



ASK ALBERT!

Albert Roberts, Pine Stump Farms, Omak

Getting Ready for Spring Fieldwork

Winterizing machines can save you a lot of effort come springtime.

If you *grease everything* before putting it away, it will keep moisture out and the equipment will run nice when it's started up in the spring. When equipment operates, oil and grease out are pushed out, leaving the moving parts to run metal-to-metal. If rust is present, pieces can flake off, causing parts to deteriorate much quicker.

- To avoid engine damage, it is important to wash, dry, and grease bearings and oil chains regularly, emphasizing that hay equipment should be cleaned thoroughly because hay remnants are especially prone to attracting moisture.
- Covering exhaust openings with a tin can to stall moisture accumulation during wet periods and to prevent mice from nesting in engine compartments is another inexpensive — but effective — way to protect equipment.
- Place mothballs inside engine compartments, near wires and under floor mats to ward off rodents. Mice are known for destroying insulation and chewing on electrical wires. Exposed wires can cause a short circuit and start fires.
- Test antifreeze limits with a hydrometer every year in September or October. The meter's float indicates the lowest temperature antifreeze will protect. If the hydrometer reading is not as low as regional temperatures, the fluid can be drained and more antifreeze with the correct limit can be added to reach the needed protection. Hydrometers can be purchased at most parts stores for less than \$10.
- Along with antifreeze, before storing equipment, hydraulic tanks and fuel tanks should be checked to ensure moisture

hasn't collected inside. The easiest way to do this is to open the drain valve and observe if water comes out. When water is present, drain the tank until the moisture is gone, and then replace oil and fuel as needed.

- Fuel stabilizer can also help maintain engine function by preventing fuel evaporation, which, if prolonged, can leave deposits of varnish and cause floats to stick. When this happens, it's common that a carburetor must be removed and cleaned before equipment can be used in the spring. Running the equipment with stabilizer in the fuel tank before winter is the best bet.

Winter preparations must also take place outside the engine compartment. Airing up tires to keep them from going flat or blocking them off the ground to keep weight off them are good ways to ensure equipment is field-ready in spring. Low air pressure creates a weak spot in the tube or tire that can cause it to fail earlier than it should.

If you find that extra time that everyone covets, here are some activities that your machinery will appreciate.

Radiator

It is good to clean out the radiator and make sure all the fins are straight. If a fin comb tool is available, it can greatly facilitate the process of straightening the fins and minimize the chance of poking a tube in the radiator. While you're at the radiator, check the water pump and make sure it's not leaking. The radiator hoses should also be reviewed for cracking or bulging and verifying that the hose clamps are tight.

The radiator fan belt needs to be tight and not frayed or with a glaze on it. The belt should not ride down in the groove of the pulley; rather, contact should be on the side of the belt, not the bottom of the belt. The belt itself should be snug but not too tight. There are gauges to test play, but the general rule is 1/8" depression when pushing down on the belt.

Belts & Hoses

Where are the hoses rubbing or vibrating? Are they wearing through anywhere? Finding and fixing these belts and hoses when they are showing signs of wear will save you a headache when you are out in the field, generally far away from the shop and tools that make the job easier, not to mention climatic conditions.

If a hose is rubbing, that's a good place to put a spiral hose wrap on to prevent further friction. If you need to replace a hose, an old fire hose or a larger rubber hose that encases the functioning hose will help protect, especially hydraulic hoses that move a lot in their work.

Jack your tractor up

Jack your tractor up on the frame to take the weight off the spindles and axle pivot. Repack wheel bearing on the steering axle (this is for 2-wheel drive tractors only). Check for play in the spindles and axle pivot and grease at them at this time because the grease will go around on the pressure side of the bushings rather than just on the slack side.



Grease zerks. Photo credit: toyotal20.com

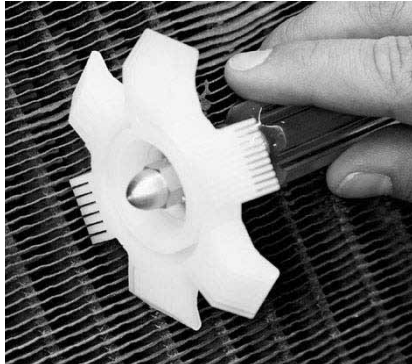
On 4-wheel drive tractors as well as 2-wheel drive tractors, inspect the axle pivots and spindles (depending on the type of tractor). Grease where applicable i.e. if there's a grease zerk or plug. Fill with the proper lubricant.

Get a shop manual and a parts book

This is an opportune time to get out your shop manual and look in the service section. Many owners manuals do not have sufficient level of detail; for that reason it's worthwhile to invest in a shop manual and a parts book. The shop manual tells you what things are and their function or activity while the parts book shows you in pictures the component parts.

If a full service didn't happen earlier in the season, then now is a good time to take advantage of less active demands out in the field. Change oil and filters. This means all filters: oil, air, and fuel, as well as hydraulic.

This is also a good time to grease wheel bearings of field



Radiator fin straightener.

Photo credit: jalopyjournal.com

equipment, trailers, cultivators, rakes, etc. Check clamps on toolbars. Are shanks cracked or broken? Replace points or sweeps on cultivators using new bolts. Check and grease drivelines on rotovator, change oil on gearbox and grease end bearing. Check for signs of oil leaks or wear. Replace teeth if needed.

Doing these basic maintenance and monitoring activities not only puts you in a good position with your equipment, but familiarizes you with just what kind of shape each piece is in.

Albert was raised on a fourth-generation grain and cattle operation in North Dakota. He has ranched in the Okanogan for twenty eight years with his partner Carey Hunter. This time of year, he's thawing his frostbite fingers at the heater in between working on his equipment in the shop. www.pinestump-farms.com Ask Albert your farm machinery questions albert_roberts@hotmail.com

Got Questions?

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