DA FORM 5988-E

EQUIPMENT MAINTENANCE & INSPECTION WORKSHEET

DATE

UIC:

ADMIN NUMBER	MODEL	EQUIPMENT NOUN	CURRENT READING
	M2A3	FIGHTING VEHICLE, INFANTRY	
SERIAL NUMBER	EQUIPMENT NUMBER	EQUIPMENT NSN	CURRENT READING
		Multiple, Next Page.	

PUB NUMBER	PUB DATE(YYMM)	PUB CHANGE
TM 9-2350-438-10-1	30 NOV 2019	

INSPECTORS NAME	DATE/TIME

SIGNATURE:_____ DATE/TIME: _____

SERVICE DATA

SERVICE TYPE	SERVICE DUE	READING DUE	USAGE REMAINING	UNIT OF MEASURE

FAULTS & PARTS REQUESTED

NOTIFICATION	TECH STATUS	NOTIFICATION DATE	FAULT DESCRIPTION	WORK ORDER

MAINTENANCE FAULTS

ITEM NUM	TECH STATUS	FAULT DATE	FAULT DESCRIPTION	CORRECTIVE ACTION	INITIAL

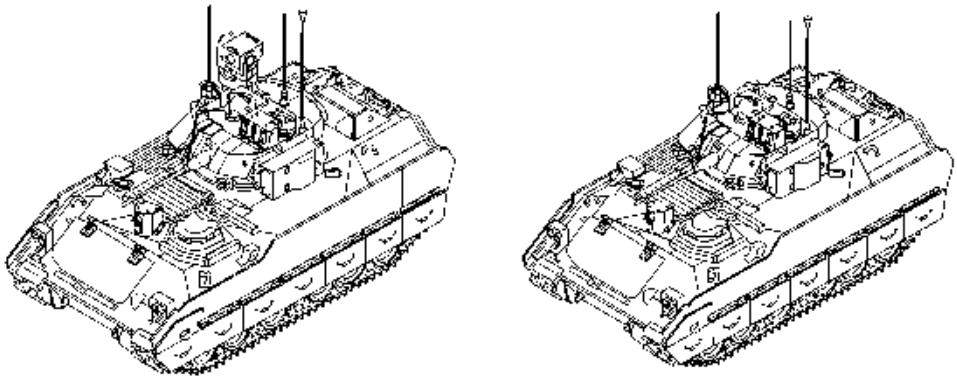
TM 9-2350-438-10-1

TECHNICAL MANUAL

OPERATOR MANUAL
FOR

FIGHTING VEHICLE, INFANTRY
M2A3
(NSN 2350-01-436-0005) (EIC APG)
FIGHTING VEHICLE, INFANTRY, OPERATION DESERT STORM, SITUATIONAL AWARENESS (ODS SA)
M2 ODS SA
(NSN 2350-01-565-3460) (EIC AP2)

HULL



SUPERSEDURE NOTICE – TM 9-2350-438-10-1 in conjunction with TM 9-2350-438-10-2 dated 30 November 2019 supersede TM 9-2350-438-10 dated 31 May 2018, including all changes.

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HEADQUARTERS, DEPARTMENT OF THE ARMY

30 NOVEMBER 2019

Table 1. Preventive Maintenance Checks and Services, Before.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			NOTE Refer to local safety and environmental protocols for the proper segregation, recycle, and/or disposal of used rags/cloths contaminated with petroleum, solvents, and/or hazardous components.	
1	Before	Vehicle Exterior	**DRIVER** **WARNING**  Fire Resistant Hydraulic Fluid (FRH) is toxic if absorbed through skin or ingested. Do not service hydraulic system when FRH is hot or pressurized. Do not allow to come into contact with skin or eyes. Use goggles or face shield and protective gloves. If FRH contacts skin, wash immediately with soap. If FRH gets into eyes, wash with lots of water for 15 minutes and get medical attention. If FRH is swallowed, get medical attention.	

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  **FUEL** Fuel is flammable and harmful to health. Keep fuel away from heat or ignition sources. DO NOT smoke within 50 feet (15 m) of a fuel source. Do not work on fuel system when engine is hot. Shut down engine before refueling. Ensure fuel nozzle is grounded to filler neck. Do not overfill fuel tank. Keep fire extinguisher nearby. Wear gloves and eye protection and ensure adequate ventilation during refueling. Refer to local procedures and plans for preventing and responding to fuel spills or leaks. Use a drain pan or suitable container to capture any draining, leaking or spilled fuel. Refer to local procedures and plans for preventing and responding to fuel spills or leaks. Immediately clean up spilled fuel. Keep cloths / rags away from open flame and / or ignition sources. Comply with local procedures and environmental regulations when disposing of unused fuel, soiled/ cleanup materials (such as filters and rags), and drained, leaked or spilled fuel. Failure to comply may result in injury to personnel and/or damage to the environment.	

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  **ENGINE COOLANT** Engine coolant is poisonous if ingested and can irritate skin and eyes. Avoid skin and eye contact. Wear protective eyewear and clothing. If exposed, flush skin and/or eyes with water and seek medical attention. Use a drain pan or suitable container to capture any draining, leaking or spilled fluid. Refer to local procedures and plans for preventing and responding to fluid spills or leaks. Immediately clean up spilled fluid. Comply with local procedures and environmental regulations when disposing of unused chemicals, soiled/cleanup materials (such as filters and rags), and drained, leaked or spilled fluids. Failure to comply may result in injury to personnel and/or damage to the environment.	

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  **HYDRAULIC SYSTEM** Hydraulic systems operate at high pressures and temperatures. Hydraulic fluid under pressure can pierce the skin. Do not check for leaks with your hand. Always allow hydraulic oil to cool and relieve pressure in hydraulic system before conducting tasks. Open lines and hoses slowly and wait for any residual pressure to relieve before continuing to open lines and hoses. Hydraulic fluid may be flammable. Keep away from heat, open flame and/or other ignition sources. Prolonged contact with hydraulic fluid may cause skin irritation. Wear protective eyewear, gloves and clothing. If exposed, flush skin and/or eyes with water and seek medical attention. Use a drain pan or suitable container to capture any draining, leaking or spilled fluid. Refer to local procedures and plans for preventing and responding to fluid spills or leaks. Immediately clean up spilled hydraulic fluid. Keep cloths/rags away from open flame and/or ignition sources. Comply with local procedures and environmental regulations when disposing of unused chemicals, soiled/ cleanup materials (such as filters and rags), and drained, leaked or spilled fluids. Failure to comply may result in injury to personnel and/or damage to the environment.	

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  **LUBRICATING OIL** Lubricating oil may be flammable. Keep away from heat, open flame and/or other ignition sources. Prolonged contact with lubricating oil may cause a skin rash. Wear protective eyewear, gloves and clothing. Remove saturated clothing immediately and thoroughly wash skin that comes in contact with lubricating oil. If exposed, flush skin and/or eyes with water and seek medical attention. Use a drain pan or suitable container to capture any draining, leaking or spilled fluid. Refer to local procedures and plans for preventing and responding to fluid spills or leaks. Immediately clean up spilled oil. Keep cloths/rags away from open flame and/or ignition sources. Comply with local procedures and environmental regulations when disposing of lubricating oil, soiled/ cleanup materials (such as filters and rags), and drained, leaked or spilled fluids. Failure to comply may result in injury to personnel and/or damage to the environment.	

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  **FILLING/DRAINING/LEAKING FLUIDS** Use a drain pan or suitable container to capture any draining, leaking or spilled fluid. Refer to local procedures and plans for preventing and responding to fluid spills or leaks. Immediately clean up spilled fluid. Comply with local procedures and environmental regulations when disposing of unused chemicals, soiled/cleanup materials (such as filters and rags), and drained, leaked or spilled fluids. Failure to comply may result in injury to personnel, damage to equipment and/or damage to the environment. 1. Check exterior of vehicle for damage or missing items. Ensure all items are properly secured. 2. Check wires and lead seals on external fire extinguisher handles.	Wire or lead seal on external fire suppression handle is missing or broken.

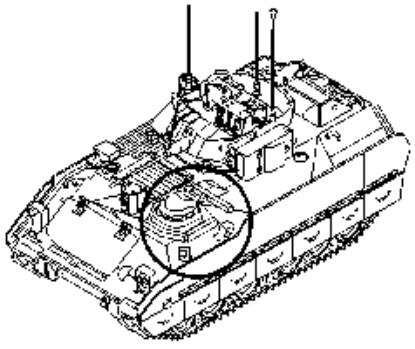


Figure 1. External Fire Extinguisher Handle Wire and Lead Seal Location (Front).

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:

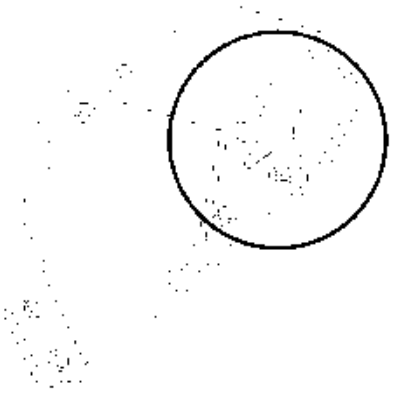


Figure 2. External Fire Extinguisher Handle Location (Detailed View) (Front).

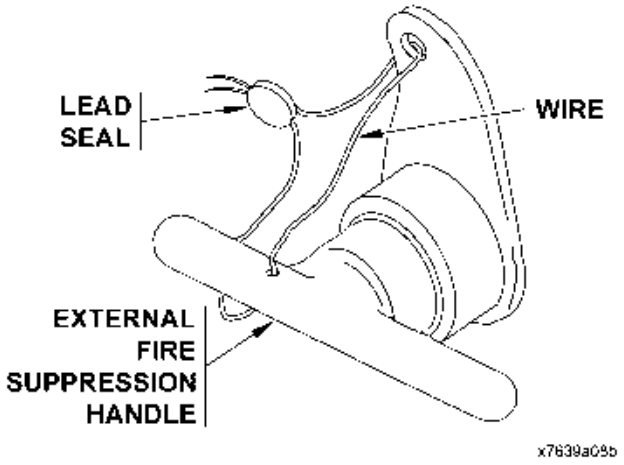


Figure 3. External Fire Extinguisher Handle Wire and Lead Seal (Front).

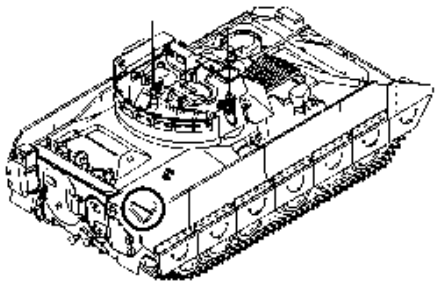


Figure 4. External Fire Extinguisher Handle Wire and Lead Seal (Rear).

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

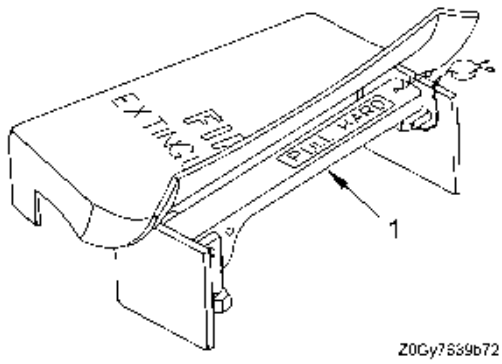
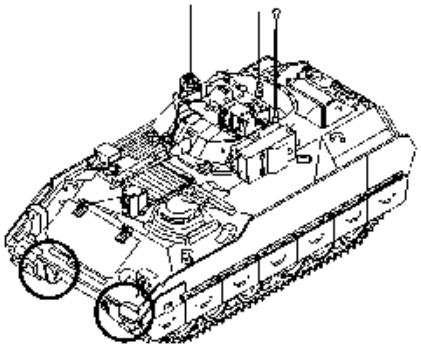
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 5. External Fire Extinguisher Handle Wire and Lead Seal (Rear).	
			3. Check outside of vehicle for signs of fuel, oil, or coolant leaks.	Any fuel or any Class III oil or coolant leak is found.
2	Before	Final Drive Hull Drain Plugs	**DRIVER** 1. Check that right and left final drive hull drain plugs are installed.	Final drive hull drain plug is missing.
			 Figure 6. Final Drive Hull Drain Plug Location.	

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

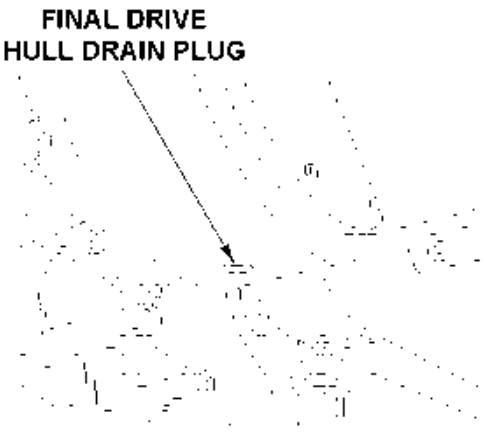
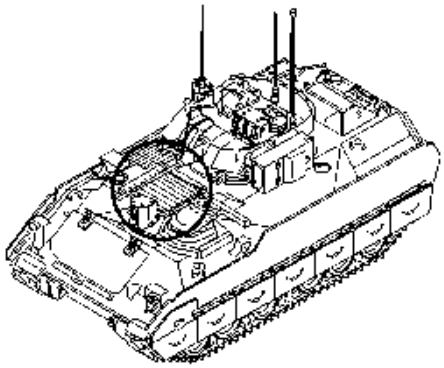
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 7. Final Drive Hull Drain Plug.	
3	Before	Intake Screen	**DRIVER** 1. Inspect intake screen. a. Clean debris from intake screen. b. Check intake screen for damage. c. If intake screen is damaged, notify Field Maintenance.	
			 Figure 8. Intake Screen Location.	

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

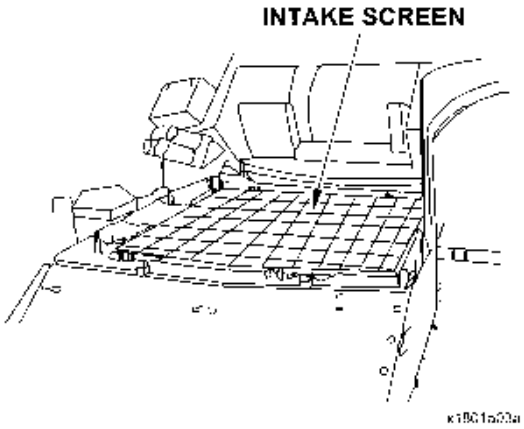
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 9. Intake Screen.	
4	Before	Cooling System	**DRIVER** **WARNING**  **ENGINE COOLANT** Engine coolant is poisonous if ingested and can irritate skin and eyes. Avoid skin and eye contact. Wear protective eyewear and clothing. If exposed, flush skin and/or eyes with water and seek medical attention. Use a drain pan or suitable container to capture any draining, leaking or spilled fluid. Refer to local procedures and plans for preventing and responding to fluid spills or leaks. Immediately clean up spilled fluid. Comply with local procedures and environmental regulations when disposing of unused chemicals, soiled/cleanup materials (such as filters and rags), and drained, leaked or spilled fluids. Failure to comply may result in injury to personnel and/or damage to the environment.	

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  **FILLING/DRAINING/LEAKING FLUIDS** Use a drain pan or suitable container to capture any draining, leaking or spilled fluid. Refer to local procedures and plans for preventing and responding to fluid spills or leaks. Immediately clean up spilled fluid. Comply with local procedures and environmental regulations when disposing of unused chemicals, soiled/cleanup materials (such as filters and rags), and drained, leaked or spilled fluids. Failure to comply may result in injury to personnel, damage to equipment and/or damage to the environment. **CAUTION** Coolant other than the approved antifreeze (A-A-52624A) added in an emergency should be drained and replaced with approved antifreeze at the earliest opportunity. 1. Check radiator coolant level (WP 0100). Look into radiator filler neck. If coolant level is below ADD marker, add coolant into radiator filler neck until coolant level reaches full mark. If coolant level is above ADD marker or is at the full mark, install radiator cap and close radiator cover.	
			2. Check to see that chain is installed on cap and gasket under cap is not broken or missing.	Radiator cap is unserviceable or missing. Gasket is broken or missing.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
5	Before	Driver's Hatch Cover	**DRIVER** **WARNING**  Standard hatch will not be properly supported if an uparmored spring retainer is used. Improperly supported hatch can fall and injure personnel. Use correct retainer for hatch. **WARNING**  Falling hatch could seriously injure you. Keep head lower than closed hatch position when opening or closing hatch. Keep hands clear of hatch rim when closing. Make sure latch pin or mechanism is fully engaged when hatch is in any open position. 1. Check operation of Driver's hatch cover. a. Check that Driver's hatch cover opens and closes freely, and locks in both OPEN and CLOSED positions.	Driver's hatch cover will not lock in OPEN or CLOSED position.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			b. Check that safety latch is present and locks in place.	Safety latch is missing or will not lock in place.

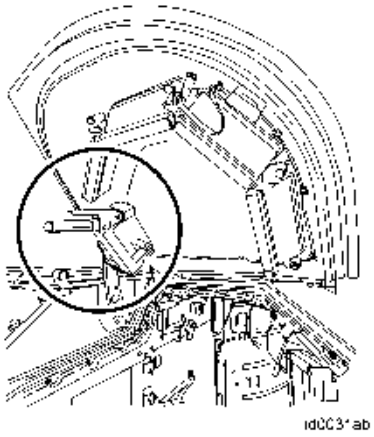


Figure 10. Safety Latch and Cover Handle Location.

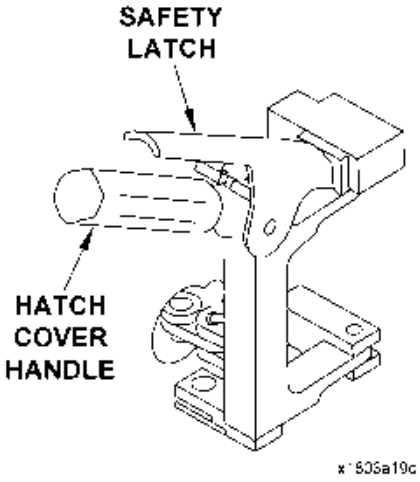


Figure 11. Safety Latch and Cover Handle

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
6	Before	Driver's Periscopes	**DRIVER** 1. Check Driver's periscope lenses for dirt and cracks. If periscope lenses are dirty, wipe with clean, lint-free cloth. 2. Check Driver's blackout covers for tears. 3. Check that Driver's blackout covers stay in place when closed.	Over 50% loss of visibility through Driver's center periscope lens.

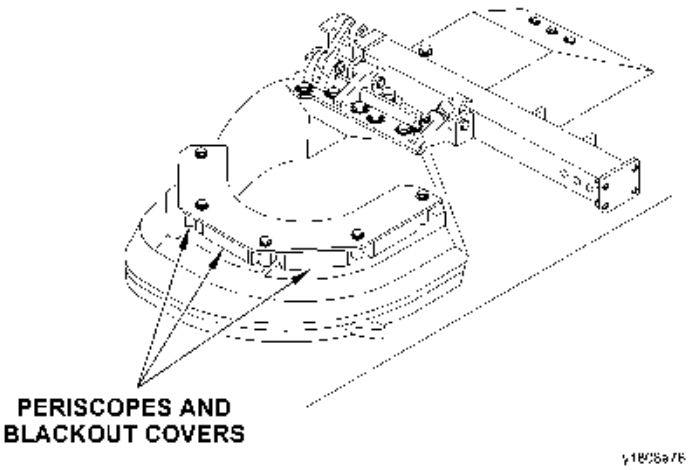


Figure 12. Blackout Covers.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
7	Before	Driver's Seat	**DRIVER** 1. Check Driver's seat adjustment for proper operation (WP 0012). 2. Check that the seat belt cutter is present.	 Seat will not adjust. Seat belt cutter is missing

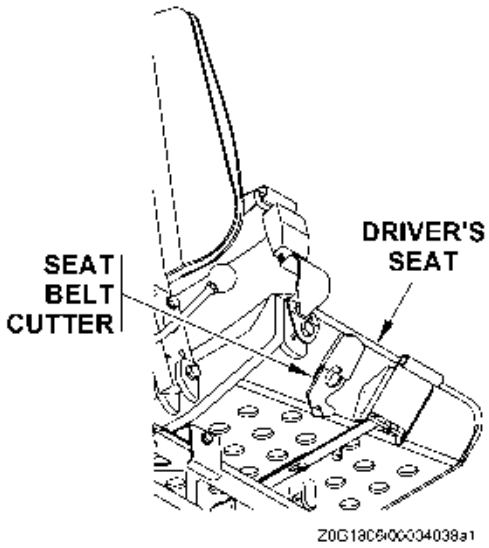


Figure 13. Seat Belt Cutter.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
8	Before	Engine Oil	**DRIVER** 1. Remove forward engine access panel (WP 0045). 2. Check engine oil level.	

Figure 14. Engine Oil Level Check Location.

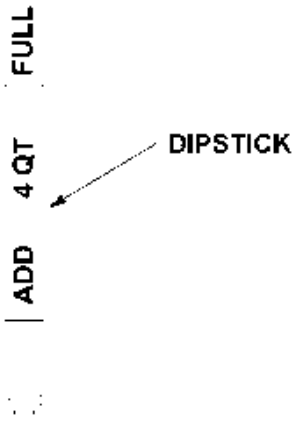


Figure 15. Engine Oil Dipstick.

			3. Install forward engine access panel (WP 0045).	

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
9	Before	Hull Drain Plugs	**DRIVER** 1. Check for open or missing front hull drain plug and that bridge plates are fully seated.	Front hull drain plug is missing or bridge plates will not seat.

Figure 16. Drain Plug Access Door and Components Location.

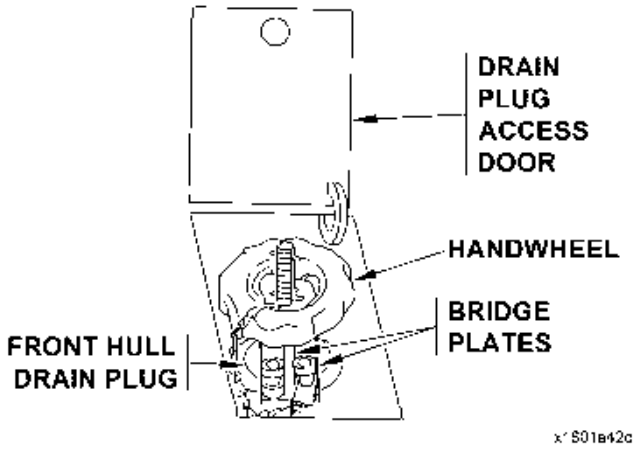


Figure 17. Drain Plug Access Door and Components.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
10	Before	Engine Compartment Fire Extinguisher	**DRIVER** 1. Check engine compartment fire extinguisher.	
			a. Check wire or lead seals on engine compartment fire extinguisher.	Wire or lead seals on engine compartment fire extinguisher are missing, broken, or improperly laced.
			b. Check that pressure gauge on FM-200 engine compartment fire extinguisher **does** read within ± 25 PSIG of pressure shown on instruction plate table at ambient bottle temperature.	Pressure gauge on FM-200 engine compartment fire extinguisher does not read within ± 25 PSIG of pressure shown on instruction plate table at ambient bottle temperature.

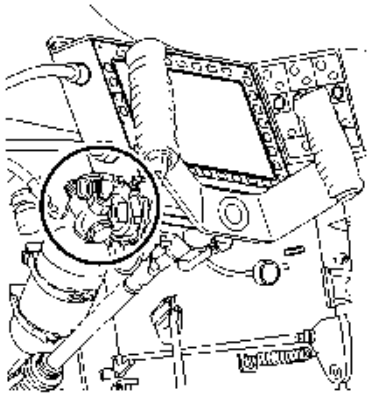


Figure 18. Engine Compartment Fire Extinguisher and Components Location.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:

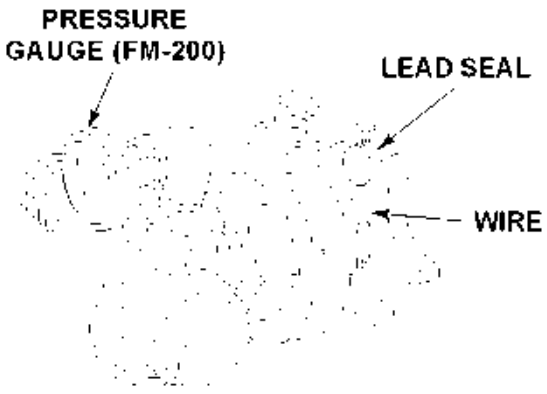


Figure 19. Engine Compartment Fire Extinguisher Pressure Gauge, Wire and Lead Seal.

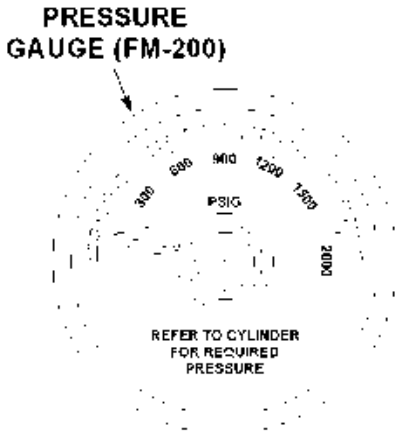


Figure 20. Engine Compartment Fire Extinguisher Pressure Gauge.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			c. Check flame sensor cable and sensor box in tunnel.	Cable or sensor box is disconnected, damaged, or missing.

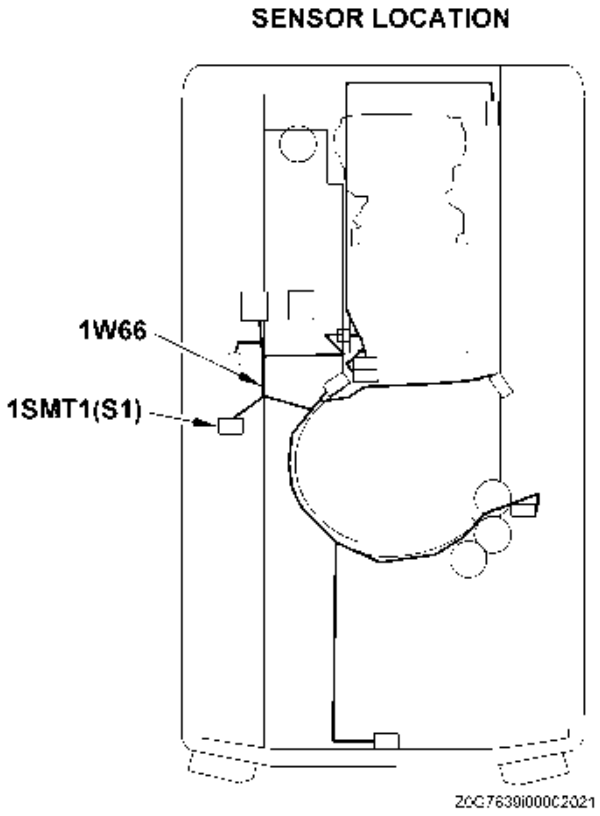


Figure 21. Flame Sensor Cable and Sensor Box.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
11	Before	Engine Compartment First-Shot Fire Extinguisher	**DRIVER** 1. Check engine compartment First-Shot fire extinguisher. a. Check pin and recoil plug on engine compartment fire extinguisher.	

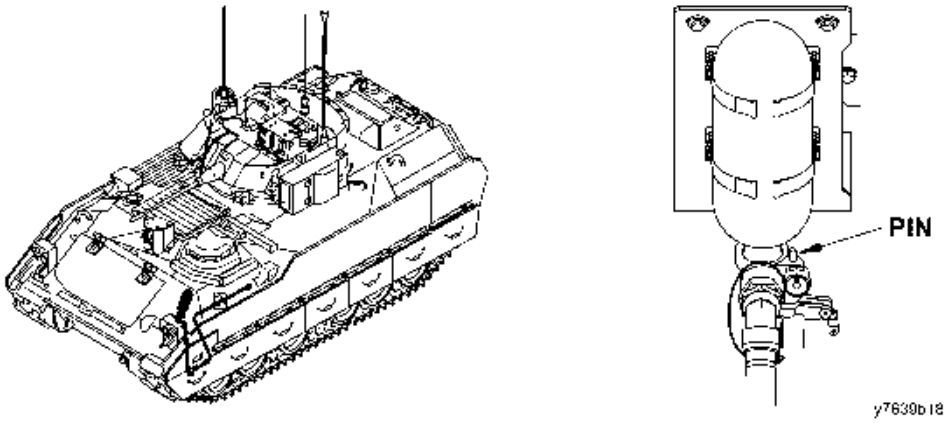


Figure 22. First-Shot Engine Compartment Fire Extinguisher Pin.

			b. Check that pressure gauge on “First-Shot” engine compartment fire extinguisher does read within marked green area on gauge.	Pressure gauge on “First-Shot” engine compartment fire extinguisher does not read within marked green area on gauge.

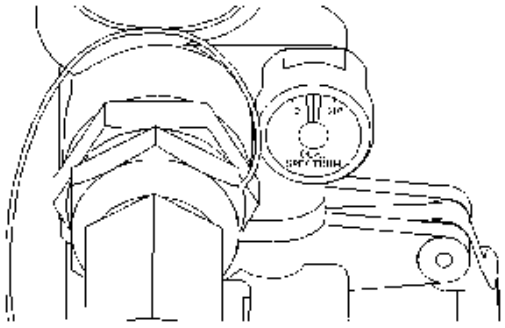


Figure 23. First-Shot Engine Compartment Fire Extinguisher Gauge.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			c. Check three sensors and sensor cable in engine compartment. (1) Check sensor windows for dirt, oil, and contamination. If dirty, clean with a soft, dry cloth.	

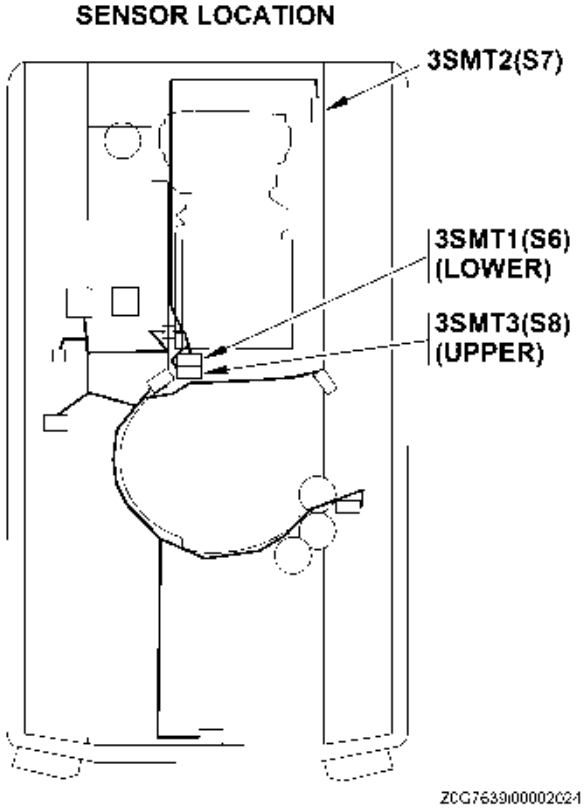


Figure 24. Engine Compartment Sensors.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
12	Before	Control Electronics Panel (CEP)	**DRIVER** 1. Move MASTER POWER switch to ON (WP 0004). 2. Check that Automatic Fire Extinguishing System (AFES) Control Electronics Panel (CEP) SYSTEM ON LED (GREEN) is OFF, until after Power-Up BIT (PBIT) tests. a. If fire sensor light(s) (S1-S8) illuminates solid RED, clean indicated fire sensor lens. b. Extinguisher discharge status reset. c. If fire sensor light(s) (S1-S8) illuminates solid RED again, notify Field Maintenance.	AFES CEP SYSTEM ON LED is RED.

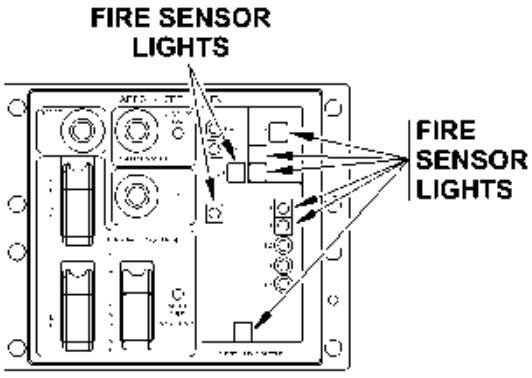


Figure 25. Fire Sensor Lights.

			3. Check discharge status or if a brief single blink appears on CHECK AFES status indicators.	Discharge status or CHECK AFES status indicator comes on steady.

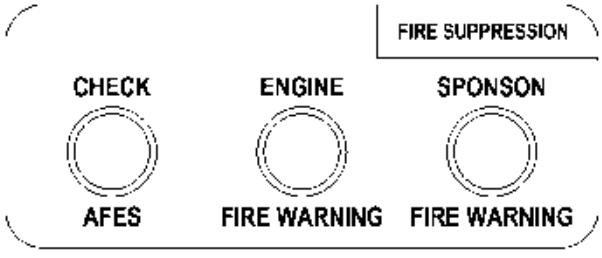


Figure 26. Fire Suppression Indicator Lights.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			4. Check that AFES CEP SYSTEM ON LED(s) illuminate sequentially (PBIT).	AFES CEP status LED(s) comes on steady or does not come on.
			a. All LED(s) (except SYSTEM ON) are sequenced as shown by dashed lines on CEP. b. SYSTEM ON and external vehicle indicators are OFF during LED sequencing. c. Eight (8) complete sequences are performed, taking approximately 8 seconds.	
			5. AFES CEP SYSTEM ON LED (GREEN) is illuminated.	AFES SYSTEM ON LED comes on RED.
			NOTE AFES CEP SYSTEM ON LED (GREEN) will now stay ON, regardless of MASTER POWER state, until AFES POWER DOWN procedure is performed.	
			6. AFES is now operational; verify that no fault LED(s) are illuminated.	Fault LED is illuminated.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
13	Before	Driver's Switch and Indicator Panel	**DRIVER** 1. Perform lamp test on Driver's Switch and Indicator Panel (DSIP). a. Press the LAMP TEST switch and hold while observing the DSIP. Indicators for: PANEL LIGHTS, MASTER POWER, ENGINE ACCESSORY, Chemical, Biological, Radiological, and Nuclear (CBRN), WARNING, CAUTION, RAMP UNLOCKED, COLD START, CHECK AFES, ENGINE FIRE WARNING, and SPONSON FIRE WARNING, should all light when pressed. b. If CBRN System and/or COLD START lamps do not come on, notify Field Maintenance.	MASTER POWER, ENGINE ACCESSORY, WARNING, CAUTION, RAMP UNLOCKED, CHECK AFES, ENGINE FIRE WARNING, and SPONSON FIRE WARNING lamps do not light.

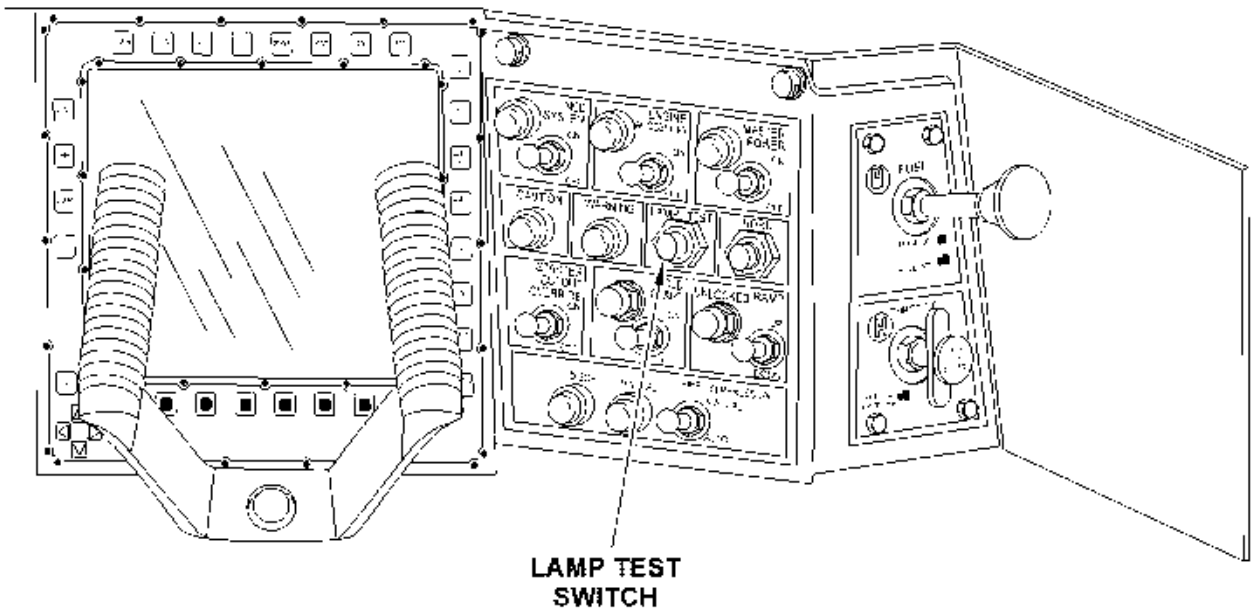


Figure 27. Driver's Tactical Display (DTD) and DSIP.

14	Before	Driver's Tactical Display (DTD)	**DRIVER** 1. Check DTD to ensure DTD and Digital Vehicle Distribution Box (DVDB) test status is Go. Then select F-1 softkey.	

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
				Either DTD or DVDB received a No Go or if the DTD does not display self test screen.
			2. Check if DTD display is dirty or cracked. Clean dirty display (WP 0107).	Screen will not display Combat Mode screen clearly.
			3. Using brightness keys, check that display brightness can be adjusted.	DTD display is cracked. Display brightness cannot be adjusted.

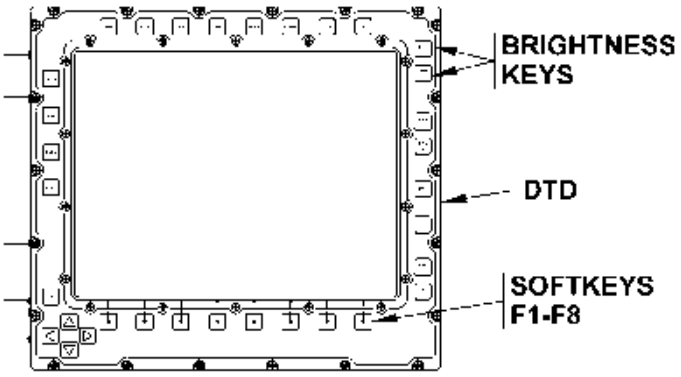


Figure 28. Driver's Tactical Display (DTD) Brightness Keys.

			4. Move ENGINE ACCESSORY switch to ON (WP 0004).	
			5. Check oil pressure gauge and volts gauge.	Oil pressure gauge is not in red zone. Volts gauge is in the RED zone.
			6. Check for DSIP WARNING light on.	WARNING light is not on.
			7. Check to ensure the following warning indicators are flashing with ENGINE ACCESSORY SWITCH to ON: ENG OIL PRESS LOW and TRANS OIL PRESS LOW.	Either warning indicator is not flashing or if any other warning indicators are flashing.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

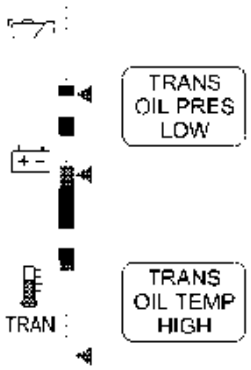
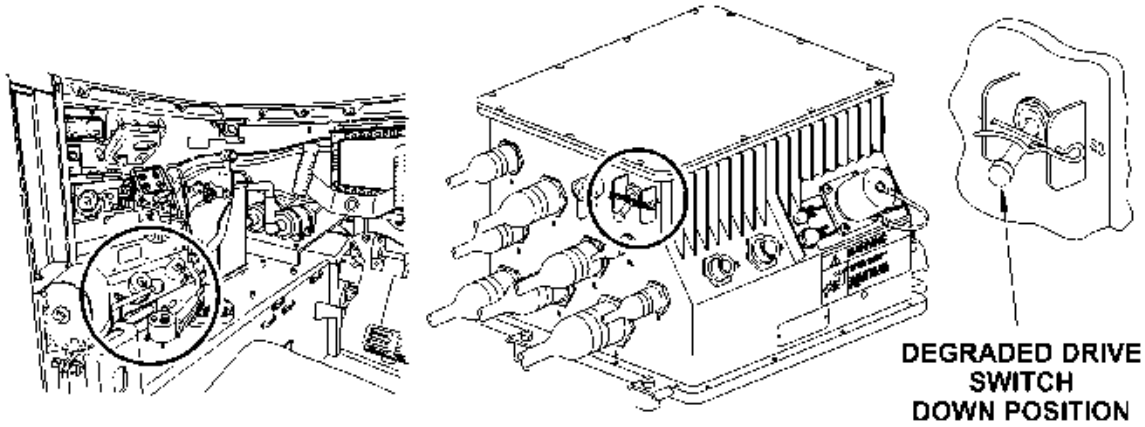
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 29. Transmission Oil Pressure and Oil Temperature Gauges.	
			8. Move ENGINE ACCESSORY switch to OFF (WP 0004). 9. Check the DVDB to ensure that the Degraded Driver Switch pin is installed with the switch in the down position.	Pin not installed.
			 Figure 30. DVDB.	
15	Before	Hand Brake	**DRIVER** 1. Check hand brake.	Hand brake will not lock/release brake pedal. Hand brake will not slide forward easily.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			a. Push down and hold brake pedal firmly. b. Lift hand brake handle up and pull back. c. Release foot pressure. Check to see that brake pedal locks in down position. d. Push down and hold brake pedal firmly. e. Rotate knob on hand brake handle away from instrument panel and lift handle up to disengage brake. f. Apply additional foot pressure, as needed, so hand brake will release and slide forward. g. Turn hand brake handle down. h. Release brake pedal. Pedal should come up.	

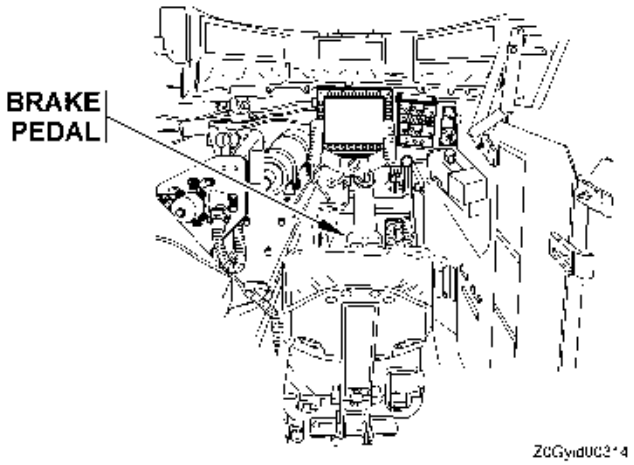


Figure 31. Brake Pedal.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

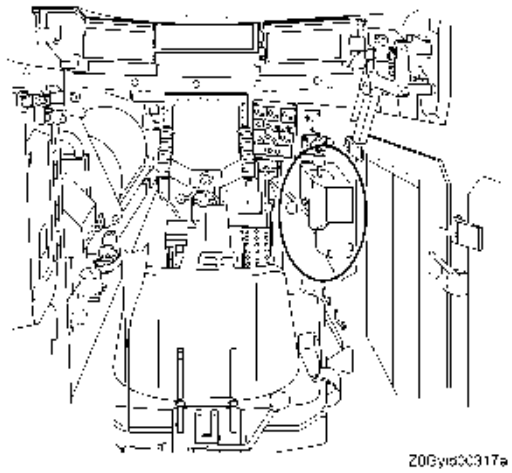
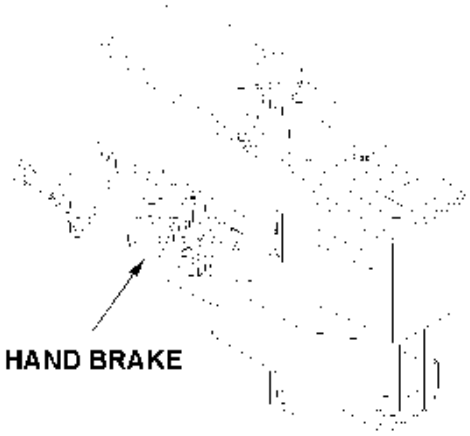
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 32. Hand Brake Location.  Figure 33. Hand Brake.	
16	Before	Driver's Compartment CBRN System	**DRIVER** 1. Check CBRN system air flow. 2. Activate CBRN system (WP 0053). Allow CBRN system to run for 5 minutes. a. Check that Driver's air outlet hose is not pinched, crushed, or torn. b. Check air outlet hose for warm and sufficient air flow.	

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			c. Check that communication is present while wearing CBRN mask.	

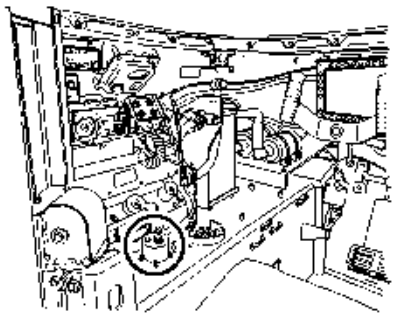


Figure 34. Driver's CBRN Heater Control Location.

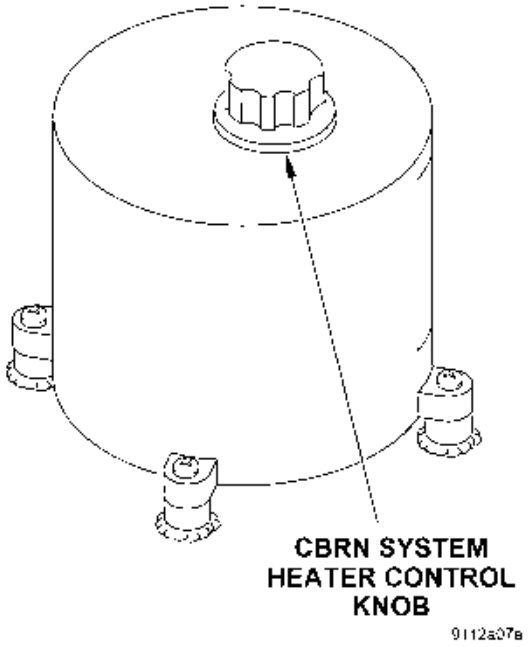


Figure 35. Driver's CBRN Heater Control.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
17	Before	Ramp	**DRIVER** **WARNING**  **HYDRAULIC SYSTEM** Hydraulic systems operate at high pressures and temperatures. Hydraulic fluid under pressure can pierce the skin. Do not check for leaks with your hand. Always allow hydraulic oil to cool and relieve pressure in hydraulic system before conducting tasks. Open lines and hoses slowly and wait for any residual pressure to relieve before continuing to open lines and hoses. Hydraulic fluid may be flammable. Keep away from heat, open flame and/or other ignition sources. Prolonged contact with hydraulic fluid may cause skin irritation. Wear protective eyewear, gloves and clothing. If exposed, flush skin and/or eyes with water and seek medical attention. Use a drain pan or suitable container to capture any draining, leaking or spilled fluid. Refer to local procedures and plans for preventing and responding to fluid spills or leaks. Immediately clean up spilled hydraulic fluid. Keep cloths/rags away from open flame and/or ignition sources. Comply with local procedures and environmental regulations when disposing of unused chemicals, soiled/ cleanup materials (such as filters and rags), and drained, leaked or spilled fluids. Failure to comply may result in injury to personnel and/or damage to the environment.	

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  Fire Resistant Hydraulic Fluid (FRH) is toxic if absorbed through skin or ingested. Do not service hydraulic system when FRH is hot or pressurized. Do not allow to come into contact with skin or eyes. Use goggles or face shield and protective gloves. If FRH contacts skin, wash immediately with soap. If FRH gets into eyes, wash with lots of water for 15 minutes and get medical attention. If FRH is swallowed, get medical attention. **WARNING**  **FILLING/DRAINING/LEAKING FLUIDS** Use a drain pan or suitable container to capture any draining, leaking or spilled fluid. Refer to local procedures and plans for preventing and responding to fluid spills or leaks. Immediately clean up spilled fluid. Comply with local procedures and environmental regulations when disposing of unused chemicals, soiled/cleanup materials (such as filters and rags), and drained, leaked or spilled fluids. Failure to comply may result in injury to personnel, damage to equipment and/or damage to the environment.	

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  Ramp cylinder failure can cause the ramp to fall and kill or seriously injure personnel. Do not stow anything in the ramp cylinder box, and remove anything found stowed there. 1. Check ramp operation. a. Lower and raise ramp (WP 0010).	Ramp power unit does not raise or lower ramp. Ramp does not lock. Ramp UNLOCKED indicator light is on when ramp is locked. Ramp UNLOCKED indicator light is off when ramp is unlocked.

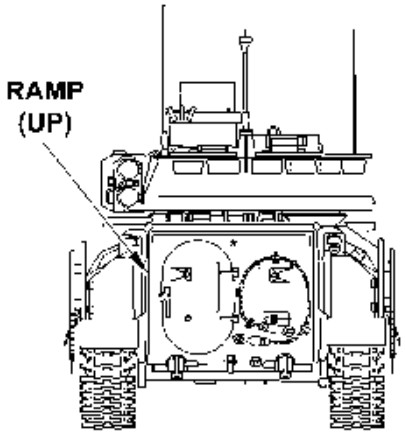


Figure 36. Ramp Positions – Ramp Up.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

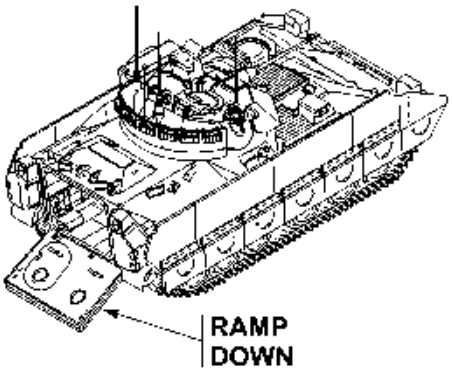
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 37. Ramp Positions – Ramp Down.	
			WARNING  Fire Resistant Hydraulic Fluid (FRH) is toxic if absorbed through skin or ingested. Do not service hydraulic system when FRH is hot or pressurized. Wear gloves and avoid contact with skin. If FRH contacts skin, wash immediately with soap. If FRH gets into eyes, wash with lots of water for 15 minutes and get medical attention. If FRH is swallowed, get medical attention. 2. Check ramp hydraulic power unit. a. Lower ramp (WP 0010). b. Remove ramp hydraulic power unit cover and check sight glass. If fluid level is below ADD mark, add FRH (MIL-PRF-46170) as needed. Never fill over halfway between ADD and FULL with ramp down. Ramp hydraulic power unit will be overfilled with ramp up.	Any Class III leak is found.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			c. Install ramp hydraulic power unit cover.	

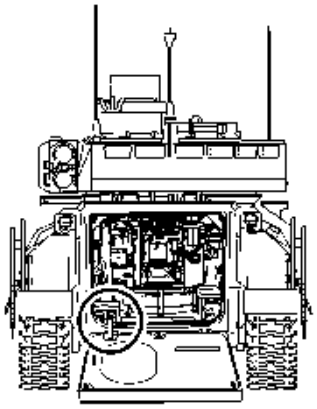


Figure 38. Hydraulic Power Unit Location.

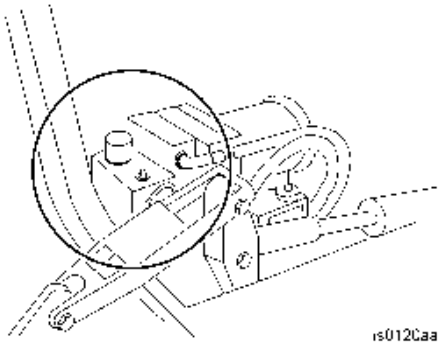


Figure 39. Ramp Hydraulic Power Unit Sight Glass.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
18	Before	Power Unit	**DRIVER** **WARNING**  **LUBRICATING OIL** Lubricating oil may be flammable. Keep away from heat, open flame and/or other ignition sources. Prolonged contact with lubricating oil may cause a skin rash. Wear protective eyewear, gloves and clothing. Remove saturated clothing immediately and thoroughly wash skin that comes in contact with lubricating oil. If exposed, flush skin and/or eyes with water and seek medical attention. Use a drain pan or suitable container to capture any draining, leaking or spilled fluid. Refer to local procedures and plans for preventing and responding to fluid spills or leaks. Immediately clean up spilled oil. Keep cloths/rags away from open flame and/or ignition sources. Comply with local procedures and environmental regulations when disposing of lubricating oil, soiled/ cleanup materials (such as filters and rags), and drained, leaked or spilled fluids. Failure to comply may result in injury to personnel and/or damage to the environment. 1. Open engine access door (WP 0009).	

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			2. Check transmission oil level.	

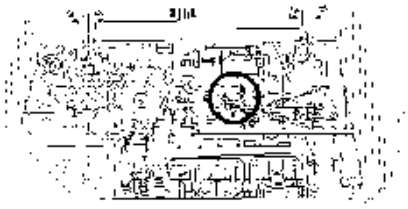


Figure 40. Transmission Oil Dipstick Location.

Figure 41. Transmission Oil Dipstick.

			3. Check final drive oil levels.	

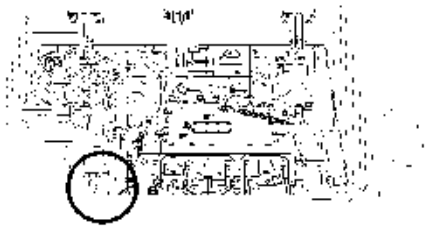


Figure 42. Right Final Drive Dipstick Location.

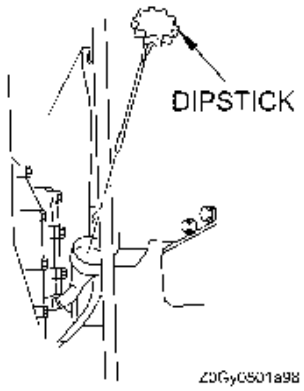


Figure 43. Right Final Drive Dipstick.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

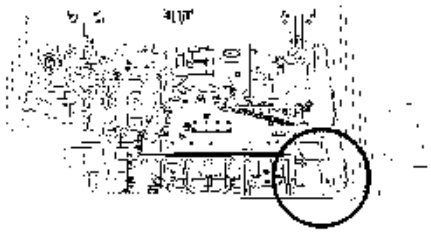
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
				

Figure 44. Left Final Drive Dipstick Location.

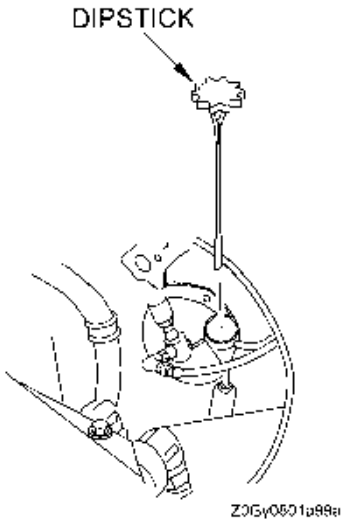


Figure 45. Left Final Drive Dipstick.

		4. Check right angle drive oil level.	

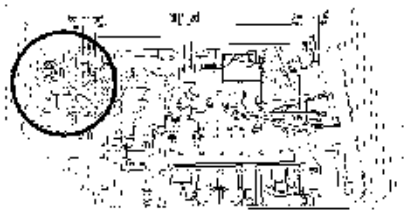


Figure 46. Right Angle Drive Oil Level Location.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

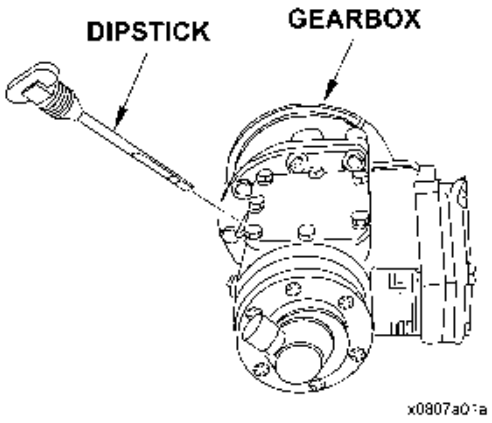
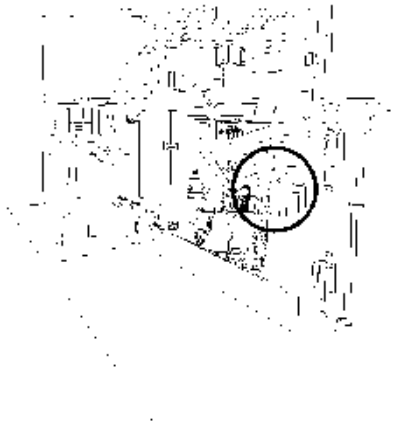
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 47. Right Angle Drive Oil Level.	
19	Before	Engine Air Cleaner	**DRIVER** 1. Remove rear power unit access panel (WP 0045). 2. Remove door from air cleaner housing.	Air Cleaner Housing has fluid inside that cannot be drained or removed.
			 Figure 48. Air Cleaner Housing Location.	

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

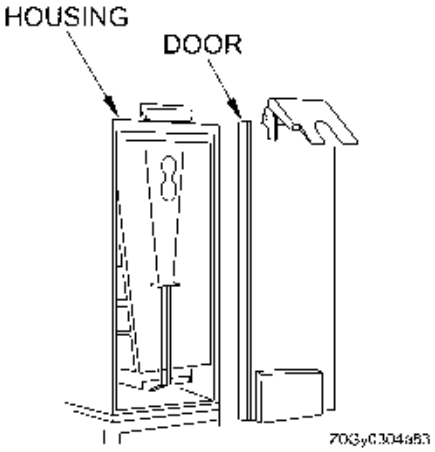
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 49. Air Cleaner Door and Housing.	
			3. Remove drain plug on air cleaner. 4. Check air cleaner for any fluid. 5. Install drain plug on air cleaner housing. 6. Install door on air cleaner housing. 7. Install rear power unit access panel (WP 0045).	
20	Before	Driver's Tactical Display (DTD)	**DRIVER** **WARNING**  Diesel fuel can catch fire and seriously injure or kill personnel and damage or destroy the vehicle. Wipe up fuel spills immediately. Do not smoke near fuel or when working on the fuel system. Disconnect vehicle ground when working on the fuel system. **NOTE** Engine must be started to make the following checks, DTD should be monitored while operating the vehicle. 1. Check DTD gauges and lights. 2. Move ENGINE ACCESSORY switch to ON (WP 0004) and start engine (WP 0022).	

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			3. Check ENGINE OIL PRES gauge.	ENGINE OIL gauge is in red zone or gauge fails to register.

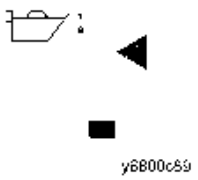


Figure 50. Engine Oil Pressure Gauge.

			4. Check VOLTS gauge.	VOLTS gauge reads in the RED zone.

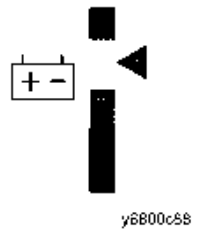


Figure 51. Volt Gauge.

			5. Check ENGINE COOLANT TEMP gauge.	ENGINE COOLANT gauge is in red zone or gauge fails to register.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

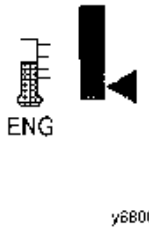
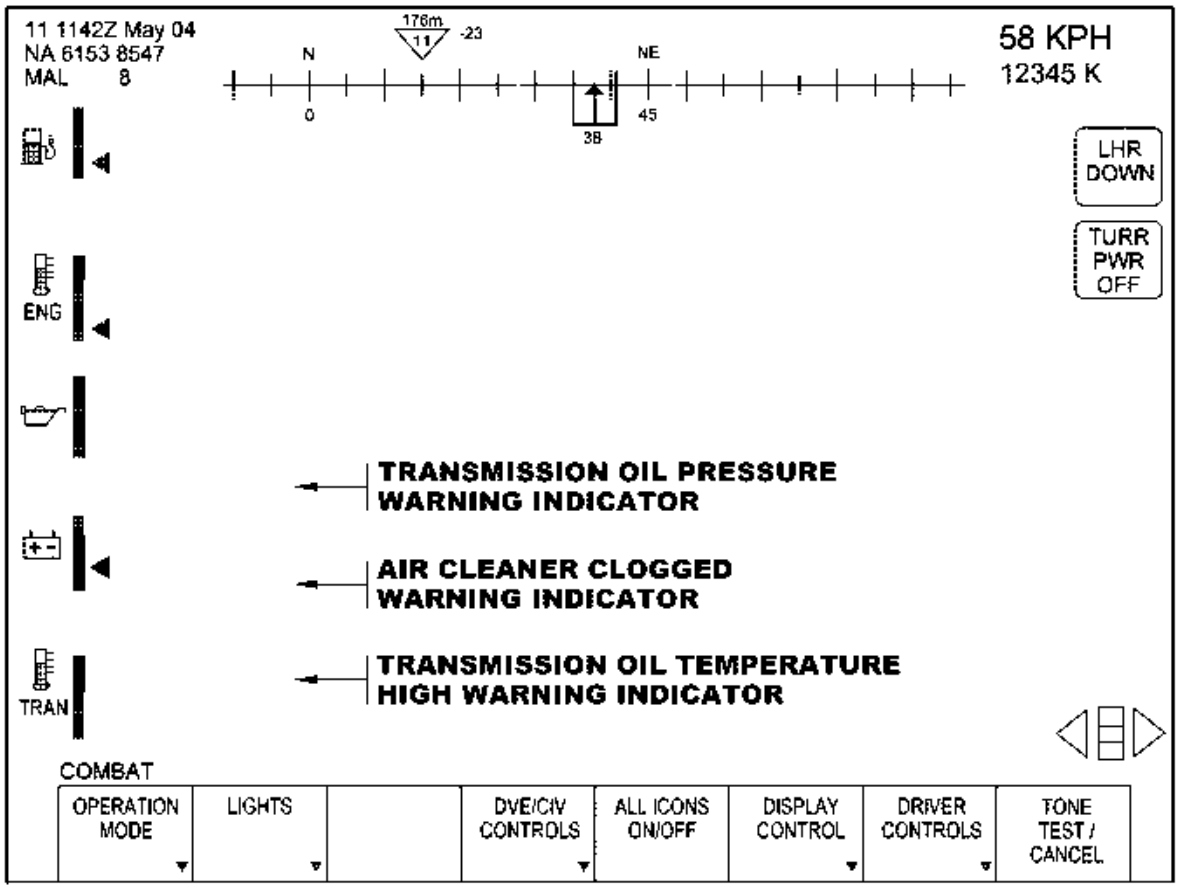
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 52. Engine Coolant Temperature Gauge.	
			6. Check TRANS OIL PRESS LOW indicator goes out after 30 seconds.	TRANS OIL PRESS LOW indicator is flashing after 30 seconds.
			7. Check TRANS OIL TEMP HIGH indicator goes out after 30 seconds.	TRANS OIL TEMP HIGH indicator is flashing after 30 seconds.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:

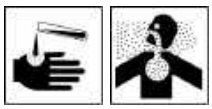


COMBAT Mode of Operation on Driver's Tactical Display (Warning Indicators)

Figure 53. Transmission Oil Temperature High Indicator.

		8. Check Warning indicators.	Any Warning indicators are ON.
		9. Check DISP Warning Lamp.	WARNING lamp is on.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  Contact with Chemical, Biological, Radiological, and Nuclear (CBRN) agents can kill or seriously injure you. If vehicle exposure to CBRN agents is suspected, contact unit CBRN officer or CBRN Non-Commissioned Officer (NCO). Do not service CBRN filter or vent system. Do not handle air filter media without the proper protective equipment. 10. Check Air Filter Restriction Gauge. If gauge reads less than 20 inches of water, reset follow-on pointer and go to Step 12. If gauge reads 20 inches of water or more, go to Step 11. 11. If AIR FILTER RESTRICTION gauge reads 20 inches of water or more, stop engine (WP 0026). Remove rear power unit access panel (WP 0045).	

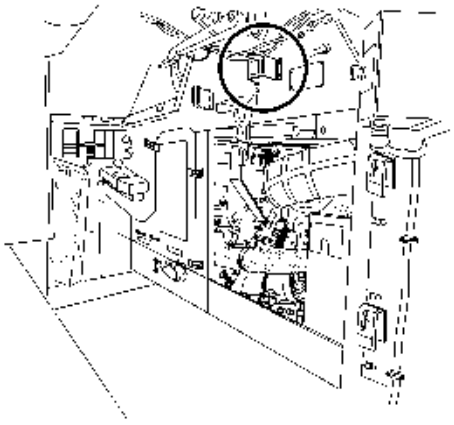


Figure 54. Air Filter Restriction Gauge Location.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

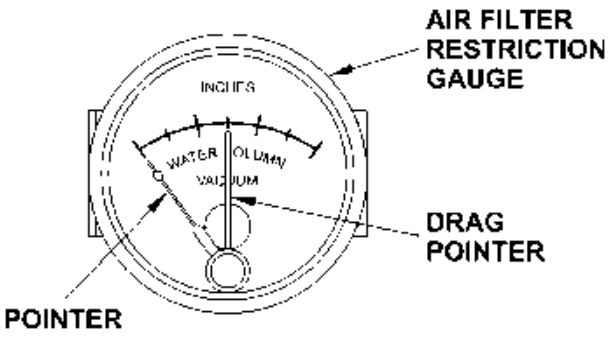
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 55. Air Filter Restriction Gauge.	
			a. Remove air intake air filter element (V-Pac).	
				

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 56. Intake Air Filter Location.	
			b. Examine V-Pac element for holes, dents, tears, or buildup of ice. If element is bad or ice is present, replace V-Pac element. c. If V-Pac is oily and covered in soot, replace V-Pac element. d. Shake V-Pac element to remove dust, and hand brush dirt from outside surface. e. If necessary, tap narrow end of V-Pac element on ground to shake out dust. f. Reinstall V-Pac element. Install power unit access panel. g. Start engine (WP 0022). h. Check AIR FILTER RESTRICTION gauge. If gauge still reads 20 inches of water of more, notify Field Maintenance. 12. Check FUEL FILTER CLOGGED indicator. If FUEL FILTER CLOGGED indicator is flashing, stop engine (WP 0026).	

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

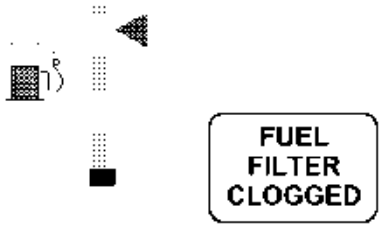
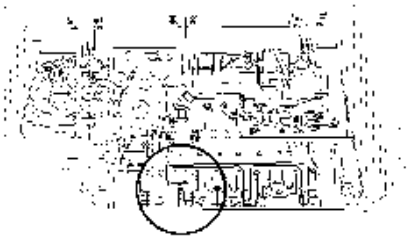
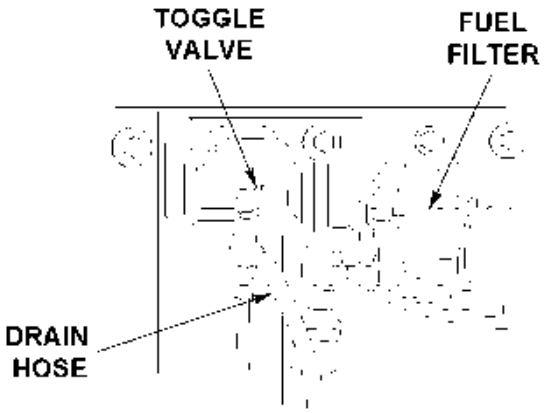
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 57. Fuel Filter Clogged Indicator.	
			13. Drain fuel filter into suitable container until clear fuel comes out. If fuel is contaminated or does not drain, notify Field Maintenance. If FUEL FILTER CLOGGED indicator continues to flash, notify Field Maintenance.	
			 Figure 58. Fuel Filter Location.	
			 Figure 59. Fuel Filter.	

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
21	Before	Transmission Electronic Controller (TEC) Fault Indicator Light	**DRIVER** 1. Check TEC fault indicator light. **NOTE** If TEC fault indicator light is covered with dirt or debris, it cannot be seen. Clean fault indicator light with a clean wiping cloth. a. Move MASTER POWER switch to OFF (WP 0004). b. Move MASTER POWER switch to ON (WP 0004). c. After 22 seconds, observe TEC fault indicator light.	TEC Fault indicator light is on or flashing.
			d. Start engine (WP 0026).	
22	Before	Driver's Vision Enhancer (DVE)	**DRIVER** 1. Check DVE for proper operation (WP 0044). Ensure clear video is displayed on DTD. Notify field level maintenance if displayed video is not clear.	DVE does not function, is not clear, or cannot be aligned.

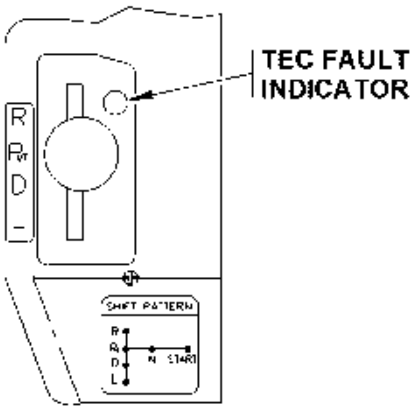


Figure 60. TEC Fault Indicator Light.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
23	Before	Accelerator Pedal	**DRIVER** 1. Check accelerator pedal operation.	Accelerator pedal binds when pressed down and released. Engine does not return to idle when accelerator pedal is released. Engine stays at idle when accelerator is depressed.

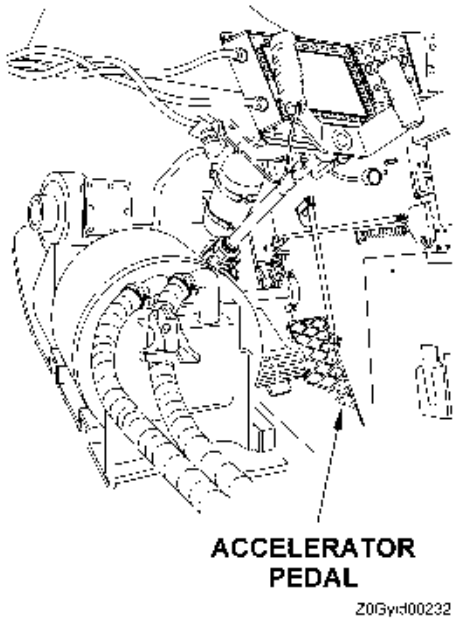


Figure 61. Accelerator Pedal.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

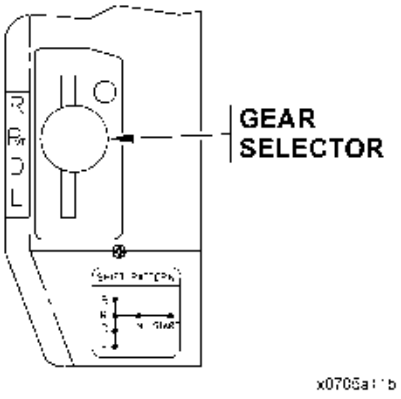
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
24	Before	Gear Selector	**DRIVER** **WARNING**  Vehicle can move suddenly when engine is started or transmission is engaged. Ensure personnel are clear of the vehicle before starting engine or engaging transmission. Failure to comply may result in death or injury to personnel. **NOTE** Ensure brakes are applied when checking gear selector. 1. Check gear selector operation.	Gear selector binds when moved. Transmission does not engage when gear selector is put in gear.
			 Figure 62. Gear Selector.	
			2. Apply hand brake.	

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
25	Before	Fan Speed Control Bypass	**DRIVER** **CAUTION** If bypass knob is pushed in and locked under normal operating conditions, possible damage could occur to vaneaxial fan drive, fan speed control assembly and transmission. Do not engage bypass knob when operating under normal operating conditions or for extended periods. **NOTE** Fan speed control is disengaged when the bypass knob is out. Fan speed control is engaged when the bypass knob is pressed in and locked. 1. Check that fan speed control bypass knob is disengaged.	

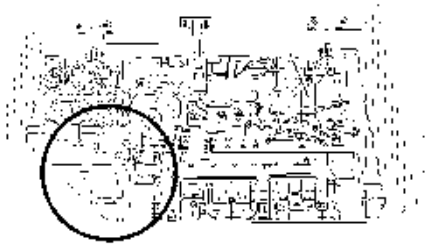


Figure 63. Fan Bypass Knob Location.

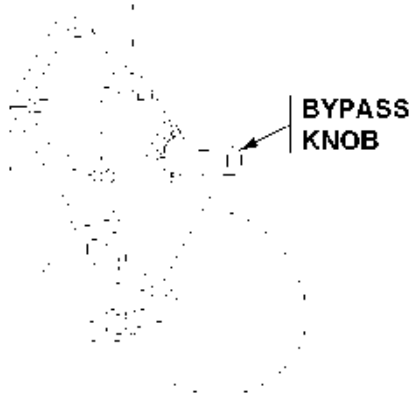


Figure 64. Fan Bypass Knob.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

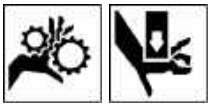
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  Moving parts of power unit can seriously injure you. Clear personnel away from power unit before startup. Stay clear of moving parts when power unit is running. **WARNING**  Hot parts can burn you. Allow parts to cool before working on or near them. If necessary, use heat protective gloves to work on hot parts. 2. Start engine (WP 0022). 3. Check that fan is operating at normal speed. 4. Stop engine (WP 0026). 5. Close engine access door (WP 0009).	Fan operates at maximum speed when bypass button is disengaged.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
26	Before	Exterior and Interior Vehicle Lights	**DRIVER** 1. Station one helper at front of vehicle and another helper at rear of vehicle. 2. Check that headlights, blackout marker, stop light, parking light, turn signal, hazard signal, panel lights, and dome light operate correctly and are not damaged.	

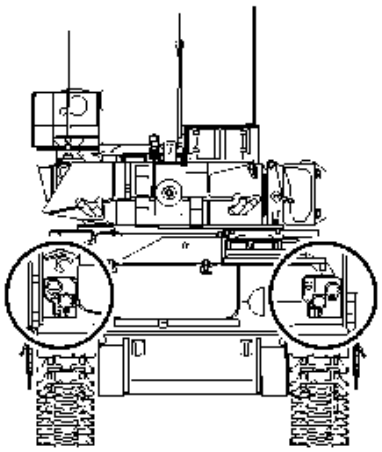


Figure 65. Exterior Lights Front.

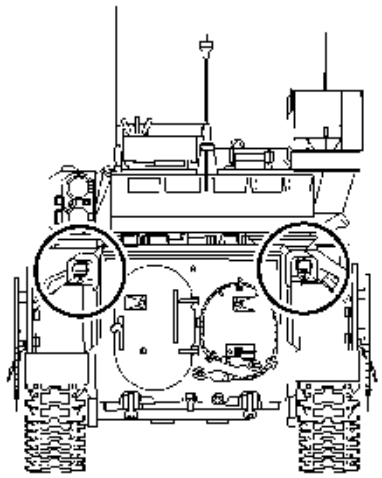


Figure 66. Exterior Lights Rear.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:

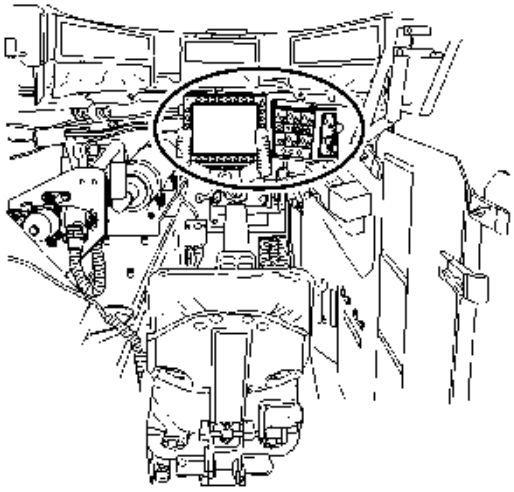


Figure 67. Driver's Panel.

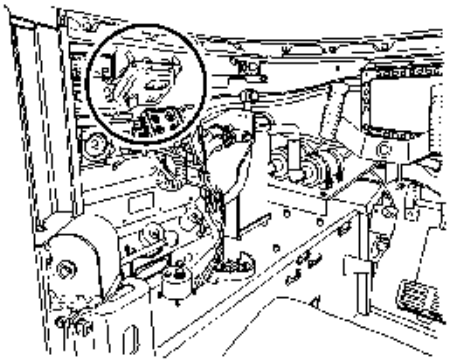


Figure 68. Driver's Dome Light.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:

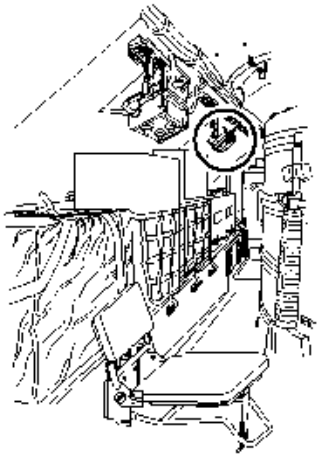


Figure 69. Left Crew Dome Light.

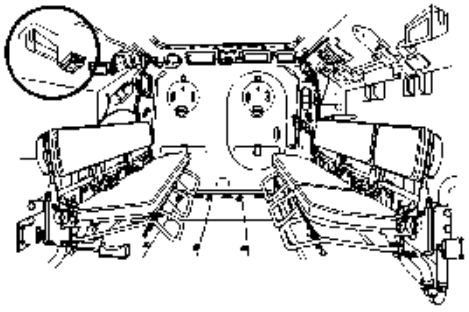


Figure 70. Right Crew Dome Light.

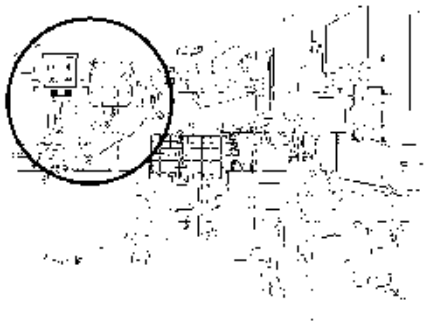


Figure 71. Left Turret Dome Light.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

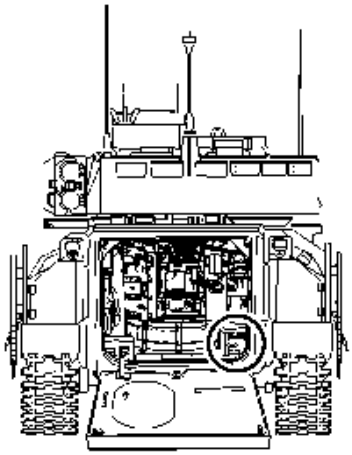
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 72. Right Turret Dome Light.	
27	Before	Hull Drain Plugs	**DRIVER** 1. Check for open or missing rear hull drain plug and that bridge plates are fully seated.	Rear hull drain plug is missing or bridge plate will not seat.
			 Figure 73. Floor Plate, Fastener and Rear Hull Drain Plug Location.	

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

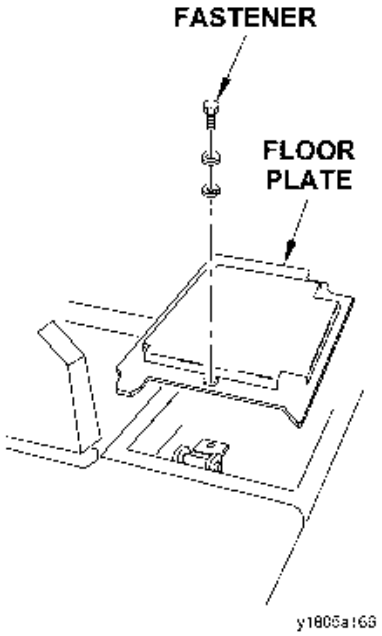
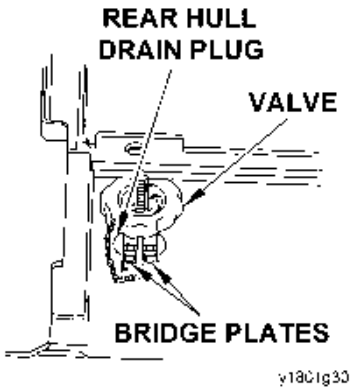
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 74. Floor Plate and Fastener.	
			 Figure 75. Rear Hull Drain Plug.	
28	Before	Portable Fire Extinguisher	**DRIVER** 1. Check seals on both portable fire extinguishers.	

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
				Seal on portable fire extinguisher is missing or broken. Fire extinguisher is discharged. Portable fire extinguisher is missing.

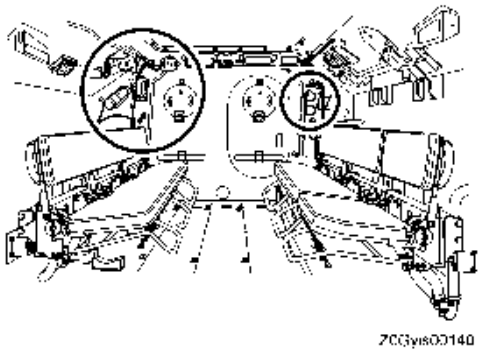


Figure 76. M2 Portable Fire Extinguisher Locations.

29	Before	Internal/Squad Area Fire Extin-guishers	**DRIVER** 1. Check that pressure gauges on both squad area fire extinguishers read at or above minimum pressure on chart. Estimate temperature in squad area.	Pressure gauge on squad area fire extinguisher reads below pressure shown on chart.

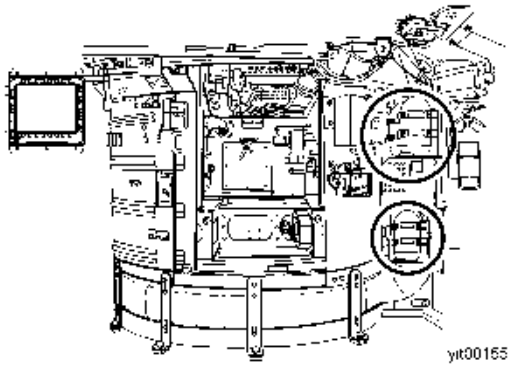


Figure 77. Squad Area Fire Extinguishers Location.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:

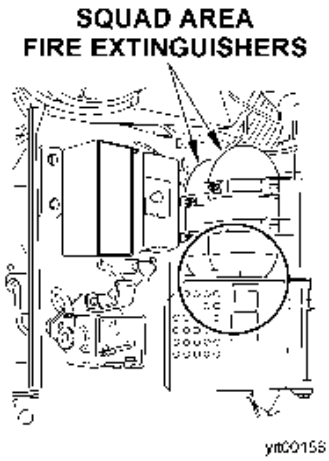


Figure 78. Squad Area Fire Extinguishers, Pressure Chart and Gauge Location.

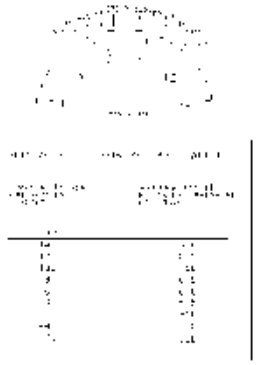


Figure 79. Squad Area Fire Extinguishers Pressure Chart.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

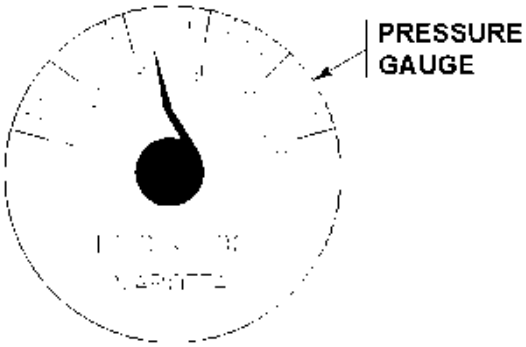
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 80. Squad Area Fire Extinguishers Pressure Gauge.	
			WARNING  Placing stowage items over fire suppression system outlets can prevent fires from being put out. Fire can kill or seriously injure personnel. Equipment can be damaged. Ensure stowage items are kept clear of fire suppression system outlets. **WARNING**  Ensure that stowed items do not interfere with the fire suppression system manual activation cables. Do not stow any items in the area adjacent to the fire extinguisher bottles where the cables hook up to the valves. Accidental discharge may occur when the turret is traversed. Personnel may be injured if fire suppression system is accidentally discharged. 2. Check that manual activation cables are not damaged or disconnected.	Manual activation cables are damaged or disconnected.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

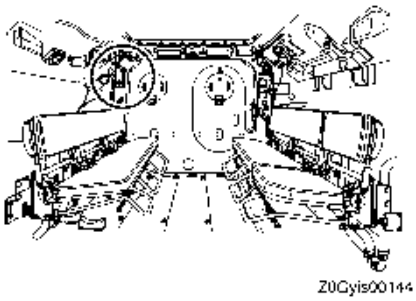
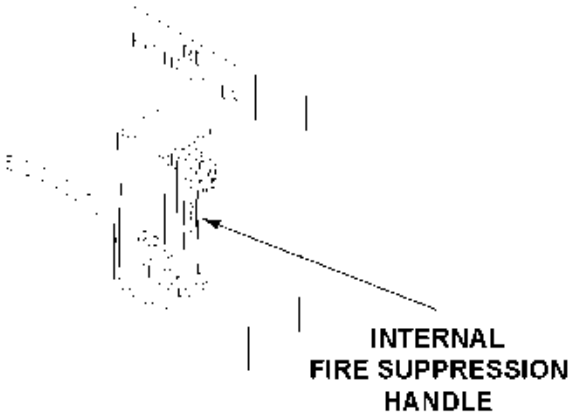
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 81. Manual Activation Handle Location.  Figure 82. Manual Activation Handle.	
			3. Check that anti-recoil plugs are properly stowed and that safety pins are not inserted.	

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:

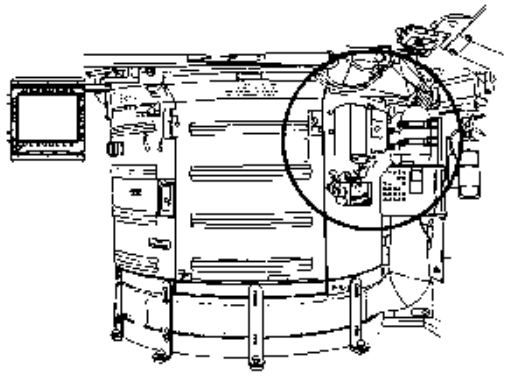


Figure 83. Anti-Recoil Plugs and Safety Pins Location.

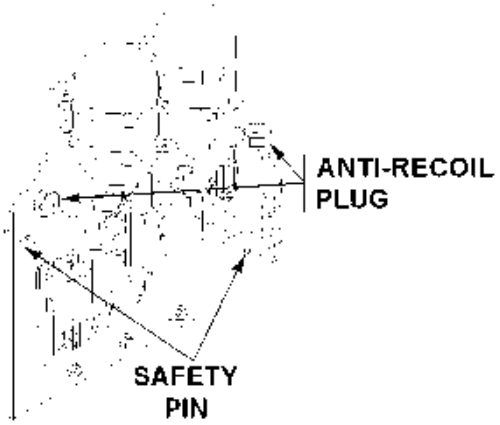


Figure 84. Anti-Recoil Plugs and Safety Pins.

			4. Check flame sensor cables and sensor boxes.	Cable or sensor box is disconnected, damaged, or missing.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:

Figure 85. Flame Sensor Cables and Sensor Boxes (Lower).

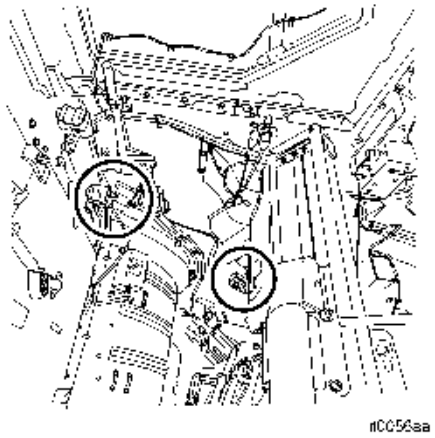


Figure 86. Flame Sensor Cables and Sensor Boxes (Upper).

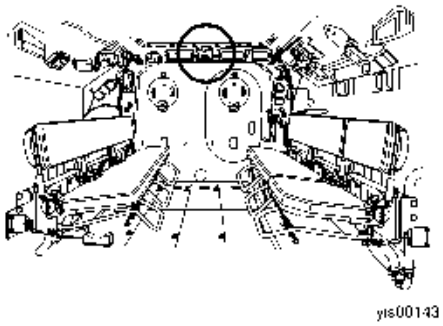


Figure 87. Flame Sensor Cables and Sensor Boxes (Rear).

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

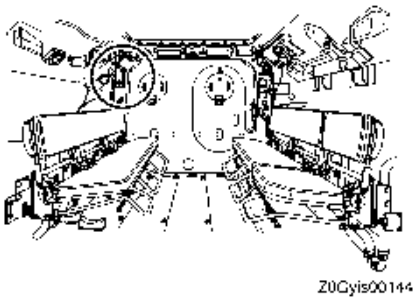
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 88. Flame Sensor Cables and Boxes.	
			5. Check wire and lead seal on internal fire suppression handle.	Wire or lead seal on internal fire suppression handle is missing or broken.
			 Figure 89. Internal Fire Suppression Handle Wire and Lead Seal Location.	

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

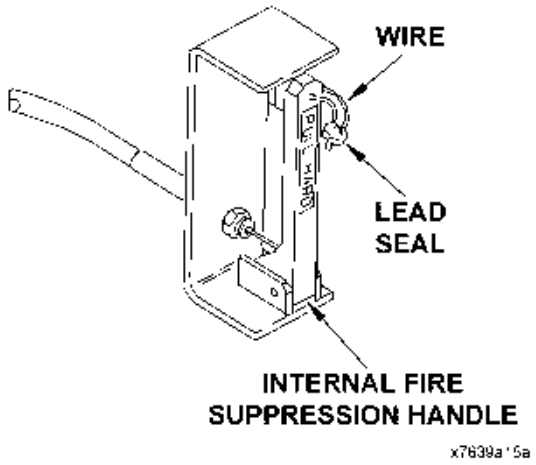
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 90. Internal Fire Suppression Handle Wire and Lead Seal.	
			6. Raise ramp (WP 0010).	

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
30	Before	Internal/Squad Sponson Area Fire Extinguish-ers	**DRIVER** 1. Check that pressure gauges on both squad/sponson area fire extinguishers read at or above minimum pressure on chart on bottle label. Estimate temperature in squad area.	Pressure gauge on squad/sponson area fire extinguisher reads below pressure shown on chart on bottle label.

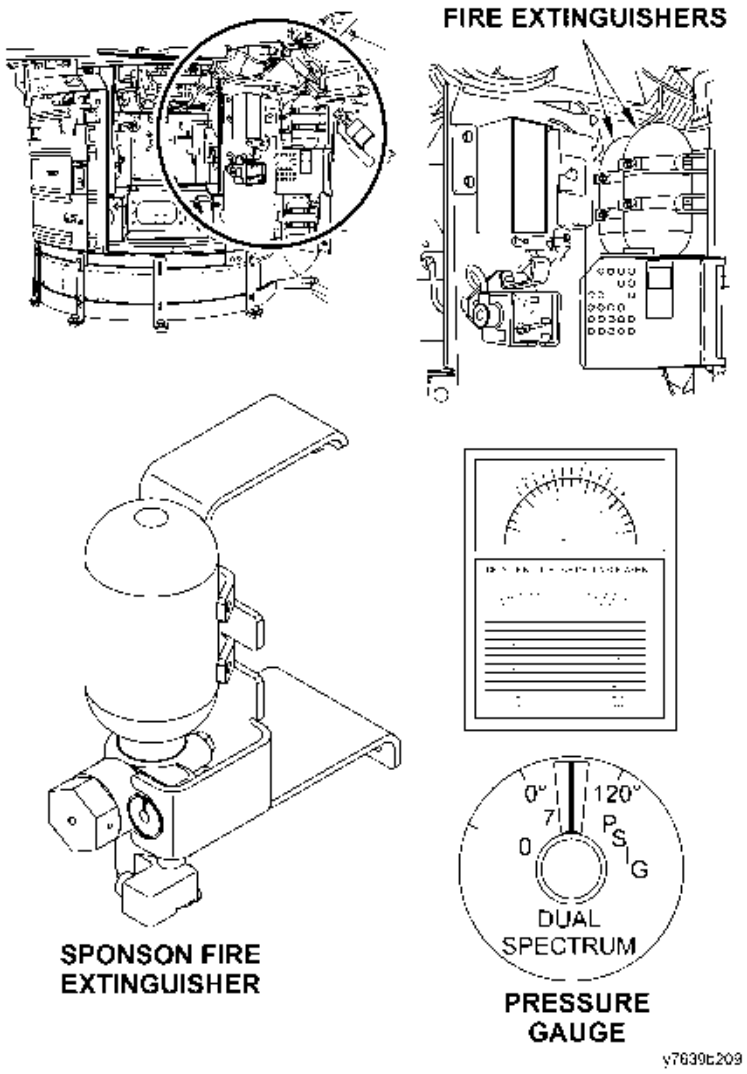


Figure 91. Squad/Sponson Area Fire Extinguisher and Pressure Gauges.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  Placing stowage items over fire suppression system outlets can prevent fires from being put out. Fire can kill or seriously injure personnel. Equipment can be damaged. Ensure stowage items are kept clear of fire suppression system outlets. **WARNING**  Ensure that stowed items do not interfere with the fire suppression system manual activation cables. Do not stow any items in the area adjacent to the fire extinguisher bottles where the cables hook up to the valves. Accidental discharge may occur when the turret is traversed. Personnel may be injured if fire suppression system is accidentally discharged.	
			2. Check that manual activation cables are not damaged or disconnected.	Manual activation cables are damaged or disconnected.
			3. Check sponson area fire extinguisher.	
			a. Check wire and lead seals, pin, and recoil plug on sponson fire extinguisher.	Wire or lead seals or pin or recoil plug on sponson fire extinguisher are missing, broken, damaged, or improperly laced.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
31	Before	Personnel Heater	**DRIVER/GUNNER/COMMANDER** **WARNING**  Personnel heater is extremely hot and can lead to ammunition cookoff, explosion of demolitions, and fires from pyrotechnics, lubricants, or other flammable materials. Personnel can be severely injured and equipment can be damaged. Do not allow any ammunition, pyrotechnics, demolitions, lubricants, or other flammable objects to contact the personnel heater outlet duct or be in the path of heated air from the heater outlet duct. Follow the vehicle load plan. **NOTE** Perform this check only if operating in cold weather or if heater operation is anticipated. Do not turn personnel heater on if air duct insulation is loose or damaged. Notify Field Maintenance. 1. Check personnel heater operation (WP 0029). a. Check heater air duct pipe for proper insulation and seals.	

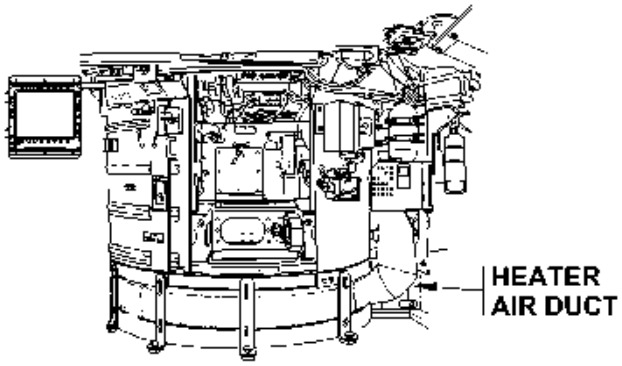


Figure 92. Heater Air Duct.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  Component malfunction could cause a fuel leak that may result in a vehicle fire leading to equipment damage and serious injury to personnel. Ensure that personnel heaters are routinely inspected for leaks. Ensure that operators remain with the vehicle during heater operation to detect and suppress fires. **WARNING**  Heater can flood and leak fuel. Diesel fuel can catch fire and kill or seriously injure personnel and damage equipment. Do not attempt to start flooded heater by using starting aids such as ether. If heater does not start after three attempts, notify Field Maintenance. **WARNING**  Exhaust from vehicle engine and personnel heater can kill you. Make sure exhaust is unobstructed. Exhaust grille cover must be pulled back. Do not breathe exhaust gases. See warning in the front of this manual. 2. Turn personnel heater on (WP 0029).	

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			a. Check squad area duct outlet for steady heat output.	

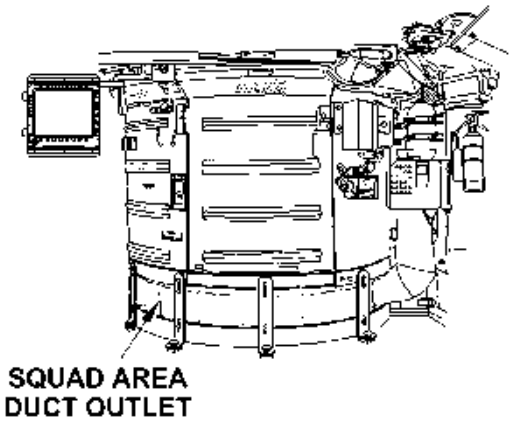


Figure 93. Squad Area Duct Outlet.

			b. (G) Manually traverse turret to 5200 mils (TM 9-2350-438-10-2).	
			c. (G) Check around personnel heater for smoke or strong diesel fumes.	Exhaust leak is found.

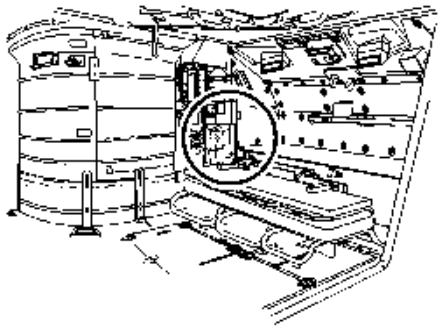


Figure 94. Personnel Heater Location.

			d. (G) Manually traverse turret to 4100 mils (TM 9-2350-438-10-2).	
			e. (G) Check fuel lines, fittings, and personnel heater for fuel leaks. Have Gunner make check through turret door opening.	Any fuel leak is found.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			f. (D) Check for flashing personnel heater indicator light on control box. If light is flashing, go to Personnel Heater Troubleshooting (WP 0078). If light continues to flash, do not operate personnel heater during mission. Notify Field Maintenance.	

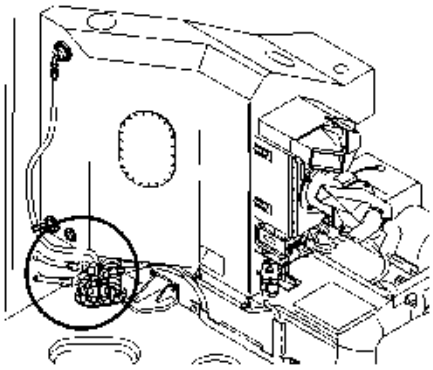


Figure 95. Fuel Tank Fuel Lines and Fittings Location.

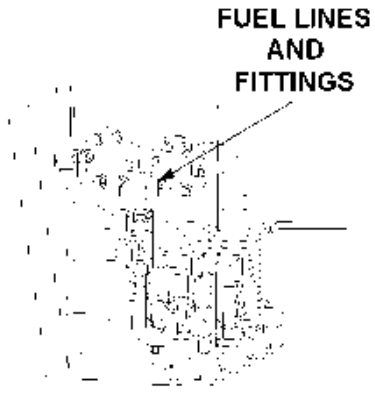


Figure 96. Fuel Tank Fuel Lines and Fittings

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

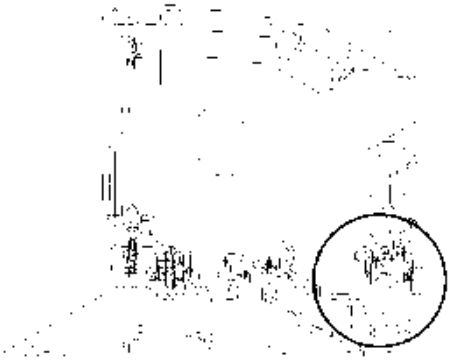
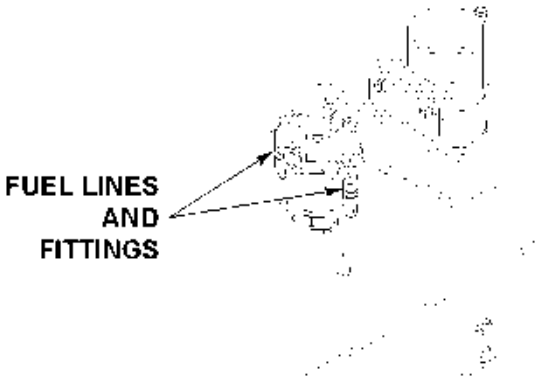
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 97. Personnel Heater Fuel Lines and Fittings Location.  Figure 98. Personnel Heater Fuel Lines and Fittings.	
			3. Turn personnel heater off (WP 0029).	
32	Before	Communications and Intercom	**GUNNER/COMMANDER/DRIVER** 1. Check intercom and radio system (WP 0020). 2. Check to see if communication is present between Driver and Commander. Check operation of intercom button (TM 9-2350-438-10-2).	No intercom between Commander and Driver. Radio will not transmit or receive.

Table 1. Preventive Maintenance Checks and Services, Before – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
33	Before	Squad Leader's Display (SLD)	**SQUAD LEADER** 1. Check squad leader's display as follows:	
			a. Check if display is dirty or cracked. Clean dirty display (WP 0107).	Display is cracked.
			b. Using brightness keys, check that display brightness can be adjusted.	Display brightness cannot be adjusted.
			c. Check that display shows DRVR and GNR images when SLD bezel buttons are pressed.	Display does not show images as selected by bezel buttons.

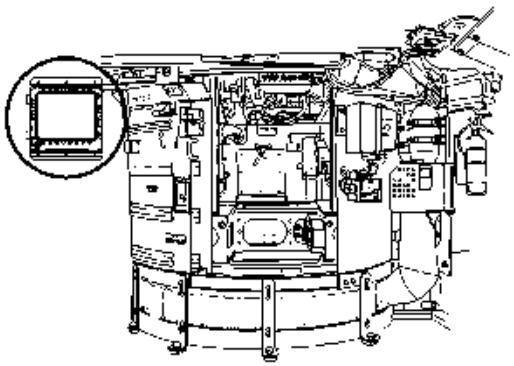


Figure 99. Squad Leader's Display.

MANDATORY REPLACEMENT PARTS

There are no replacement parts required for these PMCS procedures.

END OF WORK PACKAGE

OPERATOR MAINTENANCE

PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) - DURING

INITIAL SETUP:

Personnel Required
Driver

References
WP 0024

Equipment Condition
Vehicle parked
Turret shut down (TM 9-2350-438-10-2)

Table 1. Preventive Maintenance Checks and Services, During.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
1	During	Driver's Controls	**DRIVER** **NOTE** The vehicle will pull (steer) to one side if the track on that side is brand new and the track on the opposite side is used track (1000 miles plus). This condition is normal and should decrease after approximately 200 miles of operation. 1. Drive vehicle (WP 0024).	

Table 1. Preventive Maintenance Checks and Services, During – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			a. Check steering yoke operation.	Side drift (left or right) exceeds three feet during 100 feet of travel at 20-25 mph (32-40 km/h). Steering yoke does not center itself when released.

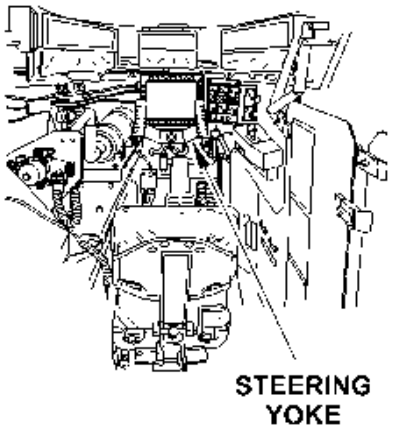


Figure 1. Steering Yoke.

Table 1. Preventive Maintenance Checks and Services, During – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			b. Check vehicle brakes.	Brake pedal touches floor when pushed down, or brake sticks when released. Brakes will not stop vehicle.

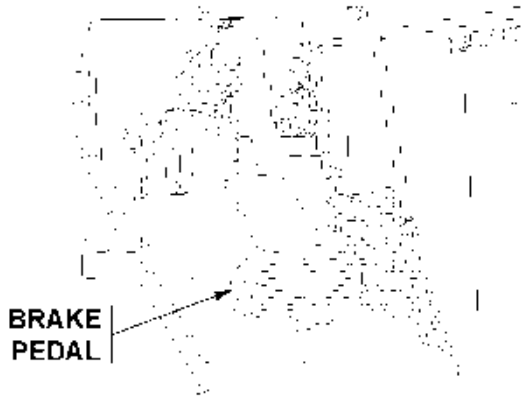


Figure 2. Brake Pedal Location.

MANDATORY REPLACEMENT PARTS

There are no replacement parts required for these PMCS procedures.

END OF WORK PACKAGE

OPERATOR MAINTENANCE

PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) - AFTER

INITIAL SETUP:

Materials
Lint-free cloth (WP 0116, Item 4)

Personnel Required
Commander
Driver
Gunner
Crew

References
TM 9-2350-438-10-2
WP 0004
WP 0009
WP 0022
WP 0026
WP 0045
WP 0086
WP 0088

Equipment Condition
Vehicle parked
Turret shut down (TM 9-2350-438-10-2)

Table 1. Preventive Maintenance Checks and Services, After.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  **ENGINE COOLANT** Engine coolant is poisonous if ingested and can irritate skin and eyes. Avoid skin and eye contact. Wear protective eyewear and clothing. If exposed, flush skin and/or eyes with water and seek medical attention. Use a drain pan or suitable container to capture any draining, leaking or spilled fluid. Refer to local procedures and plans for preventing and responding to fluid spills or leaks. Immediately clean up spilled fluid. Comply with local procedures and environmental regulations when disposing of unused chemicals, soiled/cleanup materials (such as filters and rags), and drained, leaked or spilled fluids. Failure to comply may result in injury to personnel and/or damage to the environment.	

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  **FILLING/DRAINING/LEAKING FLUIDS** Use a drain pan or suitable container to capture any draining, leaking or spilled fluid. Refer to local procedures and plans for preventing and responding to fluid spills or leaks. Immediately clean up spilled fluid. Comply with local procedures and environmental regulations when disposing of unused chemicals, soiled/cleanup materials (such as filters and rags), and drained, leaked or spilled fluids. Failure to comply may result in injury to personnel, damage to equipment and/or damage to the environment.	

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  **FUEL** Fuel is flammable and harmful to health. Keep fuel away from heat or ignition sources. DO NOT smoke within 50 feet (15 m) of a fuel source. Do not work on fuel system when engine is hot. Shut down engine before refueling. Ensure fuel nozzle is grounded to filler neck. Do not overfill fuel tank. Keep fire extinguisher nearby. Wear gloves and eye protection and ensure adequate ventilation during refueling. Refer to local procedures and plans for preventing and responding to fuel spills or leaks. Use a drain pan or suitable container to capture any draining, leaking or spilled fuel. Refer to local procedures and plans for preventing and responding to fuel spills or leaks. Immediately clean up spilled fuel. Keep cloths / rags away from open flame and / or ignition sources. Comply with local procedures and environmental regulations when disposing of unused fuel, soiled/cleanup materials (such as filters and rags), and drained, leaked or spilled fuel. Failure to comply may result in injury to personnel and/or damage to the environment.	

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  **HYDRAULIC SYSTEM** Hydraulic systems operate at high pressures and temperatures. Hydraulic fluid under pressure can pierce the skin. Do not check for leaks with your hand. Always allow hydraulic oil to cool and relieve pressure in hydraulic system before conducting tasks. Open lines and hoses slowly and wait for any residual pressure to relieve before continuing to open lines and hoses. Hydraulic fluid may be flammable. Keep away from heat, open flame and/or other ignition sources. Prolonged contact with hydraulic fluid may cause skin irritation. Wear protective eyewear, gloves and clothing. If exposed, flush skin and/or eyes with water and seek medical attention. Use a drain pan or suitable container to capture any draining, leaking or spilled fluid. Refer to local procedures and plans for preventing and responding to fluid spills or leaks. Immediately clean up spilled hydraulic fluid. Keep cloths/rags away from open flame and/or ignition sources. Comply with local procedures and environmental regulations when disposing of unused chemicals, soiled/ cleanup materials (such as filters and rags), and drained, leaked or spilled fluids. Failure to comply may result in injury to personnel and/or damage to the environment.	

Table 1. Preventive Maintenance Checks and Services, After – Continued.

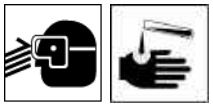
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  **LUBRICATING OIL** Lubricating oil may be flammable. Keep away from heat, open flame and/or other ignition sources. Prolonged contact with lubricating oil may cause a skin rash. Wear protective eyewear, gloves and clothing. Remove saturated clothing immediately and thoroughly wash skin that comes in contact with lubricating oil. If exposed, flush skin and/or eyes with water and seek medical attention. Use a drain pan or suitable container to capture any draining, leaking or spilled fluid. Refer to local procedures and plans for preventing and responding to fluid spills or leaks. Immediately clean up spilled oil. Keep cloths/rags away from open flame and/or ignition sources. Comply with local procedures and environmental regulations when disposing of lubricating oil, soiled/ cleanup materials (such as filters and rags), and drained, leaked or spilled fluids. Failure to comply may result in injury to personnel and/or damage to the environment. **WARNING**  **GREASE** Grease contains ingredients that can cause mild skin contact hazard. Treat random or occasional skin contact with mild soap and water. Gloves and eye protection is required with heavy, constant exposure. Do not ingest. Immediately clean up any spilled compound. Comply with local procedures and environmental regulations when disposing of grease or cleanup materials. Failure to comply may result in injury to personnel and/or damage to the environment.	

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			NOTE Refer to local safety and environmental protocols for the proper segregation, recycle, and/or disposal of used rags/cloths contaminated with petroleum, solvents, and/or hazardous components.	
1	After	Suspension System	**DRIVER** 1. Start engine (WP 0022). Drive vehicle forward slowly. 2. Check roadwheels and support rollers for loss of rubber, pitting, chunking, and separation of rubber from metal.	Separation of one inch (25 mm) of rubber contact from metal surface around 75% of roadwheel and/or chunking of three inch (76 mm) by four inch (102 mm) on wheel surface exists. Separation of 1/2 inch (13 mm) of rubber contact from metal surface around 75% of support roller and/or chunking of one inch (25 mm) by two inch (51 mm) on wheel surface exists.

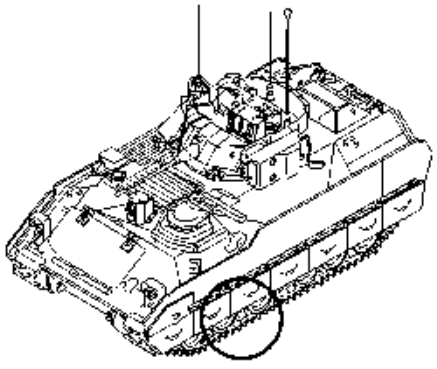


Figure 1. Roadwheels and Support Rollers Location.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:

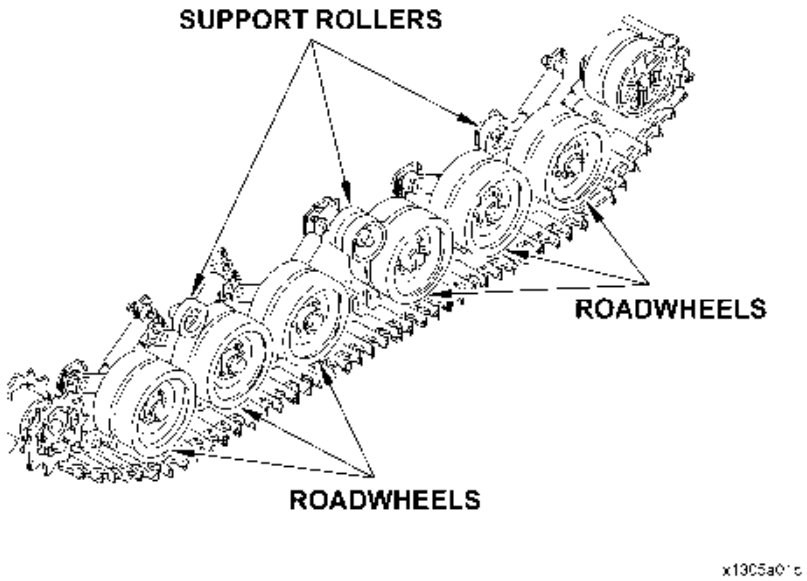


Figure 2. Roadwheels and Support Rollers.

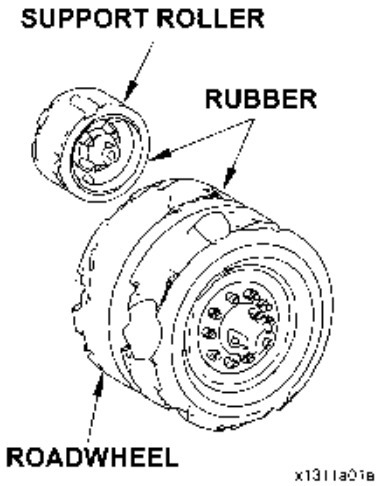


Figure 3. Roadwheels and Support Rollers Check.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			3. Check for missing or damaged roadwheels, idler wheels, and support rollers. Check for wire wrapped around wheels and final drive housing.	Idler wheels or support rollers and roadwheel No. 1 or No. 6 is cracked, bent, or missing. Roadwheels No. 2 through No. 5 are missing, bent, or cracked, or both wheels on same arm are missing, cracked, or bent.
			a. Remove any wire wrapped around suspension components. **WARNING**  Worn or damaged track components can cause track failure and loss of vehicle control. Soldiers can be killed or injured. If track components are not in satisfactory condition, do not operate vehicle.	
			4. Move vehicle to firm level ground. Allow vehicle to coast to a stop.	
			5. Move gear selector to N (neutral). Set hand brake.	
			6. Check for broken or bent road and idler wheel arm.	One or more road or idler wheel arms are broken or bent.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:

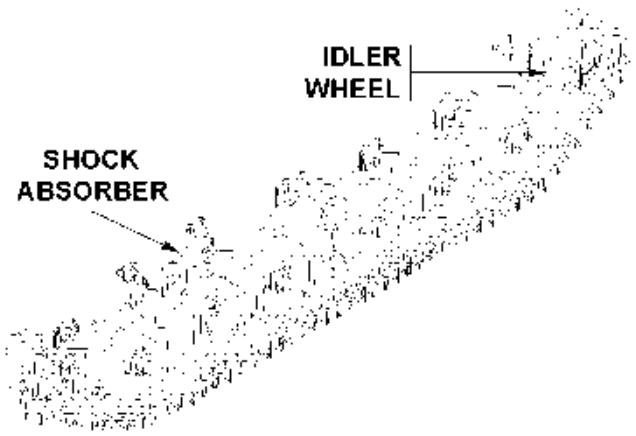


Figure 4. Roadwheel and Roadwheel Arm.

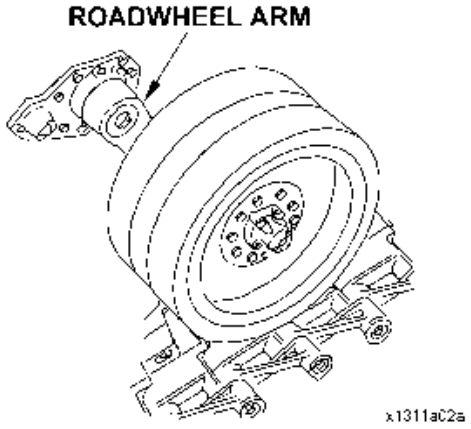


Figure 5. Roadwheel and Roadwheel Arm Check.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  Hot parts can burn you. Allow parts to cool before working on or near them. If necessary, use heat protective gloves to work on hot parts.	
			7. Check for missing, broken, leak greater than class I leak, or overheated shock absorbers.	Any shock absorber is missing, broken, greater than class I leak, overheated, or cold to the touch.

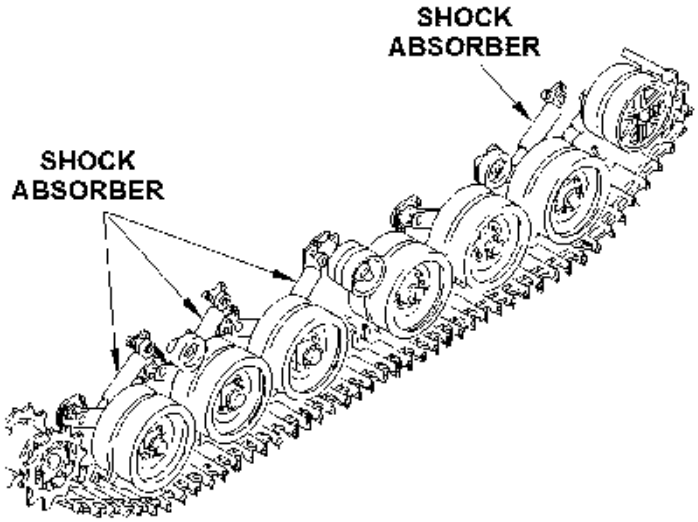


Figure 6. Shock Absorbers.

			8. Check for loose shock absorber mounts and bushings.	

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  Hot parts can burn you. Allow parts to cool before working on or near them. If necessary, use heat protective gloves to work on hot parts. **NOTE** Some dampness may be evident between hull and suspension mounts due to fluids in bilges. These are not leaks. 9. Check all hubs for any large difference in temperature. Pass hands near hubs. 10. Check roadwheel, idler wheel, and support roller oil levels through sight glasses. Look for milky color and other signs of contamination. Notify Field Maintenance if oil contamination is present. 11. Check roadwheel idler wheel, and support roller oil levels through sight glasses. Fill with OE/HDO as needed. Move vehicle if needed, so one filler plug is at top of hub. Remove plug. Add oil to level of hole and install plug. After fording, check for water in oil. If oil looks milky or bubbly, it has water in it. Notify Field Maintenance.	Any hub is overheated. Oil looks milky or bubbly.

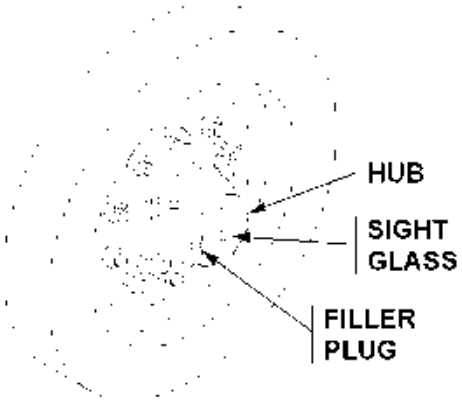


Figure 7. Roadwheel Idler Wheel.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			12. Check roadwheels, idler wheels, and support rollers for signs of oil leaks.	Any Class III oil leak is present.
			13. Check for worn mounting holes and hooks fasteners by looking for shiny areas around nuts, bolts, and screws. Notify Field Maintenance if worn mounting holes or loose fasteners are present.	
			14. Check for missing or damaged track adjusters.	Track adjuster missing or unserviceable.
			WARNING  Not having the correct track tension during inspection can cause you to not see defective track parts that could cause track failure and loss of vehicle control. Soldiers can be killed or injured. Adjust track tension before inspecting track assembly and track shoes.	
			NOTE Checking track tension will be performed for left and right sides of track at the same time.	
			15. Check track tension. Adjust track tension as necessary (WP 0088).	Track is loose or cannot be adjusted.
			16. Reach under bolt-on armor and try to turn rear support roller (WP 0088). If rear support roller does not turn freely, track is too loose.	
			17. Check track adjuster lubrication fitting and bleed valve for leaks.	Track adjuster lubrication fitting or bleed valve leaks.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:

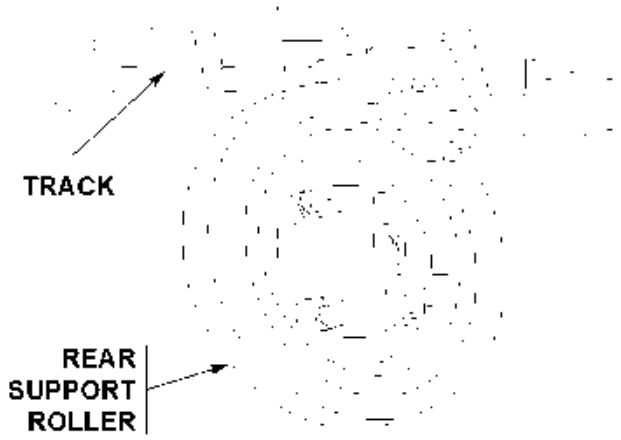


Figure 8. Rear Support Roller.

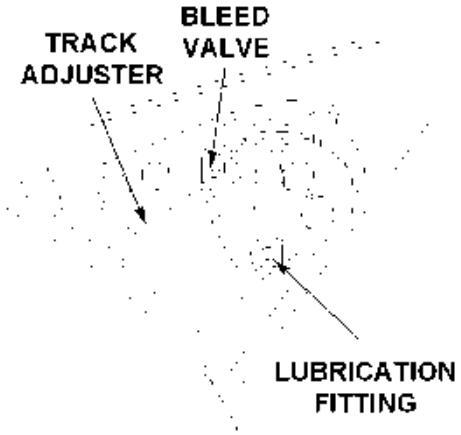


Figure 9. Track Adjuster Lubrication Fitting and Bleed Valve.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
2	After	Hull Rear and Lower Idler Support Blocks	**DRIVER** **NOTE** There are three idler support blocks; one rear (left side) and two lower (left and right side). Minor cracking is not a concern and progressive weld cracking over time is expected. Cracks in idler support block welds are not a major concern, but continued cracking from the idler support block welds that extends into the hull plates will create further damage and will require extensive repair. 1. Inspect idler support blocks for weld cracks. a. Inspect left and right idler plates/ flanges and surrounding welds for cracks. b. If installed, inspect rear and two lower idler support blocks for weld cracks.	

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			c. If weld crack is noted around idler plate(s)/flange(s) or support block(s), notify Field Maintenance.	

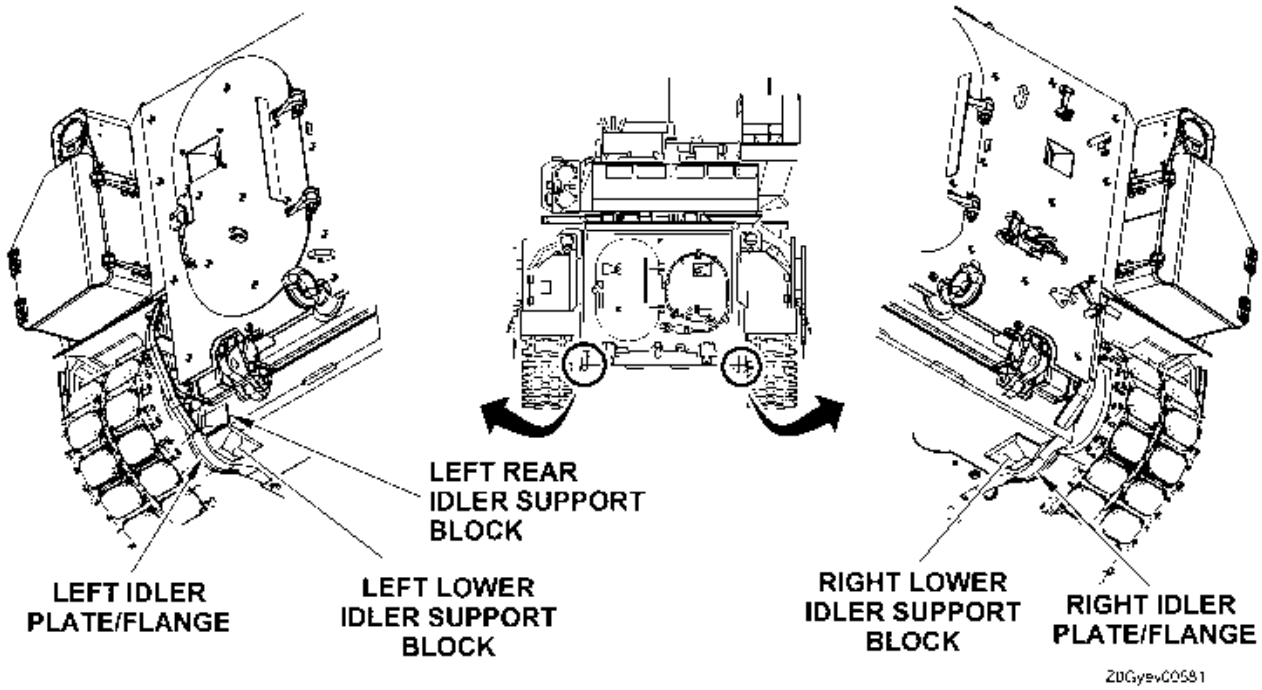


Figure 10. Hull Idler Support Blocks.

3	After	Single Pin Track	**DRIVER** **NOTE** Start checks at front side of vehicle. Both sides of track are checked at the same time. **NOTE** If only one side of the sprocket rings are worn to the wear indicator, notify Field Maintenance to reverse sprockets. If both sides of the sprocket rings are worn to the wear indicator, notify Field Maintenance that sprockets are unserviceable.	

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			1. Check drive sprockets for breaks. Check sprocket for broken, missing or worn teeth. If any sprocket teeth are worn to/or below wear indicator, notify Field Maintenance.	Breaks in sprockets, any sprocket teeth bent, broken, cracked, missing or worn to wear indicator on leading edge.
			2. Check carrier track supports.	Any carrier track support is missing.

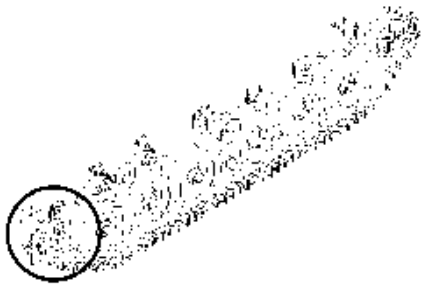


Figure 11. Carrier Track Drive Sprocket and Wear Indicator Location.

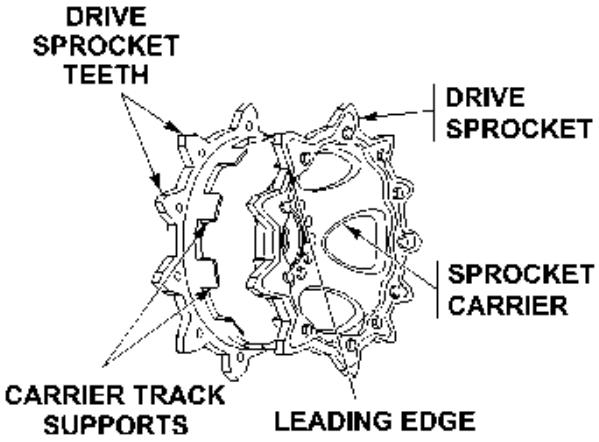


Figure 12. Carrier Track Drive Sprocket.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:

Figure 13. Wear Indicator.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			3. Check sprocket carrier and drive sprockets for loose, broken, or missing bolts. Tighten any loose bolts. At End of Mission (EOM), notify Field Maintenance to torque bolts. 4. Check for track shoe pads worn even with grouser or missing.	Two or more sprocket to carrier mounting bolts missing.

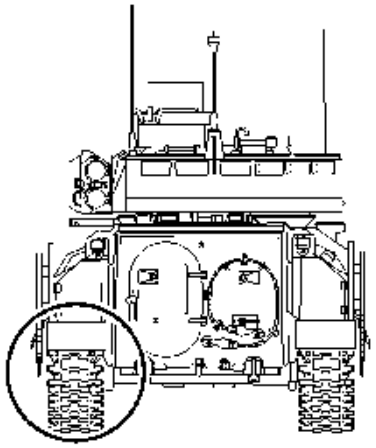


Figure 14. Track Shoe Pads Location.

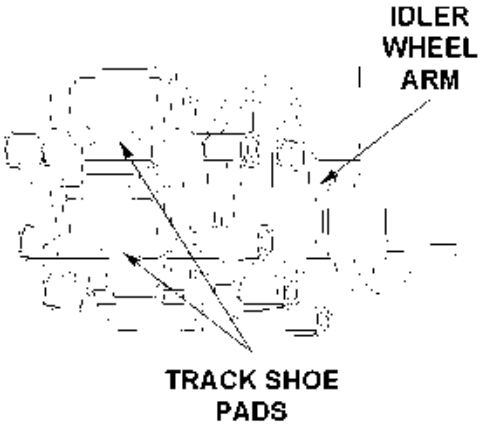


Figure 15. Track Shoe Pads.

			a. Replace missing or worn pads (WP 0098).	

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			b. Check that track shoe pad is fully seated in groove.	

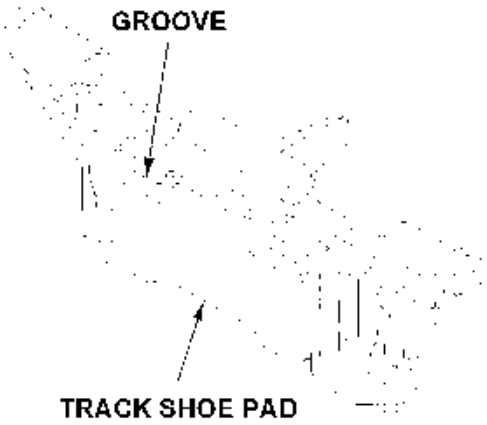


Figure 16. Track Shoe Pads Check.

WARNING

Worn or damaged track components can cause track failure and loss of vehicle control. Soldiers can be killed or injured.

If track components are not in satisfactory condition, do not operate vehicle.

NOTE

Track pin should minimally be flush or protrude through nut. Track pin is considered to be protruding excessively if track pin protrudes .06 inch (1.5 mm) or more past the edge of the track shoe body.

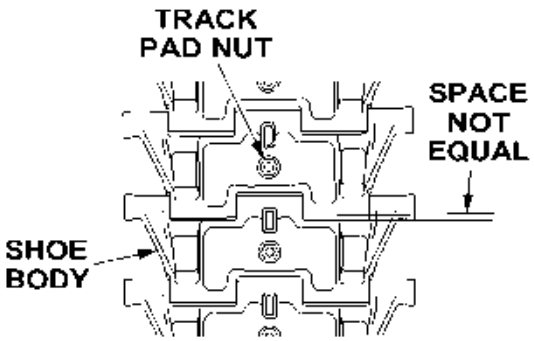
Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			NOTE Off-center track pin nuts indicate worn bushings.	
			5. Check for off-center or missing track pin nuts, cracked, bent or broken center guides, or broken track shoes.	Any one track shoe body or center guide is bent, cracked, or broken. Any track pin is bent, cracked, or broken. Any one track shoe has a worn bushing, protruding pin, or missing track pin nut.

Figure 17. Track Alignment Location.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:



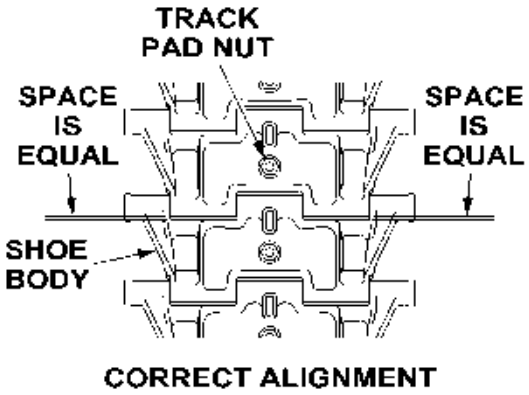


Figure 18. Track Alignment.

Figure 19. Track Pin Location.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

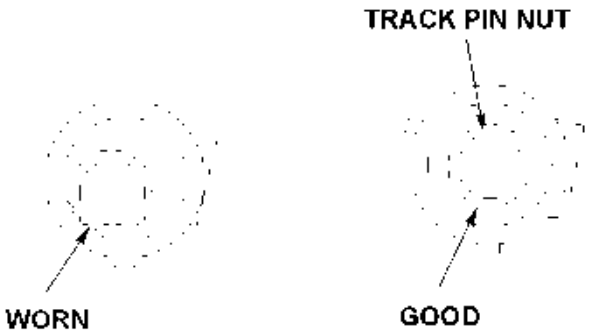
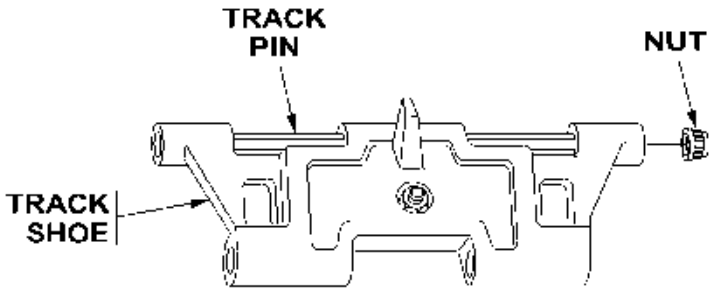
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 20. Track Pin Nut Wear.  Figure 21. Track Shoe, Pin, and Nut.	
			a. Visually check for unusual or uneven gaps between two adjacent shoes, which indicate worn bushings. b. Check track shoes for damage. Damage includes cracked or broken shoe body, bent, broken, or missing center guides, and chunked or missing roadwheel path rubber.	
4	After	Double Pin Track	**DRIVER/COMMANDER/GUNNER** **NOTE** If only one side of sprocket rings are worn to wear indicator, notify Field Maintenance to reverse sprockets. If both sides of sprocket rings are worn to wear indicator, notify Field Maintenance that sprockets are unserviceable.	

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			1. Check drive sprockets for cracks and breaks. Check sprocket for cracked, broken, missing or worn teeth.	Breaks in sprockets, any sprocket teeth bent, broken, cracked, missing, or worn to wear indicator on leading edge.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			NOTE Field Maintenance is required to torque loose hardware.	
			2. Check sprocket carrier for breaks. Check carrier track supports. Check sprocket carrier and drive sprockets for loose, broken, or missing bolts.	Broken sprocket carrier. Loose or missing hardware.

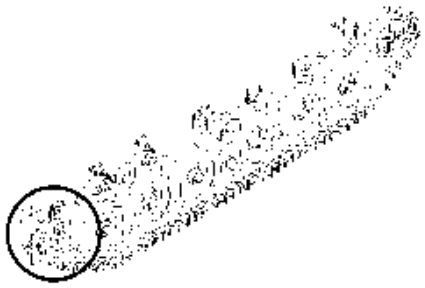


Figure 22. Carrier Track Drive Sprocket Location.

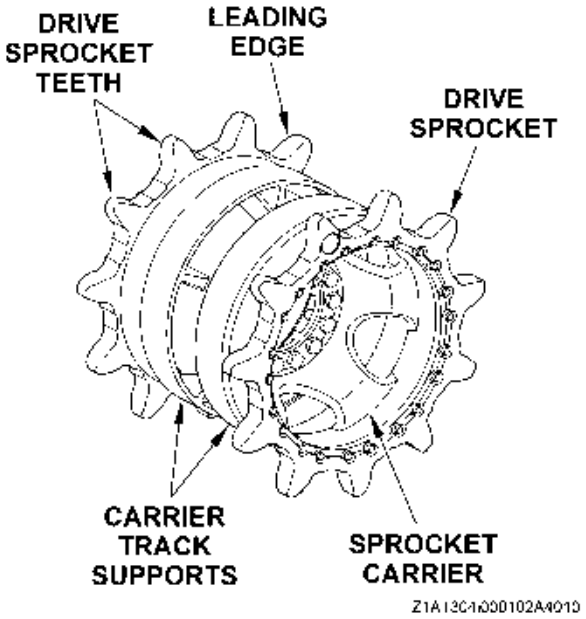


Figure 23. Carrier Track Drive Sprocket.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:

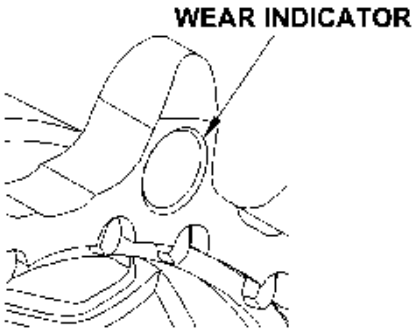


Figure 24. Wear Indicator.

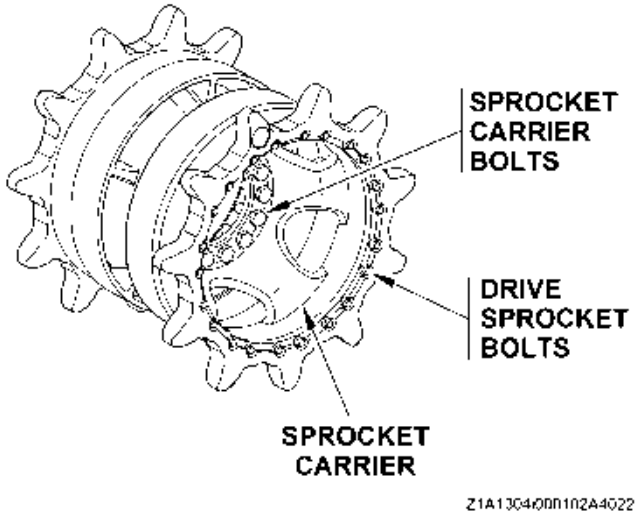


Figure 25. Drive Sprocket Carrier and Drive Sprocket Carrier Bolt Inspection.

			3. Check for track shoe pads missing or worn even with grouser.	

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			a. Replace worn or missing pads (WP 0099).	

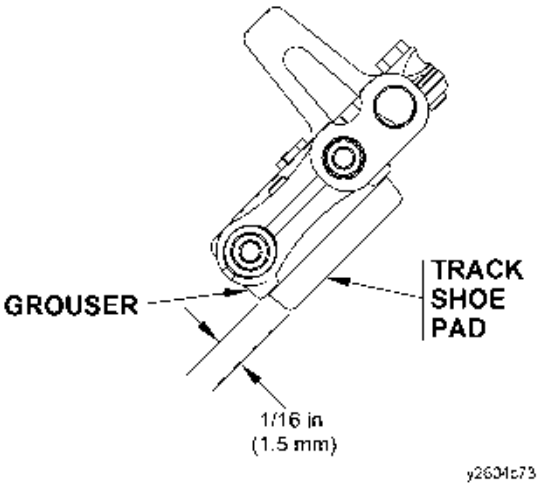


Figure 26. Track Shoe Pad Inspection.

			b. Check that track shoe pad is fully seated in groove.	

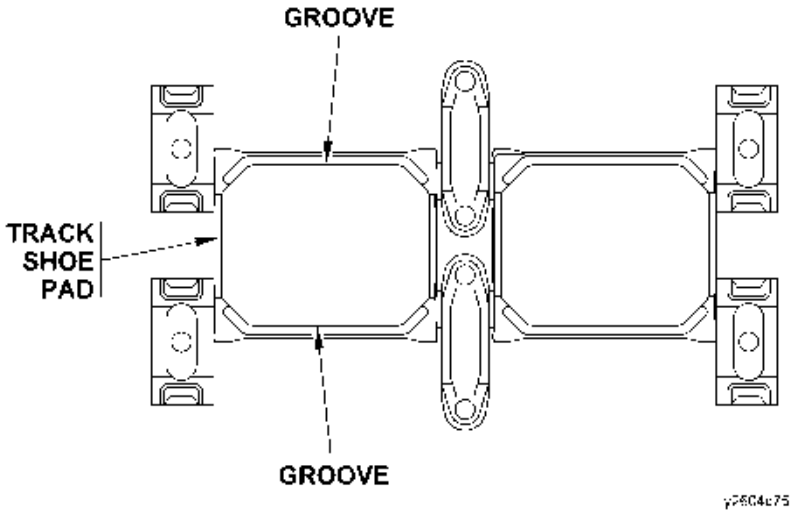


Figure 27. Check Track Shoe Pad.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			4. Check for excessively worn, missing or cracked end connectors.	
			a. Check for end connector wear thickness 3/16 inch (4.8 mm) or more.	Worn to less than 3/16 inch (4.8 mm) thickness.

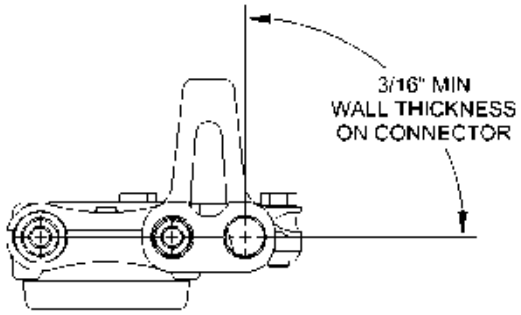


Figure 28. End Connector Wear Inspection.

			NOTE Track pins should be flush with or protrude out of the outboard edge of the end connector. Connector should be flush against or up to 1/16 inch (1.5 mm) away from track shoe body.	
			5. Check end connectors for missing, loose, or improperly seated wedges or wedge bolts. Bolts should protrude through wedge. If end connectors or center guides are found to be loose at halts, tighten them. Notify Field Maintenance for inspection and application of proper torque.	One or more wedges missing or improperly seated.
			6. Check for bent, cracked, or broken track pins.	One or more broken track pins.
			7. Check roadwheel path rubber for obvious non-support of the roadwheel due to cutting, chunking, or blowout.	Roadwheel is not adequately supported by roadwheel path rubber.
			8. Inspect for dead (broken) track shoes. A dead track shoe appears to be out-of-line.	One or more dead (broken) track shoes.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

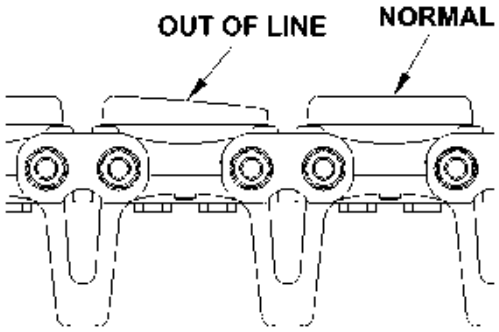
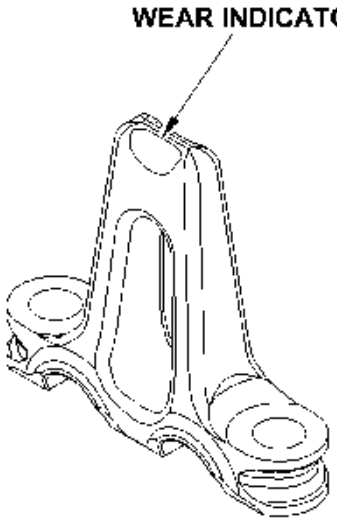
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 29. Track Shoe Inspection.	
			9. Check for cracked, bent, broken, missing center guide, screws, and cap.	Guide or screw is cracked, bent, broken, or missing; Cap is cracked, broken, or threads are damaged.
			10. Check for worn center guide.	Center guide wear indicators are no longer visible.
				

Table 1. Preventive Maintenance Checks and Services, After – Continued.

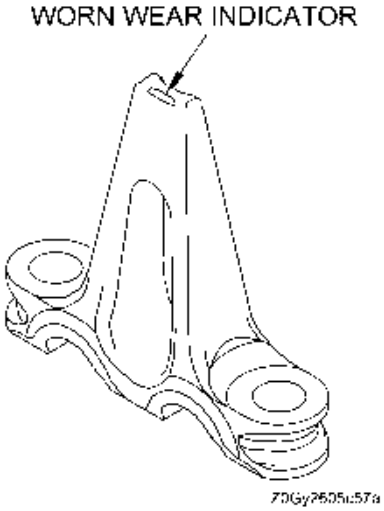
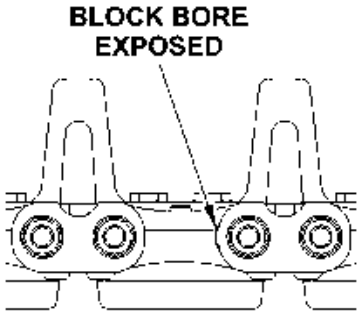
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 30. Center Guide Inspection.	
			11. Check for worn or damaged bushings. Check for metal-to-metal contact. Metal-to-metal contact is indicated when the block bore can be seen behind a connector.	Bushings are worn or damaged; Metal-to-metal contact is observed.
			 Figure 31. Bushing Inspection.	
			12. Check for cracked or broken track grouser.	One or more track grouser cracked or broken.
			13. Check that track grouser thickness is more than 2 inches (51 mm).	Track grouser thickness is 2 inches (51 mm) or less.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

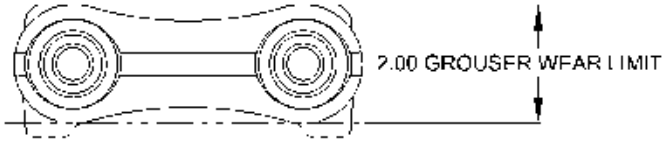
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 32. Grouser Inspection.	
5	After	Suspension Support Assembly	**DRIVER** 1. Remove skirt armor (WP 0086) as necessary to access suspension support assembly. 2. Check for misalignment between pivot arm and the support housing. If it appears to be misaligned, notify Field Maintenance.	

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:

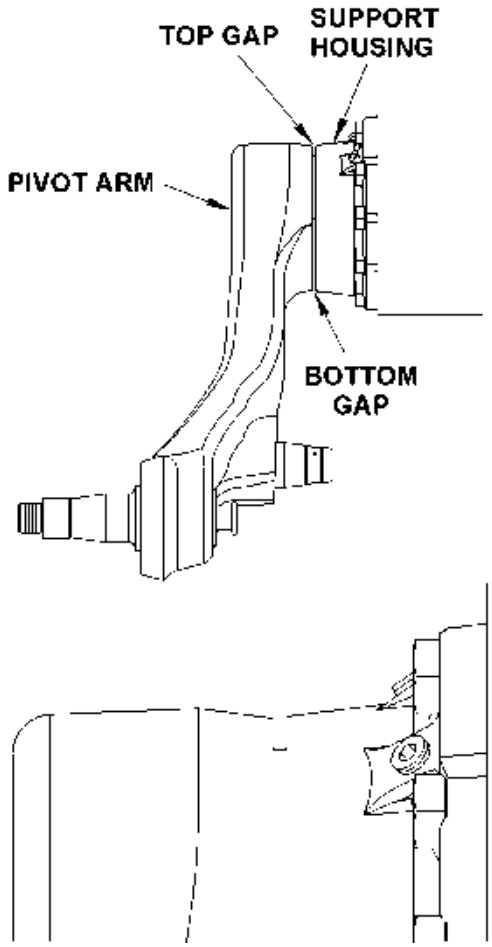


Figure 33. Good Alignment.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

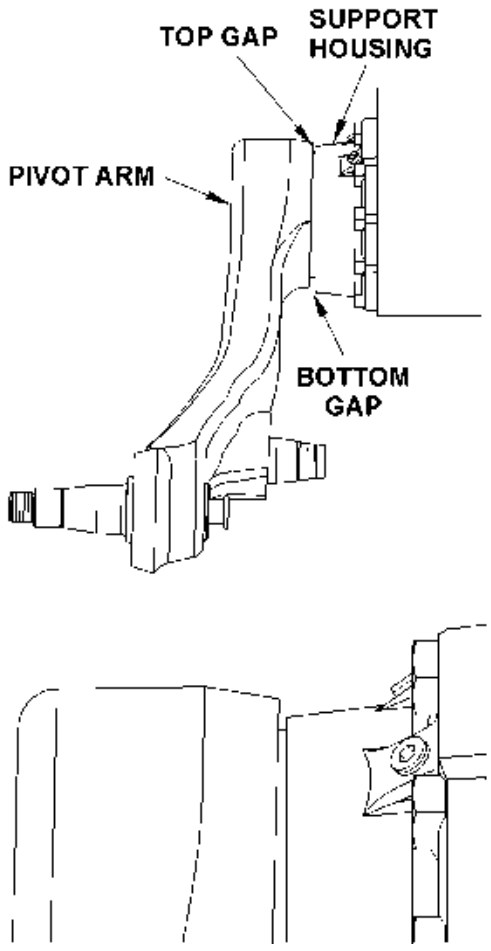
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 34. Bad Alignment.	
6	After	Torsion Bars	**DRIVER** Check roadwheels No. 1 through No. 6 on both sides of vehicle for broken torsion bars. Lift each roadwheel with a crowbar. If roadwheel can be lifted easily, torsion bar is broken. Notify Field Maintenance.	Torsion bar No. 1 or No. 6 or any two other torsion bars are broken.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

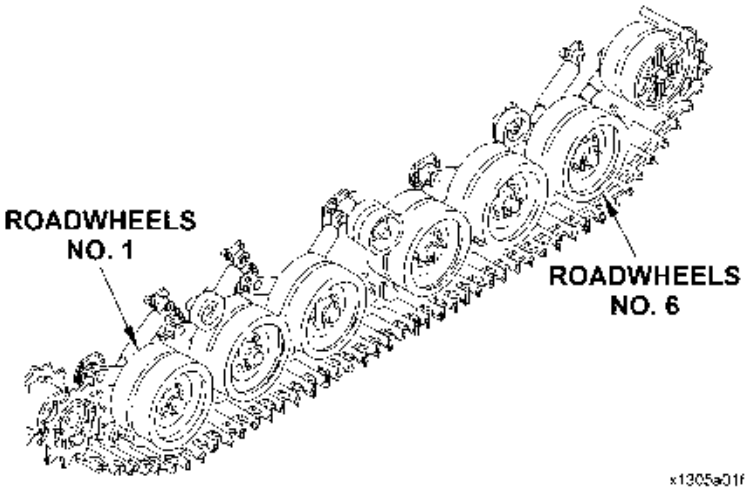
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 35. Roadwheels No. 1 Through No. 6 Location.	
7	After	Engine Compartment	**DRIVER** 1. Remove power unit access panels (WP 0045). 2. Open power unit access door (WP 0009). a. Check engine compartment and bilge area hoses, clamps and fittings for fuel, oil, and coolant leaks.	Any fuel or any Class III oil or coolant leak is found.
			 Figure 36. Engine Compartment Access Location.	

Table 1. Preventive Maintenance Checks and Services, After – Continued.

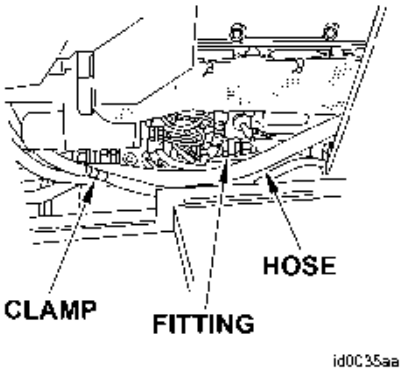
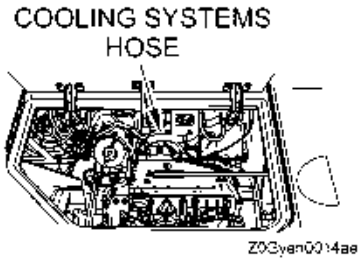
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 37. Hoses, Clamps and Fittings.	
			 Figure 38. Cooling System Hoses.	
			b. Check engine oil level.	

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			(1) Check dipstick for level between ADD 4 QT and FULL marks. If level is below ADD 4 QT mark, remove oil filler cap and add OE/ HDO as needed. Install oil filler cap. Recheck oil level. If oil looks milky or bubbly, notify Field Maintenance.	

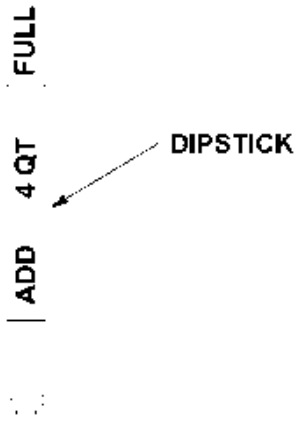


Figure 39. Engine Oil Dipstick.

			c. Check power unit access panel insulation.	

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			(1) Check the insulation panels on the power unit access panels and bulkhead post for rips, tears, or punctures. If any are found, notify Field Maintenance.	

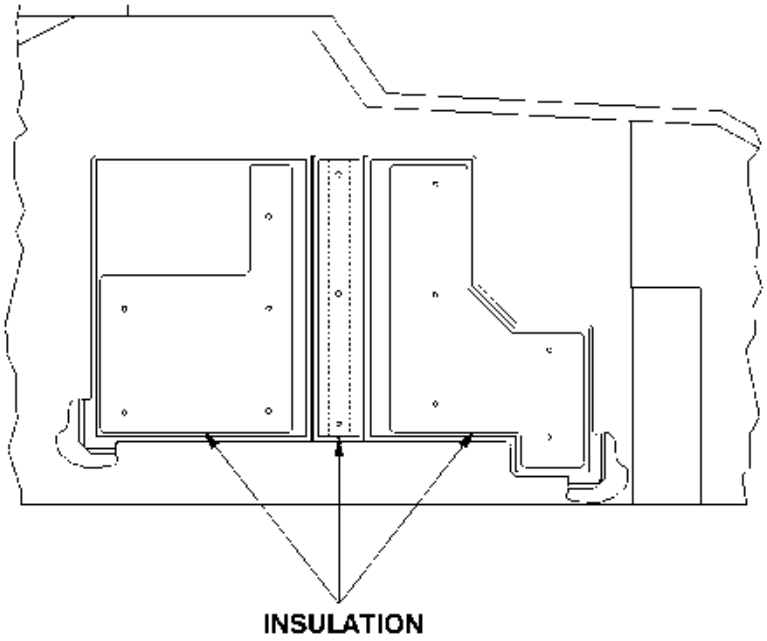


Figure 40. Insulation Panels.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
8	After	Power Unit Access Door	**DRIVER** 1. Check that door brace safety latch holds power unit access door open.	Door cannot be raised, or, using manual hydraulic pump safety latch, does not hold door.

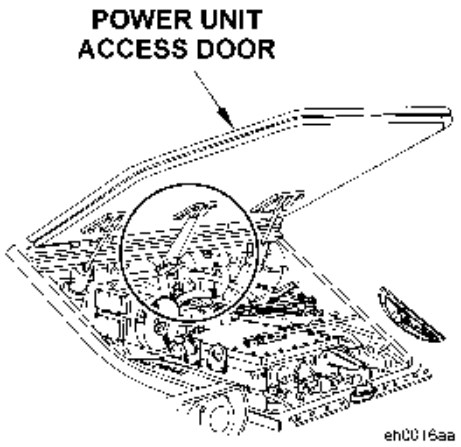


Figure 41. Access Door.

			2. Check hoses, fittings, cylinders, tubes, and hydraulic pump for leaks.	

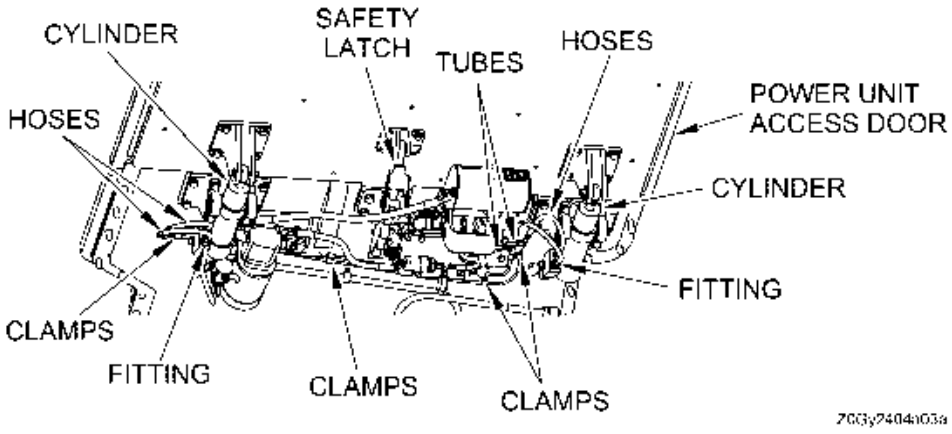


Figure 42. Hoses, Fittings, Cylinders and Tubes.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  Fire Resistant Hydraulic Fluid (FRH) is toxic if absorbed through skin or ingested. Do not service hydraulic system when FRH is hot or pressurized. Wear gloves and avoid contact with skin. If FRH contacts skin, wash immediately with soap. If FRH gets into eyes, wash with lots of water for 15 minutes and get medical attention. If FRH is swallowed, get medical attention. **CAUTION** Do not fill access door hydraulic reservoir above MAX FLUID LEVEL. Access door will not close if too much fluid is added. 3. Check power unit access door hydraulic reservoir. 4. Check that fluid is visible in sight glass. If fluid is not visible in sight glass, add FRH to level line on reservoir.	

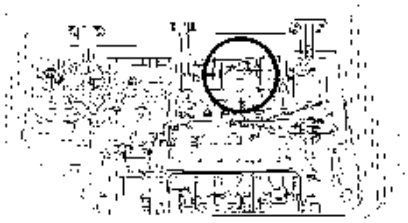


Figure 43. Fluid Sight Glass Location.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

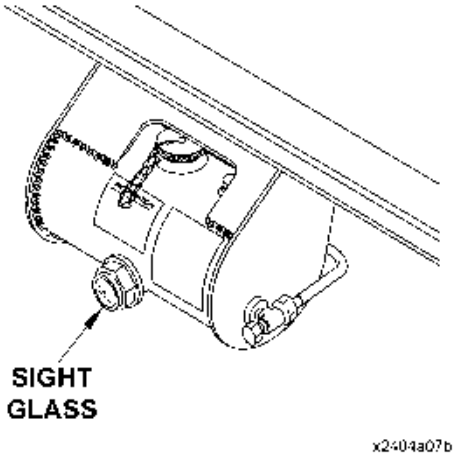
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 44. Fluid Sight Glass.	
9	After	Final Drives	**DRIVER** 1. Notify Field Maintenance to remove front hull access cover. **WARNING**  Vehicle can move suddenly when engine is started or transmission is engaged. Ensure personnel are clear of the vehicle before starting engine or engaging transmission. Failure to comply may result in death or injury to personnel. 2. Check universal joint bolts on ends of propeller shaft connecting to final drive and for looseness. Engine will have to be started and vehicle moved slightly forward or backward to access all bolts.	Universal joint bolts are loose or missing.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:

Figure 45. Left Propeller Shaft Location.

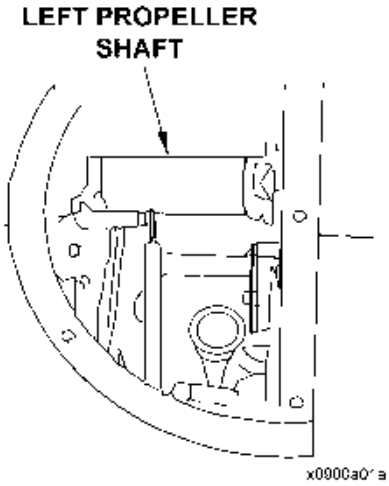


Figure 46. Left Propeller Shaft.

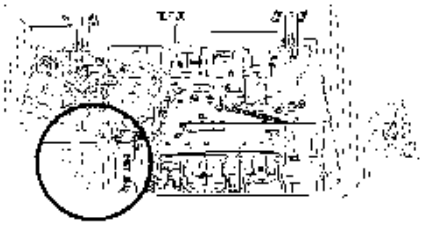


Figure 47. Right Propeller Shaft Location.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:

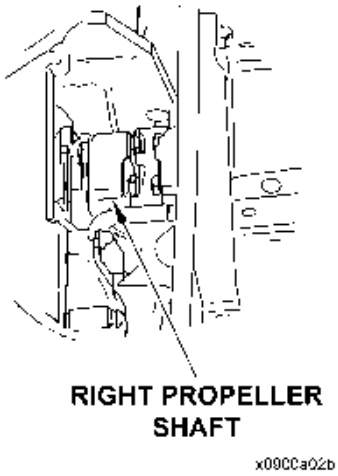


Figure 48. Right Propeller Shaft.

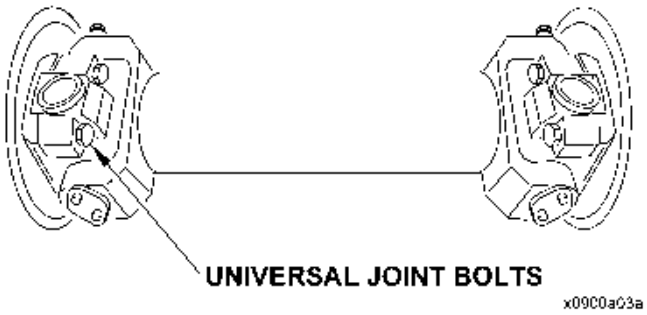


Figure 49. Universal Joint Bolts Location.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

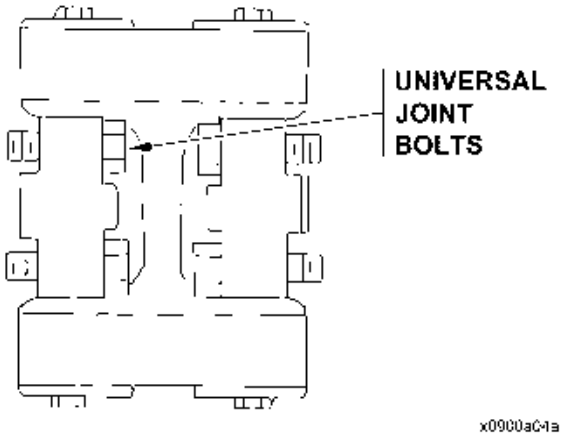
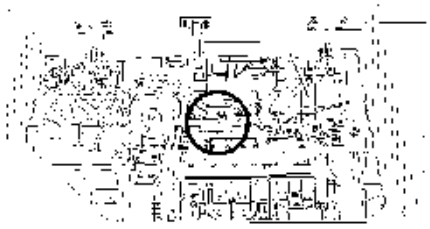
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 50. Universal Joint Bolts.	
10	After	Transmission	**DRIVER** **NOTE** If protective cover and band are damaged, notify supervisor. Check transmission oil filter indicator. If transmission oil filter indicator is tripped, reset it. Start engine (WP 0022) and see if it trips again. Stop engine (WP 0026).	Transmission oil filter indicator trips after being reset once.
			 Figure 51. Transmission Oil Filter Indicator Location.	

Table 1. Preventive Maintenance Checks and Services, After – Continued.

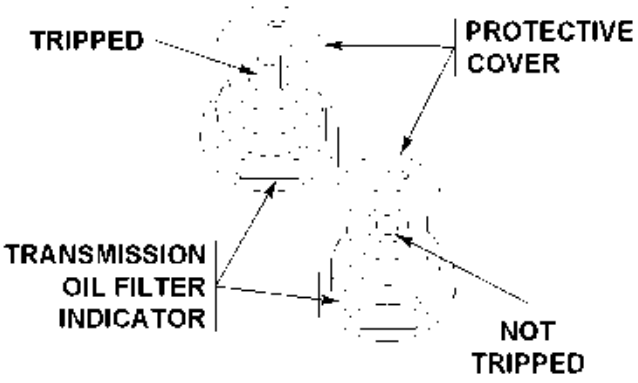
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 52. Transmission Oil Filter Indicator Location (Detailed View).  Figure 53. Transmission Oil Filter Indicator.	
11	After	Oil Levels	**DRIVER** 1. Check oil levels. a. Check transmission oil level.	

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			(1) Transmission dipstick has readings on both sides. Use side marked, CHECK HOT NEUTRAL ENGINE OFF.	

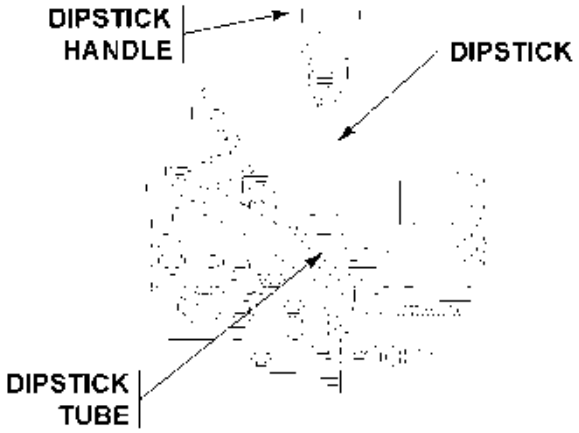


Figure 54. Transmission Oil Dipstick and Dipstick Tube.

Figure 55. Transmission Oil Dipstick Check.

			CAUTION Transmission can get damaged when transmission is filled above full mark. Do not fill transmission above full mark. (2) If oil level is below ADD mark, add transmission oil (OE/HDO or OEA) as needed. (3) If oil level is above FULL mark or looks milky or bubbly, notify Field Maintenance. b. Check that oil level in right and left final drives is between ADD and FULL marks. If level is below ADD mark, add OE/HDO or OEA as needed. If oil looks milky or bubbly, notify Field Maintenance.	

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			c. Notify Field Maintenance to install front hull access cover.	

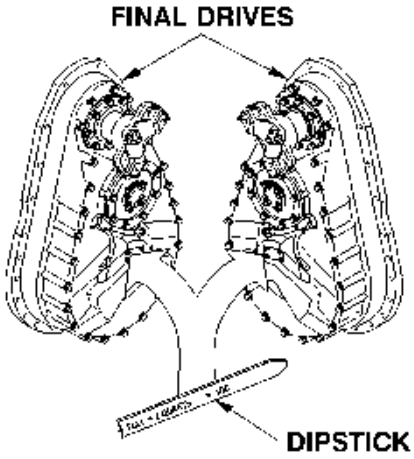


Figure 56. Final Drives.

			d. Check right angle fan drive gearbox for oil leaks.	Class III oil leak is found.

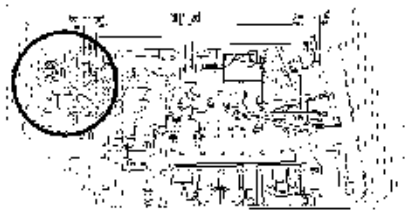


Figure 57. Right Angle Fan Drive Location.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

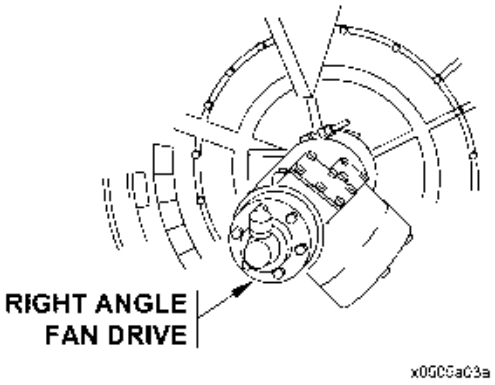
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
				

Figure 58. Right Angle Fan Drive.

			e. Check right angle fan drive gearbox oil level. (1) Remove dipstick and wipe dry. (2) Screw dipstick in gearbox finger tight and remove. Oil level must be at FILL TO HERE arrow. (3) Add OE/HDO as needed.	

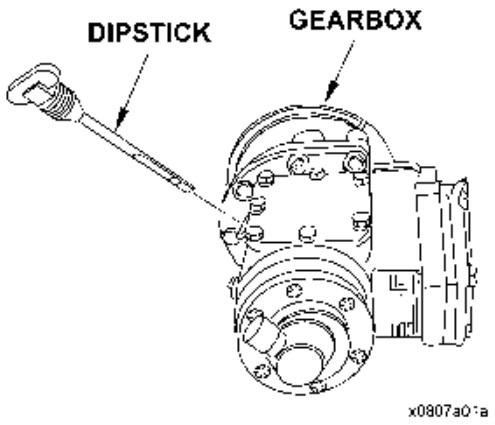


Figure 59. Right Angle Fan Drive Gearbox Oil Dipstick.

12	After	Cooling System	**DRIVER** Check cooling system hoses, clamps and fittings for coolant leaks.	Class III coolant leak is found.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

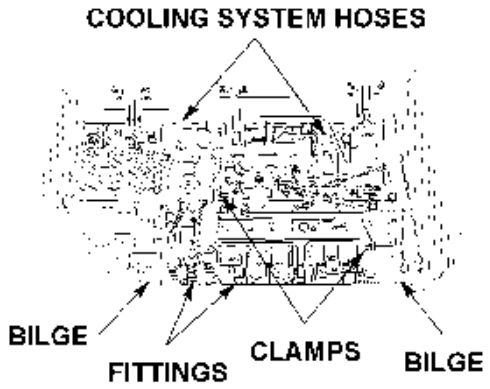
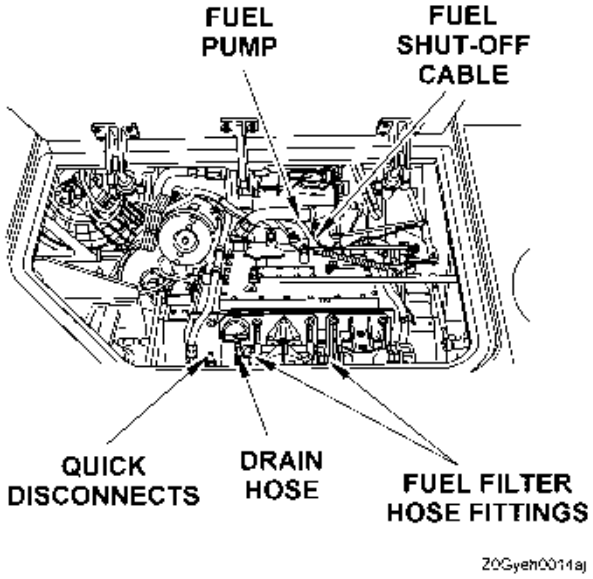
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 60. Cooling System Hoses, Clamps and Fittings.	
13	After	Fuel System	**DRIVER** 1. Check that fuel shutoff cable is not binding or broken. 2. Check drain hose, quick disconnects, fuel filter hose fittings, and fuel pump for fuel leaks.	Fuel shutoff cable is binding or broken. Any fuel leak is found.
			 Figure 61. Drain Hose, Quick Disconnects, Fuel Filter Hose Fittings and Fuel Pump.	

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			3. Move MASTER POWER switch to ON (WP 0004). 4. Move ENGINE ACCESSORY switch to ON (WP 0004). **WARNING**  Diesel fuel can catch fire and injure or kill personnel and damage or destroy vehicle. Do not allow fuel to drain into hull. Ensure the drain valve for the fuel/water separator is fully closed after draining. 5. Drain fuel filter into suitable container until clear fuel comes out.	

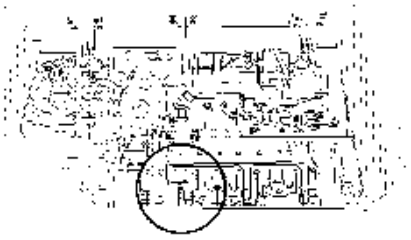


Figure 62. Drain Hose and Toggle Valve Location.

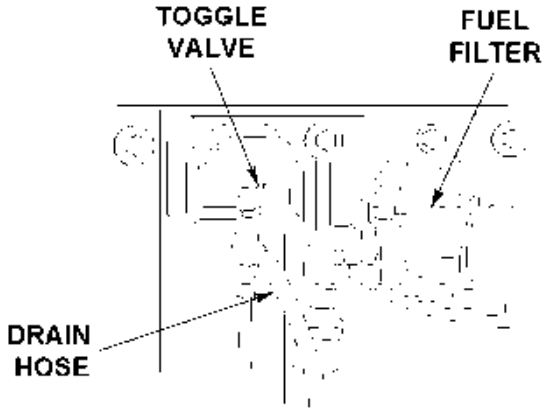


Figure 63. Drain Hose and Toggle Valve.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  Diesel fuel can catch fire and injure or kill personnel and damage or destroy vehicle. Do not allow fuel to drain into hull. Ensure the drain valve for the fuel/water separator is fully closed after draining. 6. Check drained fuel for contaminants. 7. Lower and secure power unit access door (WP 0009).	
14	After	Intake Screen	**DRIVER** Check intake screen for debris or damage.	

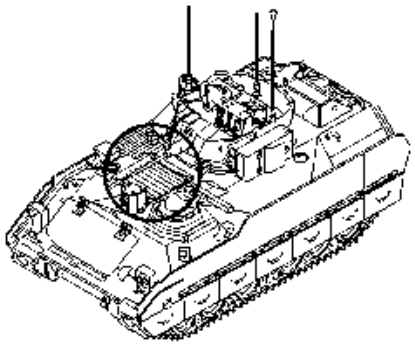


Figure 64. Intake Screen Location.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

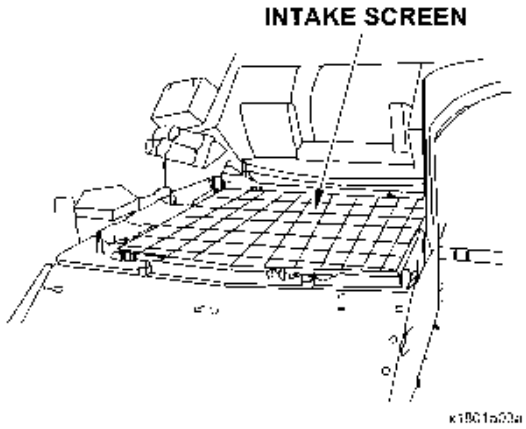
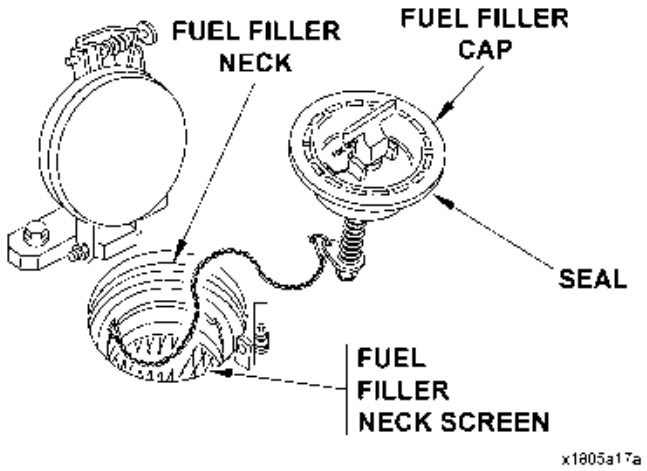
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 65. Intake Screen.	
15	After	Fuel Filler Cap	**DRIVER** 1. Open fuel filler cover. Check cover for missing or damaged gasket.	Fuel filler cover gasket is damaged or missing.
			 Figure 66. Fuel Filler Cover and Cap.	
			2. Remove any dirt or water from around fuel filler cap. 3. Remove and check fuel filler cap for missing or torn cover seal.	Fuel filler cap is missing.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			4. Check fuel filler neck for dirt or damage. Clean dirt from threaded portion of filler neck. 5. Check fuel filler neck screen for damage or trash. Clean screen, if trash is present.	Fuel filler neck screen is damaged or missing.
16	After	Ramp Hydraulic Power Unit	**DRIVER** **NOTE** Never fill over halfway between ADD and FULL with ramp down. Ramp hydraulic power unit will be overfilled with ramp up. Check ramp hydraulic power unit fluid level through sight glass. If fluid level is below ADD mark, add FRH (MIL-PRF-46170), as needed.	

Figure 67. Ramp Hydraulic Power Unit Fluid Level Sight Glass Location.

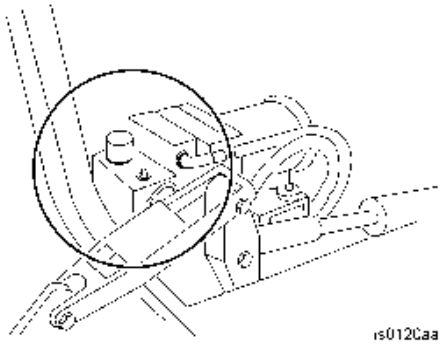


Figure 68. Ramp Hydraulic Power Unit Fluid Level Sight Glass Location (Detailed).

Table 1. Preventive Maintenance Checks and Services, After – Continued.

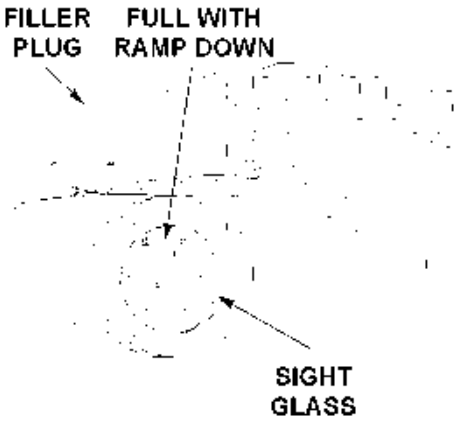
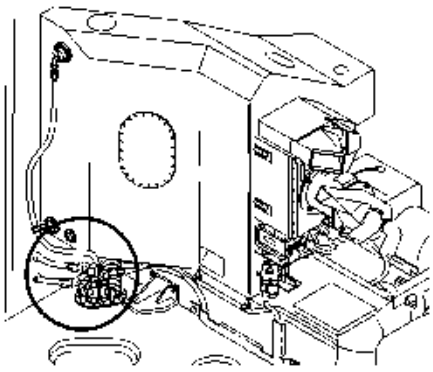
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 69. Ramp Hydraulic Power Unit Fluid Level Sight Glass.	
17	After	Fuel System	**GUNNER/COMMANDER** 1. Manually traverse turret to 5200 mils (TM 9-2350-438-10-2). 2. Check valves and fittings on fuel tank for fuel leaks.	 Any fuel leaks are found.
			 Figure 70. Fuel Tank Fuel Lines and Fittings Location.	

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:

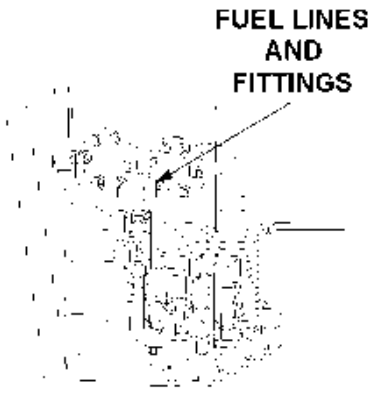


Figure 71. Fuel Tank Fuel Lines and Fittings.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			3. Manually traverse turret to 4100 mils (TM 9-2350-438-10-2). 4. Check valves and fittings on personnel heater for fuel leaks.	

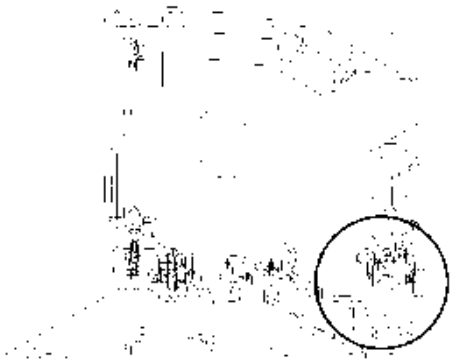


Figure 72. Personnel Heater Fuel Lines and Fittings Location.

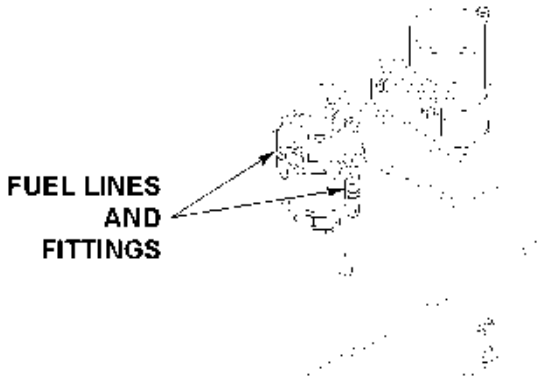


Figure 73. Personnel Heater Fuel Lines and Fittings.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
18	After	Cargo Hatch	**DRIVER** **WARNING**  Falling hatch could seriously injure you. Keep head lower than closed hatch position when opening or closing hatch. Keep hands clear of hatch rim when closing. Make sure latch pin or mechanism is fully engaged when hatch is in any open position. 1. Check operation of cargo hatch. a. Open and close hatch cover. b. Check that release latch releases cargo hatch cover easily and locks it in OPEN and CLOSED position. c. Check that hinge handle locks cargo hatch in POP-UP, TOW LOAD (MID-OPEN), UPRIGHT, and FULL-OPEN positions with latch pin fully inserted into index gear.	Cargo hatch cover will not lock in any one position or latch pin does not fully insert into index gear in any one position.

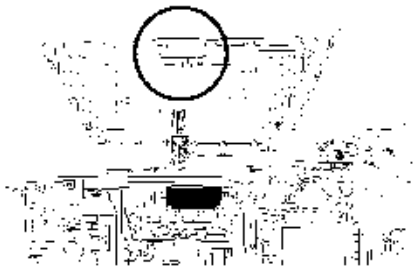


Figure 74. Cargo Hatch Hinge Position Handle and Latch Pin and Index Gear Location.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:

Figure 75. Cargo Hatch Hinge Position Handle.

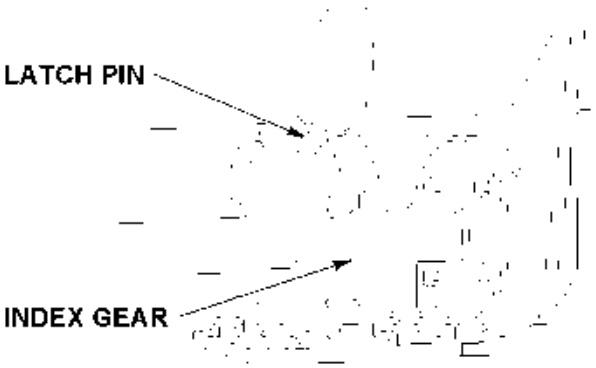


Figure 76. Cargo Hatch Latch Pin and Index Gear.

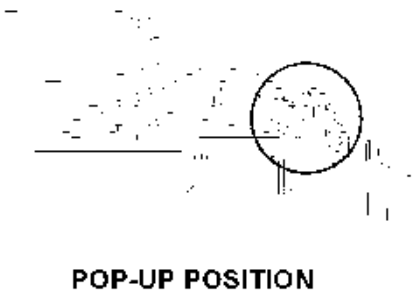


Figure 77. Cargo Hatch Pop-Up Position.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

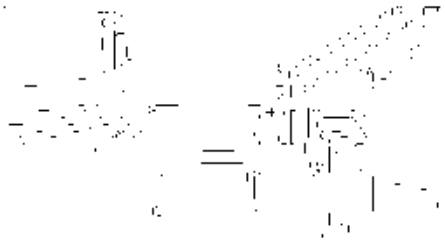
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:

TOW LOAD POSITION
(MID-OPEN POSITION)

Figure 78. Cargo Hatch TOW Load Position.

UPRIGHT POSITION

Figure 79. Cargo Hatch Upright Position.



FULL-OPEN POSITION

Figure 80. Cargo Hatch Full-Open Position.

Table 1. Preventive Maintenance Checks and Services, After – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
19	After	Squad Area Periscopes	**DRIVER** **NOTE** Some cargo hatch covers have four periscopes. 1. Check squad periscope lenses for dirt and cracks. If periscope lenses are dirty, wipe with clean, lint-free cloth. If over 50% visibility is lost, notify Field Maintenance.	

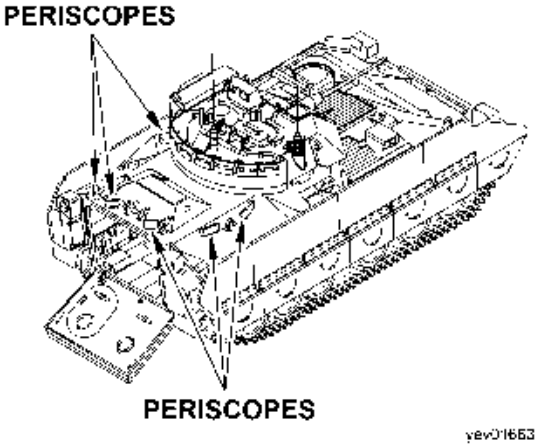


Figure 81. Squad Periscope Locations.

Figure 82. Squad Periscope Lenses.

			2. Check squad blackout covers for tears. 3. Check that blackout covers stay in place when closed.	

MANDATORY REPLACEMENT PARTS

There are no replacement parts required for these PMCS procedures.

END OF WORK PACKAGE

OPERATOR MAINTENANCE

PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) - WEEKLY

INITIAL SETUP:

Personnel Required
Commander
Crew
Driver
Gunner

References
WP 0053
WP 0059
WP 0103

Equipment Condition
Vehicle parked
Turret shut down (TM 9-2350-438-10-2)

Table 1. Preventive Maintenance Checks and Services, Weekly.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  **ENGINE COOLANT** Engine coolant is poisonous if ingested and can irritate skin and eyes. Avoid skin and eye contact. Wear protective eyewear and clothing. If exposed, flush skin and/or eyes with water and seek medical attention. Use a drain pan or suitable container to capture any draining, leaking or spilled fluid. Refer to local procedures and plans for preventing and responding to fluid spills or leaks. Immediately clean up spilled fluid. Comply with local procedures and environmental regulations when disposing of unused chemicals, soiled/cleanup materials (such as filters and rags), and drained, leaked or spilled fluids. Failure to comply may result in injury to personnel and/or damage to the environment.	

Table 1. Preventive Maintenance Checks and Services, Weekly. – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  **FILLING/DRAINING/LEAKING FLUIDS** Use a drain pan or suitable container to capture any draining, leaking or spilled fluid. Refer to local procedures and plans for preventing and responding to fluid spills or leaks. Immediately clean up spilled fluid. Comply with local procedures and environmental regulations when disposing of unused chemicals, soiled/cleanup materials (such as filters and rags), and drained, leaked or spilled fluids. Failure to comply may result in injury to personnel, damage to equipment and/or damage to the environment. **NOTE** Refer to local safety and environmental protocols for the proper segregation, recycle, and/or disposal of used rags/cloths contaminated with petroleum, solvents, and/or hazardous components.	
1	Weekly	Driver's Compartment Chemical, Biological, Radiological, and Nuclear (CBRN) System	**DRIVER** 1. Check CBRN system air flow. 2. Activate CBRN system (WP 0053). Allow CBRN system to run for 5 minutes. a. Check that Driver's air outlet hose is not pinched, crushed, or torn.	

Table 1. Preventive Maintenance Checks and Services, Weekly. – Continued.

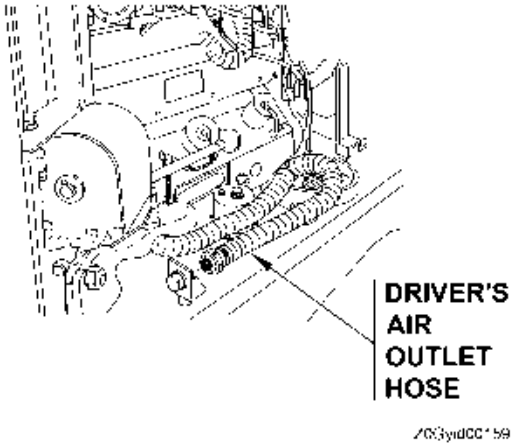
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			b. Check air outlet hose for warm and sufficient air flow.	
			 Figure 1. Air Output Hose Location.	
			c. Check that communication with Commander and Driver is present while wearing CBRN mask.	
2	Weekly	Cooling System	**DRIVER** 1. Check coolant pump belt. a. Check for worn, cracked, or missing coolant pump belt. If coolant pump belt is worn, cracked, or missing, notify Field Maintenance.	Coolant pump belt is missing, worn, or cracked.

Table 1. Preventive Maintenance Checks and Services, Weekly. – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			b. Check that coolant pump belt does not slip on pulleys. If coolant pump belt slips, notify Field Maintenance.	Coolant pump belt slips.

Figure 2. Coolant Pump Belt Location.

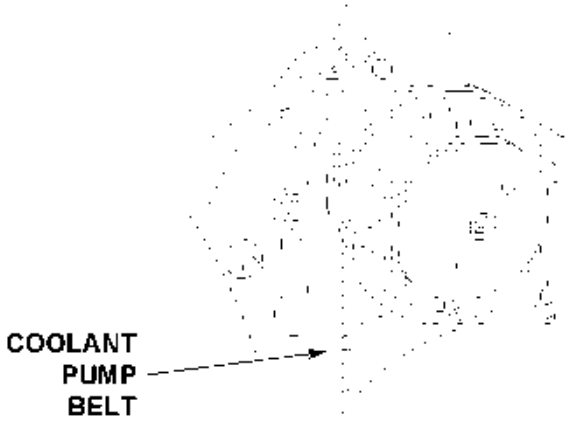


Figure 3. Coolant Pump Belt.

3	Weekly	Hull Batteries (Absorbed Glass Mat (AGM) Batter-ies Only)	**DRIVER**	

Table 1. Preventive Maintenance Checks and Services, Weekly. – Continued.

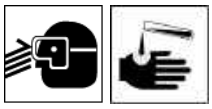
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  Battery posts and power cables can short circuit and burn you. Remove vehicle ground cable before starting task. Do not touch battery posts with tools or other metal objects. Do not wear jewelry when working with battery or electrical system. **WARNING**  **ABSORBED GLASS MAT (AGM) BATTERY** Gas from batteries can explode and injure you. Use caution when charging or working near batteries. Disconnect battery ground before working in battery compartment. Do not smoke or allow sparks and flame near the batteries. Mixing battery types will result in overcharging and off gassing of batteries which will create a potentially explosive environment. Be sure correct battery types are used when performing battery replacement or maintenance. **WARNING**  Battery acid can blind or burn you. Do not get acid on your skin or in your eyes. Wear gloves and goggles when working around batteries. If exposed, flush skin and/or eyes with water immediately. **NOTE** Gloves and goggles may be obtained from Field Maintenance.	

Table 1. Preventive Maintenance Checks and Services, Weekly. – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			1. Check AGM batteries (WP 0103).	Battery is missing or cracked. Battery terminal is broken.
			a. Check battery compartment for damaged or missing batteries.	One or more batteries is damaged, missing, or unserviceable.
			b. Check battery cable and connections.	Cables are missing, broken, or frayed.
			c. Check battery terminal posts.	Battery posts are damaged or have rust or corrosion.
			d. If batteries show any discrepancies, notify Field Maintenance.	
			2. Check plastic coating on battery hold downs are not worn through.	Plastic coating is worn through.
			a. Check hold down on batteries below floor plates.	
			b. Check hold down on sponson batteries.	

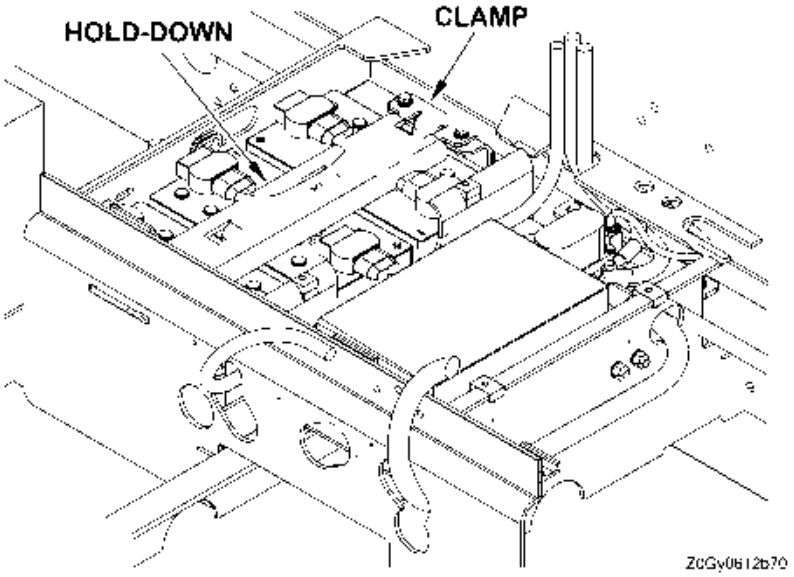


Figure 4. Battery Compartment.

Table 1. Preventive Maintenance Checks and Services, Weekly. – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
4	Weekly	Commander's Hatch Emergency Release	**DRIVER** Open turret shield door and check Commander's hatch release cable for binds, breaks, proper installation, and operation.	Commander's hatch release cable is binding, broken, is not installed, or does not operate properly.

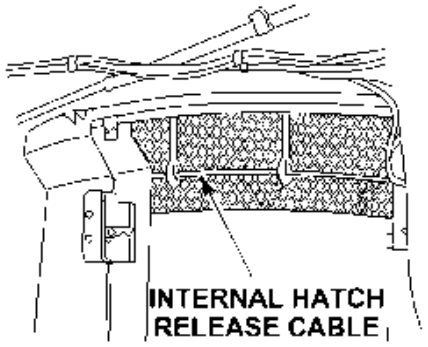


Figure 5. Commander's Hatch Release Cable.

5	Weekly	Towing Pintle	**DRIVER** 1. Check towing pintle for damage, proper jaw opening, rotation, and presence of locking pin. a. If there are any discrepancies with the towing pintle, notify Field Maintenance. b. Check towing pintle for tightness to ramp. (1) If pintle is wobbly in ramp, notify Field Maintenance.	

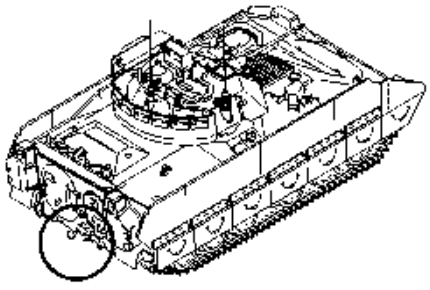


Figure 6. Towing Pintle Location.

Table 1. Preventive Maintenance Checks and Services, Weekly. – Continued.

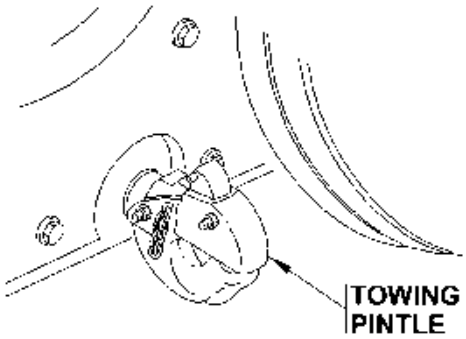
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 7. Towing Pintle.	
6	Weekly	Squad Seats	**DRIVER** **WARNING**  Personnel can be injured using unsecured seats or seats with missing or inoperative seat belts during vehicle operations. Be sure that all seat pins or latches are in place and seat belts are functional before using the seat. 1. Check single squad seat. a. Check that squad seat is secured by locking latches/pins. b. Check that lap safety belts adjust and release by latches. c. Check that safety pins are in the two seat springs between seat back and pan. 2. Check bench seats. a. Check that seat backs and benches are secure.	Seat latches/pins are damaged and/or missing.

Table 1. Preventive Maintenance Checks and Services, Weekly. – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			b. Check that seat belt latches are operational and not missing hardware.	Seat belts are not operational.

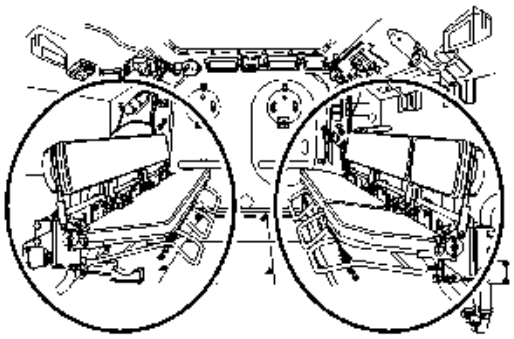


Figure 8. M2 Seat Belt Location.

			3. Check 10th man squad seat. a. Check that seat is secured by locking latches/pins. b. Check that lap safety belts adjust and release by latches. c. Check that foot rest stows and unstows by latches. d. Check that seat belt cutter is present.	Seat belt cutter is missing.

Figure 9. 10th Man Seat Location.

Table 1. Preventive Maintenance Checks and Services, Weekly. – Continued.

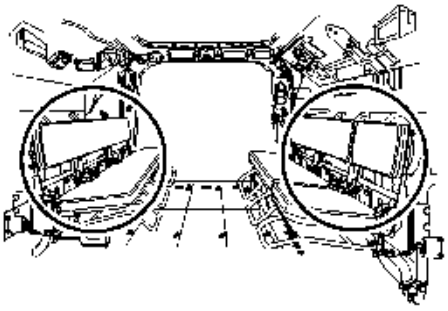
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
7	Weekly	Crew Compartment CBRN System	**DRIVER** 1. Check rear CBRN system air flow. 2. Activate CBRN system (WP 0053). Allow CBRN system to run for 5 minutes. a. Check that rear outlet hoses are not pinched, crushed, or torn. b. Check rear outlet hoses for warm and sufficient air flow.	
				
			Figure 10. M2 Squad Air Output Hose Location.	
			3. Deactivate CBRN system (WP 0053).	
8	Weekly	Emergency Ramp Release (ERR)	**DRIVER** 1. Check ramp operation. a. Operate ERR (WP 0059).	Ramp power unit does not raise or lower ramp. Ramp does not lock. Ramp UNLOCKED indicator light is off when ramp is unlocked.

Table 1. Preventive Maintenance Checks and Services, Weekly. – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			b. Check lead seals on ramp latches are missing or broken.	

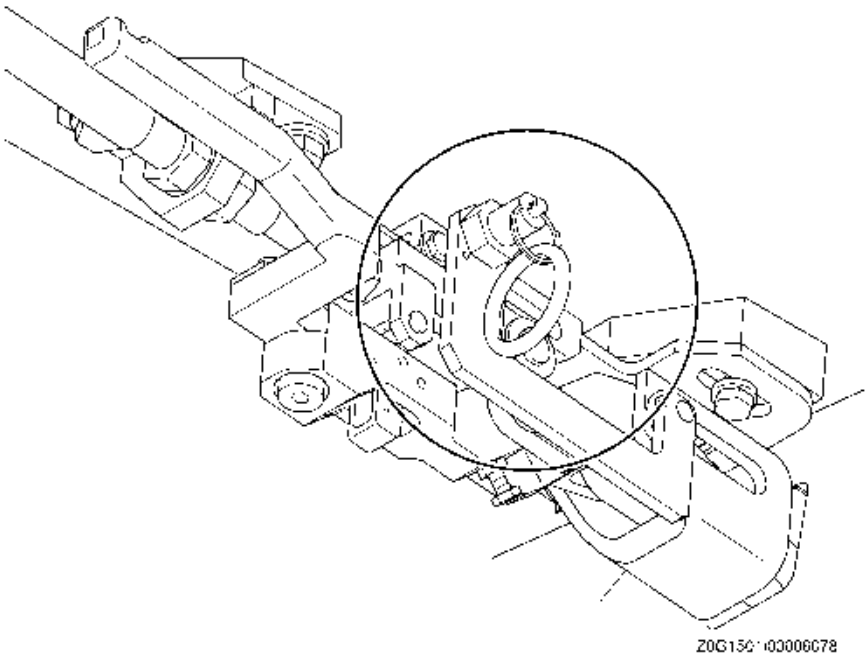


Figure 11. Emergency Ramp Release (ERR).

MANDATORY REPLACEMENT PARTS

There are no replacement parts required for these PMCS procedures.

END OF WORK PACKAGE

OPERATOR MAINTENANCE

PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) - MONTHLY

INITIAL SETUP:

Tools
Lubricating gun, hand (WP 0114, Item 37)

Materials
Disposable gloves (WP 0116, Item 5)
Automotive and artillery grease (WP 0116, Item 2)
Wiping rags (WP 0116, Item 13)

Personnel Required
Commander
Driver

References
WP 0036
WP 0106
WP 0108

Equipment Condition
Vehicle parked
Turret shut down (TM 9-2350-438-10-2)

Table 1. Preventive Maintenance Checks and Services, Monthly.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  **DEGREASING SOLVENT** Degreasing solvent MIL-PRF-680 is flammable and can cause irritation to the eyes, skin or respiratory tract. Read and carefully follow manufacturer's instructions prior to use. Only use in well-ventilated areas and keep away from heat, open flame and/or other ignition sources. Ensure containers are securely closed when not in use. Keep fire extinguishers nearby. Wear protective eyewear and clothing. Do not breathe vapors. Use a respirator as needed. If exposed, immediately flush eyes with water and/or wash skin with soap and water, seek medical attention. Refer to local procedures and plans for preventing and responding to spills or leaks. Immediately clean up any spills. Keep cloths / rags away from open flame and / or ignition sources. Comply with local procedures and environmental regulations when disposing of degreasing solvent, cleanup materials, and leaked or spilled fluid. Failure to comply may result in injury to personnel, damage to equipment and/or damage to the environment.	

Table 1. Preventive Maintenance Checks and Services, Monthly. – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  **FILLING/DRAINING/LEAKING FLUIDS** Use a drain pan or suitable container to capture any draining, leaking or spilled fluid. Refer to local procedures and plans for preventing and responding to fluid spills or leaks. Immediately clean up spilled fluid. Comply with local procedures and environmental regulations when disposing of unused chemicals, soiled/cleanup materials (such as filters and rags), and drained, leaked or spilled fluids. Failure to comply may result in injury to personnel, damage to equipment and/or damage to the environment. **WARNING**  **LUBRICATING OIL** Lubricating oil may be flammable. Keep away from heat, open flame and/or other ignition sources. Prolonged contact with lubricating oil may cause a skin rash. Wear protective eyewear, gloves and clothing. Remove saturated clothing immediately and thoroughly wash skin that comes in contact with lubricating oil. If exposed, flush skin and/or eyes with water and seek medical attention. Use a drain pan or suitable container to capture any draining, leaking or spilled fluid. Refer to local procedures and plans for preventing and responding to fluid spills or leaks. Immediately clean up spilled oil. Keep cloths/rags away from open flame and/or ignition sources. Comply with local procedures and environmental regulations when disposing of lubricating oil, soiled/ cleanup materials (such as filters and rags), and drained, leaked or spilled fluids. Failure to comply may result in injury to personnel and/or damage to the environment.	

Table 1. Preventive Maintenance Checks and Services, Monthly. – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			NOTE Be sure to conduct cleaning in areas with approved drains and collection methods of cleaning run-off. Dispose of spent cleaning solutions, applicators, and washing aids IAW approved industrial methods, local safety, and environmental protocols. **NOTE** Refer to local safety and environmental protocols for the proper segregation, recycle, and/or disposal of used rags/cloths contaminated with petroleum, solvents, and/or hazardous components.	
1	Monthly	Driver's Vision Enhancer (DVE)	**DRIVER** Check the alignment of Vehicle Width Bars to the DVE Sensor (WP 0108).	
2	Monthly	Chemical, Biological, Radiological, and Nuclear (CBRN) System	**WARNING**  Contact with Chemical, Biological, Radiological, and Nuclear (CBRN) agents can kill or seriously injure you. If vehicle exposure to CBRN agents is suspected, contact unit CBRN officer or CBRN Non-Commissioned Officer (NCO). Do not service CBRN filter or vent system. Do not handle air filter media without the proper protective equipment.	

Table 1. Preventive Maintenance Checks and Services, Monthly. – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  The CBRN protection filters may use a type of carbon that contains Chromium VI. This is a known carcinogen if inhaled or swallowed. Damaged or unusable filters are classified as hazardous waste. Use a dust respirator and wash hands immediately after handling damaged filters that are leaking carbon. Do not throw away damaged or unusable filters as trash. Turn in damaged or unusable filters to your Hazardous Waste Management Office or Defense Reutilization and Marketing Office (DRMO). Filters are completely safe to handle and use if they are not damaged in such a way that carbon leaks from them. If carbon does leak, use protective equipment and put carbon in container such as self-sealing plastic bag. Turn in filters to Hazardous Waste Management Office or DRMO. Disposal of hazardous waste is restricted by law. Violation is subject to criminal penalties. 1. Check blower and filter for damage and leaks. 2. Check filter outlet hoses for damage and leaks. Ensure that they are correctly installed and that clamps are tight. 3. Check filter for water. If CBRN system has been immersed in water, filter must be replaced. Notify field maintenance.	

Table 1. Preventive Maintenance Checks and Services, Monthly. – Continued.

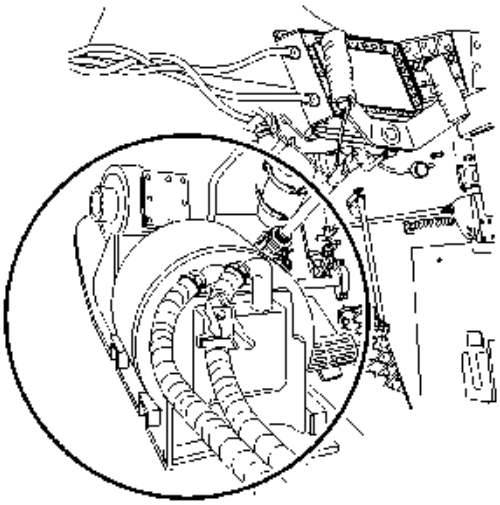
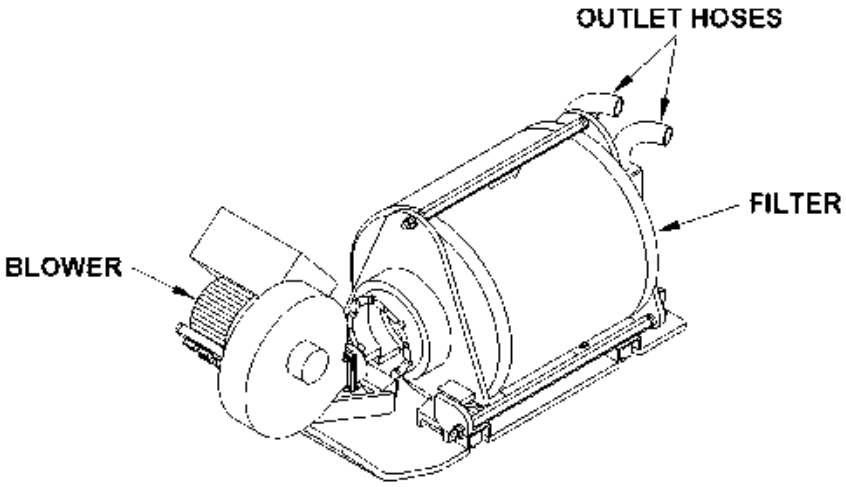
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 1. M2 Filter Location.  Figure 2. M2 Blower and Filter.	
3	Monthly	Bilge Pumps	**DRIVER** 1. Check if bilge pumps operate. 2. Check bilge pump operation by directing crew member to feel at bilge pump outlets for a stream of air or water, if water is present in vehicle. If plugged, backflush both bilge pumps. Notify Field Maintenance.	A bilge pump does not work.

Table 1. Preventive Maintenance Checks and Services, Monthly. – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			3. Inspect bilge areas around pumps. If dried mud or other debris is present, loosen hull drain plugs. Flush mud and debris from the bilge area through the drains (WP 0106). Tighten drain plugs. 4. Inspect pump vent holes for clogging. 5. Clear pump vent holes by running a wire in and out a few times.	

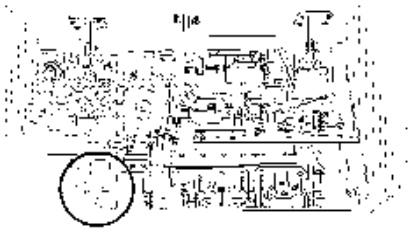


Figure 3. Front Vent Hole Location.

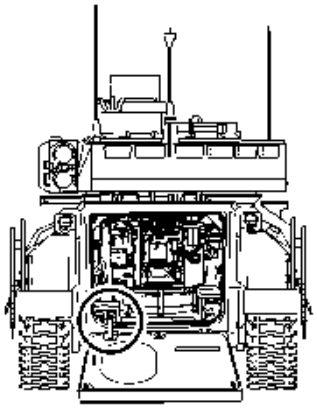


Figure 4. Rear Vent Hole Location.

Table 1. Preventive Maintenance Checks and Services, Monthly. – Continued.

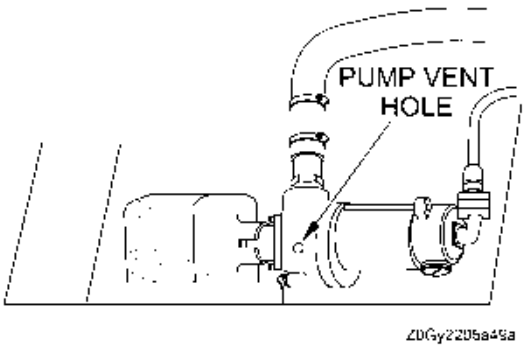
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 5. Pump Vent Hole.	
4	Monthly	Lubrication Requirements (Heavy Duty Final Drive)	**DRIVER/CREW** **WARNING**  Prolonged contact with lubricating oil may cause a skin rash. If skin and clothing come in contact with lubricating oil, wash immediately. Saturated clothing should be removed immediately. Use in a well-ventilated area. Failure to comply may result in death or severe injury to personnel. **WARNING**  Oil is slippery and can cause falls or fire hazards. Clean up any spilled oil immediately with wiping rags. Dispose of residual oil and wiping rags IAW local SOP. Failure to comply may result in death or severe injury to personnel or damage to equipment.	

Table 1. Preventive Maintenance Checks and Services, Monthly. – Continued.

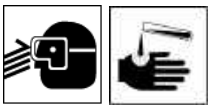
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			WARNING  Spilled, leaked, or drained fluids that have not been properly collected may be hazardous to personnel or to the environment. Spilled fuel or lubricants may lead to an engine compartment fire. Use drain pan or appropriate containment equipment when adding fluids or to capture any draining or leaking fluids. Do not allow fuel to drain into hull. Make sure drain plugs are fully closed after draining. Clean up spilled hazardous and flammable material IAW all local regulations. Be careful to keep container and spill rags from open flame or combustible heat source. Rags saturated with coolant, cleaning compound, petroleum, or other hazardous fluids must be disposed of IAW authorized facility procedures and disposal regulations. Failure to comply may result in death or severe injury to personnel and/or damage to environment. **WARNING**  Grease is harmful to skin and eyes. If grease contacts eyes, rinse thoroughly with water and contact physician if irritation persists. If skin is contacted, wash thoroughly with soap and water. Failure to comply may result in death or severe injury to personnel. 1. Lube universal joints on propeller shafts: a. Open power unit access door (TM 9-2350-438-10-1). b. Notify Field Maintenance to remove front hull access cover. c. Apply GAA to universal joint lubrication fittings on left and right propeller shafts. Each universal joint contains two lubrication fittings.	

Table 1. Preventive Maintenance Checks and Services, Monthly. – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			(1) If propeller shaft universal joint lubrication fittings cannot be accessed, start engine (TM 9-2350-438-10-1). (2) Drive vehicle forward 2-3 ft (61-91 cm). (3) Stop engine (TM 9-2350-438-10-1). (4) Repeat above steps as necessary.	

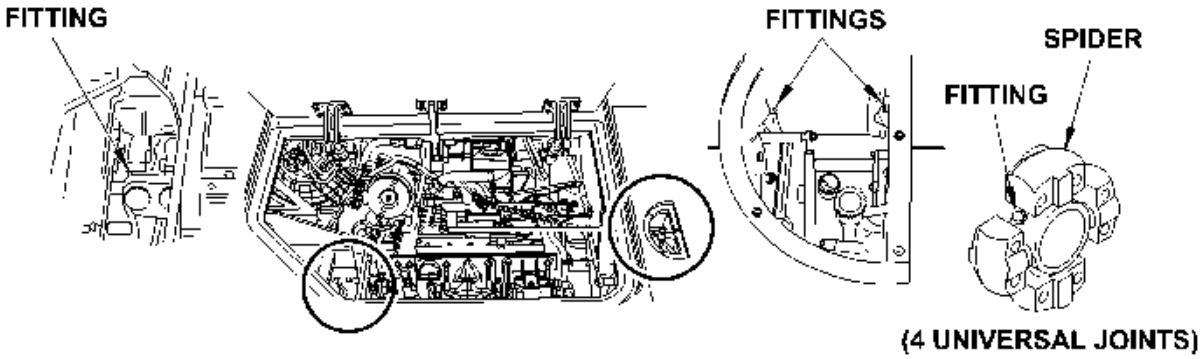


Figure 6. Propeller Shaft Universal Joints Location.

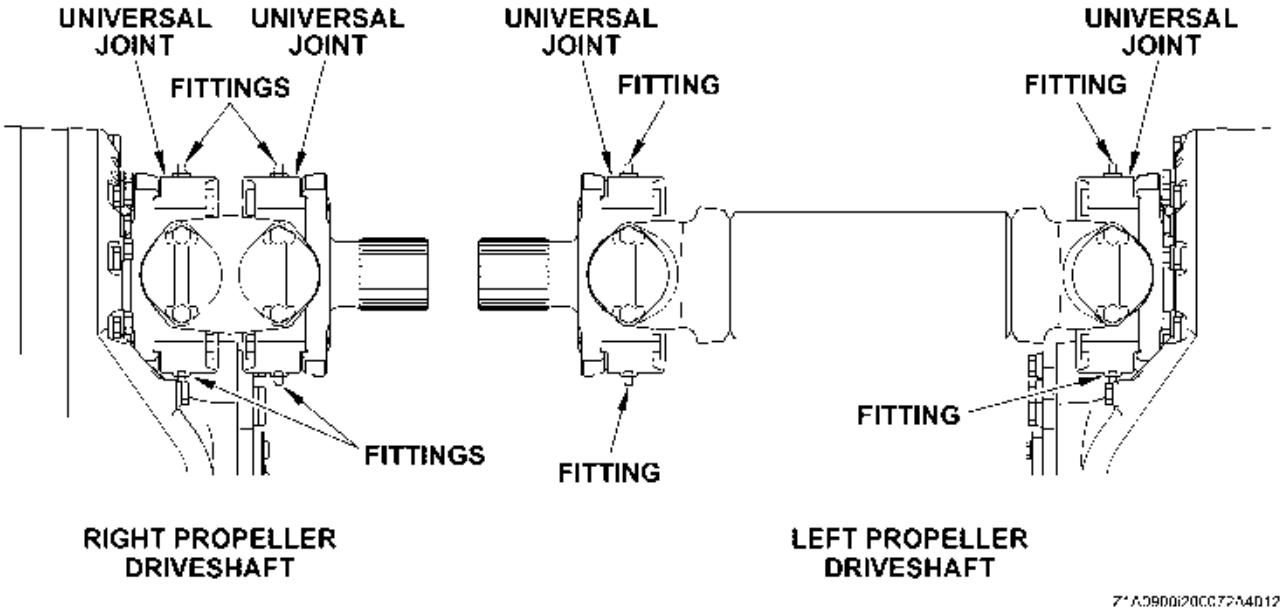


Figure 7. Propeller Shaft Universal Joints.

Table 1. Preventive Maintenance Checks and Services, Monthly. – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			2. Notify Field Maintenance to install front hull access cover. 3. Close power unit access doors (TM 9-2350-438-10-1).	
5	Monthly	Hotbox Containment Bag	**GUNNER/COMMANDER/DRIVER** **NOTE** Stitching should not be confused with the yellow tracer stitches on the webbing. **NOTE** If any discrepancies are noted during the inspection of the hotbox containment bag(s), the bag(s) should be replaced as soon as possible. 1. Inspect webbing on all sides of the bag. Check for webbing that is visibly frayed or appears to be unraveling. Pay close attention to the edges of the webbing. 2. Inspect all thread and stitch patterns. Check that there are no stitches that are cut, broken, or unraveled. 3. Inspect all seams. Check for any seams that have burst open or appear to be damaged. 4. Inspect the fabric on all sides of the bag. Check for any cuts, tears, or punctures in the fabric, regardless of the size. 5. Inspect all buckles. Check for both visible damage and mechanical dysfunction of the buckles. Any buckles that are not functioning properly should be cleaned and re-tested. If they are still not functioning, the bag should not be used.	

Table 1. Preventive Maintenance Checks and Services, Monthly. – Continued.

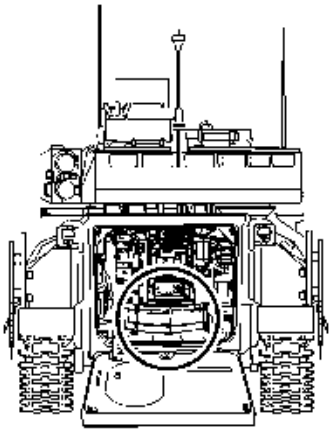
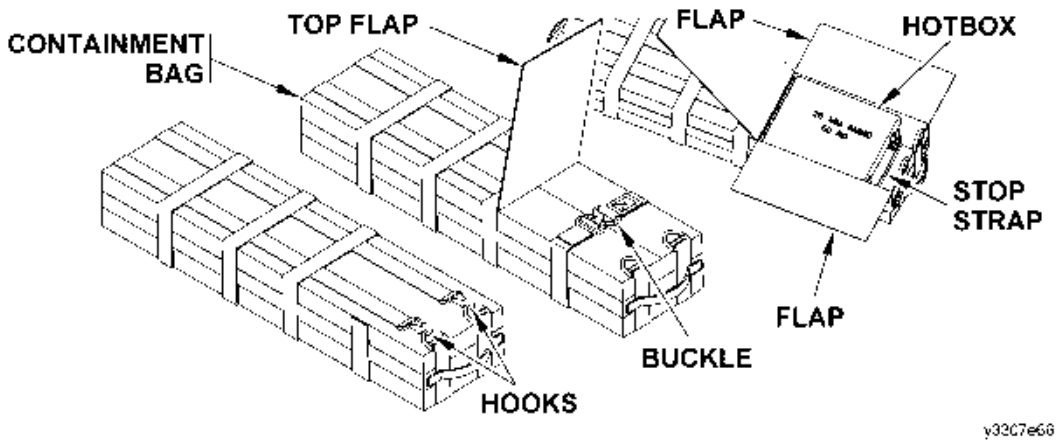
ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			 Figure 8. Hotbox Containment Bag Location.  Figure 9. Hotbox Containment Bag.	
6	Monthly	Hotbox	**GUNNER/COMMANDER/DRIVER** 1. Inspect hotbox bag for visible fungal growth. a. Remove hotbox from outer bag assembly (WP 0036). b. Check entire hotbox bag for visible signs of fungal growth. Check the blanket for dampness. If there are no signs of fungal growth on the blanket, and associated components are dry, no cleaning is necessary.	

Table 1. Preventive Maintenance Checks and Services, Monthly. – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			CAUTION When cleaning the hotbox bag assembly, do not use a wire brush or bleach-based cleaners for cleaning. Damage to the blanket assembly may occur. c. If fungal growth is present or if the bag is damp or wet to touch, it must be cleaned with a soft bristle brush using soap and water. Rinse with clean water and allow all components to air dry thoroughly.	
7	Monthly	Bradley Advanced Survivability Seats (BASS) Energy Attenuating (EA) Link	**GUNNER/COMMANDER/DRIVER** **NOTE** There are two EA links per seat frame. Check the length of the EA link of each seat frame by inserting EA Go-No Go gauge between the EA link and the guide rod. In the absence of the EA Go-No Go gauge, the EA links must measure a minimum of 1 5/16 inch (33 mm). If EA Go-No Go gauge does not fit or the EA link does not measure at least 1 5/16 inch (33 mm), notify Field Maintenance.	

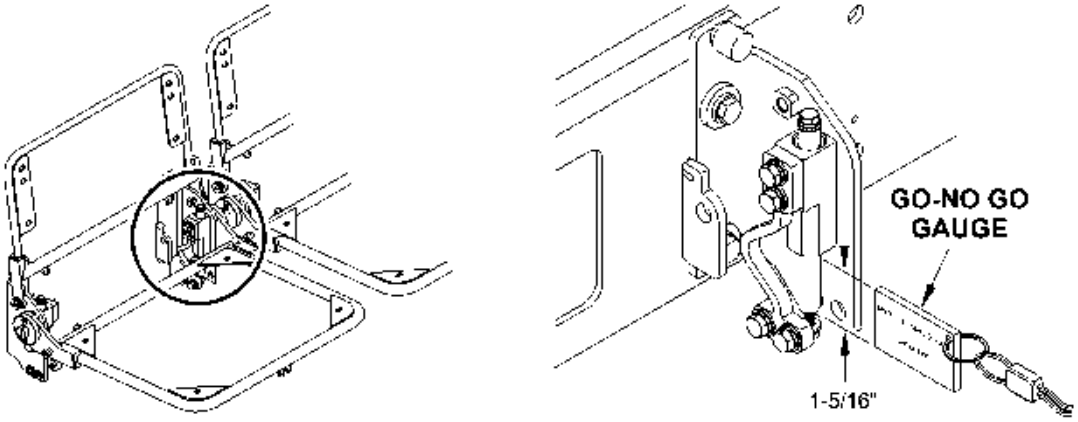
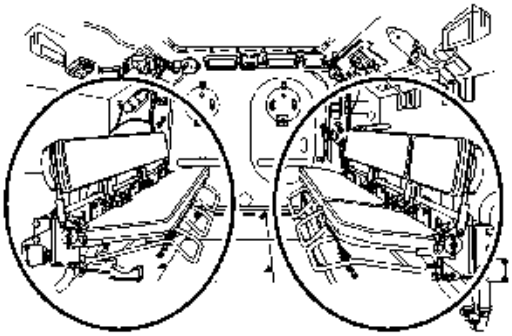


Figure 10. EA Links.

8	Monthly	Seat Cushion	**GUNNER/COMMANDER/DRIVER** 1. Inspect seat cushion.	

Table 1. Preventive Maintenance Checks and Services, Monthly. – Continued.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	EQUIPMENT NOT READY/ AVAILABLE IF:
			a. Check squad seat cushions for visible signs of fungal growth. Check for dampness. If there are no signs of fungal growth and the cushions are dry, no cleaning is necessary.	
			 Figure 11. M2 Squad Seat Cushions.	
			b. If fungal growth is present or if the cushions are damp or wet to touch, it must be cleaned with a soft bristle brush using soap and water. Rinse with clean water and allow all components to thoroughly air dry.	
9	Monthly	Firing Ports	**GUNNER/COMMANDER/DRIVER** 1. Check firing ports. a. Check for free movement of firing port balls by hand from inside of vehicle. b. Check that firing port plugs are secure when installed.	