



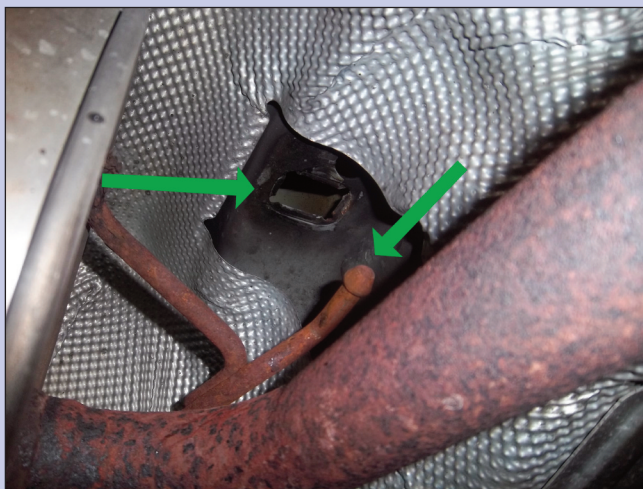
## Ford Focus - exhaust fixing missing

Sometimes jumping to conclusions can blind you to the true nature of the problem. This was certainly the case with this 2006 Ford Focus.

The owner was capable of carrying out a few repairs, and when he had heard his exhaust knocking around under the motor, he decided to have a quick look. He expected to see a split rubber and thought that once the failed mount had been located it would be a simple task to fit a new one into place.

What he saw was that the rubber was totally missing and also, it appeared, was the fixing bracket! Fearing that the metal bracket must have broken away and dropped off he bought the motor in to us to sort out the problem.

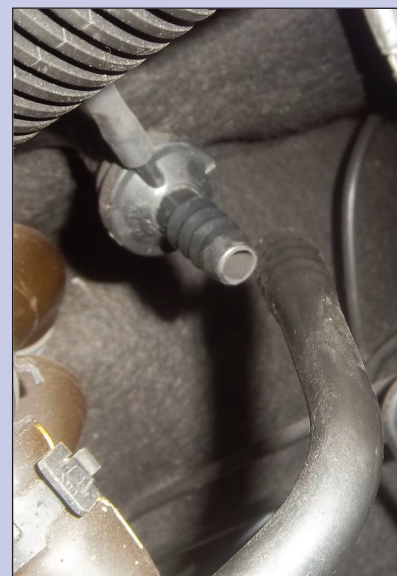
He was very relieved when we explained that



The rubber was missing but the new one simply needed to be screwed into position.

the rubber did not fit on a metal bracket but was screwed into the hole he could see in the underfloor. The square end of the rubber mount, only needs pushing up into the hole and twisting 90° to secure it into position. The exhaust bracket can then be slid on to secure the pipe.

## Fabia - solid brake pedal



The hard plastic servo hose had failed at the joint

When I started back in the trade many years ago, when working on vehicle brakes the aim was to get a good solid pedal. Back then, servo assisted braking was very rare. A good brake pedal did not have the soft progressive feel that a servo now adds.

Brakes on modern vehicles apply more effort into the hydraulic system by using the assistance of the servo, this means a light touch on the brake pedal will be amplified, producing a decent amount of effort at the wheels.

Vehicle brake systems have now been designed to rely on the servo assistance and trying to stop with a modern braking system, without the assistance of the servo is very difficult, requiring a lot of effort to push the pedal down.

The lady owner of this 2004 Skoda Fabia diesel discovered this one morning when she almost didn't stop. Fortunately, at the time she was travelling quite slowly and had left a good distance between her and the vehicle in front. Not wishing to drive the Skoda any further, she got the recovery service to bring it to us.

When we inspected the vehicle, the problem was, as we suspected, that the servo was not operating. The reason for this was not a failed servo or vacuum pump, but merely a failed servo hose.

The hard plastic servo hose between the vacuum pump and servo had hardened with age and split apart at a joint. Easily rectified, the Skoda was soon back on the road with fully operational brakes.

## Kunifer brake pipe better than copper

I often come across those who love using copper brake pipe. The reason they give is that the copper is an easily malleable pipe and can be bent into shape and easily positioned. Although this is true, and the copper pipe will not corrode, it has a few (in my mind) major disadvantages.

When replacing any brake pipes on a

vehicle, I much prefer to use Kunifer (or Cunifer as it can be spelt). This uses a mix of copper and nickel, with a small amount of iron and manganese added to give a stronger composition.

Kunifer has a far greater resistance to bonding to steel and is malleable, meaning it is easy to work with and easy to flare. It does have most of the benefits associated with copper, but unlike its copper equivalent will not work harden.

The biggest disadvantage of the copper pipe was seen on this 1998 Peugeot 406 when it came in with braking problems. The rear wheel cylinders needed replacing, but because the copper had firmly stuck in the brake union, the pipe would not come undone without twisting the old copper brake pipe.

I have seen this countless times, and for this reason I will not fit copper brake pipe.



The soft copper pipe was stuck in the union, making it impossible to remove the pipe without twisting it