



# Accurate, Intelligent, Portable Oil and Lubricant Dispensing System

Includes Models: SKL SMARTK-5, SKL SMARTK1562, SKL SMARTK1566, SKL SMARTK1572, SKL SMARTK1576, and SKL SMARTK2072



Model SKL SMARTK1562 shown.

# **Operation Manual**

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### **△** WARNING



#### TURN POWER OFF

Before performing any maintenance, be sure to turn system power off to avoid electric shock.



#### EYE PROTECTION

Pressurized systems may cause leaks and spray that may be dangerous for your eyes. Always wear eye protection.



#### **INJURY**

Wear gloves for protection from liquids that may cause irritation or burns.



#### **READ**

Read and understand all related manuals thoroughly.

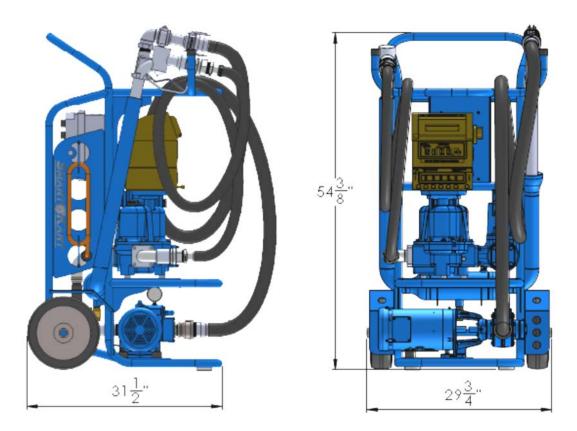
### **Receipt and Inspection**

Upon receipt of equipment, inspect for damage and sign delivery receipt only if no damage is present. Promptly notify delivery company about any damage.

### **General Description**

Smart-Kart<sup>TM</sup> Drum & Tote Portable Lubrication Fill Systems are specially designed to transfer oils and lubricants from bulk tanks, totes, or drums to appropriate containers. Each Smart-Kart<sup>TM</sup> includes on-board controls that automatically adjust pump speed based on transfer product viscosity, thereby optimizing the flow rate to achieve maximum-speed delivery. The unit operates on 115 VAC power. 2-inch diameter suction and 1-1/2-inch discharge hoses and fittings are included, and each cart comes with a product drain catch tank. Components are mounted on a custom-designed, powder-coated steel frame equipped with pneumatic tires. All Smart-Karts<sup>TM</sup> equipped with meters are Weights-and-Measures compliant for reliable and accurate custody transfer applications involving a range of oils and lubricants.

### Smart-Kart<sup>™</sup> Dimensions



Model SKL SMART1566 Shown

# Smart-Kart<sup>™</sup> Specifications

#### Standard Features (included with all models)

- Transfer Fluid Viscosity Range: 30 20,000 SSU
- Pump: Self-priming, positive displacement pump with internal bypass valve
- Motor: TEFC, CSA & UL-listed (non-explosion proof)
- Power Requirements: 115 VAC, non-gfci 20 amp dedicated circuit (maximum 15 amp draw)
- Power Cord: 25' length, 12 gauge, industrial grade, oil resistant cable with standard 3-prong plug
- Control Box: UL-listed, NEMA 4 industrial-grade enclosure
- Suction Stinger: 36" or 60" aluminum with male camlock
- Suction Hose: 2" x 10' length nitrile rubber
- **Discharge Hose:** 1.5" x 15' length nitrile rubber
- Swivels on suction and discharge hoses for ease of handling
- Nozzle Holders and Drip-Catch Tank w/ Drain Ports for Suction Stinger & Discharge Nozzle
- Frame: Industrial-strength, powder coated steel
- Tires: Heavy duty pneumatic tires

# **Smart-Kart** TM **Specifications** - continued

#### Features (listed by model)

#### Model SKL SmartK-5

• Meter: none

#### Model SKL SmartK-1562

• Meter: TCS 682 aluminum, piston-style meter w/ 1.5" inlet and 1.5" outlet

• Register: TCS mechanical register

#### Model SKL SmartK-1566

• Meter: TCS 682 aluminum, piston-style meter w/ 1.5" inlet and 1.5" outlet

• Air Eliminator: TCS aluminum air eliminator

• Register: TCS mechanical register

• Ticket Printer: TCS manually operated ticket printer

#### Model SKL SmartK-1572

• Meter: TCS 700 aluminum, rotary-style meter w/ 1.5" inlet and 1.5" outlet

• Register: TCS mechanical register

#### Model SKL SmartK-1576

• Meter: TCS 700 aluminum, rotary-style meter w/ 1.5" inlet and 1.5" outlet

• Air Eliminator: TCS aluminum air eliminator

• Register: TCS mechanical register

• Ticket Printer: TCS manually operated ticket printer

#### Model SKL SmartK-2072

• Meter: TCS 700 aluminum, rotary-style meter w/ 2.0" inlet and 2.0" outlet

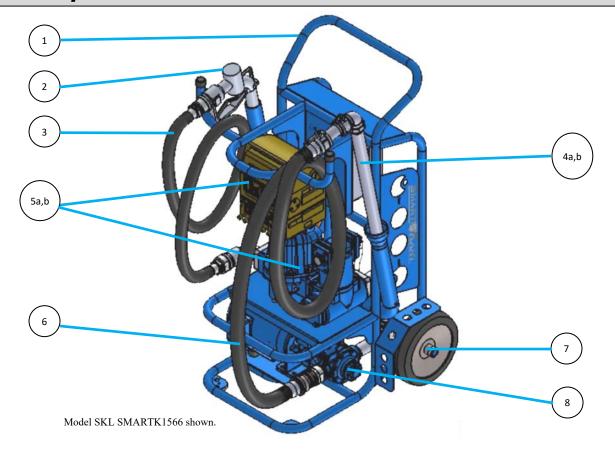
• **Register:** TCS mechanical register

#### **Options**

Upgrade to TCS 3000 Electronic Register

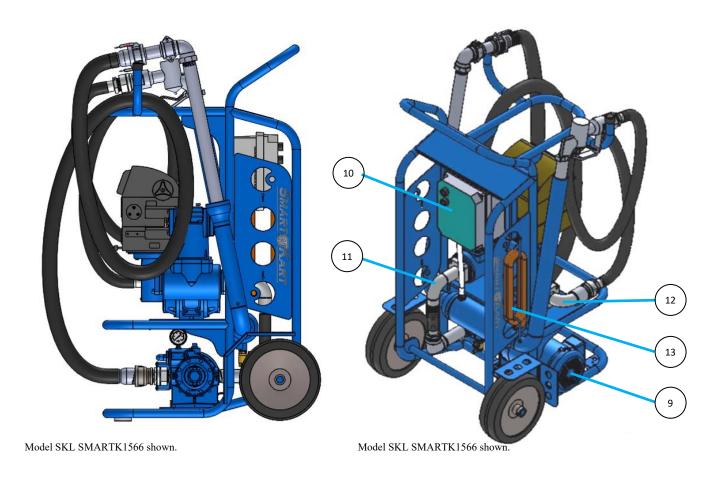
• Upgrade to TCS 3000 Ticket Slip Printer

# **Assembly Overview & Parts List**



Illus. No.	Description	Part No.
1	Smart-Kart frame, Steel, Powder Coated	SBD 910995
2	Nozzle, Aluminum, 1-1/2"	MOR 231AF-0600
3	Discharge Hose, Nitrile, 1-1/2" x 15'	HOS T650AH-1.5
4a	Tote / Drum Aluminum Suction Stinger, 36"	SBD 911068 (36")
4b	Tote / Drum Aluminum Suction Stinger, 60"	SBD 911068 (60")
5a	Piston Meter, WM, w/ Mech. Register & Printer, Air Eliminator	68215SP2AT
5b	Rotary Meter, WM, w/ Mech. Register & Printer, Air Eliminator	700 15SP2AT
6	Suction Hose, Nitrile, 2" x 10'	HOS T605AH-2
7	Cart Wheel & Tire Assembly	SBD 910996
8	Pump, Pos. Displacement, Ductile Iron, 1.5"	BLK XLF1.5B

# **Assembly Overview & Parts List (continued)**



Illus. No.	Description	Part No.
9	Pump Motor	MOT VEM3558T
10	Control Box	MEI ELC4545A
11	Elbow, Meter Inlet, 682/700	SBD 911043
12	Elbow, Meter Outlet, 682/700	SBD 911044
13	Electrical Cable, 110 VAC, 25' w/ 3-prong Plug	KEN 062256106

### **Mechanical Installation Instructions**



### **CAUTION**

Systems are heavy! Use care when transporting...

- ♦ Use caution when rolling over uneven ground, or when going up a ramp.
- ♦ If moving from the ground to a truck bed, always use a lift to avoid injury.
- ♦ If transporting in a vehicle, system must be secured well.
- MEI Portable Lubrication 2-Wheel Cart Fill Systems come fully assembled for normal use.
- Optional fill and dispenser couplers can be installed. Keep unused couplers in a clean, dry place.
- Tank being dispensed from must be vented. Vent tank by temporarily removing lid or plug on tank top. A better method is to install a pressure vacuum vent on the tank top (vent is <u>not</u> included with Fill System).

### **Electrical Installation Instructions**



# WARNING ELECTRICAL HAZARD





SERIOUS INJURY OR DEATH MAY RESULT FROM ELECTICAL SHOCK.
A CERTIFIED ELECTRICIAN SHOULD VERIFY ADEQUATE POWER SUPPLY.

- Power Requirements: 115 VAC standard 15 amp outlet with a recommended 20 amp circuit breaker.
- NOTE: The cart will not operate on a circuit with a GFCI (Ground Fault Circuit Interrupter)
- It is strongly recommended that <u>nothing else</u> be operating on the 115 VAC circuit.
- Extension cords, for temporary use, <u>MUST</u> be able to handle at least 15 amps at 115VAC over their full length.



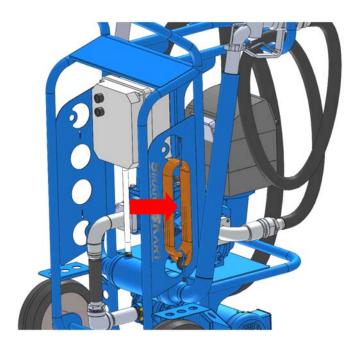


# **System Operation**

Open top of supply container from which lubricant is to be withdrawn. Wipe off any dirt off suction wand, then place wand end of suction hose into supply container.



Plug power cord into appropriate 115V power source. Note that system takes 30 seconds to power up and be ready to use.

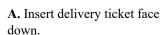


# **System Operation (Continued)**

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<u>For models equipped with Ticket Printer</u>: prepare Ticket Printer for Operation (*NOTE: Prior to first-time use, remove the sample ticket from ticket printer by turning reset knob until it stops and release ticket. If ticket fails to release, do not tear ticket. Instead, turn knob and try procedure again).* 









**B.** Turn reset knob to set register to zero and lock ticket into place.

Remove dispensing hose from hose hanger and insert nozzle into receiving container. (NOTE: For first-time use, dispose of the first 2 gallons pumped, into an approved waste container.)



# **System Operation (Continued)**

5 Press "Start" button to start pump.

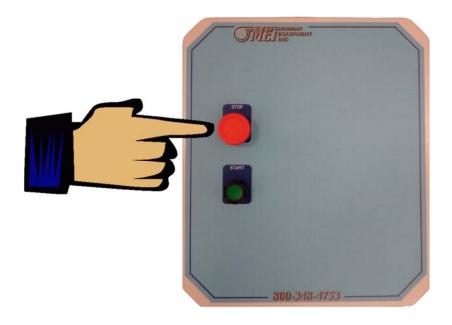


6 Squeeze nozzle trigger to make product delivery.



# **System Operation (Continued)**

When dispensing is complete, turn off power by pressing "STOP" button. Disconnect cord from power source and rewind on cord holder.



- 8 Remove discharge nozzle from receiving container and replace hose on hose hanger
- 9 For models equipped with Ticket Printer: turn reset knob on register to print and release ticket.





### **Warranty Information**

### **Murray Equipment, Incorporated**

**Exclusive Limited Warranty** 

#### Warranty

New machines, equipment or components of Murray Equipment, Inc. ("MEI") manufacturing or fabrication with which this warranty is enclosed, are warranted by MEI to the original purchaser only for a period of one (1) year from the date of invoice, to be free, under normal use and service, from defects in material workmanship. For defects occurring within the stated warranty period, MEI will repair or replace, at MEI's option; provided that part(s) are returned to MEI transportation charges prepaid, and that upon MEI's examination, the part(s) or workmanship are determined to have been defective upon delivery to the purchaser.

#### **Exclusions**

Labor and/or travel costs are not covered under this warranty. Warranty does not cover any miscellaneous products or drum/ tote dispensing and metering equipment not manufactured by MEI, but these items may be covered by the separate warranties of the manufacturer. This warranty does not extend to any equipment which has been subjected to misuse, negligence, or accident, or if operated in any manner other than in accordance with MEI's operating instructions and specifications. This warranty applies only to products sold in the United States and Canada.

#### **Claim Procedures**

In order to obtain performance by MEI of its obligations under this warranty, the original purchaser must return the defective machine, piece of equipment, or component covered by this warranty, with transportation charges prepaid, to MEI at the address shown below together with a written statement setting forth the nature of defect and proof of purchase from MEI.

#### **Limitations**

There are no other warranties of any kind expressed or implied. MEI specifically disclaims any warrant of merchantability or of fitness for any particular purpose. MEI's sole obligation, which shall represent the buyer's sole and exclusive remedy, shall be to repair or at MEI's option to replace any product or part determined to be defective. In no event shall MEI be held liable for any special, direct, indirect, incidental, consequential or other damages of similar nature incurred, nor any liability to be assumed except as expressly provided herein; there is no other express or implied warranty.

#### **Design and Equipment**

Any changes in design or improvements added shall not create any obligation to install same on equipment previously sold or ordered.

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Liquid Handling Solutions

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