

REF PAL-650 MicroAire® PAL® System

Instructions for Use



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For Surgery. For Life.™

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本 明 的 中 文 本 可 在 网 上 www.microaire.com/resources.

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日本語 (Japanese)

このマニュアルのデンマークの翻訳がオンラインで入手可能です www.microaire.com/resources.

INDICATION FOR USE

The MicroAire PAL System is indicated for the removal of tissue or fluid from the body during general surgical procedures, including suction lipoplasty for the purpose of aesthetic body contouring.

CONTRAINDICATIONS

Patients with chronic medical conditions, such as diabetes; heart, lung, or circulatory system disease; or obesity are contraindicated for the MicroAire PAL System.

APPLICABLE PART NUMBERS*

REF Number	Description
REF CAP-600E	Washer Disinfectant Cap
REF PAL-730	PAL Manual Wand
REF PAL-500	PAL Sterilization Case
REF PAL-1200	PAL Single-Use Aspiration Tubing (12 foot), 5 PK
REF 1020	Standard Electric Console (IEC 60601-1 2nd Edition)
REF 5020	Electric Power Console
REF PAL-650	PAL Electric Handpiece

APPLICABLE PART NUMBERS (continued)

– TYPE BF APPLIED PARTS

REF Number	Description
REF 1006-PALE	PAL Electric Handpiece Cable (for use with REF 1020)
REF 5006-PAL	PAL Electric Handpiece Cable
REF PAL-700	PAL Single-Use Luer Lock Adapter
REF PAL-XXX	PAL Single-Use Aspiration Cannula
REF PAL-XXXB	PAL Single-Use Bent Aspiration Cannula
REF PAL-XXXT	PAL Single-Use Turbo Aspiration Cannula
REF PAL-RXXXXXX	PAL Multi-Use Cannulas

*See www.microaire.com for cannula part numbers and specifications.

MARKINGS	DEFINITION	MARKINGS	DEFINITION
	Follow Instructions for Use.		Caution; specific warnings or precautions associated with medical device, consult IFU.
	Consult Instructions for Use (IFU).		DO NOT Reuse
	DO NOT use if packaging is damaged		DO NOT Immerse
	DO NOT Lubricate		DO NOT expose to stray magnetic fields
	Non Sterile	STERILE R	Sterilized Using Irradiation
STERILE EO	Sterilized Using Ethylene Oxide	REF	Product Catalog Number
SN	Product Serial Number		TYPE BF Applied Part
EC REP	Authorized European Representative	LOT	Lot Number Example (1010775891)
	European Conformity Mark		Part, On
	Part, Stand-By		Humidity Limitations
	Atmospheric Pressure Limitation		Date of Manufacture YYYY-MM
	Manufacturer		Expiration Date YYYY-MM
	Temperature Limitations	R_{only}	Caution: Federal Law (U.S.A.) restricts this device to sale by or on the order of a physician (or properly licensed practitioner)
	MEDICAL-GENERAL MEDICAL EQUIPMENT AS TO ELECTRIC SHOCK, FIRE, AND MECHANICAL HAZARDS ONLY. IN ACCORDANCE WITH ANSI/AAMI ES 60601-1 (2005) + A1 (2012) + CAN/CSA C22.2 No. 60601-1 (2014) Control Number: E494242		
	Waste Electrical and Electronic Equipment (WEEE) European Community Symbol. Regarding Electrical Equipment European Union end of life of product, indicating separate collection for electrical and electronic equipment. ALWAYS follow the current local recommendations and/or regulations governing environmental protection and the risks associated with recycling or disposing of the equipment at the end of its usual life.		

GENERAL WARNINGS

WARNING Used to indicate that the safety of patients and hospital personnel could be involved.
CAUTION Used to indicate procedures that must be followed to avoid damaging an instrument.
NOTE Used to indicate the easiest means of carrying out the techniques.

WARNING: See IM-5025 Instruction Manual for detailed information on the 5020 Electric Instrument Console.
See IM-1020 Instruction Manual for detailed information on the 1020 Electric Console.

WARNING: Use care to ensure that there is no electromagnetic interference between these devices and other devices in use. See IM-5025 for EMC information.

WARNING: This device will not, in and of itself, produce significant weight reduction.

WARNING: The volume of blood loss and endogenous fluid loss may adversely affect intra and/or postoperative hemodynamic stability and patient safety. The capability of providing adequate, timely replacement is essential for patient safety.

WARNING: Failure to comply with maximum intended re-use may result in injury to patients.

CAUTION: This device is designed to contour the body by removing localized deposits of excess fat through small incisions.

CAUTION: Use of this device is limited to those physicians who, by means of formal professional training or sanctioned continuing medical education (including supervised operative experience), have attained proficiency in suction lipoplasty.

CAUTION: Results of this procedure may or may not be permanent.

CAUTION: Results of this procedure will vary depending upon patient age, surgical site, and experience of the physician.

CAUTION: The amount of fat removed should be limited to that necessary to achieve a desired cosmetic effect.

CAUTION: Federal Law (USA) restricts this device to sale by or on the order of a physician (or properly licensed practitioner).

SYSTEM SETUP AND OPERATION

Make sure unit functions properly prior to use. If not, contact MicroAire for service repair.

1. Inspect the Handpiece, Console, Cable and Cannulas for damage, corrosion or excessive wear.
2. Inspect sterile disposable items to make sure packaging is not damaged.
3. Attach the electrical connection cable from the back of the Console (REF 5020) to a wall outlet.
4. To attach the Cable (REF 5006-PAL) from the Console to the PAL Handpiece (REF-PAL-650), locate the end of the Cable with the tethered end caps. To remove the caps pull back on the collar with one hand (*Figure A*) while removing the cap with the other hand (*Figure B*). With the white dot on the Cable facing upward, insert the Cable into either of the two Cable receptacles on the front of the Console. Attach the other end of the Cable to the PAL Handpiece by aligning the red dot on the Cable with the red dot on the Handpiece.

CAUTION: DO NOT twist or force the Cable pins into the receptacles. Doing so can bend the pins.

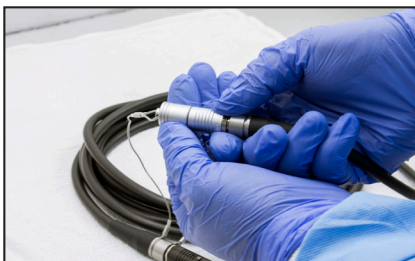


Figure A - Pull back on collar with one hand



Figure B - Remove the cap with other hand

5. To attach a Cannula (REF PAL-XXX, REF PAL-XXXB, REF PAL-RXXXXXX, or REF PAL-XXXT) to the PAL Handpiece, place the thumb-throttle of the PAL Handpiece in the STAND-BY position (PAL-650 only). Slide the small end of PAL Tubing (REF PAL-1200) onto the end of the Cannula (*Figure C*). Attach the square opening of the Cannula hub onto the corresponding square shaft of the PAL Handpiece, with the Tubing on the bottom of the Handpiece (*Figure D*). Secure the Tubing along the underside of the PAL Handpiece by pushing the Tubing into the groove on the bottom of the PAL Handpiece (*Figure E*).

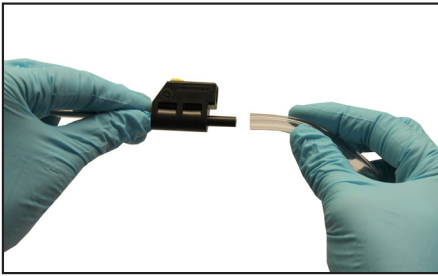


Figure C - Attach PAL tubing to cannula



Figure D - Attach hub to PAL Handpiece



Figure E - Push Tubing into PAL Handpiece

6. Connect the large end of the Tubing to a collection canister.

NOTE: Only use MicroAire Aspiration tubing (REF PAL-1200); Using other tubing may result in tubing failure and unfavorable results.

WARNING: Do not use the Cannula to lift or elevate tissue. Avoid excess loading and bending of the Cannula tip. Inspect after each use for defects. Discard if defects are found to avoid potential injury.

7. To operate the powered reciprocation of the PAL Handpiece, gently slide the thumb-throttle from STAND-BY to ON. Use the thumb-throttle to adjust the speed of reciprocation during the procedure; use the Console to set the maximum speed. The PAL Handpiece is designed to operate at full speed for most procedures.

8. To remove the Cannula from the PAL Handpiece, stop the reciprocation by sliding the thumb-throttle to the STAND-BY position. Pull the Tubing out of the groove on the underside of the PAL Handpiece. Press the colored tab on the Cannula hub to release the Cannula from the shaft, and slide the Cannula off of the PAL Handpiece.

DUTY CYCLE

PAL-650: The PAL Electric Handpiece operating duty cycle is 2 hours ON, 2 hours OFF.

CLEANING AND STERILIZATION

WARNING: Universal precautions for handling contaminated materials should be observed at all times.

CAUTION: All multi-use components of the device must be sterilized and all disposable components replaced before using the system on another patient.

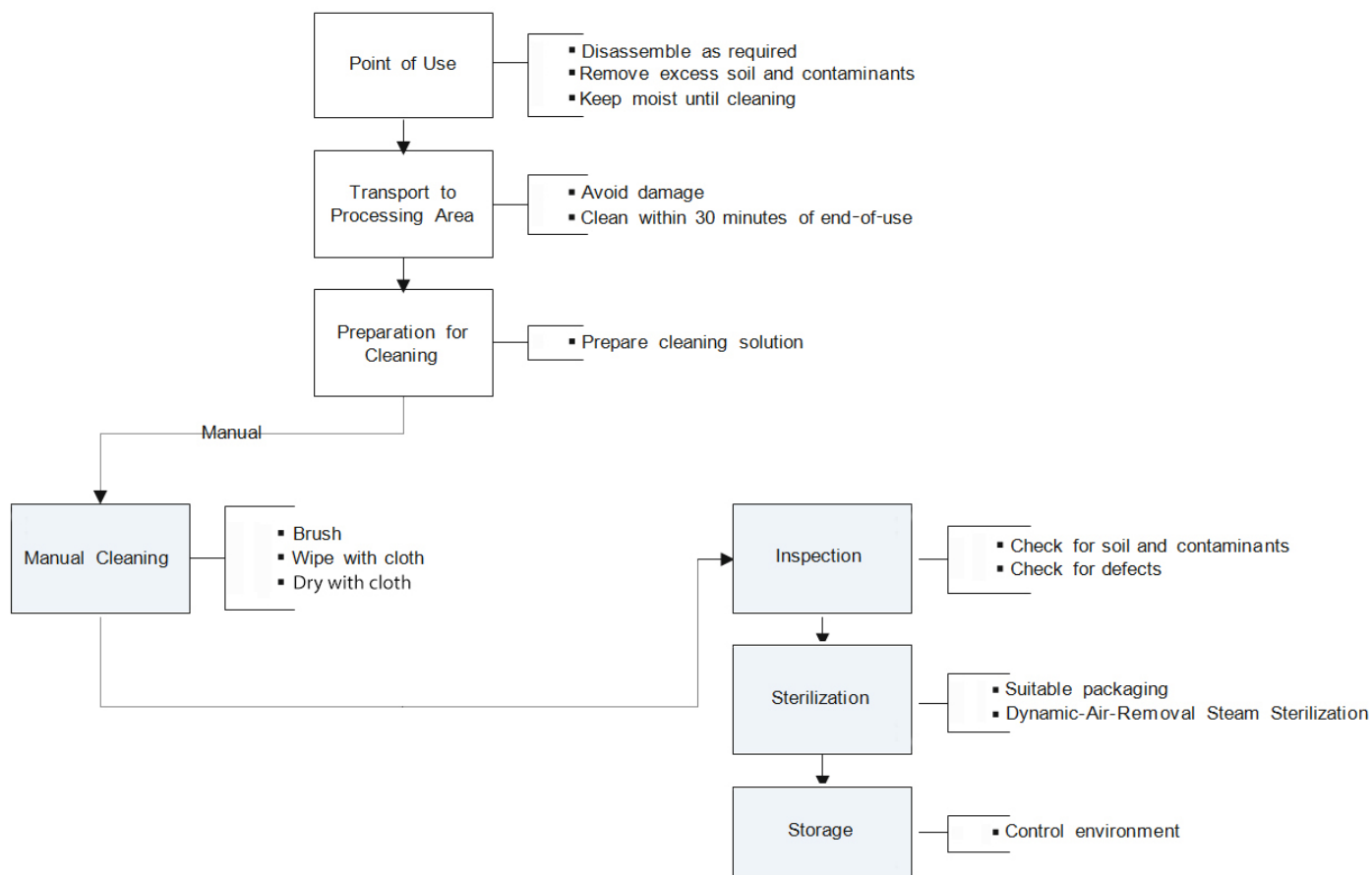
PAL SYSTEM MANUAL CLEANING AND STERILIZATION INSTRUCTIONS

The steps required to properly clean and sterilize the PAL 650 Handpiece, PAL Cable and Multi-use Cannula are summarized in the chart below. Complete cleaning and sterilization instructions are detailed in the following pages.

WARNING: Do not immerse cable or handpiece.

WARNING: Sterilizers vary in design and performance parameters. Verify that the cycle parameters of the sterilizer meet the parameters outlined in the sterilization instructions contained in this IFU.

CAUTION: Use only cleaning solutions of a mild pH. Do not use cleaning solutions with chlorine or chloride as the active ingredient is corrosive to stainless steel.



LIMITATIONS ON PAL 650 HANDPIECE and PAL CABLE REPROCESSING

Repeated processing, according to the instructions below has minimal effect on the PAL Handpiece and Cable. End of life is determined by wear and damage to use.

1. At Point of Use

- Remove the tubing (disposable), cable and cannula from the Handpiece.
- Remove excess soil and contaminants with a disposable, lint-free wipe. Loosely coil Cable and cover devices with a cloth dampened with water.
- The cannula should be covered and transported with the other devices but cleaned to a separate set of instructions found in the section "Multi-Use Cannula Cleaning and Sterilization Instructions".
- Keep instruments moist until processing. The devices must be processed within 30 minutes of end-of-use.

2. Transport to Processing Area

Transport the instruments to where cleaning will be performed within the allotted time. Take special care to prevent damage to the instrument.

NOTE: It is recommended that the devices shall be cleaned within 30 minutes of end-of-use to minimize the potential for organic material to dry on the devices.

3. Preparation of Cleaning Solution

Prepare enzymatic solution, (such as Steris® Prolystica® 2X Concentrate Enzymatic Presoak and Cleaner) using warm tap water ($\geq 49^{\circ}\text{C}$) per manufacturer's instructions.

4. Cleaning: Manual

- Inspect the proximal end of the Handpiece and the distal end of the Cable for the presence of any soil.
- Wet a bristled brush, (such as Sklar® 10-1650), with prepared cleaning solution. Brush the proximal end of the Handpiece connector and the distal end of the Cable wetted with warm tap water ($\geq 49^{\circ}\text{C}$) for 1-2 minutes to agitate any soil.
- Using a lint-free wipe wetted (wet but not dripping) with warm water ($\geq 49^{\circ}\text{C}$) for a minimum of 30 seconds or until no visible soil remains in the connector or adjacent areas of the Handpiece and or corresponding areas of the Cable. Replace wipes as necessary if they become soiled.
- Insert Washer Disinfector Cap (REF CAP-600E)

- e. Insert Cable Caps on each end of cable.
- f. Brush the Handpiece and Cable using a brush (such as the Sklar® 10-1650 wetted with the prepared detergent solution ($\geq 49^{\circ}\text{C}$) for 2 – 5 minutes paying particular attention to crevices. Where applicable, toggle the Handpiece ON/STAND-BY switch multiple times to clean the crevices on both sides of the switch.

5. Drying

- a. Dry the Handpiece and Cable with a clean, lint free wipe.
- b. Coil the Cable and remove caps.
- c. Remove cap from Handpiece.

6. Maintenance and Inspection

- a. Using 10x-15x magnification, visually inspect the Handpiece and Cable for the presence of any remaining soil. Repeating the cleaning process if any soil is found.
- b. Visually inspect for defects and wear.

NOTE: If there is concern that the functionality of the device may be compromised, please contact MicroAire.

7. Packaging

a. Once cleaned and inspected, the Handpiece and Cable can be wrapped individually in a standard FDA cleared medical grade steam sterilization wrap (such as Cardinal Health® Convertors® Bio-Shield® Sterilization Wraps - supplier part #4040). The wrap should be large enough to contain the Handpiece or the Cable without stressing the packaging.

Alternatively, the Handpiece, Cable and cleaned Cannulas can all be loaded in a PAL-500 sterilization tray. See figure below for loading:

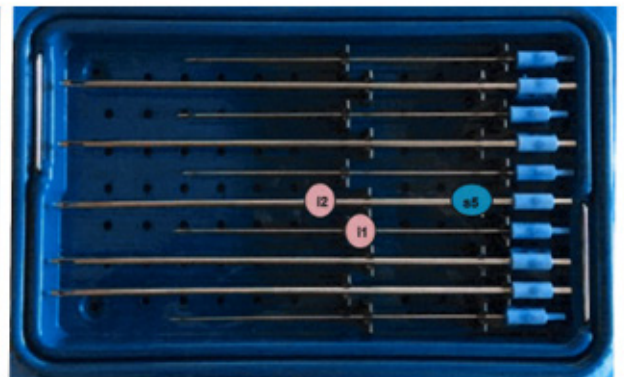
Diagram I – PAL-500 Sterilization Case

Lower Trav



Diagram II – PAL-500 Sterilization Case

Upper Trav



8. Sterilization

Dynamic-Air-Removal Steam Sterilization: full cycle with 4-minute exposure time at 132°C (270°F), 20 minute minimum heated dry time for individually wrapped devices or a loaded case.

PAL HANDPIECE, HANDPIECE PAL CABLE AND CANNULA STERILIZATION INSTRUCTIONS

Cycle Type	Dynamic-Air-Removal
Pulses	4
Set Point Temperature	132° C / 270° F
Exposure Time	4 minutes
Dry Time	20 minutes

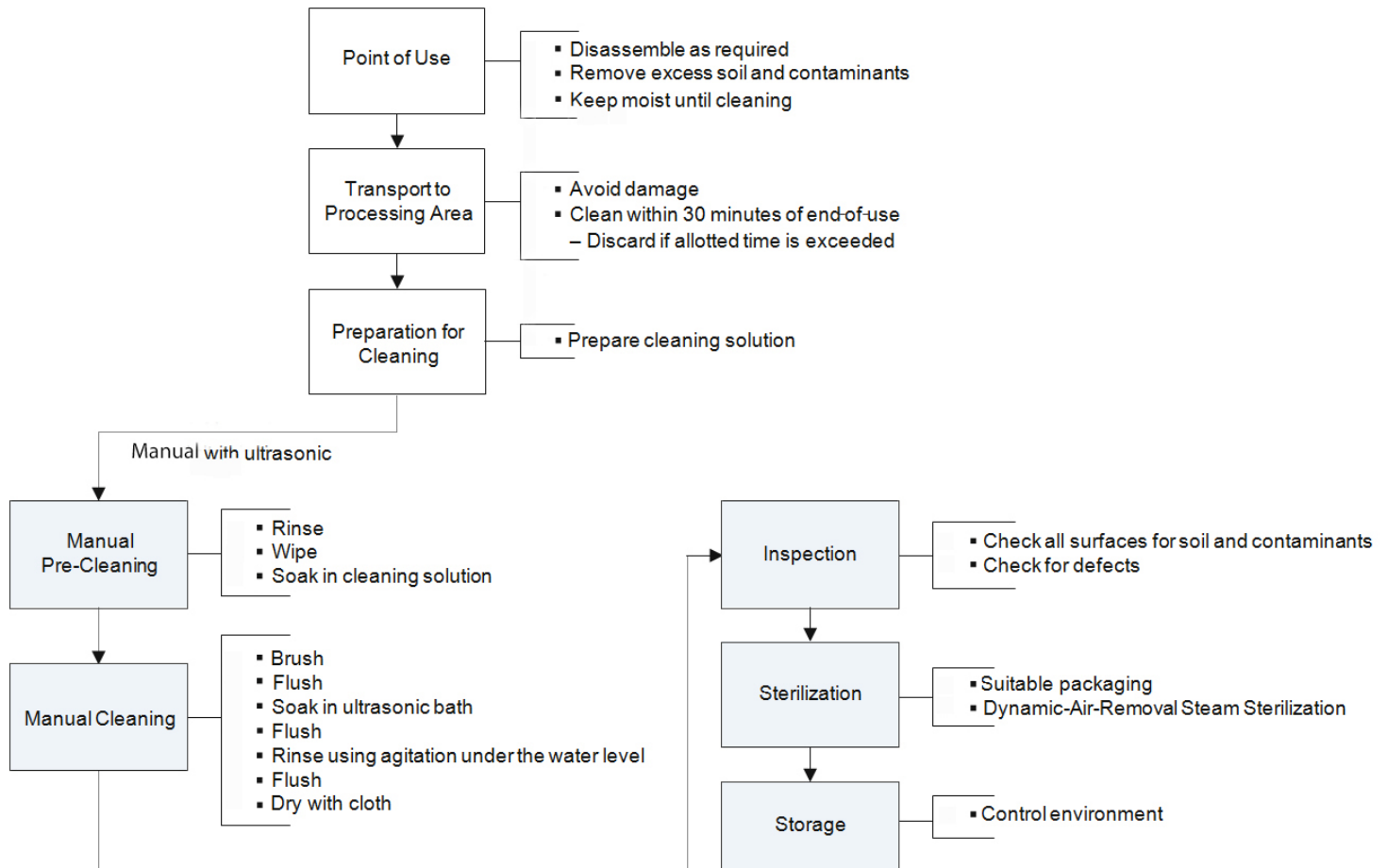
9. Storage

Sterile, packaged multi-use instruments should be stored in a dry, dust-free location with appropriate environmental controls.

MULTI USE CANNULA CLEANING AND STERILIZATION INSTRUCTIONS

- WARNING:** Sterilizers vary in design and performance parameters. Verify that the cycle parameters of the sterilizer meet the parameters outlined in the sterilization instructions contained in this IFU.
- CAUTION:** All multi-use components of the device must be sterilized prior to use.
- CAUTION:** Use only cleaning solutions of a mild pH. Do not use cleaning solutions with chlorine or chloride as the active ingredient is corrosive to stainless steel.

The steps required to properly clean and sterilize the MicroAire Multi Use Cannulas are summarized in the chart below. Complete cleaning and sterilization instructions are detailed in the following pages.



LIMITATIONS ON REPROCESSING

MicroAire recommends that the Multi Use Cannula be reprocessed no more than 20 times. Do not apply excessive force to the metal Cannula. Prior to each use, the user should inspect the plastic hub and the metal Cannula using 10x - 15x magnification for signs of cracking. Pay particular attention to the metal Cannula fenestrations. Discard the Cannula if there are signs of cracking or corrosion, or if the metal Cannula is bent or distorted.

- WARNING:** Do not use the Cannula to lift or elevate tissue. Avoid excess loading and bending of the Cannula tip. Inspect after each use for defects. Discard if defects are found to avoid potential injury.

1. At Point of Use

- Remove the tubing and Cannula from the Handpiece.
- Remove excess soil and contaminants with a disposable, lint-free wipe and cover with a cloth dampened with water.
- Keep instruments moist until processing. The device must be processed within 30 minutes of end-of-use.

- WARNING:** Cleaning of the Cannula cannot be guaranteed if the allotted time between end-of-use and processing exceeds 30 minutes. In such cases the device must be discarded.

2. Transport to Processing Area

Transport the instruments to where cleaning will be performed within the allotted time. Take special care to prevent damage to the instrument.

3. Preparation of Cleaning Solution

Prepare an enzymatic solution, (such as Steris® Prolystica® 2X Concentrate Enzymatic Presoak and Cleaner), per manufacturer's instructions using warm water. Cleaning agents shall be determined by local or country regulations.

4. Cleaning: Manual

- a. Rinse Cannula under warm ($\geq 49^{\circ}\text{C}$) running water (for 2-5 minutes) to remove visible soil. Use a lint-free cloth wetted with water to aid in the removal of excess soil and contaminants.
- b. Fully submerge the Cannula in the prepared cleaning solution. Use a syringe to flush the cleaning solution through the lumen, and then allow to soak for 2-5 minutes.
- c. After soaking the Cannula, while immersed in the cleaning solution, brush the outer surface for 2-5 minutes using a bristled brush, (such as Sklar® 10-1650), to remove visible soil and contaminants from the distal fenestrations and the exterior of the Cannula.
- d. After external cleaning, while still immersed in the cleaning solution, brush the interior (lumen) of the Cannula for 2-5 minutes using an appropriately sized lumen brush, (such as Sklar® 10-1350 for 2.4mm Cannula), to remove soil and contaminants from the interior. Use a syringe to flush the interior (lumen) with the cleaning solution. Repeat this step until no visible soil or contaminants are observed exiting either end of the Cannula.
- e. Prepare an ultrasonic bath with the cleaning solution. Immerse the Cannula in the ultrasonic bath and use a syringe to flush with the cleaning solution. Sonicate for 10-20 minutes.
- f. Remove the Cannula from the ultrasonic bath and thoroughly rinse under running tap water for a minimum of 1 minute.
- g. Prepare an ultrasonic bath of critical water. Immerse the Cannula in the ultrasonic bath and sonicate for a minimum of 10 minutes.
- h. Remove the Cannula from the ultrasonic bath and use a syringe to flush the lumen of the Cannula with 60mL of critical water a minimum of 3 times. Thoroughly rinse under warm running water for a minimum of 1-2 minutes. Repeat this step at least 2 more times using critical water for the final rinse.

WARNING: Inadequate rinsing or flushing may leave residual detergent on the Cannula. Read and review the hazards and precautions associated with the cleaning detergent.

- i. Upon completion of the manual cleaning visually inspect, using 10x - 15x magnification, Cannula shaft, hub and all recessed features to ensure that all visible soil and contaminants have been removed. If soil or contaminants remain, repeat the entire manual cleaning process.

5. Drying

Thoroughly dry the exterior of the Cannula with a clean, lint-free cloth and dry the lumen with filtered compressed air.

6. Maintenance and Inspection

- a. Using 10x-15x magnification inspect the Cannula to ensure that all visible soil and contaminants have been removed. Repeat the cleaning process if soil or contaminants are found.
- b. Visually inspect for defects or wear.

NOTE: If there is concern that the functionality of the device may be compromised, please contact MicroAire.

7. Packaging

Once cleaned and inspected, wrap the dry Cannula individually in a standard FDA cleared medical grade steam sterilization wrap (such as Cardinal Health® Convertors® Bio-Shield® Sterilization Wraps - supplier part# 4040). The wrap should be large enough to contain the instrument without stressing the packaging.

8. Sterilization

Dynamic-Air-Removal Steam Sterilization: full cycle with 4-minute exposure time at 132°C (270°F), 20 minute minimum heated dry time.

Multi Use Cannula Sterilization Instructions

Cycle Type	Dynamic-Air-Removal
Pulses	4
Set Point Temperature	132°C / 270°F
Exposure Time	4 minutes
Dry Time	20 minutes

9. Storage

Sterile, packaged multi-use instruments should be stored in a dry, dust-free location with appropriate environmental controls.

SYSTEM SET UP

CAUTION: All multi-use components of the device must be sterilized prior to use.

NOTE: It is recommended that personnel shall become familiar with the equipment before it is set up for use in any procedure. Such personnel may include central processing personnel, members of the surgical team, and the bioengineering department.

1. Inspect the Handpiece for defects, such as corrosion or excessive wear. If these are identified contact MicroAire for repair.
2. Prior to each use, inspect the plastic hub and the metal Cannula using 10x - 15x magnification for signs of cracking. Pay particular attention to the metal Cannula fenestrations. Discard the Cannula if there are signs of cracking or corrosion, or if the metal Cannula is bent or distorted.

TECHNICAL DESCRIPTION

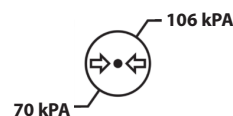
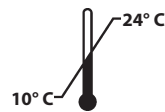
The PAL-650 is a powered surgical instrument that vibrates a cannula used in liposuction procedures. It is powered by a MicroAire 5020 Instrument Control Console which provides IEC60601-1 Type BF isolated control signals to the PAL-650 via the 5006-PAL Instrument Cable. The user can command the PAL-650 to ON or STAND-BY via a slider switch located on the instrument. The PAL-650 and the 5006-PAL cable are reusable. The suction cannula come in variety of styles as both single use and reusable items. The PAL-1200 single use suction tubing connects the cannula to a collection canister and vacuum source.

ESSENTIAL PERFORMANCE

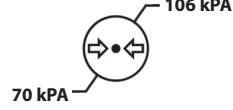
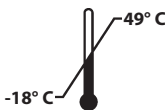
The PAL-650 System has no Essential Performance as defined by ANSI/AAMI/IEC 60601-1 when used with the 5020 Instrument Control Console.

ENVIRONMENTAL PARAMETERS

OPERATING CONDITIONS



SHIPPING AND STORAGE CONDITIONS



Temperature

Humidity

Atmosphere

Guidance and Manufacturer's Declaration – Power Output, Vibration Exposure, Noise Emission Value and Mass Weight Information for the Power-Assisted Liposuction (Electric) Handpiece - REF PAL-650						
Power Output kW – Kilowatts	Vibration Exposure		Noise Emission Value			Mass Weight (kg)
	ahv(m/s ²)	Uncertainty K (m/s ²)	LPA (dB(A))	LC,peak (dB(C))	LWA (dB(A))	
0.065	3.77	1.5	<70	-	-	0.5

DISPOSAL

In accordance with the 2002/96/EC Directive on Waste Electrical and Electronic Equipment (the WEEE Directive) and the current national provisions, the organization of the transfer of these wastes for devices sold by MANUFACTURER shall be undertaken by DISTRIBUTOR. For this reason, DISTRIBUTOR shall organize a system for the collection, storage and arrange transfer of any and all WEEE components to a Manufacturer's approved WEEE collection facility in Europe. DISTRIBUTOR shall provide on request to MANUFACTURER, the proof of compliance with the European and national provisions regarding the WEEE Directive. Please refer to www.microaire.com/weee for WEEE Compliance Instructions.

SERVICE AND REPAIR INFORMATION

IN HOSPITAL SERVICE

All MicroAire power equipment should be inspected and tested periodically in accordance with the facility's bioengineering policy. Such service should be documented within the bioengineering department.

Repairs or alterations to MicroAire products made by anyone other than MicroAire or an Authorized MicroAire Repair Facility will void that product's warranty.

PREVENTATIVE MAINTENANCE

CAUTION: DO NOT lubricate or oil the PAL Handpiece. Lubrication may damage the internal motor mechanism. Also take special precautions to avoid the use of cleaners that contain lubricants.

Because of the stressful nature of surgical use, decontamination, and sterilization, MicroAire recommends that the PAL System (PAL-650 Handpiece, 5006-PAL Cable and 5020 Console) be returned to the factory for routine inspection and service at least once a year. There is no charge for service during the warranty period.

TROUBLESHOOTING

NOTE: The most common cause for repair of the PAL Handpiece is improper use of the Washer Disinfector Cap (REF CAP-600E) and provided cable caps.

CAP the Cable and PAL Handpiece during manual cleaning to prevent liquid from entering the device. Using either the Washer Disinfector Cap or by keeping the Cable plugged into the PAL Handpiece.

UNCAP the Cable and the PAL Handpiece during sterilization to allow steam to penetrate the device.

DRY the devices completely using the dry cycle after sterilization to remove all moisture from within the device. Failure to do so may cause corrosion on the pins and within the motor.

1. Difficulty attaching the Cable

Align connectors and receptacles carefully. Ensure the white dot is facing upward when connecting the Cable to the Console. Ensure the red dot on the Cable is aligned with the matching red dot on the PAL Handpiece. Never force the cable into a receptacle because this can bend the pins.

2. The Handpiece will not start

- Check that the Console is plugged in, turned on, and the touchscreen is indicating a connection to the PAL Handpiece.
- Check the pins in the Cable and the PAL Handpiece to see if they are bent or corroded.
- If the PAL Handpiece does not start, the problem could be in the Handpiece, the Cable or the Console. Return all three system components to MicroAire for a proper diagnosis.
- Note the error number of any error messages that appear on the REF 5020.

REPAIR SERVICE

Responsive service comes with every MicroAire product. If a problem should arise with your equipment, contact our Customer Service Department at:

MicroAire Surgical Instruments, LLC, 3590 Grand Forks Boulevard, Charlottesville, VA 22911 USA

	Telephone:	FAX:	Email:
USA:	800-722-0822	800-438-6309	inquiry@microaire.com
OUTSIDE USA:	+434-975-8000	+434-975-4134	inquiry@microaire.com

WARNING: Do not modify this equipment.

WARNING: PAL equipment can only be serviced by MicroAire or an Authorized MicroAire Repair Facility. DO NOT attempt to service the equipment. Unauthorized service will void the warranty.

NOTE: If a problem occurs with your PAL System, return all three System components (PAL-650 Handpiece, 5006-PAL Cable and 5020 Console). The equipment works as an integrated system, returning only one or two of the System components may result in a false diagnosis.

NOTE: Original owners, (based on serial number registration) may request a loaner System while their System is being repaired. This option is not available to owners of PAL Systems from secondary sources.

To return an item for service, follow this procedure:

- Contact Customer Service for a Return Material Authorization (RMA) number.

NOTE: Do not return equipment without an RMA number. This may cause delays in service and problems tracking returns.

- Clean and sterilize equipment before sending for repair.
- Along with the items sent for repair, please enclose a description of the problem along with contact information.
- If the instrument is out of warranty, enclose a purchase order number with the instrument.
- Ship the merchandise by Express Mail, Federal Express or UPS to ensure tracking and to prevent mail delays.
- Indicate if an estimate of repair costs is needed prior to commencing work on the repair.

WARRANTY

MicroAire Surgical Instruments LLC warrants its instruments to be free from defects in material and workmanship in their manufacture for a period of one year from the original purchase date by the end customer. The warranty is limited to the repair or replacement of the product without charge.


This warranty is void in the event of abuse, misuse, or use in other than normal surgical environment, or in the event of disassembly, alteration, or repair of the product not authorized by the manufacturer, or in the event that the product has not been used in a reasonable manner and in compliance with the written instructions furnished by the Manufacturer.

All other expressed or implied warranties of fitness and merchantability are excluded here from, and the manufacturer shall have no liability of any kind for incidental or consequential damages.

EXTENDED WARRANTY / SERVICE AGREEMENT

Extended warranties and service agreements are available on MicroAire power equipment. Extended warranties may be purchased while the equipment is covered by the original warranty. If the equipment is out of warranty, it must first be restored, if necessary, to full serviceable condition before being eligible for a service agreement.



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