

RECOMMENDED CONVERSION PROCEDURES

HFC/ WATER GLYCOL HYDRAULIC FLUID TO QUINTOLUBRIC® HFD-U

Overview

Water-based hydraulic fluid does not mix with QUINTOLUBRIC® HFD-U fluid, and it is detrimental to have a significant amount of residual water in the QUINTOLUBRIC® HFD-U fluid for an extended period of time. The recommended conversion procedure is intended to minimize the amount of residual water-based hydraulic fluid present following a conversion to the QUINTOLUBRIC® HFD-U fluid.

Prior to the conversion, ensure that the design of each of the circuit components is compatible with the characteristics of the QUINTOLUBRIC® HFD-U. Ensure also that seals, packings, and hoses, as well as coatings, are compatible with the fluid selected.

1. Drain the water-based hydraulic fluid from the system reservoir. Any build-up of dirt in the reservoir should be removed. Where feasible, drain fluid from accumulators, cylinders and lines. Also drain low points and dead zones of the circuit
2. Refill the system reservoir with at least the minimum quantity of a Quaker Houghton FLUSHING COMPOUND necessary for proper operation of the system. The FLUSHING COMPOUND is an oil based fluid which contains emulsifiers. This flushing fluid will mix with and absorb any water-based hydraulic fluid remaining in the system
3. Turn on the power unit and actuate all cylinders for several cycles to move the FLUSHING COMPOUND throughout the system circuitry. Ideally, the flushing should be continued for a twenty-four (24) hour period, with periodic actuation of the cylinders. When not feasible, continue to flush for several hours. Drain the FLUSHING COMPOUND W as per step 1, preferably when the fluid is warm
4. Refill the system reservoir with the minimum quantity QUINTOLUBRIC® HFD-U fluid. Turn the power unit on and actuate all cylinders for several cycles, to move the fluid throughout the system. Start if possible at a reduced load and then gradually increase the load, bleeding air out of the system as needed. Filter elements should be checked periodically and replaced if necessary, following the conversion. Dirt deposits in the hydraulic circuitry can be loosened and suspended during the fluid changeover, so monitoring the filter elements for a time is a precautionary measure
5. Submit QUINTOLUBRIC® HFD-U fluid samples for analysis following the conversion. The amount of residual water contamination plus standard QUINTOLUBRIC® HFD-U fluid operating specifications will be determined and reported. This sampling program should be continued until satisfactory operation and fluid condition is well established. To keep the QUINTOLUBRIC® HFD-U fluid in optimal condition it is recommended to analyze the fluid twice per year regarding the operating specifications

