SHIMANO

ENGLISH (U)

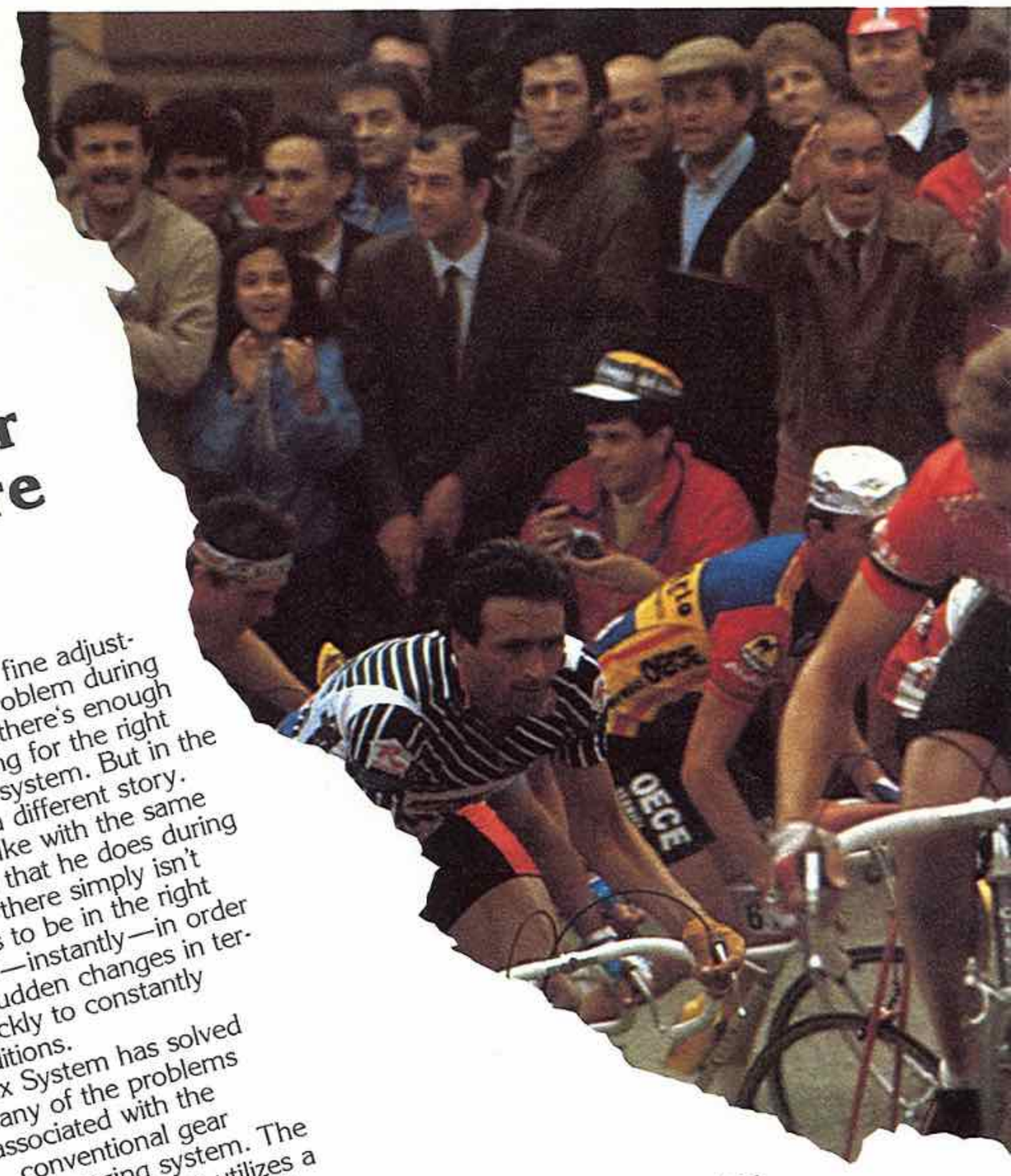
NEW

DURA-ACE

The Unlimited Challenge

New Dura-Ace lets you aim for the top

Responsive SIS Shifting: Gear Changing Reduced to the Pure Essentials.



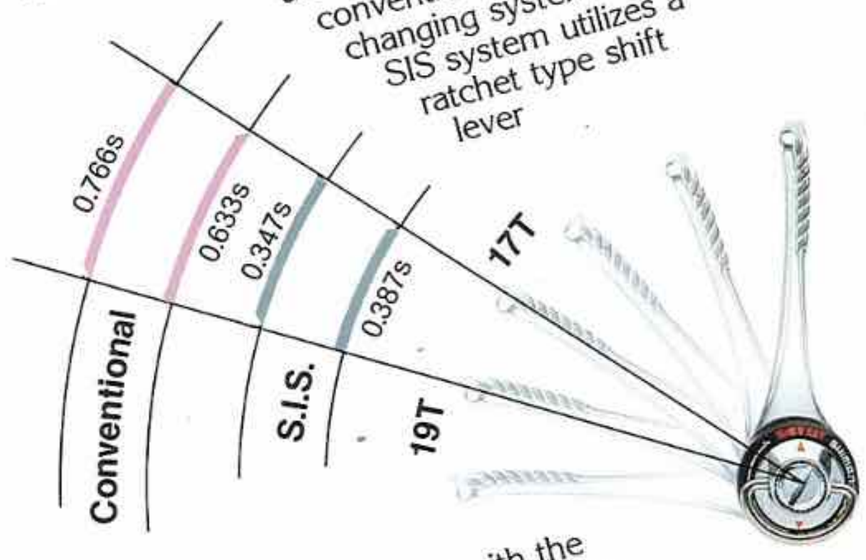
WHY S.I.S. (Shimano Index System)?

Shimano took a good look at the conventional racing bicycle's gear changing system and saw that there was still much room for improvement. Shimano found that the gear change system is the one group of components whose function most completely depends on a certain skill developed by the rider. An improved shifting system would take much of the burden of shifting off of the rider and integrate it into the function of the components where it really belongs. If the gear shifting system could provide more precise shifting with less input from the rider, the rider would be able to concentrate more on winning the race. It's worth stressing that the goal of the bicycle racer is simply to win races—not to develop a smooth shifting technique. Gear changing is merely a means to an end. Racers have been forced to become skilled at shifting the conventional system simply because it has been the only gear change system available until now.

As a result of these factors, Shimano developed the Shimano Index System which delivers fast, smooth, precise gear changing that's almost automatic. Gears are changed accurately with minimal input and attention from the rider. This means racers can devote more time to pure racing—not shifting.

But first let's take a look at why shifting problems exist. While the freewheel gears are placed at set intervals, the derailleur is positioned among these gears in a smooth movement with an infinite number of positions. Derailleur position and movement (which determine shifting performance) are controlled through a cable that the rider adjusts in a continuous, stepless manner. Gears must be searched for and "felt out." As a result, shifting performance is directly related to the rider's skill at manipulating the lever in a series of very fine adjustments. This presents no problem during training (or touring) when there's enough time to devote to searching for the right gear and fine tuning the system. But in the heat of competition it's a different story. No racer can shift his bike with the same accuracy and precision that he does during training. In a real race there simply isn't time. The racer needs to be in the right gear at the right time—instantly—in order to sprint, deal with sudden changes in terrain, or respond quickly to constantly changing race conditions.

The Shimano Index System has solved many of the problems associated with the conventional gear changing system. The SIS system utilizes a ratchet type shift lever that's coordinated with the position of the rear derailleur in relation to the freewheel gears. The spaces between the audible click-stops at the lever correspond exactly to the spaces between the gears on the freewheel. This means that gears are changed by simply moving the lever to the next click-stop. The rear derailleur is automatically adjusted at that gear position and doesn't need further tuning. One quick movement of the lever and "click"—you're in gear. SIS coordinates the operation

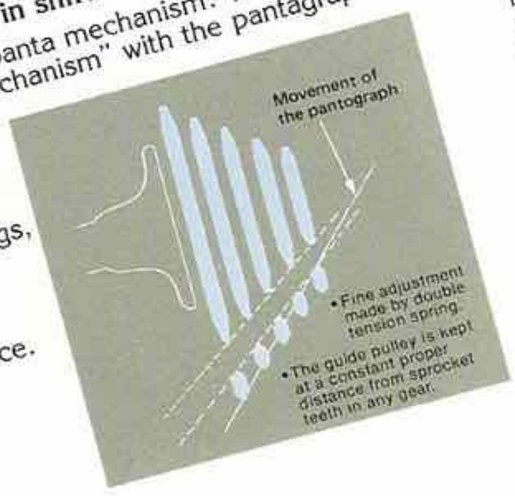


THE UNLIMITE

Features of the Rear Derailleur

1. Improvement in shifting performance

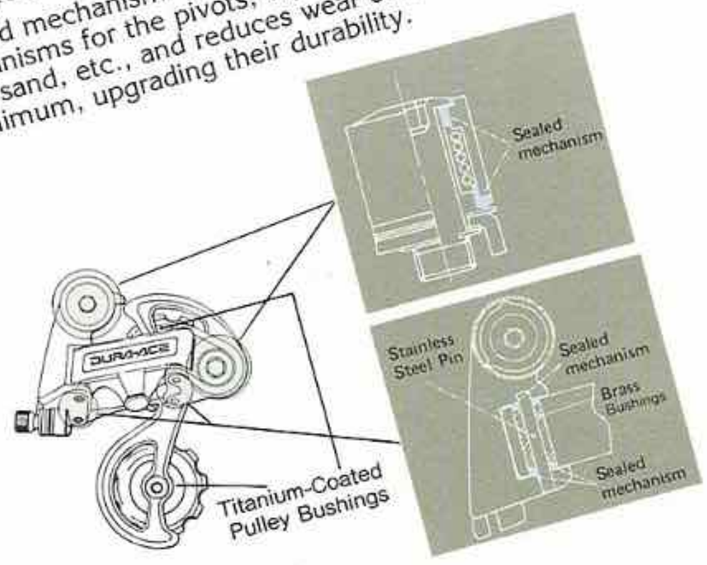
•Double servo-panta mechanism: The "Double Servo-Panta Mechanism" with the pantagraph at an appropriate angle, and at the same time using double tension springs, for greatly improved shifting performance.



•Centeron guide pulley: The self-centering mechanism that automatically keeps the chain on the right gear if it is shifted improperly.

2. Upgraded durability

•Sealed mechanism: Shimano uses sealed mechanisms for the pivots, which keep out water, mud, sand, etc., and reduces wear of the pivots to a minimum, upgrading their durability.

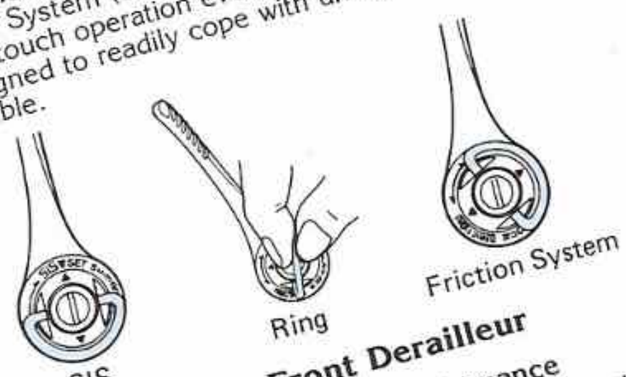


and functions of the derailleur, freewheel, chain, cable and lever to form an integrated shifting "system." SIS frees racers to concentrate on racing—not shifting—and makes a great contribution to the racing bicycle's overall performance.

D CHALLENGE

transmits a click to the fingertips, which means the gearshift has just been completed.

• The SIS lever can switch to either "Shimano Index System (SIS) or "Friction System" with one-touch operation even while riding, which is designed to readily cope with unexpected trouble.



• Sintered alloy guide pulley: New DURA-ACE employs Sintered Alloy for the tips of the guide pulley teeth, minimizing friction with the chain and thereby assuring a longer period of high shifting performance.

• Brass bushings and stainless steel pins

• Play reduced

• Titanium-coated pulley bushings employed

3. Safety feature

• Double spoke barrier: Special-shaped left pulley cage plate is provided to prevent the rear derailleur from being caught in the spoke.

4. Simple and compact design

• Built-in inner cable fixing bolt

• Inlaid epoxy finish: "Inlaid Epoxy Finish", which is often found in fine jewelry is used in the name plate link.

Features of the Shifting Lever

Revolutionary shifting system

• Shimano index system: Shimano has introduced the "Index Mechanism" into the shifting system for the racer achieving "shortened shifting time", "eliminating mis-shifting" and "force", and thereby saving time and energy.

• The built-in "Index Mechanism" of the lever

Features of the Front Derailleur

1. Improvement in shifting performance

• Special shape of the chain guide: The inner plate is "Dished-Out" so that shifting to high gear is performed, smoothly and quickly, without "slipping"

• Enhanced rigidity of the chain guide: The front end of the chain guides is "bridged" and rigidity of the chain guide is enhanced so that the shifting performance is improved.

• Upgraded durability of the return spring: Adoption of a sealed mechanism on the return spring not only upgraded durability of the spring itself but also stabilized shifting performance of the front derailleur.

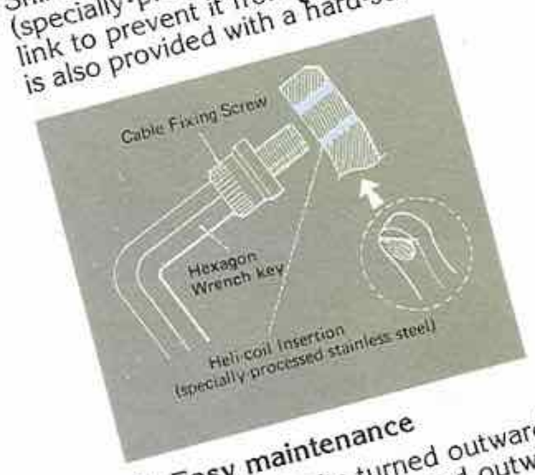
2. Upgraded durability

• Sealed mechanism provided for the return spring

• Enhanced machining precision of sliding part of the links

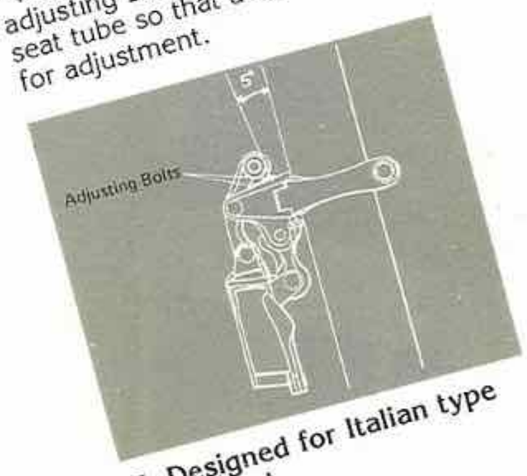
3. Safety feature

• A heli-coil insertion in right link for cable fixing screw: The New DURA-ACE, just like New Shimano 600 EX, provides a "Heli-coil" insertion (specially-processed stainless steel) on the right link to prevent it from being destroyed. The screw is also provided with a hard-surface heat treatment.



4. Easy maintenance

• Adjusting bolts turned outward by 5°: The adjusting bolts are turned outward by 5° from the seat tube so that a screwdriver can be easily used for adjustment.



5. Designed for Italian type bracket brazed-on

NEW DURA-ACE

More Cornering Clearance and Pedal Load Handling Capability

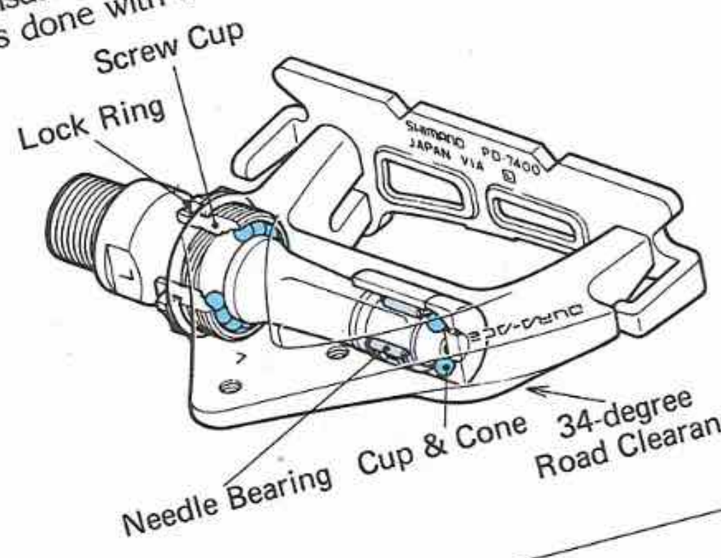
To ride faster

The New Dura-Ace pedal is a revolutionary design. This new design offers more strength and load carrying ability through a unique bearing configuration plus an amazing 34 degrees of road clearance resulting from a shortened axle. This gives racers the confidence to go faster and dive deeper into turns at speed without worrying about pedal contact and possible spills. The aerodynamic triangular shape of the pedal was carefully developed to insure the lightest weight with maximum structural strength.

The New Dura-Ace pedal comes in two models with steel or alloy back plates. The pedal body is of all high-strength alloy construction with a nickel chrome-molybdenum axle having precision polished bearing surfaces. The bearing layout is particularly fascinating and the most advanced feature of the pedal. Besides utilizing conventional inner and outer ball bearings and cones, the pedal incorporates a taperless roller bearing positioned just inside of the outer ball bearing at the load center to take up the heavy vertical loads encountered in racing, especially sprints. This three-bearing design assures adequate dispersion of heavy vertical and lateral bearing loads. Another feature is that the dust cap has been eliminated. The outer bearing and axle are completely covered by the pedal body with the outer bearing cone being anchored in the body. The adjustable cone has been moved to the crank side of the axle and a special tool is required for adjustment and disassembly. Sealing at the crank arm end is done with a close tolerance reverse thread on the cone adjuster. This novel design means that bearing clearance can be adjusted quickly and cleanly without exposing any of the inner mechanisms. The wedge-shaped aerodynamic body accepts either alloy or steel New Dura-Ace toe clips and provides two directional adjustments: 24 millimeters of fore and aft adjustment plus 28 degrees of radial adjustment. Three sizes of toe clips coupled with this adjustability guarantee that a wide range of shoe sizes and placement positions can be accommodated. The large 34 degree road clearance angle is a vast improvement over conventional quill designs which only offer 29 degrees at most.

Designed to withstand the severe rigors of racing applications, the New Dura-Ace pedal also lends itself exceptionally well to long distance loaded touring due to its excellent sealing, strength, and durability.

Making the crucial point of contact where human power is first transmitted to the bicycle, the New Dura Ace pedals deliver the best possible balance of weight, strength, durability, and cornering clearance.



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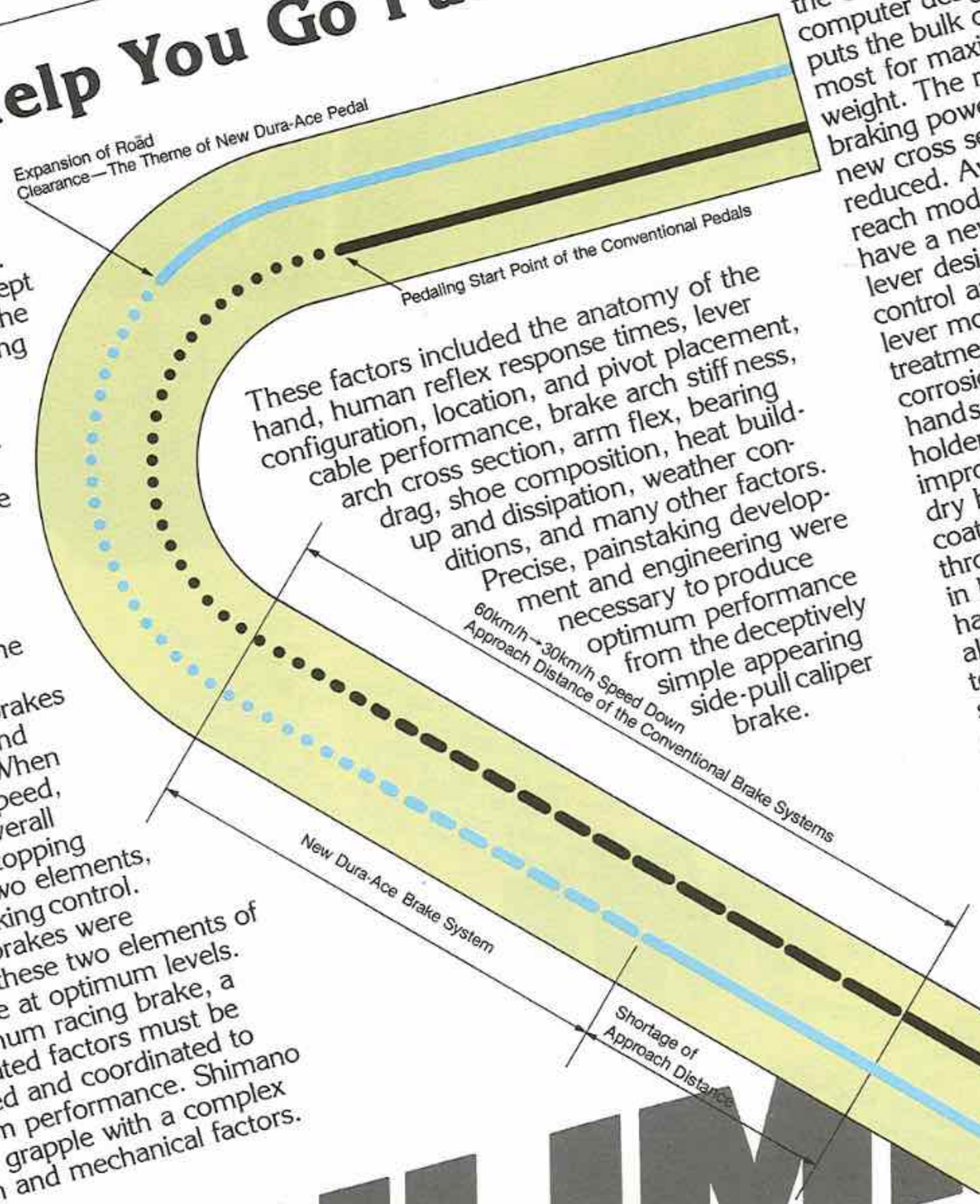
Brakes That Help You Go Fast

Brakes for faster riding?

In bicycle racing, the faster you can enter a turn, the faster you can exit. With this simple but essential concept in mind, Shimano has developed the New Dura Ace brakes. Ideal braking performance shortens the approach distance needed to enter a turn to the absolute minimum. This is one of the main areas where component performance can increase overall speed through a winding course where braking is needed. Shortening the approach distance entails braking at the last possible moment with the confidence that your brakes will respond predictably and precisely to lever input. When entering a turn at high speed, it's important to have overall stopping power. This stopping power is divided into two elements, braking force and braking control. The New Dura Ace brakes were designed to provide these two elements of braking performance at optimum levels. To design the optimum racing brake, a number of interrelated factors must be carefully considered and coordinated to produce maximum performance. Shimano engineers had to grapple with a complex variety of human and mechanical factors.



These areas have been carefully analyzed and incorporated into the New Dura Ace brakes. The New Dura-Ace brakes are in the classic side-pull design but offer a new computer designed arm cross section which puts the bulk of the metal where it's needed most for maximum rigidity with minimum weight. The result is greater stiffness and braking power. An additional benefit of the new cross section is that wind resistance is reduced. Available in standard or short reach models, the New Dura-Ace brakes have a new modified arm configuration design that provides more precise control and braking force proportioned to lever movement. An alumite surface treatment has been applied for long life corrosion and discoloration resistance. The handsome high-tech gray one-piece holders and tire guides hold shoes with improved composition for better dry braking. The spring stop tab is coated. This provides a smooth action through reduced spring friction. Developed in high-tech manufacturing techniques, have been applied to give clearance all around. This new precision design helps to reduce vibration and eliminate squeal while enhancing the overall design to give a tight, rigid appearance. We believe the New Dura-Ace brakes have established a new level of performance. Racers can go faster because they can rely on the New Dura-Ace brakes to deliver the ultimate in performance.

THE UNLIMITE

Features of the Pedal

1. Sharp cornering
- 34° Road clearance: The New DURA-ACE pedal achieves the world's highest Road Clearance in a mass-produced pedal.

graded durability
npound structure of needle bearing and
& cone bearings: We adopted a compound
cture of needle bearing and cup & cone
ring to support the axle. The bearings in three
ces disperse thrusting and radial forces, greatly
grading durability of the pedal.
Nickel/Cr-Mo axle
- Sealed mechanism: The New DURA-ACE pedal
nas no axle hole on the outside of pedal body.
And a counter multiple-thread is provided in the
direction of rotation on the inside of the axle,
completely excluding water, sand, mud, etc. when
the pedal rotates.
- Anodized finish for alloy rear plate

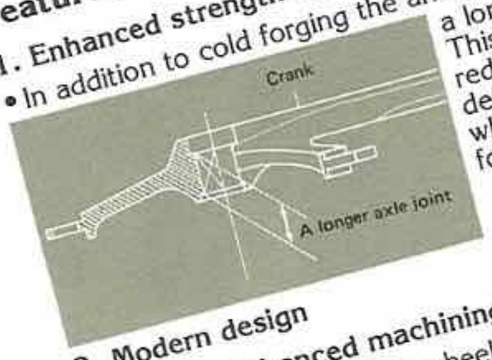
3. Fully adjustable toe clip for best fit

4. Easy maintenance
- Tool for cone adjustment included
- Adoption of changeable front/rear plates

5. Compact, lightweight design

Features of the Front Chainwheel

1. Enhanced strength and rigidity
- In addition to cold forging the arms, we designed a longer axle joint. This was found to reduce chainwheel deflection even when pedaling forces are high.



2. Modern design

3. Greatly enhanced machining precision
- Complete fitting of chainwheel to crank arm

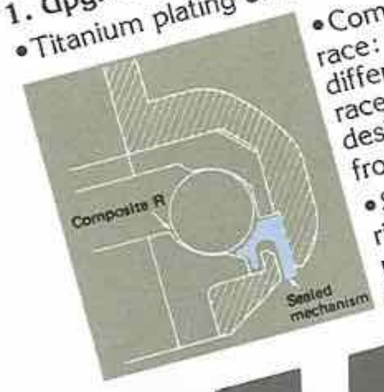
4. Improved efficiency
- We improved the tooth shape of the chainwheel so that the gear teeth have a greater contact area, thereby assuring much better efficiency.

5. Upgraded durability
- Sealed Mechanism

6. Easy adjustment
- 11-ball retainer

Features of the Head Set

1. Upgraded durability
- Titanium plating of lower cone race.



- Composite radius ball race: We designed two different radii for the ball race. This composite radius design protects the ball race from impact load.
- Sealed mechanisms: An O-ring seal in the lock nut keeps rain and sweat from entering the fork stem.

2. Compact and simple design
- Built-in lock washer
- Double-etch anodizing for a high-tech appearance.

3. Lightweight design
- Except for the ball race and lock washer, all the parts (including the cones) are made of high strength aluminum light alloy.

Features of the Brake

1. Successful combination of high braking force and smooth control
- By greatly reducing the friction of the arch, levers, cables, return spring, etc., and by increasing the efficiency of the arch output relative to lever input, high braking force plus smooth control have been successfully combined.

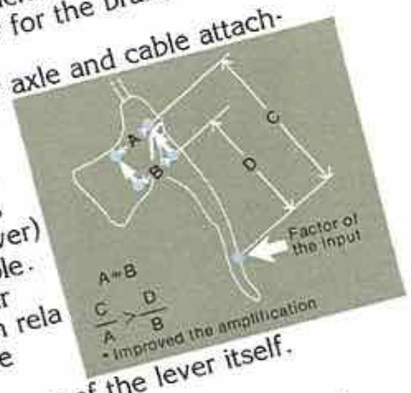
2. Improved durability and higher braking efficiency
- Both durability and braking efficiency have been greatly improved by increasing the machined precision of the arch's sliding surfaces. A special resin is used where the spring contacts the arch in order to prevent any decrease of braking efficiency, and decrease wear.

3. Quick release: "click & quick"
- Click mechanism built into quick release: By incorporating the click mechanism in the quick release, the arch quick release be secured anywhere, with confidence that it will not slip.

4. Aerodynamic design
- CAD design: An even further computer developed aerodynamic design of the NEW SHIMANO 600 EX brake adds rigidity to the arch and suppresses vibration and noise.

Features of the Brake Lever

1. Improved lever operation
- Lever shaft and cable attachment positions moved: The most important factor for the brake lever is its operation.
The positions of the lever axle and cable attachment have been moved upward, thus improving the amplification factor of the input (the hand's force applied to the lever) transmitted to the cable. The result is a greater output than before in relation to the light force applied, thereby improving the efficiency of the lever itself.



2. Anatomical design
- Full-fit design: By applying the principles of anatomical design to the shape of the lever, bracket and bracket cover.
- Compact design

3. Increased durability
- As one way in which to improve durability, special spacers are used at the lever shaft. And, in order to prevent squeeking after long use, the diameter of the wire attachment shaft has been reduced, and special spacers are used.

4. Improved maintenance
- One-touch cable installation:
The cable attachment is above the lever.
- Easy lever position adjustment: The lever band's installation bolt can now be adjusted with the cable taut.
- Instantly-solderable inner cable end employed.

Features of the Freehub

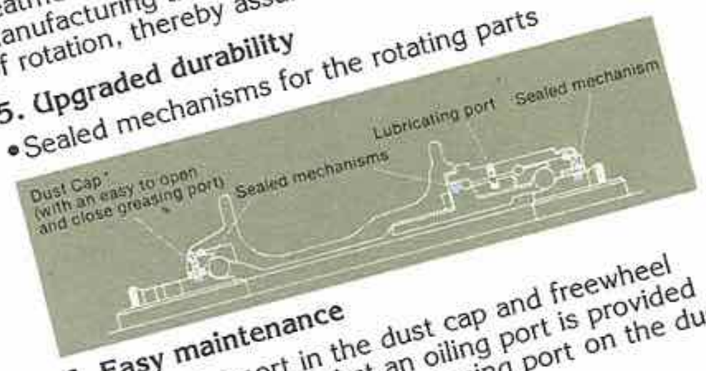
1. Upgraded durability of the wheel
- Uni-balance system
- Improvement in the spoke hole: By changing the conventional spoke hole angle of 110 degrees to 90 degrees and the flange thickness of 3mm to 3.2mm, we prevent spokes from being broken and together with the uni-balance system, make possible a wheel with enhanced durability.

2. Cassette system

3. Improvement in shifting performance
- New UG gear: We designed the new UG gear to have a toothtip shape that allows positive catching of the chain.

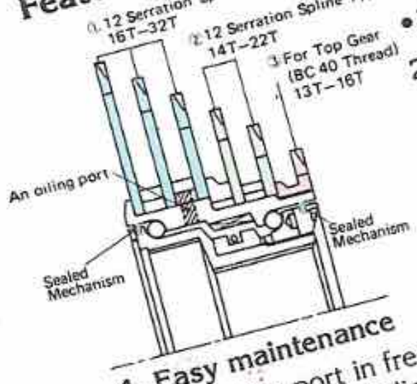
4. Highly precise rotation
- Special treatment for the ball race: A special heat treatment and precise machining are used in manufacturing the ball race. This reduces variation of rotation, thereby assuring smooth rotation.

5. Upgraded durability
- Sealed mechanisms for the rotating parts



6. Easy maintenance
- Lubricating port in the dust cap and freewheel body: The secret is that an oiling port is provided on the freewheel and the greasing port on the dust cap is easy to open and close.

Features of the Freewheel



1. Improvement in shifting performance
- New UG gears

2. Highly precise rotation
- Special treatment for the ball race

3. Upgraded durability
- Sealed mechanism

4. Easy maintenance
- Lubricating port in freewheel body
- Spline sprocket: Spline sprockets, from second to low, serve to facilitate quick removal and assembly.

CHALLENGE

NEW DURA-ACE

Rear Derailleur
RD-7400
Responsive "SIS shifting"—
Removes Extra Shifting Actions

Specifications
• Minimum Rear Sprocket: 12T • Maximum Rear Sprocket: 26T • Maximum Rear Sprocket Difference: 26T • 6.7oz. (189g.) • Light Alloy·Color Anodized (Bracket & Plate Body), Light Alloy·Inlaid Epoxy Finish (Right Link), Light Alloy·Inlaid Anodized Finish (Left Link, Right & Left Plate) • Double Servo-Panta Mechanism, Centeron Guide Pulley, Sealed Mechanism, Centeron Alloy Guide Pulley Teeth, Titanium-Coated Pulley Bushing, Brass Bushings & Stainless Steel Pins in Link Pivots, Double Spoke Barrier

Shifting Lever
SL-7400
SL-7400 BCA! (SIS, Side-Band A Type)
SL-7400 FCA! (SIS, Side-Brazed-on A Type)
SL-7400 FCB! (SIS, Mount-Brazed-on B Type)
*"C" of Model Number means Italian Type
(Fixing Bolt is 5mm diameter)

Specifications
• SL-7400BCA!: 2.5oz. (72g.) • Light Alloy·Buff Finish (Lever), Steel·Chrome-Plated (Fixing Bolt, Clamp), Zinc Diecast·Chrome-Plated (Top-mount Housing) • Shimano Index System with One-touch Switch is SIS & Friction System • Down Tube Lever • Lever Clamp Diameter: 1-1/8" (28.6mm.) • Shimano Index System (SIS), Sealed Mechanism, Human Engineered Design Non Loosening Mechanism • Use SIS with New Dura-Ace Rear Derailleur/Freehub/ Freewheel

Front Derailleur
FD-7400-B (Band Type)
FD-7400-F (Brazed-on Type)
Evolution of Form and Improvement of Total Performance

Specifications
• Maximum: 15T • 3.2oz. (93g.) Band Type • Light Alloy·Anodized Finish (Front & Rear Band), Light Alloy·Color Anodized (Right Link), Light Alloy (Left Link), Heat Treated Steel·Chrome-Plated (Chain Guide, Clamp Bolt) • Clamp Diameter: 1-1/8" (28.6mm.) • Sealed Mechanism, Chain Release Dish-out, Helicoil-Secured Cable Fixing Screw, Heat Treated Cable Fixing Bolt

Head Parts
HP-7400
Durability-Minded Specifications to Withstand Extreme Load

Specifications
• 4.0oz. (113g.) • Light Alloy·Anodized Finish (Nut, Cup), Light Alloy·Anodized Finish (Cone, Bearing Steel Insertion), Titanium-Plated (Lower Cone) • Road Type • Sealed Mechanism
• Variations:

Type	Thread	Press Race Diameter	
		Upper Cone & Lower Cup	Lower Cone
English/ Italian	BC1 × 24T.	30.2mm.	26.4mm.
French	M25 × P1.0	30.2mm.	26.4mm.

Front Chainwheel & Bottom Bracket Assembly
FC-7400 (Double)
BB-7400 (B.B.Parts)
Solid Feel Responding to Ultimate Pedaling Force

Specifications
• 22.5oz. (637g.) (42T.~52T., 170mm.) 11.1oz. (314g.) (B.B. Set) • Light Alloy·Anodized Finish (Crank, Chainring), Light Alloy·Etching Anodized Finish (Crank Arm Cap), Steel·Chrome-Plated (Fixing Bolt) • Nickel Cr-Mo Axle • For 1/2"×3/32" Chain • Teeth: Inner; 39T.~46T., Outer; 48T.~54T. • Crank Length: 165mm., 167.5mm., 170mm., 172.5mm., 175mm. • Crank Thread: BC 9/16 × 20 T.P.I. • Cup Thread: English 1.37 × 24 T.P.I., French 35 × 1.0, Italian 36 × 24 T.P.I. • B.B. Size: 68-W-112, 70-W-113 • Computer Aided Design (Crank), Sealed Mechanism (B.B.)
(46T. and 54T. are available from March '85)

THE UNLIMITE

Pedal
PD-7400
34-degree Road Clearance
Revolutionized Cornering Concept!

Specifications
• Light Alloy: 13.1oz. (372g.) Pair, (Including Toe Clip, L-size) • Light Alloy·Buff Finish (Body), Light Alloy·Anodized Finish (Front Plate), Light Alloy Black Solid Anodized Finish (Rear Plate), Nickel Cr-Mo Steel·Chrome-Plated/Polished Finish (Axle), Steel·Chrome-Plated (Toe Clip) • Toe-Clip Size: M, L, LL • Crank Thread: BC 9/16 × 20 T.P.I. • Compound Structure of Needle Bearing, and Cup & Cone Aerodynamic Design, Sealed Mechanism

Brake
BR-7400-49 (Short 49 Type)
A Highly Efficient Brake System for Successful Coexistence of Braking Performance and Control!

Specifications
• 12.5oz. (355g.) (F & R, 49 Type) • Forged Light Alloy · Anodized Finish (Arch), Steel · Chrome-Plated (Pivot Bolt, Quick Release), Light Alloy · Color Anodized Finish (Shoe Holder with Tire Guide) • Front Double Lock Nut Type (Pivot Bolt) • Eccentric Type Quick Release • Computer Aided Design (CAD)

Brake Lever
BL-7400
High Output from Low Input

Specifications
• 7.7oz. (216g.) Pair • Light Alloy · Anodized Finish (Lever, Bracket), Stainless Steel (Lever Axle) • Bracket Cover: Black • Lever Clamp Diameter: 24.2mm.
• Anatomical Design

Freehub
FH-7400-6 (Rear/6-speed)
HB-7400-F (Front Hub)
Durability-Minded Design for Severe Riding Conditions

Specifications
• 15.4oz. (438g.) Rear 6-speed, 126mm. (w/o Sprocket), 8.0oz. (228g.) Front • Forged Light Alloy · Anodized Finish (Hub Shell), Resin · Black Finish (Dust Cap), Steel · Chrome-Plated (Quick Release Housing & Nut) • Champagne Gold Finish (Sprocket) • Teeth: Threaded Sprocket; 12T.~16T., Spline Sprocket; 13T.~32T. • Front 3-5/16" (100mm.), Rear 5" (126mm.) • Spoke Holes: 28H, 32H, 36H • Sealed Mechanism, New Uniglide Teeth, Cassette Freehub, Uni-Balance System, Lubricating Ports with Open/Close

Standard Sprocket Combinations:

6-speed	12, 13, 14, 15, 16, 17T. 13, 14, 15, 16, 17, 18T. 13, 14, 15, 17, 19, 21T. 13, 15, 17, 19, 21, 23T. 13, 15, 17, 20, 23, 26T.

Hub
HB-7400-R
HB-7400-F
Specifications
• 11.1oz. (315g.) Rear, 8.0oz. (228g.) Front • Forged Light Alloy · Anodized Finish (Hub Shell) • Resin · Black Finish (Dust Cap) • Steel · Chrome Plated (Quick Release Housing & Nut) • Quick Release, One-Piece Front & Rear Hub • Over Lock Nut Dimensions: Front 3-5/16" (100mm.), Rear 6-speed, 5" (126mm.) • Spoke Holes: 28H, 32H, 36H • Sealed Mechanism, Lubricating Ports with Open/Close

D CHALLENGE

Multiple Freewheel
MF-7400 (6-speed)
Highly Efficient Driving Backed Up by Evolved Gear Function

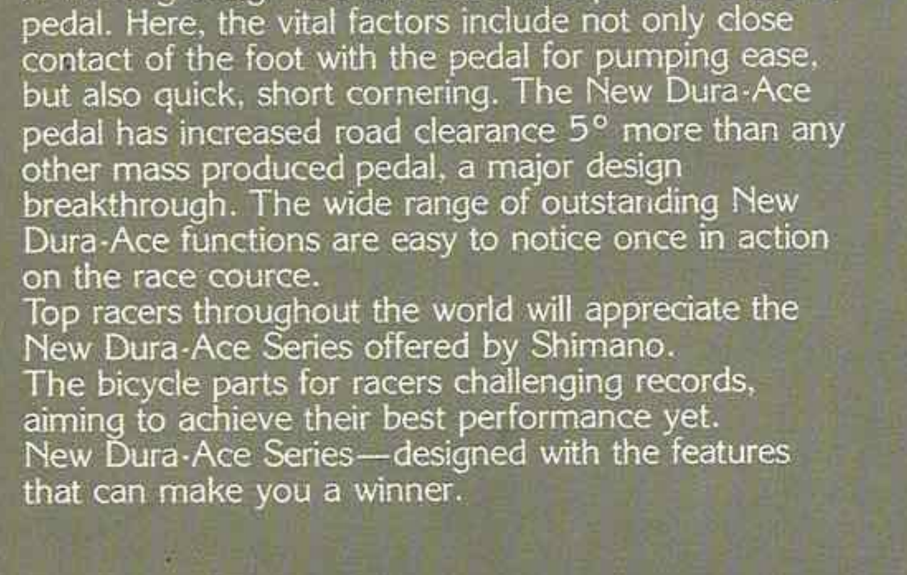
Specifications
• 12.7oz. (360g.) (13, 14, 15, 17, 19, 21T) • Steel · Champagne Gold Finish • For 1/2" × 3/32" Chain • Sealed Mechanism, New Uniglide Teeth, Lubricating Port on Freewheel body

Standard Sprocket Combinations:

6-speed	13, 14, 15, 16, 17, 18T. 13, 14, 15, 17, 19, 21T. 13, 15, 17, 19, 21, 23T.

NEW DURA-ACE

Parts for racing bicycles are judged primarily by their functional quality, which has a direct bearing on whether one wins or loses the race.
The derailleur featuring outstanding gearshifting performance, and the brake offering smoothness and effectiveness as well as efficiency—these New Dura-Ace racing parts have been specially developed for smoother operation, lighter weight, greater durability and easier maintenance.
In addition, the vital functions of each part—crucial to the outcome of any race—have been maintained at the same high level. What is so important about gear-shifting performance?
Why is it necessary that parts be designed with less weight, even by 1 gram? —because each of these factors can be vital to the goal of winning races.
Helping true competitors win their races is what great bicycle parts are all about. And since this is our primary goal, we have dedicated our efforts toward producing state-of-the-art racing bicycle components that give racers the functional performance they are looking for.
In developing the New Dura-Ace Series bicycle components, the basic mechanisms were thoroughly refined and innovations were added, including Shimano's advanced gearshift-positioning mechanism, the SIS (Shimano Index System).
Even highly experienced professional racers have found themselves facing such problems as improper gearshifting due to fatigue or lack of concentration, idling as a result of chain slippage and reduction in pedaling power while shifting gears.
Any problem, no matter how seemingly small, can adversely affect speed as well as increase fatigue.
The end result can be a critical loss of power in the final sprint—and subsequent defeat. The SIS has been designed to prevent loss while shifting gears, and it enables proper gearshifting at the touch of a
The SIS is truly an ideal system for racers. The brake requires what are often contradictory characteristics—braking performance and maneuverability. In trying to solve this conflict, the New Dura-Ace brake system is designed to further reduce cornering approach distance. A number of conditions can interfere with braking performance—the rider's condition, road conditions, weather, temperature, wheel rims, tires, and many more. In any case, efficiency is determined by how well lever input is conveyed to the arch. The New Dura-Ace brake system increases input/output efficiency to a maximum, while reducing friction in the complete system to a minimum.
A winning design has also been incorporated into the pedal. Here, the vital factors include not only close contact of the foot with the pedal for pumping ease, but also quick, short cornering. The New Dura-Ace pedal has increased road clearance 5° more than any other mass produced pedal, a major design breakthrough. The wide range of outstanding New Dura-Ace functions are easy to notice once in action on the race cource.
Top racers throughout the world will appreciate the New Dura-Ace Series offered by Shimano.
The bicycle parts for racers challenging records, aiming to achieve their best performance yet.
New Dura-Ace Series—designed with the features that can make you a winner.



SHIMANO SYSTEM COMPONENT

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Specifications are subject to change without notice.