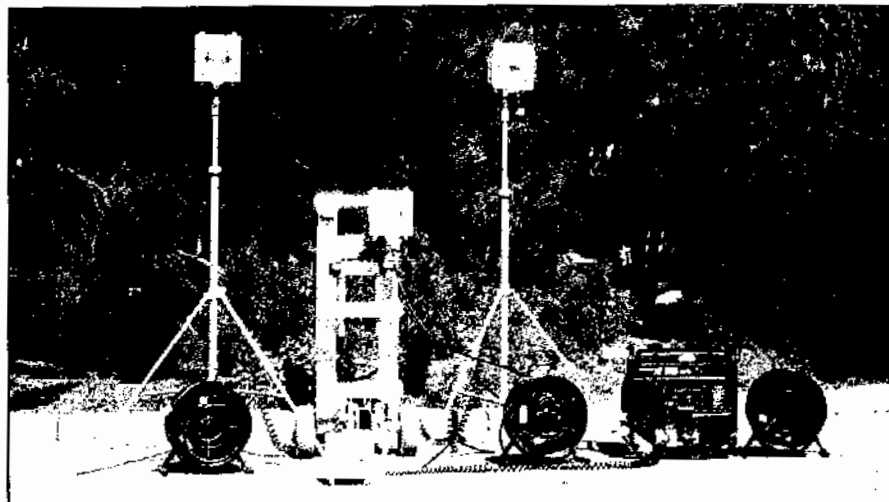
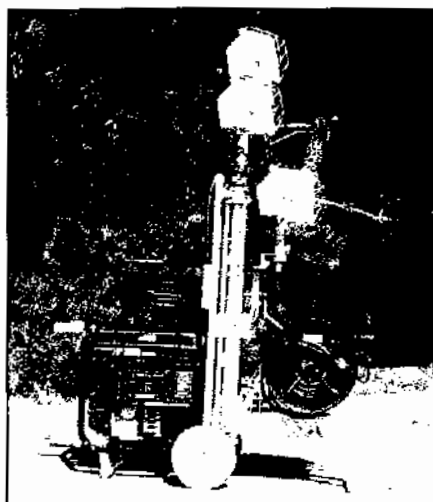




# TECHNOLOGY TODAY

## THE KELLY KART™: A BREAK-AWAY PORTABLE LIGHTING SYSTEM BY RAY DOWNEY



Photos by Louis G. Kelter, Jr.

Over the years many of the new tools and equipment—spanning the entire spectrum from hand tools to electric- and battery-operated, to pneumatic and hydraulic equipment that has found a home in the fire service—introduced into the fire service have been the result of firefighter input. This has happened in many ways. Some commercial, industrial, and automotive tools have been adapted or modified for fire service use. In other cases, the products have been the results of firefighter innovation and ingenuity—two common firefighter traits.

The Kelly Kart™ is named after Lieutenant Tim Kelly of the City of New York (NY) Fire Department Special Operations Command. One of Kelly's many duties is purchasing equipment for his command.

■ **RAY DOWNEY** is a battalion chief, chief of rescue operations, and a 33-year veteran of the City of New York (NY) Fire Department. The former captain of Rescue Company 2, he is the USAR task force leaders representative to FEMA for all 26 teams and is a member of FEMA's USAR Working Group for Equipment, Advisory Committee, and Technical Review Panel. Downey is also the author of the book *The Rescue Company*, the video *Rescue Operational Planning: Factors for Success*, and the video series *Collapse Rescue for the Fire Service*, published by Fire Engineering Books and Videos.

The units in this command respond to numerous varied types of incidents that require the use of specialized tools and equipment. Kelly came up with the idea of the Kelly Kart™ after having been involved at incidents that required portable lighting in locations that are not the norm for the routine response.

### SPECIFICATIONS AND FEATURES

The Kelly Kart™ has among its specifications and features the following:

#### Generator

- 3,500-watt Coleman Powermate.
- Honda 5.5-hp engine.
- Operating Panel: (2) 120V/15A house receptacles.
- (1) 120V/30A twist lock.
- (1) 240V/20A twist lock.
- (1) 12V/15A DC.

*Note:* The 240V/20A receptacle has a converter attachment that enables the generator to be used remote from the Kart (125 feet maximum) via a four-wire cable that feeds a branch 1900-type box on the Kart. The four outlets in the branch box can be used for lights or power hand tools.

#### Light Kart

- (2) 500-watt halogen lights that can be used as follows:

- fixed on the Kart.
- handheld.
- hanging on an attached hook.
- freestanding on the ground.
- (2) 500-watt telescoping halogen lights that can be used as follows:
  - a. attached to the Kart mainframe.
  - b. removed from the Kart to a remote area.
- (2) 100-foot extension cords.

The modular construction concept used in the Kelly Kart™ enables it to fit into a Chevy Suburban®. At the scene, it can be maneuvered by one firefighter and easily assembled/disassembled. Once a suitable location is selected, the generator is detached from the Kart, and an electrical supply line (125 feet) is stretched from the generator to the Kart. The two 100-foot extension cords can then be stretched from the Kart to the site of operations.

The end result is multifaceted lighting and electric power remote (up to 325 feet) from the power source, which enables the rescuer to work in an environment that is free from engine noise and exhaust fumes while providing superior lighting.

The weather and the time of day tremendously influence the outcome of any job. Now, with the introduction of the Kelly Kart™, the "Dark Ages" will be gone forever. ■