

Engine Storage Guidelines – Long Term

John Deere - 4045T3, 6068T3, 6090T3

- ✓ John Deere engines can be stored outside for up to 3 months with no long-term preparation, if covered by waterproof covering.
- ✓ John Deere engines can be stored in a standard overseas shipping container for up to 3 months with no long-term preparation.
- ✓ John Deere engines can be stored inside, warehoused, for up to 6 months with no long-term preparation.
- ✓ John Deere engines expected to be stored more than 6 months should be prepared according to the procedure outline below.

Preparing Engine for Long-Term Storage

The following storage preparations are good for long-term engine storage up to 1 year. After that, the engine should be started, warmed up, and retreated for an extended storage period.

- ◆ Change engine oil and replace filter. Used oil will not give adequate protection.
- ◆ Service air cleaner.
- ◆ Draining and flushing of cooling system is not necessary if engine is to be stored only for several months. However, for extended storage periods of a year or longer, it is recommended that the cooling system be drained, flushed, and refilled. Refill with appropriate coolant.
- ◆ Pour three (3) ounces of rust preventative oil into the turbocharger intake. (It may be necessary to temporarily install a short intake elbow on the turbocharger inlet to receive the oil.)
- ◆ Prepare the tank with a solution of diesel fuel and rust preventative oil, at ten (10) ounces of rust preventative oil per gallon of diesel fuel.
- ◆ Remove existing lines/plugs as required, and run a temporary line from the tank to the fuel transfer pump intake, and another temporary line from the fuel return manifold to the tank, so rust preventative oil solution is circulated through the injection system during cranking.
- ◆ Crank the engine several revolutions with starter. (Do not allow the engine to start.)
- ◆ Remove temporary lines installed above and replace any lines/plugs previously removed.
- ◆ Remove fan/alternator belt, if desired.
- ◆ Remove and clean batteries. Store them in a cool, dry place and keep them fully charged.
- ◆ Clean the exterior of the engine with salt-free water and touch-up any scratched or chipped painted surfaces with touch up paint.
- ◆ Coat all exposed (machined) metal surfaces with grease or corrosion inhibitor if not feasible to paint.
- ◆ Seal all openings on engine with plastic bags and tape.
- ◆ Store the engine in a dry protected place. If engine must be stored outside, cover it with a waterproof canvas or other suitable protective material and use a strong waterproof tape.

> PUT A WARNING TAG ON THE ENGINE STATING THE FOLLOWING:

- ◆ The engine does not contain oil
- ◆ Do not operate the engine.
- ◆ Store the engine in an area that is dry and has a uniform temperature.

Removing Engine from Long-Term Storage

- ◆ Remove all the protective coverings from engine. Unseal all openings on engine and remove the covering from electrical systems.
- ◆ Remove batteries from storage. Install batteries (fully charged) and connect the terminals.
- ◆ Install fan/alternator belts if removed.
- ◆ Fill fuel tank
- ◆ Perform all appropriate prestarting checks.
- ◆ Open fuel valve, fill fuel filter/water separator with clean fuel and bleed the fuel system.
- ◆ Crank engine for 20 seconds with starter, do not allow engine to start. Wait 2 minutes and crank engine an additional 20 seconds to assure bearing surfaces are adequately lubricated.
- ◆ Start engine and run at low idle and no load for several minutes. Warm up carefully and check all gauges before placing engine under load.
- ◆ The small amount of rust preventative compound, which still remains in the fuel system, will cause smoky exhaust for a few minutes.
- ◆ On the first day of operation after storage, check overall engine for leaks and check all gauges for correct operation.