Installation and maintenance guide



# Electronic lube meter

# Model 981, series "A"



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## 🛦 DANGER

Read manual prior to installation or use of this product. Keep manual nearby for future reference. Failure to follow instructions and safety precautions may result in death or serious injury.



### A WARNING

Systems which will be dispensing fluids under pressure may need to be protected by using a thermal relief kit, which will safely limit the pressures caused by thermal expansion. Please contact your local Lincoln distributor and refer to Service Page Section K5, Page 31 for more details. Failure to include thermal relief protection may cause damage not covered under Lincoln's warranty policy.

## General

The Lincoln electronic lube meter is designed specifically to dispense motor oils (SAE 5-50), gear oils (SAE 80-240), automatic transmission fluid, antifreeze (Ethylene glycol), brake fluid, engine coolant, and windshield wiper fluid solutions. Modular design, low cost, lightweight and rugged design make the model 981 the best choice for overhead reel systems.

The electronic register module contains a microprocessor powered by a lithium battery. It can be programmed to dispense in pints, quarts, liters, or gallons and will totalize in liters or gallons. The meter calibration factor is determined during factory test. The meter can be recalibrated in the field for fluids of different viscosity. A six-digit liquid crystal display, accurate to the second decimal place, shows the exact amount of fluid dispensed. The electronic-register, module housing is made of shock-resistant nylon that is protected by a rubber boot to handle the harshest of environments.

## Operation

As fluid passes through the metering chamber by entering the inlet port, it forces the internal gears to rotate and exits through the outlet port. Each rotation of the gear displaces a given volume of fluid.

The display shows the amount of fluid dispensed since the last time the reset button was pushed. Pushing the reset button will reset the display to zero for the next dispense.

To change the unit of measure:

- 1 Press the TOTAL button three times, followed by the RESET button three times within a time frame of two seconds. The active unit of measure symbol begins flashing, indicating that you are in programming mode.
- **2** Press the RESET button repeatedly until the desired unit of measure appears flashing in the display.
- **3** Simultaneously press and hold the RESET button and the TOTAL button for about three seconds to enter the new unit of measure and exit programming mode.

Meter is not for resale measurement of fluid.

## A CAUTION

Please ensure that all fluid is properly filtered before it enters the meter.

Foreign particles in the meter could cause inaccurate meter readings, and could possibly damage the meter.

## Features

- 1,500 psi (103.5 bar) pressure rating.
- Max flow rate 10 gal./m (38 l/m).
- Large six-digit LCD display with two decimal point precision.
- Dispense total display in pints, quarts, gallons or liters.
- Unit of measure selectable from the front of register.
- Totalization in gallons and liters.
- Re-settable and non-re-settable totalizer
- Display operation temperature range -4 to 140 °F (-20 to 60 °C).
- Low-battery indicator
- Long-life, field-replaceable, top-loading battery
- Accuracy of ±0.5 percent
- Calibration factor programmable from front of register
- Calibration factor saved in nonvolatile memory
- Rigid spout with automatic tip

**Note:** The display remains ON and does not affect the life of the battery

# Apply Meter to Hose

Close the drain valve before starting this procedure.

- 1 Attach swivel to meter. Apply thread sealant to the external end of the hose. Recommended sealant is Loctite® 243.
- **2** Insert the metal end of the hose into the swivel. Tighten completely with an open ended, adjustable, wrench.



#### Notice

Threaded end of meter always has internal threads. Metal end of hose must have external threads.

Apply thread sealant, Loctite® 243 or equivalent, to external end.

Inlet and outlet swivel connections are either 1/2" NPT or 1/2" BSPP, depending on meter model.

# Program scale factor

- 1 Press the TOTAL button three times, and immediately press the RESET button three times, within a two-second time frame. The active unit of measure symbol will flash, indicating that you have successfully activated the meter's programmable mode.
- **2** Press the TOTAL button to advance to the first digit of the scale factor. The first digit will be blinking.
- **3** Press the RESET button to increment the digit to the desired value.
- 4 Press TOTAL to move to the next digit. Repeat these steps for each digit.
- 5 Once the value has been properly set, simultaneously press and hold both the RESET button and the TOTAL button for three seconds. This will enter the scale factor value and will exit from programmable mode.



Parts		
ltem	Description	Part no.
1 2 3	Housing cover kit with screws (standard) Gear service kit with o-ring (standard) Register module with screws	276920 272377 276921
4 5 6	Rubber boot (not shown) Control handle (not shown) Rigid spout with automatic tip (not shown)	276922 276924 282842
7	Replacement battery, 3 V lithium 2/3 AA (not shown)	276923





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