



QUICK CHANGE PUMP
SERVICE CART

OPERATION MANUAL

KJLC Part Number:
QCFC-100

Data and information herein are subject to change.
KJLC reserves the right to make changes at any time without notice.

All information, illustrations, and specifications in this manual are based on the latest product information available at the time of printing.

Contact the Kurt J. Lesker Company® for the latest version of this manual.

This manual contains drawings and technical instructions that are proprietary by the Kurt J. Lesker Company®. Any duplication of this manual, in whole or in part, without express written approval from Kurt J. Lesker Company® is strictly prohibited.

The Kurt J. Lesker Company® assumes no liability for damages to customer facilities or personnel resulting from misuse or misapplication of the unit.

Original instructions are written in English.

Kurt J. Lesker Company®
~ Version 1.1 ~
~ April 2016 ~

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Warranty	1
Global Service and Support.....	1
About Us	2
Four Focused Divisions	3
Introduction	4
Safety Symbol	4
Receiving and Inspection	4
Unpacking:.....	4
Setup and Operation	5

WARRANTY

THE KURT J. LESKER COMPANY ASSUMES NO LIABILITY FOR PERSONAL INJURIES OR DAMAGE TO EQUIPMENT CAUSED BY MISUSE AND OPERATION OF THIS EQUIPMENT. LIABILITY IS LIMITED SOLELY TO THE STANDARD 1 YEAR WARRANTY AGAINST DEFECTS IN MATERIAL AND WORKMANSHIP USED IN THE MANUFACTURING OF THIS PRODUCT. THIS WARRANTY DOES NOT COVER CONSUMABLES, MISUSE, SHIPPING DAMAGES, AND DAMAGE DUE TO PROCESS CONTAMINATES.

GLOBAL SERVICE AND SUPPORT

NORTH AMERICA	EUROPE	ASIA
Phone: 800-245-1656 pumprepair@lesker.com	Phone: (+44) 1424-458100 pumprepair@lesker.com	Phone: (+86) 21-50115900 pumprepair@lesker.com

For all other regions, contact North America customer service.



Before returning any product for repair and/or adjustment, contact KJLC Technical Support to discuss the problem. Be prepared to give the serial number of the unit and the reason for the proposed return. This consultation call will allow KJLC to determine if the problem can be corrected in the field or if the unit needs to be returned. Such technical assistance is always available at no charge.

If you return a unit without first getting authorization from KJLC Customer Service and that unit is found to be functional, you will be charged an evaluation fee as well as all shipping charges.

A Return Material Authorization (RMA) number must accompany any equipment being returned to KJLC. The RMA number will be issued by KJLC Service. This will expedite handling and ensure proper service of your equipment. A “Declaration of Product Safety” must also accompany the returned unit. This form must be filled out and signed by the appropriate person before the unit can be received into the Kurt J. Lesker Company®. This can be found in the “Forms” section of our website www.lesker.com

ABOUT US

As a leading global provider of high quality vacuum products and systems, along with an established tradition of service and attention to detail, the Kurt J. Lesker Company® has built a reputation for “Enabling Technology for a Better World”.

The common attribute across the entire company is the relentless and tireless pursuit of quality and customer satisfaction, both in the vacuum products and the services we provide worldwide. KJLC takes this responsibility seriously, working at all levels to ensure high quality performance in all our products.

Drawing from our comprehensive list of products and services, KJLC has long believed and behaved in ways that set industry standards and demonstrate responsibility and responsiveness to its customers. Every phone call is answered by an actual person. Every product issue gets immediate and complete attention until it is resolved. Experienced employees continually make themselves available to those seeking information and guidance. KJLC sees every customer interaction as an opportunity to deepen valued relationships.

Founded in 1954, KJLC has grown from a regional manufacturer and distributor of vacuum components into today's worldwide marketplace, offering a full range of vacuum parts, products, systems, design technologies, innovative thinking, and responsive customer service. Working with an attentive eye toward quality, environmental stewardship of resources, and customer satisfaction, KJLC serves the research and development market at both the academic and commercial levels, as well as providing vacuum products and services to industry on a global scale. Following our successful expansions into Europe and Asia, KJLC continues to reach out for a greater global presence with the newest location in Hong Kong.

FOUR FOCUSED DIVISIONS

As a manufacturer and distributor of all things vacuum, being focused is crucial. KJLC has developed the following divisions to better focus on the unique challenges each application provides:



Quality, backed by years of experience - that's what sets our manufacturing division apart. Providing not only standard and custom vacuum chambers to the industry for over six decades, but also ensuring the quality that comes with the KJLC brand is infused throughout the organization. World class manufacturing equals top quality products for all of our business segments



We provide customers with advanced single chamber and cluster chamber, computer controlled, and thin film deposition systems designed and built to meet the high demands of a growing and increasingly adventurous research and production client base. Utilizing our clean room assembly and test facilities in the U.S. and the U.K., KJLC is ready to help meet all of your capital equipment needs.



Customers have access to the full range of approximately 14,000 basic vacuum components, such as flanges, fittings, pumps, fluids, valves, feedthroughs, and traps. Some would refer to these as the building blocks for every application in the marketplace; to that end we have the largest inventory of in-stock, ready to ship products in the industry. Dependable delivery and superior customer service keep the Vacuum Mart™ division the go-to source for customers all around the world.



Customers can select from an extensive list of pure elements, compounds, alloys, advanced metal oxide ceramic materials, and mixtures for thin film deposition, each stocked for rapid delivery. In addition to our expansive materials offering and technical expertise, this division also provides a vast array of crucibles, boats, filaments and wires available in all shapes and sizes, so you get the exact fit for your process. In-house bonding facilities and precious metal reclaim services highlight one of the most complete and quality driven material lines in the industry.

INTRODUCTION



Read this operation manual carefully before installing or operating. Save all materials and the box should future upgrades or repairs be required.

The Kurt J. Lesker QUICK CHANGE PUMP SERVICE CART is shipped fully assembled and tested. Both fill and drain lines are equipped with female quick-connects, in addition, two male quick connects are also included and, if desired, can either replace the female couplings or be used on pumps. All quick connects are double valved, therefore, each vacuum pump to be serviced need only be equipped with a single quick connect on the drain port. Both draining and filling of the pump may be accomplished through this single port if desired. Each cart incorporates a removable side panel on the bottom fluid shelf which allows easy removal and installation of new and used fluids.

Safety

SAFETY SYMBOL

The following safety notation will be used throughout this manual:



This notation indicates a potentially hazardous situation that may result in injury if not avoided. It is also used to alert against unsafe practices that may result in damage to the equipment.

RECEIVING AND INSPECTION

UNPACKING:

1. Inspect entire unit for physical damage immediately upon receipt.
2. All damage claims must be filed with carrier by the recipient. Check all packages if unit is shipped in more than one container.
3. Check supply voltage for unit. Users supply voltage must be within 10% of voltage supplied.
4. Prior to hook up and operation, check all fittings, connections, hoses, and electrical components to make sure that all components are tight and secure. Although each unit is fully function tested prior to shipment, the strain caused during shipment can loosen various items making it impossible to assure that they will be in satisfactory condition for operation after installation.

SETUP AND OPERATION

Setup:

- Prior to operation, place a full container of new oil on the lower shelf next to the container supplied labeled CONTAMINATED FLUID.
- To insure minimal dust and moisture contamination, the QCFC cart is equipped with Hypodermic-type taps which can puncture the plastic seal used with fluids manufactured by the Kurt J. Lesker Company. Removal of the seal may be necessary when using other fluids.
- In order to puncture the seal, remove the caps from fluid containers and place the tip of the long hypodermic tap on the seal of the new container and press firmly to puncture.
- Insert the tap such that the tip rests on the bottom of the container. Likewise, insert the shorter tap into the empty container to be used for the contaminated fluids.

Draining Fluid:

- In operation, the RED drain line of the QCFC cart is connected to the drain port of the vacuum pump using the male double-valved quick connect fitting.
- Used fluid is removed by installing the RED drain hose connection on the pump drain port connection, and pressing the "DRAIN" button on the hand held control.
- Continue draining till all fluid is expelled from the pump. This process is made easier when the old vacuum pump fluid is still warm from pump operation.
- When the pump is empty, remove the RED drain hose and store it back on the cart in its respective holder.

Filling Pump:

- After draining used oil and removing RED hose, install YELLOW fill hose on quick connect coupling.
- Depress "FILL" button and initiate new oil flow in to the pump.
- Continue to press "FILL" button until proper amount of fluid is dispensed into the pump as indicated by the sight glass.
- Activate the pump to circulate the new fluid and check the fluid level. The pump may have to be "TOPPED OFF" after running due to losses in the stages and oil filtration units.
- Disconnect the YELLOW fill hose and store on the cart in its respective holder.

Fluid Disposal:

- After draining the pumps and filling the “CONTAMINATED FLUID” container, dispose of the waste fluid in accordance with EPA, State, Federal, and Local regulations.
- If the fluid is an inert vacuum pump fluid, reclaiming may be an alternative to disposal. Contact your local KJLC sales representative or call 800-245-1656 for more information.
- After filling the “CONTAMINATED FLUID” container, use the empty new fluid container for the next batch of contaminated fluid.

NOTE: It is recommended that the drain pump be flushed out with clean oil or a flushing fluid periodically to avoid damage to internal components due to contaminated fluid being pumped.

CAUTION

Do not mix hydrocarbon base fluids with inert vacuum pump fluids. This can contaminate the respective fluids seriously damaging the operational characteristics of the fluid and damage the equipment. Prior to fluid changes of this type, the QCFC-100 pump and all its components must be cleaned and prepared for use with the fluid.