

ANOTHER SPRING START

ou did it again didn't you? Even though you know better, you left your bike to sit alone and unloved over the winter, without so much as a kind word or soft touch, let alone any proper maintenance. Now it's payback time.

For once, I'm going to forget the lecture about an ounce of prevention being worth a pound of cure. We all know the consequences of riding them hard and putting them away wet. Let's move on and get the bike back on the road with as little pain as possible.

Start by ...

Occasionally you can beat the odds. I've seen plenty of bikes that sat in the cold all winter fire right up come spring, and run just fine to boot, once the cobwebs were blown out. If you're feeling lucky, go for it; who knows, maybe the bike will shake it off—if you're lucky. Most of us, especially



those that live in colder climates, aren't going to be that lucky, so chances are good you'll have some work to do before that first ride.

Charge it

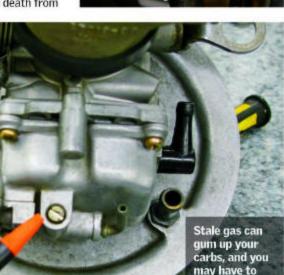
Modern bikes place high electrical demands on their batteries, so if yours isn't in decent shape it's unlikely you'll be going anywhere until it is. Ideally, the battery should be removed from the bike; cleaned, and inspected-including a load test if possible—and fully charged before being put back into service. You and I both know that isn't always going to happen, in some cases because the manufacturers seem to go out of their way to make removing the battery as complicated as possible, and in others, because you just don't feel like doing all that work when you can more easily connect a charger to the battery where it sits. I get it, but at least wipe down the top of the battery to remove any conduc-



tive grime, and make sure the terminals are clean and tight.

If you're still using a lead/acid wet cell battery, check the fluid level, and top it off before recharging the thing, preferably using distilled water; again we both know you're going to top it off with tap water, and frankly in my experience that'll work just as well. Chances are the battery will die an unnatural death from

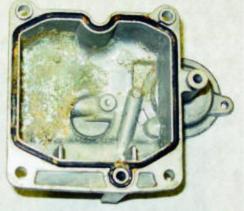




other causes long before the minerals in the water kill it.

What's that gunk in the float bowl?

As gasoline ages, some of the more volatile components evaporate out, making what remains less effective as a fuel. Stale gas creates starting and performance problems, at least until it burns off or is drained and replaced by fresh stuff, so of itself, it's not a huge problem. Unfortunately, as the process occurs, hydrocarbons in the gas react with oxygen to change the chemical composition of the fuel. This leads to gum and varnish deposits in the fuel system. Gum and varnish don't work particularly well as an energy source, but they do an outstanding job of plugging up the small ports and passages that carburetors and injector nozzles use



drain and clean

bowls to get to

out the float

the sludge.

to meter fuel, so they'll need removing before the bike runs properly.

The smaller the volume of fuel the quicker it'll turn to goo so the first priority is to drain the float bowls. This is done by loosening the float bowl drain screw and letting the old crap run out of the

K.I.S.S. ETECHTIP

Sometime in the 14th century, a Franciscan Friar named William of Ockham (Occam) formulated a principle so elegant that it remains to this day one of the foundations of scientific thought. The principle that old Willy came up is known as Occam's Razor (or knife) and what it says is this: "Entities must not be multiplied beyond necessity."

Boiled down, what that means is that all things being equal, the simplest explanation that solves a given problem is the best one, at least until something better comes along. The last part is emphasized because there are times when the simplest explanation isn't necessarily the best, or fullest, but that's a fine philosophical point.

Here's how it applies to motorcycles. As a general rule, whenever you encounter a problem, check the easy stuff first. For example, if the bike cranks but won't start, check the fuel before you pull out the compression tester. If you turn the key and the warning lights come on but the bike won't crank, check the kill switch and make sure the bike isn't in gear with the kickstand down before you replace the starter motor. If you turn on the key and everything's dim, check the battery voltage. If nothing at all comes on, suspect the fuse. No idle? Make sure the float bowl's clean, and the injectors clean. Trust me on this, I've seen a lot more dirty float bowls and plugged injectors than I have warped carburetors or bad EFI computers.

I'm sure you can see where I'm going with this. I've worked as a mechanic of one sort or another for over forty years now, and in the vast majority of cases the solution to the problem, no matter how complicated, always turned out to be something simple, and by extension, the thought process that got me there always started with the simplest explanation that fit my facts.

I'm not nearly as articulate as Occam, so I've modified his phrase slightly; I call it the KISS theory, which stands for Keep It Simple Stupid. For me that works just fine. float bowl drain, preferably into a catch can or at very least onto old towel or rag. Don't forget that, while it may no longer be much good as a fuel, it's still a volatile, easily combustible liquid, so treat it, and any contaminated articles with caution.

If the drained liquid is really brown and sludgy, your carbs may be past the point of no return (see the side bar for your options), but be advised that if things have gone too far, a total carburetor strip and rebuild may be the only way out. Assuming it still resembles gas, let the bowl drain completely, then remove the drain screw, taking care not to lose any 0-rings or washers, then spray a blast of carb clean (making sure to protect any painted areas) or WD 40 into the float bowl to help clean out any residual sludge.

If your bike has a petcock with an external removable screen (a rarity these days) now's the time to inspect and clean that as well, and to replace any fuel filters. If the gas is foul, you'll need to drain the tank, and refill it with fresh fuel, and again take the necessary precautions.

By the way, some manufacturers place a small screen at the fuel line inlet to the carburetor, and debris there can cause hard-to-diagnose fuel delivery problems.



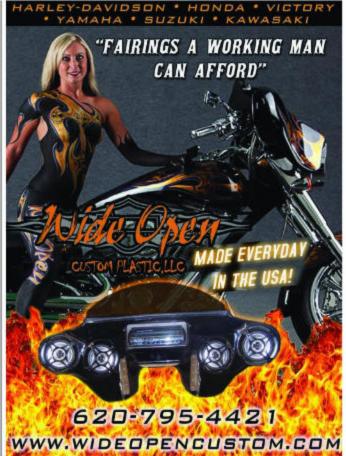
I've yet to see one completely plugged, but I've found several that were plenty dirty, so it pays to pull the fuel line and check them from time to time.

EFI systems present different concerns. Although it's not an everyday problem, contaminated fuel can plug injector nozzle tips or prevent the injector from operating properly. When that happens, your only recourse is to remove the injector for service, or replace it. Fortunately,

some of the pour-in cleaners that are now available work very well, and in many cases can restore a balky injector to some semblance of health. In every other respect what holds true for carbureted bikes applies to EFI-equipped ones; i.e., if the fuel has deteriorated into something that looks like tar, you might as well drain the fuel tank and replace the filter now, as you'll be doing it eventually anyway.

While you're poking around in the





fuel bay, take a few minutes to examine the air box. I've seen mice build nests in a motorcycle's air box overnight, and given a few months they can construct a veritable condo. If it's been inhabited by anything other than the filter, give it a thorough cleaning. Allow me to digress here and point out that rodent infestation should never be taken lightly. I've seen more than one engine ruined because mice made their way into the engine through an open valve and camped out in the cylinder. Besides the mess they make with their nesting material, mouse urine is highly corrosive, and they're not very particular about where they spray it, so you can imagine what the inside of your mill will look like if Mickey decides to set up housekeeping in it.

Ready, steady, go

With a fully charged battery and good fuel, the engine should at least start, run

WHAT CONSTITUTES OLD FUEL?

The rule of thumb is that properly stored gasoline has a shelf life of approximately 90 days before serious degradation sets in, but as always, there's a catch or two. First, you never know old the gas you just purchased is. It may have left the refinery yesterday, or it could have been in storage for a month before you pumped it into your tank, Second, what constitutes "proper storage?" While there are several good answers, a half full motorcycle tank, parked in a nontemperature-controlled environment like your typical garage, isn't one of them. The bottom line here is that, if you use your motorcycle on an infrequent basis, or leave it parked over the cold dark winter, a can of stabilizer is cheap insurance.

and idle, so check the oil and coolant levels, (assuming your bike is watercooled) and fire it up. If everything goes according to plan, the engine should crank quickly and start easily, though it may take a moment or two for the fresh gas to work its way into the combustion chamber. After a short warm up, it should settle down to an even idle and respond smoothly to the throttle. Finish up by changing the engine oil and filter, especially if you can't recall when you last did it. As a footnote, liquid-cooled bikes should have their coolant tested and changed on a regular basis. Even if the stuff looks fine, change it if it's two or more years old. Like oil, coolant contains additives that are

depleted in use. As the coolant degrades, so does its ability to protect your engine. If nothing else, a periodic coolant change is cheap insurance.

Wait-there's more

With the engine out of the way, it's time to address the running gear. Foremost are the tires. Skins that might have been good enough "for one last ride" aren't going to cut it when the weather turns balmy and the open road beckons. Check the tire sidewalls for cracks and damage, and the tread for depth. Adjust the tire pressure, and take a good look at the drive chain or belt. If it's loose, adjust it and give it a shot or three of its favorite lube, though obviously that last only applies to chains. While you're at wheel level, give the brakes a quick look; if they're getting thin, you know what to do.

Do a quick preflight on the controls. Cables stretch slowly in use, so slowly that you might not realize how much free play has developed when you're riding the bike every day. If they require





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Engines need three things to run: Compression, spark and fuel. However if we want them to run properly, we have to attend to certain details, not the least of which is having the fuel delivered in the proper propor-



tion, and therein lies the major problem for bikes that have been left to stew in their own juices.

Very often bikes that sit with stale fuel in them for any length of time will start, but refuse to run properly. If the bike is very difficult to start, won't idle, or doesn't respond to the throttle well, or maybe not at all, you can reasonably assume that the carburetor jets or injector orifices are at least partially blocked and require cleaning.

Normally, I'd tell you that if that's the case, you're going to have to bite the bullet and physically clean the parts in question, and quite frankly that's probably going to be the most practical solution, especially if the bike uses carburetors, or has sat unprotected for an extended period of time.

However, as the quality of fuel has deteriorated, some very good fuel system detergents have come onto the market, so my first inclination, particularly if the problem isn't severe, would be to try running a few ounces of a commonly available cleaner through the tank to see what happens. My guess would be that you have at least a 50/50 shot at curing the problem without resorting to pulling the fuel system apart and if I'm wrong, you're no worse off.

Of course, if the bike refuses to start at all or won't run once the choke is turned off, it's unlikely that anything you pour into the tank is going to be of much help, but who knows? Maybe you'll dodge the bullet.

Of course, the best way to dodge the fuel issue altogether is to use a conditioner, or drain the system before storage. adjustment or lubrication, do it before the first test ride. A sticky or broken throttle or clutch cable will make that first spring ride way more exciting than it has to be. As will brakes that stick or fade, so if the brake fluid is getting a little murky, now might be an opportune time to change it.

Finally, give the remaining fluids a quick check and don't forget to check and top off or change the tranny, rear end and drive shaft fluids as required, and give the hardware a once over. Look for loose or missing nuts and bolts, and make sure any cotter pins are in place and properly bent and make sure the lights and horn work properly.

Assuming the foregoing has gone without hitch, you're good to go, at least in a quick and dirty sense, and I'll add that the usual cautions apply here. If you've been off the road for a few months, allow yourself a few miles to get acclimated. Riding skills deteriorate nearly as fast as motorcycles when they sit unused, so take it easy. CR

