

Installation, Service, and User Instructions

FD500





DISCLAIMER

Copyright © 2024 by MOPEC

All rights reserved. No part of this publication may be reproduced, distributed, or transmitted in any form or by any means, including photocopying, recording, or other electronic or mechanical methods, without the prior written permission of the publisher. For permission requests, write to the publisher, addressed "Attention: Permissions Coordinator," at the address below.

Mopeo

800 Tech Row, Madison Heights, MI 48071

Phone: 1-800-362-8491

email: customerservice@mopec.com

Owner's Record
Model No.:
Serial No.:
Voltage:
Dealers Name:
Dealers Address:
Date of Durchase

Document Revisions

Date	Version Number	Document Changes
6-9-17	1.0	Initial draft
3-6-23	2.0	Update format
2-5-24	3.0	Update Specifications



Table of Contents

1	PREFACE	. 6
	1.1 Description of the User	6
	1.2 Notations Used in This Manual	6
	1.3 Explanation of Safety Warnings	. 6
	1.4 Obtaining Instructions	. 6
	1.4.1 Internet	6
	1.4.2 Ordering Documentation	6
	1.4.3 Documentation Feedback	.7
2	Description of the product	8
	2.1 Purpose of the Product	8
	2.2 Unpacking your Product	. 8
	2.3 Technical Data	. 8
	2.4 Product Compliance	. 8
	2.5 Induction	. 8
	2.6 Warranty Statement	. 9
3	Installation	10
	3.1 How to unpackage your workstation	
	3.1.1 Check for freight damage:	
	3.1.2 Uncrating Contents:	
	3.1.3 Removing Unit from Skid	10
	3.1.4Transporting Unit to the final location	10
	3.1.5 Placing unit into position	11
	3.1.6 Electrical Connection	11
	3.1.7 Ventilation connection (in-house ventilation)	11
	3.1.8 Ventilation Specification during Installation	12
	3.2 Decommissioning the Unit	12
	3.2.1 Decontaminate the unit	12
	3.3 How to Store the Product	12
	3.3.1 Storage in place	12
	3.3.2 Storage on a skid	12
	3.4 Disposal and Recycling	12
	3.4.1 Stainless Steel	13



	3.4.2 Plastic	13
	3.4.3 Electronics	13
4	Factory Options & Accessories	14
	4.1 Standard Features	14
	4.1.1 The unit is equipped with the following standard features	14
	4.1.2 Customization (CUST) & Modification (MOD)	14
	4.2 Accessories	14
	4.2.1 Available Accessories	14
	4.2.2 New Accessories	14
5	OPERATION/USE	15
	5.1 How to operate and utilize the product	15
	5.1.1 Pumping Formalin	15
	5.1.2 Monitoring the Formalin Waste Collection Container and Collection Alarm Indicators	15
	5.1.3 Changing the Formalin Cubetainer	15
	5.1.4 Lighting	15
	5.2 What to Do in Emergency and Exceptional Situations	15
6	MAINTENANCE	16
	6.1 Preventative Maintenance Checks	16
	6.1.1 Maintenance	16
	6.2 How to Maintain the Product	16
	6.2.1 Resetting the Main GFCI	16
	6.3 Stainless Steel Maintenance & Cleaning	16
	6.3.1 Disinfecting Stainless steel	16
	6.3.2 Stainless Care and Maintenance	17
	6.3.3 Use of DECAL	17
	6.3.4 Rust and Oxidation Formation	17
	6.3.5 Scratch Repair	17
	6.3.6 Fingerprints and solvent cleaning	18
	6.4 Mopec Service	18
7	TROUBLESHOOTING AND REPAIR	19
	7.1 How to Identify and Solve Problems	19
8	Documentation	21
	8.1 Sample Rough in Drawing	21
9	Appendices	22
	9.1 Spare Parts & Consumables	22



	9.1.1Spare Parts	22
	9.1.2 Consumables	23
10	GLOSSARY	24



1 PREFACE

1.1 Description of the User

The Mopec FD500 is a Formalin Dispensing & Collection Station. The station is designed to provide users with safe and effective means for dispensing and collecting formalin. The station has a backdraft and downdraft ventilation system that connects directly to the facility ventilation system at the top of the unit. The station has a footprint of $44''(112 \text{ cm}) \times 31'' (79 \text{ cm}) \times 78'' (198 \text{ cm})$ H and is built for laboratory needs.

1.2 Notations Used in This Manual

- Width (W) refers to the left-to-right measurements as you face the unit.
- **Height (H)** refers to the top-to-bottom measurement.
- **Depth (D)** refers to either the measurement of the station from the front of the work surface to the rear of the station or the depth of the sink.
- **(REF)** references a section of the manual for more information.

1.3 Explanation of Safety Warnings

This manual employs the following symbols to call attention to warnings cautions and notices.



Warning is used to indicate the presence of a hazard that CAN cause severe injury or death if ignored.



Caution is used to indicate the presence of a hazard that Will or CAN cause personal injury or property damage if the warning is ignored.



Notice is used to notify people of installation, operation, or maintenance information that is important but not hazard-related.

1.4 Obtaining Instructions

Instructions are typically supplied digitally and stored on a USB type flash drive that is zip tied to the main faucet spout. At any time the most current revision of this manual can be downloaded from the company website list in section 1.4.1

1.4.1 Internet

The latest version of the documentation is available at the following address: http://www.mopec.com

1.4.2 Ordering Documentation

Documentation, user instructions, and technical information can be ordered by calling Mopec at 800-362-8491.



1.4.3 Documentation Feedback

If you are reading Mopec product documentation on the internet, any comments can be submitted on the support website. Comments can also be sent to customerservice@mopec.com

We appreciate your comments.

2 Description of the product

2.1 Purpose of the Product

The Mopec FD500 formalin dispensing and collecting station is an advanced pathology workstation on the market today and is designed with the special needs of the user in mind. Careful consideration is given to the functional requirements and workflow patterns, as well as the need for maximum space utilization and sanitation.

2.2 Unpacking your Product

The FD500 is for grossing study and is not intended to be used as a medical device where tissue comes into contact with a patient. The actual grossing process is defined by each facility and is not the responsibility of Mopec.

UNPACKING

- 1) Carefully inspect the exterior of the shipping container before opening. If the crate is damaged and the product has sustained damage then immediately contact Mopec and the freight carrier. Never discard the shipping container even if it is damaged beyond recognition.
- 2) Have the delivery driver note any suspected damage on the Bill of Lading and sign it. Mopec will help assist in filing a claim for product repair and/or replacement.
- 3) Carefully open the containers and inspect the equipment for concealed damage. If visible damage is noticed (i.e. broken welds, dented stainless, scratches, etc.) follow through as noted above. Do not discard the shipping material. They are important in settling claims.

CAUTION: There are loose components in the packaging of your product. Be very careful in examining the packaging material as it may contain installation parts and/or product components.

2.3 Technical Data

The product is designed and manufactured under the following guidelines:

ISO 9001:2015 with Design – Mopec facility located at 800 Tech Row, Madison Heights MI USA.

2.4 Product Compliance

The product is designed and manufactured under the following guidelines:

EN 61010-1:2010 Safety requirements for electrical equipment for measurement control and laboratory use.

2.5 Induction

Mopec's FD500 Ventilated Formalin Station is constructed of stainless steel with a # 4 Satin Finish. The station includes one GFCI duplex outlet, safety splash shield, fluorescent lights, Lexan side shields, formalin collection and dispensing systems with an indicator light when the collection bottle is full. Two 14" long shelves, Backsplash mounted formalin faucet, bi-parting Lexan doors, and three removable grid plates, and Mopec's signature peg board.

2.6 Warranty Statement

Products manufactured by Mopec will be free from defects in material and workmanship and conform to Mopec's description or specifications. If a warranty claim is made within one (1) year from the date of shipment or the date of installation (if installation is provided by Mopec), the defective or nonconforming Product or Part thereof will be repaired or (at Mopec's option) replaced free of charge, FCA Mopec's dock. All warranty claims must be in writing and received by Mopec within the warranty period. The warranty is not transferable (other than to customers of Mopec's authorized Distributors), and will not apply unless the Equipment has been properly installed, maintained, and operated in accordance with all instructions; and does not apply to defects, nonconformities, or other failure due to Equipment misuse, abuse, modifications, or other causes outside Mopec's control. THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF. THE WARRANTY AS SET FORTH HEREIN IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. To the extent that Mopec is acting as a supplier of Products manufactured by a third party, the Products will be warranted only to the extent that they are warranted by their manufacturers and Buyer (or its customer) agrees to look solely to the Product manufacturer for all warranty claims. For shipments outside the United States or Canada, as to any defective or non-conforming part, the part will be replaced upon return of the part to Mopec. Mopec will owe no obligation to perform any repair or to install any replacement part.

3 Installation

Notice: If you have purchased installation from Mopec your installer will cover section 3

3.1 How to unpackage your workstation

3.1.1 Check for freight damage:

• If the unit has sustained damage during transit or unloading from the carrier now is the time to file a freight claim.

NOTICE

Many large institutions use their own carriers. A freight claim would be filed with that provider.

- Check for damage to the skid that would result in an unsupported or twisted station.
- Check that the sides of the crate have not been punctured or smashed.
- Check that the top of the crate has not sustained damage or has evidence of being placed upside down.
- Take photographs of any damage and contact Mopec or your private freight carrier if applicable.

3.1.2 Uncrating Contents:

- Remove the top boards from the crate. Place in a dumpster or out of the way to dispose of later. Watch for staples, nails, and slivers of wood.
- Remove the sideboards, end boards, and plywood from the crate.
- Remove the corner posts of the crate. Pull downward and then sideways to break away from the base.
- Remove all the bracing at the bottom of the skid. Note the small 2"x 4" blocks nailed to prevent the unit from moving.
- Carefully cut the plastic wrap so the unit is not scratched, and the components are not damaged.
- Unwrap the plastic wrap and foam from the unit.
- Cut and remove the metal banding material securing the unit.
- Look the unit over for hidden damage. If found, take photos, and contact Mopec.
- Remove any optional equipment from the sink, under the sink, or behind the doors (if so equipped).
- Ensure all plumbing and wiring are secured and up and out of the way before moving the unit.

3.1.3 Removing Unit from Skid

- Ensure there is plenty of room to work around the unit.
- Tip the unit forward to retract the back leveling feet to allow the unit to slide on the crate floor.
- Tip the unit back to retract the front leveling feet to allow the unit to slide on the crate floor.
- Slide the unit back a little more than half off the skid, and tilt back until the bottom edge is resting on the floor. Tip the unit back a little farther so the skid can be pulled out from under the unit.
- Then gently put the unit upright on its base, making sure not to drop the unit.

3.1.4 Transporting Unit to the final location

• Place the Unit on a. (4) corner dollies or b. (2) skid dollies on each end. If available, one can use c. (2) crank up furniture or Piano Mover style dollies on each end of the station.



- Wheel the unit to the desired location, and pay close attention to the dollies when going over thresholds or entering and exiting elevators.
- Pay attention to door frames with magnetic contacts and door closure devices. Watch for low-hanging signs in hallways and door arches.

3.1.5 Placing unit into position

- Before you unload the equipment check that the utilities have been prepared in accordance with the Mopec rough-in drawing for your model workstation.
- Check the floor condition is clean dry and as level as possible. Masonite boards can be used to protect softer styles of flooring.
- The unit has leveling feet with non-marring skids and will slide on other hard smooth surfaces.
- Remove the unit from the dollies and set it on the Masonite boards.
- Tip the unit back to lower the front leveling feet so the bottom of the foot is approximately ¼ inch below the frame.
- Slide the unit back to the desired distance, if different than the approval drawing.
- The back feet should drop off the Masonite board near the installation location.

NOTICE Do not slide the unit on soft vinyl flooring, it will tear the flooring. If the unit must be adjusted, it will have to be moved one end at a time on soft vinyl flooring. The unit will slide on other hard smooth surfaces.

- Confirm the distance of the unit from the wall is 3" (inches) or more.
- Level the unit using retractable leveling feet on the bottom of the station.

3.1.6 Electrical Connection

- The electrical connection comes out of the rear of the unit. Reference the rough-in drawing for further details.
 - o The workstation is provided with a wire wipe and should be wired to a dedicated 15amp circuit.
 - (1) 115/1/60, 15amp circuit to power the unit.

3.1.7 Ventilation connection (in-house ventilation)

- The top of the unit comes with a designed rectangular duct measuring 23.875 x 4.5".
- This duct will get connected to the facility's house ventilation system to remove formalin fumes.
- Connection of the air exhaust is located above the canopy as shown on the equipment drawing and rough-in drawing. The exhaust ties directly into the building ventilation system located within the wall or adjacent to

the wall surface. It should be noted that the working environment is open therefore existing room conditions and air currents have an effect on the efficiency of the ventilation.

3.1.8 Ventilation Specification during Installation

- FD500 Formalin Workstation Free Standing Facility Ventilation volumetric flow rates should be adjustable and be between 370 520 cubic feet per minute. This variable will allow the user a means of adjusting the air flow to their comfort level and work conditions. Calculations are based on maintaining 125 175 (feet per minute) face velocity through the grid plates. The ventilation is connected to the facility through a duct stub on the unit. The FD500 does not have any fans or filters.
- Static pressure is approximately 0.25" of water at 445 CFM

 The ventilation back splash grill for the unit is 8" x 35" and 90 Degrees to the work surface. The down draft grid plate is 21-1/2" x 34". The back draft perforated pattern is provided with 3/16" x 5/8" slots on 13/16" x 3/8" staggered centers, yielding a 36% open area. The down draft perforated pattern is provided with 3/32" x 5/32" diameter on staggered centers, yielding a 33% open area.

3.2 Decommissioning the Unit

3.2.1 Decontaminate the unit.

- Decontaminate the workstation per your standard processes.
- Determine if drainage from the unit is classified as a biohazard. This will depend on your local ordinances.
- The disposal unit, the drain line, and P-trap may contain fluids when disconnected.

3.3 How to Store the Product

3.3.1 Storage in place

- Adjust the elevation to its lowest position for long-term storage.
- Disconnect the ventilation ducts and tape off the opening to prevent dust and debris from entering.
- Disconnect power to the unit.
- Wipe WD40 on all stainless surfaces to protect from transfer rust.
- Cover or drape the unit with a tarp.

3.3.2 Storage on a skid

- Follow the steps in 3.3.1 to prep the unit.
- Lift the unit one end at a time and walk the station side to side onto a skid.
- Strap the unit down across the worksurface and pull it down towards the skid. Be sure to put padding on the edges of the work surface where the straps contact the sheet metal.

3.4 Disposal and Recycling

Disposal of the unit is ultimately up to local codes and guidelines. The following section breaks down the materials of construction for recycling purposes.

3.4.1 Stainless Steel

- The Hood is made entirely of 304 stainless steel. Remove all electronics and recycle them appropriately.
- The worksurface is also 304 stainless steel.
 - o Remove the faucets and fixtures as these are typically chrome-plated brass in construction.
- The lower skirting is 304 stainless steel along with the frame cross connectors.

3.4.2 Plastic

- The cutting board and formalin dispense tank lid are made of thick HDPE.
- The waterlines, fittings, flexible vent ducts, and collection carboys are typically made of thermoplastics like polypropylene, vinyl, and polyvinyl chloride and should be recycled accordingly.

3.4.3 Electronics

• The unit has internal circuitry, circuit boards, and LED lighting should be recycled as electronic components.

4 Factory Options & Accessories

4.1 Standard Features

4.1.1 The unit is equipped with the following standard features.

- Dimensions: 44"(112 cm) L x 31" (79 cm) x 78" (198 cm) H
- Stainless steel construction
- (1) Power outlet: (1 G.F.C.I. receptacle)
- Ensemble Pegboard™ System

4.1.2 Customization (CUST) & Modification (MOD)

- If your base unit has a feature customized the Model No. will show a "CUST" suffix
- If your base unit has a feature removed Model No. may show a "MOD" suffix

4.2 Accessories

Accessories are features and tools that can be added to the FD500.

4.2.1 Available Accessories

- AX001 PEGBOARD, MONITOR MOUNT
- AX002 PEGBOARD, REQUISITION HOLDER
- AX003 PEGBOARD, TICKET HOLDER
- AX004 PEGBOARD, MARKING DYE HOLDER
- AX006 PEGBOARD, 14" SHELF
- AX008 PEGBOARD, SMALL BIN
- AX010 PEGBOARD, LARGE BIN
- AX011 PEGBOARD, C-FOLD GLOVE/PAPER TOWEL BIN
- AX012 PEGBOARD, DOUBLE C-FOLD GLOVE/PAPER TOWEL BIN
- AX013 PEGBOARD, TRIPLE C-FOLD GLOVE/PAPER TOWEL BIN
- AX014 PEGBOARD, QUAD C-FOLD GLOVE/PAPER TOWEL BIN
- AX015 PEGBOARD, MAGNETIC TOOLBAR
- AX016 PEGBOARD, ARTICULATING MONITOR MOUNT
- AX017 PEGBOARD, BARCODE HOLSTER
- AX018 PEGBOARD, FACE SHIELD HOLSTER
- AX019 PEGBOARD, GLASSES HOLSTER
- AX020 PEGBOARD, WIPE DISPENSER

4.2.2 New Accessories

 New Accessories are developed every day! To make a suggestion for a new accessory or to check on our latest go to www.mopec.com for more information.

5 OPERATION/USE

5.1 How to operate and utilize the product.

5.1.1 Pumping Formalin

Make sure the main power is on. If desired, turn on the LED lights. Turn the pump switch on (the switch should glow red). Place the container to be filled under the spout. Move the safety splash shield between the operator and the formalin dispensing. Open the valve at the spigot to the desired flow. Close the spigot when the container is at the level you desire (NOTE: do not over-tighten the valve. This will cause damage to the internal parts of the valve). Move the safety splash shield. Retrieve your container of formalin. When you are finished with dispensing, turn the pump switch off. Note: the pump may run for a few moments after you have stopped filling your container, the system will build up pressure and remain ready for dispensing.

5.1.2 Monitoring the Formalin Waste Collection Container and Collection Alarm Indicators

The collection has a full indicator light and an audible alarm. The audible alarm indicator has a mute switch. The LED light will glow red when the bottle is full. To change the collection CAR-BOY follow these steps: Turn the audible alarm to mute. Disconnect the sensor from the bottle to the station at the plug. The plug unscrews in the middle then pull apart the ends. Loosen the collection couplings on the hose. Lift the bottle out of the pull-out tray and remove the collection cap. Insert the replacement bottle with the collection cap. Connect the hose couplings. Connect the sensor coupler Changing the formalin Cubetainer

5.1.3 Changing the Formalin Cubetainer

Open doors and pull the slide tray out for easier access. Disconnect the hose from the Cubetainer. Squeeze the latch and the hose will disconnect. Remove the SCREW TYPE adapter from YOUR FORMALIN CONTAINER!! Remove the container from the tray. Place the full container in the tray. Remove the cap and place the male adapter on the container. Connect the hose to the container. Slide the tray into the cabinet and close the doors. Turn on the pump. PLACE SPLASH SHIELD BETWEEN USER AND FORMALIN DISPENSING. Open the valve. CAUTION FORMALIN MAY SPUTTER OR BUBBLE OUT UNTIL THE AIR IS REMOVED FROM THE CONTAINER ENSURE THE SPLASH SHIELD IS IN PLACE. Close the formalin valve when the flow is steady. Turn the pump off.

5.1.4 Lighting

Lights can be turned ON and OFF by the switch at the top of the unit or by shutting down the unit completely by turning off the main power overhead.

appropriate file for future reference. Complete and affix an inspection sticker, when applicable. Return the unit to service.

5.2 What to Do in Emergency and Exceptional Situations

First, follow your laboratory safety procedures. Reference the below protocol for unit situations.

- Suspected electrical issue.
 - Turn off the main power switch.
 - o Turn off the unit's facility breaker if further electrical issues are detected.

6 MAINTENANCE

6.1 Preventative Maintenance Checks.

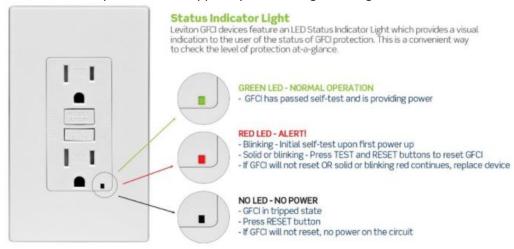
6.1.1 Maintenance

Visually check the exterior of equipment for any signs of damage. Visually check the condition of the power cord and plug(s) for cracks, cuts, bare or broken wires, and signs of excessive heat (discoloration). Visually inspect electronics for signs of damage and/or overheating. Ensure receptacle and covers are operating properly (testing GFCI). Verify the correct operation of the unit including all controls, buttons, displays, and indicators when applicable. Access the main pedestal to ensure no leaks, dry rotted hoses, or electrical issues under the table. Check all the fixtures. Verify correct lubrication of all applicable parts. Clean the exterior of the unit. Complete the paperwork of inspection and file in

6.2 How to Maintain the Product

6.2.1 Resetting the Main GFCI

Should the unit trip the Main GFCI; the controls, touch screen, and auxiliary power outlets will no longer be powered. First, check that your unit has tripped by referencing the image below.



The GFCI will only reset if power is supplied to the station. Check that your Main Power switch is on and that your facility's circuit breaker is not tripped.

- Press the TEST and RESET buttons on the GFCI and confirm operation or status lights per the diagram above.
- If the GFCI has reset and shows a green light the unit is ready to operate.
- If the GFCI fails, there may still be a ground fault in the system or the GFCI unit may need to be replaced. See the section on Troubleshooting (8.0) or call Mopec Service (7.3)

6.3 Stainless Steel Maintenance & Cleaning

6.3.1 Disinfecting Stainless steel

All stainless steel surfaces can be cleaned with soap and water to remove tissue and debris. The stainless steel surfaces can be disinfected with a non-caustic disinfectant.

- Always wipe in the direction of the stainless steel grain.
 - We suggest using BE045 Path Cloud or BE047 Bench Wipe for cleaning purposes.
- Most disinfectants must be followed up with a water rinse to remove the salts that remain after these products dry. Always follow up a disinfection cleaning with a thorough rinse of water.
- DO NOT USE a straight bleach solution to clean your unit. Bleach will eventually erode stainless steel if not thoroughly rinsed.
 - o Erosion from chlorine bleach is detectable and will void the warranty.
 - If your process must use chlorine bleach it must not exceed 10% and must be rinsed immediately after disinfection to avoid damage to the metal.

6.3.2 Stainless Care and Maintenance

To maintain your stainless steel product, follow these steps:

- Rinse the surfaces with water frequently.
- Do not touch the surfaces with oily hands.
- Always use soft abrasive fine grit pads to clean grime in the direction of the metal grain.
- Once clean, condition your stainless surfaces with WD40 lubricant or Stainless steel polish.

6.3.3 Use of DECAL

When a Decal solution is used a brown rust ring along with a milky white substance can deposit on the surface. Decal is very harsh, even the fumes can cause staining on stainless steel. Consider placing the Decal container you currently use inside a plastic base that will help catch drips that might occur.

• Clean and rinse your station after every use of the Decal solution.

6.3.4 Rust and Oxidation Formation

Rust can and will occur on stainless steel if it is not maintained properly. The most common cause of rust is from using a ferrous material on or near the unit. This is referred to as "transfer rust". Salts from cleaners or disinfectants can extract ferrous materials and deposit or transfer them to stainless steel. Always rinse all disinfectants before they dry. Decal solutions and fumes are very aggressive and can deposit rust if not cleaned. Formalin use has not been shown to cause rust but it does contain salts and therefore can deposit rust.

There are a few ways to remove rust should you develop it.

- <u>Vinegar</u> Pour White Vinegar on the rust and let it soak for 5 minutes. Scrub with a soft brush (like a toothbrush) Rinse with water and wipe dry.
- <u>Lemon Juice & Baking Soda</u> Mix equal parts of each into a paste and spread over the affected area. Let it set for 30 minutes before washing away with a damp sponge. Repeat as necessary.
- Rust Remover as a last resort try a chemical cleaner like Magica Rust Remover Magica Rust Remover | Best Rust Removal Products, and follow the instructions.

6.3.5 Scratch Repair

A surface scratch can be repaired using the following technique. Completely removing the scratch will depend on how severe it is.

- Use 120 grit emery cloth or paper and firm pressure to sand the scratch.
- Sanding must always go in the direction of the grain. Sand in a perfectly straight line, avoiding the natural tendency to sand in an arc. Sand the surface until the scratch is gone.
- Polish using a very fine grade of 3M scotch-brite pads. Use the same motions as with sanding. Polish the surface until the original finish is restored.

6.3.6 Fingerprints and solvent cleaning

The most common surface contaminants that occur from normal use are fingerprints and mild stains. These usually affect only appearance and do not affect corrosion resistance. They can easily be removed by a variety of simple cleaning methods.

• Fingerprints can be removed with a common glass cleaner or by gently rubbing with a paste of soda ash (sodium carbonate) and water which would be applied with a soft cloth. It is best to follow with a warm water rinse.

6.4 Mopec Service

PLEASE have the following information available BEFORE you call from your station ID tag or original order or quote. Reference the ID tag located near the Power Switch under the GFCI outlet. Older units may have this ID tag in the knee space on the sink side.



Product Model Number:

Example: FD500

Product Serial Number: Example FD500-0-140203-001

Call 1-800-362-8491 and follow the prompts. Or email us at customerservice@mopec.com

7 TROUBLESHOOTING AND REPAIR

7.1 How to Identify and Solve Problems

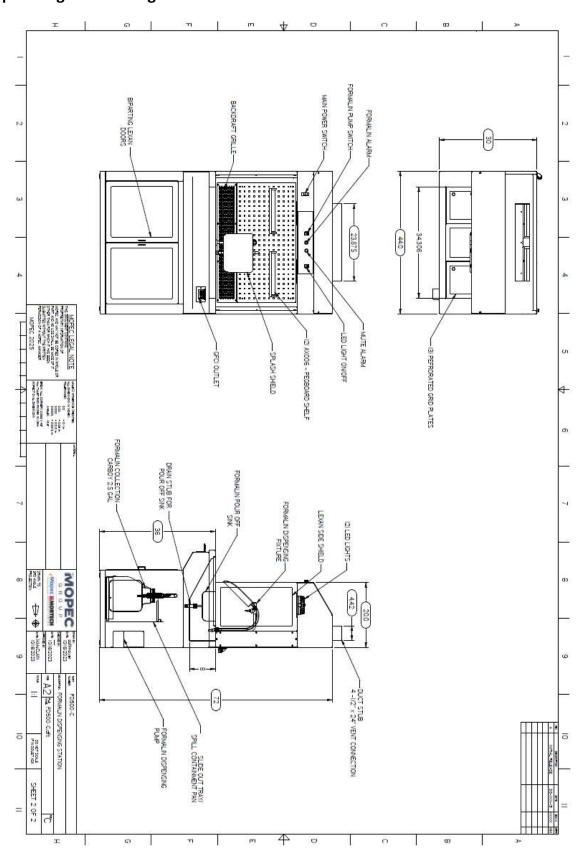
WARNING: The troubleshooting section is for reference only. Any repairs should be made by skilled and trained persons following proper facility safety protocols.

Error / Issue / Failure	Cause	Solution
Power up Failure		
	G.F.C.I. has been tripped	Reset G.F.C.I. There are two per station. One is above the shelf, and one in the "Cord Wrap" area on the side of the machine. <i>NOTE: The station must have the main power "ON" to reset GFCI.</i>
My Station does not turn "ON"	The facility breaker has been tripped	Reset facility breaker
	Power system short	Check connections at the power cord and plug the connector.
LIGHTING		
No lights will come on	G.F.C.I. has been tripped	Reset G.F.C.I. (station power must be "ON")
	LED driver issue	Check connections in hood at driver. Check driver output. Replace driver
FORMALIN DISPENSING/TRANSFER PUMP SYSTEM		
Pump shuts off when I press the green button	User not pressing and holding button to transfer formalin	Press and hold green button to transfer formalin
	System/internal storage tank is full. Pump Is automatic turned off to prevent overflow	Dispense formalin inside internal storage tank and refill as needed.
Pump will not transfer any more formalin/stops while pumping	System/internal storage tank is full	Use formalin inside internal storage tank
Pump will not pump fluid	Pump is clogged	Clean out salt deposits in pump. Replace pump if damaged

	Internal float switch stuck or bad	Clean salt deposits on float switch or replace internal float switch	
	Green Button is bad	Replace green button	
Alarm Screen Say "Formalin Dispense Low" at bottom of screen	Internal Formalin storage Tank is low	Add formalin to internal tank using transfer pump	
Formalin Dispensing Leak alarm is present (sensor #1, inside station, beneath formalin storage tank)	There is a formalin leak or sensor is faulty	Repair leak & clean sensor of fluid or replace faulty sensor	
FORMALIN COLLECTION SYSTEM			
	Formalin collection Jug/Carboy is full	Empty formalin Jug/Carboy	
Formalin Collection Full alarm	Float switch disconnected	Plug float switch into station. Check wires in connector are not pulled out	
	Float switch "bulb" is stuck in the "full" (up) position	Unscrew cap on Jug/Carboy and make sure metal "bulb" on float switch can move up and down the rod without getting stuck. Or replace float switch.	

8 Documentation

8.1 Sample Rough in Drawing



9 Appendices

9.1 Spare Parts & Consumables

9.1.1 Spare Parts

General Part Description	Mopec #	OEM#	Use(s)
Leveling Foot	PL0041	McMaster 23015T66	Machine base
Screw 8-32 Truss ½" lg.	PB0039	McMaster 91770A194	Various
Plumbing Part Description	Mopec #	OEM#	Use(s)
Dust cap ¾" (Male for carboy)	PP0309	McMaster 91105K621	Male for carboy
Carboy with flat cap	PM0140	McMaster 91105K841	Сар
Carboy cap with Fittings	FP003	Carboy Kit	Fitting
Splash Shield	M0009	n/a- Custom to Mopec	Splash Shied
Collection Carboy	PM0141	US plastics #73003	Formalin collection
Collection Cap assembly	5850	n/a – Custom to Mopec	Formalin collection
Collection tubing (¾" Vinyl)	PP0045	McMaster 5233K71	Formalin collection
Funnel, SS small	PM0159	US plastics 85151	Formalin collection
Electrical Part Description	Mopec #	OEM#	Use(s)
24 VDC Buzzer	PE0587	ECX2071-24R	Alarm Buzzer
Float Sensor, 6.5" lg.	PE0285	n/a – custom to Mopec	Formalin Collection Sensor
Float Sensor, 18" lg.	PE0768	n/a – custom to Mopec	Formalin dispensing
Leak Sensor	PE0805	n/a – custom to Mopec	Formalin dispensing
LED Driver	PE0591	TRC MeanWell LPF-16D-36	Lighting Hood
Power Supply, 24VDC 480W	PE0745	Automation Direct PSB24-480	Ventilation Hood
GFCI Power Outlet, 20a	PE0510	Leviton 034-N7899-HGG	Power Hood

9.1.2 Consumables

Part Description	Mopec #	Use(s)
Cleaning and Disinfecting Kit	BE125	Cleaning and disinfection of your unit.
Formalin Adsorbent pad MEDIUM	BE094	Fume reduction pad
SaniPath Disinfecting Wipes	BE036	Disinfection wipes
SaniPath Disinfecting Spray	BE047	Disinfection spray cleaner
ClearSteel Stainless Spray	BE048	Stainless steel cleaner and polish spray
SaniPath Disinfectant Foam Spray	BE045	Disinfectant foaming spray
ClearSteel Stainless Wipes	BE039	Stainless steel cleaner and polishing wipes
Mopec Prefilled Formalin Cube – 2.5/5 Gallons	BG520/ BG525	Formalin Containers are filled with a 10% neutral buffered formalin used as a general-purpose fixative for tissues.

10 GLOSSARY

Term	Meaning	
Pathology	The science of the causes and effects of diseases, especially the branch of medicine that deals with the laboratory examination of samples of body tissue for diagnostic or forensic purposes	
Decal	Refers to decalcification agents used as a technique for removing minerals from bone or other calcified tissue. Typically strong acids, weak acids or ethylenediaminetetracetic acids(EDTA).	
GFCI	Acronym for Ground Fault Circuit Interrupt. Safety device that senses the slightest amount of current across the hot input side and the neutral side of the output on a power outlet in an effort to protect a user from electrical shock.	
Cubitainer	A semirigid cubical plastic container typically used within a cardboard box. Commonly used to store Formalin.	