



LHS2 Alternatives

A short time ago, I sent out an email through our Web Wallah, Bruce Stringer regarding the supply of Castrol RR363 hydraulic fluid, one respondent of that email was Jeffrey Madsen from Cairns, Queensland who is the owner of a 1962 ID19, Jeffrey told me he has been running his car on a mixture of Castrol Dot 3 brake fluid and Castor oil at a ratio of 80/20% for over 18 months with no ill effects.

I had a holiday conveniently booked for Cairns so took the opportunity to meet with Jeffrey, have a look at his car and discuss the matter further. Jeffrey told me that he had purchased the brake fluid through the local Auto Pro store who did some research into the matter on his behalf and advised him to use the Castrol product as it would best suit the Castor oil blend.

His car started up from cold, hydraulics reacted quickly and worked perfectly, I had a close look at the hydraulic hoses, etc and found no ill effects.

The initial reason for my email was the fact that Castrol has ceased producing RR363 and stocks of LHS2 were non-existent, Bentley had purchased the rights to produce RR363 but had yet to release any supply date. I found an article in an English motoring magazine that confirmed the supply of RR363 through Flying Spares, who are Rolls Royce and Bentley parts stockists at a price of £18.00 per litre or around \$36.00 AUD.

In their article they supplied some notes saying:

You cannot simply add castor oil to a standard Dot 3 brake fluid – Castor oil waxes up at low temperatures and will separate from Dot 3 in the reservoir.

You can use Dot 3 brake fluid in an emergency to top up your reservoir, it will not do any damage, but recommend a full flush and replenish with RR363 as soon as possible.

RR363 can be used in place of Castrol LHS2 in the hydraulic systems of pre 1966 Citroen models fitted with a black reservoir.

Dot 3 brake fluids are mixtures of glycols and glycol ethers. Dot 4 contains borate esters in addition to what is contained in Dot 3. Dot 5 is silicone based.

I then spoke to Peter Raffles from Pleiades, who is my guru on hydraulic matters, he assured me that the Dot 3 brake fluid and Castor oil mix has been used in the U.K. for many years and that he has never encountered the waxing or separation problems raised in the Flying Spares article but did advise to use it with a 90/10% mix.

I do hope this does assist owners of early LHS2 Citroens as I did have an unpleasant experience using a brake fluid/castor oil mix some years ago. I can only say that a Dot 4 brake fluid was used, of an over the counter brand at the time with adverse results, maybe the borates contained in the fluid played a part, I am not a chemist! The noticeable difference between Dot 3 and Dot 4 fluids is their boiling points. In summing up it would appear safe to use Castrol Dot 3 brake fluid as a base mixed with Castor oil on a 90/10% basis as recommended by Peter Raffles.

Further reading on this subject is on the Flying Spares website which is www.flyingspares.com scroll down the page to find RR363 in the sub headings and click on that.

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