

Carrying Out an Oil Change

Contaminant in hydraulic systems is recognized as the most frequent cause of malfunction or failure of hydraulic equipment. Dependent on the nature, size and/or amount of contaminant, it can cause:

- Reduced component service life.
- Machine malfunction, particularly when operating near maximum capacity.
- Risk of frequent breakdowns under the same conditions.

Good maintenance procedures make it mandatory to keep the hydraulic fluid clean. A daily, weekly or monthly log should be kept on the hydraulic fluid condition.

No hard and fast rules can be established for changing the fluid because of the great variety of operating conditions. However, we do know that when filter elements are replaced frequently, service life of a system increases. Periodic testing of the fluid by the Systems Services is recommended to confirm suitability for continued use and to establish the correct fluid and filter element replacement interval.

Some of the considerations affecting hydraulic fluid are: operating temperature, type of service, contamination levels, filtration, and the chemical composition of the fluid.

Procedure

1. Ensure all test specimens are removed from the test equipment
2. Isolate the electricity to the control cabinet
3. Empty the oil from the reservoir
4. Drain all the oil from the hydraulic ring main and hoses (if applicable)
5. Disconnect all the test systems from the ring main and loop the hoses together
6. Remove the reservoir panels and inspect the interior
7. Clean the reservoir interior and replace suction filters
8. Seal and refit the inspection panels
9. If possible pump clean oil into the ring main (if applicable)
10. Link out oil level and pressure switches on the pump unit
11. Fill the tank with sufficient oil to cover the suction lines
12. Flush the system for a minimum of 4 hours
13. Empty the oil from the main reservoir
14. Drain the oil from the ring main
15. Fill the system with clean oil
16. Reinststate the oil level switch
17. Flush the system for a further 4 hours — see Systems Services Technical Bulletin “Flushing Guidelines”

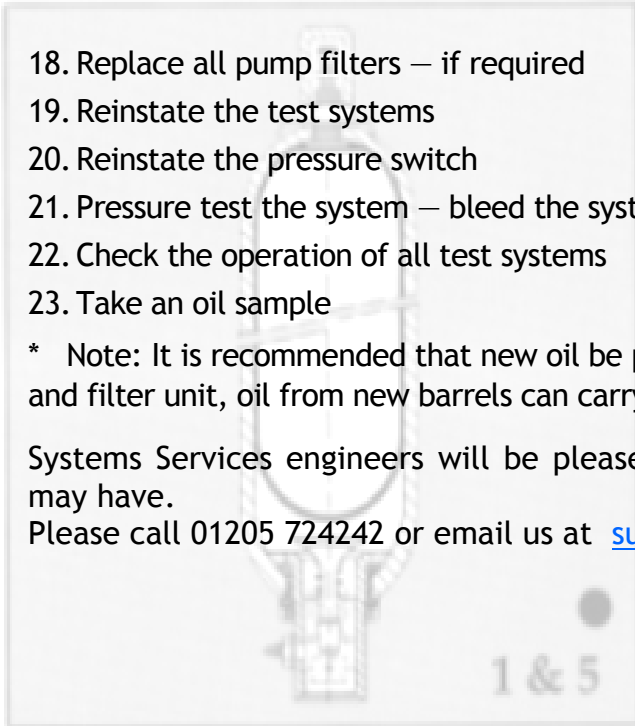
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18. Replace all pump filters – if required
19. Reinststate the test systems
20. Reinststate the pressure switch
21. Pressure test the system – bleed the system
22. Check the operation of all test systems
23. Take an oil sample

* Note: It is recommended that new oil be pumped into the system using a transfer pump and filter unit, oil from new barrels can carry high levels of contamination.

Systems Services engineers will be pleased to assist with any technical queries you may have.

Please call 01205 724242 or email us at support@systems-services.co.uk



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