

Parking-assist technology *made simple*

By Allan Lamb and Bob McHugh

The old saying 'practice makes perfect' doesn't always apply to the art or skill of parking. Some vehicles are easier to park than others, some people appear to be much better at it than others and some ... well, just get out of their way.

Technology to the rescue! There are a host of driver aids available today that can make parking an easier task. They generally can be grouped under the headings 'vision enhancement' or 'obstacle detection' and there are even systems out there that will actually park the vehicle for you.

Lexus was the first auto maker to introduce us to a car that automatically steers itself into a parallel or slot parking stall, with the '07 LS 460. And BMW has developed a, yet to be released here, remote (key-fob operated) parking system that self-drives the car both into and out of a tight parking stall.

While at \$1000-plus, the Lexus system is beyond most people's auto budget, there are less-costly parking aid alternatives – good driving practices, common sense and awareness, topping the list.

It's generally best and safest (if you have a choice) to back a vehicle into a parking space, it allows an easier exit. And the generally recommended driving procedure is to turn your body to the right with right arm over the seatback, left hand on the wheel and look through the back window.



The Lexus LS 460's parking-assist system automatically steers the vehicle into a parallel or slot parking stall.

Side mirrors that automatically tilt down in reverse are handy for picking out stall markings. Alternatively, if the side mirrors are large enough, those inexpensive small convex mirror attachments may help.

Parking lot collisions are generally low speed impacts or bumper scuffing affairs. The most serious backing-up collisions generally happen right in a driver's own driveway – and involve small children. Ironically, it's the popular family vehicles, minivans and sport utility vehicles that are most likely to be involved in this type of tragic mishap.

More and more vehicles are coming with an obstacle detection system included in the standard equipment package or offered as an option. Marketed as "parking aids," they are designed purely to assist a driver perform a low-speed parking manoeuvre.

Parking-assist systems are either sensor-based (ultrasonic or radar) warning systems, or visual rearview-camera systems or a combination of both. While good to have, there are limitations to all of these systems and they should not be relied on exclusively.

Sensor-based parking aids use sensors mounted in the rear bumper to detect obstacles. They provide some form of warning, lights or a beeping signal, to indicate the presence of, and distance to, obstacles behind the vehicle. The number of sensors and

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Always turn and look behind your vehicle before backing up.

A safety tip from the BCAA Traffic Safety Foundation



their positioning will influence the accuracy of the system.

Camera systems show a video image of the area behind the vehicle on a display that's typically mounted in the centre of the dash. However, this poses a problem as you're supposed to be looking in the opposite direction. More advanced systems can also show the projected path of the vehicle based on the steering angle.

The NHTSA (National Highway Traffic Safety Administration) in the



An ultrasonic rear obstacle-detection system warns the driver of obstacles behind the vehicle.

US has tested vehicles with park assist systems and some aftermarket products, too. It's an on-going inconclusive study that involves the American Automobile Association through a survey of thousands of members who have purchased vehicles equipped with these new technologies.

So far, NHTSA appears to favour camera-based systems as having the greatest potential to provide drivers with reliable back-up assistance. So, the agency is encouraging vehicle manufacturers to continue to develop systems that can be effective in addressing this risk at a reasonable cost to the consumer.



A camera system relays an image of the area behind the vehicle to a dash-mounted screen.

Allan Lamb is the Executive Director of the BCAA Traffic Safety Foundation and Bob McHugh is a freelance automotive journalist. This article was originally published in The Province newspaper.