GATEWAY
TO THE
FUTURE

KAP
MEDICAL

MODEL K-3OEM

ECONOMY LOW AIR LOSS SYSTEM

OPERATING INSTRUCTIONS

www.kapmedical.com

MODEL K-3OEM

ECO-AIR

ECONOMY LOW AIR LOSS SYSTEM

OPERATING INSTRUCTIONS MANUAL FOR ALL K-3OEM MODELS

GATEWAY TO THE FUTURE

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DANGER:

♦EXPLOSION HAZARD♦
DO NOT USE IN THE PRESENCE OF FLAMMABLE ANESTHETICS

Caution:

- Do not use in the presence of smoking materials or open flame. Air flowing through air mattress will support combustion.
- Risk of electrical shock, do not remove control unit cover.
- Refer servicing to qualified service personnel.

Warning:

- Never drop or insert any object into any opening of the control unit.

MANUFACTURER'S LIABILITY

KAP MEDICAL will be liable for any effects on safety, reliability and performance of the K-3OEM ECONOMY LOW AIR LOSS SYSTEM whenever changes, readjustments, or repairs have been carried out by a factory authorized service center or a technician of KAP MEDICAL, or whenever the control unit and mattress system has been used according to the following operating instructions.

KAP MEDICAL's liability under the warranty is the repair or replacement provided and, in no event, shall KAP MEDICAL's liability exceed the purchase

price paid by the customer of the product. Under no circumstances shall KAP MEDICAL be liable for any loss, direct, indirect, incidental, or special damage arising out of or in connection with the use of this product.

EXPLANATION OF SYMBOLS USED ON THIS DEVICE

SYMBOL	EXPLANATION
Stand By	Control unit Off, with orange led lit indicating the unit still has power internally
SOFT - FIRM	Used to set patient comfort pressure levels, Soft I: lowest setting (6 ± 3 mmHg), Firm: Highest setting (31 ± 2 mmHg)
MAX FLOW	Max flow for rapid inflation of mattress.
PULSE Pressure	Pulse mode to obtain low and high pressure in entire air cells of the mattress. High Pressure can be set.
UPRIGHT	If patient is in fowler position, the unit will boosts pressures to keep the patient from bottoming out.
Alarm Silence	Alarm silence mode to activate or deactivate buzzer.
POWER FAIL	Light flashes along with the buzzer noise in the event of a power outage.
CPR LABEL / Disconnect Connectors	CPR label on the unit: Before administering CPR to the patient disconnect mattress hose from the control unit.

LOCK	Press and hold lock key until it beeps and the light is on, this locks out all control unit function keys including power.
PATIENT SET-UP	Enter patient weight and height, the control unit will automatically set the patient comfort pressure level.
MODE	Mode key will set the desired theraputic function, such as: Static and Pulse therapy.
	**Indicates the point of attachment of the equipment to earth (Grounding Point)**
	**Attention: Instructs end user / care giver / operator to refer to the manual**
	**Indicates that the degree of protection against electrical shock is TYPE BF**
	**Not for use in presence of flammable anesthetics**
	**Risk of electrical shock, do not remove back.**

K-3OEM SYSTEM (Figure -1 Page 12):

The K-3OEM(ECO-AIR) System is a digitally controlled low air loss system used to provide pressure reduction. It consists of a control unit (A) which is used to inflate a mattress replacement system (B) or an overlay system. The control unit is designed to provide continuos static or pulsating pressure at required patient comfort levels. The ABS/PVC blend enclosure houses a high output air

blower (40 CFM), pressure valve, a display and a microcontroller which controls all of the above components, and provides desired patient comfort pressure levels.

The mattress replacement system (B) is comprised of a quick coupling hose assembly (V), a durable cordura base (C) with a "2" safety convoluted foam base, 6"/8" (inflated) air cushions (T) with holes and covered with a vapor permeable, water proof, low friction and low shear nylon quilted top sheet (E) with zipper or straps to fasten the top sheet to the mattress base. The complete mattress system has 10 straps (F) in several areas so it can be easily fastened to any size hospital bed.

K-3OEM ECONOMY LOW AIR LOSS SYSTEM FEATURES

CONTROL UNIT (A) {Figure -2 Page 13}:

- High flow (40 CFM) air output and quiet operating control unit, Max flow mode (W) inflates mattress in 10 ~ 20 seconds depending on the size of the mattress. Has 15 minute Max Flow timer.
- State of the art microcontroller technology unit for accurate patient comfort pressure settings and dynamic times.
- Highly visible display panel (G) displaying current mode (M), and desired patient comfort pressure level (Z).
- Ergonomically designed and easy to operate patient comfort control (K) and mode parameter setting (M), to set mode parameters and comfort levels.

- 3~31mmHg pressure levels of patient comfort control with bar graph (Z) display.
- Static (non alternating) mode.
- PULSE mode (M), high Pulse pressures can be individually set.
- Alarm Silence mode (AS) to mute audio chime.
- Integrated handle/hanger (P) for easy carrying and hanging the control unit from the footboard of the bed.
- 14' long detachable 16 AWG hospital grade power cord (Q).
- Durable, attractive and rugged 1/2" flow connector (R) for quick connection and disconnection (CPR deflation).
- Control unit has a short circuit / over voltage protection with fused IEC connector (S).

SUPPORT SURFACE MATTRESS (B) {Figure - 1 Page 12}:

- Self-contained five pressure zoned mattress replacement system (B) with easily detachable components for cleaning.
- Detachable urethane coated, nylon taffeta, flame retardant / water repellent, mildew resistant, low friction and low shear. 8" high (inflated) lateral tubular 20~21air cushions (T) with holes for low air loss.
- Detachable zippered or strapped highly breathable urethane coated, 70 Denier nylon, flame retardant / water repellent, highly vapor permeable, anti-microbial, low friction and low shear quilted reusable top sheet (E).
- 2" convoluted safety foam enclosed in the base (C) to support the patient in the event of loss of air pressure in the mattress.

- The mattress has a connector hose assembly (V) with easy to use quick connect and disconnect connector (R).

TECHNICAL SPECIFICATIONS

ELECTRICAL SPECIFICATIONS

(Auto Switch Universal Power Input)
Input Voltage AC: 88 ~ 132 / 176 ~ 264V
Input Frequency: 47 ~ 63 Hz
Current: 2A
Power Consumption: 220 W

Circuit Protection: Fused
(Fast Acting Fuse): 250V, 5A
Mode Of Operation: Continuous

PERFORMANCE SPECIFICATIONS

Max Flow: 40 CFM
Max Flow Pressure: 35 ± 4 mmHg
Max Flow Timer: 15 minutes
Support Surface
Inflation Time: <1 minute

Patient Comfort Control Pressures

Min Pressure: 6 ± 4 mmHg
Max Pressure: 35 ± 6 mmHg

MECHANICAL SPECIFICATIONS

Control Unit (A)

Dimensions, LxWxH:	12" x 5 3/4" x 10 .5" (29.54cm x 14 x 27cm)
Weight:	14 lbs. (6 Kgs)
Power Cord:	14' Long detachable 16 AWG Hospital Grade
Connection:	1/2" flow quick disconnect connector
Packaging:	1Piece per Box

Support Surface (B)

Description	Inflated Dimensions LxWxH	Weight
Various Sizes and custom sizes available, 36", 39", 42", 48", 54", 60", 76" wide mattress.		
Mattress:	80"x36"x8"/10" (203x89x20.4/25.5cm)	24 lbs. 11 Kg.

ENVIRONMENTAL SPECIFICATIONS

Operating Conditions:

Ambient Temperature:	40° ~ 104° F 10° ~ 40° C
Relative Humidity:	30% ~ 75% Non-Condensing
Atmospheric Pressure:	700 hPa to 1060 hPa

Storage And Shipping Conditions:

Ambient Temperature:	-40° ~ 158° F -40° ~ 70° C
Relative Humidity:	10% ~ 100%
Atmospheric Pressure:	500 hPa to 1060 hPa

Protection Against Harmful Ingress Of Liquids:
Ordinary Protection (IPXO)

SAFETY AGENCY APPROVALS

ETL Listed:

To standard for safety of Medical Electrical Equipment

Conforms To: UL STD 2601-1 with respect to Electrical Shock, Fire and Mechanical Hazards

Certified To: CAN/CSA STD C22.2 No. 601.1

CE Mark: CE

SAFETY INSTRUCTIONS

- To avoid damaging your K-3OEM control unit (A), before operating be sure the AC power (X) available at your location matches the power requirements printed on the boiler plate label on the back of the control unit.

- To avoid electric shock, always plug in the power cord of the control unit into a properly grounded power source (X).

- Do not insert items into any openings of the control unit (A). Doing so may cause fire or electrical shock by shorting internal components.

- Do not spill liquids or food on or into the control unit (A). In the event of any spillage, immediately turn off the control unit and disconnect it form the power source (X). Send the control unit for servicing by a factory authorized service technician.

- Care should be taken such that the inlet air vent of the control unit (A) is not blocked, and kept away from any heat sources or radiators during the operation of the unit.

- Care should be taken such that the power cord (Q) of the control unit is not pinched, or has any objects placed on it, and also ensure it is not located where it can be stepped on or tripped over.

- Do not attempt to service the control unit except as explained in this operating instructions manual, contact factory for servicing instructions. Always follow operating and service instructions closely.

♦ **WARNING:** Before opening the control unit (A) enclosure, make sure the control unit is turned off and unplugged from its power source (X). The control unit enclosure should only be opened by a factory authorized qualified service technical personnel. ♦

SYSTEM SET-UP

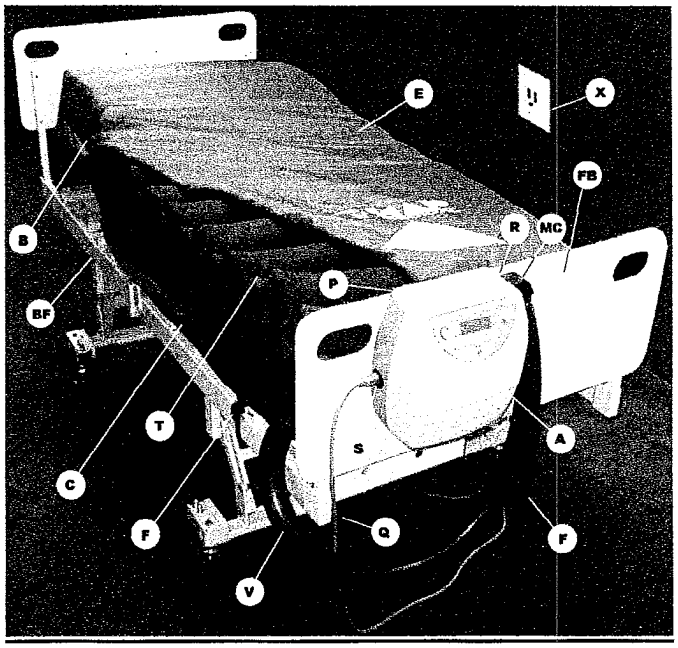

Figure - 1

PLEASE NOTE: K-3OEM LOW AIR LOSS System must be installed on bed frames that are equipped with side rails. Please raise side rails on the bed and lock them in position after the patient is on the mattress. NEVER LEAVE PATIENT UNATTENDED ON MATTRESS SYSTEM WITH BED SIDE RAILS IN THE DOWN POSITION.

CONTROL UNIT SET-UP

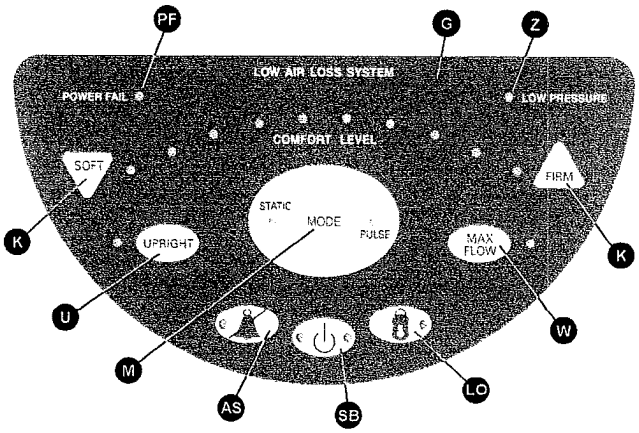

Figure - 2

Refer To The Diagram On Page 13

1. Before using the K-3OEM 5 ZONE DIGITAL TRUE LOW AIR LOSS Mattress Replacement System, remove any non K-3OEM mattress replacement system from the bed frame (BF).

2. Unroll the K-3OEM mattress (B) and place it on the bed frame (BF). Note: Make sure hose assembly end of the mattress is towards the foot of the bed.

3. There are ten nylon black straps with buckles (F), two strap at the head of the mattress, two on the foot of the mattress, and three on each side of the mattress. Loop each strap around the bed frame and fasten it securely to the bed frame using the buckle.

4. Pull the hanger (P) on the back of the control unit (A) and suspend the control unit from the footboard (FB) of the bed frame (BF). If the bed frame you are using does not have a footboard, place the control unit (A) on its feet on a flat surface underneath the bed near the foot of the bed frame (BF). **Note:** Care should be taken such that the air inlet vent, or (air filter) on the control unit is not covered, and the control unit is not placed on the floor in such a manner that it is a hazard for flow of traffic.

5. Press On/Std. By switch (SB) to "Stand By" (Off) position. Uncoil the power cord (Q) and plug the cord into the appropriate AC power source (X), which is properly grounded. The control unit will go through the system

initialization routine and once it is complete the display will read stand by and the orange stand by led lights up. **Note:** Care should be taken such that the power cord (Q) of the control unit is not pinched, or has any objects placed on it, and also ensure it is not located where it can be stepped on or tripped over.

6. Connect the matting hose connector (MC) on the mattress hose assembly (V) into the connector (R) located on the top right side of the control unit (A) respectively and lock them in place. Note: Press mating connectors in place until the connectors are flat. Also care should taken, such that the mattress hose is freely suspended with out being pinched or kinked.

OPERATING INSTRUCTIONS

Refer To The Diagram On Page 13

1. Make sure the mattress hose assembly (V) is connected securely to the control unit (A).

INITIAL POWER UP

2. During initial power up (when the power cord (Q) is plugged into the power source), the control unit (A) will go through a system initialization routine for few a seconds. Once the routine is complete the display (G) will display current mode or "STAND BY" mode.

3. If the unit is in stand by mode (SB), only the amber led on the power switch will be lit. Once the power switch (SB) is turned on, press the MAX FLOW switch (W), the blower will come on full blast.

4. If the power comes on after a power outage, the control unit will go through the system initialization routine for a few seconds, and then display the current mode function and the current comfort control level. The control unit will resume the desired function.

MAX FLOW (W)

5. This mode is used to rapidly inflate the mattress. During this mode a series of beeps will sound every 3 minutes as a reminder that MAX FLOW mode has been activated. MAX FLOW mode will be activated for 15 minutes. After 15 minutes the unit will resume the previously set mode and display the current settings. During the MAX FLOW mode the mattress will not exceed more than 35 $\pm$ 5 mmHg pressure. Note: The audible beep can be muted if desired by activating alarm silence mode.

6. The mattress (B) will inflate to its normal size in 10 $\approx$ 20 seconds. (Inflation time depends on the size of the mattress).

7. To set MAX FLOW mode (W) gently press the switch until the green LED lights up.

MODE (M)

STATIC

8. To set STATIC mode gently press the mode switch (M) the green LED turns off. The comfort control level bar graph will display the desired patient comfort pressure level.

9. In the STATIC mode all the air cushions in the mattress will be maintained at a constant desired patient comfort pressure level.

PULSE (M)

1. To set PULSE mode (M) gently press the Mode switch (M) the pulse green LED lights up. The PULSE time is 30 seconds using the comfort control (K) set the patient comfort level.

2. For every 30 seconds the pressures in zones of the entire mattress will be lowered to 50% of the comfort level set, for a few seconds and back to set pressures. This will repeat for every set.

Alarm Silence (AS)

1. During "MAX FLOW" mode the unit will beep twice every 3 minutes to indicate the caregiver that the unit is in "MAX FLOW" mode, and also in the event of the control unit sensing an abnormal condition, such as low pressure or power outage an audio visual signal will be activated to alert the care giver. If desired the care giver can mute the audible signal by

activating the Alarm Silence mode (AS) to keep the patient from being disturbed.

2. To set Alarm Silence (AS) press the "Alarm Silence" key until the blue LED lights up. To deactivate the "Alarm Silence" press "Alarm Silence" key until the blue LED turn off.

Lock Out (LO)

1. During "**Lock Out**" mode all the control unit functions and keys including the power key will be locked out to avoid tampering of the patient settings.

2. To activate lock out (LO) press and hold "Lock Out" key until the blue LED lights up. To deactivate "Lock Out" press and hold "Lock Out" key until the blue LED turn off.

PATIENT COMFORT CONTROL LEVEL (Z)

1. Use Soft and Firm keys (K) to adjust patient comfort pressure level.

2. The K-3OEM standard mattress is designed for patients weighting between 50 ≈ 350 lbs. (22 Kgs. ≈ 160 Kgs.). By pressing the comfort control (K) SOFT key reduces the pressure setting, and by the FIRM key increases the pressure. The patient comfort pressure ranges from SOFT 6 ± 4 mmHg to FIRM 32 ± 6 mmHg, The mattress inflation and deflection pressure is monitored by the microprocessor and processor depending on the desired patient comfort level increases or

decrease the speed of the air pump to provide the appropriate air flow into the mattress to maintain the desired pressure in the mattress.

3. Once the mattress is inflated to its normal size with the patient lying on it, set the COMFORT CONTROL LEVEL keys to the desired patient comfort position. Custom patient comfort level can be achieved by adjusting the comfort control level keys to softer or firmer settings. Wait a few minutes for the mattress pressure to stabilize, verify the appropriate pressure required to support the patient by performing a simple "four finger check". Make sure that the patient is lying flat on his or her back in the middle of the mattress. Place four fingers directly underneath the sacral region of the patients body, there should be a minimum of 3 to 4 finger width clearance between the bottom of the patient and the safety foam base. Repeat this procedure until the desired patient comfort pressure is achieved.

Note: The K-3OEM mattress system is a five pressure zone system. Head, Back, Torso, Leg and Foot, each zone has different pressure to conform to the anatomy of the human body.

RECOMMENDED PRESSURE SETTINGS

4. For rapid inflation of the mattress press "Max Flow" key until "Max Flow" green LED turns on.

5. For extra firm support during Patient ingress /egress, Patient wound care, Patient turning, or Patient cleaning it is recommended to set the comfort control key to max comfort control settings.

6. During patient Upright (fowler) (U) positioning or in case of Patients who's weight to height ratio is below the normal average, it is recommended to set the comfort control key to 10% more than their actual weight settings.

UPRIGHT (U):

1. This mode is selected during the patient is in fowler position (when the bed frame is articulated to fowler position). In upright mode the unit will maintain 31± 4 mmHg in the Torso section of the mattress in order to float the patient without the patient being bottomed.

FAILURE MODES

LOW PRESSURE ALARM

1. In the event of the control unit sensing an abnormal condition, such as low pressure (mattress hose disconnection) the microprocessor will activate an audiovisual signal to alert the caregiver by flashing "LOW PRESSURE" on the display and turning on the buzzer. Once the failure mode is corrected the audiovisual signal will cease and the unit starts operating its set mode.

P0WER FAIL (PF)

2. In the event of the control unit sensing an abnormal condition, such as power outage the microprocessor will activate an audio visual signal to alert the care giver by flashing the orange "POWER FAIL" LED and turning on the buzzer. The display goes blank during this failure mode. Once the failure mode is corrected the audiovisual signal will cease and the unit starts operating its set mode.

CPR FUNCTION

Refer To The Diagram On Page 12 & 13
NOTE : The mattress should be deflated before performing CPR on the patient.

1. To deflate the mattress or for CPR function, disconnect the mattress hose assembly (V) from the control unit connector (R) by pressing the mattress connector (MC) and pulling the connector straight out from the control unit connector (R).

2. In case of CPR emergency, for quick deflation of the mattress unzip the top sheet from the foot to the head by pulling the zipper located by the patient's right foot, near the exit location of the hose assembly. Disconnect a few air cushions, which are directly below the patient's chest from the mattress by pressing the quick release button on the connector with one hand and pulling the air cushion connector with the other.

CLEANING PROCEDURE

WARNING

CONTROL UNIT

- Before attempting to clean the U.S., or the International control unit, turn off the unit and disconnect the control unit power cord from the power source. ♦
- ♦ **DO NOT HEAT, STEAM AUTOCLAVE, OR IMMERSE THE CONTROL UNIT IN LIQUIDS** ♦

1. Wear eye goggles and rubber gloves before starting the cleaning procedure.

2. The following germicidal detergent / disinfectant is recommended by the EPA as hospital disinfectants.

   a. Johnson Wax, Virex 128, EPA Registration Number 47371-130-4822.

   b. Quaternary Detergent-Disinfectant by Airkem Professional Products, Division of Ecolab, Inc., Ecolab Center, St. Paul, Minnesota. EPA registration number: EPA # 42964-5.

   c. Hi-Tor Germicidal Detergent by Huntington Laboratories, Inc. Huntington, Indiana. EPA registration number: EPA # 303-91.

Note: A fresh spray bottle of disinfectant / detergent solution should be prepared every day to clean the control unit.

3. By following the preparation instructions provided with the germicidal detergent /disinfectant solution, prepare the required amount of disinfectant solution or mild detergent solution.

4. Pour required amount of the germicidal solution into a spray bottle.

5. Using a brush or a cloth wipe off dust. If necessary, spray the exterior of the control unit, power cord and the cord plug with the prepared disinfectant / detergent solution. Using a damp cloth wipe down the sprayed surface cleanly. **Note: Do not spray excess amount of solution on the control unit.**

6. Once the control unit is clean, wipe the unit, the power cord and the cord plug down dry with a clean dry cloth.

7. Place the control unit to dry in a cool and dry area for an hour before operating the unit again. If the control unit is not used immediately place the control unit in a plastic bag and store it in a storage area.

8. After the cleaning operations are completed remove and dispose the rubber gloves appropriately. Wash your hands thoroughly with antibacterial soap.

MATTRESS

9. Wear eye goggles and rubber gloves before starting the cleaning procedure.

10. Follow steps 2 through 4 above to prepare disinfectant solution.

11. Using a damp cloth wipe down the air cushions and the mattress base. Once the air cushions and the base are clean, wipe them down dry with a clean dry cloth.

12. Air cushions should be washed periodically, top sheet will require more frequent washing. Set the wash cycle to heavy load with warm water. Once the water is full add manufacturer suggested quantity of laundry detergent and/ or standard hospital disinfectants. If the air cushions or the top sheet becomes soiled with human waste or blood, clean immediately by wiping down. Use hospital recommended laundry detergent and/ or disinfectant per manufacturer's instructions. **Note: Use non-chlorine bleach detergent.**

13. Once the wash cycle is complete, make sure excess water from inside the air cushions is completely removed. Set the dryer to the lowest heat settings, and operate the dryer until the air cushions or the top sheets are completely dry.

14. Leave the mattress to dry in a cool, dry area for an hour before using. If the mattress is not used immediately roll the mattress and insert it into a plastic bag and store it in a storage area.

15. After the cleaning operations are completed remove and dispose the rubber gloves

appropriately. Wash your hands thoroughly with antibacterial soap.

CARE AND STORAGE

1. When the control unit is not in use, turn off the unit, disconnect the power cord from the power source and wrap the cord around the control unit. Wrap the control unit and the power cord in a plastic bag and cable tie it so that dust cannot enter the bag.

2. Roll the mattress and place it in a plastic bag and tie wrap the bag.

3. Store the control unit and the mattress in a storage area designated to medical electronic product storage.

TROUBLESHOOTING GUIDE

THE FOLLOWING INFORMATION IS FOR FACTORY AUTHORIZED SERVICE FACILITIES AND FACTORY QUALIFIED SERVICE PERSONNELL ONLY

KAP MEDICAL will make available on request service manual, circuit diagrams, component lists, calibration instructions, quality control acceptance test procedures, or other information which will assist the factory qualified technical personnel to repair those items deemed repairable by the manufacturer.

PROBLEM	CAUSE	SOLUTION
A. Mattress Not Inflating / Not Alternating Properly	1. Mattress hose disconnected.	1. Connect hose connectors and lock them in place.
	2. Air hose kinked or split.	2. Un kink hose or replace split hose.
	3. Major leak in the air cushions or overlay pad.	3. Replace leaking air cushions or overlay pad.
	4. Kinked or split manifold.	4. Un kink manifold or replace split manifold.
	5. Control unit not working.	5. Send control unit back to factory for repair.
	6. Valve malfunction.	6. Send control unit back to factory for repair.

B. No Power	1. Control Unit OFF.	1. Check power source and turn on unit.
	2. Power cord disconnected.	2. Connect power cord to the power source.
	3. No power in the power source.	3. Check power source has power and turn it "ON".
	4. Power outage.	4. Wait till the power source has power.
	5. Blown fuse.	5. Replace blow fuse with an equivalent fuse.

PREVENTIVE MAINTENANCE

It is important to periodically test the K-3OEM unit to verify the proper functionality. If the control unit air pressure reading is out of specification, it can result in poor or reduced patient support.

PLEASE CLEAN FILTER EVERY 5 MONTHS. Remove 2 filter screws and separate filter foam. Wash filter foam using soap and water, dry and replace filter back on the unit and fasten screws.

NOTE: All preventive maintenance service, performance and electrical tests, or repairs should be performed only by factory authorized and qualified technical personnel.

Preventive Maintenance Schedule

The following tests should be performed every 6 to 9 months and all test data should be recorded, a device history record on each control unit should be maintained.

1. Electrical Tests

   The following or similar Hi-pot Tester and Electrical Current Leakage Analyzer should be used to perform electrical tests.

   a. ROD-L Hi-pot Tester (120 / 240 Models)
   b. Bio-Tek Analyzer, (120V AC Models)
   c. Bio-Tek Analyzer, (220 / 240V AC Models)

   To perform the leakage current test on the control unit please follow the manufacturers or factory authorized test instructions for

setting-up and performing the electrical tests.

Caution: Risk of electrical shock, proper precautionary measures should be taken while performing electrical tests.

A. Hi-pot Test

If no alarm sounds, or no red "fail" light appears, the test is complete in about 60 seconds. The control unit passes Hi-pot test.

B. Leakage Current Test

Switch function key to leakage current position and test the following power configurations.

Polarity Switch	Ground Switch
1. Normal Polarity	Closed Ground
2. Reverse Polarity	Closed Ground
3. Reverse Polarity	Open Ground
4. Normal Polarity	Open Ground

120 V Models
PASS $\leq$ 100 μA
FAIL $>$ 100 μA

220 / 240 Models
PASS $\leq$ 500 μA
FAIL $>$ 500 μA

C. Ground Impedance Test

Switch the polarity switch to "OFF" and function switch to ground wire resistance position.

120V and 220 / 240V Models

PASS ≤ .1 Ω

FAIL > .1 Ω

2. Performance Tests

The following Flow and Pressure gauges should be used to perform functional tests.

a. Flow gauge, 0 ~ 50 CFM
b. Pressure gauge, 0 ~ 50 mmHg
c. Quick disconnect dual hose assembly

To perform the functional tests on the control unit please follow the factory authorized test instructions for setting-up and performing the functional tests.

A. Flow Test

Connect the dual hose connector to the control unit and the flow gauge. Turn on the unit and set the comfort control knob to max weight position, record flow reading.

PASS ≥ 30 CFM

B. Pressure Test

Connect the dual hose connector to the control unit and the pressure gauge. Turn on the unit and set the

comfort control knob to Soft / Firm position, record reading. Set mode knob to Max Flow position and record data.

Note: Since the test is performed without the mattress connected to the control unit, the minimum pressure in one of the air outlet ports will be zero.

120 and 220 /240 V AC Models

Soft Position
PASS - 4 ~12 mmHg

Firm Position
PASS - 26 ~ 36 mmHg

Max Flow Position
PASS - 28 ~ 38 mmHg

ACCESSORIES

K-3OEMMS: K-3OEM Control Unit & Mattress System.
K-3OEMMS39, K-3OEMMS48, K-3OEMMS54, K-3OEMMS60, K-3OEMMS76: K-3OEM Control Unit & Bariatric Mattress.
K-3OEM: K-3OEM Control Unit.
K-3OEMM: Mattress Replacement System.
K-3OEMM39, K-3OEMM48, K-3OEMM54, K-3OEMM60, K-3OEMM76: K-3OEM Bariatric Mattress Replacement System.

K-136, K-139, K-148, K-154, K-160, K-176: Standard and different size Bariatric quilted Breathable Top Sheet.

♦ **Note:** To place an order or if you have any questions regarding the K-3OEM control unit and its warranties, please call the KAP MEDICAL customer service at 951 340 4360, email: sales@kapmedical.com. ♦

WARRANTY

KAP MEDICAL warrants the K-3OEM control unit and the mattress for a period of ONE (1) year from the original date of purchase.

KAP MEDICAL standard warranty is extended to the original buyer purchasing the equipment directly from KAP MEDICAL or through its authorized dealers. All warranty periods, where applicable, commence on the date of purchase from KAP MEDICAL or its authorized dealers.

KAP MEDICAL's sole obligation and liability under this warranty is limited to (at KAP MEDICAL's option) the repair or replacement by KAP MEDICAL's authorized personnel of any parts or assemblies, which upon test and examination by KAP MEDICAL, prove to be defective. This equipment may be returned prepaid to KAP MEDICAL after notification has been given and approval obtained for the return. Please call your KAP MEDICAL sales representative or the Customer Service phone number to arrange for warranty services.

KAP MEDICAL's liability under the warranty is the repair or replacement provided and, in no event, shall KAP MEDICAL's liability exceed the purchase price paid by the customer of the product. Under no circumstances shall KAP MEDICAL be liable for any loss, direct, indirect, incidental, or special damage arising out of or in connection with the use of this product.

The control unit warranty does not cover normal maintenance such as cleaning, periodic electrical tests, performance tests, and updating of equipment or parts thereof. This warranty shall be void and not apply if the control unit, including any of it's parts, is modified without KAP MEDICAL's written authorization, is attempted to be repaired by personnel not authorized by KAP MEDICAL, is not maintained in accordance with the prescribed preventive maintenance schedule, is used with accessories or parts not authorized by KAP MEDICAL, or is damaged due to misuse, mishandling, abuse, negligence, accident, fire, or inadequate packaging by owner for shipment of the control unit for service, upgrade, repair, retrofit, or product return. All reasonable freight charges for valid factory approved warranty returns will be reimbursed. KAP MEDICAL makes no guarantee of clinical results.

♦ **THE WARRANTY STATED ABOVE (INCLUDING ITS LIMITATIONS) IS THE ONLY WARRANTY MADE BY KAP MEDICAL AND IS IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. KAP**

ORIGINAL

MEDICAL SHALL NOT BE LIABLE FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES OF ANY KIND♦.

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