

DEUCE TRACTOR
COLD WEATHER OPERATIONS

This abbreviated checklist is not to be used as a replacement for the -10 series Tech Manuals or any other PMCS guide

Reference: TM 5-2430-01-200-10; FM 9-207, Operations and Maintenance of Ordinances Materiel in Cold Weather; FM 31-70, Basic Cold Weather Manual; FM 31-71, Northern Operations

Prepare Equipment in Advance of Cold Weather

1. Change crankcase, power train, hydraulic System, winch box and cab tilt pump fluids to viscosities in accordance with the -10 for the coldest historical temperatures the equipment will be operating in.
2. Ensure coolant has correct concentration of antifreeze operating temperatures.
3. Maintain prescribed daily and weekly lubrication intervals.

WARNING

1. Do not operate machine in an enclosed space due to buildup of carbon monoxide which is hazardous.
2. Do not run coolant heater or tractor while refueling, fumes are explosive.
3. Ether is explosive/flammable. Extreme care must be used when operating near source of ignition. Do not store replacement cylinders in operator's compartment. Avoid breathing vapors and contact with skin.
4. Limit engine idling time to 10 minutes to prevent damage to engine.
5. Check gages and instruments including oil pressure and coolant temperate to ensure they register in normal operating range. Shut down vehicle if not.

Approved for public release: distribution is unlimited

Distributor: U.S Training Support Center

May 2006

Starting Machine (equipped with engine coolant heater)

1. First start engine coolant heater and run for 10 to 15 minutes and turn off (for temperatures below -32 degrees C/-25 F run heater for 40 minutes).
2. Before starting tractor engine turn off coolant heater and wait three minutes for coolant heater to cycle and purge fumes.
3. Engage tractor starter while pulling back on blade control. If engine does not start within 15-30 seconds, stop and wait 30 seconds before cranking engine again. **Note: starter may overheat and be damaged if this procedure is not followed.**
4. The start-aid switch is a cold weather assist. Use ether sparingly for 2 or 3 seconds and only while engine is turning over.

Starting Machine (without engine coolant heater)

Machines should be stored in heated facility. Pull back on blade control lever while cranking engine. Use normal starting procedures.

After Use

1. Clean mud, snow and debris from engine, cylinders, wheels and track.
2. Fill fuel tank at end of operating cycle to prevent water condensation in fuel tank.
3. Shelter machine, direct radiator away from wind and snow, cover engine/radiator and park in a dry location. Use planking if necessary to keep machine from freezing to ground.
4. Remove batteries to warm location if possible.