

## Backing Up is Hard To Do

Backing up a 15-passenger van is the number one source of vehicle collisions reported from youth recreation programs. The use of a spotter would have prevented nearly all of these collisions. Even though very few injuries occur, the costs of vehicle repairs can significantly impact your insurance premiums.

Collision Avoidance Systems are a recent innovation that several vehicle manufacturers are installing on new automobiles. These devices (think of them as modified radar guns) are mounted within the rear bumper and alert the driver through the use of sound or lights to objects or people that the vehicle may be backing toward. Collision Avoidance Systems can be retrofitted to existing vehicles! From a quick Internet search, costs to retrofit a 15-passenger van ranged from around \$250 to \$310, with lower costs for volume installations.

There are several varieties of Collision Avoidance Systems: ultrasonic, microwave (or Doppler), and infrared. Vehicle manufacturers are installing the ultrasonic variety on new cars. The ultrasonic variety seems to have fewer problems identifying stationary objects and at night than the microwave or infrared systems. Audible warning sensors are reported safer than visual light warning sensors, which can be distracting at a crucial moment when backing up.

A leading consumer product testing organization tested a number of sensors and gave the Grote Obstacle Detection System, at \$275, its best buy rating. This was for a single-unit system designed for vehicles under 80 inches wide, so the dual unit system for a 15-passenger van is likely to cost a little more.

Several of the Collision Avoidance System manufacturers indicate on their web sites that they will come to your facility to install the devices on your vehicles. You might want to call neighboring camps or clubs to inquire if they're interested in acquiring a group volume discount.