



## Kaution Korner

By Traveler

Each year, as the riding season comes to an end, riders typically store their bikes and count the days until the next riding season approaches.



Storage often consists of simply connecting a battery tender, adding a fuel stabilizer to the gas tank, and placing a cover over the bike. Winter storage complete, right? Not for the experienced rider.....

As with any mechanical item and vehicle, some components deteriorate when sitting, unused, and unnoticed. Broken or worn components clearly are unsafe and can contribute to accidents, injury, or death.

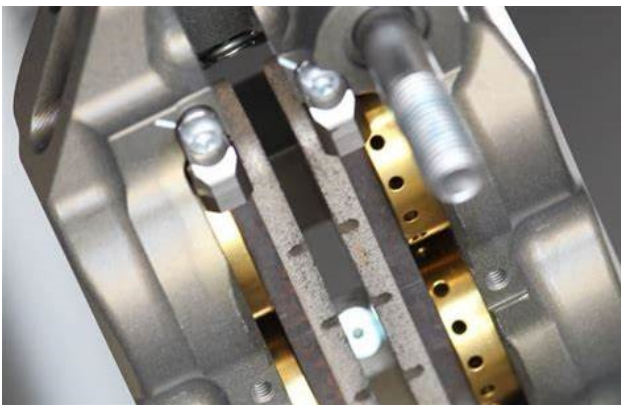
## ENGINE



Today's motorcycle engines are pretty much bullet proof yet, they still need attention to assure reliability and performance. Check things like:

- ✓ Engine oil, primary oil, transmission oil. Is there any indication of white residue? If so, that indicates moisture in that component.
- ✓ Old engine oil contains acids, condensation, and other damaging particles it absorbs thru normal operation. Left in your engine during winter storage, it can cause damage. That is why manufacturers recommend an oil change before storing your bike.

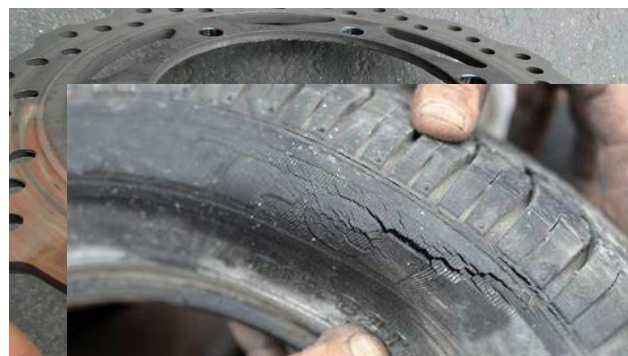
## BRAKES



Brakes wear out thru normal use. Typically, we have our brakes serviced when we replace tires however, it's a good idea to check these items before storage:

- ✓ Brake fluid is nasty stuff. It eats away at paint and some metals. Check your brake lines from the master cylinders to the calipers for deteriorating hoses and fittings.

over your brake rotors for deep grooves and physical damage. Brake rotors are stamped the allowable depth of a groove. When in doubt, it is an excellent idea to replace the rotor. Note that some surface rust is normal. NOT lubricate your brake rotors.



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✓ Brake pads are easy to check also. Simply shine a light on your brake caliper and look at the pad. If they look thin, change them. Worn brake pads can cause extreme adrenaline rushes, pain, and injury!

## **RUBBER**



All rubber components can deteriorate from normal use, and during storage. Ultraviolet, chemicals, heat all contribute to deterioration. Check:

✓ Coolant hoses for hardening, for loose or rusty clamps and for cracks. Coolant hoses should have a degree of flexibility when squeezed.

✓ Rubber can deteriorate in the most obscure places also. Check your handlebar grips, foot pegs, any rubber bushings, and floorboards for breaks, cracks, and excessive wear.

✓ Tires are the most obvious rubber items to wear. Check, not only the tread depth with a good depth gage but, look for sidewall cracks, nails, etc.

Check air pressure before storage, during storage and after storage to identify any slow leaks.

✓ Tires harden during extended storage. Hard tires have less traction and wear out faster. The old thumbnail poke of the tire can give you an idea of hardening when you compare it to a newer tire.

## **HYDRAULIC FLUIDS**



Hydraulic fluids like brake fluids (DOT 3, 4, 5.1) are hygroscopic meaning that they absorb moisture. This reduces the viscosity of the fluid and the effectiveness of it.

For reliable, consistent brake system operation, brake fluid must maintain a constant viscosity under a wide range of temperatures, including extreme cold. This is especially important in systems with an anti-lock braking system (ABS), traction control, and stability control (ESP), as these systems often use micro-valves and require very rapid activation. Check:

✓ Your owner's manual to determine the type of fluid required i.e. DOT 2,3,4,5, 5.1). DO NOT mix types of fluid. It can cause rapid deterioration of your hydraulic system.

✓ Check all hydraulic systems both front brake, rear brake and clutch if hydraulic.

✓ Look for discoloration in the fluid. This is an indicator that it is deteriorating and needs to be changed.

✓ On all of your hydraulic systems, activate them by pulling the lever, pressing the pedal. Check for a good feel of resistance and limited travel. If you must pull the brake lever almost to your handlebar, or push your brake pedal to the floorboard, you need to service your brakes.

## CONTROLS



Modern bikes today have fewer cable – activated controls. However, on those bikes with cable activated controls like the choke, carburetor enricher, front brake, throttle, etc., check them for:

✓ Wear. Look for frayed ends indicating more damage where you can't see it easily.

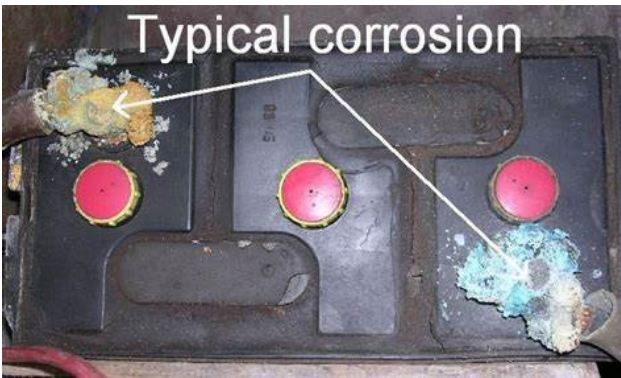
✓ Cables should operate smoothly. If you feel resistance, it is an indicator of excessive wear.

✓ Cables require lubrication. This is often a slow tedious process but, one that helps assure longevity and smooth function.

✓ Don't forget to check the operation of your electronic controls like throttles. Any stiff resistance usually indicates a problem. With both electronic and cable throttles, they should quickly, and smoothly return to the off position when released.

✓ Don't overlook your switches like turn signals, headlight, dimmer, etc.

## ELECTRONICS



Motorcycles are becoming increasingly electronic. That means that we have much more to check like:

✓ Batteries. Look for corrosion at the battery terminals. Corrosion can be cleaned with baking soda and water mixed. Lubricate the terminals with a good battery lubricant or grease.



that your battery tender is compatible with your rates differ between battery needs and battery you have the newer lithium battery, they require a tender.

✓ Check all electronic connections that you tightness. Loose connections cause many sparks to component failure.

✓ Make sure battery. Charging tenders. Also, if different battery

can see for problems from

✓ It pays to look at your fuse box for corroded fuses and to check the presence and condition of the spare fuses.

✓ Lights are a seemingly obvious item to check. Are they on or off? What you need to look for on all lights like headlights, taillights, turn signals, gage lights, warning lights is not only do they work properly but, is there any sign of corrosion or are bulbs loose? If so, replace the bulb and, it's always good to use a corrosion prevention lubricant.

✓ Be sure to check your warning lights. When the ignition switch is first turned on, your warning lights like oil pressure, ABS, alternator, temperature or whatever your bike has for warning lights, should illuminate.

## **RIDING GEAR**



All riding gear deteriorates! No exceptions. Those favorite gloves, boots, goggles, and helmets all wear out and when they do, their level of protection deteriorates. During the "Off Season: it's smart to check:

✓ Helmets for wear of the lining and fasteners. Normal life span of a helmet is 2 to 3 years unless dropped. If dropped, it's best to replace it.

✓ It's hard to replace that favorite pair of riding boots and, the price of new boots makes it even harder. If they obviously look worn out, the protection that they provide will be less.

✓ Heated vests only fail when you need the most....riding in the cold. Put it on, plug it in, turn it up and make sure that you feel the heat. It's too late to discover a bad vest when you're out on the bike.

✓ Gloves with holes, goggles with severe scratches, old ear muffs, coolant scarfs all need to be checked for function before you really need them.

## **PAPERWORK**



Probably the most overlooked aspect of motorcycling is the paperwork side of it. Yet, it is just as important to safe motorcycling as any other component. Make sure that you:

✓ Renew your insurance to recommended levels of coverage and, carry an insurance card that proves so.

✓ Check your driver's license for the expiration date. You don't want it to expire when you're in the middle of your trip across country.

✓ The same expiration date should be a concern for your State registration. Make sure you carry a copy and that it will be valid throughout any trips you have planned.

✓ Most roadside assistance programs have subtle limitations like; only good within 100 miles of home, good for one recovery per term of contract, only good for the vehicle registered on the plan, etc.

✓ Our bike is new, our bike runs great, our bike is in great condition are all easy traps that we can fall into unless we go one step further....check for NHTSA Recalls at <https://www.nhtsa.gov/recalls>.

So, your bike is put away for the winter and you have nothing to do regarding our sport of motorcycling? If that's what you think, I would encourage you to read this article again.



Why go through all of this? It just makes sense to find things that need to be fixed before the riding season so you won't have to waste good riding time getting your bike fixed and back into safe riding condition.