



Contamination Control Guidelines

Caterpillar Machines Operation and Maintenance Manual

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Contamination Control Guidelines

Procedure for Operating Caterpillar Filter Carts{0680, 0768, 5050}

Media Number -SEBF8279-05

Publication Date -24/03/2009

Date Updated -24/03/2009

i03547320

Procedure for Operating Caterpillar Filter Carts{0680, 0768, 5050}

SMCS - 0680; 0768; 5050

Agricultural Tractor: All
Articulated Truck: All
Asphalt Paver: All
Backhoe Loader: All
Challenger: All
Cold Planer: All
Combine: All
Compact Track Loader: All
Compact Wheel Loader: ALL
Earthmoving Compactor: All
Excavator: All All Wheeled Excavators
Forest Products: All
Integrated Toolcarrier: All
Landfill Compactor: All
Load Haul Dump: All
Mini Hydraulic Excavator: All
Motor Grader: All
Multi Terrain Loader: All
Off-Highway Truck/Tractor: All
Paving Compactor: All
Pipelayer: All
Road Reclaimer/Soil Stabilizer: All
Skid Steer Loader: All
Soil Compactor: All
Telehandler: All
Track Feller Buncher: Caterpillar
Track-Type Loader: All
Track-Type Skidder: All
Track-Type Tractor: All
Underground Articulated Truck: All
Wheel Dozer: All
Wheel Feller Buncher: All
Wheel Loader: All
Wheel Skidder: All
Wheel Tractor-Scraper: All

Introduction

This guideline enables dealers and the dealer's customers to benefit from cost reductions which were made possible through an established Contamination Control Program. Fluids used in Caterpillar machines are highly effective unless the fluid contains damaging amounts of contaminants. Therefore, every effort must be made in order to reduce the contamination level within Caterpillar fluid systems. Caterpillar makes ongoing changes and improvements to the Caterpillar products. This guideline must be used with the latest technical information available from Caterpillar in order to ensure that such changes and improvements are incorporated when applicable.

For questions or additional information concerning this guideline, submit a feedback form in the Service Information System web site.

Summary

Portable filter carts offer a means of removing contamination from machine oil systems, which can be accomplished without removing and replacing the oil from the machine.

Filter carts are an environmentally safe means of:

- Off-loading used oil during oil changes
- Cleaning new oil, while replenishing the fluid system.
- "Kidney loop" cleaning oil in the fluid tank.

The filter cart should be used in conjunction with the recommended hydraulic system maintenance procedures. The resulting clean oil will prolong component life as well as provide smooth actuator and control movement.

There is a complete range of micron rated filter elements available for these filter carts. The choice of the micron rating depends on the contamination level and viscosity of the oil. In a heavily contaminated system (ISO code 22/19 or higher) it is recommended to begin filtering with a 20-micron absolute element. This will eliminate the 20-micron and larger particles. After the large particles have been removed, install a standard 13-micron, or a finer 5-micron absolute element, in order to complete the filtration to an acceptable ISO rating determined by the system. When used in a kidney loop filtration application, the 64 L/min (17 US gpm) filter cart is sized and targeted for fluid tanks less than 113.6 L (30 US gal) in fluid capacity.

The filter cart and elements will not decrease existing wear on internal parts. The filter cart will not remove, eliminate, or repair mechanical problems associated with part wear due to contamination.

It is recommended that filter cart "Kidney Loop" filtration becomes a standard part of machine maintenance. The filter cart should be used at the appropriate oil filter change intervals, typically at the 250 to 500 hour service meter reading.

NOTICE

If the vehicle system is being service due to a catastrophic component failure, a complete system cleaning operation is required before initiating this kidney loop filtration procedure. If the failure is not addressed early, particles from the failed component will contaminate other system components such as valves, pumps, motors and controls.