

CATERPILLER CS-433 TYPE I AND III VIBE ROLLER
HOT WEATHER/DESERT OPERATION

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

FM 90-3, DESERT OPERATIONS contains detailed instructions for living and working in the desert. **TM 5-3895-382-10** contains detailed PMCS instructions for proper maintenance and operation.

NOTE: A very high standard of maintenance is essential to long term operation under conditions of extreme heat. High temperature can cause early failure of systems. Constant checking is necessary to prevent failures.

ENGINE OPERATION IN EXTREME HEAT

1. Watch engine and hydraulic oil temperature and temperature warning indicator light.
2. If any warning message or oil levels are ignored, damage may result.
3. Check oil levels frequently.
4. Follow proper engine cool down and shutdown procedures.
5. Make sure all air inlets are kept clear and sealed to permit cooling.
6. Check all hoses and fittings frequently to insure proper fit.
7. Inspect Cooling Fan Assemblies.
8. Remove packed sand from engine compartment.
9. Start up vehicles regularly to prevent discharge of batteries.
10. Gen/ALT belt tension
11. Fluid levels correct to prevent heat build up
12. Oil cooler filter clean.

Approved for public release: distribution is unlimited
Distributor: U.S Training Support Center

Dec 2005

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ENGINE OPERATION (continued)

13. Clean air filter and dust boot
14. Keep Radiator fins clean of dust and debris
15. Keep mud and dirt cleaned off to reduce heat build up.
16. Fuel/water sediment bowl/filter drained
17. Use of high temp grease, to reduce thinning from heat
18. Clean up oil spills/grease to prevent dirt build up and heat retention.
19. Look at parts most affected by heat (belts, hoses and other rubber parts).
20. Ensure engine cooling fan blades are turned to the proper direction for hot weather use on vehicles having this option

BATTERY MAINTENANCE

1. Battery specific gravity must be changed to adjust for heat.
2. Watch ELECTRICAL SYSTEM voltmeter closely.
3. Keep batteries full, but do not overfill.

OPTICS MAINTENANCE

1. Under extreme dust conditions, check air cleaner service indicator every ½ hour of operation.
2. Lubricate suspension items daily, and clean grease fittings.
3. Reduce sand ingestion by stretching nylon stockings over air cleaners.
4. Check lubrication orders and TM's for the correct viscosity of lubricants for higher temperatures.
5. Clean sand and dirt away from vehicle.