



TECHNICAL SHEET

VOLVO FH-FM 8x2 4 axles - configuration 2+2

Hydraulic rear steering application on the 4th axle

Maximum weight 32000 kg



DESCRIPTION

SYSTEM TRUCK's fully developed, tested and patented hydraulic steering system "TECHNOLOGY", has been appreciated by our customers for many years and is now available for rear axle application on VOLVO 8x2 FH and FM models. The patented steering system is characterised by its simple construction and it is distinguished by the following features:

- It is perfectly synchronized with the second axle behind the cabin and optimises the steering of the vehicle. It steers in both forward and reverse directions and guarantees reliability and operates in all working conditions, dynamic and emergency.
- It ensures excellent road performance in both forward and reverse and it eliminates all the functional limitations one finds with self-steer axles which are apparent under load on different road conditions resulting in wheel slippage (asphalt, excavated, wet, mud, etc.).
- The patented rotary oil distributor provides the correct oil flow for steering while the aviation standard flexible command cable translates the angular position of the front axle to the hydraulic system. The patented AIR/OIL cylinder ensures that in the event of oil pressure loss from the independent hydraulic system that the air chambers in the cylinder will keep the axle in the central position.
- The servo assisted steering on the front axle, defined by the manufacturer, is in no way modified or interfered with.
- The force required on the steering wheel and the driving sensation remain unchanged from those originally defined by the manufacturer.
- Air bleeding of the hydraulic system is fully automatic and an oil by-pass valve will intervene if a high oil temperature is detected.
- The hydraulic steering system gives the vehicle the possibility to operate in all conditions; tyre skid is eliminated resulting in less tyre wear, less road surface abrasion. Induced torsion loads on the axle suspension are also minimised. The vehicles turning radius is reduced making the vehicle more manoeuvrable and allowing it to respond quickly to driver inputs.
- Driving control, performance and operation are guaranteed by precision command and reliable response from the rear axle, controlled by the angle of rotation proportional to the steering angle on the front axle.
- Improved drivability and better safety; the vehicle is more stable, particularly in dynamic situations during curves or emergency manoeuvres; the steering is secure and exact with any surfaces or objects prohibiting turning or the wheels.
- In reverse, the manoeuvres are performed as normal without the need of supplementary and special actions to block the axle as with a self steer axle.
- The original vehicle should be ordered with a power take off device for the engine PTER attach DIN (code EPTT650) for hydraulic pump installation although an alternative pulley & belt pump solution is available.
- Installation time 6 Hours.

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