1999 Panoz Aluminum Intensive Vehicle

Each Panoz AIV Roadster had the same hand assembled Ford SVT Mustang Cobra engine and Borg-Warner T-45 five speed transmission originally introduced in the 1996 Mustang Cobra. This 305 HP all aluminum Modular 4.6 liter V-8 had the DOHC 32 valve configuration. Brakes came from the Mustang Cobra as well with 13 inch vented twin piston discs up front and 10 inch vented single piston discs in the rear. All Panoz AIVs had four wheel independent suspension with the 8.8 Ford limited slip differential. All had the large bore extruded aluminum chassis rails with an aluminum backbone frame with mild steel tubular subframes. The bodies were super plastic formed (SPF) aluminum with fiberglass fenders and hood scoop. Here is a further breakdown. It had an extruded aluminum space frame with a central backbone. Consequently, the new Roadster was at approximately 70% aluminum and was dubbed an Aluminum Intensive Vehicle, the AIV Roadster.

The new engine produced 305 horsepower (227 kW) and 300 foot-pounds force (410 N·m) of torque. Combined with the lighter chassis this increased the car's power-to-weight ratio signifacntly.