### M2/M3 Bradley Fighting Vehicle System

## OPERATING VEHICLE IN EXTREME SAND OR DUST. continued

- 6. Do not straddle sand dune or drive on sides of two sand dunes. A sand dune can be an unstable overhanging ridge and give way under the weight of your vehicle.
- 7. If vehicle starts to skid on loose sand, take foot off accelerator. Steer in direction of skid until vehicle stops skidding. Slowly accelerate and steer vehicle on a straight course.
- 8. If track popping sound is heard while driving in loose sand, drive vehicle in straight line until track popping sound stops. If track popping sound continues, stop vehicle and set hand brake. Check track and suspension for buildup of sand. If sand is built up on suspension, move vehicle backward and forward two or three times to clear suspension.
- 9. Ensure track tension is set properly on a daily basis.

  Driving in sand or loose dirt may cause track to stretch.

### DRIVING VEHICLE IN SAND OR LOOSE DIRT.

- 1. Allow as much distance as possible between vehicles in convoys. Flying dust and sand will damage optics and clog air filters.
- 2. The best time to drive on sand is at night or early morning when sand is damp. Damp sand allows better traction.
- 3. Do not make pivot turns in sand or loose dirt or thrown track may result.
- 4. Do not make sharp turns at high speed. Turn vehicle with a series of gradual turning motions to avoid throwing track or overturning vehicle.
- Do not slide vehicle sideways into loose dirt or sand; a thrown track could be the result.

### M2/M3 Bradley Fighting Vehicle System

# DRIVING VEHICLE IN SAND OR LOOSE DIRT. continued

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#### GTA 43-01-010

### M2/M3 Bradley Fighting Vehicle System HOT WEATHER/DESERT OPERATION

THE FOLLOWING DATA IS NOT TO BE USED IN LIEU OF OPERATIONS AND MAINTENANCE DATA CONTAINED IN TM9-2350-294-10-1 AND TM9-2350-294-10-2

### OPERATING VEHICLE IN EXTREME HEAT.

- 1. Check oil levels frequently. Oil seals are more likely to leak in extremely hot weather. Do not overfill oil.
- 2. Check batteries more frequently in hot weather. Keep electrolyte at the proper level. Do not alter the electrolyte specific gravity.
- 3. Keep air inlets clear to permit cooling and maintain engine power.
- Check coolant pump belt for proper tension frequently.
   Belts can stretch in extremely hot weather and cause engine overheating.
- 5. Add only proper antifreeze/coolant to cooling system. Check coolant level only when system is cool; hot coolant can burn you.
- 6. Park vehicle in the shade whenever possible. Surface temperatures in direct sunlight can reach 180 F (82 C).
- 7. Before engine shutdown, always cool engine by running at high idle (1000 rpm) for 5 minutes or until COOLANT TEMP gauge reads in green zone.
- Monitor coolant and transmission HI-TEMP lights and the warning tone in the headset for any indication of overheating. Immediately follow troubleshooting procedures for overheating (WP 0058 00 in TM 9-2350-294-10-1).

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### M2/M3 Bradley Fighting Vehicle System

## OPERATING VEHICLE IN EXTREME SAND OR DUST continued

- Aircraft grease, wide temperature range (WTR), MIL-G-81322, WP 0082 00, (Item 2) may be used when grease, artillery and automotive (GAA), MIL-G-10924 WP 0082 00, (Item 9) is not available.
- 10. Track will wear more rapidly when vehicles are operated in higher ambient temperatures, especially on paved surfaces. Complete PMCS daily for proper maintenance and operation. In particular, check for failed bushings which may be evidenced by pins which have drifted or walked in excess of 3/8 inch.

### M242 Chain Gun:

- 1. Limit burst length to 20 seconds to avoid overheating the gun barrel.
- 2. Keep the muzzle brake plug installed when not in use. One wrap of tape may be used to cover the muzzle brake vent holes and secure the plug. The plug can be shot out of the muzzle only as a last resort.
- Do not apply lubricant to the external surfaces of the feeder or receiver assemblies.
- 4. Keep the gun bag zipped up during vehicle operation or when hatches are open.
- The lower HE link eject chute should be removed and wiped clean daily. Do not use cleaners and lubricants.
- Clean link stripper grooves daily. Use a dry rifle bore cleaning patch to clean all four of the stripper grooves. Do not use cleaners or lubricants.

### M2/M3 Bradley Fighting Vehicle System

#### M242 Chain Gun continued:

- 7. Lightly tape the vehicle cartridge case eject port closed.
- 8. Clean and inspect bolt and track assembly daily if the vehicle is operated in a blowing dust environment.

### M257 Smoke Grenade Launcher:

- Keep tubes covered when the launchers are loaded to prevent sand from accumulating in the bottom of the tubes. Accumulation of sand could prevent proper loading of grenades.
- Clean tubes, especially the firing pins, to be sure the pins are free of oil. Oil-covered pins could become coated with sand, preventing proper electrical contact and launching of grenades.
- 3. Check the drain holes of the launcher to be sure they are not clogged, so that burst distance is not affected.
- Do not remove and reload grenades unless cleaning of the grenades and smoke launchers can be accomplished. Turret Operation:
- 1. Perform Preventive Maintenance Checks and Services (PMCS) on a regular basis.
- 2. Keep ballistic sight cover doors closed when Integrated Sight Unit (ISU) (A2, A2ODS)/Target Acquisition Subsystem (TAS) (A3) is not in use.
- 3. Keep Commander's View Unit (CVU) stowed when not in use (A3).
- 4. Keep tarpaulin on vehicle when vehicle is not in use.
- 5. Keep rubber caps on commander's and gunner's eyepieces when ISU is not in use.

### M2/M3 Bradley Fighting Vehicle System

### **Turret Operation continued:**

- 6. Check position of sun through ISU unity window before using ISU.
- 7. Set sensor select switch to neutral position when using ISU on bright sunny days. (A2, A2ODS)
- 8. Fire TOW missile only when temperature is less than 125 degrees F (52 degrees C) and target can be seen or tracked through ISU.
- 9. Replace electrical connector cover after unloading TOW launcher (A2, A2ODS, A3).

### OPERATING VEHICLE IN EXTREME SAND OR DUST.

- Keep optics and periscopes covered to prevent scratching or pitting. Use tarp if available. Uncover only those optics necessary for operations.
- 2. Clean optics carefully to prevent scratching surfaces.
- 3. Ensure that fuel filter is drained daily. Water and sand can damage engine and engine components.
- 4. Observe air filter restriction gauge frequently during sand or dust conditions. If either gauge pointer indicates 25 inches water or more, or engine loses power or blows black exhaust, stop engine and service air cleaner V-pac element. Carefully shake dust out of the element. Do not bang element on a hard surface to clear dust.
- Ensure suspension and power train components are properly lubricated. Clean grease fittings before and after lubrication.
   Sand entering grease fittings can cause rapid component wear.