DRAINING AND FLUSHING THE HYDRAULIC SYSTEM OF THE ID, DS AND BREAK (SAFARI) VEHICLES
In the same way as the periodical draining of the engine and gearbox oils, the draining of the hydraulic fluid from the hydraulic system is a normal maintenance operation. The correct functioning and long life of all the hydraulic units depends upon this operation being carried out.

After the first 300 miles (500 Km) it is necessary to drain the engine oil. This first draining is a security measure. The lubricating power of the drained oil remains, but the "running in" of parts by movement releases metallic particles which can conveniently be removed with the engine oil. The hydraulic mechanisms are also "run-in". Their operational conditions are no less severe than those of the engine. It is necessary to protect them with just as much care.

The efficiency of the filter is such that draining of the system at the first 300 miles (500 Km) service is not necessary. It is only required that the filter be cleaned and examined.
It is because of this efficiency, added to regular maintenance of the filter, that the frequency of draining can be 6 to 10 times less than that of the engine oil.

WHEN THE HYDRAULIC SYSTEM SHOULD BE DRAINED.

It is advisable to drain the hydraulic system on the DS, ID and BREAK (SAFARI) every 18000 miles (30000 Km) approximately. Nevertheless this figure is flexible: A vehicle driven only in towns or mountains or in dusty or humid countries or submitted to long periods of immobilisation necessitates greater frequency of draining than others which are frequently in use on the open road in a temperate climate.

Cleaning and periodical examination of the hydraulic filter, absolute cleanliness and careful fitting when working on the hydraulic system and units, will avoid premature draining of the system.
PROCEDURE FOR DRAINING THE HYDRAULIC SYSTEM

1. Complete draining: Complete draining of the system necessitates the removal of all the units. One can, however, obtain efficient draining without removing the units by following the method of operation given below.

Put the car in the low position by means of the manual height control (illustration No.1).

Unscrew the pressure regulator bleed screw (illustration No.2).

Operate the hydraulic brake pedal until there is a complete exhaustion of pressure reserve from the brake accumulator (or from the brake accumulators on previous types).

Drain the reservoir by syphoning (illustration No.3).

On the ID with supplementary suspension connection to the master cylinder, also drain the brake auxiliary reservoir (illustration No.4).
By hand, compress the rear suspension cylinder dust covers (illustration No. 5) in order to expel from them the fluid contained, towards the main reservoir.

Complete the draining of the reservoir by means of a clean syringe (illustration No. 6).

Remove the reservoir, plug up the openings, and pour in 1 3/4 pints (1 litre) approximately of alcohol, screw on the cap and shake the reservoir vigorously in order to cleanse it.

Drain out the alcohol and refit the reservoir.

Clean the filter by immersing it in clean alcohol (illustration No. 7).

Then blow with compressed air from outside (in the reverse direction to the flow of fluid) (illustration No. 8), again rinse and very thoroughly check the filter.
ALL FILTERS SHOWING DEFECTS IN THE MESH MUST BE RENEWED.

Pour 7 pints (4 litres) approximately of new fluid into the reservoir.

Start the engine and let it run for a few minutes in order to prime the high pressure pump.

Tighten the pressure regulator bleed screw.

Check that the level of the fluid in the reservoir is correct after having placed the manual height control in the required position for this operation (normal position or high position according to type-inscription shown on the reservoir).
Note: If the high pressure pump does not prime itself: withdraw the filter tube from the reservoir, reverse it and pour fluid through the intake orifice (illustration No. 9).

Replace the filter tube and run the engine, pressure regulator bleed screw unscrewed, until the pump is primed.
2. **Partial draining:** If the car is relatively new or if the draining of the system has recently been carried out it is unnecessary to carry out a complete draining. It is simply necessary to cleanse the height corrector section of the system.

Proceed in the following manner:

Put the car in the low position.

Unscrew the pressure regulator bleed screw.

With alcohol, clean the external part of the union, the area round the union and the joint of the suspension sphere and suspension cylinder (illustration No. 10).

Disconnect the pipe from the suspension cylinder.

Put the manual height control in the high position.

Tighten the pressure regulator bleed screw.
Start the engine (normal idling).

Let approximately $\frac{1}{4}$ pint (one eighth of a litre) of fluid flow through the pipe in order to remove any impurities which may be inside (illustration No. 11).

Stop the engine.

Remove the suspension sphere and cleanse together with the suspension cylinder, as detailed in the suspension damper booklet.

WHEN TO FLUSH THE HYDRAULIC SYSTEM.

The hydraulic system must be flushed out in the case of severe gumming up of the slide valves or when it contains unsuitable products such as mineral oil, for example.

This operation is not necessary to suppress damper noise.
PROCEDURE FOR FLUSHING THE HYDRAULIC SYSTEM.

Drain the hydraulic system completely.

Refill with hexylene glycol and run the car with this product for approximately 20 miles (30 Km). Again completely drain the system and refill with correct new hydraulic fluid.

In the case of unsuitable fluid in the system, flushing with hexylene glycol must be followed by complete dismantling of all the units in order to replace all the ring seals, sleeves, dust covers and rubber pipes which usually come in contact with the fluid.

The suspension spheres and accumulators must be replaced.

Note: Hexylene glycol is a product of:

S.I.D.A. 16, rue Monceau,
Paris - 8e - Tel. CARnot 04-80.

or

SHELL CHEMICALS Ltd.
Villiers House,
London W. C. 2.
CITROEN CARS LTD.

Trading Estate
Slough
Bucks

Information Booklet No. 2(D.C.12)