

ANY QUESTION

ANSWERED

If we don't know the answer, we'll find the person who does

Send your questions to: advice@motorcyclenews.com or 01733-468002

Q My Honda keeps losing its cool

My Honda CBR650F has started overheating quite badly when I am riding at sub-40mph speeds. It is fine when above 40mph, but anything lower and the needle creeps near the red. Although the fan spins freely, it doesn't seem to be coming on.

Charles Barnes, Norbury

A Answered by Chris Dabbs, MCN

There are a series of simple checks you can do when a bike starts to overheat. Start by checking that the fuse for the fan circuit hasn't blown and there's sufficient coolant in the system. Then run the engine at a standstill until it's warmed up and see if the fan kicks in. If it doesn't, this could be because the fan switch is faulty or the coolant isn't circulating properly. Stop the motor, and wearing

a heavy glove with some waste cloth wrapped around the radiator cap, very carefully crack the rad cap open to release any pressure, before removing it completely. Start the engine again and see if the coolant is flowing through the radiator properly and there's enough in there. If the top hose is still cool it could be that the thermostat is sticking closed and not allowing water to circulate, or you have got an airlock somewhere. If this is the case, you need to drain the system, check the thermostat opens and closes and refill the system. If everything there checks out, it's just possible the water pump could be getting lazy, either through crud building up on the impeller blades or bearings getting worn.



An airlock in your coolant could stop the fan kicking in when it should

KIT CHOOSER

Q I want to keep my machine safe in shed heaven

The thieving scum seem to be circling my bike. There's been a spate of bike thefts in the part of Manchester where I live, so I want to get a secure storage unit which will fit in my backyard.

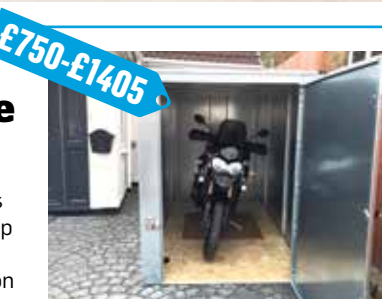
Philip Healey, Manchester

A Answered by Chris Dabbs, MCN

We've found several metal shed options, they're not cheap but hopefully they'll give you peace of mind. You'll need a bit of level hardstanding and bolting the

shed to a firm base makes it harder for the scum to tip it over. Decent ventilation is important to cut down on condensation and consider whether you will be able to assemble it yourself, or whether you'll need to get the suppliers to do it.

There are a couple of industry standards to look out for: Secured by Design is a police initiative and there's the Loss Prevention Certification Board from the UK Locksmiths' Association; level 2 is for motorcycles.



Armadillo Boxes



Protect-a-bike 940-960



Asgard Motorcycle Storage Garages

£750-£1405

£1160-£1435

£1119-£1369

Q How do I sort a sticking valve?

I own a Triumph Daytona 675, which has recently developed a fault in the exhaust valve so the Malfunction Illumination Lamp (MIL) is staying on. Although my local dealer diagnosed the fault and cancelled the light, it only remained off for five minutes before going on again. Someone said I could get the system cut and shut with the valve chopped out, but that seems a bit on the drastic side.

Eric Fleet, email

A Answered by Clive Wood, Clive Wood Triumph

The butterfly valve can seize up – but it is only there to get through noise testing, so you can live without it. What I would suggest is that you sling the motors and cables in the bin and jam it open with a bolt. To switch the MIL off I load a different engine map for exhaust systems that don't have the valve fitted. It takes about an hour to do the whole job.



That valve is only there for noise tests

Q How do you clean rads?

Is there a product or a process to clean aluminium radiators and oil coolers? You could eat your dinner off the rest of my bike but these get covered in crud and corrosion. It can't be good for their efficiency and looks naff. Do you take them off and dunk them in something?

Pete Judd, email

A Answered by Scott Bullett, Doble Motorcycles

Any sort of chemical will eat into the alloy. Sponging caked-on dirt very gently, then using a garden hose set to 'mist' or 'spray' to gently rinse out the crud can work, though sometimes the caked-on dirt is what's holding the radiator core together and it may spring a leak after a good clean. The other method I've heard of to get totally dry dirt off is with a high-pressure airline, but don't get too close.



Sponge the crud away but do it gently

MCN LAW

Your legal questions

Q Can I switch solicitors as progress is slow?

I am not happy with the lack of communication I get from the solicitors provided by my insurer following an accident. I am always having to chase them and each time I call no progress has been made but I always get an assurance that things will improve. I have had enough and want to know how I can go about changing solicitors. I am six months into my claim which is for soft tissue injuries and out-of-pocket expenses as well as some minor bike damage.

Name withheld

'You may have difficulty persuading a new firm to take your case on because of cost limits'

A You may have difficulty persuading a new firm to take your case on. This is because in cases where the injuries are fairly minor, very limited legal costs are payable by the third-party insurer and it is likely that your current firm will have exhausted the costs entitlement already.

You do have freedom of choice of which lawyers you choose and you do not have to instruct the firm appointed by your insurer. While it used to be the case in lower value cases that insurers could insist you use their solicitors until the point of issuing court proceedings, a recent decision (Nobile v DAS) has confirmed injured motorists can instruct a firm of their choice from day one – utilising the before-the-event legal expenses insurance they have through their insurers.

I often take over serious injury cases from other firms, as there is not the same restriction on costs.

Andrew Campbell

Solicitor and author of the MCN Law column for the last five years

Andrew Campbell, Bikelawyer. Visit www.bikelawyer.co.uk or email andrew@bikelawyer.co.uk or call 01446 794169



Bikelawyer

Motorcycle Accident Solicitors

EXPERT'S GUIDE TO... SPROCKET SCIENCE

How going up or down a few teeth can boost top speed or help your bike accelerate faster

THE EXPERT

Chaz Ing is a Technical Sales Adviser at B&C Express, who specialise in performance motorcycle parts. Chaz has worked there for 15 years and is a lifelong motorcyclist.

Name withheld



Going up at the back boosts acceleration

Adding teeth to a front sprocket has the complete opposite effect to adding them to the rear. If you were to add one tooth onto the front you would end up 'gearing the bike up', which has the effect of dropping a bike's revs at cruising speed.

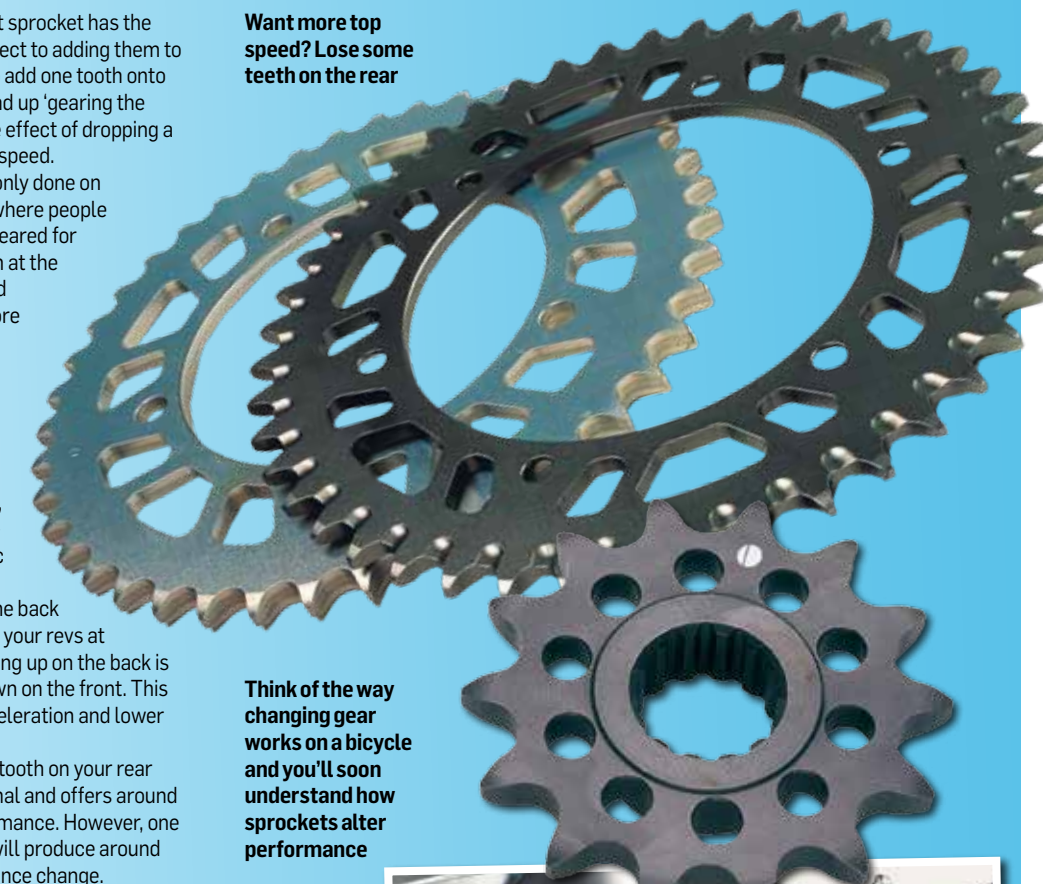
This is quite commonly done on enduros and trailies, where people find them a bit short geared for road use. Adding teeth at the front will cure that and allow the bike a bit more speed at the top end.

If you wanted to have the same effect by altering the sprocket at the rear, then you would have to remove three teeth, as it works on a three-to-one ratio, as a basic approximation.

Going up teeth on the back sprocket will increase your revs at cruising speed and going up on the back is the same as going down on the front. This will increase your acceleration and lower your top speed.

The addition of one tooth on your rear sprocket is very minimal and offers around a 3% change in performance. However, one tooth off of the front will produce around an 8% to 9% performance change.

Want more top speed? Lose some teeth on the rear



Think of the way changing gear works on a bicycle and you'll soon understand how sprockets alter performance

THINGS YOU NEED TO KNOW...

It can mess with your speedo accuracy

If you've got a speedo that's driven off a sensor in the gearbox, then it will read a known rotational speed for standard gearing and won't factor in the sprocket change, as it's not picking up the road wheel speed. Any change of this nature, as well as tyre size alterations, will throw a speedo of this nature out.

If you're looking to lower your revs at cruising speed, then it changes the speedo in favour of the police and will read slower than you're going. If you go the other way, the speedo will over-read. You can get speedo heelers to rectify this though.

If you've got an older bike with a speedo sensor driven off the front wheel, then it won't change because it's still reading a true speed. A speedo like this would most commonly be found on pre-fuel injection bikes,

or perhaps even earlier machines that predate ECUs.

Why's swapping cogs so popular in bike racing?

A lot of the time, this will come down to rider preference. Some riders like to use all the gears, so they will gear the bike so it is reaching the upper end of top gear at the end of the track's longest straight.

Other riders don't feel

the need to do that and they will have a riding style that uses fewer gears, so it really is a personal choice based on you. For that reason, we never offer advice on the correct gearing for any track at B&C.

If I go too far will it damage my bike?

If you're looking to drop the revs at cruising speed, then you may find that you



Racers fine tune their sprockets to suit different tracks



Going too radical with your changes can have its problems

accidentally over-gear the bike, which will make first gear too tall, meaning you'll have to slip the clutch to get going, which will put wear on the clutch plates.

Also, the smaller the front sprocket, the faster it will wear out, especially on the more high-end powerful sports machines.

This is because the chain is constantly trying to flay off the sprocket, as (according to physics) it wants to carry on going forward and not turn on itself and head back towards the rear of the bike. The smaller the sprocket,

the greater the effect on wear rates. Larger rear sprockets can also sometimes have an effect how a bike squats under hard acceleration.

Next week The magic of DCT gearboxes

