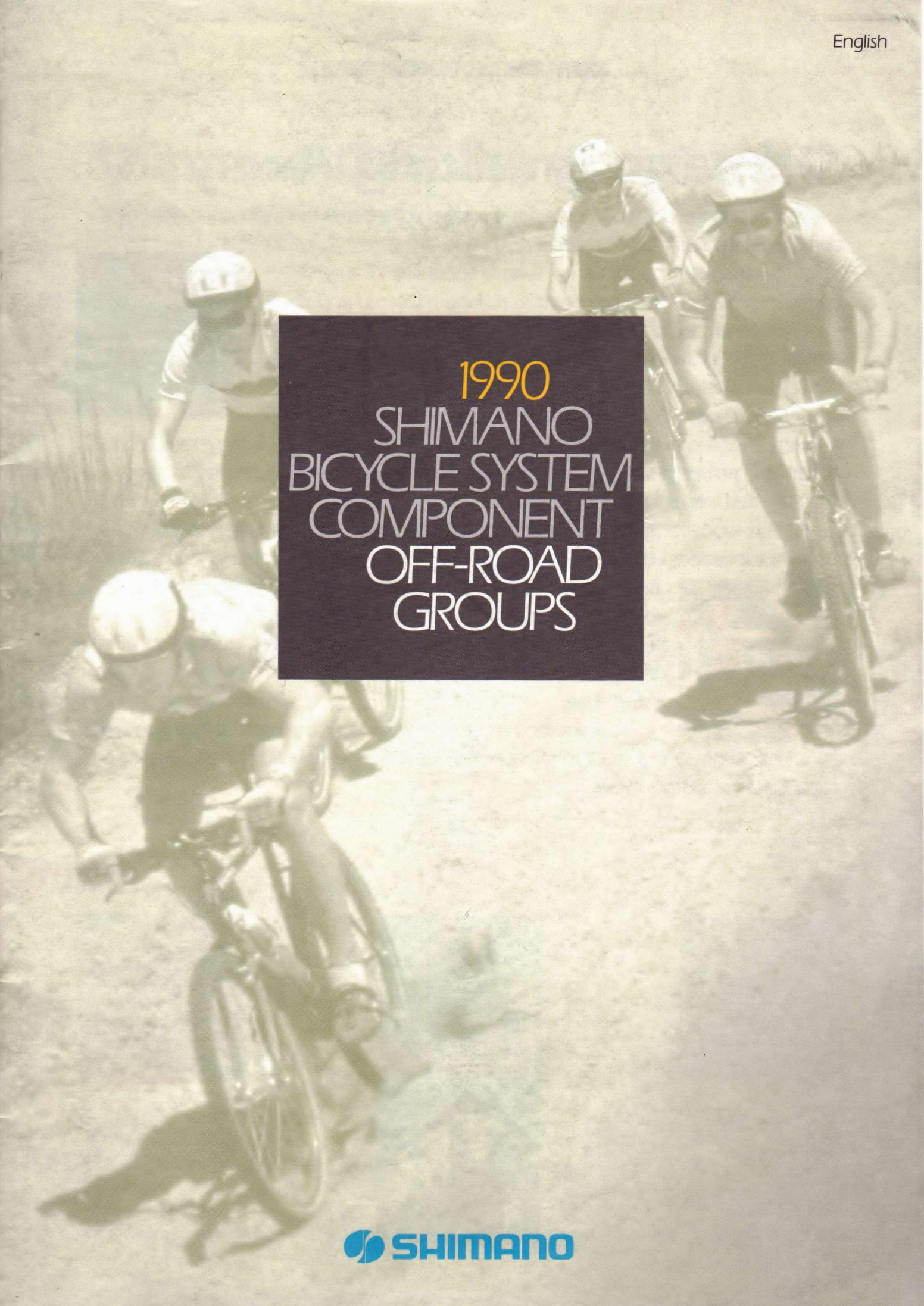
English

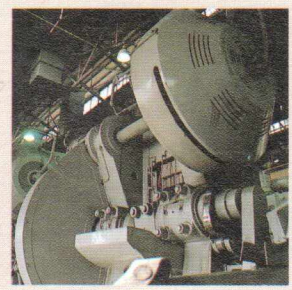


1990 SHIMANO BICYCLE SYSTEM COMPONENT OFF-ROAD GROUPS

SHIMANO

Shimano Breaking Away

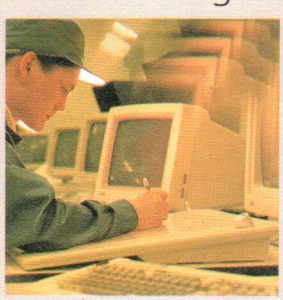
Shimano continues to work toward the creation of a better bio-mechanical interface between the cyclist and the bicycle.



It starts with the Shimano "system approach." Each component is designed from the start to be a balanced and integrated member of a complete and unified group. The result is a higher level of synergy. A performance whole greater than the sum of its parts.

The resources of our extensive R&D program supplement and enhance the system approach. Here is where human-engineering research, advanced computer simulation techniques, and new materials technologies are implemented into Shimano components.

This work has led to leading edge functions like the Shimano Index System, Dura-Ace Integrated-8, and SLR brake system; and advanced components like the Biopace chainring, rear Freehub, and Hyperglide sprockets. This expertise has laid the foundation for Shimano Total Integration, a revolutionary bicycle control system in which steering, braking, and shifting can be done while keeping the hands safely on the handlebars.



Shimano has broken away from the pack. What was once an art has evolved in a modern science. The result is a new world of performance capabilities for today's cyclist.



Shimano Off-The Road

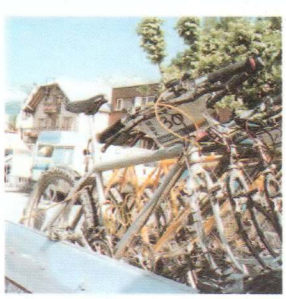
Off-road riding poses new challenges, and new rewards, to cycling enthusiasts. Born in the United States, off-road cycling has become a boom sport and is quickly gaining popularity in Europe, Japan, and around the world.

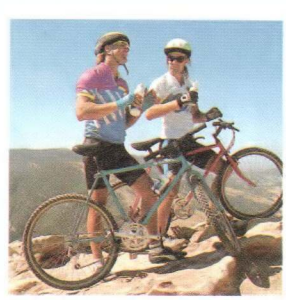
The dangers of riding in the rough make it more important than ever to have as much control as possible over the bicycle. This means that ATB components must deliver a higher level of response and bio-mechanical interaction between the rider and the bicycle.

The Shimano Philosophy is based on improving the off-road bicycle in this way. Our pioneering work in developing the first specialized component groups for the ATB has helped to define the high level of performance that today's quality all-terrain bicycle is capable of.

Shimano off-road components, featuring advanced functions like SIS, SLR brakes, Biopace chainwheels, and Hyperglide sprockets, are raising performance standards. Now, Shimano Total Integration (STI) promises a new age of complete "hands-on" control for the off-road rider.

Shimano all-terrain component groups are helping off-road cyclists to more fully realize their individual performance potential with more safety, confidence, and fun than ever before.







STI DEVELOPMENT CONCEPT



STI DEVELOPMENT CONCEPT

Shimano Total Integration...

A new relationship between the cyclist and the bicycle

Shimano Total Integration, STI, means that the main control functions of steering, braking, and shifting gears can now be executed without ever removing hands from the handlebars. It's a breakthrough in bicycle component technology which promises a whole new generation of riding convenience, and performance, for all cyclists.

STI is not a development which stands alone. It's the cumulative result of years of research and development. SIS for example. SIS's click-stop shifting action makes derailleur shifting fast, accurate and foolproof. SIS also increased overall cycling performance for racing cyclists, sport riding enthusiasts, and casual cyclists alike.

SIS has been further refined with Hyperglide sprockets and Superglide chainwheels which help to speed up and smooth out chain movement during shifting.

Yet with all the advantages SIS offers, there is still a problem in shifting gears. On-road bicycles place the shifting lever on the frame's downtube. This means that you must let go of the handlebar in order to shift. Of course, there are many times when you need to shift but can't afford to release the handlebars. Speed, concentration, and balance are often sacrificed in order to shift the derailleur.

The same problem exists for off-road bicycles which use a thumb shifter mounted on top of the bars. Your grip must be released in order to operate the thumb shifter to change gears. Needless to say, this can make the bike difficult to control when you need to shift while riding through rough and changing terrain.

Shimano has solved this final impediment to total bicycle control with the STI concept. STI places all of the bicycle's control functions, for off-road bicycles, directly under the cyclist's hands while the hands are gripping the handlebars. With STI you can steer, brake, and shift gears—always keeping a firm grip on the bars. STI is a great leap forward in cycling convenience and performance.

SIS, SLR, Hyperglide, Superglide...

Advanced component technology supporting STI

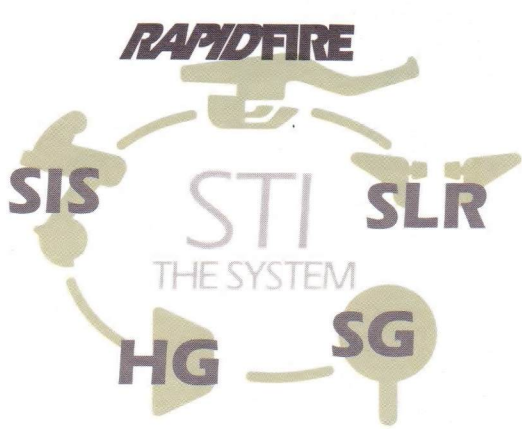
STI has been made possible through the high level of refinement offered by its supporting functions of SIS, Hyperglide sprockets, Superglide chainrings, and SLR brake technology.

Through the careful integration of these advanced functions, STI finally realizes a complete bicycle control system in which any desired control input can be executed instantly and directly without affecting other areas of control. In other words, STI lets you shift gears, brake, and steer the bicycle without any sacrifice in stability or concentration.

STI even lets you shift gears during extreme maneuvers, while cornering or braking for example, a significant advantage for the racing and performance-oriented cyclist. This new level of cycling control has been made possible by the continuing evolution of Shimano's advanced component functions.

The first STI system will be introduced as a standard feature of all Shimano off-road component systems for 1990.

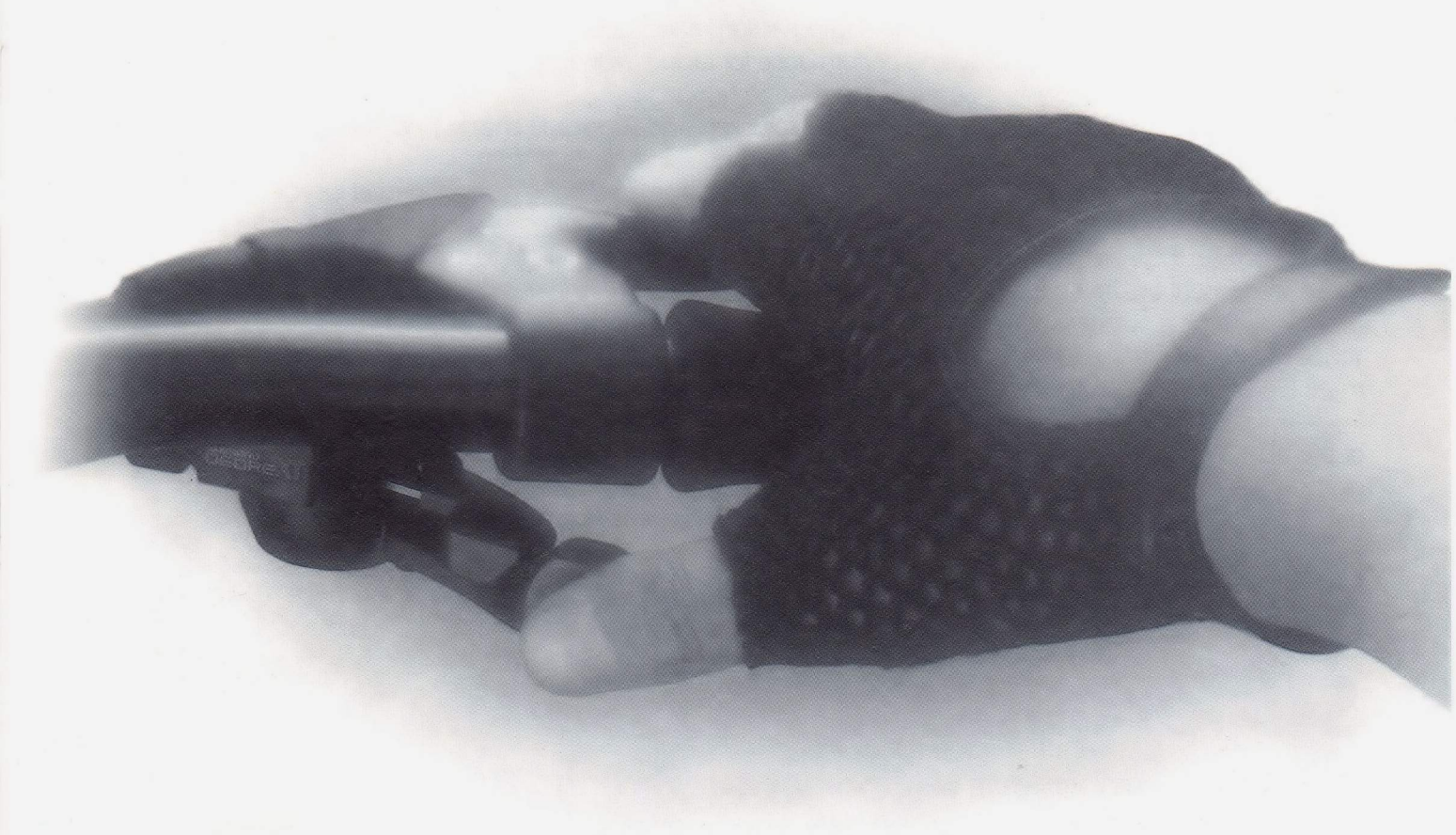
This is how Shimano is bringing the bicycle closer to the real needs of the cyclist.



OFF-ROAD STI

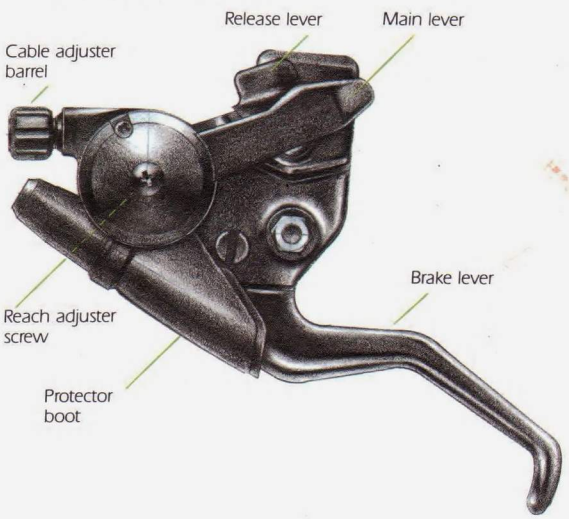
RAPIDFIRE

DUAL REPEAT FUNCTION



Keep your grip while you shift. Off-road STI Rapidfire lever uses two ratchet-action push levers mounted conveniently under the bar in front of the thumb. Shift one gear at a time, or shift down the entire gear block with a full stroke push. (ST-M090, ST-M091, ST-M070, ST-M071) Release (upshift) lever lets you shift up the sprocket cluster with the same capability.

Shift triple front chainwheels with the same precise STI action, 1 or 2 gears at a time. Trimming adjustment eliminates chain rub.



Enhanced Control and Safety for the All-terrain Bicycle

The current design of the off-road shifting system utilizes a thumb-type shifter placed on top of the bars near the grip. While the shift lever is located near the hand position, the hand must still be released from the grip in order to shift gears. Of course, this results in a certain loss of control and balance, and makes shifting almost impossible when traversing rough and changing terrain.

Shimano tackled the problem and found that there was a much better place to put the off-road shift lever—under the bar, directly in front of the thumb when the hand is in the normal bar-gripping position.

But that's not all. A new type of dual repeat function lever was developed in which only a simple "punching" movement of the thumb is needed to both downshift and upshift. The result is a significantly easier and faster shifting action which allows the rider to maintain a firm grip on the bars at all times.

Off-road STI frees the rider to shift instantly whenever the situation demands—something which is especially important for the off-road riding style. STI not only improves performance, but gives the off-road rider a refreshing new feeling of confidence and control.

Off-road STI has been made possible by continuing refinements in SIS shifting technology, Hyperglide sprockets, Superglide chainrings, and sensitive SLR braking performance.

Off-road STI will be introduced as standard equipment on all Shimano off-road component systems for 1990, from the top line Deore XT-II group to the versatile Exage family. STI also signals a new era in off-road cycling.

1 **Let your thumb shift while you keep your grip...**
The biomechanical design of STI's Rapid Fire levers, placed under the bar, lets you keep your grip while shifting with a fast repeat-action movement of the thumb only.

2 **Get the gear you need exactly when you need it...**
With STI there's no need to reach for the shift lever—it's always there, right under your thumb. This means you can instantly punch in the gear you want exactly when you need it, without changing hand position or diverting attention from the trail ahead.

3 **A "thumb only" one-punch shifting action...**
STI's dual-action lever gives you one lever for upshifting and one for down shifting. Both levers work with the same positive repeat action. One punch of your thumb gives you either a higher or lower gear—shifting can't be any easier.





THESE ARE THE ADVANCED FUNCTIONS THAT MADE STI A REALITY...

HG
HYPERGLIDE

Fast and smooth shifting, even under high chain loads.

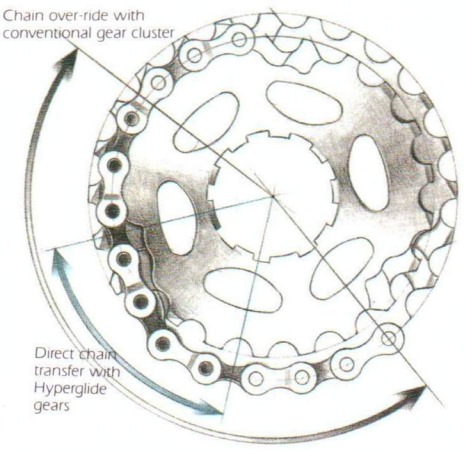
When shifting with conventional sprockets, the chain can occasionally slip over the gear teeth or ride on top of the teeth before completing the shift. This problem is made even worse when a shift is attempted under high chain loads.

Hyperglide sprockets were developed in order to solve these long standing shifting problems.

Shimano made extensive use of the computer in the development of Hyperglide. Hyperglide works by controlling chain movement between sprockets so that the chain moves quickly and directly from one sprocket to the next. It's done through special tooth profiles designed to positively release and pickup the chain, and the strategic indexing of the sprockets in relation to each other.

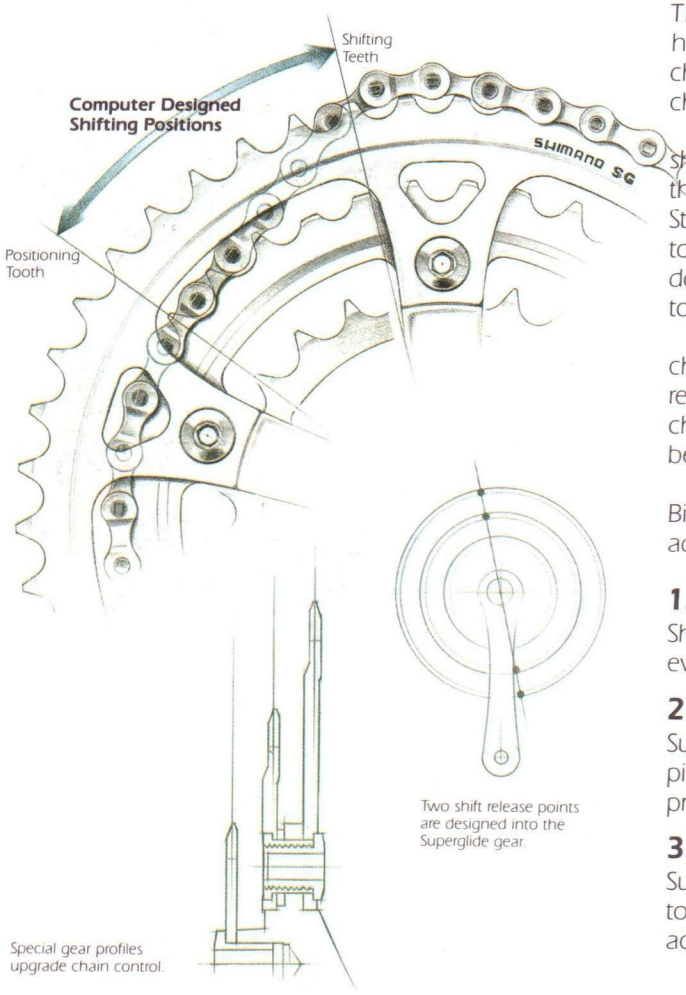
The result is significantly upgraded shifting performance that helps make STI a reality. Hyperglide shifts are fast and clean, even when there's high torque applied to the chain as when climbing or sprinting.

Hyperglide sprockets are standard equipment on all Shimano component groups for 1990.



SG
SUPERGLIDE

Significantly improved chainwheel shifting



The same technology applied to the Hyperglide sprocket has been applied in the development of the Superglide chainring in order to solve the problems inherent in chainwheel shifting.

The main chainwheel shifting problem occurs when shifting to the inner chainring while applying pressure to the pedals, such as when trying to shift when climbing. Strong pressure on the chain makes it difficult for the chain to separate from the large chainring. And when the chain does shift, many times it misses the inner chainring or fails to engage quickly.

The unique computer-aided design of the Superglide chainring features a special tooth profile that lets the chain release only at the two points of lowest pressure on the chainring. Shifting shock is eliminated. Chainwheel shifting becomes smoother, faster, and much more precise.

Superglide chainrings are available in both round and Biopace types. They make a significant contribution to the advanced performance of the STI system.

1. Chain shifting shock eliminated

Shifting shock and hesitation are completely eliminated, even during high pedal loads.

2. Chain throwing eliminated

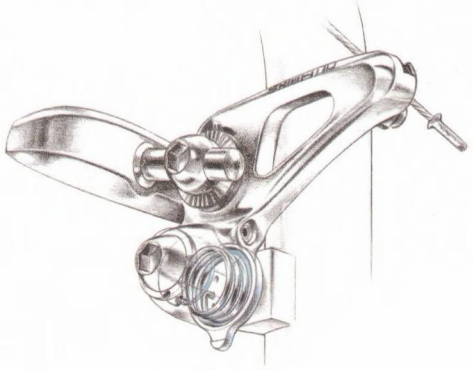
Superglide's specifically designated chain release and pickup points enhance chain control to realize much more precise chainwheel shifting.

3. Smoother chain movement

Superglide's controlled chain movement prevents damage to chainwheels while providing a much smoother shifting action.

SHIMANO LINEAR RESPONSE

Improved braking power with more sensitive lever control

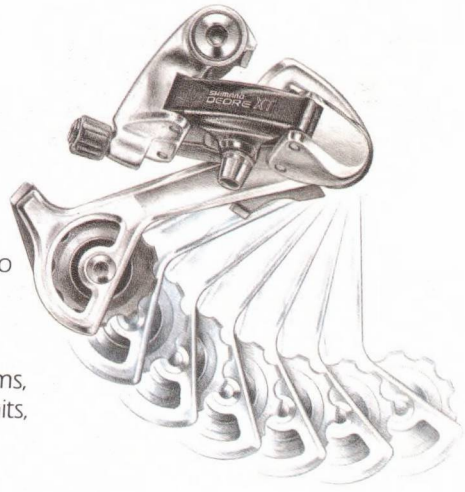


At its introduction, Shimano Linear Response (SLR) finally reconciled the two opposing factors of bicycle braking performance—stopping power and control sensitivity.

The SLR design eliminates friction in the brake system by utilizing a special helper spring in the lever, low-friction pivot bearings in the caliper, and other mechanisms which result in strong braking power being delivered with sensitive and responsive fingertip control.

SIS
SHIMANO INDEX SYSTEM

Shimano indexed shifting continues to be refined.



There are many indexed shifting systems available today, but only one SIS. Shimano Index Shifting is the original indexed shifting system that continues to define the world standard in derailleur shifting performance.

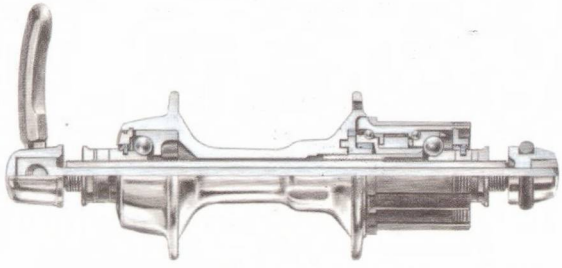
SIS delivers fast, positive, and error-free gear shifting that doesn't take practice or skill. With SIS, anyone can shift like a pro, right from the start.

SIS continues to improve. Progressing from six to seven to 7-speed systems, SIS performance is being upgraded through the use of new light-action SIS units, Hyperglide sprockets, and Superglide chainrings.

SIS is still the leader in indexed shifting.

THE SHIMANO FREEHUB

New Hyperglide Freehub System



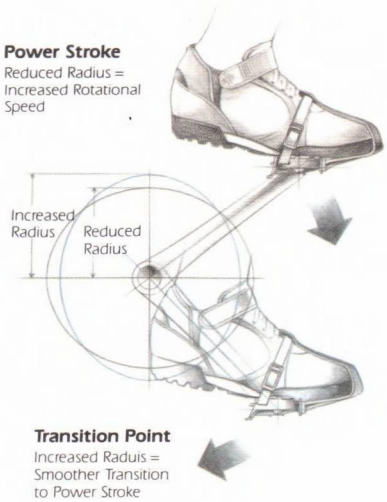
The Shimano freehub combines the rear hub and freewheel mechanism into a stronger one-piece unit. The advantages of freehub design are more advantageous placement of spoke flanges, placement of the hub bearings closer to the dropouts, and a stronger rear frame triangle to enhance power transfer efficiency.

The freehub has also contributed to the development of 7- and 8-speed gearing.

Another advantage of the freehub is that it helped make possible the Hyperglide sprocket. An asymmetrical spline on the freewheel body allows precision Hyperglide sprocket indexing.

biopace
Computer-Designed Drive System

Greater pedalling efficiency with Superglide shifting



The optimum pedalling motion should copy the natural movement of the human leg when it's walking or running.

That's exactly what Biopace does. Biopace is a computer-designed chainring whose non-round shape produces a pedalling cadence that more closely matches the natural speed changes in the human leg when walking or running.

The result is that pedalling with Biopace feels lighter and livelier, hills are easier to climb, and stamina is also increased.

Now Biopace incorporates the Superglide function which means that it shifts better than ever. It's another Shimano function that brings the bicycle closer to the rider.



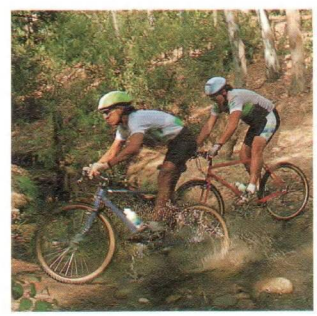
Take on the challenge of riding in the rough.

Take on the challenge of off-road cycling with the help of Deore DX. Discover new adventure in the wild with components that always get you there and back.

Deore DX is a full performance off-road component group. In fact, Deore DX offers the same "hands-on" integrated STI control capability as found on Deore XT. STI means there's no special technique needed to be able to shift and brake while keeping a tight grip on the bars. Deore DX's STI capability lets you steer, brake, and shift with new confidence—no matter the terrain—no matter how fast or how hard you're riding.

It's all here—Shimano quality and precision with 7-speed SIS, Hyperglide sprockets, Superglide chainrings, Biopace crankset, SLR braking system, Powerplate U-II Brake and cantilever, and a whole lot more.

Deore DX is the component system that's serious about performance in the rough.



STI
SHIMANO
TOTAL
INTEGRATION

Deore DX... Off-road components that get you there and back.



HG SG SLR SIS THE SHIMANO FREEHUB biopace

SHIMANO DEORE DX



STI
SHIMANO TOTAL INTEGRATION

Model No.	Specifications	Compatibility	Finish
Rapidfire **ST-M070** (4-Finger Type) **ST-M071** (2-Finger Type)	535g. (2-Finger Type) Lever Clamp Diameter: 22.2mm. **Use with Shimano SIS-SP Outer Cable with Liner.*	STI (Shimano Total Integration) Compatible SLR Compatible Dual Repeat Function BL/SL Angle Adjust	Bracket: Light Alloy•Anodized Finish Shifting & Brake Lever: Light Alloy•Paint Finish
Rear Derailleur **RD-M650-SGS** (Super Long Cage) **RD-M650-SS** (Short Cage)	320g. (Super Long Cage) Front Difference: 20T. Total Capacity: 38T. Max. Rear Sprocket: 32T. Min. Rear Sprocket: 12T. 257g. (Short Cage) Front Difference: 13T. Total Capacity: 28T. Max. Rear Sprocket: 28T. Min. Rear Sprocket: 12T.	STI (Shimao Total Integration) Compatible 6 & 7-speed SIS Compatible B-Tension Adjuster Chain Retainer	Bracket Body: Light Alloy•Barrel Finish Plate Body: Light Alloy•Barrel Finish Right Link: Light Alloy•Paint Finish Left Link: Steel•Pearl Bright Finish
Front Derailleur **FD-M650**	117g. (Normal Band Type) Band Diameter: Ø28.0 ~ 28.6mm. (Band Type) Capacity: 24T. (Biopace HP) 26T. (Round) Stroke (w/Ø28.6mm. Band): 34 ~ 54	STI (Shimano Total Integration) Compatible SG Gear Compatible Narrow Type Chain Compatible Trailing Action Pantagraph Mechanism New Trapease Mechanism	Right Link: Light Alloy•Paint Finish Front Band: Light Alloy•Paint Finish Rear Band: Light Alloy•Paint Finish Chain Guide: Chrome Plated
U-II Brake **BR-MT63**	338g. (1 unit) **For SLR System use Rapidfire or SLR Compatible Brake Lever and Shimano Outer Cable with Liner.*	STI (Shimano Total Integration) Compatible SLR (Shimano Linear Response) Compatible Power Plate with Shark Tooth	Light Alloy•Anodized Finish
Cantilever Brake **BR-MT62**	190g. (Pair) **For SLR System use Rapidfire or SLR Compatible Brake Lever and Shimano Outer Cable with Liner.*	STI (Shimano Total Integration) Compatible SLR (Shimano Linear Response) Compatible	Light Alloy•Barrel Finish (Black Finish Available)
Front Chainwheel **FC-MT60-SG** (SG Gear Triple, MD Type) **Bottom Bracket Assembly** **BB-MT60** (B.B. Set)	740g. (28T., 38T., 48T., 170mm.) 320g. (B.B. Set, 68-T-122.5, D-3NL) Crank Length: 170mm., 175mm. B.B. Axle Length: 122.5 Chain 1/2" x 3/32" 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.	STI (Shimano Total Integration) Compatible SG Gear Narrow Type Chain Compatible, Computer Aided Design (Crank) Sealed Mechanism (B.B.)	Crank Arm: Light Alloy•Barrel Finish Chain Ring: Light Alloy•Anodized Finish
Freehub **FH-M650** (Rear, 7-speed)	445g. (w/Quick Release) Spoke Holes: 36H., 32H. Hole PCD: 45 Axle Thread: 10mm.	STI (Shimano Total Integration) Compatible 7-speed SIS Compatible Hyperglide Compatible UG/HG Compatible Type	Light Alloy•Anodized Finish
Front Hub **HB-M650-F**	231g. (w/Quick Release) Spoke Holes: 36H., 32H Hole PCD: 38 Axle Thread: 9mm.	One-Piece Forged Hub Body Lip-Type Sealed Mechanism Cr-Mo Axle	Light Alloy•Anodized Finish
Cassette Sprockets **CS-HG70** (7-speed)	325g. (Sprocket **E** group & Spacer) Use Narrow Type Chain	STI (Shimano Total Integration) Compatible 7-speed SIS Compatible 7-speed Hyperglide	Steel•Silver Finish
HG Chain **CN-HG70**	325g. (114 Link) Size: 1/2" x 3/32" Chain	STI (Shimano Total Integration) Compatible Narrow Type Hyperglide Chain Chromed Finish Link Pins	Roller Link Plate: Gray Finish Pin Link Plate: Black Finish
Head Parts **HP-M650** **HP-M651**	121g. (HP-M650) 149g. (HP-M651)	Off-Road Type Sealed Mechanism	Black Finish
Pedal **PD-MT60**	412g. (Pair) Crank Thread: English BC 9/16" x 20T.P.I.	Low Profile Design Parallelogram Shape Contact Type Sealed Mechanism	Body: Light Alloy Plate: Steel
Pedal **PD-M650**	385g. (Pair w/Toe Clip) Top Clip Locking System: 2-Screw Crank Thread: English BC 9/16" x 20T.P.I. Toe Clip Size: M, L, LL	Super Low Profile Design 32° Road Clearance Contact Type Sealed Machanism Toe Clip/Reflector Attachable	Body: Light Alloy Plate: Steel Toe Clip: Resin

Other Information

FC-MT60-SG
Teeth:

	Biopace		Round	
Top	48T.	46T.	48T.	46T.
Middle	38T.	36T.	38T.	36T.
Low	28T.	26T.	28T.	24T.

FH-M650

O.L.D.	135	130	135	130
Axle Length	146	141	185	180
Chain Line	45.7	43.2	45.7	43.2
Mounting Type	Quick Release		Nut	

HB-M650-F

O.L.D.	100	
Axle Length	108	142
Mounting Type	Quick Release	Nut

CS-HG70
Cassette Sprocket Combinations:

7-speed	**J**	13, 14, 15, 16, 17, 19, 21T.
	I	13, 14, 15, 17, 19, 21, 23T.
	H	13, 15, 17, 19, 21, 23, 26T.
	E	12, 14, 16, 18, 21, 24, 28T.
	G	13, 15, 17, 20, 23, 26, 30T.
	F	14, 16, 18, 21, 24, 28, 32T.
	K	13, 15, 17, 20, 24, 29, 34T.

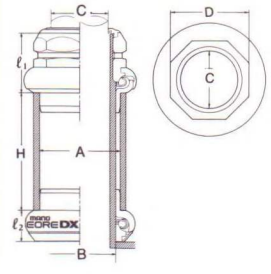
HP-M650/M651
Variation & Dimensions:

	HP-M650		
Thread	BC1" x 24T		M25 x P1.0
A	30.0 (JIS)	30.2	30.2
B	27.0 (JIS)	26.4 27.0	26.4
C	22.1		
D	32.0		
ℓ_1	22.0		
ℓ_2	11.5		

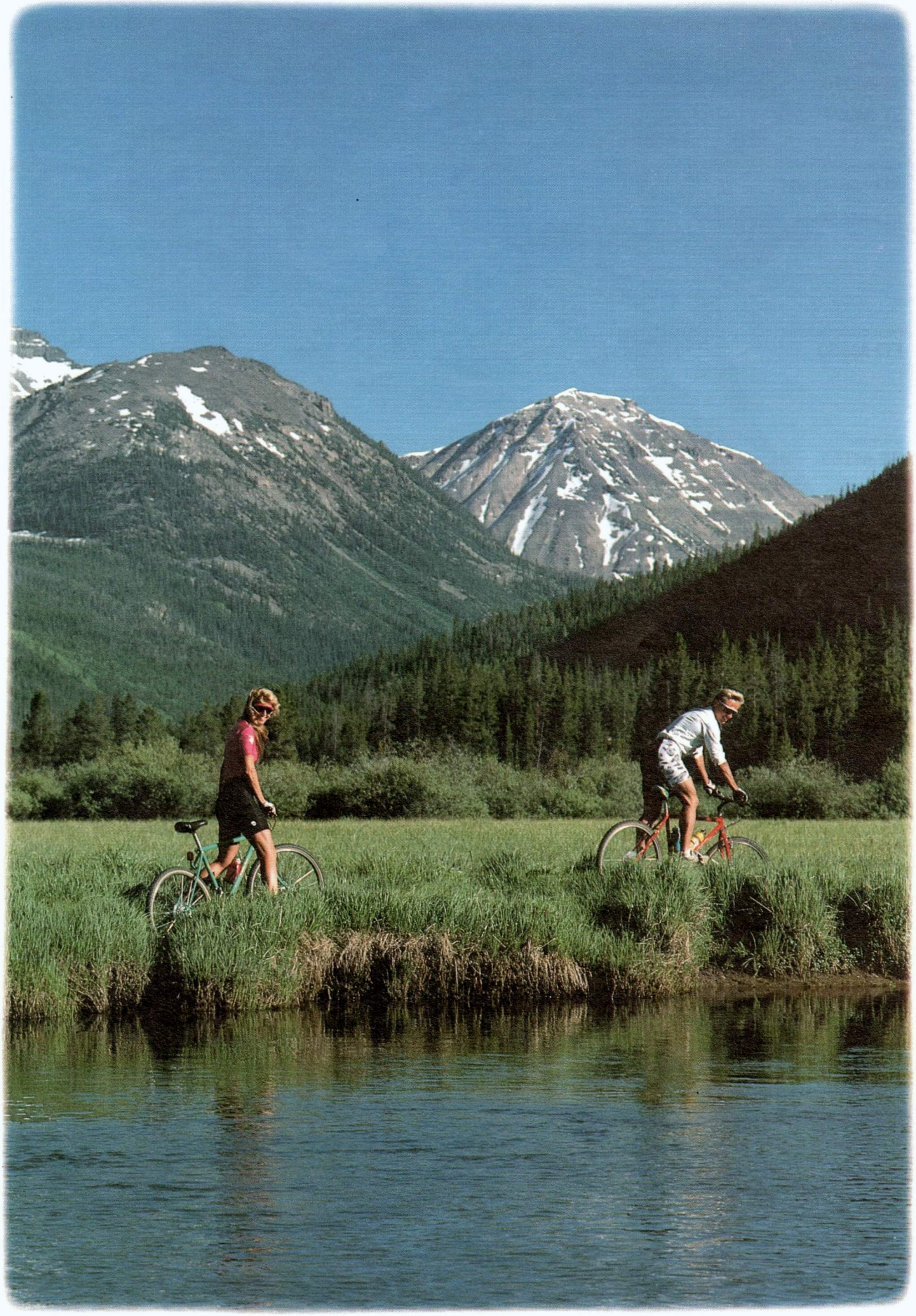
Unit: mm

	HP-M651
Thread	BC1-1/8" x 26T
A	34.0
B	30.0
C	25.5
D	36.0
ℓ_1	22.0
ℓ_2	11.5

Unit: mm



SHIMANO
DEORE LX



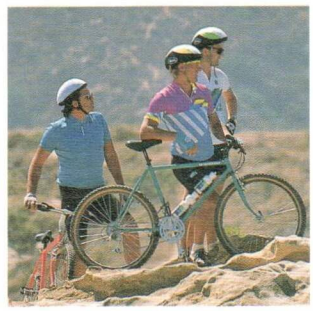
STI delivers total performance off the road.

Off-road cycling is a challenge that demands a high level of skill. It's the job of the ATB's components to provide the rider with the highest level of control possible to help meet that challenge.

Now equipped with STI, Deore XT components provide a higher level of off-road control than ever before. Deore XT features the new under-bar "Rapidfire" STI shift levers that let you shift "on the fly" without releasing the grip on the bars. Deore XT's STI lets you brake and shift without ever changing your grip.

This hands-on control capability is supported by the most advanced off-road derailleur shifting system available today—7-speed SIS with Hyperglide sprockets and Superglide chainrings. Deore XT's SLR U-Brake, cantilever, and highly responsive "two finger" lever deliver incredibly strong braking power with precise fingertip control. There's also a new headset for large diameter head tubes and a new cone.

The advanced control functions of Deore XT with STI offer improved performance with a greater margin of safety.



STI
SHIMANO
TOTAL
INTEGRATION

Keep your grip while you shift with the STI/Deore XT off-road group.



HG SG SLR SIS THE SHIMANO FREEHUB biopace

SHIMANO DEORE XT



STI
SHIMANO TOTAL INTEGRATION

Model No.	Specifications	Compatibility	Finish
Rapidfire **ST-M090** (4-Finger Type) **ST-M091** (2-Finger Type)	550g. (2-Finger Type) Lever Clamp Diameter: 22.2mm. **Use with Shimano SIS-SP Outer Cable with Liner.*	STI (Shimano Total Integration) Compatible 7-speed SIS Compatible SLR Compatible Dual Repeat Function	Bracket: Light Alloy Shifting & Brake Lever: Steel•Resin Molding
Rear Derailleur **RD-M735-SGS** (Super Long Cage) **RD-M735-SS** (Short Cage)	270g. (Super Long Cage) 250g. (Short Cage)	STI (Shimano Total Integration) Compatible 6 & 7-speed SIS Compatible Sealed Pulley B-Tension Adjuster Chain Retainer (Super Long Cage)	Bracket Body: Light Alloy•Buff Finish Plate Body: Light Alloy•Buff Finish Right Link: Light Alloy•Anodized Finish Left Link: Light Alloy•Barrel Finish
Front Derailleur **FD-M735**	116g. (Normal Band Type) Band Diameter: Ø28.0 ~ Ø28.6mm. (Band Type) Ø31.8, Ø34.9mm. (EC-Type) Capacity: 24T. (Biopace HP) 26T. (Round) Stroke (w/Ø28.6mm. Band): 34 ~ 54	STI (Shimano Total Integration) Compatible SG Gear Compatible Narrow Type Chain Compatible Trailing Action Pantagraph Mechanism Rigid Chainguide New Trapease Mechanism	Right Link: Light Alloy•Anodized Finish Front Band: Light Alloy•Buff Finish Rear Band: Light Alloy•Buff Finish Chain Guide: Chrome Plated
U-II Brake **BR-M733**	375g. (1 unit) **For SLR System use Rapidfire or SLR Compatible Brake Lever and Shimano Outer Cable with Liner.*	STI (Shimano Total Integration) Compatible SLR Compatible Power Plate with Shark Tooth	Light Alloy•Anodized Finish
Cantilever Brake **BR-M732**	185g. (Pair) **For SLR System use Rapidfire or SLR Compatible Brake Lever and Shimano Outer Cable with Liner.*	STI (Shimano Total Integration) Compatible SLR Compatible Easy Cable Attachment	Light Alloy•Buff Finish (Black Finish Available)
Front Chainwheel **FC-M730-SG** (SG Gear Triple, MD Type) **Bottom Bracket Assembly** **BB-M730** (B.B. Set)	730g. (26T., 36T., 46T., 170mm.) 295g. (B.B. Set, 68-T-122.5, D-3NL) Crank Length: 165mm., 170mm., 175mm., 180mm. B.B. Axle Length: 122.5 Chain: 1/2" × 3/32"	STI (Shimano Total Integration) Compatible SG Gear Narrow Type Chain Compatible Computer Aided Design (Crank) Sealed Mechanism (B.B.)	Crank Arm: Light Alloy•Anodized Finish Chain Ring: Light Alloy•Anodized Finish
Freehub **FH-M732** (Rear, 7-speed)	490g. (w/Quick Release) Spoke Holes: 36H., 32H. Axle Thread: 10mm.	STI (Shimano Total Integration) Compatible 7-speed SIS Compatible Hyperglide Compatible	Light Alloy•Buff Finish
Front Hub **HB-M730-F**	213g. Spoke Holes: 36H., 32H. Axle Thread: 9mm.	Lip-Type Sealed Mechanism Cr-Mo Hub Axle Support	Light Alloy•Buff Finish
Cassette Sprockets **CS-HG90** (7-speed)	325g. (Sprocket & **E** Group Spacer) Use Narrow Type Chain	STI (Shimano Total Integration) Compatible 7-speed SIS Compatible 7-speed Hyperglide	Steel•Chrome Plated
HG Chain **CN-HG90**	326g. (110 Link) Size: 1/2" × 3/32" Chain	STI (Shimano Total Integration) Compatible Narrow Type Hyperglide Chain	Roller Link Plate: Black Finish Pin Link Plate: Silver Finish Link Pin: Chrome Finish
Pedal **PD-M735**	295g. (Pair) Toe Clip Locking System: 2-Screw Crank Thread: English BC 9/16" × 20T.P.I. Toe Clip Size: M, L, LL	Super Low Profile Design 32° Road Clearance Parallelogram Shape Contact Type Sealed Mechanism Toe Clip/Reflector Attachable	Body: Light Alloy Plate: Light Alloy•Anodized Finish Toe Clip: Resin
Pedal **PD-M730**	412g. (Pair) Crank Thread: English BC 9/16" × 20T.P.I.	Low Profile Design Parallelogram Shape Toe Clip/Reflector Attachable	Body: Light Alloy Plate: Light Alloy
Head Parts **HP-M735** **HP-M736** **HP-M737**	110g. (HP-M735) 149g. (HP-M736) 155g. (HP-M737)	Off-Road Type Sealed Mechanism	Black Finish
Seat Pillar Quick-Release **SQ-M730**	75g. Shaft Adjustment Length: 36 ~ 43mm., 26 ~ 33mm. Shaft Diameter: Ø6mm. or Ø8mm.	Easy Operation Position-Set Spring	Steel
Chain Deflector **DF-M730**	9g.	Keeps the Chain from Jamming Between the Tire & Chainstay	Resin
Seat Pillar **SP-M730**	296g. (330mm.) Outside Diameter: 26.6mm., 26.8mm., 27.0mm. Length: 280mm., 330mm.	Hight Strength Structure Light Weight Long Size	Cr-Mo Steel

Other Information

RD-M735
Capacity:

	SS	SGS
Total Capacity	28T.	38T.
Max. Rear Sprocket	28T.	32T.
Min. Rear Sprocket	12T.	12T.

FC-M730-SG
Teeth:

	Biopace		Round	
Top	48T.	46T.	48T.	46T.
Middle	38T.	36T.	38T.	36T.
Low	28T.	26T.	28T.	24T.

Thread:

Crank Thread	English	BC 9/16" × 20T.P.I.
Cup Thread	English	BC 1.37 × 24T.P.I.
	French	M35 × 1.0
	Italian	M36 × 24T.P.I.

FH-M732

O.L.D.	135	130	135	130
Axle Length	146	141	185	180
Chain Line	46	43.5	46	43.5
Mounting Type	Quick Release		Nut	

HB-M730-F

O.L.D.	100	
Axle Length	108	142
Mounting Type	Quick Release	Nut

CS-HG90
Cassette Sprocket Combinations:

7-speed	**J**	13, 14, 15, 16, 17, 19, 21T.
	I	13, 14, 15, 17, 19, 21, 23T.
	H	13, 15, 17, 19, 21, 23, 26T.
	E	12, 14, 16, 18, 21, 24, 28T.
	G	13, 15, 17, 20, 23, 26, 30T.
	F	14, 16, 18, 21, 24, 28, 32T.
	K	13, 15, 17, 20, 24, 29, 34T.

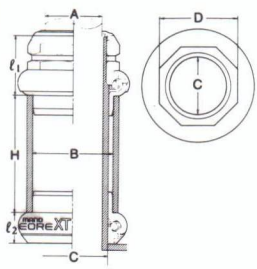
HP-M735/M736/M737
Variation & Dimensions:

	HP-M735		
Thread	BC1"×24T.		M25 × P1.0
A	30.0 (JIS)	30.2	30.2
B	27.0 (JIS)	26.4 27.0	26.4
C	22.1		
D	32.0		
ℓ_1	22.0		
ℓ_2	11.5		

Unit: mm.

	HP-M736	HP-M737
Thread	BC1-1/8" × 26T.	BC1-1/4" × 26T.
A	34.0	37.0
B	30.0	33.0
C	25.5	28.7
D	36.0	40.0
ℓ_1	22.0	27.3
ℓ_2	11.5	13.0

Unit: mm.



SHIMANO
DEORE DX



The high-value off-road component group with STI

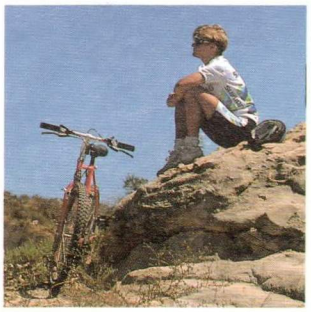
There isn't a better value in off-road components than Deore LX. Whether it's a leisurely exploration of a new trail or an all-out run over open field, Deore LX components deliver a feeling of total control that makes off-road riding that much more enjoyable.

There are no cutbacks in advanced Shimano functions with Deore LX. Full STI capability means you can shift on the run with just a flick of the thumb—and never change your grip on the bars.

STI lets you shift with even more precision thanks to refined SIS and Hyperglide sprockets. Superglide chainrings significantly upgrade chainwheel shifting too.

The full SLR treatment with U-Brake and cantilever means great stopping power with a sensitive lever feeling. And of course, Biopace chainwheels make pedalling that much easier and efficient.

On or off the road, Deore LX delivers performance, value, and enjoyment.



STI
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Deore LX... No greater valve in off-road components today.



HG SG SLR SIS THE SHIMANO FREEHUB biopace

SHIMANO DEORE LX



STI
SHIMANO TOTAL INTEGRATION

Model No.	Specifications	Compatibility	Finish
Rapidfire **ST-M060** (4-Finger Type)	326g. (4-Finger Type Rear) Lever Clamp Diameter: 22.2m **Use with Shimano SIS-SP Outer Cable with Liner.*	STI (Shimano Total Integration) Compatible 7-speed SIS Compatible SLR (Shimano Linear Response) Compatible Dual Repeat Function Light Action Lever	Bracket: Light Alloy•Paint Finish Shifting & Brake Lever: Steel•Zinc Plated Resin•Molded
Rear Derailleur **RD-M550-SGS** (Super Long Cage) **RD-M550-GS** (Long Cage)	320g. (Super Long Cage) Front Difference: 20T. Total Capacity: 38T. Max. Rear Sprocket: 32T. Min. Rear Sprocker: 12T. (Long Cage) Front Difference: 20T. Total Capacity: 36T. Max. Rear Sprocket: 30T. Min. Rear Sprocket: 12T.	STI (Shimano Total Integration) Compatible 6 & 7-speed SIS Compatible Double Servo-Panta Mechanism Centeron Guide Pulley Sealed Pivot Axle Sintered Alloy Guide Pulley Bushing Adjustable Return Spring B-Tension Adjuster Chain Retainer	Bracket Body: Light Alloy•Barrel Finish Plate Body: Light Alloy•Barrel Finish Right Link: Light Alloy•Paint Finish Left Link: Steel•Pearl Bright Finish
Front Derailleur **FD-M550**	119g. (Normal Band Type) Band Diameter: ϕ28.0 ~ ϕ28.6mm. (Band Type) ϕ31.8, ϕ34.9mm. (EC-Type) Capacity: 24T. (Biopace HP) 26T. (Round) Stroke (w/ϕ28.6mm. Band): 34 ~ 54	STI (Shimano Total Integration) Compatible SG Gear Compatible Narrow Type Chain Compatible Trailling Action Pantagraph Mechanism Rigid Chainguide New Trapease Mechanism	Right Link: Light Alloy•Paint Finish Front Band: Light Alloy•Barrel Finish Rear Band: Light Alloy•Barrel Finish Chain Guide: Chrome Plated
U-II Brake **BR-M453**	368g. (1 unit) **For SLR & System use Rapid Fire or SLR Compatible Brake Lever and Shimano Outer Cable with Liner.*	STI (Shimano Total Integration) Compatible SLR (Shimano Linear Response) Compatible Pre-Road Spring Design Sealed Internal Spring Design Power Plate with Shark Tooth	Light Alloy•Barrel Finish
Cantilever Brake **BR-M550**	216g. (Pair) **For SLR & System use Rapid Fire or SLR Compatible Brake Lever and Shimano Outer Cable with Liner.*	STI (Shimano Total Integration) Compatible SLR (Shimano Linear Response) Compatible Rigid Computer Designed Shape Sealed Internal Spring Design Spring Tension Adjuster	Light Alloy•Barrel Finish
Front Chainwheel **FC-M550** (SG Gear Triple, MD Type) **Bottom Bracket Assembly** **BB-M500** (B.B. Set)	752g. (28T., 38T., 48T., 170mm) 339g (B.B. Set) Crank Length: 170mm., 175mm. B.B. Axle Length: 121.1 Chain: 1/2" × 3/32" Crank Thread: English BC 9/16" × 20T.P.I. Cup Thread: English BC 1.37" × 24T.P.I., French M35 × 1.0, Italian M36 × 24T.P.I.	STI (Shimano Total Integration) Compatible SG Gear Narrow Type Chain Compatible Computer Aided Design (Crank) Sealed Mechanism (B.B.)	Crank Arm: Light Alloy•Barrel Finish Chain Ring: Light Alloy•Anodized Finish
Freehub **FH-M550** (Rear, 7-speed)	445g. (w/Quick Release) Spoke Holes: 36H., 32H Hole PCD: 45 Axle Thread: 10mm.	STI (Shimano Total Integration) Compatible 7-speed SIS Compatible Hyperglide Compatible UG/HG Compatible Type One-Piece Forged Hub Body Bolt-Secured Freewheel Sealed Mechanism	Light Alloy•Polish Finish
Front Hub **HB-M550-F**	230g. (w/Quick Release) Spoke Holes: 36H., 32H Hole PCD: 38 Axle Thread: 9mm.	One-Piece Forged Hub Body Sealed Mechanism	Light Alloy•Polish Finish
Pedal **PD-M550**	326g. (Pair) Toe Clip Locking System: 2-Screw Toe Clip Size: M, L, LL	Super Low Profile Design 31° Road Clearance Parallelogram Shape Toe Clip/Reflector Attachable	Body: Resin Plate: Steel Toe Clip: Resin
Cassette Sprockets **CS-HG70** (7-speed)	325g. (Sprocket **E** group & Spacer) Use Narrow Type Chain	STI (Shimano Total Integration) Compatible 7-speed SIS Compatible 7-speed Hyperglide	Steel•Silver Finish
HG Chain **CN-HG70**	323g. (114 Link) Size: 1/2" × 3/32" Chain	STI (Shimano Total Integration) Compatible Narrow Type Hyperglide Chain Bushingless Design Chrome Finish Link Pins	Roller Link Plate: Gray Finish Pin Link Plate: Black Finish
Head Parts **HP-R500**	121g. Height: Upper Cone 22.0mm. Lower Cone 11.5mm. Color: White, Silver, Black	Road Type Sealed Mechanism	Lock Nut: Steel Upper Cup: Resin Lower Cup: Resin

Other Information

FC-M550
Teeth:

	Biopace		Round	
Top	48T.	46T.	48T.	46T.
Middle	38T.	36T.	38T.	36T.
Low	28T.	26T.	28T.	24T.

FH-M550

O.L.D.	135	130	135	130
Axle Length	146	141	185	180
Chain Line	45.7	43.2	45.7	43.2
Mounting Type	Quick Release		Nut	

CS-HG70
Cassette Sprocket Combinations:

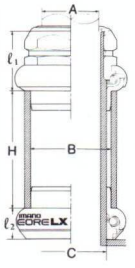
7-speed	**J**	13, 14, 15, 16, 17, 19, 21T.
	I	13, 14, 15, 17, 19, 21, 23T.
	H	13, 15, 17, 19, 21, 23, 26T.
	E	12, 14, 16, 18, 21, 24, 28T.
	G	13, 15, 17, 20, 23, 26, 30T.
	F	14, 16, 18, 21, 24, 28, 32T.
	K	13, 15, 17, 20, 24, 29, 34T.

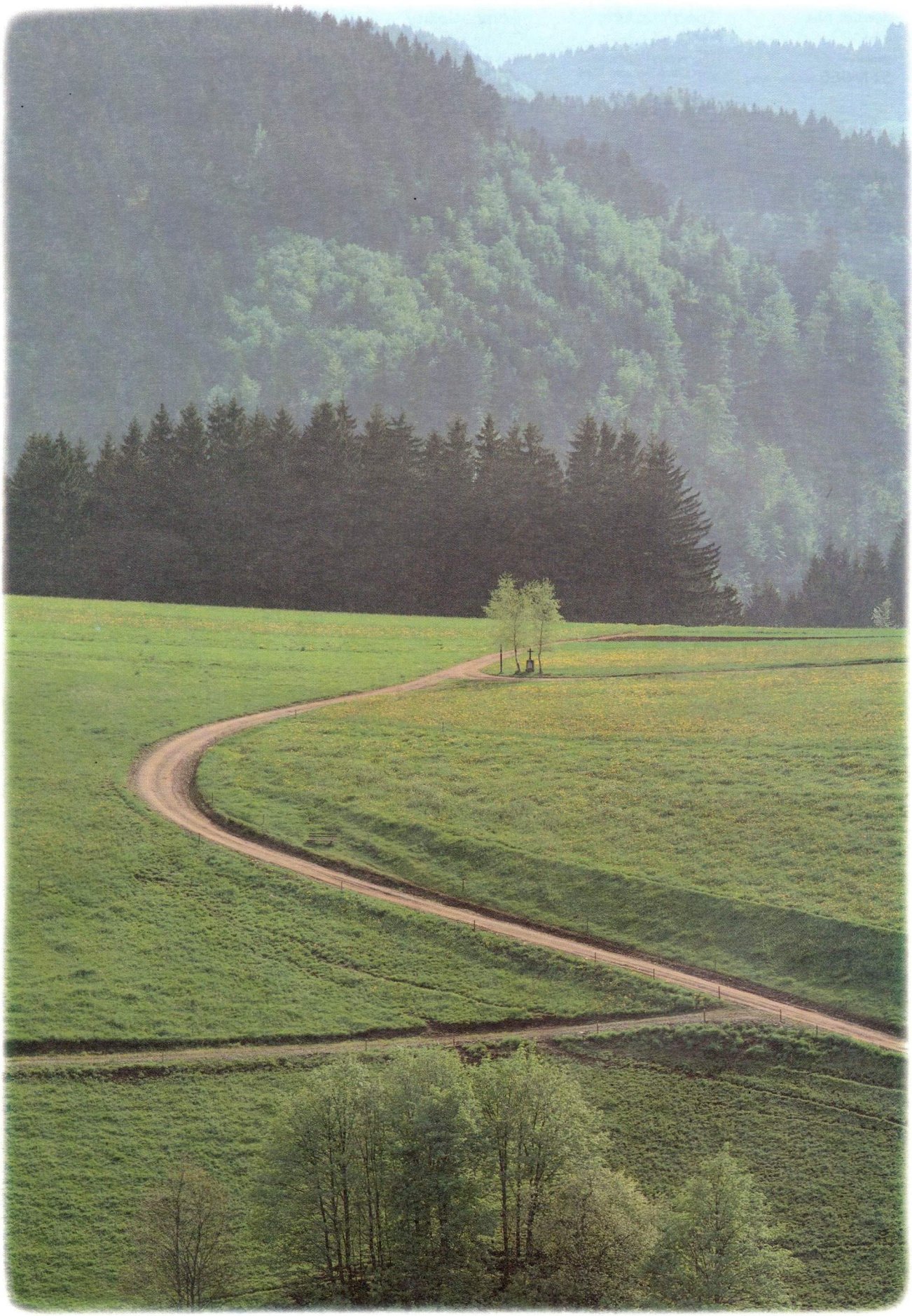
HP-R500
Variation:

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

Dimensions:

ℓ_1	22.0mm
ℓ_2	11.5mm.
H	Head Tube Length
A	22.3mm.
B	30.2mm.
C	26.4mm.
Thread	BC 1"×24T. (English Thread)





A versatile and wide-ranging off-road component family with STI.

Offering Shimano Total Integration, Exage LX is a versatile new high-performance family of off-road components for both on and off-road "fat tire" bicycles.

Exage LX realizes a wider range of affordable on- and off-road fat tire bikes offering the new level of control, riding ease, and safety that STI makes possible.

Yet Exage LX delivers a lot more than just the convenient "keep our grip while you shift" control function of STI. You also get precision-shifting Biopace SG chainwheels, sensitive SLR braking, and a new 7-speed SIS with fast-shifting Hyperglide sprockets. And don't forget the Shimano freehub.

Two new Exage City groups bring all the advantages of the latest Shimano off-road component functions, including STI, to the increasingly popular "fat tire" urban bicycle. Exage "Comfortable City" offers the excellent all-weather braking performance of the Hub Roller Brake with the added benefit of Hyperglide sprockets.

Exage LX realizes great performance, rugged construction, and famed Shimano quality in a wide range of fat-tire bicycles that express the leading edge in component technology at a reasonable price. What else could you ask for?

EXAGE 500LX



HG SG SLR SIS THE SHIMANO FREEHUB biopace

EXAGE 400LX



HG SG SLR SIS THE SHIMANO FREEHUB biopace

ACTIVE CITY



HG SG SLR SIS THE SHIMANO FREEHUB biopace

EXAGE 300LX



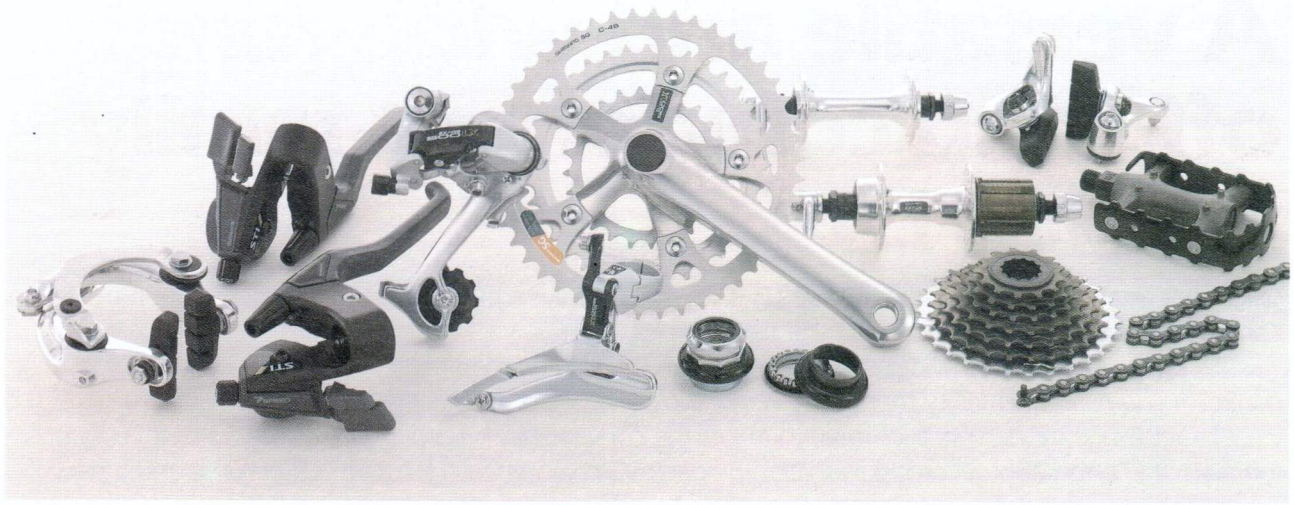
HG SG SLR SIS THE SHIMANO FREEHUB biopace

COMFORTABLE CITY



HG SG SLR SIS THE SHIMANO FREEHUB biopace

EXAGE 500LX



EXAGE 400LX



EXAGE 300LX



EXAGE 500 LX

STI
SHIMANO TOTAL INTEGRATION

Model No.	Specifications	Compatibility	Finish
Rapidfire **ST-M050** (4-Finger Type) **Brake Lever** **BL-M050** (Use Front Single)	305g. (4-Finger Type Rear) Lever Clamp Diameter: 22.2mm. **Use with Shimano SIS-SP Outer Cable with Liner.*	STI (Shimano Total Integration) Compatible 7-speed SIS Compatible SLR Compatible Dual Repeat Function Light Action Lever Anatomical Design	Bracket: Light Alloy•Paint Finish Shifting and Brake Lever: Steel•Zink Plated Resin•Molding
Rear Derailleur **RD-M500-SGS** (Super Long Cage) **RD-M500-GS** (Long Cage)	329g. (Super Long Cage) Front Difference: 20T. Total Capacity: 38T. Max. Rear Sprocket: 32T. Min. Rear Sprocker: 12T. (Long Cage) Front Difference: 20T. Total Capacity: 36T. Max. Rear Sprocket: 30T. Min. Rear Sprocket: 12T.	STI (Shimano Total Integration) Compatible 6 & 7-speed SIS Compatible Double Servo-Panta Mechanism Centeron Guide Pulley Sealed Pivot Axle Sintered Alloy Guide Pulley Bushing Cable Saver Arm B-Tension Adjuster Chain Retainer	Bracket Body: Light Alloy•Paint Finish Plate Body: Light Alloy•Paint Finish Right Link: Steel•Paint Finish Left Link: Steel•Pearl Bright
Front Derailleur **FD-M500**	118g. (Normal Band Type) Band Diameter: φ28.0 ~ φ28.6mm. (Band Type, EC-Type) φ31.8, φ34.9mm. (EC-Type) Capacity: 24T. (Biopace HP) 26T. (Round) Stroke (w/φ28.6mm. Band): 34 ~ 54	STI (Shimano Total Integration) Compatible SG Gear Compatible Narrow Type Chain Compatible Trailling Action Pantagraph Mechanism Rigid Chainguide New Trapease Mechanism Sealed Mechanism	Right Link: Light Alloy•Paint Finish Front Band: Light Alloy•Paint Finish Rear Band: Light Alloy•Paint Finish Chain Guide: Chrome Plated
U-II Brake **BR-M453**	368g. (1 unit) **For SLR System use Rapid Fire or Compatible Brake Lever and Shimano Outer Cable with Liner.*	STI (Shimano Total Integration) Compatible SLR (Shimano Linear Response) Compatible Pre-Road Spring Design Sealed Internal Spring Design Rigid Computer Designed Shape Spring Tension Adjuster Power Plate with shark Tooth	Light Alloy•Barrel Finish
Cantilever Brake **BR-M454**	216g. (Pair) **For SLR System use Rapid Fire or Compatible Brake Lever and Shimano Outer Cable with Liner.*	STI (Shimano Total Integration) Compatible SLR (Shimano Linear Response) Compatible Rigid Computer Designed Shape Sealed Internal Spring Design	Light Alloy•Barrel Finish
Front Chainwheel **FC-M500** (SG Gear Triple, MD Type) **Bottom Bracket Assembly** **BB-M500**	756g. (28T., 38T., 48T., 170mm.) 339g (B.B. Set) Crank Length: 170mm., 175mm. B.B. Axle Length: 121 Teeth: Top 48T. Middle 38T. Low 28T. Chain: 1/2" × 3/32" Crank Thread: English BC 9/16" × 20T.P.I. Cup Thread: English BC 1.37" × 24T.P.I., French M35 × 1.0, Italian M36 × 24T.P.I.	STI (Shimano Total Integration) Compatible SG Gear Narrow Type Chain Compatible Computer Aided Design (Crank) Sealed Mechanism (B.B.) Biopace Chainring	Crank Arm: Light Alloy•Barrel Finish Chain Ring: Light Alloy•Anodized Finish
Freehub **FH-HG50** (Rear, 7-speed)	435g. (w/Quick Release) Spoke Holes: 36H., 32H Hole PCD: 45 Axle Thread: 10mm.	STI (Shimano Total Integration) Compatible 7-speed SIS Compatible Hyperglide Compatible UG/HG Compatible Type One-Piece Forged Hub Body Bolt-Secured Freewheel Sealed Mechanism	Light Alloy•Dia-cut Finish
Front Hub **HB-RM50-F**	228g. (w/Quick Release) Spoke Holes: 36H., 32H Hole PCD: 38 Axle Thread: 9mm.	One-Piece Forged Hub Body Sealed Mechanism (Choice)	Light Alloy•Dia-cut Finish
Cassette Sprockets **CS-HG50** (7-Speed)	325g (Sprocket **E** Group & Spacer) Use Narrow Type Chain	STI (Shimano Total Integration) Compatible 7-speed SIS Compatible 7-speed Hyperglide	Brown Finish and Silver Finish (Low Gear)
HG Chain **CN-HG50**	335g. (114 Link) Size: 1/2" × 3/32" Chain	STI (Shimano Total Integration) Compatible Narrow Type Hyperglide Chain Bushingless Design Chrome Finish Link Pins	Roller Link Plate: Black Finish Pin Link Plate: Black Finish
Pedal **PD-M450**	518g. (Pair)	Low Profile Design Toe Clip/Reflector Attachable	Body: Resin Plate: Steel

Other Information

FH-HG50

O.L.D.	135	130	126
Axle Length	146	141	137
Chain Line	45.7	43.2	41.2
Mounting Type	Quick Release		Nut

HB-RM50-F

O.L.D.	100	96
Axle Length	108	104
Mounting Type	Quick Release	

CS-HG50
Cassette Sprocket Combinations:

7-speed	**J**	13, 14, 15, 16, 17, 19, 21T.
	I	13, 14, 15, 17, 19, 21, 23T.
	H	13, 15, 17, 19, 21, 23, 26T.
	E	12, 14, 16, 18, 21, 24, 28T.
	G	13, 15, 17, 20, 23, 26, 30T.
	F	14, 16, 18, 21, 24, 28, 32T.
	K	13, 15, 17, 20, 24, 29, 34T.

EXAGE 400LX

STI
SHIMANO TOTAL INTEGRATION

Model No.	Specifications	Compatibility	Finish
Rear Derailleur **RD-M400-SGS** (Super Long Cage) **RD-M400-GS** (Long Cage) **RD-M400-SS** (Short Cage)	330g. (Super Long Cage) 318g. (Long Cage) **GS & SS Front Single Available*	STI (Shimano Total Integration) Compatible 6 & 7-speed SIS Compatible Centeron Guide Pulley Cable Saver Arm B-Tension Adjuster Chain Retainer (GS Type, SGS Type)	Bracket Body: Light Alloy•Barrel Finish Plate Body: Light Alloy•Barrel Finish Right Link: Steel•Paint Finish Left Link: Steel•Zinc Plated **GS & SS White Finish Available*
Front Derailleur **FD-M400**	132g. (Normal Band Type) Band Diameter: Ø28.0 ~ Ø28.6mm. (Band Type, EC-Type) Ø31.8, Ø34.9mm. (EC-Type) Capacity: 24T. (Biopace HP) 26T. (Round) Stroke (w/Ø28.6mm. Band): 34 ~ 54	STI (Shimano Total Integration) Compatible SG Gear Compatible Narrow Type Chain Compatible Trailing Action Pantagraph Mechanism Rigid Chainguide New Trapease Mechanism Sealed Mechanism	Right Link: Light Alloy•Paint Finish Front Body: Light Alloy•Paint Finish Rear Band: Light Alloy•Paint Finish Chain Guide: Chrome Plated
Cantilever Brake **BR-M351**	227g. (Pair) **For SLR System use Repidfire or SLR Compatible Brake Lever and Shimano Outer Cable with Liner.*	STI (Shimano Total Integration) Compatible SLR Compatible Sealed Internal Spring Design Spring Tension Adjuster Low Profile Brake Shoe	Steel & Resin
Front Chainwheel **FC-M400** (SG Gear Triple, MD Type) **Bottom Bracket Assembly** **BB-M500**	763g. (28T., 38T., 48T., 170mm.) 339g. (B.B. Set) Teeth: Top 48T., Middle 38T., Low 28T. Crank Length: 170mm., 175mm. B.B. Axle Length: 121.1 Chain: 1/2" x 3/32"	STI (Shimano Total Integration) Compatible SG Gear Biopace Chainring Narrow Type Chain Compatible Computer Aided Design (Crank) Sealed Mechanism (B.B.)	Crank Arm: Light Alloy•Barrel Finish Chain Ring: Steel•Paint Finish
Pedal **PD-M350**	445g. (Pair)	Low Profile Design Toe Clip/Reflector Attachable	Body: Resin Plate: Steel

Other Information

RD-M400
Capacity:

	SS	GS	SGS
Total Capacity	28T.	36T.	38T.
Max. Rear Sprocket	28T.	30T.	32T.
Min. Rear Sprocket	12T.	12T.	12T.
Front Difference	13T.	20T.	20T.

FC-M400
Thread:

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.

The Exage 400LX component group uses certain components in common with the 500LX group which include the ST-M050 Rapidfire, FH-HG50 freehub, HB-RM50 front hub, CS-HG50 cassette sprockets, CN-HG50 chain, and HP-R500 headset.
See the 500LX component listing for information on these components.

EXAGE 300LX

STI
SHIMANO TOTAL INTEGRATION

Model No.	Specifications	Compatibility	Finish
Rear Derailleur **RD-M300-SGS** (Super Long Cage) **RD-M300-GS** (Long Cage)	319g. (Super Long Cage)	STI (Shimano Total Integration) Compatible 6 & 7-speed SIS Compatible Cable Saver Arm B-Tension Adjuster Chain Retainer	Bracket Body: Light Alloy•Barrel Finish Plate Body: Resin•Molding Right Link: Steel & Resin•Zinc Plated Left Link: Steel•Zinc Plated
Front Derailleur **FD-M300**	135g. (Normal Band Type) Band Diameter: Ø28.0 ~ Ø28.6mm. (Band Type) Ø31.8, Ø34.9mm. (EC-Type) Capacity: 24T. (Biopace HP) 26T. (Round) Stroke (w/Ø28.6mm. Band): 34 ~ 54	STI (Shimano Total Integration) Compatible SG Gear Compatible Narrow Type Chain Compatible Trailing Action Pantagraph Mechanism Rigid Chainguide New Trapease Mechanism Sealed Mechanism	Right Link: Light Alloy•Paint Finish Front Band: Steel•Pearl Bright Finish Rear Band: Light Alloy•Barrel Finish Chain Guide: Chrome Plated
Cantilever Brake **BR-M250**	235g. (Pair)	STI (Shimano Total Integration) Compatible SLR Compatible Rigid Computer Designed Shape Low Profile Brake Shoe	Steel & Resin
Front Chainwheel **FC-M300** (SG Gear Triple, MD Type) **Bottom Bracket Assembly** **BB-M500**	756g. (28T., 38T., 48T., 170mm.) 339g. (B.B. Set) Teeth: Top 48T., Middle 38T., Low 28T. Crank Length: 170mm., 175mm. B.B. Axle Length: 121 Chain: 1/2" x 3/32"	STI (Shimano Total Integration) Compatible SG Gear Biopace Chainring Narrow Type Chain Compatible Computer Aided Design (Crank) Sealed Mechanism (B.B.)	Crank Arm: Light Alloy•Barrel Finish Chain Ring: Light Alloy•Anodized Finish
Pedal **PD-M350**	445g. (Pair)	Low Profile Design w/Reflector Toe Clip/Reflector Attachable	Body: Resin Plate: Steel

Other Information

RD-M300
Capacity:

	GS	SGS
Total Capacity	36T.	38T.
Max. Rear Sprocket	30T.	32T.
Min. Rear Sprocket	12T.	12T.
Front Difference	20T.	20T.

FC-M300
Thread:

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.

The Exage 300LX component group uses certain components in common with the 500LX group which include the ST-M050 Rapidfire, FH-HG50 freehub, HB-RM50 front hub, CS-HG50 cassette sprockets, CN-HG50 chain, and HP-R500 headset.
See the 500LX component listing for information on these components.

SHIMANO 200GS

STI
SHIMANO TOTAL INTEGRATION



Model No.	Specifications	Compatibility	Finish
Rapidfire **ST-M020**	190g. (4-Finger Type Rear) Lever Clamp Diameter: 22.2mm. **Use with Shimano SIS-SP Outer Cable with Liner.*	STI (Shimano Total Integration) Compatible 7-speed SIS Compatible Dual Repeat Function	Bracket: Light Alloy•Paint Finish Shifting Lever: Steel•Zinc Plated Resin•Molding
Rear Derailleur **RD-M200-SGS** (Super Long Cage) **RD-M200-GS** (Long Cage)	323g. (Super Long Cage)	STI (Shimano Total Integration) Compatible 6 & 7-speed SIS Compatible B-Tension Adjuster Chain Retainer	Bracket Body: Light Alloy•Barrel Finish Plate Body: Resin•Molding Right Link: Steel•Paint Finish Left Link: Steel•Zinc Plated
Front Derailleur **FD-M200**	169g. (Normal Band Type) Band Diameter: Ø28.0 ~ Ø28.6mm. (Band Type)	Narrow Type Chain Compatible Rigid Chainguide Trapease Mechanism w/Cable Stopper	Right Link: Steel•Paint Finish Resin Molding Front Band: Steel•Chrome Plated Rear Band: Steel•Zinc Plated Chain Guide: Chrome Plated
Front Derailleur **FD-M201**	170g. (Normal Band Type) Band Diameter: Ø28.0 ~ Ø28.6mm. (Band Type) Ø31.8mm. (EC Type)	STI (Shimano Total Integration) Compatible SG Gear Compatible Narrow Type Chain Compatible w/Cable Stopper	Right Link: Steel•Paint Finish Front Band: Steel•Paint Finish Rear Band: Light Alloy•Barrel Finish Chain Guide: Chrome Plated
Shifting Lever **SL-M200** (6-speed) **SL-M201** (7-speed)	154g. (SL-M201) Lever Clamp Diameter: 22.2mm. **Use with Shimano SIS-SP Outer Cable with Liner.*	6-speed SIS Compatible (SL-M200) 7-speed SIS Compatible (SL-M201) Sealed Mechanism Chainring Triple Compatible	Bracket: Steel•Paint Finish Lever: Resin•Molding
Cantilever Brake **BR-M200**	226g. (Pair) **Use with Shimano Outer Cable with Liner.*	STI (Shimano Total Integration) Compatible SLR Compatible Rigid Computer Designed Shape	Steel & Resin
Brake Lever **BL-M200**	265g. Lever Clamp Diameter: 22.2mm. **Use with Shimano Outer Cable with Liner.*	STI (Shimano Total Integration) Compatible SLR Compatible	Bracket: Steel•Zinc Plated Lever: Steel•Zinc Plated Risin•Molding
Front Chainwheel **FC-M200** (SG Gear Triple, MD Type) **Bottom Bracket Assembly** **BB-M500**	1,350g. (28T., 38T., 48T., 170mm.) 339g. (B.B. Set) Crank Length: 170mm.	SG Gear Biopace Chainring Narrow Type Chain Compatible Computer Aided Design (Crank) Sealed Mechanism (B.B.)	Crank Arm: Steel•Zinc Plated Resin•Molding Chain Ring: Steel•Pearl Bright Finish
Front Chainwheel **FC-M201** (SG Gear Triple, MD Type) **Bottom Bracket Assembly** **BB-M500**	756g. (28T., 38T., 48T., 170mm.) 339g. (B.B. Set) Crank Length: 170mm., 175mm.	STI (Shimano Total Integration) Compatible SG Gear Biopace Chainring Narrow Type Chain Compatible	Crank Arm: Light Alloy•Barrel Finish Chain Ring: Light Alloy•Anodized Finish
Freehub **FH-HG20** (Rear, 7-speed)	425g. (w/Quick Release) Spoke Holes: 36H. Axle Thread: 10mm.	STI (Shimano Total Integration) Compatible Hyperglide Compatible 7-speed SIS Compatible	Light Alloy•Dia-Cut Finish
Front Hub **HB-RA50-F**	Type: Quick Release/Nut Type (Small Flange) Spoke Holes: 36H.	Sealed Mechanism One-Piece Forged Hub Body	Light Alloy
Cassette Sprockets **CS-HG20** (7-speed)	325g. (Sprocket **E** Group & Spacer) Use Narrow Type Chain	STI (Shimano Total Integration) Compatible 7-speed SIS Compatible 7-speed Hyperglide	Brown Finish and Silver Finish (Low Gear)

Other Information

RD-M200
Capacity:

	GS	SGS
Total Capacity	36T.	38T.
Max. Rear Sprocket	30T.	32T.
Min. Rear Sprocket	12T.	12T.
Front Difference	20T.	20T.

FD-M200/M201

	FD-M200	FD-M201
Capacity	20T. (Biopace HP) 22T. (Round)	24T. (Biopace HP) 26T. (Round)
Stroke (w/Ø28.6mm. Band)	36 ~ 54	

FC-M200/M201

Teeth	Top 48T., Middle 38T., Low 28T.	
B.B. Axle Length	121	
Chain	1/2" × 3/32"	
Crank Thread	English	BC 9/16" × 20T.P.I.
Cup Thread	English	BC 1.37 × 24T.P.I.
	French	M35 × 1.0
	Italian	M36 × 24T.P.I.

FH-HG20

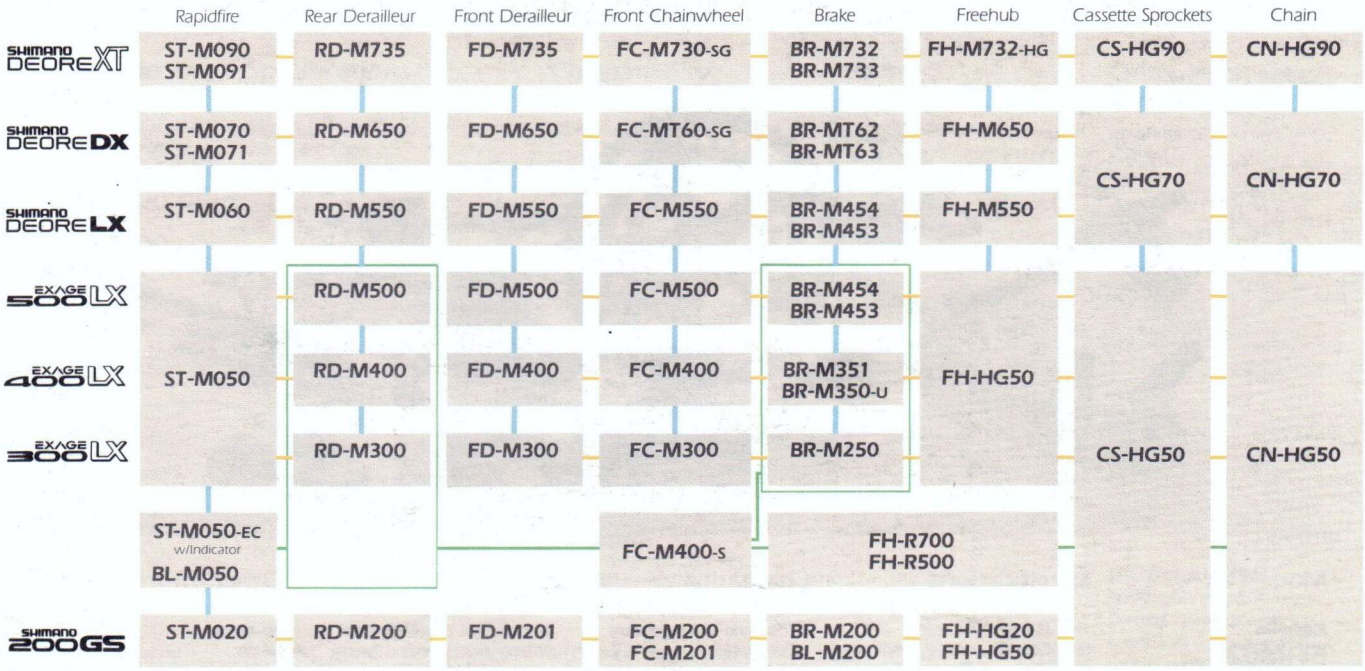
O.L.D	130	126
Axle Length	140	137
Chain Line	43.2	41.2
Mounting Type	Quick Release	

CS-HG20
Cassette Sprocket Combinations:

7-speed	**J**	13, 14, 15, 16, 17, 19, 21T.
	I	13, 14, 15, 17, 19, 21, 23T.
	H	13, 15, 17, 19, 21, 23, 26T.
	E	12, 14, 16, 18, 21, 24, 28T.
	G	13, 15, 17, 20, 23, 26, 30T.
	F	14, 16, 18, 21, 24, 28, 32T.
	K	13, 15, 17, 20, 24, 29, 34T.

The Shimano 200GS component group uses certain components in common with the 500LX group which include the CN-HG50 chain and HP-R500 headset. See the 500LX component listing for information on these components.

STI COMBINATION CHART



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