INTRODUCTION

The LM50M meter has been designed specifically to dispense lubricating oils, ATF and engine oil up to a viscosity of SAE 140. This high pressure, positive displacement-type meter is suitable for all in-line and end-of-line applications and features a rugged and robust register with Total and re-settable Totals.

Please read and retain this Owner’s manual to assist you in the operation and maintenance of this quality product.

GENERAL INFORMATION

If you experience problems with this product, refer to the Maintenance and Troubleshooting sections of this manual. If you require further assistance, please contact GPI Customer Service.

IMPORTANT INFORMATION

GPI recommends that if you are using your meter as an in-line application you should install a filter before the inlet of the meter. Contact GPI for further details.

INSTALLATION

Flow direction is bottom to top through meter. Do not over tighten connections.

NOTE: If using in an in-line application, open the valve slowly to prevent over spinning the rotors.

OPERATION

Reset Button
The Reset Button allows you to clear the Total.

MAINTENANCE

Register and Gear Train Removal
1. Remove the protective shroud and peel off the meter faceplate.
2. Remove the four (4) Phillips head screws.
3. Remove the register assembly.
4. Take careful note of the orientation of the gears on the gear train, then carefully remove the gears.

NOTE: Assembly is a reversal of the assembly procedure.
5. Replace the gears.
6. Replace the register and screws.
7. Fit a new faceplate onto the register face.
8. Replace the protective shroud.

Rotor Replacement
1. Remove the eight (8) Phillips head screws from the underside of the meter and remove the coverplate and O-ring.
2. Remove both rotors and inspect for any signs of wear or damage. Replace if worn or damaged.

NOTE: The register is not repairable and will need to be replaced if faulty or damaged.
6. Replace the register and screws.
7. Fit a new faceplate onto the register face.
8. Replace the protective shroud.

CAUTION

Ensure the fluid supply to the meter is disconnected and the line pressure is released before disassembly.

Rotor with Magnets

NOTE: If using in an in-line application, open the valve slowly to prevent over spinning the rotors.

NOTE: If the rotors do not rotate freely, remove one of the rotors and replace it correctly at 90 degrees to the other rotor. Re-check the operation of the rotors.
4. Lightly grease the O-ring and place it on the meter body.
5. Clean the meter coverplate and place it on the body. Take care not to damage the O-ring.
6. Install the eight (8) Phillips head screws and tighten in a diagonal pattern to 0.73 ft.-lbs. (1 nm). Visually check that the cap has been pulled down evenly.
7. Test the meter by turning the rotors with a finger or by supplying low air pressure (No more than a good breath) to the inlet port of the meter. This will confirm the meter is operating correctly.

### TROUBLESHOOTING

**A. METER NOT ACCURATE.**
1. Flowrate not correct. Adjust flowrate to correct rate:
   0.26-8 GPM (1-30 LPM)

**B. NO FLUID PASSING THROUGH THE METER.**
1. Dirty particles jamming the rotors. Dismantle meter assembly and clean. (Refer to meter disassembly)

**C. THE METER IS NOT REGISTERING FLUID OUTPUT.**
1. Damaged register assembly. Replace register assembly.
2. Damaged gear or gears. Replace complete gear set.

**D. OIL LEAK FROM COVERPLATE.**
1. Damaged O-rings. Replace damaged O-rings.

### SPECIFICATIONS

<table>
<thead>
<tr>
<th>Item</th>
<th>Part No.</th>
<th>Description</th>
<th>Req’d.</th>
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<tbody>
<tr>
<td>1</td>
<td>IM071BUS</td>
<td>Protector Shroud Set ..................</td>
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<td>2</td>
<td>IM166L-GPIS</td>
<td>Faceplate (Litre) ..................</td>
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<td>3</td>
<td>IM166Q-GPIS</td>
<td>Faceplate (Quart) ..................</td>
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<td>4</td>
<td>IM166G-GPIS</td>
<td>Faceplate (Gallon) ..................</td>
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<td>5</td>
<td>IM166AS</td>
<td>Register Assembly ...................</td>
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<tr>
<td>6</td>
<td>N87S</td>
<td>Register Screw Set ..................</td>
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<td>7</td>
<td>IM176S (Litre)</td>
<td>Gear Set (Litre / 4 Gears) ....</td>
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<tr>
<td>8</td>
<td>IM177S (Quart)</td>
<td>Gear Set (Quart / 4 Gears) .</td>
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<td>IM178S (Gallon)</td>
<td>Gear Set (Gallon / 5 Gears)</td>
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<td>Meter Body (NPT) ....................</td>
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<td>BS035S</td>
<td>O-Ring ..................................</td>
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<td>Coverplate ................................</td>
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<td>N65</td>
<td>Screw Set .....................</td>
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**Limited Warranty Policy**

Great Plains Industries, Inc. 5252 E. 36th Street North, Wichita, KS USA 67220-3205, hereby provides a limited warranty against defects in material and workmanship on all products manufactured by Great Plains Industries, Inc. This warranty gives you specific rights and you may also have other rights which vary from U.S. state to U.S. state.

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Great Plains Industries, Inc. hereby provides a limited warranty against defects in material and workmanship on all products manufactured by Great Plains Industries, Inc. This product includes a 1 year warranty.}

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