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PRACTICAL WAYS TO CONTROL HYDRAULIC SYSTEM CONTAMINATION

Farm Machinery Fact Sheet FM-20

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Equipment Service Tips from JI Case Company

Hydraulic contamination can mean expensive downtime and needless costly repairs. The following steps can help to control hydraulic system contamination in your equipment:

- 1. Insure proper functioning of all contamination control devices (i.e., filters, breathers, external seals) on your vehicle.
- 2. Follow instructions issued for maintenance of the control devices.
- 3. Use only designated fluids.
- 4. Never expose a hydraulic system (or fluid to be added) to a dirty atmosphere.
- 5. Use only precleaned transfer containers to add fluids.
- 6. Use clean fluid (prefilter if necessary).
- 7. Insure proper cleanliness of all replacement components before installing.
- 8. Use proper technique for removing bulk fluids from storage containers.
- 9. Properly service the entire system after major component failure.
- 10. Replace fluids as required.
- 11. Provide a clean facility for the tear-down, inspection and rebuilding of components.
- 12. Never disassemble a component until it has been thoroughly cleaned externally.
- 13. Properly seal or cap items for storage.
- 14. Before breaking seals in any area of a system (i.e., hoses, inspection plates, access covers, etc.), thoroughly clean the immediate area.
- 15. Protect the connections from exposure to the environment by capping with an effective plug.
- 16. Avoid use of rags on sharp edges or rough surfaces, such as spool bores, threaded areas, case holes, etc.
- 17. Use clean, new oil for washing or flushing.
- 18. Repair all system leaks as quickly as practical, especially in areas of poor environment.
- 19. When attempting to drain highly contaminated fluid from a system, make certain the system is highly active for a period of not less than 15 minutes immediately prior to draining.
- 20. Use a portable filtering unit to thoroughly clean a contaminated system, following service manual procedures.

21. If there is a contamination warning light on the instrument panel, periodically check to see if the indicator lights up when the ignition is on prior to starting the engine. If it fails to light, determine whether the problem is with the indicator, or with the warning system itself by grounding the sender with a piece of wire. If the indicator still does not light, change the indicator bulb. If a new bulb fails to light, there is a problem with the warning system that should be serviced immediately.

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