J-Chair® (Model J-3) and V-Chair™

Installation, Operation and Care Manual
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## Wiring Schematic
Section I  Introduction

This manual contains the installation, operation and care instructions and user service information for the DentalEZ® J-Chair® (Model J-3) and V-Chair™.

The DentalEZ J-Chair and V-Chair are designed to provide many years of trouble-free service when installed, operated and cared for according to the procedures set forth in this manual.
**Section I  Introduction**

**Specifications**

**Electrical Power:** 15 amp fused Branch Circuit
- 115 VAC, 50/60 Hz, as applicable
- 220 VAC, 50/60 Hz, as applicable

**Shipping Weight:**
- **J-Chair** 320 lbs.
- **V-Chair** 310 lbs.

- **Chair Carton:** 320 lbs.
- **Upholstery Package:** 60 lbs.

**V-Chair Dimensions**

- **B**
- **A**

Class 1, Type B Medical Equipment for Ordinary Use with Respect to Electric Shock, Fire, Mechanical and Other Specified Hazards Only in Accordance with UL 2601-1 and CAN/CSA No. 601.1.
Section II  Pre-installation

Read/Review Instructions

To ensure proper installation, carefully read all the instructions contained in this manual paying close attention to all warnings, cautions and notes.

Before starting installation procedures, please review the illustration below to become familiar with the components of the DentalEZ J/V-Chair.

After the J/V-Chair is installed, please review the features, operation procedures and care guidelines with the doctor's staff. Then leave this manual in the doctor's office for the staff’s future reference.

— NOTE —

Most instructions/illustrations depict only the J-Chair but similarly pertain to the V-Chair.

J-Chair

Back Switches

Headrest

Chair Back

Arm Sling

Armrest

Floating Arm

Chair Brake (behind seat)

Chair Base (Cantilever Section)

Foot Control

V-Chair

Back Switches

Arm Sling

Armrest

Driven Arm

Chair Seat

Model/Serial No. (front of seat mount casting)

Base (Pump) Cover

Chair Base Plate
Section II  Pre-installation

Unpacking

Tools Required:
- Pliers
- 1/2" Socket and Ratchet

Chair Carton

1. Using pliers, remove the staples that secure the shipping carton to the wooden pallet.
2. Remove the carton and packing inserts from the pallet by lifting up.
3. Using a 1/2" socket and ratchet, remove the four bolts that secure the chair base to the shipping pallet.
4. Grasp the chair mount casting and slide the chair off the pallet.

— CAUTION —
If the chair is equipped with the air glide option, be careful not to tear the air caster when sliding the chair off the pallet and during placement of the chair.

— WARNING —
The J/V-Chair is shipped with a retaining strap to secure the base mechanism. DO NOT REMOVE this strap until the chair is out of the carton and in its position on the floor.

Upholstery Carton

Remove and set aside the following items from the J/V-Chair upholstery assembly packaging:
- Upholstered Back Assembly
- Sling Assemblies
- Upholstered Seat
- Upholstered Armrests
- Headrest
- Optional Foot Control
- Any ordered Options
- Hardware Package

Chair Placement

1. Taking into consideration the J/V-Chair's specifications (found on Pages 2 and 3), position the chair in its permanent location on a smooth, hard and level floor.

   NOTE: Make sure the chair is placed where nothing will interfere with its movement.

2. Remove the retaining strap that secured the base mechanism during shipment.

   — NOTICE —
   For any questions about an order, please contact a DentalEZ Equipment customer service representative at 1-866-DTE-INFO.
Section III  Installation

— WARNING —
DO NOT CONNECT the chair POWER cord until all shipping hardware is removed.

Tools Required:
- Phillips Screwdriver
- Flat-head Screwdriver
- 9/16" Socket and Ratchet
- 5/32" Allen Wrench

Preparing Chair

1. Lift up the chair back casting and attach the chair back using four 9/16" hex bolts and lock washers.

2. Connect the chair power. (The chair will emit two short beeps and the LEDs in the two back switch assemblies will light up to indicate the chair is on.)

3. On one side of the chair back, press the switch with the up arrow between the 3 and 4 buttons to raise the chair’s base to its full up position.

4. Using a Phillips screwdriver, remove the four screws that secure the base cover. (See photos above.)

5. Gently lift off the base cover and set it aside.

NOTE: The base cover remains off the chair until installation is complete.

— NOTICE —
The hydraulic system is shipped with a plug in the reservoir to prevent spillage during shipment. This plug MUST be removed prior to operating the chair.
Section III  Installation

6. Remove the rubber shipping plug from the reservoir vent hole.

7. Leave the plug on top of the reservoir cap for future use if necessary.

8. Make sure the stationary arm is on the specified side of the chair.

NOTE: If arm reversing is necessary, proceed with the following opposite arm conversion instructions:

Opposite Arm Conversion

NOTE: The pictures show changing the driven arm from the left side to the right side of the chair. The steps below are for changing either side.

1. Make certain the chair back is in its full upright position.

2. Remove the decorative plastic cap that covers the hole on the opposite side of where the drive arm goes into the seat mount casting.

3. Flip the floating arm all the way up.

4. Remove the 5/16" slotted screw from the slot on the control sleeve that holds the floating arm.

5. Rotate the floating arm forward until it aligns with the driven arm.

6. Align the hole in the control sleeve with the threaded hole in the arm and install the 5/16" slotted screw that was removed in Step 4.

NOTE: This locks both arms and makes conversion easier.
7. Using a 5/32" Allen wrench, remove the shoulder screw, bushing and washer that holds the driven arm to the drive arm.

8. Rotate the drive and driven arms down towards the floor.

9. Pull the drive arm out of the hole in the seat mount casting.

NOTE: The drive arm should only come out of the seat mount casting when it is pointing to the floor. A pin in the casting fits into the groove on the arm and prevents it from pulling out of the casting when the arm is rotated up.

10. Push the drive arm, with it pointed toward the floor, into the hole on the opposite side of the seat mount casting.

11. Rotate the drive arm up, and make sure it will not pull out.

12. Rotate the two armrests until the hole in the driven arm lines up with the threaded hole in the drive arm.

13. Install the shoulder screw, bushing and washer that was removed in Step 7, placing the washer on the outside.

14. Remove the 5/16" slotted screw that holds the old driven arm to the control sleeve.

15. Rotate the old driven arm back and install the 5/16" slotted screw into the arm through the slot in the control sleeve. (This arm is now the floating arm.)
Section III  Installation

NOTE: Make sure that when the new floating arm is rotated forward, it lines up with the new driven arm.

16. Place the plastic cap into the original drive arm hole in the seat mount casting.

Delivery Units

Install chair-mounted and Magellan-style delivery units according to the manufacturer's instructions supplied with the unit.

Chair Controls

The J-Chair’s (Model J-3) primary controller is located on the chair back’s head rest area with switches on both sides. The V-Chair’s primary controller is located on both sides of the lower back. The connections for this controller are labeled M (main) on the chair wiring harness. One controller can be added to the chair and should be attached to the chair wiring labeled A (auxiliary). For installation of the additional controller follow the instructions supplied with the control package. If an auxiliary controller is added, the DIP switch settings on the main control board will need to be set before the controller is recognized (See the DIP Switch Settings, Page 25.)

Auxiliary Controller Options

Foot Control

The foot control harness must be routed through the cord-retaining bracket, which is located underneath the cantilever section. (For more information, refer to the instructions supplied with the foot control package.)

Unit Mounted Touchpad

A touchpad can be mounted on the delivery head or assistant’s arm of an aXcs® chair mounted unit. (For more information, refer to the instructions supplied with the touchpad control package.)

Options

Air Glide

NOTE: If the air glide option was ordered, the air regulator was attached to the base chassis prior to shipment of the chair.

— IMPORTANT —

For proper air glide operation, the floor MUST BE LEVEL and have a smooth, hard and non-obstructive surface.

1. Place the J/V-Chair on a smooth, hard and level (vinyl, tile or terrazzo type) floor.

2. Connect the air glide tubing to a regulated air supply source (usually 80 PSI on most dental units).
10 Installation, Operation and Care Manual

Section III Installation

— CAUTION —
To prevent air caster damage, DO NOT EXCEED 20 PSI. If bouncing should occur, reduce the air pressure as required.

3. Adjust the air regulator located on the base chassis to 15-20 PSI.

4. Actuate the air regulator toggle switch at the rear of the chair on the base cantilever section cover.

5. Check for proper air glide operation.

6. Make sure the doctor and staff receive proper air glide feature operation instructions. (See Operation, Optional Features, Page 22.)

Light Receptacle

An AC power connector is supplied with each J/V-Chair to accommodate a light (up to 2 amps). The connector is located on the right side of the chair mount. A light having the proper connector can attach directly to the AC power connector, or a light receptacle plug can be installed. To install the J/V-Chair light receptacle option, proceed with the following steps:

1. Raise the seat to its full UP position.

2. Disconnect the chair power.

3. Feed the light receptacle cord through the slot in the front cover of the seat casting.

4. Connect the light receptacle connector to the chair AC power connector.

5. Using a 1/4” clamp and #10-32 x 3/8” screw and lock washer, secure the light receptacle cord to the chair mount casting.

6. Arrange the chair power cord so there is no slack and make sure the cord does not come in contact with any of the chair's moving parts. Then, if necessary, adjust the clamp that secures the chair power cord.
Section III  Installation

Auxiliary Light Relay

NOTICE: There are three different light relays that can be installed depending on the application:

- The **120 VAC** relay is used with a light that requires a 120 VAC connection to its transformer.
- The **220 VAC** relay is used with a light that requires a 220 VAC (single phase) connection to its transformer.
- The **24 VAC** relay is used with a DentalEZ aXcs® Operatory Light and power module package. The aXcs light connects directly to the aXcs power module.

--- CAUTION ---

Make sure the voltage and amperage ratings for the light relay installed is correct for the light package. (The relay ratings are printed on the side of the relay.)

1. Raise the chair base to its full UP position.
2. **Disconnect** the chair power.
3. Review the wire schematic printed on the side of the relay. (Take note of the positions for the DC positive (+) and negative (-) connections. There are two male 3/16" spade connectors on the relay.)
4. Using the screws and nuts supplied with the auxiliary light relay, mount the relay to the main control board mounting plate.
5. Plug in the DC relay wires according to the schematic. The red/white positive (+) and black negative (-) wires with female 3/16" spade connectors are located on the wiring harness above the relay.

6. For 120/220 VAC connection do the following steps:

   a. Locate the jumper in the black AC wiring below the relay and remove the short black jumper with the male 1/4" spade connectors.
   b. Plug the two female 1/4" spade connectors into the male 1/4" spade connectors on the relay.
   c. Proceed to Step 8.

7. For 24 VAC connection do the following steps:

   a. Remove the four #10 screws that secure the utility service center (USC) cover and take off the cover.

**NOTE:** The aXcs light has two AC lines for low and high light intensities. The relay turns on and off the common wire to the light's two AC lines.
Section III  Installation

8. **Reconnect** the chair power.

9. After a light has been installed and set to the **ON** position, do the following to check the operation of the auxiliary light relay:
   
   a. Depress the auxiliary light relay button once on the touch pad control. (*Pressing the auxiliary light relay button toggles the on/off state of the light.*)

   b. One short beep will sound to alert the operator the light state has changed.

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**NOTE:** In the kit, one end of the wire harness adapter should have one tab and one receptacle connector to match the connectors on the power module harness. The other end should have two receptacle connectors. These connectors will plug onto the relay.

**— REMINDER —**
Replace the base (pump) cover using the four Phillips-head screws previously removed.

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**Chair Upholstery**

**Arm Rests**

1. Place the upholstered arm rests on the arms with curved side of the arm rest to the outside of the chair.

2. Fasten the upholstered arm rests to the underside of the arms using two 1/4-20 x 1" screws for each arm.

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b. Locate the two wire connectors on the black ground wire in the power module wire harness. Then unplug the two connectors from each other.

d. Route the wire adapter harness through the umbilical going to the chair.

e. Plug the two wire connectors onto the relay.

f. Replace the USC cover using the four #10 screws previously removed.
Section III  Installation

Arm Slings

For each arm sling, perform the following steps:

1. Hold the arm sling with the larger tab to the outside of the chair, and align the hole at the end of the sling to the front hole on the underside of the arm rest.

2. Using a 1/4-20 x 5/8" screw, attach the arm sling to the arm rest.

3. Place the arm sling’s larger tab against the chair back casting with the tab end toward the front of the chair, and fold the smaller tab up to align with the lower eyelet of the larger tab.

4. Slide a 1/4-20 x 5/8" screw through the arm sling’s small tab eyelet, the lower eyelet of the large tab and the chair back casting. Then tighten the screw securely.

5. Using a 1/4-20 x 5/8" screw, fasten the upper end of the arm sling's larger tab to the chair back casting, allowing the sling to drape over the upholstered arm rest.

Surgical Slings (Optional)

1. Follow the same procedure described for Arm Slings on this page making sure the pouch for the surgical sling board is facing down toward the arm rest.

2. After the arm slings are attached, place the surgical sling board into the sling pouch on the driven arm with the slanted cut edge of the board facing toward the chair.

3. Wrap the two vinyl straps with Velcro® around the driven arm rest and sling.
Section III Installation

Arm Cover Plate

1. Under each arm, position the arm cover plates with the straight end of the plate towards the front of the arm.

NOTE: The arm cover plate containing the cut out goes on the driven arm of the chair.

2. Using three Phillips-head screws, secure each arm cover plate to the underside of the arms.

Back Upholstery

J-Chair

NOTE: The J-chair back upholstery has two types of fasteners: There are two align then slide-on fasteners at the top and four blind grip push-on fasteners at the middle and bottom.

1. While keeping the lower part of the back upholstery slightly lifted, align the two holes in the top of the back upholstery over the two washers at the top of the chair back casting. (There will be a gap between the top of the chair back casting and upholstered back until the upholstered back is moved down into position.)

2. Slide the upholstered back down into position and verify that the washers are holding the back upholstery against the chair back casting.

3. Push down on both sides of the middle and bottom of the upholstered back to snap the four blind grip fasteners together.

NOTE: Make sure the tabs of the arm slings are tucked in neatly.
Section III Installation

**V-Chair**

**NOTE:** The V-chair back upholstery has two types of fasteners: There are two align then slide-on fasteners at the top and two blind grip push-on fasteners at the bottom.

1. While keeping the lower part of the back upholstery slightly lifted, align the two holes in the top of the back upholstery over the two washers at the top of the chair back casting. (There will be a gap between the top of the chair back casting and upholstered back until the upholstered back is moved down into position.)

2. Slide the upholstered back down into position and verify that the washers are holding the back upholstery against the chair back casting.

3. Push down on both sides of the bottom of the upholstered back to snap the two blind grip fasteners together.

**NOTE:** Make sure the tabs of the arm slings are tucked in neatly.

**Seat Cushion**

1. Place the seat cushion on the seat mount casting.

2. Slide decorator plastic covered caps on four 1/4-20 x 5/8" screws.

3. Attach the back of the chair seat cushion to the back of the seat mount casting using **two** 1/4-20 x 5/8" screws with plastic caps. Then snap the decorator cap covers in place.

4. Attach the front of the chair seat cushion to the underside of the seat mount casting using the **remaining two** 1/4-20 x 5/8" screws with decorator caps. Then snap the decorator cap covers in place.
Head Rest

1. Slide the blade of the standard fixed headrest or the optional double articulating headrest into the opening of the V-Chair's back casting.

2. Place the magnetic headrest cushion or magnetic neck support on the J-Chair or the fixed headrest of the V-Chair.
Section IV Features

The DentalEZ J/V-Chair can be customized to attain optimum work efficiency so dental professionals can offer quality care and treatment to patients. In order to achieve the most efficient use in the operatory and understand what the J/V-Chair offers, here is a compilation of some standard and optional features:

**Ergonomic/Comfort Features**

The J/V-Chair allows total patient placement flexibility to create the most comfortable working position for the patient and dental team. Some of these ergonomic and comfort features are:

- All chair function controls are conveniently placed on both sides of the chair back.
- The back, seat and base positions adjust independently. This feature allows precise placement of the patient; therefore, eye, back and neck strain are virtually eliminated, even after long procedures.
- The ergonomically designed magnetic headrest can be placed in any position on the upper portion of the chair back to comfortably support the patient’s head and neck.
- The chair arm and slings recline with patient and hold the patient’s arms in proper position for better operator access.
- The reshaped, thin, tapered chair back allows optimum access to the oral cavity while providing more lumbar and cervical support for increased patient comfort.
- The new chair contour helps remove any obstructions from the operator’s thighs and knees allowing for a more ergonomically correct position.
- The seat has stretcher springs for comfort and durability.
- The V-Chair’s headrest choice of the magnetic catcher’s mitt style cushion, magnetic neck support or optional double articulating, provides headrest options to accommodate all dental procedures.

**Design Features**

- Self diagnostics is possible via a series of visual display signals (LED codes) and audible signals (beep codes) making each function and control condition easy to track. *(See User Service Section.)*
- Any control can be programmed to offer eight pre-set positions for one operator, or four presets each for two operators. *(See Operation Section.)*
- Every J/V-Chair can accommodate an additional control. *(See Installation Section.)*
- The chair can swivel 15° to either side of its center position.
- Hydraulic, cantilever-style base provides superior stability and smooth operation.
- The virtually silent hydraulic pump eliminates distraction.
- Chair-mounted and Magellan-style delivery units can be mounted.
- Upholstery is removable and replaceable.

**Safety Features**

- A base lowering safety features ensures nothing gets caught underneath the base as it lowers. *(See Operation Section.)*
- A locking chair brake holds the chair in place and stops any swivel movement. *(See Operation Section.)*
- The handpiece operated chair movement lock-out prevents any unexpected chair movement while operating any handpiece.

**Optional**

- Air glide feature allows free and easy floor positioning of the chair.
- An AC light receptacle outlet can be added to the chair’s AC power.
- Lights can be operated using the auxiliary light relay button on the touch pad control.
- The V-Chair’s headrest options can be easily and quickly changed.
Manual Positioning

Manual positioning of the J/V-Chair is accomplished by using the back switch controls located on each side of the chair, the foot control or the unit touch pad control. The J/V-Chair can be operated using one or two separate controls. To operate these controls:

1. Select the direction of travel.
2. Depress and hold the corresponding button.
3. The chair will move to a factory-set travel limit, or run until the directional button is released.

Automatic Positioning

Programming Auto Positions

The J/V-Chair back switch controls, the foot control and unit touch pad control are capable of executing eight auto positions (four on A mode indicated by a green LED and four on B indicated by a yellow LED).

To establish the pre-sets, refer to the appropriate J/V-Chair switch control illustration on the next page and perform the following steps:

1. Determine A or B user by depressing the A/B toggle button. The A (green) or B (yellow) LED will light and one beep will sound for A mode and two beeps will sound for B mode.
2. Situate the chair in the desired auto position.
3. Press and hold the desired auto button (1, 2, 3 or 4) for approximately five seconds.

**NOTE:** The chair will beep once when the auto button is first depressed and beep again after the program is accepted.

4. Repeat Steps 1-3 to program the other three positions.
Section V  Operation

J-Chair Back Switch Control

- Side of Chair
- Back Up
- Back Down
- Seat Up
- Seat Down
- Base Up
- Base Down
- LED Light
  (A green, one beep)
  (B yellow, two beeps)
- Operator A/B Toggle Button

V-Chair Back Switch Control

- Side of Chair
- Back Up
- Back Down
- Seat Up
- Seat Down
- Base Up
- Base Down
- LED Light
  (A green, one beep)
  (B yellow, two beeps)
- Operator A/B Toggle Button

Foot Control

- Operator A/B
- Auto Buttons
- Base Up
- Seat Up
- Seat Down
- Operator A/B LED
- Light Relay

Unit Touch Pad Control

- Back Up
- Back Down
- Base Up
- Base Down
- A/B Toggle Button
- A LED Light
  (one beep; green)
- B LED Light
  (two beeps; yellow)
- Auto Buttons
Section V  Operation

Activating Auto Positions

To activate the auto positions:

1. Determine A or B user by depressing the A/B toggle button. The A (green) or B (yellow) LED will light and one beep will sound for A mode and two beeps will sound for B mode.

2. Depress the #1, 2, 3 or 4 button once on the back switch control, foot control or the unit touch pad control.

3. A beep will sound.

4. The chair will automatically stop in the programmed position selected.

**NOTE:** Pressing any button on a chair control module while the J/V-Chair is moving to a programmed position will immediately stop the movement of the chair, and three short beeps will sound. To continue and complete the automatic positioning of the chair, simply press the desired position button a second time.

Reprogramming Auto Positions

To change a programmed position, simply maneuver the J/V-Chair to the desired position and follow the Programming Auto Positions instructions described earlier in this Section.

**NOTE:** Reprogramming a new auto position spontaneously erases the old position.

Command Time-out

When a function is moved or an auto position is activated, the chair assumes movement completion will take no longer than 45 seconds.

If a function button has been held down or an auto position has not completed in this allotted time, the chair will reset itself and restart as though it were being powered up.

If a button is stuck on a controller, it will fail the calibration test when the chair restarts and the original command will be ignored.

If an auto position was activated and for some reason could not be completed, the chair will not continue trying completion of this command when the chair restarts.

Silent Mode

Anytime a function position button is pressed, a short beep sounds letting the operator know a function move has started. These short beeps can be silenced by changing the #3 DIP switch to the OFF position. (See Section VII, Dip Switch Settings for details.)

Potentiometer Override Mode

In the event one of the three potentiometers used to measure each function's position on the chair cannot be read, the chair will automatically switch to a manual-only mode. In this mode, the chair can only be manually positioned, and the affected function's travel limits will be its limit switch position or physical limit. A constant fast beep will sound while an affected function is being moved to alert the operator the function requires service. When the affected function is idle, no beep signal will sound.

All other functions that are operating normally will maintain their programmed travel limits without audible signals.

Auto positions cannot be set or activated in this mode because at least one of the function's positions cannot be measured.

If any auto position buttons are pressed, the chair will sound three short beeps to indicate auto positioning is not available and the chair is in manual-only mode.

Controller Functions/Modes

Controller Self-Calibration

When power is first connected to the chair, each attached controller having its associated DIP switch set to the ON position is tested and calibrated.

If a controller does not pass the calibration test, its commands are ignored and an associated LED code is generated letting the user know the controller failed the calibration test.

While the chair is idle, approximately every 15 minutes, the attached controllers are tested and calibrated to ensure they are working as expected.
Section V  Operation

**Standard Features**

**Base Lowering Safety**
The following describes how this feature operates:

1. When the base cantilever section lowers and contacts an obstruction, the cover on the underside of the cantilever section moves up and activates safety switches.

2. Motion of the base stops immediately and the chair emits a constant short warning beep.

**NOTE:** As long as the safety switches are activated, the base will not lower any further. All other chair functions, except auto programs, are still available. If the chair is moving to an auto position and the base cover moves up activating the safety switches, auto positioning will stop.

3. Moving the base up and off the obstruction deactivates the safety switches and silences the warning beep.

**Chair Arms**
The J/V-Chair’s floating arm lifts to allow easy patient entry and exit.

--- CAUTION ---
The chair's arms (floating or driven) SHOULD NOT be used as a means of support when entering, exiting, or leaning against the chair.

**Chair Rotation**
The J/V-Chair is capable of swivelling 15° to either side of its center position. To swivel the chair:

1. Release the chair brake located on the back of the chair seat casting by moving the brake handle completely to the left.

2. Swivel the chair to the desired position.

3. Lock the chair brake by moving the brake handle to the right.

**Standard Headrest (V-Chair)**
Firmly push down or pull up the blade from the chair back to change the headrest height.

**Optional Features**

**Double Articulating Headrest (V-Chair)**
To position the double articulating headrest:

1. While facing the back of the headrest, fully depress the release mechanism on the left.

2. Keep the release mechanism depressed and tilt the headrest until the desired position is reached.

3. Release the mechanism to lock the headrest in place.

**NOTE:** The use of disposable headrest covers is recommended to prevent soiling of the headrest. These covers may be purchased through a local dental supplier.
Section V  Operation

Air Glide
The air glide option aids the operator in repositioning the chair. To operate the air glide option:

1. Make sure the chair is on a smooth hard, level and non-obstructive surface.
2. Activate the air regulator toggle switch on the base cover at the rear section of the chair.
3. The rear of the chair base is supported by an air pillow and lifts off the floor.
4. When the base rear is raised, it allows the rollers on the front of the base plate to contact the floor.
5. While the chair is supported only by the rollers and air pillow, reposition the chair as desired.

Surgical Sling
Make sure the surgical sling board is properly seated in the pouch located on the underside of the surgical sling. Then using the two vinyl straps with Velcro, wrap the patients arm securely in place on the driven arm of the chair.

Auxiliary Light Relay
The auxiliary light relay allows the operator to turn on an attached light and then control its on/off state using the touch pad control. To operate the auxiliary light relay option:

1. Depress the auxiliary light relay button once on the touch pad control.
2. One short beep will sound to alert the operator the light state has changed.
3. Pressing the auxiliary light relay button toggles the on/off state of the light.

Light Receptacle
*(See Installation Section, Page 10.)*
Section VI  Care

Cleaning

Before attempting to clean or disinfect the J/V-Chair, please read the following instructions carefully.

— IMPORTANT —
Pay strict attention to all the cleaning product manufacturer’s warnings and cautions.

Because any cleaning product may be harmful or irritating:

✓ Use protective gloves and eye protection in a well ventilated area.
✓ Do not inhale or swallow any cleaning product.
✓ Protect surrounding surfaces and clothing from exposure.

When using strong cleaning agents, such as bleach or alcohol, it is advisable to first test them in an inconspicuous area to be certain they will not damage the upholstery, plastic or metal surfaces of the J/V-Chair.

— CAUTION —
Cleaning agents, other than household bleach or rubbing alcohol, may contain harsh or unknown solvents. Also, these other cleaning agents are subject to formula changes made by the manufacturer without notice.

Chair Upholstery

1. To remove light soil:
   a. Prepare a solution comprised of one part household dishwashing liquid and nine parts warm water.
   b. Apply the above solution to the upholstery using a soft, damp cloth.

   NOTE: If necessary, a soft bristle brush may be used.

2. To remove heavy soil:
   a. Dampen a soft, white cloth with lighter fluid (naphtha) and rub the area gently.
   b. Using a soft cloth dampened in plain water, wipe the area thoroughly.

3. To remove stains using bleach:
   a. Prepare a solution comprised of one part household bleach (sodium hypochlorite) and nine parts water.
   b. Apply the above solution to the stain using a dampened, soft, white cloth.

   NOTE: If necessary, full-strength household bleach may be applied to the stained area using a soft, white cloth.
   c. Allow the bleach to puddle on the affected area, or apply a bleach-soaked cloth to the area for 30 minutes.
   d. Using a soft cloth dampened in plain water, rinse the treated area thoroughly to remove any bleach residue.

4. To remove stains using alcohol:
   a. Dampen a soft, white cloth with rubbing alcohol and rub the stain gently.
   b. Using a soft cloth dampened in plain water, rinse the treated area thoroughly to remove any alcohol residue.

5. To restore luster:
   a. Apply a light coat of spray furniture wax containing lemon.
   b. Wait 30 seconds and lightly buff the surface using a clean, white cloth.
Plastic and Coated Metal Surfaces

— CAUTION —

NEVER use abrasives or petroleum-based cleaners on any plastic or coated metal surfaces unless otherwise specified.

1. To remove ordinary dirt:
   a. Prepare a soapy solution comprised of household dishwashing liquid and water.
   b. Using a soft cloth or sponge, apply this soapy solution to the plastic and coated metal surfaces.
   
      NOTE: To remove heavier dirt, apply Formula 409® or Fantastik®.
   
   c. Wipe the area dry immediately using a soft cloth.

2. To remove stubborn stains:
   a. Apply a mild abrasive such as toothpaste or liquid tooth polish using a soft, white cloth.
   b. Using a chamois or moist sponge, remove all traces of the mild abrasive.
   
   c. Dry the area thoroughly to prevent marking.

Metal Surfaces and Chrome Parts

For ordinary dirt, fingerprints, etc., use a non-abrasive, all-purpose cleaner.

Disinfecting

The J/V-Chair®'s upholstery is comprised of a sulfide stain, oil and mildew resistant material which provides outstanding protection in difficult medical and health care environments. This material contains antimicrobial agents that are effective against the following microorganisms:

Bacterial Species:
- Bacillus Subtilis
- Staphylococcus Aureus
- Aerobacter Aerogenes
- Proteus Vulgaris
- Brevibacterium Species
- Streptomyces Rubiureticuli
- Escherichia Coli
- Klebsiella Pneumoniae
- Pseudomonas Aeruginosa

Fungal Species:
- Aspergillus Niger
- Aspergillus Flavus
- Penicillium Funiculossum
- Penicillium Islandicum
- Chaetomium Globosum
- Trichoderma Species
- Auerobacidium Pullulene
- Canadida Albicans

Upholstery

High-Level Disinfection

The J/V-Chair's upholstery material is formulated to withstand high-level disinfection, which is required in medical/dental applications. Disinfectant products that contain sodium hypochlorite (household bleach) can be used full strength or with gluteraldehydes.

Intermediate-Level Disinfection

This level of disinfection is achieved by applying either rubbing alcohol or a solution comprised of one part sodium hypochlorite (household bleach) and nine parts water. Because sodium hypochlorite is easier to apply, its use is preferred over rubbing alcohol. To achieve intermediate-level disinfection, rubbing alcohol must remain puddled on the upholstery's surface until evaporation is complete.

All Other Chair Surfaces

Cavicide™ is recommended for disinfecting all other surfaces of the J/V-Chair. The use of any disinfectant, other than Cavicide™, may cause premature staining, discoloration or damage to the J/V-Chair's materials.
Section VII  User Service Information

DIP Switch Settings

A DIP switch assembly, which is located at the top center of the main control board under the base cover, is used to set certain functions of the chair’s electronic control package.

— IMPORTANT —

Change DIP switches only while the chair power is disconnected. Once the chair power is reconnected, the main control board will recognize any changes made.

NOTE: The main control board expects at least one controller attached to the M (main) wiring connector. If there is no controller attached to either the M or A (auxiliary) connectors, the board will generate a service LED code that indicates one of the controllers needs checking.

<table>
<thead>
<tr>
<th>DIP Switch</th>
<th>State</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>#1</td>
<td>ON</td>
<td>Controller M is ON and the board assumes back switch controller is connected. Special installation mode (base automatically rises when power is connected.)</td>
</tr>
<tr>
<td></td>
<td>OFF</td>
<td></td>
</tr>
<tr>
<td>#2</td>
<td>ON</td>
<td>Controller A is ON and the board assumes an optional controller is connected.</td>
</tr>
<tr>
<td></td>
<td>OFF</td>
<td>Controller A is OFF and the board assumes no controller is connected.</td>
</tr>
<tr>
<td>#3</td>
<td>ON</td>
<td>Function command activation signal beeps are activated.</td>
</tr>
<tr>
<td></td>
<td>OFF</td>
<td>Function command activation signal beeps are silenced.</td>
</tr>
<tr>
<td>#4</td>
<td>ON</td>
<td>Travel limits programming mode.</td>
</tr>
<tr>
<td></td>
<td>OFF</td>
<td>Normal operation mode.</td>
</tr>
<tr>
<td>#5</td>
<td>ON</td>
<td>Three-function chair mode: base, back and seat functions.</td>
</tr>
<tr>
<td></td>
<td>OFF</td>
<td>Two-function chair mode: base and back/seat functions.</td>
</tr>
<tr>
<td>#6</td>
<td>ON</td>
<td>Must be in OFF position</td>
</tr>
<tr>
<td></td>
<td>OFF</td>
<td></td>
</tr>
</tbody>
</table>

Beep Codes

The J/V-Chair’s electronic control package is designed to sound specific beep code signals to alert the operator of certain control conditions. Understanding the beep codes enables the operator to isolate the condition and take appropriate action.

Base conditions are indicated by a constant short beep; back conditions by two constant short beeps; and seat conditions by three constant short beeps. Three short beeps indicate a function is not available when its button is pressed. A constant fast beep that sounds only when a function is moved indicates a potentiometer condition.

The beep code signal chart on the following page lists the audible sound, control condition and service action to take. The codes are also prioritized letting the user know that conditions listed above the indicated code are normal.
<table>
<thead>
<tr>
<th>Beep Code</th>
<th>Condition</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant fast beep (FB)</td>
<td>Special installation mode (base automatically rises)</td>
<td>Disconnect the chair power. Move #1 DIP switch to ON. Reconnect the chair power.</td>
</tr>
<tr>
<td>Constant short beep (SB)</td>
<td>Base lower safety cover contacted and moved up activating switches (LS2 &amp; LS3)</td>
<td>Move the base up and remove obstruction under cover.</td>
</tr>
<tr>
<td></td>
<td>Cover is jammed</td>
<td>Move cover around until it's free then push the cover up to make sure it's working properly.</td>
</tr>
<tr>
<td></td>
<td>Base upper limit switch (LS1) activated (base exceeded its upper travel limit)</td>
<td>Reprogram the chair's travel limits.</td>
</tr>
<tr>
<td>Constant (SB)(SB)</td>
<td>Back upper limit switch (LS4) activated (back exceeded its upper travel limit)</td>
<td>Reprogram the chair's travel limits.</td>
</tr>
<tr>
<td>Constant (SB)(SB)(SB)</td>
<td>Seat upper limit switch (LS5) activated (seat exceeded its upper travel limit)</td>
<td>Reprogram the chair's travel limits.</td>
</tr>
<tr>
<td></td>
<td>Seat lower limit switch (LS6) activated (seat exceeded its lower travel limit)</td>
<td>Reprogram the chair's travel limits.</td>
</tr>
<tr>
<td>Constant (SB)</td>
<td>Auxiliary limit switch (LS7) wire connectors unplugged</td>
<td>Make sure connectors are plugged in securely.</td>
</tr>
<tr>
<td></td>
<td>Auxiliary limit switch activated (user installed option)</td>
<td>Determine where the switch is installed and why it was activated. Then appropriately deactivate switch.</td>
</tr>
<tr>
<td>(SB)(SB)(SB)</td>
<td>When any control button is pressed (except auxiliary light relay)</td>
<td>Make sure connectors are plugged in securely.</td>
</tr>
<tr>
<td></td>
<td>Handpiece safety wire connectors unplugged</td>
<td>Determine where switch is installed and why switch is activated. Then appropriately deactivate switch.</td>
</tr>
<tr>
<td></td>
<td>Handpiece safety switch activated (user-installed option)</td>
<td></td>
</tr>
<tr>
<td>When any control auto button is pressed</td>
<td>Auto position program is not activated because one or more potentiometers are disconnected or out of range</td>
<td>Determine which potentiometer is locking out the auto programs by checking the service LED codes or by moving each function until a constant (FB) is signaled while the function is in motion. Check the indicated potentiometer's wiring and linkage for proper function. Then check the potentiometer's resistance and voltage.</td>
</tr>
<tr>
<td>While in travel limits programming mode (DIP switch #4 is ON) and either auto 1 or 2 button is pressed</td>
<td>Cannot program travel limits because one or more potentiometers are disconnected or out of range</td>
<td>Determine which potentiometer is locking out the travel limits program by checking the service LED codes or by moving each function until a constant (FB) is signaled while the function is in motion. Check the indicated potentiometer's wiring and linkage for proper function. Then check the potentiometer's resistance and voltage.</td>
</tr>
<tr>
<td>Constant (FB) Only while a function is moving</td>
<td>The potentiometer on the activated moving function is disconnected or out of range</td>
<td>Verify the suspected potentiometer by checking the service LED codes. Check the potentiometer's wiring and linkage for proper function. Then check the potentiometer's resistance and voltage.</td>
</tr>
</tbody>
</table>
Section VII  User Service Information

LED Codes

There is a three-light LED assembly on the main control board that indicates each power up mode and various service conditions the chair may encounter. The LED assembly is located at the top center of the main control board (left of the DIP switch assembly) under the base cover.

The power-up codes are described in the table below.

A service condition LED code chart appears on the next page. The LED codes are prioritized from top to bottom letting the user know the conditions listed above the indicated code are normal.

**LEGEND**

<table>
<thead>
<tr>
<th>LED Code</th>
<th>Beep Code</th>
<th>DIP Switch</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="LED Codes" /></td>
<td>(SB)</td>
<td>#1 On, #4 Off</td>
<td>Normal operating</td>
</tr>
<tr>
<td><img src="image" alt="LED Codes" /></td>
<td>(SB)</td>
<td>#1 On, #4 On</td>
<td>Travel limits programming</td>
</tr>
<tr>
<td><img src="image" alt="LED Codes" /></td>
<td>constant (FB)</td>
<td>#1 Off</td>
<td>Special installation (base automatically rises)</td>
</tr>
</tbody>
</table>

Service Instruction

If the area of concern is not addressed in this manual, contact your local DentalEZ full-service dealership. Please have the following product information available:

- Model Name__________________________
- Model Number________________________
  (found on the front of the seat mount casting)
- Serial Number_______________________
- Date of Installation_________________
<table>
<thead>
<tr>
<th>LED Code</th>
<th>Condition</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>☑ ☑ ☑</td>
<td>Special installation mode</td>
<td>Disconnect the chair power. Move #1 DIP switch to On. Reconnect the chair power.</td>
</tr>
<tr>
<td>☑ ☑ ☑</td>
<td>A/D converter failure</td>
<td>Replace the chair main control board.</td>
</tr>
<tr>
<td>☑ ☑ ☑</td>
<td>EEPROM failure</td>
<td>Replace the chair main control board.</td>
</tr>
<tr>
<td>☑ ☑ ☑</td>
<td>Handpiece safety wire connectors unplugged</td>
<td>Make sure connectors are plugged in securely.</td>
</tr>
<tr>
<td>☑ ☑ ☑</td>
<td>Handpiece safety switch activated (user-installed option)</td>
<td>Determine where the switch is installed and why it was activated. Then appropriately deactivate the switch.</td>
</tr>
<tr>
<td>☑ ☑ ☑</td>
<td>Base lower safety cover contacted and moved up activating switches (LS2 &amp; LS3)</td>
<td>Move base up and remove obstruction under the cover.</td>
</tr>
<tr>
<td>☑ ☑ ☑</td>
<td>Cover is jammed</td>
<td>Move the cover around until it’s free, then push the cover up to make sure it’s working properly.</td>
</tr>
<tr>
<td>☑ ☑ ☑</td>
<td>Base upper limit switch (LS1) activated (base exceeded it’s upper travel limits)</td>
<td>Reprogram the chair’s travel limits.</td>
</tr>
<tr>
<td>☑ ☑ ☑</td>
<td>Back upper limit switch (LS4) activated (back exceeded its upper travel limit)</td>
<td>Reprogram the chair’s travel limits.</td>
</tr>
<tr>
<td>☑ ☑ ☑</td>
<td>Seat upper limit switch (LS5) activated (seat exceeded its upper travel limit)</td>
<td>Reprogram the chair’s travel limits.</td>
</tr>
<tr>
<td>☑ ☑ ☑</td>
<td>Seat lower limit switch (LS6) activated (seat exceeded its lower travel limit)</td>
<td>Reprogram the chair’s travel limits.</td>
</tr>
<tr>
<td>☑ ☑ ☑</td>
<td>Auxiliary limit switch (LS7) wire connectors unplugged</td>
<td>Make sure connectors are plugged in securely.</td>
</tr>
<tr>
<td>☑ ☑ ☑</td>
<td>Auxiliary limit switch activated (user-installed option)</td>
<td>Determine where the switch is installed and why it was activated. Then appropriately deactivate the switch.</td>
</tr>
<tr>
<td>Only while base is moving</td>
<td>Base potentiometer (P1) is disconnected or out of range</td>
<td>Check the base potentiometer’s wiring and linkage for proper function. Then check its resistance and voltage.</td>
</tr>
<tr>
<td>Only while back is moving</td>
<td>Back potentiometer (P2) is disconnected or out of range</td>
<td>Check the back potentiometer’s wiring and linkage for proper function. Then check its resistance and voltage.</td>
</tr>
<tr>
<td>Only while seat is moving</td>
<td>Seat potentiometer (P3) is disconnected or out of range</td>
<td>Check the seat potentiometer’s wiring and linkage for proper function. Then check its resistance and voltage.</td>
</tr>
<tr>
<td>☑ ☑ ☑</td>
<td>Controller M (main) will not calibrate</td>
<td>Check wiring for breaks or loose connections. Check for stuck switches. Make sure a controller is connected to the M wiring. If only one controller is used, it should be connected to M. Disconnect and reconnect chair power forcing controller calibrations. Replace controller if it still will not calibrate.</td>
</tr>
<tr>
<td>☑ ☑ ☑</td>
<td>Controller A (auxiliary) will not calibrate</td>
<td>Check wiring for breaks or loose connections. Check for stuck switches. If a controller is not connected to A, change #2 DIP switch to OFF so it will not calibrate. Disconnect and reconnect chair power forcing controller calibrations. Replace controller if it still will not calibrate.</td>
</tr>
<tr>
<td>☑ ☑ ☑</td>
<td>When chair is idle</td>
<td>Base potentiometer (P1) is disconnected or out of range</td>
</tr>
<tr>
<td>☑ ☑ ☑</td>
<td>When chair is idle</td>
<td>Back potentiometer (P2) is disconnected or out of range</td>
</tr>
<tr>
<td>☑ ☑ ☑</td>
<td>When chair is idle</td>
<td>Seat potentiometer (P3) is disconnected or out of range</td>
</tr>
<tr>
<td>☑ ☑ ☑</td>
<td>Normal</td>
<td></td>
</tr>
</tbody>
</table>
Section VII  User Service Information

Programming Travel Limits

Tools Required:
- Phillips Screwdriver
- Tape Measure

--- WARNING ---
Disconnect the chair power when indicated.

1. Raise the chair base and seat to their full UP position, and place the chair back in a halfway position.

2. Disconnect the chair power.

3. If the upholstered seat was installed, take it off by unsnapping the decorator plastic cover caps on the back and front of the chair seat mount casting and removing and retaining the 1/4-20 x 5/8" screws with plastic caps from the back and front of the chair seat cushion.

4. Take off the base (pump) cover by removing and retaining the four Phillips-head screws that attach it to the base plate.

5. On the main control board, flip the #4 DIP switch to the ON position. (This will place the chair in its travel limits programming mode when the chair’s power is reconnected.)

NOTE: All three LEDs on the board will light up five times, along with a short beep each time, to indicate the chair is in its travel limits programming mode.

6. Reconnect the chair power.

NOTE: The upper and lower travel limit values specified are factory settings. Values within the ranges are valid depending on specific applications. Different travel limit values may be required to achieve adequate clearance for accessories attached to or near the chair.

NOTE: Any one of the two possible controls connected to the chair can be used to set the travel limits.

7. Perform the following steps to program the upper limits:

   a. Move the base up until the distance between the bottom of the chair mount casting and the top of the cantilever support casting measures between 22-5/8" and 22-3/4".

   b. Move the back up until the distance between the end of the spring connecting link and the rear edge of the seat mount casting rib measures between 14" and 14-1/8".

   c. Move the seat up until the distance between the chair mount casting and the top edge of the seat mount casting measures between 10-1/2" and 10-5/8".

---

Step 7a

Step 7b

Step 7c

---
Section VII  User Service Information

J-Chair®/V-Chair™

**d.** Press and release the auto #1 button on a control.

--- CAUTION ---
Do not press the auto button for more than one second.

**NOTE:** A short beep will sound when the button is pressed, another will sound when the button is released. The second beep indicates the travel limits have been stored.

**NOTE:**
A short beep will sound when the button is pressed, another will sound when the button is released. The second beep indicates the travel limits have been stored.

**8.** Perform the following steps to program the lower limits:

**a.** Move the base down until the distance between the bottom of the chair mount casting and the top of the cantilever support casting measures between 9-1/4" and 9-3/8".

**b.** Move the back down until the distance between the end of the spring connecting link and the rear edge of the seat mount casting rib measures between 11" and 11-1/8".

**c.** Move the seat down until the distance between the chair mount casting and the top edge of the seat mount casting measures between 6-1/2" and 6-5/8".

**d.** Press and release the auto #2 button on a control.

--- CAUTION ---
Do not press the auto button for more than one second.

**9.** Disconnect the chair power.

**10.** Flip the #4 DIP switch back to the OFF position. (This will place the chair back into its normal operating mode.)

**11.** Reconnect the chair power.

**12.** Move each function to their programmed limits to verify they have been properly set. (Each function should stop before activating a limit switch or reaching a physical stop.)

**NOTE:** If a limit was adjusted to accommodate an accessory, make sure the resulting clearance is sufficient.

**13.** Replace the pump cover using the four Phillips-head screws previously removed.

**14.** Replace the seat using the four 1/4-20 x 5/8" screws with plastic caps previously removed.

**15.** Reprogram the auto positions.
Section VII  User Service Information

Control Valve Speed Adjustment

Tools Required:

- Phillips Screwdriver
- Flat-head Screwdriver
- Safety Glasses

1. Raise the chair base to its full UP position.

2. Take off the base (pump) cover by removing and retaining the four Phillips-head screws that attach it to the base plate.

NOTE: Adjustable flow control valves, located in the hydraulic control valve, are used to set the chair function speeds. The base and back cylinders are single acting cylinders. They have two flow control valves each (UP and DOWN) to control their speeds. The seat cylinder is double acting and requires four flow adjustment valves. Valves marked (PWR) are for incoming fluid. Valves marked (RET) are for outgoing fluid. The (RET) valves are adjusted first to set a gross speed and the (PWR) valves are used for fine tuning the speeds. Once the (RET) flows have been set, they should not be readjusted.

Function times given are based on a 200-pound person sitting in the chair.

--- WARNING ---

Wear safety glasses while adjusting the valve. Flow control valves should not be turned out farther than the top of their heads being even with the valve body surface. Adjustment of the flow control valves beyond the valve body surface may result in oil leakage with uncontrolled motion of the chair and the possibility of a valve being ejected from the valve body.

a. Move the base up and down adjusting the flow controls until it takes 12 seconds for the base to move either up or down the full travel.

b. Move the back up and down adjusting the flow controls until it takes 12 seconds for the back to move either up or down the full travel.
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c. Adjust the UP (PWR) and DOWN (PWR) flow adjustment screws all the way open (counterclockwise). The valves are open when the top of the screws are approximately level with the valve body.

d. Adjust the UP (RET) and DOWN (RET) flow adjustments all the way closed (clockwise).

NOTE: With the flow adjustments closed all the way, the seat may not move at all until the valve is adjusted open a little.

e. Move the seat up or down while opening the corresponding (RET) flow adjustments.

f. Continue adjusting the flows until the seat moves from its full up and down positions in about seven seconds both ways.

g. Adjust the UP (PWR) and DOWN (PWR) flow adjustment screws all the way closed (clockwise).

h. Move the seat up or down while opening the corresponding (PWR) flow adjustments.

i. Continue adjusting the flows until the seat moves from its full up and down positions in about nine seconds both ways.

3. Raise the chair base up.

4. Replace the base (pump) cover.
### J-Chair (J-3) Upholstery

<table>
<thead>
<tr>
<th>Part/Kit Name</th>
<th>Part/Kit No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upholstery Set, J-3, (color specified when ordering chair and includes items marked w*)</td>
<td>3625-587</td>
</tr>
<tr>
<td>Headrest* Neck Support or Catcher's Mitt</td>
<td>3801-740, 3801-826</td>
</tr>
<tr>
<td>Back Cushion*</td>
<td>3801-876</td>
</tr>
<tr>
<td>Arm Sling (two per kit)*</td>
<td>3801-743</td>
</tr>
<tr>
<td>Left Armrest Cushion, 15**</td>
<td>3801-744</td>
</tr>
<tr>
<td>Right Armrest Cushion, 15**</td>
<td>3801-746</td>
</tr>
<tr>
<td>Driven Arm Cover Plate (15&quot; armrest)*</td>
<td>3801-938</td>
</tr>
<tr>
<td>Driven Arm Cover Plate (16&quot; armrest)</td>
<td>3801-749</td>
</tr>
<tr>
<td>Floating Arm Cover Plate (15&quot; armrest)*</td>
<td>3801-939</td>
</tr>
<tr>
<td>Floating Arm Cover Plate (16&quot; armrest)</td>
<td>3801-750</td>
</tr>
<tr>
<td>Seat Cushion*</td>
<td>3801-751</td>
</tr>
<tr>
<td>Seat Mounting Hardware*</td>
<td>3801-752</td>
</tr>
<tr>
<td>Seat Toe Guard*</td>
<td>3801-753</td>
</tr>
<tr>
<td>Seat Lower Cover*</td>
<td>3801-754</td>
</tr>
<tr>
<td>Back Blind Grip Fasteners</td>
<td>3801-742</td>
</tr>
</tbody>
</table>

### V-Chair Upholstery

<table>
<thead>
<tr>
<th>Part/Kit Name</th>
<th>Part/Kit No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Upholstery Set, V-Chair, (color specified when ordering chair and includes items marked w*)</td>
<td>3625-604</td>
</tr>
<tr>
<td>Back Cushion*</td>
<td>3801-912</td>
</tr>
<tr>
<td>Arm Sling (two per kit)*</td>
<td>3801-743</td>
</tr>
<tr>
<td>Left Armrest Cushion*</td>
<td>3801-744</td>
</tr>
<tr>
<td>Right Armrest Cushion*</td>
<td>3801-746</td>
</tr>
<tr>
<td>Driven Arm Cover Plate*</td>
<td>3801-749</td>
</tr>
<tr>
<td>Floating Arm Cover Plate*</td>
<td>3801-750</td>
</tr>
<tr>
<td>Seat Cushion*</td>
<td>3801-751</td>
</tr>
<tr>
<td>Seat Mounting Hardware*</td>
<td>3801-752</td>
</tr>
<tr>
<td>Seat Toe Guard*</td>
<td>3801-753</td>
</tr>
<tr>
<td>Seat Lower Cover*</td>
<td>3801-754</td>
</tr>
<tr>
<td>Standard Headrest Cushion*</td>
<td>3801-827</td>
</tr>
<tr>
<td>Standard Headrest Magnetic Cushion*</td>
<td>3801-826</td>
</tr>
<tr>
<td>Double Articulating Headrest Cushion* (optional)</td>
<td>3801-535</td>
</tr>
<tr>
<td>Surgical Slings (two per kit) (optional)</td>
<td>3625-611</td>
</tr>
<tr>
<td>Back Blind Grip Fasteners</td>
<td>3801-742</td>
</tr>
</tbody>
</table>

### Electrical

<table>
<thead>
<tr>
<th>Part/Kit Name</th>
<th>Part/Kit No.</th>
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</thead>
<tbody>
<tr>
<td>Master Circuit Board (115 VAC)</td>
<td>3801-765</td>
</tr>
<tr>
<td>Master Circuit Board (220 VAC)</td>
<td>3801-788</td>
</tr>
<tr>
<td>Fuses (115 VAC)</td>
<td>3801-766</td>
</tr>
<tr>
<td>Fuses (220 VAC)</td>
<td>3801-767</td>
</tr>
<tr>
<td>Main Wiring Harness</td>
<td>3801-768</td>
</tr>
<tr>
<td>Power Cord (115 VAC)</td>
<td>3801-769</td>
</tr>
<tr>
<td>Power Cord (220 VAC)</td>
<td>3801-770</td>
</tr>
<tr>
<td>Pump Motor Capacitor (115 VAC)</td>
<td>3801-409</td>
</tr>
<tr>
<td>Pump Motor Capacitor (220 VAC)</td>
<td>3801-410</td>
</tr>
<tr>
<td>Valve Solenoid (115 VAC)</td>
<td>3801-424</td>
</tr>
<tr>
<td>Valve Solenoid (220 VAC)</td>
<td>3801-425</td>
</tr>
<tr>
<td>Base Potentiometer</td>
<td>3801-435</td>
</tr>
<tr>
<td>Limit Switch (all)</td>
<td>3801-431</td>
</tr>
<tr>
<td>Back and Seat Potentiometer</td>
<td>3801-771</td>
</tr>
<tr>
<td>Back Switch Wiring Harness</td>
<td>3801-915</td>
</tr>
<tr>
<td>Back Control Cable</td>
<td>3801-853</td>
</tr>
<tr>
<td>Light Receptacle Option</td>
<td>3625-495</td>
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### Controls

<table>
<thead>
<tr>
<th>Part/Kit Name</th>
<th>Part/Kit No.</th>
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<tbody>
<tr>
<td>J-3 Right Back Switch</td>
<td>3801-894</td>
</tr>
<tr>
<td>J-3 Left Back Switch</td>
<td>3801-895</td>
</tr>
<tr>
<td>V-Chair Right Back Switch</td>
<td>3801-913</td>
</tr>
<tr>
<td>V-Chair Left Back Switch</td>
<td>3801-914</td>
</tr>
<tr>
<td>Delivery Head Touch Pad Option</td>
<td>3625-561</td>
</tr>
<tr>
<td>Touch Pad Assembly</td>
<td>3801-759</td>
</tr>
<tr>
<td>Touch Pad Membrane Switch</td>
<td>3801-760</td>
</tr>
<tr>
<td>Rear Assistant’s Arm Membrane Switch</td>
<td>3801-790</td>
</tr>
<tr>
<td>Touch Pad Circuit Board</td>
<td>3801-761</td>
</tr>
<tr>
<td>Foot Control Option</td>
<td>3625-548</td>
</tr>
<tr>
<td>Back and Foot Control Circuit Board</td>
<td>3801-763</td>
</tr>
<tr>
<td>Foot Control Cord</td>
<td>3801-764</td>
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<tr>
<td>Light Relay Option (115 VAC)</td>
<td>3625-549</td>
</tr>
<tr>
<td>Light Relay Option (220 VAC)</td>
<td>3625-591</td>
</tr>
<tr>
<td>Light Relay Option (24 VAC for power module)</td>
<td>3625-596</td>
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<tr>
<td>Handpiece Safety Switch Option</td>
<td>3625-562</td>
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### Mechanical

<table>
<thead>
<tr>
<th>Part/Kit Name</th>
<th>Part/Kit No.</th>
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</thead>
<tbody>
<tr>
<td>Arm Screw</td>
<td>3800-112</td>
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<tr>
<td>Control Sleeve</td>
<td>3800-113</td>
</tr>
<tr>
<td>Seat Pivot Pins</td>
<td>3801-772</td>
</tr>
<tr>
<td>Spring</td>
<td>3801-445</td>
</tr>
<tr>
<td>Back and Seat Potentiometer Actuator</td>
<td>3801-773</td>
</tr>
<tr>
<td>Air Glide Caster</td>
<td>3801-680</td>
</tr>
<tr>
<td>Air Glide Regulator</td>
<td>3801-791</td>
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<tr>
<td>Air Glide Toggle Switch</td>
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### Hydraulic

<table>
<thead>
<tr>
<th>Part/Kit Name</th>
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</thead>
<tbody>
<tr>
<td>Pump (115 VAC)</td>
<td>3801-774</td>
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<tr>
<td>Pump (220 VAC)</td>
<td>3801-775</td>
</tr>
<tr>
<td>Valve (115 VAC)</td>
<td>3801-776</td>
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<tr>
<td>Valve (220 VAC)</td>
<td>3801-777</td>
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<tr>
<td>Fluid Reservoir</td>
<td>3801-778</td>
</tr>
<tr>
<td>Base Cylinder</td>
<td>3801-429</td>
</tr>
<tr>
<td>Back and Seat Cylinder</td>
<td>3801-783</td>
</tr>
<tr>
<td>Hose (pump to valve)</td>
<td>3801-780</td>
</tr>
<tr>
<td>Hose (base cylinder)</td>
<td>3801-784</td>
</tr>
<tr>
<td>Hose (back and seat up)</td>
<td>3801-781</td>
</tr>
<tr>
<td>Hose (seat down)</td>
<td>3801-782</td>
</tr>
<tr>
<td>Base and Back Cylinder Vent Tubing</td>
<td>3801-418</td>
</tr>
<tr>
<td>Pump and Reservoir Tubing</td>
<td>3801-417</td>
</tr>
<tr>
<td>Hydraulic Oil (one pint)</td>
<td>3801-549</td>
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### Exterior Components

<table>
<thead>
<tr>
<th>Part/Kit Name</th>
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<tbody>
<tr>
<td>Left Arm</td>
<td>3801-745</td>
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<tr>
<td>Right Arm</td>
<td>3801-747</td>
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<tr>
<td>Drive Arm</td>
<td>3801-748</td>
</tr>
<tr>
<td>Brake Cover</td>
<td>3801-755</td>
</tr>
<tr>
<td>Brake Handle</td>
<td>3801-803</td>
</tr>
<tr>
<td>Top Base Cover</td>
<td>3801-787</td>
</tr>
<tr>
<td>Bottom Base Cover</td>
<td>3801-756</td>
</tr>
<tr>
<td>Front Cover Assembly</td>
<td>3801-793</td>
</tr>
<tr>
<td>Pump Cover</td>
<td>3801-737</td>
</tr>
</tbody>
</table>
DentalEZ Group

DentalEZ Equipment Division

J-Chair (Model J-3) and V-Chair

The DentalEZ Group and its employees are proud of the products we provide in the dental community. We stand behind these products with a warranty against defects in material and workmanship as provided below and have our own in-house repair facility to service our products.

In the event you experience difficulty with the application or operation of any of our products, please contact our Customer Service Department at our expense at 1-866-DTE-INFO (1-866-383-4636).

If we cannot resolve the issue by telephone, we will arrange for a representative to contact you or suggest that the product be returned to our factory for inspection.

If product repair or return is required, we will provide you with a Return Authorization number and shipping instructions to return the product to the proper facility. If the product is under warranty, we will ask you to provide proof of purchase, such as a copy of your invoice. Please be sure to include the Return Authorization number on the package you are returning.

Products returned without a Return Authorization number cannot be repaired.

Freight costs for product returns are the responsibility of the customer. Products under warranty will be repaired or replaced at our sole discretion and returned at our expense. Products outside the warranty limits will be repaired and returned with costs invoiced to the customer. We are not responsible for shipping damages. We will, however, help you file a claim with the freight carrier. Written repair estimates are available.

DentalEZ warrants the J/V-Chair to be free of defects in material and workmanship, under normal usage, under the following terms:

The following items are covered under this limited warranty for a period of three (3) years from the date of installation:

• Structures: Base Plate, Castings, Chair Seat and Back
• Hydraulic System: Cylinders, Solenoid Valves and Pump
• Electronics: Master Circuit Board and Foot Control Circuit Board, Chair Control

The upholstery package is covered under this limited warranty for a period of one (1) year from the date of installation.

Please note the following additional terms of our warranty and return policy:

• Warranties cover manufacturing defects only and do not cover costs resulting from abuse, improper handling, cleaning, care or maintenance, normal wear and tear or non-observance of operating, maintenance or installation instructions. Failure to use authorized parts or an authorized repair facility voids this warranty.
• Liability is limited to repair or replacement of the defective product at our sole discretion. All other liabilities, in particular liability for damages, including, without limitation, consequential or incidental damages are excluded.
• THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. NO EMPLOYEE, REPRESENTATIVE OR DEALER IS AUTHORIZED TO CHANGE THIS WARRANTY IN ANY WAY OR TO GRANT ANY OTHER WARRANTY.

WARRANTY REPAIRS: Parts repaired or replaced on a product that is in warranty will be warranted for the duration of that product’s original warranty.

NON-WARRANTY REPAIRS: The warranty on parts either repaired or replaced on an out-of-warranty product will cover the repaired part only and will be for the time frame of a new parts warranty period.

PRODUCT RETURN: Opened product returns more than a year old cannot be returned for credit. There will be a 15% ($25.00 minimum)restocking charge on all items authorized for return.

* Provided conditions defined in the Installation, Operation and Care Manual are met.

V-Chair is a trademark, and DentalEZ, aXes and J-Chair are registered trademarks of DentalEZ, Inc.

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Connections shown in line for clarity.
All wires are black.
Pins 9 through 12 are neutral.
As functions move up, all potentiometer pin #2 voltages increase.
When a relay is not used, a shielded jumper wire is placed in line on the light connection.
When optional switches are not installed, connectors are plugged into each other.
120 & 220 VAC relays connect to the chair light connection.
24 VAC relay connects to the CMU main wire harness through a jumper wire which controls the light common.
International AC connection. Not used in US.