

## Model History: Tiger 50 > Tiger 50 Mk II > Pantera 50 > P6

Porsche constantly refines their product. Thus, while an old Porsche 911 looks a lot like a current production Porsche (because they're both rear-engine sports cars) yet it's really a different car. Same thing with the Pantera because if you eyeball a 2004 vs. our current production, the heritage is obvious. Things like the servo layout, the tail control, and the rotor head - plus advanced features like the snap together self-aligning side frames complete with hassle-free integral cooling fan duct design - have been retained. However, these features have evolved and thus, while they still look distinctively the same . . . they are different!

P6 revisions to the iconic Pantera 50, a favorite amongst sportsmen and beginners, encompass more than all new side frames plus a new canopy. Most visible, of course, is the canopy, but in addition to the near bullet proof HDPE material (perfect for beginner's knocks and bumps), we also offer several beautifully prepainted fiberglass versions. Mechanical updates include the new side frames, refinements to the drive train, plus a newly available 3D tail gear case, and a host of small refinements.

More interesting for you, the owner, is how unlike with a Porsche 911, virtually all of these may generally be retrofit to older models - nice - because it shows respect for your investment so if you're considering us for the first time, bear this in mind versus developers who change and update their model two and three times in a year and leave you no upgrade path (this is far more common than you might suspect).

Meanwhile, deeper and more comprehensive P6 updates include two electric power packages. Plus, now you can opt for a Tomcat nitro-package from the onset (thus, permitting installation of .91-class engine - as used in a 700-class model - into a 600-class model, e.g. creating a rocketship). Hence, while the Pantera name is a tether to the past, the P6 designation expands on the heritage by increasing the model's versatility. If anything, it's become a more compelling proposition for folks seeking their ideal in a customized solution from within the 600-class offerings.

For example, like the Tiger 50 that started it all, the Pantera 50 initially became popular with beginners and sport pilots because of its inherent toughness and durability. Along with mild and predictable handling qualities, which inspired pilots to successfully learn to hover and perform their first maneuvers, some extended the envelope to include 3D maneuvers. What is unchanged is the size. The P6 remains bigger and considerably overbuilt compared to competing designs. With larger than contemporary bearings and clutch, a P6 is essentially a big and easy to see 700-class model - but fitted with a 600-class engine (and importantly, comparatively cheaper to repair following crashes).

### Side Frames

All new, the P6 side frames involved a thorough rework (dynamically superior to their predecessor by dint of being 15% stiffer). Combined with strict weight saving measures, the results are they're a few grams lighter too.

Moreover, respecting the investment existing Pantera 50 owners made in our product, updating from P50 to P6 side frame is easy. Involving the addition of the newly developed removeable dual-bearing block, which mounts above the clutch stack, this opens the door to future gearing enhancements.

Spotting the new design P6 side frames while on the flight line is easy because the visual *tell* is a silky-feeling 400-micron smooth-finish. While clean up and maintenance is easier than with the previous textured finish, the self-aligning snap-together nature of the previous frame design is carried over because it ensures even field repairs result in perfect gear train mesh every time.

### **Tail Gear Case**

Once we stretched the P6 (in effect making a P7) folks began wanting their own. Since extending the tail by 4 inches meant reducing the mass of the tail gear case was paramount to keep the model's CG range the same. This led to intense computational simulations and engineering studies to develop an all new 3D tail case design, which would be as strong as the predecessor while maintain compatibility with all previous components. This means Tiger 50 and Pantera 50 owners can upgrade easily because everything else, e.g. the bearings, the output shaft and pulley, as well as the hub, and tail rotor blade grip assemblies carry over.

Another update is the new tail pitch change lever. Compatible with the P50 tail gear case, it's a nice update because this new unit incorporates steel guide pins as standard equipment. Also, there's a new plastic formulation for the tail slide ring. This new control component ensures greater durability because of the better wear characteristics of the material. Lighter, stronger, more durable - better - what's not to like?

### **Refinements**

Beyond the frames and tail gear case, we refined the autorotation hub. Next we took previously optional 3D accessories like the 3-position seesaw arms, skeletonized tail fins, and lightweight landing gear struts and made them standard equipment. Thus, while it still flies the same, and it's still the same tough model, it's really all new.

### **More**

Best of all, you have more choices when you build a P6 because you can order it from the get go as a 55-class nitro, a 91-class nitro, and either of two electric versions - right out of the box. Plus, you now have choices of the easy to fly conventional flybar head, a flybarless set up if your interest is in 3D or scale, plus a fantastic four-blade, the Quattro, rotor head assembly.