

PRODUCT UPDATE: TESTING AS SIMPLE AS . . . A.B.C.

Both UL and NFPA have issued new standards that benefit distributors, service companies, end-users and ultimately the fire protection industry. These two new requirements are **"TESTING AND MAINTENANCE OF SMOKE DETECTORS."**

ON THE MANUFACTURING SIDE:

The Testing Requirements(s) UL 268 Section 61:1: The sensitivity of each detector shall be checked following the warm-up period recommended by the manufacturer and using the appropriate instruments to determine that the sensitivity is within the listed range. The requirements highlighted in UL 268, Section 61; **"to determine that the sensitivity level is within the marked rating including tolerance, which is within the detector's specified limits.** The test equipment **shall** verify the value or range of sensitivities **marked** on the detector. The value of the instrument reading shall be convertible to percent per foot obscuration."

ON THE FIELD SIDE:

NFPA 72E 8-2.4.2 = To assure that each smoke detector is within its listed and marked sensitivity range it shall be tested using either:

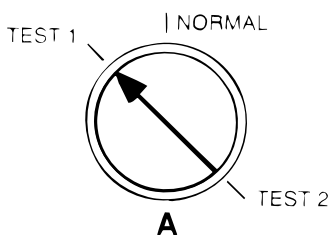
- A. A calibrated test method;
- B. The manufacturer's calibrated sensitivity test instrument;
- C. Listed control equipment arranged for the purpose;
- D. Other calibrated sensitivity test methods acceptable to the AHJ.

Detectors found to have a sensitivity level outside the approved **range** shall be replaced.

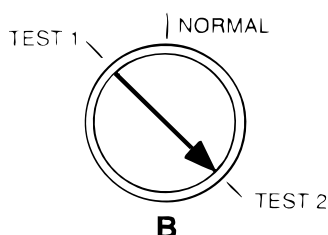
Gentex has met the requirements for testing each smoke detector utilizing a combination of methods A and B. The Gentex UL listed three position test feature simulates a true smoke condition to the range of sensitivities listed on the detector - **with a turn of a knob - no additional test equipment is needed.**

It should be noted that **no** additional costs to OEMs, distributors or service companies are incurred with the Gentex detectors. The benefits derived from the Gentex three (3) position test features are, ease of testing, no additional equipment cost, makes meeting the requirements of **NFPA 72E 8-3.4.2** a simple procedure with **no** bulky expensive equipment to carry from installation to installation.

Here's How It Works



Turn the test knob on the front of the unit from the normal setting to the TEST 1 position (counter-clockwise). The alarm should sound in less than 6 seconds. To reset the system, return the knob to its NORMAL position and use the reset switch on the system Control Panel. Hold in reset for 5 or more seconds or until smoke clears.

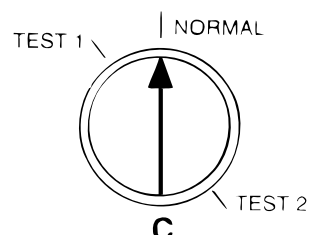


To test detector for high sensitivity, rotate test knob clockwise to the TEST 2 position. Alarm should remain silent.

If your detector alarmed during TEST 2 the detector's sensitivity has become too high and may cause false alarms.

This may mean your detector is dirty and should be cleaned as described in our maintenance procedure.

If your detector still alarms in TEST 2 position following washing and recommended drying time return it to Gentex Corp. for service.



Return test knob back to normal position.

As mentioned in NFPA 72E 8-3.4.2, "detectors found with abnormal sensitivities **shall** be replaced or cleaned and recalibrated." With the Gentex detectors, by simply turning the calibrated test knob clockwise you will identify those detectors which have been contaminated with dust or dirt and have made the detector more sensitive than 1.2%. Gentex has taken a very aggressive approach to this maintenance requirement of NFPA 72E and UL 268. Not only have we made it extremely economical for the identification of contaminated detectors with the three position test feature, we also have developed a maintenance program that is simple. The Gentex detectors can be **"washed."** Yes, **washed!** See Gentex Technical Bulletin #002 or your installation manual for further details.

After maintenance has been completed on the detectors; according to **NFPA 72E 8-4**, you must test the detectors again. Simply perform the tests outlined earlier by turning the test knob. Or, you can haul out the **expensive** bulky equipment other manufacturers recommend for testing the most sensitive and least sensitive marked sensitivity range of the detector. The choice is yours.....

Gentex Corporation had the distributors, OEMs and service contractors in mind when we designed these economical, practical, simple and inexpensive features to meet the new standards requirements. Contact your Gentex regional manager or representative today, or give us a call at the factory, to start enjoying the quality and benefits of the Gentex photoelectric smoke detectors.

GENTEX CORPORATION

ZEELAND, MICHIGAN

You have seen it! Now believe it! Gentex Corporation, Fire Protection Group, has a **cost effective, simple to test and maintain smoke detector** that meets or exceeds the requirements of NFPA 72 and UL 268.

Have you been considering buying a special smoke generator to meet this requirement, or using another type of instrument that will give you some reading that you must then convert?

Look at the cost involved in using a special smoke generator:

- Cost of equipment = \$2000 - \$3000
- Cost of testing = .25 man hours per detector - 2 technicians or 7 1/2 minutes per man
- Material costs - \$25.00 a day for oils, filters, and wear and tear
- Semi-Annual recalibration cost

Now consider a smoke detector such as Gentex Corporation's that provides you with a UL listed calibrated test knob on each detector - let's look at the associated costs:

NOT GENTEX DETECTORS

- Equipment Cost (\$500-\$3000)
- \$10.00 an hour minimum 2 technicians testing per job
- \$25.00 for test equipment materials
- Recalibration charges

GENTEX DETECTORS

- None
- 1 technician on a walk through
- None
- None

Advantage in testing is to Gentex Corporation - How about **maintenance**.

NFPA 72 and UL 268 both require that once a detector has been identified as needing maintenance, how do you perform the maintenance or do you? We would imagine that you are sending your detectors back to the manufacturer for maintenance.

With Gentex Corporation's products simply wash the entire detector. Yes, wash it! Get yourself three buckets of water and follow the instructions in our installation manuals. Look at the savings:

- No charge to you when you wash your own detectors. Others will charge you \$10-20 per detector.
- No shipping charges.
- Minimum down time.

Gentex's photoelectric smoke detectors are UL 268 listed for the wash program outlined in each installation manual. This means that the detectors passed 50 cycles of the wash program without significant degradation in sensitivity. Unbelievable, but true. Again, a clean advantage to the Gentex detectors for its superior maintenance program.

Compare the savings:

Based on 24 detectors.

NOT GENTEX DETECTORS

- Shipping Cost \$14.27
- Cost per detector (\$10x24=\$240)
- Down time ? \$
- Return shipping cost \$14.27

GENTEX DETECTORS

- None
- None
- Minimal
- None