

bike test

With the predominance of MTBs, the traditional British touring bike has become ever more sidelined by the bigger manufacturers and even by many dealers. Increasingly, the best deals are offered by specialist shops and frame builders who can build full-custom models or put together a value-for-money package with plenty of options. Both approaches appeal to riders who know what kind of touring they most enjoy and want a specific machine to meet this need – as opposed to the more generic approach taken by, say, the Dawes Super Galaxy which has to aim at a mass market.

Bespoke tourers tend to start at around £1200, compared to the £800 Super Galaxy, so for most tourists the investment has to be right. But an off-the-shelf model simply won't do for many, as experience normally breeds strong preferences. Additionally, tourists tend to want a machine to last for decades and not simply until the next fad. Top touring bikes are becoming increasingly dedicated to specific purposes, well built machines are available for having a blast on a short, fast audax; the efficiency and comfort needs of longer audax events and light touring; the all-round abilities and load carrying requirements for 'traditional' touring/camping; and the longer-term reliability and extra-heavy loads of full blown expeditions. For our review

we specified bikes suitable for the middle ground – audax, over-nighting, and stretching to the potential for lightweight camping, leaving our suppliers to do the rest.

Argos in Bristol have almost 25 years experience of building custom tourers, including those used by Ian Hibell, perhaps the world's most intrepid cycle-tourist. Their Paris-Brest-Paris model (£1299) is their first 'semi-production' machine. It's intended for audax through to lightly loaded touring use.

London based Condor have been supplying distinctive touring machines for 50 years. The Pendio tested (£1199) is built from Reynolds 631 and is aimed at fast day use. Like Argos, Condor offer full custom options at extra cost.

Paul Hewitt, of Leyland, Lancashire, is quickly building up a reputation for top quality machines. The Custom Touring tested (£1471.73) is fully customer specified. It's the closest of the test bikes to the Super Galaxy in terms of intended usage – road camping and day rides.

For our review, Tyneside based Dave Yates ditched 700C wheels and built us a new 26in wheeled version of his custom Hosteller (£1150) – a bike designed for full-on touring.

Frame

Although not a full custom machine, the purchaser goes through a thorough measuring session with the founder of Argos, Arthur

Needham, on an adjustable mocked-up machine to ensure correct sizing and component choice. Our test model appeared to be built to the most exacting standards we've come to expect from Argos, and to the eye was absolutely flawless. Surprisingly, the head tube was 2mm out of the vertical though this is going to be unnoticeable when riding.

Both the Argos and the Hewitt are built from Reynolds 725 tubing – a high-specification heat-treated CrMo offering 40% more strength than Reynolds 531, for the same weight. Both use neat cast short point lugs and are silver brazed. This is a lower temperature process than bronze brazing, and ensures as much strength as possible is retained after construction. As fork blades are not available in 725, both bikes comes with Reynolds 531 forks. The Hewitt's alignment was as good as they come.

The Condor is very neatly built from Reynolds 631 main tubes, 725 stays and 531 forks. 631 is an air hardening steel, like 853, but is not heat-treated. It is nominally of the same strength as 531, and joins should not lose strength by nature of the air hardening process after brazing. Reynolds claim that, compared to standard CrMo, fatigue life is extended. Alignment was not quite perfect with the head tube being 3mm out of the vertical. The Condor lacked some of the brazed-on touring features that were standard on all the rivals, such as

Argos Paris-Brest-Paris £1299

The Argos is made from Reynolds 725 tubing with 531 forks. The frame detail suggests that it is designed for a very long life



The Argos bag support allows ST1 to be used



An expert mitre on the 'fast back' stays



RIVALS

GEORGE LONGSTAFF CUSTOM (around £1500). No typical spec as customers needs vary so much – ask for what you want. Particular attention paid to personalised fit, reliability, and long service life. Special Longstaff/Goldtech touring hubs with 4-pawl ratchet, 40 or 48 spokes are new for '99. Contact Longstaff Cycles ☎ 01782 561966

ROBERTS TRANSCONTINENTAL (typical spec £1275). A high specification custom tourer, designed for mile eating and load carrying in comfort. Columbus Nivacrom frame w/ oversize stays, and generous tyre clearances. Functional wide-range 27-speed gearing based on mix of Campag Ergopower, Shimano cassette and Sachs Quarz mech. ROUGHSTUFF model with 26in MTB wheels in Reynolds 631 (from £995) or, custom Nivacrom (from £1200) also available. Contact Roberts ☎ 0181 684 3370.

MERCIAN KING OF MERCIA (£1530). Custom made tourer with great appeal to the traditionalist, built in Reynolds 531. Equipment is mainly Campag with a TA Zephyr chainset, TA Techno bottom bracket and TA pedals. Contact Mercian Cycles ☎ 01332 346786.

mudguard fixings that dispense with annoying 'tin-plate' clips.

The chrome-molybdenum (CrMo) Reynolds 525 tubing is slowly superseding their venerable 531 manganese molybdenum (MangMo). It has the same tensile strength. The Yates – this one built by Dave himself as signified by his signature on the top tube – is built from 525, but with a 531 fork. Build standard was very high throughout, except the head/down tube lug which looked like it had been over-filled in its upper point, though this is only a cosmetic issue. The head tube was 3mm to one side of the bottom bracket/seat tube – much less significant

than being out of vertical. The full custom build is less common on frames of this price, and the dynamo braze-on fitting is an extra some builders will charge you £18 for.

All the frames had 28.6mm oversize top tubes, and all but the Argos had 32mm oversize down tubes. In the case of a heavily-loaded Yates or Hewitt this would give some welcome stability. On the Condor this was less necessary.

Vertical drop-outs aid easy wheel removal and fitting and are stronger than horizontal dropouts. These were fitted to all the frames except the Condor. Some tourists prefer its horizontal drop-outs as its easier to re-position a

buckled wheel, and get home on it. Those of the Argos are tidy polished stainless steel, so you'll never have to worry about rust spots. Frame Saver internal anti-rust protection is also provided as standard – good for a bike that's going to spend a considerable amount of time outdoors.

Argos	●●●●●
Condor	●●●●○
Hewitt	●●●●○
Yates	●●●●○

Handling

The Yates stuck to the road beautifully. Riding in the dark I got caught on some mud that had collected in the middle of the country lane – after a bit of wavering when I thought I was going to lose it, I was surprised to get through upright; I'm sure I would have been ditched by the rivals. Basically the Yates was rock steady and took no effort at all to hold a dead straight line whether going slow or fast. Even with panniers these attributes were still there, and the steering of the Yates under load was the best on test.

The Argos had go-where-you-point steering, but a touch of 'wheel flop' was apparent. This is a feeling where, once the bars are turned past a certain amount, a more conscious effort is needed to bring them straight again, for example when cornering tightly. Going down the straight and narrow, even after long hours in the saddle, ➤



Condor Pendio 631 Athena £1199

The 631 framed Condor is a lively machine – ideal for shorter audax rides



The Condor boasts nicely embellished lugs



The 32T chainring may be too large for some

bike test



WHAT TO LOOK FOR IN A QUALITY TOURER

FRAME AND HANDLING Stable handling with slow steering, rather than tetchy and quick, is all important. This is especially the case over long distances, at speed, and carrying loads. This means shallow head angles of 71 or 72° and around 6cm-plus of trail. Oversize top tubes are now almost standard, and in particular help to stabilise a bike carrying heavy loads. For heavier loads, roughstuff and improved comfort, check that wider tyres (37mm plus) can be used.

WHEELS Expect quality hubs with good sealing – this usually means MTB hubs, which being 5mm wider than road models, build a stronger wheel with less dish. 36/36 spoking is standard but for heavier loads 40 spokes in the rear wheel can be used for greater reliability and strength, though the choice of 40 spoke rims and hubs is limited. Sapim and DT spokes are acknowledged leaders for long-term reliability.

26in MTB wheel tourers are becoming more common. These have the advantages of stronger wheels, greater adaptability, lower loads (increasing stability), greater comfort, and lower gear ratios while using standard transmission.

GROUPSET Complete groupsets are either intended for MTB or road racing giving the choice of good low ratios with big gaps in the cruising range, or close-ratio cruising gears with what can be insufficiently low ratios – some mix and match is often the best compromise. Brakes involve similar compromises. Road groupset brakes have insufficient 'drop' for anything greater than 28mm tyres (25mm for Campag) when used with mudguards. Drop-bar levers have too little cable pull when used with V-brakes and most cantilever brakes unless adapters or careful set-ups are used. These arrangements are necessary for wide clearances and sufficient braking power when loaded.

OTHER ELEMENTS Consider what extras are included as this varies between individual bikes: pedals, carriers, mudguards, extra braze-ons etc.

no effort is required to keep a steady safe line on the road. We thought the handlebar bag on its optional forward mounting support (£70) would exaggerate the 'flop' but we soon got used to it if it was modestly loaded. The Argos also behaved very well with light camping gear at the rear. Unlike traditional tourers, this one had a much racier feel, ideal for long audax rides.

The Hewitt handled similarly to the Argos, but all-round it was more suited to normal touring loads, when it handled very well indeed – an ideal balance between stability and not too ponderous steering. For such a versatile touring bike we liked its efficient feel, which we put down to the quality of the frame tubing and build. The Condor too, was very stable but in a different way, with more of a road bike's 'lean to steer' rather than bar movement being required. We still wouldn't hesitate to use it on long audax events, yet it has a more dynamic sprightly feel suited to those of a sportier nature – those that like to pedal through tight curves. It would be ideal for training. While less stable than the ovals with loads, it is still quite manageable, although tyre problems will be more of an issue.

UNLOADED

Argos	●●●●○
Condor	●●●●●
Hewitt	●●●●○
Yates	●●●●●

LOADED

Argos	●●●●○
Condor	●●●●○
Hewitt	●●●●●
Yates	●●●●●

Gears

The gearing range for touring bikes goes beyond the demands of racing and mountain biking. Very low gears indeed (17in) can be needed to crawl up steep rough-stuff with camping loads. Yet later in the same day you might want to breeze along a good road in a gear of over 100in, and if

possible tourists need the gaps between ratios to be reasonably close for maximum efficiency and comfort. Little special equipment is made to meet these needs – some adaptation and compromise is usually in order. Hewitt has mixed Campag and Shimano systems in an attempt to get the best from both worlds. Campag Veloce-Ergopower shifters leave clear space for a bar bag, and the front mech is far easier to 'trim' (to avoid chain rub). Ergopower also has a less plasticky feel than Shimano STI. Campag's 9-speed Ergopower shifters are all of a more compact design than the former 8-speed models, have a new lighter mechanism, and are now much easier to use if you have small hands. The Hewitt's Veloce equipment might seem low-end but works very well. Campag's rear sprockets now no longer exceed 26T so a Shimano 12-34T cassette is fitted. Shimano cassettes are more closely spaced than those from Campag, so gear shifts are slightly mushier and extreme gears can be noisier – and this arrangement is very sensitive to incorrect cable tension adjustment. An alternative wide-ratio cassette that will index with Campag (or Shimano) will soon be available from TA.

Argos and Condor have gone for complete 9-speed triple chainwheel groupsets – Shimano Ultegra on the Argos and Campag Athena (Racing Triple T) on the Condor. These are aimed at the swisher side of touring such as audax, with 32 and 30T inner chainrings and 35 and 30in bottom gears respectively. The Condor has well-spaced ratios for most road work; ideal for maintaining a constant cadence with few gaps exceeding 6in. The Argos has a much higher top of 117in, as opposed to 108in, but the gaps between the cruising gears are a little greater. Overall, the Campag system gave the most consistently smooth shifts.

The Yates has taken a standard MTB set-up with its Shimano LX groupset. This offers a very wide range of ratios with a 'lowish' top of 97in and a wall-climbing 17in. The gaps between ratios are on the large side for road cruising but



would be ideal for the back-lanes, roughstuff and expeditions. Components are straightforward to replace in the 'developed' world – just as well as they may not last the longest hauls. The bar-end shifter's friction option means any rear mech will do in an emergency, or if the gear hanger is bent. The '99 chainset was rather crude, with the chain sometimes catching the shifting tabs – an early production problem, we suppose.

TA chainsets are always very welcome. The Hewitt's Zephyr is offered in any length from 150-185mm with rings down to 20T an option.

Argos	●●●●○
Condor	●●●●○
Hewitt	●●●●●
Yates	●●●●○

Wheels

In all four cases, wheel truing and tensioning appeared expertly executed. However, the deficit between left and right hand spoke-tension on the Campag hubs brings into question the long term life of the spokes. Shimano have addressed this by positioning the flange nearer the hub than is the case with the Campag.

Double-buttet spokes which more easily withhold their tension, and long-life single buttet spokes on the gear side of the rear wheel (where breaks are most likely) together with

Ambrosio rims, are going to contribute to the Hewitt's long-term wheel life. While Mavic, was once the byword for rim reliability, problems have been reported by tourists using their latest 'trekking' models, which have been made too thin-walled for real touring use.

Hub choice usually comes down to the gear system. The Condor's Athena hubs place the right side bearing near the middle of the hub, increasing loading of the bearings and axle. The bearings appear in practice to have a fairly short life, even though the sealing is very good. Campag's rear hubs have a user-maintainable freewheel mechanism – wear is easy to monitor, but it is a more robust design anyhow.

The Argos's similarly priced Shimano Ultegra hubs have labyrinth and inner neoprene contact seals though the Campag's proper contact lip seals are ultimately more resistant to the effects of vigorous cleaning methods like a jetwash.

Shimano's MTB hubs, in this case the LX of the Yates and XT of the Hewitt, are very well sealed and are normally reliable, though in extreme cases the freewheel mechanism seems the weakest point.

Argos	●●●●○
Condor	●●●●○
Hewitt	●●●●●
Yates	●●●●○

Comfort

While oversize top and down tubes stiffen a frame, the air pocket of the tyre is more significant. The Yates was supremely comfy thanks to its 26x1.6in tyres, and touring rather than MTB style fork design. At the other end of the spectrum, the Condor's 25mm tyres are only really at home on smooth tarmac – at least for longer rides. The Argos and Hewitt's frame and tyres are similar, but the Hewitt will readily take 40mm tyres offering greater comfort and easier load carrying when required – or even the occasional rough-stuff foray.

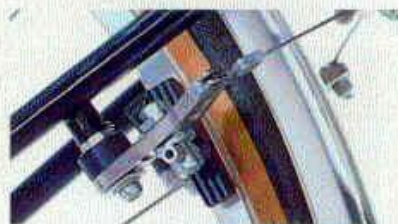
3T Morphe anatomic Randonneur bars seem to be flavour of the month, and are fitted to all but the Condor. The shoulders of these raise up and back a little compared to more usual models. These make riding on the tops more comfortable though I preferred 43 and 44cm models rather than the 40cm of the Yates – narrow by any standards.

Most tourists have the handlebars somewhat higher (relative to the saddle) than roadies, yet stems don't always support this without exceeding the 'Max' mark. Argos and Yates get round this by extending the fork column and using a spacing piece.

Saddles will always be a personal matter but Yates sells more Rols than all the others put together. For me, the alternatives fitted to the

Paul Hewitt Custom Touring £1471.73

A beautifully made machine, the Hewitt was the most versatile of the bikes on test



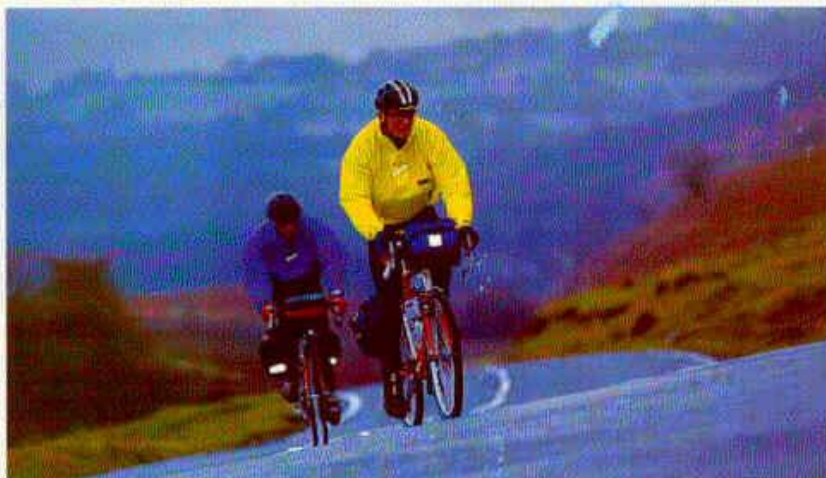
The Hewitt boasts clearance for 40mm tyres



The convenient Campag Ergopower levers



bike test



Condor and Hewitt were no match. The Kallay Ritchey copy seat posts fitted by Argos and Hewitt allow the most precise saddle adjustment.

Argos	●●●●○
Condor	●●●○
Hewitt	●●●●●
Yates	●●●●●

Equipment

While Dia Compe cantis and Scott Super blocks are rarely seen these days, the Hewitt

combination worked admirably – very powerful and smooth, requiring the least effort of the test. When heavily loaded and descending steep lanes this ensured full confidence and least hand effort. More toe-in than normal is required to avoid horrendous squealing.

The Yates has V-brakes with V-dapters. These appear to offer the least friction losses of such widgets, but the feel is still not quite as nice – or as powerful – as straight bar mounted V-brakes.

When the bike's design allows, Shimano's deep-drop Shimano RX100 calliper brakes are

the usual choice for fast tourers, and are fitted to the Argos. They are powerful, easy to adjust and suited to tyres up to around 28mm with mudguards. The Condor's Athena brakes have too little reach for comfort, and their operation can be hampered by the mudguards unless carefully positioned.

While it might seem dated, the Yates Shimano XT '93 headset uses oversize 1/4in balls and steel cups. This will survive expedition use better than most modern alternatives. The Shimano cartridge models fitted to the Hewitt and the Argos are extra-smooth, well sealed and maintenance free. The Condor's Athena model may have a shorter life but runs smoothly.

Argos	●●●●○
Condor	●●●○
Hewitt	●●●●●
Yates	●●●○

Cycling Plus verdict

In our view, the most versatile machine, with least compromise, was the Hewitt and this would appear to be the most traditional tourer. It very carefully balanced the needs of typical uses so that the one machine is game for most kinds of touring – it's certainly good for soaking up the miles. The pick and mix equipment selection was made with great care, taking the machine well beyond the average.

Dave Yates Hosteller Custom £1150

26in wheels and more MTB-oriented gearing make the Yates suitable for rougher riding, too



The Dave Yates boasts an extended fork column



The V-brakes work okay with V-dapters



bike test

The Argos is a more sprightly version of the Hewitt, again with a lot of fine attention to detail. Argos custom frames are not cheap but the stock frame tested was practically perfect – it's very good value if you don't need to go custom. Its rock-steady handling suits nocturnal riding, making its Paris-Brest-Paris name an apt choice.

For shorter audax rides, but hardly touring in the conventional sense, the Condor has lots of get up and go, but its main limitation is its 25mm max tyre size. This means that longer rides are never going to be as comfortable as we'd like, unless riding on billiard table roads. As for messy winter lanes, a fair degree of caution will need to be exercised. The Condor Heritage (Reynolds 525/Campag Mirage, from £899) is a

better choice for this and camping.

The Yates gave us complete confidence in all conditions, taking on roughstuff with ease, and was the most comfortable. With narrower tyres such as the 26x1.3in Vredestein 5.Licks it's still quite a passable machine for licking along the tarmac. With their versatility, comfort and generally nice feel, 26in wheeled tourers such as this really are a good way to go. It could serve as audax and expedition bike in one, and its value for money was greater here than in some of the middling components fitted. The 'Hosteller' name doesn't do it full justice.

In all cases, it is up to you to decide what you want. With the help of the supplier you can make an informed choice – as personal

preferences vary hugely. And with an item of this importance and expense you have to make the choice that is absolutely right for the type of cycling that you do.

PERFORMANCE

Argos	●●●●○
Condor	●●●○●
Hewitt	●●●●●
Yates	●●●●●

Value

Argos	●●●●●
Condor	●●●●○
Hewitt	●●●●○
Yates	●●●●○

CYCLING PLUS WORKSHOP REPORT SHEET

MAKE AND MODEL	CONDOR PENDIO 631 ATHENA	ARGOS PARIS-BREST-PARIS	DAVE YATES HOSTELLER CUSTOM	PAUL HEWITT CUSTOM TOURING																																																																																																																																																																																																																																																																																				
Replace value	£1195	£2298 (framezet only £450 w/ headset)	£760 (transset only \$420)	£1471.73 (transset only \$625)																																																																																																																																																																																																																																																																																				
Contact	Condor Cycles ☎ 0171 269 6820	Argos Racing Cycles ☎ 017 972 4230	Contact M. Steel Cycles ☎ 0191 2344275	Paul Hewitt Cycles ☎ 01772 434773																																																																																																																																																																																																																																																																																				
Frame	Size Tested: 56cm/22in Sizes Available: Any Weight Tested: 11.53kg/25.40lb Frame: Brazed lugged Reynolds 631 CoMo main tubes, 725 stays Forks: Reynolds 531 Frame Weight: 1.55kg/3.42lb Forks Weight: 0.89kg/1.95lb	Size Tested: 54.0cm/21.25in Sizes Available: 48-63cm in 1cm increments Weight Tested: 11.1kg/24.50lb Frame: Silver brazed lugged Reynolds 725 Designer Select CoMo Forks: Reynolds 531 Frame Weight: 1.50kg/3.32lb Forks Weight: 0.78kg/1.81lb	Size Tested: 57cm/22.4in Sizes Available: Any (14-32in) Weight Tested: 12.05kg/26.50lb Frame: Brazed lugged Reynolds 525 CoMo Forks: Reynolds 531 Frame Weight: 2.31kg/5.08lb Forks Weight: 0.85kg/1.87lb	Size Tested: 56cm/22in Sizes Available: Any Weight Tested: 11.70kg/25.80lb Frame: Silver brazed lugged Reynolds 725 CoMo Forks: Reynolds 531 Frame Weight: 2.21kg/4.86lb Forks Weight: 0.75kg/1.65lb																																																																																																																																																																																																																																																																																				
Geometry & alignment	Top tube: 45.5cm/17.9in Seat tube (c-c): 34.5cm/13.6in Chainstays: 43.0cm/16.9in Wheelbase: 101.1cm/39.8in Head/seat angle: 72.5° Seat tube angle: 73° Fork offset: 4.5cm Trail: 6.1cm BB height: 27.3cm/10.7in Standover height: 80.7cm/31.8in Brake-ons: 2 sets bottle mounts, rear rack mounts, pump peg on seat tube	Top tube: 55.0cm/21.7in Seat tube (c-c): 54.0cm/21.25in Chainstays: 43.0cm/16.9in Wheelbase: 101.5cm/40.0in Head/seat angle: 71° Seat tube angle: 73° Fork offset: 5.1cm Trail: 6.4cm BB height: 28.7cm/11.3in Standover height: 78.1cm/30.7in Brake-ons: 2 sets bottle mounts, rear rack mounts, pump peg on seat tube, chain hanger, concealed rear brake cable	Top tube: 51.0cm/20.1in Seat tube (c-c): 55.0cm/21.7in Chainstays: 43.0cm/16.9in Wheelbase: 104.5cm/41.1in Head/seat angle: 72° Seat tube angle: 73° Fork offset: 4.5cm Trail: 5.8cm BB height: 27.3cm/10.7in Standover height: 81.0cm/31.5in Brake-ons: 3 sets bottle mounts, rear rack and low-rider mounts, pump peg on seat tube, chain hanger, dynamo bracket	Top tube: 54.5cm/21.4in Seat tube (c-c): 34.5cm/13.6in Chainstays: 43.0cm/16.9in Wheelbase: 104.0cm/40.9in Head/seat angle: 71° Seat tube angle: 73° Fork offset: 5.0cm Trail: 6.0cm BB height: 28.3cm/11.1in Standover height: 81.0cm/31.5in Brake-ons: 3 sets bottle mounts, rear rack and low-rider mounts, pump peg on seat tube, chain hanger																																																																																																																																																																																																																																																																																				
Transmission	Chainset: Campagnolo Athena 100mm, 22-42-52T Bottom bracket: Campagnolo Athena cartridge Freewheel: Campagnolo 13-14-15-16-17-18-21-23-26T Chain: Campagnolo D2 Derailleurs: Campagnolo Athena Racing Triple T Gear levers: Campagnolo Athena Ergopower Pedals: None	Chainset: Shimano Ultegra 100mm, 26-42-52T Bottom bracket: Shimano Ultegra 8500 cartridge Freewheel: Shimano HG70 12-13-14-15-17-19-21-24-27T Chain: Shimano HG52 Derailleurs: Shimano Ultegra 8500, long cage Gear levers: Shimano Ultegra STi Flat Deck compatible Pedals: None	Chainset: Shimano LX 100mm, 22-32-42T Bottom bracket: Shimano UN52 cartridge Freewheel: Shimano HG70 11-12-14-16-18-21-24-28-32T Chain: Shimano HG52 Derailleurs: Shimano LX Gear levers: Shimano Deore Ace Bar End Pedals: basic plastic	Chainset: Ti Zephyr 100mm, 28-34-46T Bottom bracket: Shimano UN52 cartridge Freewheel: Shimano CS-4750 11-14-16-18-20-23-26-30-34T Chain: Sachs PC89 Derailleurs: Campagnolo Veloc long cage Gear levers: Campagnolo Veloc Ergopower Pedals: None																																																																																																																																																																																																																																																																																				
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Wheels	Rims: Front & Rear 36H 700C DBC 5722 Hubs: Campagnolo Athena Spokes: stainless Sapin ply (2.0mm) Tyres: Michelin Azul Soltec Kevlar 700x23C Wheel weight (w/ cassette): front: 1.20kg/2.65lb, rear: 1.01kg/2.24lb	Rims: Front & Rear 36H 700C Mavic 1217 SUP w/ Shimano Ultegra Hubs: stainless DT ply (2.0mm) Spokes: stainless Sapin Ply 700x23C Tyres: front: 1.35/2.10in, rear: 1.50kg/3.30lb (w/o cassette)	Rims: Front & Rear 36H 26in Mavic 1217 SUP Hubs: Shimano LX Spokes: stainless DT ply (2.0mm) spokes Tyres: Sans Riment 160 26x1.1in Wheel weight (w/ cassette): front: 1.45kg/3.19lb, rear: 1.54kg/3.39lb	Rims: Front & Rear 36H 700C Aeroliner Texas 24 Hubs: Shimano XT Spokes: Sapin Ply Sapin Ply w/ (gear side) Tyres: Panaracer Puroda 700x23C Wheel weight (w/ cassette): front: 1.53kg/3.41lb, rear: 1.81kg/3.99lb																																																																																																																																																																																																																																																																																				
Components	Handlebar stem: Cinelli KE 9cm Handlebars: Cinelli Anatomica 44cm (c-c) Headset: Campagnolo Athena Saddle: San Marco Superslim Active Parafel Seatpost: San Marco 22.2mm Brake: Campagnolo Athena Accessories: 1x water bottle cages, narrow SRS mudguards, Topack rear rack	Handlebar stem: ST Synthetic 11cm Handlebars: ST Morphie Randonneur Anatomica 42cm (c-c) Headset: Shimano 600 Saddle: San Marco Rolo Duo Seatpost: Kaley Ritchey copy 22.2mm Brake: Shimano RX80 deep drop Accessories: 2 bottle cages, narrow SRS mudguards, Blackburn EX-1+ rear rack, Zefal HPA pump	Handlebar stem: ST Synthetic 8cm Handlebars: ST Morphie Randonneur Anatomica 40cm (c-c) Headset: Shimano Deore XT '00 Saddle: San Marco Rolo Seatpost: Unidentified 22.2mm Brake: Shimano LX V-brakes w/ V-brackets Accessories: 2 bottle cages, wide SRS mudguards, rear rack, Blackburn Custom low-rider, pump	Handlebar stem: ST Status 10cm Handlebars: ST Morphie Randonneur Anatomica 44cm (c-c) Headset: Shimano Deore XT cartridge Saddle: Selle Italia Turbomatic 3 Seatpost: Kaley Ritchey copy 22.2mm Brake: Opa Campa Vera CS cassette/Scott Super blocks Accessories: 2 bottle cages, wide SRS mudguards, Blackburn EX-1+ rack, Blackburn Custom low-rider																																																																																																																																																																																																																																																																																				

