

# POMEROY CONCRETE DRILL

by Battalion Chief Raymond M. Downey

With each upcoming issue of WNYF, there will be an article on a new, unusual or interesting tool, currently in use by the FDNY. This issue introduces that column by focusing on the Pomeroy Drill, two of which the FDNY now has in service. (For an idea of what was available for the past 20 years, see "The Concrete Core Cutter...a versatile high-rise firefighting weapon," by Robert F. Mendes, Deputy Chief of Staff and Operations, pages 9-11, WNYF, First Issue 1974.)

One of the most difficult challenges for firefighters during firefighting and search and rescue operations is penetrating concrete. There are many reasons why firefighters might need access openings in concrete walls, ceilings or floors: Sometimes, high-rise fires require openings in the floor above the fire to place a hand-line or penetrating nozzle for water delivery onto the fire and the opening can provide a means to visually inspect an area.

Collapse operations may require openings in concrete for:

- Visual inspection of structural components
- Visual search for possible entrapped victims
- Placement of search cameras
- Placement of electronic listening instruments
- Entry into inaccessible areas
- Openings for K-9 search dogs
- Openings for removal of victims
- Provision to cut openings in concrete roofs
- Openings for relief from flooded conditions
- Openings for placement of cable slings or other lifting devices for use with heavy equipment



FF practices with the Pomeroy Concrete Drill at FDNY Collapse School. (Inset) Components of the Pomeroy Drill.

All photos Chief Downey

The Department always has had some capability for penetrating concrete, but often, the tool has been too bulky, heavy, difficult to set up and/or not very versatile.

The Pomeroy Drill has none of these drawbacks. It is compact and light, weighing only 15 lbs. It is gasoline-powered and consists of a Stihl power plant to which a bit is attached. The power



plant is a standard Stihl 026 chain saw motor, which has a clutch assembly that attaches to the right side of the tool. It is water cooled by use of a pressurized water sprayer or a garden hose adapter.

The Pomeroy Drill features two-inch and four-inch O.D. (outer diameter) diamond-tip core drill bits, which will cut to a depth of 14 inches. When needed, openings larger than four inches can be made by using overlapping cuts.

Operation is similar to that of many other power tools used by the FDNY. Remember to let the tool do the work; don't force it. As a gasoline-powered tool, proper ventilation is required when used in a confined or unventilated area.

Currently, the Pomeroy Drill is carried on both Tactical Support Units with plans to supply each Rescue Company with one.

## About the Author...

Battalion Chief Raymond M. Downey is a 36-year veteran with the FDNY and heads up the Special Operations Command. He is a Contributing Editor for Fire Engineering, the author of The Rescue Company and a frequently requested speaker and instructor throughout the country. He holds an AAS in Fire Science.



The Pomeroy Drill in action after the Oklahoma City bombing. (Top) Used in a high-angle operation and (above), drilling a hole in a hanging slab.