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LEAKING SEALS AND HOW TO AVOID THEM

Often I hear riders complain about fork and shocks leaking oil and seals that do not last. Obviously they are not aware that shock and fork seals are subjected to harsh conditions and sooner or later will leak. It is important to note though that by looking after your seals you can contribute substantially to a longer life span of your seals. All forks leak for a reason. Every time I get a fork or shock that is leaking I try finding the cause and 90% of the time it is fairly obvious. If you just change fork seals without finding the problem then they will soon leak again for the same undetected reason.

THERE ARE TWO MAJOR REASONS FOR LEAKING:

1) The surface is not smooth

Seals are designed to run on a very smooth surface, which in the case of suspension is usually a chrome surface or similar. Fork and shock shafts are prone to damage from rocks, rubbing against other bikes on trailers or from crashes or roost. Common causes of damage is from rocks thrown up from the front wheel which hit the engine guard and bounce back into the unprotected side of the chrome inner tube.

Mud is also a seal killer because it often dries on the fork tubes and creates a type of grinding paste that easily gets past the dust seal and into the fork seal. De Wildt black turf is the most infamous and anyone who rides after the rain is almost sure to have seal leaks. Sand and mud in combination is just as bad.

So the best you can do after a muddy ride is to pull down the dust seal and clean inside of it and clean the area outside the oil seal. Put some grease between the dust seal and oil seal and push the dust seal back into place.

If you have a seal leak, make sure you carefully inspect the chrome surfaces and use your fingernail to try detecting any damage, even tiny scratches. If you can feel any high spot that catch your nail then use a nail file to flatten them carefully on the chrome tube. Small hollows are not a problem only the high spots destroy seals. File the high spot until your nail runs smoothly over the damage.

2) Bushes are worn

Seals are also designed to work within certain tolerances and excessive lateral movement due to fork bush wear is not desirable. Worn bushes with extra tolerance and can cause leaking and often cause excessive air build up in the forks.

If seals leak and no damage is found on the chrome surfaces then I suggest you change fork bushes and the dust seals. Always use genuine seals and not aftermarket ones, change fork bushes every 50hrs and make sure your dust seal is in good condition and lubricate it often especially after cleaning the bike.

The problem	How to fix it
Rock and roost	Invest in good guards
Rubbing on trailers	Be careful how to load bikes
Mud	Check, clean and oil during and after ride
High spots	Inspect often, file down
Worn seals	Change every 50hrs
Excess tolerances	Use genuine parts
Worn dust seals	Lubricate and clean often

Minimising leaking also depends on looking after your suspension and inspecting it often. I am sure that if you maintain your fork as mentioned above you will have good suspension and much fewer leaks. You may find it could even save you money in the long run.