INTRODUCTION

Your new Aseptico ADC-02CF portable hydraulic dental chair provides patient seating for field dentistry and is engineered to provide years of reliable service. Please read the instructions provided in this manual to receive the best service from your Aseptico equipment.

FEATURES
- Easy and quick set-up
- Hands-free hydraulic operation; no external power required
- Chair height and backrest adjustable with patient in chair
- 300 lb (136 kg) load capacity
- Wheels allow chair to be easily moved
- Chair folds down into a compact package
- Quality vinyl upholstery and adjustable pillow headrest
- High-strength steel frame and corrosion-resistant hardware

ITEMS FURNISHED
- Portable hydraulic dental chair [PN ADC-02CF]
- Mil-spec transport case [PN 410209]
- Operation/maintenance manual & parts list [PN 421020]
- Schematic drawing set [PN 421062]
- Setup guide [PN 421061]
SETUP AND OPERATION

1. UNPACKING: Using two people, lift the chair A from the transport case and set it on the floor.

2. MOVING INTO POSITION: Pull out the stabilizer A and use it as a handle to tilt the chair up onto its wheels B, then roll the chair to where it will be used.

WARNING: The backrest strap C must always be securely fastened when tilting the chair upright to prevent injury or damage caused by the backrest suddenly opening.

3. CHAIR PREPARATION: Set the chair down with its feet on the floor. Make sure that the stabilizer A is fully extended. Adjust the leveling foot B as needed to compensate for an uneven floor. Remove the backrest strap C from the chair and save for reuse.

WARNING: The stabilizer must be fully extended and the leveling foot properly adjusted to reduce chair tipping hazard. The floor under the chair must be hard and level.

4. SELECTOR LEVER LABELS: Locate the 2 selector lever labels A on opposite sides of the chair base. These labels show the selector lever positions for lifting and lowering the seat and the backrest.

   SEAT LIFT
   BACKREST LIFT
   LOWER
   LOWER

   The selector lever can be operated hands-free from either side of the chair.

5. SEAT LIFT: Rotate the selector lever A to the SEAT LIFT position (as shown on the label B) then pump the lift lever C with your foot until the chair reaches the desired height.

6. SEAT LOWER: Press down and hold the selector lever A in the SEAT LOWER position (as shown on the label B) to lower the chair.

EXTENDING THE SELECTOR LEVERS

The selector levers can be extended outward to make them easier to reach. Depress the locking button A on the selector lever tube, then slide the selector lever out until the locking button pops out of the second hole B on the tube.
SETUP AND OPERATION (Continued)

7. CONNECTING BACKREST CYLINDER: Lift the backrest A upright while simultaneously guiding the clevis pin B on the end of the backrest cylinder into the latch C on the backrest frame, until they have securely latched D.

8. BACKREST LIFT: Rotate the selector lever A to the BACKREST LIFT position (as shown on the label B) then pump the lift lever C with your foot until the backrest reaches the desired height.

9. BACKREST LOWER: Press down and hold the selector lever A in the BACKREST LOWER position (as shown on the label B) to lower the backrest; it may be necessary to manually push down on the backrest to help it recline.

10. CHAIR PANELS: Unfold the leg panel A and foot panel B.

WARNING: The leg and foot panels must not be used for seating to reduce chair tipping hazard. Patients must only be seated on the main seat panel.

11. ARM SLINGS: Fold out the hand grips A on the arm posts, then insert the hand grips into the ends of the arm slings B.

The arm slings C can be folded up to make it easier to get in and out of the chair.

12. PILLOW: Adjust the height of the pillow A as needed by adjusting the pillow straps B on the rear of the backrest.

CLEARING HYDRAULIC LOCKUPS

Rotate the selector lever back and forth to clear a lockup. A lockup may occur while lowering the seat if the backrest frame comes into contact with the lift lever, causing a conflict between simultaneous lifting and lowering hydraulic operations.

WARNING: Make sure the clevis pin is centered in the latch and not off to one side. Both ends of the clevis pin must be securely latched.

Never attempt to raise the backrest by lifting up on the backrest manually, as this may pull air into the hydraulic system! Only use the lift lever to raise the backrest.

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CLEANING AND MAINTENANCE

CLEANING

Clean the upholstery by wiping with a soft cloth moistened with a mild detergent. Although not recommended, bleach diluted to <10% with water can be used but must be wiped dry immediately. The use of solvents or other solutions may cause damage and void the warranty.

The use of barrier covers will greatly extend the life of the chair upholstery.

PURGING AIR FROM THE HYDRAULIC SYSTEM

If the hydraulic operation of the ADC-02CF feels soft or jerky, the system may need to be purged of air.

With normal use, small amounts of air can enter the hydraulic system. Air may be in the pump, seat or backrest cylinders. Since air will always rise to the top of contained hydraulic oil and there are no bleeder valves, special procedures are required to purge air from the cylinders:

1. **QUICK PURGE:** Put the selector lever (Fig. 1 A) in the SEAT LIFT position and pump the lift lever (Fig. 1 B) with several brisk full strokes. This may simply resolve the problem. If the hydraulic operation is still not satisfactory, proceed to step 2.

2a. **PUMP CYLINDER PURGE:** Put the selector lever (Fig. 2 A) in the SEAT LIFT position. Press down on the lift lever (Fig. 2 B) and hold it there so you can access the rubber bump stop (Fig. 2 C). Remove the rubber bump stop by twisting and pulling on it.

2b. The object now is to force the pump piston all the way into the pump cylinder to purge any trapped air. You will need a flat blade screwdriver with shaft diameter of 3/8” or larger. Push the lift lever all the way down with one hand and with the other hand, place the tip of the screwdriver (Fig. 3 A) between the pump roller (Fig. 3 B) and pump piston (Fig. 3 C). As you allow the lift lever to come up, wedge the screwdriver further down between the pump roller and pump piston. It may take a couple of strokes to wedge the screwdriver in far enough until the lift lever stops where the pump piston has “bottomed out” and all the air has been purged.

If the seat reaches full height before you are able to push the pump piston all the way in, you will need to lower the seat part way to continue.

Complete this operation by reinstalling the rubber bump stop removed in step 2a. If the hydraulic operation is still not satisfactory, proceed to step 3a.

3a. **SEAT CYLINDER PURGE:** Raise the seat (Fig. 4 A) and the backrest (Fig. 4 B) all the way up. Tie the arm slings (Fig. 4 C) loosely over the pillow. Fully extend the stabilizer (Fig. 4 D).
3b. Using the stabilizer (Fig. 5 A) as a handle, tilt the chair up on its wheels until the lift lever (Fig. 5 B) touches the floor; use your foot to keep the base of the chair (Fig. 5 C) from suddenly rolling towards you. Hold the chair in this position and note that the hose end of the seat cylinder (Fig. 5 D) is now oriented up so that any air in the cylinder will be near the hose fitting.

3c. While holding the chair in this position, press and hold the selector lever (Fig. 6 A) in the SEAT LOWER position. The seat will move towards the base, compressing the seat cylinder and draining oil and any air out of the seat cylinder. As the seat (Fig. 6 B) moves toward the base, the backrest will approach the floor. Tilt the chair towards yourself just enough to keep the backrest off the floor so the seat can continue compressing. When the seat has compressed most of the way, this operation is complete. Tilt the chair down with its base on the floor, then test the hydraulic operation.

4a. BACKREST CYLINDER PURGE: If the backrest hydraulics feel soft or jerky, this step may be desired. Start with the backrest (Fig. 7 A) fully up, the seat (Fig. 7 B) halfway up, and the stabilizer (Fig. 7 C) fully extended.

4b. Lift the stabilizer and place it on an elevated surface such as a stool (Fig. 8 A) so that the chair is tilted at approximately 30°. Note that the hose end of the backrest cylinder (Fig. 8 B) is now oriented up so that any air in the cylinder will be near the hose fitting. Place one hand on the seat and push down with your other hand on the backrest (Fig. 8 C) while simultaneously holding the selector lever (Fig. 8 D) in the BACKREST LOWER position with your foot. The backrest will recline. When the backrest is completely down, this operation is done. Put the chair down with its base on the floor, then test the hydraulic operation.

If the hydraulic operation still feels soft or jerky, it may be necessary to perform steps 1 and 2 (page 5) one last time to firm up the action of the lift lever. If that doesn’t resolve the issue, proceed to step 4a.

It is important during steps 3 and 4 that the lift lever not be pumped while the chair is tipped back. Any air in the hydraulic oil reservoir will be near the pump intake and can be drawn back into the pump cylinder, which would require purging the pump again as in step 2 (page 5).
ADDING OIL TO THE HYDRAULIC SYSTEM

With prolonged use, small amounts of oil may leak out of the hydraulic system and need to be replenished. Check the oil level if:

- The hydraulics begin to feel sluggish or jerky and purging air out of the system (page 5) does not resolve the issue.
- The seat or backrest do not reach their maximum height when being raised.

1. Press down and hold the selector lever in the BACKREST LOWER position (Fig. 9 A) while simultaneously pushing down on the backrest (Fig. 9 B) until it is fully reclined.

2. Disconnect the backrest latch from the backrest cylinder and fold the backrest forward, over the seat.

3. Using a 1/4” Allen wrench, remove the oil FILL plug (Fig. 10 A) from the pump cylinder.

   Do not remove the other two plugs on the pump—doing so will introduce air into the hydraulic lines.

4. Press down and hold the selector lever in the SEAT LOWER position until the seat is fully lowered. This will cause the hydraulic oil to rise to its maximum level inside the reservoir.

5. Using a small mirror and a flashlight, look down into the oil fill port and observe the oil level. The oil (yellow-green) should come up to the bottom of the threads (Fig. 11 A). If not, top off with a premium quality, medium-grade hydraulic oil (ISO VG 46, SAE 15), such as Mobil DTE 25.

7. Reinstall the oil fill plug while the chair is still collapsed.

Whenever hydraulic oil has been added to the system, the system should be purged of any air that might have infiltrated the system (see Purging Air From the Hydraulic System, page 5). Confirm that the hydraulics work properly before resuming patient procedures.
DISASSEMBLY

OVERVIEW: When disassembling the ADC-02CF Chair, it is recommended that its modular components be detached and removed in the following order:

1. Backrest Assembly
2. Seat Assembly
3. Hydraulic Assembly (*)
4. Base Assembly

(*) The individual components of the hydraulic assembly are not customer-serviceable and shouldn’t be disassembled in the field. Return to Aseptico if repairs are required.

1 BACKREST ASSEMBLY

Disengage the backrest latch [PN 462239] (Fig. 12 A) from the backrest cylinder.

Use a 3/16” Allen wrench and 1/2” combination wrench to remove the bolts [2x PN 510815], washers [4x PN 510845], spacer washers, [A/R PN 510297] and nuts [2x PN 510126] (Fig. 13 A) that attach the backrest assembly to the seat frame. Note the quantities and positions of the “A/R” (as required) spacer washers between the component frames. These washers should be used as spacers during reassembly to ensure a snug fit. Detach the backrest assembly and set on workbench.

Use a Phillips screwdriver to remove the pillow strap mounting screws [2x PN 510239] (Fig. 14 A) that attach the pillow strap [PN 462313] to the rear of the backrest. Remove strap and pillow [PN 462304]. Use a 5/32” Allen wrench to remove the screws [PN 510841], washers [PN 510500] and bushings [PN 462301] (Fig. 14 B) that attach the arm slings [PN 462289] to the sides of the backrest.

2 SEAT ASSEMBLY

Remove the clevis pin [PN 510917] and cotter ring [PN 510927] (Fig. 15 A) that attach the backrest cylinder to the underside of the seat assembly. Push the cylinder (Fig. 15 B) with attached hydraulic hose backward over the support strap [PN 462291] (Fig. 15 C) and out from under the seat. Rest the cylinder on the floor until the complete hydraulic system can be detached as a unit.

Do not disconnect the hydraulic hose from the cylinder.

Fold the foot and leg panels closed onto the seat panel. Use a 3/16” Allen wrench and 7/16” combination wrench to remove the bolts [2x PN 510842], washers [6x PN 510500] and nuts [2x PN 510296] (Fig. 16 A) that attach the seat frame to the base struts [2x PN 462191]. Note: One washer is installed between the seat frame and each strut. Use a 1/4” Allen wrench and 1/2” combination wrench to remove the bolts [2x PN 510809], spacer washers [8x (A/R) PN 510845] and nuts [2x PN 510126] (Fig. 16 B) that attach the seat frame to the main lever [PN 330614]. Note the quantities and positions of the A/R spacer washers between the component frames; these washers should be used as spacers during reassembly to ensure a snug fit. Detach the seat assembly and set on workbench. Remove the wing nuts [2x PN 510311], bolts [2x PN 510810], rubber washers [4x PN 710138], coved washers [2x PN 510822] and washers [2x PN 510845] (Fig. 16 C) that attach the arm posts to the seat frame. Use an 1/8” Allen wrench to remove the small screws [6x PN 510312] (Fig. 16 D) that connect the arm post components together.
Unfold the leg and foot panels then turn the seat assembly over to expose the underside. Peel back the flaps on the seat cover and check the tie wraps [9x PN 510135] (Fig. 17 A) for tightness. Replace tie wraps as necessary. Because of its vinyl covering, it is not recommended that the chair's foot, leg, or seat panels be disassembled. However, if disassembly is necessary, use a 5/32” Allen wrench and 7/16” combination wrench to remove the foot panel mounting hardware and then use a 1/4” Allen wrench to remove the mounting screws [2 x PN 510048] and adjustment knobs [2x PN 850025] (Fig. 17 B) from the leg panel framework.

3 HYDRAULIC ASSEMBLY

IMPORTANT: When removing the hydraulic assembly, do not disconnect any hydraulic lines nor open any hydraulic port connections. The entire assembly can be detached from the chair as a self-contained system. If the integrity of this closed system is broken, hydraulic oil may need to be added and air may need to be bled from the system.

Lower the main lever frame [PN 330614] (Fig. 18 A) down onto the base frame by holding the selector lever in the SEAT LOWER position. Cut the two tie wraps [PN 510835] (Fig. 18 B) that attach the hydraulic hose to the main lever frame. Remove the cotter ring [PN 510927] and clevis pin [PN 510916] (Fig. 18 C) at the top end of the seat cylinder where it connects to the main lever frame. Lower this end of the cylinder down and rest it on the base until the other end can be detached. Use a 5/16” Allen wrench and 9/16” combination wrench to remove the bolts [2x PN 510847], washers [2x PN 510846] and nuts [2x PN 510811] (Fig. 18 D) that attach the main lever to the base. Note the quantities of the A/R washers between the component frames. These washers should be used as spacers during reassembly to assure a snug fit. Remove the main lever and place it aside. Remove the cotter ring [PN 510927] and the clevis pin [PN 510917] (Fig. 18 E) from the lower end of the seat cylinder.

Use a 3/16” Allen wrench and 7/16” combination wrench to remove the bolts [2x PN 510813], bolt [PN 510339], washers [2x PN 510500] and nuts [2x PN 510296] (Fig. 19 A) that attach the toggle selector link [PN 462218] (Fig. 19 B) to the linkage selector arm [PN 462249] (Fig. 19 C) and selector lever [PN 330625] (Fig. 19 D).

At the opposite end of the linkage selector arm (Fig. 20 A) where it attaches to the pump, use a 5/32” Allen wrench to remove the bolt [PN 510119] and washers [A/R PN 510500] (Fig. 20 B). Note that when reassembling these components, these A/R washers should be spaced on each side of the selector arm as required to center the arm over the selector lever at the opposite end.
DISASSEMBLY (Continued)

Use a 3/16” Allen wrench to remove the bolts [2x PN 510692] and washers [2x PN 510500] (Fig. 21 A) that attach the pump mount stiffener [PN 462259] (Fig. 21 B) and pump (Fig. 21 C) to the base frame. Remove the hydraulic pump, two cylinders and two hoses that comprise the entire hydraulic assembly without disconnecting any hydraulic components nor opening any hydraulic ports.

Disassembly of the hydraulic assembly is not recommended unless a component malfunctions. Refer to the Schematic Drawings (page 14) for configuration details.

BASE ASSEMBLY

Disassembly of the ADC-02CF base is not necessary unless a component breaks. If disassembly is required, remove the primary components as follows:

Use a 5/16” Allen wrench and 9/16” combination wrench to remove the bolt [PN 510812], roller [PN 462233], bushing [PN 520105] and nut [PN 510811] (Fig. 21 D) from the lift lever.

Use a 3/16” Allen wrench to remove the bolts [4x PN 510813] that attach the lever mounting brackets [2x PN 462243] (Fig. 22 A) to the base frame. When removing the lift lever (Fig. 22 B), note the bearing pins [PN 510818] mounted inside each of the mating brackets (Fig. 22 C).

Remove the selector pedals [2x PN 330636] (Fig. 23 A) on each side of the chair by depressing the locking buttons and pulling the selector pedals out of selector lever bar (Fig. 23 B). Use a 3/16” Allen wrench to remove the bolts [4x PN 510813] that attach the pump switch brackets [2x PN 462242] (Fig. 23 C) to the base frame. Use a 3/32” Allen wrench to remove the bearing screws [2x PN 510857]. Remove the selector lever bar [PN 330625] with bearings [2x PN 462511].

Use two 1/2” combination wrenches to remove the bolts [2x PN 510806], bearings [4x PN 520115], spacers [2x PN 510823] and nuts [2x PN 510126] that attach the wheels [2x PN 730679] (Fig. 24 A) to their struts.

The knob [PN 850042] and leveling foot [PN 850044] (Fig. 24 B) and the rubber feet [2x PN 462312 & 1x PN 462390] do not require disassembly or maintenance and can be left attached to the frame.

THIS COMPLETES THE DISASSEMBLY PROCEDURE FOR THE CHAIR.

REASSEMBLY:

To reassemble the chair, follow the above instructions in the reverse order.

Refer to the Schematic Drawings (page 14) for part numbers and configuration drawings when reassembling chair.
REPACKING THE CHAIR

1. ARM SLINGS: Remove the arm slings from the ends of the arm posts, then tuck the arm slings into the frame on the rear of the backrest.

2. ARM POSTS: Rotate the arm posts down just below the seat frame, then fold in the hand grips (Fig. 25 A).

   Make sure the hand grips are positioned below the seat frame before proceeding or damage to the upholstery may occur when folding the leg and foot panels closed.

3. FOAM & PANELS: Place a piece of foam (Fig. 26 A) overlapping the seat and backrest panels. Tie two small pieces of foam (Fig. 26 B) around the arm post pivots. Fold the foot and leg panels closed onto the seat panel.

4. BACKREST PANEL: Flip the pillow (Fig. 27 A) over to the rear side of the backrest. Detach the backrest latch from the cylinder, then fold the backrest down onto the seat panel.

5. LOWER CHAIR: Press and hold the selector lever in the SEAT LOWER position until the seat frame touches the floor. If the seat frame won’t lower all the way, press down on the lift lever and hold it there while simultaneously holding the selector lever in the SEAT LOWER position.

6. SELECTOR LEVERS: If the selector levers are in the extended position, retract each one by pushing in on the locking button, then sliding the selector lever in until the locking button pops out of the inner hole on the selector lever tube.

7. BACKREST STRAP: Tuck the pillow down between the chair framework. Guide the backrest strap (Fig. 28 A) under the main lever frame and over the top of the backrest, then fasten the strap securely.

8. STABILIZER BAR: Fully retract the stabilizer bar.

9. LOADING CASE: Using two people, lift the chair and place it into the transport case. Make sure to position the headrest end (Fig. 29 A) of the chair towards the label (Fig. 29 B) inside the case to prevent the chair from getting scratched by the rivets on the inside of the case.

10. LOCKING CASE: Place the lid on the case and close all 10 latches (Fig. 30 A). The case is equipped with wheels for easy transport.

CAUTION

- ALWAYS LIFT THE CASE USING THE HANDLES PROVIDED.
- WHEN TRANSPORTING CHAIR, DO NOT PLACE HEAVY OBJECTS ON TOP OF THE CASE.
SPECIFICATIONS

Chair Dimensions:
- Chair, Folded: 34”L x 22”W x 18”H (86.4 x 55.9 x 45.7 cm)
- Chair, Extended: 76”L x 24”W x 36”H (193 x 60.9 x 91.4 cm)

Range of Chair Positions:
- Minimum Seat Height: 11” (27.9 cm)
- Maximum Seat Height: 33” (83.8 cm)
- Backrest adjustable from upright (vertical) to supine (horizontal) positions

Chair Weight:
- Chair only: 69 lb (31.3 kg)
- Maximum Load Capacity: Approx. 300 lb (136 kg)

Shipping Case Dimensions:
- Case Size: 25” W x 38” L x 24” H (64 cm x 97 cm x 61 cm)

Shipping Case Weight:
- Case only: 51.5 lb (23.4 kg)
- Fully Loaded: Approx. 121 lb (54.9 kg)

Hydraulic Oil:
- Industrial premium-quality, medium-grade oil (ISO VG 46, SAE 15), such as Mobil DTE 25 or equivalent

REQUIRED TOOLS LIST

Allen Wrenches:
- 3/32"
- 1/8"
- 5/32"
- 3/16"
- 1/4"
- 5/16"

Combination Wrenches (or Socket Wrenches):
- 7/16"
- 1/2"
- 9/16"
- 5/8"

Screwdrivers:
- #2 Phillips
- 3/8” Flathead

Pliers:
- Standard

SYMBOl DEFINITIONS

WARNING – Serious damage, injury or death may result if ignored.

CAUTION – Damage to property, the environment or injury may result if ignored.

Manufacturer

SN Serial number

Do not sit on leg panel or foot panel.

Information – Useful tips or hints.

Authorized European Representative
**TROUBLESHOOTING GUIDE**

**Seat or backrest locks up and cannot be raised or lowered:**
- Refer to Clearing Hydraulic Lockups on page 4.

**When preparing the chair for shipping, the frame posts won't lower all the way to the floor:**
- Press down and hold the selector lever in the SEAT LOWER position and press and hold down the lift lever simultaneously.

**Chair’s hydraulics feel sluggish or jerky when raising or lowering the seat or backrest:**
- Refer to Purging Air from the Hydraulic System on page 5.
- Refer to Adding Oil to the Hydraulic System on page 7.

**Oil is leaking from the hydraulic system:**
- NOTE: Small amounts of oil leaking after prolonged use are normal.
- Tighten all hydraulic hose fittings and port plugs on the hydraulic pump. If leakage persists, contact Aseptico customer service about returning the hydraulic assembly for repairs.

**WARRANTY**

Aseptico warrants this product against defects in material or workmanship for a period of two (2) years, from date of original invoice. Aseptico’s sole obligation under product warranty is (at its sole option and discretion) to repair or replace any defective component or product in part or whole. Aseptico shall be the sole arbiter of such action.

In the event of alleged defect under warranty, the purchaser is to notify Aseptico’s customer service department promptly. Customer service will provide instructions, usually directing that the product be returned for service. Shipment to Aseptico and the cost thereof is always the responsibility of the purchaser.

Accidental misuse, inappropriate installation, or failure to perform directed maintenance voids the warranty. Deliberately defacing, modifying, or removing the serial number voids the warranty.

Aseptico does not assume, under this warranty, any risks or liabilities arising from the clinical use of its products, whether or not such use involves coincidental utilization of products manufactured by others.

**REPAIRS**

Aseptico repairs carry a ninety (90) day limited warranty against defects in material and workmanship. This warranty pertains only to the specific repair. Any new and different defect in materials or workmanship will be treated as a new repair. If the product is not covered under warranty, Aseptico offers repair services for a fee.