Detection of leakage on shock absorbers

Whilst checking shock absorbers in the workshop, it continuously occurs that the piston rod seal is incorrectly diagnosed as defective.

It has been indicated that the assumption that the shock absorber leaks is a result of the following misunderstanding:

In order to attain optimum protection against the ingress of water and dust, the piston rod seals are treated using a special assembly grease during production of the shock absorber. When the shock absorber is installed in the vehicle and heats up during operation, the excess assembly grease becomes fluid and, thus, is mistaken for escaping hydraulic oil.

Therefore, in order to prevent unnecessary complaints and the associated cost of assembly, it is necessary to clean the affected areas and again check for leakage after a test run. If in doubt, repeat the process several times.

A defect only exists if a larger quantity of fluid escapes and the damping effect is significantly impaired!

Figure 1 shows an absorber with liquefied assembly grease, but intact seal.

Figure 2 shows clear traces of hydraulic oil.