#### **M707 Knight Vehicles**

# Perform preventative maintenance checks and services on the host, (HMMWV) vehicle

- 1. Check all fluids for proper level.
- Check drive belts and liquid hoses for cracks and degradation
- 3. The vehicle may overheat during long, hard towing operations in high gear or when driving at high speed. Check temperature gauges and warning lights often. Stop vehicle to cool off when practical. Keep ventilating blower on during operation. Inspect the air cleaners and oil coolers often. Clean off dust, insects, or debris from oil coolers by brushing off screens or flushing with low- pressure water. Have unit maintenance add tropical electrolyte to batteries.
- 4. Check the vehicle tire pressure. Tire pressure will increase with high temperatures. Vehicle should be driven periodically to ensure the antioxidants migrate to the surface of the tire.
- 5. Check the vehicle batteries for proper electrolyte level.
- 6. The recommended oils for use in TACOM engines are OE/HDO 15W/40 or OE/HDO-40 weight oil that conform to MIL-L-2104. For other components/subcomponents, use the oils/lubricants specified in each equipment technical manual, which meet the operational requirements for hot environments. For vehicles/equipment operating in the desert, cut normal oil change intervals in half. For example: if oil change is normally required at 12,000 miles, change oil at 6,000 miles; if normally required at 400 hours, change at 200 hours; if normally required every 6 months, change every 3 months. Shorten these intervals if conditions become more severe.

# M707 Knight Vehicles

### **Knight Mission Equipment**

- 1. At temperatures above 125 degrees Fahrenheit mission equipment may have degraded accuracy.
- 2. When performing cable maintenance take extra care to prevent sand from entering cable connectors on components and LRUs. Before making cable connections, remove sand and other foreign material from connectors
- 3. Do not touch or rub any optic surfaces with your fingers. Dust or blowing sand can scratch optical surfaces. Keep optics covered as much as possible in these conditions to prevent scratches.
- 4. Avoid extended exposure to intense direct sunlight and the abrasive effect of sand on exposed glass.
- 5. Use extreme care when cleaning sight lenses to prevent scratching surfaces.
- 6. Check electrical equipment cooling fans for operation and their associated filters for cleanliness.

#### **Night Vision Systems**

- Operate active night vision systems only at night or during periods of low visibility. Operation in high temperatures may reduce system life.
- 2. Cool-down time for active night vision systems may increase. System acceptability should be based on thermal image rather than cool-down time.

#### GTA# 43-01-074

M707 Knight Vehicles, NSN 2350-01-455-3174, 2350-01-513-8431 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

1. Operating vehicle in hot weather increases risk of heat stress. Heat stress impairs performance and can lead to injury. Drink lots of water. Work and rest in shade when possible. Follow instructions in FM 21-11.

Prolonged exposure to bright sunlight produces very hot metal surfaces, which will burn flesh on contact. Wear gloves when contacting hot metal surfaces with your hands. Wear additional clothing as required.

- 2. Mold, mildew, and fungus grow very quickly in hot, humid weather. Keep all glass, rubber, and leather surfaces clean and dry.
- 3. Keep lens covers installed except during actual operations.
- 4. If mission will allow, do the following:
- a.. Position vehicle out from sun and in shady area.
- b. Place camouflage netting over vehicle to reduce heat from sun.
- c. If in dismount mode, use camouflage netting, brush, or tree limbs to shade unit from sun.
- d. Refer to TM 9-2320-280-10 for operating vehicle in extreme heat.