

## Bleeding Brakes, Caliper Problems and Fluids.

Yet again this dangerous '**hold it under pressure overnight**' is rearing its ugly head.

This procedure will force the air (and any water it contains) into the fluid, this air **will** boil out in use making the alarming concept of no brakes a reality.

There is no brake system that cannot be bled without special equipment. If you are unable to bleed brakes properly, just get someone that can.

Anyone advocating this 'hold it under pressure overnight' method is deluded, a danger and incompetent.

If anyone has done this to your motorcycle, change the fluid.

**Excessive Lever Travel**, normally front brake. Assuming you have bled your hydraulic system correctly and certain no air remains it will be corrosion behind the piston seals, specifically the dust seal (bent solid discs and wheel bearings can also cause this – but not whilst stationary).

See where screwdriver is pointing:



This stops the piston moving outward [finding it's new position] as the pads wear causing excessive brake lever travel.

Under careful visual examination you will see the pistons/pads move off the disc more than the usual 0.5 - 1mm on release of the brake lever.

To remove the pistons, find an inexpensive piston removal tool off eBay. Under no circumstances use 'mole grips' or any other form of clamping method.



The corrosion must all be removed, this is normally solidly compacted and difficult, the caliper itself will have already lost its anti-corrosion coating.

**Always** use red rubber grease on re-assembly; not brake fluid.

Wash off spilt fluid with water.

## Fluids

Use DOT 4, or DOT 3 if unavailable. DOT 4 has a higher boiling point and 'can' be mixed with DOT 3, but really shouldn't be as the boiling point will be lowered.

Do not use DOT 5 unless specified by the manufacturer, this cannot be mixed with systems using DOT 4.

Confusingly, DOT 5.1 is similar to DOT4 with an even higher boiling point.

**DOT 3, 4, 5.1** – all **glycol based** and 'can' be mixed.

**DOT 5 - silicone based** and cannot be mixed with any other type of fluid.

If your hydraulic fluid looks visually dirty or more than two years old, change it with fluid from a sealed container.

Never use fluid from an opened container; buy small containers.

And use a bloody torque wrench you heathens.