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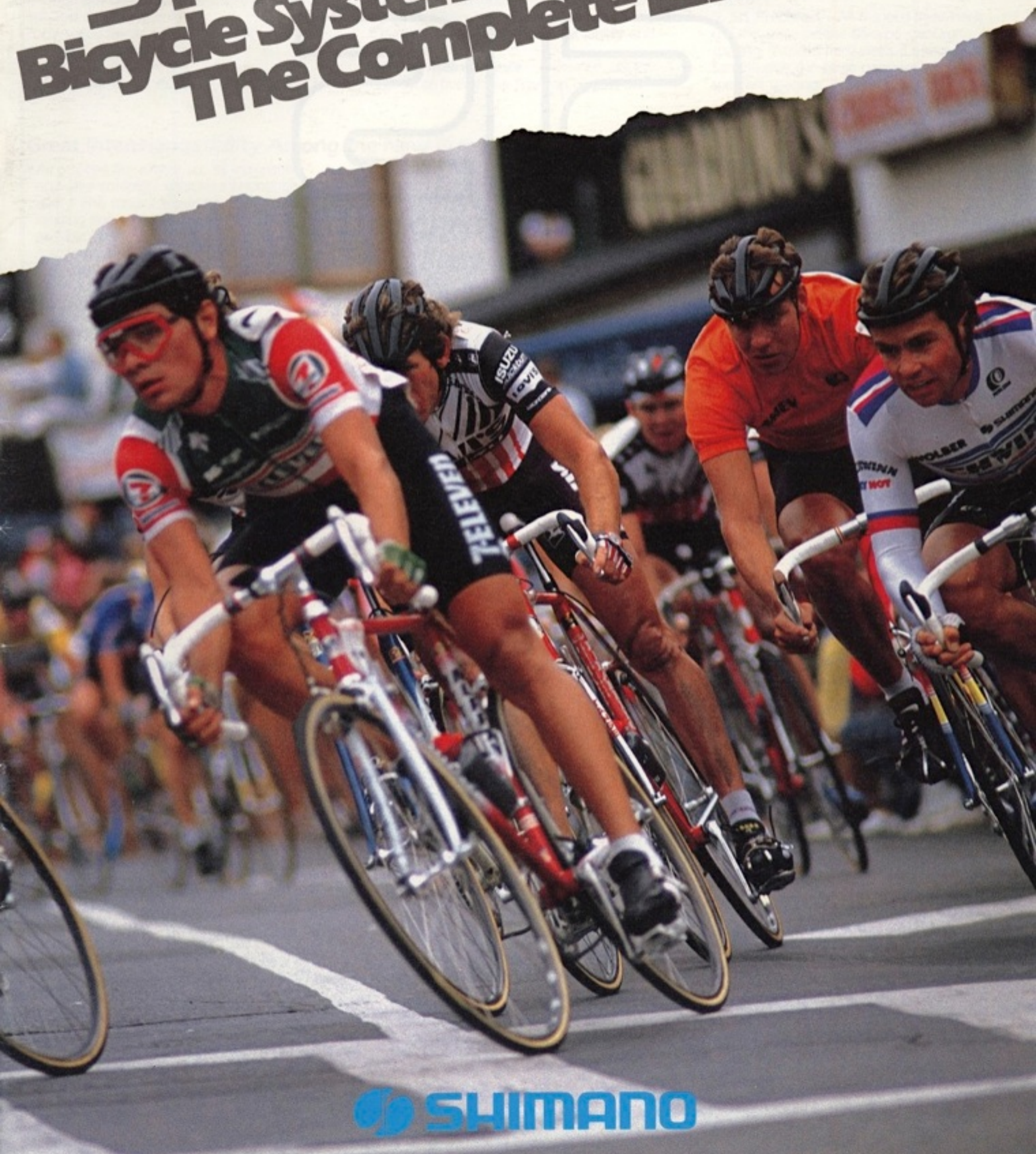
SHIMANO
Bicycle System Components
The Complete Line



SHIMANO

A Whole New World of Shifting Performance

SIS

SHIMANO INDEX SYSTEM

The Shimano Index System has made shifting of the derailleur-equipped bicycle faster and easier than ever before. With SIS, shifting accuracy is no longer a matter of rider skill, but a precision function that's designed into the component system.

SIS utilizes an indexed shift lever that's closely synchronized with rear derailleur movement and freewheel sprocket position. Each gear is shifted instantly into perfect alignment with a positive "click" that you can feel at the lever. Missed shifts, grinding chains, and the need to fine tune the lever are completely eliminated.

SIS first gained wide acceptance in the top line Dura-Ace group because it gives racing cyclists a competitive edge. SIS shifting precision is now available throughout the entire Shimano line, including the smart new Santé components and the New Deore-XT group for all-terrain bicycles. Whatever your cycling style, you can now ride with greater performance and confidence knowing that the next gear is just a "click" away. The Shimano Index System. It's a whole new world of shifting performance.

General Notes on SIS:

- SIS may not function properly if used with frames that route the shift cable inside the frame tubes. Excess friction and/or cable slack may impair free movement of the cable.
- Always use a Shimano designated SIS outer cable casing (liner type). Other types of cable casings may induce excess friction and/or casing compression that will impair cable movement and SIS performance.
- For optimum SIS performance, we recommend a Shimano UG type chain. Narrow types must be used for 7-speed SIS.
- Setup and adjustment procedures are essentially the same for all SIS component groups.
- An SIS-compatible rear derailleur with its Double Servo-Pantagraph design will also provide superior friction shifting performance when used in friction mode or with non-Shimano levers.

SIS Combination Chart

	Shifting Lever	Cable	Rear Derailleur	Freehub/ Freewheel	Chain	Fork End
DURA-ACE 7-SPEED	SL-7401	Shimano SIS Cable with Liner	RD-7401	FH-7400-7 MF-7400-7	Shimano Narrow UG Chain*	Shimano EF* Campa. Small*
DURA-ACE 6-SPEED	SL-7400			FH-7400-6 MF-7400-6		
Santé	SL-5000		RD-5000	MF-5000	Shimano Narrow UG Chain*	
SHIMANO 600 EX	SL-6208		RD-6208	MF-6208	Shimano UG* or Narrow UG Chain*	Shimano EF* Shimano SF* Campa. Small*
NEW SHIMANO 105	SL-1050		RD-1050	MF-Z012		
NEW SHIMANO DEORE XT	SL-M730	Shimano SIS-SP Cable with Liner	RD-M730	FH-M730 MF-6208		Shimano SF* Shimano SFR*
NEW SHIMANO DEORE	SL-MT60		RD-MT60	MF-Z012		
MS Series	SL-MS55 SL-MS40		RD-M531			

★ Our Recommendation — Denotes Component Grouping ⟷ Denotes Interchangeability

Notes on SIS Interchangeability:

- Because of the differences in the shift lever stroke, SIS components of the Shimano 600EX, New Shimano 105, and Santé groups are not interchangeable with Dura-Ace SIS components.
- SIS rear derailleurs from Shimano 600EX, New Shimano 105, or Santé can be used with Dura-Ace levers (or vice versa), but the SIS function will be lost.
- SIS components from the Shimano 600EX and New Shimano 105 groups are interchangeable.
- All 6-speed SIS freewheels and freehubs have the same sprocket spacing. However, slight differences in sprocket design may affect shifting performance if components are mixed. For this reason we recommend using the designated freewheel or freehub for the group.
- There is no interchangeability between SIS 6-speed and SIS 7-speed components except rear derailleur.
- Santé 7-speed and Dura-Ace 7-speed freewheels or freehubs are interchangeable although this is not recommended.
- The New Deore XT rear derailleur will provide SIS shifting with all downtube type SIS shift levers excluding Dura-Ace and Santé.
- SIS components can be freely mixed if operation is planned only for normal friction shifting.

Greater Pedaling Efficiency

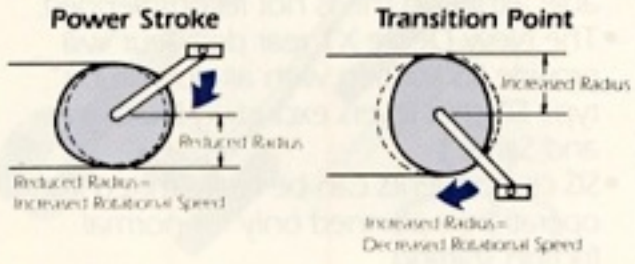
biopace

Computer-Designed Drive System

Biopace is the first scientific approach to chainwheel design.
The Biopace chainwheel was developed from extensive computer-aided research with the goal of making better use of leg power. The result is a unique chainwheel shape which creates a more efficient pedaling cadence that closely matches the natural movement of the leg.
Biopace pedaling has a new light and natural feeling that actually saves energy and makes cycling more enjoyable. Hills are easier to climb too. In fact, many top triathletes are now using Biopace to get an energy-saving advantage in competition.
Shimano Biopace. It's the new shape of pedaling efficiency.

1. How it Works

Although there are more complex factors involved, here's basically how Biopace works.
Chainwheel radius is decreased as the crank enters the downward power stroke. This allows the leg to push faster, much as it does naturally when walking or running. As the leg makes the transition from the power stroke to the return stroke at the bottom of its travel, chainwheel radius increases. This momentarily slows rotational speed and helps the leg to make better use of momentum gained on the power stroke, again a more natural movement. This area also reduces the energy-wasting 'bump' effect felt at the bottom of the crank stroke with round chainwheels.
Instead of forcing the leg to conform to a purely mechanical movement, Biopace adjusts crank speed to more closely match the natural movement of the leg as it rotates. This smoothes out the transition between muscle groups and creates a more efficient pedaling motion.



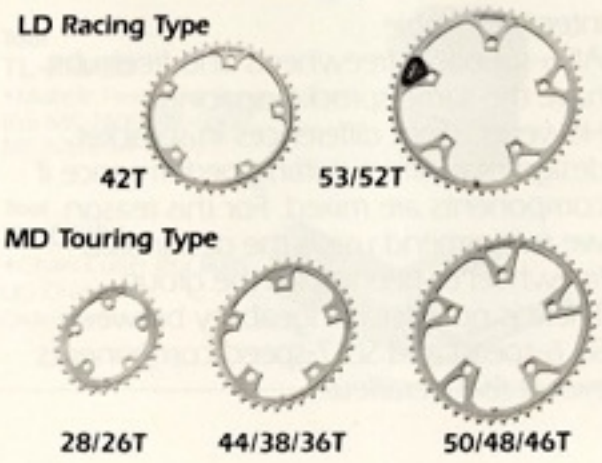
2. Excellent Shifting Performance

Tooth profiles are longer where the chainwheel radius is smallest, and shorter where the radius is greatest. This means Biopace has an almost round shape at its outermost circumference. Smooth positive chain transfer is also aided at the points where the circumferences of the two chainwheels come closest. The result is shifting performance that's better than normal round chainwheels.

3. Function-Specific Design

The various pedaling speeds used with different size chainwheels have been considered in the design of Biopace. This means the outer, middle, and inner chainwheels feature modified profiles in order to provide the greatest Biopace advantage.

Modified Profiles According to Position

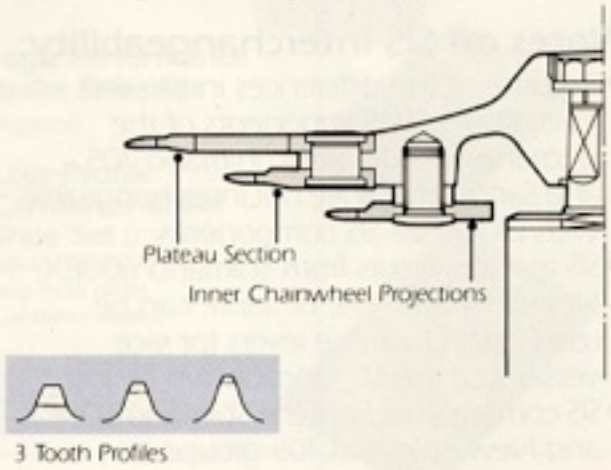


4. Wide Application

Biopace is available in versions both for the smaller MD crank spider pitch of touring cranksets and the larger LD pitch of Shimano racing-type cranksets. The LD version is specifically designed for the higher RPM's used with racing cranksets.

5. And Now Biopace II

Biopace II is the new generation of Biopace that provides greatly upgraded shifting performance. Three different tooth profiles improve chain release and pickup. Plateau-sections with cutout channels prevent the chain from dropping between chainwheels and help guide the chain during shifting. Projections on the small inner chainwheel prevent the chain from falling onto the bottom bracket and allow easy re-shifting of dropped chains.



Improved Braking Control

SLR

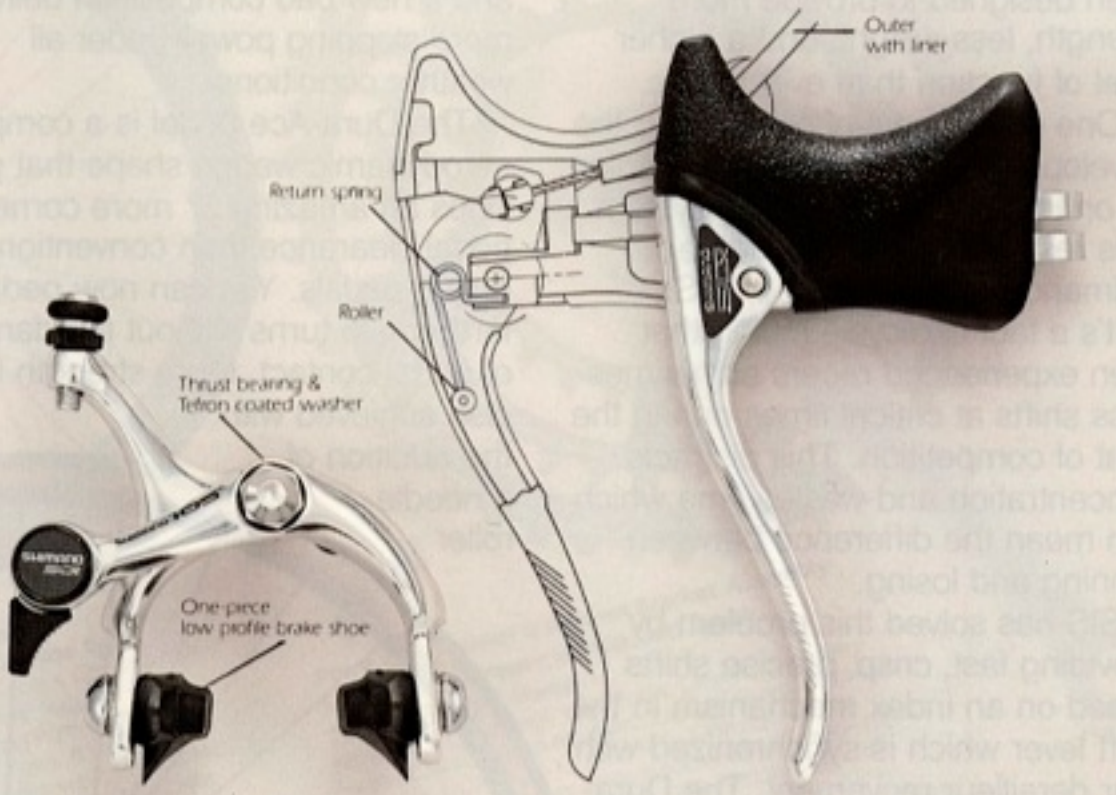
SHIMANO LINEAR RESPONSE

Conventional caliper brakes really do very litttle to signal the degree of braking force to the rider. The result is that many cyclists, even some of the most experienced, lack confidence in their ability to brake.

Shimano has made a great advance in overcoming this problem through applying the System Approach. Innovative new designs were incorporated into the caliper, cable, and lever to dramatically reduce friction throughout the brake system. The overall result is a light and balanced 'linear-response' lever feeling which provides more feedback to the rider.

That's why we call it Shimano Linear Response. SLR is now part of the New 105 and L-Series component groups.

With SLR, the rider can now control the bicycle's braking performance to a finer degree for safer, more enjoyable cycling. With SLR, everybody becomes a better cyclist.



The SLR System: What Makes it Work

1. The Caliper

New 105 caliper features 2 Teflon® washers and a special thrust bearing at the arm pivot. (L-series caliper uses 3 Teflon® washers.) Both use low-friction resion liners at the spring/arm contact points.
Further friction-reducing designs in the cable and lever allow the use of a softer return spring. Caliper arms are computer-designed for maximum rigidity with minimum weight. New one-piece brake shoes are more rigid and provide greater braking force.

2. The Cable

A smoother cable action is achieved through an improved cable which incorporates a self-lubricating resin liner sleeve.

3. The Lever

A special assist spring was integrated into the SLR lever to further reduce friction and balance the caliper return spring.

Racing Components

The Unlimited Challenge—Dura-Ace Lets You Aim for the Top.

The performance of your bicycle components has a direct bearing on your performance in competition.

Helping you reach your ultimate goal, winning, is the prime consideration behind Dura-Ace. We re-evaluated all parameters affecting the racing bicycle in order to design a state-of-the-art component system that provides a real advantage in competition.

Dura-Ace features revolutionary shifting performance, brakes offering more stopping power and control, plus other advanced components that have been designed to provide more strength, less weight, and a higher level of function than ever before.

One of the main efforts behind the development of Dura-Ace was centered on improving the shifting system. This resulted is the birth of the Shimano Index System, or SIS.

It's a fact of bicycle racing that even experienced racers sometimes miss shifts at critical times during the heat of competition. This distracts concentration and wastes time which can mean the difference between winning and losing.

SIS has solved this problem by providing fast, crisp, precise shifts based on an index mechanism in the shift lever which is synchronized with rear derailleur movement. The Dura-Ace rear derailleur is shifted into perfect alignment beneath each gear of the Dura-Ace freewheel or freehub with an audible "click" and indent that's felt at the lever. This means no more missed shifts, no more fine tuning, and less time spent shifting.

The Dura-Ace side-pull brakes and levers provide smoother operation and more stopping power with fine control feedback that lets you dive deeper into turns with more confidence. The high efficiency of Dura-Ace brakes provide more output power with less input than other brakes. This means you have reserve stopping power even when braking from the top of the levers. Computer-designed brake arms insure maximum rigidity with minimum weight, and a new pad composition delivers more stopping power under all weather conditions.

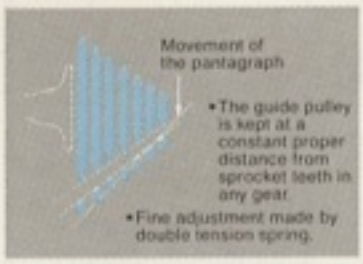
The Dura-Ace pedal is a compact aerodynamic wedge shape that provides an amazing 5° more cornering pedal clearance than conventional racing pedals. You can now pedal farther into turns without the danger of pedal contact. More strength is also achieved with the addition of a needle roller bearing between two sets of ball bearings.

The other components in the Dura-Ace group have all been designed with the same close attention to providing superior performance.

First take a look, then take a ride and discover how Dura-Ace offers a higher level of component function that you can actually feel. Take the unlimited challenge. Dura-Ace can give you the winning advantage.

Rear Derailleur RD-7401

- High-performance 7-speed version provides precision SIS shifting with a wider gear selection.
- Faster, more accurate SIS shifting, but also a superior shifting derailleur in the friction mode.
- Double Servo-Panta mechanism closely follows gear profile.
- More durability from brass bushings, ceramic pulley bushings & sealed mechanisms.
- Double spoke barrier protects against overshifting.
- Easy SIS adjustment with the barrel cable adjuster.

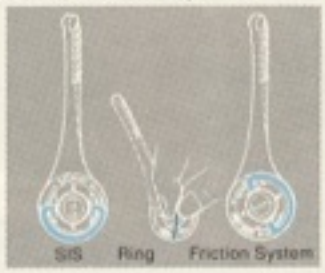


7-SPEED DURA-ACE SIS Compatible

Shifting Levers SL-7401

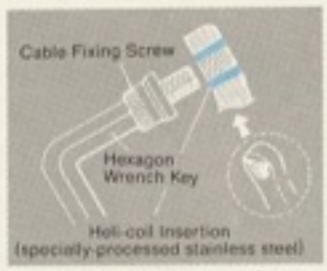
- High-tech gray 7-speed SIS shift levers incorporate a new SIS unit.
- Quick, precise SIS shifting.
- D-ring quick change from SIS to friction mode.

7-SPEED DURA-ACE SIS Compatible



Front Derailleur FD-7400

- New chain guide shape & more rigid design for better shifting.
- Heli-Coil insert at cable anchor prevents thread stripping.
- Durability increased from a sealed mechanism around the return spring.



Front Chainwheel FC-7400

- Longer bottom bracket axle mating surfaces for more strength & rigidity.
- High manufacturing precision for a more accurate chainring/spider fit.
- Decreased maintenance with the sealed mechanism bottom bracket.

Pedal PD-7400

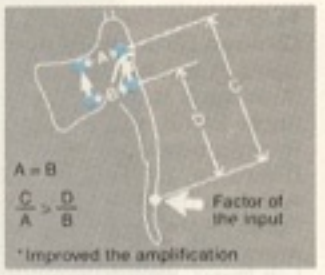
- Faster cornering from 5° more road clearance.
- Greater strength from its composite needle & ball bearing design.
- Lighter & stronger from nickel/cro-moly axle & compact alloy body.
- Fully adjustable toe clip for precise fit.

Side-Pull Brakes BR-7400

- CAD design for maximum rigidity & minimum weight.
- Reduced friction for smooth action and fine control.
- Better wet and dry braking from new pad composition.

Brake Lever BL-7400

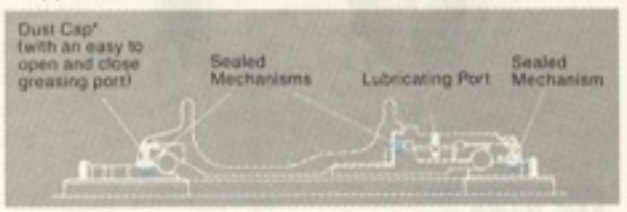
- Higher power output from improved mechanical leverage design.
- Easy assembly with "one-touch" cable attachment & easy lever positioning.
- More hand comfort from ergonomic lever design.



Freehub FH-7400-7

- 7-speed freehub utilizes same hub/freewheel body as 6-speed but with narrow type SIS sprocket spacing.
- Cassette system provides quick & easy gear changes.
- Easy maintenance from body & dust cap lube ports.
- Sealed mechanisms increase durability.
- Better shifting from UG gear tooth design.
- Smoother running from precision ground races.
- Redesigned spoke hole radiusing for a stronger, more durable wheel.
- Less weight than standard Hub/Freewheel combinations.
- Less wheel dish and better axle support.

7-SPEED DURA-ACE SIS Compatible



Hubs HB-7400

- Easy maintenance from dust cap lube ports.
- Smooth rotation from precision machined ball races.
- Sealed mechanisms upgrade durability.
- Improved spoke hole radiusing for a stronger, more durable wheel.

Multiple Freewheel MF-7400-7

- Narrow spaced 7-speed SIS freewheel features many sprockets which interchange with the 6-speed version.
- Sealed mechanism improves durability.
- Smooth & true running from precision ball races.
- Better shifting from UG gear tooth design.
- Quick gear changes from two-step splined body design.
- Easy maintenance from lube ports on body.

7-SPEED DURA-ACE SIS Compatible

Headset HP-7400

- Upgraded durability from titanium plated composite radius ball race, & sealed mechanism.
- Recessed lock washer & double-etch anodizing for a compact, simple design.
- Reduced weight from high strength alloy.

DURA-ACE

7-SPEED SIS
Shimano Index System

Rear Derailleur
RD-7401
NEW

●SIS Compatible ●Double Servo-Panta Mechanism, Centeron Guide Pulley, Sealed Mechanism, Sintered Alloy Guide Pulley Teeth, Ceramic Pulley Bushings, Brass Bushings & Stainless Steel Pins in Link Pivots, Double Spoke Barrier ●Minimum Rear Sprocket: 12T. ●Maximum Rear Sprocket: 26T. ●Maximum Front & Rear Sprocket Difference: 26T. ●7.2 oz. (205g.) ●Light Alloy•Color Anodized (Bracket & Plate Body), Light Alloy•Inlaid Epoxy Finish (Right Link), Light Alloy•Anodized Finish (Left Link, Right & Left Plate)

DURA-ACE SIS Compatible

Shifting Lever
SL-7401-BCAI (7-speed SIS, Band A Type)
SL-7401-FCAI (7-speed SIS, Brazed-on A Type)
SL-7401-FCBI (7-speed SIS, Mount-Brazed-on B Type)
* "C" of Model Number means Italian Type
(Fixing Bolt is 5mm. diameter)

NEW

●7-speed SIS Compatible ●Shimano Index System (SIS), Sealed Mechanism, Non-loosening Mechanism, Human Engineered Design ●SL-7401 FCAI: 2.3 oz. (65g.) ●Light Alloy•Buff Finish (Lever), Steel•Chrome-Plated (Fixing Bolt, Clamp) Zinc•Chrome-Plated (Top-mount Housing) ●Shimano Index System with One-touch Switch for SIS or Friction Mode ●Down Tube Lever ●Lever Clamp Diameter: 1-1/8" (28.6mm.) ●Use SIS with Dura-Ace 7-speed Rear Derailleur/Freehub/Freewheel/Shimano SIS Casing with Liner

DURA-ACE SIS Compatible

Freehub
FH-7400-6/7 (Rear, 6-speed/7-speed)
HB-7400-F (Front Hub)

●6-speed and 7-speed SIS Compatible ●Sealed Mechanism, New Uniglide Teeth, Cassette Freehub, Uni-Balance System, Lubricating Ports with Open/Close ●15.4 oz. (439g.) Rear 6-speed and 7-speed, 126mm. (w/o Sprocket), 8.0 oz. (228g.) Front, 7.3 oz. (208g.) Sprocket (6-speed 13 – 21T.) & Spacer, 7.8 oz. (221g.) Sprocket (7-speed 12 – 21T.) & Spacer ●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. – 28T. ●Front 100mm. O.L., Rear 126.5mm. O.L. ●Spoke Holes: 28H, 32H, 36H

●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.
7-speed	12, 13, 14, 15, 16, 17, 18T. 12, 13, 14, 15, 17, 19, 21T. 13, 14, 15, 16, 17, 19, 21T. 13, 14, 15, 17, 19, 21, 24T. 13, 15, 17, 19, 21, 23, 26T.

6-speed

DURA-ACE SIS Compatible

NEW

7-speed

Hub
HB-7400

●Sealed Mechanism, Lubricating Ports with Open/Close ●11.1 oz. (315g.) Rear, 8.0 oz. (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 ●Front: 100mm. O.L., Rear: 6-speed, 126mm. O.L. ●Spoke Holes: 28H, 32H, 36H

Multiple Freewheel
MF-7400-6 (6-speed)
MF-7400-7 (7-speed)

●6-speed or 7-speed SIS Compatible ●Sealed Mechanism, New Uniglide Teeth, Lubricating Port on Freewheel body ●12.7 oz. (360g.) (6-speed 13, 14, 15, 17, 19, 21T.) 12.9 oz. (367g.) (7-speed 12, 13, 14, 15, 17, 19, 21T.) ●Steel•Champagne Gold Finish ●For 1/2" × 3/32" Chain

●Standard Sprocket Combinations:

6-speed	13, 14, 15, 16, 17, 18T. 13, 14, 15, 17, 19, 21T. 13, 15, 17, 19, 21, 23T. 13, 15, 17, 20, 23, 26T.
7-speed	12, 13, 14, 15, 16, 17, 18T. 12, 13, 14, 15, 17, 19, 21T. 13, 14, 15, 16, 17, 19, 21T. 13, 14, 15, 17, 19, 21, 24T. 13, 15, 17, 19, 21, 23, 26T.

DURA-ACE SIS Compatible

NEW

7-speed

6-speed

Shifting Lever
SL-7400

SL-7400 BCAI (SIS, Side-Band A Type)
SL-7400 FCAI (SIS, Side-Brazed-on A Type)
SL-7400 FCBI (SIS, Mount-Brazed-on B Type)
SL-7400 FAI (SIS, Brazed-on A Type M4.5)
* "C" of Model Number means Italian Type
(Fixing Bolt is 5mm diameter)

●SIS Compatible ●Shimano Index System (SIS), Sealed Mechanism, Non-loosening Mechanism, Human Engineered Design ●SL-7400 BCAI: 2.5 oz. (72g.) ●Light Alloy•Buff Finish (Lever), Steel•Chrome-Plated (Fixing Bolt, Clamp), Zinc•Chrome-Plated (Top-mount Housing) ●Shimano Index System with One-touch Switch for SIS or Friction Mode ●Down Tube Lever ●Lever Clamp Diameter: 1-1/8" (28.6mm.) ●Use SIS with Dura-Ace Rear Derailleur/Freehub/Freewheel/Shimano SIS Casing with Lever

DURA-ACE SIS Compatible

UG Chain (DURA-ACE)
CN-7400

●Narrow Type Uniglide Chain, Bushingless Design, Boron Finished Link Pins ●Size: 1/2" x 3/32" Chain ●Roller Link Plate; Nickel Finish, Pin Link Plate; Nickel Finish

Front Derailleur

FD-7400-B (Band Type)
FD-7400-F (Italian Brazed-on Type)

●Sealed Mechanism, Chain Release Dish-out, Helicoil-Secured Cable Fixing Screw, Heat Treated Cable Fixing Bolt ●Maximum: 15T. ●3.2 oz. (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.)

Pedal

PD-7400

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

Front Chainwheel & Bottom Bracket Assembly

FC-7400 (Double)
BB-7400 (B.B. Parts)

●Computer Aided Design (Crank), Sealed Mechanism (B.B.) ●22.5 oz. (637g.) (42T., 52T., 170mm.) 11.1 oz. (314g.) (B.B. Set) ●Light Alloy•Anodized Finish (Crank, Chainring), Light Alloy•Etched-Anodized Finish (Crank Arm Cap), Steel•Chrome-Plated (Fixing Bolt) ●Nickel Cr-Mo Axle ●For 1/2" x 3/32" Chain ●Teeth: Inner; 39T. – 46T., Outer; 48T. – 54T. ●Crank Length: 165mm., 170mm., 172.5mm., 175mm. ●Crank Thread: English BC 9/16 × 20 T.P.I. ●Cup Thread: English BC 1.37 × 24 T.P.I., French M35 × 1.0, Italian M36 × 24 T.P.I. ●B.B. Size: 68-W-112, 70-W-113

Brake

BR-7400-49 (Short 49 Type)

●Low Profile Brake Shoe, Eccentric Type Quick Release ●Computer Aided Design (CAD) ●13.5 oz. (382g.) (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)

Brake Lever

BL-7400

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

Seat Pillar

SP-7400 (Round Tube) A-Type
SP-7410 (Semi Oval Tube) B-Type

●Aerodynamic Design, Hexagon Release ●7.9 oz. (224g.) (SP-7400; 26.8mm.), 8.6 oz. (244g.) (SP-7410; 26.8mm.) ●Light Alloy•Anodized Finish ●Outside Diameter: SP-7400; 26.4mm., 26.6mm., 26.8mm., 27.0mm., 27.2mm., 27.4mm. SP-7410; 25.0mm., 27.0mm., 27.2mm.

Handle Stem

HS-7400

●Aerodynamic Design, Hexagon Release ●8.9 oz. (252g.) (100mm.) 9.2 oz. (260g.) (120mm.) ●Light Alloy•Anodized Finish ●Extension: 80mm., 90mm., 100mm., 110mm., 120mm., 130mm. ●Handle Stem Diameter: 22.2mm. ●Handle Bar Clamp Diameter: 26.0mm.

Head Parts

HP-7400

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

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

Brake Lever

BL-7401

●Aerodynamic Design, Anatomical Design, One-Step Cable Attachment ●Lever Clamp Diameter: 24.2mm ●9.0 oz. (254g.) ●High Tech Gray Anodized Finish (Lever)

A New Expression in Componentry

Santé

by SHIMANO

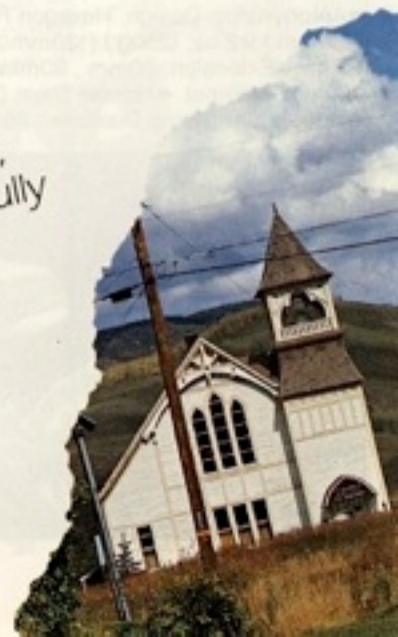
Santé. The new components
for the new way people feel about cycling.
Santé is a synthesis of high-technology
and sophisticated style that takes a new direction
in component design.
Offering the cycling enthusiast high-performance functions
in a stunning new style,
Santé leads the way into the future of
high-performance sport cycling.

Light-Action 7-Speed SIS

Santé is 7-speed shifting precision.
A wider choice of gears is only a click-stop away with
Santé's light-action 7-speed SIS.
A helper spring in the shift lever body
results in fast and easy SIS shifting
with a new light feeling.

Unified High-Tech Appearance

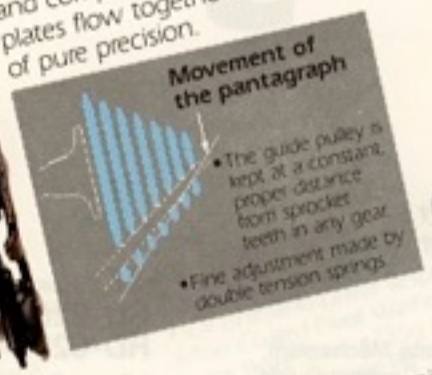
Santé is the look of pure precision.
Compact design, coordinated
pearl white/high-tech gray color treatment,
and smooth unbroken lines create a beautifully
new and modern bicycle appearance.



NEW

Rear Derailleur
RD-5000
•7-speed SIS Compatible •Centeron Guide Pulley Complete Sealed Mechanism, Resin-Coated Inner Pulley Cage, Ceramic Bushings in Tension and Guide Pulleys, Brass Bushings & Stainless Steel Link Pins, Double Spoke Barrier Protection •Minimum Rear Sprocket: 12T •Maximum Rear Sprocket: 24T. •Maximum Front & Rear Sprocket Difference 24T. • 16.7 oz. (191g) •Light Alloy•Silver Finish (Bracket & Plate Body), Light Alloy•Pearl White Finish (Rigit Link), Light Alloy•High-Tech Gray Finish (Left Link & Plate, Right Plate)

High-performance 7-speed SIS shifting in a beautiful and compact rear derailleur. End brackets and link plates flow together in the smooth unbroken look of pure precision.



SIS Compatible

NEW

Front Derailleur
FD-5000-B (Band Type)
FD-5000-F (Italian, Brazed-on Type)
•Leading Action Pantagraph Mechanism, Rigid Chainguide. Sealed Mechanism, Helicoil Cable Ancor Threads •Maximum: 14T. • 3.5 oz. (100g) Band Type •Light Alloy•Silver Finish (Clamp Band), Light Alloy•Pearl White Finish (Right Link), Light Alloy•Anodized High-Tech Gray Finish (Left Link) •Clamp Diameter: 1-1/8" (28.6mm)

The beautiful Santé front derailleur is a more rigid and compact design that incorporates leading action pantagraph operation for fast and crisp front chainwheel shifting.

NEW

Shifting Lever
SL-5000-FCAI (7-speed SIS, Brazed-on A Type)
•"C" of Model Number Means Italian Type (Fixing Bolt is 5mm Diameter)
•7-speed SIS Compatible •Shimano Index System (SIS), Light Action Mechanism, Integral Assist Spring, Human Engineered Design, One Piece Unit for Easy Installation, Flush Fit Covers Over Cable Anchor, Sealed Mechanism •SL-5000 FCAI: 2.5 oz. (70g) •Light Alloy•Pearl White Finish (Lever) •Shimano Index System with One-touch Switch for SIS or Friction Mode •Down Tube Lever •Lever Clamp Diameter: 1-1/8" (28.6mm) •Use SIS with RD-5000 Rear Derailleur/MF-5000, MF-7400-7 Multiple Freewheel/ CN-6208 or CN-7400 Chain/Shimano SIS Casing with Liner

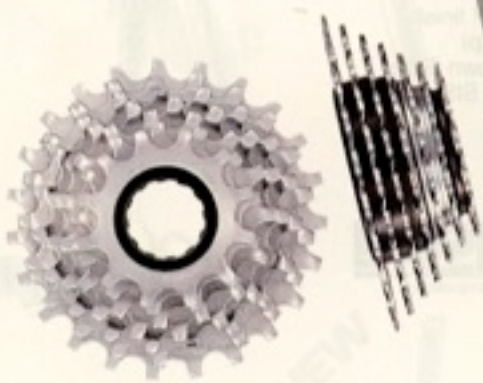
Both shift levers incorporate a helper spring for a new "light action" shifting feeling. Lever form is enhanced through resin inserts covering the cable anchor holes.

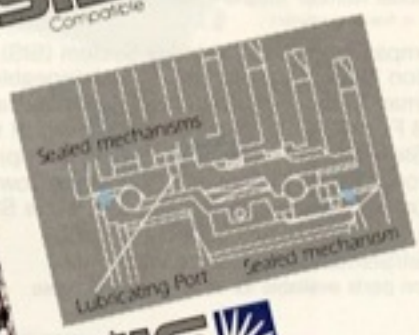
SIS Compatible

NEW

Multiple Freewheel
MF-5000
•7-speed SIS Campatible •Compatible with Dura-Ace 7-speed SIS •Narrow 7-speed SIS Spacing •Sealed Mechanism, New Uniglide Teeth, Lubricating Port on Freewheel-body • 14.5 oz. (410g) (12, 13, 15, 17, 19, 21, 23T.) •Steel•Nickel-Chrome Plate (Sprocket) •For 1/2" × 3/32" Chain •Standard Sprocket Combinations:

7-speed	12, 13, 15, 17, 19, 21, 23T.
	13, 14, 15, 17, 19, 21, 24T.





SIS Compatible

Fast and precise 7-speed SIS shifting from a standard 125mm rear wheel dropout width. Same sprocket spacing as Dura-Ace 7-speed SIS.

The High Energy Cycling

Rear Derailleur

RD-6208

●SIS Compatible ●Double Servo Panta Mechanism, Centeron Pulley, Sealed Mechanism, Ceramic Guide Pulley Bushing, Double Spoke Barrier, Digital Adjust Mechanism ●Minimum Rear Sprocket: 12T. ●Maximum Rear Sprocket: 28T. ●Maximum Front & Rear Sprocket Difference: 28T. ●7.2 oz. (204g.) ●Light Alloy·Barrel & Buff Finish (Bracket & Plate Body, Left Link), Light Alloy·Resin (Right Link), Light Alloy (Right & Left Plate)

SIS Compatible

Shifting Lever

SL-6208-FCAI (SIS, Brazed-on A Type)
SL-6208-BCAI (SIS, Band A Type)

·"C" of Model Number means Italian Type
(Fixing Bolt is 5mm. diameter)

●SIS Compatible ●Shimano Index System (SIS), SIS/Friction Mode, Mild Shifting, Interchangeable Lever Axle, Human Engineered Design, Sealed Mechanism ●SL-6208 FCAI: 2.4 oz. (69g.) ●Light Alloy·Buff finish (Lever), Steel·Chrome-Plate (Fixing Bolt, Clamp) Zinc·Chrome-Plated (Top-mount Housing) ●Down Tube Lever ●Lever Clamp Diameter: 28.6mm. ●Use SIS with RD-6208, RD-L525 Rear Derailleur/MF-6208 Freewheel/Shimano SIS Casing with Liner
*Conversion parts available for other mounting types.

SIS Compatible

Rear Derailleur

RD-6207 (Short Cage)
RD-6207-GS (Long Cage)

●Servo-Panta Mechanism, Sealed Mechanism, Twin Return Spring System, Brass Bushings in Link Pivots, Sintered Alloy in Guide Pulley, Double Spoke Barrier Mechanism ●Max. Rear Sprocket/Short: 28T., Long: 34T., Max. F & R Difference/Short: 28T., Long: 34T ●6.8 oz. (195g.) (Short), 7.6 oz. (217g.) (Long) ●Forged Light Alloy (Bracket Body) Light Alloy·Buff Finish (Plate Body & Link), Light Alloy (Cage Plate)

Shifting Lever

SL-6207-BA (Band A Type)
SL-6207-FC (Brazed-on C Type)

●Non-loosening Mechanism, Sealed Mechanism, Human Engineered Design ●SL-6207BA: 2.2 oz. (63g.) ●Light Alloy (Lever) ●Friction Type ●Down Tube Lever ●Lever Clamp Diameter: 1-1/8" (28.6mm.)

Front Derailleur

FD-6207-B (Band Type)
FD-6207-F (Italian Brazed-on Type)

●Trap-Ease Mechanism ●Maximum: 18T. Minimum: 3T. ●3.9 oz. (110g.) ●Forged Light Alloy (Right Link), Diecast Light Alloy Buff Finish (Body), Heat Treated Steel·Chrome-Plated (Chain Guide) ●Clamp Diameter: 1-1/8"(28.6mm.)

Front Chainwheel & Bottom Bracket Assembly

FC-6207-BP (Biopace Double, LD Type)
FC-6207 (Double, LD Type)
BB-6207 (B.B. Parts)

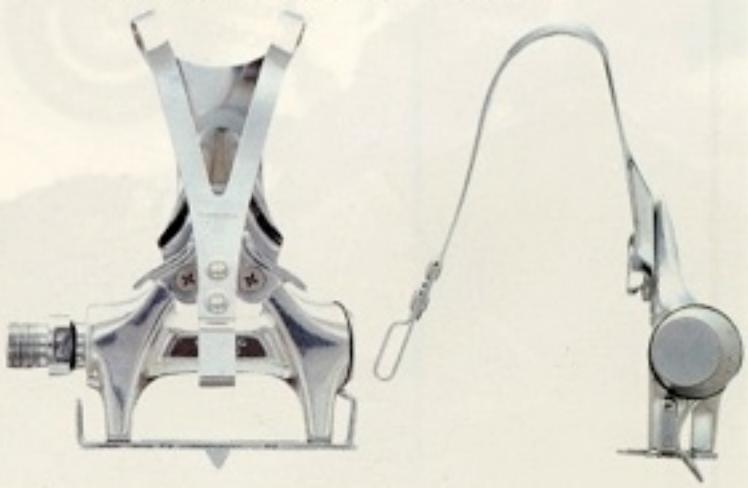
●Computer Aided Design (CAD), Sealed Mechanism ●23.5 oz. (667g.) (Biopace), 23.2 oz. (672g.) (Round) (42T., 52T., 170mm.), 11.5 oz. (326g.) (B.B. Set) ●Buff Finish or Color Anodized/Gun-Metallic Gray Finish (Biopace Chainring), Light Alloy·Anodized Buff Finish (Round Chainring). (Crank) ●For 1/2" × 3/32" Chain ●Crank Length: 165mm., 170mm., 172.5mm. 175mm. ●Crank Thread: BC 9/16 × 20 T.P.I. ●Cup Thread: English 1.37 × 24 T.P.I., French M35 × 1.0, Italian M36 × 24 T.P.I. ●B.B. Size: 68-W-116 (D-3L), 70-W-119 (D-5LL) ●Outer 52T., 53T. (Biopace), 48T. ~ 53T. (Round), Inner 42T. (Biopace), 39T. ~ 45T. (Round) ●Bolt Circle Diameter: 130mm. LD Type

Round Type

Pedal

PD-6207

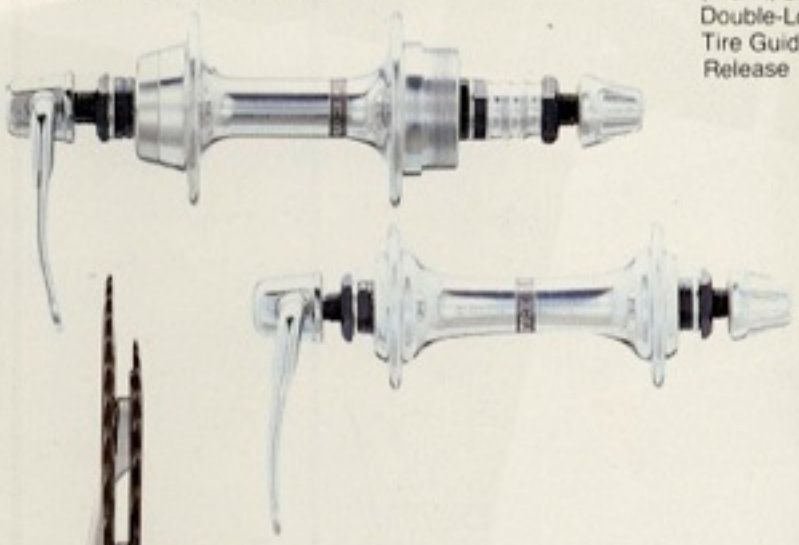
●Aerodynamic Design, Sealed Mechanism ●15.5 oz. (440g.), Pair (Including Toe Clip Size: L) ●Cr-Mo Axle ●Light Alloy·Buff Finish (Body) ●Steel·Chrome-Plated (Toe Clip, Frong & Rear Plate) ●Crank Thread: English BC 9/16 × 20 T.P.I. ●Toe Clip Size: M, L, LL



Components

SHIMANO 600 EX

Hub
HB-6207-R (Rear Hub)
HB-6207-F (Front Hub)
●F: 7.7 oz. (219g.), R: 11.0 oz. (312g.) ●Light Alloy-Buff Finish ●Quick Release Type ●Thread: 1.37" × 24 T.P.I. ●Over Lock Nut Dimensions: Front: 100mm., Rear: 126mm. ●Spoke Holes: 36H, 32H



Brake
BR-6208-49 (Short-49 Type)
BR-6208-57 (Long-57 Type)
●Teflon Coated Pivot Washer, Spring Sleeve, Pivot Bolt Cap, One-Piece Brake Shoe, Computer Aided Design (CAD), Aerodynamic Design, Large Shoe ●11.7 oz. (332g.) (F & R, 57 Type) ●Light Alloy-Anodized Finish ●Rear Double-Lock Side Pull Type ●Light Alloy-Black Anodized Tire Guide, Frame Protector & Eccentric Type Quick Release

Brake Lever
BL-6208
●Anatomical Design, Frictionless Bushings ●7.5 oz. (214g.), Pair (Including Rubber Cover) ●Light Alloy-Anodized Finish (Lever), Light Alloy-Barrel Finish (Bracket) ●Hooded Lever with Rubber Cover ●Lever Clamp Diameter: 23.8mm. – 24.2mm. ●Drilled Out Lever

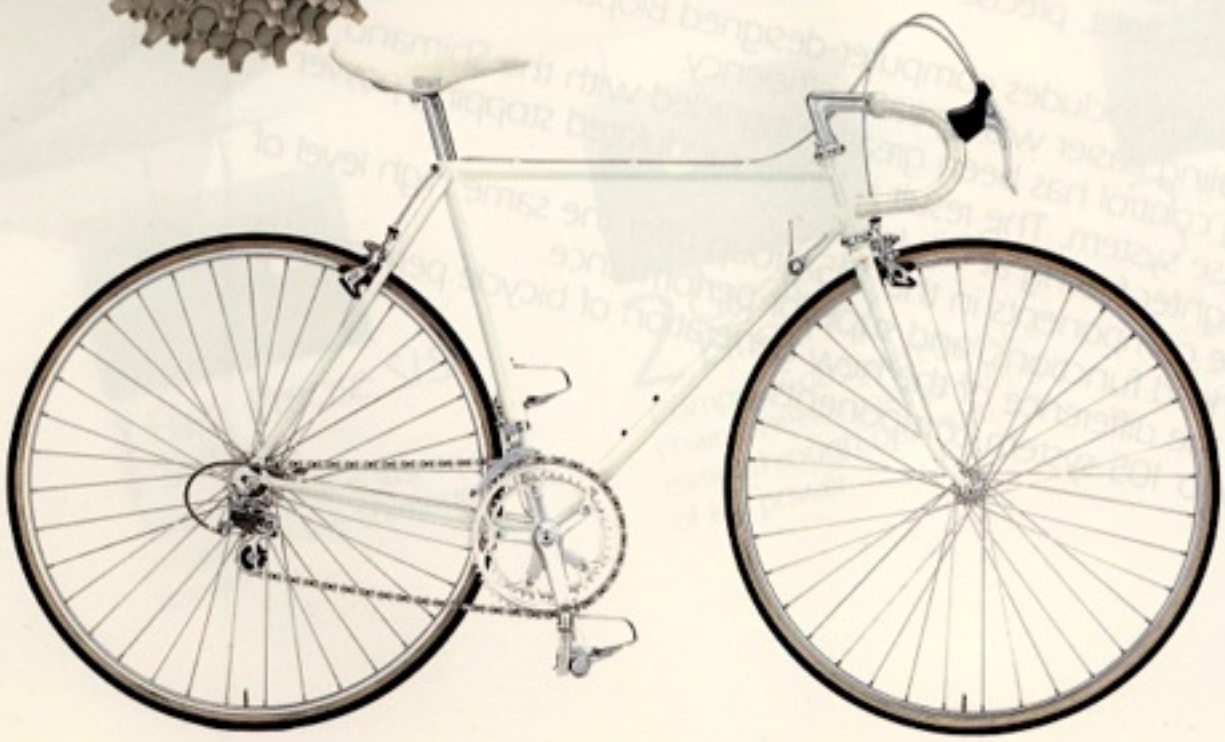
Multiple Freewheel
MF-6208-6 (6-speed)
●New Uniglide Teeth, Sealed Mechanism ●13.6 oz. (386g.) (6-speed/13—23T.) ●Silver Finish Sprocket ●For 1/2" x 3/32" Chain ●Standard Sprocket Combinations:

6-speed	13, 14, 15, 16, 17, 18T.
	13, 14, 15, 17, 19, 21T.
	13, 15, 17, 19, 21, 23T.
	13, 15, 17, 19, 21, 24T.
	13, 15, 17, 20, 23, 26T.
	13, 15, 17, 20, 24, 28T.
	13, 17, 20, 23, 26, 30T.
	13, 16, 19, 22, 26, 32T.

SIS Compatible

Head Parts
HP-6207
●Sealed Mechanism ●5.2 oz. (150g.) ●Light Alloy-Anodized Finish (Cups & Nut), Steel-Chromium Finish (Cones) ●Road Type

Brake Lever
BL-6209 NEW
●Aerodynamic Design, Anatomical Design, One-Step Cable Attachment ●8.4 oz. (238g.) Pair ●Light Alloy-Anodized Finish (Lever), Diecast Light Alloy (Bracket) ●Hooded Lever with Rubber Cover ●Lever Clamp Diameter: 23.8mm. – 24.2mm.



UG Chain
CN-6208 (Silver)
●Narrow Type Uniglide Chain, Bushingless Design, Roller Chain Type ●Steel ●Surface Treatment: Roller Link Plate; Black Finish, Pin Link Plate; Silver Finish

The New Generation of Performance

NEW SHIMANO 105

A Great Component System Means a Great Bicycle.

This is the revolutionary component group that brings the Shimano system component concept to the casual sport cyclist. Shimano 105 components signal the creation of a new class of bicycle that delivers a new generation of cycling performance.

Advanced new features make riding with 105 easier and more enjoyable than ever for everybody. Features like the Shimano Index System that provides light, precise shifting with a foolproof clickstop index mechanism.

Shimano 105 includes computer-designed Biopace chainwheels that make pedaling easier with greater efficiency.

Braking control has been greatly upgraded with the Shimano Linear Response system. The result is better modulated stopping power with a new lighter feeling at the lever.

All the components in the 105 group offer the same high level of quality, balanced functions, and superior performance.

Feel the difference of the new generation of bicycle performance from Shimano 105 system components.

Shimano 105 Component Series includes these new advanced functions

SIS
SHIMANO INDEX SYSTEM

1 Fast, Precise S.I.S. Shifting

Your next gear is just a "click" away with the Shimano Index System.

biopace
COMPUTER DESIGNED DRIVE SYSTEM

2 Greater Pedaling Efficiency

Computer-designed Biopace chainwheels make pedaling easier through optimum use of leg power.

SLR
SHIMANO LINEAR RESPONSE

3 Improved Braking Control

Shimano Linear Response (SLR) provides better modulated braking control with a new light lever feel.

The New Generation of Performance

Rear Derailleur NEW
RD-1050
•SIS Compatible •Double Servo Panta Mechanism, Centeron Guide Pulley, Sealed Mechanism, Sintered Alloy Guide Pulley Bushing, Double Spoke Barrier, Digital Cable Adjust Mechansim •Minimum Rear Sprocket: 12T. •Maximum Rear Sprocket: 28T. •Maximum Front & Rear Sprocket Difference: 28T. •257g •Light Alloy (Bracket & Plate Body), Light Alloy•Dark Gray Metallic Finish (Right Link)

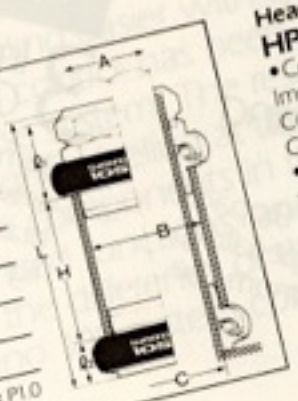
SIS Compatible

Shifting Lever NEW
SL-1050-BCAI (SIS, Brand A Type)
SL-1050-FCAI (SIS, Brazed-on A Type)
"C" of Model Number means Italian Type
(Fixing Bolt is 5mm diameter)
•SIS Compatible •Shimano Index System (SIS), SIS/Friction Mode, Clutch Spring for Light Action Shifting, Human Engineered Design, Sealed Mechanism •SL-1050-FCAI: 68g •Light Alloy (Lever) •Down Tube Lever •Lever Clamp Diameter: 28.6mm •Use SIS with 6-speed SIS Rear Derailleur/6-speed SIS Spaced Freewheel/Shimano UG Chain/Shimano SIS Casing with Liner
*Conversion parts available for other mounting types.

SIS Compatible

Front Derailleur NEW
FD-1050-B (Band Type)
FD-1050-F (Italian Brazed-on Type)
•Leading Action Pantagraph Mechanism, Upgraded Chain Guide Rigidity •Maximum: 14T. •Band Type: 98g •Light Alloy (Clamp Band), Light Alloy•Dark Gray Metallic Finish (Right Link), Heat Treated Steel•Chrome-Plated (Chain Guide)
•Clamp Diameter: 28.0 – 28.6mm

•Dimensions	
ℓ1	21.2mm
ℓ2	11.5mm
H	Head tube Length
L	H + 34.5mm
A	22.4mm
B	30.2mm
C	26.4mm
Thread	BC1" ×24T/M25 × P1.0



Head Parts NEW
HP-1050
•Composite Structure, Sealed Mechanism •129g •High Impact Resin•Dark Gray Metallic Finish (Upper & Lower Cup Covers), Steel (Nut/Upper & Lower Cup/Upper & Lower Cone), Resin (Seal Ring)
•Variations:

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

Pedal NEW
PD-1050
•Aerodynamic Design, 34° Road Clearance, Compound Structure of Resin Bushing and Cup & Cone Bearings •280g (Pair), 46g (Pair of Toe Clip L Size) •Light Alloy (Body), Cr-Mo Steel (Axle), Resin•Dark Gray Metallic Finish •Crank Thread: BC 9/16 × 20TPI.
•Toe Clip Size: M, L, LL

NEW SHIMANO 105

Front Chainwheel & Bottom Bracket Assembly
FC-1050-BP (Double, LD Type Biopace)
BB-1050 (B.B. Set)
•Low Profile & Aerodynamic Design, Biopace Mechanism •664g (42, 52T., 170mm), 327g (B.B. Set) •Light Alloy (Crank/Chain Ring) •For 1/2" × 3/32" Chain •Chainwheel: Inner: 42T., Outer: 52T. •Crank Length: 165mm, 170mm, 172.5mm, 175mm •Crank Thread: BC 9/16 × 20TPI. •Cup Thread: English 1.37 × 24TPI., French M35 × 1.0, Italian M36 × 24TPI. •B.B. Size: 68-W-113, 70-W-115

NEW

Brake Lever
BL-1050 (Standard Type)
BL-1051 (Aero Type)
•SLR (Shimano Linear Response) System, Anatomical Design, Outer Guide for easy cable change (Aero Type) •202g (BL-1050, Pair), 252g (BL-1051, Pair) Including Rubber Cover •Light Alloy •Hooded Lever with Rubber Cover •Lever Clamp Diameter: 23.8 – 24.2mm •Bracket Cover: Black, White, Brown

NEW

SLR

BL-1050

BL-1051

Brake
BR-1050-49 (Short 49 Type)
BR-1050-57 (Long 57 Type)
•SLR (Shimano Linear Response) System, Thrust Bearing & Teflon Coated Pivot Washer, Spring Sleeve, One-Piece & Low Profile Brake Shoe •335g (F & R, 49 Type) •Light Alloy *For SLR system use BR-1050, BL-1050/BL-1051, and Shimano outer cable with liner.

NEW

SLR

Hub
HB-1050-R (Rear)
HB-1050-F (Front)
•Sealed Mechanism •327g (Rear), 218g (Front) •Light Alloy (Hub Shell), Resin•Dark Gray Metallic Finish (Dust Cap) •Over Lock Nut Dimensions: 100mm (Front), 126mm (Rear) •Spoke Holes: 32H, 36H •Spoke Hole Diameter: ∅2.6mm

NEW

Multiple Freewheel
MF-Z012
•15.9 oz. (451g) •Silver & Black Finish •Chain Size: 1/2" × 3/32" Chain •Thread: BC 1.37 × 24 T.P.I. (English) •Threaded Sprocket for 1st Position: 13T. – 16T. Splined Sprocket for 2nd-3rd gear: 14T. – 20T. Splined Sprocket for 4th-6th gear: 17T. – 24T., 26T., 28T., 30T., 32T., 34T.

Track Racing Components

NEW DURA-ACE TRACK

Hub

HB-7600 (Large & Small Flange)

●Precision Ground Cones, Diamond-Polished Mirror Finish (Cup & Cone), Sealed Mechanism, Composite-Type Design (Large Flange) ●11.0 oz. (313g.) Rear Large w/Lock Ring, 8.5 oz. (241g.) Front Large ●Forged Light Alloy•Anodized Finish (Hub Body), Poly-carbonate Resin Cover ●Front: 3.94" (100mm.), Rear: 4.72" (120mm.) (One-Side or Both-Side Threaded Type) (Small Flange/Large Flange) ●Sprocket Thread: BC 1.37 × 24T.P.I. (English) ●Lock Ring Thread: BC 1.29 × 24T.P.I. (Left) ●Spoke Holes: 28H, 32H, 36H (Option: 24H) ●Spoke Hole Diameter: ∅2.4 mm ●Fork End Slot Width: Front; 9mm. (Hollow Axle), Rear; 10mm. (Hollow Axle)

Sprocket

SS-7600 (Hub Sprocket for Track Model)

●Cr-Mo Steel ●Thread: BC 1.37 x 24T.P.I. (English) ●Standard Sprocket: 1/2" x 1/8", 1/2" x 3/32" ●Teeth: 13T., 14T., 15T., 16T.
●1/2" x 1/8" Sprocket

13T.	1.1 oz. (31g.)
14T.	1.3 oz. (38g.)
15T.	1.6 oz. (44g.)
16T.	1.9 oz. (53g.)

Front Chainwheel & Bottom Bracket Assembly

FC-7600
BB-7600 (B.B. Parts)

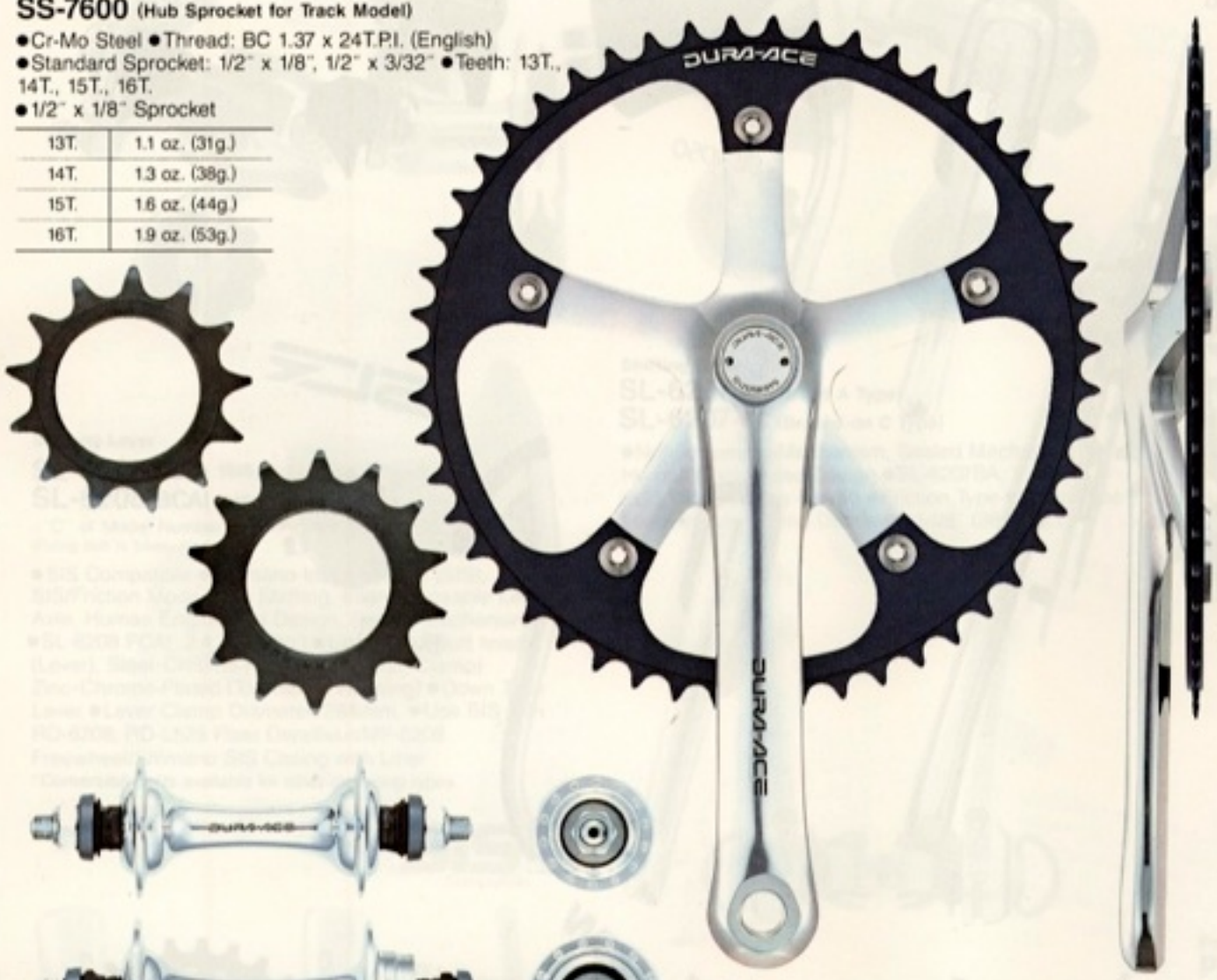
●Exclusively Designed for the Track, Computer Aided Design (Crank), Removable Sealed Mechanism (B.B.) ●21.3 oz. (605g.) (48T., 170mm), 10.8 oz. (305g.) (B.B. Set) ●Light Alloy•Anodized Finish (Crank, Crank Arm Cap), Light Alloy•Hard Color Anodized Finish (High-tech Gray), Steel•Chrome-Plated (Fixing Bolt & Nut) ●Nickel Cr-Mo Axle ●Teeth: 46T. ~ 52T. (Option; 42T. ~ 45T., 53•54T.) 1/8" and 3/32" available ●Crank Length: 165mm., 167.5mm., 170mm., 172.5mm., 175mm. ●Crank Thread: English BC 9/16 x 20T.P.I., ●Cup Thread: English BC 1.37 x 24T.P.I., French M35 x 1.0, Italian M36 x 24T.P.I. ●B.B. Size: 68-S-109mm., 70-S-109mm.

Head Parts

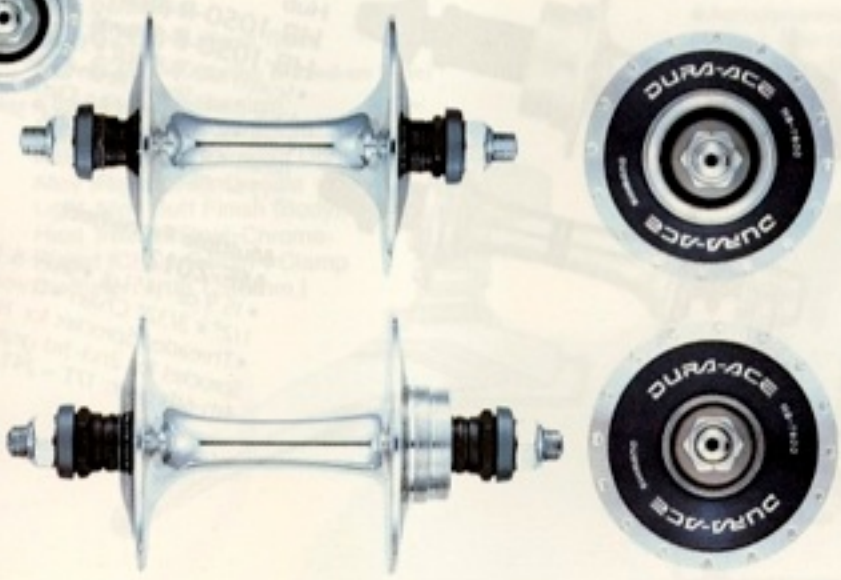
HP-7600

●Composite Structure, Sealed Mechanism, Super-Light Weight ●3.2 oz. (90g.) ●Light Alloy•Anodized Finish (Lock Nut/Upper Cone Nut), High Impact Resin (Upper Cone/Lower Cup Covers), Bearing Steel (Upper & Lower Cup), Die Steel•CVD Finish* (Upper & Lower Cone)
*Titanium Plated
●Variations:

Type	Thread	Press Race Diameter	
		Upper & Lower Cup	Lower Cone
English/ Italian	BC 1 x 24T.	30.2mm.	26.4mm.
French	M25 x P1.0	30.2mm.	26.4mm.



- With its compact aerodynamic shape, excellent road clearance, and unique bearing configuration, the Dura-Ace Road pedal (PD-7400) lends itself extremely well to track use.
  The 5° more road clearance provided by the Dura-Ace Road pedal gives an ample safety margin on banked tracks where pedal contact problems often lead to accidents. The center needle bearing construction is very suitable for withstanding the severe loads imposed upon track pedals during competition.



The New Shape for Pedaling Efficiency—
A Computer-Designed Chainring for Better Biomechanics.

biopace
Computer-Designed Drive System

Front Chainwheel & Bottom Bracket Assembly
FC-1050-BP (Double, LD Type Biopace)
BB-1050 (B.B. Set)

●Low Profile & Aerodynamic Design, Biopace Mechanism ●664g. (42, 52T., 170mm.), 327g. (B.B. Set) ●Light Alloy (Crank/Chain Ring) ●For 1/2" × 3/32" Chain ●Chainwheel: Inner; 42T., Outer; 52T. ●Crank Length: 165mm., 170mm., 172.5mm., 175mm. ●Crank Thread: BC 9/16 × 20 T.P.I. ●Cup Thread: English 1.37 × 24 T.P.I., French M35 × 1.0, Italian M36 × 24 T.P.I. ●B.B. Size: 68-W-113, 70-W-115

Double Front Chainwheel
FC-B126 (Biopace Double, LD Type) NEW

●Computer Aided Design (CAD) ●24.8 oz. (704g.) (42T., 52T., 170mm.) ●Light Alloy•Anodized Finish (Chainring), Light Alloy•Anodized Buff Finish (Crank) ●For 1/2" × 3/32" Chain ●Crank Length: 165mm., 170mm.; ●Crank Thread: BC 9/16 × 20 T.P.I. ●Cup Thread: English 1.37 × 24 T.P.I., French M35 × 1.0, Italian M36 × 24 T.P.I. ●Teeth: Outer 52T., Inner 42T. ●Bolt Circle Diameter: 130mm., LD Type

Double Front Chainwheel & Bottom Bracket Assembly
FC-6207-BP (Biopace Double, LD Type)
BB-6207 (B.B. Parts)

●Computer Aided Design (CAD), Sealed Mechanism ●23.7 oz. (667g.) (42T., 52T., 170mm.), 11.5 oz. (326g.) (B.B. Set) ●Light Alloy•Anodized Buff Finish (Crank), Buff Finish or Color Anodized/Gun-Metallic Gray Finish (Chainring) ●For 1/2" × 3/32" Chain ●Crank Length: 165mm., 170mm., 172.5mm., 175mm. ●Crank Thread: BC 9/16 × 20 T.P.I. ●Cup Thread: English 1.37 × 24 T.P.I., French M35 × 1.0, Italian M36 × 24 T.P.I. ●B.B. Size: 68-W-116 (D-3L), 70-W-119 (D-5LL) ●Outer 52T., 53T., Inner 42T. ●Bolt Circle Diameter: 130mm. LD Type

Front Chainwheel & Bottom Bracket Assembly
FC-M730 (Biopace II Triple, MD Type)
BB-M730 (B.B. Parts)

●Biopace II Chainrings, Low Profile Design, One-Piece Forged Crank, Computer Aided Design, Sealed Mechanism ●25.0 oz. (707g.), (26T., 36T., 46T., 170mm.) ●11.0 oz. (310g.), B.B. Parts ●Light Alloy-Anodized Finish ●For 1/2" × 3/32" Chain ●Outer 46T., 48T., 50T., Middle 36T., 38T., 44T., Inner 26T., 28T. ●Crank Length: 165mm., 170mm., 175mm., 180mm. ●Crank Thread: BC 9/16" × 20 T.P.I. ●Cup Thread: English 1.37 × 24 T.P.I., French M35 × 1.0, Italian M36 × 24 T.P.I. ●B.B. Size: 68-T-117.5 (D-3A), 68-T-122.5 (D-3NL), 70-T-117.5 (D-5A)

Triple Front Chainwheel
FC-B124 (Biopace Triple, MD Type)

●Computer Aided Design (CAD) ●26.6 oz. (752g.) (28T., 38T., 48T., 170mm.) ●Light Alloy•Anodized Finish (Chainring), Light Alloy•Anodized, Buff Finish (Crank) ●For 1/2" × 3/32" Chain ●Combinations: 48T., 38T., 28T. or 50T., 44T., 28T. ●Crank Length: 170mm., 175mm. ●Crank Thread: BC 9/16 × 20 T.P.I. ●Cup Thread: English 1.37 × 24 T.P.I., French M35 × 1.0, Italian M36 × 24 T.P.I. ●Bolt Circle Diameter (Outer & Middle): 110mm. MD Type, (Inner): 74mm.

NEW
SHIMANO
DEORE XT

THE TOTAL CO
SYSTEM

Take on the challenge of off-road cycling with Total Control. A result of the Shimano system approach to component design, New Deore-XT has established a new level of performance for the off-road bicycle. The advanced functions of SIS shifting, Biopace II chainwheels, and U-Brake/cantilever brake system help you experience the excitement of off-road cycling with greater safety and confidence. New Deore-XT is the new standard in ATB components.

SIS Shifting Precision Goes Off-Road!

SIS

The Positive shifting benefits of SIS are now available to the off-road rider. Smooth and precise, light action thumb lever SIS shifting is now possible even with rear cogs as large as 32 teeth!

Better Shifting Performance With Second Generation Biopace II

biopace II

Efficient energy-saving Biopace II chainwheels also provide better shifting for triple cranksets through newly developed tooth profiles and plateau sections.

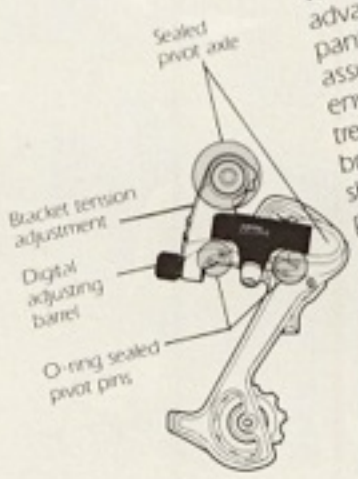
More Powerful Braking Through a New Design

U-Brake

Chain stay mounted rear U-Brake delivers powerful braking performance plus great durability in the mud and grit of off-road riding.

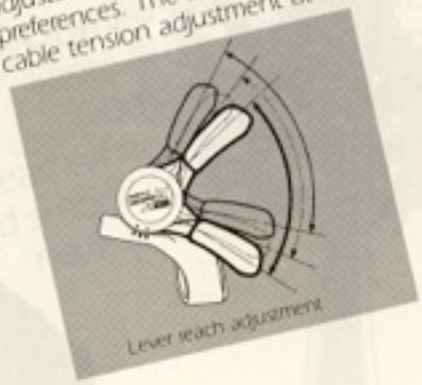
Rear Derailleur
RD-M730

6-speed SIS shifting precision in a rugged, wide-ratio rear derailleur incorporating the advanced Shimano double servo-pantagraph design. SIS shifting accuracy is assured in the roughest off-road environments through a full sealing treatment that shuts out dirt and water. A bracket tension adjuster bolt enhances SIS shifting precision by positioning the guide pulley to compensate for different dropout types and maintains proper guide pulley/sprocket distance for sprockets up to 32 teeth. A digital cable adjusting barrel makes SIS adjustment fast and easy and insures constant cable tension. The New Deore-XT rear derailleur means rugged precision that sets the standard for ATB performance.



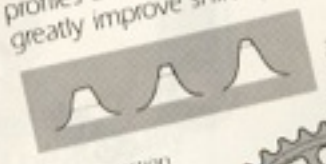
Shifting Lever
SL-M730

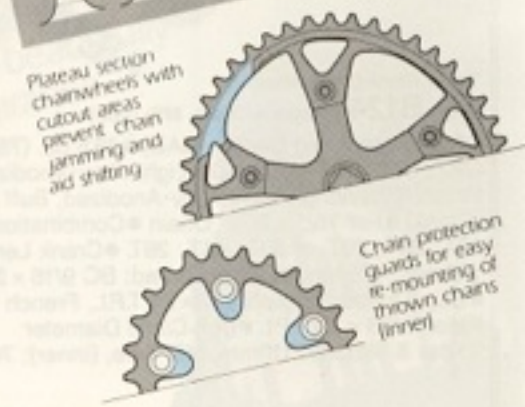
SIS precision at your fingertips. The New Deore-XT thumb-shifter incorporates the SIS index unit as an integral part of the lever itself. Both levers offer a new light action shifting feeling resulting from an integral helper spring. SIS lever position is adjustable to three points to suit riders' preferences. The barrel adjuster allows cable tension adjustment at the lever.



Front Chainwheel
FC-M730

The New Deore-XT crank features a low profile design and offset crank arm that give plenty of ankle clearance for all-out off-road riding. The narrow bottom bracket axle helps reduce flex and improves power transfer efficiency. Computer- designed Biopace II chainwheels provide efficient pedaling action. Biopace II's three tooth profiles and plateau-section chainwheels greatly improve shifting performance.

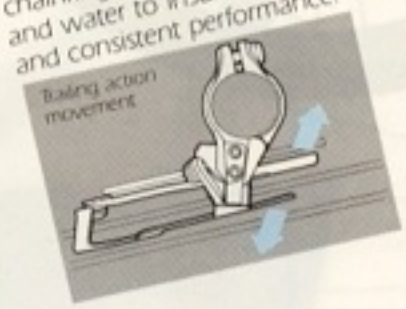




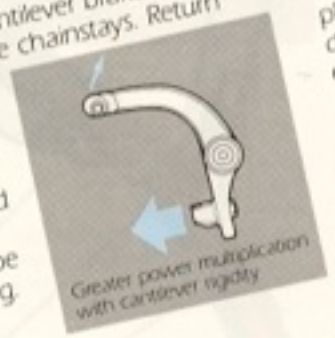
NTROL

Freehub
FH-M730-NT (6-speed nut type)
FH-M730-QR (6-speed quick release type)
The New Deore-XT 6-speed SIS freehub is as rugged as the outdoors. Unique freehub design places the axle bearings closer to the frame dropouts for superior strength, better power transfer efficiency, and a virtual end to the problem of bent axles. Both front and rear hubs feature complete contact sealing and open/close lube ports in the dust covers. Sure-grip gum covers on quick-release lever and nut for non-slip operation.

Front Derailleur
FD-M730
Trailing-action pantagraph design makes triple chainwheel shifting easier than ever before. A deep chain cage accommodates super-small granny chainrings. A total sealing treatment keeps out dirt and water to insure a long trouble-free service life and consistent performance.

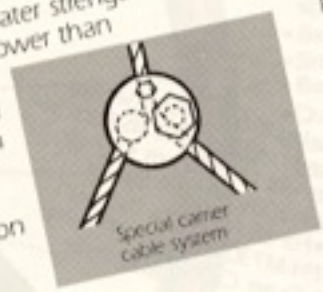


U-Brake
BR-M731
A strong and rugged ATB rear brake that combines the best of the caliper and cantilever brake. Mounts to brazed-on pivots under the chainstays. Return springs are completely enclosed and sealed to guarantee free brake action in the worst off-road conditions. Shoe angle and return spring adjustment features insure proper shoe positioning and centering.



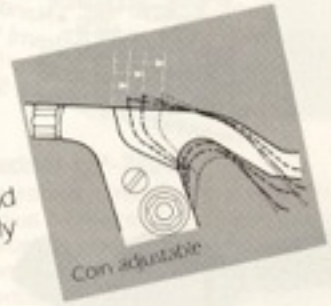
Seat Post Quick-Release
SQ-M730
Fast and quick seat height adjustment from a quick-release seat binder bolt. Position set spring keeps lever in position when opened and keeps adjustment from loosening. Gum covers on lever and nut for comfortable and non-slip grip. Chrome finish.

Cantilever Brake
BR-M730
Low-profile design means greater strength with less weight in a brake that's narrower than conventional cantilever types. Internal sealed return spring assures precise action while large brake shoes provide strong stopping power. Return spring tension adjusting screw allows precise arch centering.



Pedal
PD-M730
The New Deore-XT pedal is ready to take the punishment of off-road riding. Chrome-moly spindle and contact sealing insure strength and durability in the rough. Low-profile parallelogram shape results in a large solid anchor for the foot in a pedal that's surprisingly compact. Can be used with or without toe clips and reflectors.

Brake Lever
BL-M730
Human engineered for maximum performance. The New Deore-XT brake lever features an easy-grip shape, non-projecting safety clamp band, and 4-step lever position adjustment that can be easily set with a coin. Compatible with heavy-duty cables.



THE TOTAL CONTROL SYSTEM

Rear Derailleur NEW
RD-M730
•SIS Compatible •Double Servo-Panta Mechanism, Centeron Guide Pulley, Ceramic Guide Pulley Bushing, Sealed Mechanism, Digital Adjust Mechanism, B-Tension Adjustment Bolt, Brass Bushings & Stainless Steel Pins in Link Pivots, Double Spoke Barrier, Chain Retainer •Maximum Rear Sprockets: 28T. – 32T.) (Using SFR, SF Fork Ends) •Minimum Rear Sprockets: 12T. •Maximum Front & Rear Sprocket Difference: 38T. •9.3 oz. (265g) •Light Alloy

Front Derailleur NEW
FD-M730
•Trailing Action Pantagraph Mechanism, Rigid Chainguide •4.0 oz. (112g) (Normal Band Type) •Body/Light Alloy, Right Link/Forged Light Alloy, Chain Guide/Steel CP Finish

Capacity (Front gear difference)	FD-M730-AL (Alpine)	Round gear 8T. – 26T.
		Biopace gear (CR-BP10) 8T. – 22T.
	FD-M730-HS (Hi-tit-step)	Round gear 5T. – 26T.
		Biopace gear (CR-BP10) 5T. – 22T.
Band diameter	Band type	Ø 28.0 – 28.6mm (1-3/32" – 1-1/8")
	EC-type (End-less clamp type)	Ø 31.8mm (1-1/4")

Cantilever Brake NEW
BR-M730
•Rigid Computer Designed Shape, Sealed Internal Spring Design, Spring Tension Adjuster, Low-Profile Brake Shoe (Low-Profile 65), Easy Cable Attachment •6.7 oz. (190g)/ Pair •Light Alloy •Buff Finish, Steel

Pedal NEW
PD-M730
•Low Profile Design, Parallelogram Shape, Contact-Type Sealed Mechanism, Stainless Steel Grip Pins, Toe Clip/ Reflector Attachable •14.5 oz. (412g) Pair •Body/Light Alloy, Spindle/Cr-Mo Steel •Crank Thread: BC 9/16" × 20TPI

Shifting Lever NEW
SL-M730
•SIS (Shimano Index System), Light Action Mechanism, Low Profile Design, 3-Step Lever Adjustment, SIS/Friction Mode Switch, Digital Adjustment Mechanism •6.7 oz. (191g) •Light Alloy •Handlebar Use •Lever Clamp Diameter: 7/8" (22.2mm) •For SIS Function, use with RD-M730 Rear Derailleur/FH-M730 Freehub, MF-6208 Freewheel/Shimano SIS-SP Outer Casing with Liner

Chain Deflector NEW
DF-M730
•Keeps the chain from jamming between the tire and chainstay •0.3 oz. (9g) •Resin

NEW
SHIMANO DEORE XT

U-Brake
BR-M731 NEW
•Rigid Computer Designed Shape, Chamstay Mounting Position, Spring Tension Adjuster, Internal and Sealed Spring Design, Low-Profile Brake Shoe (Low-Profile 60) •10.0 oz. (286g)/pcs. •Light Alloy

Brake Lever
BL-M730 NEW
•Full-Fit Design, Safety Clamp Design, Digital Lever-Reach Adjustment (4 Positions), 2mm Diameter Inner Cable Available •11.2 oz. (317g) Pair •Forged Light Alloy •Lever Clamp Diameter: 7/8" (22.2mm)

Freehub
FH-M730-NT (6-speed nut type)
FH-M730-QR (6-speed quick release type)
•SIS Compatible •Bolt-Secured Freewheel, Contact Type Sealed Mechanism, Superior Hub Axle Support, High Strength Freewheel Body, Lubricating Ports with Open/Close •Front: 7.3 oz. (206g) (Nut Type), Rear (Except Sprockets): 14.9 oz. (422g) (Quick Release Type), Rear (Except Sprockets): 16.0 oz. (451g) (Quick Release Type) •Light Alloy •Buff Finish •Over Lock Nut Dimensions: Front: (Nut Type) 100mm, Rear: 130mm •36H •Teeth: 12T – 16T Top (Threaded), 13T – 26T, 28T, 30T, 32T (Spline) •For 1/2" × 3/2" Cham

SIS Compatible

NEW

Front Chainwheel & Bottom Bracket Assembly
FC-M730 (Biopace II Triple, MD Type)
BB-M730 (B.B. Parts)
•Biopace II Chainrings, Low Profile Design, One-Piece Forged Crank, Computer Aided Design, Sealed Mechanism •25.0 oz. (707g), (26T, 36T, 46T, 170mm) •11.0 oz. (310g), B.B. Parts •Light Alloy-Anodized Finish •For 1/2" × 3/32" Chain •Outer 46T, 48T, 50T, Middle 36T, 38T, 44T, Inner 26T, 28T •Crank Length: 165mm, 170mm, 175mm, 180mm •Crank Thread: BC 9/16" × 20TPI, •Cup Thread: English 1.37 × 24TPI, •B.B. Size: 68-T-117.5 (D-5A), M36 × 24TPI, •B.B. Size: 68-T-117.5 (D-3A), 68-T-122.5 (D-3NL), 70-T-117.5 (D-5A)

Note: Biopace II chainwheels are currently (Fall '86) not available in all Biopace sizes. See chart at right.
"●" and "★" denotes current availability.
"★" will change to Biopace II type in '87.

		Biopace	Biopace II
Inner	26T	★	●
	28T		
Middle	36T	★	●
	38T	●	
	44T		
Outer	46T	★	●
	48T	●	
	50T		

NEW

Seat Post Quick-Release
SQ-M730
•Easy Operation, Position-Set Spring •2.6 oz. (73g) •Shaft Adjustment Length: 36 – 43mm, 26 – 33mm •Shaft Diameter: ∅6mm or ∅8mm

Off-Road Components

Rear Derailleur
RD-MT60 NEW

•SIS Compatible •Double Servo-Panta Mechanism, Centeron Guide Pulley, Sealed Mechanism, Digital Adjust Mechanism, B-Tension Adjustment Bolt, Brass Pivot Bushings & Heat Treated Steel Pins in Link Pivots, Double Spoke Barrier, Chain Retainer •Maximum Rear Sprockets: 28T – 32T) (Using SFR, SF Fork Ends) •Minimum Rear Sprockets: 13T •Maximum Front & Rear Sprocket Difference: 38T • 11.0 oz. (311 g) •Light Alloy

SIS Compatible

Front Derailleur
FD-MT60 NEW

•Trailing Action Pantagraph Mechanism, Rigid Changuide •4.0 oz. (113g) (Normal Band Type) •Body/Light Alloy, Right Link/Forged Light Alloy, Chain Guide/Steel CP Finish

Capacity (Front gear difference)	FD-MT60-AL (Alpine)	Round gear	8T – 26T
		Biopace gear (CR-BP10)	8T – 22T
	FD-MT60-HS (Hust-step)	Round gear	5T – 26T
		Biopace gear (CR-BP10)	5T – 22T
Band diameter	Band type	∅28.0 – 28.6mm (1-3/32" – 1-1/8")	
	EC-type (End-less clamp type)	∅31.8mm (1-1/4")	

U-Brake
BR-MT61 NEW

•Rigid Computer Designed Shape, Chainstay Mounting Position, Spring Tension Adjuster, Internal and Sealed Spring Design, Low-Profile Brake Shoe (Low-Profile 60) •9.9 oz. (280g) 1 pc. •Light Alloy

Cantilever Brake
BR-MT60 NEW

•Rigid Computer Designed Shape, Sealed Internal Spring Design, Spring Tension Adjuster, Low-Profile Brake Shoe (Low-Profile 65), Easy Cable Attachment •5.9 oz. (166g)/Pair •Light Alloy •Buff Finish, Steel

Brake Lever
BL-MT60

•Full-Fit Design, Safety Clamp Design, Digital Lever-Reach Adjustment (4 Positions), 2mm Diameter Inner Cable Available • 11.0 oz. (310g) Pair •Forged Light Alloy •Lever Clamp Diameter: 7/8" (22.2mm)

NEW

Shifting Lever
SL-MT60 NEW

•SIS (Shimano Index System), Light Action Mechanism, SIS/Friction Mode Switch, Digital Adjustment Mechanism •7.4 oz. (210g) •Light Alloy •Handlebar Use •Lever Clamp Diameter: 7/8" (22.2mm) •For SIS Function, use with RD-MT60, RD-M730 Rear Derailleur/FH-M730 Freehub, MF-6208 Freewheel/Shimano SIS-SP Outer Casing with Liner

SIS Compatible

Rear Derailleur
RD-M531-GS (Long Cage) NEW

•SIS Compatible •Pre-Select Mechanism with Light Action, Double Servo-Panta Mechanism, Double Spoke Barrier Mechanism, Sealed Mechanism, Steel Bushing in Link Pivots, Centeron Guide Pulley, 6mm Hexagon Fixing Bolt, Chain Retainer •Maximum Rear Sprocket: 30T •Maximum Front & Rear Sprocket Difference: 36T (Using FE-SF21, SF22 & PR20 Fork Ends) • 10.4 oz. (294g) •Light Alloy (Bracket Body), Steel (Right & Left Link, Plate Body & Pulley Plate)

SIS Compatible

Shifting Lever
SL-MS55 NEW

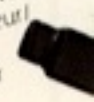
•SIS (Shimano Index System), SIS/Friction Mode Switch •7.2 oz. (203g, Pair) •Light Alloy and Resin •Handlebar Use •Lever Clamp Diameter: 7/8" (22.2mm) •For SIS Function, use with RD-M730, RD-MT60 Rear Derailleur/Shimano MF-6208, MF-Z012 Freewheel/Shimano SIS-SP Outer Casing with Liner

SIS Compatible

Shifting Lever
SL-MS40

•SIS (Shimano Index System) •6.2 oz. (176g, Pair) •Light Alloy and Resin •Handlebar Use •For SIS Function, use with RD-M531, Rear Derailleur/ MF-Z012 Freewheel/ Shimano SIS-SP Outer Casing with Liner

SIS Compatible



NEW
SHIMANO
DEORE

Shimano Components

SHIMANO COMPONENTS

Rear Derailleur
RD-L525-SS (Short Cage) SIS Compatible
RD-L525-GS (Long Cage)
RD-L525-SGS (Super Long Cage)
•SIS Compatible (Short Cage only) •Pre-Select Mechanism with Light Action, Double Servo-Panta Mechanism, Double Spoke Barrier Mechanism, Sealed Mechanism, Steel Bushing in Link Pivots, Centeron Guide Pulley, 6mm Hexagon Fixing Bolt, Chain Retainer (Long Cage, Super Long Cage) •Maximum Rear Sprocket: Short 28T., Super Long 34T. •Maximum Front & Rear Sprocket Difference: Short 28T. (Using All Shimano Fork Ends), Long 34T., Super Long 40T. (Using FE-SF21, SF22 & PR20 Fork Ends) •9.3 oz. (265g) Short, 10.0 oz. (284g) Long, 10.4 oz. (294g) Super Long •Light Alloy (Bracket & Plate Body, Right Link), Steel•Pearl Bright Finish (Pulley Plate & Left Link), Steel (Left Plate)

SIS

Shifting Lever
SL-S434-FCAI (SIS, Brazed-on A Type) NEW
*"C" of Model Number means Italian Type (Fixing Bolt is 5mm Diameter)
•SIS Compatible •Shimano Index System with One-touch Switch SIS or Friction Mode, Light Action Lever •SL-S434-FCAI: 2.5 oz. (72g) •Attachment Position: Down Tube •Lever Clamp Diameter: 1-1/8" •Use SIS with RD-6208, RD-1050, RD-L525-SS, RD-L523-SS, RD-L532-SS, RD-M531 Rear Derailleur/ MF-2012, MF-6208 Freewheel/ Shimano SIS Casing with Liner

SIS

Shifting Lever
SL-S431 NEW
•SIS Compatible •Shimano Index System (SIS) •Double Lever: 4.8 oz. (136g), Single Lever: 3.4 oz. (95g) •Light Alloy (Fixing Bolt, Clamp), Resin (Lever) •Attachment Position: Handle Stem •Lever Clamp Diameter: 7/8" (22.2mm) •Use SIS with RD-L532-SS, RD-L525-SS, RD-M531, RD-1050 Rear Derailleur/MF-6208, MF-2012 Freewheel/ Shimano SIS-SP Casing with Liner

SIS

Brake
BR-L490-49 (Short-49 Type) NEW
•SLR (Shimano Linear Response) System, Teflon Coated Pivot Washer, Spring Sleeve, One-Piece & Low Profile Brake shoe •355g (Front & Rear) •Light Alloy
*For SLR System Use BR-L490, BR-1050/BL-L330, L331, BL-1050, 1051 and Shimano Outer Cable with Liner

SLR

Brake Lever
BL-L330 (Standard Type)
BL-L331 (Aero Type) NEW
•SLR (Shimano Linear Response) System, Anatomical Design, Outer Guide for Easy Cable Change (Aero Type) •7.1 oz. (202g) (BL-L330, Pair), 9.0 oz. (254g) (BL-L331, Pair) Including Rubber Cover •Light Alloy •Hooded Lever with Rubber Cover •Lever Clamp Diameter: 23.8 – 24.2mm

SLR

Rear Derailleur
RD-L523-SS (Short Cage) SIS Compatible
RD-L523-GS (Long Cage)
RD-L523-SGS (Super Long Cage)
•SIS Compatible (Short Cage only) •Pre-Select Mechanism with Light Action, Double Servo-Panta Mechanism, Double Spoke Barrier Mechanism, Sealed Mechanism, Steel Bushing in Link Pivots, Chain Retainer (Long Cage, Super Long Cage) •Maximum Rear Sprocket: Short 28T., Super Long 34T. •Maximum Front & Rear Sprocket Difference: Short 28T. (Using All Shimano Fork Ends), Long 34T., Super Long 40T. (Using FE-SF21, SF22 & PR22 Fork Ends) •9.7 oz. (204g) Short, 10.3 oz. (293g) Long, 10.6 oz. (300g) Super Long •Light Alloy (Bracket & Plate Body), Steel•Pearl Bright Finish (Pulley Plate & Right Link), Steel (Left Plate)

NEW

SIS

Shifting Lever
SL-L422-BA (Band A Type for Down Tube)
SL-L422-FA (Brazed-on A Type)
SL-L422-S (Band Type for Stem Mount)
•3.4 oz. (95g)/Band A Type, 5.1 oz. (145g)/Stem Type •Light Alloy •Light Action Type •Attachment Position: Down Tube, Handle Stem •Lever Clamp Diameter: 1-1/8" (Down Tube), 7/8" (Handle Stem)

Pedal
PD-T100
•Sealed Mechanism, Concave Platform with Studs, Toe Clip Attachable •14.6 oz. (414g) w/Reflector, 12.3 oz. (362g) w/o Reflector •Body/Light Alloy, Spindle/Cr-Mo Steel, Cap, Reflector & Dust Seal/Resin •Crank Thread: English BC 9/16 × 20 TPI, UNC 1/2 × 20 TPI

Rear Derailleur
RD-L532-SS (Short Cage) SIS Compatible
RD-L532-GS (Long Cage)
RD-L532-SGS (Super Long Cage)
•SIS Compatible (Short Cage only) •Pre-Select Mechanism with Light Action, Double Servo-Panta Mechanism, Double Spoke Barrier Mechanism, Sealed Mechanism, Steel Bushing in Link Pivots, Centeron Guide Pulley, 6mm Hexagon Fixing Bolt, Chain Retainer (Long Cage, Super Long Cage) •Maximum Rear Sprocket: Short 28T., Long•Super Long 34T. •Maximum Front & Rear Sprocket Difference: Short 28T. (Using All Shimano Fork Ends), Long 34T., Super Long 40T. (Using FE-SF21, SF22 & PR22 Fork Ends) •9.6 oz. (272g) Short, 10.3 oz. (293g) Long, 10.8 oz. (306g) Super Long •Light Alloy (Bracket Body), Steel (Right & Left Link, Plate Body & Pulley Plate)

NEW

SIS

SIS Compatible

	SS	GS	SGS
RD-L525	○	X	X
RD-L523	○	X	X
RD-L532	○	X	X
RD-M531	—	○	—

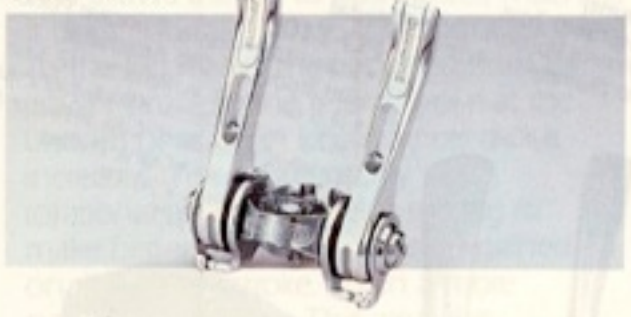
SHIMANO
DURA-ACE
COMPONENTS

Rear Derailleur
RD-Z501 (Short Cage)
RD-Z501-GS (Long Cage)
RD-Z501-SGS (Super Long Cage)

●Double Spoke Barrier Mechanism, Sealed Mechanism (Bracket Body only) ●Max. Rear Sprocket/Short: 28T., Long: 34T.*, Max. F & R Sprocket Difference/Short: 30T., Long: 34T. (Using all Shimano Fork Ends) ●10.0 oz. (284g.) (Short) 10.8 oz. (305g.) (Long) ●Light Alloy (Bracket Body) Steel (Plate Body, Pulley Plate)
*(Using SFR Fork End)

Shifting Lever
SL-Z401-BA (Band A Type)
SL-Z401-FA (Brazed-on A Type)
SL-Z401-S (Stem Band Type)

●SL-Z401BA: 2.2 oz. (63g.) ●Light Alloy ●Friction Type ●Down Tube Lever, Handle Stem ●Lever Clamp Diameter: 1-1/8" (28.6mm.) (Down Tube), 7/8" (22.2mm.) (Handle Stem)

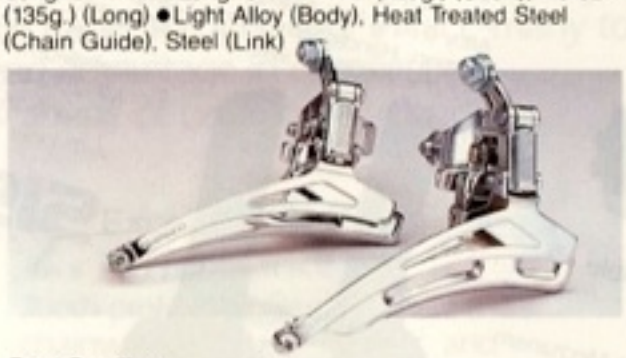


Front Derailleur
FD-Z206 (Short Cage)
FD-Z206-GS (Long Cage)

●Spring Cover, Trap-Ease Mechanism ●Max./Short 18T., Long: 27T. Min./Long: 6T. ●3.9 oz. (110g.) (Short), 4.2 oz. (120g.) (Long) ●Forged Light Alloy (Right Link), Light Alloy (Body), Heat Treated Steel (Chain Guide)

Front Derailleur
FD-Z204 (Short Cage)
FD-Z204-GS (Long Cage)

●Spring Cover, Trap-Ease Mechanism ●Max./Short: 18T., Long: 27T. Min./Long: 6T. ●4.4 oz. (125g.) (Short), 4.8 oz. (135g.) (Long) ●Light Alloy (Body), Heat Treated Steel (Chain Guide), Steel (Link)



Front Derailleur
FD-Z202

●Trap-Ease Mechanism ●Max./14T. ●4.9 oz. (140g.) ●Light Alloy (Body), Heat Treated Steel (Chain Guide), Steel (Link)

Brake
BR-Z570 (57 Type) **BR-Z720** (72 Type)
BR-Z640 (64 Type) **BR-Z790** (79 Type)

●Easy-Centering Mechanism, One-piece Pivot Bolt, Smooth Movement Sleeve ●Front: 5.4 oz. (152g.) (57 Type), 5.4 oz. (154g.) (64 Type), 5.5 oz. (157g.) (72 Type), 5.6 oz. (160g.) (79 Type), Rear: 5.3 oz. (149g.) (57 Type), 5.3 oz. (151g.) (64 Type), 5.4 oz. (154g.) (72 Type), 5.5 oz. (157g.) (79 Type) ●Forged Light Alloy ●Slide Pull ●Option: Quick Release & Tire Guide

TYPE	A — A
CS-57	43mm (1-11/16") — 57mm (2-1/4")
CS-64	49mm (1-17/32") — 64mm (2-1/2")
CS-72	54mm (2-1/8") — 72mm (2-27/32")
CS-79	61mm (2-13/32") — 79mm (3-1/8")

Brake Lever
BL-Z325-AQ (w/o Bracket Cover, w/Quick Release)
-A (w/o Bracket Cover)
-BQ (w/Bracket Cover, w/Quick Release)
-B (w/Bracket Cover)

BL-Z326-A (w/o Bracket Cover)
-B (w/Bracket Cover)

●Easy-grip Human Engineered 3-dimensional Designed Bracket ●7.0 oz. (198g.) (Including Bracket Cover) Pair ●Light Alloy ●Lever Clamp Diameter: 22.2mm. or 23.8mm./24.2mm. ●Option: Dual Extension Lever (BL-Z32) 7.9 oz. (224g.)

Tool
TL-RD10
•Rear Dropout Centering and Dropout Hanger Alignment Tool

Tool
TL-CT10
•Cable Cutter (For SIS-SP Cable and Normal Cables, Outer Casings)

Tool
TL-FW30
•Multiple Freewheel Removal Tool (For MF-7400, MF-5000, MF-6208, MF-2012)

Tool
TL-CN20
•Chain Cutter (For Both UG Chain and Ordinary Chain)

Dura-Ace Grease
•Special grease water resistant

High Performance Brake Shoe Set
(4 shoes)

Low-Profile Cantilever Brake Shoe Set (2 shoes)
(BR-M730, BR-MT60) and most other Cantilever Brakes

Low-Profile U-Brake Shoe Set (2 shoes)
(BR-M731, BR-MT61)

New Shimano Freewheel System

Features:

1. Splined Design—All 6-speed freewheels use a thread mounted top gear. The 2nd through 6th gears simply slide on and off for fast and easy replacement.
For 7-speed freewheels, the top two sprockets are thread mounted. The 3rd through 7th sprockets are the spline type.
2. Uniglide Tooth Profile—All freewheels incorporate precise-shifting SIS type Uniglide twist-tooth profiles.
3. Sealed Mechanisms—Dura-Ace, 600EX, and Santé freewheels incorporate efficient O-ring sealing for all-weather durability and a long service life.
4. Easy Maintenance—Dura-Ace, 600EX, and Santé freewheels have an oil port on the body that allows internal lubrication of bearings and pawls simply by removing the sprockets.
5. SIS Precision—All 6-speed freewheels use the same precise SIS-type sprocket spacing. 7-speed freewheels (Dura-Ace & Santé) utilize the same narrow-type SIS sprocket spacing.

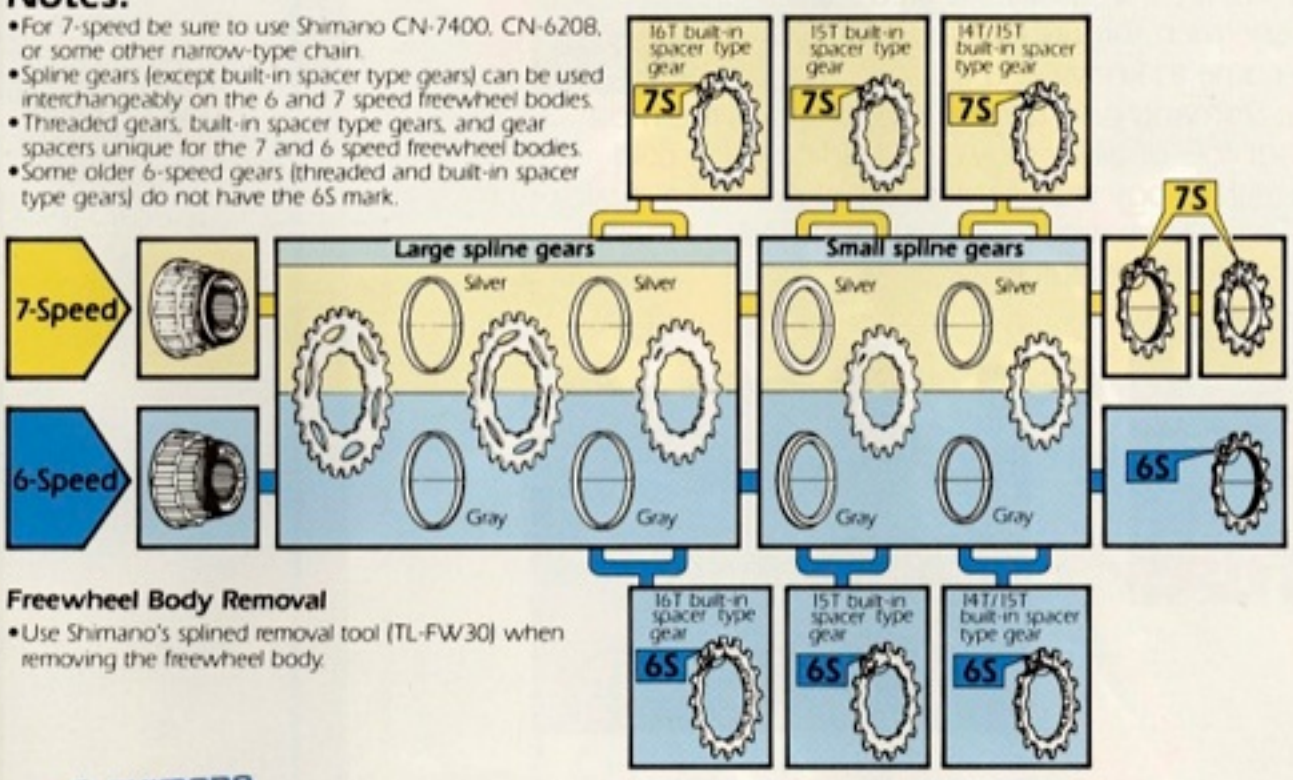
Great Interchangeability Among the New Freewheels

- All 6-speed freewheels are SIS compatible and offer complete sprocket interchangeability. This means freewheel combinations ranging from 13—16T. to 16—34T. are possible from only 28 sprockets and 3 spacer types. The result is maximum flexibility.
- Dura-Ace and Santé narrow-spaced 7-speed SIS freewheels offer complete sprocket interchangeability in a wide selection ranging from 12 to 26 teeth.
- The splined sprockets (excluding built-in spacer types) are completely interchangeable between 6-speed and 7-speed freewheels.

Note: Although the 6 and 7-speed freewheel bodies have the same outer thread dimension (BC40T), differences in sprocket spacing prevent interchangeability of the BC40 threaded sprockets between the two freewheels.

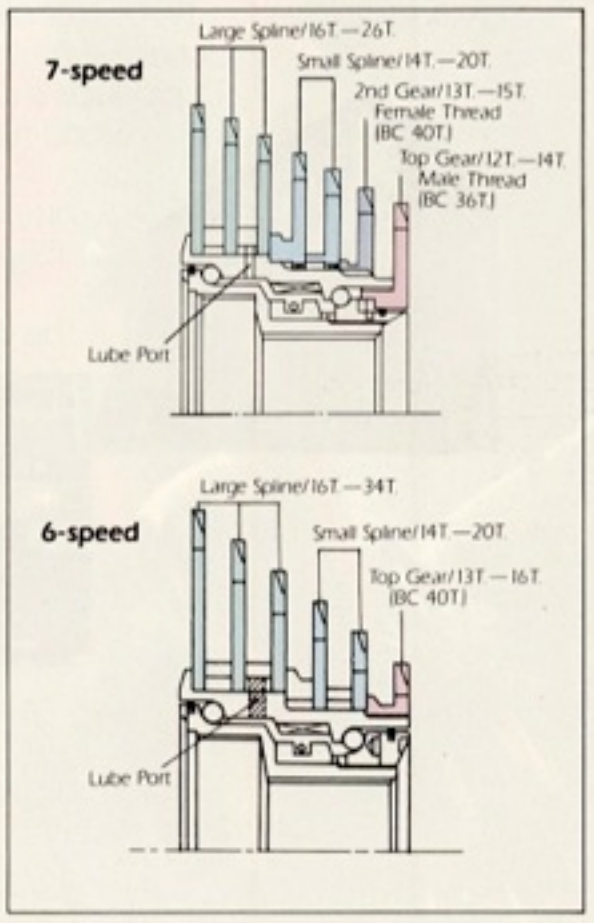
Notes:

- For 7-speed be sure to use Shimano CN-7400, CN-6208, or some other narrow-type chain.
- Spline gears (except built-in spacer type gears) can be used interchangeably on the 6 and 7 speed freewheel bodies.
- Threaded gears, built-in spacer type gears, and gear spacers unique for the 7 and 6 speed freewheel bodies.
- Some older 6-speed gears (threaded and built-in spacer type gears) do not have the 6S mark.



Freewheel Body Removal

- Use Shimano's splined removal tool (TL-FW30) when removing the freewheel body.



"Ask Your Dealer About These and Other Accessory Items with the Shimano Logo."

"Your Shimano Dealer Has the Cogs to Make Almost Any Sprocket Combination"

Racing Wheel Covers

- Nylon lined inside surface with water resistant rubberized outer skin.

Water Bottle

- 500ml

Cycling Cap

- High Quality Cotton Cycling Cap

Head Band

- High Quality 100% Cotton with Elastic

Shop Apron

- Durable 100% cotton shop apron. Perfect for home or shop mechanics. Large pocket and heavy-duty cord tie.

A Creative Synthesis of Man, his Tools, and his Resources

Shimano Industrial Co., Ltd. is composed of the bicycle component, fishing tackle, and cold forging divisions whose products are marketed throughout a world-wide sales, marketing & service network.

Incorporating innovative design and advanced functions, Shimano products continue to establish new standards of quality and performance in their respective fields.

Shimano bicycle components are extremely popular world-wide. This is the direct result of Shimano's commitment to advancing the state of the cycling art through constant research and development.

Dramatic improvements in cycling performance have been realized in system component groups like Dura-Ace, Shimano 600EX, and New Shimano 105 along with technical breakthroughs like the Shimano Index System and Biopace chainwheels. These products have excited the industry and provided continued growth for the company.

Newer to the company is the fishing tackle division which was established in 1970. This division produces a wide line of distinctive fishing rods, reels, and other related products that fishermen throughout the world have come to know and trust.

The Shimano cold forging division plays the most important role of all by providing leading edge cold forging technology that is the heart of Shimano quality.

This is Shimano—a creative synthesis of man, his tools, and his resources.

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