Roll-up of Articles

March 2022

General and Special Topics

AOAP: Temporary Gap in Service and Workarounds

/ Published March 1, 2022

Photo by Lt. Col. Jefferson Wolfe

Starting on Feb 20, 2022, the contract that supports the Army Oil Analysis Program (AOAP) will experience a gap in service. As a result, the AOAP labs located at Fort Bragg, North Carolina; Fort Hood, Texas; Joint Base Lewis-McChord, Washington; and Camp Arifjan, Kuwait will not be analyzing oil samples until a new contract is put into place.

This doesn't mean units will stop taking oil samples. There is a new procedure being put into place to fill this gap. Units will follow their current maintenance schedule and continue to mail or deliver samples to their servicing laboratory.

Samples normally analyzed at Bragg, Hood and Lewis-McChord will be collected at the lab and shipped to the lab at Redstone Arsenal (RSA), Alabama. Those normally analyzed at Arifjan will be collected and shipped to the lab at Kaiserslautern Army

Depot, Germany. The Camp Humphreys, Korea, lab will remain open and conduct business as usual.

At RSA, the samples will be analyzed according to the following order: crash investigations, special aeronautical, routine aeronautical, special non-aeronautical and routine non-aeronautical.

Because of lab capacity, the required turnaround times will be affected and take longer than normal.

Bottom line: there’s no change to when a sample is due to be taken. The change is where the sample is analyzed, how it gets there and the length of time it takes the lab to process it.

Be sure to routinely check this website, which will provide an update as soon as the new contract is in place and the idled labs are operational again.

I Sustain This Recognition Program: Nominate a Deserving Civilian Sustainer

/ Published March 2, 2022

Photo by Airman Xiomara Martinez

Maintaining equipment to meet combat readiness requirements and stay in the fight, even under the most arduous of circumstances, often relies on the support of civilian sustainers and maintainers.

Whether it's a Department of the Army civilian (DAC) or contractor and whether they turn a wrench at the local logistics readiness center (LRC) or field maintenance shop, operate a supply warehouse, serve as a logistics assistance representative (LAR), service equipment as a spray paint technician or issue items at a central issue facility, these sustainers often go above and beyond to ensure that military units, equipment and Soldiers are mission-ready.

Consider the following questions.

- Do you know of or work with civilian sustainers who support your unit, organization, installation or facilities and have made a positive impact on your unit's readiness?
- Do they strive for excellence in all they do and complete their work with pride?
- Do they exhort their peers or Warfighters to do the same?

If the answer to these questions is "yes," then nominate them for the *PS Magazine* "**I Sustain This"** recognition program, where they'll be featured on the magazine's website.

The program works like this:

1. Complete the nomination form located **HERE**. Nominations will be accepted on an ongoing basis. Anyone with first-hand knowledge of the civilian sustainer's efforts and can speak authoritatively about the ways this individual enhances unit or fleet readiness can nominate a sustainer. That could be a peer, a supervisor, a maintenance leader or a unit leader.

2. Contractor supervisors can nominate subordinates or peers **BUT** all nominations must include the name of the supported unit's commander or DoD supervisor (military or civilian) or contracting officer representative.

3. At the end of each month, one name among those submitted over the prior 30 days will be selected at random. The reason for making it random is to avoid concerns about the fairness of the selection process and to lessen the administrative burden of running a monthly selection panel.

4. The magazine's supervisory editor will communicate with the commander or supervisor of whomever is selected to ensure they concur with the nomination and endorse the recognition, unless that leader submitted the nomination.

5. A photo or two of the nominated sustainers in their work setting or beside the type of vehicle or equipment they sustain is encouraged with all nominations. Please ensure, however, they're OPSEC-compliant and avoid any security violations.

You can email your pictures separately to:

usarmy.redstone.asc.mbx.psmag@army.mil

Be sure to include the sustainer's name and relevant caption information.

Although the randomly-selected sustainer will be prominently featured, the names of all nominated sustainers, along with a brief explanation of the reason for their nomination, will be included on the **“I Sustain This”** webpage created for that month.

Nominees will also appear on *PS*’s social media platforms and newsletter.

I Own This: February 2022 Nominees

/ Published March 3, 2022

PS Magazine's ***I Own This*** campaign is designed to recognize Warfighters of all services who exemplify the highest standards of care for their assigned vehicles and equipment and contribute in meaningful ways to their unit's overall maintenance and supply posture. In short, they live and breathe readiness.

This month, we had one (1) Warfighter nominated for this program: SGT Francisco PerezRios, US Army.

SPOTLIGHT PROFILE

SGT Francisco PerezRios

US Army/Active
UH-60 Black Hawk Quality Control NCO-in-Charge
D Co., 3-227 Assault Helicopter Battalion (AHB)
Fort Hood, TX (Deployed Forward)
Nominated by: SFC Christopher Herrera

Why does this individual deserve recognition? SGT PerezRios demonstrated fierce leadership and decision making while deployed with 3-227 AHB in support of Operation Atlantic Resolve. He ensured by-the-book maintenance standards were adhered to for 34 UH-60's through presence and action. SGT PerezRios is a highly sought-out technical inspector within the battalion for his technical knowledge. He provided over 3,000 man-hours of technical inspections and educated battalion maintainers through challenging troubleshooting procedures on a daily basis. He enabled the battalion to safely fly over 5000 hours incident free.

Additional Comments: SGT PerezRios demonstrated the intelligence and motivation to excel as a 3-227 AHB technical inspector. He has the dedication and

character and deserves to be recognized as a great leader that Soldiers are inspired to emulate.

To learn more about nominating a Warfighter for this recognition, read the article HERE.

Set Up a Virtual TDY with PS Magazine

/ Published March 3, 2022

Read on to find out more!

PS Magazine was created in 1951 to help Soldiers with maintenance and logistics issues. We're still here to help after 70 years and we'd like to invite combat, combat support and combat service support units across the Army to conduct virtual TDYs with us to discuss maintenance and sustainment challenges. We're also encouraging units to share maintenance and sustainment successes so that *PS* can potentially share them across the force in order to enhance overall combat readiness.

These virtual TDYs will typically last between 30 minutes to one hour. Units are encouraged to include maintenance and supply leaders in these virtual sessions, along with a handful of frontline Soldiers who can offer first-hand accounts of the challenges they're facing and answer questions from the *PS* writing staff about the information they need to be more successful at sustaining their vehicles and equipment.

To set up a virtual TDY—either by VTC or MS Teams depending on which platform best suits the unit making the request—we'll need some basic information such as the unit's point of contact, means of contact, method for conducting the session and dates and times the unit can make itself available for the discussion.

To book a virtual TDY with *PS Magazine,* click **HERE** to send us an email request.

If the link above fails to work, send an email to **usarmy.redstone.asc.mbx.psmag@mail.mil** with the following info:

- Unit making the request and location
- Unit point of contact (name, phone, and email)
- Preferred platform for conducting the virtual TDY
- Preferred dates/times (please offer 2-3 options)

Leader Interview: Mr. Baker, AOAP

/ Published March 4, 2022

Mr. Jim Baker, AOAP Program Manager

MSG Half-Mast literally walked down the street to speak with Mr. Jim Baker, Program Manager for the Army Oil Analysis Program (a subordinate activity of Army Sustainment Command) about its mission, history and continued positive impact on Army Readiness.

Mr. Baker has served as PM since 2011 and been affiliated with AOAP since 2007. He entered federal service in 2002 as an Army Materiel Command fellow and then served in a variety of assignments in CONUS and overseas, while also attending graduate school.

MSG Half-Mast: Would you offer a brief history of the Army Oil Analysis Program (AOAP) and how long has it been existence?

Mr. Baker: The Army established its first oil analysis laboratory at Ft Rucker in 1961. In 1975, the AOAP Program Management Office was established and the

program was expanded to include ground combat systems. Tactical wheeled vehicles were added in 1977 and support equipment 1979.

The AOAP is a member of the Joint Oil Analysis Program (JOAP). The JOAP was established in 1967 with the signing of a tri-service agreement by the service secretaries. AOAP requirements are outlined in Joint Regulation (AR 700–132/OPNAVINST 4731.2/AFI 21–13) and Army Regulation 750-1.

MSG Half-Mast: Why was the program deemed necessary? Was there anything in particular that led to it being instituted?

Mr. Baker: The Army's oil analysis program was established after a Navy oil analysis laboratory detected impending failures on Army helicopters. Like any preventive maintenance effort, the cost of not having a program specifically focused on Army equipment was deemed too high and resulted in the creation of the Army's first lab and the expansion of the program over time.

Oil analysis ensures we're ahead of the curve when it comes to keeping our air and ground systems combat ready. The cost of the program is far outweighed by the costs associated with having to replace failed engines, transmissions, hydraulics or even complete platforms. More importantly, the AOAP enhances the safety of the personnel that operate these systems.

MSG Half-Mast: How has the AOAP evolved since it began? Put another way, what lessons have been learned and implemented to make the program more responsive and effective over its existence?

Mr. Baker: As you might expect, the increasing accuracy of our laboratory instruments over time has resulted in the ability to detect problems down to the parts-per-million level. This greater accuracy means we can detect potential problems earlier and provide more appropriate guidance to maintainers.

We've also been able to move toward more targeted enrollments that focus on critical weapon systems, specifically aviation, watercraft, combat vehicles and locomotives. Targeted enrollments ensure prioritization of effort so we can allocate our resources more effectively.

When barcoding came along, it significantly increased the efficiency of laboratory operations. Looking back, it's hard to imagine we ever operated without it.

Finally, data integrity has increased with the integration of the AOAP's laboratory

information management system (OASIS) and the Army's enterprise maintenance system (CGSS-A).

MSG Half-Mast: Why is it important for units to participate in AOAP and how does the program affect Army readiness?

Mr. Baker: AOAP laboratories detect a wide variety of failure modes in engines, transmissions, gear boxes, and hydraulic systems at their onset, such as contaminated, degraded, and incorrect lubricants, internal corrosion, bearing wear, gear wear, air induction leaks, fuel leaks, coolant leaks, etc., and issue actionable maintenance recommendations to Army maintainers.

The benefits of AOAP analyses are threefold. First, AOAP laboratories provide actionable maintenance recommendations that result in improved readiness, reduced maintenance costs, and enhanced operational safety. Second, AOAP laboratories reduce life-cycle sustainment costs across the Army by optimizing oil change intervals. And third, AOAP laboratory analyses support improvements to lubricant formulation, filtration and component design.

MSG Half-Mast: We understand the program may experience a period of disruption beginning in Feb 2022. What can you tell us about this disruption and how the program office will mitigate its effects?

Mr. Baker: The AOAP will experience a gap in service for it laboratory operations contract beginning in February 2022. Unit procedures will remain unchanged. However, units are advised that sample turn-around times may increase. Units will be advised when laboratory operations return to normal. Until then, units can contact the AOAP PMO for help at (256) 955-0236 or email: **usarmy.redstone.asc.list.aoap-field-ops@army.mil**

Hours of operation are 0700 to 1600 CST, Monday through Friday.

To learn further details about the temporary gap in service, read the article **HERE**.

Logistics: Not Optional Says the Army Chief of Staff

/ Published March 16, 2022

Army Chief of Staff James McConville

In a recent article appearing in *Breaking Defense*, writer Valerie Insinna captured the observations of three top American generals about key lessons learned so far from Russia's invasion of Ukraine. One of the lessons highlighted was the significant role logistics play in supporting combat operations.

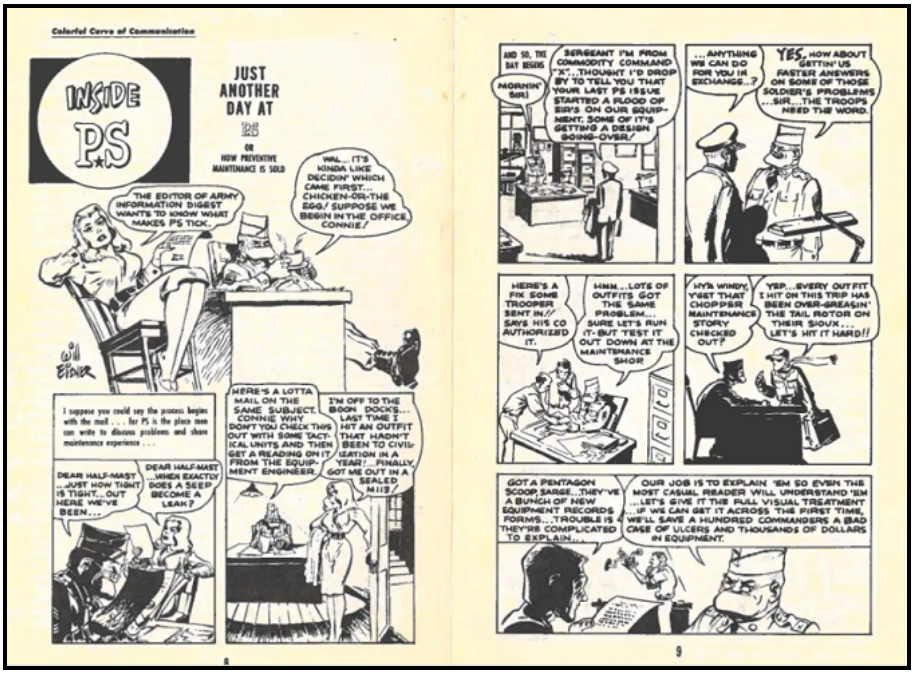
In the article, Army Chief of Staff James McConville states,

> If you're going to put an army on the move, if you're going to conduct combat operations, if you don't have logistics, if you don't have gas, if you don't have parts, if you don't have all the ammunition, then those weapon systems become paperweights. They just sit on the side of the road and you can't fight [with] them.

Click **HERE** to read the full article and learn more about the observations made by McConville; Gen. Mark Kelly, USAF; and Gen. David Berger, USMC.

PS Magazine: One of the Original Explainers

/ Published March 17, 2022



Will Eisner uses MSG Half-Mast and Connie to explain PS Magazine's purpose.

From *Army Information Digest*, Apr 1964.

What's an explainer, you ask?

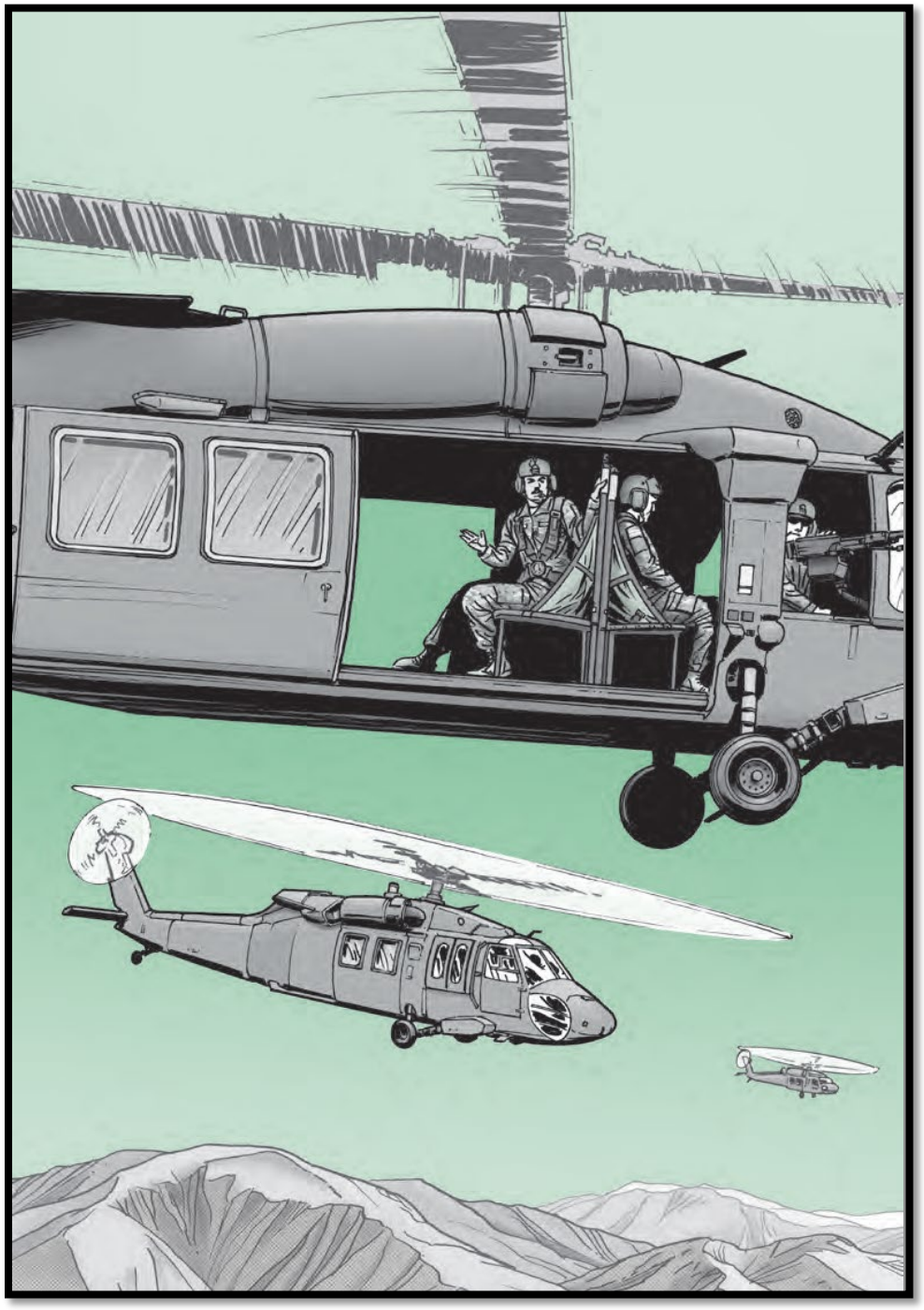
The term actually defines itself: it's a form of communication intended to explain something. In the case of *PS Magazine*—or as it was called at the outset, *PS: The Preventive Maintenance Monthly*—the chief purpose of the cartoon-illustrated bulletin was to explain how to care for vehicles and equipment. Its genius was the marriage of sequential art (cartooning) with conversational explanations by its creator, Will Eisner, to convey technical information in a way that facilitated comprehension and retention.

To honor the magazine's 70th anniversary, professor and librarian at the University of Nebraska-Lincoln, Richard Graham, wrote "A Brief History of One of the Original Explainers: *PS, The Preventive Maintenance Monthly*" for *The Comics Journal* (click

the title to hyperlink to and read his article).

In addition to serving as a member of the UNL faculty, Graham is managing editor for SANE Journal, an open-access and peer-reviewed periodical dedicated to using comics in the classroom. He has been an Eisner Awards judge (2015) and nominee (2012) and is the author of *Government Issue: Comics for the People, 1940s-2000s.*

Aviation



ALSE: Ordering Aviation Life Support Equipment

/ Published March 9, 2022

Photo by Spc. Deomontez Duncan

Dear Sergeant Blade,

As a new aviation life support equipment (ALSE) officer, I'm trying to figure out the best way to order ALSE equipment from Air Warrior. Can you help?

WO1 T.G.

Dear WO1 T.G.,

Good to hear from you, sir.

You're correct about the challenges you're facing. Right now, Air Warrior is transitioning post-fielding sustainment support to the applicable life cycle management commands (LCMCs).

Most of, if not all of, Air Warrior's portfolio of products will be soon make their way into the supply system for units to order.

You can contact the POCs listed below to assist with your questions and concerns:

- ALSE – Mr. Issi Ortis:
  issaias.j.ortis.civ@army.mil

- Hand-Held Electronics – Mr. Shannon Bruce:
  shannon.w.bruce.civ@army.mil

- Aircraft Installed Electronics – Mr. Warren Reppond:
  warren.e.reppond2.civ@army.mil

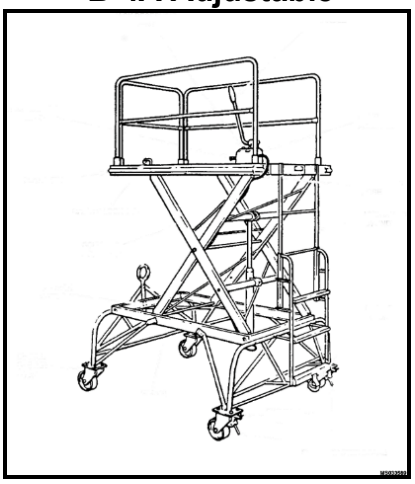
AGSE: Maintenance Platform Care & Safety

/ Published March 10, 2022

Photo by Charles Rosemond

Successful maintenance on aircraft is a must. To access hard-to-reach places on your Black Hawk, Apache or Chinook, you'll need maintenance platforms. These stands also require maintenance. And when using maintenance platforms, safety is a must.

Maintenance Platform	
Item	**NSN**
B-1	1730-00-390-5618

	
B-4A Adjustable 	1730-00-294-8883
Low-level 	1730-00-269-8283

Maintaining the B-1 and B-4A maintenance platforms is rather straightforward: simply refer to the relevant TM.

- In the case of the B-1, it's TM 1-1730-201-13&P (Mar 10).
- In the case of the B-4A, it's TM 1-1730-215-13&P (Mar 10).

The low-level maintenance stand gets a lot of use. Over time, the platform starts to make noises and wobble from normal wear and tear. To keep it up-to-date with

repairs, you'll need to order replacement parts. Make a note that the **low-level platform is not supported by a TM**.

Here are the parts that support the low-level maintenance platform:

- Rigid caster, NSN 5340-01-340-9799
- Quick-release pin, NSN 5315-00-935-8804
- Latch assembly-clamping catch, NSN 5340-00-787-3209. Make a note that this item comes as an assembly. To order separately, use NSN 5340-01-295-4896 for the catch strike and NSN 5340-00-821-0304 for the clamping catch.
- Clamping latch catch spring loaded, NSN 5340-00-860-3862. This is a non-standard item.

Check your low level maintenance platforms and make sure you stencil "MAX WEIGHT FOLDED 500 LBS AND 750 LBS MAX WEIGHT UNFOLDED on the sides of the platform and add reflective tape so it can be seen while performing night maintenance.

When moving the stand around the hangar, always remember to "fold it before you roll it" and lock the top portion of the stand when it's in position and meant to be stationary. Keep in mind that this stand is bulky and heavy. Control its movement and roll it slowly around the hangar so it doesn't get away from you and possibly take out a chunk of an airframe.

Maintenance Platform Safety Tips

Here are some safety tips to keep in mind:

- Make sure a load test certification is done like it says in TB 43-0142, *Safety Inspection and Testing of Lifting Devices* (Feb 97). Record the inspection information on DD Form 314, *Preventive Maintenance Schedule and Record*. Maintenance platforms must have an initial load test certification document from the manufacturer or one from a repair facility when the equipment is new, extensively repaired or altered.
- When using maintenance platforms, always protect yourself from falls, injuries or death while you're working on an aircraft at a height above four (4) feet, like it says in TM 1-1500-204-23-1, *General Aircraft Maintenance* (Jul 92).
    - Note that AR 385-10, *The Army Safety Program* (Feb 17), directs Army units to draft guidelines and procedures to meet a number of Army and OSHA safety requirements, including fall protection.

- And any time you perform maintenance four (4) or more feet off the ground, use fall protection like foam pads or restraint equipment.

If you have any questions about AGSE equipment, especially maintenance platforms, or have a recommendation for a product improvement that will save time, improve readiness, or reduce costs, contact the AGSE voicemail hotline at (256) 955-8540, or send the help desk an email at:

usarmy.redstone.amcom.list.jtdi-agse@army.mil

General Aviation: Get the Right Footwear

/ Published March 11, 2022

Photo by Ken Scar

Accomplishing the mission with the right equipment is important.

If you ever have a question about which combat boots are or are not approved for aviation use, visit the United States Army Aeromedical Research Laboratory (USAARL) web page **HERE**.

On that page, you'll also find information about requesting a copy of the most current memorandum governing approved footwear.

AGSE: Tire Replacement for GANG

/ Published March 15, 2022

Photo courtesy AGSE Product Office

Dear SFC Blade,

I'm doing maintenance on the tire and wheel assembly for the generic aircraft nitrogen generator (GANG) and have hit a roadblock. In TM 1-3655-245-13&P (Mar 13), the NSN for the tire and wheel assembly is inactive according to FED LOG, although the part number is still active.

I'm wondering if there’s a new NSN. Can you help?

SPC J.B.

Dear SPC J.B.

We can. The GANG subject-matter expert (SME) said the tire and wheel assembly

comes with NSN 2530-01-506-2183 (PN 581952-001) and the CAGE is 75906. The NSN has an SMR code of XD0ZZ, which means it's a non-stocked item and must be obtained via local purchase like it says in Fig 2-1 on Page 2 of AR 700-82, *Joint Regulation Governing the Use and Application of Uniform Source, Maintenance, and Recoverability Codes* (Aug 20).

Sometimes these parts get dropped by DLA due to low demand or other factors. When this happens, units typically order the part or parts "off-line" or as non-standard requisitions. PD-AGSE favors using the non-standard requisition process through GCSS-Army because it helps build back the demand needed for DLA to restock the item.

We covered the non-standard requisition process in **AGSE: For Want of an ALUMMC Windshield Bolt** (just click on the title to download a copy).

Additionally, should you need it, we've attached the **OEM information and cost estimate** for the tire and wheel assembly, which includes the vendor's sales rep contact information.

If you have other questions or need assistance, email the GANG POC, Jon Ramsey, at:

jon.p.ramsey.ctr@army.mil

You can also submit an AGSE help desk ticket by email:

usarmy.redstone.amcom.list.jtdi-agse@army.mil

All Aircraft: Turn in ARC-231 Radios and Mounts

/ Published March 23, 2022

Photo by Sgt. Matthew Jones

Dear Editor,

The CECOM Integrated Logistics Support Center (ILSC) Enterprise Soldier Aviation (ESA) Directorate needs units to turn in unserviceable and unused serviceable ARC-231 receiver transmitters, NSN 5821-01-500-4770, and KAB mounts, NSN 5975-01-555-9367 ASAP! It especially needs KAB mounts.

I've provided an information sheet with where to send each item. Will you please share with your readers?

Chris Doolittle
Operational Item Manager

Editor's note: *Thanks for submitting this information, Chris. We'll gladly share.*

Operators, if your aircraft uses the radio and mount, click **HERE** for instructions on where to turn in this equipment. Also, for information on how to avoid a credit reversal with unserviceable turn-ins, click **HERE**.

IADS: Export and Import Function Enables Sharing of Notes

/ Published March 29, 2022

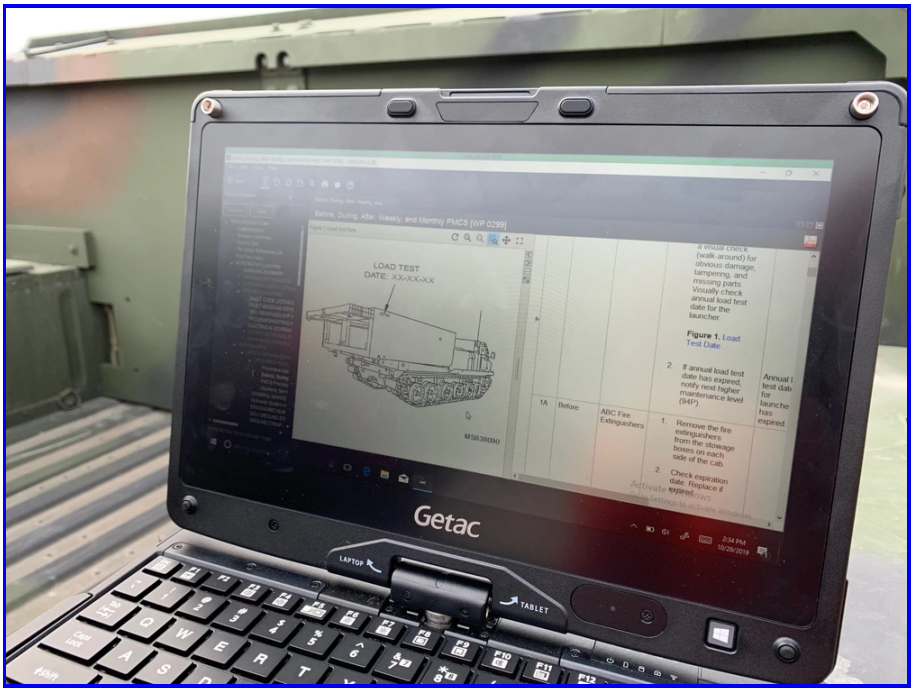


Photo by Kinsey Lindstrom

For Soldiers using IADS to view IETMS—which is primarily limited to aviation and missile units at present—there's a relatively new feature to be aware of: the ability to export and import notes, particularly those relating to Aviation Maintenance Action Message (AMAM), Ground MAM (GMAM) or Aviation Safety Action Message (ASAM) changes or updates to the manual.

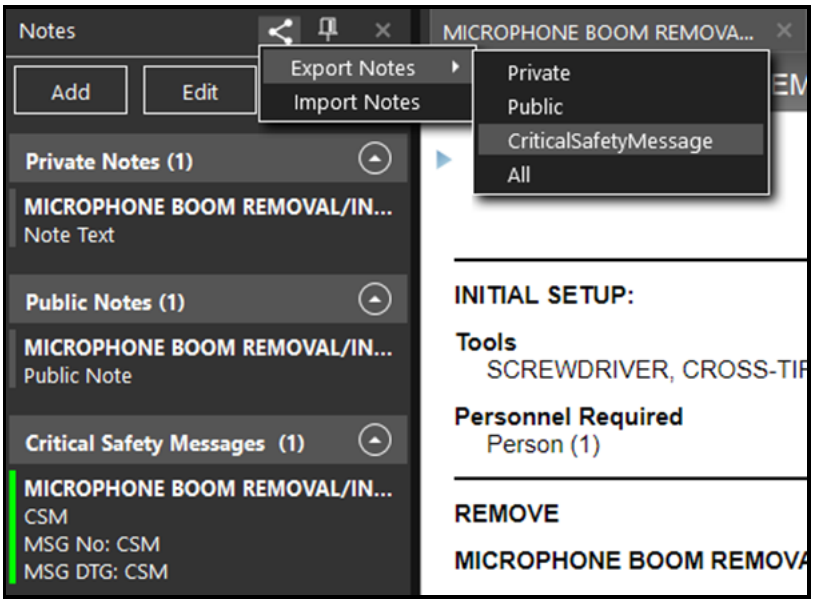
The export/import feature became available in November 2020 and requires IADS version 4.1.1 or newer. Here are the steps to follow to export and then import notes from one computer or device to another.

1. With the IADS Notes window open, click the share icon along the top to open the export/import function.

Share icon

2. Select Export Notes and the specific type of notes to export. This will create an EXCEL file that can be migrated to a flash drive or other removable media (such as CD or DVD) to transfer the data to another computer or device (make sure to follow local security protocols and unit SOP when it comes to removable media).

3. On the receiving computer or device, repeat Step 1 and, in Step 2, select Import Notes instead of Export Notes.



Notes window showing sub-menus to export and import notes

Whenever a new or updated IETM is published to the field, units should ensure that all notes remain valid and delete those for changes that have been incorporated into the IETM.

If you have questions about how to use IADS, contact IADS Customer Support by email at:

usarmy.redstone.amcom.mbx.immc-pub-iads-support@army.mil

You can also visit the IADS website **HERE**.

CBRN

M26 Decon: New M333 Decontaminant Mixing Instructions

/ Published March 23, 2022

Photo by Staff Sgt. Regina Machine

New mixing instructions for M333 Joint General Purpose Decontaminant for Hardened Military Equipment (JGPD-HME) are available online at JACKS for the M26 decontamination system. The M333's decontaminate material, NSN 6850-01-685-8602, is designed for CBRN personnel and general users of the M26 Decon.

M333 is a decontaminant for chemical and biological (CB) agents on tactical vehicles, shipboard surfaces, and individual weapons in environments exposed to CB contamination. When applied directly to the contaminated surface, it's capable of reducing and neutralizing CB contamination within 30 minutes of application.

M333 JGPD-HME pre-measured packaging

The decontaminant consists of three (3) pre-measured pouches: Pouch 1 contains the oxidizer, Pouch 2 contains the activator, and Pouch B contains biological activator. When the contents of the three pouches are mixed, they activate the decontaminant and neutralize chemical and biological agents.

For more info on the new JGPD-HME mixing instructions for the M26, visit the JACKS training menu **HERE** or go to the Central Army Register (CAR) **HERE**.

Combat Vehicles

M113A3-Series FOV: Periscope Stowage Box Pin Replacement

/ Published March 9, 2022

Photo by Spc. Michael McDevitt

Dear Half-Mast,

I need to replace the pins and their springs for the periscope stowage box on an M113A3 armored personnel carrier. The pins hold the periscope in place while driving. The stowage box is inside the M113A3 on the right rear side.

I can't find the pins in any TM. This is what I need:

Periscope stowage box pin and spring

Can you help?

Mr. R.J.

Dear Mr. R.J.,

Sure can! Here's everything you need to replace the periscope holder pins:

Item/Part	**NSN**
Cotter pin	5315-00-839-2326
Flat washer	5310-00-081-4219
Spring	5360-00-776-1546
Hook	5340-00-932-4989

Half-Mast

Bradley FOV: Don’t Remove Towing Shackles Before Turning In

/ Published March 25, 2022

Photo by Sgt. Adam Manternach

Units are in the process of turning in their Bradley A2/A3 vehicles to depot so they can be upgraded to the new A4 variant.

Units turning in vehicles should be aware that the towing and tie-down shackles installed on current vehicles aren’t required on the new A4 variant. Upgrading to the new variant includes installing newly designed tie downs that are replacing the shackles.

There’s no need to remove the shackle anchors, NSN 4030-01-187-0964, from vehicles being turned in for upgrade. They’ll be removed at depot before the new tie downs are installed.

Once vehicles are turned in, units can remove the towing shackles from their property books.

Corrosion: Bust Rust with TACOM CCI Checklists

/ Published March 31, 2022

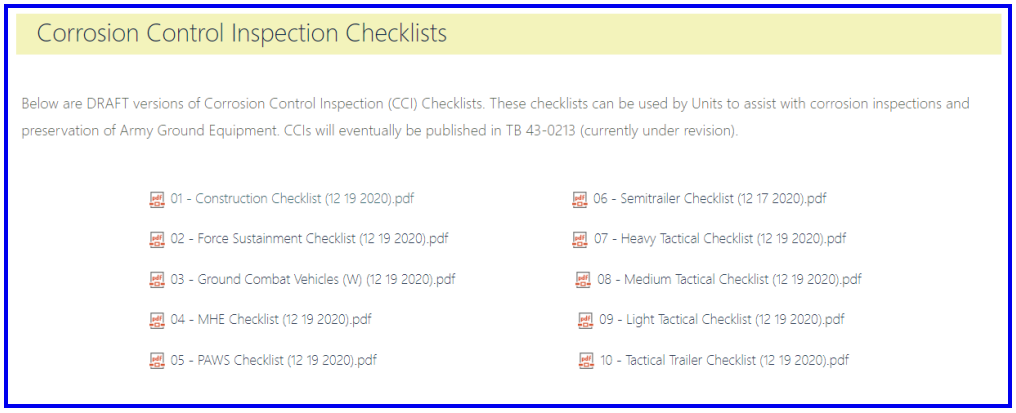
Photo by Cpl. Daniel Woodall

Maintenance leaders, did you know the **TACOM Corrosion website** has corrosion control inspection (CCI) checklists? It sure does.

Don't forget you'll need your CAC to log on to the site. Once you've logged on, hover your mouse over Corrosion Prevention and select Inspect / Report.

Select Inspect/Report

Scroll about halfway down the page and you'll see the checklists. Just click on the one you want.



CCI Checklist options (click on image above to directly link to site)

Corrosion Control Inspection Checklists

CCI checklists were developed from work packages (WPs) that can be found in TB-43-0213, *Corrosion Prevention and Control (CPC) for Army Ground Equipment* (Mar 19), and can be used along with the equipment TM. Note that the CCI checklists will be included in the next update of TB-43-0213.

These checklists are handy for helping your unit combat corrosion by identifying areas and components where corrosion of Army equipment was observed during TACOM Corrosion surveys.

Each CCI checklist has a general checklist and an asset-specific checklist for those end items of Army equipment that are covered in it.

You'll want to use both the general and asset-specific checklists for proper maintenance, along with the appropriate TM guidance. Note that some checklists cover multiple end items.

Here's a table with info on CCI checklists and the specific equipment covered.

CCI checklist title	**Equipment (asset-specific)**
01-Construction	HMEE, CS-563D Type II, D7RII dozer
02-Force Sustainment	Containerized kitchen, mobile integrated remains collection system (MIRCS)

03-Ground Combat Vehicles	Stryker, M-ATV
04-MHE	ATLAS, ATLAS II, M4K, MHE-270, RTCH
05-PAWS	Petroleum and Water System
06-Semitrailer	M1000, M129, M870, M871, M872
07-Heavy Tactical	M915, M916, M917, M984, M985, M977, M978, M1070, M1074, M1075, M1076, M1077, M1120
08-Medium Tactical	M1078, M1081, M1083, M1084, M1085, M1086, M1088, M1089, M1090, M1093, M1094, M1157
09-Light Tactical	General
10-Tactical Trailer	M1101, M1102, M1076, M1082, M1095

For more info on corrosion prevention and control, contact the TACOM Corrosion team at:

usarmy.detroit.tacom.mbx.ilsc-corrosion@army.mil

Construction

D7R Dozer: Before Start Up and After Shutdown

/ Published March 7, 2022

Photo by Spc. Amanda Treible

Operators, you just started your dozer and you're ready to move dirt around, right?

Not so fast! The vehicle's turbocharger packs lots of air into the engine. Bearing oil starvation damages the dozer's turbo when you start the engine and move to high idle before the oil warms up. The damage is just as severe if you shut down a hot engine without a cool-down period.

You'll know something's up if an alternator fault code appears on the vehicle's monitoring screen when you head out.

Immediately after startup, run the engine at low idle for five (5) minutes. That gives the oil time to lubricate parts. It also lets the engine warm up enough to boil off condensation caused by normal engine breathing.

After you've run the dozer hard, idle-cool the engine five (5) minutes before shutdown. The engine needs to cool down slowly. If the engine's shut down before it's sufficiently cooled, then bad things can happen, such as cracking the block, warping the valves and head, or baking the oil until it's no longer slick enough to lube the bearing.

4K and 5K Forklifts: TACOM POC Info

/ Published March 15, 2022

Photo by Scott Sturkol

Mechanics, if you have maintenance or supply-related questions about 4K and 5K forklifts, then send an email to the TACOM material handling equipment (MHE) team's mailbox for solutions. The MHE team stands ready to answer your questions and maybe some you haven't thought of yet. Email the team at:

usarmy.detroit.tacom.mbx.ilsc-mhe@army.mil

Forklifts: Load Testing Requirement

/ Published March 15, 2022

Photo by Sgt. Gaelen Lowers

Dear Half-Mast,

Our unit is having an issue with lifting devices and load testing. I've been told that lifting devices (like a forklift) don't have to be load tested anymore.

I was also told that a load test was only required when a vehicle's hydraulic line is leaking or a hose is replaced. What's the scoop?

Mr. W. T.

Dear Mr. W.T.,

TB 43-0142, *Safety Inspection and Testing of Lifting Devices* (Feb 97), doesn't have a blanket requirement for annual functional testing (also referred to as load testing) of all forklifts. The only exception is forklifts that are used for handling hazardous material, per Para 4.b.(2)(d).

Paragraph 4.a.(1) does require load testing prior to the first use after production or extensive repairs.

Paragraph 4.b.(2)(c) leaves it to TMs, manufacturer documentation and Appendix D to define when a forklift requires a functional test, so review each of these to see if they provide specific guidance.

Be advised that for TACOM-managed forklifts, there are currently no requirements to conduct yearly functional tests.

Although it’s not expressly mentioned in the TB, annual functional tests can always be mandated by unit or command SOPs.

The bottom line is: a load test is required whenever a load-bearing structure is removed, replaced or repaired. Examples include a crane’s boom section that's welded or a hydraulic lift cylinder that's replaced.

Replacing a hydraulic hose doesn’t require a load test. Although replacing a leaking hydraulic hose to a boom lift cylinder doesn’t require a new load test, replacing the lift cylinder itself **does** require a load test.

ATLAS II Forklift: Curb Clogged Axle Vent

/ Published March 21, 2022

Photo by Spc. Quontel Prince

AMC LARs are reporting more and more axle seals leaking on the ATLAS II forklifts. Axle seals leak when an axle's vent hose or vent cap is plugged, clogged or missing.

A clogged or plugged vent cap causes the vehicle's differential fluid to leak into the axle's knuckle area. Recently, a DA Form 2028 was submitted to add inspections for both of the forklift's axle vents as a semi-annual requirement in TM 10 3930-673-23-2 (May 12).

The photo below is an example of someone disconnecting the forklift's vent hose assembly and then plugging the threaded port in the axle housing with a solid brass threaded plug.

Don't plug axle's vent port

A plugged axle port caused the axle seals to leak, so they had to be replaced to prevent serious damage.

Plain and simple: Do **not** plug the axle's vent port! During PMCS, make sure you check and clean the vent cap. And while you're at it, check the vent hose assembly and elbow fitting to make sure they're connected.

RCV Buffalo A2: When Water is Your Enemy

/ Published March 24, 2022

Photo by Sgt. 1st Class Andy Yoshimura

Water collects in the hull of the Buffalo A2 like a rain barrel on the side of a barn. Water drips off wet boots and uniforms, trickles in from the top of the vehicle, comes in from the wash rack and can seep in through loose drain plugs during fording. If you're not careful, water can become your vehicle's worst enemy.

The Problem

Water takes on three forms - solid, liquid and gas. All three create problems in your

A2.

- **Solid:** If you're in a cold weather environment, water in the hull and under the floor plates will freeze. Since water expands as it freezes, lines and fittings are ruptured, causing all kinds of damage.

- **Liquid:** Water under the floor plates will rust the vehicle's air brake valves and just about anything made of metal.

- **Gas:** As temperatures go up, the water evaporates and condenses on radios and electronic gear. Enough moisture can short out electronic equipment.

The Solution

To prevent these problems, open the hull's drain plugs on the bottom of your Buffalo A2 after every use as stated in the AFTER PMCS checks located in Item 8 of Table 3 in WP 0114 of TM 9-2355-352-10 (Jun 20). There are three plugs, so make sure you open them all or you'll leave water behind.

Make sure any water drained from the hull goes into a drip pan and is disposed of according to your unit's SOP. That's because any fluid leaks, like coolant, oil or power steering fluid, can end up in the vehicle's hull. Do **not** dump contaminated water down a drain or let it run on or into the ground.

And don't let water get back through the drain plug openings. Make sure you reinstall them before operation, and do it right. Plugs that are loose will vibrate free, and plugs that are too tight are hard to open and more likely to be left closed when draining is needed.

Make sure to apply a little anti-seize compound, NSN 8030-01-087-8254, to the threads before installing the plugs. That lets you tighten the plugs enough to keep them from vibrating loose, but makes them easier to open next time.

Just make sure you put the compound on each plug's threads and the threaded portion of the hull. That way, all the threads are coated and the plugs aren't sticking.

RCV Buffalo A2: Follow These Seven PM and Safety Pointers

/ Published March 24, 2022

Courtesy Photo II Marine Expeditionary Force

Crewman, keep the following preventive maintenance (PM) pointers in mind. They'll keep your RCV Buffalo A2 mission-ready.

Keep Breather Valves Clean

Breather valves on the Buffalo A2's front and rear differentials must be clean and open to let off pressure that builds up in those assemblies.

If a breather valve is plugged, seals blow, oil leaks out and gears become damaged.

Keeping the breather valves clean is simple. Just twist the valve's cap to loosen any dirt inside the cap. If the cap will not turn and pull up, get a new valve.

Make sure a new valve is good by blowing into the valve's threaded end. If you can't blow through the breather, it won't do the job for your equipment. The cap on a good breather opens a little under ½ psi, almost no pressure at all.

Then give all breather valves the twist and pull test after each operation in mud or heavy dust. Your A2's differentials will live longer if you do this simple check.

Top Off the Fuel Tank

Make it a habit of topping off the fuel tank to 95 percent at each fill up. That keeps condensation from warm days and cool nights from building up in the tank.

Too much water in the tank clogs the engine's fuel/water separator, making the vehicle run rough, especially during start up.

Switch Off Disconnect Switches

Electronics inside the A2 have a sneaky habit of running down the vehicle's batteries. That means the batteries can lose their charge in just a week. No juice means a slave start or you'll be going nowhere at all.

After the day's run, there are two battery disconnect switches that need your attention. The first switch is under the hood on the driver's side of the vehicle near the firewall. The second switch is inside the vehicle under the forward passenger seat on the commander's side. Switching off the disconnect switches keep batteries from running down.

While you're at it, also make sure the #1 and #2 power distribution module (PDM) rotary battery switches are turned to the OFF position. You'll find the PDM inside the back of the vehicle. These switches shut off power to the commo gear.

Keep Emergency Door Closed When Moving

Keep the emergency door closed while the vehicle is moving.

Some crewmen leave the door open to keep air circulating inside the hull. Forget it! Leaving the door open can cause it can to come crashing down on your head and kill you!

Use the Ladder Properly

Make sure you're facing the vehicle when climbing down the ladder in the back of the A2. **Don't** step down with your back to the vehicle! Gear can get hung up in the ladder steps, causing you to slip and fall off the ladder!

Get the Water Out

You have to drain the air tanks on your A2 every day after operation. If you forget, moisture builds up. It creates corrosion that plugs up the entire air system, including brake valves and cylinders, which can lead to brake failure.

Drain water from the primary and secondary air tanks on the driver's side of the vehicle. The tank has three pull cables.

By the way, you'll find this tip listed as steps 1 & 2 in WP 0137-2 of TM 9-2355-352-10 (Sep 11).

Keep Paint off Hoses

It's no secret that a vehicle's hydraulic hoses become brittle from exposure to the elements in all kinds of weather.

There's no reason to paint the Buffalo's hoses with CARC paint. CARC doesn't extend the durability or life of the hose. In fact, it can cause more damage whenever it covers a pin-hole leak or hides cracks and abrasions. These problems areas are all symptoms of a hydraulic leak waiting to happen.

Tell your buddies at the paint shop to make sure all exposed hydraulic hoses are covered and taped before they go to work to make the Buffalo look like new.

HYEX: Cold Weather Jitters

/ Published March 24, 2022

Photo by Staff Sgt. Rauel Tirado

A hard-to-start engine and cold weather seem to go hand in hand. Keep these PM pointers in mind to get rid of your excavator's cold weather jitters.

Starter Reminder

Too many starters end up at support for service or repair because operators press on the start switch for too long and burn it out.

Follow the word on Page 5-2 of TM 5-3805-280-10 (Feb 00). When you try to start your vehicle's engine in cold weather, never keep the starter engaged for more than 30 seconds! Give the starter at least two (2) minutes to cool off before trying again.

After a false start, do not turn the starter switch until the engine stops. If your excavator's engine won't start in three (3) tries, call it quits. Call in your mechanic to

find out what's wrong.

Water In – Water Out

Cool nights cause condensation to form in the excavator's fuel tank. That means you have to drain the fuel/water separator before the day's run.

Not draining the separator leaves water and crud in the fuel system. Then the engine runs rough or not at all.

Open the separator, located behind the engine access door (curbside), by turning its drain cock counterclockwise. Push down on the press pump to get water out of the separator.

Store drained fuel in an approved hazardous waste container. Never dump it down a drain or on the ground from the separator's drain hose.

If the fuel is clear, you're OK. If the fuel doesn't run clear, close the valve and report it to your mechanic.

Empty Ether Canister?

The excavator may be hard to start when the temperature drops below freezing. The vehicle's cold-weather starter system has a fuel canister that automatically injects ether into the engine when you push the cold start button.

If your excavator is difficult to start even when using the cold start button, chances are the ether canister is empty. Have your mechanic replace it.

Cylinder Rod Saver Info

Temperatures drop and ice forms on the excavator's cylinder rods.

Problem is, any ice buildup on the rods will scrape or cut seals when the rods are moved. Damaged seals lead to fluid leaks, which lead to NMC equipment. If you find any ice, get rid of it.

Another rod saver, no matter the weather, is to exercise the cylinders weekly. Regular cylinder exercise fights rust by spreading a thin coat of oil on the rods. Rust, like ice build-up, will scrape and cut the rod's seal.

If the excavator sits longer than a month, spray the rods with rust inhibitor, NSN 8030-01-127-4187. Make sure you don’t get any inhibitor on the excavator’s painted surfaces. It’ll chew up the paint right down to the vehicle’s metal surface.

Before operations, remove any rust inhibitor from the cylinder rod with cleaning solvent.

M1272 Buffalo: TM Missing Tire Chain Instructions

/ Published March 25, 2022

Photo by Sgt. Doug Roles

Operators, TM 9-2355-352-10 (Jun 20) for the Buffalo, doesn't have installation and removal instructions for tire chains.

According to TACOM 22-020 Maintenance Information Message (MIM), the tire chains will be added to the Additional Authorized List (AAL) of the TM. Work packages with installation and removal procedures will also be added to the TM in a future update.

With your CAC in hand, you can view the TACOM message that includes the tire chain installation and removal instructions **HERE** or view and download just the instructions **HERE**.

Once you've downloaded the tire chain instructions, you'll want to keep them handy until the TM is updated.

M400W Skid Steer Loader: Door Assembly NSN

/ Published March 28, 2022

Photo by Staff Sgt. Steven Eaton

Get a door assembly for the M400W skid steer loader using **NSN 2510-01-593-8321**.This NSN replaces the parts info shown in Item 36 of Fig 66 in TM 5-3805-292-23P (Nov 07)

Construction Vehicles/Equipment: Exercise is Good PM

/ Published March 30, 2022

Photo by Sgt. Brian Calhoun

Exercising construction equipment is part of preventive maintenance. Neglected equipment will wear out just by sitting too long. Exercising equipment, at a minimum, means starting it up and running it for a set amount of time but it can also mean moving it over a set distance.

Without regular exercise:

- Seals dry rot.
- Hoses get soft, mushy or dry rot.
- Polished surfaces, like cylinder rods, corrode. A corroded rod will cut seals and cause leaks.

Most, if not all, of these maintenance problems can be avoided simply by exercising equipment on a regular basis. To keep equipment mission-ready, set up a schedule for your operators to run their equipment for 20 minutes at least once a month.

While the equipment is exercised, have your Soldiers look for leaks under equipment and shiny spots or rust around nuts and bolt threads. Listen for unusual noises. In short, they should report anything that doesn’t look, feel, smell or sound right.

120M Road Grader: Blade and Inching Pedal Tips

/ Published March 30, 2022

Photo by Petty Officer 2nd Class Cole Pielop

Operators, remember these two pointers before the day's run at the worksite.

Enough Edge

Give your grader the edge it needs to move dirt and sand. The blade's cutting edge protects the moldboard. If it wears down too far, the moldboard is damaged and has to be replaced or sent off for repair.

Here's what you should do:

- Raise the blade about six (6) inches off the ground and place wooden blocks under it.
- Next, lower the blade and take a close look. If the cutting edge is worn to less than ¾ inch, about the width of a penny, report it.

Your mechanic can reverse the edge or replace it if the edge was reversed before.

Inching Pedal

The grader's transmission modulator control (inching pedal) is designed to disengage power to the wheels. That's why you need to keep your big boot off it and to the side during operations.

Here are two other reminders:

- Avoid prolonged use of the inching pedal when moving heavy loads. Instead, shift into a lower gear to match load conditions, especially if the grader is stalling out.
- It's OK to use the inching pedal as a clutch for directional changes. The machine is designed to "shuttle shift." It makes direction changes quick and effortless, reducing cycle time in typical grader applications.

You'll find this info in WP 0005-25 of TM 5-3805-293-10 (Dec 10).

22-Ton Crane: Keep it Lifting with Proper PM

/ Published March 30, 2022

Photo by Petty Officer 2nd Class Daniel Garas

Operators, hoist up on these PM pointers to keep your crane mission-ready at all times.

Use the Handholds

The crane's swing/auxiliary hoist control lever, known as the joystick, is not a handhold for climbing into and out of the cab.

The joystick is not strong enough to support your weight. A busted joystick puts your crane out of action until a new one is installed. With that new joystick comes a big bill!

Instead, use the handholds attached to either side of the cab door.

Use Stowage Box

Remind yourself to do some good housekeeping after the day's run.

Don't leave the crane's lifting slings, cables, chains or pile drive attachments on the vehicle's superstructure when you're done with them. Anything left behind can get lost when the crane moves, or cause you to slip and fall off the vehicle.

Put the items where they belong, in the stowage box next to the cab carrier. That way they'll be out of the way, won't get lost, and you'll know where to find them.

Lube the Hook Block

Four grease fittings on the crane get overlooked because they're on the vehicle's hook block.

Without lube, the block's sheaves, trunnion and thrust bearings can seize up. That causes excessive wear and tear on the crane hoist cables and hook block sheaves.

For smooth crane operation, lube the hook block with GAA monthly or every 100 hours like it says on Page 1-4-9 of TM 5-3810-307-24-1-1 (Aug 00).

Cap the Grease Fitting

Here's a good idea: Use protective caps on the hook block's grease fittings.

These caps keep the fittings clean and unclogged. It's easier to take the cap off when it's time to lube than it is to replace the fitting(s) because they won't take grease.

You can order protective caps with NSN 4730-00-289-8148.

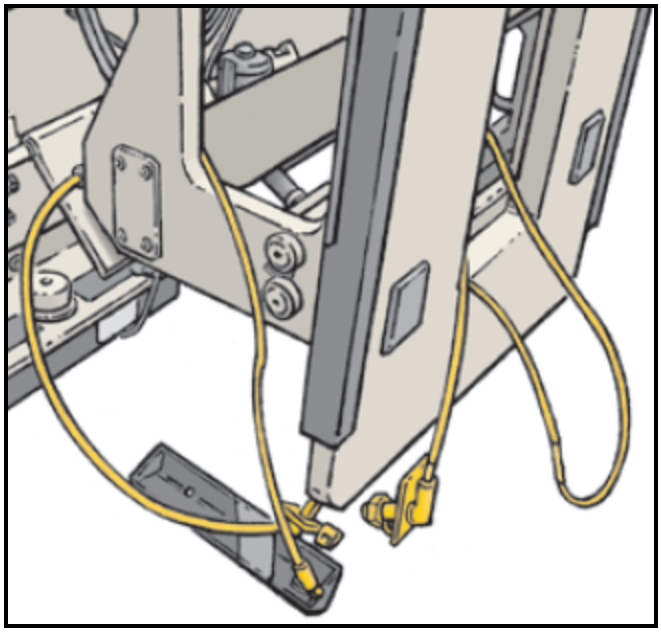
MK III VMMD Husky: Ink Spray Hoses

/ Published March 31, 2022

Photo by Spc. Corey Confer

Operators, make sure the MK III VMMD Husky's ink spray hoses are properly routed, attached and tucked away whenever the vehicle's mine detector heads are in the elevated position.

Hoses that are loose or dangling will get ripped off the vehicle on the way to the work site. You won't be locating any mines then!



Dangling ink spray lines will get ripped off

Check the hoses before and after the day’s run. Notify your mechanic if any of the ink lines are loose or damaged.

You’ll find more about proper ink hose routing in WPs 0084 and 0085 of TM 9-2355-316-10 (Jun 19).

Commo/Electronics

Communications: M20 Antenna Info

/ Published March 7, 2022

Photo courtesy PEO C3T

Dear Editor,

In support of maintenance information message (MIM) CECOM-MI-22-01003, CECOM is reaching out to units regarding M20 antennas.

To reduce costs and the ordering footprint, we recently completed the provisioning of the Gen III and Gen IV versions. Below are the new assembly breakouts that allow units to order individual components of the M20, as opposed to having to order the entire assembly as in the past.

Breakout Listing - GEN III

GEN	Base	Payload	Radome	Case	Detailed Description	SOTM P/N	Payload Installed	Spare Payload	Base Color	Radome Color	Known NSN
III	X	X	X	X	M20 GEN III Antenna M20-20L with Both Payloads	2020-06-5121-02	Ku	Ka	Black	Green	5985-01-668-6749
						2020-06-5121-05	Ku	Ka	Black	Sand	5985-01-668-6744
III	X	X	X		M20 GEN III Antenna M20-20L with Ka Only	2020-06-3121-06	Ka		Black	Green	5985-01-695-4165
						2020-06-3121-07	Ka		Black	Sand	5985-01-695-3696
III	X	X	X		M20 GEN III Antenna M20-20L with Ku Only	2020-06-3121-02	Ku		Black	Green	N/A
						2020-06-3121-05	Ku		Black	Sand	N/A
III	X			X	M20 GEN III Gimbal Base Only	SY06-06-6008-07			Black		5985-01-695-4167
III		X		X	M20 GEN III Payload Only with Grey Transit Case	2020-L6-PLM0-00	Ka				5985-01-656-0925
						2020-L6-PLU0-00	Ku				5985-01-660-6989
III		X			M20 GEN III Payload Only	SY06-5540-01	Ka				5985-01-656-0925
						SY06-5200-01	Ku				5985-01-660-6989
III				X	M20 GEN III Payload Transit Case Only	2311A					3439-20-000-1966
III			X		A-Sandwich Composite Standalone Radome	G420-06-9520-02				Green	5985-01-668-9928
						G420-06-9520-05				Sand	5985-01-668-6743

Click on the image above to open a PDF version

Breakout Listing - GEN IV

GEN	Base	Payload	Radome	Case	Detailed Description	SOTM P/N	Payload Installed	Spare Payload	Base Color	Radome Color	Known NSN
IV	X	X	X	X	M20 GEN IV Antenna M20-20M with Both Payloads	G420-06-1006-12	Ka	Ku	Black	Green	5985-01-682-1875
						G420-06-1006-13	Ka	Ku	Black	Sand	5985-01-682-1014
IV	X	X	X		M20 GEN IV Antenna M20-20M with Ku Only	G420-06-1016-12	Ku		Black	Green	N/A
						G420-06-1016-13	Ku		Black	Sand	N/A
IV	X	X	X		M20 GEN IV Antenna M20-20M with Ka Only	G420-06-1016-14	Ka		Black	Green	5985-01-695-0957
						G420-06-1016-15	Ka		Black	Sand	5985-01-695-1018
IV	X			X	M20 GEN IV Gimbal Base Only with Grey Transit Case	2020-M6-BS0F-08			Black		5985-01-695-3697
IV		X		X	M20 GEN IV Payload Only with Grey Transit Case	2020-M6-PLM0-00	Ka				5985-01-682-1719
						2020-M6-PLU0-00	Ku				5985-01-659-9007
IV		X			M20 GEN IV Payload Only	G420-06-5211-01	Ka				5985-01-682-1719
						G420-06-5201-01	Ku				5985-01-682-1730
IV				X	M20 GEN IV Payload Transit Case Only	ORION2984					
IV			X		C-Sandwich Ruggedized Standalone Radome	G420-06-9521-02				Green	5985-01-682-2088
						G420-06-9521-05				Sand	5985-01-682-1607

Click on the image above to open a PDF version

The new GEN IV variant is now fielded with the Next Generation (NG) point of presence (PoP) B kit, Tactical Communications Node-Lite (TCN-L), and Tactical Communications Node (TCN) during technical insertion events.

The GEN IV assemblies are interchangeable with the GEN III variant. Soldiers can identify which antennas they currently have by comparing the part number, NSN or both on the data plates to the tables shown above.

The payloads of both payload generations are procurable. However, the GEN IV and GEN III payloads are **not** interchangeable between generations. That means if Soldiers need a replacement payload for the GEN IV M20 antenna, they must order GEN IV payloads, and likewise for the GEN III.

Please pass this information along to your readers. The official CECOM-MI-22-01003 message also contains more information and can be found **HERE**.

For answers to questions, units can contact the following:

The M20 item manager, James Bryant:

james.r.bryant134.civ@army.mil

The NG PoP ILS manager, Jeremy Rood:

jeremy.j.rood.civ@army.mil

or the INC 2 branch chief, Nicholas Basirico:

nicholas.a.basirico.civ@army.mil

James Bryant
Jeremy Rood
Nicholas Basirico
CECOM C3T Directorate

Editor's note: *Consider the word passed on, gentlemen*.

Publications: New URL for CECOM's DA Form 2028

/ Published March 23, 2022

Photo by Kevin Valentine

Take note! CECOM has a new URL for submitting DA Form 2028, *Recommended Changes to Publications and Blank Forms* (Jun 18):

https://pubsweb.redstone.army.mil/CECOM2028/Default.aspx

Jot it down for future use and be sure to also download a copy of the form's instructions **HERE**.

Questions? Email:
usarmy.apg.cecom.mbx.ilsc-ltsd-psd-stp-2028-team@army.mil

PQAS-E: B300 W10 Hard Drive Swap Requirement

/ Published March 25, 2022

Photo by Sgt. Justin Geiger

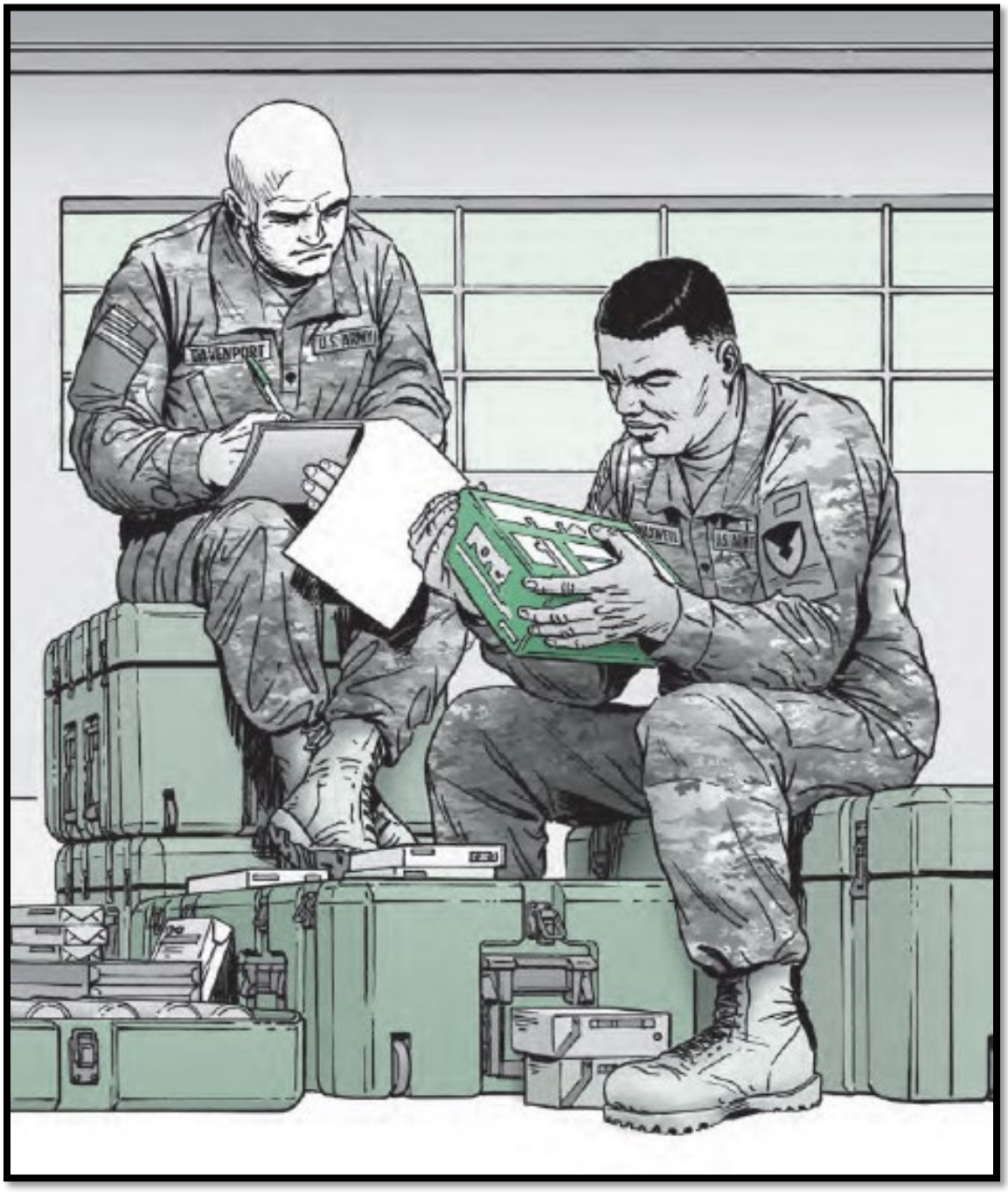
Here's an important alert! The laboratory shelter, a component of the Petroleum Quality Analysis System-Enhanced (PQAS-E), NSN 6640-01-547-1760 (EIC-ZBX), LIN P25743, needs attention. More specifically, the B300 W10 laptop needs a software upgrade.

The computer's current hard drive software needs to be updated to version 2.2.3. **The deadline for this action is on April 30, 2022**.

Be advised that the hard drive software system is also transitioning to a universal serial bus (USB) drive-based update method. This new update method has several advantages, including no longer shipping entire hard drives, enhancing cybersecurity, enabling Soldiers to reset their laptops in the field, and streamlining the hard drive software update process.

For specific step-by-step instructions and POCs, see maintenance advisory 22-021 on the TULSA website **HERE**.

Logistics Management



Set Up a Virtual TDY with PS Magazine

/ Published March 3, 2022

Read on to find out more!

PS Magazine was created in 1951 to help Soldiers with maintenance and logistics issues. We're still here to help after 70 years and we'd like to invite combat, combat support and combat service support units across the Army to conduct virtual TDYs with us to discuss maintenance and sustainment challenges. We're also encouraging units to share maintenance and sustainment successes so that *PS* can potentially share them across the force in order to enhance overall combat readiness.

These virtual TDYs will typically last between 30 minutes to one hour. Units are encouraged to include maintenance and supply leaders in these virtual sessions, along with a handful of frontline Soldiers who can offer first-hand accounts of the challenges they're facing and answer questions from the *PS* writing staff about the information they need to be more successful at sustaining their vehicles and equipment.

To set up a virtual TDY—either by VTC or MS Teams depending on which platform best suits the unit making the request—we'll need some basic information such as the unit's point of contact, means of contact, method for conducting the session and dates and times the unit can make itself available for the discussion.

To book a virtual TDY with *PS Magazine,* click **HERE** to send us an email request.

If the link above fails to work, send an email to **usarmy.redstone.asc.mbx.psmag@mail.mil** with the following info:

- Unit making the request and location
- Unit point of contact (name, phone, and email)
- Preferred platform for conducting the virtual TDY
- Preferred dates/times (please offer 2-3 options)

Fuels: Don’t Store Fuel, Period!

/ Published March 7, 2022

Photo by Spc. Calab Franklin

Operators, your field exercise is over and you’ve got 5-gal cans of leftover fuel. The rule is: put that fuel into any vehicle or system that uses and needs it, but **don’t** store it.

If you store the cans outside, rain gets in. Store them inside or outside, and heat and cold cause condensation – more water – inside the can.

Either way, the fuel is contaminated, and contaminated fuel can ruin an injector pump.

Warning: Storing fuel is also dangerous. A spark could blow up the storage can, the storage shed and anyone nearby.

Logistics: Not Optional Says the Army Chief of Staff

/ Published March 16, 2022

Army Chief of Staff James McConville

In a recent article appearing in *Breaking Defense*, writer Valerie Insinna captured the observations of three top American generals about key lessons learned so far from Russia's invasion of Ukraine. One of the lessons highlighted was the significant role logistics play in supporting combat operations.

In the article, Army Chief of Staff James McConville states,

> If you're going to put an army on the move, if you're going to conduct combat operations, if you don't have logistics, if you don't have gas, if you don't have parts, if you don't have all the ammunition, then those weapon systems become paperweights. They just sit on the side of the road and you can't fight [with] them.

Click **HERE** to read the full article and learn more about the observations made by McConville; Gen. Mark Kelly, USAF; and Gen. David Berger, USMC.

MSD: CM Tool Update Available

/ Published March 16, 2022

Courtesy PD TMDE

An update for the maintenance support device (MSD) V4 that protects the device from unauthorized Windows updates when it's connected to a network is available on CM Tool. You can find CM Tool **HERE;** you'll need your CAC for access.

Remember, CM Tool is the only authorized location for Windows downloads for MSDs. If you try to download a Windows update from anywhere else or load a different operating system that wasn't provided by PD TMDE, cyber security will render the device inoperable.

If that happens, you'll need to contact the MSD/ICE Help Desk at (877) 564-1137 or email:

apats@redstone.army.mil

Looking for the MSD-V4 Linux updates supporting Abrams? Call (800) 880-7087 or email:

SEMSD.HelpDesk@drs.com

GCSS-Army: Use “My Work Place” for Increased Productivity

/ Published March 23, 2022

Image courtesy of CASCOM

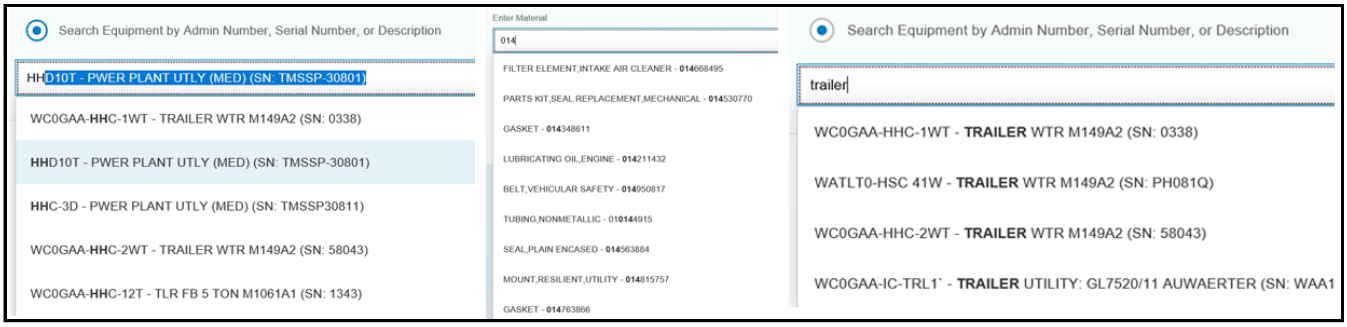
GCSS-Army’s Automated Identification Technology (AIT) “My Work Place” User Interface 5 (UI5) allows end users to conduct day-to-day tasks in less time while minimizing the potential for errors, increasing productivity.

GCSS-A managers can use transaction code ZAIT to customize their team’s access to “My Work Place.” For example, a customization can assign tasks to members, such as dispatching and processing turn-ins, creating notification work orders or performing goods receipts and issue.

“My Work Place” also provides users visual indicators (tiles)that support timely decision making on which areas need attention. This approach can decrease training time since users can quickly understand the tiles.

UI5 Tile

As an added benefit, “My Work Place” uses suggestive search technology that allows strings of information to search GCSS-A in various ways using admin numbers, equipment numbers, serial numbers or descriptions to create notifications or dispatches.



Search by admin number... equipment ID... or equipment name

Looking for more information about GCSS-A? Download the GCSS-A smart books **HERE**. Keep in mind you’ll need your CAC to access the site.

Logistics Management: MDL Moved to milSuite

/ Published March 24, 2022

Photo by Sgt. Gene Arnold

Leaders, have you been looking for the latest Master Divestiture List (MDL)?

When Army Knowledge Online (AKO) sunsetted in June 2021, the MDL was relocated to milSuite.

Grab your CAC and click **HERE** to get the latest MDL and other helpful information.

IADS: Export and Import Function Enables Sharing of Notes

/ Published March 29, 2022

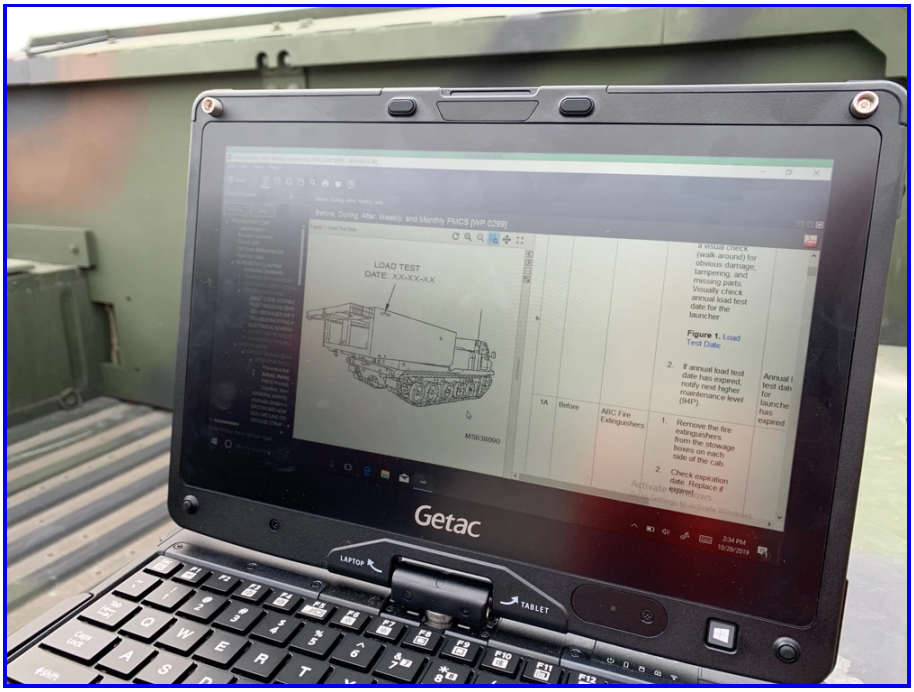


Photo by Kinsey Lindstrom

For Soldiers using IADS to view IETMS—which is primarily limited to aviation and missile units at present—there's a relatively new feature to be aware of: the ability to export and import notes, particularly those relating to Aviation Maintenance Action Message (AMAM), Ground MAM (GMAM) or Aviation Safety Action Message (ASAM) changes or updates to the manual.

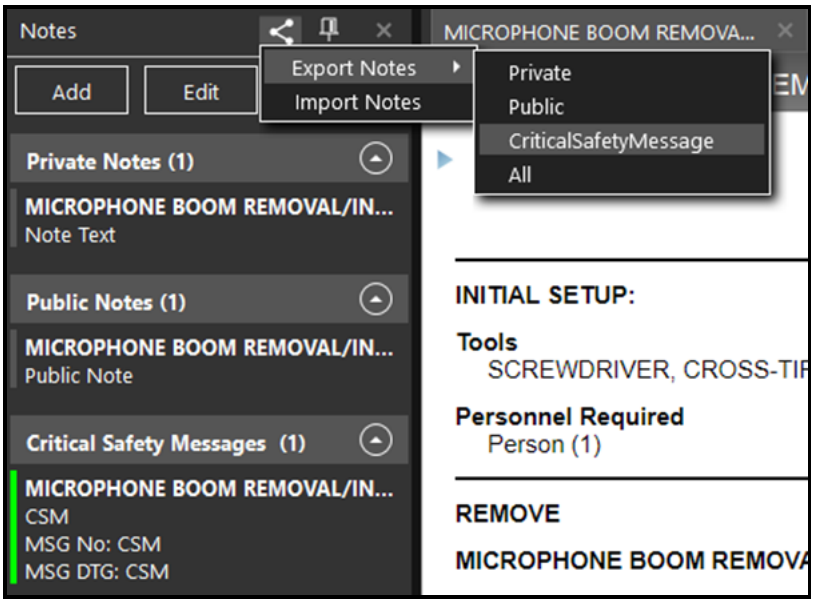
The export/import feature became available in November 2020 and requires IADS version 4.1.1 or newer. Here are the steps to follow to export and then import notes from one computer or device to another.

1. With the IADS Notes window open, click the share icon along the top to open the export/import function.

Share icon

2. Select Export Notes and the specific type of notes to export. This will create an EXCEL file that can be migrated to a flash drive or other removable media (such as CD or DVD) to transfer the data to another computer or device (make sure to follow local security protocols and unit SOP when it comes to removable media).

3. On the receiving computer or device, repeat Step 1 and, in Step 2, select Import Notes instead of Export Notes.



Notes window showing sub-menus to export and import notes

Whenever a new or updated IETM is published to the field, units should ensure that all notes remain valid and delete those for changes that have been incorporated into the IETM.

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usarmy.redstone.amcom.mbx.immc-pub-iads-support@army.mil

You can also visit the IADS website **HERE**.

Corrosion: Bust Rust with TACOM CCI Checklists

/ Published March 31, 2022

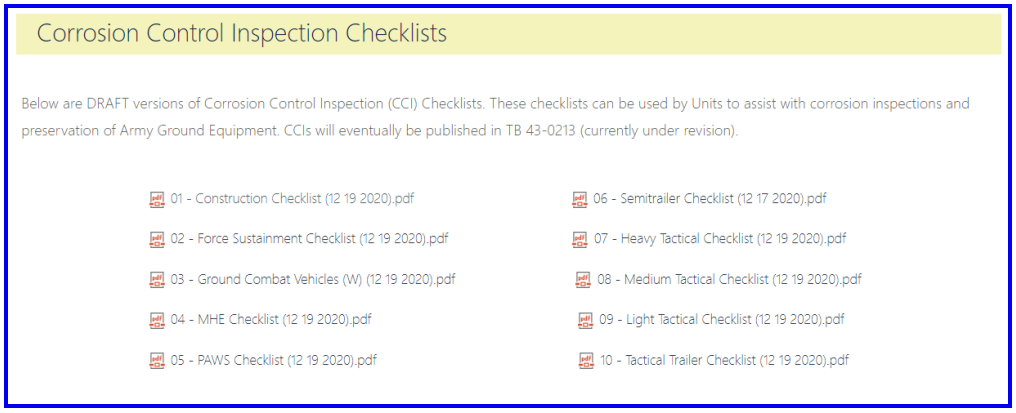
Photo by Cpl. Daniel Woodall

Maintenance leaders, did you know the **TACOM Corrosion website** has corrosion control inspection (CCI) checklists? It sure does.

Don't forget you'll need your CAC to log on to the site. Once you've logged on, hover your mouse over Corrosion Prevention and select Inspect / Report.

Select Inspect/Report

Scroll about halfway down the page and you'll see the checklists. Just click on the one you want.



CCI Checklist options (click on image above to directly link to site)

Corrosion Control Inspection Checklists

CCI checklists were developed from work packages (WPs) that can be found in TB-43-0213, *Corrosion Prevention and Control (CPC) for Army Ground Equipment* (Mar 19), and can be used along with the equipment TM. Note that the CCI checklists will be included in the next update of TB-43-0213.

These checklists are handy for helping your unit combat corrosion by identifying areas and components where corrosion of Army equipment was observed during TACOM Corrosion surveys.

Each CCI checklist has a general checklist and an asset-specific checklist for those end items of Army equipment that are covered in it.

You'll want to use both the general and asset-specific checklists for proper maintenance, along with the appropriate TM guidance. Note that some checklists cover multiple end items.

Here's a table with info on CCI checklists and the specific equipment covered.

CCI checklist title	**Equipment (asset-specific)**
01-Construction	HMEE, CS-563D Type II, D7RII dozer
02-Force Sustainment	Containerized kitchen, mobile integrated remains collection system (MIRCS)

03-Ground Combat Vehicles	Stryker, M-ATV
04-MHE	ATLAS, ATLAS II, M4K, MHE-270, RTCH
05-PAWS	Petroleum and Water System
06-Semitrailer	M1000, M129, M870, M871, M872
07-Heavy Tactical	M915, M916, M917, M984, M985, M977, M978, M1070, M1074, M1075, M1076, M1077, M1120
08-Medium Tactical	M1078, M1081, M1083, M1084, M1085, M1086, M1088, M1089, M1090, M1093, M1094, M1157
09-Light Tactical	General
10-Tactical Trailer	M1101, M1102, M1076, M1082, M1095

For more info on corrosion prevention and control, contact the TACOM Corrosion team at:

usarmy.detroit.tacom.mbx.ilsc-corrosion@army.mil

Mines

RCV Buffalo A2: When Water is Your Enemy

/ Published March 24, 2022

Photo by Sgt. 1st Class Andy Yoshimura

Water collects in the hull of the Buffalo A2 like a rain barrel on the side of a barn. Water drips off wet boots and uniforms, trickles in from the top of the vehicle, comes in from the wash rack and can seep in through loose drain plugs during fording. If you're not careful, water can become your vehicle's worst enemy.

The Problem

Water takes on three forms - solid, liquid and gas. All three create problems in your

A2.

- **Solid:** If you're in a cold weather environment, water in the hull and under the floor plates will freeze. Since water expands as it freezes, lines and fittings are ruptured, causing all kinds of damage.

- **Liquid:** Water under the floor plates will rust the vehicle's air brake valves and just about anything made of metal.

- **Gas:** As temperatures go up, the water evaporates and condenses on radios and electronic gear. Enough moisture can short out electronic equipment.

The Solution

To prevent these problems, open the hull's drain plugs on the bottom of your Buffalo A2 after every use as stated in the AFTER PMCS checks located in Item 8 of Table 3 in WP 0114 of TM 9-2355-352-10 (Jun 20). There are three plugs, so make sure you open them all or you'll leave water behind.

Make sure any water drained from the hull goes into a drip pan and is disposed of according to your unit's SOP. That's because any fluid leaks, like coolant, oil or power steering fluid, can end up in the vehicle's hull. Do **not** dump contaminated water down a drain or let it run on or into the ground.

And don't let water get back through the drain plug openings. Make sure you reinstall them before operation, and do it right. Plugs that are loose will vibrate free, and plugs that are too tight are hard to open and more likely to be left closed when draining is needed.

Make sure to apply a little anti-seize compound, NSN 8030-01-087-8254, to the threads before installing the plugs. That lets you tighten the plugs enough to keep them from vibrating loose, but makes them easier to open next time.

Just make sure you put the compound on each plug's threads and the threaded portion of the hull. That way, all the threads are coated and the plugs aren't sticking.

RCV Buffalo A2: Follow These Seven PM and Safety Pointers

/ Published March 24, 2022

Courtesy Photo II Marine Expeditionary Force

Crewman, keep the following preventive maintenance (PM) pointers in mind. They'll keep your RCV Buffalo A2 mission-ready.

Keep Breather Valves Clean

Breather valves on the Buffalo A2's front and rear differentials must be clean and open to let off pressure that builds up in those assemblies.

If a breather valve is plugged, seals blow, oil leaks out and gears become damaged.

Keeping the breather valves clean is simple. Just twist the valve's cap to loosen any dirt inside the cap. If the cap will not turn and pull up, get a new valve.

Make sure a new valve is good by blowing into the valve's threaded end. If you can't blow through the breather, it won't do the job for your equipment. The cap on a good breather opens a little under ½ psi, almost no pressure at all.

Then give all breather valves the twist and pull test after each operation in mud or heavy dust. Your A2's differentials will live longer if you do this simple check.

Top Off the Fuel Tank

Make it a habit of topping off the fuel tank to 95 percent at each fill up. That keeps condensation from warm days and cool nights from building up in the tank.

Too much water in the tank clogs the engine's fuel/water separator, making the vehicle run rough, especially during start up.

Switch Off Disconnect Switches

Electronics inside the A2 have a sneaky habit of running down the vehicle's batteries. That means the batteries can lose their charge in just a week. No juice means a slave start or you'll be going nowhere at all.

After the day's run, there are two battery disconnect switches that need your attention. The first switch is under the hood on the driver's side of the vehicle near the firewall. The second switch is inside the vehicle under the forward passenger seat on the commander's side. Switching off the disconnect switches keep batteries from running down.

While you're at it, also make sure the #1 and #2 power distribution module (PDM) rotary battery switches are turned to the OFF position. You'll find the PDM inside the back of the vehicle. These switches shut off power to the commo gear.

Keep Emergency Door Closed When Moving

Keep the emergency door closed while the vehicle is moving.

Some crewmen leave the door open to keep air circulating inside the hull. Forget it! Leaving the door open can cause it can to come crashing down on your head and kill you!

Use the Ladder Properly

Make sure you're facing the vehicle when climbing down the ladder in the back of the A2. **Don't** step down with your back to the vehicle! Gear can get hung up in the ladder steps, causing you to slip and fall off the ladder!

Get the Water Out

You have to drain the air tanks on your A2 every day after operation. If you forget, moisture builds up. It creates corrosion that plugs up the entire air system, including brake valves and cylinders, which can lead to brake failure.

Drain water from the primary and secondary air tanks on the driver's side of the vehicle. The tank has three pull cables.

By the way, you'll find this tip listed as steps 1 & 2 in WP 0137-2 of TM 9-2355-352-10 (Sep 11).

Keep Paint off Hoses

It's no secret that a vehicle's hydraulic hoses become brittle from exposure to the elements in all kinds of weather.

There's no reason to paint the Buffalo's hoses with CARC paint. CARC doesn't extend the durability or life of the hose. In fact, it can cause more damage whenever it covers a pin-hole leak or hides cracks and abrasions. These problems areas are all symptoms of a hydraulic leak waiting to happen.

Tell your buddies at the paint shop to make sure all exposed hydraulic hoses are covered and taped before they go to work to make the Buffalo look like new.

M1272 Buffalo: TM Missing Tire Chain Instructions

/ Published March 25, 2022

Photo by Sgt. Doug Roles

Operators, TM 9-2355-352-10 (Jun 20) for the Buffalo, doesn't have installation and removal instructions for tire chains.

According to TACOM 22-020 Maintenance Information Message (MIM), the tire chains will be added to the Additional Authorized List (AAL) of the TM. Work packages with installation and removal procedures will also be added to the TM in a future update.

With your CAC in hand, you can view the TACOM message that includes the tire chain installation and removal instructions **HERE** or view and download just the instructions **HERE**.

Once you've downloaded the tire chain instructions, you'll want to keep them handy until the TM is updated.

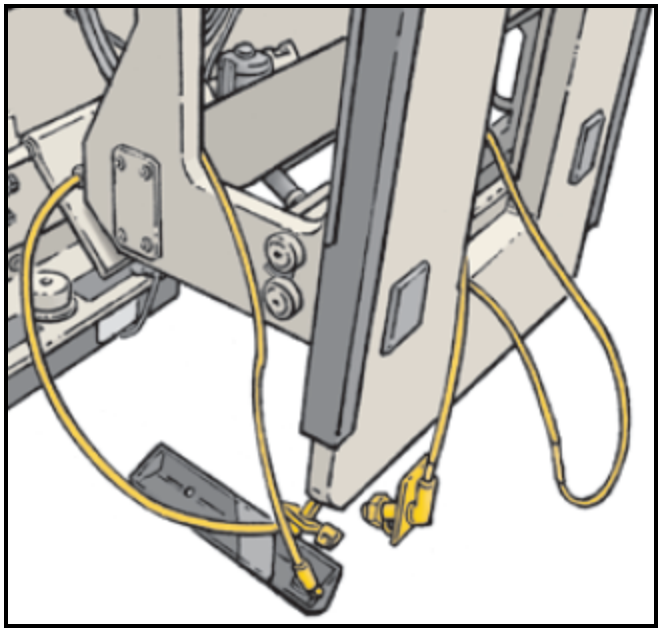
MK III VMMD Husky: Ink Spray Hoses

/ Published March 31, 2022

Photo by Spc. Corey Confer

Operators, make sure the MK III VMMD Husky's ink spray hoses are properly routed, attached and tucked away whenever the vehicle's mine detector heads are in the elevated position.

Hoses that are loose or dangling will get ripped off the vehicle on the way to the work site. You won't be locating any mines then!



Dangling ink spray lines will get ripped off

Check the hoses before and after the day’s run. Notify your mechanic if any of the ink lines are loose or damaged.

You’ll find more about proper ink hose routing in WPs 0084 and 0085 of TM 9-2355-316-10 (Jun 19).

Small Arms

M151 Spotting Scope: Verify MWO Has Been Applied

/ Published March 16, 2022

Photo by Spc. Alleea Olive

Soldiers, inspect your M151 spotting scope to make sure MWO 9-6650-238-50-1 (Jan 20) has been applied. The MWO application window will close on 1 January 2023.

That date seems far away, but it'll sneak up on you and if you wait until **after that** to apply the MWO, it **could take a bite out of your budget.**

Follow these two steps to see if the MWO is applied:

1. Inspect the M151 spotting scope, NSN 6650-01-504-8456. Here's what you should see if MWO 9-6650-238-50-1 has been applied:

Nomenclature: Spotting Instrument, Optical
LIN: S08669
NSN: 6650-01-549-5838

PN: 13016120
XXXXX-U1-U2

2. If the M151 scope has the MWO applied, check the property book for the correct serial number formatting: **XXXXX-U1-U2**. If the serial number isn't in this format, adjust the property book so the scope's serial number is in the above format. The MWO isn't complete until the serial number is correct in the property book!

For a copy of the MWO, have your CAC handy and click **HERE**.

If the MWO has not been applied, then follow the M151 scope MWO mail-in process, found **HERE**.

Questions? Email Michael Kustra at:

michael.j.kustra.civ@army.mil

M2/M2A1 Machine Guns: Ammo for Training on Short Range

/ Published March 21, 2022

Photo by Staff Sgt. ShaTyra Reed

Don’t let limited space to fire the M2/M2A1 machine gun stop your unit from training. With an impact area of only 700 meters, short-range training ammunition (SRTA) is an available solution. You can order SRTA under DODICs A602 and A603.

M860 tracer and M858 ball

Here's what you need to know before firing M2/M2A1 SRTA ammo:

- The M3 recoil amplifier barrel assembly (RABA), NSN 1005-01-323-5406, must be installed prior to using the ammo. If the M3 RABA isn't installed, there won't be enough recoil energy to cycle the M2/M2A1. Refer to TM 9-1005-203-13&P (Oct 09) for installation instructions.
- When using the M3 RABA on the M2/M2A1, you must headspace and time the weapon. Refer to TM 9-1005-213-10 (Aug 17) for the following tasks.
    - Adjust Headspace: Flex and M48
    - Timing Adjustment for Flex and M48
    - Safety/Functions Check for Fixed M48 and M2/M2A1
- If your unit has M2A1 machine guns, you'll need to order the legacy M2 headspace/timing gage, NSN 5220-00-35-1217. M2A1 operators will also need to be trained on proper headspace and timing procedures. Refer to TM 9-1005-213-10 (Aug 17) for the following tasks.
    - Adjust Headspace: Flex and M48
    - Timing Adjustment for Flex and M48
    - Safety/Functions Check for Fixed M48 and M2/M2A1
- You must install the associated discriminator, NSN 1005-01-216-7051 (left-hand feed), or NSN 3040-01-213-2401 (right-hand feed), in place of the front cartridge guide when preparing to fire SRTA. Once the discriminator is installed, you can't fire standard ammo.

  Never mix standard .50-cal ammo and SRTA in the same belt. And make sure only M858 ball or M860 tracer rounds are in the linked belt.

Also, look for dented, deformed or loose projectiles. Firing damaged ammo or damaged SRTA can injure people and damage weapons.

SRTA is as lethal as standard ammo. Don't use SRTA for multiple integrated laser engagement system (MILES), paintball or force-on-force training. SRTA is strictly for firing at inanimate, non-human targets.

Don't relax range safety procedures when firing SRTA. It may be fired on a shorter range, but it still packs a punch.

Heed this WARNING: the shorter distance doesn't reduce the noise, explosive hazard or the potential for injury or death. Make sure you wear eye and hearing protection, and practice normal safety rules when firing SRTA.

Look to your local training support center (TSC) to get the M3 RABA. If you need more than TSC has, use TM 9-1005-203-13&P (Oct 09) and order what you need.

Information regarding the M3 RABA is not available in the M2/M2A1's TM 9-1005-213-10 (Aug 17). The M3 has its own TM, TM 9-1005-203-13&P (Oct 09). You can find it **HERE**.

Soldier Support

AOAP: Temporary Gap in Service and Workarounds

/ Published March 1, 2022

Photo by Lt. Col. Jefferson Wolfe

Starting on Feb 20, 2022, the contract that supports the Army Oil Analysis Program (AOAP) will experience a gap in service. As a result, the AOAP labs located at Fort Bragg, North Carolina; Fort Hood, Texas; Joint Base Lewis-McChord, Washington; and Camp Arifjan, Kuwait will not be analyzing oil samples until a new contract is put into place.

This doesn't mean units will stop taking oil samples. There is a new procedure being put into place to fill this gap. Units will follow their current maintenance schedule and continue to mail or deliver samples to their servicing laboratory.

Samples normally analyzed at Bragg, Hood and Lewis-McChord will be collected at the lab and shipped to the lab at Redstone Arsenal (RSA), Alabama. Those normally analyzed at Arifjan will be collected and shipped to the lab at Kaiserslautern Army

Depot, Germany. The Camp Humphreys, Korea, lab will remain open and conduct business as usual.

At RSA, the samples will be analyzed according to the following order: crash investigations, special aeronautical, routine aeronautical, special non-aeronautical and routine non-aeronautical.

Because of lab capacity, the required turnaround times will be affected and take longer than normal.

Bottom line: there’s no change to when a sample is due to be taken. The change is where the sample is analyzed, how it gets there and the length of time it takes the lab to process it.

Be sure to routinely check this website, which will provide an update as soon as the new contract is in place and the idled labs are operational again.

Publications: New URL for CECOM's DA Form 2028

/ Published March 23, 2022

Photo by Kevin Valentine

Take note! CECOM has a new URL for submitting DA Form 2028, *Recommended Changes to Publications and Blank Forms* (Jun 18):

https://pubsweb.redstone.army.mil/CECOM2028/Default.aspx

Jot it down for future use and be sure to also download a copy of the form's instructions **HERE**.

Questions? Email:
usarmy.apg.cecom.mbx.ilsc-ltsd-psd-stp-2028-team@army.mil

PQAS-E: B300 W10 Hard Drive Swap Requirement

/ Published March 25, 2022

Photo by Sgt. Justin Geiger

Here's an important alert! The laboratory shelter, a component of the Petroleum Quality Analysis System-Enhanced (PQAS-E), NSN 6640-01-547-1760 (EIC-ZBX), LIN P25743, needs attention. More specifically, the B300 W10 laptop needs a software upgrade.

The computer's current hard drive software needs to be updated to version 2.2.3. **The deadline for this action is on April 30, 2022**.

Be advised that the hard drive software system is also transitioning to a universal serial bus (USB) drive-based update method. This new update method has several advantages, including no longer shipping entire hard drives, enhancing cybersecurity, enabling Soldiers to reset their laptops in the field, and streamlining the hard drive software update process.

For specific step-by-step instructions and POCs, see maintenance advisory 22-021 on the TULSA website **HERE**.

IADS: Export and Import Function Enables Sharing of Notes

/ Published March 29, 2022

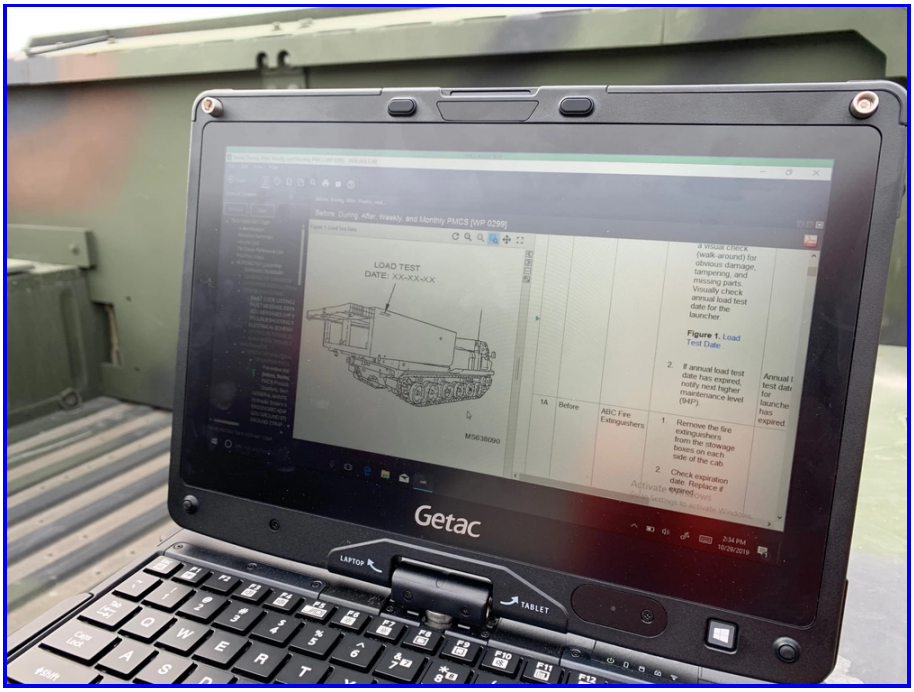


Photo by Kinsey Lindstrom

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Share icon

2. Select Export Notes and the specific type of notes to export. This will create an EXCEL file that can be migrated to a flash drive or other removable media (such as CD or DVD) to transfer the data to another computer or device (make sure to follow local security protocols and unit SOP when it comes to removable media).

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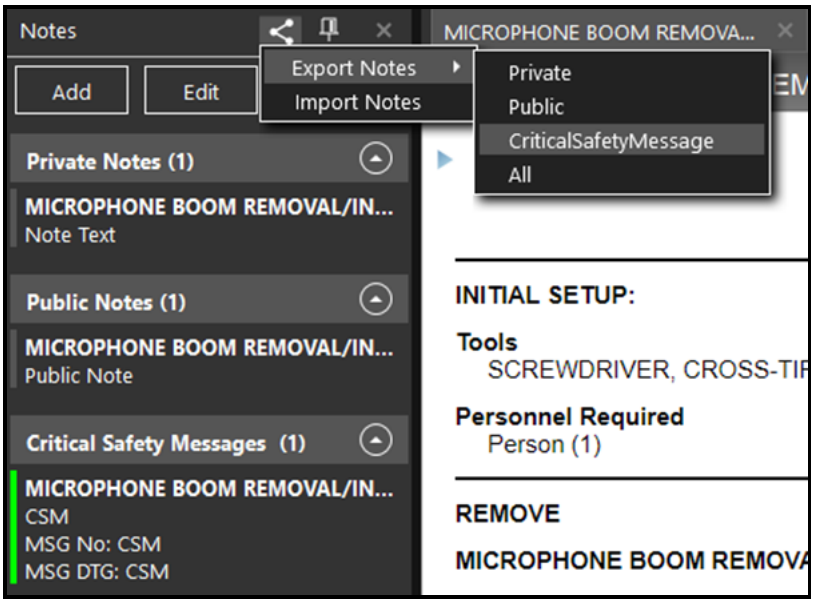

Notes window showing sub-menus to export and import notes

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If you have questions about how to use IADS, contact IADS Customer Support by email at:

usarmy.redstone.amcom.mbx.immc-pub-iads-support@army.mil

You can also visit the IADS website **HERE**.

Tactical Vehicles

FMTV: Watch for Pests in Exhaust Ports

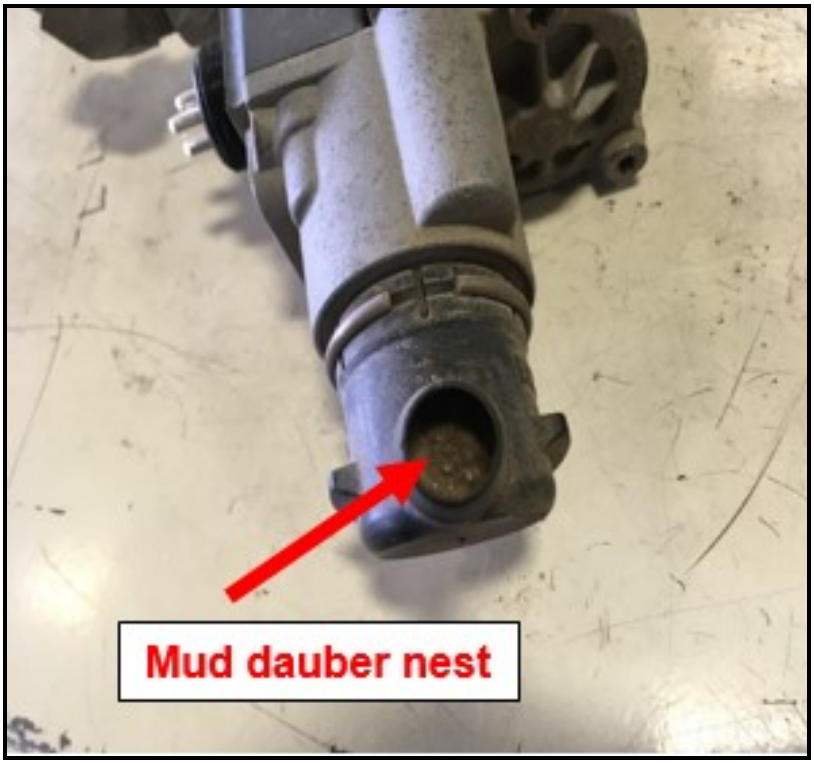
/ Published March 2, 2022

Photo by Sgt. Paige Behringer

Dear Editor,

While conducting maintenance on our FMTVs, we got readings that led us to believe an anti-lock braking system (ABS) valve was bad on one of our FMTV's wheels.

The issue, believe it or not, was mud daubers (wasps). We've run across this problem several times. Mud daubers have occasionally constructed nests inside the exhaust ports of the modulating valves, sealing them closed, which could cause brakes to release slowly and, in some cases, generate faulty readings in the system.



Mud dauber nest inside exhaust port

In regions where mud daubers are common, it's a good idea to check these exhaust ports more often because they can build a nest in a day.

Walter Johnson
TACOM FMX, Maintenance Support

Editor's note: *Another great tip, so bee-careful! We appreciate it and thanks*.

FMTV: New PTO Transmission

/ Published March 3, 2022

Courtesy photo

Mechanics, there are two (2) different configurations of power takeoff (PTO) transmissions for FMTVs; an old style PTO transmission and a new style PTO transmission.

If your old PTO is working, there’s no need to replace it. Just be aware that it’s no longer being produced.

Old PTO

The fit and the function of the old and new PTOs are basically the same, except the new PTO doesn’t have the pressure lube line.

List of Affected FMTVs

M1083A1 truck cargo, w/winch	M1083A1P2 truck cargo, w/winch
M1084A1 truck cargo, w/MHE	M1084A1P2 truck cargo, w/MHC
M1089A1 wrecker	M1089A1P2 wrecker
M1148 truck (LHS)	M1085A1 truck, w/winch
M1157A1 dump truck, w/winch	M1157A1P2 dump truck, w/winch

To get the new style PTO, use **NSN 2520-01-480-2088**, (PN 277-20).

New PTO

You'll want to jot this info down until the appropriate TMs are updated.

M915A3 Tractor Truck: New NSN for Collision Warning ECU

/ Published March 7, 2022

Photo by Staff Sgt. Jeff Hansen

Maintainers, if your unit has M915A3 tractor trucks, be aware that the NSN for the collision warning ECU was replaced.

To get the collision warning ECU use **NSN 7050-01-691-0409**, instead of NSN 7042-01-494-8319, that's currently shown as Item 7 in Fig 291 of TM 9-2320-302-24P (Feb 06).

M149A2 Water Trailer: Need a Data Plate?

/ Published March 9, 2022

Photo by Sgt. James Geelen

Maintenance leaders, do you need to order either a water tank data plate or trailer data plate for your M149A2 water trailer? Here's some help.

To get the water tank data plate, use NSN 9909-01-097-7047. For the trailer data plate, use NSN 9909-01-086-1580.

M915A5 Tractor Truck: NSNs Assigned for Cable Pivot Brackets

/ Published March 9, 2022

Photo by Capt. Adrian Silva

Maintainers, Item 26 in Fig 208 of TM 9-2320-426-13&P (IETM EM 0308, Aug 14) doesn't show NSNs for the cable pivot brackets. However, NSNs are now available for the right-hand (RH) and left-hand (LH) brackets.

Get the cable pivot bracket (RH) with **NSN 2590-01-699-1184**. Get the cable pivot bracket (LH) with **NSN 2590-01-699-1181**.

Jot this info down until the TM is updated.

FMTV: Silence Air Warning Buzzer While Troubleshooting

/ Published March 10, 2022

Photo by Spc. Vontrae Hampton

Mechanics, troubleshooting your FMTV's electrical system with the air warning buzzer blaring can be frustrating. Here's a simple trick to silence the buzzer while you're working.

Air warning buzzer

Grab that can of brake parts cleaner and remove the lid.

Remove lid from brake parts cleaner

Take the lid from the brake parts cleaner and place the open end of the lid over the air warning buzzer.

Lid placed atop air warning buzzer

Now you can continue working on the FMTV’s electrical system in peace and quiet. Don’t forget to remove the lid from the air warning buzzer once you’ve completed your work.

M1151A1 HMMWV: Ordering the Engine Compartment Hood

/ Published March 16, 2022

Photo by Gertrud Zach

Dear Half-Mast,

I'm trying to replace a broken engine compartment hood on an M1151A1 HMMWV. However, NSN 2510-01-432-3338 shows the hood as AAC V in FED LOG. That means it's a terminal item.

Can my unit still order the hood?

SGT T.J.

Dear Sergeant T.J.,

You're correct! The Defense Logistics Agency (DLA) shows NSN 2510-01-432-3338 as AAC V. Even though it's a terminal item, your unit can still order the engine

compartment hood until stocks are exhausted.

Note that once stocks are exhausted, the replacement NSN for the engine compartment hood is NSN 2510-01-628-3889.

However, with the replacement NSN, if your truck has a serial number of 246890 and above, you'll also need to order the air lift bracket retainer seal (LH), NSN 5330-01-593-9642, and air lift bracket retainer seal (RH), NSN 5330-01-593-9643.

Up-Armored HMMWV: Inspect Seat Belt Assemblies

/ Published March 17, 2022

Photo by Sgt. Thomas Day

Maintenance leaders, TACOM Safety of Use (SOU) message 22-002 advises you to inspect the seat belt assemblies (both lap and shoulder seat belts) in your up-armored HMMWVs.

Quality control personnel identified that connector webbing was improperly sewn onto the metal tongue on some HMMWV models. The improperly sewn belts will still click when used and give the operator the impression they're connected properly; they aren’t.

Be warned that the improperly sewn seat belts will have reduced holding strength and may fail in the event of an accident, which could result in potentially severe or fatal injuries.

Up-Armored HMMWV Models Affected

M1151, M1151A1	M1151P1
M1152, M1152A1	M1152P1
M1165, M1165A1	M1167

For more info, have your CAC handy and go to TACOM SOU 22-002 **HERE**.

RCV Buffalo A2: When Water is Your Enemy

/ Published March 24, 2022

Photo by Sgt. 1st Class Andy Yoshimura

Water collects in the hull of the Buffalo A2 like a rain barrel on the side of a barn. Water drips off wet boots and uniforms, trickles in from the top of the vehicle, comes in from the wash rack and can seep in through loose drain plugs during fording. If you're not careful, water can become your vehicle's worst enemy.

The Problem

Water takes on three forms - solid, liquid and gas. All three create problems in your

A2.

- **Solid:** If you're in a cold weather environment, water in the hull and under the floor plates will freeze. Since water expands as it freezes, lines and fittings are ruptured, causing all kinds of damage.

- **Liquid:** Water under the floor plates will rust the vehicle's air brake valves and just about anything made of metal.

- **Gas:** As temperatures go up, the water evaporates and condenses on radios and electronic gear. Enough moisture can short out electronic equipment.

The Solution

To prevent these problems, open the hull's drain plugs on the bottom of your Buffalo A2 after every use as stated in the AFTER PMCS checks located in Item 8 of Table 3 in WP 0114 of TM 9-2355-352-10 (Jun 20). There are three plugs, so make sure you open them all or you'll leave water behind.

Make sure any water drained from the hull goes into a drip pan and is disposed of according to your unit's SOP. That's because any fluid leaks, like coolant, oil or power steering fluid, can end up in the vehicle's hull. Do **not** dump contaminated water down a drain or let it run on or into the ground.

And don't let water get back through the drain plug openings. Make sure you reinstall them before operation, and do it right. Plugs that are loose will vibrate free, and plugs that are too tight are hard to open and more likely to be left closed when draining is needed.

Make sure to apply a little anti-seize compound, NSN 8030-01-087-8254, to the threads before installing the plugs. That lets you tighten the plugs enough to keep them from vibrating loose, but makes them easier to open next time.

Just make sure you put the compound on each plug's threads and the threaded portion of the hull. That way, all the threads are coated and the plugs aren't sticking.

RCV Buffalo A2: Follow These Seven PM and Safety Pointers

/ Published March 24, 2022

Courtesy Photo II Marine Expeditionary Force

Crewman, keep the following preventive maintenance (PM) pointers in mind. They'll keep your RCV Buffalo A2 mission-ready.

Keep Breather Valves Clean

Breather valves on the Buffalo A2's front and rear differentials must be clean and open to let off pressure that builds up in those assemblies.

If a breather valve is plugged, seals blow, oil leaks out and gears become damaged.

Keeping the breather valves clean is simple. Just twist the valve's cap to loosen any dirt inside the cap. If the cap will not turn and pull up, get a new valve.

Make sure a new valve is good by blowing into the valve's threaded end. If you can't blow through the breather, it won't do the job for your equipment. The cap on a good breather opens a little under ½ psi, almost no pressure at all.

Then give all breather valves the twist and pull test after each operation in mud or heavy dust. Your A2's differentials will live longer if you do this simple check.

Top Off the Fuel Tank

Make it a habit of topping off the fuel tank to 95 percent at each fill up. That keeps condensation from warm days and cool nights from building up in the tank.

Too much water in the tank clogs the engine's fuel/water separator, making the vehicle run rough, especially during start up.

Switch Off Disconnect Switches

Electronics inside the A2 have a sneaky habit of running down the vehicle's batteries. That means the batteries can lose their charge in just a week. No juice means a slave start or you'll be going nowhere at all.

After the day's run, there are two battery disconnect switches that need your attention. The first switch is under the hood on the driver's side of the vehicle near the firewall. The second switch is inside the vehicle under the forward passenger seat on the commander's side. Switching off the disconnect switches keep batteries from running down.

While you're at it, also make sure the #1 and #2 power distribution module (PDM) rotary battery switches are turned to the OFF position. You'll find the PDM inside the back of the vehicle. These switches shut off power to the commo gear.

Keep Emergency Door Closed When Moving

Keep the emergency door closed while the vehicle is moving.

Some crewmen leave the door open to keep air circulating inside the hull. Forget it! Leaving the door open can cause it can to come crashing down on your head and kill you!

Use the Ladder Properly

Make sure you're facing the vehicle when climbing down the ladder in the back of the A2. **Don't** step down with your back to the vehicle! Gear can get hung up in the ladder steps, causing you to slip and fall off the ladder!

Get the Water Out

You have to drain the air tanks on your A2 every day after operation. If you forget, moisture builds up. It creates corrosion that plugs up the entire air system, including brake valves and cylinders, which can lead to brake failure.

Drain water from the primary and secondary air tanks on the driver's side of the vehicle. The tank has three pull cables.

By the way, you'll find this tip listed as steps 1 & 2 in WP 0137-2 of TM 9-2355-352-10 (Sep 11).

Keep Paint off Hoses

It's no secret that a vehicle's hydraulic hoses become brittle from exposure to the elements in all kinds of weather.

There's no reason to paint the Buffalo's hoses with CARC paint. CARC doesn't extend the durability or life of the hose. In fact, it can cause more damage whenever it covers a pin-hole leak or hides cracks and abrasions. These problems areas are all symptoms of a hydraulic leak waiting to happen.

Tell your buddies at the paint shop to make sure all exposed hydraulic hoses are covered and taped before they go to work to make the Buffalo look like new.

M1272 Buffalo: TM Missing Tire Chain Instructions

/ Published March 25, 2022

Photo by Sgt. Doug Roles

Operators, TM 9-2355-352-10 (Jun 20) for the Buffalo, doesn't have installation and removal instructions for tire chains.

According to TACOM 22-020 Maintenance Information Message (MIM), the tire chains will be added to the Additional Authorized List (AAL) of the TM. Work packages with installation and removal procedures will also be added to the TM in a future update.

With your CAC in hand, you can view the TACOM message that includes the tire chain installation and removal instructions **HERE** or view and download just the instructions **HERE**.

Once you've downloaded the tire chain instructions, you'll want to keep them handy until the TM is updated.

M915A3 Tractor Truck: Battery Equalizer NSN

/ Published March 28, 2022

Photo by Spc. Jeffrey La Flex

Maintainers, the battery equalizer for your M915A3 tractor truck, shown as Item 34 in Fig 95 of TM 9-2320-302-24P (Feb 06), is listed as NSN 6150-01-482-1211. That's no longer correct.

To get the battery equalizer, use **NSN 6150-01-595-3497**.

Jot the info down until the TM is updated.

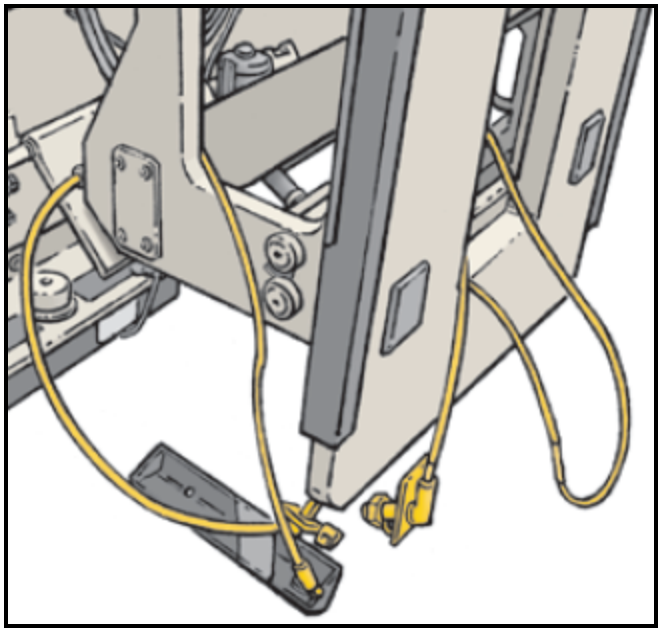
MK III VMMD Husky: Ink Spray Hoses

/ Published March 31, 2022

Photo by Spc. Corey Confer

Operators, make sure the MK III VMMD Husky's ink spray hoses are properly routed, attached and tucked away whenever the vehicle's mine detector heads are in the elevated position.

Hoses that are loose or dangling will get ripped off the vehicle on the way to the work site. You won't be locating any mines then!



Dangling ink spray lines will get ripped off

Check the hoses before and after the day’s run. Notify your mechanic if any of the ink lines are loose or damaged.

You’ll find more about proper ink hose routing in WPs 0084 and 0085 of TM 9-2355-316-10 (Jun 19).

Corrosion: Bust Rust with TACOM CCI Checklists

/ Published March 31, 2022

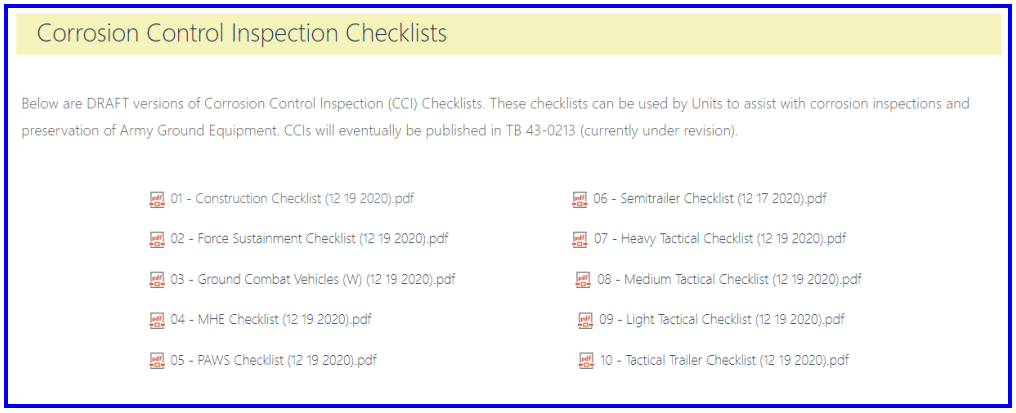
Photo by Cpl. Daniel Woodall

Maintenance leaders, did you know the **TACOM Corrosion website** has corrosion control inspection (CCI) checklists? It sure does.

Don't forget you'll need your CAC to log on to the site. Once you've logged on, hover your mouse over Corrosion Prevention and select Inspect / Report.

Select Inspect/Report

Scroll about halfway down the page and you'll see the checklists. Just click on the one you want.



CCI Checklist options (click on image above to directly link to site)

Corrosion Control Inspection Checklists

CCI checklists were developed from work packages (WPs) that can be found in TB-43-0213, *Corrosion Prevention and Control (CPC) for Army Ground Equipment* (Mar 19), and can be used along with the equipment TM. Note that the CCI checklists will be included in the next update of TB-43-0213.

These checklists are handy for helping your unit combat corrosion by identifying areas and components where corrosion of Army equipment was observed during TACOM Corrosion surveys.

Each CCI checklist has a general checklist and an asset-specific checklist for those end items of Army equipment that are covered in it.

You'll want to use both the general and asset-specific checklists for proper maintenance, along with the appropriate TM guidance. Note that some checklists cover multiple end items.

Here's a table with info on CCI checklists and the specific equipment covered.

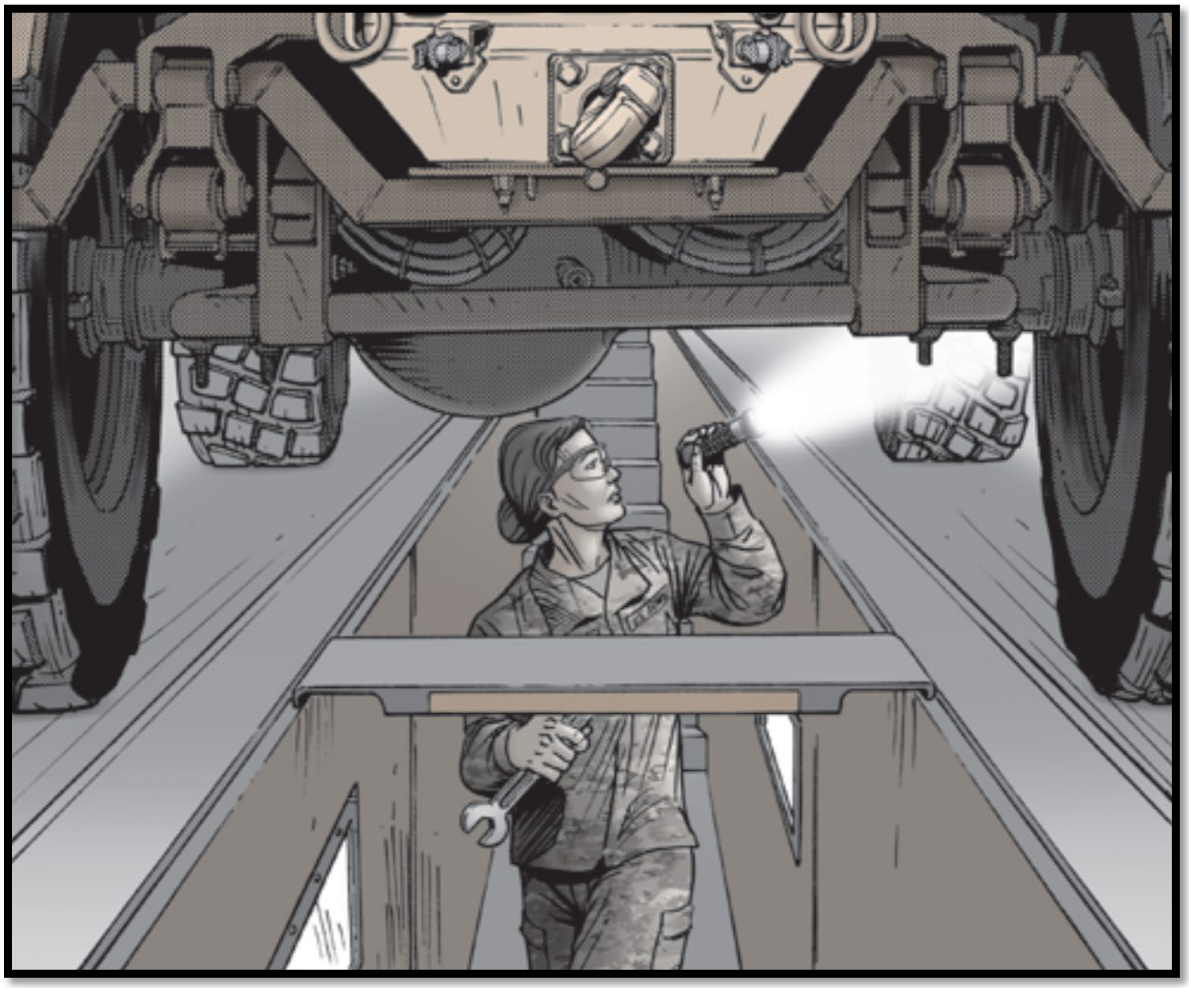
CCI checklist title	**Equipment (asset-specific)**
01-Construction	HMEE, CS-563D Type II, D7RII dozer
02-Force Sustainment	Containerized kitchen, mobile integrated remains collection system (MIRCS)

03-Ground Combat Vehicles	Stryker, M-ATV
04-MHE	ATLAS, ATLAS II, M4K, MHE-270, RTCH
05-PAWS	Petroleum and Water System
06-Semitrailer	M1000, M129, M870, M871, M872
07-Heavy Tactical	M915, M916, M917, M984, M985, M977, M978, M1070, M1074, M1075, M1076, M1077, M1120
08-Medium Tactical	M1078, M1081, M1083, M1084, M1085, M1086, M1088, M1089, M1090, M1093, M1094, M1157
09-Light Tactical	General
10-Tactical Trailer	M1101, M1102, M1076, M1082, M1095

For more info on corrosion prevention and control, contact the TACOM Corrosion team at:

usarmy.detroit.tacom.mbx.ilsc-corrosion@army.mil

Tools



SATS: NSNs for Sliding Platform Assemblies

/ Published March 14, 2022

Photo Courtesy of TACOM

Order the upper-rail sliding assembly for the generator's platform in the Standard Automotive Tool Set (SATS) with NSN 5340-01-629-3185. The lower-rail sliding assembly comes with NSN 5340-01-628-6282. Make a note of these NSNs until the parts info for Item 6 on Page 0053 00-23 of TM 9-4910-783-13&P (Sep 05) is updated.