How to

Fit Fiesta wide arches

Fit wide wheels to your Fiesta and you need a bit of coverage. We follow as Matt Barton fits some Group 2-style arches to cover his Turbo rims.

Words and Photos Jon Hill

Fill your Mk1 Fiesta's engine bay full of horsepower and chances are you need some big fat rims to help with traction, but there's a limit to what you can get under the standard arches.

We've been closely following Matt Barton's 2-litre Zetec build for a while now and he's got a load of horsepower hikes planned too. And to cope with that, he's invested in a set of 7x13 OS4 Turbo rims from John Brown Wheels along with 185/60R13 tyres — although these are likely to go up in size to around 205s.... The trouble is, they stick out of the arches so a great way to solve that is to fit a set of rally arches (sometimes referred to as Group 2 arches) — and that really makes sense because Matt also wants to run the car much lower than he has before...

Info

Contacts:
Smith & Deakin
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John Brown Wheels
01926 817444
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Eumro Tools (Cleco fasteners)
01268 288880
http://eumro.co.uk

Matt's rally arches are made from GRP (glass-reinforced polyester), which he bought from Smith & Deakin for £150 for the set of four. Now, if you're of a faint heart, then these aren't the components for your car because you will need to cut into your bodywork and you will need to do some welding. But it's not too difficult — if you're brave! The front wings are not too bad simply because they are single-skinned, but the backs are a lot more involved because they have an inner arch, which needs modifying.

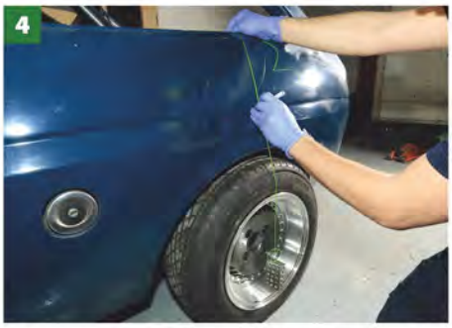
We followed along as Matt makes it looks pretty simple — as normal, he'd done his homework and researched some pretty trick fittings to make fitting the arches easy and therefore painting too. Matt's getting towards the tail end of his dummy build and as such, there may be a bit more updating yet — he reckons he might stiffen the front wings later on with a new lip on the edge of the steel wings. If he does we'll keep you updated via Our Cars. In the meantime, let's fit some arches!

"THE NEW RIMS STICK OUT OF THE WHEEL ARCHES, SO A GREAT WAY TO SOLVE THAT IS TO FIT SOME GROUP 2-STYLE RALLY ARCHES"

With Matt's new OS4Turbos fitted and the car dropped to as low as he can get it without sitting on the arch, you can see the there's virtually no clearance, while they seriously stick out of those arches.

At the back, the problem's even worse, plus we have added problem of the inner wheel tubs — these are double skinned.

The solution's these GRP rally arches, which really suit the Mk1 Fiesta.



First job is to line them up. Initially, Matt finds the centre of the wheel using a plumb line and weight — he runs the line through the centre of the wheel and projects the line upwards using a silver paint marker to scribe a line.

He then uses the centre fixing hole of the arches and offers the piece up to see how it fits — there's more considerations yet!

You need to check that the bottom of the arch corresponds with the bottom of the bodywork — in this example, it's the front wing; lining up with the lip of the Fiesta's spoiler but it's the same at the extremities of all the arches. There's a bit of leeway and the arches are flexible so they can be tweaked but you do need to keep standing back to check too.

In addition, there are moulded-in cut-outs for the bumpers — if you want to run them of course. Matt's unsure at the moment — he'll probably fit quarter bumpers but you need to line the options up properly, too!

To temporarily hold the wings in place, Matt's going to use Clecos (aka skin pins) through the moulded-in fixing cut-outs.

Clecos are almost essential bodywork tools; allowing you to fix one panel to another. They fit using a special pair of pliers that pull back allowing the centre shaft to slide inside itself and therefore make it slimmer, which allows you to slot it in a small hole — once it's released, it expands and grips the two pieces you're trying to fix together. And of course, you can easily remove them too.

First you need to drill a clearance hole through the two components: rally arch and bodywork behind.

Then the Cleco's fitted with the special pliers and the arch is quickly fixed in place, allowing you to move onto the next fitting — there's a bonus too because once you have all the Clecos fitted, you also have reference marks for the actual fixings.

Matt works his way around the arch — it should line up with the bottoms, if you've checked and checked!

Once completely fitted stand back and check it's all as you want it and that the wheels fit the arch.

It goes without say that Matt also fitted the rally arch to the front as well, using Clecos.

The next bit's the point of no-return! Matt has marked a line around the outside of the arch, then removes it and marks another inside it, but 20 mm further down.

He works his way around the whole arch until all the marks are joined up — this is his cut line!

Using a 1 mm cutting disc in an angle grinder, Matt carefully cuts through the outer skin…

…and trims off the bottom of the arch so that the outer skin comes away…

…leaving the inner arch. That's if it's there, as it might be rusted and need replacement.

Next we need to reshape the inner arch to meet the outer, so Matt cuts thin slots into the inner skin…

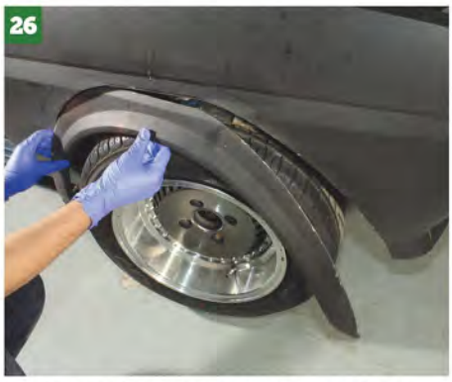
…and re-forms it so that it touches the outer — yes, it's longer so…

…all you now have to do is tack it to the outer skin and work your way round — as usual, do small sections at a time and keep checking you're not distorting the arch.

When you're happy with the tacks, you can finish weld them shut — but again, do small sections at a time to control heat and subsequent distortion.

Matt's worked his way round until the arch is completely shut...

...and then dressed the welds back so they're nice and neat — he'll apply some seam sealer later plus some stone chip to protect the steel from corrosion in the inner arch when the time comes to finish the car.

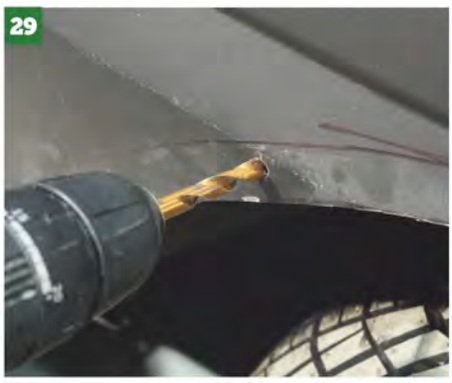


The front is of course very similar — although there's only one skin meaning no welding.

There's plenty of clearance here and Matt can lower the car a lot more yet.

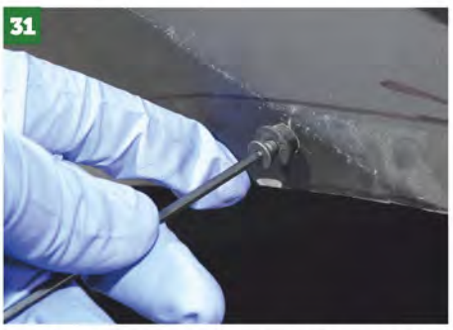
Fixing the arches

The homework we mentioned that Matt carried out was to find these rubber Rivnut-type fixings, which have a metal threaded insert moulded towards the bottom of the fixing — they squash up to clamp the arch in place.



All you need to do is drill a clearance hole into the arch, using the Cleco fixing hole as reference.

Then push the fixing in the hole.



Matt found that it helps if you partially screw the fixing screw into the thread, which allows you to easily push the fixing into the hole — they should be reasonably tight.

You'll need to enlarge the Cleco hole in the arch to provide clearance for the fixing screw. These are M4x16 mm countersunk head Allen screws, which Matt will also fit screw cups to, making the installation neater — although he may increase the screws' lengths to 20 mm.

He's left it off for now but Matt has also sourced a plastic U-section strip to finish the edges of the arch — this simply slides into place and serves to hide the gap between arch and wing.

Matt's worked his way around the arches, both front and rear, and they're done — paint next!