

**\*TM 9-2355-335-10**

**OPERATOR MANUAL**

**FOR**

**MINE RESISTANT AMBUSH PROTECTED  
ALL TERRAIN VEHICLE (M-ATV)**

**M1240**

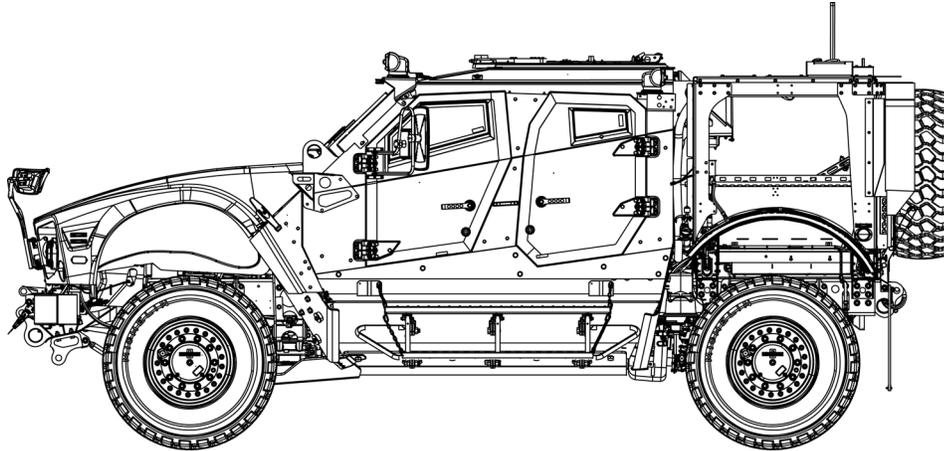
**NSN: 2355-01-575-9632 (EIC 1UT)**

**M1240A1**

**NSN: 2355-01-596-1330 (EIC 1ZW)**

**M1245**

**NSN: 2355-01-586-8070 (EIC 1VE)**



\*This manual supersedes TM 9-2355-335-10, dated 31 March 2011.

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**HEADQUARTERS, DEPARTMENT OF THE ARMY**

**17 AUGUST 2012**

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## PMCS INTRODUCTION

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### GENERAL

This paragraph contains the operator PMCS requirements for the M-ATV. The PMCS table contains checks and services necessary to ensure that the M-ATV is ready for operation. All M-ATV variants are addressed within the PMCS table. Multiple configuration/model specific items are called out with notes and Steps. Using the PMCS table, perform the maintenance at the specified intervals.

### USE OF THE PMCS TABLE

1. Interval Column. This column describes when and how often the checks are to be made. Pay close attention to all CAUTIONS and WARNINGS. Checks and services given in table are for normal operation. Extreme weather conditions, periods of high use, or combat conditions may dictate that the PMCS is performed more often than is mentioned in the PMCS table.
  - (a) B (Before): Perform your BEFORE (B) PMCS just before you operate the vehicle and/or its components.
  - (b) D (During): Perform your DURING (D) PMCS while the vehicle and/or its components are in operation.
  - (c) A (After): Perform your AFTER (A) PMCS right after operating the vehicle and/or its components.
  - (d) M (Monthly): Perform your MONTHLY (M) PMCS on a monthly basis. Perform all B and A PMCS tasks when performing monthly checks.
2. Equipment is Not Mission Capable Column. This column contains the criteria that causes the equipment to be classified as not ready/not available because of the inability to perform its primary mission. If severity of the problem is such that the operator thinks the vehicle cannot be operated, the operator should contact their Supervisor.
3. Item to Be Inspected Column. This column lists specific items to be checked and a brief description of the procedure by which the check is to be performed.
4. Always perform your PMCS in the same order.
5. If you find a problem that is beyond your echelon of repair, report the problem to Field Maintenance.

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## GENERAL MAINTENANCE PROCEDURES

1. *Cleanliness.* Dirt, grease, oil, and debris get in the way and may cover up a serious problem. Always perform PMCS on a clean vehicle.
2. *Nuts and Screws.* Check for obvious looseness, missing, bent, or broken nuts and screws. Look for chipped paint, bare metal, or rust around screw heads.
3. *Welds.* Look for loose or chipped paint, rust, or gaps where parts are welded together.
4. *Electrical Wires and Connectors.* Look for cracked or broken insulation, bare wires, and loose or broken connectors.
5. *Fluid Lines and Fittings.* Look for wear, damage, or leaks and make sure clamps and fittings are tight. Wet spots show leaks but a stain around a fitting or connector can also mean a leak.
6. *Damage.* Damage is defined as any condition that affects safety or would render the vehicle unserviceable for mission requirements.

## FLUID LEAKAGE

The following are definitions of the types/classes of leakage for determining the status of fluid systems. Become familiar with them, and remember - **WHEN IN DOUBT, NOTIFY YOUR SUPERVISOR.**

1. **Class I.** Seepage of fluid (as indicated by wetness or discoloration) not great enough to form drops.
2. **Class II.** Leakage of fluid great enough to form drops but not enough to cause drops to drip from item being checked/inspected.
3. **Class III.** Leakage of fluid great enough to form drops that fall from item being checked/inspected.

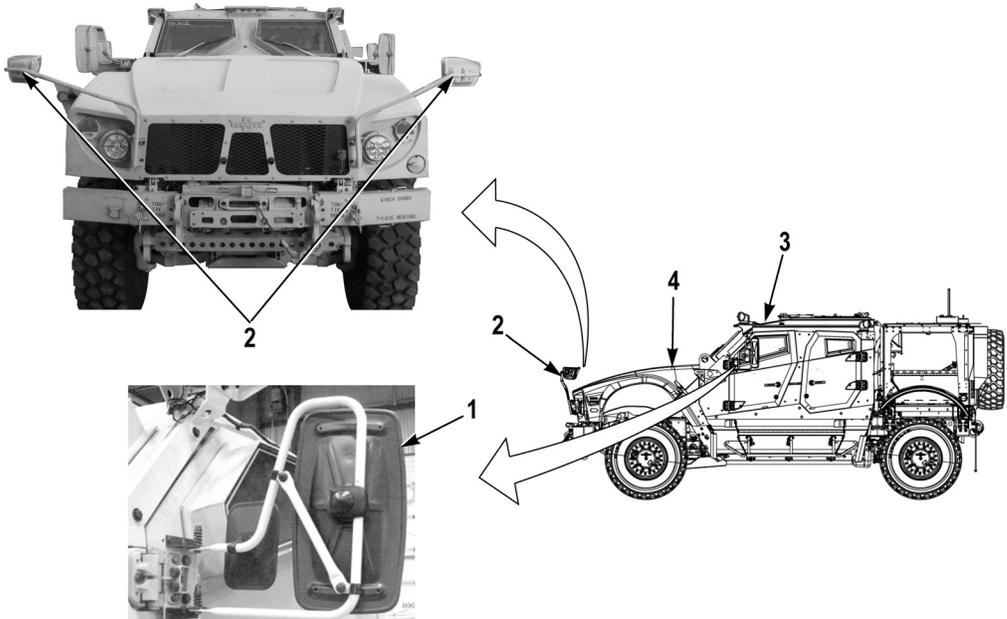
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PMCS TABLE

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS).**

Note: These checks are to be made in the order listed, within designated intervals.

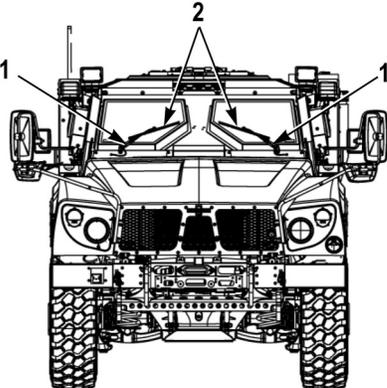
B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
1.					<p><b>MAKE THE FOLLOWING WALK AROUND CHECKS:</b></p> <p><b>CAPSULE AND HOOD EXTERIOR</b></p> <p><b>NOTE</b> Cracked mirrors can impair driver's vision.</p> <ul style="list-style-type: none"> <li>• a. Inspect side view mirrors (1) for damage and to ensure mirrors are securely attached.</li> <li>• b. Inspect auxiliary mirrors (2) for damage and to ensure mirrors are securely attached.</li> <li>• c. Check under vehicle for fuel, oil, transmission fluid, or coolant leakage.</li> <li>• d. Inspect capsule (3) and hood (4) for damage.</li> <li>• e. Check hood latches for damage (cracks, dry rot, separated rubber).</li> </ul>	<p>Any mirror that is missing, unusable or has cracks that impair driver's vision.</p> <p>Any mirror that is missing, unusable or has cracks that impair driver's vision.</p> <p>Any fuel leak or Class III oil or coolant leak.</p>
						

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
2.					<p><b>WINDSHIELD WIPER ARMS AND BLADES</b></p> <p>Check windshield wiper arms (1) and blades (2) for damage or wear.</p> <div style="text-align: center;">  </div>	Windshield wiper arms cracked or missing. Blades worn, cracked or torn.

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

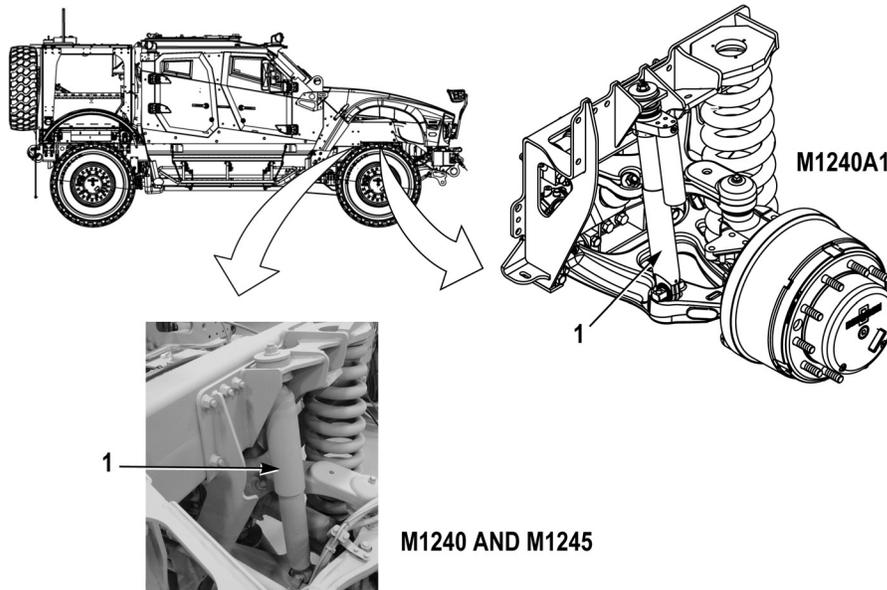
Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
3.					<p><b>WINDSHIELD AND DOORS</b></p> <p style="text-align: center;"><b><u>WARNING</u></b></p> <p>Ballistic glass may become very hot when exposed to sun or when in a hot environment. Avoid contacting hot ballistic glass with hands or skin. Failure to comply may result in injury to personnel.</p> <p style="text-align: center;"><b><u>CAUTION</u></b></p> <ul style="list-style-type: none"> <li>• Do not use cool water when cleaning hot ballistic glass. Putting cool water on hot ballistic glass may cause window to crack or delaminate. Failure to comply may result in damage to equipment.</li> <li>• Ballistic glass must only be cleaned with a lint-free cloth and a mild solution of warm water and soap. Failure to comply may result in damage to equipment.</li> </ul> <ul style="list-style-type: none"> <li>• a. Check for broken, scratched, or cracked ballistic glass on windshield (1), front driver and passenger side windows (2), and rear driver and passenger side windows (3).</li> <li>• b. Check both front doors (4) and both rear doors (5) for damage.</li> <li>• c. Check latches (6) and shackles (7) (if equipped) on both front doors (4) and both rear doors (5) for damage and proper operation.</li> <li>• d. Check combat locks (8) for proper operation.</li> </ul>	<p>Ballistic glass cracked or broken. Poor visibility due to scratches.</p> <p>Hinges not functional.</p> <p>Latch not operable or door binds.</p>

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

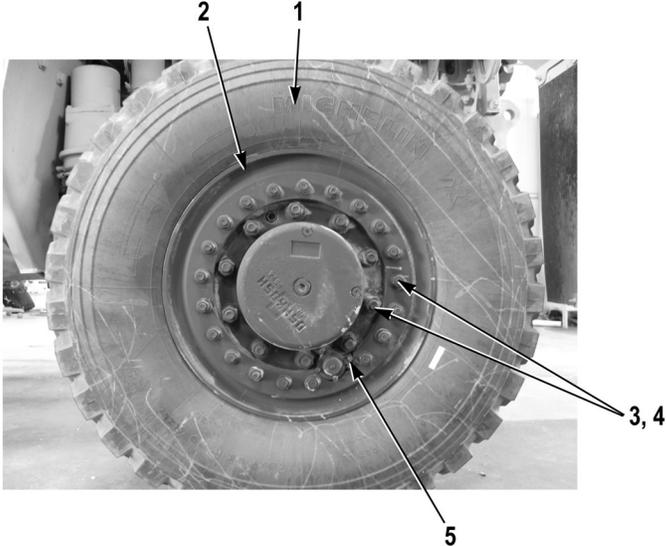
Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
4.					<p><b>SHOCK ABSORBERS</b></p> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>Lower shock bearing wear is normal and does not impair vehicle operation.</li> <li>Shock absorbers may have a thin film of oil on the outer surface due to a normal condition known as "misting." Misting is not considered a leak and will not be evident as a stream of fluid.</li> </ul> <p>Check shock absorbers (1) for leaks and damage.</p>	<p>Leak or damage to shock absorbers that impairs vehicle operation.</p>



**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

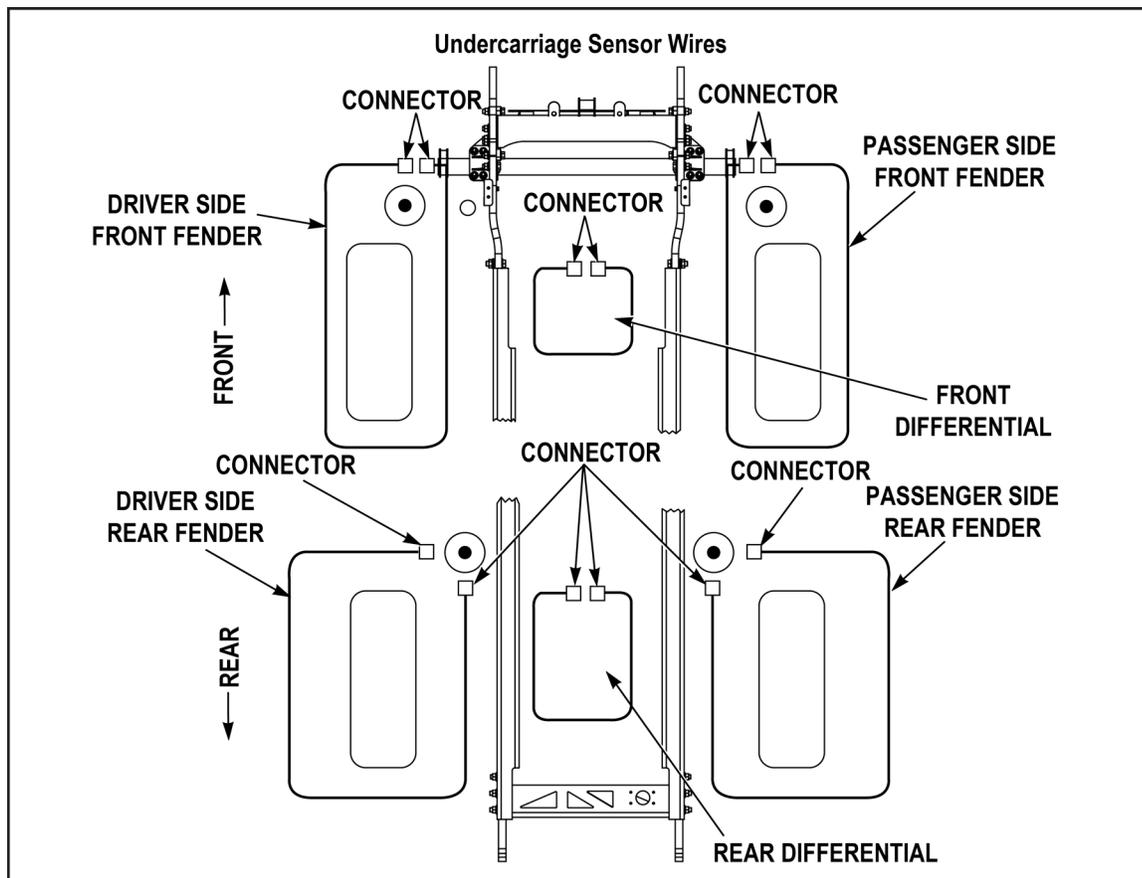
Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
5.					<p><b>TIRES</b></p> <ul style="list-style-type: none"> <li>a. Check tires (1) for cuts, gouges, cracks, leaks, or other damage.</li> <li>b. Check wheels (2) for broken, cracked, or bent surfaces.</li> <li>c. Check wheel nuts (3) and wheel studs (4) for obvious looseness or damage.</li> <li>d. Check that valve caps (5) are securely tightened.</li> </ul>	<p>Any tire has wear or damage that allows ply or belt material to be exposed through the tread or sidewall. Any tire has tread or sidewall separation. Any tire that has an audible leak.</p> <p>Wheel is broken, cracked, or bent.</p> <p>One or more wheel nuts and/or wheel studs are missing, loose, or damaged.</p>
						

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
6.					<p><b>UNDERCARRIAGE FIRE SUPPRESSION SYSTEM (VEHICLES EQUIPPED WITH SENSOR WIRES)</b></p> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>For vehicles equipped with nitrogen detection lines go to Item 7.</li> <li>Location of undercarriage sensor wires are shown in undercarriage sensor wires chart.</li> </ul> <p>a. Check undercarriage fire suppression system detection wires for damage.</p>	Wires kinked or damaged.



**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
6.					<p><b>UNDERCARRIAGE FIRE SUPPRESSION SYSTEM (VEHICLES EQUIPPED WITH SENSOR WIRES) (Continued)</b></p> <p style="text-align: center;"><b>NOTE</b></p> <p>Inspection mirror and flashlight may be required to check date stamp on top of cylinders.</p> <ul style="list-style-type: none"> <li>• b. Check fire suppression cylinder gauge (1) for proper charge and four digit date stamp (2) on top of cylinder (3).</li> <li>• c. Check fire suppression cylinders (3) for damage.</li> <li>• d. Check fire suppression system hoses (4) for kinks or damage.</li> </ul>	<p>Gauges read below green or date stamp is more than five years old.</p> <p>Cylinder(s) is damaged.</p> <p>Hoses kinked or damaged.</p>

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

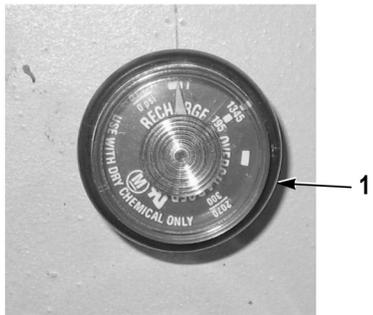
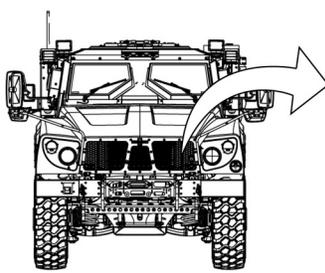
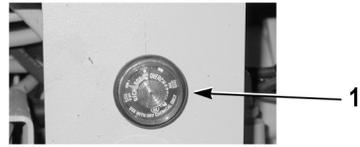
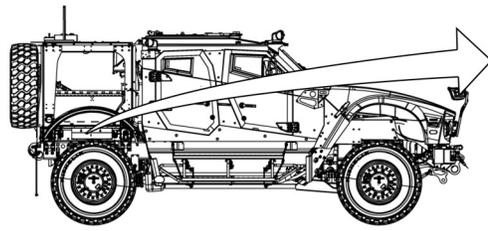
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6.					<p><b>UNDERCARRIAGE FIRE SUPPRESSION SYSTEM (VEHICLES EQUIPPED WITH SENSOR WIRES) (Continued)</b></p> <ul style="list-style-type: none"> <li>• e. Check for missing fire suppression nozzle protection caps (5) and proper installation.</li> <li>• f. Check wire harness (6) to control switch for proper connection and damage.</li> <li>• g. Ensure that control switch safety cover (7) is secured with wire.</li> <li>• h. Turn battery disconnect switch to ON (WP 0007).</li> <li>• i. Turn ignition switch to ON position (WP 0007) (engine OFF).</li> <li>• j. Check that two fire suppression system LED's (8) are green.</li> <li>• k. Turn ignition switch to OFF position (WP 0007).</li> </ul>	<p>Nozzle protection caps missing.</p> <p>Missing or broken wire.</p> <p>Either LED is not green.</p>

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
7.					<p><b>UNDERCARRIAGE FIRE SUPPRESSION SYSTEM (VEHICLES EQUIPPED WITH NITROGEN LINES)</b></p> <p>a. Check undercarriage fire suppression system detector tube pressure gauges (1) for proper pressure (indicator in green range of dial).</p>	Indicator is not in green range of dial.

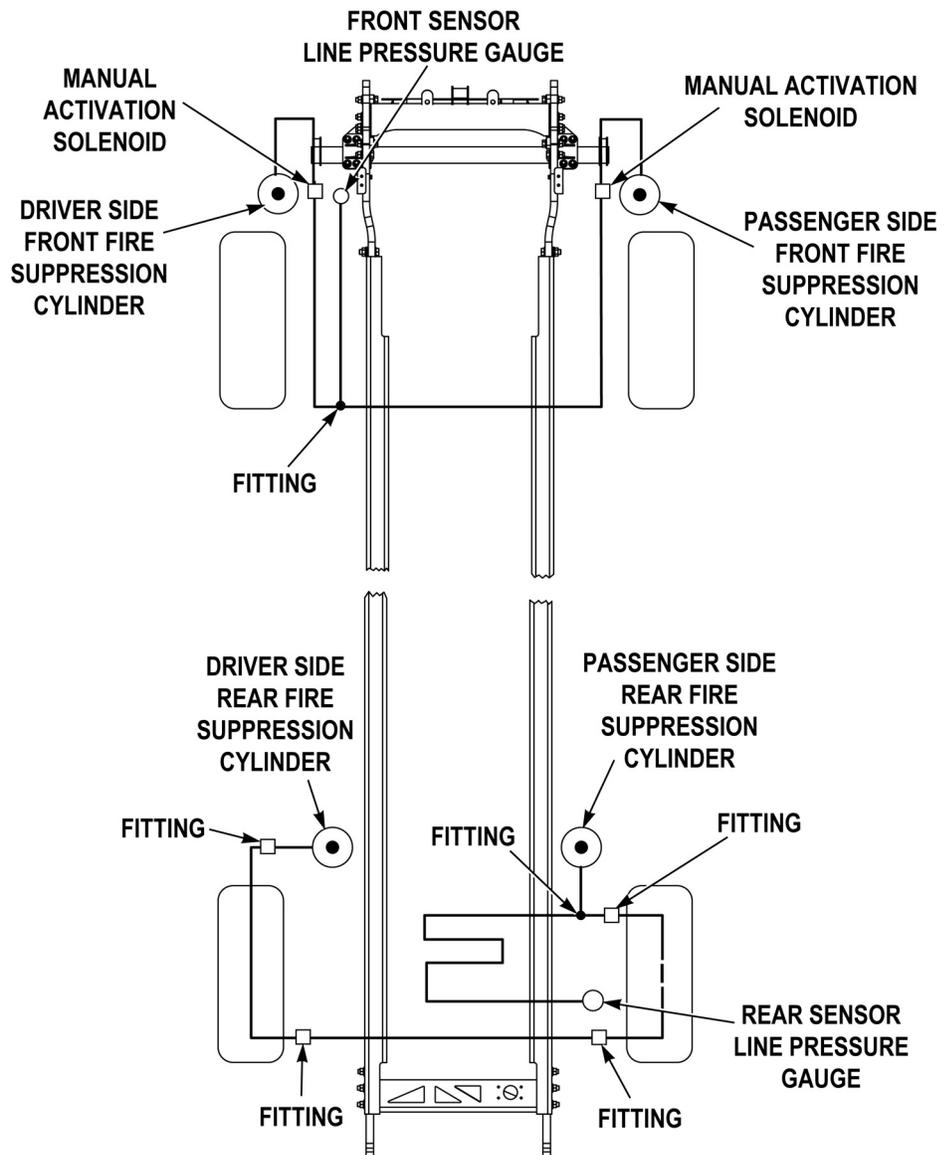


**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

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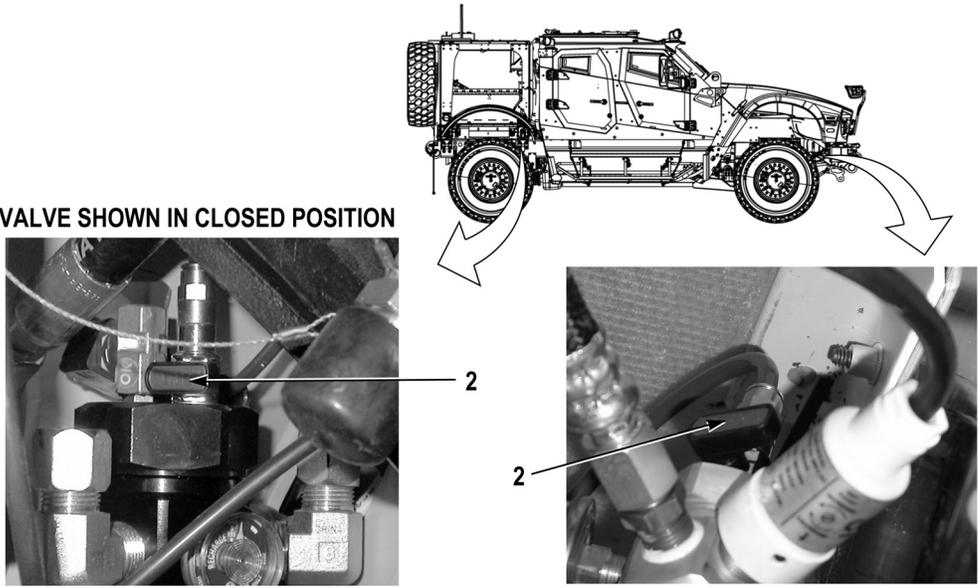
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7.					<p><b>UNDERCARRIAGE FIRE SUPPRESSION SYSTEM (VEHICLES EQUIPPED WITH NITROGEN LINES)</b> <b>(Continued)</b></p> <p>b. Check undercarriage fire suppression system detector lines for kinks or damage.</p>	Lines kinked or damaged.



**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
7.					<p><b>UNDERCARRIAGE FIRE SUPPRESSION SYSTEM (VEHICLES EQUIPPED WITH NITROGEN LINES) (Continued)</b></p> <p>c. Check that undercarriage fire suppression system cylinder ball valves (2) are in open position.</p>	<p>If valves are in closed position notify Field Maintenance.</p>
					<p><b>VALVE SHOWN IN CLOSED POSITION</b></p> 	

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

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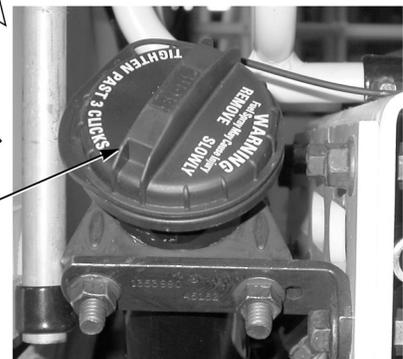
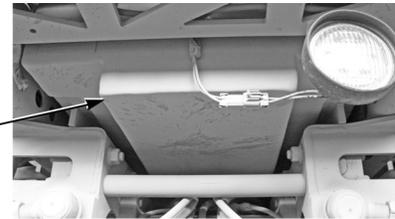
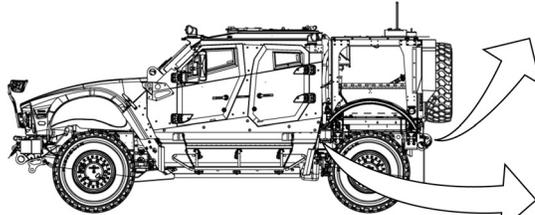
Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
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7.					<p><b>UNDERCARRIAGE FIRE SUPPRESSION SYSTEM (VEHICLES EQUIPPED WITH NITROGEN LINES) (Continued)</b></p> <ul style="list-style-type: none"> <li>• d. Check for missing fire suppression nozzle protection caps (3) and proper installation.</li> <li>• e. Check wire harness (4) to control switch for proper connection and damage.</li> <li>• f. Ensure that control switch safety cover (5) is secured with wire.</li> <li>• g. Check that two fire suppression system LED's (6) are green.</li> </ul>	<p>Nozzle protection cap missing.</p> <p>Missing or broken wire.</p> <p>Either LED is not green.</p>

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

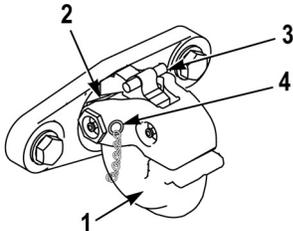
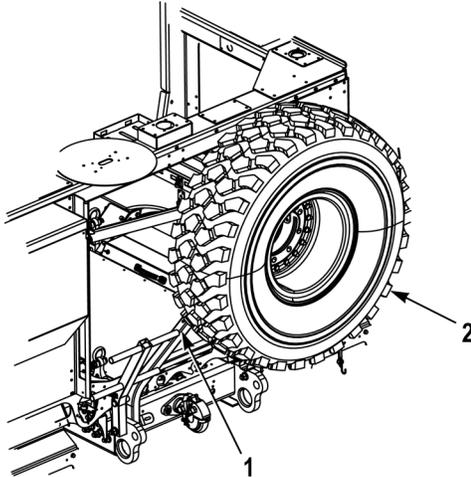
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	B	D	A	M		
8.					<p><b>FUEL TANK</b></p> <p style="text-align: center;"><b><u>WARNING</u></b></p> <p>Do not perform fuel system checks while smoking or near flames, fire, or sparks. Fuel could ignite, causing damage to vehicle, severe injury, or death to personnel.</p> <p style="text-align: center;"><b><u>CAUTION</u></b></p> <p>Do not overfill fuel tank or fuel spillage will occur. Failure to comply may cause damage to equipment.</p> <ul style="list-style-type: none"> <li>• a. Ensure fuel cap (1) is securely tightened.</li> <li>• b. Check fuel tank (2) and undercarriage for evidence of leaks.</li> <li>• c. Check fuel hoses and connections for leaks and damage.</li> </ul>	<p>Fuel cap is missing.</p> <p>Any fuel leak.</p> <p>Any leakage or loose connections.</p>



**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

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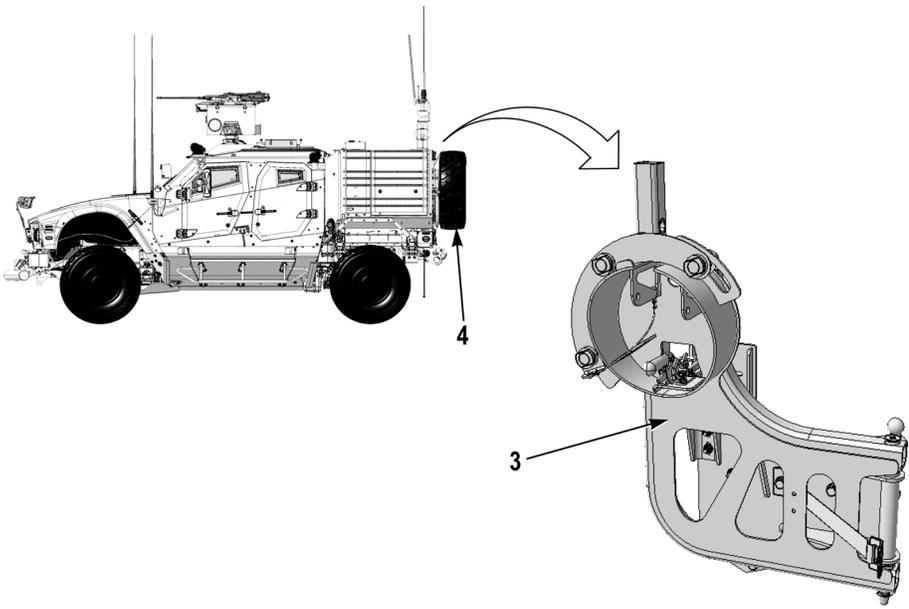
B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
9.					<p><b>PINTLE HOOK</b></p> <ul style="list-style-type: none"> <li>a. Check pintle hook (1) for secure mounting and proper operation. Ensure safety latch (2) engages hook lock (3).</li> <li>b. Ensure safety pin (4) is secured and functional.</li> <li>c. Lubricate pintle hook (1) after each use (WP 0068).</li> </ul> 	Pintle hook is unserviceable.
10.					<p><b>TIRE CARRIER ASSEMBLY</b></p> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>• Perform checks (a) and (b) for M1240 and M1240A1.</li> <li>• Perform checks (c) and (d) for M1245.</li> </ul> <ul style="list-style-type: none"> <li>a. Check spare tire carrier assembly (1) for loose or missing hardware.</li> <li>b. Check spare tire carrier assembly (1) for corrosion, cracks, and secure tire (2) attachment.</li> </ul> 	

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
10.					<p><b>TIRE CARRIER ASSEMBLY (Continued)</b></p> <ul style="list-style-type: none"> <li>• c. Check spare tire carrier assembly (3) for loose or missing hardware.</li> <li>• d. Check spare tire carrier assembly (3) for corrosion, cracks, and secure tire (4) attachment.</li> </ul>	
						

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

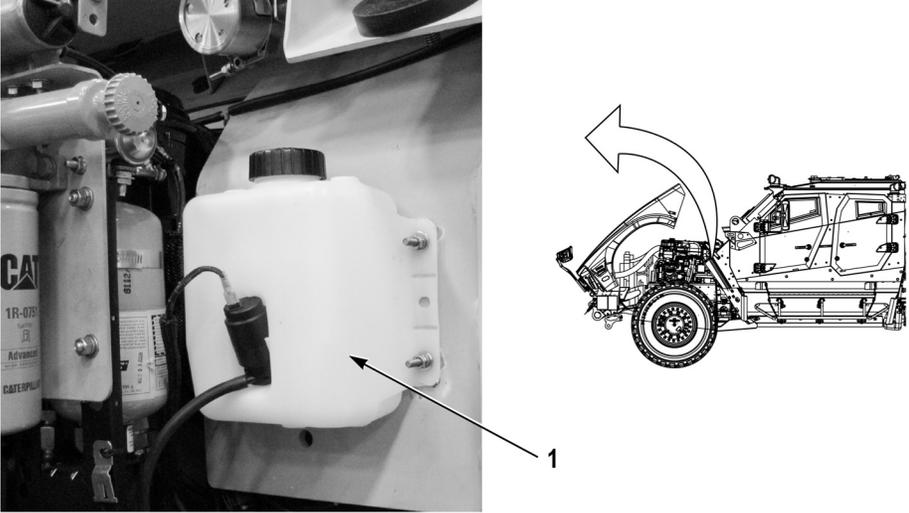
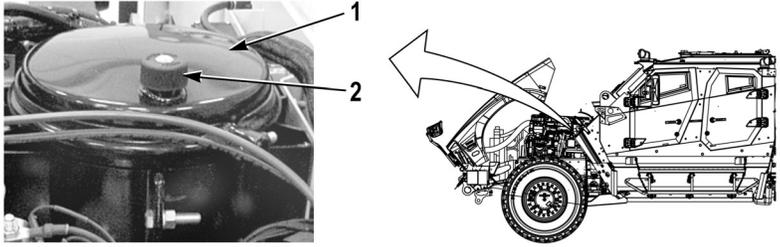
B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
11.					<p><b>FRONT AND REAR GLADHANDS</b></p> <ul style="list-style-type: none"> <li>• a. Check front and rear gladhands (1) and air lines for damage or obstruction.</li> <li>• b. Inspect front and rear gladhands (1) for missing or rotted seals (rubber grommet).</li> <li>• c. Check lanyards (2) on both front gladhands for damage and serviceability.</li> </ul>	<p>Air line is damaged or obstructed.</p> <p>Seal missing or rotted.</p> <p>Any air leak.</p>

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
12.					<p><b>WINDSHIELD WASHER FLUID BOTTLE</b></p> <p>Check to ensure there is fluid in windshield washer bottle (1) and that there is no damage to bottle or hoses. Add windshield washer fluid as necessary.</p> 	Any Class III leak.
13.					<p><b>HYDRAULIC STEERING SYSTEM</b></p> <p>a. Check hydraulic steering reservoir (1) for damage or leaks.</p> <p style="text-align: center;"><b>NOTE</b></p> <p style="text-align: center;">When checking steering hydraulic oil level, the oil temperature should be at outside air temperature.</p> <p>b. Check hydraulic steering reservoir (1) and ensure steering oil level is between ADD and FULL marks on dipstick (2). Add fluid as required (WP 0068).</p> 	Any Class III leak.  Oil level not between add and full marks. Any Class III leak.

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
13.					<p><b>HYDRAULIC STEERING SYSTEM (Continued)</b></p> <p><b>NOTE</b></p> <p>Refer to steering hose chart for location of steering hoses and fittings.</p> <ul style="list-style-type: none"> <li>c. Check hydraulic steering hoses and fittings for damage, leakage, or looseness.</li> </ul>	Any Class III leak.

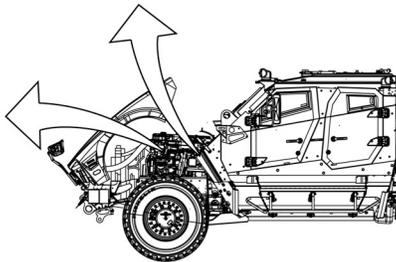
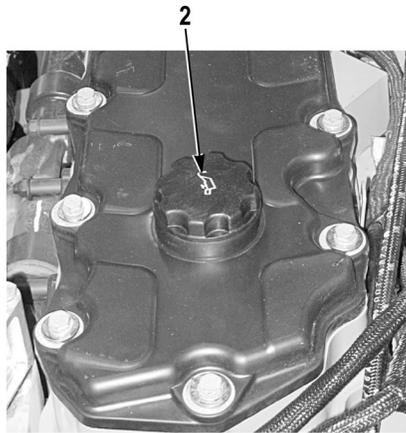
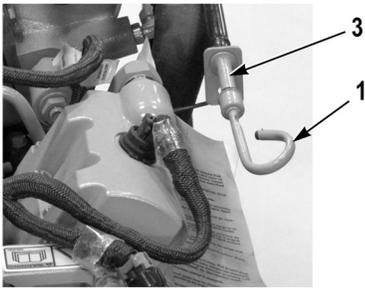
Hose Number	From	To
<b>Steering Hoses</b>		
2278	HYDRAULIC RESERVOIR FITTING (3)	HYDRAULIC PUMP FITTING (4)
2701	HYDRAULIC RESERVOIR FITTING (5)	HYDRAULIC PUMP FITTING (6)
2883	HYDRAULIC RESERVOIR FITTING (7)	HYDRAULIC PUMP FITTING (8)
2393	HYDRAULIC RESERVOIR FITTING (9)	HYDRAULIC PUMP FITTING (10)
2878	HYDRAULIC RESERVOIR FITTING (11)	HYDRAULIC PUMP FITTING (12)
2879	HYDRAULIC RESERVOIR FITTING (13)	HYDRAULIC PUMP FITTING (14)
2877	HYDRAULIC RESERVOIR FITTING (15)	HYDRAULIC PUMP FITTING (16)

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
14.					<p><b>ENGINE OIL</b></p> <p style="text-align: center;"><b><u>CAUTION</u></b></p> <p>If engine oil needs to be drained, contact Field Maintenance. Failure to comply may result in damage to equipment.</p> <p style="text-align: center;"><b>NOTE</b></p> <p>If engine has been running, wait approximately 20 minutes after engine shutdown before checking engine oil.</p> <ul style="list-style-type: none"> <li>• a. Check engine oil on dipstick (1). Oil should be between the ADD and FULL mark. Add oil as required (WP 0068).</li> <li>• b. Ensure dipstick (1) and fill cap (2) are properly installed.</li> <li>• c. Check dipstick tube assembly (3) and oil fill cap (2) for damage or leakage.</li> </ul>	Oil level is too high or too low. Any Class III leak.

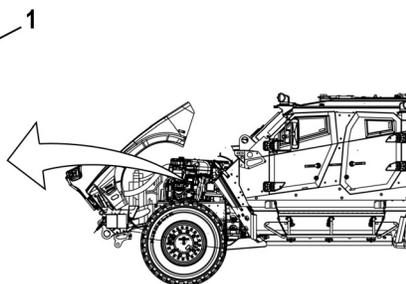


**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
15.					<p><b>ETHER START SYSTEM</b></p> <p style="text-align: center;"><b><u>WARNING</u></b></p> <ul style="list-style-type: none"> <li>• Use care when working around ether canister as ether canister is pressurized and is flammable. Failure to comply may result in injury or death to personnel.</li> <li>• Canisters are considered hazardous material and must be handled with care and disposed of in accordance with current directives. Failure to comply may result in injury or death to personnel.</li> <li>• Ether canister contains diethyl ether with carbon dioxide as a propellant. Keep away from heat and flame. NEVER smoke near contents. Do not incinerate or puncture container. Do not store at temperatures above 120°F (49°C). Avoid contact with skin and eyes. Avoid breathing of fumes. Do not store spare containers in capsule. If swallowed, do not induce vomiting. Contact physician immediately. Failure to comply may result in injury or death to personnel.</li> <li>• Inspect ether canister (1) for punctures or obvious damage.</li> </ul>	



**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

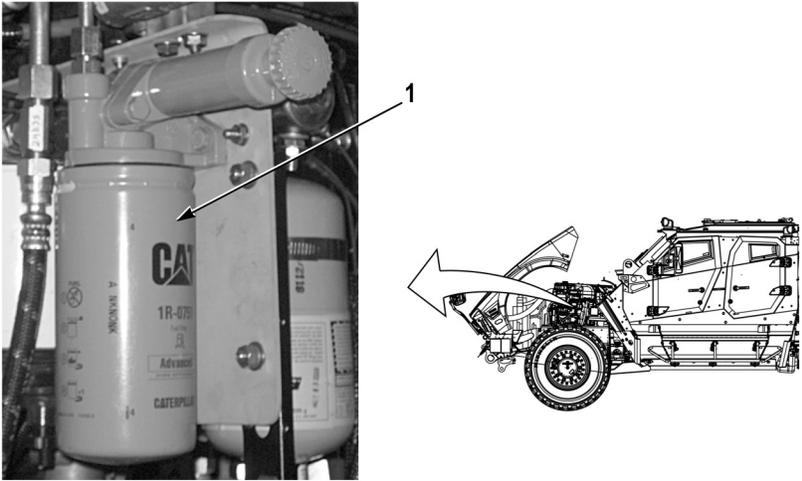
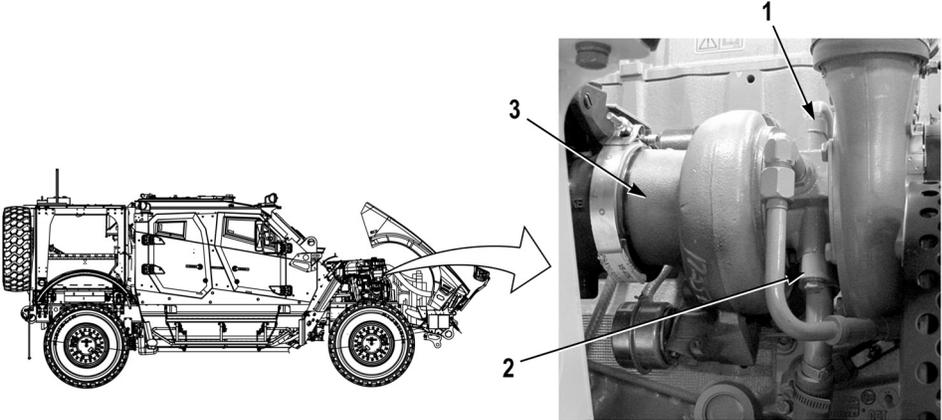
B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
16.					<p><b>FUEL/WATER SEPARATOR</b></p> <p><b><u>WARNING</u></b></p> <p>Fuel is flammable and can explode. Keep fuel away from open flame and keep fire extinguisher within easy reach when working with fuel. Do not work on fuel system when engine is hot. Fuel can be ignited by hot engine. Smoking is prohibited while working with fuel. Failure to comply may result in injury or death to personnel.</p> <p><b>NOTE</b></p> <p>Refer to local procedures and plans for the use, storage or disposal of drained fluids.</p> <ul style="list-style-type: none"> <li>• a. Check sediment bowl (1) for water. If water is present, drain fuel from bowl into suitable container until clean fuel flows out. To drain fuel from sediment bowl, open drain valve (2) until water and contaminated fuel are allowed to drain from sediment bowl. Close drain valve (2) once all water and contaminated fuel is drained from sediment bowl.</li> <li>• b. Check fuel water separator (3) for leaks, damage, or loose connections.</li> </ul>	Any fuel leak.

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
17.					<p><b>FUEL FILTER AND LINES</b></p> <ul style="list-style-type: none"> <li>• Check fuel filter (1) for damage or leaks.</li> </ul>	Any fuel leak.
						
18.					<p><b>TURBOCHARGER</b></p> <ul style="list-style-type: none"> <li>• a. Check turbocharger oil supply line (1) and the drain line (2) for damage or signs of leakage.</li> <li>• b. Inspect mounting screws and clamps on turbocharger (3) for looseness, damage, and exhaust leaks.</li> </ul>	Any Class III leak.
						

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
19.					<p><b>BATTERIES</b></p> <p style="text-align: center;"><b><u>WARNING</u></b></p> <ul style="list-style-type: none"> <li>• Do not smoke or use open flame near batteries. Batteries may explode from spark. Failure to comply may result in injury or death to personnel.</li> <li>• Lead-acid batteries contain sulfuric acid, which can cause severe burns. Avoid contact with skin, eyes, or clothing. Wear safety goggles and gloves. If battery electrolyte is spilled, take immediate action to stop its corrosive (burning) effects. If battery acid is spilled on clothing or vehicle, wash immediately with cold water. Neutralize with baking soda or household ammonia solution. If battery acid comes in contact with skin, flush with cold water to remove acid. If eyes are contacted, flush with cold water for at least 15 minutes. If swallowed, drink large amounts of water or milk, follow with milk of magnesia, beaten egg, or vegetable oil. Seek immediate medical attention.</li> <li>• Remove all jewelry, such as rings, dog tags, bracelets, etc. If jewelry contacts battery terminal or positive electrical circuit, a direct short may result in instant heating of tools, injury or death to personnel, or damage to equipment.</li> <li>• To prevent arcing, do not allow tools to contact batteries or other battery terminals. Failure to comply may result in injury or death to personnel.</li> </ul> <p style="text-align: center;"><b>NOTE</b></p> <ul style="list-style-type: none"> <li>• Prior to performing battery PMCS, ensure battery disconnect switch is OFF (WP 0007). Turn battery disconnect switch to ON when battery PMCS is completed.</li> <li>• Batteries are located in cargo deck over rear wheel wells along side cargo deck. Two on driver side and two on passenger side.</li> <li>• Perform check (a) for M1240/M1240A1.</li> <li>• Perform check (b) for M1245.</li> </ul> <p>a. Open battery covers (M1240/M1240A1) (WP 0062).</p>	

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

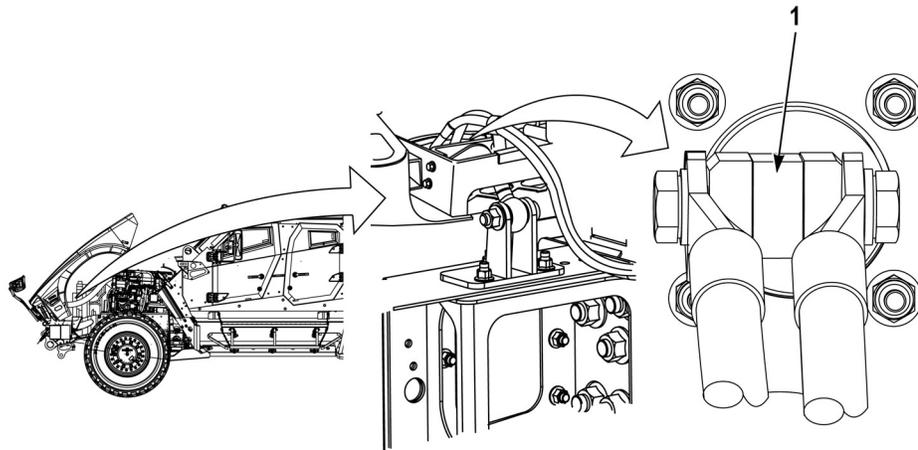
Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
19.					<p><b>BATTERIES (Continued)</b></p> <ul style="list-style-type: none"> <li>• b. Notify Field Maintenance to open battery covers for M1245.</li> <li>• c. Inspect for any missing or damaged batteries (1).</li> <li>• d. Inspect all batteries (1) for cracks or leaking casing.</li> <li>• e. Inspect terminal posts (2), cables and connections (3) for secure attachment, damage and evidence of burning.</li> <li>• f. Check battery posts (2) and terminals (3) for corrosion.</li> <li>• g. Inspect battery isolator (4) for cracks and damage as well as loose, broken, corroded, or burned terminals (5), cables, and connections (3).</li> <li>• h. Inspect battery hold down (6) for proper installation, security, and missing hardware.</li> </ul>	<p>Battery is missing or damaged.</p> <p>Battery is damaged or leaking.</p> <p>Terminals or cables are broken, burned or loose.</p> <p>Battery posts or terminals are corroded.</p> <p>Battery hold down is not installed, secured, or is missing hardware.</p>

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

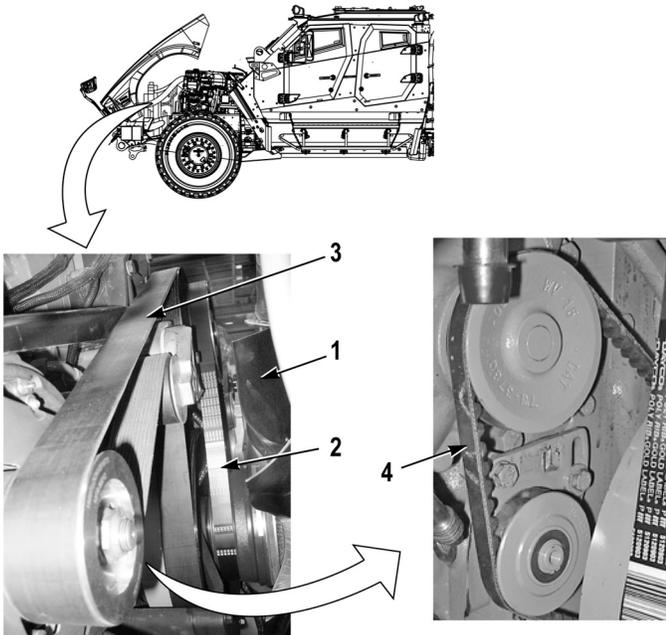
Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
20.					<p><b>NATO SLAVE</b></p> <p style="text-align: center;"><b><u>WARNING</u></b></p> <p>Use extreme care not to short out slave receptacle terminals. Remove all jewelry such as rings, ID tags, bracelets, etc. prior to working on or around slave receptacle. Jewelry and tools can catch on equipment, contact positive electrical circuits, and cause severe burns or electrical shock. Failure to comply may result in injury or death to personnel.</p> <ul style="list-style-type: none"> <li>• Inspect slave receptacle (1) for loose cables, damage, or missing cover.</li> </ul>	



**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
21.					<p><b>COOLING FAN AND BELTS</b></p> <p><b><u>WARNING</u></b></p> <p>Keep hands and clothing clear of moving parts in engine compartment. Rotating parts can cause severe injury to personnel. Ensure that all guards are in place and do not wear loose clothing when conducting maintenance. Always check to ensure that area is clear of personnel and obstructions before starting engine. Failure to comply may result in injury to personnel.</p> <ul style="list-style-type: none"> <li>• a. Check cooling fan (1) for looseness or damage.</li> <li>• b. Check air conditioner belt (2), alternator belt (3), and water pump belt (4) for cracking, fraying, or other damage.</li> <li>• c. Check air conditioner belt (2), alternator belt (3), and water pump belt (4) for proper tension. Belt has proper tension when belt can be depressed approximately 1/2 in. (1.3 cm) by normal pressure (10 to 15 lbs. [4.5 to 6.8 kg]).</li> </ul>	<p>Loose or damaged fan.</p> <p>Any damage that would prevent the fan belt or alternator belt from driving the cooling fan.</p> <p>Any belt that is broken or cracked to the belt fiber, has more than one crack (1/8 in. (3.2 mm) in depth or 50% of belt thickness) or has frays more than 2 in. (51 mm) long. Any belt is loose.</p>
						

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

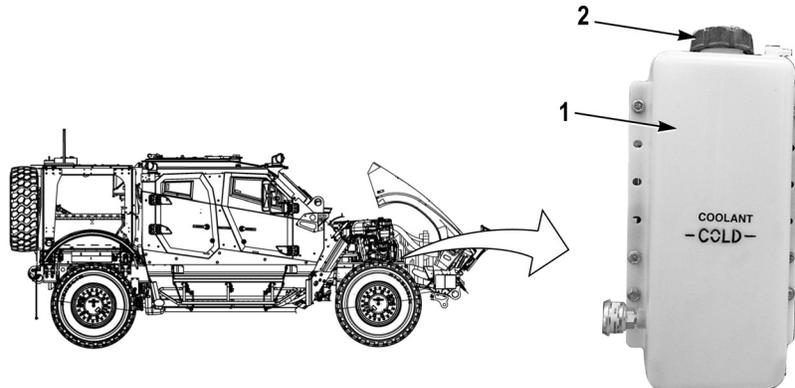
Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
22.					<p><b>RADIATOR AND COOLANT LINES</b></p> <p><b><u>WARNING</u></b></p> <p>Engine cooling system is hot and pressurized. Do not remove radiator cap while engine is hot; steam and hot coolant can escape and burn personnel. Allow the system to cool and remove cap slowly to relieve pressure. Failure to comply may result in serious injury or death to personnel.</p> <p><b><u>CAUTION</u></b></p> <p>Use extreme care when cleaning radiator fins, charge air cooler fins, and A/C condenser fins to prevent damage to equipment.</p> <ul style="list-style-type: none"> <li>• • a. Check radiator (1) for damage and leaks. Check charge air cooler fins (2) for obstructions and clear obstructions as required.</li> <li>• • b. Check A/C condenser fins (3) for obstructions and clear obstructions as required.</li> <li>• • c. Check coolant hoses for leaks, cuts, loose hose clamps, and other obvious damage.</li> <li>• d. Check air conditioning compressor housing (4) for obvious damage.</li> <li>• e. Check air conditioning hoses for leaks, cuts, and other obvious damage.</li> </ul>	<p>Any Class III leak.</p> <p>Any Class III leak.</p>

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
23.					<p><b>COOLANT OVERFLOW TANK AND COOLANT LEVEL (FOR VEHICLES EQUIPPED WITH COOLANT OVERFLOW TANK)</b></p> <p style="text-align: center;"><b><u>WARNING</u></b></p> <ul style="list-style-type: none"> <li>• Engine cooling system is hot and pressurized. Do not remove radiator cap while engine is hot; steam and hot coolant can escape and burn personnel. Allow the system to cool and remove cap slowly to relieve pressure. Failure to comply may result in serious injury or death to personnel.</li> <li>• Cooling system components become pressurized and extremely hot during normal operation. Use extreme care when working around hot components. Failure to comply may result in injury or death to personnel.</li> </ul> <ul style="list-style-type: none"> <li>• a. Check coolant overflow tank (1) and cap (2) for damage or leakage.</li> <li>• b. Check coolant level in coolant overflow tank (1) to ensure it is above the COLD mark. If coolant is low, add coolant to bring it up above the COLD mark.</li> </ul>	Any Class III leak.



**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

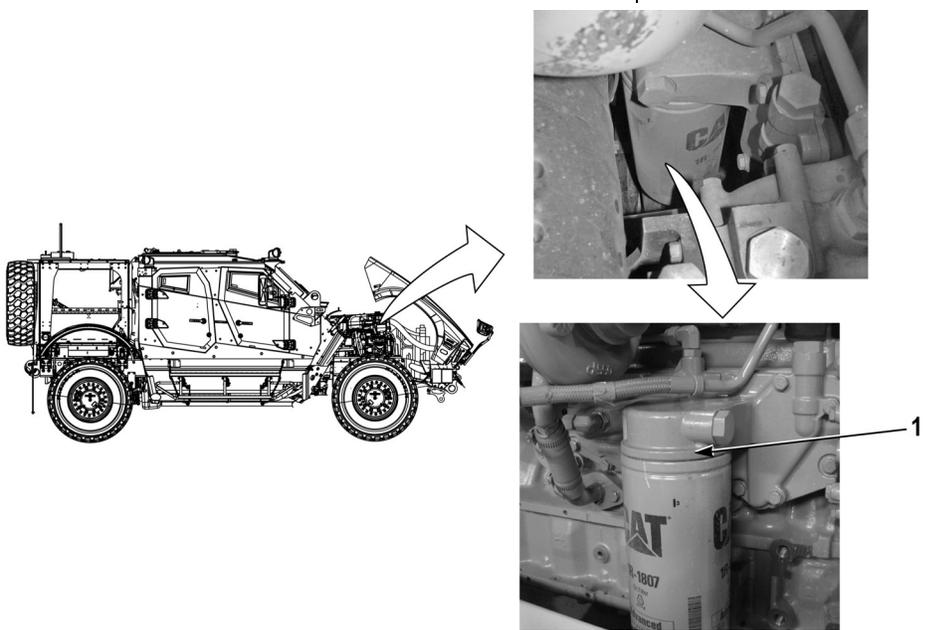
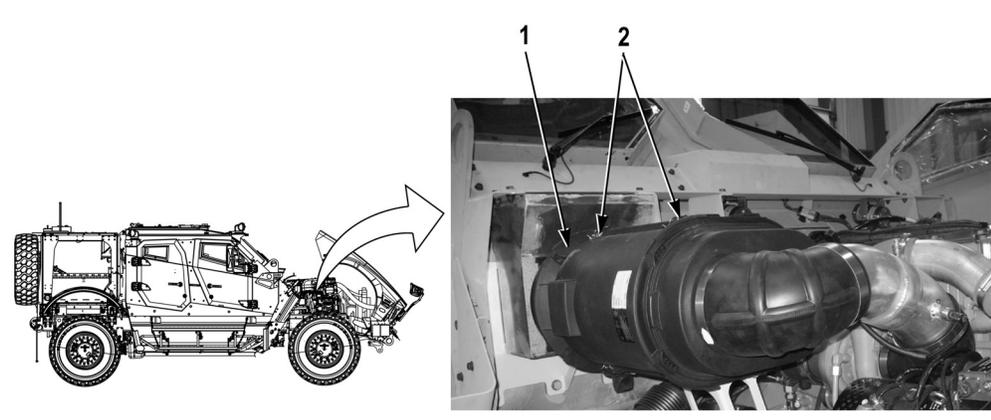
B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
24.					<p><b>COOLANT SURGE TANK AND COOLANT LEVEL (FOR VEHICLES EQUIPPED WITH COOLANT SURGE TANK)</b></p> <p style="text-align: center;"><b><u>WARNING</u></b></p> <ul style="list-style-type: none"> <li>• Engine cooling system is hot and pressurized. Do not remove radiator cap while engine is hot; steam and hot coolant can escape and burn personnel. Allow the system to cool and remove cap slowly to relieve pressure. Failure to comply may result in serious injury or death to personnel.</li> <li>• Cooling system components become pressurized and extremely hot during normal operation. Use extreme care when working around hot components. Failure to comply may result in injury or death to personnel.</li> </ul> <ul style="list-style-type: none"> <li>• a. Check coolant surge tank (1) and cap (2) for damage or leakage.</li> <li>• b. Check coolant level in coolant surge tank (1) to ensure it is visible in sight glass (3). If coolant is low, add coolant until visible in sight glass (3).</li> </ul>	Any Class III leak.
<p>The image consists of three parts: a line drawing of a vehicle with an arrow pointing to the engine compartment, a photograph of the engine compartment with arrows pointing to the coolant surge tank (1) and its cap (2), and a close-up photograph of the cap (2) with an arrow pointing to the sight glass (3).</p>						

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

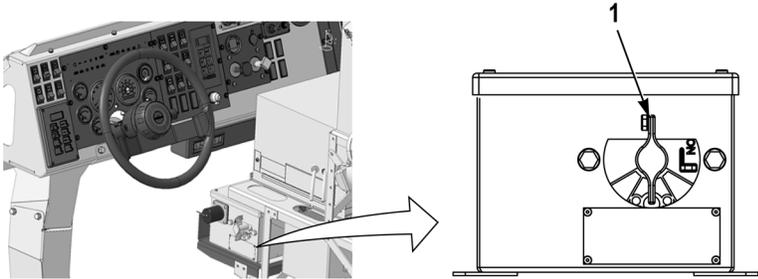
B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
25.					<p><b>OIL FILTER</b></p> <p>Check engine oil filter (1) for leaks or damage.</p> 	Any Class III leak.
26.					<p><b>AIR INTAKE SYSTEM</b></p> <ul style="list-style-type: none"> <li>a. Check air intake system for loose clamps and punctured or damaged hoses or tubes.</li> <li>b. Check air cleaner housing (1) for loose clips (2) and damage. Secure clips as required.</li> <li>c. Check rest of engine compartment for serviceability and looseness of tubes, hoses, wires, nuts, and bolts.</li> </ul> 	<p>Any damage that would allow unfiltered air to enter engine.</p> <p>Any damage that would allow unfiltered air to enter engine.</p>

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
27.					<p><b>ENGINE COMPARTMENT FIRE SUPPRESSION SYSTEM</b></p> <p><b><u>WARNING</u></b></p> <ul style="list-style-type: none"> <li>• Ensure vehicle battery disconnect switch is OFF before inspecting engine compartment fire suppression system. Failure to comply may result in injury or death to personnel.</li> <li>• Do not smoke or have open flame inside engine compartment, as fire suppression system may activate. Failure to comply may result in injury to personnel.</li> </ul> <p>a. Turn vehicle battery disconnect switch (1) to OFF (WP 0007).</p> <div style="text-align: center;">  </div> <p><b>NOTE</b></p> <p>Vehicles will be equipped with either four or five aerosol generators.</p> <p>b. Check aerosol generators (2) for damage, discharged condition, and date stamp.</p> <div style="text-align: center;">  </div>	<p>Aerosol generators are damaged, discharged, or date stamp is more than ten years old.</p>

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
27.					<p><b>ENGINE COMPARTMENT FIRE SUPPRESSION SYSTEM (Continued)</b></p> <p style="text-align: center;"><b><u>WARNING</u></b></p> <p><b>Blue transportation caps must be removed from aerosol generators prior to vehicle operation. Failure to comply may result in injury or death to personnel.</b></p> <p style="text-align: center;"><b>NOTE</b></p> <ul style="list-style-type: none"> <li>• Perform checks (c) and (d) for vehicles equipped with five aerosol generators and sensor wire detection.</li> <li>• Perform checks (e) and (f) for vehicles with four aerosol generators and thermal sensor detection.</li> </ul> <p>c. Check blue transportation caps (3) are removed from five aerosol generators (2).</p> <p>d. Check sensor line (4) for damage, dirt, or grease.</p>	<p>Blue transportation caps are present.</p> <p>Sensor line is damaged.</p>

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
27.					<p><b>ENGINE COMPARTMENT FIRE SUPPRESSION SYSTEM (Continued)</b></p> <ul style="list-style-type: none"> <li>• e. Check blue transportation caps (3) are removed from four aerosol generators (2).</li> <li>• f. Check thermal sensors (5) for damage, dirt, dust, or grease. Clean sensors, as required.</li> </ul>	<p>Blue transportation caps are present.</p> <p>Thermal sensors are damaged.</p>
					<div style="text-align: center;"> </div> <ul style="list-style-type: none"> <li>• g. Turn vehicle battery disconnect switch (1) to ON (WP 0007).</li> </ul>	

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
27.					<p><b>ENGINE COMPARTMENT FIRE SUPPRESSION SYSTEM (Continued)</b></p> <ul style="list-style-type: none"> <li>• h. Turn vehicle start switch to ON (engine OFF) (WP 0007) and check the LEDs (6 and 7) on engine fire suppression system control panel (8) in capsule interior for illumination.</li> <li>• i. Ensure toggle switch safety cover (9) is secured with wire.</li> </ul>	<p>If green system OK LED (5) is not illuminated or SERVICE SYSTEM LED (6) is flashing.</p> <p>Safety wire is missing.</p>

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
28.					<p><b>CAPSULE INTERIOR FIRE SUPPRESSION SYSTEM</b></p> <p><b><u>WARNING</u></b></p> <p>Capsule interior fire suppression system uses optical fire detectors. Do not smoke or have open flame inside the capsule, as fire suppression system may activate. Failure to comply may result in injury to personnel.</p> <ul style="list-style-type: none"> <li>• a. Verify optical sensors (1) are not damaged, are in position, clear of dirt and dust and not obstructed.</li> <li>• b. Ensure both self-test LED's (2) are flashing.</li> <li>• c. Turn vehicle battery disconnect switch (3) to ON position (WP 0007).</li> </ul> <p><b>NOTE</b></p> <p>Wait 15 seconds after turning vehicle start switch to ON before checking POWER LED for illumination.</p> <ul style="list-style-type: none"> <li>• d. Turn vehicle start switch to ON (engine OFF) (WP 0007) and check capsule interior fire suppression system control panel (4) POWER LED (5) for solid illumination.</li> <li>• e. Check capsule interior fire suppression system control panel (4) FAULT LED (6) for fault indication.</li> </ul>	<p>Sensors are damaged or out of position/missing.</p> <p>POWER LED is red, flashing, or not illuminated.</p> <p>FAULT LED flashes.</p>

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

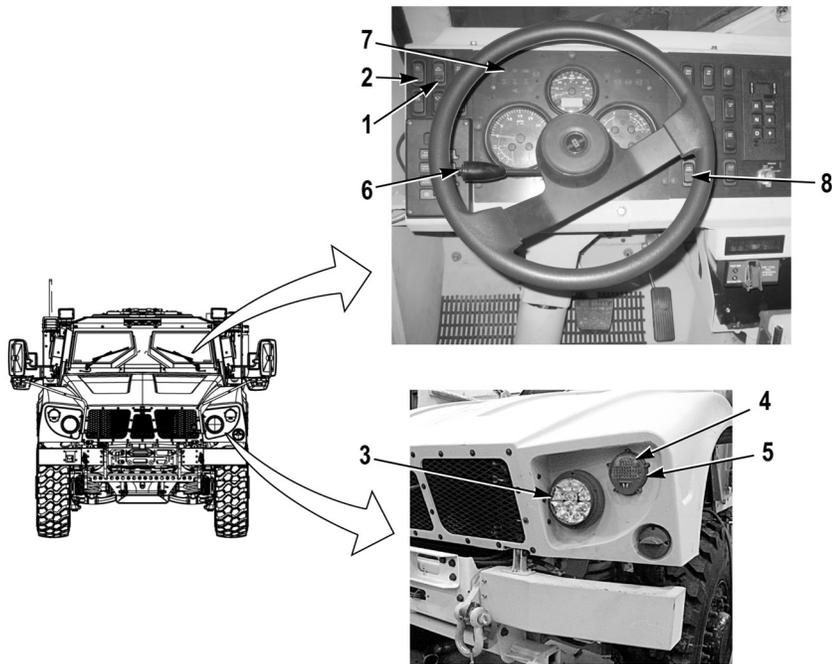
Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
28.					<p><b>CAPSULE INTERIOR FIRE SUPPRESSION SYSTEM (Continued)</b></p> <p style="text-align: center;"><b>NOTE</b></p> <ul style="list-style-type: none"> <li>• Inspection mirror and flashlight may be required to check pressure gauge.</li> <li>• Pressure gauge must be checked when capsule temperature is above 0°F (-17.8°C). If capsule temperature is below 0°F (-17.8°C), utilize HVAC to heat vehicle to the minimum inspection criteria (WP 0007).</li> </ul> <p>f. Check pressure gauge (7) on extinguisher cylinder (8) for indicator needle positioning, discharged condition, and check extinguisher cylinder (8) for damage and date stamp (9).</p>	<p>Gauge indicator is not in green range of gauge, extinguisher cylinder is damaged, or date stamp is more than six years old.</p>

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
29.					<p><b>LIGHTS</b></p> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>To determine location of switches needed to operate lights for the following checks, refer to Location and Function of Controls and Indicators (WP 0007).</li> <li>Prior to turning on lights, battery disconnect switch must be turned ON (WP 0007).</li> <li>An assistant is needed to perform the light checks.</li> <li>When light checks are completed, ensure all lights are turned OFF (WP 0007).</li> </ul> <p>a. Position blackout select switch (1) in down position and headlight switch (2) in full up position. Ensure headlights (3) and parking light function (4) of front composite lights (5) illuminate. Operate dimmer switch (6) and ensure headlights (3) change from high beam to low beam and ensure high beam indicator (7) on dash operates properly.</p> <p>b. With headlight switch (2) ON, ensure dash light dimmer (8) switch operates properly.</p>	Headlights are inoperable.
	•	•				
	•	•				

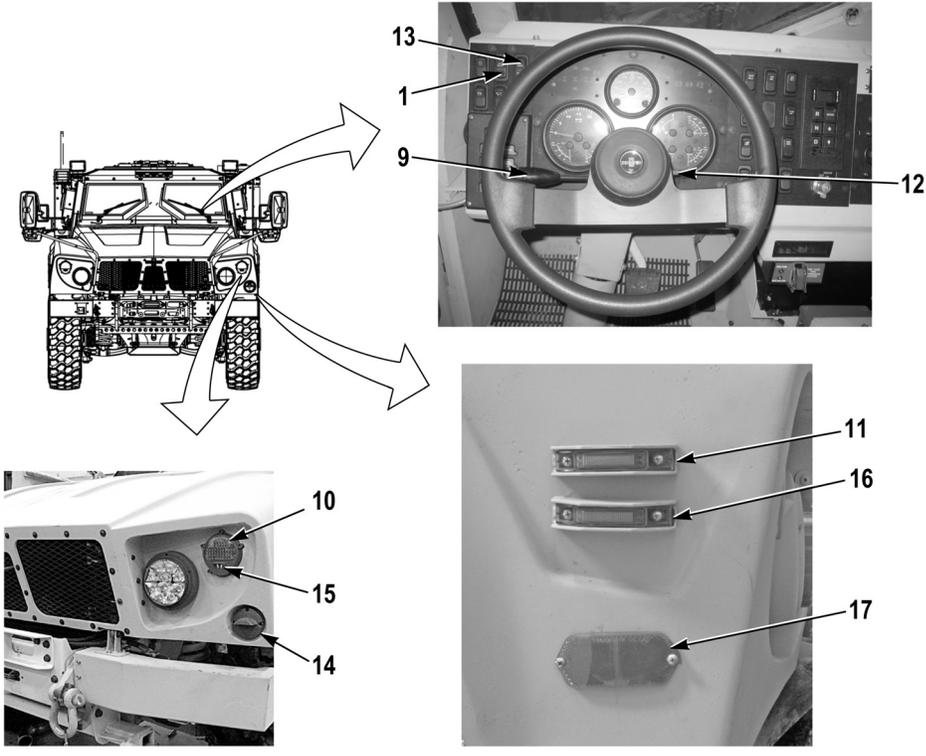


**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
29.					<p><b>LIGHTS (Continued)</b></p> <ul style="list-style-type: none"> <li>• c. Operate turn signal lever (9) and ensure turn signals (10) and (11) function.</li> <li>• d. Push in emergency flasher control switch (12) and ensure turn signals (10) and (11) blink.</li> <li>• e. Position blackout select switch (1) to up position and blackout light switch (13) in full up position, and ensure blackout drive headlight (14) and blackout marker lights (15) illuminate.</li> <li>• f. Check marker lights (16) and reflectors (17) for serviceability.</li> </ul>	

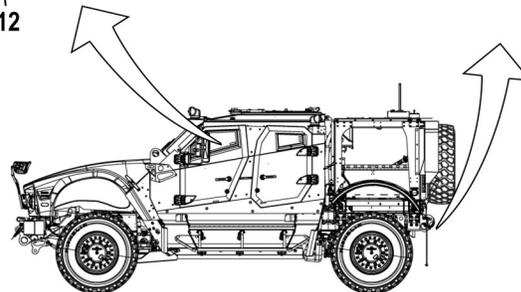
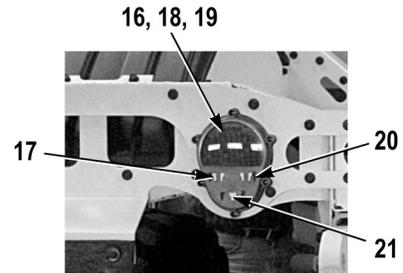
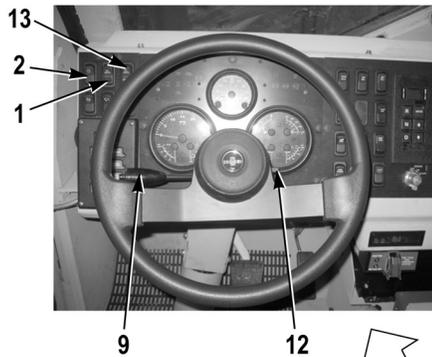


**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
29.					<p><b>LIGHTS (Continued)</b></p> <ul style="list-style-type: none"> <li>• g. Position blackout select switch (1) in down position and headlight switch (2) in full up position. Ensure parking light function (16) of rear composite lights (17) illuminate. Operate service brake pedal and ensure brake light function (18) of rear composite lights (17) illuminate.</li> <li>• h. Operate turn signal lever (9) and ensure turn signal function (19) of rear composite lights (17) blink.</li> <li>• i. Push in emergency flasher control switch (12) and ensure parking light function (16) of rear composite lights (17) blink.</li> <li>• j. Position blackout select switch (1) in up position and blackout light switch (13) in full up position, and ensure blackout parking light function (20) of rear composite lights (17) illuminate. Operate service brake pedal and ensure blackout marker brake light function (21) of rear composite lights (17) illuminate.</li> </ul>	Brake lights are inoperable or half of LED's are unserviceable.

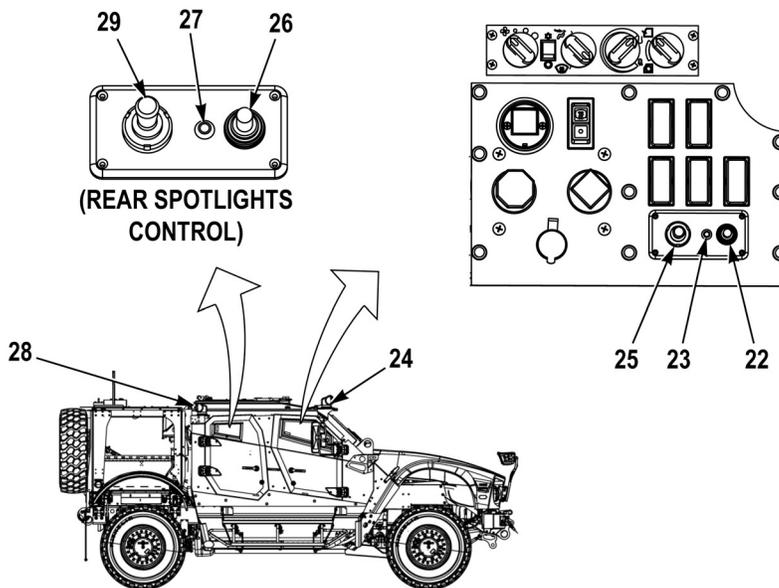


**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

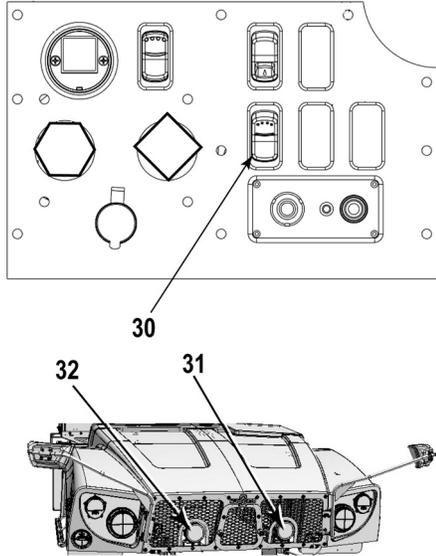
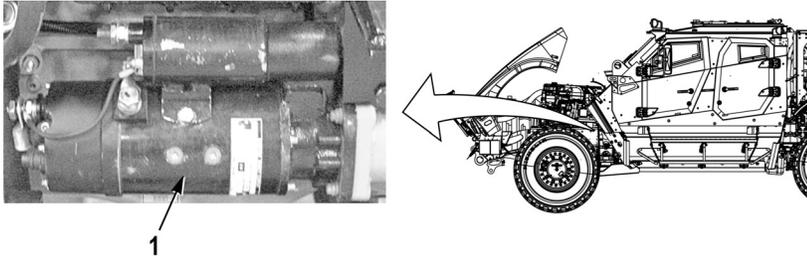
Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
29.					<p><b>LIGHTS (Continued)</b></p> <ul style="list-style-type: none"> <li>• k. Move front spotlight ON/OFF switch (22) to ON position and ensure spotlight ON indicator (23) and both front spotlights (24) illuminate.</li> <li>• l. Operate front spotlight joystick (25) and ensure both front spotlights (24) move properly.</li> <li>• m. Move rear spotlight ON/OFF switch (26) to ON position and ensure spotlight ON indicator (27) and both rear spotlights (28) illuminate.</li> <li>• n. Operate rear spotlight joystick (29) and ensure both rear spotlights (28) move properly.</li> </ul>	



**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
29.					<p><b>LIGHTS (Continued)</b></p> <p><b>NOTE</b></p> <p>Perform check (o) for M1245.</p> <ul style="list-style-type: none"> <li>o. Move IR light switch (30) to center position and ensure driver side IR light (31) illuminates. Move IR light switch (30) to upper position and ensure both IR lights (31, 32) illuminate.</li> </ul> 	
30.					<p><b>ENGINE OPERATION</b></p> <ul style="list-style-type: none"> <li>a. Inspect starter (1) for secure mounting and loose or damaged wires.</li> <li>b. Start engine (WP 0020) and check starter (1) for slow operation or unusual noises when cranking.</li> <li>c. While running, check engine for excessive smoke, unusual noise, rough running, or misfiring.</li> <li>d. Drive vehicle and ensure engine brake operates (WP 0024).</li> </ul> 	<p>Starter is loose or has loose or damaged wires.</p> <p>Starter is noisy or cranks slowly.</p> <p>Any of these conditions are found.</p>

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
31.					<p><b>CAPSULE INTERIOR</b></p> <ul style="list-style-type: none"> <li>a. Drain air system (WP 0060).</li> <li>b. Start engine (WP 0020).</li> <li>c. Ensure low air indicator light (1) remains illuminated and warning buzzer sounds until front air pressure gauge (2) and rear air pressure gauge (3) reach 64 to 76 psi (441 to 524 kPa).</li> <li>d. Check to ensure front air pressure gauge (2) and rear air pressure gauge (3) indicate a reading between 90 and 125 psi (621 and 862 kPa).</li> <li>e. Check to ensure oil pressure gauge (4) indicates pressure at idle and increases with engine speed.</li> <li>f. Check to ensure water temperature gauge (5) reads below 220°F (104°C).</li> <li>g. Check to ensure transmission oil temperature gauge (6) reads below 250°F (121°C).</li> <li>h. Check to ensure voltage (7) reads between 24 and 30 volts, refer to (WP 0027).</li> <li>i. Check to ensure air restriction indicator (8) reads below 20 inches.</li> </ul>	<p>Low air indicator light or warning buzzer fails to operate.</p> <p>Air pressure is below 90 psi (621 kPa) or exceeds 125 psi (862 kPa).</p> <p>Oil pressure does not increase as engine speed increases.</p> <p>Water temperature exceeds 220°F (104°C).</p> <p>Transmission oil temperature exceeds 250°F (121°C).</p> <p>Voltage is below 24 volts or above 30 volts.</p> <p>Air restriction indicator reads above 20 inches.</p>
<p>The diagram shows a top-down view of the instrument panel. Callout 1 points to a small indicator light on the left. Callout 2 points to a large circular gauge in the center. Callout 3 points to another large circular gauge on the right. Callout 4 points to a gauge below gauge 2. Callout 5 points to a gauge below gauge 4. Callout 6 points to a gauge on the far right. Callout 7 points to a gauge at the top center. Callout 8 points to a gauge on the far right edge of the panel.</p>						

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

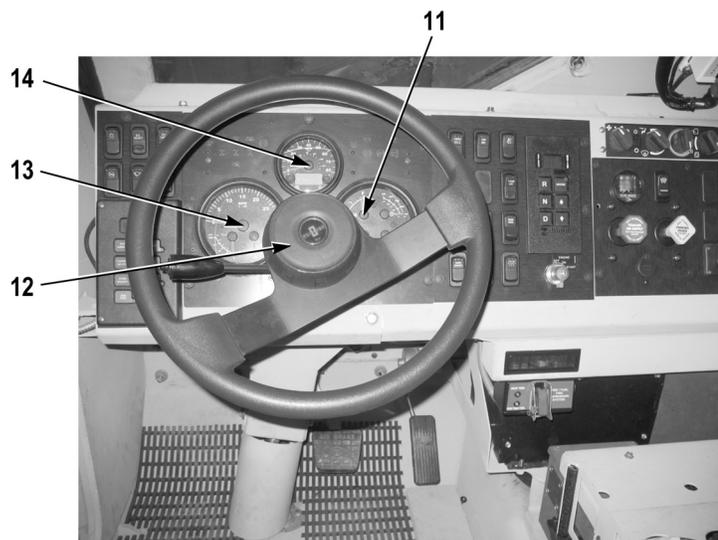
Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
31.					<p><b>CAPSULE INTERIOR (Continued)</b></p> <p>j. Check seat belts (9) and buckles (10) for serviceability and proper operation (WP 0016).</p> <div style="text-align: center;"> <p>10 M1240/M1240A1</p> <p>9 10 M1245</p> </div>	Damaged, missing, or inoperable seat belts.

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
31.					<p><b>CAPSULE INTERIOR (Continued)</b></p> <ul style="list-style-type: none"> <li>• k. Ensure fuel gauge (11) operates.</li> <li>• l. Check horn button (12) for proper operation.</li> </ul> <p style="text-align: center;"><b>NOTE</b></p> <p>With ignition switch OFF, tachometer will not return to zero. Tachometer will “zero out” and indicate correct rpm when ignition switch is ON and engine is operating.</p> <ul style="list-style-type: none"> <li>• m. Ensure tachometer (13) indicates 600 to 800 rpm with engine idling.</li> </ul> <p style="text-align: center;"><b>NOTE</b></p> <p>With ignition switch OFF, speedometer will not return to zero. Speedometer will “zero out” and indicate correct speed when ignition switch is ON and vehicle is in motion.</p> <ul style="list-style-type: none"> <li>• n. Drive vehicle and ensure speedometer (14) operates properly.</li> </ul>	



**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

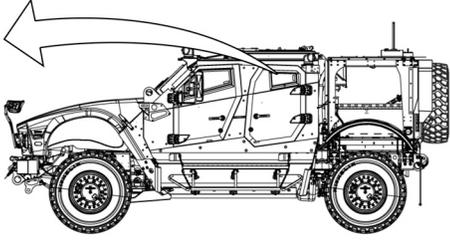
B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
31.					<p><b>CAPSULE INTERIOR (Continued)</b></p> <ul style="list-style-type: none"> <li>• o. Check windshield washer control (15) and windshield wiper control (16) for proper operation.</li> <li>• • p. Check front fan control (17) for proper fan operation in all settings.</li> <li>• • q. Check heat and defrost controls (18) for proper operation. Check for warm airflow.</li> <li>• • r. Check front air conditioner (19) for proper operation (WP 0007). Wait 5 minutes to allow temperature to stabilize. Check vents for cool air.</li> <li>• • s. Check vent control switch (20) for proper operation.</li> </ul>	<p>Climatic conditions require air conditioning and A/C is inoperable, or vented air is not cooler than ambient temperature.</p>
<p>The diagram shows a top-down view of the capsule interior control panel. It features several gauges, switches, and control knobs. Numbered callouts point to specific components: 15 points to a windshield washer control, 16 to a windshield wiper control, 17 to a front fan control, 18 to heat and defrost controls, 19 to a front air conditioner control, and 20 to a vent control switch.</p>						

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

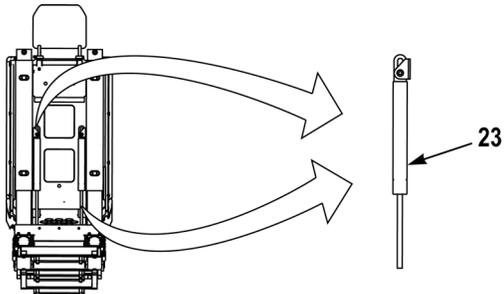
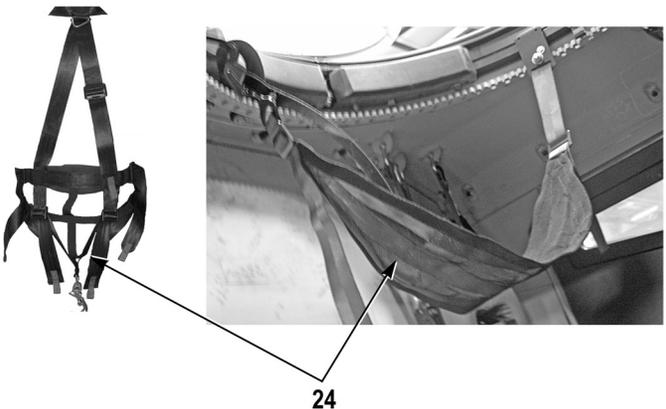
B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
31.					<p><b>CAPSULE INTERIOR (Continued)</b></p> <p><b>NOTE</b></p> <ul style="list-style-type: none"> <li>M1240 fire extinguishers are located on radio rack.</li> <li>M1240A1/M1245 fire extinguishers are located under dash on driver and passenger side.</li> </ul> <p>t. Check two fire extinguishers (21) for proper charge, damage, or broken or missing seal.</p> <div style="display: flex; justify-content: space-around; align-items: center;">   </div> <ul style="list-style-type: none"> <li>u. Inspect driver and passenger seats (22) for serviceability.</li> </ul> <div style="display: flex; justify-content: center; align-items: center; margin-top: 20px;">  </div>	<p>Fire extinguisher not present, not properly charged, or seal broken or missing.</p> <p>Front seats do not adjust. Seat pans or welds are cracked or bent. Frame missing seat cushion. Shocks do not properly support weight of occupant. Shocks bent or leaking oil. Seats not securely mounted.</p>

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
31.					<p><b>CAPSULE INTERIOR (Continued)</b></p> <p><b>NOTE</b></p> <p>Perform check (v) for M1240A1.</p> <p>v. Inspect for bent or leaking seat shocks (23) and verify shocks (23) properly support weight of occupant.</p>  <p><b>NOTE</b></p> <p>Turret Gunner Restraint System (TGRS) is considered a personnel restraint device and falls under requirements outlined in AR 385-10. If the TGRS harness is not present, is unserviceable, or is inoperable refer to the Commander or their representative who can make the decision to authorize dispatch of the vehicle if the gunners position is manned based on urgency of mission requirements (refer to AR750-1).</p> <p>w. If equipped inspect Turret Gunner Restraint System (TGRS) harness (24) for any frayed, cut, broken, clips or straps.</p> 	<p>Leaking or damaged.</p> <p>Frayed, cut, broken, clips or straps. TGRS harness not present.</p>

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
31.					<p><b>CAPSULE INTERIOR (Continued)</b></p> <ul style="list-style-type: none"> <li>x. Inspect gunners retractor belt (25) for any cuts or damage. If retractor fails to lock with a swift pull in any direction report damage to field maintenance.</li> <li>y. Inspect barrel nut (26) for tightness and exposed threads.</li> <li>z. Inspect emergency relief swivel (27) for connection and ensure emergency relief swivel (27) remains secure on retractor (28).</li> </ul>	Barrel nut is not tight or threads are exposed or damaged.

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

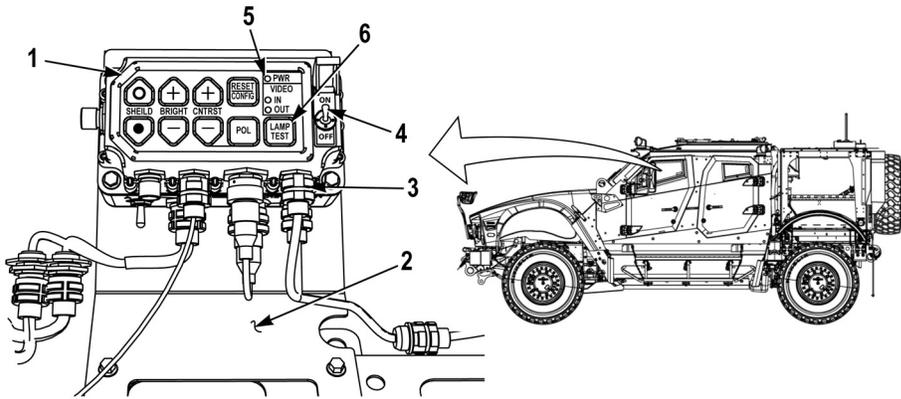
Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
31.					<p><b>CAPSULE INTERIOR (Continued)</b></p> <ul style="list-style-type: none"> <li>• • aa. Check rear air conditioner (25) for proper operation (WP 0007). Wait 5 minutes to allow temperature to stabilize. Check vents for cool air.</li> <li>• • ab. Check rear heat control (26) (M1240/M1240A1) for proper operation.</li> <li>• • ac. Check rear fan control (27) for proper operation in all settings.</li> <li>• • ad. Check all visible nuts and bolts for looseness and corrosion.</li> <li>• ae. Check air conditioner louvers (28) for damage or debris.</li> </ul>	<p>Climatic conditions require air conditioning and A/C is inoperable, or vented air is not cooler than ambient temperature.</p>

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

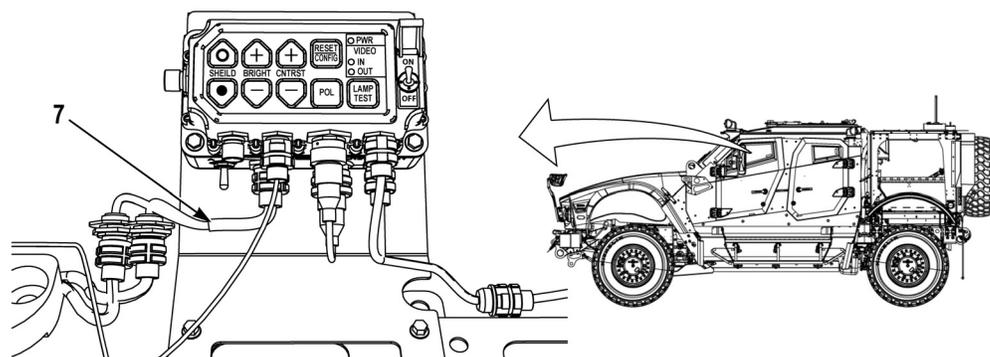
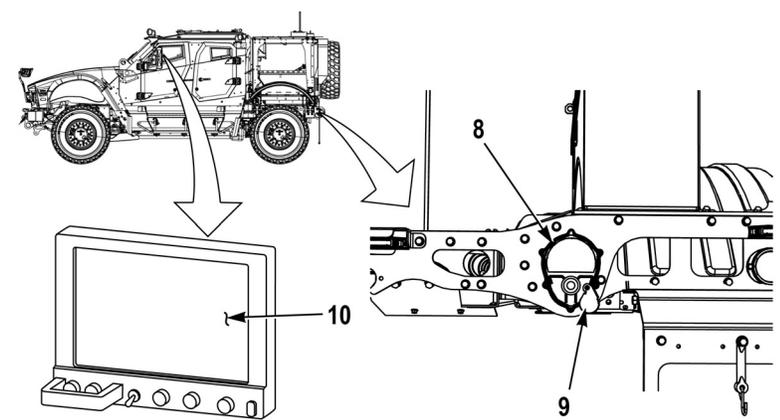
Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
32.					<p><b>CHECK-6 COMPONENTS</b></p> <ul style="list-style-type: none"> <li>• a. Check control boxes (1) for obvious damage and secure mounting.</li> <li>• b. Check mounting bracket (2) for missing or loose hardware.</li> <li>• c. Check connectors (3) for security.</li> </ul> <p style="text-align: center;"><b>NOTE</b></p> <p style="text-align: center;">Refer to Check-6 operation (WP 0036) for detailed information on operating Check-6 vision system.</p> <ul style="list-style-type: none"> <li>• d. Turn power switch (4) to ON position.</li> </ul> <p style="text-align: center;"><b>NOTE</b></p> <ul style="list-style-type: none"> <li>• The LAMP TEST button illuminates three LEDs (PWR, VIDEO IN, VIDEO OUT). Power LED will stay illuminated green indicating power.</li> <li>• VIDEO IN and VIDEO OUT will illuminate amber when LAMP TEST button is pressed or loss of signal is indicated.</li> </ul> <ul style="list-style-type: none"> <li>• e. Check three LEDs (5) by pressing the LAMP TEST button (6).</li> <li>• f. Check that the PWR LED (5) is the only one illuminated.</li> </ul>	



**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

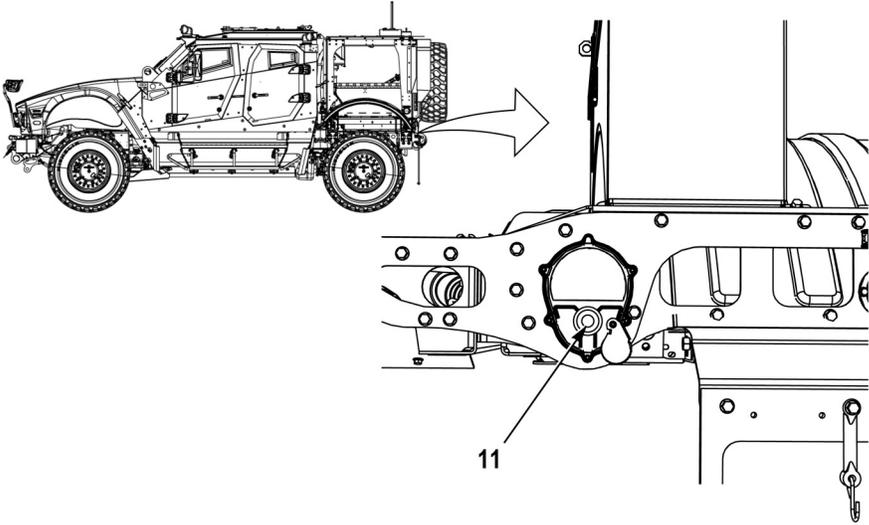
B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
32.					<p><b>CHECK-6 COMPONENTS (Continued)</b></p> <ul style="list-style-type: none"> <li>• g. Check all cables (7) for obvious damage.</li> <li>• h. Check that all cables (7) are secure and away from moving parts.</li> </ul> 	Cables are damaged.
					<ul style="list-style-type: none"> <li>• i. Check taillights (8) for obvious damage, dirt, and debris.</li> </ul> <p style="text-align: center;"><b>CAUTION</b></p> <p><b>Do not move camera shields by hand. Failure to comply may result in damage to equipment.</b></p> <p style="text-align: center;"><b>NOTE</b></p> <p>Refer to Check-6 operation (WP 0036) for detailed information on operating Check-6 vision system.</p> <ul style="list-style-type: none"> <li>• j. Check operation of camera shields (9).</li> </ul> <p style="text-align: center;"><b>NOTE</b></p> <p>Perform Step (k) if DVE display is present. <li>• k. Verify that image is being displayed on DVE display (10).</li>  </p>	

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

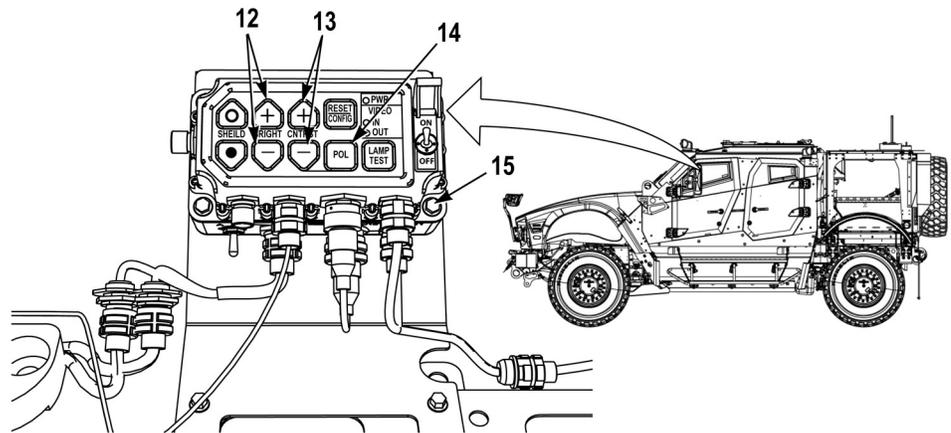
Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
32.					<p><b>CHECK-6 COMPONENTS (Continued)</b></p> <p style="text-align: center;"><b><u>WARNING</u></b></p> <p>Camera glass may become very hot when exposed to sun or when in a hot environment. Avoid contacting hot glass with hands or skin. Failure to comply may result in injury to personnel.</p> <p style="text-align: center;"><b><u>CAUTION</u></b></p> <p>Glass must only be cleaned with a lint-free cloth and a mild solution of warm water and soap. Failure to comply may result in damage to equipment.</p> <p>i. Check for broken, scratched, or dirty camera lens glass (11).</p>	
	•		•		 <p>The diagram shows a side view of a military-style vehicle on the left. An arrow points from the rear of the vehicle to a detailed view of a camera lens assembly on the right. The lens assembly is mounted on a metal frame and is labeled with the number '11'.</p>	

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

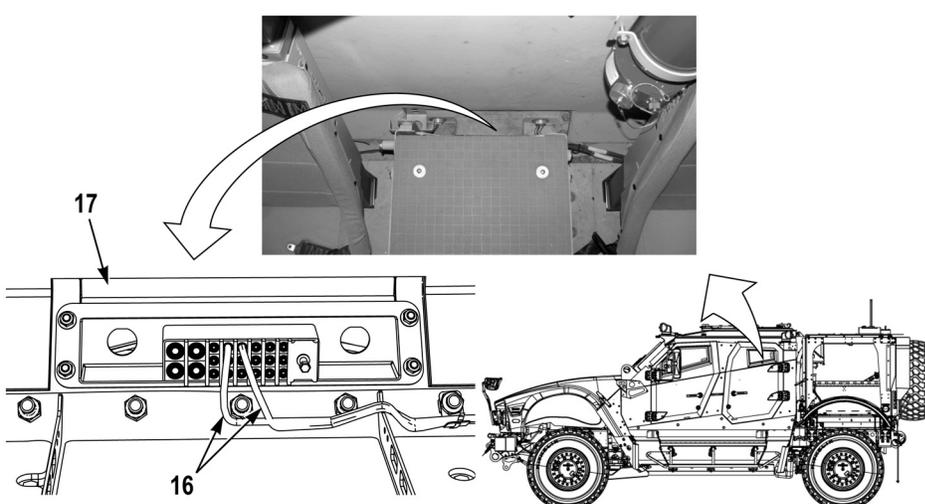
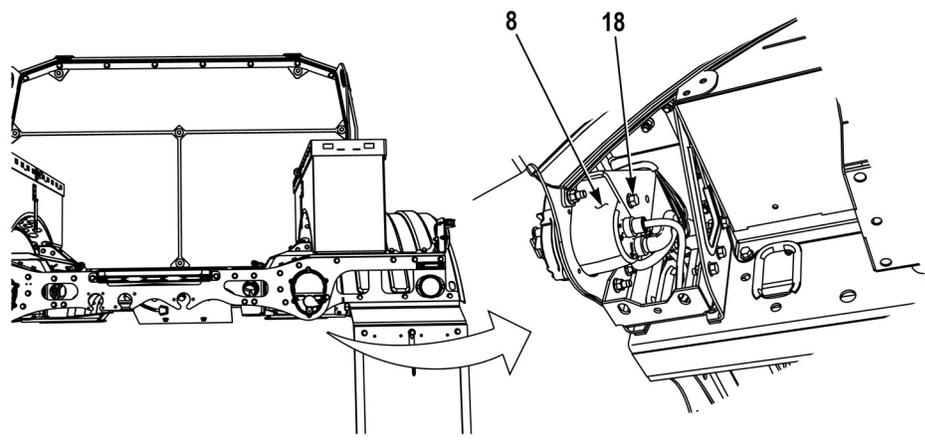
Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
32.					<p><b>CHECK-6 COMPONENTS (Continued)</b></p> <ul style="list-style-type: none"> <li>• m. Check that the BRIGHT buttons (12) function properly.</li> <li>• n. Check that the CNTRST buttons (13) function properly.</li> <li>• o. Check that the POL button (14) functions properly.</li> <li>• p. Check for missing or loose mounting hardware (15).</li> </ul>	



**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

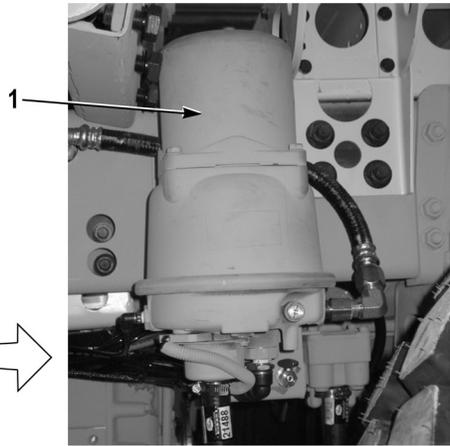
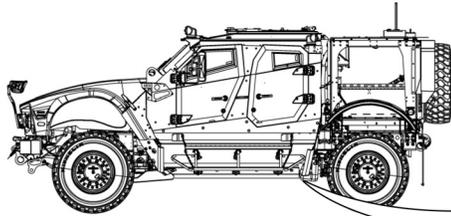
Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
32.					<p><b>CHECK-6 COMPONENTS (Continued)</b></p> <ul style="list-style-type: none"> <li>q. Check GFE and camera cables (16) for secure mounting on Roxtec assembly (17).</li> </ul>  <ul style="list-style-type: none"> <li>r. Check taillights (8) for loose or missing mounting hardware (18).</li> <li>s. Check taillights (8) for obvious damage.</li> </ul> 	<p>Mounting is not secure.</p> <p>Mounting hardware is missing.</p> <p>Taillights are damaged.</p>

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

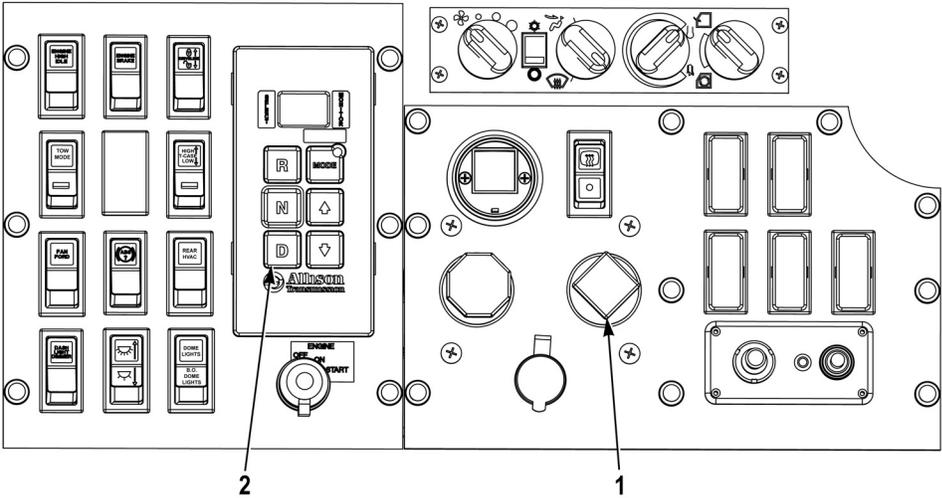
Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
33.					<p><b>AIR DRYER</b></p> <ul style="list-style-type: none"> <li>• a. Inspect air dryer (1) for punctures and obvious damage.</li> <li>• b. Check air dryer (1) for loose mounting screws and loose or damaged air lines and fittings.</li> <li>• c. Check wires to air dryer (1) for proper connection and damage.</li> <li>• d. Start engine (WP 0020).</li> <li>• e. Check that air dryer (1) purges when governor shuts off air compressor at 125 psi (862 kPa).</li> </ul>	<p>Air dryer is punctured.</p> <p>Air lines or fittings loose or damaged.</p> <p>Wires are damaged or disconnected.</p> <p>Air dryer does not purge. Air dryer is leaking.</p>



**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

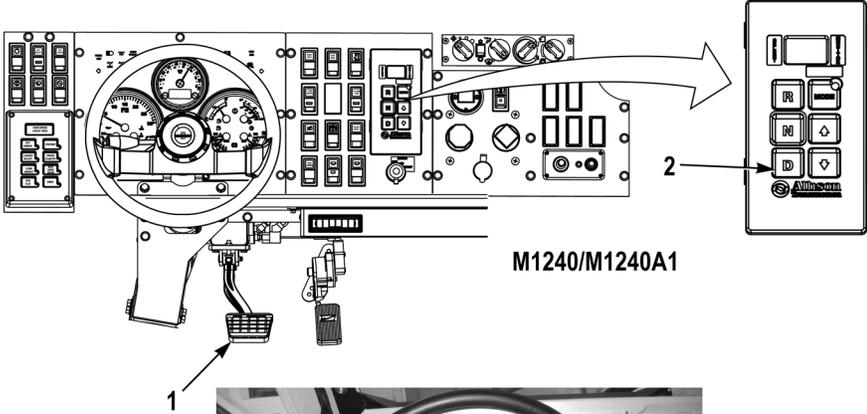
B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
34.					<p><b>PARKING BRAKE</b></p> <p style="text-align: center;"><b><u>WARNING</u></b></p> <p><b>Prior to performing brake test, ensure area 30 ft. (9 m) to front of vehicle is clear of objects and personnel. Failure to comply may result in injury or death to personnel.</b></p> <p>Apply parking brake (1). Select D (drive) on transmission range selector (2) and run engine at 1000 rpm. Vehicle should not move. Park vehicle (WP 0025).</p> 	Vehicle moves when parking brake is applied.

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
35.					<p><b>SERVICE BRAKE STALL TEST</b></p> <p><b><u>WARNING</u></b></p> <p>Prior to performing brake test, ensure area 30 ft. (9 m) to front of vehicle is clear of objects and personnel. Failure to comply may result in injury or death to personnel.</p> <p>Apply service brake (1). Select D (drive) on transmission range selector (2) and run engine at 1000 rpm. Vehicle should not move. Park vehicle (WP 0025).</p>	Vehicle moves when service brake is applied.
					 <p>M1240/M1240A1</p>	
					 <p>M1245</p>	

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

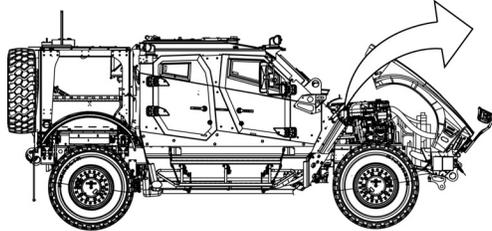
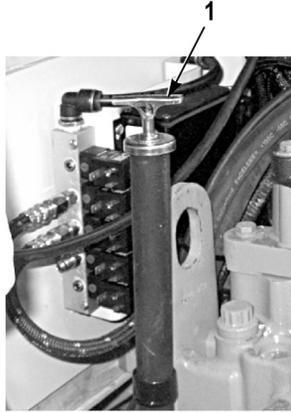
B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
36.					<p><b>TRANSMISSION FLUID</b></p> <p style="text-align: center;"><b><u>CAUTION</u></b></p> <p><b>Do not permit dirt, dust, or grit to enter transmission filler tube. Thoroughly clean dipstick handle and end of filler tube. Serious internal transmission damage can result if transmission is contaminated.</b></p> <p style="text-align: center;"><b>NOTE</b></p> <p>If the transmission oil temperature is between 160° and 250°F (71° and 121°C), go directly to the HOT CHECK procedure. If there is evidence of transmission oil leakage, contact Field Maintenance. If the transmission oil temperature is less than 160°F (71°C), go to the next Step, COLD CHECK procedure.</p> <p><b>COLD CHECK:</b> The COLD CHECK determines if the transmission has enough fluid to be operated safely until a HOT CHECK can be made.</p> <ul style="list-style-type: none"> <li>• a. Apply parking brake (WP 0025).</li> <li>• b. If the engine has been shut down for an extended time, park the vehicle on a level surface and apply the parking brake.</li> <li>• c. Idle engine at (500 to 800 rpm) in N (neutral) for about one minute. Shift to D (drive) and then to R (reverse) to clear the hydraulic circuits of air. Shift to N (neutral) and leave engine at idle.</li> </ul>	

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
36.					<p><b>TRANSMISSION FLUID (Continued)</b></p> <p>d. Remove transmission dipstick (1).</p> <p style="text-align: center;"><b><u>CAUTION</u></b></p> <p><b>If transmission fluid is too high and needs to be drained, notify Field Maintenance. Failure to comply may result in damage to equipment.</b></p> <p>e. After wiping the transmission dipstick (1) clean, check the fluid level. If the fluid on the dipstick is within the COLD RUN band, the level is satisfactory. If the fluid level is not within this band, add fluid as necessary to bring the level within the COLD RUN band. Refer to Lubrication Instruction (WP 0068).</p> <p>f. Install transmission dipstick (1).</p> <p>g. Perform HOT CHECK at the first opportunity after normal operating temperature (160° to 250°F [71° to 121°C]) is reached.</p>	Transmission fluid level is too high or too low. Any Class III leak.
					 	

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

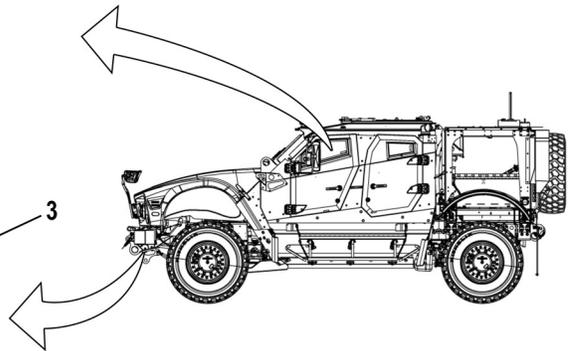
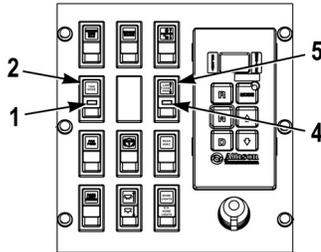
Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
36.					<p><b>TRANSMISSION FLUID (Continued)</b></p> <p style="text-align: center;"><b><u>CAUTION</u></b></p> <ul style="list-style-type: none"> <li>• The transmission must not be operated for extended periods of time until Hot Check has verified proper fluid level. Transmission damage can result from extended operation at improper fluid level conditions.</li> <li>• An accurate fluid level check cannot be made unless the engine is idling (500 to 800 rpm) in N (neutral), the transmission fluid is at the proper temperature, and the vehicle is on a level surface. Failure to comply may result in damage to equipment.</li> </ul> <p><b>HOT CHECK:</b> Because the fluid level rises as the temperature increases, the fluid must be hot to ensure an accurate check.</p> <ul style="list-style-type: none"> <li>• • h. Be sure fluid has reached normal operating temperature (160° to 250°F [71° to 121°C]).</li> <li>• • i. Park the vehicle on a level surface and shift to N (neutral). Apply the parking brake and allow the engine to idle (500 to 800 rpm).</li> </ul> <p style="text-align: center;"><b><u>CAUTION</u></b></p> <p><b>If transmission fluid is too high and needs to be drained, notify Field Maintenance. Failure to comply may result in damage to equipment.</b></p> <ul style="list-style-type: none"> <li>• • • j. Remove transmission dipstick (1).</li> <li>• • • k. After wiping the transmission dipstick (1) clean, check the fluid level. The safe operating level is anywhere within the HOT RUN band on the dipstick. If the fluid level is not within this band, add fluid as necessary to bring the level within the HOT RUN band (WP 0068).</li> <li>• • • l. Install transmission dipstick (1).</li> <li>• • m. Be sure that fluid level checks are consistent. Check level more than once, and if readings are not consistent, notify your supervisor or Field Maintenance.</li> <li>• • n. Shut off engine (WP 0026).</li> </ul>	<p>Transmission fluid level is too high or too low. Any Class III leak.</p>

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

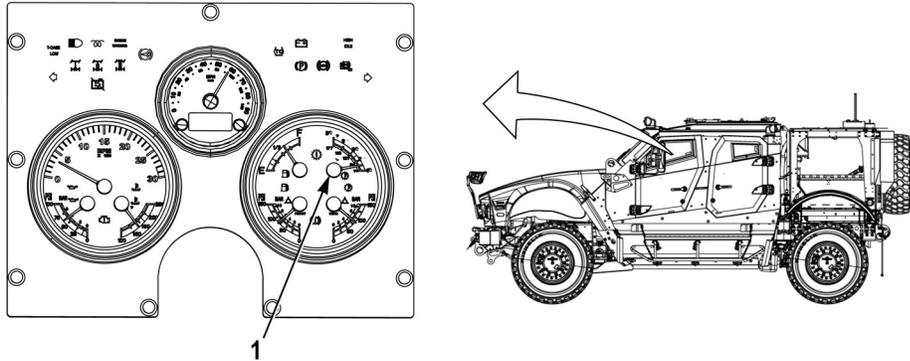
Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
37.					<p><b>TRANSFER CASE NEUTRAL SHIFT LEVER</b></p> <ul style="list-style-type: none"> <li>• a. Push switch lock (1) up and push TOW MODE button (2) to exhaust air from transfer case high and low solenoids.</li> <li>• b. Pull transfer case neutral shift valve handle (3) forward. Put transmission in drive and verify vehicle does not move.</li> <li>• c. Push transfer case neutral shift valve handle (3) back so handle (3) is parallel to bumper. Push switch lock (4) up and push HIGH or LOW on transfer case shift button (5). Put transmission in drive and verify vehicle moves.</li> <li>• d. Shut off engine (WP 0026).</li> </ul>	



**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

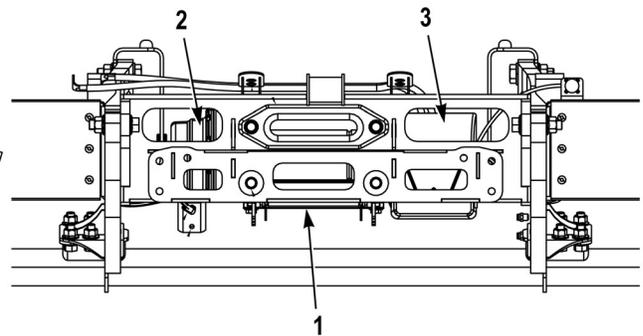
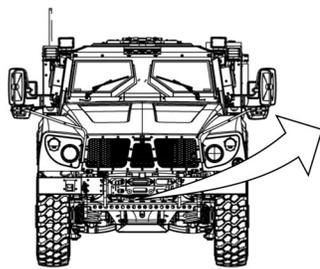
Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
38.					<p><b>TRANSMISSION</b></p> <ul style="list-style-type: none"> <li>• a. Check transmission for proper shifting (WP 0022).</li> </ul> <p style="text-align: center;"><b>NOTE</b></p> <p>At idle speed, the automatic transmission may not reach 160°F (71°C) oil temperature.</p> <ul style="list-style-type: none"> <li>• b. Check transmission temperature gauge (1) for normal operating temperature of 160° to 250°F (71° to 121°C). If the transmission temperature exceeds 250°F (121°C), downshift to a lower gear to avoid overheating.</li> </ul>	<p>Transmission does not operate any range.</p> <p>Transmission fluid temperature is above 250°F (121°C).</p>
						

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
39.					<p><b>WINCH</b></p> <p><b>NOTE</b> Refer to Winch (WP 0049) for more detailed information on operation of winch.</p> <ul style="list-style-type: none"> <li>• a. Check for obvious damage to winch (1).</li> <li>• b. Check free spool clutch (2) for air leaks.</li> </ul> <p><b>CAUTION</b> <b>If a substantial amount of winch cable is payed out, tension must be maintained on winch cable while reeling in winch cable. Failure to comply may result in tangled winch cable and damage to equipment.</b></p> <ul style="list-style-type: none"> <li>• c. With the aid of an assistant, pay out and reel in winch cable and check winch motor (3) for unusual noises and proper operation.</li> </ul>	Free spool clutch leaks air or any air leak that prevents free spool operation.



**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
39.					<p><b>WINCH (Continued)</b></p> <p style="text-align: center;"><b><u>WARNING</u></b></p> <p>Use heavy leather gloves when checking winch cable. Injury to hands can result if gloves are not worn. Failure to comply may result in injury or death to personnel.</p> <p style="text-align: center;"><b>NOTE</b></p> <p>Worn spots will show up as flattened spots on the strands.</p> <ul style="list-style-type: none"> <li>• d. Inspect winch cable (4) for kinks and broken strands while cable is being payed out for use.</li> <li>• e. Inspect for worn spots while cable is being payed out for use.</li> </ul>	<p>Cable is frayed, kinked, or worn.</p> <p>Outer strands are reduced in diameter by one-fourth.</p>
<p>The diagram illustrates the inspection criteria for a winch cable. It shows a cross-section of a cable with four strands, a top view of a single strand, and a side view of a cable with 1-inch segments labeled 'SERVICEABLE' and 'UNSERVICEABLE'. A photograph shows a cable with a hook and a label '4' pointing to it. A truck diagram has an arrow pointing to the winch area.</p>						

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

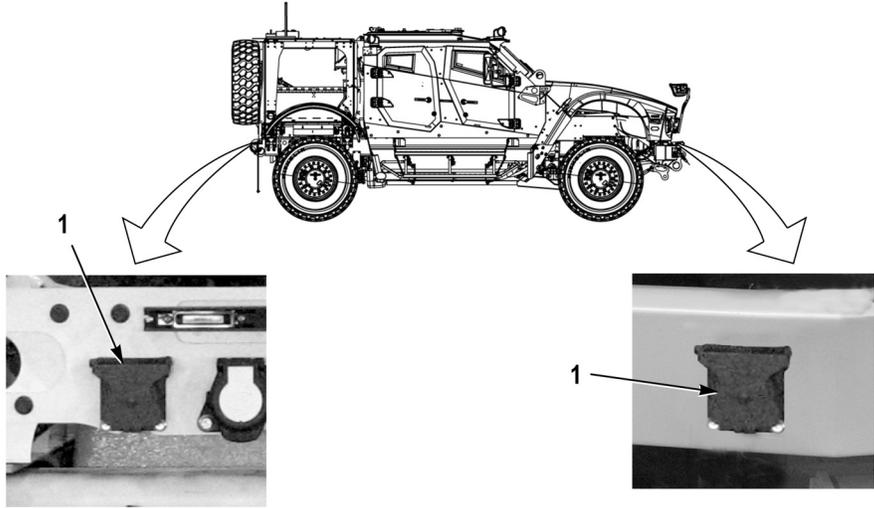
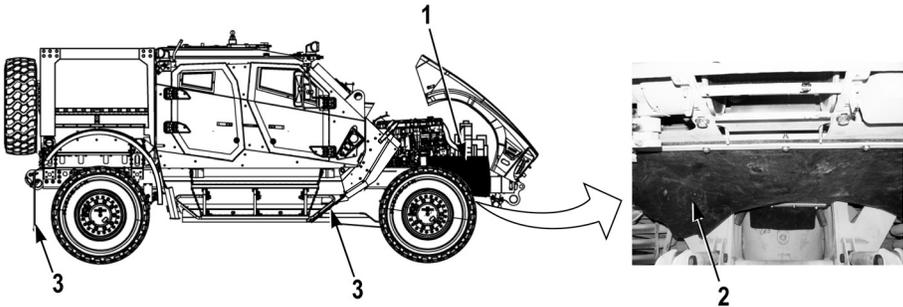
B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
39.					<p><b>WINCH (Continued)</b></p> <p>f. Inspect broken strands to determine if it is a single broken strand or several broken strands. Inspect while cable is being payed out for use.</p> <p style="text-align: center;"><b>CAUTION</b></p> <p><b>If a substantial amount of winch cable is payed out, tension must be maintained on winch cable while reeling in winch cable. Failure to comply may result in tangled winch cable and damage to equipment.</b></p> <p>g. Reel in winch cable (4) (WP 0049).</p> <p>h. Check that winch cable hook (5) is not broken.</p>	<p>Individual strands are broken next to one another, six randomly distributed broken strands in one lay (the distance in which the strands make one complete turn around the cable); or three broken strands in one lay.</p> <p>Hook is broken.</p>

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

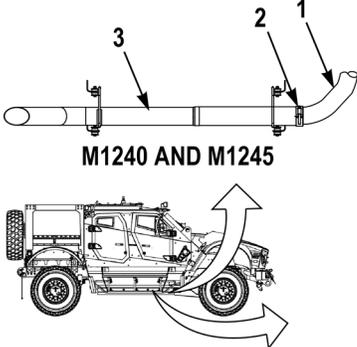
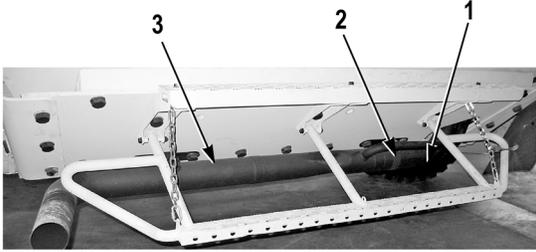
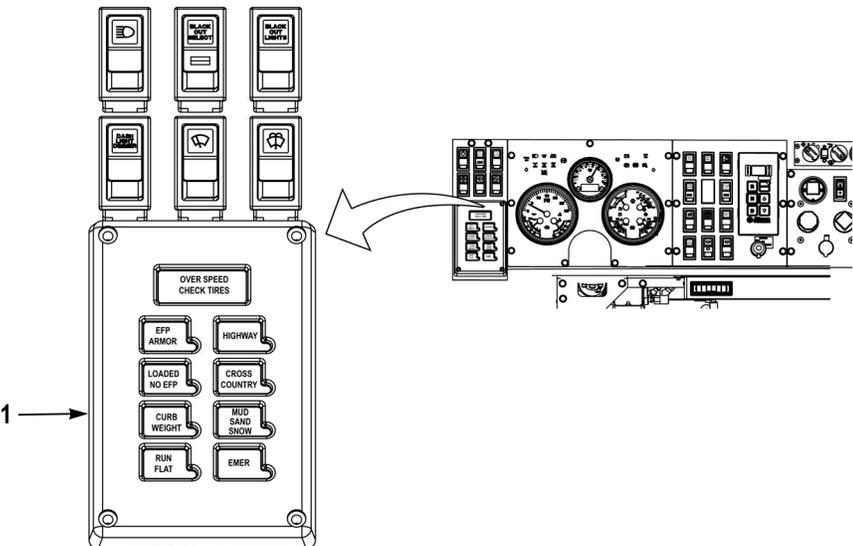
B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
40.					<p><b>FRONT AND REAR INTERVEHICLE ELECTRICAL CONNECTOR</b></p> <ul style="list-style-type: none"> <li>• a. Inspect both front and rear electrical connectors (1) for damage.</li> <li>• b. Inspect both front and rear electrical connector cover seals for tears or rot.</li> </ul> <div style="text-align: center;">  </div>	
41.					<p><b>RADIATOR BAFFLES AND MUD FLAPS</b></p> <ul style="list-style-type: none"> <li>• a. Inspect both side radiator baffles (1) and lower radiator baffle (2) for tears and missing or loose hardware.</li> <li>• b. Inspect all mud flaps (3) for tears and missing or loose hardware.</li> </ul> <div style="text-align: center;">  </div>	

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

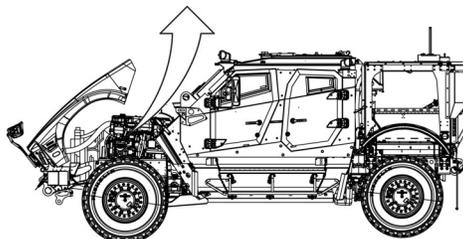
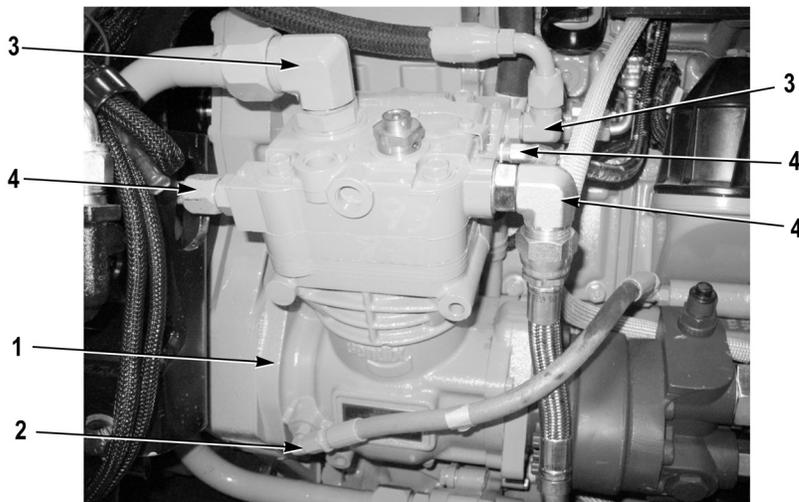
Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
42.					<p><b>EXHAUST SYSTEM</b></p> <ul style="list-style-type: none"> <li>Check exhaust piping (1), clamps (2), and muffler (3) for looseness or damage. While engine is running, listen for exhaust leaks.</li> </ul>  <p>M1240 AND M1245</p>  <p>M1240A1</p>	Exhaust leaks present between elbow turbo. Refer exhaust leak to field maintenance.
43.					<p><b>CENTRAL TIRE INFLATION SYSTEM (CTIS)</b></p> <ul style="list-style-type: none"> <li>a. Start engine (WP 0020).</li> <li>b. Activate each button on CTIS controller (1) (WP 0031) and ensure corresponding indicator light illuminates.</li> </ul> 	No lights on CTIS board or five lights flashing.

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

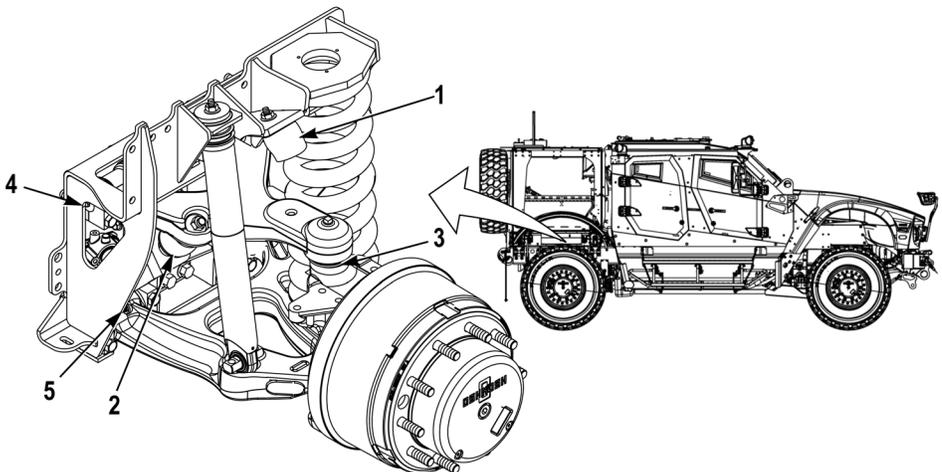
Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
44.					<p><b>AIR COMPRESSOR</b></p> <ul style="list-style-type: none"> <li>a. Check air compressor (1) for oil or coolant leaks.</li> <li>b. Check air compressor (1), oil fitting (2), coolant fittings (3), and air fittings (4) for looseness and leakage.</li> <li>c. Check that air compressor (1) is securely mounted.</li> </ul>	<p>Any Class III leak.</p> <p>Any Class III leak or air leakage.</p> <p>Compressor is loose.</p>



**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

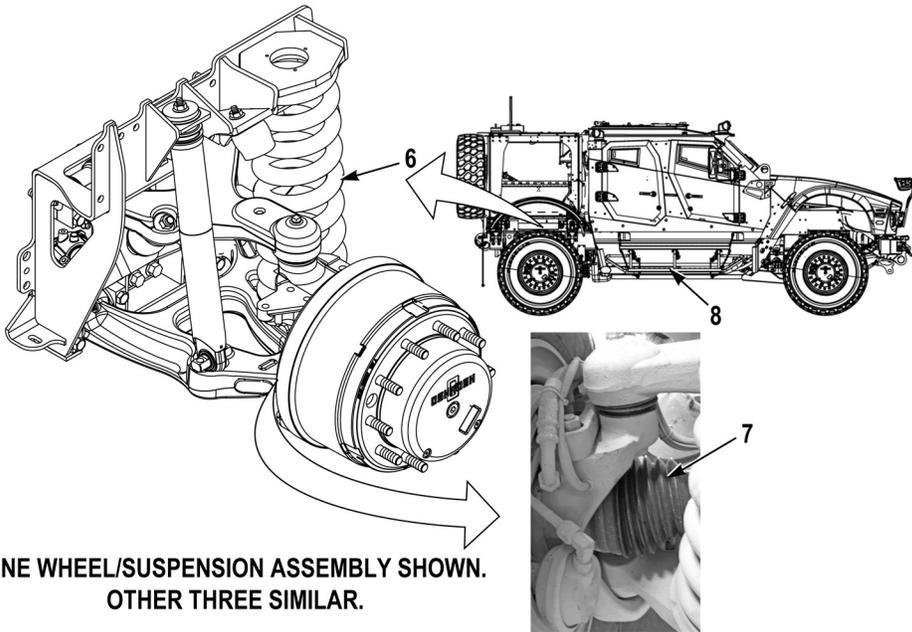
Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
45.					<p><b>UNDERCARRIAGE AND FRAME</b></p> <ul style="list-style-type: none"> <li>• a. Inspect frame rails and crossmembers for loose or broken screws and cracked or broken welds.</li> <li>• b. Inspect jounce bumpers (1) and rebound bumpers (2) for damage.</li> <li>• c. Inspect upper and lower control arm ball joint boots (3) for leaks and damage.</li> <li>• d. Inspect upper and lower control arm pivot bushing bolts (4) and grease fittings (5) for looseness or damage.</li> <li>• e. Inspect axles No. 1 and No. 2 for leaks or damage.</li> <li>• f. Inspect engine, transmission, and transfer case for leaks or damage.</li> </ul>	<p>Any broken frame rails, crossmembers, broken welds, loose or broken screws.</p> <p>Loose, missing, or damaged pivot bushing bolts.</p> <p>Any damage that would impair vehicle operation.</p> <p>Any Class III leak.</p>
 <p><b>ONE WHEEL/SUSPENSION ASSEMBLY SHOWN. OTHER THREE SIMILAR.</b></p>						

**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
45.					<p><b>UNDERCARRIAGE AND FRAME (Continued)</b></p> <ul style="list-style-type: none"> <li>g. Inspect springs (6) for cracks, broken coils, or other damage.</li> <li>h. Inspect half shaft boot (7) for damage and proper installation.</li> </ul> <p style="text-align: center;"><b><u>CAUTION</u></b></p> <p><b>All guidelines set forth for maintaining corrosion preventive compounds must be adhered to. Failure to follow these guidelines will negatively impact the corrosion control integrity of the vehicle and result in damage to equipment.</b></p> <ul style="list-style-type: none"> <li>i. Inspect underside of capsule (8) for presence of corrosion. Look for and be aware of spots where paint has been damaged and primer has been exposed.</li> <li>j. Inspect armor mounting nuts and bolts for looseness and corrosion.</li> <li>k. Inspect underside of vehicle for loose or damaged wires.</li> </ul>	Any broken springs are found.



**Table 1. Operator/Crew Preventive Maintenance Checks and Services (PMCS). (Continued)**

Note: These checks are to be made in the order listed, within designated intervals.

B-Before Operation D-During Operation A-After Operation M-Monthly

Item No.	Interval				ITEM TO BE INSPECTED/ PROCEDURE: Check for and have repaired, filled, or adjusted as needed.	Not Mission Capable If:
	B	D	A	M		
46.		•			<p><b>AIR SYSTEM</b></p> <p>a. Start engine (WP 0020).</p> <p style="text-align: center;"><b>NOTE</b></p> <p style="text-align: center;">Low air lights must go out prior to performing air reservoir checks.</p> <p>b. Shut engine OFF (WP 0026).</p> <p>c. Listen for leaks.</p> <p>d. Drain air system (WP 0060).</p>	Leak is detected.

**END OF WORK PACKAGE**