#### M1A2/SEP TANK

# **OPERATE TURRET IN EXTREME HEAT continued**

- Cover muzzles with shoot thru materials (Nylon Stocking)
- 5. Remove any debris around thrust nut/gun mount
- 6. Clean away any excess lubrication or fluid seepage
- 7. Check Ball and spring race ring for debris
- 8. Check hand held fire extinguishers
- 9. Check ready ammo door seals for wear or damage
- 10. Remove debris from ammo door rails
- 11. Check main hydraulic fluid reservoir
- 12. Inspect replenisher for debris/service
- 13. Purge Optics
- 14. Exercise Main Gun monthly
- Inspect turret lifting device holes have protective bolts installed
- 16. Clean Gunners Auxiliary Sight
- 17. Check for any signs of damage from mating surfaces contaminated with debris
- 18. Check for smooth operation of CWS
- Check for debris or excess lubrication on breech ring
- Check MRS updates more often due to changing heat
- 21. Have/keep extra water containers.

## GTA 43-01-009

# M1A2/SEP TANK HOT WEATHER/DESET OPERATIONS

FM 90-3, DESERT OPERATIONS, contains detailed instructions for living and working in the desert.

**TM 9-2350-288-10** contains detailed PMCS instructions for proper maintenance and operation. (M1A2)

**TM 9-2350-388-10** contains detailed PMCS instructions for proper maintenance and operation. (SEP)

**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.

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

# **OPERATE ENGINE IN EXTREME HEAT**

- 1. Clean or check Vee packs often.
- Monitor driver's integrated display (DID) for warning messages.
- If any warning message or oil levels are ignored, damage may result.
- 4. Check oil levels frequently.
- 5. Follow proper engine cool down and shutdown procedures.
- Run engine at idle for about 2 minutes before shutting down.

#### M1A2/SEP TANK

# **OPERATE ENGINE IN EXTREME HEAT (continued)**

- Idling will cool the engine faster than a quick shutdown and may prevent damage from remaining engine heat.
- Make sure all air inlets are kept clear to permit cooling.
- Check all hoses and fittings frequently to insure proper fit.
- Inspect left & right assemblies Cooling Fan Assemblies.
- Remove packed sand from Cooling Fan Drive gear boxes and clutches.
- Start up vehicles regularly to prevent discharge of batteries.

#### **MAINTAIN BATTERIES IN EXTREME HEAT**

- B attery specific gravity must be changed to adjust for heat.
- Monitor DID for LOW BATTERY CHARGE warning or LOW ELECTRICAL SYSTEM VOLTAGE caution messages.
- 3. Keep batteries full, but do not overfill.

## MAINTAIN OPTICS IN EXTREME DUST, SAND, OR MUD

- Clean fire sensor lenses at least every 4 hours in extremely dusty conditions.
- Optics should remain covered as much as possible in these conditions to prevent scratching.
- If tactical situation permits, keep GPS ballistic doors closed.

#### M1A2/SEP TANK

# MAINTAIN OPTICS IN EXTREME DUST, SAND, OR MUD continued

Keep a close eye on DID for caution/warning messages, to be sure dust does not affect equipment.

#### OTHER DESERT OPERATION PMCS

- Inspect and verify airflow operation of the NBC Protection System, Distribution, Compartment Pressure, Filtration, Indications and Controls.
- 2. Check track tension daily.
- Lubricate suspension items daily, and clean grease fittings.
- 4. Reduce send ingestion by stretching nylon stockings over air cleaners.
- Use high-grade 20W-50 oil: it serves well under desert conditions.
- 6. Check lubrication orders and TM's for the correct viscosity of lubricants for higher temperatures.
- 7. Clean sand and dirt away from vehicle.
- 8. Check fuel cap cartridge frequently.

#### **OPERATE TURRET IN EXTREME HEAT**

- During operation in extreme heat, operate the thermal management system (SEP).
- 2. During operation in extreme heat, operate the NBC main system (M1A2).
- 3. Seal inflatable turret seal when not in use if equiped.