NEW PRODUCT HIGHLIGHT | JUL2021





to fit: Renault Trucks Midlum





Function

Due to the high vehicle weight and the underlying engine power, clutches in heavy commercial vehicles must be dimensioned accordingly. However, this also requires high forces to operate the clutch, which would overstrain the driver in the long run. Therefore, clutch servos are used in heavy commercial vehicles. They are hydraulic slave cylinders that are combined with a compressed air cylinder as an amplifier. The pneumatic assistance reduces the force for the driver to operate the clutch pedal by about 80 % and enables a sensitive and precise clutch operation.

Cause of Failure

Since clutch servos consist of various mechanical components such as springs and valves with small bores, mechanical defects, leaks or blockage of bores are common causes of failure. In addition to the compressed air system, clutch servos are also connected to a closed hydraulic system, which is filled with either brake fluid or hydraulic oil based on mineral base oils. It repeatedly happens that the wrong fluid is used, which destroys sealing rings inside within a short time. Therefore, always use only the operating medium as specified by the vehicle manufacturer.