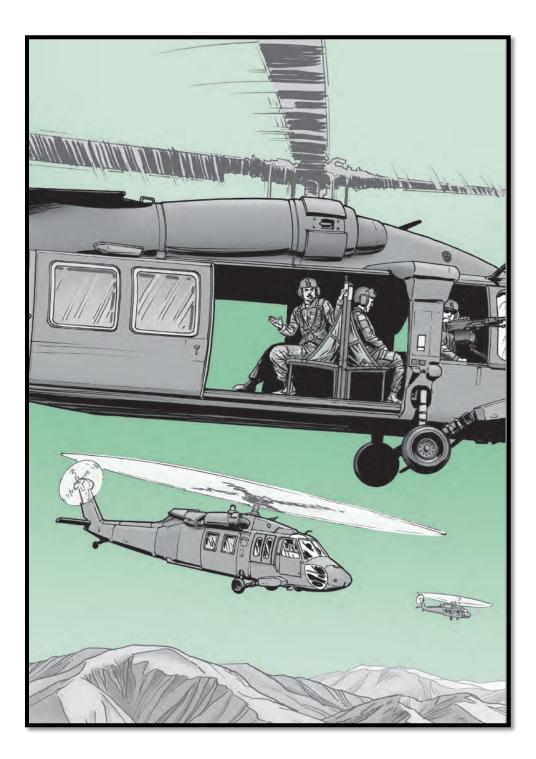




Roll-up of Articles November 2019

Aviation





Black Hawk: Don't Stockpile Unserviceables

/ Published Nov. 5, 2019

BLUF: Don't stockpile unserviceable components; instead, turn them in for repair so they can be put back into the supply system.



Photo by Master Sgt. Becky Vanshur

Mechanics,

Keeping unserviceable Black Hawk assets on the shelf does no one any good. It's much better to turn in that equipment for repair so it can be returned to service.

The equipment listed below has a low unserviceable return rate. So, if you have any of these items hanging around your hanger, turn them in now!

-	Nomenclature	NSN	PN	Item Manager
				Kelly McDaniel, (256) 313-1383,
	interface	01-	3100-	kelly.m.mcdaniel2.civ@army.mil
			017	

	620- 0416		
Blade, rotary wing	1615- 01- 113- 8188	70101- 31000- 043	
Blade, rotary wing	1615- 01- 546- 1148	70150- 09200- 041	
Blade, main rotor	1615- 01- 106- 1903	70150- 09100- 043	Allen Forche, (256) 876-5481 <u>allen.a.forche.civ@army.mil</u>



Apache: IR Harness Mixup Creates Return Credit Confusion

/ Published Nov. 5, 2019

BLUF: Turn in IR harness for return credit but ensure you use the proper NSN and part number.



Photo by Sgt. Sarah Sangster

Mechanics,

Getting a return credit for turn-in goes much smoother when you include the item's proper NSN and part number.

Take the Apache IR harness, for example. A legacy IR harness, NSN 5995-01-186-8601 / PN 10078758-101 (Fig. 1), is getting returned for credit as the current IR harness, NSN 6150-01-534-0552 / PN IH-92900A-00 (Fig. 2).

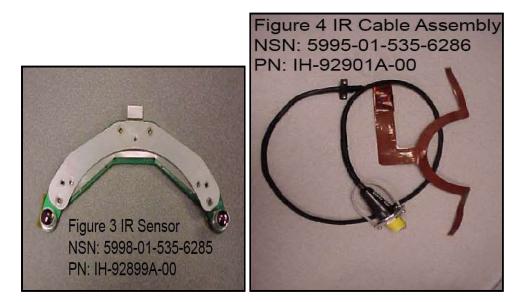


While the two harnesses are interchangeable, they're not on the same repair contract. So when an incorrectly labeled harness is turned in to the wrong repair facility, valuable time and resources are wasted.

So before you turn in that IR harness, make sure it's labeled with the correct NSN and part number. And be sure to send it to the right repair facility.

Telling the difference between the two harnesses is easy:

- The legacy harness has wires soldered to the IR sensor with copper tape covering the wires.
- The current harness has a flat, flexible cable, NSN 5995-01-535-6286 / PN IH-92901A-00, with connectors that allow units to replace the IR sensors, NSN 5998-01-535-6285 / PN IH-92899A-00. The right and left IR sensor are interchangeable.



Remember, before you ship IR harnesses for repair, eyeball everything and make

sure all parts are correctly labeled.



Aviation: UMARK Limitation Criteria Abolished

/ Published Nov. 6, 2019 Operators,

If you haven't heard, the Unit Maintenance Aerial Recovery Kit (UMARK) lifting limit criteria has been updated.



Completed MWO Means no lifting recertification required

With the completion of MWO 1-1670-260-50-3, users are no longer required to perform the five-year sling recertification. In addition, the 20 aerial lifts, 16 cumulative flight hour and 100 crane or hoist lift limitations are gone.

The MWO changed the UMARK NSNs 1670-01-454-9945 and 1670-01-501-8140 to NSN 1670-01-641-7829.

All the slings associated with the UMARK kit are condition-based maintenance items, so you maintain them using the guidance in TM 1-1670—261-23&P (Jun 16, w/Ch1,

Nov 17). The slings have a 15-year service life, but no longer have lift limitations.

If you still have either of the old UMARKS, NSNs 1670-01-501-8140 and 1670-01-454-9945, they must be demilled and turned into DLA Disposition Services (DLA-DS). Follow the instructions in MWO 1-1670-260-50-3.

If you have questions about the UMARK turn-in process, contact the AGSE help desk at:

usarmy.redstone.peo-avn.mbx.agse-help@army.mil



Apache: Inspection Kits Now Available

/ Published Nov. 8, 2019 Mechanics,

PM Apache heard your concerns about inspections on the aircraft and gun.

A lot of the angst dealt with the hours required to locate and gather parts for the 250hour, 500-hour and six-month gun inspections. PM Apache answered those concerns with a series of kits that reduce the man-hours associated with gathering parts and getting the job done.

Here are the Apache inspection kits you'll need:

- E-Model 250-hour inspection kit, NSN 4920-01-657-9111.
- E-Model 500-hour inspection kit, NSN 4920-01-658-8362.
- D-Model 250-hour inspection kit, NSN 4920-01-564-0311.
- D-Model 500-hour inspection kit, NSN 4920-01-564-0327
- Apache D-Model and E-Model six-month 30mm gun inspection kit, NSN 4920-01-564-0333.

Get your orders in **now** so you're ready to do inspections when the time comes.

For more information on the kit component list and quantities or if you have questions, recommendations or suggestions for future updates, email David Robinson:

david.a.robinson56.civ@army.mil



Apache: Helmet Chinstrap Needs Care

/ Published Nov. 8, 2019

BLUF: Protect your head by ensuring your HGU-56/P helmet is secure and functioning; inspect chinstrap for fraying and ensure it's properly threaded through the D-rings.



Photo by Pierre Courtejoie

ALSE techs, NCOs and flight crews,

Protecting your noggin is vital during any aircraft emergency. Part of that protection is making sure the chinstrap on your HGU-56/P helmet is secure and functioning.

Recently, a crewmember received preventable injuries during a helicopter emergency, all because their helmet came off during the crash. The likely cause was a frayed chinstrap.

The definition of fraying is: to unravel or become shredded or worn at the ends or

edges, typically through constant rubbing. Another definition is: separation of whole yarns at the edge of the webbing structure.

Operator and maintainer PMCS say the helmet shouldn't be used if the chinstrap is frayed. And there's no percentage of fraying allowed either. **Any** fraying means the helmet is non-mission capable.

During PMCS, keep an eye out for fuzzing on the chinstrap. Fuzzing is usually caused by continuous contact with hook and loop fasteners and is not considered fraying. If you spot fuzzing, trim it down to the surface using scissors or a razor blade.

Remember: Repeated use of the chinstrap snaps from putting on and taking off the helmet may result in misaligned double D-rings. Misaligned D-rings won't securely grip the chinstrap.

An unsecured chinstrap decreases helmet stability and can lead to head injury. So **always** verify that the chin strap is threaded through the two D-rings when wearing the HGU-56/P helmet.



Apache: Return Servo-Cylinders in Original Containers

/ Published Nov. 8, 2019

BLUF: When returning unserviceable Apache servo-cylinders for overhaul, always use their original, reusable, shipping and storage containers.



Photo by Staff Sgt. Oscar Gollaz

Mechanics,

When returning unserviceable Apache servo-cylinders for overhaul, your shipping container makes all the difference. To ensure the servo-cylinders arrive safely and with no further damage, always use their original, reusable, shipping and storage containers.

A makeshift container, box or crate may look sufficient, but chances are good the servo-cylinders inside will arrive at the repair facility with even more damage! Even worse, using the wrong container makes your unit liable for the cost of a new container. While the containers aren't incredibly expensive, the costs can add up.

Your installation LRC Supply & Services Division (Packaging and Crating or PPP&M) usually keeps a supply of the white, multi-purpose containers on-hand, such as the one shown below.



Use original container to ship servo-cylinder

Check with your Combat Aviation Brigade's supply support activity (SSA) if you need a container.

Here's a short list of servo-cylinders and the containers to use for each:

Servo-cylinder	Servo-cylinder NSN	Container NSN		
Directional servo-cylinder	1650-01-273- 7610	8145-00-529- 8585		
Longitudinal servo-cylinder	1650-01-494- 0084	8145-00-529- 8585		
Collective/Lateral servo- cylinder	1650-01-494- 0083	8145-00-549- 6647		



Apache: USB Interface Device Now Available

/ Published Nov. 18, 2019



Photo by Sgt. Aaron Braddy

Mechanics,

If you haven't received it yet, be on the lookout for the new MIL-STD-1553 Apache USB interface device, NSN 5995-01-668-2169 (PN ACS1553M, CAGE 644Y8). The Apache PM started distributing the device in mid-2019.

The official nomenclature of this device is "*special purpose, electrical cable assembly*."

Each battalion will receive 10 devices for use in conducting maintenance data recorder (MDR) downloads. The new device replaces current MDR download devices such as the MSD-V internal card, the PCMIA card or the Express card made by Data Device Corporation (DDC).

Software for the device is available on the Apache JTDI webpage:

https://www.jtdi.mil/

It can be installed without removing the DDC software, except for one file. Just log in with your CAC, Click <u>Apache</u> in the My Sites dropdown menu. Next, click on <u>Software</u> and scroll down to the links under Logbook Resources.

If DDC software is installed, installation of the AIM software will prompt you to remove or rename the ACE4.dll file. By renaming the ACE4.dll you'll be able to switch between the different device types. It's recommended you rename the unused file ACE4-DDC.dll or ACE4-AIM.dll, as appropriate, when switching between devices.

When you perform an MDR download, the Longbow Integrated Maintenance Support System—Ground Analysis Software (LIMSS-GAS) looks for the ACE4.dll and attempts to communicate with the device. LIMSS-GAS prompts an error if the ACE4.dll doesn't correspond with an available new 1553 device.

If that happens, you can test the installation without actually connecting to the aircraft by following these steps:

- 1. Launch LIMSS-GAS.
- 2. Select "Download MDR Data."
- 3. Select "MDR Status."
- 4. An error code of "303: BC no response" indicates a successful installation. It means LIMSS-GAS and the device were able to communicate, but the device was not able to communicate with the MDR.



H-60 Aircraft: Got Utility Helicopter Safety Questions?

/ Published Nov. 18, 2019 Brief, Having safety issues with any of your H-60 helicopter models?

Here's an email address for field units to submit inquiries about any issues affecting safety:

usarmy.redstone.peo-avn.mbx.avn-uh-po-safety@army.mil



Black Hawk/Apache: Don't Hoard T700-GE-701C PTMs

/ Published Nov. 25, 2019

BLUF: Power train module, NSN 2840-01-286-1909 is no longer being used and is replaced by NSN 2840-01-503-1700.



Courtesy Photo, 40th Combat Aviation Brigade

Mechanics,

Returning unserviceable parts that are no longer being used benefits you.

If you have any unserviceable T700-GE-701C power turbine modules (PTMs), NSN 2840-01-286-1909, stockpiled in your back shop area, this part is no longer used on the Apache and Black Hawk aircraft and should be turned in. That's because it's being replaced by NSN 2840-01-503-1700.

All of the -1909 PTMs should be turned in to help with the existing overhaul programs so the item can be converted to the -1700 configuration.

This guidance applies to **all** unserviceable parts. Whenever you order a repairable

item, an unserviceable one should be turned in to receive the unserviceable credit. That offsets the full purchase price and helps out the depot repair folks.



H-60 Black Hawk: Get Parts Turned in for Repair

/ Published Nov. 25, 2019 Mechanics,

Maintenance and overhaul programs rely on you to do your part! In order for the supply system to meet the demands for H-60 series helicopter components, unserviceable Black Hawk parts must be turned in for repair **ASAP**.

Without those unserviceable items, on-hand inventory takes a nosedive and, results in critical shortages. That means you wait longer for parts and readiness takes a hit.

If you have any of the following unserviceable components lying around the hangar, get 'em turned in to the repair programs:

ltem	Component	NSN	PN
1	Tail rotor servo	1650-01-305- 6954	2227000-17 70410-06520-046
1		1650-01-625- 0436	2227000-19 70410-06520-048
2	Primary servo	1650-01-143- 1226 1650-01-625- 0164 1650-01-114-9538	274000-1027 274000-1031 274000-1035
3	Main landing gear	1620-01-231- 1831 1620-01-109- 7195 1620-01-111-0193 1620-01-181- 8288	70250-12051-042 70250-12051-043 70250-12051-044 70250-12051-045
4	Electro-mechanical actuator	1615-01-242- 2066	CU09609213

5	Electro-mechanical actuator	1680-01-571- 7578 1680-01-261- 2044	70400-06641-201 70400-06641-117
6	Collective servo	1650-01-140- 0967 1650-01-624- 9557	274600-1045 274600-1049
7	APU generator	6115-01-300-9669 6115001-252- 0367	70550-02032 28B262-35-C
8	Bell crank	1680-01-158- 9685	70400-08102-045
9	Engine Starter	2995-01-079- 9316	407711
10	Electro-mechanical actuator	1680-01-557- 9613	70400-02260-128
11	Cylinder assembly	1650-01-647- 4590 1650-01-375- 3160	70410-02561-115 70410-02561-112
12	Shock absorber	1620-01-421- 0890	70250-13101
13	Connecting link	3040-01-287- 2348	70400-08151-061
14	Connecting link	3040-01-197- 1745	70400-08110-060
15	Exhaust duct	2840-01-619- 1022	70308-03025
16	Exhaust duct	2840-01-619- 1030	70400-08110-060
17	Drag brace landing	1620-01-523- 0905	70250-22010-043
18	RH, module assembly	1560-01-236- 3078	70308-03613-042
19	Walking beam assembly	1680-01-158- 9653	70400-08104-048

Have a question for the item manager?

- For Items 1-2, contact April Whisenant at (256) 313-5111.
- For Items 3-6, contact William Brown at (256) 843-1106.

•	For Items 7-8, contact Angela Duncan (256) 955-0147.
•	For Items 9-12, contact Adam Nickelson at (256) 955-8222.
•	For Items 13-19, contact Schylo Phillips at (256) 313-5689.



MEDEVAC: Breeze-Eastern Rescue Hoist Training Available

/ Published Nov. 25, 2019 Mechanics,

There's a great need for maintenance training on the Breeze-Eastern external rescue hoist.

To support that need, training is available through Vertical Lift Consulting at:

https://verticalift.com

At this website, you can sign up for available slots in upcoming Breeze-Eastern training or MEDEVAC hoist workshops, request training for your unit, see upcoming events, read hoist-related blog articles, and access a library of other materials. Access to most of the information is restricted and requires registration and login privileges to the website.



Hoist training (courtesy of Vertical Lift Consulting website)

Registration is limited to those who have completed the Breeze-Eastern sponsored training, or those with a .mil or .gov email address.

Read more about hoist training opportunities at the website below (click on picture to access the site)

	HOME	TRAINING ~	EVENTS ~	BLOG	LIBRARY	CONTACT	LOGIN			
Looking for hoist training on the BL-29900-30-1 external n	escue hoist (US /	Army)? Then doi	n't miss out!							
There are many opportunities to be taken advantage of:										
Training on-site at Breeze-Eastern	ining on-site at Breeze-Eastern									
• Breeze-Eastern hosts four two-day hoist maintenance w NJ.	orkshops per yea	r at their location	n in Whippany							
These workshops are conducted at no cost to the attend	ee (unit pays TD)	Y costs).								
· Attendees that complete both days of training will recei	ve a serialized H	oist Maintenance	Training							
Certificate from Breeze-Eastern.										
Class sizes are limited so check the events calendar for	the available cou	rses and sign up	today!							
Hoist Workshops hosted by PD MEDEV.	AC									
• PD MEDEVAC hosts four two-day hoist maintenance v	vorkshops per ye	ar. Location vari	es between							
Redstone Arsenal (Huntsville), AL and Ft. Rucker, AL.										
• These workshops are conducted at no cost to the attended	ee (unit pays TD)	Y costs).								
· Attendees that complete both days of training will recei	ve a serialized H	oist Maintenance	Training							
Certificate from Breeze-Eastern.										
• Class sizes are limited so check the events calendar for	the available cou	rses and sign up	today!							
Pre-deployment Training										
• As a special "Thank You" to our Warfighters, Breeze-E	astern offers two	days of hoist ma	intenance							
training at the unit's location. These training events are			UH pre-							
deployment visits or DES Hoist Training Support Packa	ige (TSP) events.									
• This training is conducted at no cost to the unit.										

Click on picture to access website



AH-64: Avoid the Green Tag Snag

/ Published Nov. 25, 2019



Photo by Staff Sgt. Thomas Mort

Mechanics,

When turning in an unserviceable component, it's important you fill out the green tag DD Form 1577-2, *Unserviceable (Reparable) Tag-Materiel,* with the correct information.

That hasn't been the case lately for the Apache's fire control radar (FCR). And that documentation is critical for producing accurate failure reporting, analysis and corrective action system (FRACAS) for the FRC program.

That green tag info gives the manufacturer the data needed to accurately diagnose faults and repair the FCR. It also allows them to discern trends by individual aircraft, aircraft type and failure modes. That lowers operational and sustainment costs for the

component.

Not sure how to fill out the green tag? Follow this example:

-	NSN, PART NO. AND ITEM DESCR	PTION	UNSERV CEABLE (REPARABLE)		
s, eltechy the c not the ore	7600 2300 - 109 POWER SUPPLY CONTROL	. Assembly	METECTION ACTIVAL DE 1-3 00 A28 MEASION ON REMAINING CONDITION INTERNAL FAILURE FAULT CODES	Specific bit code callouts, failure	
			2F01 : 2F11 : 2F21 : 2F3 : 2F81	mode filled out	
s eq file de	SERIAL NO LOT NO	UNIT OF ISSUE CLANTITY	AH-64D 04-05429	GAD or ALL GAE an	
and poly and	NA IAN: TM 1-1520 LONG SMR: PRODD CASE: 04939	Row I	OS PERMINE AND		

Click on image above for PDF version



Apache/Black Hawk: Engines Can't Take a Steppin' and Keep on Trekkin'

/ Published Nov. 25, 2019

BLUF: Do not use the engine as a step stool. Only use approved step zones on your helicopter.



Photo by Master Sgt. Becky Vanshur

Mechanics,

If you're confused about why we keep mentioning how Black Hawk and Apache engines are no step zones, it's because your feet are still breaking delicate engine connectors and parts.

Every time you use an engine as a stepstool or shortcut across a helicopter, stuff gets broken. That defeats the purpose of preventive maintenance.

Some of you step on the engine's accessory gearbox, hydromechanical unit and IPS blower while gently traversing the engine nacelle—not realizing you're damaging

seals, splines and connectors at the same time.





Consider the entire engine as a **no-step** zone, though. Stepping on the engine results in broken parts, and all you'll get for your effort is mission aborts, unscheduled maintenance and aircraft downtime.

Engine reliability depends on keeping your feet away. And it's a good idea to spread the word to others.



Black Hawk: Turn in Unserviceable H-60 Series Landing Lights

/ Published Nov. 25, 2019

Brief, The supply system is in critical need of unserviceable H-60 landing lights, NSN 6220-01-105-6582 (PNs 70553-01104-102 and 45-0190-7). Turn in these needed assets **now** for repair.

Landing light returns have drastically decreased and are needed **now** for the maintenance and overhaul repair program. Without turn-ins, you might not get the repaired part you need later for your helicopter.



Aviation: Corrosion Prevention Never Ends

/ Published Nov. 26, 2019

Staying on top of corrosion saves money and equipment. To stay in the fight, the AMCOM Corrosion Program Office (CPO) recommends Soldiers use supplemental information in TM 1-1500-344-23-4 to provide ordering information for consumable materials and equipment used to prevent, control, and repair corrosion damage to aircraft and avionics.

Remember! Equipment-specific IETM procedures and materials always take precedence over general practice manuals.

For more information, contact the AMCOM CPC's Center of Excellence (CoE) website:

https://amcomcorrosion.army.mil

Here's a list of authorized corrosion preventive compounds:

30 September 2016

NAVAIR 01-1A-509-4 TM 1-1500-344-23-4

Nomenciature	Specification/ Part No.	National Stock	Unit of Issue	Intended Use		able)n
	T artito.	Number	10000		AC	A
Corrosion Preventive Compound, Solvent Cutback, Cold Application	(Hard film) Class II Grade 1 (Hard film, low VOC)	8030-00-231-2345 (8030-01-396-5731 8 8030-01-396-5732 (QT GL PT GL CN (5 GL)	Class I: high VOC materials. Class II: low VOC (<340 g/l) materials. Grade 1: Use for long term protection of metal surfaces against corrosion with or without covering (indoors or outdoors).	x	
	Class I Grade 2 (Soft film) Class II Grade 2 (Soft film, Iow VOC)	8030-00-118-0686 8030-01-149-1731 8030-00-244-1297 8030-00-244-1298 8030-00-244-1295 8030-01-534-5768	CN (11 OZ) QT GL CN (5 GL) DR (55 GL) GL	Grade 2: Use for protection of metal surfaces against corrosion during rework or storage, and extended indoor protection of interior or exterior surfaces without the use of barrier materials. Can be used for limited outdoor protection where temperatures are not extreme.	x	
	Class I Grade 3 (Soft, oily film) Class II Grade 3 (Soft, oily film, low VOC)	8030-00-837-6557 8030-00-244-1296 8030-00-244-1293 8030-01-396-5735 8030-01-347-0971	PT GL CN (5 GL) PT CN (5 GL)	Grade 3: Use for indoor and short term outdoor protection where surfaces can be recoated. Water displacing, but no lubrication or penetrating properties.	x	×
	Class I Grade 4 (Transparent, non- tacky soft film) Class II Grade 4 (Transparent, non- tacky soft film, low VOC)	8030-00-903-0931 8030-00-062-5866 8030-01-396-5738 8030-01-396-5743 8030-01-347-0972	PT GL PT GL CN (5 GL)	Grade 4: Use for protection of metal surfaces against corrosion during indoor storage, limited outdoor preservation, and fastener installation. Use on control cables, fasteners, bare metal areas, or anywhere temporary (30 days or less) protection is needed.	x	x
Corrosion Preventive Compound, Water Displacing, Transparent, (formerly	MIL-DTL-85054 Type I Class CO ₂ Type I Class CO ₂ (Cor-Ban 35, dyed)	8030-01-347-0980 8030-01-531-7358	CN (11 OZ) BX (12, 12 OZ cans)	CAUTION MIL-DTL-85064 should not be used around liquid oxygen fittings. Type I is aerosol. Type II is bulk form.	x	×
AMLGUARD)	Type II Type II (Cor-Ban 35, dyed)	8030-01-347-0983 8030-01-347-0981 8030-01-347-0982 8030-01-615-4733 8030-01-531-7360	BT (32 OZ Sprayer) QT CN (5 GL) BX (12, 8 OZ can with brush top) CN (5 GL)	Use for temporary repair of small paint damaged areas (chips, scratches, or cracks). Intended for use on non- moving parts not requiring a lubricated surface, such as fasteners, seams, access panels, joints, unpainted metal. Use Cor-Ban 35 products if specified by the maintenance manual.	x	×

Table 2-5. Corrosion Preventive Compounds

Click on image above for larger version

30 September 2016

Nomenclature	Specification/ Part No.	National Stock	Unit of Issue	Intended Use	Usable On	
	r arcito.	Number	13500			AV
Corrosion Preventive Compound, Solvent Cutback, Cold Application	MIL-PRF-16173 Class I Grade 1 (Hard film) Class II Grade 1 (Hard film, low VOC)	8030-00-062-6950 8030-00-231-2345 8030-01-396-5731 8030-01-396-5732 8030-01-347-0970	QT GL PT GL CN (5 GL)	Class I: high VOC materials. Class II: low VOC (<340 g/l) materials. Grade 1: Use for long term protection of metal surfaces against corrosion with or without covering (indoors or outdoors).	x	
	Class I Grade 2 (Soft film) Class II Grade 2 (Soft film, low VOC)	8030-00-118-0666 8030-01-149-1731 8030-00-244-1297 8030-00-244-1298 8030-00-244-1295 8030-01-534-5768	CN (11 OZ) QT GL CN (5 GL) DR (55 GL) GL	Grade 2: Use for protection of metal surfaces against corrosion during rework or storage, and extended indoor protection of interior or exterior surfaces without the use of barrier materials. Can be used for limited outdoor protection where temperatures are not extreme.	x	
	Class I Grade 3 (Soft, oily film) Class II Grade 3 (Soft, oily film, low VOC)	8030-00-837-6557 8030-00-244-1296 8030-00-244-1293 8030-01-396-5735 8030-01-347-0971	PT GL CN (5 GL) PT CN (5 GL)	Grade 3: Use for indoor and short term outdoor protection where surfaces can be recoated. Water displacing, but no lubrication or penetrating properties.	x	x
	Class I Grade 4 (Transparent, non- tacky soft film) Class II Grade 4 (Transparent, non- tacky soft film, low VOC)	8030-00-903-0931 8030-00-062-5866 8030-01-396-5738 8030-01-396-5743 8030-01-347-0972	PT GL PT GL CN (5 GL)	Grade 4: Use for protection of metal surfaces against corrosion during indoor storage, limited outdoor preservation, and fastener installation. Use on control cables, fasteners, bare metal areas, or anywhere temporary (30 days or less) protection is needed.	x	x
Corrosion Preventive Compound, Water Displacing, Transparent,	MIL-DTL-85054 Type I Class CO ₂ Type I Class CO ₂ (Cor-Ban 35, dyed)	8030-01-347-0980 8030-01-531-7358	CN (11 OZ) BX (12, 12 OZ cans)	CAUTION MIL-DTL-85054 should not be used around liquid oxygen fittings. Type I is aerosol. Type II is bulk form.	x	×
(formerly AMLGUARD)	Type II Type II (Cor-Ban 35, dyed)	8030-01-347-0983 8030-01-347-0981 8030-01-347-0982 8030-01-615-4733 8030-01-531-7360	BT (32 OZ Sprayer) QT CN (5 GL) BX (12, 8 OZ can with brush top) CN (5 GL)	Use for temporary repair of small paint damaged areas (chips, scratches, or cracks). Intended for use on non- moving parts not requiring a lubricated surface, such as fasteners, seams, access panels, joints, unpainted metal. Use Cor-Ban 35 products if specified	x	x

Table 2-5. Corrosion Preventive Compounds



Aviation: Need Condition Code Tags?

/ Published Nov. 26, 2019 Dear Sergeant Blade,

I'm the production control person in my FMS shop, and I need an NSN for the yellow DD Form 1574, *Serviceable Tag-Materiel.* Can you help me out?

Mr. J.P.

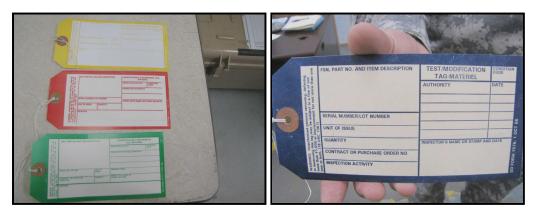
Dear Sir,

I sure can.

While the yellow (DD Form 1574), red (DD Form 1577), green (DD Form 1577-2), and blue (DD Form 1576) condition code tags don't have NSNs, you can order them through the Army Media Distribution Division (MDD). To set up an account, email the MDD customer service help desk at:

usarmy.stlouis-mo.106-sig-bde.mbx.apdcustsrv@army.mil

You can also call them at (314) 592-0910 to sign up for an account number and password. If you already have an account, order the forms by going to:



https://epubs.army.mil/orderingportal

Yellow, red, green and blue condition code tags

When using condition code tags, remember to fill them out completely and include accurate information to prevent delays. Pay close attention to providing details in the REMARKS block about the part. That allows the person examining the part to understand and address the problem.

When a part is turned in with an incomplete condition code tag, time and money are wasted.

As a reminder, here's a list of the tags and what they're used for:

1. The yellow tag, DD Form 1574, is for a repaired component sent back to you from aviation support battalion (ASB) or depot.

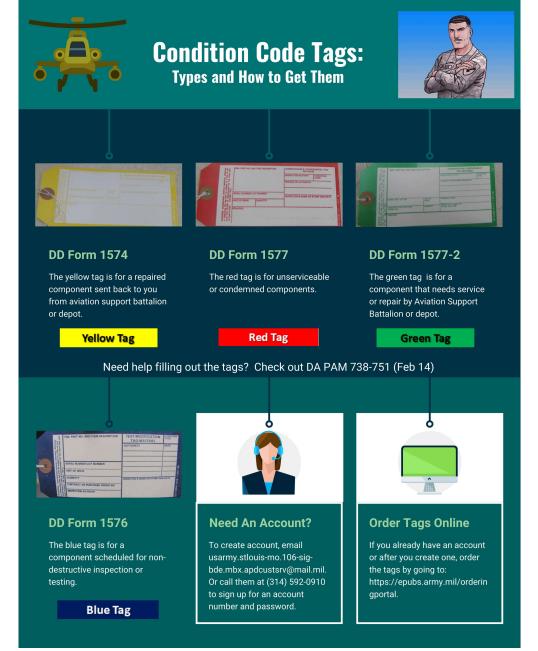
2. The red tag, DD Form 1577, is for unserviceable or condemned components.

3. The green tag, DD Form 1577-2, is for a component that needs service or repair by ASB or depot.

4. The blue tag, DD Form 1576, is for a component scheduled for non-destructive inspection (NDI) or testing.

If you need help with filling out the green, red, blue or yellow tags, check out DA Pam 738-751, *Functional Users Manual for the Army Maintenance Management System–Aviation* (Feb 14).

SFC Blade



Click on image above to view PDF version



H-60A/L: Position Critical for Oil Cooler Sensor Mounting Block

/ Published Nov. 26, 2019 Mechanics,

During a recent Black Hawk test, technicians discovered the oil cooler sensor mounting block wasn't installed correctly.

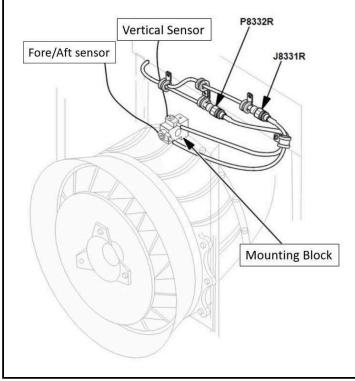


Oil cooler sensor mounting block installed incorrectly

The sensor block was installed with the fore/aft sensor facing the right side of the aircraft instead of facing forward.

The fore/aft sensor is the primary sensor used to calculate the oil cooler shaft balance inches per second (IPS) and is also used to calculate bearing faults. If you change the sensor's position, it becomes less sensitive and can miss detecting faults.

WP 1955 in TM 1-1520-237-23&P (Jan 19) doesn't specify the mounting direction. However, Figure 1 of the work package does contain a drawing showing the correct orientation.



Follow TM to install oil cooler sensor mount and sensor correctly

During your next preventive maintenance daily (PMD), take a moment to eyeball the oil cooler sensor block to make sure it's installed in the right position. While you're at it, ensure the oil cooler lines aren't in contact with the accelerometer.

Accelerometers are sensitive components. Correct installation will help ensure the safety of your aircraft and you'll have less of a maintenance burden.



Lakota: Test EPS Before Flight

/ Published Nov. 26, 2019 Air crews,

Keeping your Lakota helicopter's emergency power supply (EPS) charged depends on you performing the proper tests.

The EPS provides 30 minutes of power to the emergency exit lighting and the standby horizon if there's a complete electrical failure. It's powered by the PS-835 battery on the right-hand side of the aircraft behind the sound proofing panel.



Test the emergency power supply using the BAT HOR/EXIT test during pre-start checks. When you move the BAT HOR switch to the TEST position, you should see the EMER BAT LED turn green on the overhead panel, the HOR BAT lights up on the CAD, and the EXIT panels illuminate. That means the power supply is working properly.

But if the LED changes from green to red, or turns red immediately during the test, the battery isn't sufficiently charged. Make sure you document the problem in the aircraft notebook so maintainers can troubleshoot the system according to aviation maintenance manual AMM 34-24-00, 1-1.

The emergency battery is recharged by the external power unit (EPU) or the aircraft generators. You must make sure the EM/EX switch is in the ARM position to charge the battery while in flight.

To keep the emergency battery from draining and to prolong its life, make sure both the STBY HOR and EM/EX are turned **off** at the end of the flight before you leave the aircraft.



UAS: Protect Gray Eagle Aircraft from Cold

/ Published Nov. 26, 2019



Gray Eagle

Gray Eagle, Extended Range

Maintainers and operators,

It's a fact that accumulation of snow, ice, frost and moisture on aircraft surfaces places the aircraft in adverse conditions that warrant special care.

Get Smart

When taking care of your Gray Eagle, NSN 1550-01-619-2239, and Gray Eagle Extended Range, NSN 1550-01-648-0888, in winter weather, check out the snow and ice removal procedures in TM 1-1550-696-23&P (June 19). Operators should also check out Chapter 5 of TM 1-1550-697-10-2 (Dec 18) and eyeball AR 95-1, *Flight Regulations* (Mar 18).

When you bring an aircraft from a warm environment to a cooler environment, moisture and frost build on the surface of the aircraft.

And icing is most common in temperatures ranging from 0°C (32°F) to -20°C (-4°F), along with visible moisture such as clouds, drizzle, rain or wet snow.

For more information on icing, check out Para 3-7 of TC 3-04.4, *Fundamentals of Flight* (Dec 16). And make sure you review AR 95-1 for specific rules concerning flight in icing conditions.

Cold Weather Maintenance

There are costs associated with not taking care of your aircraft in cold weather conditions. So take the time needed to perform maintenance. Remove as much snow and ice as possible from the aircraft surfaces with a soft brush. Then apply a light coat of de-icing fluid to affected surfaces, and immediately wipe dry. Not doing this could cost you millions per aircraft!

Caution

Icing is a serious matter. So remove all moisture from aircraft surfaces when the ground temperature is at or below 0°C (32°F). If you don't, much longer takeoff ground roll, decreased climb rate, and potential damage to or loss of the aircraft may result.

CBRN



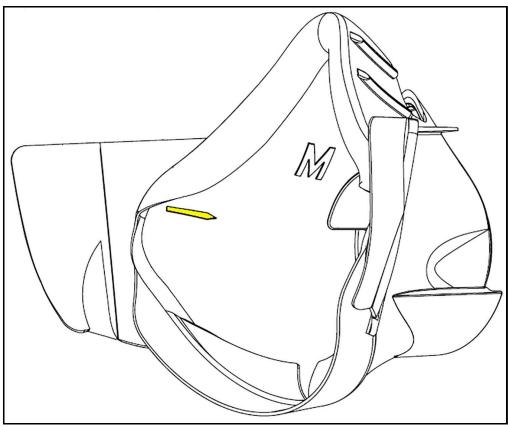


JSGPM: Nosecup News

/ Published Nov. 4, 2019 Dear Editor,

As members of the Command Maintenance Evaluation and Training Team (COMET), we've come across a couple of nosecup issues on the Joint Services General Purpose Mask (JSGPM):

• There is in an arrow on the nosecup to help you properly install the internal drink tube. Most Soldiers don't realize that. The arrow should point to the top of the internal drink tube. That way the drink tube moves toward your mouth when you drink instead of away from it. Adjust the drink tube if necessary.



Pay attention to arrow (in yellow above) when installing drink tube

Some Soldiers think the nosecup should be removed when they clean the mask. Not true! If you reinstall the nosecup wrong, it affects air flow in the mask and can cause the eyelenses to fog up. WP 0017 in TM 3-4240-542-13&P (May 08) gives a detailed cleaning procedure for the mask. It doesn't include removing the nosecup.

David Whitmire Damon Franklin JBLM, WA

Editor's note: More good tips from the JBLM COMET! Thanks for your willingness to help Soldiers.



M26 and M12A1 Decon: Protection from the Cold



150724-A-IL912-042

Soldiers of the 318th Chemical Biological Radiological Nuclear Company (Area Support) from Birmingham, Ala., conduct decontamination exercises at Fort McClellan, Ala., during their Extended Combat (annual) Training July 24. Here, an M-12 decon truck is used to decontaminate an affected building and its surroundings. The ability to counteract the effects of such WMD events on equipment, personnel and the environment contribute to the survivability of U.S. forces and, should the unit deploy, foreign soldiers and citizens.

/ Published Nov. 21, 2019

Cold temperatures are not your friend if your M26 and M12A1 decons sit outside for long periods. In freezing weather, you should protect them.

It's almost impossible to drain out all water from the M26 and M12A1s. That water can freeze and damage things like tanks and pumps, which are expensive to repair.

Stop cold in its tracks like this:

For the M26, freeze protection is easy. Just run antifreeze through it. Follow the *Measures for Storing* and *Frost Protection in Excess of 30 Days* guidance in WP 67 of TM 3-4230-238-23&P (Nov 09, w/ch 1,



COMET CBRN Advice

/ Published Nov. 26, 2019



Photo by Cpl. Jennifer Gay

Dear Editor,

While helping CBRN units, we've come up with a few suggestions to make CBRN rooms run more efficiently:

- Make sure the CBRN specialist is actually trained to run a CBRN room. We've seen several instances of Soldiers assigned the job who have no idea what they're supposed to do. Most posts have a two-week course that gives the basics of managing a CBRN room. Your local AMC SCB LAR or your training officer can point you in the right direction.
- Pay attention to calibration deadlines. All of the radiac equipment in the CBRN room requires calibration. But it's the M41 Protection Assessment Test System (PATS) that's most often overlooked. It's supposed to have a complete overhaul every 18 months. When PATS goes for years with no

calibration, it gives bad readings and flunks good masks while passing bad masks.

It's simple to tell if an item needs calibration. Just check its DA Label 80. It gives the last calibration date. If the label's gone, check with TMDE. They'll have a record of the last calibration.

Remember to notify TMDE when transferring equipment to another unit. That lets them track the location of equipment needing calibration.

- When you transfer masks, change out the drink tube. That's just basic hygiene. You don't want to be drinking through someone else's drink tube.
- For goodness sake, don't use drip pans for cleaning and sanitizing your masks. Who knows what's been in those pans? NSN 7240-01-094-4305 gets the 5-gal bucket you're supposed to use.
- For the joint services general purpose mask (JSGPM), it's a good idea to keep some basic items as benchstock. Here are the items that often disappear or get damaged:

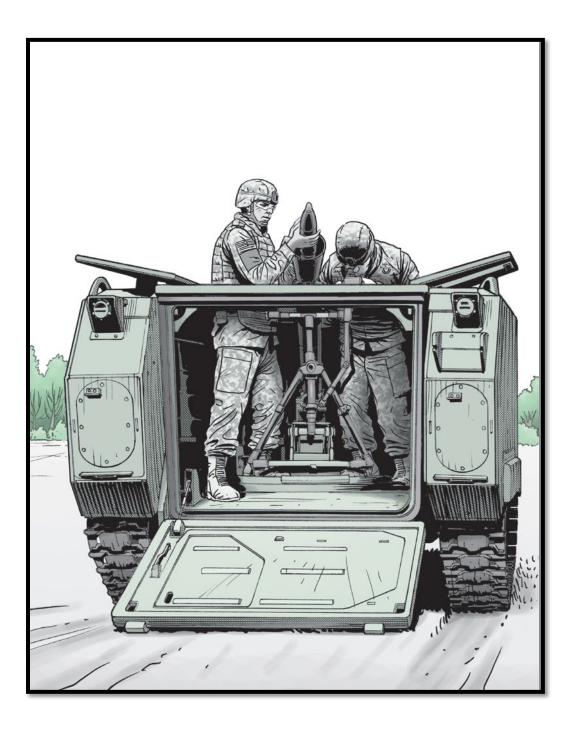
Item	NSN	Qty
Valve disk	4820-01-528-9292	10
Valve disk	4820-01-528-9291	10
Outlet valve cover	4240-01-529-1400	1
Quick coupling half	4224-01-539-5593	1
Air deflector	4240-01-540-2888	1
Internal drink tube	4224-01-529-1399	1
Water canteen cap	8465-01-529-9800	1
Operator cards	7690-01-529-1398	1

Terry Brown Randy Pond Terri Gill Rony Reyes Jeovanny Cordova Ft Carson, CO

Editor's note: Great advice, again, from all of you. Thanks!

For the M12A1, follow the *Operator Maintenance Operation under Usual Conditions* instructions in WP 11 of TM 3-4230-237-10 (Jul 12). If the M12A1 is going to be stored for less than 24 hours, follow Step 1. For 24-48 hours, follow Step 2. For more than 48 hours, follow Step 3.

Combat Vehicles





Combat Vehicles: What's the CVE Program?

/ Published Nov. 25, 2019

An important component of Army readiness is TACOM's Combat Vehicle Evaluation (CVE) Program. Under CVE, more than 9,000 combat vehicles are inspected and evaluated each year to determine if they should be sent to depot for overhaul.

Vehicles in National Guard and Reserve units get a Go/No Go inspection every year, while active Army vehicles are inspected every two years. No vehicles are inspected outside of this inspection timeline.

CVE isn't a vehicle "swap out" program. And just because a vehicle qualifies for depot repair doesn't necessarily mean that vehicle will be sent to depot. In fact, a vehicle can qualify for depot repair and still be mission capable.

When Is a Vehicle Sent to Depot?

A vehicle qualifies for depot repair if it:

- exceeds the scoring threshold used in the evaluation process.
- isn't repairable by lower than depot-level maintenance.
- has suffered extensive fire or accident damage.

The evaluation is intended to provide a snapshot of the combat vehicle fleet's overall health. Vehicles either qualify for depot-level maintenance or are re-inspected during the next evaluation cycle. This allows the worst-case vehicles to be sent to depot.

Keep in mind that the CVE program only **evaluates** vehicles; it doesn't control which vehicles are sent to depot. That decision rests with the weapon system manager (WSM) for each vehicle.

However, by providing written justification, commands can nominate vehicles for depot. Then the CVE program manager makes the final decision to evaluate

nominated vehicles based on the command's input.

What are Vehicles Evaluated On?

CVE evaluations are broken down into nine areas for non-turreted vehicles and 12 areas for turreted vehicles. The areas of evaluation are:

- Hull, front
- Hull, final drives
- Hull, upper sides
- Hull, lower sides
- Hull, rear
- Hull, top
- Hull, bottom
- Hull, interior
- Hull, electrical system
- Turret, exterior
- Turret, interior
- Turret, traversing

Which Vehicles are Evaluated?

The vehicles currently evaluated under CVE include the: M109A6, M1068A3, M113A3, M992A2, M113 OSV, M60A1 AVLB, M2/M3/M7BFIST FOV, M113 MBT, M48A5 AVLB, M9 ACE, M1A1 FOV, Stryker FOV, M1064A3, M1A2 FOV, M577A3, M88A1/A2, M104 Wolverine and the M1 AVB. The MLRS is inspected under AMCOM's CVE program.

For more information on the TACOM CVE program, contact Aaron Williamson, CVE team leader, at (586) 282-7087 / DSN 786-7087 or email:

aaron.d.williamson4.civ@mail.mil



BDAR Kit: Get One Today!

/ Published Nov. 26, 2019

The TRADOC Project Office (TPO) for Battlefield Recovery/BDAR has developed a new and improved battle damage and repair kit for all ground combat and tactical systems.

The improved kit, NSN 2590-01-659-5620, has all the capabilities of the previous kit, with a few new components.

The kit can also be split into sub-kits to save space on missions. For example, an M1A2 tank crew wouldn't require a tire repair kit, but wheeled vehicle crews would. Both might need the electrical and hydraulic kits.

The new BDAR kit is a Class IX item and can be ordered through the supply system right now.

To make the new kit its absolute best, TPO-BR needs your feedback. Tell them how the kit components work and how the kit can be improved. Contact TPO-BR at DSN 298-3050/3488/4115, (410) 278-3050/3488/4415, or by email:

michael.s.deschenes.civ@mail.mil william.l.payson.civ@mail.mil





M2/M3-Series Bradley: When a Leak Isn't a Leak

/ Published Nov. 26, 2019



Photo by Spc. DeAndre Pierce

Crewmen,

Be sure to inspect your Bradley's shock absorbers right away for leaks. Replace any shock absorber, NSN 2540-01-624-5291, that has a Class II or Class III leak.

If the shock has a Class I leak, keep a close eye on it, but *don't* replace it unless the leak gets worse.

The -10 TM currently states that *any* leak requires replacing a shock absorber. The TM is being updated to state replacement is required *only* for shocks with Class II or III leaks. In the meantime, make a pen and ink change to the PMCS tables in your -10 TM.

If you find a shock installed on or after March 2018 with a Class II or III leak, file a Product Quality Deficiency Report (PQDR).



M109A7 Paladin/M992A3 Ammo Carrier: Replace Just the O-Ring, Please!

/ Published Nov. 26, 2019



Photo by Sgt. Jeremiah Woods

This article can potentially save your unit \$2100

Mechanics,

When working on the hydraulic cooling fan for the M109A7 howitzer and M992A3 ammo carrier, you're supposed to inspect the O-ring face seal (ORFS) and quick disconnect (QDC) fittings. The TM says if you find an unserviceable O-ring, replace the applicable ORFS or QDS fitting.

But those fittings range in price anywhere from \$26 for an ORFS fitting to between \$1,093 and \$2,100 for a QDC fitting. It's a lot cheaper and faster to just replace the O-ring instead.

Order O-rings with NSN 5331-00-498-5755. They only cost 57 cents each, so that's a pretty good cost savings over replacing an ORFS or QDC. Replacing just an O-ring will also save you a lot of

time and effort.



M1128 MSG Stryker: Override Rammer Damage

/ Published Nov. 26, 2019

Reading this article could save your unit \$100,000!

Crewmen,

It gets hectic inside your M1128 MGS Stryker during gunnery tables. But do not fire the main gun without making sure the autoloader's rammer assembly is in the HOME position.

The central control panel (CCP) alerts you when the rammer assembly is in the wrong position. Follow the troubleshooting procedures in the -10 TM if you see a caution or warning.

But it's easy to overlook the CCP when you're trying to quickly identify and fire on targets. And if the combat override is engaged, or you're using the emergency manual firing device (master blaster), the main gun will fire even if the rammer assembly isn't in the HOME position. Goodbye rammer assembly!

So whenever the combat override is engaged or you're using the master blaster, always eye the rammer assembly closely to make sure it's in the HOME position. If you fire with the rammer assembly in the wrong position, you could cost your unit nearly \$100,000! That's how much it costs to replace the rammer assembly.



Photo by Staff Sgt. Matthew Johnson



Stryker: Protect Vehicle from Battery Box Catastrophe

/ Published Nov. 26, 2019 Crewmen,

Unsecured battery box covers can damage your vehicle and even seriously injure you or your fellow Soldiers if your Stryker's involved in a rollover accident.

The battery box cover and batteries will fly around the crew compartment if the cover isn't tightened down. That'll cause expensive damage-and maybe seriously injure you and your fellow Soldiers!

Take a minute during Before PMCS to check the battery box cover. If it's latched good and tight, you're ready for your mission. If the battery box cover can't be secured because of damage to the cover or latches, tell your mechanic right away.



Photo by Spc. Ethan Valetski



Stryker: Service Kits NSNs

/ Published Nov. 29, 2019

Sometimes it can be hard to track down the right NSNs for service kits. That's a problem when it's time to do the required semi-annual and annual service for your unit's Strykers.

But no worries! Make things easy on yourself by taking note of the NSNs below. They'll get you what you need to do services on your vehicles and keep them combat ready:

Description	NSN 4330-
C7 semi-annual service kit	20-007-4536
3126 semi-annual service kit	20-007-0297
C7 annual service kit	20-007-4533
3126 annual service kit	20-007-0295



Photo by Sgt. LaShic Patterson



M88A2 Recovery Vehicles: Shutdown Engine Properly

/ Published Nov. 29, 2019

Heeding this article could save your unit anywhere from \$3,000 to \$300,000+



Photo by Sgt. Randis Monroe

At the end of a long mission, it's tempting to shut down your M88A2's engine as soon as you hit the motor pool so you can grab a shower and some hot food. But being in a hurry can lead to some serious damage.

Not shutting down the engine the right way can cause overheating that damages the engine, turbos and other components. Remember, since there are no auxiliary fans to cool the engine and engine compartment, you have to run the engine at high idle to cool it down before shutting it down.

One unit recently had costly damage to an M88A2 engine after the vehicle towed a tank back from the field. The crew shut down the engine without running it at high idle first. That caused the turbo's bearings to seize up. Don't let that happen to you! A new engine costs \$329,000 while the turbos cost between \$3,000 and \$4,300 each.

Just like it says in the TM, idle the engine at 1,000-1,200 RPM for three to five minutes before shutting it down. Check out WP 0017-1 of TM 9-2350-292-10 (Dec 18) for more info.

Construction





REBS: Retrieve Bridge the Right Way



181022-A-VF357-317

Paratroopers from 127th Airborne Engineer Battalion, 504th Brigade, 82nd Airborne Division, Fort Bragg, N.C. conducted hands on training on the new A4 Rapidly employed bridge system (REBS) on Oct. 22, 2018. / Published Nov. 26, 2019 Crewmen,

Your next mission might go nowhere fast if you don't use the proper procedures while retrieving your Rapidly Emplaced Bridge System (REBS).

The pallet pinwheel drive gear on the launch boom can be damaged if the teeth of the pinwheel don't engage in the grooves between the drive pins in the rail track on the bridge half.

If the boom is lifted while the drive pins are sitting on the pinwheel teeth, the weight of the bridge is supported by the pinwheel instead of the boom. Then the pinwheel assembly bolts shear off and the teeth break, damaging equipment and preventing bridge retrieval.

So before retrieving the bridge, make sure the pinwheel teeth align with the grooves in the bridge. You'll find updated instructions on operating your REBS, including a couple of videos, at:

https://tulsa.tacom.army.mil/Safety/message.cfm?id=GSA20-002.html

Commo/Electronics





SMART-T: Get SMART-T Handbook

/ Published Nov. 18, 2019 Brief, Training Circular (TC) 6-02.21, *Secure Mobile Anti-Jam Reliable Tactical-Terminal (SMART-T) Handbook* (Jul 19), is for Soldiers who are assigned, attached or tasked as SMART-T operators and mission planners. Find the TC at:

the Army Publishing Directorate:

https://armypubs.army.mil

or the Central Army Registry:

https://atiam.train.army.mil/catalog/dashboard



AN/PYQ-10 SKL: Software Updated

/ Published Nov. 21, 2019

The AN/PYQ-10 simple key loader (SKL), NSNs 5810-01-517-3587 and 5810-01-644-4375, LIN C05002, has newly approved user application software (UAS).



AN/PYQ-10 simple key loader (SKL)

The new approved Army baseline and Army approved version is UAS version 11.0. SKL UAS version 12.0 is now an approved version and authorized for use on all SKLs. No SKL versions earlier than 11.0 are authorized or supported.

Note: You can't go from UAS version 10.0 directly to UAS version 12.0. You must have firmware 4.10 installed, and install UAS version 11.0 and then version 12.0.

To download the latest SKL software version, visit the LandWarNet (LWN) eUniversity site:

https://lwn.army.mil/

If you have technical difficulties or questions, contact the SKL Help Desk at DSN (312) 648-2119, (443) 395-2119, or email:

dod.mcsc@mail.mil

POC for this action is Eric Walters, DSN (312) 879-4992, (520) 538-4992, email:

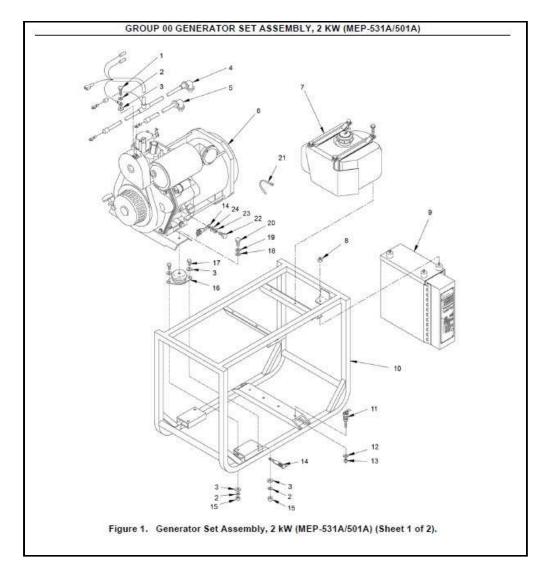
eric.a.walters.civ@army.mil

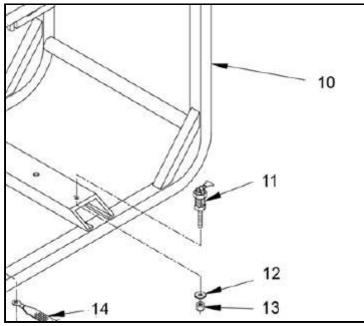


MEP-531A: Generator Stud Terminal (Literally)

/ Published Nov. 21, 2019 Dear Half-Mast,

I'm having trouble finding a valid NSN or PN for the stud terminal on an MEP-531A 2kW generator. It's listed as Item 11 in Fig 1 of TM 9-6115-673-13&P (Jun 10).





Neither the NSN 5940-01-374-3138 or PN 588558-01 listed in the TM show up in the

current FEDLOG. Any help is appreciated.

SSG C.M.

Dear Sergeant,

That NSN was cancelled and, after a while, FEDLOG no longer provided the replacement NSN.

NSN 5940-00-021-3321 will do the job just fine. It runs about \$70.

Half-Mast-



NVGs: Purging Applies to All Units

/ Published Nov. 26, 2019 Dear Half-Mast,

I have a question about purging AN/PVS-14 night vision goggles (NVGs). Are the Reserves required to purge semiannually? If so, would we follow the low-usage criteria set in DA Pam 750-8, *The Army Maintenance Management System (TAMMS) User's Manual* (Aug 05) and AR 750-1, *Army Materiel Maintenance Policy* (Aug 17)? I assume we wouldn't, but just want to make sure we're doing the right thing.

Mr. C.W.



Photo by Spc. Daniel Parrott

Dear Sir,

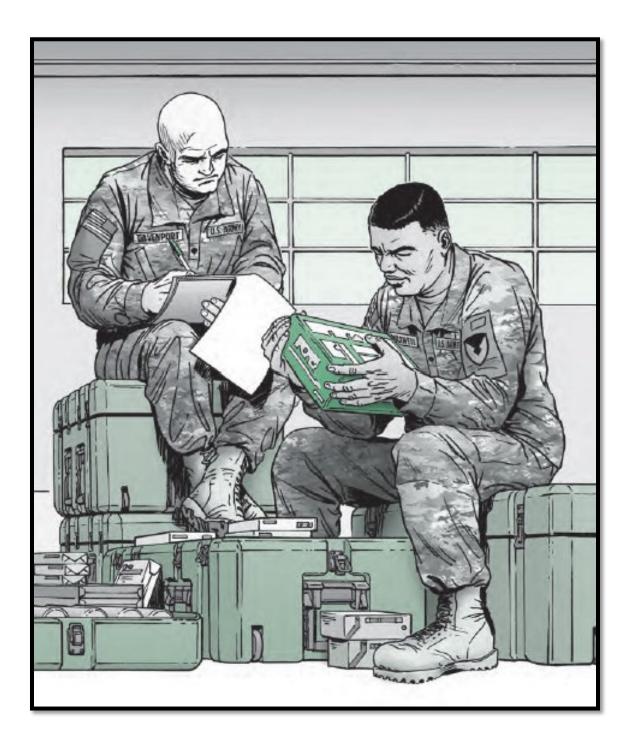
If a PVS-14 is being used less than 75 hours per year, it meets the low-usage criteria for NVGs in AR 750-1. There's nothing in the reg that limits this criteria to active duty

units. So it applies to **all** Army units, including the Reserves.

Under the low-usage criteria, the PVS-14 can be serviced annually instead of every 180 days. If at any point the annual usage exceeds or is expected to exceed 75 hours, the equipment needs to be returned to the normal maintenance and service schedules in the TM.

Half-Mast-

Logistics Management





POL: How Low Can I Go?

/ Published Nov. 18, 2019

BLUF: Army regulations specify the rules for low-usage or administrative storage for equipment.



Photo by Master Sgt. Benari Poulten

Dear Connie,

When my unit puts our petroleum equipment in low-usage or administrative storage, am I still required to perform PMCS and conduct filter effectiveness tests (FETs)?

SGT B.N.

Dear Sergeant,

The rules are found in the regs. First, figure out if your unit's equipment even qualifies for low-usage. See Para 4-3 in AR 750-1, *Army Materiel Maintenance Policy* (Feb 23), and Chap 3-9b.-(10 a-f) in DA Pam 750-8, *The Army Maintenance Management*

System (TAMMS) Users' Manual (Aug 05).

Low-Usage

If the equipment qualifies for low-usage, follow these guidelines:

- Prior to petroleum equipment being placed into low usage, all scheduled services must be performed.
- Fuel in the tank compartment of refuel vehicles and filter separators must be sufficient to recirculate fuel and to make it possible to conduct the required 30-day FET. Refer to the applicable TM for minimum quantities.
- Although in low-usage, the equipment still requires monthly PMCS, which includes conducting all before, during, after, weekly and monthly checks. Additionally, this monthly PMCS includes driving vehicles a minimum of five miles to exercise seals and ensure mission capability.
- The storage tank must retain enough fuel to conduct recirculation and fuel testing, IAW the applicable TM. Due to the high cost of replacements, filter elements must remain wetted in the filter separator of refuel equipment for conducting FETs.
- Equipment will still be considered "in service" when in the low-usage program.
- FETs are still required, not to exceed 30 days from the previous sample date.

Administrative Storage

Administrative storage is entirely different. Commands must provide a plan when they decide to place equipment in administrative storage, per Para 14-10 in Chap 14 of AR 750-1. Administrative storage is only intended as a short-term solution.

- Prior to petroleum equipment being placed into administrative storage, all scheduled services must be performed.
- Whenever possible, equipment must not be left in administrative storage for a period exceeding 365 days, and the unit is still required to exercise the equipment as directed by the applicable TMs.
- Due to the relatively high cost of replacement filter elements, it may be impractical to drain the fuel from the storage tank and filter separator. However, if the filter elements are removed from the filter separator prior to being put in administrative storage, it's advisable to empty the storage tank and filter separator of fuel to prevent accumulation of water and

microbiological growth. If filters are removed, cover over (remove) any stenciling of the filters' change- date.

- FETs aren't required while in administrative storage; however, when removed from administrative storage, a thorough PMCS of the petroleum equipment is necessary. Follow the instructions in FTL 18-01, *Petroleum Sampling Guidance*, to include installing filters (if they were removed) and stenciling on a new filter-change date.
- Commanders must also ensure a visual examination of the fuel is conducted, as well as a sample or FET submitted to an authorized laboratory, prior to issuing fuel to any equipment.

Got questions? Email:

usarmy.belvoir.usamc.mbx.usapc---operations-div@army.mil

Connie

Small Arms

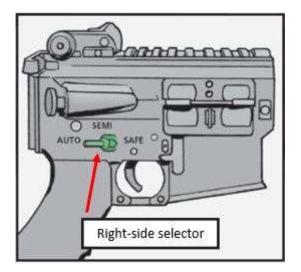




M16-Series Rifles, M4/M4A1 Carbine: Solving Loose Lever Mystery

/ Published Nov. 18, 2019 Dear Editor,

We've had a problem at Ft Leonard Wood with the M16 and M4's right-side fire control selector lever working loose and sometimes disappearing.



We suspect the reason is from armorers forcing the weapons to fit into M12 racks. Over time, that loosens the lever's screw.

As *PS* has pointed out in the Oct '19 issue, older M12 racks must be modified so that M4s and M16s with the new fire control selector lever will fit. If a weapon won't slide easily into the rack slot, then the rack probably needs to be modified. Armorers should tell their small arms repairman. But never force a weapon into a rack.

Soldiers need to check for a loose right-side selector lever when they do PMCS. Repairmen can tighten the screw with a 7/64 hex wrench. Coating the screw with sealing compound can help it stay tight. Robert Castanieto Victor Jackson Richard Hallas Ft Leonard Wood, MO

Editor's note: That's another good tip from the FMX weapons repair shop. Check out the story on Pages 42-43 of PS 803 (Oct 19):

https://www.logsa.army.mil/web2/archive/PS2019/803/803-42-43.pdf

It shows you how to modify racks with welding pliers or a mini-sledge hammer.



M240L Machine Gun: BFA Correction

/ Published Nov. 18, 2019

Brief, On Page 31 of PS 797 (Apr 19), we said to use the M24 BFA, NSN 1005-01-480-0289, with the M240L machine gun. But with the application of MWO 9-1005-313-23-4, the M240L changed from the standard barrel to a short barrel.

The M240L now uses **only** the M26 BFA, NSN 1005-01-565-6693.



Small Arms: Proper Handling of Malfunctions

/ Published Nov. 18, 2019 Soldiers,

Some of you aren't taking the individual and crew-served weapon's basic issue items (BII) with you when you go to the field or the range. Bad idea!

All weapons from .50-cal and below have BII. The BII is used to put the weapon into operation, during operation and for emergency repairs.

So **never** fire a weapon in the field or on the range without having all the BII by your side.



Never fire your weapon without your Bll nearby, including the TM

Remember, either the -10 or -13 TM, depending on the weapon, is part of the BII.

Before you fire your weapon, you must complete the BEFORE checks in the PMCS section of the TM. And don't forget to complete the AFTER PMCS when you're done firing. With a correctly completed PMCS, you'll know the weapon is in good working condition and ready to fire.

It's been reported that malfunctions, such as stuck rounds, occur while firing in the field and on the range. If your BII is with you and you use the TM, the risk of malfunction is reduced.

The TM is written to ensure your safety and the proper operation of the weapon. And when it's used along with a good training program and a range safety SOP, you reduce the likelihood of malfunctions and stoppages while firing.

But if there is a malfunction or stoppage while you're firing your weapon, open the BII, pull out the TM and follow the emergency or troubleshooting procedures. Then you can **safely** fix the issue and continue firing.

The key is leader involvement. With proper training from competent NCOs, Soldiers have far less issues operating their weapons.



Small Arms: Don't Mix & Match your Red/Yellow BFAs

/ Published Nov. 18, 2019 Dear Editor,

I'm writing to raise awareness of an issue we're noticing with the blank firing adapters or BFAs. Soldiers are using the red and yellow BFAs interchangeably and this leads to cycling problems when firing and possible damage. The BFAs are intended for specific weapons and are **not** interchangeable.

BFAs come in two colors: yellow and red. Each is designed for specific weapons and each has its own NSN. Soldiers sometimes mix and match their BFAs with weapons for which they weren't intended (especially the ones in slides 3, 4, and 5 in the attached PDF). When incorrectly matched with a weapon and fired with blanks during training, they can cause damage to that weapon.



Don't mix and match red and yellow BFAs. Use them according to the PDF at the link below.

AMC LARs who specialize in small arms have also found that Soldiers sometimes spray paint the BFAs because they believe they're interchangeable and may be short one or the other. **Do not** spray paint any BFAs. Their original color has a very specific purpose and ensures they are used on the correct weapon. The proper matching of each BFA to various weapons by type and NSN is available at this link (You'll need your CAC to access it):

https://www.milsuite.mil/book/docs/DOC-698847

Please encourage leaders to download, copy and share this document as widely as possible with their Soldiers and subordinate leaders.

Gustavo "Gus" Caruso Schofield Barracks, HI

Editor's Note: We're happy to share the document via the link above, Gus. As always, thank you for staying on top of issues like this one.

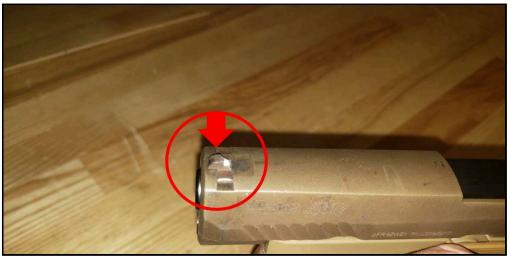


M17/M18 Modular Handgun System: Sight Adjustment

/ Published Nov. 25, 2019 Some Soldiers are trying to adjust the front sight on their new M17/M18 pistol. *Big mistake!*

Adjusting the front sight yourself usually means a broken sight. And there's no reason to adjust it anyway. The pistol came from the manufacturer already zeroed.

If your front sight gets damaged and needs replacing, see WP 0010-6 and -7 in TM 9-1005-470-23&P (Jun 19) for the steps to replace it.



Adjusting the front sight on the M17/M18 pistol can lead to damage

Your small arms shop will have the special sight pusher tool, NSN 1005-01-665-0463, needed to do the job right. It leaves the pistol zeroed and ready to fire.



Sight pusher special tool



Ammo: Use New Dummy Rounds Only

/ Published Nov. 26, 2019

To prevent mix-ups in the field, three years ago, the Army fielded new small arms dummy rounds that are easily identified as dummy rounds. Units need to remember: these new rounds are the **only** dummy rounds authorized for training, weapon cycling, and any other situation requiring inert rounds.

There is **one temporary exception**: A159 7.62mm linked dummy rounds. These rounds are OK to use until new 7.62 linked dummy rounds are available.

The new dummy rounds are completely nickel-plated. The 9mm dummy round has two holes drilled in the cartridge case, while the 5.56mm, 7.62mm and .50-cal rounds have fluted cartridge cases to make them easy to identify, even in the dark.

The M249 rounds are not available in linked form, but units can get links from their ammo supply point (ASP) and link the dummy rounds themselves.

Caliber	Model	DODIC	NSN 1305-
9mm	M917A1	AB45	01-568-5691
5.56mm	M199A1	AB46	01-568-5686
7.62mm	M63A1	AB47	01-568-5689
.50-cal	M2A1	AB48	01-568-5696
.50-cal linked	M2A1	AB36	01-557-7022

Here are the new dummy rounds and their NSNs:

The NSN for the M242 machine gun's 25mm dummy round remains 1305-01-356-0187 and the NSN for the M230 machine gun's 30mm dummy round remains 1305-01-268-7273.

If you have any of the old dummy rounds except the A159, turn them in to your ASP and request the new dummy rounds.

Dummy rounds are accountable items, so keep track of them.



M153 CROWS II: How Tall Is CROWS When Towed?

/ Published Nov. 26, 2019 Dear Editor,

Drivers may be aware of how much height is added to their vehicle with the M153 CROWS II installed. But they should also give thought to its height when towed.

Here are a few facts to keep in mind: Without a weapon attached, the CROWS is 3 feet tall. With an M2A1 machine gun mounted at maximum elevation, the system goes to 5 feet, 3 inches. That's pretty tall for a weapon system.



Photo by Master Sgt. Michel Sauret

If the CROWS is equipped on a 9 foot, 4 inch LTAS FMTV, the CROWS' overall height rises to 14 feet, 7 inches. And that's not all. If the LTAS has to be towed by a HEMTT wrecker, the CROWS is lifted an additional foot. The towed system is now 15 feet, 7 inches tall!

The recommended height for public bridges is 14 feet. But many are still less than 13 and a half feet. There's no way to safely tow something 15 feet, 7 inches under one of these bridges.

Always make sure your route doesn't have any low clearance bridges. Jumping into your truck and taking the shortest route home could be a recipe for disaster. At the very least, you may damage a **very** expensive weapon system.

Towing heights can be found in the HEMTT's TM 9-2320-326-13&P (IETM EM 0288, Dec 15).

CW3 Paul A Lyman Devens, MA

Editor's Note: A great heads-up tip, Chief Lyman!



M17/M18 Modular Handgun System: Magazine Won't Fit?

/ Published Nov. 29, 2019 Dear Editor,

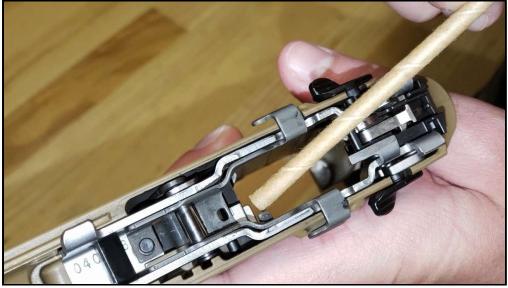
I've noticed Soldiers are having trouble loading the magazine into their new M17 and M18 pistols after reassembly. In pretty much every case, it's because the slide hasn't been locked to the rear.

The M9 pistol didn't need the slide locked to the rear, so the confusion is understandable.

With the new M17s and M18s, you first have to lock the slide to the rear, and then press the side catch lever to release it. Lifting up the slide catch lever locks the slide to the rear and allows the takedown safety lever to move back into the forward position to clear the magazine well.

This quick and simple action of locking the slide to the rear allows magazine insertion.





Takedown safety lever in the forward position to clear the magazine well

You'll find this troubleshooting procedure in WP 0010-4 of TM 9-1005-470-10 (Mar 19).

Also, NCOs should make sure their Soldiers understand the differences between assembling the M17/M18 and the M9.

Scott Taylor Ft Benning, GA

Editor's Note: Good tip from you, Scott. Thanks!

Soldier Support





DRASH: Replacing Power Unit Frame Shelters

/ Published Nov. 21, 2019

What do you do when DRASH tents are not mission capable or not economically repairable? The answer is simple.

The Army has approved replacement of the older technology articulating frame shelters listed below:

DRASH	ТМ	
PU-821/T, PU-822A/T	11-6115-742-13&P (May 12)	
PU-823A/T, PU-824B/T	11-6115-748-13&P (Sep 09)	
PU-823/T, PU-824A/T	11-6115-743-13&P (Jul 09)	

The following HDT[®] AirBeam[®] tents/shelters are newer technology, and are authorized substitutions for the DRASH MX and DRASH J:

HDT [®] Airbeam [®] Model	NSN 8340-
Series 20, medium green	01-656-3890
Series 20, medium tan	01-656-3894
Series 32, large green	01-657-0010
Series 32, large tan	01-657-0038



HDT[®] Airbeam[®] Model, Medium Tan

When requisitioning the new HDT[®] Airbeam[®] series, units will get all necessary parts needed to raise the new tents/shelters.

Got questions? Contact Jason Kerr at (256) 260-5815 or email:

jason.kerr@hdtglobal.com



Railroad Maintenance: Keeping Tracks Safely on Track

/ Published Nov. 21, 2019

The Army moves equipment from fort to port on railroad lines. But there are many behind-the-scene activities that enable rail lines to keep operating.

Railroad track maintenance is the backbone that keeps the Army's cargo moving. Without proper track inspection and maintenance, the railroad network can't move the warfighters' equipment and supplies.

It's not just the tracks that are a major multiplier in rail transportation; the personnel who perform track maintenance are also a vital part of the railroad network.



Keeping track workers safe is essential. Workers must observe train movements and must use one of the six on-track safety methods of protection, IAW 49 CFR part 214 and TM 4-14.21, *Rail Safety* (Feb 15).

The following methods provide on-track safety:

- 1. Exclusive track occupancy
- 2. Inaccessible track
- 3. Individual train detection (ITD)
- 4. Train approach warning (TAW)
- 5. Red flag protection
- 6. Blue flag protection

Exclusive track occupancy provides workers with on-track safety by establishing working limits on controlled tracks, and giving the work gang exclusive rights to occupy the track within those working limits. This type of protection prevents trains from entering work zones.



Inaccessible track gives workers on-track safety by establishing working limits on non-controlled tracks by making the track physically inaccessible to trains and other on-track equipment at each possible point of entry. Non-controlled track consists of:

- Yard tracks.
- Industrial leads.
- Non-controlled sidings.
- Main track within yard limits, which are not governed by controlled signals.

Individual train detection (ITD) gives a lone worker on-track safety when all the following conditions are met:

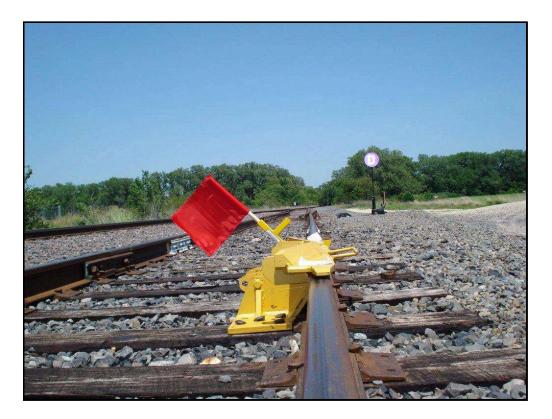
- The lone worker is trained and qualified on the General Code of Operating Rules and Army rail safety rules.
- Only routine inspection or minor repair is performed. The lone worker may not occupy any position or engage in any activity that would interfere with the ability to detect the approach of a train or equipment in either direction.
- The lone worker can visually detect the approach of trains or equipment moving at maximum speed, and can move to a place of safety at least 15

seconds before its arrival.

- The lone worker's ability to hear and see approaching trains and equipment is not impaired by:
 - Background noise.
 - Lights.
 - Inclement weather.
 - Passing trains.
 - Other physical conditions.
- The lone worker has completed a written statement of on-track safety. When using ITD, the lone worker must produce the completed statement of on-track safety upon request.

Train approach warning (TAW) provides workers with on-track safety that can be used by work gangs to perform routine inspections or other minor corrections, without establishing working limits. TAW may also be used to provide warning on adjacent tracks for large scale maintenance work.

Red flag protection is a piece of the on-track safety methods, exclusive track occupancy through a track bulletin Form B, and inaccessible track as discussed. Under these methods, red flags or yellow-red flags, are used to mark working limits.



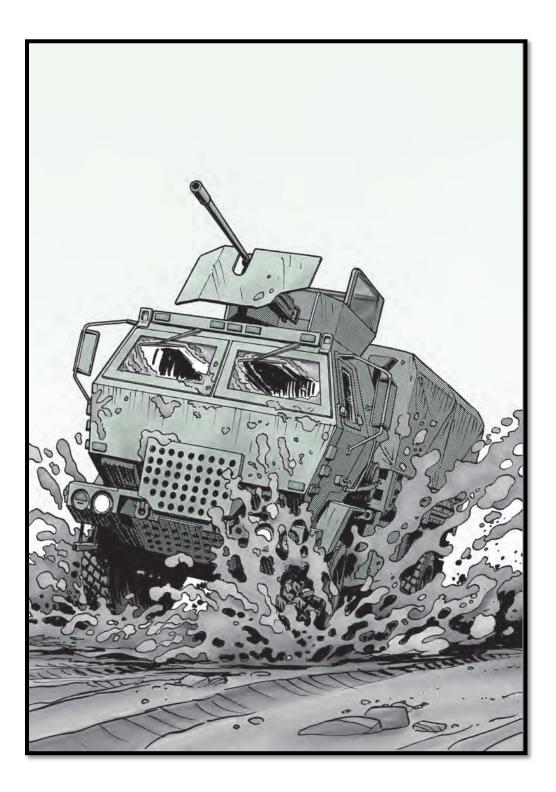
Blue flag protection is used whenever there is a worker or workers (other than the train crew themselves) working on, about, around or under rail equipment for any length of time, primarily within the yard limits of a rail yard. Under blue flag protection,

working limits (or lockout positions) will be identified at either end of the area where the work will be done. Mark lockout positions with blue flags that can be clearly seen during the day. At night, display blue lights with the flags.

As the Army continues to move very large scale equipment by rail, everyone must be alert when working on or around railroad tracks.

It's easy for onlookers to see locomotives moving military equipment, be fascinated by the sight, and forget the risk. Keep safety first and use caution when near railroad tracks. Always expect train movement on any track, in any direction and at any time!

Tactical Vehicles





BDAR Kit: Get One Today!

/ Published Nov. 26, 2019

The TRADOC Project Office (TPO) for Battlefield Recovery/BDAR has developed a new and improved battle damage and repair kit for all ground combat and tactical systems.

The improved kit, NSN 2590-01-659-5620, has all the capabilities of the previous kit, with a few new components.

The kit can also be split into sub-kits to save space on missions. For example, an M1A2 tank crew wouldn't require a tire repair kit, but wheeled vehicle crews would. Both might need the electrical and hydraulic kits.

The new BDAR kit is a Class IX item and can be ordered through the supply system right now.

To make the new kit its absolute best, TPO-BR needs your feedback. Tell them how the kit components work and how the kit can be improved. Contact TPO-BR at DSN 298-3050/3488/4115, (410) 278-3050/3488/4415, or by email:

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