



drop*link*

2020 DROPLINK OWNERS MANUAL

WARNING

Cotic **droplink** models are bicycle frames designed for general off road XC, Trail, All Mountain and Enduro use only. They are not Freeride or Downhill bikes. Performing large drops and jumps may cause damage to or failure of the frame which could result in injury to the rider. Cotic Ltd does not take responsibility for any of these events. The frames exceed the requirements of BS ISO4210.

Whilst Cotic endeavours to ensure that all items assembled at the factory are correctly and safely installed, it is the responsibility of the owner to check all fasteners and components to satisfy themselves that the bicycle is safe to use. If you do not feel qualified to make these assessments, you must ensure they are carried out prior to use of the bicycle by a qualified bicycle shop mechanic.

All fasteners, component installations and components should be checked and maintained regularly to ensure the continued safe operation of your bicycle. It is particularly recommended to check pivot bolts for tightness before and after the first two rides to ensure safe operation.

Your Cotic **droplink** Bike

Your Cotic is a full suspension mountain bike for technical trail use. It uses the best materials for maximum strength and durability in hard riding situations. Its carefully developed geometry ensures confident handling and fun.

Your Cotic is equipped with Cotic **droplink** suspension. This is a linkage driven design which combines the strength and stiffness of a single swingarm with a finely controlled progressive shock rate. This keeps the back of your bike tied firmly to the front and the shock rate gives you a positive platform to work from.

Overall Parameters

The Cotic **droplink** bikes are designed to work optimally within certain limits of component size, shape and performance. The frames handle better within these parameters. It's more fun as well as safer. The frame is not designed to perform safely outside these limits. Using components which do not conform to the below requirements voids the warranty and could result in unsafe handling traits or frame damage or failure, which could result in rider injury.

Cotic Ltd does not take responsibility for any damage or injuries caused as a result of fitting an incorrect component outside of the boundaries specified below.

Forks

Cotic **droplink** bikes should always be used with suspension forks, as follows:

droplink Model (production date)	Wheel Size	Minimum Fork Length/Travel (mm)	Maximum Fork Length/Travel (mm)
Rocket Gen4 (March 2020)	27.5" / 650B	539mm Static Length/ 150mm Travel	563mm Static Length/ 170mm Travel
RocketMAX Gen3 (March 2020)	29"	561mm Static Length/ 150mm Travel	573mm Static Length/ 160mm Travel
Jeht Gen1 (Oct 2020)	29"	541mm Static Length/ 140mm Travel	563mm Static Length/ 150mm Travel
Flare Gen2 (April 2019)	27.5" / 650B	531mm Static Length/ 130mm Travel	543mm Static Length/ 140mm Travel
FlareMAX Gen3 (Dec 2019)	29"	526mm Static Length/ 120mm Travel	553mm Static Length/ 140mm Travel

droplink bikes are NOT approved for use with dual crown forks.

Shock

The rear shock **droplink** bikes are as follows:

droplink Model	Shock eye-to-eye Length (mm)	Shock Stroke (mm)
Rocket Gen4	215	63
RocketMAX Gen3	230	60 or 62.5
Jeht Gen1	210	55
Flare Gen2	190	45 or 50
FlareMAX Gen3	200	50

All the above **droplink** bikes use the following shock fittings:

Top Shock Mounting	M8 x 15.75mm wide
Bottom Shock Mounting	M8 x 24.0mm wide

Piggyback shocks may be used, usually with the piggyback reservoir installed at the down tube end, on the top of the main barrel of the shock, with the exception of small size RocketMAX which must be fitted with the reservoir underneath the shock at the seatstay end.

WARNING: If installed with the reservoir underneath, it could hit the frame before full travel is achieved if you are not using a shock supplied by Cotic. If mounting the shock with the reservoir on the underside, let all the air out and fully compress the shock to check clearance to the down tube. If fitting a brand of shock not supplied by Cotic then always check clearance throughout the travel range to both top and down tubes and bottle cage if used, especially on size Small and Medium frames. Whilst we have endeavoured to check clearances for shocks, we can't check all products, or products which come to market after the designs are completed, therefore it is the responsibility of the owner of the bicycle to check safe clearances are maintained through the travel.

Coil Shocks

Coil shocks may also be used if desired, but please seek advice from Cotic for spring rate. Our bikes are progressive in nature and require stiffer springs than usually suggested by 3rd party suppliers and online spring calculators. If using a spring without the advice of Cotic it will void your warranty. Too soft a spring leads to frame damage.

When using a coil shock, preload applied to the spring should be minimum 1 turn (to prevent the spring rattling loose), and REGARDLESS OF THE SHOCK MANUFACTURERS INSTRUCTIONS no more the 3 turns of preload should be applied to achieve the Cotic recommended sag for your model. If you require more than 3 turns of preload, you need a stiffer spring. If you use more than 3 turns of preload, your warranty is void. Using more than 3 turns of preload can result in coil binding before bottom out which will overload and damage your frame. Cotic is not responsible for this.

Brakes

Cotic **droplink** frames are equipped with International Standard (IS) rear disc mountings. In order to maximise suspension performance under braking the disc mount is positioned forward of the top centre of the disc rotor. The placement distributes the forces in a neutral direction. In order to achieve the best position for the brake caliper the top bolt of the disc mount also forms the shaft of the left side seatstay/swingarm pivot. The bike must therefore never be ridden without a brake installed as the seatstay pivot will not be fastened.

Minimum rear rotor size: 160mm.
Maximum rear rotor size: 203mm.

Front brake rotor size should be no larger than the maximum recommended by the fork manufacturer and should not exceed 203mm diameter.



Tyres

droplink Model	Wheel Size	ISO Rim Size	Maximum Tyre Width	Maximum Wheel Diameter
Rocket	27.5"/650B	584	2.6" / 66mm	28.34" / 720mm
RocketMAX	29"	622	2.5" / 64mm	29.53" / 750mm
Jeht	29"	622	2.5" / 64mm	29.53" / 750mm
Flare	27.5"/650B	584	2.6" / 66mm	28.34" / 720mm
FlareMAX	29"	622	2.5" / 64mm	29.53" / 750mm

Tyres larger than stated above could contact the frame whilst the bicycle is in use causing frame and/or tyre damage which could lead to rider injury.

Headset

droplink Model	Top Cup	Bottom Cup
All models April 2019 / Flare Gen 2 onwards	ZS44 / 28.6 (1 1/8")	EC44 / 40 (1.5")

Droplink bikes are designed to use an external type bottom cup (regardless of steerer size) to maintain the geometry of the bike. It is possible to install a 1 1/8" steerer fork using a crown race adaptor. Installing a 1 1/8" fork using a zero stack bottom cup will steepen the geometry and drop the BB height. It will also result in fork crown adjusters not having sufficient clearance from the down tube, thus allowing potential damage the frame and fork if the bars are over-rotated. ZS44 lower cups are therefore not approved.

Specifically it is not safe to install a longer travel than recommended fork (eg 180mm travel or more on a Rocket) with a 1 1/8" steerer and ZS44 bottom cup thinking that because the overall length of the system is similar to the approved EC44 bottom cup/max fork length set up it will be safe. It won't. No matter what the headset-steerer combination, forks longer than the maximum stated in the table above are not approved.

It is possible to fit various brands of angle adjust headset to the Cotic Rocket. Whilst this does not invalidate any warranty, it does move the handling away from the layout we spent a great deal of time researching and perfecting. We accept some people have different preferences to the handling of the bike, and all we ask is that you proceed with care if fitting an angle adjust headset and take time to learn how the bike handles differently.

Use of offset bushings in the shock to alter the geometry is prohibited and invalidates the warranty. The tyre clearance at full travel is not sufficient to allow the use of offset bushes and presents a danger to the rider and the safety of the frame if used and invalidates the warranty.

Seatpost

The seatpost size is 31.6mm, using a 34.9mm clamp. Hose routing is provided along the down tube and through a hole in the seat tube for internal or 'stealth' routed seatposts.

For internal 'Stealth' routed seatposts, the routing hole is on the front of the seat tube above the bottom bracket, but below the **droplink**. Feed your remote cable/hose through by anchoring it to the outer cable pre-installed in the frame and install as per the seatpost manufacturer instructions. Once installed, wrap the supplied Jagwire routing grommet over the cable/hose and push into the seat tube hole until firmly in position. This will prevent water ingress at this point.

To prevent frame damage, the seatpost should have a minimum of 100mm of insertion into the frame below the top of the seat tube with the saddle set at the maximum height required by the rider, regardless of any minimum insertion marker on the seatpost.

Failure to observe this minimum insertion of 100mm will result in premature frame failure and invalidation of your warranty.

It is important to check and ensure that you can insert your dropper seatpost far enough into the frame to get your correct pedalling height.

For maximum insertion measurements for your frame to check dropper post compatibility, please check the latest data on the geometry chart on the product page of the website at www.cotic.co.uk.

Rear Axle

The rear axle is a screw-through Syntace X-12 Boost148 type. The axle is supplied with the frame and requires a 5mm Allen key to install and remove. The derailleur hanger is also Syntace X-12 Type1. Both regular and Shimano Direct Mount versions of this hanger are available, but the frame is supplied with a regular version.

droplink Model	Rear Axle Width / Size
Rocket	Boost148 x 12
RocketMAX	Boost148 x 12
Jeht	Boost148 x 12
Flare	Boost148 x 12
FlareMAX	Boost148 x 12

Pivot Bearings

All the pivots on the Cotic **droplink** bikes use standard 'deep groove' ball bearing cartridges or standard shock size bushings. If noticeable rattle or play develops in the suspension system, yet all the pivot axle fasteners are tightened correctly, then it is highly probable that the bearings require replacement.

The pivot bearings are as follows:

Pivot	Bearing Number	Quantity per Frame	Axle Size	Housing Size
Main Pivot	61902-2RS	2	15mm	28mm
Droplink Seat Tube	61902-2RS	2	15mm	28mm
Droplink Seatstay End	608-2RS	2	8mm	22mm
Seatstay Swingarm	IGUS WSI-0809-08	2	1/2"	19/32"
Seatstay Swingarm Fitting Size	-	2 sets	M6	15.8mm

It is important to quote the '2RS' addendum as this specifies the seal type. To ensure your Cotic Rocket performs at its best we recommended that you buy the highest quality bearings from a reputable manufacturer (eg. Enduro, SKF, NSK, etc).

Should you wish to exchange some slight drag for higher dirt ingress resistance, specify SKF brand bearings with the "W64" suffix instead of "2RS", so for the large bearings they would be 61902 W64. These bearings use the Cane Creek Cycling Components pioneered Hellbender Neo Solid Oil lubrication.

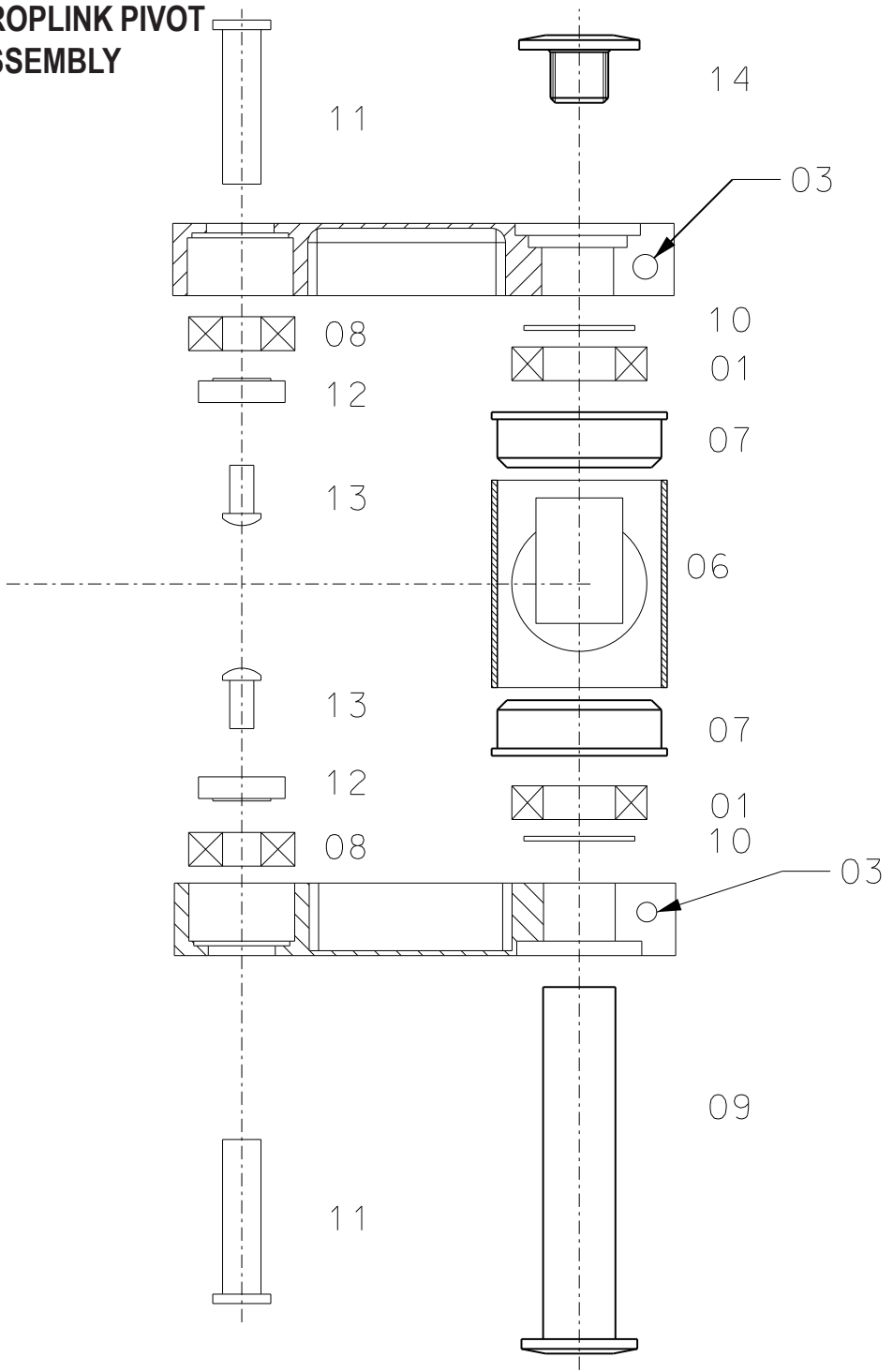
The Seatstay/Swingarm pivot uses a 1/2" internal diameter bushing. This is identical in size to a regular shock bushing. We install a high specification IGUS plain bearing, but if you are stuck without spares, any 1/2" shock bushing will fit and be safe to use.

The bearings and bushings are press fitted into the frame housings. Old bearings should be knocked out carefully using a drift and a hammer. New bearings should be pressed in square using a large vice with soft jaws into the housings to prevent frame damage and ensure accurate alignment.

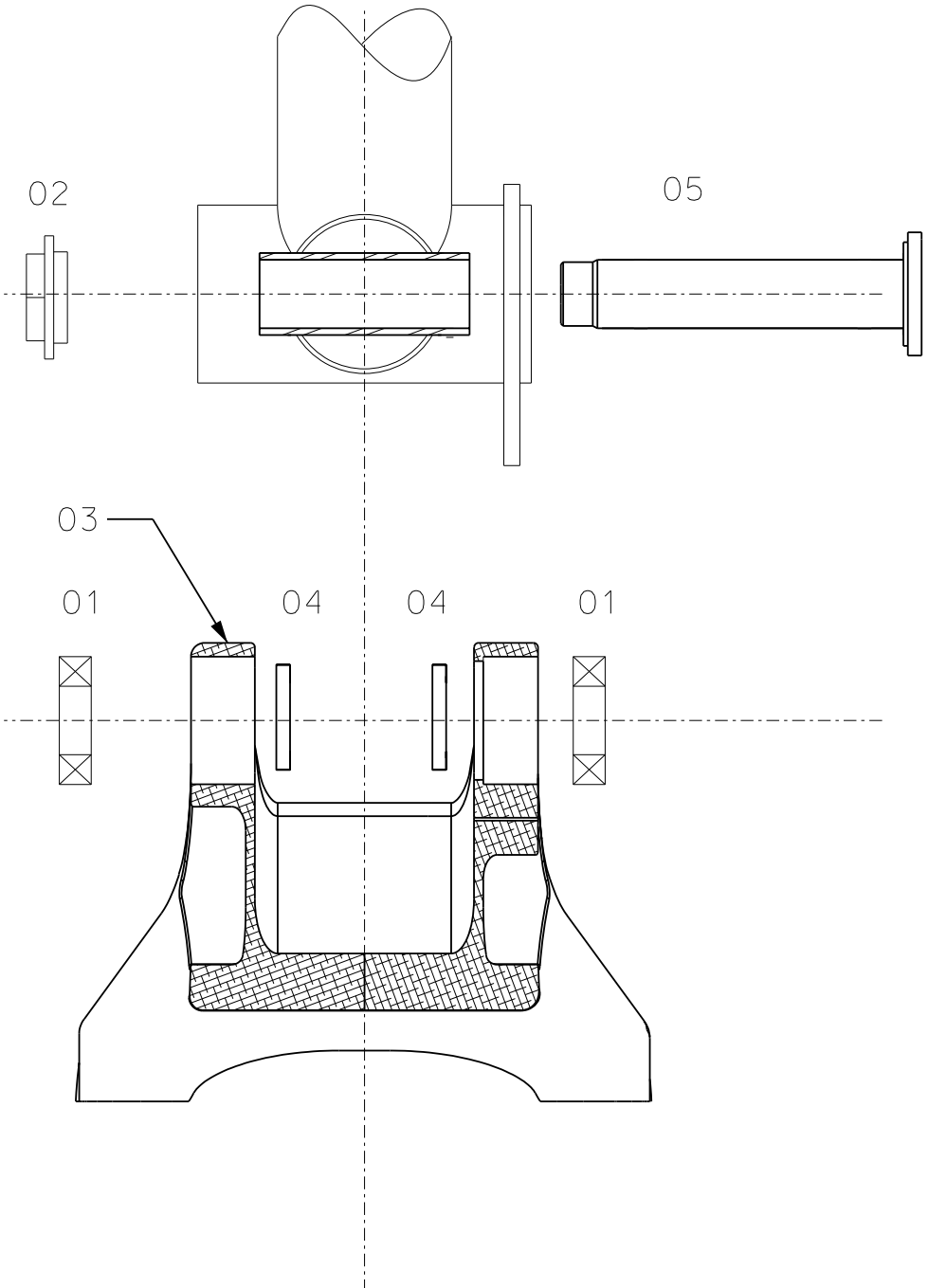
If you do not have the equipment to press the bearings in DO NOT attempt to install them using a hammer or similar as you run the risk of damaging the frame.

When re-installing the pivot axles after changing the bearings, it is imperative that all the spacers and axles are installed again correctly. When disassembling take note of the order in which assemblies came apart. Make sure they go back together the same way. Use high quality grease on all surfaces.

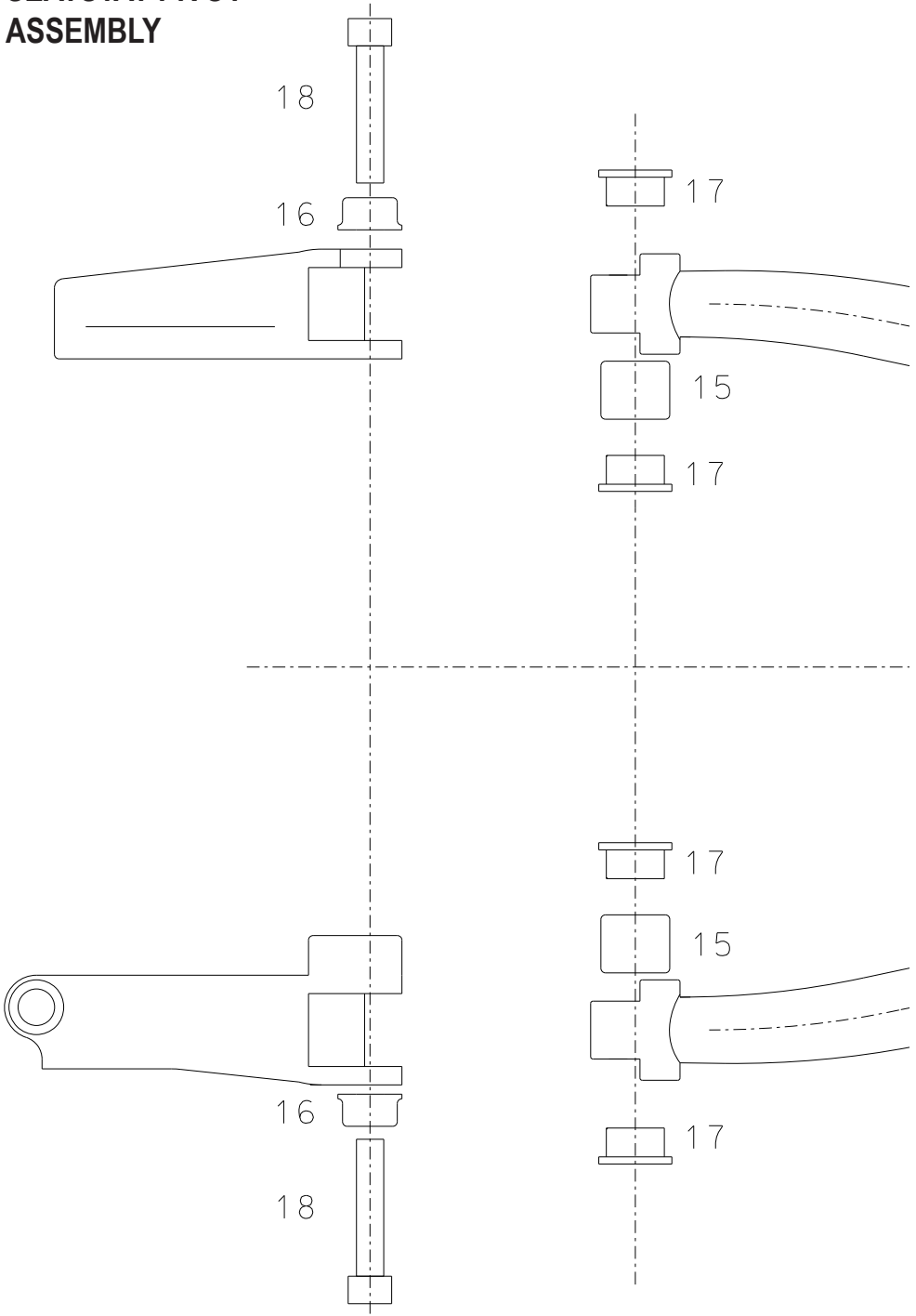
DROPLINK PIVOT ASSEMBLY



MAIN PIVOT ASSEMBLY



SEATSTAY PIVOT ASSEMBLY



PARTS LIST

PER ASSY	REF	DESCRIPTION	CAT/PART NO.	MATERIAL SPEC ETC.	WT. kg
2	18	M6 x 35 BOLT 5mm HEX KEY CAP HEAD		GRADE 8.8 EZP	
4	17	BUSHING TOPHAT	15.8 x M6 1/2" SHOCK BUSH FITTINGS		
1	16	SEATSTAY PIVOT CAP	COTICFS-007-10		
2	15	IGUS BUSH	1/2" IGUS W300 WSI-0809-08		
1	14	DROPLINK LARGE SCREW	COTICFS-082		
2	13	M5 x 10 TORX T25 DOME HEAD SCREW		GRADE 8.8 EZP	
2	12	8mm DROPLINK PIVOT CAP	COTICFS-007-09		
2	11	8mm DROPLINK PIVOT AXLE	COTICFS-042		
2	10	DROPLINK PIVOT SPACER	COTICFS-007-01		
1	09	DROPLINK PIVOT AXLE	COTICFS-081		
2	08	SMALL DROPLINK BEARING	608-2RS		
2	07	SEAT TUBE BEARING CUP	COTICFS-076		
1	06	SEAT TUBE BEARING SPACER	COTICFS-080		
1	05	MAIN PIVOT AXLE	COTICFS-079		
2	04	MAIN PIVOT SPACER	COTICFS-078		
3	03	M5 x 8 SCREW 4mm HEX KEY CAP HEAD		GRADE 8.8 EZP	
1	02	PIVOT END NUT	COTICFS-007-06		
4	01	15mm PIVOT BEARING	61902-2RS	BEARING RUBBER SEALED	

All the pivots and pinch clamps are designed to be done up with the following torque settings:

Pivot	Torque	Head Sizes
Main Pivot Axle	17Nm	8mm allen key/17mm spanner
Main Pivot Pinch Clamps	6Nm	4mm allen key
Droplink Seat Tube End	N/A*	8mm allen key/6mm allen key
Seatstay/Droplink Pivot	8Nm	4mm allen key/T25 Torx
Droplink Pinch Clamps	10Nm	4mm allen key
Seatstay Pivot	10Nm	5mm allen key
Shock Mountings	8Nm	2 x 4mm allen key

*There is no specified torque for the **droplink** Seat Tube Pivot Axle (15mm diameter). This is because for maximum bearing life, the pivot should be assembled loosely, with threadlock on the large screw and the **droplink** pinch clamps undone. The 15mm axle should then be tightened until there is just enough preload to remove any slack in the pivot, but still allows free turning. Just like pre-loading a headset. Once at this point, tighten the **droplink** pinch clamps to the recommended torque to hold the assembly together.

This ensures safe operation of the frame. Failure to install the spacers and pivots correctly, or to tighten the bolts sufficiently will lead to premature frame failure. If you're at all unsure, get your Independent Mountain Bike Specialist to do the job for you.

Feel free to contact Cotic for answers to any specific questions or to return the frame to us for service.

Other General Specifications

Seat Clamp (supplied)	34.9mm
Front Derailleur	N/A – The frames are 1x drivetrain only
Bottom Bracket Shell	BSA 73mm threaded
Chainguide Mounting	ISCG05 lower 2 tabs. Integrated Cotic / One Up Components top guide supplied with frame/bike
Cable/Hose Routing	Down tube routed full outer for gears, internal dropper post and rear brake.

Warranty

Your Cotic **droplink** frame (not including shock) is covered by a 5 year warranty which covers workmanship and materials defects only. If your frame fails due to a workmanship or material defect within 5 years of purchase, we will replace your frame for free. Your statutory rights are not affected by this warranty.

If you break your frame by using parts falling outside the specifications above, or by simply using it for riding which it was not designed for (i.e. Freeride, Downhill, large jumps/drops or wanton abuse). This kind of failure is explicitly not covered by the warranty.

Your seatpost must have a minimum 100mm insertion into the frame at full pedalling height or your warranty is void.

If using a coil shock, you must seek advice on spring rate from Cotic. Our bikes are progressive in nature and require stiffer springs than usually suggested by 3rd party suppliers and online spring calculators. If using a spring without the advice of Cotic it will void your warranty. Too soft a spring leads to frame damage.

You must not use more than 3 full turns (3mm) of preload on the spring to achieve the desired sag. This is measured from when you just take up the slack and stop the spring rattling loosely on the shock. If you require more than 3 turns of preload, you need a stiffer spring.

If your shock manufacturer recommends less than this, use that guidance. If your shock manufacturer approves more than 3 turns of preload, REGARDLESS OF THE SHOCK MANUFACTURERS INSTRUCTIONS you must still only use 3 turns of preload. Your Cotic frame warranty is void if you use more than the manufacturer suggested preload, or more than the 3 turn limit specified here, whichever is the smaller. Using more than 3 turns of preload can result in coil binding before bottom out which will overload and damage your frame. Cotic is not responsible for this.

If you use shocks or forks outside the specifications mentioned above, your warranty is void.

Setup Suggestions

The suspension on your Cotic **droplink** bike is designed to work at it's best when the suspension 'sags' with the rider on board the bike. 'Sag' is the amount the shock compresses with a rider on board. The suspension works at its best when set with between 25% and 30% of the available travel as sag.

You should be looking to set up your bike between the following amounts of sag, measured on the shaft of the shock:

droplink Model	25% Sag	30% Sag
Rocket Gen4	16mm	19mm
RocketMAX Gen3	16mm	19mm
Jeht Gen1	14mm	16mm
Flare Gen2 (45 stroke shock)	11mm	14mm
Flare Gen2 (50 stroke shock)	12.5mm	15mm
FlareMAX	12.5mm	15mm

How To Set Your Sag - Air Shock

Using a shock pump, put 170psi in the rear shock. Leave your forks as they are (if you've already set them up) or put the recommended pressure for your weight in them according to the fork manufacturer's manual.

Check the shock and turn off any lockout or Climb Switch. This allows the shock to compress unhindered and ensures a more accurate sag measurement.

Put your riding kit on. Or at least a fully loaded backpack if you usually ride with one. Make particular note of the amount of water in your pack on your bottles. It's probably the heaviest thing you strap to your bike after yourself, and it makes a difference to the suspension setup.

Set the saddle to your correct full pedalling height.

Mount the bike and go for a quick ride in a suitably quiet area. Whilst riding, bounce on the saddle a couple of times to get the rear shock compressing as much as you can.

Pull in somewhere safe, stop, get off the bike and slide the o-ring on the shock down against the seal. Now get back on the bike and with saddle at full height sit down and let your legs dangle off the pedals and make sure the o-ring on the shock is still up against the seal. Now, gently get off the bike without moving the shock (using a kerb or something as step helps).

Once off the bike, measure the distance between the o-ring and the shock body. Adjust the air pressure in the shock accordingly to get the desired amount of sag.

How To Set Your Sag - Coil Shock

If using a coil shock, go through the process above, but get someone to measure the eye to eye length of the shock with you on board to estimate the loaded length, then take this away from the unloaded length to get sag. For example:

RocketMAX: The rider sits on board and measures 209mm eye to eye length. $230 - 209 = 21\text{mm}$ sag. At this point the rider needs to add some preload to get the desired sag of 19mm.

You must not use more than 3 full turns (3mm) of preload on the spring measured from when you just take up the slack and stop the spring rattling loosely on the shock. If your shock manufacturer recommends less than this, use that guidance. If your shock manufacturer approves more than 3 turns of preload, you must still only use 3 turns of preload. Your Cotic frame warranty is void if you use more than the manufacturer suggested preload, or the 3mm limit specified here, whichever is the smaller. If you need more than 3 turns of preload, you need a stiffer spring anyway. For example, 3mm of preload on a 500lb/in spring is 59lb of preload. At that point you would need the 550lb spring.

The progressive nature of the **droplink** rear suspension means running 30% sag gives lots of grip and fluidity whilst still having great support when moving the bike around.

It's worth noting that as the weight distribution of all bikes is different, being dependent on saddle position, stem length and bar width amongst many other things. It's quite possible that with the correct sag at the rear of the bike, your forks may end up with too much or too little sag because there's more or less weight on them compared to your previous bike. This is why we don't recommend any particular pressures, because even quite subtle differences in your saddle/cockpit set up compared to anything we measure will result in different pressures being required for a given level of sag. We always recommend setting up using sag measurement as your guide, not a generic shock pressure.

Once you've set the rear sag, check the front fork sag. For forks, we recommend running a fairly firmly sprung setup with 20-25% sag coupled with 30% sag at the rear for general riding. The firmer forks keep your weight centred on downhill sections. Setting your fork sag is easiest if you get someone to help. Again, with your riding gear on, mount the bike and then ask a friend to hold the bars and clamp the front wheel between their legs. Once steady, stand up on the pedals as if about to descend a trail. Bounce the forks once or twice to free them up, then stand up over the bars in an 'attack' riding position. Get your friend to slide the o-ring on the fork to the seal. Now, without moving the fork any more, move yourself rearward and then step off the bike. Measure the distance from the o-ring to the fork seal. That is your sag. For a 160mm fork, you should be aiming for around 32-40mm sag (20-25%).

If the fork sag requires alteration, alter it, then check the rear sag again. Keep doing this procedure until both front and rear sag is set as desired by the rider, within the manufacturer recommendations for the frame and fork.

How To Set Damping

Once the front and rear sags are set, adjust the rebound and compression damping to your preference. If you have specified the Cane Creek shock, then our base setup is on the shock already. Follow the excellent instructions in the Cane Creek manual for fine tuning.

For other shocks:

Rebound

It is recommended to start with the rebound halfway across its range. If you feel like you're being bounced out of the saddle on big compressions, or springing back too hard off drops, or the bike feels like it's bouncing back at you at high speed on rocky sections, then add more rebound damping until this sensation is eliminated.

One thing to avoid is setting the rebound based on the 'bounce in the street' test. This usually results in setting the rebound too slow for good grip in trail riding conditions, because doing the 'bounce test' with rebound set fast enough for good performance usually feels too fast in this unhelpful scenario. Use the Cotic base settings (which you will find quite open), run your fork rebound in the middle to start with, and go ride. Only start adjusting once you have a feel on the trail.

Compression / Pedal Platform

It is recommended to start with the compression damping/pedal platform switched off (or set to minimum). The Cotic **droplink** suspension is designed not to require the assistance of a compression damping circuit to give good pedalling performance. Using the minimum setting allows the suspension to move under bump forces more easily and track the ground better.

Try It Out – The Only Way You'll Know Is By Going For A Ride

We recommend starting at 30% shock sag and going for a couple of rides to see how this feels. This is a good middle ground for tackling the trails with an active, plush feel combined with a low bottom bracket height for confident handling.

If you feel that you're catching your pedals too often, or the steering isn't as fast as you'd like, or you're not getting the climbing position you want, then add more air to the shock and reduce the sag to 25% shock sag, or maybe drop the sag on your fork a few extra millimetres to move your weight forward.

Take Some Notes Before Tweaking

With all the adjustments available on modern suspension it's quite possible to get lost chasing a set up and ending up with a bike that doesn't handle too well. So, if you've twiddled and tweaked and the handling just seems to be getting worse, go back to your base setup. We've provided a section over the page for you to fill in with your basic settings and experiments.

Don't be afraid to experiment with your suspension settings and general bike setup (stem length, bar height, etc), but always have a base set up written down that you can go back to. This should include a fork travel (if the fork is adjustable) with air pressures for front suspension units. Note down how many clicks of rebound you're running. Same goes for compression damping if its adjustable on your fork.

As your experience grows, you'll begin to know what certain adjustments do and how to undo them, but it's a learning curve so keep your head and don't be afraid to start from scratch.

We really think you could get more out of your bike by playing around with things a little. We're always happy to help if you want advice. Just drop us a line at info@cotic.co.uk

Our service doesn't stop when you order a frame. We want to help you enjoy your new bike to its full potential.

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SET UP NOTES

Shock Pressure (psi)	Shock Sag (mm)	Shock Rebound (clicks)	Fork Pressure (psi)	Fork Sag (mm)	Fork Travel (mm)	Fork Rebound (clicks)	Bar/Stem Width/Length

COTIC

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