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**20C, 20C S & 20C Team
29C, 29C S & 29C Team
529, 629 & 729
801, 802, 805, 810 & 810 Ladies
901 & 905
929**

**Supplementary Service Manual
Edition 1: February 2012**

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DESIGNED IN THE U.K.

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WHYTE Service Manual

1.0: INTRODUCTION

Thanks for choosing to purchase this Whyte product. We hope you will enjoy all the benefits its advanced design and engineering will bring to your riding experience.

This manual will guide you through the set-up, safety and maintenance procedures that are specific to your Whyte bike. For other more general information, we strongly advise that you also read thoroughly the General Instruction Manual that is also supplied with your new bike.

Also, please note that the specification of all the components that are fitted to your bike as standard may be obtained from the Whyte Bikes Brochure or alternatively from the Whyte Bikes website **www.whytebikes.co.uk**

Please remember, if you are in any doubt about your ability to safely service or repair your Whyte bike, do not ride it and instead arrange for a professional bicycle mechanic at your local Whyte dealer to do the job correctly.

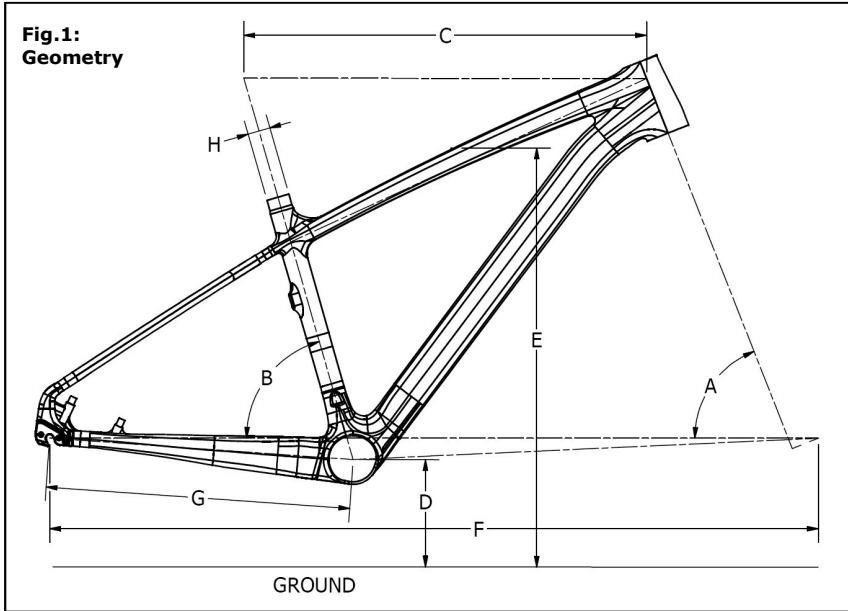
Bundled with this manual, are the respective manufacturers instructions and manuals for the branded parts that are fitted to your Whyte bike. Please take time to study all the relevant instruction manuals to ensure you have a continually safe and well set-up bike before every ride, and to help you build up a relationship of knowledge between you and your Whyte Dealer.

Happy and safe riding,

Whyte design team. February 2012.

WHYTE Service Manual

2.0: GEOMETRY



2.1: WHYTE 20C, 20C S & 20C Team

Frame Size	X	Small	Medium	Large
Head Angle	A	68.5°	68.5°	68.5°
Seat Angle	B	74.0°	73.5°	73.5°
Top Tube	C	560.0mm	584.6mm	603.6mm
BB Height*	D	300.0mm	300.0mm	300.0mm
Stand Over	E	750mm	755mm	775mm
Wheel Base	F	1073.6mm	1093.6mm	1113.6mm
Chain Stay	G	425mm	425mm	425mm
Seat Post	H	30.9mm	30.9mm	30.9mm

Note:

Geometry shown here is 'Showroom' i.e. without rider aboard the bicycle. 'With Sag' geometry is with rider after correct sag is set at the front. Please refer to suspension set up for information on how to achieve the correct sag of the fork.

* BB height with Ø660mm tyres fitted (1.9" / 47-559)

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2.2.2: WHYTE 29C, 29C S & 29C Team

Frame Size	X	Medium	Large	Extra - Large
Head Angle	A	69.3°	69.3°	69.3°
Seat Angle	B	73.0°	73.0°	73.0°
Top Tube	C	612.2mm	627.0mm	640.8mm
BB Height*	D	305mm	305mm	305mm
Stand Over	E	860mm	880mm	715mm
Wheel Base	F	1117.3mm	1127.9mm	1144.9mm
Chain Stay	G	437.5mm	437.5mm	437.5mm
Seat Post	H	30.9mm	30.9mm	30.9mm

Note:

Geometry shown here is 'Showroom' i.e. without rider aboard the bicycle. 'With Sag' geometry is with rider after correct sag is set at the front. Please refer to suspension set up for information on how to achieve the correct sag of the fork.

* BB height with Ø738mm tyres fitted (2.1" / 52-622)

2.2.3: WHYTE 529, 629 & 729

Frame Size	X	Medium	Large	Extra - Large
Head Angle	A	68.5°	68.5°	68.5°
Seat Angle	B	73.0°	73.0°	73.0°
Top Tube	C	600.2mm	614.8mm	629.4mm
BB Height*	D	305mm	305mm	305mm
Stand Over	E	809mm	827mm	852mm
Wheel Base	F	1113.4mm	1128.4mm	1143.4mm
Chain Stay	G	440.0mm	440.0mm	440.0mm
Seat Post	H	30.9mm	30.9mm	30.9mm

Note:

Geometry shown here is 'Showroom' i.e. without rider aboard the bicycle. 'With Sag' geometry is with rider after correct sag is set at the front. Please refer to suspension set up for information on how to achieve the correct sag of the fork.

* BB height with Ø738mm tyres fitted (2.1" / 52-622)

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2.2.4: WHYTE 801, 802, 805 & 810

Frame Size	X	Extra Small	Small	Medium	Large	Extra Large
Head Angle	A	68.5°	68.5°	68.5°	68.5°	68.5°
Seat Angle	B	74.0°	73.5°	73.5°	73.0°	73.0°
Top Tube	C	560.7mm	583.3mm	598.0mm	617.3mm	628.2mm
BB Height*	D	313.5mm	313.5mm	313.5mm	313.5mm	313.5mm
Stand Over	E	768mm	773mm	797mm	824mm	844mm
Wheel Base	F	1073.4mm	1091.4mm	1106.9mm	1122.7mm	1133.4mm
Chain Stay	G	425mm	425mm	425mm	425mm	425mm
Seat Post	H	30.9mm	30.9mm	30.9mm	30.9mm	30.9mm

Note:

Geometry shown here is 'Showroom' i.e. without rider aboard the bicycle. 'With Sag' geometry is with rider after correct sag is set at the front. Please refer to suspension set up for information on how to achieve the correct sag of the fork.

* BB height with Ø677mm tyres fitted (2.25" / 54-559)

2.2.5: WHYTE 810 Ladies

Frame Size	X	Small	Medium
Head Angle	A	68.5°	68.5°
Seat Angle	B	73.5°	73.5°
Top Tube	C	574.8mm	589.4mm
BB Height*	D	313.5mm	313.5mm
Stand Over	E	770mm	785mm
Wheel Base	F	1083.4mm	1098.4mm
Chain Stay	G	425mm	425mm
Seat Post	H	30.9mm	30.9mm

Note:

Geometry shown here is 'Showroom' i.e. without rider aboard the bicycle. 'With Sag' geometry is with rider after correct sag is set at the front. Please refer to suspension set up for information on how to achieve the correct sag of the fork.

* BB height with Ø677mm tyres fitted (2.25" / 54-559)

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2.2.6: WHYTE 901 & 905

Frame Size	X	Small	Medium	Large	Extra Large
Head Angle	A	67.5°	67.5°	67.5°	67.5°
Seat Angle	B	72.5°	72.5°	72.5°	72.5°
Top Tube	C	565.1mm	584.5mm	609.6mm	628.8mm
BB Height*	D	322.7mm	322.7mm	322.7mm	322.7mm
Stand Over	E	774mm	800mm	826mm	853mm
Wheel Base	F	1081.6mm	1101.9mm	1128.8mm	1153.8mm
Chain Stay	G	425mm	425mm	425mm	425mm
Seat Post	H	30.9mm	30.9mm	30.9mm	30.9mm

Notes:

Geometry shown here is 'Showroom' i.e. without rider aboard the bicycle. 'With Sag' geometry is with rider after correct sag is set at the front. Please refer to suspension set up for information on how to achieve the correct sag of the fork.

* BB height with Ø677mm tyres fitted (2.25" / 54-559)

Whyte 905 has an adjustable rear drop-out, see section 3.4. When fully extended rearwards, this adds 10mm to Chain-stay and Wheelbase lengths. When fully retracted forwards, the reduces Chain-stay and Wheelbase lengths by 10mm.

2.2.7: WHYTE 929

Frame Size	X	Small	Medium	Large
Head Angle	A	68.0°	68.0°	68.0°
Seat Angle	B	73.5°	73.5°	73.5°
Top Tube	C	609.9mm	624.9mm	637.9mm
BB Height*	D	305mm	305mm	305mm
Stand Over	E	799mm	814mm	841mm
Wheel Base	F	1129.4mm	1145.6mm	1159.4mm
Chain Stay	G	435.0mm	435.0mm	435.0mm
Seat Post	H	30.9mm	30.9mm	30.9mm

Note:

Geometry shown here is 'Showroom' i.e. without rider aboard the bicycle. 'With Sag' geometry is with rider after correct sag is set at the front. Please refer to suspension set up for information on how to achieve the correct sag of the fork.

* BB height with Ø738mm tyres fitted (2.1" / 52-622).

Whyte 929 has an adjustable rear drop-out, see section 3.4. When fully extended rearwards, this adds 10mm to Chain-stay and Wheelbase lengths. When fully retracted forwards, the reduces Chain-stay and Wheelbase lengths by 10mm.

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3.0: PREPARATIONS FOR RIDING

3.1: MAKING ADJUSTMENTS

Please refer to the specific component manufacturers manual or published technical information about adjusting the components on your Whyte bike. Instructions may be downloaded from the relevant manufacturer's internet site, as shown in the table to the right.



CAUTION! If you are uncertain in any way, about making adjustments to any components on your Whyte bike, then **DO NOT RIDE YOUR BIKE**. Contact your Whyte dealer who will be able to advise you on how to go about setting up your Whyte for riding, and or making adjustments to the components fitted to your Whyte.

Alex Rims	www.alexrim.com
Continental	www.conti-online.com
CST	www.csttires.com
DT	www.dtswiss.com
Easton	www.eastonbike.com
Fi:zik	www.fizik.it
FSA	www.fullspeedahead.com
Fulcrum	www.fulcrumwheels.com
Formula	www.formulahubs.com
Fox	www.foxracingshox.com
Hayes	www.hayesdiscbrake.com
Hope	www.hopetech.com
Mavic	www.mavic.com
Maxxis	www.maxxis.com
Shimano	www.shimano.com
SRAM	www.sram.com
Sun Ringle	www.sun-ringle.com
Tektro	www.tekro.com
TH	www.thindustries.com.tw
Thomson	www.lhthomson.com
VP	www.vpcomponents.com
WTB	www.wtb.com

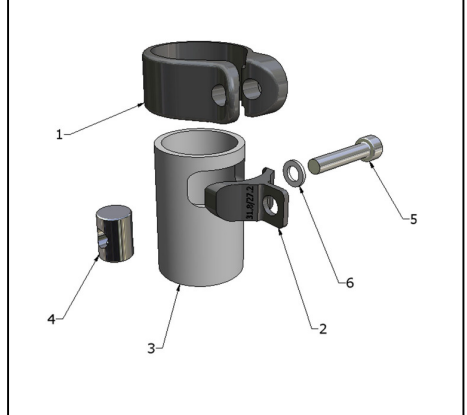
3.2: WHYTE GETTA-GRIP SEAT CLAMP

The Getta Grip seat clamp design is a patented design to allow adjustment of the saddle height by either the use of a QR Lever, or bolt-up method. This manual covers both styles of clamps.

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Item:	Description
1	Whyte Seat Clamp Band
2	T-Pad
3	Whyte Main Frame
4	Barrel Nut
5	M6 x 30mm Fastener
6	M6 Washer

Fig.2: Getta-Grip Seat Clamp: Bolt-up



Bolt-up Type: Fig.2

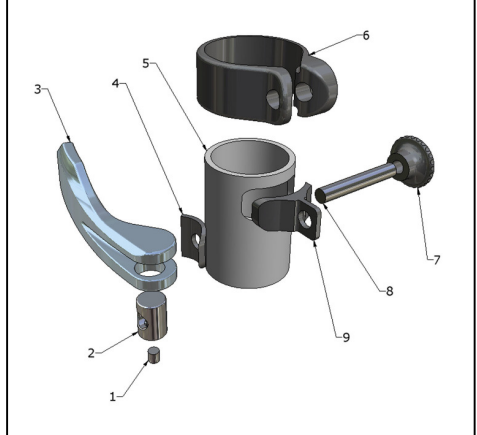
Tools Required: 5mm Allen Key

(Note, refer to the seat-pin manufacturers instructions in conjunction with these notes).

To adjust the seat height, using the 5mm Allen key, undo the M6 bolt (5) just enough to allow the seat-pin to slide freely up and down. Set the height to the desired level, and re-tighten the M6 bolt (5) with the 5mm Allen Key just enough so as to prevent the seat-pin from slipping down and twisting.

Item	Description
1	QR Lever Cam Grub Screw
2	QR Lever Cam
3	Whyte QR Lever
4	Plastic Shim
5	Whyte Main Frame
6	Whyte Seat Clamp Band
7	QR Adjuster Bobbin
8	QR Shaft
9	T-Pad

Fig.3: Getta-Grip Seat Clamp: QR Lever



To Adjust the seat height with the QR Lever assembly fitted, simply undo the QR Lever (3) from the Closed position to the Open position. Next adjust the height of the Seat Pin to the desired level, and close the QR lever (3) from the Open position to the Closed position. The QR closing force can be adjusted by turning the QR Adjuster Bobbin (7) clockwise or anti-clockwise before closing the QR Lever (3).

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3.3: SET UP OF FORK

Tools Required: *Good Quality Shock Pump.*
 Small Ruler

The front suspension fork fitted to your Whyte bike will be pre-set with the standard settings. Before riding, you may need to adjust these setting. First is the Sag setting on the fork. This is to ensure the forks are set-up correctly for your own body weight, so the fork will perform as intended.

To set Sag on the front fork, you need to measure the amount the fork compresses when you sit on the bike in the normal riding position. See the table on the right for our recommendation of front fork sag on your Whyte bike. To achieve this you will need to adjust the air spring pressure inside the fork.

Refer to the specification tables in this manual, and then to the relevant fork manufacturers set up instructions to find how to adjust the air spring pressure in the fork. Using a shock pump, either add or remove air until Sag is correctly set.

Please note that for the detailed instructions for servicing and all matters relating to the forks fitted to your Whyte bike, please refer to the manufacturers instructions.

Fork Travel	Sag (15% - Firm)	Sag (25% - Plush)
100mm	15mm	25mm
120mm	18mm	30mm

Rebound Damping adjustment:

This adjustment fine-tunes the speed at which the wheel returns to its normal ride height after hitting a bump. Refer to the relevant manufacturers instructions to find out how to adjust the rebound damping. To demonstrate the effect of this function, turn the adjuster to its slowest setting. Press down on the handlebars to compress the forks, then release the load. The suspension recovers very slowly to its original position.

Repeat the above with the adjuster turned to the fastest setting and the difference will be seen immediately the load is released. We recommend the optimum setting is to adjust the re-bounce damping to be as slow as possible, but not so slow that the normal ride height is not recovered. On very rough terrain, if the bike becomes progressively lower as more bumps are hit then the re-bounce damping is set too slow. On the other hand if the bike feels choppy and not plush then the re-bounce damping is too fast. A bit of trial and error is needed to get the exact setting.

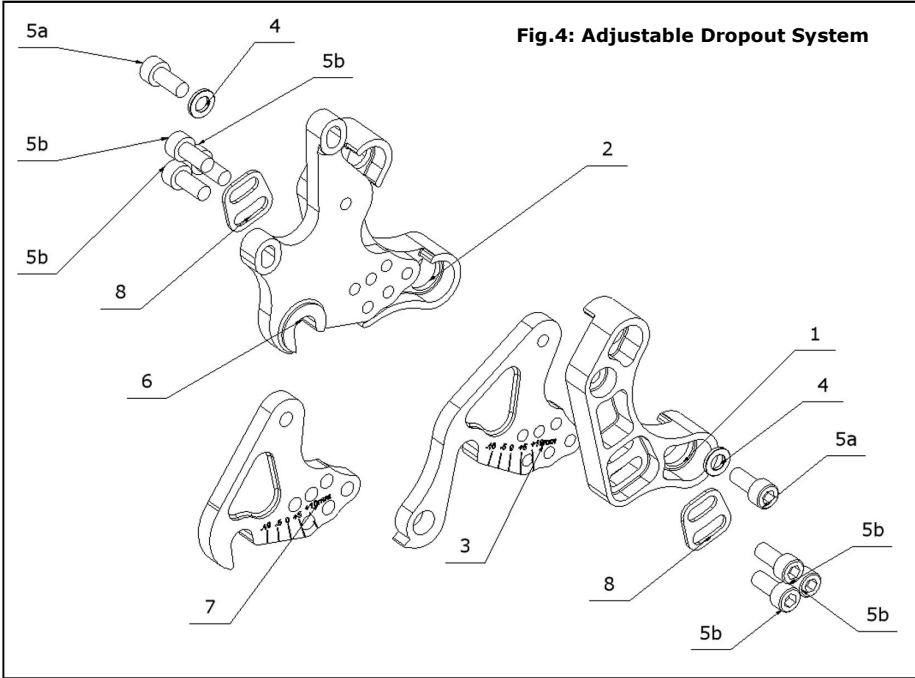
3.4: SUSPENSION TUNING LOG

Record your best suspension settings in the table below, to restore them if necessary, eg. after dealer servicing of the suspension or if a friend has borrowed your bike.

Date	Rider Weight (including all riding kit) (kg or lbs)	Fork Pressure (bar or P.S.I)	Fork Rebound Damping (# of clicks from softest setting)	Shock Pressure (bar or P.S.I)	Shock Rebound Damping (# of clicks from softest setting)

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3.5: WHYTE ADJUSTABLE DROPOUT SYSTEM



Point	Description.	Quantity.
1	Whyte 19 RH Dropout (Main Frame)	-
2	Whyte 19 LH Dropout (Main Frame)	-
3	RH Dropout (Mech Hanger Type)	1
4	M6 Washer	2
5a	M6 x 14mm Socket Head Cap Screw (Top, Dropout Pivot)	8
5b	M6 x 14mm Socket Head Cap Screw (Bottom, Dropout Clamping)	
6	LH Dropout/Disc Mount	1
7	RH Dropout (Single Speed Type)	1
8	Dropout M6 Washer Plate	2



IMPORTANT SAFETY NOTE:

If at any stage you are uncertain about safety or the safe adjustment of the Whyte 19 Dropout System as a whole, or any specific component, please do not ride your bike, and consult your Whyte Dealer for advice.

3.6: ADJUSTING THE DROPOUT SYSTEM



ADJUSTING THE WHYTE 19 TRAIL DROPOUT SYSTEM: Fig.4 4a,4b,4c,4d

Tools Required: 5mm A/F Allen Key

The Whyte 19 dropout system enables a rider to adjust the bike's Chain stay length. This allows the rider to tune the handling characteristics to their preference, or when used in conjunction with the Single Speed RH Dropout Plate (7), a single speed drive-train can be used without the need for a chain tensioner device because the dropouts (3,6,7) can be adjusted to tension the chain exactly.

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ADJUSTING THE WHYTE 19 TRAIL DROPOUT SYSTEM (Continued).


To adjust the Dropout Plates (3,6,7), first secure the bike into a work stand. Next, using the 5mm Allen Key, loosen off the RH and LH top M6x14mm Socket head Cap Screws (5a) by one turn only. Next Remove the three RH and three LH lower M6 x 14 Screws (5b) from the bike, taking care to collect both Dropout M6 Washer Plates (8). You will now be able to rotate both the RH and LH Dropout Plates (3,6,7) around the top pivot screw (5a) to adjust the chain stay lengths. Align the chosen Laser Etch marks on the Dropout Plates (3,6,7) with the edge of the mainframe dropouts (1,2) and re-assemble the Dropout M6 Washer Plates (8) and the three M6 x 14mm Socket Head Screws (5b). Before finally tightening all M6 Fasteners, double check the LH and RH dropout plate (3,6,7) Laser Etch marks correspond correctly to each other, and that the rear wheel is aligned properly in the frame. Finally tighten Screws (5a and 5b) to the torque setting described in Section 6.0

4.0: SAFETY

IMPORTANT: The following are intended to be advisory notes on the safe use of your Whyte bike. You should also read thoroughly the General Instruction Manual also supplied with your new bike. If at any stage you are uncertain about the safety or safe operation of the bike as a whole, or any specific component, then **DO NOT RIDE YOUR WHYTE** and instead please consult the specific component manufacturers instruction manual or your Whyte Dealer for advice.

Maximum Rider Weight Limit for Whyte Hardtail MTB Series':

19 Stone/120kg

 **WARNING:** As is the case with all mechanical components, the bicycle is subjected to wear and high stresses. Different materials and components may react to wear and stress fatigue in different ways. If the design life of a component has been exceeded, it may fail suddenly causing possible injury to the rider. Any form of crack, scratches and decolouring in highly stresses areas are showing that the component has exhausted its life time and has to be replaced. If you are in any doubt about one or more components on your Whyte **DO NOT RIDE YOUR BIKE**. Consult the specific component manufacturers literature, or take your bike to your local Whyte Dealer.

Designed for the following use:

All bicycles in the Whyte Hardtail MTB series' have all been designed, tested and comply with BS EN 14766 Standard, for typical cross country mountain biking use. They have not been designed or tested for extreme down-hilling or free-riding.

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5.0: LUBRICATION

5.1: GETTA-GRIP SEAT CLAMP

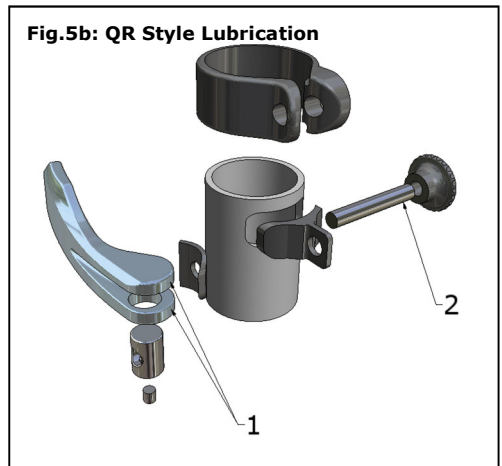
5.1.1: BOLT-UP. Fig.5a

Point	Description	Lubricant	Lubrication Interval
1	M6 x 30mm Fastener	Castrol LM or equivalent	Once a Month



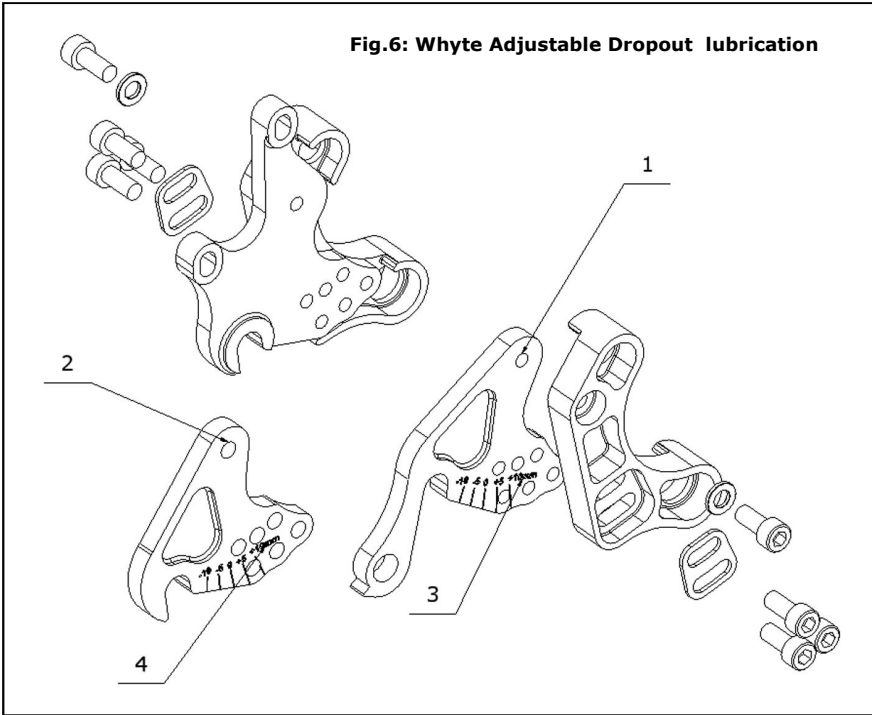
5.1.2: QR STYLE. Fig 5.b

Point	Description	Lubricant	Lubrication Interval
1	Whyte QR Lever Cam Surface	Castrol LM or equivalent	After Every Ride
2	M6 QR Shaft	Castrol LM or equivalent	Once a Month



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5.2: WHYTE ADJUSTABLE DROPOUT SYSTEM



Point	Description	Lubricant	Lubrication Interval
1	LH & RH Dropout Plate Pivot Area (Face Only)	SKF Anti Fret Paste	Check Once a Month
2	RH SS Plate Pivot Area (Face Only)	SKF Anti Fret Paste	Check Once a Month
3	LH & RH Dropout Plate Clamp Area (Face Only)	SKF Anti Fret Paste	Check Once a Month
4	RH SS Plate Clamp Area (Face Only)	SKF Anti Fret Paste	Check Once a Month

5.3: GENERAL WHYTE HARDTAIL MTB LUBRICATION

For the correct lubrication regime and maintenance of all parts on a Whyte hardtail bicycle, please refer to the specific component manufacturers detailed instructions bundled with this manual or for further information visit the specific manufacturers website.



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6.0: TORQUE SETTINGS

Whyte Adjustable Dropout System	Nm	lbs.ft
M6 x 14mm Pivot Screw	13 (min) - 15 (max)	9.5 (min) - 11 (max)
M6 x 16mm Clamping Screws	13 (min) - 15 (max)	9.5 (min) - 11 (max)
Whyte Rear Derailleur Hanger	Nm	lbs.ft
M4 x 8mm Countersunk Head Capscrew	2.3 (min) - 2.8 (max)	1.7 (min) - 2.1 (max)

Torque explained: If no suitable Torque Wrench is available a Torque of 5 lbf.ft can be obtained by applying a force of 5lb, with a Spring Balance, to the end of a spanner, 1 Foot in length.

IMPORTANT: For all other torque settings, refer to the specific manufacturers information bundled with this manual, or alternatively, refer to the specific manufacturers website for further information.

7.0: NOTES

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NOTES (continued)

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NOTES (continued)



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