SUNTOUR - 1991

	XC PRO	XC COMP	XC LTD	X1	X1 CHROMA	XCE	XCM	XCT	XCU
REAR MECH	GX long arm, 275g. Max rear cog: 32T Total cap: 39T GT short arm, 265g. Max rear cog: 32T Total cap: 34T	GX long arm, 262g. Max rear cog: 32T Total cap: 39T GT short arm, 253g. Max rear cog: 32T Total cap: 34T	GX long arm, 308g. Max rear cog: 32T Total cap: 39T	GX type, 308g. Max rear cog: 32T Total cap: 39T	GX type, 309g. Max rear cog: 32T Total cap: 39T Pink, green or yellow fluoro options	RD-XE01 Accushift Plus	RD-XM01 Accushift Plus	RD-XT01 Accushift Plus	RD-XU01 Accushift Plus
FRONT MECH	116g Cap: 24T - Clamp diameters 28.6/31.8mm	116g Cap: 24T - Clamp diameters 28.6/31.8mm	116g Cap: 24T - Clamp diameters 28.6/31.8mm	109g Cap: 24T - Clamp diameters 28.6/31.8mm	110g Cap: 24T - Clamp diameters 28.6/31.8mm Fluoro colour options	FD-XE01: Clamp diameters 28.6 or 31.8	FD-XM01: Clamp diameters 28.6 or 31.8	FD-XT01: Clamp diameters 28.6 or 31.8	FD-XU01: Clamp diameters 28.6 or 31.8
X-PRESS GEAR SHIFTERS	Underbar mount 7 speed, 331g	Underbar mount 7 speed, 331g Same unit as XC Pro	Underbar mount 7 speed, 341g	Underbar mount 7 speed, 341g Same units as XC LTD	Same units as XC LTD	Underbar mount, 7spd, 341g	Underbar mount, 7spd,	Same as XCM	Underbar, 6speed
GEAR SHIFTER OPTION	XC PRO Overbar lever. 149g.	XC COMP Overbar lever. 149g.	XC LTD Overbar lever. 149g.	X1 Overbar lever. 150g.	Overbar lever. 150g. Optional colour	Overbar lever, 150g.	7 spd Overbar or new Wishbone type	7 spd Overbar or new Wishbone type	6 spd Overbar or new Wishbone type
BRAKE LEVERS	4 finger, 220g pair. Also, 2 finger, levers available	4 finger, 225g pair. Also, 2 finger, levers available	2 finger, 265g pair.	Dia Compe 2 finger, 270g pair.	2 finger, 273g pair. Colour options	2 finger levers 4 finger levers	4 finger levers	4 finger levers	4 finger levers
CANTILEVER BRAKES	Low profile design. 205g pair. Self Energizing Rear, 245g	Low profile design. 205g pair. Self Energizing Rear, 245g	Conventional design. 189g pair.	Dia Compe 164g pair.	167g pair. Colour options	Dia Compe	Dia Compe	Dia Compe	Dia Compe
CHAINSET	46/36/24T - 46/36/26T - Crankarm lengths: 170, 175 or 180mm, Weight: 685g	46/36/24T - 46/36/26T - Crankarm lengths: 170 or 175mm, Weight: 740g	46/36/24T - 46/36/26T - Crankarm lengths: 170 or 175mm, Weight: 720g	46/36/24T - 46/36/26T - Crankarm lengths: 170 or 175mm, Weight: 730g	46/36/24T - 46/36/26T - Crankarm lengths: 170 or 175mm, Weight: 730g	48/38/28T. Crankarm lengths: 170 or 175mm	48/38/28T. Crankarm lengths: 170 or 175mm	48/38/28T. Crankarm lengths: 170 or 175mm	48/38/28T. Crankarm lengths: 170 or 175mm
BOTTOM BRACKET	348g	348g	Same as XC Comp	353g	Same as X1	353g	Same as XCE	XCT	Same as XCT
REAR HUB - OPTION	7 spd, WTB GreaseGuard 32 or 36 Holes, 312g		335g, 32 or 36 Holes	326g, 32 or 36 Holes	Same as X1	326g, 32 or 36 Holes	Same as XCE		
FRONT HUB	250g. 32 or 36 Holes. WTB Grease Guard	234g. 32 or 36 Holes.	235g. 32 or 36 Holes.	235g. 32 or 36 Holes.	Same as X1	235g, 32 or 36 Holes	Same as XCE		
FREEWHEEL - OPTION	7 sp, 13-28T, 483g, and 13-30T, 518g available		7 sp, 13-28T, 487g, and 13-30T, 514g available	7 sp, 13-28T, 487g, and 13-30T, 514g available	Same as X1	Same as X1	Same as X1	Same as X1	6 speed
REAR HUB/ CASSETTE	7spd Hub 488g 12-28T or 13-30T with WTB Grease Guard	7spd. Hub, 473g.32 or 36 Holes.12-28T or 13-30T	7spd. Hub, 32 or 36 Holes.12-28T or 13-30T	7spd. Hub, 32 or 36 Holes.12-28T or 13-30T	Same as X1	Same as X1			
CHAIN	Accushift Plus, 325g	Accushift Plus, 325g	Accushift Plus, 325g	Accushift Plus, 325g	Same as X1	Same as X1	Same as X1	Accushift Plus	Accushift Plus
PEDALS	308g, WTB Grease Guard	315g,	395g,						
HEADSET	Std diameter, 125g.								
SEATPOST	300mm, 290g	Same as XC Pro							

SUNTOUR

Japan's Number Two has a adopted a flexible 'something for everyone' approach rather than offering a radical parcel of new changes. This strategy has proven popular with bike manufacturers. In each group, it's been possible for them to specify either traditional overbar gear shifters or underbar X-Press push button shifters and, in nearly all the groups to choose between cassette freehubs and conventional splined rear hub and freewheel combinations. Also, the Accushift Plus system allows greater flexibility and compatibility between the different groupsets within the range. Expect to see an increased number of bikes specced with SunTour in 1991.

XC Pro - The top of the range group is designed for hard competition. Features include Wilderness Trail Bikes (WTB) Grease Guard system, which allows easy lubing of the bottom bracket and the hubs and is available in a cassette freehub version or a lighter, conventional set-up; SE - Self Energizing - Pedersen rear brakes or new low profile cantilever stirrups are available.

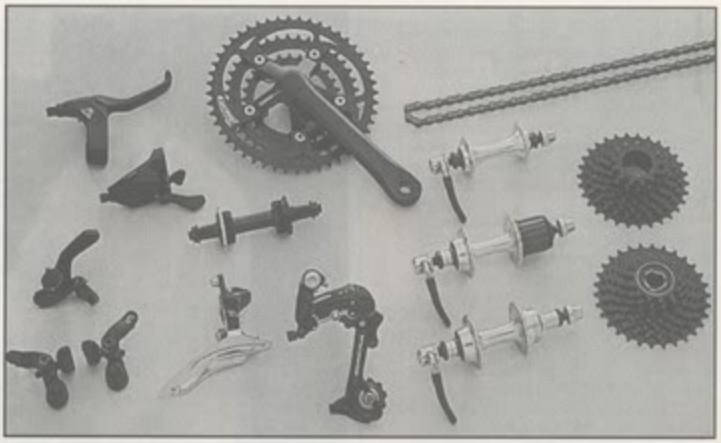
XC Comp - Another group for competitors and hardcore dirt riders. Innovations include: low profile cantilevers. SE rear brakes are also available.

XC LTD - A new group for 1991, replacing XCD. Aimed at competitors and hard riding funsters.

X-1 - For this group and its multi-coloured stablemate, X-1 Chroma, serious sport and touring riders are the anticipated end users. Again, a flexible selection of options can be specified.

XCE - Designed for cruising and touring, though capable of handling occasional forays into rougher, more mountainous terrain. This group and the ones below it in the range feature Dia Compe cantilevers that have proven very popular in the past.

XCM, XCT, XCU - The latter is a new group for 1991. Essentially, groups for entry-level riders. One neat feature they all share are the new Wishbone underbar shifter. These Y-shaped thumbshifters, similar to units produced by Simplex and Mavic, look very easy to use.



Suntour's X-1 groupset

SACHS-HURET

One of the European companies that appear determined to mount a serious challenge to Japan's domination of the groupset market. This year they have revamped their range and there are some interesting ideas in it, which is perhaps why at least one UK manufacturer, Dawes, has specced their components on some of their bikes.

New Success ATB - A race-oriented top of the range selection that includes a braking set-up designed in conjunction with Modolo. Power Grip is the Sachs-Huret twistgrip gear shifter. It features a locking button to prevent unintentional shifts. An 8-speed version is reputedly in the pipeline. Also, new low profile design cantilevers.

Rival 7000 ATB - Widely respected in France, where it falls into the 'tried and tested' category. It too features the Power Grip and a Modolo braking system.

Classic 3500 ATB - Mid-range componentry. Three gear shifting options are available, conventional thumbshifters, Power Grip or the intriguing Twist Ring, a notched ring which looks like it could counter many of the criticisms raised about twistgrips, because it sits inboard of the bar grips.

Classic 2500, 1500 ATB - Low-end utility groups that are more likely to feature on street bikes than on off-road machines.

SACHS-HURET - 1991

	New Success ATB	Rival 7000 ATB	Classic 3500 ATB	Classic 2500 ATB	Classic 1500 ATB
REAR MECH	Aris New Success. Max rear cog: 34T; Total Cap: 40T	Aris Rival. Max rear cog: 34T; Total Cap: 40T	Aris Classic 3500 Max rear cog: 34T; Total Cap: 40T	Aris Classic 2500 Max rear cog: 34T; Total Cap: 40T	Aris Classic 1500 Max rear cog: 34T; Total Cap: 40T
FRONT MECH	Aris New Success. Total Cap: 26T. Clamp dia: 29 or 31.8.	Aris Rival. Total Cap: 26T	Aris Classic 3500. Total Cap: 26T	Aris Classic 2500. Total Cap: 26T	Aris Classic 1500. Total Cap: 26T
GEAR SHIFTER	Aris Power Grip 7speed twist grip indexed or Aris ATB 7 speed indexed thumbshifter	Aris Power Grip 7speed indexed twist grip or Aris ATB 7 speed indexed thumbshifter	Aris Power Grip 7speed twist grip or Aris Twist Ring - 6 or 7 spd or Aris ATB 6 or 7 speed thumbshifters	Aris Twist Ring - 6 or 7 spd or Aris ATB 6 or 7 speed thumbshifters	Aris Twist Ring - 6 or 7 spd or Aris ATB 6 or 7 speed thumbshifters
BRAKE LEVER	Sachs-Modolo 2 or 4 finger levers	Sachs-Modolo 2 or 4 finger levers	Sachs-Modolo 2 or 4 finger levers		
CANTILEVER BRAKES	Sachs New Success low profile	Sachs Rival low profile. Hub brakes available as option.	Sachs cantilevers. Hub brakes available as option.		
CHAINSET	New Success 46/36/26 or 48/38/28 round chainrings; 170 or 175mm crankarms	Rival 7000 46/36/26 or 48/38/28 chainrings; 170 or 175mm crankarms	Classic 3500 48/38/28 steel chainrings; 170 or 175mm alloy crankarms	Same as Classic 3500 model	
BOTTOM BRACKET	SKF cassette	SKF cassette	SKF cassette	SKF cassette	
FREEWHEEL	Sachs-Maillard 12-32T 7spd block	Sachs-Maillard 12-32T 7spd block	Sachs-Maillard 13-32T 6 or 7spd blocks	Sachs-Maillard 13-32T 6 or 7spd blocks	Sachs-Maillard 13-32T 6 or 7spd blocks
HUBS	New Success alloy with cro-moly axle and sealed bearings	Rival 7000 alloy with cro-moly axle and sealed bearings	Classic 3500 alloy with cro-moly axle	Classic 2500	Classic 1500
CHAIN	Sedisport ATB	Sedisport ATB	Sedisport ATB	Sedisport ATB	Sedisport ATB