

Badger Fire Protection

## Date: December 2000

## Subject: Field Testing of Fire Extinguisher Pressure Gauges

Badger has received several inquires regarding the field testing of fire extinguisher pressure gauges during annual maintenance examinations with a procedure that pressurizes the gauge face housing to a pressure as high as 195 PSI.

Obvious concerns prompted Badger to research this practice and consult various gauge experts within the industry. The following are some issues and opinions regarding the technical merits of utilizing this particular method for checking fire extinguisher pressure gauges in the field.

- This field test concept is technically flawed in that it does not verify gauge functionality or ensure cylinder
  pressure. The pressure differential this test procedure attempts to create within the gauge housing only
  compares against the pressure contained within the gauge Bourdon tube. Should the gauge inlet or Bourdon
  tube be obscured or plugged, chances are this tube pressure does not represent the actual operating pressure
  contained within the extinguisher.
- 2. The utilization of this field test procedure could jeopardize the safety of the tester. Portable fire extinguisher gauge housings are typically not designed to withstand pressures exceeding 50 PSI. This procedure will not only compromise and breech the integrity of the extinguisher gauge housing and case, but could cause it to structurally fail or burst.
- 3. None of the fire extinguisher gauge manufacturers contacted recommended or condoned this type of test procedure.
- 4. This test procedure conflicts with the service manual procedures recommended by most fire extinguisher manufacturers.
- 5. This gauge field test procedure can compromise the warranty and listing of a fire extinguisher.

Based on the information detailed above, Badger does not recommend or condone the field testing of its fire extinguisher pressure gauges in this manner. Anyone performing this type of practice violates the manufacturer's recommendations, compromises the extinguisher listing and assumes all risk and liability.

In accordance with Badger extinguisher service manual recommendations, any time a fire extinguisher pressure gauge visually indicates any sign of damage, deformation or a potentially inaccurate reading is suspected, the fire extinguisher should be depressurized and the entire gauge assembly properly replaced with a new one.