SUNTOUR

Some component manufacturers would have you belive that THEY know more than you do, about what YOU want to ride. SUNTOUR believe in listening, not lecturing, which is how the SUNTOUR 1990 component line evolved.

RIDERS said they didn't like hype; they wanted dependable, durable, light, responsive and affordable componentry that isn't obsolete before it's out of the box. MECHANICS said components have to work BETTER in the field than in the stand, that new designs should be integrated into existing systems so parts are interchangeable, and that assembly and repair should be straightforward. FRAMEBUILDERS sat down with SunTour and demanded stuff that fits proven standard frame dimensions, existing standard tooling and sensible standard mounting bosses. DEALERS wanted all that plus availability, reliability and a commitment to service.

SUNTOUR listened and further strengthened their on-going commitments making bike parts that make sense from the rider and mechanic perspective. Which is why ALL of their rear derailleurs have the same slant parallelogram geometry, and NONE of the new 1990 drive train components lock you in with dedicated specifics.

From the simplest cantilever brake to the electronic gear changing system of the BEAST, SUNTOUR for 1990 can be summed up in three words: LIGHTER, STRONGER AND SMOOTHER. Most of the weight has been lost at the exciting XC-PRO, XC-COMP and XCD levels. Most parts are 15% – 40% lighter than last year, but stronger due to the increased use of chrome-moly and cold-forging. Smoother shifting at each specific point in the gear changing process is achieved by the combination of the AccuShift Plus freewheel/hub, chain and PoweRing Anti-Jam chainrings. The AccuShift Plus system incorporates the traditional shift levers or the hot, new, underbar, push-operated X-PRESS lever. Either way, your shifts are quick, easy and exact; whether jumping or dumping from cog to cog, or upshifting or downshifting from chainring to chainring.

SUNTOUR are justifiably proud of their new 1990 components engineered to encourage you to tackle the road or dirt, ride hard, hammer down and have NO DOUBT that, because of SUNTOUR's dedication, your equipment will go the distance.

SunTour, no doubt!

90



ACCUSHIFT PLUS 90



X-1 chroma

SunTour X-1 Chroma System

X-1 is a newly designed group for 1990. It incorporates an improved rear derailleur, based on the popular XCD-6000, with brass pivot bushings and an angle adjusting screw; a front derailleur available with 1-⅛" or 1–¼" clamp and a patented inner cage plate design for faster shifting and greater shifting tolerances; the AccuShift Plus freewheel and chain; a new SR crank with the PoweRing/Anti-Jam Chainrings; and Dia-Compe's new compact aluminum cantilever.

X-1 CHROMA is the X-1 group with interchangeable plastic NEON (yellow, pink or green) highlights snapped over the basic black X-1 finish on each component. SUNTOUR has introduced neon components during the past two race seasons, by supplying their sponsored off-road riders with special team-issue parts. The response to SUNTOUR's increased visibility on the race circuit has inspired the X-1 CHROMA group. It is an all new performance-based system that functions as well as it looks.



BEAST

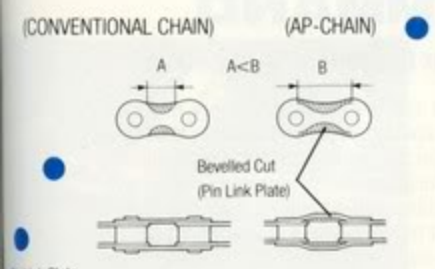
SunTour Browning Electronic AccuShift Transmission (Beast)

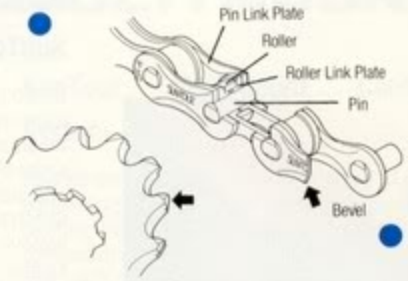
The SUNTOUR BEAST is an entirely new gear shifting concept for bicycles. The BEAST allows for precise gear changes while riding at high speed over varying terrain and grades. Perfect shifts are accomplished even with full power to the pedals, and since no special skill is necessary for smooth shifting, the BEAST is ideal for the difficult conditions of off-road riding.

The gear changing system of the BEAST is like the switching system of a railroad track: the outer and middle swinging sectors of the BEAST's chainrings function in the same way as the switch which allows a train to move from one track to another. At the hinged portion of the chainring, the pawl moves the swinging sector, which then picks up or drops the chain to the next chainring.

SUNTOUR has spent a full year testing and refining the original Browning technology before offering the BEAST as an alternative to the traditional front derailleur. The BEAST is compatible with all SUNTOUR drivetrain components. For 1990, it is offered as original equipment to bicycle manufacturers and custom builders only.









SunTour AccuShift Plus Chain and Cogs

The SUNTOUR AP-Chain and AP-Freewheel are designed to improve the accuracy of shifts under any road conditions, under any off-road conditions and, most importantly, under load when shifting not only to an adjacent cog but when skipping two or more cogs.

With AccuShift Plus quick engagement of the cog is achieved by matching the cog tooth profile and the reshaped outer face of the chain link plates.

Abrasion resistance and pedalling noise are decreased substantially by using a die-hardened bushless pin, which also reduced the weight of a 116 link chain by 10%.

All the cogs have been redesigned with new gate cuts and profiles. Because the exact engagement of the chain doesn't depend on a specific point on the cog teeth, like other systems, smooth upshifting and downshifting is possible all the time, through mud, dirt or water. The normal wide range of gear ratios is available and the AccuShift Plus cogs are interchangeable with existing cassette and freewheel bodies.

ACCUSHIFT PLUS Chain and Freewheel are standard on the entire SUNTOUR road and ATB line for 1990.

POWERING

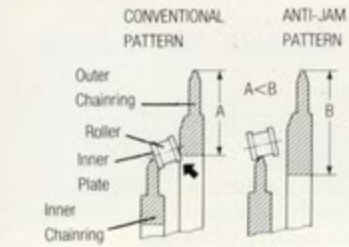
SunTour PoweRing

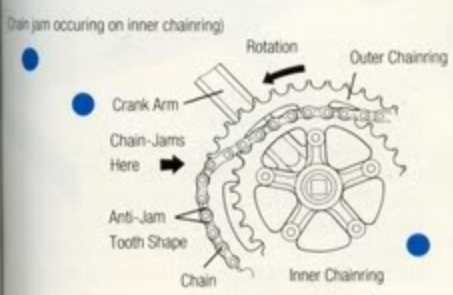
When attempting to drop the chain from the outer chainring to the middle chainring under load, the chain sometimes jams between the two chainrings. This can result in either bent chain links or a broken chain. Both of these mishaps impede forward progress of the rider and usually require him/her to get off the bike. If this happens in a race, precious seconds are lost.

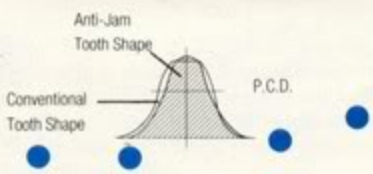
SUNTOUR has redesigned the chainring tooth profile at the directional point of initial chain engagement, on the outer and middle chainrings. This Anti-Jam tooth shape also delivers smoother shifting when used with the AccuShift Plus Chain and Freewheel.

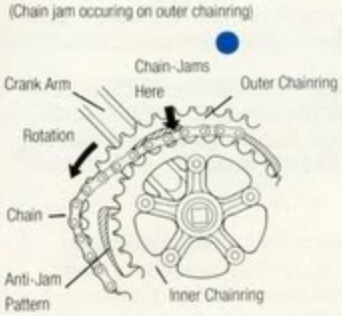
POWERING is standard on new GPX, RADIUS, EDGE, and BLAZE for lightweight bikes and XC-PRO, XC-COMP, XCD, XCD, X-1/CHROMA, XCE, XCM and XCT for ATB bikes.











SUNTOUR

90 TECHNOLOGY

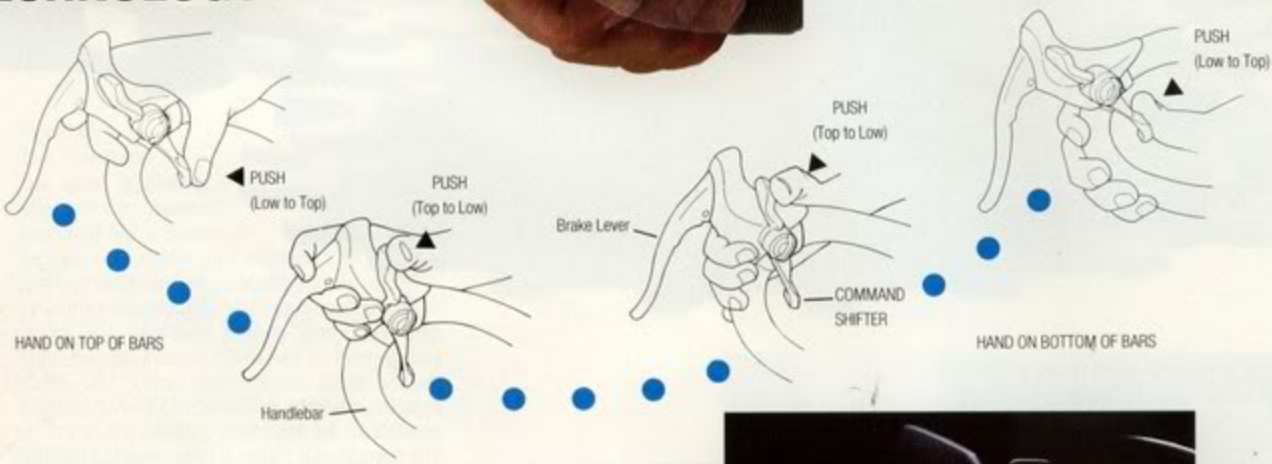


COMMAND

SunTour Command Shift Levers

SUNTOUR COMMAND is an entirely new shift lever concept for use on standard drop bars. It is mounted on the inside of the handlebar adjacent to the brake lever bracket for a more comfortable and accessible shifting motion. Like the original SUNTOUR BarCon shifters, it is not necessary to remove your hands from the bars to shift. Unlike the BarCon levers, however, the Command shifter is in a more convenient position and offers the option of either pushing or pulling the lever.

This new upshift and downshift dedicated lever is ideal for all light-weight bikes, from entry level to racing, and is perfect for hybrids, tandems and triathlon bikes. It is offered in pairs with the GPX, RADIUS, EDGE and BLAZE groups, and can be used with any SUNTOUR AccuShift compatible derailleurs.



AP SHIFTER

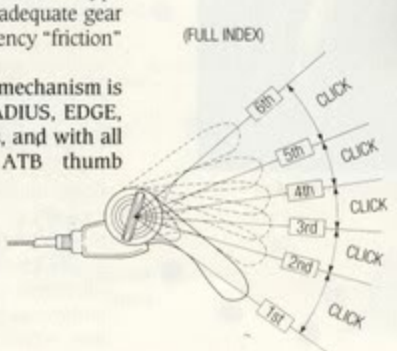
SunTour AccuShift Plus Indexing Mechanism

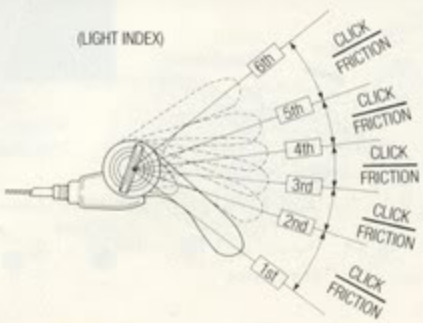
In the event of damage to the rear derailleur, it is sometimes necessary to switch from full indexing mode to a shifting mode which allows the rider to trim the derailleur to compensate for misalignment caused by the damage.

For cyclists who have only used an index shifting system, the conventional on/off type index shift levers do not provide adequate gear selection guidance when in emergency "friction" mode.

The AccuShift Plus shift lever mechanism is standard with the new GPX, RADIUS, EDGE, BLAZE, VX and AC2000 groups, and with all SUNTOUR's 1990 standard ATB thumb shifters.







MULTI MOUNT

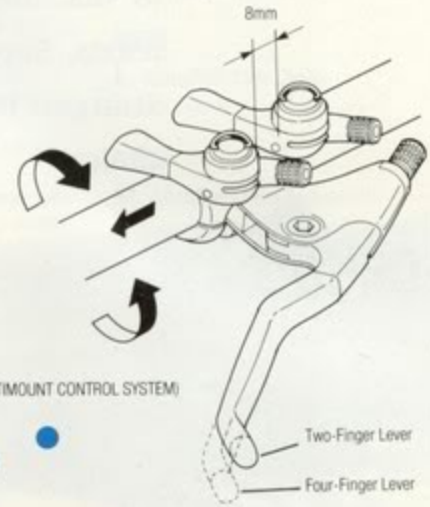


SunTour MultiMount Control System

Handlebars on ATB bikes have evolved to their narrowest possible width, largely determined by existing brake and shift lever dimensions and comparative positioning tolerances of the brake and shift lever clamps. Riders wanting the increased control of narrower bars have had to compromise by trimming clamps, levers and grips.

With the MULTIMOUNT CONTROL SYSTEM, the discriminating rider can position the levers closer together, with more options. The new, compact shift levers allow for placement either inboard or outboard of the brake levers. But you're not limited to traditional thumb shifters with MULTIMOUNT. Our new X-PRESS Control Lever is designed to match the MULTIMOUNT system, clamp for clamp. Now you can shift: over-bar, under-bar, closer, farther, pushing upshift, pushing downshift, pushing and pulling upshift and downshift, big hands, small hands, no hands, braking-shifting, no shifting/braking, no braking/flying, no excuses, no position better than the one you like best.

MULTIMOUNT is available with XC-PRO, XC-COMP and XCD groups for 1990.



(MULTIMOUNT CONTROL SYSTEM)



(X-PRESS CONTROL with MULTIMOUNT)

X-PRESS

SunTour X-Press Shift Levers

Traditional gear levers on ATB bikes are operated by pushing the lever forward to upshift and pulling back to changedown. This arrangement can make it difficult to maintain control of the bike when trying to change gear at high speed or on long descents.

With the new X-PRESS shifter these problems are a thing of the past.

X-PRESS is in effect a pair of double thumb levers mounted close to each handlebar grip, underneath the bars.



All gear shifting (up or down) is done by a push action only by the thumb. The left hand controls the front derailleur whilst the right hand operates the rear derailleur. Each control lever comprises an upper and lower unit, in the case of the right hand lever the upper unit is pushed to upshift and the lower is pushed to downshift. The left hand upper unit is pushed to drop the chain onto the smaller chainrings and the lower unit is pushed to lift the chain onto the larger chainrings. During each gear change your fingers need not leave the handlebars.

The X-Press control lever is available in 6 or 7 speed versions in XC-PRO, XC-COMP, XCD, X-1CHROMA, XCE, XCM and XCT groups and can be used with any SUNTOUR AccuShift compatible derailleur.

SUNTOUR XC PRO

The off-road reference standard has been redefined for 1990. SunTour's answer to racers wanting competition components with the seemingly contradictory features of toughness, light weight and compactness is the incredible SUNTOUR XC-PRO group. Completely new and incorporating such features as BEAST, X-PRESS, AccuShift Plus, Multi-Mount, PoweRing and SE Brake; this revolutionary group weighs 15%–40% less per part than anything else. Race use and abuse demands nothing less than SUNTOUR XC-PRO.

ATB



X-PRESS
POWERING
AP CHAIN
AP COGS
AP SHIFTER
MULTI MOUNT
GREASE GUARD
BEAST
CARTRIDGE BEARING
SE

NEW

A Rear Derailleurs

A choice of two mechanisms; short cage for city bike and flat out, off road racing use or long cage for true mountain use or long distance touring.

ACCUSHIFT PLUS index compatible.

Max rear sprocket: (28mm dropout) 30T.

Total capacity: 34T with 16T max. chainring difference (short cage), 40T with 20T max. chainring difference (long cage).

SunTour XC-PRO derailleur (GT short cage) . . . £47.95
Cat No STRA/41005

SunTour XC-PRO derailleur (GX long cage) . . . £47.95
Cat No STRA/41000

NEW

B Front Derailleur

Clean lines and quick shifting action make this the number one choice for that very special ATB.

Chainring difference: 24T max.

Min. c/ring difference: 6T min.

SunTour XC-PRO front changer . . . £27.95
Cat No STRA/41100 (1⅛" clamp)
Cat No STRA/41105 (1¼" clamp)

NEW

C Index Gear Levers

Chunky all-alloy design finished in satin black with dip-formed non slip grips. Available in 6 or 7 speed versions complete with cables.

ACCUSHIFT PLUS with MULTIMOUNT.

SunTour XC-PRO Thumbshifters (6 speed) . . . £44.95 pair
Cat No STRA/41202

SunTour XC-PRO Thumbshifters (7 speed) . . . £44.95 pair
Cat No STRA/41201



NEW

D X-Press Gear Levers

Press to shift up, press to shift down and keep your hands on the bars with this new development from SunTour.

ACCUSHIFT PLUS compatible in 6 or 7 speed versions.

SunTour X-Press levers (6 speed) . . . £44.95 pair

Cat No STRA/41252

SunTour X-Press levers (7 speed) . . . £44.95 pair

Cat No STRA/41251

NEW

E Cantilever Brakes

A new concept in cantilevers. Neat, enclosed aerodynamic low-profile design available in two versions; standard or self energising mechanism type. Supplied with heavy duty straddle cable and clamp but excluding levers and main cables. **(N.B. SE type is for rear use only.)**

SunTour XC-PRO cantilevers (SE type) . . . £44.95 (rear set)

Cat No STRA/41401

SunTour XC-PRO cantilevers (standard type) . . . £27.95 (front set or rear set)

Cat No STRA/41400

NEW

F Brake levers

New design in light alloy with soft finger grip. Available in 4-finger or compact 2-finger versions. Cables not included.

SunTour XC-PRO brake levers . . . £39.50 pair

Cat No STRA/41450 (4-finger type)

Cat No STRA/41451 (2-finger type)

Brake Cables

Special inner and outer main cable set for all SunTour ATB brakes. Colour: black.

SunTour XC brake cables . . . £6.49 set

Cat No STRA/41452





NEW

G Crankset

Hi-duty forged alloy crankset with black alloy POWERINGS. B.B. set not included.

Bolt circle dia.: 130mm (outer and middle) 74mm (inner)

Ring sizes: 26, 36, 46T

Crank lengths: 170mm, 175mm, 180mm

SunTour XC-PRO Crankset . . . £99.95

Cat No STRA/41301 (170mm, 26/36/46T)

NEW

Bottom Bracket Set

Precision engineered bearing set for triple ATB cranksets. Cup and cone type with seals. GREASEGUARD system. Axle type 3S-B-GG.

SunTour XC-PRO B.B. set . . . £21.95

Cat No STRA/41350



NEW

H Standard Hubs

Forged alloy shells, Cro-Mo axles, sealed cartridge bearings and now with **GREASEGUARD** bearing lube system – there's no better ATB hubs than XC-PRO. Available with quick release fittings in a choice of 32 or 36 holes and, in 36 hole only, with two rear axle lengths – normal 130mm or extra long 135mm. Standard rear hubs are threaded to take a normal freewheel cog unit.

SunTour XC-PRO standard quick release hubs:

Cat No STRA/41500 (Front – 32 or 36H) . . . **£32.50**

Cat No STRA/41501 (Rear – 32 or 36H – 130mm axle) . . . **£44.95**

Cat No STRA/41505 (Rear – 36H – 135mm axle) . . . **£44.95**

N.B. please state whether 32 or 36 hole when ordering.





NEW

J Cassette Type Rear Freehub

Designed to match the XC-PRO standard quick release front hub this item features a 'built in' freewheel body splined to take a SunTour 6 or 7 speed cassette sprocket cluster (not included).

Order 6 or 7 speed 32 hole or 36 hole and normal (130mm over locknuts) or extra long axle as required.

SunTour XC-PRO rear Freehubs with quick release £59.95 (excl. cassette)

Cat No STRA/41503 (6 speed, 130mm, 32 or 36H)

Cat No STRA/41502 (7 speed, 130mm, 32 or 36H)

Cat No STRA/41504 (7 speed, 135mm, 32 or 36H)

K ATB Seat Pillar

A robust item in high-grade light alloy with micro-fine saddle adjustment. Extra long at 300mm. State diameter when ordering – 25, 26.4, 26.6, 26.8, 27.0 or 27.2mm.

SunTour XC-PRO seat pillar . . . £49.95

Cat No STRA/41700

NEW

L ATB Headset

This lightweight precision component has been developed from extensive off-road experience. *Colour:* Black.

Thread: BC 1" × 24T (standard – English)

SunTour XC-PRO Headset . . . P.O.A.

Cat No STRA/41900 (standard)

NEW

M Vice Grips

Non-slip handlebar grips for the serious mountain biker. Colour: black.

SunTour XC-PRO 'Vice-Grips' . . . £8.99 pair

Cat No STRA/41902

NEW

N Seat Post Binder

A re-designed quick release seat pillar clamp with a useful skewer length of 18mm to 38.5mm.

SunTour XC-PRO seat post binder . . . £13.95

Cat No STRA/41901

FOR XC-PRO FREEWHEELS, FREEHUB CASSETTES AND CHAINS SEE FW-AL10, CP-AP00 AND CH-AP00 ON PAGES 94–96.

NEW

P BEAST Electronic Transmission System

Crankset: BT-CW00.
Bottom Bracket: BB-XP00-E.
Selector Assembly: BT-SA00.
Battery Electronic Housing: BT-BU00.
Battery type: 006P – 9v Alkaline.
Shift Control Switch: BT-SB00.

N.B. The BEAST system and replacement parts (other than batteries) are at present only available to Bicycle Manufacturers and Custom Builders. Any service or replacement parts enquiries should be addressed to the appropriate cycle manufacturer or their appointed agent.

R ATB Pedals

Intended for use with toeclips, these alloy pedals are really light at only 302 grams per pair. Noteworthy features include tough Cro-Mo steel axles and fully sealed bearings.

SunTour XC-PRO pedals . . . £79.50 pair

Cat No STRA/41600

SUNTOUR XC COMP

The Assignment: To apply the same exacting specification of the SUNTOUR XC-PRO componentry to a lower priced COMPETITION group.

The Result: A nicely co-ordinated, fully raceable groupset incorporating many XC-PRO features, coming within a few grams of XC-PRO.

With XC-COMP expert riders can realise state-of-the-art performance without up-market cost.

ATB

NEW

A Rear Derailleurs

Two models with differing cage geometry. Choose the short cage version for fast ATB racing or off-road hybrids. Both versions are ACCUSHIFT PLUS compatible. Capacities as XC-PRO.

SunTour XC-COMP GX rear derailleur (long arm) . . . £39.95
Cat No STRA/42000

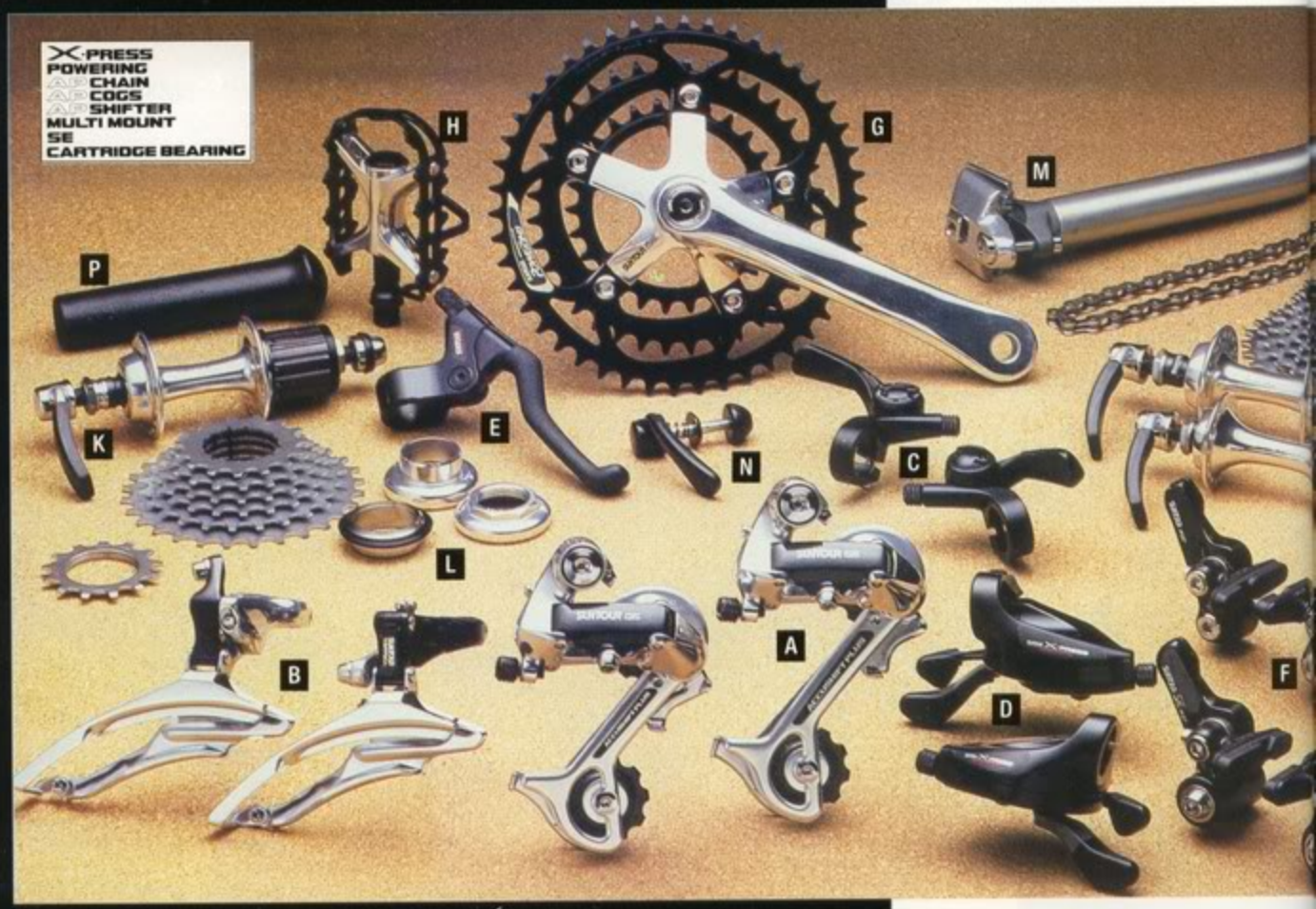
SunTour XC-COMP GT rear derailleur (short arm) . . . £39.95
Cat No STRA/42005

NEW

B Front Derailleur

This highly polished component features an entirely new cage plate design for trouble-free shifting.
Capacities: See XC-PRO.

SunTour XC-COMP front derailleur . . . £24.95
Cat No STRA/42100 (Std 1⅛" clamp)
Cat No STRA/42105 (1¼" clamp)



ACCUSHIFT PLUS FREE WHEELS AND

NEW

C Standard Index Gear Levers

Traditional 'thumbshifters' vastly improved with ACCUSHIFT PLUS and MULTIMOUNT. Choose from 6 or 7 speed versions. Complete with cables.

SunTour XC-COMP shift levers (6 speed) . . . £39.95 pair
Cat No STRA/42202

SunTour XC-COMP shift levers (7 speed) . . . £39.95
Cat No STRA/42202

NEW

D X-Press Control Levers

Order STRA/41251 or STRA/41252, details on page 84 (XC-PRO).

E Brake Levers

Available in 4-finger or 2-finger versions. Order STRA/41450 or STRA/41451 on page 84.

NEW

F Cantilever Brakes

Self-Energising (SE) for the rear, normal for the front. Order STRA/41401 or STRA/41400 on page 84.

NEW

G Crankset

Black alloy POWERINGS offset the chunky highly polished XC-Comp crank arms on this race proven set
Bolt circle dia.: 130mm (outer and middle). 74mm (inner).
Ring sizes: 26T, 36T, 46T
Crank lengths: 170mm, 175mm
SunTour XC-COMP Crankset (excl. B.B.) . . . £84.95
Cat No STRA/42301 (170mm. 26/36/46T)



NEW

Bottom Bracket Set

An ATB – quality set with sealed cups and bolt type axles. Axle type 3S.
SunTour XC-COMP B.B. set . . . £19.95
Cat No STRA/42350

NEW

H Pedals

A new plate design allied to the well proven 'Lazy-H' alloy one piece body concept. Suitable for use with ATB toeclips and straps.
SunTour XC-COMP pedals . . . £28.50
Cat No STRA/42600





NEW

J Standard ATB Quick Release Hubs

Based on XC-PRO but without Grease-Guard these hubs offer you racing quality without extra expense. Use with 6 or 7 speed freewheel. Available in 32 or 36 hole drillings.
SunTour XC-COMP standard Q/R hubs:
Cat No STRA/42500 (Front, 32 or 36H) . . . **£29.50**
Cat No STRA/42501 (Rear, 130mm, 32 or 36H) . . . **£39.95**

NEW

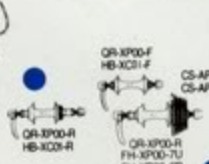
K Cassette Type Rear Freehub

Use XC-PRO Freehub on page 84 with XC-Comp front hub.



















L Headset

The proven durability of SunTour's HS-SA00-E road headset makes it ideal for off-road use. It's light alloy construction offers an appreciable weight saving.
Thread: BC 1" × 24T
Crown race I. Dia.: 26.4mm
SunTour XC-Comp headset . . . £37.00
Cat No STRA/42900



M.N.P. Seat pillar, Pillar clamp, Vice grips

Order same items from XC-PRO range on pages 84–85.

R Chain

See ACCUSHIFT PLUS Model CH-AP00 on page 96.

CASSETTE CLUSTERS ARE ON PAGES 94– 95.

SUNTOUR XCD

Lighter, stronger and smoother, that's SunTour's claim for the re-vamped popular XCD group. XCD is also the most easily affordable component set for the really serious mountainbiker, the price break really starts with XCD.

Evolved from the industry's very first off-road group, the legendary SunTour-XC, XCD comes into the 90s with a choice of derailleurs, hubs, shifters and brakes-in effect two groups in one.

XCD's a good looker but 'function' beats appearance when you're switching through city traffic or sliding through mountain mud. Well, XCD really does function, thanks to AccuShift Plus, Multi-mount, PoweRing and X-Press.

NEW

A Rear Derailleurs

ACCUSHIFT PLUS compatible, both these mechanisms will switch up to a maximum low gear cog of 30 teeth. If you can manage with a difference of 16T between the inner and outer chainrings choose the shorter GT version, if not opt for GX.

Capacities: As XC-PRO.

SunTour XCD rear derailleur ... £29.95

Cat No STRA/32000 (GX-long arm)
Cat No STRA/32005 (GT-short arm)

NEW

B Front Derailleur

The familiar XCD design vastly improved by a newly profiled cage plate. Makes for rapid shifting with PoweRing and APChain.

Gear Capacity: See XC-PRO.

SunTour XCD front derailleur ... £19.95

Cat No STRA/32100 (Std 1⅛" clamp)
Cat No STRA/32105 (1¼" clamp)



X-PRESS
POWERING
AP CHAIN
AP CDGS
AP SHIFTER
MULTI MOUNT
SE

NEW

C Standard Index Gear Levers

Ergonomic style ACCUSHIFT PLUS shifters employing the versatile MULTI-MOUNT system. Available in 6 or 7 speed versions, complete with cables.

SunTour XCD shift levers (6 speed) . . . £28.95 pair
Cat No STRA/32202

SunTour XCD shift levers (7 speed) . . . £28.95 pair
Cat No STRA/32201

NEW

D X-Press Control Levers

Order STRA/41252 or STRA/41251 from XC-PRO series on page 84.

NEW

E SE Cantilever Brake

The stopping power of this Self Energising brake is so incredible that it **must only be used on the rear.** Only light lever pressure is needed due to controlled braking being applied by the utilisation of energy – transfer from the wheel rim to the brake arm's directional helical mechanism. Will fit onto standard cantilever bosses and comes as one unit (rear) with straddle cable and cable holder.

SunTour XCD S.E. rear brake . . . £34.95 (rear)
Cat No STRA/32401

NEW

F Standard Cantilever Brake

Up to the minute design in high grade alloy with one piece moulded brake blocks. For front or rear use. Supplied as one brake unit with straddle cable and cable holder.

SunTour XCD standard brake . . . £24.95 (front or rear set)
Cat No STRA/32400

NEW

G Brake Levers

Light alloy units with non-slip finger grip, cable and reach adjustment facilities. Choose from short 2-finger or 4-finger versions. Cable not included.

SunTour XCD brake levers . . . £27.50 pair
Cat No STRA/32451 (short)
Cat No STRA/32450 (long)

Brake Cables

For main cable sets order XC-PRO on page 84.

NEW

H Crankset

Hefty light alloy ATB cranks fitted with the latest POWERING anti-jam chainrings. Colour coded grey and black. B.B. set not included.

Bolt circle dia.: 130mm (outer and middle). 74mm (inner).
Chainrings: 26T, 36T, 46T
Crank lengths: 170mm, 175mm

SunTour XCD crankset . . . £64.95
Cat No STRA/32301 (170mm, 26/36/46T)

NEW

J ATB Pedals

Heavier version of the XC-COMP item with black steel plates. Good value when weight isn't the main consideration.

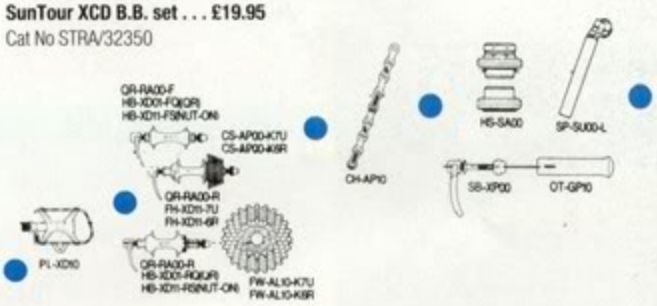
SunTour XCD pedals . . . £26.50 pair
Cat No STRA/32600

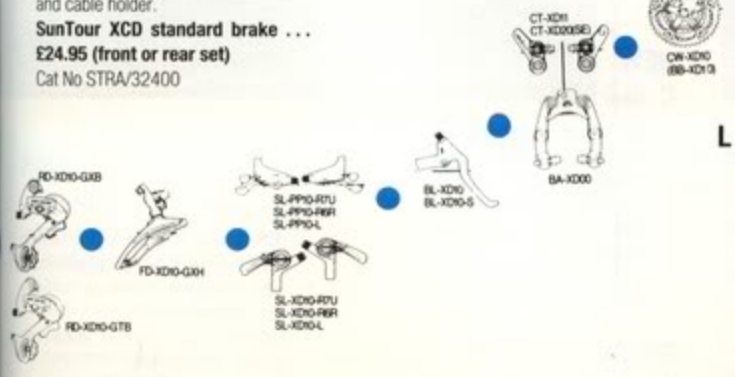


Bottom Bracket

Axle, sealed chrome plated cups, lockring and ball races to suit XCD crankset. Axle type 3S.

SunTour XCD B.B. set . . . £19.95
Cat No STRA/32350





K Standard ATB Quick Release Hubs

Free-running hub with adjustable cup and cone bearings. Finished in a special grey hi-tech coating to colour match XCD.

Over locknut dimensions: Front – 100mm. Rear – 130mm.

SunTour XCD Q/R hubs:
Cat No STRA/32500 (Front, 36H) . . . **£19.50**
Cat No STRA/32501 (Rear, 36H) . . . **£21.95**

L ATB Cassette Type Freehubs

36 hole rear hub in grey alloy with quick release fittings and integral freewheel body, splined to take SunTour cassette sprocket sets (not included). Matches XCD standard front hub. Order 6 or 7 speed, please refer to pages 94 to 95 for the appropriate cassette set.

SunTour XCD Q/R Freehub (6 speed) . . . £36.95
Cat No STRA/32502

SunTour XCD Q/R Freehub (7 speed) . . . £36.95
Cat No STRA/32503

M ATB Seat Pillar

Extra long (300mm) in light alloy with single bolt clamping and adjustment. Available in 26.6mm, 26.8mm, 27mm and 27.2mm, please state diameter when ordering.

SunTour XCD seat pillar . . . £26.50
Cat No STRA/32700

N Chain

See item CH-AP10 on page 96.

P Freewheel

See item FW-AL10 on page 94.

R Freehub Cassette

See item CS-AP00 on page 94.

S Headset

See XC-COMP on page 87.

T Seat Pillar Clamp

See XC-PRO on page 84.

U Vice Grips

See XC-PRO on page 84.

Power-cam Brake

(Not illustrated).
Loosing popularity with the advent of improved cantilevers and SE brakes but very powerful nonetheless. Essential replacement for use on bikes with brake spigots located for use on 'Power-Cams'. Levers and cables extra.

SunTour XCD Power-Cam brake . . . £19.95 each
Cat No STRA/34202



SUNTOUR X-1

X-1: Basic black for basic, down-to-earth riders, the type of person who rides a bike day-in day-out. This is the rider who loves his bike but also likes to pass unnoticed in the crowded urban scene. The black X-1 is for the racer who wins from the back!

But, many mountain bikers are unashamedly brash, colourful people. Their bikes are an extension of self, customised in bright eye-catching neons and fluorescents – hot and jazzy. If colour's your scene then X-1 Chroma is the group for you. What's more, whenever the mood changes, snap-on, spring-off buttons enable you to switch from yellow to green, through to pink and even back to black again.

New for 1990, X-1 and X-1 Chroma share the same technical specification and price structure. You just choose the colour, put it all together and get into the scene.

NEW

A Rear Derailleur

Wide capacity gear in black alloy with a robust black steel cage for strength and economy. Fully ACCUSHIFT PLUS compatible.

Max rear cog: 32T (with 28mm dropout)

Total capacity: 40T (max. c/ring difference: 22T)

SunTour X-1 rear derailleur ... £26.95

Cat No STRA/17000X

NEW

B Front Derailleur

Alloy hinged clamp type with a choice of diameters according to make of frame. The steel cage plates are pre-formed for positive shifting.

Gear Capacity: 24T

Min. between chainrings: 6T

SunTour X-1 front derailleur ... £16.95

Cat No STRA/17100 (Std 1⅛" dia.)

Cat No STRA/17105 (1¼" dia.)

NEW

C Gear Levers

All black power levers with ACCUSHIFT PLUS and MULTIMOUNT versatility. Order 6 or 7 speed as required. Complete with cables.

SunTour X-1 shift levers ... £26.95 pair

Cat No STRA/17202 (6 speed)

Cat No STRA/17201 (7 speed)

NEW

D X-Press Control Levers

Budget version of the XC-PRO, change gear with the radical new Push-Push system and maintain full control of your steering. Fully ACCUSHIFT PLUS compatible and complete with cables.

SunTour X-1 X-PRESS levers ... £34.95 pair

Cat No STRA/17252 (6 speed)

Cat No STRA/17251 (7 speed)

FOR BRAKE CABLES SEE XC-PRO ON PAGE 84.

NEW

E Cantilever Brake

Clean, confidence inspiring design in black resin composite. Supplied as two brake units to fit front and rear with straddle cables and clamps. Features one-piece adjustable blocks.

SunTour X-1 brake units (set, front and rear) ... £24.95

Cat No STRA/17400

NEW

F Brake Levers

All alloy levers with plastic cable adjuster. Short or long type operating lever. Supplied in pairs without cables.

SunTour X-1 brake levers ... £17.95 pair

Cat No STRA/17451 (short arm)

Cat No STRA/17450 (long arm)



NEW

G Crankset

Robust alloy ATB design in hi-tech black finish with X-1 graphics. Fitted with the latest PoweRing anti-jam alloy chainrings.

Bolt circle dia.: 130mm (outer and middle). 74mm (inner).

Ring sizes: 28T, 38T, 48T

Crank lengths: 165mm, 170mm, 175mm

SunTour X-1 crankset (less B.B.) ... £59.95

Cat No STRA/17301 (170mm, 28/38/48T)



X-1 Chroma

Bottom Bracket Set

Cup and cone bearing type with boron steel axle. Axle identification is type 3T.

SunTour X-1 B.B. set . . . £7.45
Cat No STRA/17350

NEW

H Standard ATB Hubs

Polished alloy quick-release hubs with sealed cup and cone type adjustable bearings. Available in pairs only, 36 hole. Front axle over-locknut dimension is 100mm, rear is 130mm to suit 6 or 7 speed freewheels.

SunTour X-1 hubs (Q/R 36h) . . . £35.95 pair
Cat No STRA/33500

NEW

K Vice Grips

See page 84, XC-PRO.

NEW

L Seat Post Binder

See page 84, XC-PRO.

ATB Pedals

Use model XCE on page 92.

NEW

P Index Gear Levers

ACCUSHIFT PLUS compatible. Specification as X-1 with colour.

SunTour X-1 Chroma shift levers (6 speed) . . . £26.95 pair
Cat No STRY/17202 (Yellow)
Cat No STRG/17202 (Green)
Cat No STRP/17202 (Pink)

SunTour X-1 Chroma shift levers (7 speed) . . . £26.95 pair
Cat No STRY/17201 (Yellow)
Cat No STRG/17201 (Green)
Cat No STRP/17201 (Pink)

NEW

M Rear Derailleur

ACCUSHIFT PLUS compatible. Specification as X-1 with colour.

SunTour X-1 Chroma rear derailleur . . . £26.95
Cat No STRY/17000 (Yellow)
Cat No STRG/17000 (Green)
Cat No STRP/17000 (Pink)

NEW

N Front Derailleur

Specification as X-1 with colour.

SunTour X-1 Chroma front derailleur (std. 1⅛" clamp) . . . £16.95
Cat No STRY/17100 (Yellow)
Cat No STRG/17100 (Green)
Cat No STRP/17100 (Pink)

SunTour X-1 Chroma front derailleur (O/S 1¼" clamp) . . . £16.95
Cat No STRY/17105 (Yellow)
Cat No STRG/17105 (Green)
Cat No STRP/17105 (Pink)







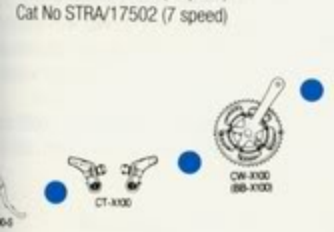


NEW

J Freehub

Hubs with quick release axles and built-in freewheel mechanism. Splined to take SunTour Accushift Plus cassette sprocket sets. Available in 6 or 7 speed versions in 36 hole with an over-locknut dimension of 130mm (rear), 100mm (front). Sealed cup and cone bearings.

SunTour X-1 Freehub and front hub (Q/R, 36h) . . . £52.95 pair
Cat No STRA/17503 (6 speed)
Cat No STRA/17502 (7 speed)



FOR SUITABLE FREEWHEELS AND SPROCKET CLUSTERS FOR X-1 SEE PAGES 94 AND 95. CHAINS ARE ON PAGE 96.

X-PRESS POWERING CHAIN COGS SHIFTER





X-PRESS POWERING CHAIN COGS SHIFTER CHROMA

NEW

R Cantilever Brake

Specification as X-1 with colour. Supplied as front and rear set without main cables and levers.

SunTour X-1 Chroma cantilevers . . . £24.95 (set, F and R)
Cat No STRY/17400 (Yellow)
Cat No STRG/17400 (Green)
Cat No STRP/17400 (Pink)

NEW

S Brake Levers

Specification as X-1 with colour.

SunTour X-1 Chroma brake levers (long arm) . . . £17.95 pair
Cat No STRY/17450 (Yellow)
Cat No STRG/17450 (Green)
Cat No STRP/17450 (Pink)

SunTour X-1 Chroma brake levers (short arm) . . . £17.95 pair
Cat No STRY/17451 (Yellow)
Cat No STRG/17451 (Green)
Cat No STRP/17451 (Pink)

NEW

T Crankset with PoweRings

Specification as X-1 with colour.

SunTour X-1 Chroma crankset (excl. B.B.) . . . £59.95 pair
Cat No STRY/17301 (170mm, 28/38/48T, Yellow)
Cat No STRG/17301 (170mm, 28/38/48T, Green)
Cat No STRP/17301 (170mm, 28/38/48T, Pink)

For Bottom Bracket set order X-1

U Spare Colour-Buttons

Snap on neon colour caps to ring the changes on X-1 and X-1 Chroma. Set comprises: 2 crank buttons, 1 rear mech. cap, 1 front mech. cap, 4 brake buttons, 2 shift lever caps, 2 brake lever adjusters.

SunTour X-1 Chroma spare buttons . . . £9.95 set
Cat No STRY/17999 (Yellow)
Cat No STRG/17999 (Green)
Cat No STRP/17999 (Pink)



SUNTOUR XCE

90

ATB

SunTour's popular XCE off-road group goes ACCUSHIFT PLUS for 1990. Now's the time to uprate your 1989 XCE-4050 equipped machine and experience the improved shifting and smoother riding that comes from AccuShift Plus and PoweRing.

XCE for the ECONOMY minded EXPERT.

NEW

A Rear Derailleur

ACCUSHIFT PLUS compatible, a wide ratio mechanism with a largest cog capacity 32 teeth and overall capacity of 40 teeth.

SunTour XCE rear derailleur ... £24.95

Cat No STRA/33000

B Front Derailleur

Available in two clamp diameters with a gear capacity of 24 teeth.

SunTour XCE front derailleur ... £15.95

Cat No STRA/33100 (1⅛" std. clamp)

Cat No STRA/33105 (1¼" o/s clamp)

D X-Press Control Levers

Use XC-Pro.

See pages 84–85.

H Quick Release ATB Hubs

See X-1 type on page 90.

J Freehubs

See X-1 type on page 90.

K ATB Pedals

Alloy one piece construction with a chunky footgrip. Dark grey satin finish.

SunTour XCE pedals ... £15.75

Cat No STRA/33600





NEW

F Brake Levers

Now in satin black alloy with cable adjuster. Supplied in pairs without cables.

SunTour XCE brake levers ... £14.95

Cat No STRA/33450 (normal type)

Cat No STRA/33451 (short type)

FOR BRAKE CABLES SEE PAGE 84.

NEW

G Crankset with PoweRings

Last year's item uprated with anti-jam RoundTech PoweRing chainrings. Finished in grey with satin black rings. Bottom bracket set not included.

SunTour XCE crankset ... £57.95

Cat No STRA/33301 (170mm, 28/38/48T)

Bottom Bracket set

Use X-1 type on page 90.

NEW

C Standard Index Gear Levers

Now with ACCUSHIFT PLUS click – index and click-friction. Normal handlebar mounting. Complete with cable set.

SunTour XCE shift levers ... £24.95 pair

Cat No STRA/33202 (6 speed)

Cat No STRA/33201 (7 speed)

X-PRESS POWERING CHAIN COGS SHIFTER

NEW

E Cantilever Brake Unit

In black satin finished alloy with one piece blocks. Available as a full cantilever set for front and rear with straddle cables and cable clamps.

SunTour XCE cantilevers ... £24.95 (set, F and R)

Cat No STRA/33400

SUNTOUR XCM

Remodelled for the 90's, XCM is a basic, no frills genuine ATB component set for the enthusiast. Features include ACCUSHIFT PLUS derailleurs. POWERING round chainrings, alloy cantilever brakes, grey resin ATB pedals and of course the option of X-PRESS push shifters from the X-1 range.

FOR SPECIAL SUNTOUR TOOLS PLEASE TURN TO PAGE 110.

X-PRESS
POWERING
AP CHAIN
AP COGS
AP SHIFTER

XCM Rear Derailleur (GXB) . . . £21.95
Cat No STRA/34000

XCM Front Derailleur . . . £12.95
Cat No STRA/34100 (Std. clamp 26.8mm dia.)
Cat No STRA/34105 (o/s clamp 31.8mm dia.)

XCM Crank/Chainring set . . . £42.95
Cat No STRA/34301 (170mm. 28/38/48T. Excluding B.B. set)

XCM Bottom Bracket set BB-XM00 . . . £7.45
With type 3S axle.
Cat No STRA/34350

XCM Pedals . . . £11.95 pair
Cat No STRA/34600

XCM Index Shift Levers . . . £21.95 pair
Cat No STRA/34202 (6 speed – with cables)
Cat No STRA/34201 (7 speed – with cables)

XCM Brake Levers only . . . £14.95 pair
Cat No STRA/34450

XCM Cantilever Brake Arms . . . £21.95
Cat No STRA/34400 (set of front and rear with straddle cables and clamp).

For Main Brake Cables see pages 84/85.



SUNTOUR XCT

Tempting prices from XCT, ALL NEW for 1990 with ACCUSHIFT PLUS derailleur, alloy cranks and black steel POWERINGS, black nylon resin pedals brakes and brake levers. Add AP-Chain, AP-Cogs and X-Press thumb push shifters and you've a transmission set that gives all without taking your last penny.

X-PRESS
POWERING
AP CHAIN
AP COGS
AP SHIFTER

XCT Rear Derailleur . . . £16.95
Cat No STRA/15000 (with hanger bracket)

XCT Front Derailleur . . . £11.95
Cat No STRA/15100 (Std. 26.8mm clamp)
Cat No STRA/15105 (o/s 31.8mm clamp)

XCT Index Shift Levers . . . £15.95
Cat No STRA/15202 (6 speed – with cables)
Cat No STRA/15201 (7 speed – with cables)

XCT Brake Levers only . . . £11.95 pair
Cat No STRA/15450

XCT Cantilever Brake Arms . . . £18.95
Cat No STRA/15400 (set of front and rear with straddle cables and clamps)

For Main Brake Cables see pages 84/85.

XCT Crank/Chainring set . . . £36.95
Cat No STRA/15301 (170mm. 28/38/48T. Excluding B.B. set)

XCT Bottom Bracket set
See page 92 – use XCM.

XCT Pedals . . . £9.95 pair
Cat No STRA/15600

