



# PRINCE

**WHITE PAPER 1.0**





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## PRINCE WHITE PAPER

# 1. INTRODUCTION

Cicli Pinarello S.R.L. is one of the most famous and winning bike manufacturers in the world. Founded in Treviso (Italy) in 1952 by Giovanni (Nani) Pinarello, it produces high end racing bikes. This name, Pinarello, recalls legendary victories of the greatest cyclists of all times: since 1975, the first victory in Giro d'Italia with Fausto Bertoglio, Pinarello has won all the most important races in the world, including The Olympics, World Championships and Tour de France.

Pinarello has always been synonymous with innovation and performance. In every area and segment, Pinarello's DNA leads to the technical solutions that best interpret the rider's needs, whether he/she is a pro rider or a beginner.

All the bikes produced for the best riders in the world have also always been available for the amateurs. This philosophy spans from the high-end Dogma family to the rest of the range, allowing every rider to perform the best. The collaboration with the pro riders allows us to develop cutting edge technologies in order to win races.... those technologies are then applied to the bikes that everyone can buy and use.





## **2. GUIDELINES OF THE PINARELLO PRINCE PROJECT**

The target of this new Pinarello Prince project (Model Year '21 or from now on MY21), has been to translate the outstanding ride quality made famous by the Dogma family, onto the new mid-range bikes.

To achieve this goal, we transferred the precision and details from our flagship bike, the Grand Tour winning Pinarello Dogma F12, to all of these new bikes. In doing this, we have wisely recalibrated these features while keeping in mind the type user for whom they are intended. That user is a demanding cyclist that asks for a pure road racing bike, but it is not as extreme as a pro-bike (as all Dogmas are) could be. Following this latter concept, in comparison with the Dogma F12 and the MY20 Prince, we have slightly revised the geometries, in order to rationalize the distribution of all sizes, and above all giving them the same famous Pinarello racing soul, without being so aggressive.

# 3. PINARELLO PRINCE FAMILY RANGE

In the previous paragraph, we referred to the new Pinarello Prince project, including a new range of bikes because we are not talking about a single new frame, but rather to a new family of bikes. Starting from the guidelines illustrated above, we developed a whole new range consisting of four new bikes. Each one similar to the others, but at the same time with particular differences that make it unique.

The four new models are:

- Pinarello Prince FX Disk
- Pinarello Prince FX
- Pinarello Prince Disk
- Pinarello Prince

All of those bikes offers the “TiCR” (Total internal Cable Routing) system, originally only seen on Dogma F12, and now available also on mid-range bikes. This kind of system represents the state of the art of the cable routing across the whole bike industry. It is an absolutely remarkable point that clearly raises the bar in respect to anything else. Another aspect that differs from “FX” version is the carbon grade. The “FX” adopts the high level T900 carbon fiber (in 3K finish), while the normal version uses the middle level T700, in UD finish.



As you can easily guess, we can also distinguish the four bikes above by their braking system. The market has increasingly required disc brakes and, replicating what was done for Dogma F12 Disk, we developed dedicated technical solutions specifically designed for the braking system. At the same time, there are still a considerable number of cyclists that prefer a bicycle with a traditional rim brake system due mainly to weight savings. So, the rim brake versions also have been object of dedicated design development.

As discussed above, it is easy to understand that the entire Prince family range covers a very wide market sector, matching the users' needs like never before.

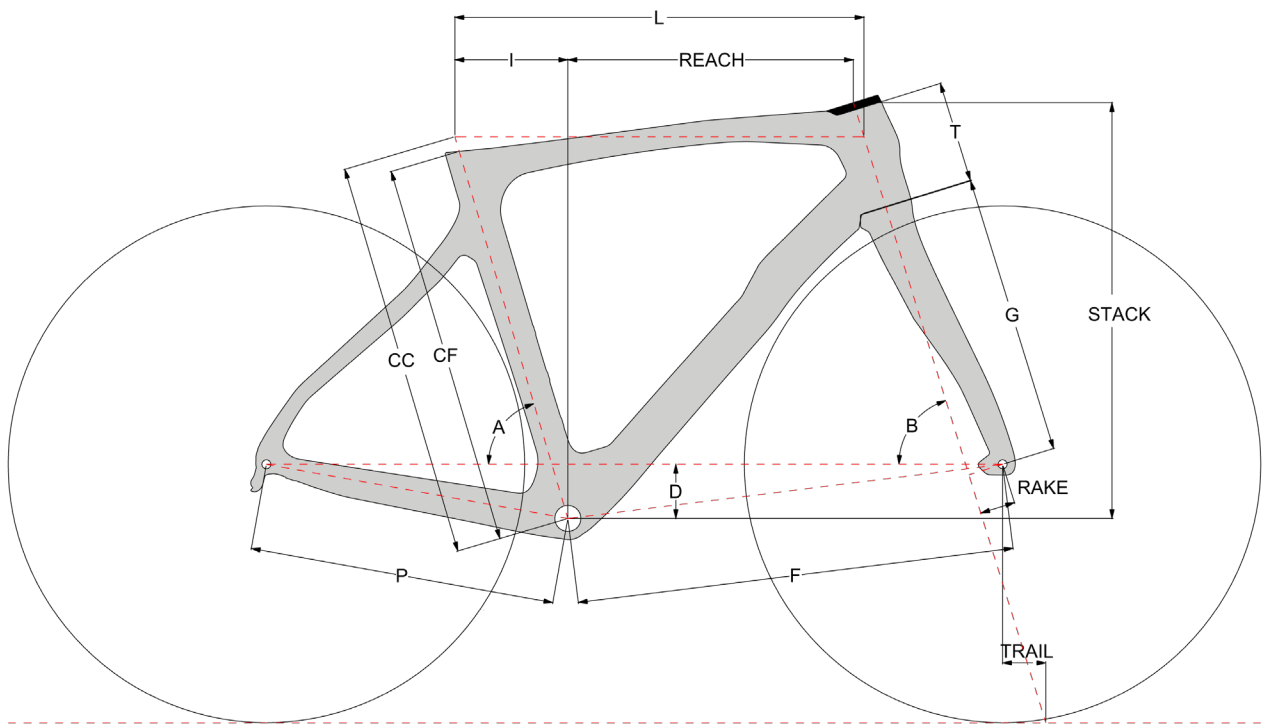


## 4. IMPROVED GEOMETRY

One of the main goals was to create a family of pure road racing bikes which are not as aggressive as a pro-bike. In addition, we decided to pursue the idea of rationalizing the size distribution, standardizing them through the whole mid-range. The result is a complex of nine sizes, shared with the new Pinarello Paris, that better cover the rider population and gender distinction.

The starting point was the MY20 Prince family. When designing a new road racing bike we always consider the geometries which are the result of years of study, development and comparison with the Dogma's geometry. Starting from MY20 Prince and keeping in mind the Dogma F12, we worked to have a new set of geometries that combines the best of both.

It is worth highlighting that all four models previously described, share the same geometry between all sizes. So one can choose freely the Prince the rider prefers, and which better satisfy their needs, knowing that whatever their choice is, they will enjoy the same Pinarello ride feeling.



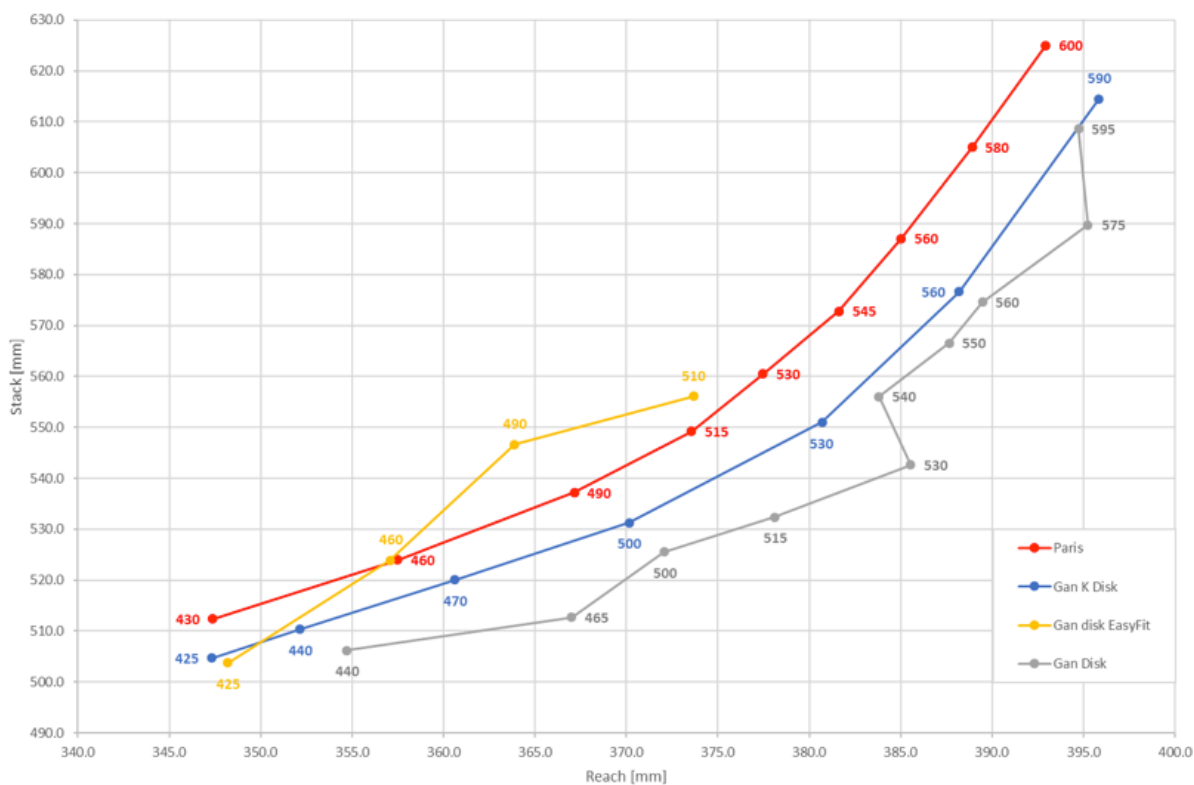




Two of the parameters we worked on most have been reach and stack. We can summarize this work in the graph that follows, which shows the optimum parabolic trend that characterizes the Reach vs Stack curve of MY21 Pinarello Prince Disk. This is indeed the trend that statistically better fits the reach and stack values along the entire rider population. Considering this latter phrase, one can really appreciate our effort finding the parabola that better integrate the MY20 Prince Disk and Dogma F12 trends, allowing to obtain an entire set of geometries that hits our targets. Despite a smaller number of sizes compared with Dogma F12, the new Pinarello Prince family covers a very wide span of reach and stack distribution.

Again, observing the graph, one could ask why MY21 Prince disk is distinguished by reach and stack values that are generally a bit shorter in terms of reach and slightly higher in terms of stack in comparison with Dogma F12. This is, in effect, a desired aspect; it is well known that by raising the stack and shortening the reach, the bike becomes more comfortable. In other words, makes it less aggressive, which is exactly what we wanted from the beginning.

However, we must not forget that the perfect balance of bike dimensions and angles is a complex science. As such, whenever you vary a factor, all others must be carefully evaluated. Driven by our long-term know-how of bike geometry and considering our changes in terms of reach and stack values, we eventually revised the others geometric parameters to guarantee to every new Pinarello Prince has the well-known and worldwide appreciated Pinarello race oriented ride feeling.



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### 4. IMPROVED GEOMETRY

Last but not least, in the graph above, one can see the reach and stack values are distributed with greater density as related to the middle sizes. This allows most cyclists, who statistically choose the middle sizes (from 515 to 560), easier to find the size that best fits their needs.

It has been mentioned that, starting with the improved reach and stack values, all other dimensions and angles have been revised accordingly. One of the major improvements is the variation of the fork rake dimension through the size range. The three smaller sizes (i.e. 430, 460 and 490) show a bigger rake than the others (52 mm instead of 47 mm). The reason behind this lies in the desire to keep the trail constant. It is well known in bike science literature, that the trail dimension strongly affects the riding experience; and one of the major challenges for a bike designer is to maintain the trail dimension inside a tight range of values between all sizes of the range. This range of values is dictated by the experience and varies the function of the type of bike (i.e. road racing, endurance, gravel bike...). Going from bigger to smaller sizes, the dimension and the angles clearly vary and with them, the trail become larger and larger. This behavior, combined with the need to follow an appropriate reach and stack trend (as already illustrated), leading to the decision to add another fork rake dimension. This decision clearly implies a considerable logistical effort, which is justified precisely in the consistency of the trail dimension, which in turn translates into a consistent ride feeling between all sizes. In summary, we can say that the new Prince bikes are characterized by a new set of dimensions and angles that smooth down the extreme road racing soul of the Dogma F12, from which they are derived. All the geometric decisions have been driven by our vast knowledge in this field. And most important, they have been confirmed by various on road tests, in which we have been able to really appreciate them. So we can say that the famous Pinarello road racing ride feel it is not only well present and even enhanced in all sizes in the view of the average user from whom these bikes are dedicated (i.e. a demanding rider that seeks a pure road racing bike yet desires a certain level on comfort during his/her rides).



## 5. STRUCTURAL DESIGN

The target of this new Pinarello Prince project (Model Year '21 or from now on MY21), has been to translate the outstanding ride quality made famous by the Dogma family, onto the new mid-range bikes.

To achieve this goal, we transferred the precision and details from our flagship bike, the Grand Tour winning Pinarello Dogma F12, to all of these new bikes. In doing this, we have wisely recalibrated these features while keeping in mind the type user for whom they are intended. That user is a demanding cyclist that asks for a pure road racing bike, but it is not as extreme as a pro-bike (as all Dogmas are) could be. Following this latter concept, in comparison with the Dogma F12 and the MY20 Prince, we have slightly revised the geometries, in order to rationalize the distribution of all sizes, and above all giving them the same famous Pinarello racing soul, without being so aggressive.

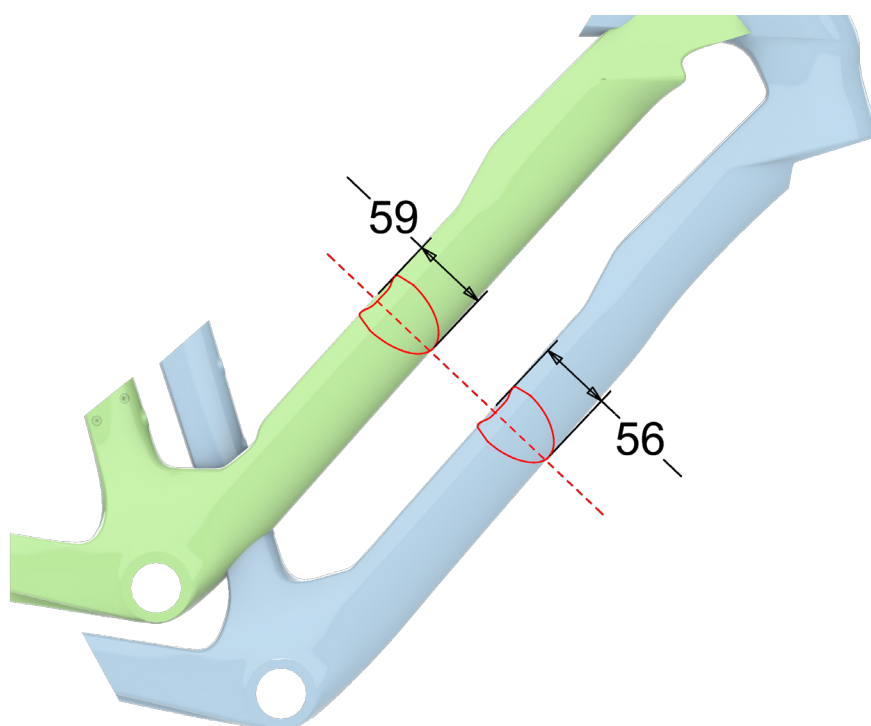


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### 5. STRUCTURAL DESIGN



Going into more details on the structural modifications that contributes to the desired ride quality of the bikes, it is worth mentioning the slight downsizing of the down tube. In the image that follows (Dogma F12 in green and new Prince in blue), we can see this detail, which makes the bike slightly more comfortable. We would like to highlight that the downsizing is a dangerous procedure if carried out without a wise understanding of the structural behavior of the bike during all riding situations (e.g. uphill, downhill, safely braking, out-of-the-saddle pedaling position...). This is why we spent a lot of time optimizing all sections and tube's profiles, in order to reach the best balance between the stiffness necessary to optimally transfer the power from the legs to the road, and the right comfort level we want to guarantee.



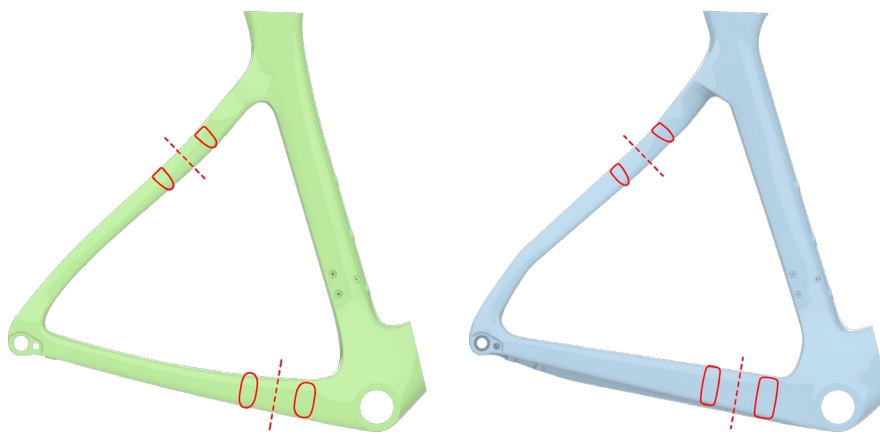
Power transfer has been mentioned just few rows above. This is the reason why, while the down tube height has changed (for comfort reasons as just said), its width remained the same between Dogma F12 and new Prince. We wanted to maintain the same lateral stiffness, and with it, the power transfer capacity performances of the high-end bike.

Beyond the downtube, the chain stays are crucial to make the bike stiff and reactive enough to be considered a real Pinarello road racing bike. The image below, helps explain the work done optimizing the power transfer capacity through the chain stays. The green rear triangle is the MY20 Prince Disk while the blue one is the MY21 new Prince Disk. It can be seen that while the seat stays have remained similar between the versions, both in terms of sections and famous “Onda” shape, maintaining the same vibration damping capacity; the chain stays sections have changed considerably. Becoming very similar to the ones of Dogma F12, and so increasing the stiffness and then the power transfer capability. In particular, during the development of the Dogma F12, we introduced the more squared chain stay compared with the rounder one of the Dogma F10 (to which the MY20 Prince was inspired). We were able to obtain a gain in terms of lateral momentum of inertia of about 45%. This resulted in a gain of about 10% in lateral stiffness.

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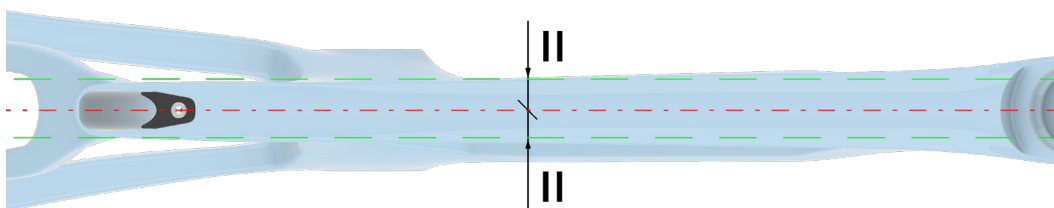
### 5. STRUCTURAL DESIGN

Comparable results were achieved going from MY20 Prince to the new MY21 Prince. This means that under the lateral pedaling forces the MY21 Prince can transfer more power to the rear wheel compared to the previous MY20 Prince. This performance increase will be immediately perceived by the rider as a better responsive and stable frame as he/she gets up on the pedals.



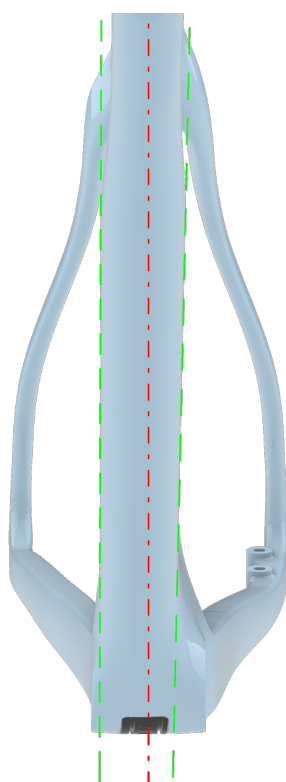
Beyond all the improvements described above, we clearly did not lose sight of our robust know-how. Hence, like all Pinarello frames since the famous Dogma 60.1, this frame is also characterized by evident asymmetry. The well-known Pinarello Asymmetric design establishes that the right side of the frame must be larger than the left side, to better counteract the asymmetric forces that come from the combined action of rider and chain, providing a stiffer and more balanced bike and allows more freedom to aerodynamically optimize the tube shape.

The Pinarello Prince has been developed following the Asymmetric principles. For example, the top tube section was moved to the right side, as clearly visible on the picture below.





At the same time, the down tube was not only enlarged but moved even more to the right side of the frame. Moving the down tube on the right side allows the bike to become stiffer where it is most useful, i.e. where the power transfer actually takes place, increasing the overall balance of the bike at the same time. The picture below shows clearly this concept:

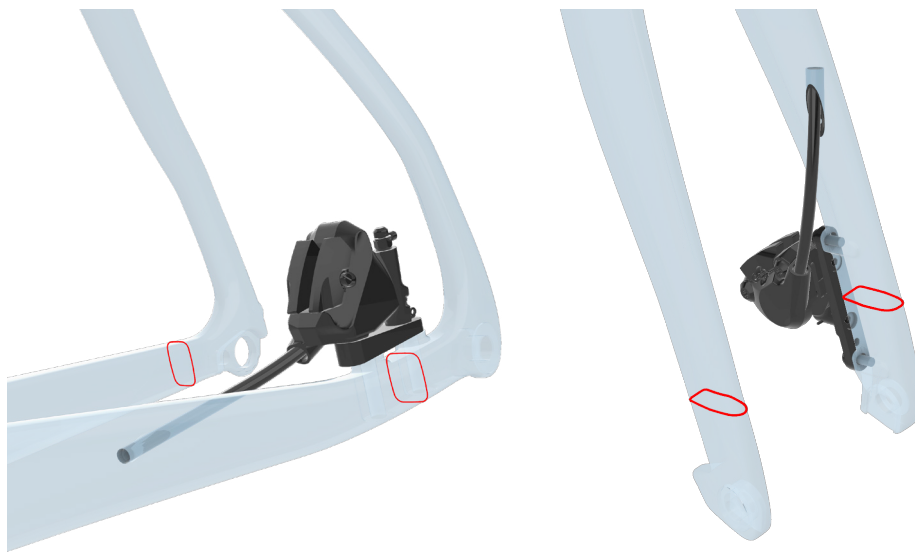


In talking about structural improvements, we can't forget to describe work done around the braking system. Nowadays, when designing a new road racing bike, we must consider the two currents of thought that animate the market. On one hand, the disc brake technology is becoming more and more popular because the braking system allows an undeniable increase of safety; on the other hand, the traditional rim brakes system is still the lightest option, and this is the reason why a large market share still prefers this system. Retracing what has been done with Dogma F12, we must design two versions of the same bike. Each one must present dedicated design solutions that must allow to keep the same soul for both versions: exactly how it is for Dogma F12 and Dogma F12 Disk.

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### 5. STRUCTURAL DESIGN

Regarding the disc brake version, the main target is to improve stability under heavy braking but with a more forgiving behavior than Dogma F12 Disk. So, applying what we learnt developing Dogma F12 Disk via FEA (Finish Element Analysis), we designed a fork with an increased left arm cross section, without anyway adding weight or aerodynamic penalties in respect to the MY20 version. This is in order to better withstand the particular forces and the twisting effect that are born when a disc brake engages. When designing this fork, we didn't forget the famous "Onda" shape that allows to better absorb the road roughness. Indeed, it is sufficient to observe the side view of the bike to easily observe what we are talking about. Last but not least, in regard to the disc brake fork, we want to highlight that, respecting initial targets, we designed a fork that is less stiff than the Dogma F12 Disk in order to make the bike more comfortable and less demanding. A similar speech can be made for the rear brake seat on the frame. Again, following Dogma F12 Disk, we designed the left chain stay with a wider cross section and, furthermore, bent it upward in correspondence of the caliper. This proven to be the best configuration to counteract the disc braking forces.



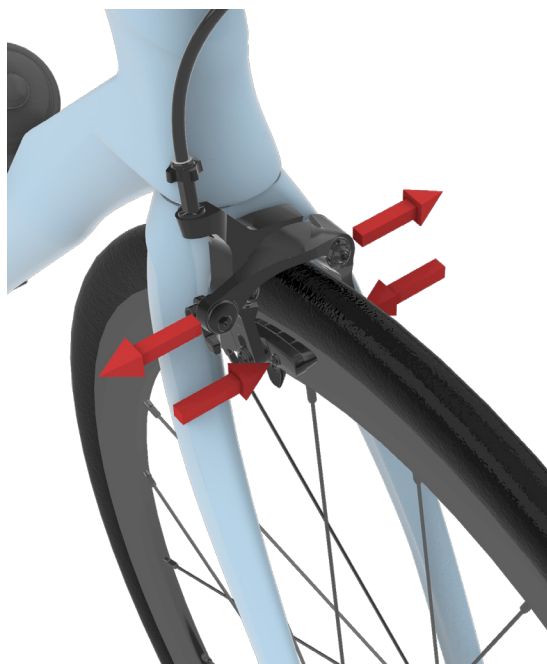
In parallel to the disc version above, we developed the rim brake version too. First of all, in order to reach the best braking performances as possible, we opted for the "direct mount" rim brakes rather than for the "single pivot" configuration. In doing this, we have once again followed the Dogma F12, and it is an evident improvement if compared with MY20 Prince (that used the single pivot solution).

On the direct mount version, the brake caliper pivots are connected directly to the fork/frame. As visible from the picture below, the forces coming from the brake pads are directly loaded on the fork/frame.



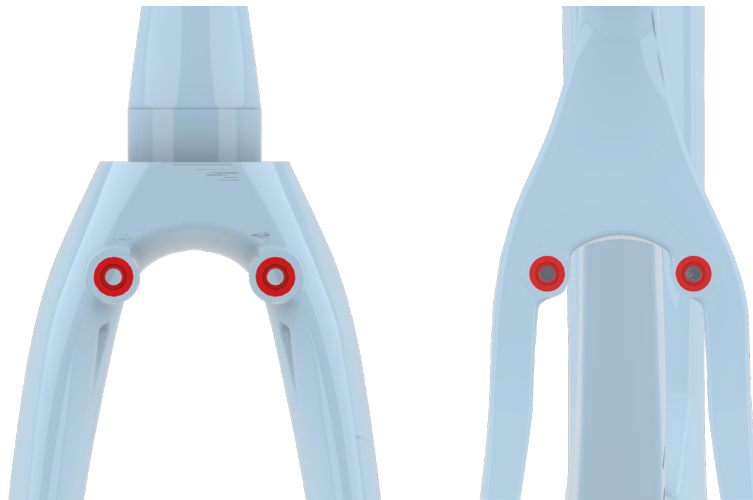


This makes it stiffer and does not deform the brake arms. In the end, the brake system is more rigid and allows transfer of higher braking power to the pads. Brake manufacturers declare an increase in braking power by 12.5% (dry conditions) to 25% (wet conditions) for the direct mount version compared to the classic single pivot system. From a structural point of view, it is clear that the increase of rigidity of the braking system means more stress transferred directly to the fork head and to the seat stays. It was fundamental to reinforce the area around the brake inserts. The forces coming from the brake pads are transferred to the frame through these inserts and they tend to move the inserts away from each other. If this happened, there will be a loss of braking power because most of the energy deforms the fork arms or the Seat Stays. For this reason, we transferred a lot of know-how from Dogma F12 to this new Prince, making the fork head and the upper part of the seat stays (where the brake inserts are) far stiffer than the previous MY20 Prince. Thus, we prevent deformations, allowing the direct mount braking system to work at its best. Alongside this increase of stiffness in the area of brake inserts, as has been done for the disc brake version, the fork has been designed to be overall slightly less stiff when compared with Dogma F12. As already mentioned, this follows the initial targets and makes the bike more comfortable and less demanding. It is remarkable that, beyond the obvious differences of the disc and rim brake versions, the look of the fork and of the stays is the same since these are two version of the same bike.



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### 5. STRUCTURAL DESIGN



The last structural aspect that is worth mentioning is related to the left rear dropout of the disc version (both “FX” and normal). With the Dogma F12 Disk, we introduced the full carbon left dropout. This allows us to save a few grams. We decided to transfer this modification to the new Prince Disk. This obsessive research of marginal gains transferred to a bike like the new Pinarello Prince disk, demonstrates our commitment to offer an entire family of mid-range bikes that clearly raises the bar in all respects.





## 6. MATERIAL CHOICE

All the performances described in the previous paragraphs, in terms of finding the best balance between the stiffness and comfort in order to obtain a family of pure road racing bikes that are not as aggressive as a pro-bike, would not have been possible without a proper and careful material choice. Indeed the choice of material, especially speaking about carbon fiber, deeply influences the performances of the frame. The polymer reinforced with carbon fiber (CFRP), in particular, based on the localization of stress, can be optimized layer by layer for each individual area of the frame to obtain the best combination of stiffness, vibration damping capacity and lightness.

For the new Pinarello Prince family, we chose to use the two different carbon grade and finish. The "FX" adopts the high level T900 carbon fiber (in 3K finish), while the normal version presents the middle level T700, in UD finish.

This choice clearly differentiates the "FX" version from the common one, in term of stiffness, weight and cost. The T900 carbon fiber in 3K finish is a very high performance material, and in combination with the absence of cable stopper seats, as the "FX" versions are, allows us to offer a very stiff and lightweight mid-range frames and forks. At the same time, the middle level T700 carbon fiber, especially in UD finish, allows us to obtain frames and forks that, considering the mid-range target, show a good level of weight and stiffness, still allowing a lower target price in respect to the "FX" version.

# 7. AERODYNAMIC DESIGN

A simple look over of the Prince bikes and you will understand that dynamics of the Pinarello Dogma F12 were widely used to reduce the drag on the new Prince. Indeed, we have transferred a lot of what we have learned with the CFD analysis done developing the Dogma F12 to these new bikes. This reflects on the aero shapes that distinguish the new Pinarello Prince, which strongly remember our flagship bike.

The similarities in the lines between new Prince family and Dogma F12, gives these new bikes exceptional aerodynamic performances, especially when compared to the previous MY20 Prince. In the rows that follow, we describe the details that distinguish the new MY21 Prince from the previous MY20.

First of all, the introduction of the "TiCR" system (Total internal Cable Routing), always present on the "FX" version and available on standard versions, allow to save the 85% of the cable and wire air drag. The remaining 15% is due to the short housing portions exposed externally on the frame. These are necessary for connections with the brake and disc calipers.

It has already been noted that we have transferred a lot of know-how and design from the Dogma F12 fork. This leads to have a consistent drag reduction in respect of the previous MY20 Prince. In particular this is due to wider cross section that better drive the air flow, to the even more emphasized "Onda" shape and to the optimized shape of the "Fork Flap™".

The area of integration between fork head and down tube is crucial to obtain a "clean" and stable air flow, and then a reduced aerodynamic drag. This has been reached combining the Dogma F12 experience with wise compromise in terms of stiffness and weight of the fork head and down tube. The result is the very good integration shown below, that compared with the MY20 Prince is way better in terms of aerodynamics.



The introduction of “TiCR” implies to introduce the 1” ½ bearing both to the upper than lower side. Hence, we consequently enlarged the head tube, especially in the area near the top tube. This extra space allowed us to redesign the cross section with a more efficient aerodynamic shape than the previous MY20 Prince, as is illustrated below:

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### 7. AERODYNAMIC DESIGN



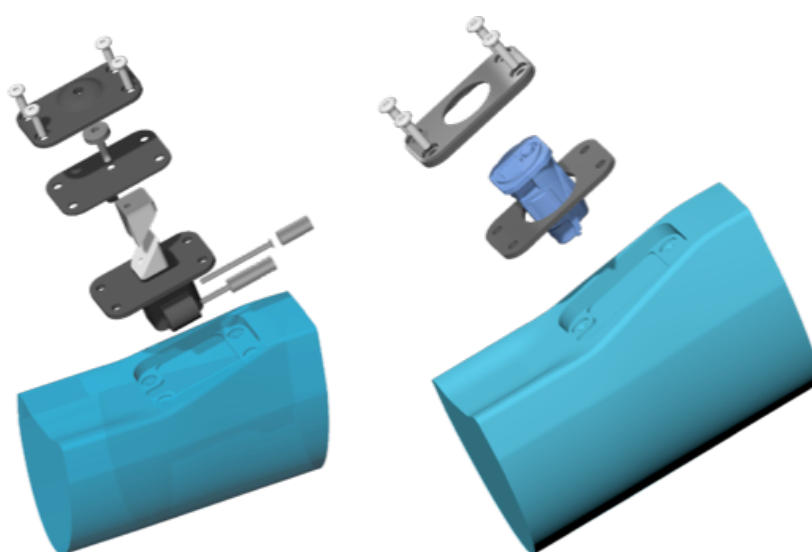
From an aerodynamic point of view, one of the most penalizing components is the water bottle. The concavity of the down tube already hides the down tube bottle from the air and partially the seat tube bottle as well. Understanding that if the seat tube bottle could be positioned lower its surface exposed to air is also reduced, thus improving aerodynamic efficiency. For this reason, the BB area has been designed with an updated special shape, strictly derived from the Dogma F12, that allows the ST bottle position to be lowered by 5mm in respect to the MY20 Prince (i.e. exactly the same height of the Dogma F12).





## 8. VERSATILITY

The adoption of the “TiCR” system doesn’t affect the versatility of the bikes. All these bikes are fully compatible with all groupsets (both mechanical and electronic) available on the market. And the heart of the system is the special opening on the down tube, first seen on Dogma F12. This derives to the one of the F10, called eLink™, but now its functionalities have grown making it the real control center of all groupsets. In 2017, on the Dogma F10, Pinarello introduced eLink™ for the first time. A dedicated slot on DT to place a Shimano Di2 junction. This integrates the junction in an easy and accessible way for adjustment and battery recharge. With the “TiCR” system the level of integration increases, and the eLink™ has now evolved to become the control center for all types of groupsets. The slot on DT and the various interfaces are designed to be compatible with all electronic groupsets and even mechanical groupsets can be adjusted through it. Due to this highest level of cable routing integration, there is no longer the ability for mechanical groupsets to have the FD adjuster on the cable housing under the handlebar. For that reason, a dedicated adjuster has been developed to be placed into the eLink™ slot, allowing adjustment of the FD cable simply through an Allen key screw. This system, based on the relative movement of two inclined prisms, enables a housing displacement of 4mm. This is a more precise way to adjust compared to all other external FD adjusters available on the market.



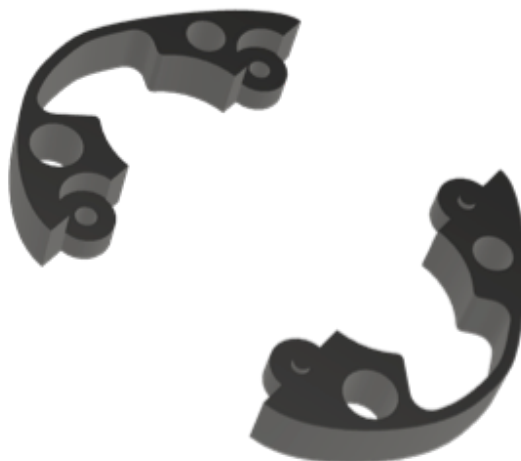
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### 8. VERSATILITY

We want to highlight that, all the new Prince will show the same head set and spacers first introduced with the Dogma F12 (since the bearings are also the same). This last phrase allows us to explain the concept of versatility also related to the need of handlebar stack adjustment. The need to adjust handlebar stack is, indeed, common for all riders regardless of their ability. Sometimes even during the season there is the need to raise or lower the stem. This functionality, being trivial in traditional bicycles, has become more difficult when cables are integrated into the handlebar and headset. Most of the time it is necessary to remove all cables from handlebar and remove the handlebar itself in order to take out or place additional spacers.

The PinaLAB has created special split spacers, first seen on the Dogma F12, that can be easily placed or removed between the top cap and the handlebar stem. This is far more efficient than traditional spacers that have to rise up the stem along the steering tube. Now without disassembly of the cables from the handlebar, the split spacers can be placed (or removed) into the desired position.

The spacers are available in 5mm and 10mm height. The maximum stack range is 50mm (5 x 10mm spacers). The split spacers have larger dimensions because of having to fit with the 1" ½ upper bearing. So, they cannot be used on the upper side of the stem. For the upper side, the standard existing aero spacers can be used.







Since the headset is the same of the Dogma F12, the compatibility with the “Most Talon Ultra” integrated handlebar is guaranteed. However, for these new family of bikes new models of stem and bar has been developed, both made in aluminum and carbon too, that allows the internal cable routing. The possibility to install the bike adopting stem and bar instead of integrated handlebar is evidently an improvement in terms of overall versatility. Looking at the following image, one can realize that the cable routing remains the same of the “Most Talon Ultra”.

The new stem, that however allows the standard “Think2™” cable routing too, is presented in aluminum and carbon:

- Most Tiger ALU TiCR: Aluminum Al2014, Length: 80/90/100/110/120/130/140 mm
- Most Tiger Ultra TiCR: Carbon 1K, Length: 90/100/110/120/130/140 mm

The new bar, that guarantees the compatibility with the standard “Think2™” cable routing, is presented in aluminum and carbon:

- Most Jaguar XA ALU TiCR: Aluminum Al6061, Width: 400/420/440/460 mm
- Most Jaguar XFC 1K TiCR: Carbon 1K, Width: 400/420/440/460 mm



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### 8. VERSATILITY

It's worth noting that while the previous version of Prince (MY20) guaranteed enough tire clearance for a 25 mm tire, this new Prince (MY21) is capable to adopt tires up to 28 mm.

Indeed, a current trend in the road bike world is a move towards wider tires. Even with the standard for pro riders still being 25mm tires, it is not unusual for others to equip a road racing bike with 28mm tires, especially if more comfort is required for longer distances. For that reason, and following the lesson of the Dogma F12, all new MY21 Prince are designed to accommodate 28mm tire clearance.

In reality the tire clearance is 37.5mm, however, we have included consideration for the ISO 4210 norm, which specifies 4mm space between the tire and frame. Analyzing several tire and rim combinations we have given a declared value of 28m. In reality a declared 28mm tire can have a real width of 29.5mm. That's the reason why the frame has been designed with 37.5mm clearance. This allowed the F12 frame to be compatible with all the most aerodynamic wheels that has a 30mm width.





## 9. TECHNICAL SPECIFICATIONS

### **PRINCE FX DISK**

Carbon Torayca T900 3K  
Asymmetric Frame  
Fork ONDA with ForkFlap™  
FlatBack Profile  
Concave Downtube  
TiCR™ Total Internal Cable Routing  
E-Link™  
Drop in Bearing System 1" ½ - 1" ½  
Italian thread BB  
FSC Frontal Seatclamp  
3XAir™  
RAD SYSTEM Disk brake  
Front Axle 100x12mm Shimano®  
Rear Axle 142x12mm Shimano®  
Disc Flat Mount max 160mm  
Max Tire 700x28mm  
UCI Approved

### **PRINCE FX**

Carbon T900 3K  
Asymmetric Frame  
Fork ONDA with ForkFlap™  
FlatBack Profile  
Concave Downtube  
TiCR™ Total Internal Cable Routing  
E-Link™  
Drop in Bearing System 1" ½ - 1" ½  
Italian thread BB  
FSC Frontal Seatclamp  
3XAir™  
Max Tire 700x28mm  
UCI Approved

## **PRINCE WHITE PAPER**

### 9. TECHNICAL SPECIFICATIONS

#### **PRINCE DISK**

Carbon T700 UD  
Asymmetric frame  
Fork ONDA with ForkFlap™  
Flatback profiles  
Concave Downtube  
TiCR™ Total Internal Cable Routing  
E-link™  
Drop in Bearing System 1" ½ - 1" ½  
Italian thread BB  
FSC Frontal seatclamp  
3X Air  
RAD SYSTEM Disk brake  
Front Axle 100x12mm Shimano®  
Rear Axle 142x12mm Shimano®  
Disk Flat Mount max 160mm  
Max Tyre 700x28mm  
UCI approved

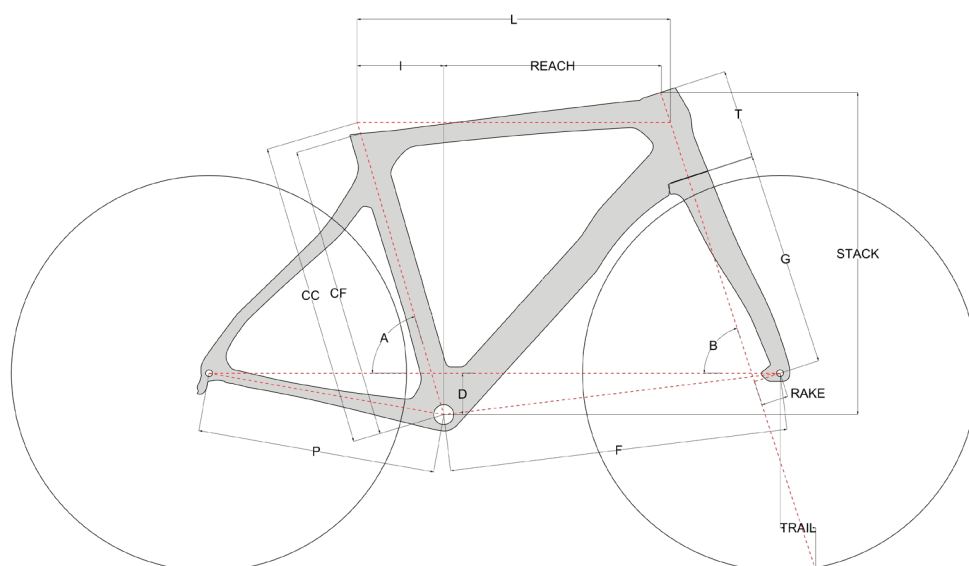
#### **PRINCE**

Carbon T700 UD  
Asymmetric frame  
Fork ONDA with ForkFlap™  
Flatback profiles  
Concave Downtube  
TiCR™ Total Internal Cable Routing  
E-link™  
Drop in Bearing System 1" ½ - 1" ½  
Italian thread BB  
FSC Frontal seatclamp  
3X Air  
Max Tyre 700x28mm  
UCI approved



# 10. GEOMETRIES AND SIZES

The concepts behind the new geometries and sizes have been extensively illustrated in the previous paragraphs. Below we summarize the nine sizes highlighting all the geometries. In addition, for those who already own a Pinarello bike and desire to better understand which one of these new sizes corresponds to the bike he/she already owns, we offer a “conversion chart” that references the MY20 Pinarello Prince Disk sizes. The chart intends to be a reference; we strongly recommend visiting a Pinarello dealer to determine the size that fits best. Finally, we would like to highlight that every single size is designed on its own, for example the bigger sizes are shaped in order to absorb bigger stresses that a taller rider involves, while smaller sizes can be lighter by saving material. The main purpose is that every rider can ride his Pinarello with the same feeling and performance.



CF	CC	L	I	A [°]	B [°]	F	P	T	D	R	G	REACH	STACK
425	430	505	115	74.50	71.00	569	408	106	67	52	373	356	513
440	460	515	125	74.25	71.75	572	408	108	72	52	373	364	523
470	490	525	135	74.00	72.25	577	408	116	72	52	373	370	532
495	515	535	144	73.75	72.75	576	408	124	72	47	373	376	543
510	530	545	150.5	73.50	72.75	584	408	135	72	47	373	380	554
525	545	557	157	73.25	73.00	591	410	151	72	47	373	385	570
540	560	565	161	73.25	73.00	599	410	168	72	47	373	388	586
560	580	580	172	72.75	73.25	607	410	193	67	47	373	392	606
590	600	600	180	72.50	73.25	624	410	231	67	47	373	398	642

**DIMENSIONS IN MM**

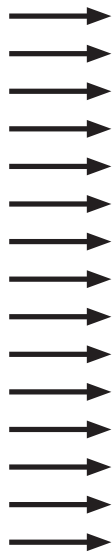
# PRINCE WHITE PAPER

## 10. GEOMETRIES AND SIZES

### CONVERSION CHART

#### MY20 PRINCE

CC	STEM LENGTH
425*	80
440	80
460*	90
465	90
490*	100
500	100
510*	110
515	110
530	110
540	120
550	120
560	130
575	130
595	140
620	140



#### NEW MY21 PRINCE

CC	STEM LENGTH
430	80
430	80
430	80
460	90
460	90
490	100
515	110
515	110
530	110
530	110
545	120
545	120
560	130
580	130
600	140

*DIMENSIONS IN MM*  
*\*EASYFIT SIZE*



# 11. RACING

All the new MY21 Pinarello Prince are UCI approved, and so ready to be used in all international competitions.



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