English (U)

SHIMANO

Bicycle System Components
The Complete Line

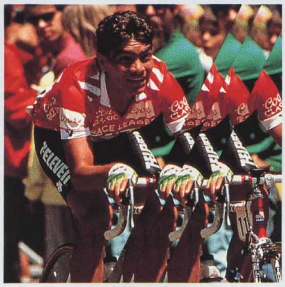


SHIMANO

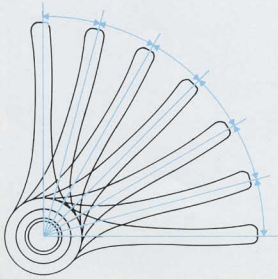
A Whole New World of Shifting Performance

SIS

SHIMANO INDEX SYSTEM



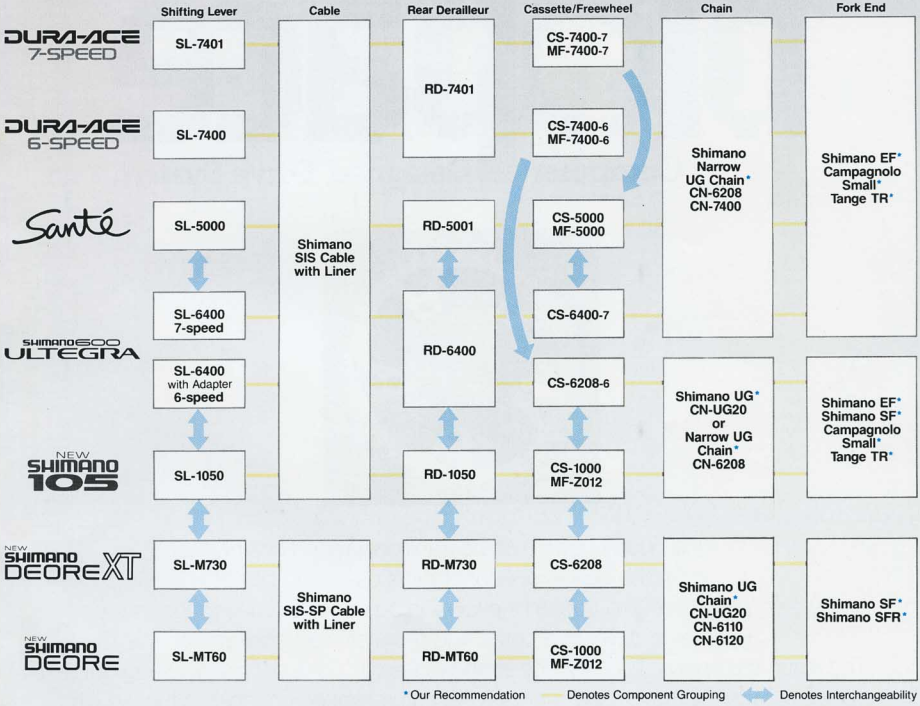
The Shimano Index System finally takes the guesswork out of derailleur shifting. With SIS, shifting enters the digital age. One quick move of the click-stop SIS lever instantly gives you the gear you want without mis-shifts, chain grinding, or the need for further lever adjustments. All cyclists, from beginners to pros, are now realizing the greater performance, convenience, and safety that SIS makes possible. SIS is now standard equipment on all Shimano system component groups. 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



Notes on SIS Interchangeability:

- Because of the differences in the shift lever stroke, SIS components of the Shimano 600 ULTEGRA, Shimano 105, and Santé groups are not interchangeable with Dura-Ace SIS components.
- SIS rear derailleurs from Shimano 600 ULTEGRA, Shimano 105, or Santé can be used with Dura-Ace levers (or vice versa), but the SIS function will be lost.
- All 6-speed SIS freewheels and freehubs have the same sprocket spacing. However, slight differences in sprocket design may affect shifting performance if components and mixed. For this reason we recommend using the designated freewheel of freehub for the group.
- The 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



It's long been known that the traditional round chainwheel is not the best shape for efficient use of leg power. Realizing this, Shimano applied the latest in computer simulation techniques in order to develop a better and more efficient chainwheel. The result is Biopace. The Biopace shape (called a "point symmetrical egg curve") creates a cadence that closely matches the natural speed changes in the leg when pedaling. Compared to round chainwheels, Biopace actually saves energy. Biopace lets you ride farther and more comfortably with less fatigue. And you can climb hills easier too. That's why we call Biopace the new shape of pedaling efficiency.

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.

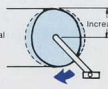
Power Stroke

Reduced Radius = Increased Rotational Speed



Transition Point

Increased Radius = Decreased Rotational Speed



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.

Improved Braking Control

SLR

SHIMANO LINEAR RESPONSE



Many cyclists, even some of the most experienced,
still lack confidence in their ability to use the brakes safely and effectively.
This is because conventional brake systems have offered little feedback at the lever.
The Shimano Linear Response System solves this problem with a dramatic
improvement in braking performance. SLR incorporates new designs
which significantly reduce friction in the lever, cable, and caliper unit.
The result is a lively and sensitive "linear response" lever feeling
that allows a higher level of braking control.
SLR makes everybody a better, and safer, cyclist.



How SLR works...

1. The Caliper

The SLR caliper unit uses a special ball plate washer and two coated washers to reduce friction. (Some models have coated washers only.) Friction is further reduced through the use of resin block bearings at spring contact points.

2. The Cable

The SLR cable incorporates a special low-friction liner sleeve that assures smooth cable movement even under strong braking pressures.

3. The Lever

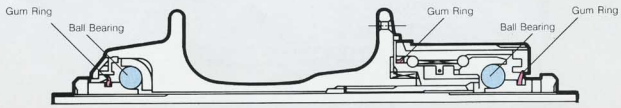
The SLR brake lever uses a low-friction pivot pin and lever return "helper" spring that contribute greatly to the sensitive linear-response feeling.

An Improved Rear Hub Design

THE SHIMANO FREEHUB



Shimano has solved the problems of the conventional rear hub with an advanced design that integrates the hub body and freewheel into a single unit called a freehub. The freehub offers significant advantages. For example, hub flanges can be positioned to reduce wheel dish. This allows more even spoke tensioning and lessens the chance of spoke breakage while increasing the wheel's strength against lateral loads. Bearings can be positioned closer to the frame dropouts (where the wheel attaches to the frame) to form a wider and more rigid hub support. This design eliminates the problem of bent axles. Another refinement is that only the freehub's top gear is threaded. The remaining sprockets utilize a common spline design for quick and easy slide-off/slide-on replacement. The Shimano freehub makes a significantly stronger rear wheel with greater hub/axle rigidity and improved power transfer efficiency. That's a real plus for all cyclists.





DURA-ACE
TRACK

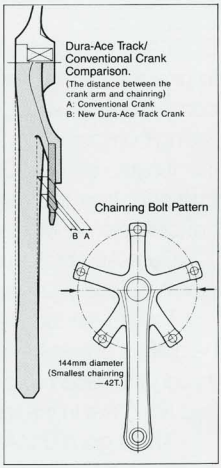
Get the Dura-Ace Advantage on the Track.



Front Chainwheel & Bottom Bracket Assembly

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

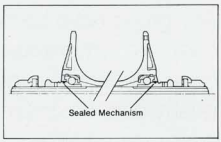
●Exclusively Designed for the Track, Computer Aided Design (Crank), Removable Sealed Machanism (B.B.) ●21.3 oz. (605g.) (48T., 170mm.), 10.8 oz. (305g.) B.B. Set ●Light Alloy•Anodized Finish (Crank, Crank Arm Cap), Light Alloy•Hard Color Anodized Finish (High-tech Gray), Steel•Chrome-Plated (Fixing Bolt & Nut) ●Nickel Cr-Mo Axle ●Teeth: 46T.~52T. (Option; 42T.~45T., 53•55T.) 1/8" and 3/32" available ●Crank Length: 165mm., 167.5mm., 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-S-109mm., 70-S-109mm.



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), Polycarbonate Resin Composite Hub Flange ●Front: 3.94" (100mm.), Rear: 4.72" (120mm.) (One-Side or Both-Side Threaded Type) (Small Flange/Large Flange) ●Sprocket Thread: BC 1.37×24 T.P.I. (English) ●Lock Ring Thread: BC 1.29×24 T.P.I. (Left) ●Spoke Holes: 24H, 28H, 36H ●Spoke Hole Diameter: ∅2.4mm ●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 1.37×24 T.P.I. (English) ●Standard Sprocket: 1/2"×1/8", 1/2"×3/32" ●Teeth: 13T., 14T., 15T., 16T. ●1/2"×1/8" Sprocket

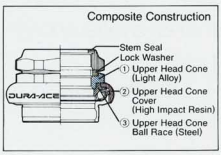
13T.	1.1 oz. (31g.)
14T.	1.3 oz. (38g.)
15T.	1.6 oz. (44g.)
16T.	1.9 oz. (53g.)

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) ●Height: Lower Stack 11.5mm., Total Stack 30.0mm.
*Titanium Plated
●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



DURA-ACE
ROAD



Dura-Ace Lets You Aim for the Top.

Dura-Ace was designed with only one purpose in mind—to give the racing cyclist a winning advantage in competition. In short, it's the most refined professional racing component system available today.

It starts with the Shimano Index System. Fast, precise, and error-free, the 7-speed SIS shifting function lets you concentrate on winning, not shifting.

Dura-Ace brakes provide strong yet sensitive stopping power which means you can dive deeper into turns and come out faster.

The advanced Dura-Ace freehub heightens power transfer efficiency through reduced axle flex and less rim offset in the rear wheel.

And it goes on. All the components in the Dura-Ace group have been designed with the same close attention to superior quality and maximum performance with minimum weight.

The result is a superior level of function that actually makes a difference in competition.

It's the winning advantage of Dura-Ace.



The Un







limited Challenge

DURA-ACE
ROAD



Rear Derailleur

RD-7401

●6 & 7-speed 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)

7-SPEED DURA-ACE SIS Compatible



Shifting Lever

SL-7401-B*CAI (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)

●7-speed SIS (Shimano Index System) ● 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) ●Down Tube Lever ●Lever Clamp Diameter: 1-1/8" (28.6mm) ●Use SIS with Dura-Ace 7-speed Rear Derailleur/Freehub/Freewheel/ Shimano SIS Outer Casing with Liner

7-SPEED DURA-ACE SIS Compatible

*Conversion parts available for other mounting types.



Shifting Lever

SL-7400-B*CAI (SIS, Side-Band A Type)
SL-7400-FCAI (SIS, Side-Brazed-on A Type)
SL-7400-FAI (SIS, Brazed-on A Type M4.5)

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

●6-speed SIS (Shimano Index System) ●SIS/Friction Changeover, 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) ●Down Tube Lever ●Lever Clamp Diameter: 1-1/8" (28.6mm.) ●Use SIS with Dura-Ace Rear Derailleur/Freehub/Freewheel/ Shimano SIS Outer Casing with Liner

DURA-ACE SIS Compatible

*Conversion parts available for other mounting types.



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.)

Front Chainwheel & Bottom Bracket Assembly

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

●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" × 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 ●Bolt Circle Diameter: 130mm. (LD Type)





7-speed

6-speed



7-speed

6-speed





Hub

HB-7400-R (Rear Hub)
HB-7400-F (Front Hub)

●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

Freehub

FH-7400-6/7 (Rear, 6-speed/7-speed)
CS-7400 (Cassette Sprockets)
HB-7400-F (Front Hub)

●6 and 7-speed SIS Compatible ●Sealed Mechanism, New Uniglide Teeth, Cassette Freehub, Uni-Balance System, Lubrication Ports with Open/Close ●15.4 oz. (439g.) Rear 6 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 126mm., 130mm. O.L. ●Spoke Holes: 28H, 32H, 36H (24H Available in Summer '88) ●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, 19T. 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.

7-SPEED DURA-ACE SIS Compatible

Multiple Freewheel

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

●6 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, 19T. 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.

7-SPEED DURA-ACE SIS Compatible

Seat Pillar

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

●Aerodynamic Design, Hexagon Release ●79 oz. (224g.) (SP-7400; 26.8mm.), 8.6 oz. (244g.) (SP-7410; 26.8mm.) ●Light Alloy•Anodized Finish ●Outside Diameter: 25.0mm., 26.4mm., 26.6mm., 26.8mm., 27.0mm., 27.2mm., 27.4mm.

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.

UG Chain (DURA-ACE)

CN-7400

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











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 (Standard Type)

●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.

Brake Lever

BL-7401 (Aero Type)

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

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) ●Height: Lower Stack 13.0mm., Total Stack 36.3mm. ●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.

Pedal

PD-7400

●34° Road Clearance, 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.

Clipless Pedal

PD-7401

NEW

●34° Road Clearance, Precision Manufactured, Compound Roller and Ball Bearing Axle, Aerodynamic Dustcap less Design, Efficient Sealed Mechanism, Adjustable Cleat Grip Tension, Compatible with Look® Cleats ●Weight: Pedal (Pair) 14.5 oz. (410g.)/Cleat & Hardware 3.0 oz. (85g.) ●Light Alloy (Body), Nickel Cr-Mo Chrome Plated Axle with Precision Ground and Polished Races ●Crank Thread: English BC 9/16 × 20T.P.I.



Santé
by SHIMANO

Perfor



mance by Design

A New Look for the Quality Bicycle

The high-tech design of the Santé component group creates a new sophisticated image for the performance bicycle.

But the real beauty of Santé lies beneath its elegant form where traditional Shimano quality and advanced functions come into play.

For example, Santé offers click-stop 7-speed SIS shifting, linear feedback SLR brake system, and energy-saving Biopace chainwheels. Crank strength is increased through a smooth aero design with dead-bottom pedal bores. Stainless steel derailleur pivots ride in brass bushings. And the list goes on.



This design integrity, combined with Santé's high-tech look of pure precision, results in the highest level of form and function ever offered in a quality component group.

So if you like to ride fast with style, consider Santé. It's performance by design.

SHIMANO INDEX SYSTEM SIS

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

COMPUTER-DESIGNED DRIVE SYSTEM biopace

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

SHIMANO LINEAR RESPONSE SLR

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

Santé
by SHIMANO

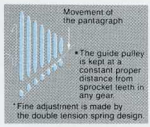


Rear Derailleur

RD-5001 (Short Cage)
RD-5001-LS (Middle Cage)

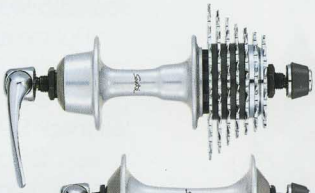
NEW

●6 & 7-speed SIS Compatible, Double Servo-Panta Mechanism, Centeron Guide Pulley, Sealed Mechanism, Ceramic Pulley Bushings, Bronze Pivot Bushings, Stainless Steel Pivot Pins, Double Spoke Barrier, Bracket Tension Adjustment Screw ●Maximum Rear Sprocket: 24T. (Short Cage), 23T. – 28T. (Middle Cage), Minimum Rear Sprocket: 12T., Maximum Front & Rear Sprocket Difference: 24T. (Short Cage), 28T. (Middle Cage) ●6.7 oz. (191g.) (Short Cage) ●Light Alloy•Silver Paint (Bracket & Plate), Light Alloy•Pearl White Paint (Right Link), Light Alloy•High-Tech Gray Paint (Right Pulley Cage), Light Alloy•High-Tech Gray Anodized Finish (Left Link & Left Pulley Cage)



7-SPEED SIS Compatible







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 (Shimano Index System) ●SIS/Friction Changeover, Integral "Light Action" Assist Spring, Sealed Mechanism, Human Engineered Design, Cable End Cover ●SL-5000-FCAI: 2.5 oz. (70g.) ●Light Alloy•Pearl White Paint ●Down Tube Lever ●Lever Clamp Diameter: 28.6mm. ●SIS Application: For Use with 600 ULTEGRA (RD-6400) or Santé (RD-5001) Rear Derailleur

*Conversion parts available for other mounting types.



7-SPEED SIS Compatible



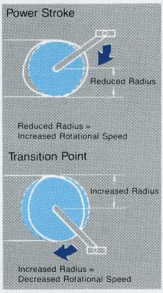
Front Chainwheel & Bottom Bracket Assembly

FC-5000 (Biopace Double, LD Type)
BB-5000 (B.B. Set)

NEW



●Chainwheel: Low Profile, Flush Surface Design, Biopace Chainrings, Available in 160mm. Crank Length ●B.B. Set: Compact Design, Sealed mechanism, Reduced Friction ●24.3 oz. (689g.) (42,52T., 170mm.), 10.4 oz. (295g.) B.B. Set ●Forged Light Alloy•Pearl White Paint (Crank), Light Alloy•Silver Brown Anodized Finish•Pattern Etching (Chainrings), Resin•Chrome Plated (Crank Cap), Nickel Cr-Mo Steel•Black Anodized Finish (B.B. Axle) ●1/2" × 3/32" Chain ●Teeth: 42T, 52T, 53T. (Biopace) ●Crank Length: 160mm., 165mm., 170mm., 172.5mm. ●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-108, 70-W-108 ●Bolt Circle Diameter: 130mm. (LD Type)



biopace
Computer-Designed Drive System



Front Derailleur

FD-5000-B (Band Type)
FD-5000-F (Italian, Brazed-on Type)

●Leading Action Pantagraph Mechanism, Rigid Chain Guide, Sealed Mechanism ●Maximum: 14T. ●Band Type: 3.5 oz. (100g.)●Light Alloy•Silver Paint (Clamp Band), Light Alloy•Pearl White Paint (Right Link) Light Alloy•High Tech Gray Anodized Finish (Left Link), Heat-Treated Steel•Chrome Plated (Chain Guide) ●Clamp Diameter: 28.6mm.



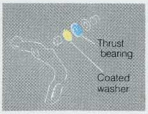


Brake

NEW

BR-5000-49 (Short 49 Type)

●SLR (Shimano Linear Response) System, CAD Developed, One-Piece Brake Shoe with Integral Tire Guide, Aerodynamic Form ●10.9 oz. (310g.) (F & R, Sunken Pivot Bolt Type) ●Forged Light Alloy•Silver Paint (Caliper Arms) ●Sunken Pivot Bolt Types ●Caliper Reach: 39—49mm. ●For SLR system use BR-5000 with SLR-type brake lever and Shimano Outer Cable with Liner



SLR
SHIMANO LINEAR RESPONSE

Freehub

NEW

FH-5000 (Rear, 7-speed)
CS-5000 (Cassette Sprockets)
HB-5000 (Front Hub)

●7-speed SIS Compatible ●Flush Surface Design, Human-Engineered QR Lever, Wider Bearing Placement, Sealed Mechanism, Gum Covered QR Nut, Uniglide Sprockets ●15.2 oz. (430g.) (Rear w/o Sprockets), 8.2 oz. (232g.) (Front), 7.9 oz. (233g.) (Sprockets 12T. – 21T. & Spacer) ●Forged Light Alloy•Pearl Silver Anodized Finish (Hub Shell), Steel•Chrome Plated (Sprockets) ●Teeth: Threaded Sprocket: 12T. – 14T., Spline Sprocket; 13T. – 28T. ●Over Lock Nut Dimensions: Front; 100mm., Rear; 126mm. ●Spoke Holes: 28H, 32H, 36H ●Maximum Spoke Diameter: 2.6mm.

●Standard Sprocket Combination:

7-SPEED SIS Compatible

7-speed	12, 13, 14, 15, 16, 17, 19T. 13, 14, 15, 17, 19, 21, 23T. 13, 14, 15, 16, 17, 19, 21T. 13, 14, 15, 17, 19, 21, 24T. 13, 15, 17, 19, 21, 23, 26T. 13, 15, 17, 19, 21, 24, 28T.

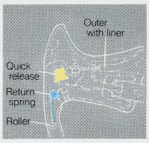


Brake Lever

NEW

BL-5001 (Aero Type)
BL-5002 (Aero Type, Short Reach)

●SLR (Shimano Linear Response) System, One-Touch Quick Release, Smooth Contours, Human Engineered Design. ●9.4 oz. (266g.) (BL-5001, Pair) ●Light Alloy•Pearl White Paint (Lever), Light Alloy (Body) ●Lever Clamp Diameter: 23.8 or 24.2mm. ●Reach: 97.5mm. (BL-5001), 87.5mm. (BL-5002) ●Bracket Cover: White, Gray



SLR
SHIMANO LINEAR RESPONSE

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 SIS Compatible

7-speed	12, 13, 14, 15, 16, 17, 19T. 12, 13, 15, 17, 19, 21, 23T. 13, 14, 15, 16, 17, 19, 21T. 13, 14, 15, 17, 19, 21, 24T. 13, 15, 17, 19, 21, 23, 26T. 13, 15, 17, 19, 21, 24, 28T.



Head Parts

NEW

HP-5000

●Sealed Mechanism, Compact Design, Composite Materials, Non-Loosening Mechanism ●3.5 oz. (100g.) ●Light Alloy•Anodized Finsh (Nut), Stainless Steel•Pearl White Paint (Upper & Lower Cups), Stainless Steel (Upper & Lower Cone) ●Stack Height: 32.5mm.

●Variations:

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









Upgraded Performance Through Human Engineering

To get the most out of your racing bike, you need to get the most out of its components.

Meet 600 Ultegra. The new racing component system that incorporates the latest advances in Shimano human-engineering technology.

600 Ultegra forms a better man-machine interface while offering a higher level of quality, value, and performance than anything else in it's class.

Among its many advanced features, 600 Ultegra offers precise 7-speed SIS shifting which includes a rugged freehub for increased rear wheel and axle strength. The SLR brake system provides highly responsive stopping power, and the positive-grip cleat and pedal allow greater power transfer efficiency and foot stability. The front derailleur shift lever has even been offset to allow faster chainwheel shifting!

This is the design integrity that stands behind the leading edge capability of 600 Ultegra.

That's why we call it Pure Performance.

ure Performance



SHIMANO 600
ULTEGRA

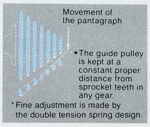


Rear Derailleur

RD-6400

NEW

●6 & 7-Speed SIS Compatible ●Improved Double Servo-Panta Mechanism, Centeron Guide Pulley, Sealed Mechanism, Ceramic Guide Pulley bushings, Double Spoke Barrier, Digital Cable Adjust Mechanism ●Minimum Rear Sprocket: 12T. ●Maximum Rear Sprocket: 28T. ●Maximum Front & Rear Sprocket Difference: 28T. ●76 oz. (216g.) ●Light Alloy•Dark Gray Paint (Bracket & Plate Body), Light Alloy•Silver Paint (Right Link), Light Alloy (Pulley Plates & Left Link)



7-SPEED SIS Compatible





Shifting Lever

SL-6400-BCAI (SIS, Side-Band A Type)

SL-6400-FCAI (SIS, Mount-Brazed-on A Type)

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

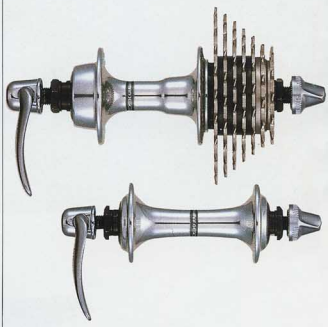
●Same Lever for 6 & 7-Speed SIS (Shimano Index System), SIS/Friction Changeover, Light Action Mechanism, Lever Interchangeability, Human Engineered Design, Sealed Mechanism ●SL-6400-FCAI: 2.1 oz (60g.) ●Light Alloy•Gray Paint ●Down Tube Lever ●Lever Clamp Diameter: 28.6mm. ●Use SIS with RD-6400 Rear Derailleur/FH-6400 Freehub/Shimano UG Chain/Shimano SIS Outer Casing with Liner

*Conversion parts available for other mounting types.

NEW



7-SPEED SIS Compatible





Front Chainwheel & Bottom Bracket Assembly

FC-6400-BP (Biopace Double, LD Type)

BB-6400 (B.B. Set)

NEW

●Low Profile Design, Forged Arm & Spider, Sealed Mechanism, Aerodynamic profile, Biopace Chainrings (FC-6400-BP) ●22.9 oz. (650g.) (42, 52T., 170mm.), 10.9 oz. (308g.) B.B. Set ●Light Alloy (Crank & Chainrings) ●For 1/2" × 3/32" Chain ●Teeth: Inner (Biopace): 42T., Outer (Biopace): 52, 53T. ●Crank Length: 165mm., 170mm., 172.5mm., 175mm. ●Crank Thread: English BC 9/16" × 20 T.P.I. ●Cup Thread: English 1.37 × 24 T.P.I., Italian M36 × 24 T.P.I. ●B.B. Size: 68-W-113, 70-W-115 ●Bolt Circle Diameter: 130mm. (LD Type)



biopace
Computer-Designed Drive System







Front Derailleur

NEW

FD-6400-B (Band Type)
FD-6400-F (Italian, Brazed-on Type)

●Leading Action Pantagraph Mechanism, Compact Design, Rigid Chainguide ●Maximum: 14T. ●Band Type: 3.7 oz. (104g.) ●Light Alloy•Dark Gray Paint (Clamp Band), Light Alloy•Silver Paint (Right Link), Heat Treated Steel•Chrome Plated (Chain Guide)

Freehub

NEW

FH-6400-6/7 (Rear, 6-speed/7-speed)
CS-6400 (Cassette Sprockets)
HB-6400-F (Front Hub)

●6 & 7-speed SIS Compatible ●Compatible with 6 & 7-speed clusters, Bolt-on Type Freewheel Mechanism, Sealed Mechanisms, Burnished Bearing Races, New Uniglide Tooth Design, Unibalance System ●14.9 oz. (423g.) (Rear w/o Sprockets), 7.5 oz. (212g.) (Front), 7.9 oz. (233g.) (7-speed Sprockets; 12T. ~ 21T. & Spacer) ●Light Alloy•Anodized Finish (Hub Shell), Resin•Dark Gray Metallic Finish (Dust Cap), Steel•Silver Finish (Sprockets) ●Over Lock Nut Dimensions: Front; 100mm., Rear; 126mm. ●Spoke Holes: 28H, 32H, 36H (Front), 32H, 36H (Rear) ●Spoke Hole Diameter: ∅2.6mm. ●For 1/2" × 3/32" Chain (Narrow Type for 7-speed) ●Standard Sprocket Combination:

6-speed	13, 14, 15, 16, 17, 18T. 13, 14, 15, 17, 19, 21T. 13, 14, 17, 19, 21, 23T. 13, 15, 17, 19, 21, 24T. 13, 15, 17, 20, 23, 26T. 13, 15, 17, 20, 24, 28T.	7-speed	12, 13, 14, 15, 16, 17, 19T. 12, 13, 14, 15, 17, 19, 21T. 13, 14, 15, 17, 19, 21, 24T. 13, 14, 15, 16, 17, 19, 21T. 13, 15, 17, 19, 21, 23, 26T. 13, 15, 17, 19, 21, 24, 28T. 15, 16, 17, 18, 19, 20, 21T.

●Teeth:

	6-speed	7-speed
Threaded Sprockets	12—16T. (6S mark)	12—16T. (7S mark)
2nd Gear (spline type) w/spacer	13T. (6S mark)	13T. (7S mark)
Splined Sprockets	14—26T./28T./30T./32T./34T.	
Spacer Width	3.65mm (Light gray)	2nd—3.30mm (except 13T.) 3rd to low—3.1mm (7S mark) (Dark gray)

7-SPEED SIS Compatible

Head Parts

NEW

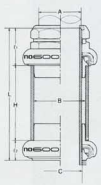
HP-6400

●Compact & Light Weight, New Improved Sealed Mechanism, Burnished & Polished Finish ●3.5 oz. (100g.) ●Light Alloy (Upper & Lower Cup), Cr-Mo Steel (Races), Stainless Steel (Lower Cone) ●Variations:

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

■Dimensions

ℓ_1	22.0mm
ℓ_2	11.5mm
H	Head Tube Length
L	H+33.5mm
A	22.3mm
B	30.2mm
C	26.4mm
Thread	BC1" × 24T

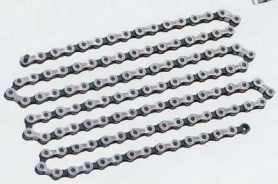












Brake

NEW

BR-6400-49 (Short 49 Type)
BR-6400-57 (Long 57 Type)

●SLR (Shimano Linear Response) System, Thrust Bearing & Coated Pivot Washer, Spring Sleeve, One-Piece & Low Profile Brake Shoe ●12.7 oz. (360g.) (F & R, 49 Type) ●Light Alloy

*For SLR system use BR-6400, BL-6400/BL-6401, and Shimano Outer Cable with Liner.

SLR SHIMANO LINEAR RESPONSE



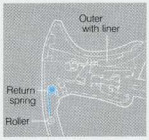
Brake Lever

NEW

BL-6400 (Standard Type)
BL-6401 (Aero Type)
BL-6402 (Aero Type, Short Reach)

●SLR (Shimano Linear Response) System, Human Engineered Design, Aero Cable Guides ●9.2 oz. (328g.) (BL-6401, Pair) Including Rubber Cover ●Light Alloy ●Hooded Lever with Rubber Cover ●Lever Clamp Diameter: 23.8mm. ~ 24.2mm. ●Bracket Cover: Black, White

SLR SHIMANO LINEAR RESPONSE



Pedal

NEW

PD-6400

●Positive Grip Shoe Cleat, Same Road Clearance as Dura-Ace, Aerodynamic Design, Sealed Mechanism, Easy-Maintenance Cartridge Axle, Compound Structure of Resin Bushing and Cup & Cone Bearings ●14.5 oz. (410g.) (Pair, Toe Clip L Size) ●Light Alloy (Body), Cr-Mo Steel (Axle) ●Crank Thread: BC 9/16 × 20T.P.I. ●Toe Clip Size: M, L, LL



Seat Pillar

NEW

SP-6400-A (Round Tube) A-Type
SP-6400-B (Semi Oval Tube) B-Type

●Aerodynamic Design, Hexagon Release ●10.0 oz. (284g.) (SP-6400-B; 27.2mm.) ●Light Alloy•Anodized Finish ●Outside Diameter: 25.0mm., 27.2mm.

Handle Stem

NEW

HS-6400

●Aerodynamic Design, Hexagon Release ●10.0 oz. (286g.) (100mm.) ●Light•Alloy Anodized Finish ●Extension: 80mm., 90mm., 100mm., 110mm., 120mm., 130mm., ●Handle Stem Diameter: 22.2mm. ●Handle Bar Clamp Diameter: 25.4mm., 260mm.

UG Chain

CN-6208 (Silver)

●Narrow Type Uniglide Chain, Bushingless Design, ●Steel ●Surface Treatment: Roller Link Plate; Black Finish, Pin Link Plate; Silver Finish

SHIMANO 105

The System Component Group for the Sport Cyclist.



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 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 ligher 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.



The



SIS
SHIMANO
INDEX SYSTEM

biopace
COMPUTER DESIGNED
DRIVE SYSTEM

SLR
SHIMANO
LINEAR RESPONSE

1 Fast, Precise S.I.S. Shifting

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

2 Greater Pedaling Efficiency

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

3 Improved Braking Control

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

New Generation of Performance



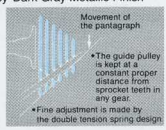
SHIMANO 105



Rear Derailleur

RD-1050

●6-speed SIS Compatible ●Double Servo Panta Mechanism, Centeron Guide Pulley, Sealed Mechanism, Sintered Alloy Guide Pulley Bushing, Double Spoke Barrier, Digital Cable Adjust Mechanism ●Minimum Rear Sprocket: 12T. ●Maximum Rear Sprocket: 28T. ●Maximum Front & Rear Sprocket Difference: 28T. ●9.0 oz. (257g.) ●Light Alloy (Bracket & Plate Body), Light Alloy•Dark Gray Metallic Finish (Right Link)



SIS Compatible





Shifting Lever

SL-1050-BCAI (SIS, Side-Band A Type)

SL-1050-FCAI (SIS, Mount-Brazed-on A type)

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

●6-speed SIS (Shimano Index System) ●SIS/Friction Changeover, Clutch Spring for Light Action Shifting, Human Engineered Design, Sealed Mechanism ●SL-1050-FCAI: 2.4 oz. (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





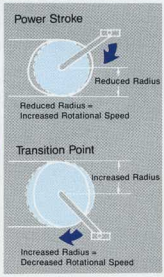
Front Chainwheel & Bottom Bracket Assembly

FC-1050-BP (Biopace Double, LD Type)

BB-1050 (B.B. Set)

●Low Profile & Aerodynamic Design, Biopace Chainring ●2.3 oz. (664g.) (42, 52T., 170mm), 11.5 oz. (327g.) B.B. Set ●Light Alloy (Crank/Chain Ring) ●For 1/2" × 3/32" Chain ●Chainwheel: Inner; 42T., Outer; 52T. ●Crank Length: 162.5mm, 165mm, 170mm, 172.5mm, 175mm ●Crank Thread: 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-113, 70-W-115 ●Bolt Circle Diameter: 130mm (LD Type)





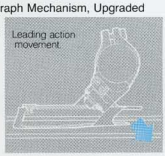
biopace Computer Designed Drive System



Front Derailleur

FD-1050-B (Band Type)
FD-1050-F (Italian, Brazed-on Type)

●Leading Action Pantagraph Mechanism, Upgraded Chain Guide Rigidity ●Maximum: 14T. ●Band Type: 3.5 oz. (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



Freehub

FH-1050-6 (Rear, 6-speed)
CS-1000 (Cassette Sprockets)
HB-1050-F (Front Hub)

●6-speed SIS Compatible ●Sealed Mechanism, New Uniglide Teeth, Bolt-Secured Cassette Freewheel, Unibalance System ●14.6 oz. (415g.) (Rear w/o Sprocket), 7.7 oz. (218g.) (Front), 7.8 oz. (221g.) (Sprocket 13T. – 24T. & Spacer) ●Light Alloy (Hub Shell), Resin-Dark Gray Metallic Finish (Dust Cap), Steel-Black Finish (Sprocket) ●Teeth: Threaded Sprocket; 13T. – 15T., Spline Sprocket; 14T. – 26T., 28T., 30T., 32T., 34T. ●Over Lock Nut Dimensions: Front; 100mm, Rear 126mm ●Spoke Holes: 32H, 36H ●Spoke Hole Diameter: ∅2.6mm ●For 1/2" – 3/32" Chain

●Standard Sprocket Combination:

6-speed	13, 14, 15, 17, 19, 21T. 13, 15, 17, 19, 21, 24T. 13, 15, 17, 20, 23, 26T. 13, 15, 17, 20, 24, 28T. 13, 15, 18, 21, 25, 30T. 13, 15, 18, 22, 26, 32T.

SIS Compatible

Rear Hub

HB-1050-6 (Rear/6-speed)

●Sealed Mechanism ●11.5 oz. (327g.) ●Light Alloy (Hub Shell), Resin-Dark Gray Metallic Finish (Dust Cap) ●Over Lock Nut Dimensions: 126mm ●Spoke Holes: 32H, 36H ●Spoke Hole Diameter: ∅2.6mm.

Head Parts

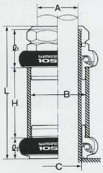
HP-1050

●Composite Structure, Sealed Mechanism ●4.6 oz. (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 × 24 T.P.I.	30.2mm	26.4mm

■Dimensions

ℓ_1	21.2mm
ℓ_2	11.5mm
H	Head Tube Length
L	H+34.5mm
A	22.4mm
B	30.2mm
C	26.4mm
Thread	BC1" × 24T









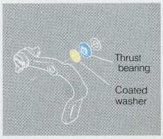
Brake

BR-1050-49 (Short 49 Type)
BR-1050-57 (Long 57 Type)

●SLR (Shimano Linear Response) System, Thrust Bearing & Coated Pivot Washer, Spring Sleeve, One-Piece & Low Profile Brake Shoe ●11.8 oz. (335g.) (F & R, 49 Type) ●Light Alloy

*For SLR system use BR-1050, BL-1050/BL-1051, and Shimano Outer cable with Linear.

SLR SHIMANO LINEAR RESPONSE



Brake Lever

BL-1050 (Standard Type)
BL-1051 (Aero Type)
BL-1052 (Aero Type, Short Reach) NEW

●SLR (Shimano Linear Response) System, Anatomical Design, Outer Guide for easy cable change (Aero Type) ●7.1 oz. (202g.) (BL-1050, Pair), 8.9 oz. (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

SLR SHIMANO LINEAR RESPONSE



Pedal

PD-1050

●Aerodynamic Design, Same Road Clearance as Dura-Ace, Compound Structure of Resin Bushing and Cup & Cone Bearings ●9.9 oz. (280g.) (Pair), 1.6 oz. (46g.) (Pair of Toe Clip L Size) ●Light Alloy (Body), Cr-Mo Steel (Axle), Resin-Dark Gray Metallic Finish ●Crank Thread: English BC 9/16 × 20 T.P.I. ●Toe Clip Size: M, L, LL



SHIMANO DEORE XT

The To



SIS Shifting Precision
Goes Off-Road!

SIS

The 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.

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.

tal Control System



Advanced Shimano functions go off-road with Deore XT.



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.

And the New Deore XT freehub eliminates the problem of bent axles once and for all through the rugged freehub design which reduces rim offset and places the bearings closer to the dropouts.

This is why New Deore XT is the world standard in ATB components.



SHIMANO DEORE XT

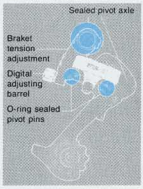




Rear Derailleur

RD-M730-GS (Long Cage) NEW
RD-M730-SGS (Super Long Cage)

●6-speed 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 Sprocket: Long; 26T.~30T., Super Long; 28T.~32T. (Using SFR, SF Fork End) ●Minimum Rear Sprocket: 12T. ●Maximum Front & Rear Sprocket Difference: Long; 36T., Super Long; 38T. ●Super Long: 9.3 oz. (265g.) ●Light Alloy



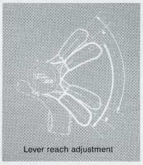
SIS Compatible



Shifting Lever

SL-M730

●6-speed SIS (Shimano Index System) ●SIS/Friction Changeover Light Action Mechanism, Low Profile Design, 3-Step Lever Adjustment, 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/Shimano SIS-SP Outer Casing with Liner



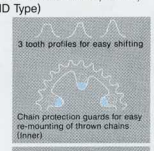
SIS Compatible

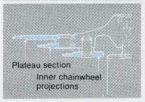


Front Chainwheel & Bottom Bracket Assembly

FC-M730 (Biopace II Triple, MD Type)
BB-M730 (B.B. Set)

●Biopace II Chainrings, Low Profile Design, Computer Aided Design, Sealed Mechanism ●25.0 oz. (707g), (26T., 36T., 46T., 170mm) ●11.0 oz. (310g), B.B. Set ●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: English BC 9/16" × 20 T.P.I., ●Cup Thread: English 1.37 × 24 T.P.I., 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) ●Bolt Circle Diameter: Inner; 74mm, Outer & Middle; 110mm (MD Type)





biopace II Computer Designed Drive System



PD-M730



PD-M731







Freehub

FH-M730-NT (6-speed Nut Type)
FH-M730-QR (6-speed Quick Release Type)
HB-M730-F (Front Hub)

●6-speed 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), 8.1 oz. (231g) (Quick Release Type) Rear (Except Sprockets): 14.9 oz. (422g) (Nut Type) 16.0 oz. (451g) (Quick Release Type), Cassette Sprockets: 9.5 oz. (270g) (12, 14, 17, 20, 24, 28T.) ●Light Alloy-Buff Finish (Black Finish Available) ● Over Lock Nut Dimensions: Front; 100mm, Rear; 126mm, 130mm ●36H., 32H. ●Teeth: 12T. ~ 16T. Top (Threaded), 13T. ~ 26T., 28T., 30T., 32T. (Spline) ●For 1/2" × 3/32" Chain ●Standard Sprocket Combinations:

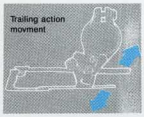
6-speed	12, 14, 16, 19, 22, 26T. 13, 15, 17, 20, 23, 26T. 12, 14, 17, 20, 24, 28T. 13, 15, 17, 21, 24, 28T. 12, 14, 17, 20, 25, 30T. 13, 15, 18, 22, 26, 32T.

SIS Compatible

Front Derailleur

FD-M730

●Trailing Action Parltagraph Mechanism, Rigid Chainguide ●4.0 oz. (112g) (Normal Band Type) ●Forged Light Alloy (Right Link), Light Alloy (Clamp Band), Heat Threated Steel-Chrome Plated (Chain Guide)



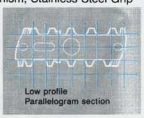
Capacity (Front gear difference)	FD-M730-AL (Alpine)	Round gear . . . . . 8T. ~ 26T.
		Biopace gear (CR-BP10) . . . 8T. ~ 22T.
	FD-M730-HS (Half-step)	Round gear . . . . . 5T. ~ 26T.
		Biopace gear (CR-BP10) . . . 5T. ~ 22T.
Band diameter	Band type . . . . . Ø28.0 ~ 28.6mm (1-3/32" ~ 1-1/8")	
	EC-type (End-less clamp type) . . . . . Ø31.8mm (1-1/4")	

Pedal

PD-M730
PD-M731 (Comp Type)

NEW

●Low Profile Design, Parallelogram Shape (PD-M730), Contact-Type Sealed Mechanism, Stainless Steel Grip Pins, Toe Clip/Reflector Attachable ●14.5 oz. (412g) (PD-M730 Pair), 12.8 oz. (363g.) (PD-M731 Pair) ●Light Alloy (Body & Plate), Cr-Mo Steel (Axle) ●Crank Thread: English BC 9/16" × 20 T.P.I.



Head Parts

HP-M730

NEW

●Off-Road Type ●Sealed Mechanism, Inside Vapor Corrosion, Inhibitor Seal Tape for Head Tube, Stainless Steel Lower Cup & Cone ●3.9 oz. (110g) ●Light Alloy-Black Anodized Finish (Lock Nut), Steel & Rubber-Black Finish (Upper Cup), Stainless-Black Finish (Lower Cup), Stainless Steel (Lower Cone), ●Height; Lower Stack 11.5mm, Total Stack 33.0mm ●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



Seat Post Quick-Release

SQ-M730

●Easy Operation, Position-Set Spring ●2.6 oz. (73g) ●Steel ●Shaft Adjustment Length: 36 ~ 43mm, 26 ~ 33mm ●Shaft Diameter: ∅6mm or ∅8mm

Chain Deflector

DF-M730

●Keeps the chain from jamming between the tire and chainstay ●0.3 oz. (9g) ●Resin

Brake Lever

BL-M730

●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.)



U-Brake

BR-M731

●Rigid Computer Designed Shape, Chainstay Mounting Position, Spring Tension Adjuster, Internal and Sealed Spring Design, Low-Profile Brake Shoe, Shark Tooth ●10.0 oz. (286g.) 1 unit ●Light Alloy



Cantilever Brake

BR-M730

●Rigid Computer Designed Shape, Sealed Internal Spring Design, Spring Tension Adjuster, Low-Profile Brake Shoe, Easy Cable Attachment ●6.7 oz. (190g.)/Pair ●Light Alloy ·Buff Finish (Brack Finish Available)





SHIMANO DEORE

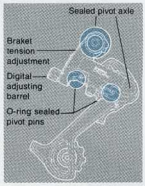




Rear Derailleur

RD-MT60

●6-speed 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. ●11.0oz.(311g) ●Light Alloy



SIS Compatible





Shifting Lever

SL-MT60

●6-speed SIS (Shimano Index System) ●SIS/Friction Changeover, Light Action Mechanism, Digital Adjustment Mechanism ●74 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, FH-MT60 Freehub/Shimano SIS Outer Casing with Liner



SIS Compatible







Front Chainwheel & Bottom Bracket Assembly

NEW

FC-MT60 (Biopace Triple, MD Type)

BB-MT60 (B.B. Set)

●Biopace Chainring, Low Profile Design, One-Piece Forged Crank, Computer Aided Design, Sealed Mechanism (B.B. Set) ●26.6 oz. (752g.) (28T., 38T., 48T., 170mm.) 11.3 oz. (320g.) (B.B. Set) ●Light Alloy•Anodized Finish (Crank & Chain Ring), Cr-Mo Steel•Black Finish (Axle) ●For 1/2" × 3/32" Chain ●Teeth: Inner; 28T., Middle; 38T., 44T., Outer; 48T., 50T. ●Crank Length: 170mm., 175mm. ●Crank Thread: BC 9/16" × 20 T.P.I. ●Cup Thread: English BC 1.37 × 24 T.P.I. ●B.B. Size: 68-T-117.5 (D-3A), 68-T-122.5 (D-3NL) ●Bolt Circle Diameter: Inner; 74mm., Outer & Middle; 110mm. (MD Type)

biopace Computer Designed Drive System



Freehub

FH-MT60-NT (6-speed, Nut Type)
FH-MT60-QR (6-speed, Quick Release Type)
HB-MT60-F (Front Hub)

NEW

●6-speed SIS Compatible ●Bolt-Secured Freewheel, Contact type Sealed Mechanism, High Strength Freewheel Body ●Front: 7.3 oz. (206g.) (Nut Type), 8.1 oz. (231g.) (Quick Release Type), Rear (Except Sprocket): 14.9 oz. (422g.) (Nut Type), 16.0 oz. (451g.) (Quick Release Type), Sprocket (6-speed 13T. – 30T.) & Spacer: 9.5 oz. (270g.) ●Light Alloy (Hub Shell), Cr-Mo Steel•Black Finish (Axle), Steel•Silver Finish (Sprocket) ●Teeth: Threaded Sprocket (Top): 13T. – 16T., Spline Sprocket; 14T. – 26T., 28T., 30T., 32T., 34T. ●Over Lock Nut Dimensions: Front; 100mm., Rear; 126mm., 130mm. ●Spoke Holes: 36H ●Spoke Hole Diameter: ∅2.6mm. ●For 1/2" × 3/32" Chain

SIS Compatible



Brake Lever

BL-MT60

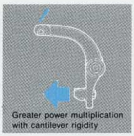
●Full-Fit Design, Safety Clamp Design, Digital Lever-Reach Adjustment (4 Positions), 2mm. Diameter Inner Cable Available ●11.0 oz. (310g.) Pair ● Light Alloy ●Lever Clamp Diameter: 7/8" (22.2mm.)



U-Brake

BR-MT61

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





NEW

Front Derailleur

FD-MT60

●Trailing Action Pantagraph Mechanism, Rigid Chainguide ●4.0 oz. (113g.) (Normal Band Type) ●Light Alloy (Body & Clamp Band), Heat Treated Steel•Chrome Plated (Chainguide)

Capacity (Front gear difference)	FD-MT60-AL (Alpine)	Round gear . . . . . 8T. – 26T.
		Biopace gear (CR-BP10) . . . 8T. – 22T.
	FD-MT60-HS (Half-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")	

Cantilever Brake

BR-MT60

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



Pedal

PD-MT60

NEW

●Low Profile Design, Parallelogram Shape, Contact Type Sealed Mechanism, Toe-Clip/Reflector Attachable ●17.5 oz. (495g.) (Pair) ●Light Alloy (Body), Steel•Black Finish (Cage), Cr-Mo Steel•Black Finish (Axle) ●Crank Thread: BC 9/16" × 20 T.P.I.

Head Parts

HP-MT60

NEW

●Off-Road Type ●Sealed Mechanism, Inside Vapor Corrosion Inhibitor Seal Tape for Head Tube, Stainless Steel Lower Cone ●4.3 oz. (121g) ●Steel (Lock Nut), Steel & Rubber•Black Finish (Upper Cup), Steel•Black Finish (Lower Cup), Stainless Steel (Lower Cone), ●Height; Lower Stack 11.5mm, Total Stack 33.5mm ●Variations:

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

Tool

TL-RD10

●Rear Dropout Centering and Dropout Hanger Alignment Tool



Tool

TL-FW30

●Multiple Freewheel Removal Tool (for MF-7400, MF-Z012)



Tool

TL-CT10

●Cable Cutter (for SIS-SP cable and normal cables, outer casings.)



Tool

TL-CN20

●Chain Cutter (for both UG chain and ordinary chain.)



Dura-Ace Grease

●Special grease water resistant



Dura-Ace Brake Shoe Set

(2 shoes)

Shimano 600 ULTEGRA Brake Shoe Set

(4 shoes)



High Performance Brake Shoe Set

(4 shoes)



Low-Profile Cantilever Brake Shoe Set

(2 shoes for BR-M730, BR-MT60 and most other Cantilever Brakes)



Low-Profile U-Brake Shoe Set

(2 shoes for BR-M731, BR-MT61)

Deore XT Shark Tooth

EXAGE

The System Component Group for the Recreational Cyclist.

Exage is the smart new 3-group component system from Shimano for derailleur-equipped sport, all-terrain, and city-type bicycles.
Exage realizes more style while creating a new standard of cost-performance value for these bicycles ridden by recreational cyclists.
In addition to precise rear derailleur SIS shifting, energy-efficient Biopace chainwheels, and the linear-response SLR brake system, Exage takes the SIS advantage one step further with a new SIS front chainwheel shifting function.
Exage brings the advantages of the Shimano system component concept and it's advanced functions to a wider range of cyclists and cycling styles.

EXAGE sport





EXAGE mountain

All Components Finished in Graphite Gray Metallic

The Shimano Components

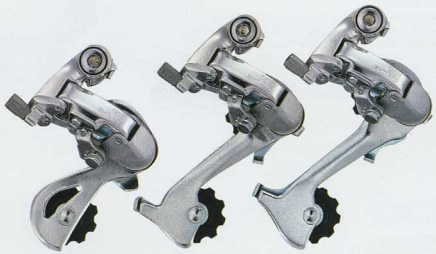


Rear Derailleur

RD-M531-GS (Long Cage)

●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 & Plate Body), Steel (Right & Left Link, Pulley Plate)

SIS Compatible



Rear Derailleur NEW

RD-L541-SS (Short Cage)

RD-L541-GS (Long Cage)

RD-L541-SGS (Super Long Cage)

●SIS Compatible ●Pre-Select Mechanism with Light Action, Double Servo-Panta Mechanism, Centeron Guide Pulley, 6mm Hexagon Fixing Bolt, Chain Retainer (Long Cage, Super Long Cage) ●Maximum Rear Sprocket: Short 28T., Long 26T.~30T., Super Long 28T.~32T. ●Maximum Front & Rear Sprocket Difference: Short 28T., Long 36T., Super Long 38T. ●11.1 oz. (314g) Short, 12.1 oz. (342g) Long, 12.2 oz. (345g) Super Long ●Light Alloy (Bracket Body), Steel-Silver Finish (Plate Body), Steel (Right & Left Link, Pulley Plate)

SIS Compatible



SIS Compatible

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)



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)

The Shima



Shifting Lever

SL-S434-BCAI (SIS, Band A Type)

SL-S434-FCAI (SIS, Brazed-on A Type)

*"C" of Model Number means Italian Type (Fixing Bolt is 5mm Diameter)

●SIS (Shimano Index System) ●SIS/Friction Changeover, Light Action Lever ●SL-S434-FCAI: 2.5 oz. (72g.) ●Attachment Position: Down Tube ●Lever Clamp Diameter: 1-1/8" ●Use SIS with PD-6400, RD-1050, RD-L532-SS, RD-M531, RD-L541 Rear Derailleur/MF-Z012 Freewheel/FH-6400, FH-1050 Freehub/Shimano SIS Outer Casing with Liner

*Conversion parts available for other mounting types

SIS Compatible



Shifting Lever

SL-S441

NEW

●SIS (Shimano Index System) ●SIS/Friction Mode Switch, Light Action Shifting ●4.9 oz. (141g.) ●Light Alloy, Resin, Steel ●Attachment Position: Handlebar ●Lever Clamp Diameter: 7/8" (22.2mm) ●Use SIS with RD-L523-SS, RD-M531, RD-L541 Rear Derailleur/ MF-Z012 Freewheel/ Shimano SIS-SP Outer Casing with Liner

SIS Compatible



Shifting Lever

SL-MS55

●SIS (Shimano Index System) ●SIS/Friction Mode Switch ●7.2 oz. (203g., Pair) ●Light Alloy and Resin ●Handleber Use ●Lever Clamp Diameter: 7/8" (22.2mm) ●Use SIS with RD-M531, RD-L541 RD-M730, RD-MT60 Rear Derailleur/ MF-Z012 Freewheel/FH-1050, FH-M730, FH-MT60 Freehub/Shimano SIS-SP Outer Casing with Liner

SIS Compatible



Shifting Lever

SL-MS41

NEW

●SIS (Shimano Index System) ●6.4 oz. (182g, Pair) ●Light Alloy, Resin and Steel ●Handlebar Use ●Use SIS with RD-M531, RD-L541 Rear Derailleur/MF-Z012 Freewheel/FH-1050, FH-M730, FH-MT60 Freehub/ Shimano SIS-SP Outer Casing with Liner

SIS Compatible



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)





BL-L330



BL-L331



BR-Z570
(57 Type)



BR-Z640
(64, 72, 79 Type)



BL-Z32

BL-Z325-BQ

BL-Z325-B

BL-Z326

no Components

Brake

BL-L490-49 (Short-49 Type)
BR-L570-57 (Long-57 Type) NEW

●SLR (Shimano Linear Response) System ●Coated Pivot Washer, Spring Sleeve, One-Piece & Low Profile Brake shoe ●355g. (Front & Rear 49 Type) ●Light Alloy ●For SLR system use BL-L490, L570 with SLR-type brake lever and Shimano Outer Cable with Liner

SLR SHIMANO LINEAR RESPONSE

Brake Lever

BL-L330 (Standard Type)
BL-L331 (Aero Type)

●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

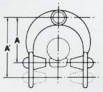
SLR SHIMANO LINEAR RESPONSE

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)



Front Derailleur

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

●Spring Cover, Trap-Ease Mechanism ●Maximum: 18T. (Short), 27T. (Long), Minimum: 6T. (Long) ●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)



Multiple Freewheel

MF-Z012

●6-speed SIS Compatible ●15.9 oz. (451g) ●Silver & Brown 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.

SIS Compatible



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, Spindie/Cr-Mo Steel, Cap, Reflector & Dust Seal/Reain ●Crank Thread: English BC 9/16 × 20 T.P.I., UNC 1/2 × 20 T.P.I.



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

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.

Racing Wheel Covers
•Nylon lined inside surface with water resistant rubberized outer skin.

Shimano Freehub System

Features:

1. Splined Design—All of the uniglide type SIS sprockets slide on and off the same size spline for quick and easy replacement.
(Only the top gear is threaded)

2. Uniglide Tooth Profile—All sprockets incorporate precise-shifting SIS type uniglide twist-tooth profiles.

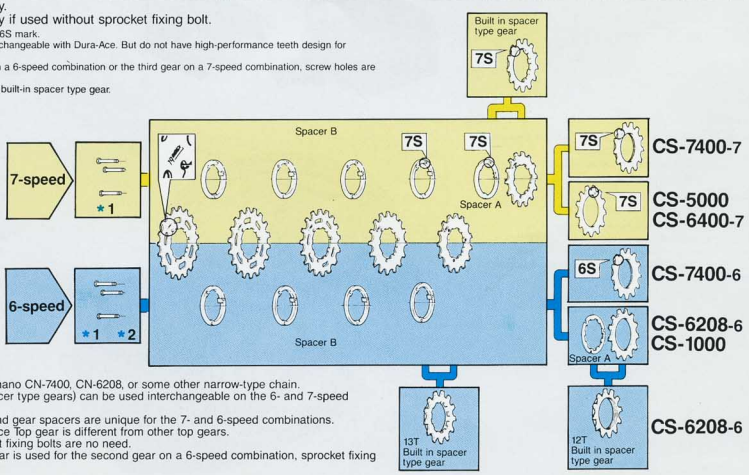
3. Advantages of Freehub Design—
- Unibalance design reduces wheel dish to make a stronger wheel.
- Bearings are placed closer to the frame dropout for better hub support, less axle flex, and increased power transfer efficiency.

Great Interchangeability Among the Freehubs

Series	DURA-ACE		Santé/600 ULTEGRA/Silver	600EX/Silver	Standard/Black
Model No.	CS-7400-7	CS-7400-6	CS-5000 CS-6400-7	CS-6208-6	CS-1000
	For 7-speed	For 6-speed	For 7-speed	For 6-speed	For 6-speed
Top Gear (threaded gear)	7S 12—16T.	6S * 12—16T.	7S 12—16T.	12—16T.	13—16T.
Built-In Spacer Type Second Gear	13 INDEX. 7S 13—17T.	13 INDEX. 6S * 13T.	13 INDEX. 7S 13T.	13 INDEX. 6S 13T.	
Other Spline Gears (including flat type second gear)	18 INDEX. 14-26, 28,		18 INDEX. *2 14-26, 28, 30, 32, 34T.		18 INDEX. *1 *2 14-26, 28, 30, 32, 34T.
Sprocket Spacer A	No Need *3	No Need	Plastic: dark gray 3.3mm 7S For second gear • Sprocket spacer A is unnecessary if a 13-teeth sprocket is used.	Steel • Sprocket spacer A is unnecessary if a 12-teeth sprocket is used.	For top gear
Sprocket Spacer B	Steel: Silver 3.1mm	Steel: Gray 3.65mm	Plastic: dark gray 3.15mm 7S For third gear-low gear	Plastic: light gray 3.7mm For second gear-low gear • Sprocket spacer B is unnecessary if a 13-teeth sprocket is used.	3.7mm For second gear-low gear
Sprocket Fixing Bolt	No Need		21.5mm	23.2mm	

⟺ Denotes Interchangeability.
➡ Denotes Interchangeability if used without sprocket fixing bolt.

* Some 6-speed gears do not have the 6S mark.
* 1: Standard spline sprockets are interchangeable with Dura-Ace. But do not have high-performance teeth design for Dura-Ace.
* 2: When using for the second gear on a 6-speed combination or the third gear on a 7-speed combination, screw holes are necessary.
* 3: Because the second gear must be built-in spacer type gear.



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 interchangeable on the 6- and 7-speed combinations.
- Top gears, built-in-type gears, and gear spacers are unique for the 7- and 6-speed combinations.
- The thread dimension of Dura-Ace Top gear is different from other top gears.
- *1: In case of Dura-Ace, sprocket fixing bolts are no need.
- *2: When built-in spacer type gear is used for the second gear on a 6-speed combination, sprocket fixing bolts are no need.

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.

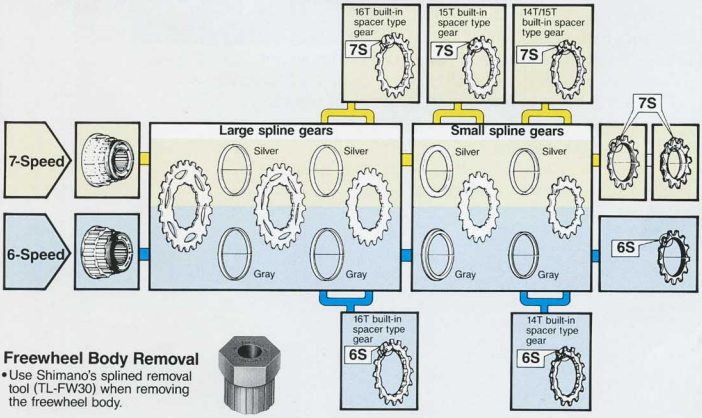
Great Interchangeability Among the Freewheels

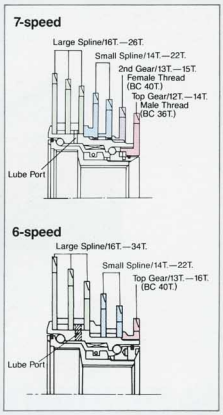
- All 6-speed freewheels are SIS compatible and offer complete sprocket interchangeability. This means freewheel combinations ranging from 13—16T. to 16—34T. are possible from only 28 sprockets and 3 spacer types. The result is maximum flexibility.
- Dura-Ace and Santé narrow-spaced 7-speed SIS freewheels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



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



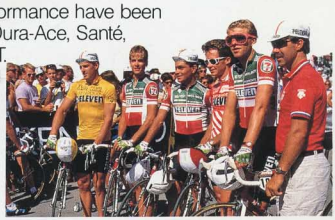
Shimano Industrial Co., Ltd. is composed of the bicycle component, fishing tackle, and cold forging divisions whose products are marketed throughout a world-wide sales, marketing & service network.

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 from system component groups like Dura-Ace, Santé, 600 Ultegra, Shimano 105, and New Deore XT. These advanced components have been supported by technical breakthroughs such as Biopace chainrings, SIS shifting, and the state-of-the-art SLR brake system. 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.

SHIMANO

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