

Toyota Prius:

Leading the Hybrid Pack

By Roger Witherspoon



There are few cars which have come along over the years and defined a change in the industry as much as the compact Toyota Prius. This was the car that showed what the potential of a hybrid could be, and it met with predictable scorn from its American and foreign competitors.

It was small, the rear seats were uncomfortable, and there was the nagging fear – partly because it was new and partly because of whispers spread by competitors – that those battery packs were going to blow up. The criticism of the interior space had some validity; the rest was just jealousy.

But the Toyota had something going for it: advanced technology which set it apart from all the rest of the car makers, and word of mouth advertising about that persistent 50 miles per gallon. And it didn't hurt that while Prius owners have driven into car accidents, there haven't been any reports of battery fires and explosions – putting to rest the more colorful of the lies.

But all things get old and Toyota, never one to sit on its laurels, has now updated its premier hybrid with the intention of eliminating the few complaints which had some basis in fact. And with the new 2010 Prius, they have engineered another trendsetter.

This Prius still has a 50 miles per gallon rating and, with careful driving, that figure can be pushed up considerably closer to the 100 MPG mark. Without really trying hard, the test car produced 65 MPG, some of it during snow conditions which tend to drag the averages down.

The new Prius is a mid-sized four-seater which will be able to compete in terms of comfort and appointments with the more established, standard brands in the field. It still has the iconic oval shape, but Toyota's designers have widened the glass on the sides and extended the glass to include the trunk area. The effect is to feel as if you are driving in a glass bubble with comfortable leather seats. And those seats can be heated which, on snowy northeastern days, is appreciated. The pair in the rear have enough leg and head room for a pair of small NBA forwards, about six-foot four- inches – which means there

is plenty of room for the rest of us. These seats also fold flat to enlarge a surprisingly ample trunk area.



In addition, the Prius' hatchback look is deceptive. There is a lot more room inside than is readily apparent. Teresa Doherty, who teaches earth science and information technology at Corcoran High School in Syracuse, N.Y., knew she wanted a car with low emissions and low gas mileage. But Doherty is the outdoors type, and her car had to have room for her nine-foot-long kayak, her mountain bike, and a week's worth of camping gear – including the air mattress and tent.

"I'm 5-foot 5," she said, "And I wanted to make sure that when everything was folded down flat, there was room enough to sleep comfortably. The tent is fine, but when the weather doesn't cooperate it's nice to be able to sleep in the back of a car. I just put down the air mattress and stretch out."

So she took her bike and backpack to a showroom, folded the rear and front passenger seat of the Prius, and stretched out. When she got home with her new Prius, she packed her bike and kayak.

"I've camped out in Maine, the Adirondacks, and gone all across the country with my kayak, bike and gear," Doherty said. "On warm nights I just use the air mattress and crack the windows and go to sleep. It all fits just fine."

Under the hood is the combination 1.8 liter, four-cylinder, 98-horsepower gasoline engine and the 80-horsepower hybrid motors connected to each axle. The latter are capable of driving the car up to about 30 miles per hour on just the battery, which pretty much obviates the need for gas in city driving. The gasoline engine is not the strongest; it takes nearly 10 seconds to go from 0 – 60 miles per hour. By that time, mid-sized competitors like the Audi A-4 or Nissan Altima are long gone. But you pay a lot more than the Prius' \$32,000 sticker for the difference in speed. On the road, however, the Prius power package provides enough combined power to easily earn a speeding ticket if you want one. More importantly, it handles as well on snow and ice as its more established competitors.

Inside, the front seats are divided by an elevated console that is sort of an extended arm rest for the driver with a storage area underneath that easily handles pocket books or brief cases. It's a design lifted from the Buick Rendezvous, but having the console serve as an arm rest actually works and feels better on the Prius. It is a design change from the earlier editions of the Prius, in which there was a traditional console and

you could slide over it and change from the drivers' seat to the front passenger seat. The raised center blocks that maneuver, though it is ergonomically easier on the right arm and hand, and the storage area under the console is more accessible to the driver.

The major gauges are set into the center of the dash, hidden from the glare of the sun by a low, sloping roof, providing a peek-a-boo effect which, in this car, is appealing. Electronically, the Prius offers the types of gadgets you would demand in a car of this price range.

It has a full navigation system with a touch screen and traffic and weather updates, an item borrowed from the Lexus line. For entertainment, the car has AM/FM and XM satellite radio, as well as a 4-disc, CD changer with the music brought to you through eight JBL speakers. There are also MP3 and iPod connections, as well as a Bluetooth system which is easy to set up.

Toyota also added technology to its safety systems. Its cruise control is now radar guided, allowing you to maintain a set distance from the car in front, slowing down automatically when there is a slower car in front, and speeding up when it gets out of the way. The system also sounds an alert if the car drifts out of its lane – a useful system if one is tired and driving at night, or in really bad rain or snow when it is difficult to see the dotted lane lines on the road. If the system senses that a collision is about to occur, it automatically applies to brakes and tightens the seat belts to lessen the shock.

As a car designed to maximize the potential of hybrid technology, the Prius is in a class of its own. The newest edition of the Prius continues setting standards which will be hard to match.



2010 Toyota Prius

MSRP:		\$32,771
EPA Mileage:	51 MPG City	48 MPG Highway
As Tested Mileage:		65 MPG Mixed

Performance / Safety:

1.8-Liter, 4-cylinder, DOHC aluminum engine producing 98 horsepower and 105 pound-feet of torque; 650-volt electric motor producing 80 horsepower and 153 pound-feet of

torque; hybrid system net power 134 horsepower; electronic continuously variable transmission; independent MacPherson front suspension; torsion beam rear suspension; power rack and pinion steering; stability and traction control; front and passenger side curtain and knee airbags; dynamic radar controlled cruise system; pre-collision system; lane change warning; 17-inch alloy wheels; 4-wheel disc brakes.

Interior / Comfort:

AM/FM/ XM satellite radio; voice activated navigation system with touch screen and XM traffic and weather; 4-disc CD player with 8 JBL speakers; Bluetooth; backup camera; MP3 and iPod connection; heated front seats; leather seats and steering wheel; tilt & telescope steering wheel with fingertip audio and cruise controls.