

# HOW TO FIT **MK3 FOCUS ST/RS WISHBONE BUSHES**

Powerflex's wishbone bushes for the Mk3 Focus ST/RS offer improved suspension geometry as well as the benefits of a polyurethane bush, so we headed to SCC Performance to see how they're fitted...

Words & Photos JAMIE

eplacing the OE bushes on a car with polyurethane upgrades can make a huge difference to how a car feels to drive. By eliminating unwanted movement in the chassis components under heavy braking, acceleration, and cornering, the suspension geometry stays in its optimum position all the time, resulting in

## **BEFORE STARTING...**

Working on cars can and should be a fun experience, but it can easily go wrong so always remember - safety first! That means wearing appropriate protective equipment and taking care when using power tools. Never work under a car without safely supporting it first, and always have a fire extinguisher to hand. If you're not confident about doing something, leave it to the professionals. The advice and guidelines given by Fast Ford are given in good faith and neither Fast Ford nor Kelsey Media can be held responsible for injuries sustained while undertaking the described tasks, or any consequences arising from them. a sharper, more positive experience behind the wheel – especially when you really start to throw the car into corners and push the limits of traction.

So, replacing the rubber bushes with polyurethane material is a modification worth making in its own right, but Powerflex have just moved the game on even further with their latest offering for the Mk3 Focus ST and RS models. They have cleverly engineered their new front wishbone rear bush (PFF19-1802G) to physically alter the suspension geometry to further improve handling and aid traction. For starters, the new-design aluminium bracket actually lowers the centre of the bush by 7.5mm, which helps with anti-lift under hard acceleration. At the same time, the bracket is machined to offer 1 degree more positive caster when compared the OE wishbone too. This gives a sharper turn-in, reduces torque steer, and improves traction.

Powerflex even offer an adjustable front bush for the wishbone too (PFF19-8011G) which allows you to adjust the camber settings – ideal for track fans.

For most fast road applications, however, the anti-lift rear bushes coupled with Powerflex's non-adjustable (PFF19-8011) front bushes provides the ideal set-up.

With that in mind, we took our very own Focus RS project car to Powerflex distributor, SCC Performance in St Albans, to see just how everything goes together...



### **ESSENTIALS** IN THE KIT

Powerflex PFF19-1802G wishbone rear bushes, PFF19-8011(or camber-adjustable PFF19-8011G) wishbone front bushes



COSTS PFF19-1802G - £383.88 PFF19-8011 - £47.44 (or PFF19-8011G -£107.88) Fitting - (3 hours) £225

#### **HOW HARD**

Removing the wishbone is fairly straightforward but removing the old bushes can be tricky. And the car should really have an alignment check after fitting too - probably a job best left to the pros.

#### **HOW LONG**

Front wishbone bushes - about 3-3.5 hours

#### **TOOLS NEEDED**

Sockets, spanners, Torx bits, Allen keys, transmission jack, ramp, hydraulic press, hacksaw, angle grinder, vice, and a big hammer

## SCC PERFORMANCE

SCC Performance have forged a stellar reputation as being among the finest Focus fettlers in the UK and they are an authorised Powerflex distributor too, so they were our first choice when it came to fitting these upgrades to our own project RS. The SCC team boasts decades of experience tuning Fords, with head honcho, Rob Oldman, having over 25 years' experience in the industry alone. Although they are happy to work on all manner of Blue Ovals, SCC have fast become a name synonymous with fast Focuses: "We started tuning the Mk1 Focus RS back in 2003 when it first came out," explains Rob Oldman, "we then moved onto the Mk2 RS, and more recently have started to get more heavily involved with tuning the Mk3 RS too." With such a vast wealth of experience with the Focus RS range you can see why SCC have become the go-to tuner of choice for RS owners.

SCC PERFORMANCE 01727 867747 www.focusrsparts.co.uk



The first job is to securely support the car in the air, remove the front wheels, and then remove the undertray. It's held in with a series to T30 Torx bolts and a couple of plastic push-in clips.



RS models have plastic brake 2 deflectors which need removing next. They're held on to the wishbone with plastic push-in clips.





With those removed, the next job is to remove the crossbrace that connects the front of both lower wishbones. There's one 15mm and one 18mm bolt each side.





Now, using a T55 Torx bit and an 18mm socket, undo the pinchbolt that holds the lower ball-



Gently open the hub by tapping a chisel into the pinch gap, then pull down on the wishbone to release the ball-joint.



When we removed the 6 crossbrace in Step 3, one of the nuts attached to a longer bolt that fixes the wishbone to the subframe. Now, remove this bolt completely.

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Gently pry the wishbone out of 8 the subframe, and it's over to the press...



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Press the rear bush off the wishbone.





If you're lucky the bush will come off the wishbone cleanly, like this ...



If not, it may tear and spray oil (the OE bushes are fluid-filled) everywhere, like this. If so it will need cleaning up before you can go any further.



Clamp the wishbone tightly in 2 a vice and remove as much of the rubber as you can with a hacksaw, before using an angle grinder or die grinder, carefully cut a slot into the metal sleeve – pay attention not to cut too deep and mark the wishbone itself...





Then, using a hammer and chisel, gently tap the old metal sleeve off the wishbone.



It's best practice to remove all the old dirty bushes before Δ fitting the new ones, so the next job is to remove the front bushes. Start by cutting away the rubber lip with a hacksaw...





Now, flip the wishbone over, and use a chisel to pry the metal lip of the bush away from the

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Back to the other end of the bush, a good whack with a hefty hammer should see the old bush come out of the wishbone.



After a quick wipe down to remove any dirt and debris, you can then start to fit the new bushes. Starting with the rear bush (PFF19-1802G) slide the washer on to the wishbone, followed by the new metal sleeve. This will need pressing or tapping fully into place.





Now, liberally apply the supplied assembly grease to the inside of the new bush...





Before sliding the whole lot onto the wishbone - make sure you're fitting the correct side; the Powerflex logo and part number should be visible from underneath when installed.



Front bushes next. Apply some 20 assembly grease to both parts of the bush and press them into the wishbone...





Then offer up the metal insert and use a vice to gently squeeze it fully into position.





With the new bushes fully fitted to both wishbones, it's time to fit them back on to the car. Refitting the wishbones is the reverse of removal (Steps 1-8).



## CONCLUSION

With everything back together and after a quick alignment check, the Focus now benefits from improved anti-lift, increased caster, and ultimately, better handling and increased traction. Out on the open road Jamie says you can really feel the difference: "The front end feels much sharper and more positive during initial turn-in, and noteably more stable under hard braking and braken and the subscription of the stable to the sharper and more braken and the subscription of the stable under hard braking and braken and the subscription of the stable to the sta hard acceleration too. It's a huge improvement and I can't wait to try it on track later!" Result! 🎞