OilSafe

Tote Dispensing System

Owners Manual

IMPORTANT

- Please read this Owners Manual carefully and thoroughly before installing and operating your Tote Dispensing System.
- Please retain this owners manual for future reference after reading it thoroughly.

OilSafe

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TABLE OF CONTENTS

FOR YOUR RECORDS

Write the model and serial numbers here:

(You can find them on the Serial/Model No. Plate mounted at the rear of your system on a lower tank frame rail.)

Serial / Model #: _____

Supplier Name: _____

Date Purchased: _____

READ THIS MANUAL

Inside you will find important information on how to use and maintain your Tote Dispensing System.

INTELLECTUAL PROPERTY

EXPLANATION OF SYMBOLS USED

This manual contains some common symbols and indications to alert you to specific areas of importance.

WARNING!

A situation that, if not avoided, could result in severe property damage, equipment damage, severe injury, or even death. FAILURE TO FOLLOW this warning will void your product warranty.

CAUTION!

A situation that, if not avoided, could result in property damage, equipment damage, or injury. FAILURE TO FOLLOW this caution will void your product warranty.

IMPORTANT:

This text will be used before text that has been designated as important to the proper installation, operation, or maintenance of your system. FAILURE TO READ and understand this text may result in improper installation, operation, or maintenance procedures and may void your warranty.

WARNINGS AND CAUTIONS

OilSafe® Bulk Systems are designed for the storage of machinery lubricating oils and other NON-VOLATILE fluids. STORAGE OF FLUIDS WITH A FLASH-POINT BELOW 150F (65.50C) IS STRICTLY PROHIBITED.

Components within this system consist of materials that may not be compatible with your fluid. Always consult your supplier and refer to the fluid manufacturer's Material Safety Data Sheet ("MSDS") before introducing a fluid to this system.

WARNING!

ALWAYS ensure the main power supply is first locked out and the system depressurized before any service is performed on this system. NEVER connect or disconnect lines or change filter elements or undertake any service work when this system is running or energized. SEVERE INJURY OR DEATH MAY OCCUR.

CAUTION!

System Operating Pressure should NEVER exceed 300 PSI. Operating pressures can be regulated by adjusting pump bypass relief valves located on pump heads to suit specific lubricant viscosities and temperatures.

IMPORTANT:

ALWAYS REFER TO THIS MANUAL OR CONSULT YOUR SUPPLIER FOR MORE INFORMATION.

- ALWAYS ensure that you wear appropriate Personal Protective Equipment ("PPE") when operating this system.
- ALWAYS ensure that all system hoses, filters and fittings are securely fastened and in good working condition.
- THE TOTE MUST ALWAYS BE VENTED TO ATMOSPHERE (preferably utilizing a Desiccant Air Breather)
- When dispensing or recirculating ALWAYS ensure the grounding cable is connected to the drum or barrel before starting the pump.
- ALWAYS ensure the system is appropriately grounded to earth utilizing the grounding wire provided at the rear base of the system, together with relevant grounding equipment as specified and installed by your authorized electrical personnel in accordance with your local and federal regulations and safety procedures.
- Ambient room temperature where the system is installed should be in the range of 60°F (15°C) TO 80°F (26°C) with optimum room temperature being 70°F (21°C). For ambient temperatures below 60°F (15°C) consult the manufacturer or your supplier for the supply of electric blanket heaters for oil barrels, pails and bulk tanks to ensure stability of lubricant viscosity, condition and system performance. Temperatures less than (<60°F / 15°C) can result in lubricant viscosity increasing above the rated ISO Code you specified at the time of order. Such adverse viscosity changes can cause higher system operating pressures than those set at the factory. System operating pressure should never exceed 300 PSI as this can cause a gasket failure on the spin-on filter resulting in a high pressure oil leak. Normal system operating pressure should be less than 240 PSI. Operating pressures above 240 PSI will necessitate adjustment of the pump pressure relief bypass valve located on the pump head. Contact the manufacturer for more information prior to commissioning the system if the ambient room temperature will ever fall below 60°F (15°C).

WARNING!

FAILURE TO FOLLOW System installation, safety and operating instructions may result in SEVERE INJURY OR DEATH, damage to plant and equipment and void warranties.

OILSAFE LIMITED WARRANTY

OilSafe ("OS") warrants to the original product purchaser (hereinafter the "Customer") that the OS product for which the Customer received this warranty was designed, developed and manufactured using all due reasonable commercial care and good manufacturing practices. OS' products shall be free from defects in material and workmanship for 365 days from the original date of purchase by Customer. OS' sole obligation under this warranty is to repair or replace the product, at OS' option. OS must be notified by Customer in writing of any claim under this warranty within 30-days of any claimed lack of conformity of the product. THIS WARRANTY IS INTENDED TO BE IN LIEU OF ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED. OS SPECIFICALLY DISCLAIMS THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.

Warranty Limitations:

In no event shall OS be liable for any loss, inconvenience or damage, whether direct, incidental, consequential or otherwise, resulting from breach of any express or implied warranty or condition, of merchantability, fitness for a particular purpose or otherwise with respect to this product, except as set forth herein. Some states or countries do not allow limitation on how long an implied warranty lasts so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which may vary, from location to location. This warranty will be interpreted pursuant to the laws of the United States and the State of Illinois. The original English language version (meaning) of this warranty controls over all translations; OS is not responsible for any errors in translation of this warranty and/or any product instructions. This warranty is not intended to confer any additional legal, jurisdictional or warranty rights to you other than those set forth herein or required by law. If any portion of this warranty is held to be invalid or unenforceable for any reason, such finding will not invalidate any other provision. For products purchased in countries other than the United States, please contact OS' authorized representative (i.e., the 'company' or 'person' who represented OS or brokered the 'sale') in the country where the product was purchased.

Warranty Service Options:

For service under this warranty you must notify OS in writing. Such notification must specify in writing the product in question by model and serial number, applicable purchase order number and/or the original of date of your written notification.

You may contact OS as follows:

OilSafe by Whitmore

930 Whitmore Drive
Rockwall, TX 75087 USA

Telephone: (469) 208-2082
Fax: (972) 722-3252
Email: sales@oilsafe.com
www.oilsafe.com

Any insurance and/or shipping costs incurred in returning your OS product for service pursuant hereto are your responsibility. OS will not be responsible for any products lost or damaged in shipment.

Warranty Exclusions:

Representatives and brokers of OS products are not authorized to modify this warranty in any way. It is the Customer's responsibility to regularly examine the product to determine the need for normal service or replacement. This warranty does not cover the following:

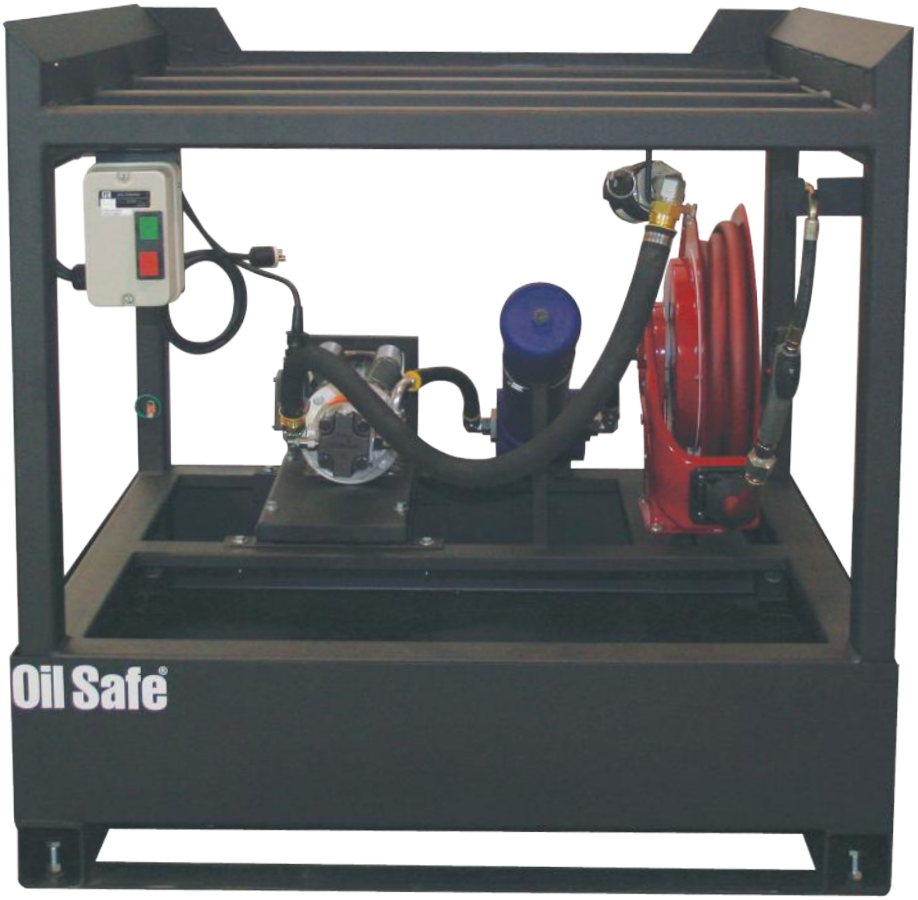
- Products that have been modified, neglected or poorly maintained, misused, abused or involved in accidents or natural disasters.
- Damage occurring during shipment of the product (such claims must be presented directly to the freight forwarder or shipping company).
- Damage to the product resulting from improper maintenance or repair, the use or installation of parts and/or accessories that are not compatible with the original intended use of the product, or the failure to follow the product warnings and usage instructions.
- Damage or deterioration to the surface finish, aesthetics or appearance of the product.
- The labor costs required to remove and/or refit and readjust the product covered by this warranty.
- Normal wear and tear to the product.
- Filter Cartridges, Desiccant Air Breathers, Level Gauges and other consumable items.
- Service Trips to Customer's location to teach Customer how to use the product.
- Defects that result from improper installation or damage not cause by OS.
- Damage to the product caused by accident, fire, floods or other acts of God.

INTRODUCTION

Thank you for purchasing an **OilSafe® Tote Dispensing System.** This system was designed to dispense bulk lubricants in the workplace. The system was designed with quality in mind and is fully modular. The installation, operation, and maintenance instructions in this document will provide you with all the information you will need for the lifetime of your system.

Your system was designed to store and dispense lubricants up to ISO 680 (if specified at the time of order).

FIGURE 1: *Overview of the Tote Dispensing System*



PARTS AND PRE-INSTALLATION CHECK LIST

IMPORTANT:

CHECK packaging list to ensure you have all applicable parts before continuing. CONTACT YOUR SUPPLIER if it appears that any parts are missing or damaged. Refer to the specification sheet for your customized system for detailed system information including electrical requirements, and total weight of system.

OS has completed the assembly for the Tote Dispensing System. The only installation and assembly required after delivery is placing the tote on top of the frame, connecting the suction hose to the drum, connecting the power and making sure of the ground.

Tote Dispensing System:

- 4 Motor/Pump (pre-installed)
- 4 Hose reel with dispensing handle
- 4 Cartridge type filter
- 4 Suction Hose Assembly

IMPORTANT:

Attached to the rear of the Tote Dispensing System are green wires. They should be connected to a known good ground.

INSTALLATION & SET UP

Tools, Materials, and Personnel Requirements:

- Electrical hook-ups and installation should be completed by your authorized electrical personnel in accordance with all local and federal laws and regulations.
- Personal Protective Equipment ("PPE") should be worn when installing and operating this system.

Determine Placement:

1. The system should be installed indoors on a flat, level surface with sufficient load-bearing capacity to support the total system weight. Each electrical motor requires a separate power outlet. See your specification sheet (or system supply quotation) for electrical requirement details. Consult with an authorized and trained electrician.
2. BEFORE beginning installation, determine where your system will be installed and ensure sufficient power outlets have been installed at the rear of the system, positioned behind where the motors will be located. Each power outlet should be equally spaced along the wall and be placed approximately 12" up from floor level. installation, determine where your system will be installed and ensure sufficient power outlets have been installed at the rear of the system, positioned behind where the motors will be located. Each power outlet should be equally spaced along the wall and be placed approximately 12" up from floor level.

IMPORTANT:

- It is important to note the effect of the ambient temperature in which the system is placed for operation. System room temperature should be in the range of 60°F (15°C) TO 80°F (26°C) with optimum room temperature being 70°F (21°C). For ambient temperatures below 60°F (15°C) consult the manufacturer or your supplier for the supply of electric blanket heaters for oil barrels, pails and bulk tanks to ensure stability of lubricant viscosity, condition and system performance.
- Temperatures less than (<60°F / 15°C) can result in lubricant viscosity increasing above the rated ISO Code you specified at the time of order. Such adverse viscosity changes can cause higher system operating pressures than those set at the factory.
- System operating pressure should never exceed 300 PSI as this can cause a gasket failure on the spin-on filter resulting in a high pressure oil leak. Normal system operating pressure should be less than 240 PSI. Operating pressures above 240 PSI will necessitate adjustment of the pump pressure relief bypass valve located on the pump head.
- Contact the manufacturer for more information prior to commissioning the system if the ambient room temperature will ever fall below 60°F (15°C).

ELECTRICAL INSTALLATION

IMPORTANT:

THE SYSTEM SHOULD BE GROUNDED BEFORE USE. A grounding wire is attached to the rear of the frame and should be connected to a good ground. Plug the power cords into a wall outlet or proper extension ground. Make sure there is a good electrical ground and that the voltage supplied is appropriate to the motor specified.

WARNING!

FAILURE TO FOLLOW system installation, safety and operating instructions may result in severe injury or death, damage to plant and equipment and void manufacturer warranties.

The following instructions should be carried out by a trained and authorized electrician or electrical personnel in accordance with your local and federal regulations and safety procedures.

ALWAYS ensure the system is appropriately grounded to earth utilizing the grounding lugs provided at the rear base of the system, together with relevant grounding equipment as specified and installed by your authorized electrical personnel.

INITIAL OPERATION

DANGER

CAUTION!

Personal Protective Equipment ("PPE") should be worn when installing and operating this system.

ALWAYS monitor the system whenever the pump is running or fluid is dispensing.

System Operating Pressure should NEVER exceed 300 PSI. System operating pressures can be regulated by adjusting pump bypass relief valves located on pump heads to suit specific lubricant viscosities and temperatures.

System SHOULD NOT be operated in a location with an ambient room temperature less than 60°F/15°C Contact the manufacturer for more information relating to service in cold environments.

Normal operating pressure when filling, dispensing or re-circulating is typically less than 30 PSI. Normal operating pressure when running the pump against a closed dispensing faucet (bypassing) is typically in the range of 70 PSI – 200 PSI. Should the relief valves require adjustment to optimize performance the instructions can be found in the Troubleshooting Section beginning on page 11.

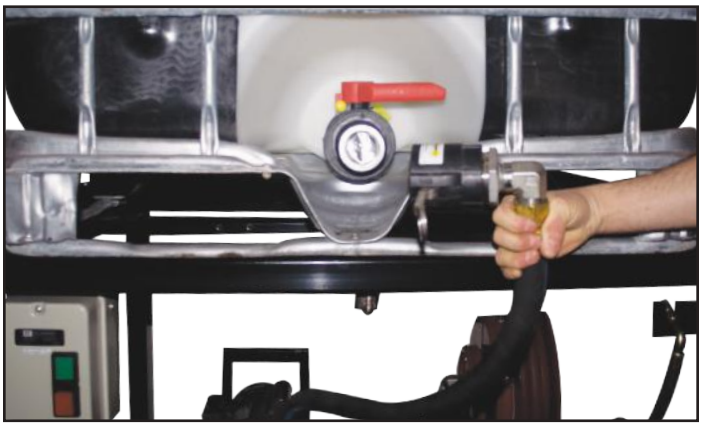


FIGURE 2

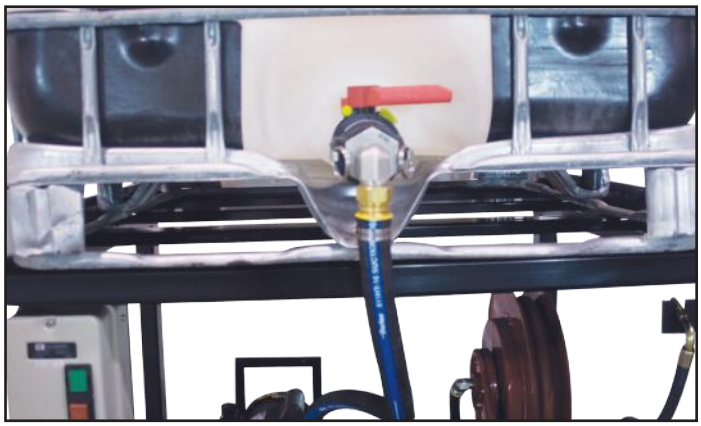


FIGURE 3

FOLLOW THESE STEPS THE VERY FIRST TIME YOU USE YOUR SYSTEM. The system is delivered pre-assembled, packaged.

1. Place the customer supplied tote on top of the frame.
2. Mount suction hose adapter to the tote, open the shut off valve and vent the tote.
3. Ground the Tote Dispensing System by connecting supplied ground wire to a known good ground.
4. Connect the Tote Dispensing System to an appropriate electrical supply.
5. Push the green button to activate the pump. Oil will be available to be dispensed through the hose reel. Do not leave the pump running if oil is not being dispensed as the pump will overheat.

THE FIRST TIME THE SYSTEM IS USED THERE WILL BE SOME AIR THAT HAS BEEN TRAPPED IN THE HOSES. This is normal and will not affect the system. Simply wait for the air to stop coming out of the lines and fluids to dispense normally before continuing. If air continues to come out of the hoses after the initial use, there may be a problem with a seal or a hose. See the Troubleshooting section of this manual, or contact your supplier for additional support.

MAINTENANCE

Periodic maintenance should be scheduled and performed on your system every three months after your initial installation.

Requirements Prior to Maintenance:

WARNING!

ALWAYS ensure the main power supply is first locked out and the system depressurized before any service is performed on this system. NEVER connect or disconnect lines, change filter elements, or undertake any service work when this system is running or energized. SEVERE injury or death may occur.

CAUTION!

Personal Protective Equipment ("PPE") should be worn when installing and operating this system.

Maintenance Checklist:

EVERY 3 MONTHS:

4 Check Filter. Filter housing may have an alarm to indicate a clogged filter.

EVERY 6 MONTHS:

4 Replace Filter as required.

4 Inspections:

- Inspect all hoses for cracks or kinks.
- Inspect all hose fittings for cracks or leaks.
- Inspect and tighten all bolts.

4 Clean external surfaces: (Use an environmentally friendly cleaning/degreasing fluid and warm water. Rinse completely before replacing.)

WARNING!

OilSafe DOES NOT recommend changing the type of fluid stored in a tank. Each system is custom-built to customer specifications including the type of fluid stored. Contact your supplier if your fluid storage needs change to remove the possibility of cross-contamination and incompatibility of system materials or components with a new fluid.

Also be aware of any change in ambient room temperature in the new location. Ambient room temperature should not be less than 60°F (15°C).

TROUBLESHOOTING

WARNING!

ALWAYS ensure the main power supply is first locked out and the system depressurized before any service is performed on this system. NEVER connect or disconnect lines, change filter elements, or undertake any service work when this system is running or energized. SEVERE injury or death may occur.

The Tote Isolation Valves (located on the front of the tote) must be in the OPEN position when operating the system and in the CLOSED position when servicing the system.

The following troubleshooting procedures will help you identify and correct problems with your system. Every part of the system has been designed per your specifications and should not require maintenance, repair, or calibration beyond what was described in the maintenance section of this document.

If any of these troubleshooting procedures do not solve the issue, contact your supplier for additional support.

Issue	Steps to Resolve
The Tote Dispensing System is not dispensing correctly	1. Check that tote shut off valve is in the proper position. 2. Check fittings for cracks and leaks. 3. Check the motor for correct rotation. If not, contact electrician. 4. Check the seals on the suction hose assembly. Replace if cracked or damaged. 5. Ensure that the Tote is vented.
The motor stops working.	1. Check electrical enclosure to ensure power is applied to the pump. 2. Check all circuit breakers to ensure power is available. Check the power cord from the electrical enclosure to the motor for cracks or problems. 3. Check the power cord connector at the motor to ensure all the pins are seated correctly and that the connector is clean of dirt and debris.

TROUBLESHOOTING CONTINUED

Issue	Steps to Resolve
The pump system pressure is above 240 PSI.	1. Locate the pump bypass pressure relief valve on the side of the pump head. 2. Using a wrench, loosen the lock nut on the valve spindle by turning it counter clock wise. 3. Turn the valve spindle counter clock wise until it comes to a stop. This will result in the pressure relief valve now being in the lowest possible pressure setting. 4. Have an additional operator stand at the control panel and start the pump and dispense fluid. Turn the valve spindle in until the flow from the hose reel is as desired. Lock down the adjusting nut. 5. In general the lowest possible pressure that results in acceptable flow will give the best results.
The pump system pressure is above 240 PSI AND the system is operating in a cold environment (less than 60°F / 15°C).	1. Ambient room temperature where the system is installed should be in the range of 60°F (15°C) TO 80°F (26°C) with optimum room temperature being 70°F (21°C). For ambient temperatures below 60°F (15°C) consult the manufacturer or your supplier for the supply of electric blanket heaters for oil barrels, pails and bulk tanks to ensure stability of lubricant viscosity, condition and system performance. 2. Temperatures less than (<60°F / 15°C) may result in lubricant viscosity increasing above the rated ISO Code you specified at the time of order. Such adverse viscosity changes can cause higher system operating pressures than those set at the factory. System operating pressure should never exceed 300 PSI as this can cause a gasket failure on the spin-on filter resulting in a high pressure oil leak.

REPLACEMENT PARTS LIST

TABLE 1: *Spare and Replacement Parts List*

Item Description	Type	Part #
Pump Assembly Low Viscosity 110v/60hz	Pump/Motor	895500
Pump Assembly Low Viscosity 220v/50hz	Pump/Motor	895550
Pump Assembly High Viscosity 110v/60hz	Pump/Motor	895505
Pump Assembly High Viscosity 220v/50hz	Pump/Motor	895555
Hose Reel	Reel	895515
Hose Reel Nozzle	Nozzle	895517
Pall Filter Housing	Cartridge	895580
Pall Filter Element	3um	895581
Pall Filter Element	7um	895582
Pall Filter Element	12um	895583
Pall Filter Element	25um	895584
Pall Differential Pressure Indicator	Indicator	8955086
Electrical Box-Complete	Control	895510
Cam Lever Coupling	Coupling	895509

REPAIR AND REPLACEMENT PROCEDURES

WARNING!

ALWAYS ensure the main power supply is first locked out and the system depressurized before any service is performed on this system. NEVER connect or disconnect lines, change filter elements, or undertake any service work when this system is running or energized. SEVERE injury or death may occur.

The major components of the system were designed to be line replaceable. Before attempting any repairs or replacement, contact OilSafe in the event your part is covered by warranty.

You may contact OS as follows:

OilSafe by Whitmore

930 Whitmore Drive
Rockwall, TX USA

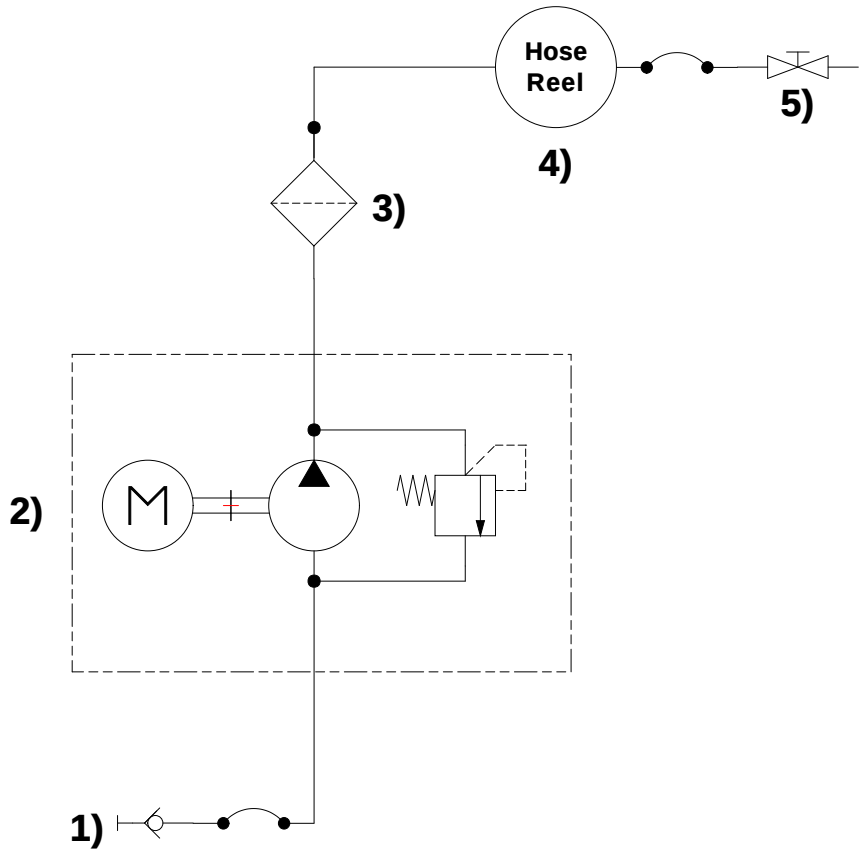
Telephone: **(469) 208-2082**
Fax: **(972) 722-3252**
Email: **sales@oilsafe.com**
www.oilsafe.com

Do not disassemble any part of the system without authorization from OS. Failure to receive this authorization will void your product warranty.

The following parts of your system are replaceable. Contact your supplier for ordering information.

- The Tank and the Motor can be replaced.
  Contact your supplier for specific instructions and have your system specification sheet at hand.

OilSafe Tote Dispensing Rack
Plumbing Schematic - Rev2



1) 2" Female Male camlock connection for tote suction
2) 1HP-1200rpm motor & 3gpm(11.4lpm) 150psi(10.3bar) pump or Pneumatic diaphragm pump
3) Oil filter with condition indicator
4) Hose reel
5) Dispensing gun

CUSTOMER SERVICE AND WARRANTY ISSUES

For any customer service, ordering requests, or warranty issues, please contact your authorized supplier or OilSafe.

You may contact OS as follows:

OilSafe by Whitmore

930 Whitmore Drive
Rockwall, TX USA

Telephone: **(469) 208-2082**
Fax: **(972) 722-3252**
Email: **sales@oilsafe.com**
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NOTES:

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