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**OPERATOR PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) XM20 FWTRD**

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**GENERAL**

To ensure that the fifth wheel towing device is ready for operation at all times, it must be inspected on a regular basis so that defects may be found and corrected before they result in serious damage, equipment failure, or injury to personnel. Table 2 contains systematic instructions on inspections, adjustments, and corrections to be performed by the operator/crew to keep your equipment in good operating condition and ready for its primary mission.

**EXPLANATION OF TABLE ENTRIES**

1. **Item Number (Item No.) Column.** Numbers in this column are for reference. When completing DA Form 5988 (Equipment Inspection and Maintenance Worksheet), include the item number for the check/service indicating a fault. Item numbers also appear in the order that you must perform checks and services for the interval listed.
2. **Interval Column.** This column tells you when you must perform the procedure in the procedure column.
  - a. *Before* procedures must be done before you operate the towing device.
  - b. *During* procedures must be done while you are operating the towing device.
  - c. *After* procedures must be done immediately after you have operated the towing device.
  - d. *Weekly* procedures must be done once each week.
  - e. *Monthly* procedures must be done once each month. The monthly PMCS shall include the performance of a Before, During, After, and Weekly PMCS.
3. **Location, Item to Check/Service Column.** This column provides the location and item to be checked or serviced.

**NOTE**

The WARNINGS and CAUTIONS appearing in your PMCS table should always be observed. WARNINGS and CAUTIONS appear before applicable procedures. You must observe these WARNINGS to prevent serious injury to yourself and others, and CAUTIONS to prevent your equipment from being damaged.

4. **Procedure Column.** This column gives the procedure you must perform to check or service the item listed in the Item to Check/Service column to know if the equipment is ready or available for its intended mission or for operation. You must perform the procedure at the time stated in the interval column.
5. **Not Fully Mission Capable if: Column.** Information in this column tells you what faults will keep your equipment from being capable of performing its primary mission. If you perform check and service procedures that show faults listed in this column, do not operate the equipment. Follow standard operating procedures for maintaining the equipment or reporting equipment failure.

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**GENERAL PMCS PROCEDURES****NOTE**

Prior to the performance of the monthly PMCS checks and services, ensure the fifth wheel towing device is placed into the hydraulic oil fill position (Figure 104, WP 0056 00-7). This position may be adjusted to accommodate particular steps being performed.

1. Always perform PMCS in the same order so it gets to be a habit. Once you've had some practice, you'll spot anything wrong in a hurry. If the fifth wheel towing device does not perform as required, refer to the appropriate troubleshooting procedure in WP 0024 00.
2. If anything looks wrong and you can't fix it, write it on your DA Form 5988. If you find something seriously wrong, IMMEDIATELY report it to your supervisor.
3. Before performing preventive maintenance, read all the checks required for the applicable interval and prepare all the tools you need to make all the checks. You'll always need a rag (Item 10, WP 0085 00) or two.
  - a. **Keep It Clean.** Dirt, grease, oil, and debris get in the way and may cover up a serious problem. Clean as you work and as needed. Use dry cleaning solvent (Item 14, WP 0085 00) on all metal surfaces. Use detergent (Item 4, WP 0085 00) and water when you clean rubber or plastic.
  - b. **Deterioration, Rust, and Corrosion.**
    - (1) Be alert for deterioration of plastic and rubber materials. Report it to your supervisor.
    - (2) Check metal parts of vehicle for rust and corrosion. If any bare metal or corrosion exists, clean and apply a light coat of oil (Item 9, WP 0085 00). Report it to your supervisor.
  - c. **Bolts, Nuts, and Screws.** Check bolts, nuts, and screws for obvious looseness, missing, bent, or broken condition. You can't try them all with a tool, of course, but look for chipped paint, bare metal, or rust around bolt heads. If you find one you think is loose, report it to your supervisor.
  - d. **Welds.** Look for loose or chipped paint, rust, or gaps where parts are welded together. If you find a bad weld, report it to your supervisor.
  - e. **Electrical Wires and Connectors.** Look for cracked or broken insulation, bare wires, and loose or broken connectors. Tighten loose connectors and ensure that the wires are in good condition.
  - f. **Hoses.** Look for wear, damage, and signs of leaks. Ensure that clamps and fittings are tight. Wet spots indicate leaks, but a stain around a fitting or connector may also indicate a leak. If a leak comes from a loose fitting or connector, tighten. If something is broken or worn out, report it to your supervisor.

**GENERAL PMCS PROCEDURES - Continued**

- g. **Fluid Leakage.** It is necessary for you to know how fluid leakage affects the status of your fifth wheel towing device. The following are definitions of the types/classes of leakage you need to know to be able to determine the status of your equipment. Be familiar with them, and remember - when in doubt, notify your supervisor.

**Leakage Definitions of PMCS**

Class I	Leakage indicated by wetness or discoloration, but not great enough to form drops.
Class II	Leakage great enough to form drops, but not enough to cause drops to drip from the item being checked/inspected.
Class III	Leakage great enough to form drops that fall from the item being checked/inspected.

**CAUTION**

**Operation is allowable with Class I and Class II leakage. WHEN IN DOUBT, NOTIFY YOUR SUPERVISOR. When operating with Class I or Class II leaks, check fluid levels more frequently. Class III leaks must be reported immediately to your supervisor. Failure to do this will result in damage to vehicle and/or components.**

# FRONT

START

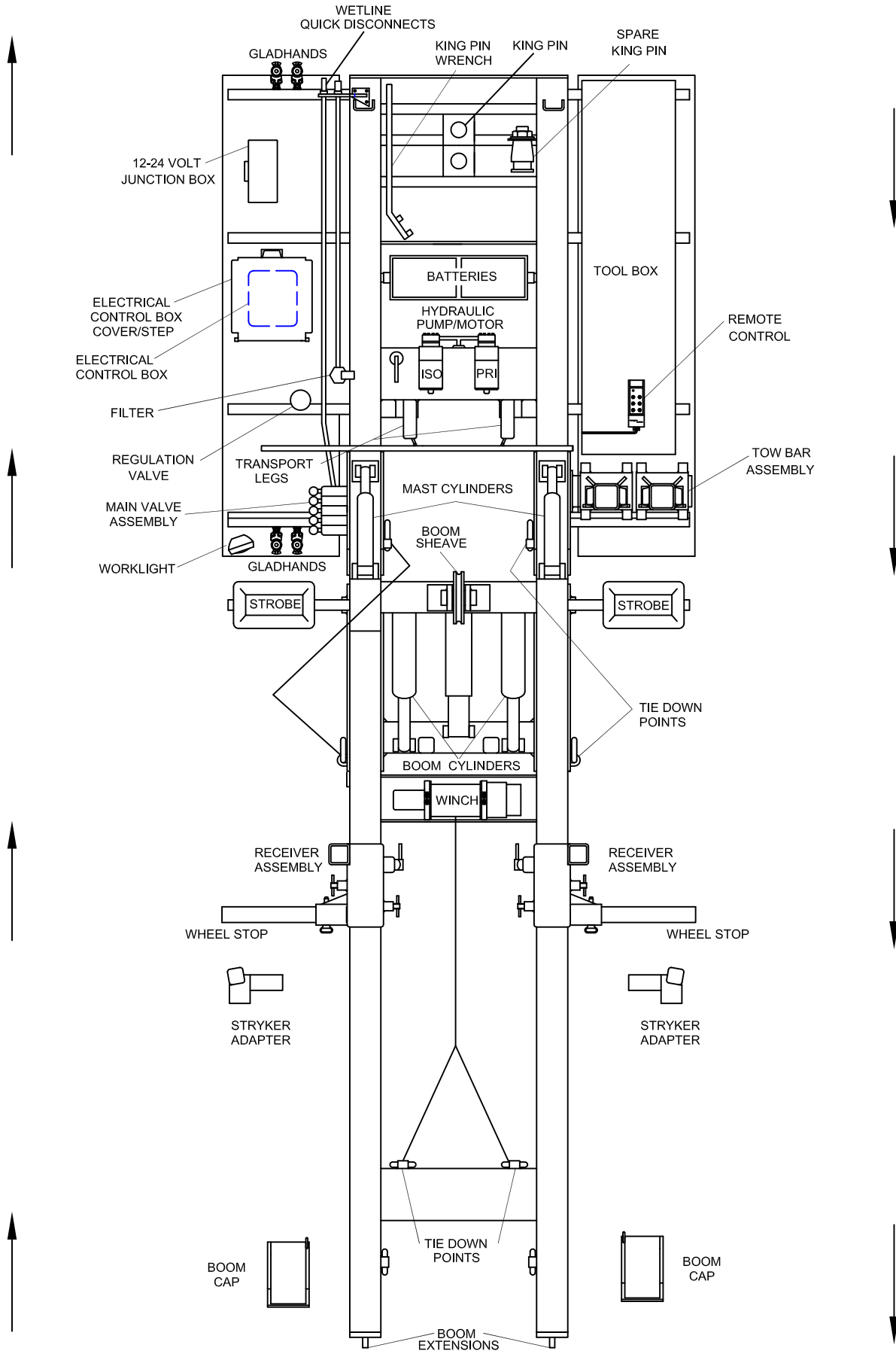



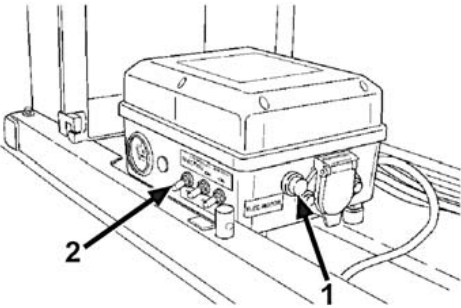
Figure 1. FWTRD PMCS Procedure Chart

0031 00-4

**Table 2. Operator Preventative Maintenance Checks and Services (PMCS) for the XM20 Fifth Wheel Towing and Recovery Device.**

Item No.	Interval	Location	Procedure	Not Fully Mission Capable If:
		Item To Check/Service		
			 <p><b>WARNING</b></p> <p>Be sure to wear the proper eye protection to avoid personal injury when you are performing the Operator Preventative Maintenance Checks and Services.</p> <p><b>NOTE</b></p> <p>Prior to the performance of the monthly PMCS, ensure the fifth wheel towing and recovery device is placed into the hydraulic oil fill position (figure 104 WP 0056 00-7). This position may be adjusted to accommodate particular steps being performed.</p> <p>Read ALL WARNINGS, CAUTIONS, AND NOTES before performing PMCS and operating the fifth wheel towing and recovery device.</p> <p>Perform all PMCS checks if:</p> <ol style="list-style-type: none"> <li>You are the assigned operator, but have not operated the fifth wheel towing and recovery device since the last inspection.</li> <li>You are operating the fifth wheel towing and recovery device for the first time.</li> </ol>	

**Table 2. Operator Preventative Maintenance Checks and Services (PMCS) for the XM20 Fifth Wheel Towing and Recovery Device.**

Item No.	Interval	Location	Procedure	Not Fully Mission Capable If:
		Item To Check/Service		
1	Before	Overall View	<p>Check fifth wheel towing and recovery device for evidence of fluid leakage.</p> <p>Check fifth wheel towing and recovery device for obvious damaged or missing parts that would impair operation.</p> <p>Check fifth wheel towing and recovery device for damage to any gauges.</p>	<p>Class III oil leak evident</p> <p>Damaged, missing parts that impair operation.</p> <p>Non-operational gauges</p>
2	Before	Electrical Control Box	<p>Check electrical control box for proper operation of electric motor switch (1) and ON/OFF switch (2).</p> <p>NOTE: After verifying electric operation, set box to appropriate positions for either "electric" or "wetline" operation based on chosen method of operation for task.</p> 	<p>Electric motor switch or ON/OFF switch non operational.</p>

**Table 2. Operator Preventative Maintenance Checks and Services (PMCS) for the XM20 Fifth Wheel Towing and Recovery Device.**

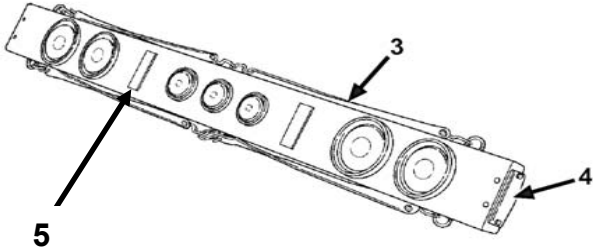
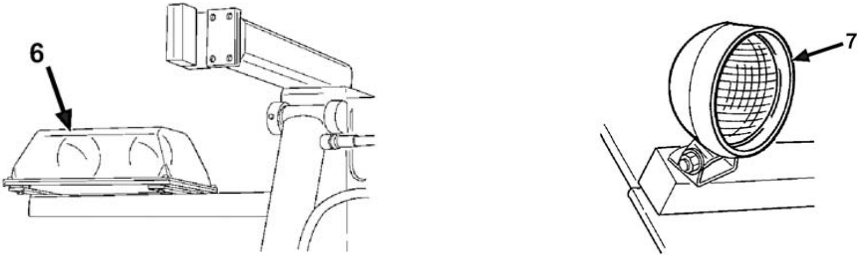
Item No.	Interval	Location	Procedure	Not Fully Mission Capable If:
		Item To Check/Service		
3	Before	Lights	<p><b>NOTE</b></p> <p>Vehicle operation with non-operational lights may violate AR-385-55.</p> <p>If present, check all brake/tail/stop lights (3), clearance lights (4), and blackout lights (5) for proper operation and cleanliness.</p> 	Any damaged components or parts
4	Before		<p>Check strobe lights (6) and work light (7) for proper operation and cleanliness.</p> 	Any damaged components or parts.

Table 2. Operator Preventive Maintenance Checks and Services (PMCS) for XM20 Fifth Wheel Towing Device

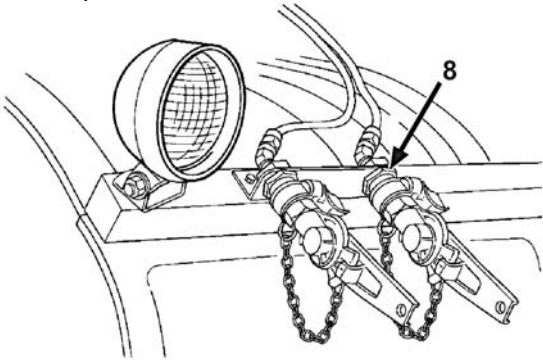
Item No.	Interval	Location	Procedure	Not Fully Mission Capable If:
		Item To Check/ Service		
5	Before	<b>BRAKES</b>	<p>Have an assistant actuate the service brakes on prime mover. Listen for air leaks at the gladhands (8).</p> 	Brakes fail to hold or air leaks are found.
6	During	<b>OVERALL VIEW</b>	Check fifth wheel towing device for evidence of fluid leakage.	Class III oil leak evident.
7	After	<b>OVERALL VIEW</b>	<p>Check fifth wheel towing device for evidence of fluid leakage.</p> <p>Check fifth wheel towing device for obvious damaged or missing parts that would impair operation.</p> <p>Check fifth wheel towing device for damage to any gauges.</p>	<p>Class III oil leak evident.</p> <p>Damaged or missing parts that impair operation.</p> <p>Non-operational gauges.</p>



Table 2. Operator Preventive Maintenance Checks and Services (PMCS) for the XM20 Fifth Wheel Towing Device

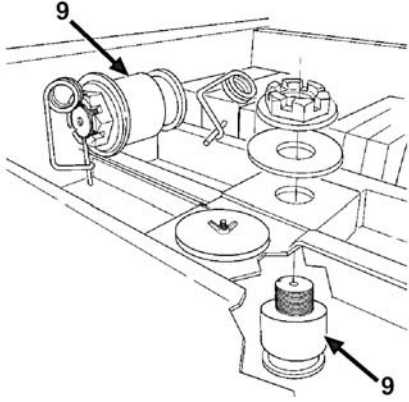

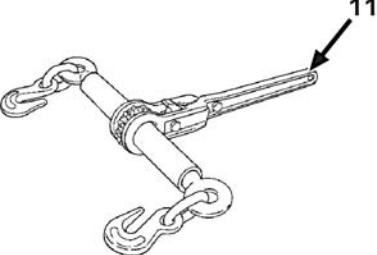
Item No.	Interval	Location	Procedure	Not Fully Mission Capable If:
		Item To Check/Service		
8	After	<b>KINGPIN</b>	Visually inspect kingpins (9) cracks, damage, or excessive wear.	Excessive wear, cracks, or damage.
			9	
10	After		Inspect kingpin plate for cracks and dents.	Kingpin plate is cracked or dented.
11	After	<b>TIEDOWNS</b>	Check chains (10), load binders (11) and other tiedowns for serviceability and proper quantity.	
				
				
				

Table 2. Operator Preventive Maintenance Checks and Services (PMCS) for the XM20 Fifth Wheel Towing Device

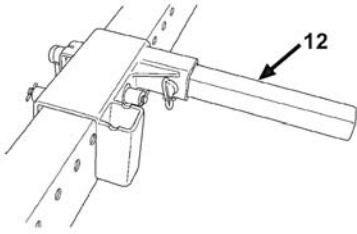
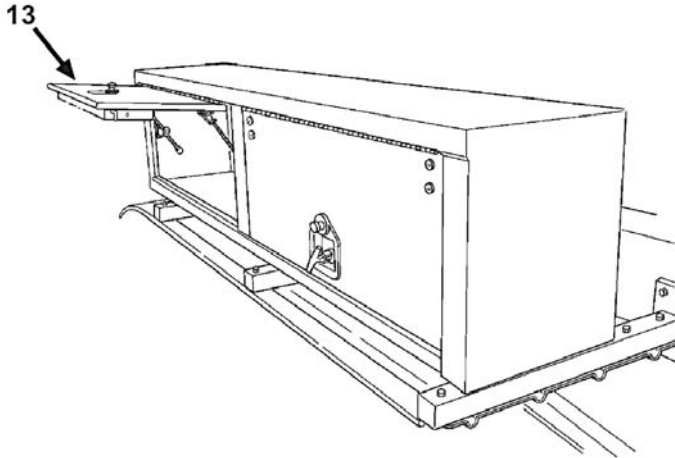
Item No.	Interval	Location	Procedure	Not Fully Mission Capable If:
		Item To Check/ Service		
12	After	<b>RECEIVER ASSEMBLY</b>	<p>Check receiver assemblies (12) for proper operation and cleanliness</p> 	
13	Weekly	<b>TOOLBOX</b>	<p>Check tool box lid (13) for proper operation and serviceability.</p> 	

Table 2. Operator Preventive Maintenance Checks and Services (PMCS) for the XM20 Fifth Wheel Towing Device

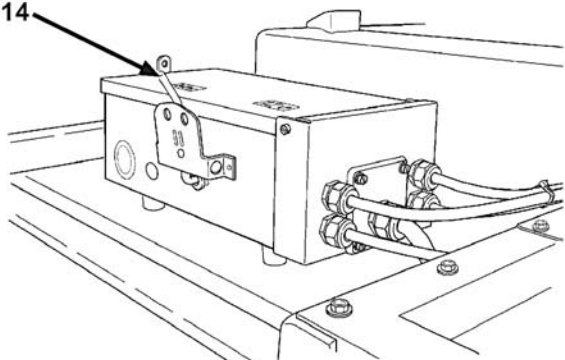
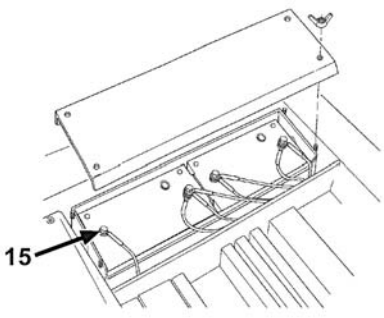
Item No.	Interval	Location	Procedure	Not Fully Mission Capable If:
		Item To Check/ Service		
14	Weekly	<b>12/24 JUNCTION BOX</b>	<p>Check junction box selector switch (14) and electrical connection plugs for excessive wear, corrosion, and serviceability.</p> 	Excessive wear present.
15	Weekly	<b>BATTERIES</b>	<p>Check for corrosion on battery posts (15). Check for leaks. Apply light coat of grease (item 7, WP 0085 00).</p> 	Excessive corrosion on battery posts or leaks present.

Table 2. Operator Preventive Maintenance Checks and Services (PMCS) for the XM20 Fifth Wheel Towing Device

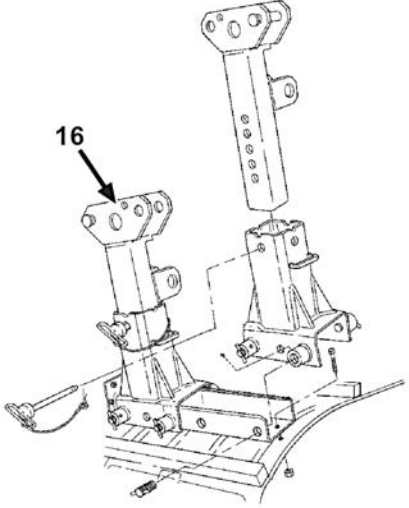
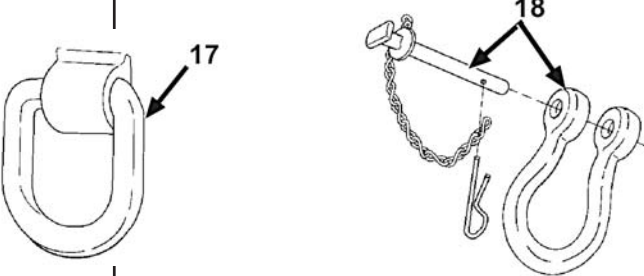
Item No.	Interval	Location Item To Check/ Service	Procedure	Not Fully Mission Capable If:
16	Weekly	<b>TOW BAR ASSEMBLY</b>	<p>Check tow bar assemblies (16) for proper operation and cleanliness.</p> 	
17	Weekly	<b>TIEDOWN POINTS</b>	<p>Check D-rings (17), and clevis (18) for serviceability.</p> 	<p>Tiedown points, load binders, or chains not sufficient for proper securing of equipment.</p>

Table 2. Operator Preventive Maintenance Checks and Services (PMCS) for the XM20 Fifth Wheel Towing Device

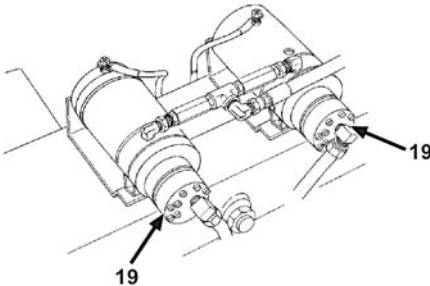
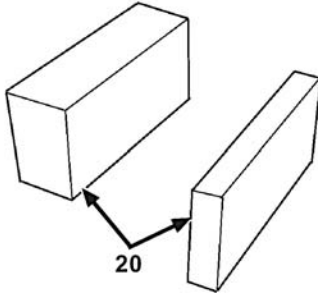
Item No.	Interval	Location	Procedure	Not Fully Mission Capable If:
		Item To Check/ Service		
18	Weekly	<b>HYDRAULIC MOTORS &amp; PUMPS</b>	<p>Inspect hydraulic motors (19) for missing, broken, kinked, or damaged wires. Check for hydraulic fluid leaks.</p> 	Missing, broken, kinked, or damaged wires. Class III fluid leak evident.
19	Weekly	<b>HYDRAULIC CYLINDERS</b>	Inspect hydraulic cylinders for scratches and wear.	Excessive wear present.
20	Weekly	<b>BOOM EXTENSIONS</b>	Inspect boom extension wear pad for excessive wear.	Excessive wear present.
21	Weekly	<b>RUBBER BLOCKS</b>	<p>Check rubber blocks (20) for serviceability.</p> 	ALL rubber blocks are missing.

Table 2. Operator Preventive Maintenance Checks and Services (PMCS) for the XM20 Fifth Wheel Towing Device

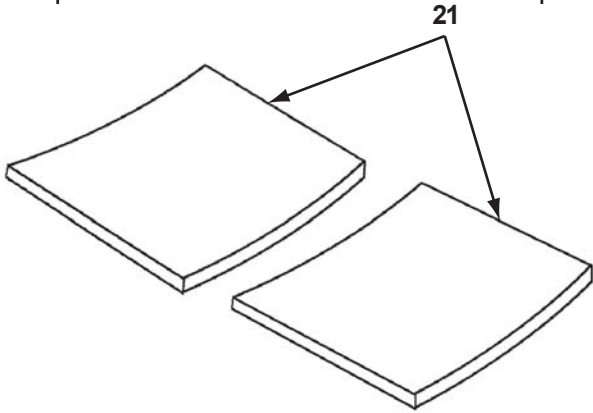
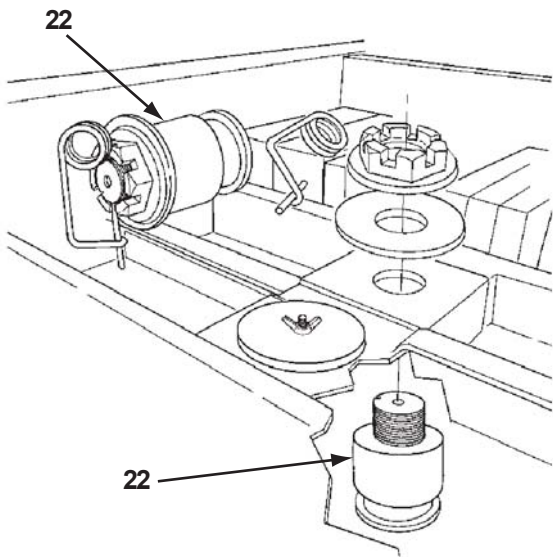
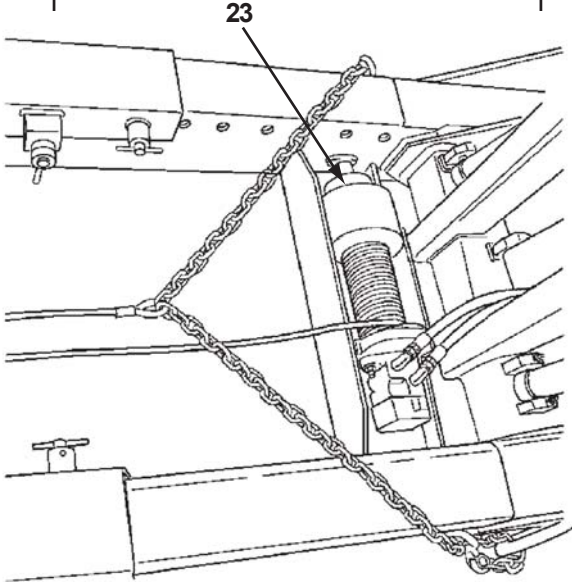
Item No.	Interval	Location Item To Check/ Service	Procedure	Not Fully Mission Capable If:
22	Weekly		<p>Check belting (21) for serviceability.</p> 	
23	Monthly	<b>KINGPIN</b>	<p>Apply grease to kingpins (22). Refer to WP 0039 00. Refer to prime mover lube order for fifth wheel.</p> 	

Table 2. Operator Preventive Maintenance Checks and Services (PMCS) for the XM20 Fifth Wheel Towing Device

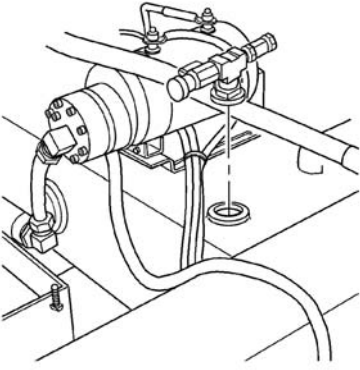
Item No.	Interval	Location	Procedure	Not Fully Mission Capable If:
		Item To Check/Service		
24	Monthly	<b>OVERALL VIEW</b>	Check reservoir, hydraulic controls, lines, and fittings for looseness, leaks, or other damage.	Any hydraulic component is loose, leaking, or damaged.
25	Monthly	<b>LUBRICATION</b>	Lubricate all fittings. Refer to WP 0039 00.	
26	Monthly	<b>WINCH</b>	Inspect winch (23) for broken or frayed cable or missing components. Inspect winch cable IAW TB 43-0142 or FM 5-125.	



The diagram shows a perspective view of a winch mechanism. A central drum is visible, with a cable wrapped around it. A chain is attached to the drum. The number '23' is written above the drum with a leader line pointing to it. The drawing shows various mechanical components, bolts, and structural elements of the winch assembly.

Table 2. Operator Preventive Maintenance Checks and Services (PMCS) for the XM20 Fifth Wheel Towing Device

Item No.	Interval	Location	Procedure	Not Fully Mission Capable If:
		Item To Check/ Service		
27	Monthly	HYDRAULIC SYSTEM	<p>Position fifth wheel towing device in hydraulic oil fill position (refer to Figure 104 in WP 0056 00-7).</p> 	





**GENERAL PMCS PROCEDURES (Cont.)**

While performing specific PMCS procedures, inspect the following components:

**Bolts, Nuts, and Screws.** Insure that they are not loose, missing, bent, or broken. Report loose or missing bolts, nuts, and screws to Unit maintenance.

**Welds.** Inspect for gaps where parts are welded together. Check for loose or chipped paint, rust, and cracks. Report bad welds to Unit maintenance.

**Electrical Conduit, Wires, and Connectors.** Inspect for cracked or broken insulation, bare wires, and loose or broken connectors. Report loose connections and faulty wiring to Unit maintenance. Use dielectric grease on all pins and connectors.

**Hose, Lines, and Fittings.** Inspect for wear, damage, and leaks. Insure that clamps and fittings are tight. Report any damage, leaks, or loose fittings and clamps to Unit maintenance.

Check that components are adequately lubricated in accordance with Appendix # .

Operator/crew PMCS is provided in Table 3. Always perform PMCS in the order listed. Once it becomes a habit, anything that is not right can be spotted in a minute. PMCS is a good tool for learning about the semitrailer. Times to perform good PMCS will decrease as you become more familiar with its operation.

Before performing PMCS, read all the checks required for the applicable interval and prepare all the tools needed. Have several clean rags handy. Perform all inspections at the applicable interval.

The column headings in Table 3 are defined as follows:

**Item No.** Provides a logical sequence for PMCS to be performed and is used as a source of item numbers for the "TM ITEM NO." column when recording PMCS results on DA Form 2404. Item numbers also appear in the order that you must perform checks and services for the intervals listed.

**SPECIFIC PMCS PROCEDURES**

**Interval.** Specifies the interval at which PMCS is to be performed.

**Item To Check/Service.** Lists the system and common name of items that are to be inspected. Included in this column are specific servicing, inspection, replacement, or adjustment procedures to be followed.

**NOTE**

**If the Item to Check/Service is specific to either the TDRT/HMRT it is called out in this column.**

**Procedure.** Provides the procedure that must be performed to check or service the item. Carefully follow these instructions. If you do not have the tools, have Unit maintenance perform the work.

**Equipment Not Ready/Available If:** Explains when the semitrailer is nonmission-capable. This column tells you when and why your equipment cannot be used.

**NOTE**

**Mission requirements, urgency, safety, and common sense should be considered in determining NMC status of the semitrailer.**

**Table 3. Operator Preventative Maintenance Checks and Services for the XM1250 Tilt Deck Recovery Trailer (TDRT) and the XM1234 High Mobility Recovery Trailer (HMRT).**

Item No.	Interval	Location	Procedure	Not Fully Mission Capable If:
		Item To Check/ Service		
			<p style="text-align: center;"><b>NOTE</b></p> <p>Perform weekly as well as before PMCS if:</p> <ul style="list-style-type: none"> <li>• You are the assigned operator but have not operated the HMRT/TDRT since the last PMCS.</li> <li>• You are operating the HMRT/TDRT for the first time.</li> </ul> <hr/> <p style="text-align: center;"><b><u>CAUTION</u></b></p> <p>Reference prime mover technical manual. Insure all operations are adhered to, i.e., coupling, fifth wheel load and position, load capabilities, speeds, on/off road operation and adverse weather/road operations.</p> <p style="text-align: center;"><b>NOTE</b></p> <p>Perform the following inspections and checks before connecting the HMRT/TDRT to the FWTRD.</p>	
1	Before	Voltage Receptacles	Visually check for damage.	Receptacles are damaged.
2	Before	Gladhands	<p>Inspect gladhands for damage, missing or worn/cracked seals, missing hardware, and free swing-away operation.</p> <p style="text-align: center;"><b>NOTE</b></p> <p>HMRT Connectors are quick-connect type at trailer connection point. Check for free non-binding operation of the quick-connects.</p>	Gladhands or quick connects are damaged, seals worn/cracked or missing, missing hardware, connectors do not operate freely.
3	Before	Landing Legs (TDRT only)	<p>a) Assist Springs in place and not damaged.</p> <p>b) Pins are in place with clips present</p>	Springs damaged or pins/clips missing.

**Table 3. Operator Preventative Maintenance Checks and Services for the XM1250 Tilt Deck Recovery Trailer (TDRT) and the XM1234 High Mobility Recovery Trailer (HMRT).**

Item No.	Interval	Location	Procedure	Not Fully Mission Capable If:
		Item to Check/ Service		
4	Before	Vise	Locked in holder. Jaws closed and vice pivot bolts tightened down securely	Pin or lock missing. Vice not kept from pivoting while traveling.
5	Before	Deck Pull-Outs (TDRT only)	Inspect that TDRT Deck Pull-Outs secured (all "in" or all "out")	Loose, damaged, or missing locking bolts
6	Before	Intervehicular Air Hoses	<p><b><u>Caution</u></b></p> <ul style="list-style-type: none"> <li>• <b>After Coupling the TDRT with the prime mover (FWTRD), the landing legs must be unpinned and brought to their travel position and re-pinned to allow for maximum clearance.</b></li> <li>• <b>Chock front and rear tires of the TDRT/HMRT prior to coupling /uncoupling.</b></li> <li>• <b>The following checks must be done with the prime mover coupled to the trailer. Assistance is required when coupling and checking trailer lights.</b></li> </ul>	Air leaks are present.
			Connect air lines to the trailer gladhands. With tractor running, check air lines and gladhands for leaks.	
7	Before	Axle Lock Pin (TDRT)	Test that Axle Lock Pin releases when knob is pulled out on the control. (Trailer must have active air supply from prime mover- trailer brakes released.)	Pin does not release.
8	Before	Lift Axle (TDRT)	Push control knob in to load lift axle and set 100psi setting. Pull the control knob and verify that axle lifts. (Trailer must have active air supply from prime mover- trailer brakes released.)	Axle doesn't lift or load properly.

**Table 3. Operator Preventative Maintenance Checks and Services for the XM1250 Tilt Deck Recovery Trailer (TDRT) and the XM1234 High Mobility Recovery Trailer (HMRT).**

Item No.	Interval	Location	Procedure	Not Fully Mission Capable If:
		Item to Check/ Service		
9	Before	Lights	<p style="text-align: center;"><b>NOTE</b></p> <ul style="list-style-type: none"> <li>• <b>Check for loose plug-in connectors. Make sure there is no debris between plug and connector and then make sure that plug-in is seated.</b></li> <li>• <b>Mission requirements, urgency, safety, and common sense should be considered in determining NMC status of the TDRT/HMRT.</b></li> </ul> <p>Connect intervehicular cable from tractor through the FWTRD to the TDRT/HMRT. Check lights for damage, proper operation, presence, and missing hardware. Notify Unit Maintenance if there are any problems in operation or damage is present.</p>	Lights are damaged, do not operate, or missing hardware. NMC if required for mission.
10	Before	Reflectors	Look for presence, damage, and missing hardware.	Reflectors are missing and required for mission.
11	Before	ABS Warning Light (TDRT)	<p style="text-align: center;"><b>NOTE</b></p> <ul style="list-style-type: none"> <li>• <b>Tractor must be coupled before checking ABS light.</b></li> <li>• <b>ABS warning light should not stay on when TDRT is moving above 4 mph (6.4 km/h).</b></li> <li>• <b>If mission requirements do not allow for troubleshooting of ABS system, continue on with mission until system can be properly diagnosed by Unit maintenance. Only modulation will be affected not stopping capacity of brake system.</b></li> </ul> <p>Visually check that ABS warning light does not stay on. Notify Unit maintenance.</p>	ABS light does not come on or stays on.

**Table 3. Operator Preventative Maintenance Checks and Services for the XM1250 Tilt Deck Recovery Trailer (TDRT) and the XM1234 High Mobility Recovery Trailer (HMRT).**

Item No.	Interval	Location	Procedure	Not Fully Mission Capable If:
		Item to Check/ Service		
12	Before	Radial Tires and Wheels	<p style="text-align: center;"><b><u>CAUTION</u></b></p> <ul style="list-style-type: none"> <li>• Rust near wheels can indicate low torque.</li> <li>• Check wheels (inner/outer) and hubcaps for grease leakage. When leakage is initially found, clean of all grease and recheck after operation. If grease leakage is still evident, notify Unit maintenance.</li> </ul> <p style="text-align: center;"><b>NOTE</b></p> <ul style="list-style-type: none"> <li>• All wheel flange nuts have right hand threads.</li> <li>• Cold radial tire pressure should be 120 psi (827 kPa) for all tires.</li> </ul> <p>a. Inspect tires, including spare, for proper inflation, unusual tread wear, sidewall damage, valve caps, loose/missing dust shield plugs on wheels.</p> <hr/> <p style="text-align: center;"><b><u>WARNING</u></b></p> <p><b>Make sure spare tire is secured in carrier and securing hardware is present. Failure to secure these items can result in injury or death to personnel.</b></p> <ul style="list-style-type: none"> <li>b. Check wheels for damaged rims, rust, or leaking grease.</li> <li>c. Check for loose or missing wheel nuts. Notify Unit maintenance. All nuts must be present and torqued to specifications.</li> </ul> <p>Re-torque wheel nuts at first 100, 500, 1000 miles (161, 805, 1609 Km), and every 6000 miles (9656 Km) thereafter unless wheel is changed out. Then use re-torque schedule. Notify Unit maintenance.</p>	<p>Tires are not properly inflated, damaged, or show unusual wear.</p> <p>Securing hardware is unserviceable or missing.</p> <p>Wheel rims are damaged, rusty or show signs of leaking grease.</p> <p>Nuts are loose, missing. Wheel nuts not torqued.</p>

**Table 3. Operator Preventative Maintenance Checks and Services for the XM1250 Tilt Deck Recovery Trailer (TDRT) and the XM1234 High Mobility Recovery Trailer (HMRT).**

Item No.	Interval	Location	Procedure	Not Fully Mission Capable If:
		Item to Check/ Service		
13	Before	Spare Tire Carrier	<p style="text-align: center;"><b>WARNING</b></p> <p>The spare tire and wheel weigh 179 lbs. (81.2 kg.) This requires two people to remove the spare tire or install it on the carrier. Follow procedures in the TM for removing the tire and wheel from the TDRT Carrier. Avoid lifting the spare on or off the carrier. Failure to comply may result in serious injury.</p> <p style="text-align: center;"><b>NOTE</b></p> <p style="text-align: center;">Convex side of the wheel mounts to the carrier studs.</p> <p>Inspect spare tire carrier assembly for loose/missing hardware and cracked/broken welds.</p>	Loose/missing hardware and cracked /broken welds.
14	Before	Hubcaps and Hubodometer	<p style="text-align: center;"><b>CAUTION</b></p> <p><b>Do not stand on hubodometer.</b></p> <p>a. Inspect hubcaps for damage, loose or missing hardware, and leakage.</p> <p>b. Inspect hubodometer for missing hardware, damage, and loose mounting bracket or gauge.</p>	<p>Hubcap is leaking grease or hardware is loose or missing.</p> <p>hubodometer is broken or hardware is loose or missing.</p>
15	Before	Suspension	<p style="text-align: center;"><b>WARNING</b></p> <p><b>Notify Unit maintenance at first month of new semitrailer operation or first 1000 miles (1609 km) (from hubodometer) that suspension nuts must be torqued. Reference item no. 1 of Unit PMCS. This could cause loss of suspension /parts which could result in serious injury to personnel and/or damage to the equipment.</b></p> <p>Visually inspect for broken or shifted leaf springs and loose or missing hardware. Notify Unit maintenance.</p>	Springs have shifted or are broken and hardware is loose or missing.

**Table 3. Operator Preventative Maintenance Checks and Services for the XM1250 Tilt Deck Recovery Trailer (TDRT) and the XM1234 High Mobility Recovery Trailer (HMRT).**

Item No.	Interval	Location	Procedure	Not Fully Mission Capable If:
		Item to Check/ Service		
16	Before	Air reservoir Tanks	<b>WARNING</b>	Drain valves leak air.  Any air leaks are present or hardware is missing.
			<p><b>Wear protective goggles if you are under the semitrailer and need to operate drain valves. Avoid the air stream. Failure to comply could result in injury to personnel.</b></p> <p>a. Make sure the drain valves do not leak air.</p> <p>b. Inspect air tanks for damage, loose fittings, missing hardware, and any evidence of air leakage.</p> <p>c. Inspect drain valve pull cables for frayed or broken condition.</p>	
17	Before	Stowage Boxes and Doors	<p style="text-align: center;"><b>NOTE</b></p> <p>The TDRT and HMRT each have two Stowage boxes located in different areas depending on which trailer you have. Be sure to check both boxes.</p> <p>Open and close door, make sure hinges do not bind, and all mounting securing hardware is tight and present. Make sure drain holes are not blocked. Keep boxes clean and serviceable.</p>	Hardware is loose or missing. Doors do not open or close securely.
18	Before	Fold Down Deck Ramps. (TDRT)	Unfold Ramps to check for smooth operation. Clean hinges of debris if necessary.	Ramps do not unfold.



**Table 3. Operator Preventative Maintenance Checks and Services for the XM1250 Tilt Deck Recovery Trailer (TDRT) and the XM1234 High Mobility Recovery Trailer (HMRT).**

Item No.	Interval	Location	Procedure	Not Fully Mission Capable If:
		Item to Check/ Service		
19	Before	Tie Downs	<p style="text-align: center;"><b><u>CAUTION</u></b></p> <p>Deformation of any part of D-ring is not allowed. Notify Unit maintenance.</p> <p>Check all tie downs for missing hardware, damage, cracked welds, and deformation. Notify Unit maintenance.</p> <p style="text-align: center;"><b>NOTE</b></p> <p>The main TDRT tiedowns (two front, two rear) have grease fittings at their swivel points. These should be greased monthly.</p>	Damaged, deformed, and cracked welds are evident.
20	Before	Brakes	With the prime mover coupled, prior to start of mission, have a person observe if trailer brakes are working. Release trailer brake pressure and slowly move tractor forward. Observe if trailer tires move. If tires move, brakes are not holding. Notify Unit maintenance.	NMC, if trailer tires move when brakes are applied.
21	Before	Lift Axle (TDRT)	With prime mover coupled and trailer air supplied, push the knob for the Lift Axle "in" and check that axle loads and is set for 100psi. Then pull knob "out" and verify that the axle lifts properly.	Axle does not load or lift.

**Table 3. Operator Preventative Maintenance Checks and Services for the XM1250 Tilt Deck Recovery Trailer (TDRT) and the XM1234 High Mobility Recovery Trailer (HMRT).**

Item No.	Interval	Location	Procedure	Not Fully Mission Capable If:
		Item to Check/ Service		
			<p style="text-align: center;"><b>NOTE</b></p> <ul style="list-style-type: none"> <li>• If ABS warning light stays on during mission, continue on with mission until system can be properly diagnosed by Unit maintenance. Braking capacity will not be impaired. The only effect will be no modulation at wheel or wheels that have fault.</li> <li>• Trailer is not NMC if during mission ABS is inoperable and there is no time to diagnose.</li> <li>• During blackout mode conditions, tape over ABS warning light. Do not remove or otherwise disable the light.</li> <li>• This applies to the XM1250 TDRT only. The XM1234 HMRT has ABS capability but is not configured currently for its operation.</li> </ul>	
22	During	ABS Warning Light (TDRT)	Check that ABS warning light does not stay on.	
23	During	Axles and Suspension	Listen for unusual noises, which are indications of possible problems. Be alert to conditions such as side pull, wandering, tracking of semitrailer, and load shift.	Unusual noises, semitrailer wanders, pulls to either side, or does not track.
24	During	General	Be alert to all conditions that may indicate unsafe operation or improperly secured cargo. Insure that all prime mover TM procedures are adhered to for safe operation, I.E., coupling load limits, speeds, and fifth wheel settings for on/off road operation.	Unsafe conditions are identified.

**Table 3. Operator Preventative Maintenance Checks and Services for the XM1250 Tilt Deck Recovery Trailer (TDRT) and the XM1234 High Mobility Recovery Trailer (HMRT).**

Item No.	Interval	Location	Procedure	Not Fully Mission Capable If:
		Item to Check/ Service		
25	After	Landing Leg Assembly (TDRT)	Inspect leg assemblies for proper operation and all hardware. Be sure there is no binding in operation and that assist springs and locating pins are in good working order.	Legs bind. Assist Springs or Locating Pins are missing or damaged.
26	After	Brake System	<p style="text-align: center;"><b>WARNING</b></p> <p><b>A hot brake can cause serious burns. Exercise caution before attempting to touch brake drum after use. Radiated heat will be felt before brake drum is touched.</b></p> <p>Cautiously feel brake drums for abnormal heat or cold. An abnormally hot drum indicates a possible dragging or grabbing brake. An abnormally cool drum indicates improper adjustment or a defective brake. Notify Unit maintenance.</p>	Brake drums abnormally hot or cold.
27	After	Air Reservoir Tanks	Pull reservoir drain cables to remove all condensation.	System is not drained of moisture.
28	After	Semitrailer Cleanliness	<p>After operation, especially in mud, salt environment, or fording conditions, flush out axles, axle ends, suspension, landing gear, underside/topside of semitrailer and stowage boxes with clean low pressure water.</p> <ol style="list-style-type: none"> <li>a. Clean and lubricate all parts as specified to make sure all water/debris is flushed out of system.</li> <li>b. Check all electrical connections for corrosion and security.</li> <li>c. Make sure all painted surfaces are touched up where necessary to prevent rust.</li> </ol>	Not accomplished when mission permits or mission completed.

**Table 3. Operator Preventative Maintenance Checks and Services for the XM1250 Tilt Deck Recovery Trailer (TDRT) and the XM1234 High Mobility Recovery Trailer (HMRT).**

Item No.	Interval	Location	Procedure	Not Fully Mission Capable If:
		Item to Check/ Service		
29	Weekly	Wheels	<p style="text-align: center;"><b>NOTE</b></p> <p><b>Mission requirements, urgency, safety, and common sense should be considered in determining NMC status of semitrailer.</b></p> <p>Check all wheels for handhold cracks, cracks between and around stud holes, rust streaks and grease stains. Notify Unit maintenance.</p>	Cracks or leaks evident.
30	Monthly	Frame and Deck	<p>Perform a visual inspection of semitrailer for evidence of corrosion. Visually check all welds for rust or cracks. Notify unit maintenance if corrosion or deck damage is evident.</p> <ul style="list-style-type: none"> <li>• XM1250 TDRT. Check that the Deck Pull Outs are securely in position and that all bolts are torqued.</li> <li>• XM1234 HMRT. Check that the bolt on deck plates are securely in place and that no screws are loose or missing.</li> </ul>	Bolts, screws are loose or missing.

**End of Work Package**