

"The OPA is stylish, roomy, highly practical and environment-friendly. It sets a new standard."

Shigeyuki Hori, Chief Engineer



## **Setting the Standard**

The OPA is a stylish and roomy next-generation vehicle. The overall package creates a fresh feel. The body, which features short overhangs and a forward-located cabin, is solid, yet chic. A five-seater, it is also ideal for two people loading it up to head out of town for the weekend—a simple arrangement of the rear seats produces a flat luggage space 1.7 meters (67 inches) in length. Featuring one of Toyota's newly-developed high-efficiency direct-injection gasoline engines linked to a continuously variable transmission, it boasts excellent fuel economy and low emissions. The OPA truly sets a new standard in medium-class vehicles.





## Functionality = Design

The name OPA heralds from a Portuguese expression of surprise. One look at the exterior design and you'll be exclaiming "Opa!" too. The vehicle's stylish form is intended to fit snugly into a young couple's lifestyle.

"By compressing the overhangs at each end and placing the wheels as close to the corners as possible, we created a vehicle with the capacity to seat five—large enough to be a family's main car," explains Chief Engineer Hori. A short overall length relative to its long wheelbase gives the OPA excellent handling and maneuverability. Triangular windows at either side of the windscreen extend the driver's forward vision, increasing all-round visibility substantially and making parking that much easier.

The vehicle's profile has been styled to split the vehicle's form into two halves, top and bottom. While the windows and roof are molded to create a sense of volume, the area beneath the window sills is intended to impart a solid feel. Panoramic windows, together with geometrically-patterned lamps and grille, add to the distinctive exterior.

## Fresh, Bright Colors

As the external body color, yellow pearl mica gives the OPA an eyecatching appeal.

"The vehicle's cabin is just as distinctive as the exterior," enthuses Mr. Hori. To create two distinct spaces within the vehicle for the occupants, the coloring for the front and rear seat areas differs—ivory for the front and charcoal for the rear. These two colors are repeated in a two-tone combination throughout the interior. The coloring for the upper cabin and lower cabin also differs for both seat areas giving the interior an even more unique feel.

The seat covering is made from a satin velour, producing a highquality, glossy look combined with a feel that is soft to the touch.





#### **Green Powertrain**

The OPA is powered by a newly-developed 2.0-liter twin-cam directinjection 4-stroke gasoline engine. It can achieve ultra-lean air-fuel ratios of up to 50:1 by injecting fuel directly into the combustion chamber, resulting in high performance combined with fuel efficiency up to 30% better than conventional gasoline engines. The VVT-i continuously variable valve train and electronically controlled throttle deliver superior response with ample torque.

The benefits of this engine are enhanced by the use of a continuously variable transmission, which controls the engine performance to maximize fuel efficiency under all operating conditions. Moreover, to boost power when the vehicle starts up without negatively impacting fuel efficiency, the CVT is fitted with a torque converter. This is a hydraulic device that generates a circular flow of transmission fluid, resulting in an increase in engine torque without producing any consequent rise in engine speed.

Fully integrated electronic control of both the engine and the transmission is the secret behind the OPA's high fuel economy and low emissions profile. Emissions of carbon dioxide, nitrogen and sulfur oxides, and hydrocarbons are among the lowest in the world for this size of gasoline-powered vehicle. Drivers benefit from lower the fuel bills while being kinder to the environment.

# **Follow Your Fancy**

"Although the OPA was intended to be an elegant vehicle, no one said you couldn't go wild every once in a while," Mr. Hori laughs. The versatile new transmission features a Sports Drive mode for just those times. When driving in this mode, the transmission increases the gear ratios to keep the engine running at higher revs, creating a much sportier driving feel.

Supporting Company:

Toyota Auto Body Co., Ltd.

