lubemate
by macnaught

DIGITAL OIL METER - 3/4" 725psi   L-DOM80-01

2 YEAR MACNAUGHT WARRANTY*

Thank you for purchasing a Lubemate digital oil meter. Your digital oil meter has been designed to reliably dispense engine oil, gear oil, automatic transmission fluid and premix automotive coolants.
This manual assists in operating and maintaining your new digital oil meter. Please take a few minutes to read through this manual before installing and operating your new digital oil meter.

High accuracy digital oil meter
5 digit easy to read, resettable LCD display.

Variable measurement units
can be set to display in litres, gallons, pints & quarts.

Heavy duty construction
makes it suitable to use on a wide range of pumps.

TECHNICAL SPECIFICATIONS

- Inlet/outlet: 3/4" BSP (F)
- Flow range: 6-80LPM
- Accuracy +/- 0.5%
- Max pressure up to 5,000kPa (725psi)

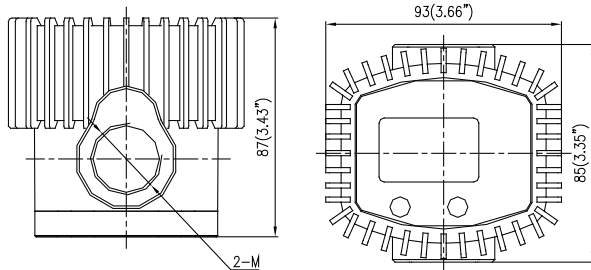- Suitable for oils up to SAE 140, engine oils, gear oils, ATF, hydraulic oils and premixed coolants

GENERAL SAFETY REGULATIONS

1. Keep the work area clean and dry. Damp or wet work areas can result in injury.

2. Keep children away from work area.
DO NOT allow children to handle this product.

3. Use the right tool for the job. DO NOT attempt to force small equipment to do the work of larger industrial equipment. There are certain applications for which this equipment was designed. It will do the job better and more safely at the capacity for which it was intended. DO NOT modify this equipment, and do not use this equipment for a purpose for which it was not intended.

4. Check for damaged parts. Before using this product, carefully check that it will operate properly and perform its intended function. Check for damaged parts and any other conditions that may affect the operation of this product. Replace damaged or worn parts immediately.

5. DO NOT overreach. Keep proper footing and balance at all times to prevent tripping, falling, back injury, etc.

6. DO NOT use the equipment when tired or under the influence of drugs, alcohol, or medication. A moment of inattention while operating this equipment may result in serious personal injury.

INSTALLATION

The digital meter installed by thread joint in the pipeline. It is suggested to install a filter at the inlet to keep the fluid pure. That will prolong the life of the meter.

⚠ WARNING

WARNING: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions or situations that could occur. It must be understood by the operator that common sense and caution are factors that cannot be built into this product, but must be supplied by the operator.

TECHNICAL DETAILS

Data	Value
Flow rate	6 ~ 80L/min
Operating Pressure (Max)	725psi (50bar)
Operating temperature	-10°C ~ 50°C
Accuracy	±0.5%
Fluid Type	Oil
Reset Total	5-Digit present total (0.01~ 999.99)
Non-reset Total	5-Digit non-resettable total (0.01~ 999.99)
Inlet and Outlet	3/4" BSP
Weight	0.8kg
Power Supply	1x3V (1xCR2)

The digital meter designed by accurate measuring chamber and oval gears inside. Aluminum body, LCD screen make it easy, portable & reliable to install. The meter can be used for measuring several different fluids, such as oil, diesel & kerosene.

OPERATION

Function button introduction
1. LCD display.
2. "MOVE" button.
3. "RESET" button.

LCDB display key
1. Partial register (5 figures with moving comma from 0.1 to 99999). Indicating the volume dispensed since the reset button was last pressed.
2. Indication of battery charge.
3. Indication of calibration mode.
4. Indication of resetting present total to Zero.
5. Total register.
6. Indication of flow rate mode.
7. Indication of unit of measurement of partial: L= Litres   GAL = Gallons
                                                                                    PT = Pints   QT = Quarts

User Buttons
The digital oil meter features two buttons (MOVE and RESET) which individually perform two main functions and together, other secondary functions. The main functions performed are:
- For the reset key, resetting the partial Register and reset table total (reset total).
- For the move key, entering instrument calibration mode.
Used together, the two keys permit entering configuration mode.

Battery Replacement
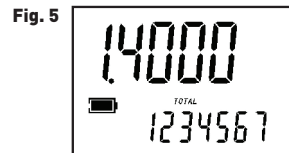When replacing the battery, please open the cover, remove the plug and replace the battery.
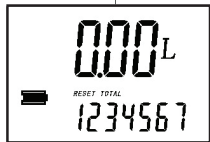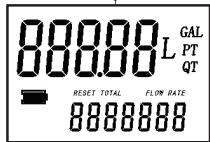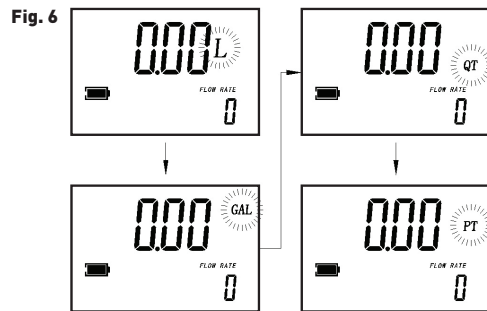
DAILY USE, BUTTON USAGE, CALIBRATION AND MEASUREMENT UNIT CHANGE

Fig. 4

Reset the present total (see Fig. 4)
1) When the meter is on standby, press the RESET key.
2) The display shows all the segments.
3) The meter resets the present total already.

Fig. 5

Show current correction factor and general total (See Fig. 5)
Press MOVE and RESET together and hold for two seconds.
Value "1.4000" is the correction factor which can be reset;
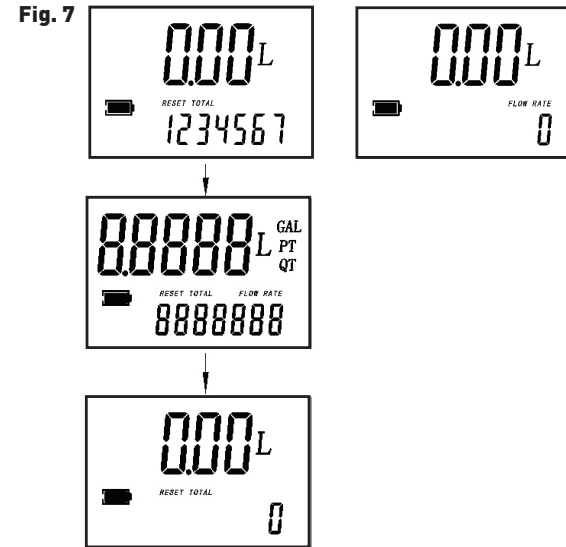"1234567" is the general total which cannot be reset.

Fig. 6

Measurement unit change (See Fig. 6)
Press MOVE and RESET together and hold for five seconds.
Zone 7 on the display is the current unit. Press RESET to chose a different measurement unit and then press MOVE to confirm.

Reset The Resettable Total (See Fig. 7)
When the meter is on standby, press the RESET key for 2 seconds to reset the present total first.

Fig. 7

PROCEDURE FOR ENTER THE CORRECTION FACTOR DIRECTLY
Carefully follow the procedure indicated below.

FORMULA

PROPER CORRECTION FACTOR = CURRENT CORRECTION FACTOR × (ACTUAL VALUE/ DISPLAY VALUE)

Example:
Actual value   20.75
Display value   18.96
Current correction factor   1.000
Proper correction factor   1.000×(20.75/18.96)=1.000×1.094=1.094
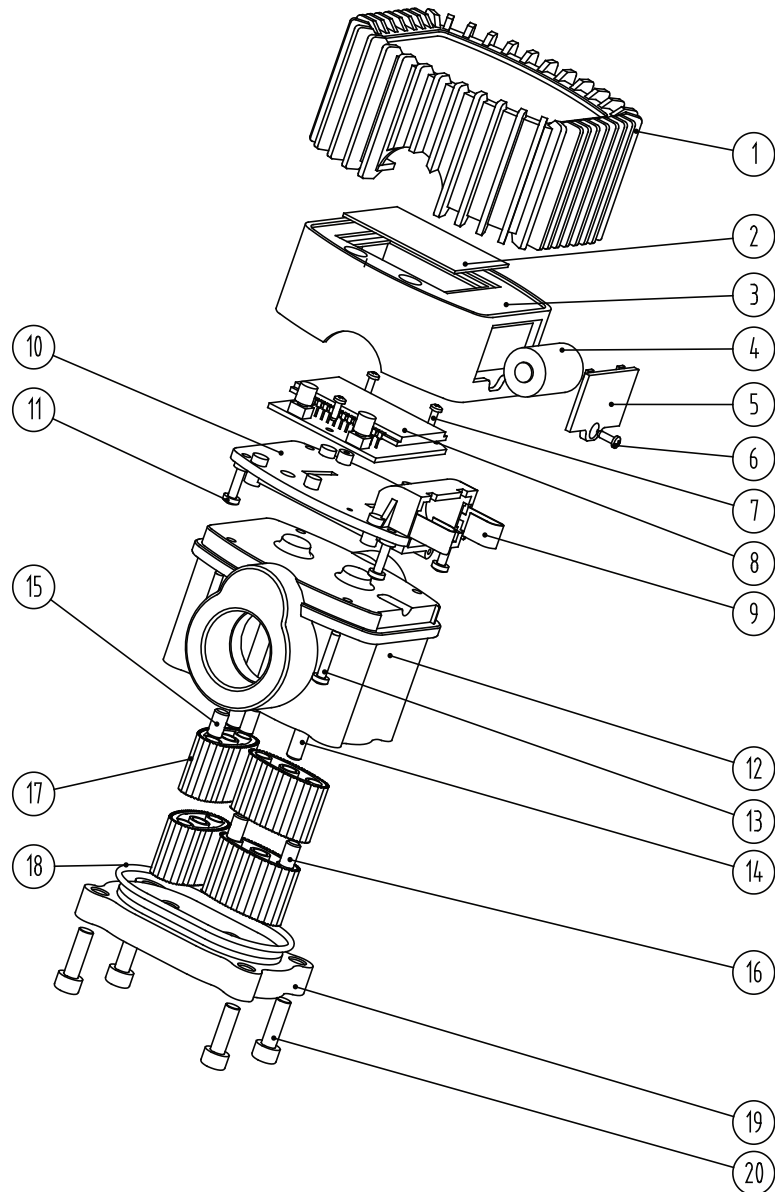
1	Wait for the meter to go to standby.	*123.45 L* RESET TOTAL 1234567
2	Reset the resettable total.	*0.00 L* RESET TOTAL 1234567
3	Press the MOVE key. Keep it pressed until similar with the image showed (the digit flash in ① zone), it means the meter is in correction factor modification mode.	*1.4000* RESET TOTAL Cal 1234567
4	Press the RESET key to choose the right digit from 0 to 9. Press the MOVE key to start the next digit. So the digit of correction factor can be changed one by one.	*1.4817* RESET TOTAL Cal 1234567
5	Make sure the correction factor is right, press the MOVE key. Keep it pressed until quit calibration mode, the factor is saved. The meter goes to standby again.	*0.00 L* RESET TOTAL 1234567

Modify the correction factor in field
Please carefully follow the procedure indicated below.

1	Wait for the meter to go to standby.	*123.45 L* RESET TOTAL 1234567
2	Reset the resettable total.	*0.00 L* RESET TOTAL 1234567
3	Start dispensing into a measuring glass. Stop dispensing when over 5 Litres of volume is reached, read out the actual value. The volume that is displayed on the LCD is the Display Value, not the Actual Value which may be slightly higher. For example, in the figure on the right, the Display Value is 18.96 while the Actual Value is 20.75.	*18.96 L* RESET TOTAL 1234567
4	Press the MOVE key. Keep it pressed until showed as the right fig., the digit flash in ① zone, Press the RESET key to choose the right digit from 0 to 9. Press the MOVE key to go the the next digit so that the Actual Value can be input.	*018.96 L* RESET TOTAL Cal 1234567 — *020.75 L* RESET TOTAL Cal 1234567
5	Make sure the correction factor is right and then press the MOVE key. Keep it pressed until calibration is finished andthe factor is save. The meter will then return to standby.	*0.00 L* RESET TOTAL 1234567

EXPLODED DIAGRAM

Part No.	Description	Q'ty
1	Rubber protection	1
2	Protection board for LCD Display	1
3	Meter cover	1
4	Battery	1
5	Battery cover	1
6	Self tapping screw	1
7	Self tapping screw	3
8	Electrical board	1
9	Spring slice for battery	2
10	Fix board	1
11	Self tapping screw	4
12	Meter body	1
13	Self tapping screw	4
14	Shaft	2
15	Magnet	2
16	Pin	2
17	Oval Gear	4
18	O-ring	1
19	Bottom plate	1
20	Hexagon screw	4

No spare parts available.

MAINTENANCE

Battery Replacement

1. When the battery signal is flashing on the LCD **(see Fig. 8)**, it means the meter is in low battery. In this condition, the meter continues to work correctly, but the flashing icon warns the user that it is advisable to change the battery.

2. Remove the Rubber protection, screw off the screw on the battery cover, then open the battery box to change the battery.

3. After that, install the battery cover, tighten the screw, fix on the rubber protection to finish the battery change. **(Battery type: 1×CR2(3V))**

Fig. 8

NOTE: This product should be disposed of according to all applicable local and national government environment regulations and guidelines!

lubemate
by macnaught

Lubemate® is a practical, cost-effective range of
equipment brought to you by the trusted team at Macnaught.

All Lubemate products are specially selected by our
experienced technical team at Macnaught®, ensuring they meet our
strict quality standards.

macnaught
Built to last since 1948.

Macnaught Pty Ltd
41-49 Henderson St, Turrella NSW 2205. Australia

Ph: 1800 185 102 **Fax:** +61 2 9597 7773
Email: info@macnaught.com   **Website:** macnaught.com