





Hemi[®] Hybrid: oxymoronic genius

By Bill Schaffer

The term "Hemi Hybrid" would seem like it might be the automotive dichotomy of the year. When we think Hemi®, we think big, powerful V-8 performance. When we think Hybrid, we think sedate fuel sipper. The two just don't go together, or do they?

In a perfect green world, everyone probably would drive some sort of sensible small or midsize car, but it's never going to be perfect, because some people need larger vehicles to carry their family and friends, pull a boat or horse trailer, or perform some other function that requires a larger, more powerful vehicle.

Chrysler planners must have thought, "If the big SUVs are using the most gas, wouldn't

it make more sense to fix them first, and then fix the smaller vehicles that already get pretty good fuel economy?" So they did just that, creating the Dodge Durango and Chrysler Aspen Hemi Hybrids.

Power for the two big SUVs comes from a state-of-the-art marriage of Chrysler's popular 385-hp Hemi V-8, with MDS (Multi-Displacement System) and the two-mode full hybrid system developed in partnership with General Motors, Mercedes-Benz and the BMW Group. The two-mode system integrates proven automatic transmission technology with a patented hybrid-electric drive system.

The two-mode hybrid utilizes low- and high-

speed electric continuously variable transmission modes and a sophisticated fuel-saving system that incorporates four fixed-gear ratios for efficient power-handling capabilities. Electric motors in the system can be used for acceleration, improving fuel economy or for regenerative braking utilizing the energy that would normally be lost during braking. Excess energy is stored in batteries for later use.

At low speeds and with a light load, the system can operate on electric power only, gas engine power only or a combination of the two. At highway speeds, the hybrid system can assist the gas engine for extra acceleration power, pulling a trailer or climbing a steep grade. With a light foot on the accelerator, the Hemi Hybrid will stay in the all-electric mode up to 25-28 mph. When decelerating the gas engine will switch off and go back to the electric-only mode at 25 mph.

The vehicles can tow trailers up to 6,000 pounds, plus they are equipped with an Electronic Stability Program with Electronic Roll Mitigation and Trail Sway Control.

The system operates seamlessly, so it is nearly impossible to feel the changes taking place, although these changes can be seen on the hybrid display screen of the navigation system. There is also an instrument, to the right of the speedometer, that indicates the level of electric, hybrid and gas activity.

The complex system mounts easily within the confines of the vehicle engine compartment and under the floorboard. A 300-volt battery pack fits under the second row passenger seat with no compromising of the passenger space.

Official EPA fuel economy estimates have not been published, but Chrysler says the gas Hemi figures of 13 mpg city and 18 mpg highway are increased by 40 percent in city driving and 25 percent overall with the new Hemi Hybrid (which would equal about 18 mpg city and perhaps approaching 22 mpg highway).

Both Hybrid vehicles get top model equipment levels, with standard features like MyGIG Entertainment with navigation and hard drive, leather-trimmed seating, heated front seats, Rear Park Assist System, ParkView™ rear backup camera and more.

Prices start at \$45,340 for the Dodge Durango Hemi Hybrid and \$45,570 for the Chrysler Aspen Hemi Hybrid, including an \$800 destination charge, with only a few options available. Hybrid prices are about \$3,600 more than a similarly equipped gasoline model, but they are nearly \$8,000 lower than competitive full-size hybrid SUVS. Buyers are expected to receive an estimated \$1,800 tax credit. The hybrid electrical components are under an 8-year, 100,000 mile warranty, while the rest of the mechanicals are under the Chrysler Lifetime Warranty.

