

**palatov**  
MOTORSPORT



CJ4

# palatov

## MOTORSPORT

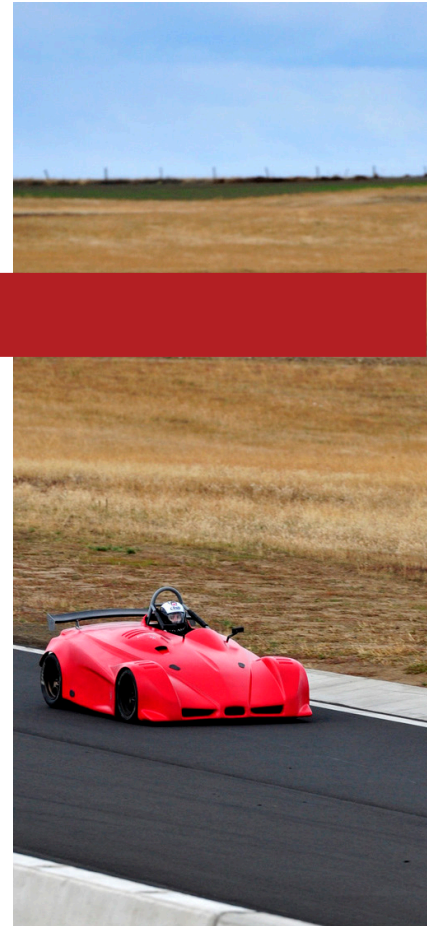
### OUTSTANDING PERFORMANCE AT MODEST COST

The D4 is designed to make genuine racecar performance accessible to trackday enthusiasts at a cost far below that of many popular production sports cars. It features advanced underbody aerodynamics, a long arm double wishbone suspension with pushrod activated coilover dampers and an optional all-wheel drive system. Power comes from a variety of track prepared motorcycle engines with most configurations using 1.0L or 1.3L units of 175–200 hp. Typical weights are in the 800–900 lbs (360–410 kg) range resulting in exceptional performance.

The AWD system is unique in this weight class and allows the use of high power turbocharged engines of over 300 hp. In this configuration the car can have over 700 hp/ton power to weight ratio and still be able to put the power to the ground.

Even a novice driver can jump into a D4 and safely enjoy driving on a racetrack, yet the car's speed potential has challenged seasoned professionals. While safe and fun for the beginner, a D4 in the right hands can match dedicated race cars costing several times as much and embarrass virtually any road-going exotic car no matter the price.

The D4 comes standard with a GPS datalogger to help drivers make the most of their track time and effectively refine and improve their driving skills.



### ADVANCED SAFETY



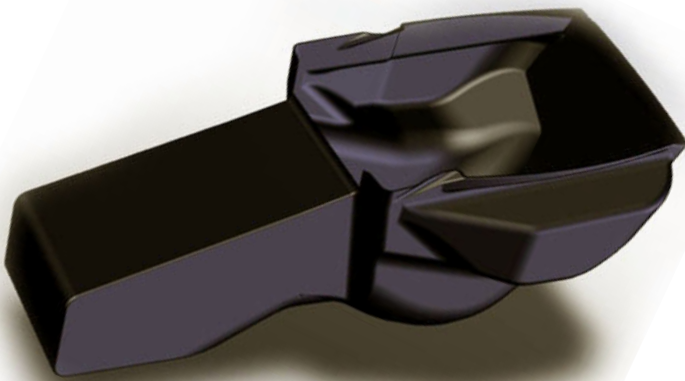
Despite its small size and light weight, the D4 offers a very high level of safety to the driver. The design is founded on the proven concept of a survival cell—a strong structure around the driver protected from impact and intrusion, surrounded by collapsible crush zones.

The survival cell consists of a triangulated frame with fully braced rollover protection. The frame is constructed of aircraft grade 4130 chromoly seamless steel tubing and complies with racing regulations for cars weighing up to 3 times as much.

Within the frame, the driver is further enclosed in a composite 'Pilot Pod' that keeps the driver's body contained completely within the survival cell. It extends traditional upper body protection to legs and feet as well. Shielding and advanced insulation outside the 'Pilot Pod' create a firewall.

Unique elbow pockets provide ample room for the driver to fasten and release his/her own belts without outside assistance. A 6-point *FIA* approved harness is standard and is compatible with *HANS* devices. Within the 'Pilot Pod' the driver is cushioned and protected by a custom fitted *BSS* foam seat. Drivers of over 6'3" height and over 250 lbs are readily and safely accommodated despite the car's compact dimensions.

Outside the survival cell, components have been designed to provide progressively collapsible crush structures. The driver's feet are entirely behind the front wheels and suspension and the car has generous crush zones front, rear, and on the sides.

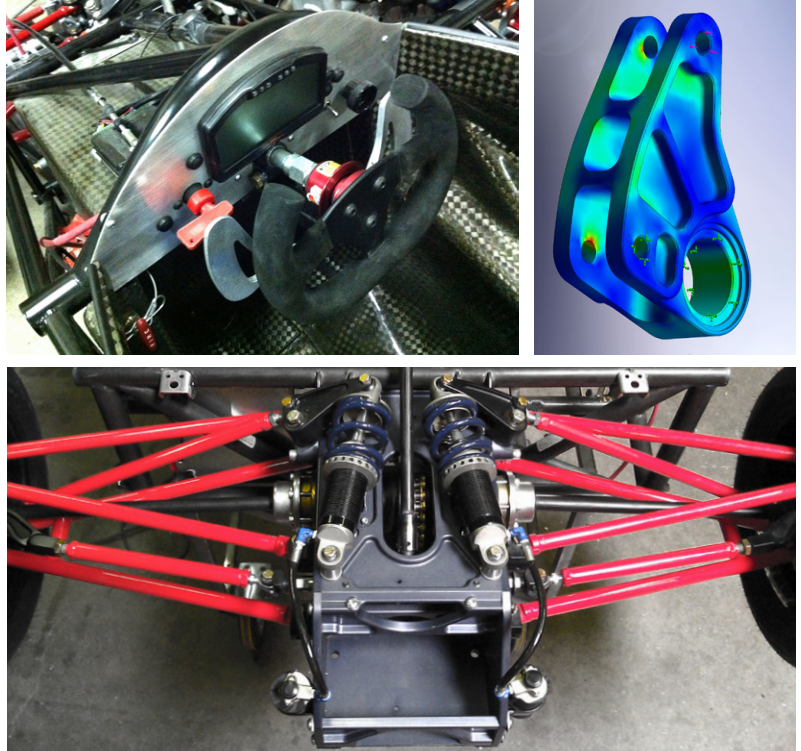


## QUALITY WHERE IT COUNTS

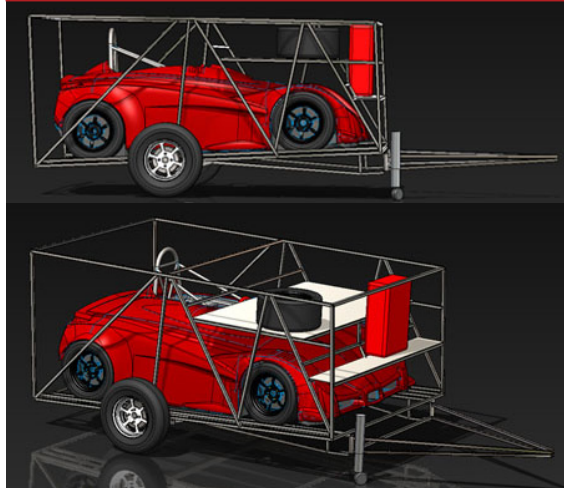
While low cost has been a priority in the design of the D4, it has been achieved through intelligent design rather than cutting corners.

The use of aircraft grade steel and aluminum in the construction of the car ensures that the materials meet strict performance and quality specifications, something that isn't always the case with 'mild steel' used by others. All components are CNC machined to exacting specifications from 3D CAD data. Finite element analysis (FEA) has been utilized on critical components to ensure they are matched to the loads. All welds are TIG and all critical threaded holes in aluminum use MIL-SPEC locking *Helicoil* inserts.

Suspension is the essence of a racecar and because of this, the D4 uses only premium components in this area. Shocks from *Penske* and *Ohlins* are custom valved for the car and each is individually dyno tested. Premium *Aurora* rodends and spherical bearings are utilized throughout. Suspension bellcranks are machined from 6061-T6 alloy and feature needle roller bearings with O-ring seals in both axial and radial directions. Suspension arms and pushrods are made of same aircraft grade 4130 steel as the frame.



## EASE OF MAINTENANCE AND OPERATION



The low weight and compact size enables towing the D4 to the track behind ordinary cars on a lightweight trailer. The optional Class I enclosed trailer has hydraulic surge brakes and can be towed by any passenger car with a Class I hitch—combined car and trailer weight is approximately 1,500 lbs. The trailer features a folding tow bar to facilitate storage in the minimum of space.

The D4 has been designed with ease of maintenance in mind. All suspension components are identical at all four corners, minimizing the need for spares. *Wilwood* brakes provide excellent performance and low maintenance cost, with pads costing under \$60 per axle set and brake rotors costing approximately \$75 each. The car uses R compound tires in 225/45-13 size which is available from several leading manufacturers. Optionally, 20x8-13 racing slicks are also readily available. The D4's light weight facilitates extended life of all components.

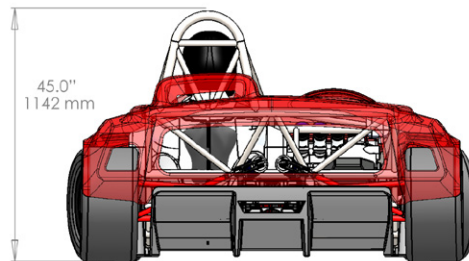
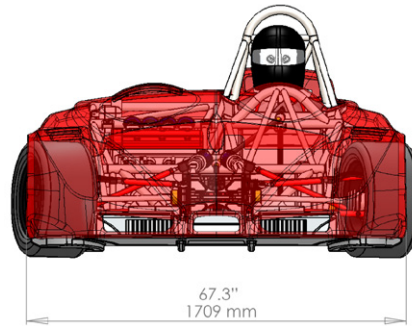
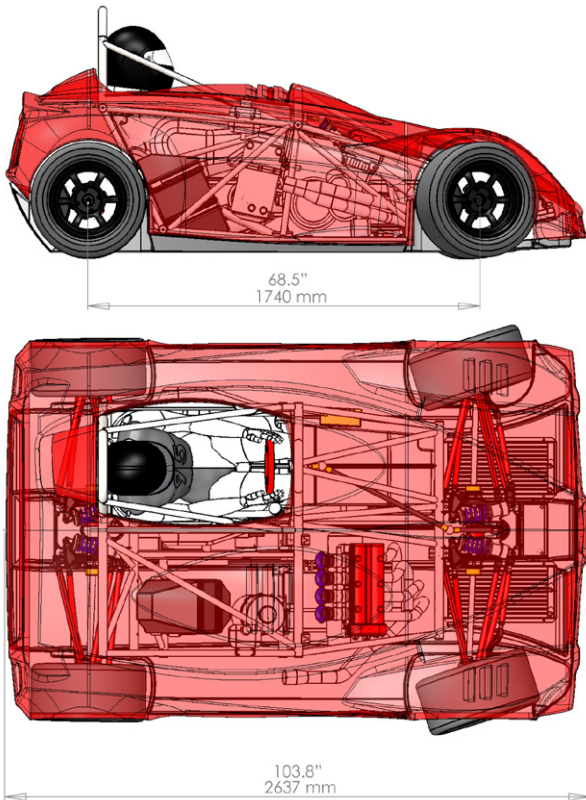
## FOCUSED ON BEING THE BEST TRACK CAR

Being highly optimized for the track, the D4 is not suitable for the street and there are no streetable options offered. Consequently there are no compromises, no extra weight, and no unnecessary cost. Just the best design, components, and technologies to make it the most effective and the most fun track car available.

Palatov Motorsport cars are designed and built by enthusiasts in Portland, Oregon. We provide free technical support over the phone and email and offer complete service at our facility. Factory visits are available by appointment.



## SPECIFICATIONS



**Wheelbase:** 68.5" (1740 mm)

**Length:** 103.8" (2637 mm)

**Width:** 67.3" (1709 mm)

**Height:** 45" (1142 mm) to top of roll bar

**Ground Clearance:** 1"-2.25" (25.4-57.15 mm)

**Weight:** ~800lb (363 kg)

**Chassis:** Welded tubular 4130 chromoly steel

**Body:** Advanced composite

**Aerodynamics:** Optional full tunnel ground effects

**Wheels:** 13x8

**Tires:** 20x8-13 race slicks

**Engine:** Motorcycle 600-1400cc, 60-200hp

**Gearbox:** Motorcycle 6-speed sequential, no reverse

**Drivetrain:** RWD or optional proprietary AWD system with chain drive and LSDs

## PRICING

Choose from the following options to configure a car. Some suggested configurations are shown with the totals below. These configurations are examples only and can be changed or modified to suit customer needs. To create a custom configuration simply select the desired options and add the corresponding prices. Additional options will be available, please contact us for details.

| Options   | Kit             | DSR             | Trackday        | Hillclimb       | Price    |
|---|-----------------|-----------------|-----------------|-----------------|----------|
| D4 Base kit: Chromoly TIG welded frame, composite one-piece body, composite cockpit shell, Ohlins non-adjustable shocks, Wilwood 10.25" vented brakes with 4 piston calipers, RWD with Quaife ATB differential, and 5 gallon foam filled Fuelsafe fuel cell | X               | X               | X               | X               | \$28,750 |
| D4 factory build  |                 | X               | X               | X               | \$3,000  |
| D4 Gen 2 composite aero floor   |                 | X               | X               | X               | \$5,000  |
| D4 rear wing  |                 | X               | X               | X               | \$1,000  |
| Wheel set, V2, 13x8   | X               | X               | X               | X               | \$660    |
| Tire set, Hoosier, 13x8 slick   |                 | X               | X               | X               | \$800    |
| GSXR-1000 engine 07-08 with baffled pan   |                 | X               | X               |                 | \$4,000  |
| GSXR-1000 engine, turbo 300hp   |                 |                 |                 | X               | \$15,000 |
| Engine fitting kit  |                 | X               |                 | X               | \$1,500  |
| D4 AWD kit  |                 |                 |                 | X               | \$5,000  |
| Floating rotor brake upgrade  |                 | X               |                 | X               | \$250    |
| XT Racing dash/data logger  |                 |                 | X               |                 | \$650    |
| Racing fuel cell  |                 | X               |                 |                 | \$2,000  |
| SCCA homologation   |                 | X               |                 |                 | \$200    |
| Mechanical paddle shift kit   |                 |                 |                 |                 | \$750    |
| Cockpit adjustable brake bias   |                 | X               |                 | X               | \$150    |
| Race Technology Dash2 & DL1 data logger   |                 |                 |                 |                 | \$2,000  |
| Carbon fiber bodywork upgrade   |                 |                 |                 |                 | \$2,000  |
| <b>Total:</b>   | <b>\$29,410</b> | <b>\$47,310</b> | <b>\$45,360</b> | <b>\$63,110</b> |          |

Prices effective as of 8/22/2011.

Specifications and pricing subject to change without notice.

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