

Operating Procedure for Small Portable Test Meter (PTM)

Thank you for choosing to purchase Master Meter's PTM. This small, lightweight meter testing device will provide years of highly accurate measurement diagnostics. The PTM is specially designed for testing flows of .5 to 20 GPM.

REFERENCE:

- Illustration depicting how to test meter in ground (*Illustration #1*)
- Illustration depicting how to test a meter removed from ground (*Illustration #2*)
- Illustration showing Register and Control Box (*Illustration #3*)

PROCEDURE:

1. Using an ordinary garden hose, connect one end to a hose bib or other appropriate connection downstream of the meter being tested. See attached illustration #1 or #2, as appropriate.
2. Connect the supplied adaptor to one end of the hose and the other to the inlet side of the PTM.
3. Connect the PTM control ball valve to the outlet side of the PTM. Note: During test, aim the control valve toward the street or other suitable area where discharged test water will not cause any damage.
4. Make sure PTM control valve is closed.
5. Open the hose faucet or other connection to fill the hose.
6. Slowly open the control valve and allow enough water to pass through the PTM to ensure that all air has been purged.
7. Check all connections and eliminate any leaks. Also make sure that water is not being used anywhere between the meter being tested and the PTM.
8. Connect one end of the test cable to the control box and the other to the top of the PTM.
9. Turn on the electronic unit (*control box*) and make sure both the Rate of Flow and Totalization displays read "0". If displays do not read "0" press the reset button on the side of the control box. See Illustration #3 for switch locations.
10. Take a reading from the meter being tested.
11. Open the PTM control valve to the desired flow rate as quickly as practical.
12. Once the desired quantity of water has passed through the PTM, as indicated on the electronic readout, the net totalization of the meter being tested is compared with the registration of the PTM shown on the electronic readout to determine meter accuracy at each flow rate *(see below).
13. Record all data and reset the electronic totalization to "0" after each test.
14. Close the hose faucet or other inlet connection prior to removal of the PTM.
15. Slowly open the PTM control valve to release residual water pressure.
16. After disconnecting the PTM, turn meter vertical to empty the chamber and replace end caps before returning to case.

* Calculation for meter accuracy at each flow rate is available on page 2.

** be sure to reconcile net meter accuracy with any inaccuracies shown on the test data supplied with the PTM.

CALCULATION FOR METER ACCURACY AT EACH FLOW RATE IS AS FOLLOWS:

$$\text{Meter Accuracy (\%)} = \frac{\text{Net Totalization of Meter}}{\text{PTM Test Meter Totalization}} \times 100$$

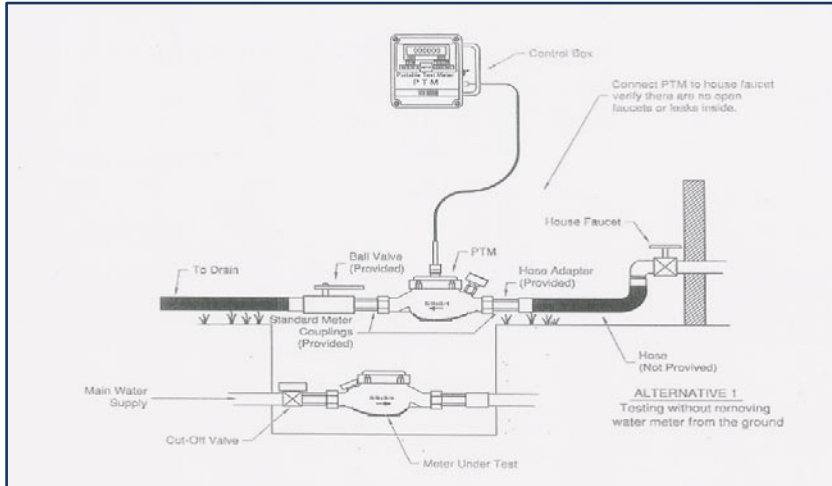


Illustration 1

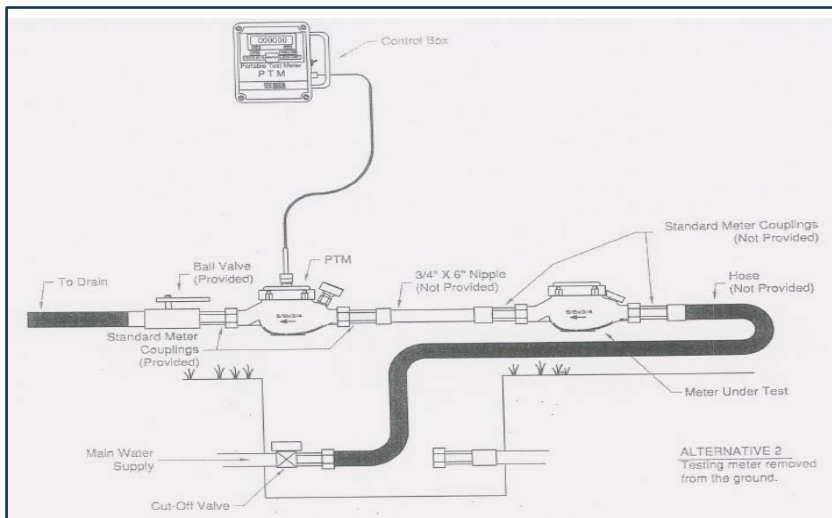


Illustration 2

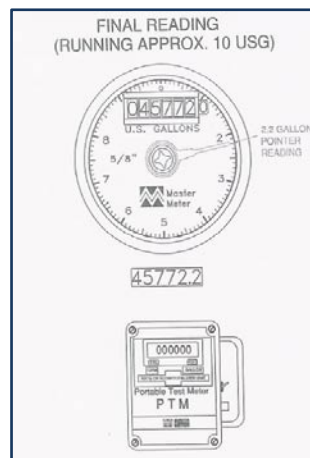
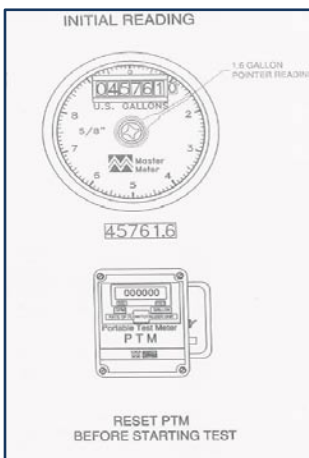


Illustration 3