

# CB500X Adventure FAQs

(revised 7th May 2019)

*Please note: These FAQs pertain specifically to the current Production Specification Rally-Raid Products CB500X 'Adventure' kit, and associated parts and accessories for the Honda CB500X, (plus those parts compatible with the CB500F and CBR500R models where appropriate).*

With the introduction of some key specification changes for the 2019 model year CB500X (primarily longer travel standard suspension and a 19" front wheel), our FAQs have been revised to reflect the new components that are specific to the 2019-onwards model, together with those which continue to be applicable to the existing 2013-18 model year range.

Broadly speaking, the specification of the Rally-Raid suspension upgrades remain that same - offering two 'LEVEL' kits - standard travel (the same as OEM/stock for that model year) and a longer travel version (with more comprehensive damping adjustment).

Wherever possible, existing parts and accessories have been redesigned to remain common across all model years - although any product/component that has specific model-year applications (such as the exhaust shield for the Adventure Engine Guard) will now have a choice from a drop-down menu on the corresponding page on the Rally-Raid Products web-shop.

1) I understand there are different 'Levels' of kit available, can you explain the key differences to me in simple terms?

We have simplified our range of wheel and suspension upgrades for the CB500X: There are now two core upgrade options available: LEVEL 1, and LEVEL 2.

In a nutshell, LEVEL 1 suspension maintains the original length suspension travel and corresponding standard seat height.

LEVEL 2 is our longer-travel suspension kit - which offers 170mm of travel (and a corresponding increase in ground clearance and seat height) both front and rear for all model years.

***please note.*** while the standard dimension front and rear LEVEL 1 suspension components are available and can be fitted separately (as desired and/or finances allow), the LEVEL 2 longer-travel suspension components have to be sold/fitted as a complete kit.

In addition the Rally-Raid heavy-duty spoked wheel kit comes with a 17" rear wheel and 19" front wheel. For the 2019-on model, these wheels are now a direct replacement whether or not you have chosen to also upgrade the suspension. For the 2013-18 model bikes [with a 17" front wheel as standard], you have to fit the longer travel LEVEL 2 suspension first to allow enough clearance for the larger 19" front wheel.

## 2) So what is this 'LEVEL 3' I still read about online and see in adverts for second-hand bikes?

'LEVEL 3' was the way we originally referred to the LEVEL 2 suspension and the 17/19" wheel kit when fitted together... you still can order exactly the same parts, it's just called "LEVEL 2 suspension, and the Spoked Wheel Kit" now we've simplified our range of options - and that in the case of the 2019 model, the wheels and suspension can now be fitted independently of one another of course.

## 3) I see, so can you describe the two 'LEVEL' suspension options in more detail?

### L1 Suspension

**LEVEL 1** upgrades the standard travel suspension with higher quality and adjustable components front and rear. This is the ideal option for those who do not wish to raise the seat height at all. These components are also suitable upgrades for the CB500F and CBR500R models.

The aluminium body **LEVEL 1 rear shock** offers the same travel as the OEM shock, but offers far high-quality and adjustable damping (*via a single combined adjuster wheel for rebound and compression*); together with the option of fitting a hydraulic remote preload adjuster to easily compensate for different loads.

The **LEVEL 1 fork kit** offers the same travel as the OEM fork components, but complete replaces the internal parts with our unique shim-valves and dedicated damper rods, plus longer linear-wound springs, which eliminate the OEM plastic spacer inside the forks.

### L2 Suspension

**LEVEL 2** increases the overall travel and ride-height to 170mm front and rear, which correspondingly offers far greater off-road performance, and is only suitable for the CB500X model.

*note. on the shorter-travel 2013-18 model bikes, our overall LEVEL 2 increase is equal to +50mm, while on the 2019-on models it is +20mm over the standard ride/seat height.*

The **LEVEL 2 rear shock** is fully adjustable - offering individual controls for rebound plus high&low speed compression damping - together with a remote reservoir for increased oil capacity. As with our LEVEL 1 shock, there is also the option of fitting a hydraulic remote preload adjuster to more easily compensate for different loads and conditions.

The **LEVEL 2 fork components** are similar to the LEVEL 1 specification, but with an increase in travel to match the longer rear shock; while the comprehensive kit for the 2013-18 bikes also

includes revised geometry rear-suspension linkage components, a billet top triple-clamp and a longer side-stand.

*note. the LEVEL 2 kit for the 2019 model is actually far more simple to fit, as Honda have already included a revised top-triple clamp and bar risers, and a longer side-stand as part of the standard specification.*

## **Rally-Raid CB500X Suspension specification summary:**

### **2013-18 model**

*LEVEL 1 suspension: 140mm front travel, 120mm rear travel (as per OEM) - adjustable shock damping as standard/optional hydraulic preload adjuster. Fork kit adds shim-valving and replacement damper rods and longer linear springs. Seat height 810mm (as per OEM).*

*LEVEL 2 suspension: 170mm front and rear travel (+30mm and +50mm respectively over standard) - fully adjustable reservoir shock with individual high & low compression and rebound damping adjusters. Optional hydraulic preload adjuster. Seat height 870mm (with TKC80 tyres).*

### **2019-on model**

*LEVEL 1 suspension: 150mm front and rear travel (as per OEM) - adjustable shock damping as standard/optional hydraulic preload adjuster. Fork kit adds shim-valving and replacement damper rods and longer linear springs. Seat height 830mm (as per OEM).*

*LEVEL 2 suspension: 170mm front and rear travel (+20mm over standard) - fully adjustable reservoir shock with individual high & low compression and rebound damping adjusters. Optional hydraulic preload adjuster. Seat height 860mm (with TKC80 tyres).*

*LOW suspension option: Lowering kit for the 2019 model reducing the travel/seat height by -20mm (ie. seat-height reduced to 810mm - the same as the previous generation model) - suitable for fitting with either the standard OEM or LEVEL 1 upgraded suspension.*

4) What about the [wire] spoked wheels?

### **The Rally-Raid heavy-duty spoked wheel kit (pair).**

The Rally-Raid heavy-duty spoked wheel kit comes with 17" x 3.50 rear and a 19" x 2.50 front size aluminium rims, hand-built on our unique in-house designed and machined billet aluminium hubs.

Our hubs have been specifically designed to accept all your existing OEM brake discs, ABS sensor rings and the sprocket/cush-drive assembly from the original bike - making the swap both simple and more affordable. It also means that any spare/replacement bearings and seals are common Honda OEM parts.

These wheels are designed to fit both the ABS and non-ABS models alike.

With the introduction of the 2019 model with a 19" front wheel as standard, we have taken this opportunity to re-design our front hub so that our spoked wheels are the same across all model years - you simply select which model year you have and will be supplied with the correct front disc mounting hardware (and dedicated stainless steel ABS ring for the 2016-18 models).

Our wheels are available either tube-type or with the BARTubeless tubeless conversion factory-installed (including their 4-year warranty), and there is a choice of either black or gold powder-coated rims at no additional cost.

*please note. our 17/19" spoked wheels can only be fitted to earlier 2013-18 models once the LEVEL 2 suspension kit has also been installed.*

Should you wish to fit our 17/19" wheels to a 2013-18 model LEVEL 2 bike, there is also a dedicated 19" front fender kit available separately to complete the conversion.

*please note. previously we also offered an alternative 17/17" 'LEVEL 1 wheel kit for those owners of 2013-18 bikes. However, going forward these LEVEL 1 wheels are now a discontinued product.*

**5) Can I purchase any of the suspension components separately, or do they have to be bought as a package?**

It is certainly possible to buy the LEVEL 1 front fork kit or rear shock separately if you desire - as these do not affect the original geometry of the bike in any way.

However, the longer-travel LEVEL 2 suspension components must be fitted as a matched pair and can only be sold as a complete package.

**6) I love the look of the spoked wheels - can I just buy the wheels on their own?**

If you have a 2019-on model CB500X, yes of course - they are a direct swap with your existing cast aluminium wheels, using all the existing hardware.

However, if you have a previous generation 2013-18 model CB500X, you do need to fit our LEVEL 2 suspension kit first, as that provides the necessary clearance for the 19" front wheel.

7) My original cast wheels are tubeless - do you have that option for your spoked wheels?

Yes, although our standard spoked wheel kit is designed to use inner tubes (*even inside tubeless tyres such as the continental TKC80*) - the rims themselves have the necessary safety bead which allows us to also offer them professionally converted by BARTubeless in Italy (complete with a 4-year warranty), and usually available from stock.

You simply choose either the tube-type or tubeless product option/part number when you order, then select your rim colour preference from the drop-down menu.

*Please note that not all colour/tube/tubeless options may always be available immediately from our warehouse stock, but all specific orders will be satisfied as quickly as possible.*

8) Ok, I'm ready to buy - I see you are based in the UK - how do I purchase the parts I want?

Rally Raid Products have a comprehensive web-shop: [www.rally-raidproducts.co.uk](http://www.rally-raidproducts.co.uk), that accepts International payment in a range of currencies, proportional to the default UK pound pricing.

We use UPS for worldwide shipping, to most destinations using their 48 hour priority service. Typically all products in stock shipped to both Europe and the USA arrive within a week.

9) Can I fit the suspension/full Adventure kit myself at home, or does it need professional installation?

The kit/s have been designed to be DIY fit, and full step-by-step instructions are available on the Rally Raid Products website to read/download at the bottom of each respective product page.

The kit/s have been specifically designed to be completely bolt-on, and there is no need to cut or weld anything to fit the upgraded components. Typical workshop tools - a metric socket set, wrenches and allen keys are really all that is required. Should you prefer a professional workshop to undertake the work on your behalf, then they too will appreciate the straightforward nature of the conversion.

*note. To safely fit the front and rear suspension components, you will need support the bike so that no weight is on either the swing-arm/front forks in turn. In that regard, we suggest you consider our tubular Engine Guard which cradles the engine, and fit that first of all - then you can support the complete weight of the bike on a scissor lift directly underneath the engine.*

*In addition, while the vast majority of the installation is simple bolt-off bolt-on, you will be required to remove the fork internal components and replace them with the new Rally Raid parts. Although it is a relatively straight-forward, if you are not confident or familiar with such a procedure, we do recommend obtaining the assistance of an experienced and/or professional workshop mechanic for that element of the conversion.*

#### 10) Can I still use a centre stand if I fit the longer-travel LEVEL 2 suspension?

No. Unfortunately the standard length centre-stand is not long enough to lift the rear wheel off the ground once the longer travel suspension has been fitted.

#### 11) OK, so how can I lift the rear wheel for chain maintenance for example?

We realise it is useful to be able to lift the rear wheel off the ground for chain maintenance and puncture repair, but at the same time, we consider a traditional centre-stand bulky, and unnecessary weight to carry around with you for the vast majority of the time - particularly on a bike that is intended to be used more frequently off-road.

Instead we would suggest you consider a short removable prop-stand similar to those used by dual-sport riders - which typically locates under the swing-arm or right-hand side footrest, and is used in conjunction with the side stand to lift the rear wheel a few inches off the ground. The Endurostar Trail Stand or Bikemaster Lift-Stick are two popular choices.

For workshop and home maintenance, we strongly recommend you invest in either a traditional paddock stand to lift the rear wheel (the universal type can be used with many other motorcycles too of course), or a simple scissor-lift that can be used to lift either wheel in conjunction with the Rally Raid tubular engine guard.

#### 12) My bike has ABS - do the Rally Raid spoked wheels still work with the ABS?

Yes, they certainly do. In the UK and Europe the CB500X is only sold as an ABS equipped model, so it was essential that our replacement wheels would retain all the OEM ABS and braking components. They work equally well with the non-ABS bikes too of course.

The only consideration is that from 2016-onwards, the OEM front ABS sensor ring changed shape. Rally Raid subsequently sell a direct replacement front sensor ring for owners of the 2016-18 models.

For the 2019-on model, Honda have revised the design of their front ABS ring, and this is a direct fit to the latest Rally-Raid spoked wheel hubs.

13) I see that some manufactures offer 'switchable' ABS these days, is that something I can have too?

Yes. Again, the UK/EU bikes all come with ABS as standard, and while we feel it is an excellent system both on-road and off, there may be an occasion (traditionally in very technical off-road terrain for example) that you absolutely don't want the ABS to cut in.

We offer a simple ABS bypass switch that complete disengages the front and rear ABS, allowing the bike to behave in exactly the same way as the non-ABS version (which is sold in the United States for example) does. When the ABS is disengaged, a dash warning light is illuminated to remind you. You can also switch between ABS on and ABS off on-the-fly as you ride along.

14) How much taller is the bike once the long-travel LEVEL 2 suspension and 19/17" spoked wheels are fitted?

We have measured our 2013-18 model LEVEL 2 bike (*fitted with Continental TKC80 all-terrain tyres*) at a little over 34" seat height (870mm). To compare, the standard seat height on the OEM cast alloy wheels and street-biased tyres is 31.9 inches (810mm).

The 2019 model CB500X has an 830mm seat height as standard, and this increases to 860mm with the LEVEL 2 suspension and TKC80 tyres fitted. *note. This is due to the 2019 model having a slightly reshaped/lower seat - the travel remains the same at 170mm front and rear on both 2013-18 and 2019-on LEVEL 2 bikes.*

15) I'm rather short in the leg, what are my options to upgrade if I want to ride my bike off-road more seriously?

We realise that the CB500X has always appealed to shorter riders, which is why we felt it important to offer our high quality/adjustable suspension in standard travel/ride-height length for both front and rear.

The LEVEL 1 suspension components will make the most of the original travel available, without raising the seat height at all - you just have to keep in mind that without raising the bike, your ground clearance is still limited.



Therefore we would certainly recommend also fitting the tubular Engine Guard to protect the otherwise vulnerable sump; while our heavy-duty foot-pegs offer a far larger platform for when standing while riding off-road, and indeed improve general comfort when riding long distances too.

### **NEW for the 2019 model - LOW option.**

In addition, while the 2019-on model with the 19" front wheel as standard does have a +20mm taller seat than the previous 2013-18 generation, Honda's revisions to the rear suspension linkage means we can now offer a lowering kit for the latest model, that essentially drops the seat height by 20mm back down to the previous generation seat-height (810mm) while retaining the stock 19" front wheel.

**16) If I fit the spoked wheels, can I swap between my OEM cast wheels for commuting during the week, then swap to the spoked wheels for off-road use?**

Yes, if you so wish - however, we have designed the Adventure kit to specifically improve and enhance the standard CB500X into more of an 'all-road all-rounder', without compromising its day-to-day usability at all.

However - and on the 2019 model particularly - we can certainly appreciate it might help to conserve your more all-terrain tread pattern tyres fitted to the spoked wheels, by using your original cast wheel and tyre combination for more mundane journeys. It's a simple job to swap wheels and tyres over, although we suggest you consider purchasing a second set of brake discs/ABS rings for your second pair of wheels to make that process even more straight-forward.

Similarly if you have a previous generation 2013-18 model bike with LEVEL 2 suspension, there is nothing to stop you fitting the original 17/17" cast wheels if you wish - the fork angle will just be approximately 1° steeper (ie. the same as it was originally) compared to with the 19" front wheel fitted.

**17) Do I need to change the gearing (my chain and sprockets) if I fit the LEVEL 2 spoked wheels?**

No. One of the main reasons we decided to retain the 17" rear wheel diameter is so that the final-drive gearing would remain the same, and that the speedometer (which is driven from the gearbox) also remains accurate. Of course there is nothing to stop you gearing up or down a few teeth to suit a personal preference, and do consider that depending on what brand/size/tread-pattern rear tyre you fit, the rear wheel may be slightly larger in diameter overall than standard - but we found that when using a 150/70 x 17 Continental TKC80 for example, there is no appreciable difference.



18) I see the LEVEL 2 longer-travel suspension kit [for the 2013-18 models] comes with new rear linkage parts and a replacement top triple-clamp too - why is that?

The rear linkage components are essential to allow the much longer rear shock (+50mm travel) to physically fit on the bike, and to retain the original leverage ratio for the rear suspension.

At the front, the LEVEL 2 components offer +30mm more travel over standard (*so that both the front and rear suspension are now equal at 170mm travel*), and as part of the geometry revisions, it was also essential to lower the top of fork legs by 20mm, which is achieved with our dedicated billet top triple-clamp.

In addition, the billet top triple-clamp offers a choice of handlebar mounting position fore and aft when using the OEM handlebars, plus the option of choosing Fat-bar risers should you wish to fit stronger aluminium handlebars. It also incorporates dedicated mountings for an optional Scotts steering damper if desired.

Also included in the LEVEL 2 package is a longer replacement side-stand so that the taller bike remains at the correct angle with the longer suspension fitted.

19) So why is the 2019-on model LEVEL 2 suspension kit different?

Primarily because Honda have done a lot of what we had to do originally themselves now, so that they too could fit a 19" front wheel onto the existing CB500X chassis.

The 2019-on model comes with a new top-triple clamp, and more conventional handlebars/risers too. It also has slightly longer travel suspension, which required a longer side stand to be fitted as standard.

What this means is that the LEVEL 2 kit for the latest model is far more simple and quicker to fit. There is no need to remove the top triple-clamp and relocate the ignition barrel in the replacement for example, while access at the rear shock and the revised linkage design also makes that element slightly more straightforward too.

20) I really don't like the stock handlebars on the 2013-18 model, but I understand their shape means the choice of alternatives is very limited - is there any alternative from Rally-Raid Products?

Yes. Our billet top triple-clamp (*standard with the LEVEL 2 suspension kit, and there is also a LEVEL 1 version available as an accessory*) has a choice of bar riser options.

You can specify the standard height bar risers to retain the (22mm) stock diameter bars, or select the high-rise Fat-bar option that is designed to accept 28mm tapered bars - mounting them correspondingly higher so that a wider selection of traditional MX/Enduro bars can now be fitted to the bike.

Our Fat-bar risers have been specifically designed to mount the Renthal 'RC High' bend (84mm rise) bars, as we feel these offer the combination of rise and sweep for off-road riding (and indeed are a very popular choice with rally riders), and fit with the OEM cables, hoses and switchgear wiring without modification.

21) Do you offer a high front-fender option for the CB500X?

No. Unfortunately, because of the brake-hose routing, it is not possible to fit a high fender successfully on the ABS equipped bikes; and personally we also feel that the low rally-style fender compliments the bikes styling, works better aerodynamically at higher speeds, and also offers better protection to the front of the engine and radiator too.

22) Can I fit the latest 2019 model cast wheels to an earlier [2013-18] bike, with your LEVEL 2 suspension fitted?

No. While they might appear visually similar, the 2019 cast 19" front wheel is different dimensionally - including the spacers and the disc off-set - as is the front axle and fork lowers on the 2019 bikes. There is also the issue that the front disc is reduced in diameter (now 310mm vs the previous 320mm) which means the original brake calliper would not line up, and similarly the ABS ring is a complete different size, so the sensor would not line up (and we also suspect there would be different software programming in the ECU too in that regard).

23) Can I fit the longer travel LEVEL 2 suspension to a earlier model CB500F too?

Technically no. While the rear shock, linkage and the fork internal dimensions are exactly the same between models, the CB500F headlight is mounted directly to the triple clamp, which is different to the replacement version we manufacture for the LEVEL 2 kit for the CB500X.

We consider that CB500F customers would be more than adequately served by fitting our standard travel length LEVEL 1 upgraded suspension, perhaps in combination with the [remaining stock] 17/17" spoked wheels should they desire more of a 'Scrambler' style conversion.

*ends.*