

ADVANCEMENTS IN AUTO SAFETY

What do they mean to you?

You're driving down a dark country road at night when a deer darts into the roadway ahead. Luckily a "night vision" display on your hood alerts you to the deer long before your headlights would make it visible. You adjust your speed and watch the deer run off into the woods.

Later, you turn onto a highway and set the cruise control to 65 mph for the rest of the trip home. Sensors on the front of your car detect another vehicle pulling in too closely in front of you and automatically adjust the cruise control speed downward.

Safe and sound, you arrive home and start backing your car into the garage. Sensors located in the car's rear bumper trigger a series of small lights and chimes to alert you to objects in your path. You avoid hitting the tricycle left in the driveway, or crunching your bumper into the back wall of the garage.

It may all sound futuristic, but some of this "collision avoidance technology" is already available in select vehicles on the road today - and more is on the way.

Some examples:

- Technology that helped the military carry out night missions during the Gulf War can now help drivers "see" three to five times further than low-beam headlights and see beyond the glare of oncoming headlights. This "night vision" feature is currently available on some luxury vehicles. It uses infrared technology and a camera-like sensor mounted on the front of the vehicle to detect heat-emitting objects such as people or animals, alerting the driver through a "heads-up" display.
- Also available on some vehicles is an ultrasonic rear parking assistance system that uses four sensors to detect the distance from the back bumper to an obstacle. A series of lights and audible chimes warns the driver to stop backing up before hitting another vehicle, a pedestrian, or another object.
- A wireless vehicle-to-vehicle warning system under development allows drivers to alert each other of road conditions up to a mile away. The system transmits safety-related information from one driver to surrounding vehicles by direct wireless

communication. Drivers with vehicles so equipped are able to send and receive alert messages, warning of such things as accidents, traffic jams, an oversized truck or slippery road conditions. This gives drivers more time to react.

- A far more comprehensive collision avoidance system was shown on a prototype vehicle at the recent Intelligent Vehicle Initiative Conference. This "smart car" uses 20 sensors and instruments to measure road conditions and environmental factors. It feeds this information to decision-making software that will not only alert the driver to hazards in the vehicle's forward path, but also adjust the car's adaptive cruise control to slow down the vehicle. The system even keeps tabs on what the driver is doing to estimate his or her "distraction level" and response times. Ten test vehicles with the system will be on the roads in Michigan in 2001 and 2002 - and the system may be coming soon after that to new vehicles in a showroom near you.

Of course, while these collision avoidance systems may reduce the risk of being in an accident, they won't eliminate it entirely. And the sensors these systems use, which will often be located in or near your vehicle's bumpers, must be installed and positioned to precise standards in order to function correctly. That means that if you are involved in even a minor collision, getting your vehicle repaired properly will require greater technical expertise to ensure the safety of the vehicle's passengers.

In choosing a repair facility, look for evidence that their technicians have been properly trained. Many insurance companies and repair facility associations recommend you look for a business that has earned the "I-CAR Gold Class Professionals" designation. The Gold Class designation indicates that a repair facility's employees have completed a substantial amount of training. They are up-to-date in collision repair knowledge and technology. I-CAR training covers virtually every step of the repair process. This includes analyzing the damage, structural repair processes, corrosion protection, matching your vehicle's paint finish, and checking safety features such as airbags, seatbelts and anti-lock braking systems. I-CAR established the Gold Class Professionals designation to help consumers identify repair facilities that have invested in proper training.

For the location of an I-CAR Gold Class Professionals business near you, call 1-800-ICAR-USA.