

Disaster Relief

Flooded Farm Vehicles and Equipment- Tips on Cleaning and Reconditioning

First check your insurance requirements before operating or attempting to clean vehicles, equipment, or tractors. File appropriate claims.

Then try to clean tractors, trucks, and farm equipment. Delay makes dirt and silt harder to remove and may cause considerable rusting and corrosion. If you use farm vehicles and equipment before proper reconditioning, you may seriously damage them.

Have your dealer or another expert recondition engines. Do not try to move or start an engine that has been under water until the engine has been cleaned and reconditioned. Dirt will damage bearings and precision parts. Clean and service all equipment, with special attention to parts that were below water level. If salt water flooded the equipment, wash with fresh water.

Emergency Cleaning

If you must use the tractor or engine immediately, or if you think the cost of professional reconditioning is not worthwhile, use the following procedure. This procedure is not thorough enough to prevent possible damage or need for overhaul in the future.

- Clean exterior thoroughly with fresh water/soapy water and a pressure washer. Scrub greasy deposits with solvent.
- Remove spark plugs or fuel injectors, air cleaner, intake manifold, and carburetor. Clean these parts thoroughly with solvent. Discard and replace water-soaked paper air filters.
- Operate the engine slowly without an air filter.
- Drain the crankcase. Flush the crankcase with diesel fuel oil and refill with clean oil. Also disconnect gasoline lines, blowing them out with compressed air. Do not disconnect diesellines. Inspect diesel fuel system to see if water is present in the tank and filters. If water is present, have trained service personnel clean the fuel system.
- Crank the engine slowly with spark plugs or fuel injectors removed to force water out of cylinders.

Squirt light lubricating oil into each cylinder, and let it stand for about five minutes. Then crank the engine slowly to lubricate cylinder walls and rings.

- Replace all filters – engine, fuel, and hydraulic.
- Completely flush out the fuel system – tank, pump, and lines – with #1 diesel fuel. Be extremely careful to avoid fire danger.
- Clean starter and generator or alternator. Have an expert service them.
- Drain and flush the transmission and final drive with solvent. Refill with new, clean oil. Check for water in oil compartments by loosening drain plugs until all water drains out.

Wheel Bearings, Cooling Systems, and Batteries

Remove and clean unsealed wheel and track bearings with solvent. Lubricate and replace the bearings. Factory-sealed bearings should not need cleaning if the seal is unbroken.

Clean all debris from the radiator, and wash with soapy water. Most cooling systems are sealed and would not need flushing, but we advise changing or flushing and replacing with new antifreeze.

Replace the battery, if necessary. If it were submerged, it will probably need to be replaced.

Starting and First Operation

Examine the machine, and turn it over by hand after you have cleaned and replaced all parts. If it turns freely, it is probably ready for operation. Start the engine, and operate the machine at low speed until you are sure all parts are working smoothly.

If there is much dirt in the crankcase, transmission, or gear train, change the oil and oil filter after operating the machine for a few hours. Using fresh lubricant is cheaper than paying for more repairs.

Additional Steps for Trucks and Cars

- Remove inside door panels.
- Clean and lubricate latches and window-raising mechanisms.
- Remove seats and floor mats. Brush and vacuum thoroughly. Clean washable surfaces with soap and water. Use rug or upholstery shampoo on non-washable areas.
- Dry thoroughly.
- Wash the frame thoroughly with a pressure washer.
- Have brakes and steering mechanism checked before you drive the vehicle.
- Gears and sprockets – Clean exposed gears and sprockets with cleaning solvent. Coat gears with light oil.
- Gear cases – Inspect enclosed gear cases for water or grit. Water may be below the oil. If you find water or grit or if you are in doubt, drain the case, flush it with solvent, and refill with clean oil.
- Belts – Examine all belts for tears or cracks. Repair or replace them as necessary.
- Cutting parts – Remove knives and cutter bars from mowers and combines. Clean and dry them. Coat cutter parts with light oil, and reassemble. Inspect the insides of combines and remove accumulated dirt, chaff, debris, or water.
- Wash implements with a pressure washer to remove salt accumulations. Use the implement for a short while to brighten the soil-engaging parts, then coat them with grease or oil.

Reconditioning Farm Implements

Follow applicable steps above, and clean the rest of the machine as follows:

- Chains – Soak chains in solvent for several hours, then remove chains and let solvent drain out of them. Soak chains for several hours in light oil, then drain off excess oil and replace chains on machine.