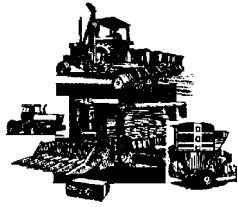




# DAILY MAINTENANCE PROCEDURES FOR EFFICIENT MACHINE PERFORMANCE



Farm Machinery Fact Sheet FM-06

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## **Equipment Service Tips from J I Case Company**

Getting into the habit of thorough daily maintenance checks not only will lead to trouble-free operation, but will also help pinpoint problem areas early so that corrective action can be taken to prevent major breakdowns. In addition, they will protect the investment that has been made in new equipment or in overhauling.

The first thing that usually comes to mind when daily maintenance is mentioned is the checking of fluid levels, beginning with the engine oil. But, performing maintenance checks by memory instead of by checklist is bad. A checklist should be established and the operator should follow through with it daily and initial it. That list should then be kept with the maintenance schedule in the operator's compartment.

Other oil levels to check are transmission oil and hydraulic oil. Be sure the machine and its attachments are in the position stated in the operator's manual for making the checks. For example, you will get a false fluid level reading if the hydraulic cylinders are extended or retracted incorrectly. Also use the right fluid. Some fluid is approved for use in both transmissions and hydraulic systems.

Next, check the air inlet. Remove the top and clean it. Some machines have precleaners for use in extremely dusty work conditions. These act as an initial dirt trap and increase the service life of paper filter elements.

Remove the air cleaner dust cup, wipe it out with a clean cloth and replace it. Be sure to replace the cup according to the manufacturer's instructions.

Check the radiator coolant level on a daily basis. Not checking it and waiting for the heat gauge to indicate overheating is playing roulette. If you add coolant, use the same brand of permanent type antifreeze that is already in the system. It is not advisable to mix brands. It is important to remember that modern diesel engines use a 50 percent antifreeze mixture year round for better heat dissipation.

Finally, remove obstructions from the radiator core and fins, and check fan belts and hoses. Periodically blow compressed air through radiator core to remove accumulated dust and

debris.

Adding fuel is second nature, but inspecting filters and draining water from fuel systems also are important parts of the fuel check. If different operators run the machine, point out on the checklist the locations of filters, water trap sediment bowls and particularly fuel line shut-off points. You can save an operator from a red face if he knows that the one who ran the machine the day before shut off the fuel line. And, if you padlock the fuel tanks, make sure the operator has the key when he goes to the machine. Otherwise, he will have to come and get it, which is a time waster.

Greasing is another item which is generally taken for granted, but be sure to follow manufacturers' specs and use the right grease. Be especially attentive to pivot points. Locating and marking grease fittings can make this job go faster, and placing clean rags and solvent in a convenient spot can make for efficient operators.

The final daily maintenance check is a walk-around inspection of the machine. You might feel that this is unnecessary since the operator has already walked around the machine to make the other checks. But, he was not specifically looking for problems either, so a walk-around to make an overall inspection is a good habit to get into. While performing this check, look under the unit for fluid leakage.

At the end of the day, fill the fuel tank to avoid overnight condensation that could gum up the fuel and fuel lines, plug the fuel filter or damage the injection system. It also means one less job to do in the morning. If you do fill up at the end of the day, it is advisable to lock the cap. This should be part of the overall program of securing machines when they are not in use.

Remember, establishing the daily maintenance program and checklist is the first step in machine care and in extending the productive life of any machine.

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