

PS**THE
PREVENTIVE
MAINTENANCE
MONTHLY****ISSUE 689 APRIL 2010**

TB 43-PS-689, The Preventive Maintenance Monthly, is an official publication of the Department of the Army, providing information for all soldiers assigned to combat and combat support units and all soldiers with unit maintenance and supply duties. All information published has been reviewed and approved by the agency responsible for the equipment, publication or policy discussed. Application of the information is optional with the user. Masculine pronouns may refer to both genders.

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M1A1, M1A2 SEP Tank Gun Tube Disposal
M2/M3-Series Bradley TOW Launcher Screws
AVLB Boom-Outrigger Pin Lubing
M113-Series FOV Hull Access Cover
M109A6 Paladin Rifle Bracket
Stryker Coolant Reservoir Damage

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HMMWV Alternator Brace Spacer
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MaxxPro MRAP Hood Opening
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Just write to:

MSG Half-Mast
PS, the Preventive Maintenance Monthly
USAMC LOGSA (AMXLS-AM)
5307 Sparkman Circle
Redstone Arsenal, AL 35898

Or email to:

logsa.psmag@conus.army.mil or
half.mast@us.army.mil

Internet address:

<https://www.logsa.army.mil/psmag/pshome.cfm>

By order of the Secretary of the Army:

GEORGE W. CASEY, JR.
General, United States Army Chief of Staff

Official:



JOYCE E. MORROW
Administrative Assistant to the Secretary of the Army

1001307

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Issue 689

PS

April
2010

THE
PREVENTIVE
MAINTENANCE
MONTHLY

TB 43-PS-689

Approved for
Public Release;
Distribution is
Unlimited

UHHH... IT SAYS
HERE ON PAGE 52
THAT YOU SHOULD
NOT MACHINE WASH
YOUR *ESAPI* OR
ESBI PLATES!

KLUMP

KLUMP

JOE
VIBER

BUMP
BUMP

KALUMP

BUMPETY BUMP

CLUMP CLUMPETY

BODY ARMOR
CARE AND CLEANING
-SEE PAGE 50-



NO MARGIN FOR ERROR

Some things in this old life you can get away with and not get burned by your mistake or neglect. These things make you say, "Whew, that was close," as you wipe the sweat off your brow. For these things, there is a margin of error.

But then there are other things for which a mistake or neglect will bite you like a rabid dog. Both the bite and after-effects will have brutal consequences. For these things, there is no margin for error.

Some PM you can neglect or do sloppily and get away with it. The effects might be minimal or short-lived. You bet on the margin for error "horse" and that horse may win.

But then there is some PM that if not done or not done right can be a killer for you, your equipment and other Soldiers. There is **no** margin of error and that "horse" finishes **dead last**.

If you don't do it now, it's time to take PM seriously. It's time to realize that **preventing** a breakdown is more important than **repairing** one.

Lives depend on equipment running and running well. Neglect PM and you may get by a hundred times and only pay the piper once. But that one payment may haunt you forever, because the tune the piper is playing is **Taps**.

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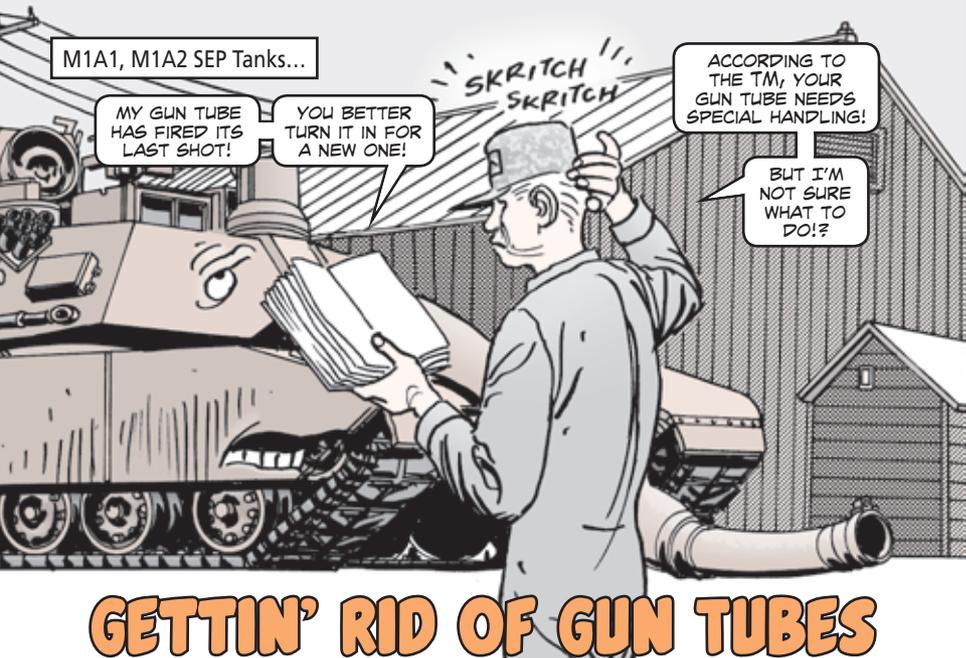

JOYCE E. MORROW

Administrative Assistant to the Secretary of the Army

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M1A1, M1A2 SEP Tanks...

MY GUN TUBE HAS FIRED ITS LAST SHOT!

YOU BETTER TURN IT IN FOR A NEW ONE!

ACCORDING TO THE TM, YOUR GUN TUBE NEEDS SPECIAL HANDLING!

BUT I'M NOT SURE WHAT TO DO!?

GETTIN' RID OF GUN TUBES

Dear Half-Mast,

Our unit has some 120mm tank gun tubes, NSN 1015-01-212-8575, that are ready for disposal. But the SMR code shown on Page 95-1 in TM 9-2350-264-24P-2 and WP 0059 00-3 in TM 9-2350-388-24P-2 has our hands tied.

The SMR code is PAFZA. The **A** at the end of the SMR code means that each gun tube "requires special handling or condemnation procedures because of specific reasons (e.g., precious metal content, high dollar value, critical material or hazardous material)."

SECTION 8
ITEM NO. CODE NSN CAGEC PART NUMBER

1 PAFZZ 5210-10-188-8271 18206 12529760
2 PAFZZ 1015-12-178-8543 18206 12529760
3 PCOZZ 6331-01-488-9943 18206 12528494
4 PAFZZ 1015-01-212-8575 18206 12528112
5 PAFZZ 3040-01-514-9644 18206 12530669
6 PAFZZ 5315-10-162-9166 18206 12529715
7 PAFZZ 5305-12-157-8121 08286 080794 MEX16-A
8 PAFZZ 1015-12-178-8536 18206 12529760
9 PAFZZ 1015-01-165-4845 18206 12528510
10 PAFZA 1015-01-212-8575 18206 12528111
11 PAFZZ 5305-12-178-8120 08286 080794
12 PCOZZ 3040-01-514-9644 18206 12530669

STOP-PRICE
BREECH MECHANISM
PARTS SEE AHEAD
CANNON
SETSCREW
PARTS NOT SHOWN
ITEMS APPLICABLE TO THIS MANUAL ARE LISTED
WASHER LOCK

10 PAFZA
11 PAFZZ
PCOZZ

So how do we dispose of these gun tubes? Can you lend a hand, Half-Mast?

MSG M.A.F.

Dear Master-Sergeant M.A.F.,

Good news! The SMR code for the gun tubes is being corrected to PAFZZ. That means the gun tubes can be condemned and disposed of at the Field Maintenance level and require no special handling or procedures.

The recoverability code has already been changed in FED LOG and WebFLIS (<http://www.dlis.dla.mil/webflis/>). So just make a pen and ink change to your parts manuals until they can be updated.

MANAGEMENT DATA RESPONSE

FSC: 1015
NIIN: 012128575
ITEM NAME: TUBE,CANNON

PMIC	ADPE CODE	CRITL CODE	DEMIL CODE	DEMIL INTG	EST ACT	EST ACT DATE	ESD	HMIC	ENAC	SCH
A	N	D	1					N		930

FLIS MANAGEMENT

MOE	AAC	QUP	UI	UNIT PRICE	SLC	QIC	REC REP CODE	MGMT CTL
DA				\$108 351 00	0	7	Z	122
EA				\$108 351 00	0	7	A	1511
EA				\$108 351 00	0	7	A	1511

Procurement Data

IIC REC REP CODE M

Z M

Evaluation and inspection procedures are in App B of TM 9-1000-202-14, Evaluation of Cannon Tubes (Feb 99 w/Ch 4, Dec 06).

The 120mm cannon tube has a demil code of **D**, so you should follow the demil, disposal and condemnation procedures in App 1 and 7 of DoD 4160.21-M-1, Defense Demilitarization Manual (Oct 91 w/Ch 1).

Make sure you close out the DA Form 2408-4, Weapon Record Data Card, for each condemned gun tube. This is done at the AEPS gun card website: <https://aeps2.ria.army.mil/commodity/guncard/index.cfm>

Then submit the gun card following the guidance in Chap 5 of DA Pam 750-8.

Condemned tubes should be turned in to your supply support activity. They will, in turn, process and turn in the condemned tube to the nearest Defense Reutilization and Marketing Office (DRMO).

The disposal service representative (DSR) is the direct link between customers and the DRMO. They can provide help by phone, email or in person. To find your DSR, check out their website: <http://www.drms.dla.mil>

For more information, check out TACOM Field Alert #09-02: https://aeps2.ria.army.mil/commodity/Field_Alerts/Tacom_WN/120MM-GunTube.html

Half-Mast

Click here for a copy of this article to save or email.

METAL-TO-METAL CONTACT BETWEEN YOUR BRADLEY'S TURRET AND TOW LAUNCHER IS NOT A GOOD THING!

YOU SAID IT, HALF-MAST!

FLOOM
FROOM

Running Interference for TOW Launcher

Dear Editor,

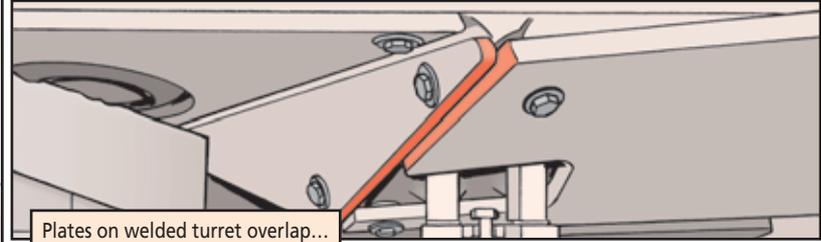
Some time back, we noticed a problem with interference between one screw on the Bradley's bolt-on armor and a second screw on the TOW launcher when it's positioned at maximum elevation.

The first screw is the upper left 1/2-in mounting screw on the turret armor plate, NSN 9515-01-268-3375. The second is a 3/8-in screw on the fourth upper hole of the TOW launcher's armor plate, NSN 1005-01-110-7641.

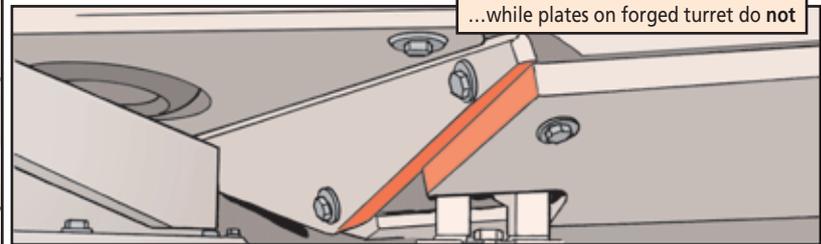
The problem exists only on Bradleys that have forged turrets. Forged turrets are thicker than welded ones, so when armor plate is installed, the mounting hardware on these turrets is closer to the TOW launcher. That results in the interference between the two screws.

The fix for the problem is fairly simple:
7. You must determine whether the turret is forged or welded. Look at the point where the two bolt-on armor plates, NSN 9515-01-267-8108 and NSN 9515-01-268-3375, meet.

If the two plates overlap, do nothing. The turret is welded and you won't have the screw interference problem. If the two plates *don't* overlap, the turret is forged. Go on to Step 2.



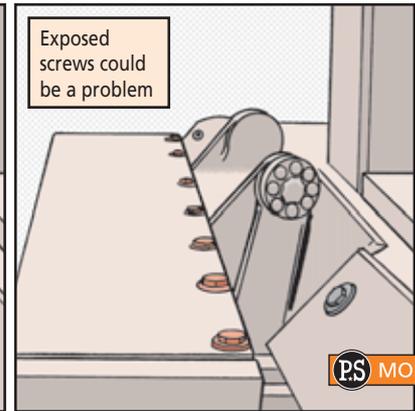
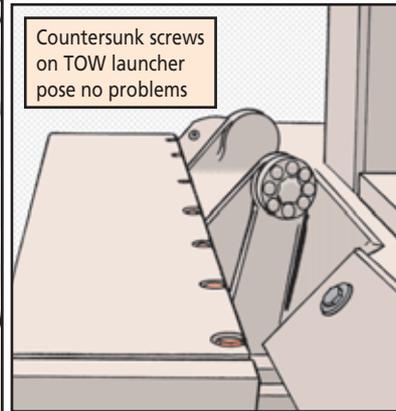
Plates on welded turret overlap...



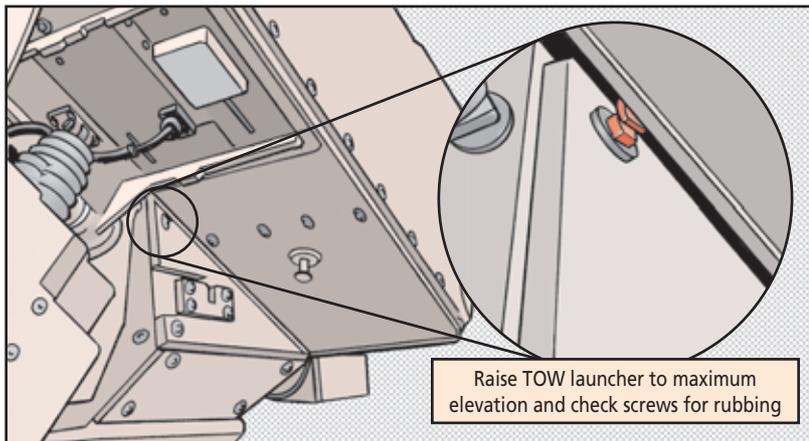
...while plates on forged turret do not

2. Check the screws attaching the armor plate, NSN 1005-01-110-7641, to the TOW launcher. Earlier versions of this armor plate used countersunk holes for the screws.

If the screws on the TOW launcher armor are countersunk, stop now. There is no interference problem. However, if the screws *aren't* countersunk, continue to Step 3.

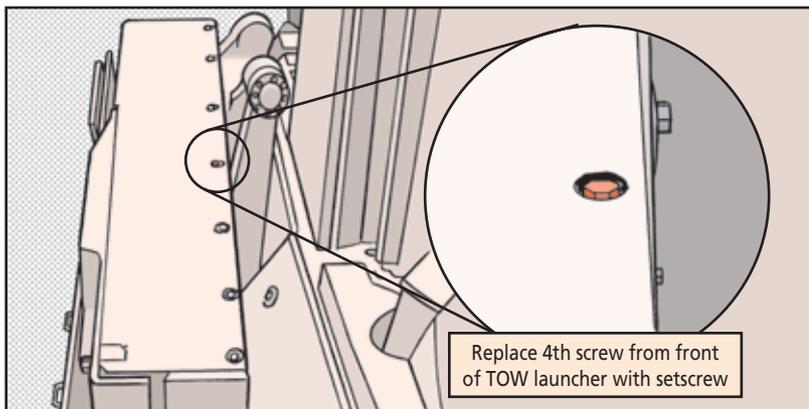


3. Raise the TOW launcher to its maximum elevation. Watch closely to see if the two screws hit. If they don't, stop here. If they do, continue to Step 4.



Raise TOW launcher to maximum elevation and check screws for rubbing

4. Remove the 3/8-in screw at the fourth position from the front of the TOW launcher. Replace it with setscrew, NSN 5305-00-724-5888. Coat the setscrew threads with sealing compound, NSN 8030-01-014-5869, to hold it in place.



Replace 4th screw from front of TOW launcher with setscrew

Once installed, the setscrew is flush with the armor plate, eliminating the interference problem.

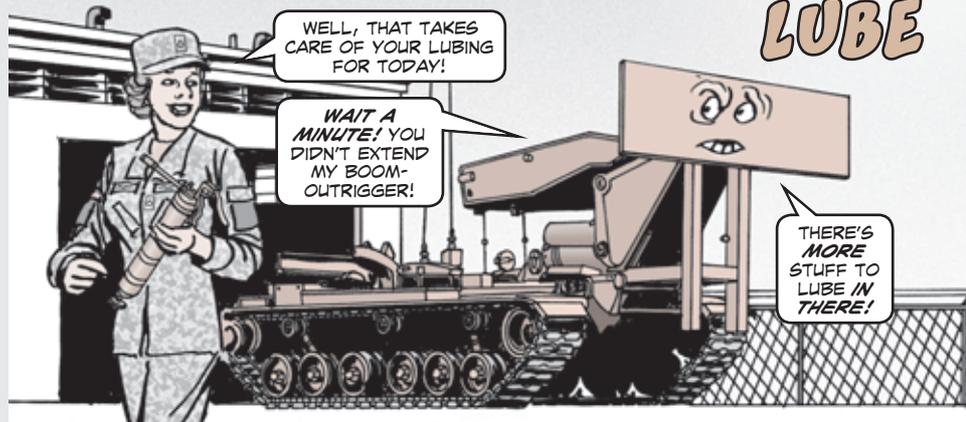
Mr. T.K.
BAE Systems
York, PA

Editor's note: We won't try to interfere with that suggestion! Good job!



AVLB...

BOOM-OUTRIGGER PINS NEED LUBE



Dear Editor,

During overhaul of AVLBs at Anniston Army Depot, we're finding that the overhead cylinder cap pin and the tongue cylinder cap pin on the boom-outtrigger aren't being lubed.

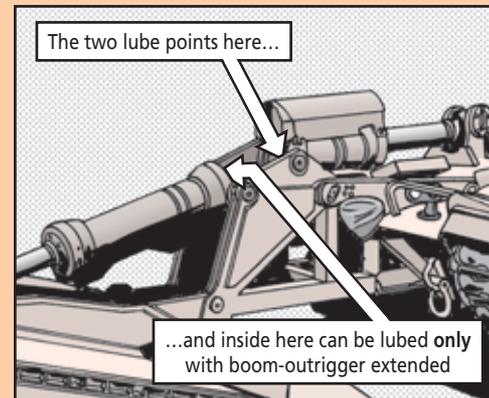
Most of the pins we see have seized up in the cylinders. They're not only hard to remove, but by the time we get them out, both pins are damaged and have to be replaced.

The overhead cylinder cap pin, NSN 5340-01-120-8562, costs nearly \$650. The tongue cylinder cap pin, NSN 3040-01-120-8561, is another \$400. So replacing them gets pretty expensive.

A lot of cost and hard work could be avoided if crewmen would remember to lube the pins quarterly with GAA. The four grease fittings (two for each pin) are hidden by the armor covers when the boom-outtrigger is retracted. That's why they're so often overlooked.

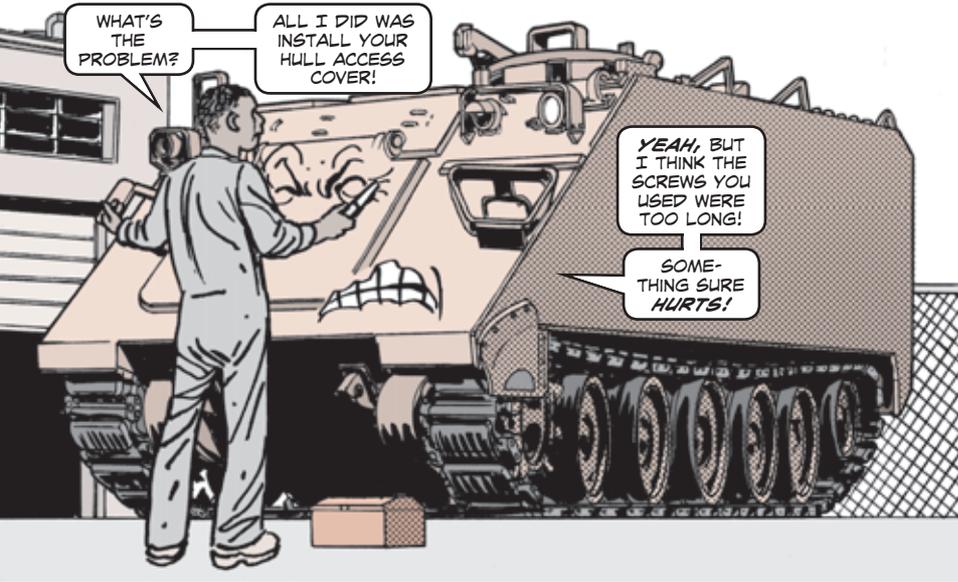
Can you remind crews to extend the boom-outtrigger and lube all four of the fittings during PMCS?

Mr. G.W.
HME Mechanic
Anniston Army Depot, AL



Editor's note: You bet, Sir. Consider them reminded!

ACCESS COVER SCREW LENGTH IMPORTANT



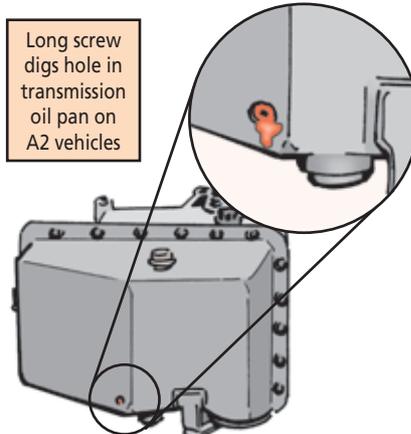
Are you one of those mechanics who grabs the first screw you can find to reattach the hull access cover, NSN 5340-00-759-5409, on an M113-series vehicle? Big mistake!

If you grab a screw that's 2 or more inches long, it'll hit the transmission oil pan on A2 vehicles and the transmission casing on A3 vehicles. Eventually, the screw rubs a hole in and creates a leak.

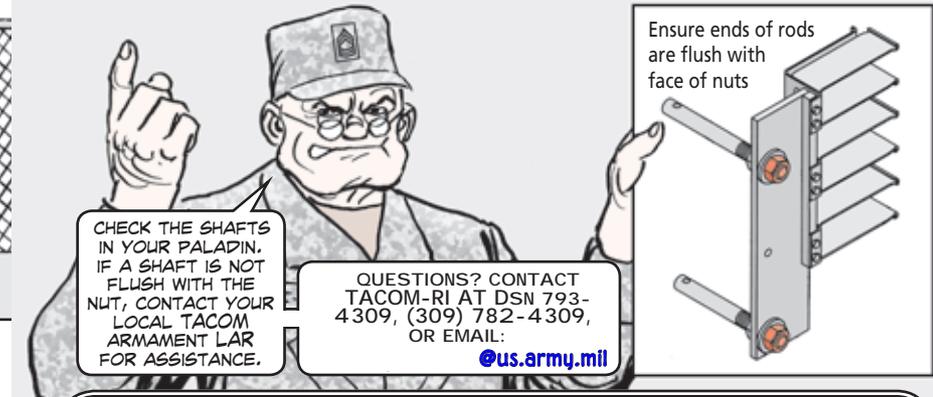
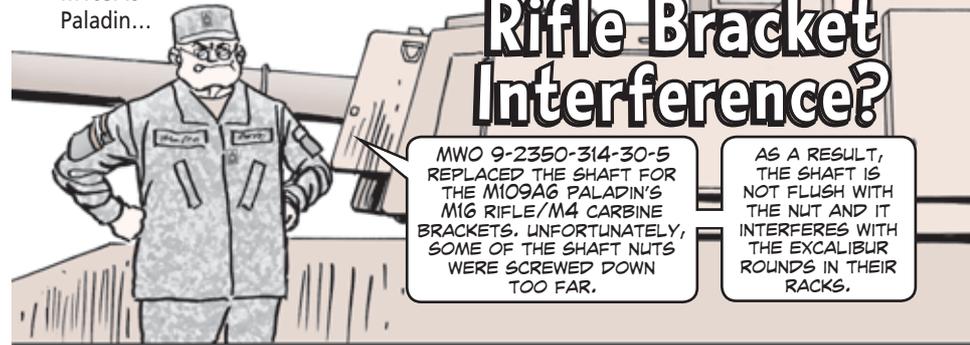
When the transmission loses enough oil, the clutches burn up and you're left with a vehicle that's going nowhere.

So make sure you use only the 1¹/₄-in screws, NSN 5305-00-719-5219, that are called out in Fig 186 of TM 9-2350-261-24P and Fig 186 of TM 9-2350-277-24P. They hold the access cover in place without damaging the transmission oil pan or casing.

And don't forget to include flat washers, NSN 5310-00-809-5998, when you use the right screws.



Rifle Bracket Interference?

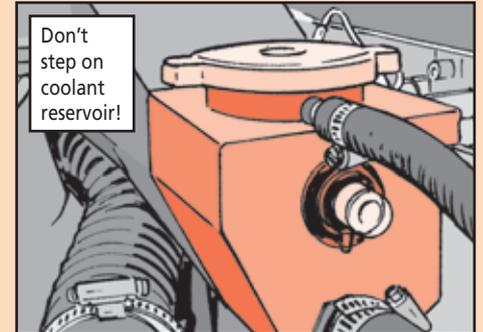


Stryker...

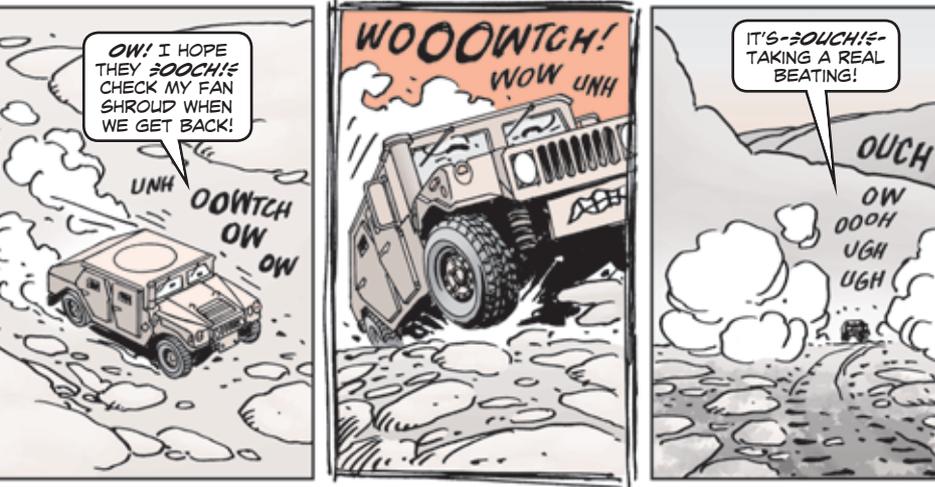
STEP LIGHTLY AROUND RESERVOIR

Crewmen, watch your step when you're pulling the air filter on your Stryker for cleaning. If you put those big size 12s in the wrong place, damage is sure to follow.

Be especially careful of the coolant reservoir. It can't hold your weight. You may not see any obvious damage, but the inner seal can crack. That sends all the coolant to the overflow tank, resulting in an overheated engine.



DON'T SHRUG OFF SHROUD

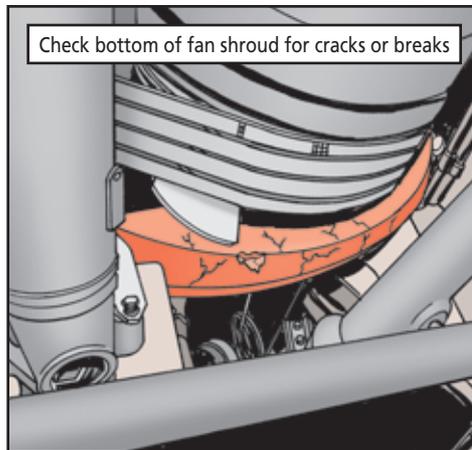


Drivers, if you've been doing a lot of cross-country driving lately, the fiberglass fan shroud in your HMMWV may have taken a beating.

The bottom of the shroud gets hit by brush, rocks, tree stumps and road debris. That cracks the shroud and can even bend it inward enough that it gets hit by the fan blades. That means even more shroud cracks and possibly a shattered blade.

So take a look at the bottom of the shroud after you've been operating in the boonies. If you spot problems, tell your mechanic.

He'll repair minor damage with the fiberglass repair kit, NSN 2090-00-372-6064. Cracks and breaks that can be fixed without removing the shroud are considered minor. Major damage means he'll have to replace the shroud following the instructions that start on Page 3-110 of TM 9-2320-280-20-2 (Jan 96 w/Ch 3).



DON'T FORGET THE SPACER!

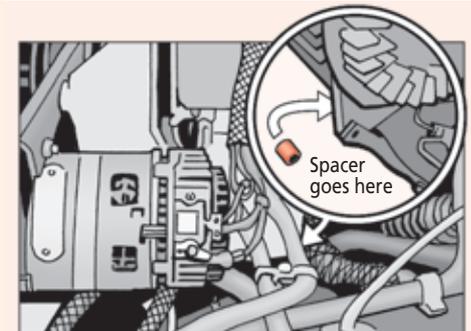


A broken ear on the 60-amp, 100-amp or 200-amp alternator on your HMMWV causes downtime and bucks to fix it.

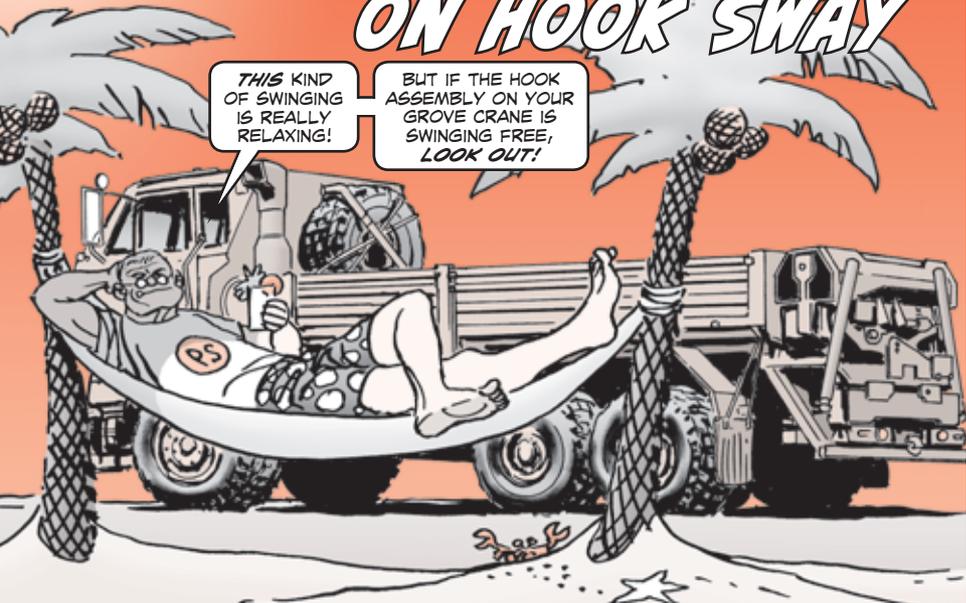
But you'll get a broken ear if you forget to re-install the spacer at the rear alternator brace! Tightening the brace nut without the spacer **in place** puts too much strain on the ear. Then the ear breaks off and the alternator has to go to the rebuild shop.

So remember to reuse the spacer, and don't lose it. Spacer, NSN 5310-01-337-7034, is used with brace, NSN 5340-01-292-8404, on 200-amp alternators.

Spacer, NSN 5310-01-292-5354, is used with brace, NSN 5340-01-293-0125, on 60-amp and 100-amp alternators. For more details, eyeball Pages 4-10 and 4-11 of TM 9-2320-280-20-2.



PUT THE KIBOSH ON HOOK SWAY



THIS KIND OF SWINGING IS REALLY RELAXING!

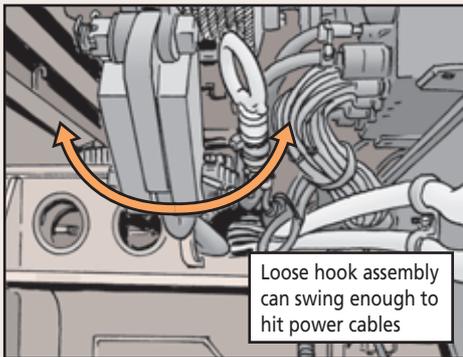
BUT IF THE HOOK ASSEMBLY ON YOUR GROVE CRANE IS SWINGING FREE, LOOK OUT!

Drivers, you've just secured the material handling crane on your medium tactical vehicle. But if your vehicle has the Grove crane, it might not be secure enough.

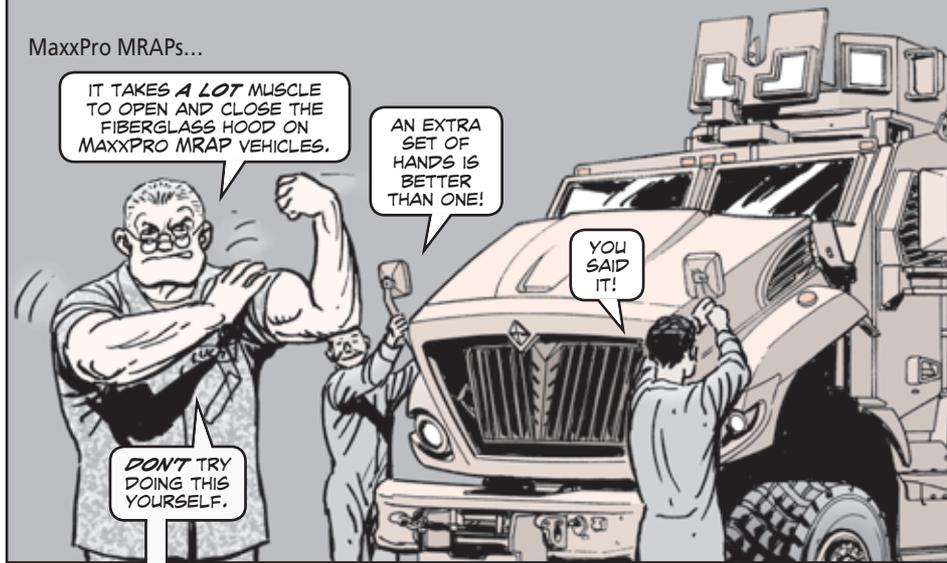
While the hook assembly may seem firmly attached to its stowage ring, some drivers leave a little too much slack in the cable. That allows the hook assembly to swing from side to side when the truck's moving. And that's where the trouble begins.

A loose hook assembly hits the cables on the back side of the power control box. One bang too many can break the wiring inside the cables, leaving the crane with no power.

Preventing that damage is easy. After you've placed the hook into the stowage ring, just take up the extra slack in the Grove crane cable. With no more swing, the power cables stay nice and safe.



Loose hook assembly can swing enough to hit power cables



IT TAKES A LOT MUSCLE TO OPEN AND CLOSE THE FIBERGLASS HOOD ON MAXXPRO MRAP VEHICLES.

AN EXTRA SET OF HANDS IS BETTER THAN ONE!

YOU SAID IT!

DON'T TRY DOING THIS YOURSELF.

MAKE IT A TWO-MAN JOB!

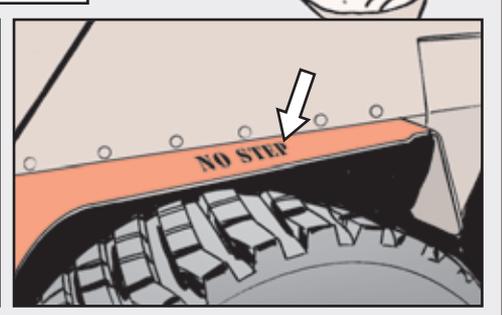
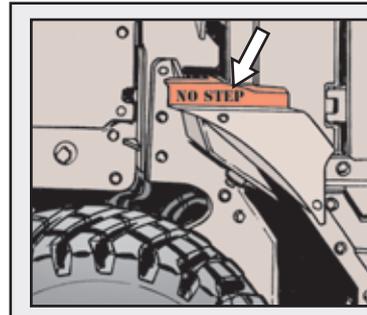
Have a buddy on the other side of the hood when it's opened or closed. That extra help avoids the stress cracks caused by flexing. It also keeps the hood from slamming shut.

Something else you'll want to remember about the MaxxPro is to stay off its hood. Your weight can be enough to crack it. Enough cracks will eventually break the hood.

So it goes without saying—do not step or walk on the hood. It will break.

ALSO, THERE ARE TWO OTHER AREAS ON THE MAXXPRO WHERE YOU'LL SEE IT'S MARKED NO STEP.

REMEMBER, THOSE WORDS ARE THERE FOR A REASON!

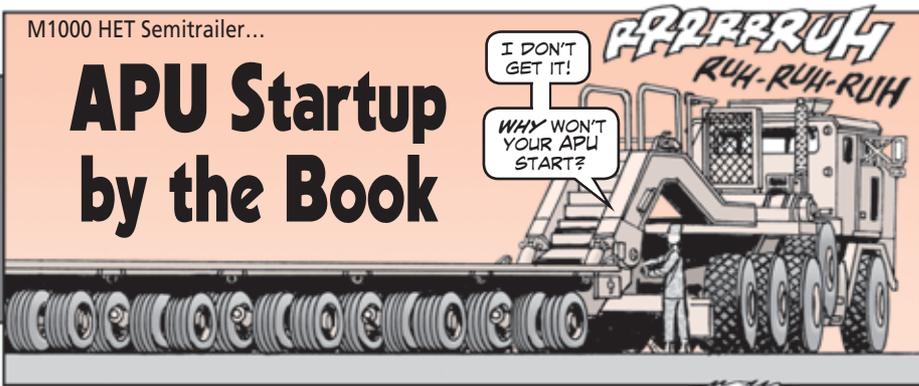


APU Startup by the Book

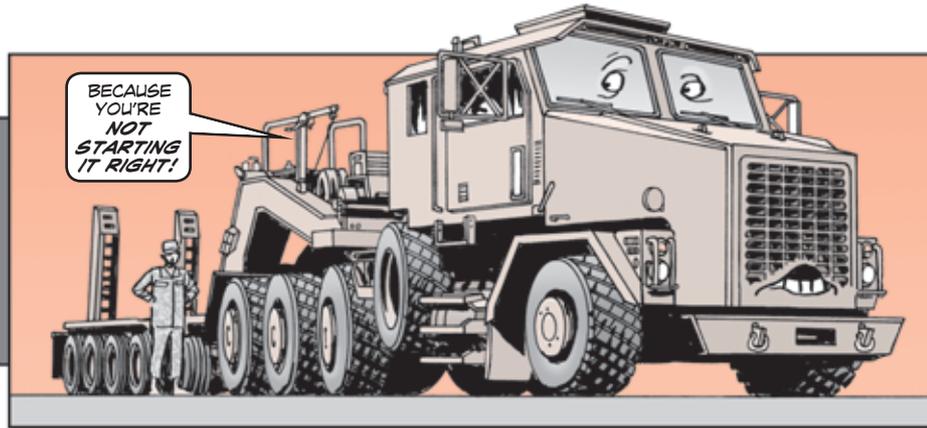
I DON'T GET IT!

WHY WON'T YOUR APU START?

*RRRRRUH
RUH-RUH-RUH*



BECAUSE YOU'RE NOT STARTING IT RIGHT!

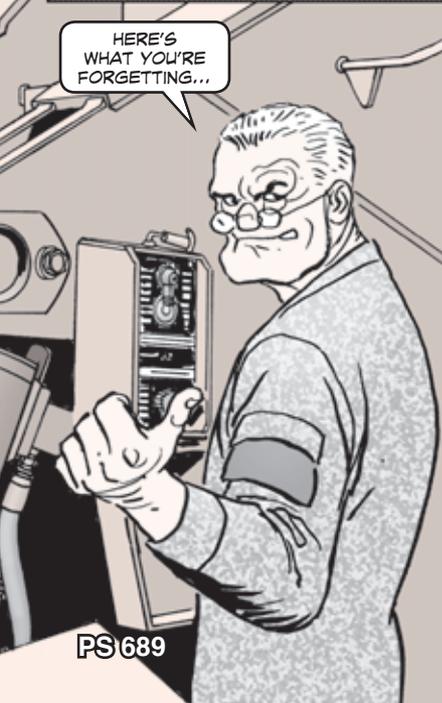


THE PROBLEM WITH THE AUXILIARY POWER UNIT (APU) ON YOUR M1000 HET SEMITRAILER IS GETTING IT STARTED.

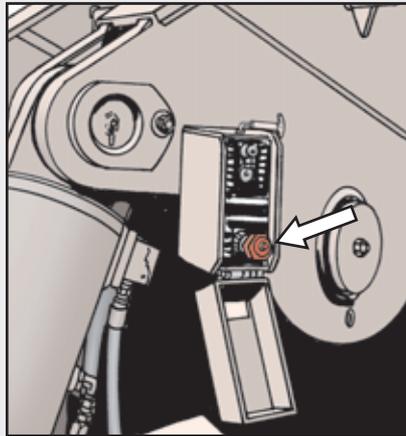
UNFORTUNATELY, TOO MANY DRIVERS EITHER FORGET TO PULL OUT THE THROTTLE OR DON'T WARM UP THE GLOW PLUG BEFORE STARTUP. THEY CRANK AND CRANK THE APU BUT ONLY SUCCEED IN DRAINING THE BATTERIES.



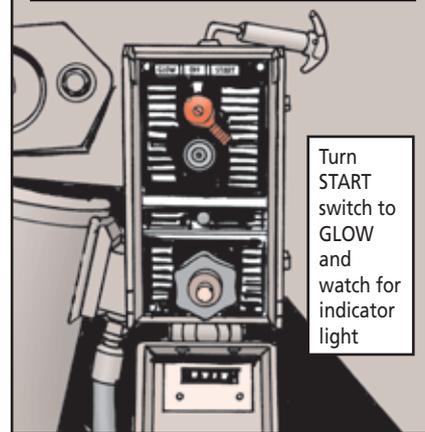
HERE'S WHAT YOU'RE FORGETTING...



1. Open the APU control box cover.
2. Press the button on the throttle control handle and pull the handle out all the way.

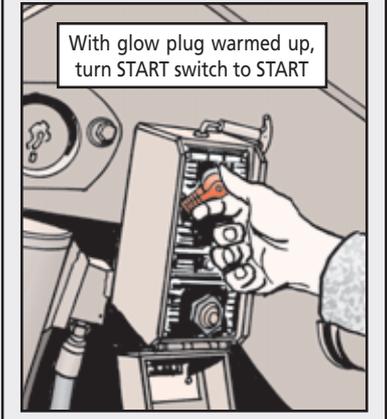


3. Turn the START switch counterclockwise to GLOW and hold. Watch for one of the following to happen:
 - a. The glow plug indicator light will light immediately. After about five seconds, the light will go out, indicating the glow plug is warm enough to assist with the startup.
 - b. If the glow plug light doesn't light, continue holding the START switch to GLOW. After about 15-20 seconds, depending on the outside temperature, the glow plug light should come on. That means the glow plug is warm enough for startup.



Turn START switch to GLOW and watch for indicator light

4. After 3a or 3b happens, turn the START switch clockwise to the START position and hold for 15 seconds or until the APU starts.



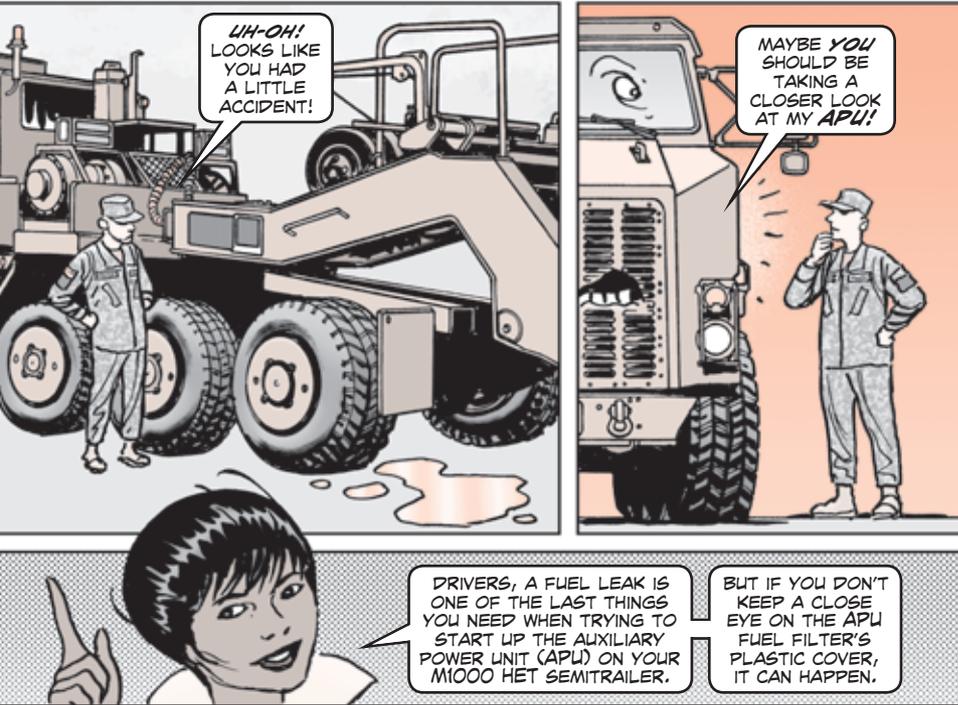
With glow plug warmed up, turn START switch to START

5. Turn the START switch back to OFF.

If the APU fires but does not start, turn the START switch to OFF and wait for the engine to stop rotating before trying again. If the APU doesn't start after four attempts, call in your mechanic.

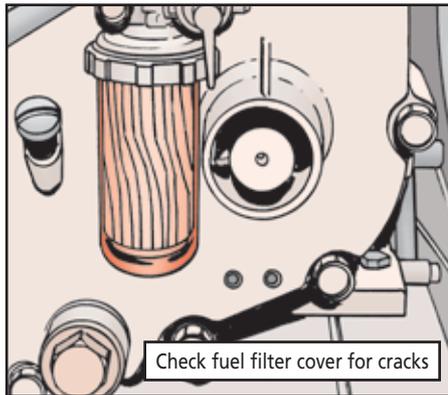
You'll find the complete step-by-step startup procedures starting in WP 0005-1 of TM 9-2330-381-13 (Oct 09). Follow them and you'll have no problems.

FIND FUEL LEAKS EARLY!

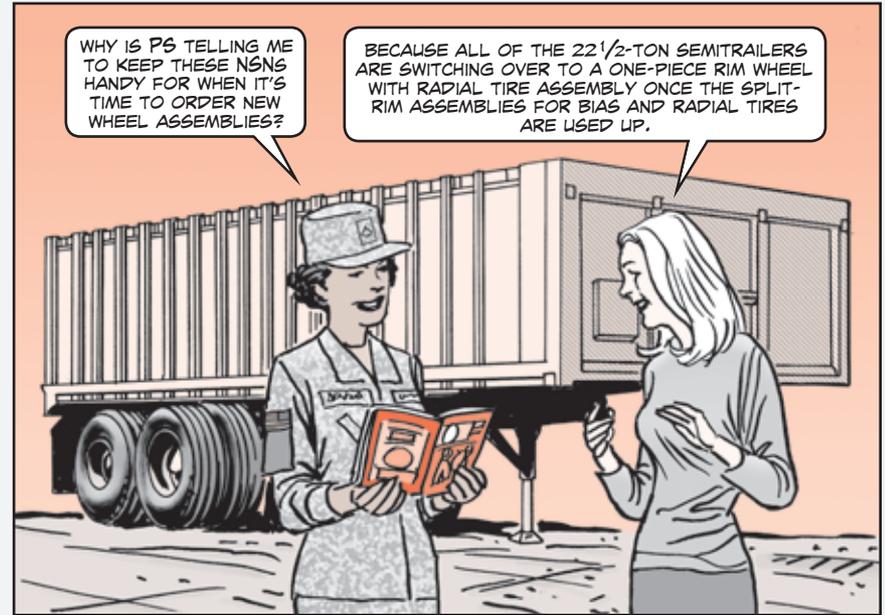


Cool nights and hot days make the cover expand and contract slightly. Week after week of that can warp and crack the cover. Before you know it, the cover's leaking and the APU won't start because of a lack of fuel pressure.

Inspecting the APU is part of your before- and during-operation PMCS. Eyeball the cover closely during the inspection. If the cover is damaged or already leaking, call in your mechanic. He'll replace it with NSN 2910-01-445-4999.



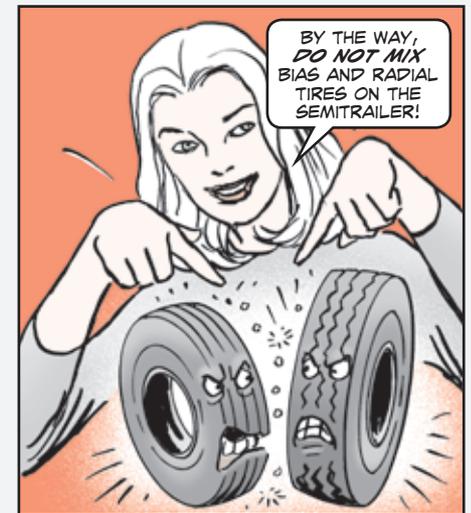
M871-Series Wheel Rim Assemblies



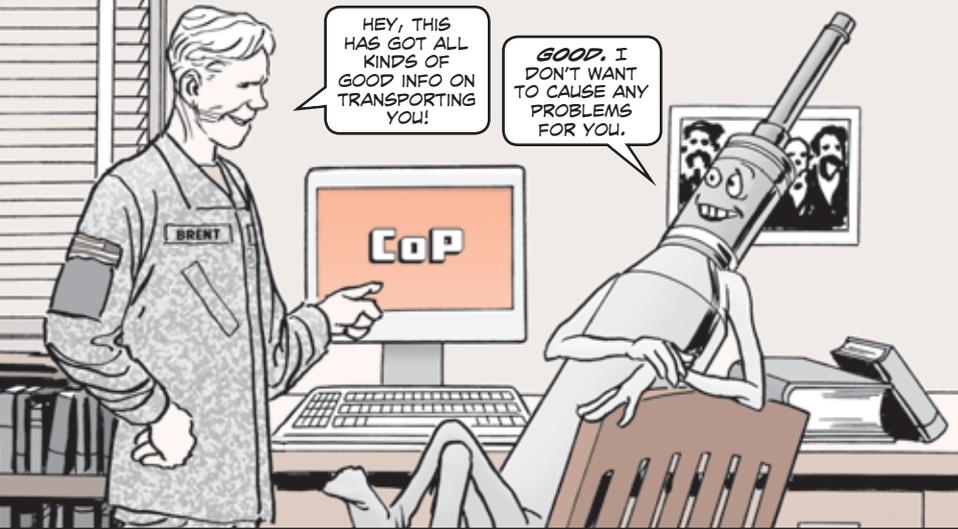
These new tire and wheel assemblies are ready for installation and come as stud-piloted or hub-piloted, depending on your model trailer. Stud-piloted wheels use studs to line the wheel up on the vehicle. The center hole on hub-piloted wheels lines up on the brake drum hub.

The **stud-piloted** one-piece wheel assembly for M871/A1/A2-semitrailers comes with NSN 2530-01-506-4129.

The **hub-piloted** one-piece wheel assembly for M871A3/M871R/A1R and M871A2R/A3R-semitrailers comes with NSN 2530-01-508-2786.



ON-LINE HELP FOR HAZMAT TRANSPORT



If your unit transports hazardous materials (HAZMAT), you need to get to know the HAZMAT Transportation Community of Practice (CoP).

The CoP, which is managed by the Defense Ammunition Center (DAC), is an interactive online knowledge base in which transportation pros can communicate and share their experiences of transporting ammunition and other HAZMAT. It is an excellent resource for lessons learned, tips, and links to HAZMAT regulations and policies. It also provides a forum for expert answers to HAZMAT questions.

The CoP has four major transport sections: commercial air, land, military air, and sea vessel. It also has a section on frequently asked questions and links to other relevant websites. CoP members can initiate or participate in discussions about any topic or explore past discussions. A popular tags feature allows you to check out the most often read discussions and searches.

To get to the CoP, go to the Battle Command Knowledge System (BCKS) portal at <https://forums.bcks.army.mil> and click on HAZMAT Transportation CoP. Then click on BECOME A MEMBER.

If you are already a member, you can access the CoP directly by clicking on

<https://haztrans.bcks.army.mil>

You will have the option of logging in via your CAC or with your AKO user id and password.

There is also on the same webpage a CoP on container inspection for those involved with the worldwide DOD container fleet. Call DSN 956-8119, (918) 420-8119, or email

@us.army.mil for more info.

Ammo CoP

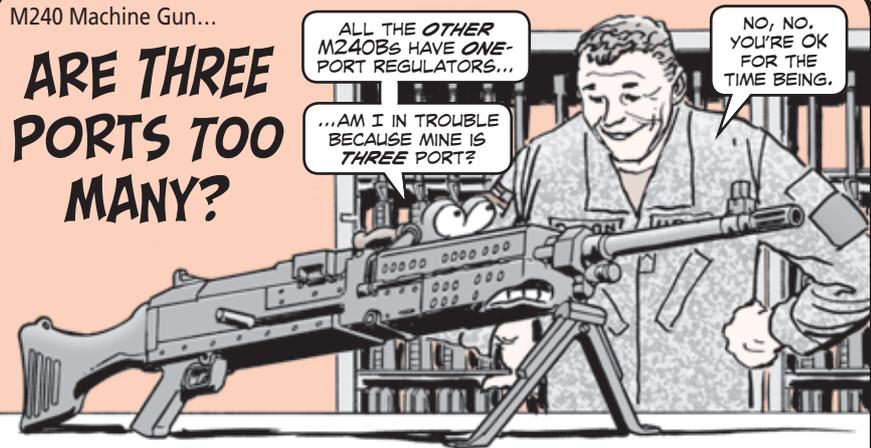
DAC has also established a CoP devoted entirely to ammunition. The Ammo CoP is run in collaboration with the Combined Arms Support Command, the Ordnance Center and School, and the Defense Acquisition University.

The Ammo CoP supplies information on safety, operations, logistics, training links, and POCs. It also has an Ask the Expert link through which questions can be sent directly to a subject matter expert.

To join the Ammo CoP, go to <https://acc.dau.mil/ammo>

M240 Machine Gun...

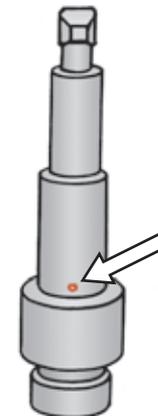
ARE THREE PORTS TOO MANY?



Dear Half-Mast,
All of our M240B machine guns have three-port gas regulators. But the M240's TM 9-1005-313-10 says they should have a single-port gas regulator. Should we turn in our M240B barrels?

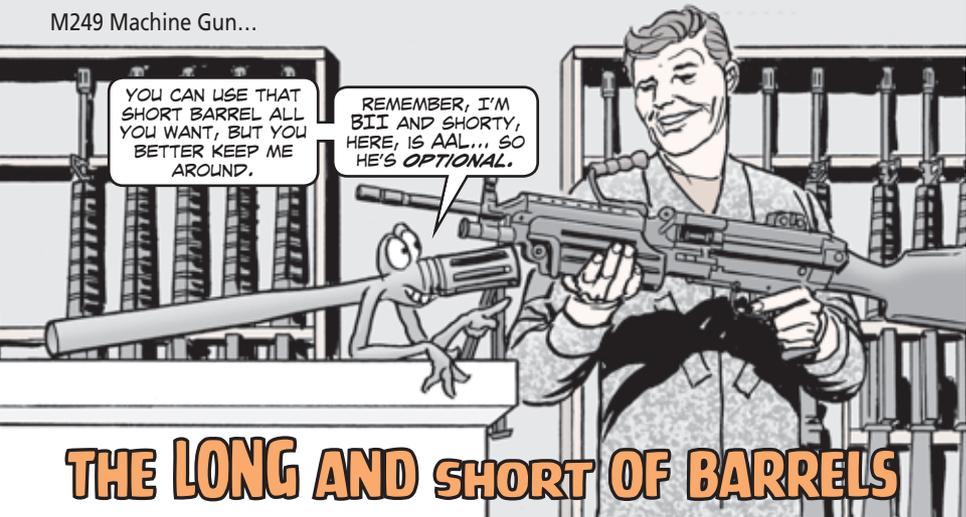
SSG P.S.

Three-port regulator should be replaced with one-port regulator when it wears out



Dear Sergeant P.S.,
No. All M240Bs and M240Hs should eventually have the newer single-port regulator. But the three-port regulator should be replaced only if it fails inspection or quits working.

Half-Mast



YOU CAN USE THAT SHORT BARREL ALL YOU WANT, BUT YOU BETTER KEEP ME AROUND.

REMEMBER, I'M BII AND SHORTY, HERE, IS AAL... SO HE'S *OPTIONAL*.

THE LONG AND SHORT OF BARRELS

Dear Editor,

In our work on Ft Bragg's Corps Logistics Assistance Team, we run into armorers who are confused about how to treat the M249 machine gun's long (or standard) and short barrels.

They think if they use only the short barrels, it's OK to turn in the long barrels. Then when they prepare to turn in an M249, they get an unpleasant surprise.

The M249 is issued with two standard barrels because those barrels are BII (basic issue items). Units are supposed to maintain all BII for their equipment at all times. So units that don't have both standard barrels don't have the M249's BII, which means trouble during inspections and turn-in. Page B-2 in the M249's TM 9-1005-201-10 (Change 2) spells this out.

The short barrel, on the other hand, is AAL (additional authorization list), which means it's authorized but optional—you don't have to have the short barrel. Page C-1 spells this out.

If you have two good barrels—a primary and a spare—for your M249 regardless of length, the weapon is considered Fully Mission Capable. But if you don't have both standard barrels, you will run into problems during inspections and equipment turn-in because you must have the M249's full BII.

Mr. H.N.
Mr. D.B.
Corps Logistics
Assistance Team
Ft Bragg, NC

Editor's note: Excellent points, gentlemen. Soldiers who have questions about this should contact TACOM at DSN 793-7458, (309) 782-7458, or email

[@us.army.mil](mailto:us.army.mil)

Don't forget the M249 short barrel now has its own blank firing attachment, NSN 1005-01-537-0491.

OK to Use Barrel Caps?



HEY! THERE'S A LOT OF SAND BLOWING AROUND OUT HERE!

BETTER PUT ON MY BARREL CAP!

Dear Half-Mast,

We are deployed in Afghanistan where we need all the help possible to keep sand out of our M16s and M4s. Is it OK to use barrel caps in the field? My first sergeant doesn't think we should because we might have to shoot through the caps.

SGT Z.E.

Dear Sergeant Z.E.,

It is definitely OK to use the barrel caps in the field. They are designed to help seal out sand. It's perfectly OK to shoot through them if necessary. You can order 100 barrel caps with NSN 5340-00-880-7666.

It is not OK to leave the barrel caps on for storage or cargo transport. The caps trap moisture inside the weapon, which leads to corrosion.

TB 9-1000-262-DT gives official guidance on using the caps.

Half-Mast

M14 Rifle Magazine Pouch NSN



I SURE WISH YOU HAD A MAGAZINE POUCH!

I DO NOW! THE POUCH JUST CAME OUT.

Dear Half-Mast,

Are there magazine pouches for our M14 sniper rifles? We sure could use them.

SGT H.O.

Dear Sergeant H.O.,

You're in luck. A magazine pouch has just become available with NSN 1005-01-543-0995.

Half-Mast

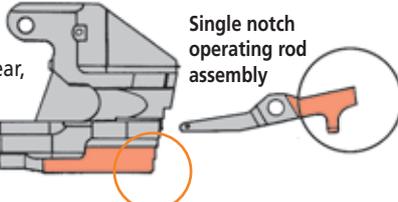
GOT THE RIGHT OP ROD?



For the M240-series machine guns, there are two distinctly different operating rods and sears. These op rods and sears aren't interchangeable between the M240 models. If the wrong op rod and sear are used, you could end up with a runaway gun, plus damage to the M240.

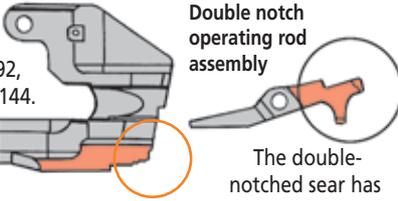
So right now, check all your M240s for the correct op rod and sear.

The M240, M240C and M240E1 should have the single-notched op rod, NSN 1005-01-033-3901, and single-notched sear, NSN 1005-01-033-1524.



Single notch operating rod assembly

The M240B, M240D, M240G, M240H, M240L, and M240N should have the double-notched op rod, NSN 1005-01-413-6992, and double-notched sear, NSN 1005-01-409-0144.



Double notch operating rod assembly

The double-notched sear has an extra step on the top.

If your M240 has the wrong op rod and sear, tell your armorer. Don't fire it.

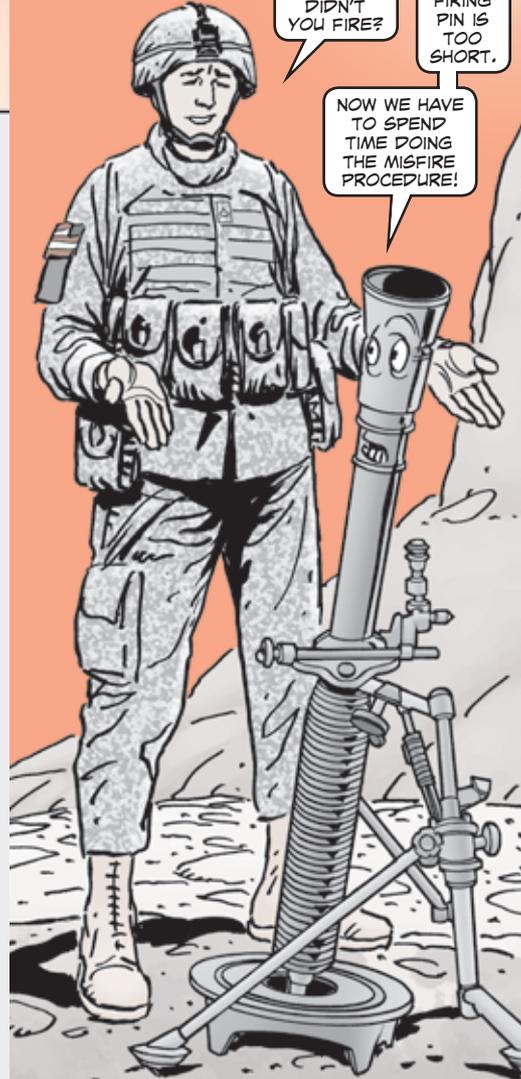
FOR MORE INFORMATION, SEE TACOM LCMC GPA MESSAGE 10-002:
https://aeps2.ria.army.mil/commodity/gpm/tacom_wn/gpa10-002.html

Firing Pins Don't Work?

HEY, WHY DIDN'T YOU FIRE?

MY FIRING PIN IS TOO SHORT.

NOW WE HAVE TO SPEND TIME DOING THE MISFIRE PROCEDURE!

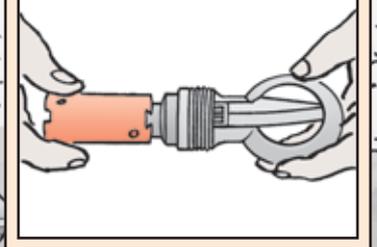


If the firing pin on any of the Army's mortars is too short or too long, the mortar won't fire because the firing pin can't ignite the cartridge's primer correctly. That means the mortar crew has to go through the whole misfire procedure, which would be a serious problem in the heat of battle.

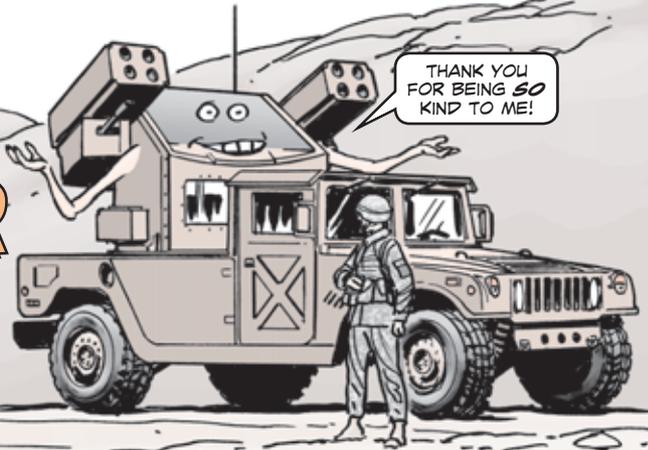
That's why it's very important mortar crews regularly check the protrusion of the firing pin as part of their BEFORE PMCS. The 81mm and 120mm mortars have gages that show the minimum/maximum acceptable length of the firing pin. Measure protrusion with the gage. If your firing pin doesn't measure up, use the spare firing pin that's part of the mortar's B.II. And tell your armorer so he can order a new firing pin.

Users of the 60mm mortar will need to have the firing pin protrusion checked by support.

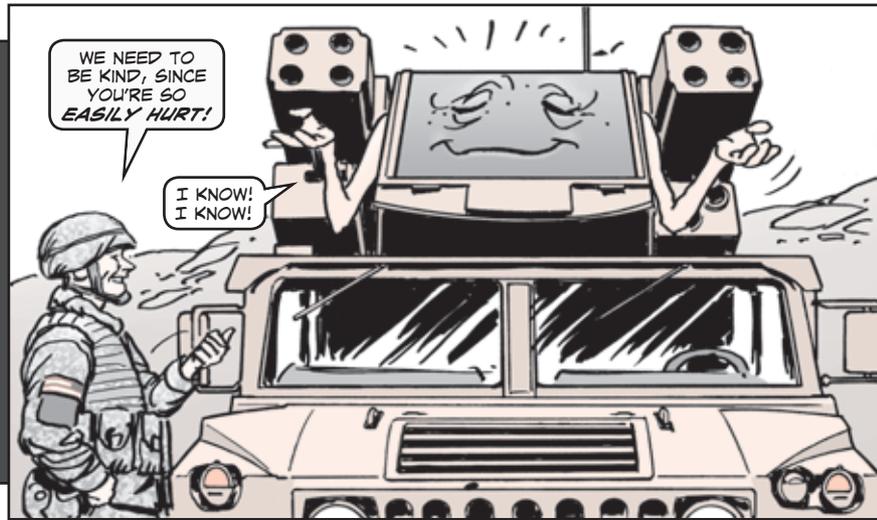
Measure firing pin with gage during BEFORE PMCS



BE KIND TO YOUR AVENGER



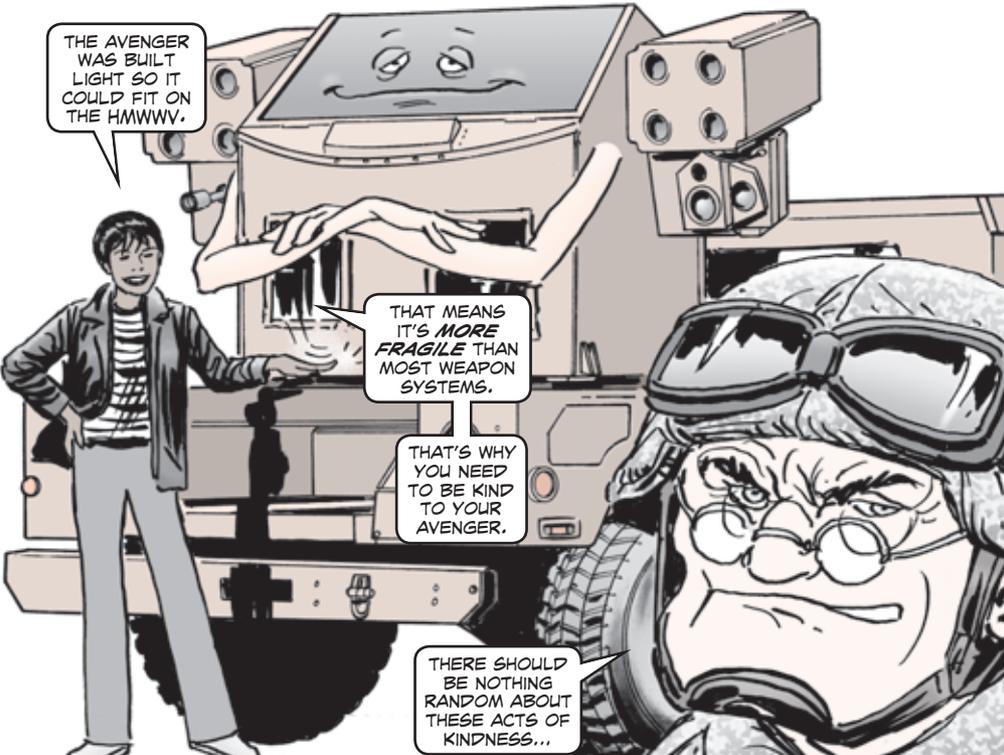
THANK YOU FOR BEING SO KIND TO ME!



WE NEED TO BE KIND, SINCE YOU'RE SO EASILY HURT!

I KNOW!
I KNOW!

THE AVENGER WAS BUILT LIGHT SO IT COULD FIT ON THE HMWVV.

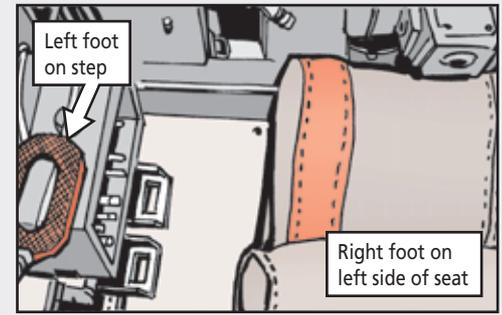


THAT MEANS IT'S MORE FRAGILE THAN MOST WEAPON SYSTEMS.

THAT'S WHY YOU NEED TO BE KIND TO YOUR AVENGER.

THERE SHOULD BE NOTHING RANDOM ABOUT THESE ACTS OF KINDNESS...

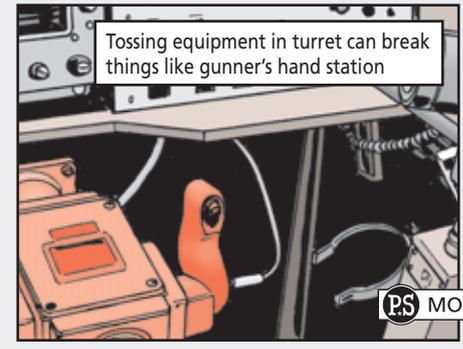
Watch your feet. Lots of gunner's hand stations have to be replaced because gunners don't watch their feet when they climb in and out of the turret. Climb into the turret by putting your left foot on the step on the left side of the turret and then your right foot on the left side of the seat. Climb out by reversing that.



Left foot on step

Right foot on left side of seat

Don't toss stuff in the turret. That can break the sight's mount or gunner's hand station switches, and even poke a hole in the turret floor. The less you put in the turret, the better. Duffle bags and rifles can bounce around and break items like the sight mount. If you leave your helmet sitting on the torque tube behind the seat, it can rip the sight mount out of the wall when the Avenger's elevated.

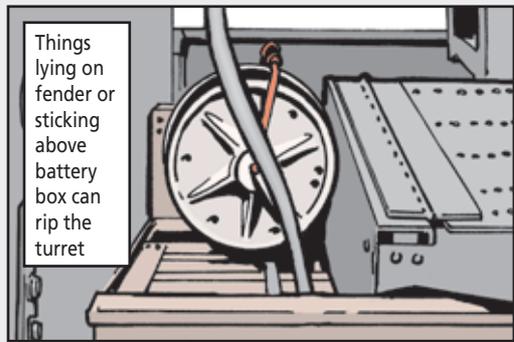


Tossing equipment in turret can break things like gunner's hand station

PS MORE

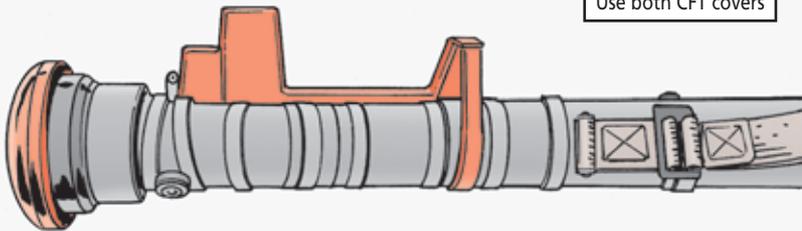
Secure the ropes for the antennas after you raise the antennas. If the ropes dangle from the antennas, their metal parts can bang against the turret and gouge its walls.

Keep stuff off the fenders and don't leave stuff sticking up from the truck bed. The turret clears the fenders by only 1 1/2 inches. If you leave a tool on the fender, it can rip a hole in the turret's bottom when you traverse. Same thing happens if something like a cable reel is left sitting up beside the battery box.

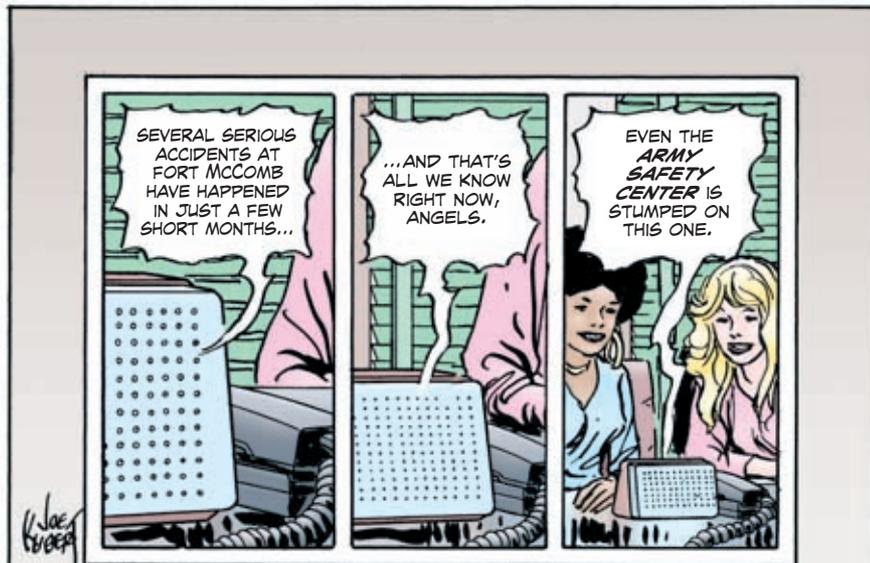
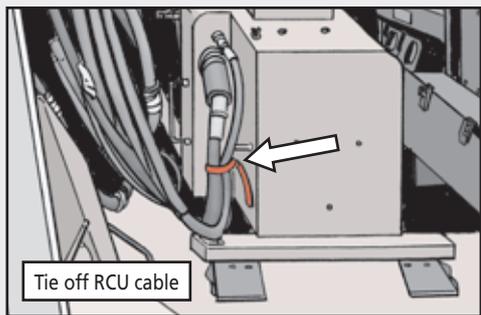


Use the covers for the captive flight trainer (CFT). If you don't use the gun port and seeker covers, the IR glass, the gas port and automate connector can be damaged.

Use both CFT covers

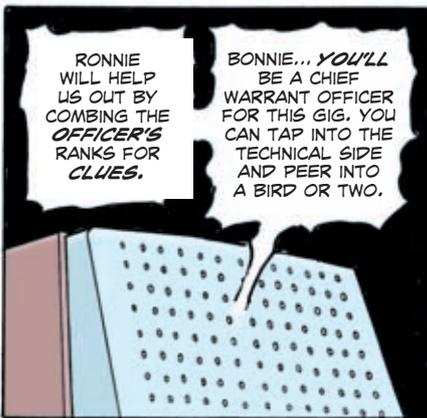


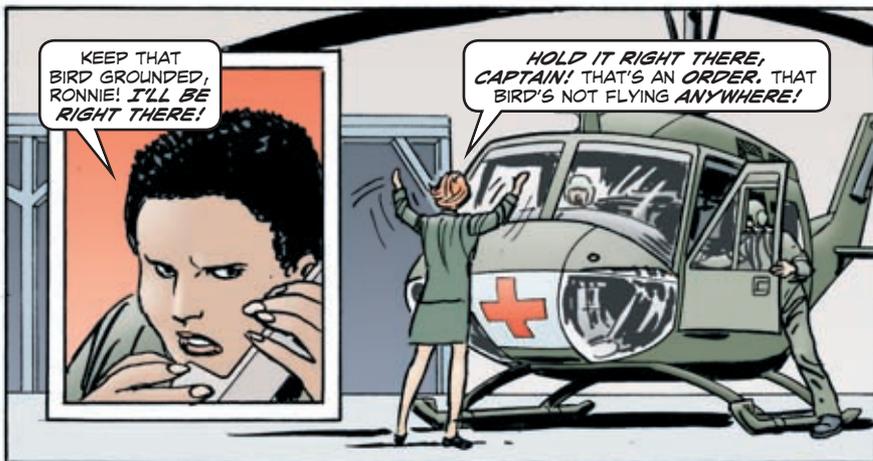
Tie off the remote control unit's (RCU) W80 cable to the RCU brackets. That prevents the cable from being jerked out when you remove the RCU from the truck. It's also a good idea to take the cable out of the truck before you take out the RCU. That makes it easier to remove the RCU without damaging the cable.



McCanick's PM Angels







KEEP THAT BIRD GROUNDED, RONNIE! I'LL BE RIGHT THERE!

HOLD IT RIGHT THERE, CAPTAIN! THAT'S AN ORDER. THAT BIRD'S NOT FLYING ANYWHERE!



I'LL DO WHAT YOU SAY, BUT IF YOU DIDN'T OUTRANK ME, MAJOR, I'D-



YOU'D DO WHAT, CAP'N KRUNCH?

HUH?



LIKE ELO SINGS, "DON'T BRING ME DOWN", SIR!



WHOA! THERE MUST BE SOME MISTAKE!



FROM A FRAYED LITTER BELT TO THIS FATIGUE CRACK...



...YOU'RE RISKING TOO MUCH WITH A LACKADAISICAL APPROACH TO PM!



WOW! WE MIGHT HAVE GONE DOWN... LIKE THAT OTHER BIRD DID LAST MONTH!

WHO SIGNED OFF ON THE PM TODAY?



HMM... NO SIGNATURE! LOOKS LIKE MAJOR APATHY TO ME!



MEANWHILE, BACK AT THE CHOW HALL...

I'LL TAKE SECONDS OF THAT FINE SUCCOTASH, PRIVATE!



SORRY, SOLDIER, CHOW'S CLOSED NOW. AND BESIDES...

...AREN'T YOU SUPPOSED TO BE DOING PREVENTIVE MAINTENANCE ON THE COMMANDER'S SEDAN? I HEARD COLONEL CRANK GAVE YOU ORDERS. PROTOCOL IS PICKING UP THE GENERAL TOMORROW AT 0700 SHARP.



YEAH, YEAH, I'LL GET AROUND TO IT. AFTER ALL, TOMORROW IS ANOTHER DAY!

IT'S THAT KIND OF INDIFFERENCE THAT CAN RESULT IN ACCIDENTS, PRIVATE O'HARA.



AW, C'MON, LIGHTEN UP. BESIDES, THE GENERAL WOULD ONLY NOTICE IF THAT RIG'S FINISH WASN'T SPIT-SHINED ENOUGH TO REFLECT ALL HIS PURDY MEDALS!

ALL KIDDING ASIDE, SOLDIER, YOU KNOW THAT ALL VEHICLES NEED BASIC PREVENTIVE MAINTENANCE.



HUH. YOU'RE AWFUL BOSSY FOR A PRIVATE!

YOU HAVEN'T SEEN ANYTHING YET...



...BECAUSE THAT CAR'S NOT LEAVING, O'HARA, AND MY HEAVENLY SUCCOTASH ISN'T FINDING YOUR PLATE AGAIN UNTIL ALL PM IS DONE ON THAT VEHICLE!



LATER IN COLONEL CRANK'S OFFICE...

I CAN'T BELIEVE WE ALMOST HAD **TWO MORE** SERIOUS ACCIDENTS.

FIRST, THE **HUEY** FAILED INSPECTION, AND THEN MY **SEDAN'S** BRAKES WERE SHOT. THE SAFETY CENTER WOULD'VE BEEN BREATHING DOWN OUR NECKS AGAIN FOR **SURE!**

EXCUSE ME, SIR, BUT ISN'T THE **REAL** LESSON TO BE LEARNED HERE THAT **PREVENTIVE MAINTENANCE** IS BEING POSTPONED OR EVEN IGNORED, POSSIBLY RESULTING IN DIRE CONSEQUENCES?



I SUPPOSE...



NOT ONLY THE RISK TO LIVES AND LIMBS, SIR, BUT THE **COST** IN TERMS OF POTENTIAL LIABILITY IS **STAGGERING!**

THAT'S **TRUE!** WE MUST FIND OUT WHO ISN'T FOLLOWING THROUGH WITH PM.

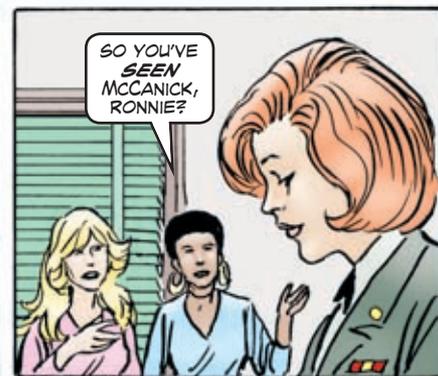


OR WHO ISN'T ORDERING AND DOUBLE-CHECKING PM IN THE **FIRST** PLACE, SIR. REMEMBER, THE RESPONSIBILITY FOR PM CUTS ACROSS **ALL RANKS**. IT'S **EVERYONE'S** DUTY TO FOLLOW THROUGH.

HUH. ANYONE EVER TELL YOU YOU'RE **AWFULLY BOSSY, PRIVATE?**



OLD FRIEND?



SO YOU'VE **SEEN** MCCANICK, RONNIE?



WELL... WE'VE FOUGHT A WAR OR TWO...

THEN... YOU MUST KNOW WHAT HE **LOOKS LIKE!**



WE-E-LL...

TELL US... PLEASE!



LATER, BACK AT THE HOME OFFICE...

MYSTERY **SOLVED**, MCCANICK! AND WE DIDN'T EVEN HAVE TO EAT CONNIE'S **SUCCOTASH** TO DO IT!

VERY FUNNY! I'LL HAVE YOU KNOW, SOME SOLDIERS ACTUALLY **LIKED** MY COOKING!

WELL, **ONE** ANYWAY!



WELL, I SURE APPRECIATE ALL OF YOUR HELP. A SPECIAL THANKS FOR PUTTING YOUR TEAM ON TASK, MCCANICK.

WE FOUND OUT THAT TMS WERE GETTING PRETTY DUSTY OUT AT MCCOMB. NOW WE KNOW **LACK** OF PM WAS THE PROBLEM, NOT SOME SINISTER PLOT!

YOU'RE WELCOME, RONNIE. ALWAYS GLAD TO HELP OUT AN OLD FRIEND.



I REALLY WISH I COULD, BUT... WE'VE ONLY MET THROUGH THE MAIL, PLAYING CORRESPONDENCE CHESS.

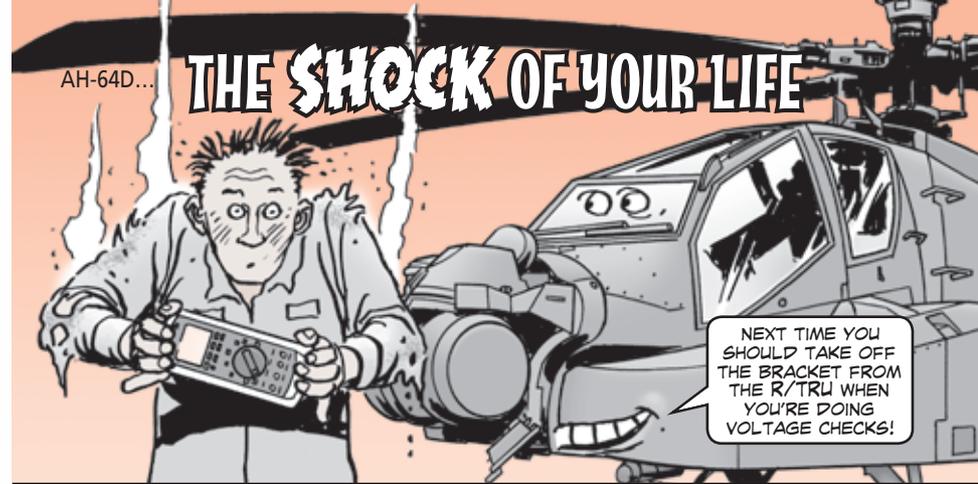
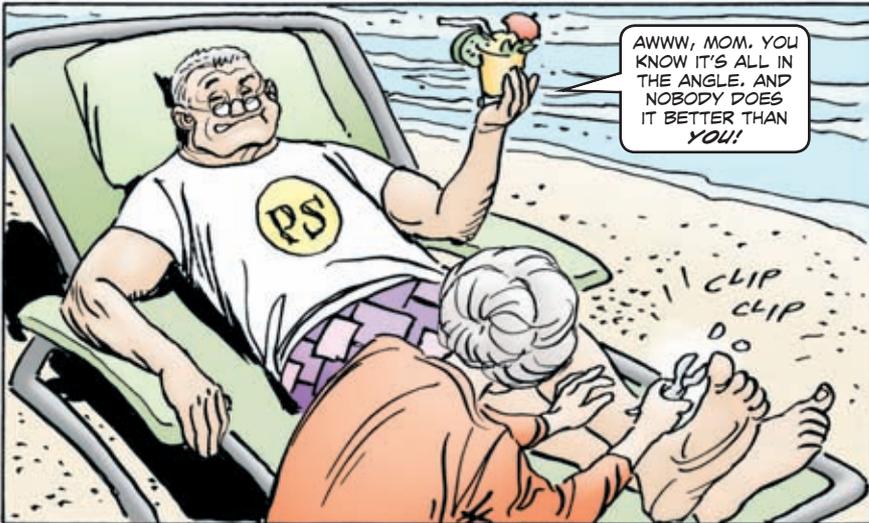


NICE TRY, ANGELS. MAYBE **NEXT** TIME! NOW I HAVE TO GO! I'M AFRAID I'VE GOT A LITTLE **PM** TO ATTEND TO.

HOME MAINTENANCE, MCCANICK?



SOMETHING LIKE THAT... SO LONG FOR NOW!



Most scary movies have scenes that can really shock you right out of your seat, mechanics.

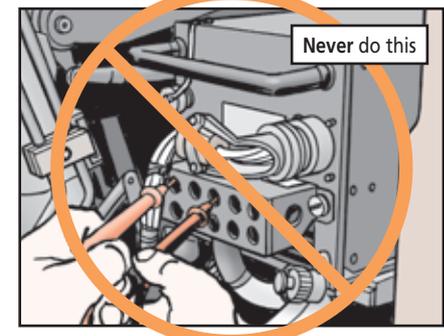
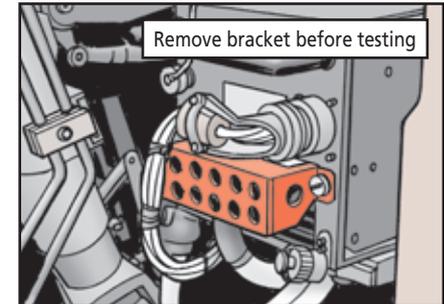
Doing voltage checks incorrectly on your AH-64D's regulated transformer rectifier unit (R/TRU), NSN 6120-01-440-5711, can shock you, too.

You must first remove the bracket from the back of the R/TRU when aircraft power is off.

To get a voltage reading, aircraft power must be on. Some mechanics think they can just place the multimeter leads through the bracket while it's still installed. But that's not the case. Placing the leads in the wrong place causes arcing. If that happens, you could get the shock of your life, burns and/or damaged equipment.

The R/TRU voltage check is measured with a multimeter across the positive and negative terminals after the cover has been removed.

Remember that you're dealing with electrical systems and the two R/TRUs provide primary DC electrical power for your bird. So make sure voltage checks are done by the book, not by the seat of your pants.



OH-58D...

LOOKS LIKE YOU NEED A RUBBER PAD!



HONEYCOMB PANEL NEEDS PROTECTION



ATTENTION, MECHANICS. CRACKS, SCARS AND SCRATCHES TO THE OH-58'S HONEYCOMB PANEL COME FROM FUEL NOZZLE OR FILLER CAP HITS DURING REFUELING.

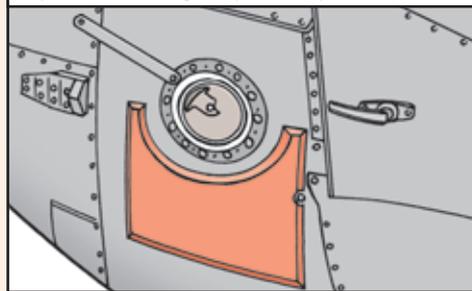
There's a rubber pad, NSN 9320-00-074-3105, that partially protects the honeycomb. But it's not strong enough to withstand the impact of the cap or fuel nozzle.

If the honeycomb behind the rubber pad looks like a woodpecker's been hammering away at it, clean, inspect and repair minor damage like it says in Task 2-2-80 and 2-2-81 of TM 1-1520-248-23, EM 0246.

Remove the rubber pad, repair the honeycomb and install a new rubber pad like it says in task 2-2-98 of TM 1-1520-248-23, EM 0246.

So avoid letting the cap or nozzle hit the rubber pad and you won't have to fix the honeycomb panel later. If your Kiowa Warrior does not have a rubber pad installed, make sure you install one.

Repair minor damage. Replace if repair can't be done

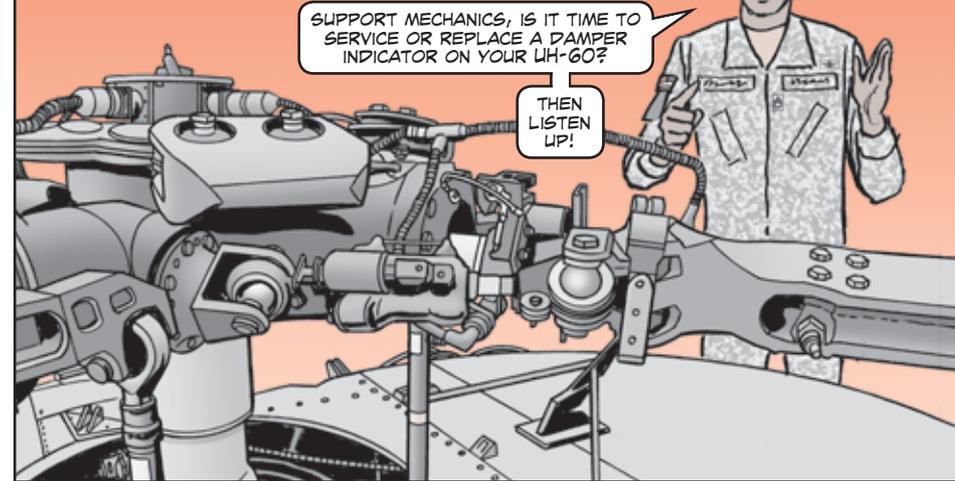


UH-60 Series...

ROTOR DAMPER INDICATOR SERVICING

SUPPORT MECHANICS, IS IT TIME TO SERVICE OR REPLACE A DAMPER INDICATOR ON YOUR UH-60?

THEN LISTEN UP!



WP 0537 00 of TM 1-1520-237-23-7 gives the inspection criteria for determining whether you can service a damper indicator. Repairs to an indicator can be done within certain limits like the TM says. There are also procedures that tell you when the dampers must be replaced or are damaged beyond repair.

If you replace a damper indicator, you must use the locally-made damper indicator insertion and installation tools.

The instructions to make these tools are in Figs 165 and 166 of WP 1085 in TM 1-1520-237-23-20.

If you can't make the tools in the machine shop, all is not lost. You can order them from the manufacturer on a DD Form 1348-6. Enter "Damper Indicator Tool" for the part number. Use CAGE Code 55723. The tools cost \$150 dollars.

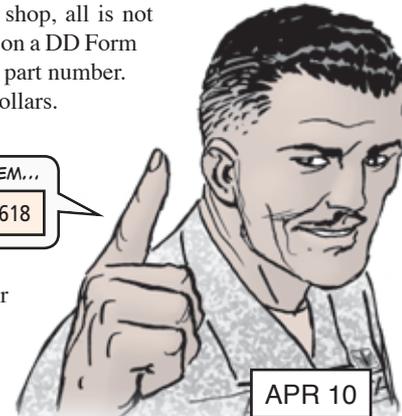
GET THEM DIRECT FROM...

Spectrum Associates Inc
183 Plains RD
Milford CT, 06461

OR CALL THEM...

(203) 878-4618

They are the folks who make the damper indicator, so you can bet your bottom dollar the tools will work.



LEAVE THE GOOD PARTS



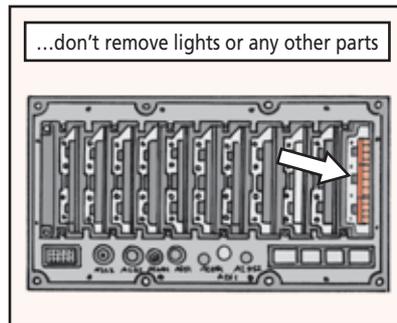
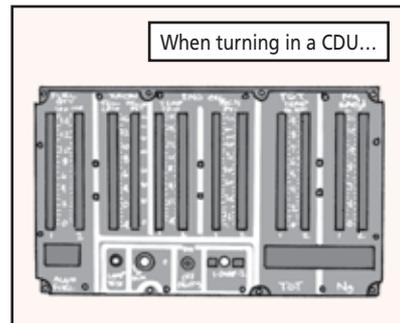
Mechanics, turning in your bird's avionic components to support for repair doesn't mean you should remove parts from it for another component or bench stock.

On a Black Hawk, for example, some think it's OK to give support the control display unit (CDU), NSN 1680-01-337-7546, minus the unit's lights, NSN 6210-01-343-1481, so they can use them on another component or for bench stock.

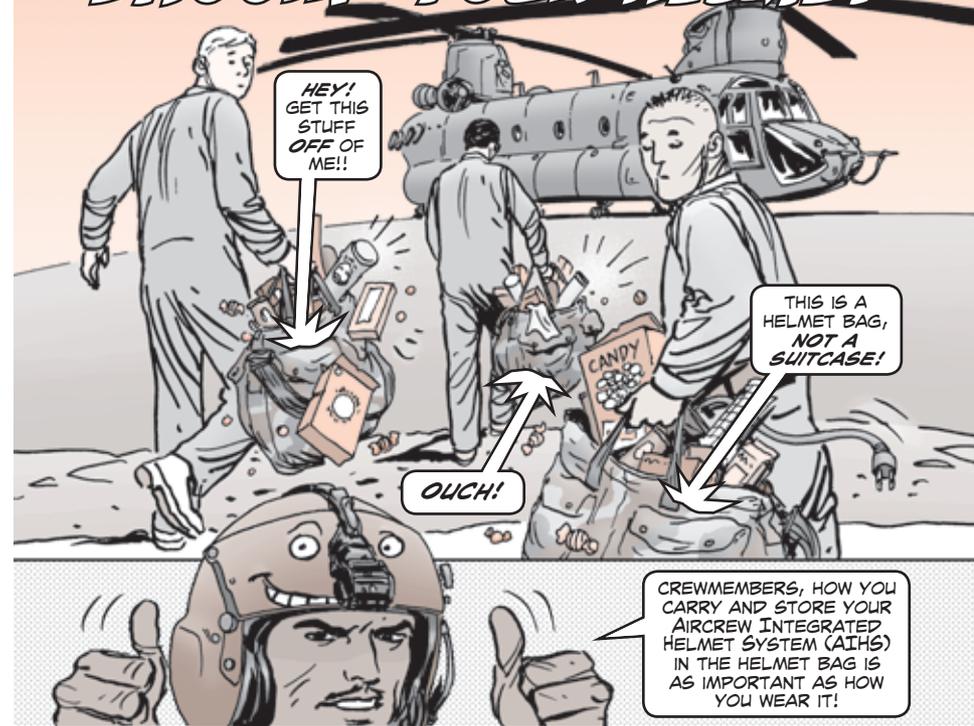
But that keeps the support shop from troubleshooting the part. AVIM needs every part attached to the component to test and repair it. If there are missing pieces, like lights, nothing gets repaired until support orders and gets new lights.

Removing the lights from a CDU creates long downtime and months of waiting for ordered parts.

So put a smile back on support's face by doing them a favor. Leave all of a component's parts in place when turning it in.



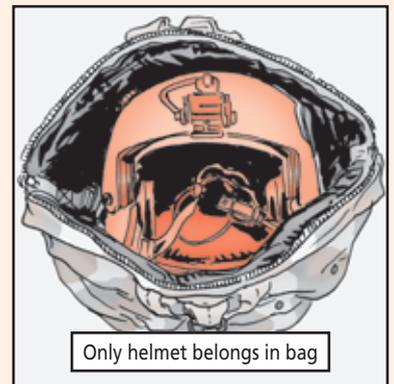
BAGGIN' YOUR HELMET



Place the helmet in the bag with the front facing towards you. Any other position puts the helmet in harm's way.

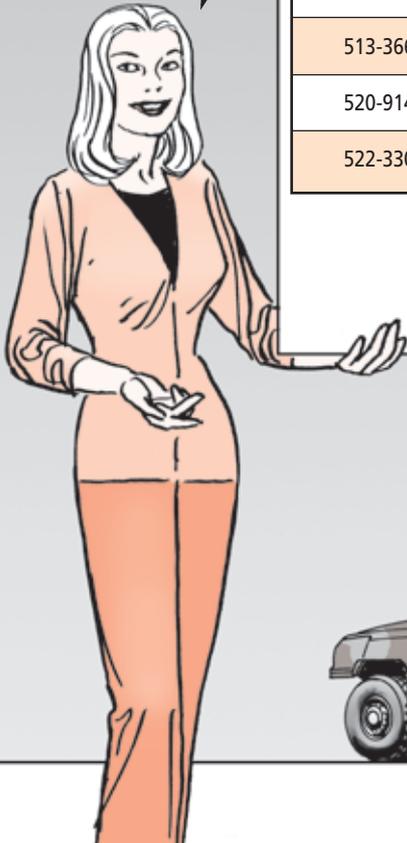
Carelessly dropping the helmet bag or tossing it around in aircraft like a sack of potatoes can create helmet soft spots. That puts your noggin at risk of not having full protection.

And by the way, don't get the urge to toss other items in the bag like knee boards and checklists that can damage the helmet. Keep all that junk out of the bag and take care of your helmet like it says in TM 1-1680-377-13&P, EM 0250.



A LITTLE FUSE NEWS

THESE FUSES MAY BE SMALL, BUT THEY HAVE A BIG IMPACT!



Dear Editor,

I'm the AN/TSC-156B Tac Sat Phoenix system ILS manager and I need to alert the field of some NSN changes for fuses. Six of the NSNs for fuses listed in TM 11-5895-1830-13&P have been canceled and the FED LOG doesn't reference replacement NSNs.

Here are the canceled NSNs, the NSNs that replaced them, and where they're located in the TM:

Old NSN 5920-01-	New NSN 5920-	Item	Fig/Table
520-9140	01-122-4181	2 2 19	Fig C-27 Fig C-28 Table D-13
323-7953	01-120-3823	7	Fig C-20
522-0272	00-407-0310	4 26	Fig C-20 Table D-13
513-3669	01-386-8116	8 16	Fig C-53 Table D-13
520-9148	00-280-5066	10 13	Fig C-34 Table D-13
522-3308	01-378-3869	2 17	Fig C-5 Table D-13

Examples of areas in TM 11-5895-1830-13&P to be changed:

Fig C-27

Item No.	SMR Code	NSN	CAGE Code	Part Number	Description and Usable on Code (UOC)	Qty
2	PAOZZ	5920-01-520-9140	75915	21801.6	Fuse, cartridge 7182953-10	2

Fig C-20

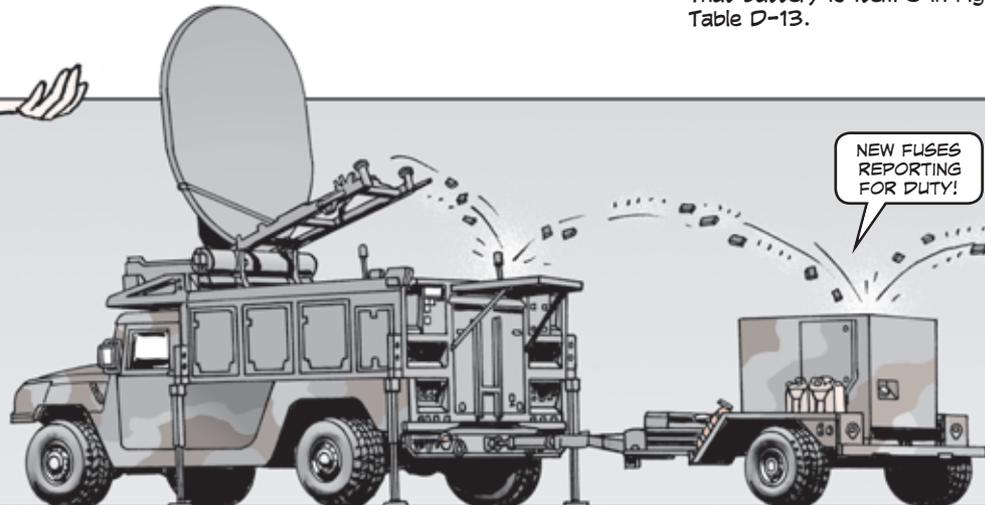
Item No.	SMR Code	NSN	CAGE Code	Part Number	Description and Usable on Code (UOC)	Qty
7	PAOZZ		75915	218025	Fuse, cartridge 7182953-12 (For 4008975+000 only)	2

Table D-13

Item No.	Description	NSN	CAGE Code	Part Number	UI EA	Qty
13	Fuse, cartridge	5920-01-520-9148	06401	7186732-05	EA	2
16	Fuse, cartridge	5920-01-513-3669	06401	7182953-23	EA	4
17	Fuse, cartridge	5920-01-522-3308	06401	7193225-00	EA	2

I also want to point out that the notebook computer battery NSN, NSN 6140-01-518-4975, has been changed to NSN 6140-01-539-0599. That battery is Item 5 in Fig C-29, Item 5 in Table D-11, and Item 28 in Table D-13.

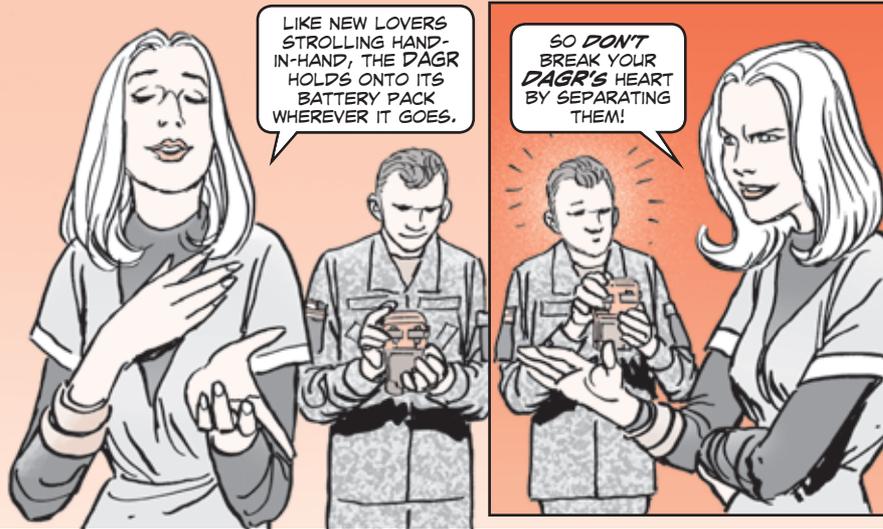
Ms D.G.Z.
ILS Manager, PM-WIN-T



NEW FUSES REPORTING FOR DUTY!

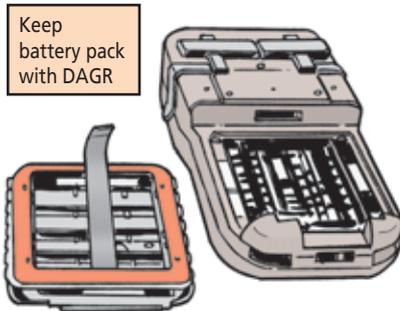
Editor's note: Thanks, Ma'am, for the updated info. Nothing is more frustrating than to find an NSN is no longer good and the replacement is not listed on the FED LOG or AMDF. One more thing, Phoenix users, about TM 11-5895-1830-13&P. The numbering system identifying the figure in the Comprehensive NSN List seems to be off by one number in many cases. That's the case with five of the six fuse NSNs. It doesn't change anything, but might confuse your search efforts.

The Battery Pack is a Component Part



Some of you are doing just that. You think the battery pack, since it has its own stock number, NSN 6135-01-521-3064, is a separate item. You think it does not need to remain with the DAGR when you turn in the DAGR for repairs or make a lateral transfer.

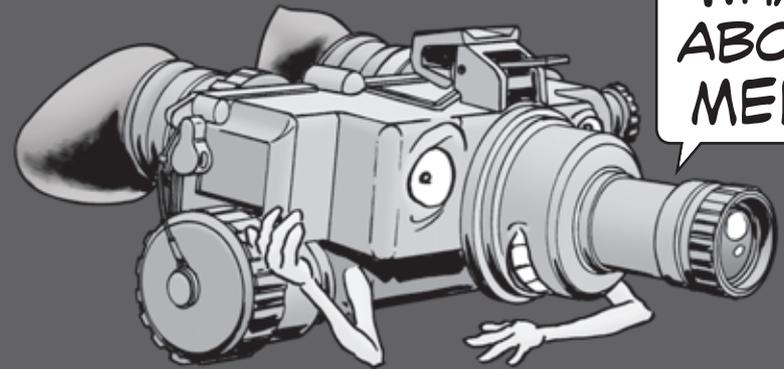
Wrong!
A complete DAGR is a DAGR **with** a battery pack. Turn in or transfer a DAGR without one and someone down the line will have to buy one. Eventually, that packless DAGR will come back to haunt you by a debit to your unit funds or a return to you without repair. Yeah, you may sneak a few through, but bad karma will catch you!



And, store your DAGR with the pack attached. Some of you are removing the pack and storing it separately with the batteries. But the pack serves a secondary purpose. Besides holding the batteries, it forms a moisture barrier to protect the DAGR's inside components from water intrusion.

Keep this pair together and don't separate the battery pack from the DAGR unit.

[Click here for a copy of this article to save or email.](#)



Dear Half-Mast,
I work in a DS maintenance shop repairing night vision goggles (NVG). One of my co-workers asked me if there were any maintenance expenditure limits (MEL) on NVGs. I looked in the TB, but it's not very clear. What's the true word on MEL for NVGs?

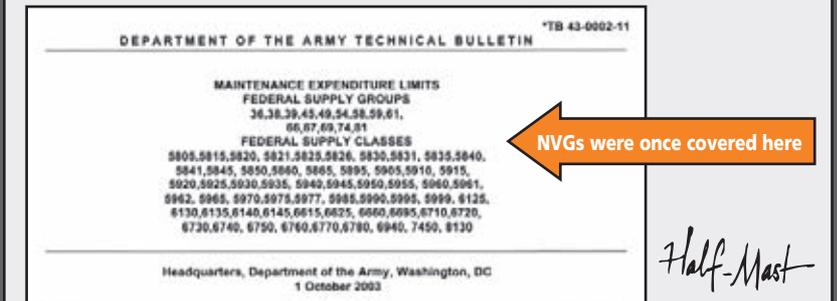
S.M.Y.

Dear S.M.Y.,
Night vision goggles belong to federal supply class (FSC) 5855. The MEL for that supply class was once covered in TB 43-0002-11. But since the 1 Oct 2003 edition of the TB, that supply class has been dropped! There no longer is a MEL for NVGs.

So, all NVGs under FSC 5855 need to be repaired to the -10/20 standard in accordance with their applicable TM no matter the cost. Well, not quite all. If the NVG has been really, really smashed or burned up or battle damaged beyond repair, then don't try to repair it.

If you need further clarification on this subject, contact CECOM LCMC at DSN 987-5908 or (732) 427-5908, or by email

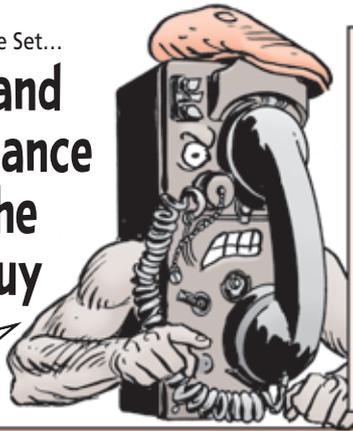
[@us.army.mil](mailto:us.army.mil)



[Click here for a copy of this article to save or email.](#)

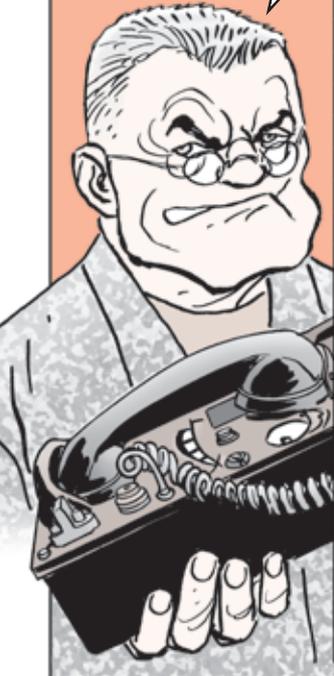
Parts and Maintenance for the Old Guy

WHO YOU CALLING "OLD", SONNY?



Old guys may have a few years on them, but they still can be useful. That's the case with the TA-312 telephone. Some of you Active Army Soldiers might vthink the TA-312 is rocking in a chair on the porch of some commo retirement home. But you're **wrong!** Reservists and National Guard troops know the TA-312 is still communicating vital info on the training ground and battlefield.

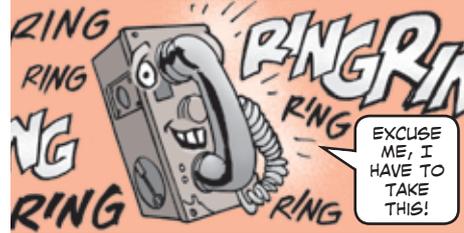
HERE'S A LIST OF PARTS FOR THE TA-312 TELEPHONE H-60 HANDSET, NSN 5965-00-669-9145...



No.	Name	NSN
1	Wiring harness	5805-00-392-6857
2	Machine screw (2)	5305-00-149-0949
3	O-ring	5331-00-618-1665
4	Earphone element	5965-00-549-0220
5	Electrical cap	5999-00-502-9378
6	Air filter element	4130-00-392-7628
7	Microphone mouthpiece	5965-00-521-0511
8	Spacer ring	5365-00-392-7649
9	Packing retainer	5330-00-620-1010
10	Microphone element	5965-00-925-5112
11	Electrical contact assembly	5999-01-154-4525
12	Terminal lug (2)	5940-00-050-2308
13	Fixed capacitor	5910-01-015-8167
14	Electrical contact assembly	5999-00-392-7937
15	Microphone element	5965-00-139-4870
16	Voltage sensitive resistor	5905-00-537-6872
17	Machine screw (3)	5305-00-057-0521
18	Cord assembly	5995-00-665-7390
19	Machine screw (3)	5305-00-054-5644
20	Sensitive switch	5930-00-504-6675
21	Electrical switch cover	5930-00-173-8358
22	Electrical switch plate	(order w/ SM-C-207921)
23	Machine screw (2)	5305-00-455-2549



HERE ARE SOME OF THE OTHER PARTS NOT SHOWN YOU MAY NEED TO KEEP THE TA-312 HUMMING...



Name	NSN
Case screws	5305-00-054-6670
Rubber boots	5970-00-869-6263
De-ice shield	4130-00-392-7628
Retaining clip spring	5805-01-025-8891
Security lamp	5805-00-782-9210
Security warning labels	7690-00-877-6864
Caution label	7690-00-877-6865



OF COURSE, ALL THE NEW PARTS IN THE WORLD WON'T DO THE JOB IF YOUR TELEPHONE DOESN'T GET REGULAR DOSES OF PREVENTIVE MAINTENANCE.

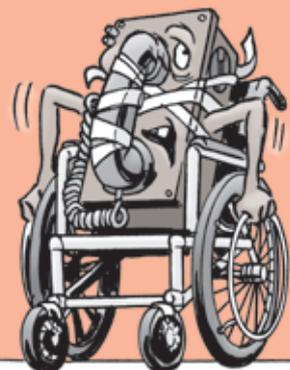
HERE ARE A FEW PM TIPS YOU NEED TO APPLY TO YOUR PHONE...

Operators, after rain or when humidity is high, remove the canvas cover, dry it and wipe the set dry. The most critical area to keep dry is the battery compartment. Moisture will corrode batteries and contacts. Wipe out the battery compartment with a clean cloth. If the compartment is dirty, add cleaning compound to the cloth. Use burnisher, NSN 5120-00-255-4458, to clean the contacts.

During rain, keep the set off the ground and covered with a poncho or anything handy. Always put a drip loop in the field wire before connecting the wire to the binding posts. This will keep water from running right onto the posts.

THE TA-312 IS TOUGH, BUT NOT INDESTRUCTIBLE.

HERE ARE FEW OF THE VULNERABLE AREAS...



A broken or lost generator handle probably means an operator decided sudden stops or cranking the handle backwards was fun. Or, maybe, they just forgot to tuck the handle in when they were done cranking.

The handset might seem like a convenient handle for carrying the telephone until it slips from the cradle and you rip the cord off. Use the carrying strap or lift the whole set.

While the spring isn't meant to hold up the phone, it should secure the hand set. To test the retaining clip spring for proper tension, stand the phone on end. If the handset stays in place, the tension's good. If it slips out, the spring is weak and needs replacing. The spring gets weakened by jerking the handset straight out from the cradle. To properly remove the handset, push forward and lift up the transceiver end first.

A lot of folks like to doodle while they talk on the phone. TA-312 operators have their own form of doodling—scratching on the designation plate. Some might even think it's creative. But a missing or unreadable designation plate is a repairable part on the telephone and requires money and time to replace.

DRINK TUBES: THERE IS A DIFFERENCE

For several years, the M40/M42-series masks have had two totally different internal drink tubes. And the difference makes a difference. One drink tube coupling can be replaced by CBRN specialists, while the other requires a whole new facepiece.

The new drink tube looks like a stretched Z—it has two bends. The old tube has only one bend.

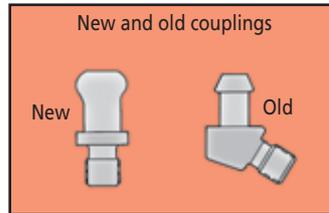
The old coupling has a squared base and points upward toward the front voicemitter and nosecup ridge. The new coupling is straight and points out of the facepiece.

The new drink tube can be used only with the new drink tube coupling. If the new tube disappears or the coupling is damaged, no problem. Just replace them like it says in the procedure in TM 3-4240-346-23&P. See WP 0012 for the internal drink tube and WP 0021 for the coupling.

But if the old drink tube coupling is damaged, your only solution is to get a new facepiece.

Don't use the new drink tube with the old coupling or vice versa. That puts the drink tube in the wrong position for drinking.

Here's a chart to help you identify and replace drink tubes and their couplings:



Characteristic	Old Internal Drinking System	New Internal Drinking System
Drinking Tube	L-shaped, one bend	Z-shaped, double bend
Tube Coupling	Angled	Straight
Repair Parts	Internal Drink Tube, NSN 4240-01-260-8711 Facepiece Assembly (used to replace damaged internal drink tube coupling), NSN 4240-01-415-4517 Small NSN 4240-01-415-4518 Medium NSN 4240-01-416-0430 Large Note: Tube coupling is permanently mounted and cannot be directly replaced	Internal Drink Tube, NSN 4240-01-441-0557 Internal Drink Tube Coupling, NSN 4240-01-462-0045

What's the Correct Second Skin?



Dear Half-Mast,

We are trying to figure out which is the correct second skin to use with our M40 and M42 masks when worn with JSLIST. There are two types of second skin in the field: one is plain and one has a pronounced lip with hooked tabs on both the top and bottom. Which one should we use?

SSG M.H.

Dear Sergeant M.H.,

The plain second skin is simply called second skin and the one with the tabs is called the universal second skin (USS). Both work fine with JSLIST and come in two sizes, small and medium/large. But the second skin is pretty much out of the Army inventory. So order the USS: small, NSN 4240-01-413-1540, and medium/large, NSN 4240-01-413-1543.

Don't forget that when you wear JSLIST, you don't need to wear the quick-doff hood for the mask. The JSLIST hood provides sufficient protection. You will need the quick-doff hood for the M42A2 mask because it's not worn with JSLIST.

Half-Mast

Order universal second skin to wear with JSLIST



JBPDS BIDS...

GENERATING GENERATOR SOLUTIONS

I'M RUNNIN' LOW ON POWER HERE.

HOW ABOUT GENERATING SOME GENERATOR PM SO I CAN REALLY CRANK INTO ACTION.

Dear Editor,

The generator for JBPDS BIDS (joint biological point detection system biological integrated detection system) can die if you don't treat it with care. Unfortunately, it's often ignored and as a result suffers. My former unit lost six generators.

But there are some easy ways to keep the BIDS generator generating:

Don't use high pressure water hoses around the generator. The generator is surrounded by fireproofing foam. High pressure water knocks off chunks of the foam and the foam is sucked into the air cleaner, which can prevent the generator from getting enough air.

It's a good idea to keep an eye on the foam. If it's crumbling, tell your repairman. He may need to replace it.

KEEP THAT HIGH PRESSURE STUFF AWAY FROM ME.

ALL THAT WATER KNOCKS MY FIREPROOFING FOAM LOOSE.



Pull out part of the exhaust hose before you slide out generator. If you don't first pull out 3-4 feet of the exhaust hose to give the hose some slack, the hose's coupling may tear the hose when you pull out the generator tray.

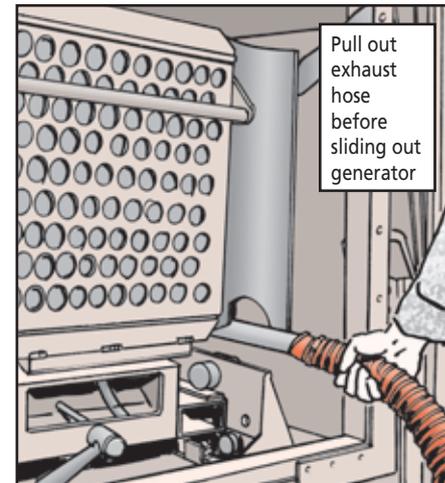
Keep an eye on the exhaust hose's wrapping. The generator's vibration can cause the wrapping to unravel to the point it catches in the generator fan.

Clean the back of the radiator every six months. This is critical if you're operating in a sandy environment like the desert. Oil and sand collect on the backside of the radiator. If it gets too dirty, the radiator can't cool the generator and it overheats. That can kill the generator.

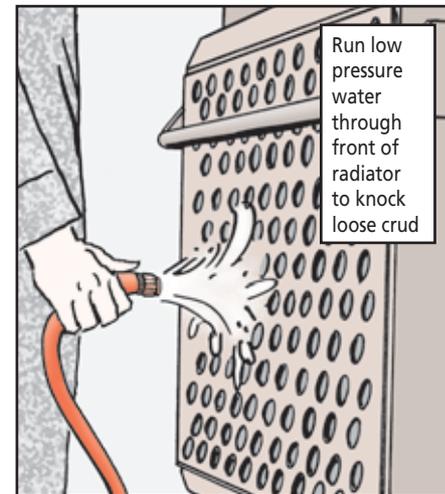
The fan guard makes it difficult to clean the back of the radiator. Your repairman will need to remove the fan guard, which is held on by several screws. Spray low-pressure water through the front of the radiator to loosen up the gunk. Then use something like a playing card to scrape the gunk off. Don't use anything metallic that could damage the radiator coils.

SSG G.E.
U.S. Army CBRN School
Ft Leonard Wood, MO

Pull out exhaust hose before sliding out generator



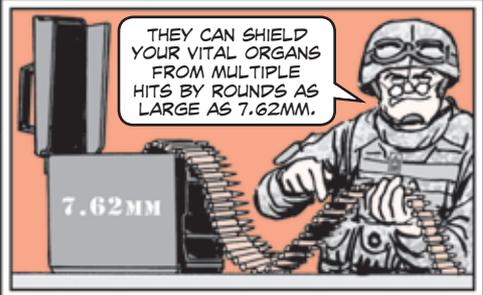
Run low pressure water through front of radiator to knock loose crud



Editor's note: Some powerful generator PM, Sergeant. JPDS BIDS operators also should keep the generator stowed except when they need to pull it out for maintenance. That protects it from dirt, moisture and other stuff that can cause problems. And make sure the HMMWV fuel tank is full before operations. If it runs out of fuel, so does the generator. Then your mechanic has to bleed the air from the generator fuel system.

TAKE AN INTEREST IN CERAMIC INSERTS

THE ENHANCED SMALL ARMS PROTECTIVE INSERTS (ESAPI) AND THE ENHANCED SIDE BALLISTIC INSERTS (ESBI) IN YOUR IMPROVED OUTER TACTICAL VEST (IOTV) ARE COMPONENTS OF THE FINEST BODY ARMOR EVER MADE.



THEY CAN SHIELD YOUR VITAL ORGANS FROM MULTIPLE HITS BY ROUNDS AS LARGE AS 7.62MM.

THEY PROTECT YOU, SO HOW ABOUT DOING A LITTLE WORK TO PROTECT THEM?

THAT INCLUDES INSPECTING, CLEANING AND STORING.



No Rough Stuff

For starters, don't play rough with the inserts. That means no throwing them to the ground or dropping them on hard surfaces. Even though they're tough, the inserts are ceramic and they can crack if you manhandle them. And cracks weaken an insert's ballistic protection.



DON'T TOSS INSERTS OR VESTS!

Inspecting

INSPECT EACH INSERT FOR CRACKS BEFORE EACH MISSION AND ONCE A DAY DURING GARRISON OR FIELD USE.

- Handle the insert to see if it flexes.
- Listen for crunching sounds that indicate broken pieces.

● Shake the insert and listen for loose pieces rattling around.



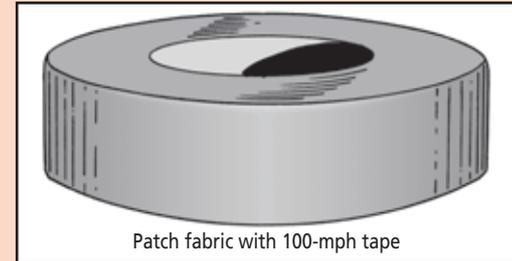
IT TAKES MORE THAN JUST LOOKING IT OVER, BECAUSE CRACKS MAY BE HIDDEN UNDERNEATH THE FABRIC.

HERE'S HOW TO INSPECT YOUR INSERT...



- Look for rips, tears or holes in the fabric that expose the black ceramic tile.

If you find any of these problems, the insert is unserviceable. Turn it in to support and get a replacement. As a field fix during operations, you can patch torn fabric with 100-mph tape, NSN 7510-00-266-5016. But remember, this is a temporary fix until you can replace the insert.



Patch fabric with 100-mph tape

If your ESAPI or ESBI gets hit by bullets or fragments, its ballistic protection is weakened. So play it safe. Turn in damaged inserts to support.



Cleaning

DIRTY, GRIMY INSERTS NEED A GOOD CLEANING, ESPECIALLY BEFORE YOU TURN THEM IN TO THE CENTRAL ISSUE FACILITY (CIF).



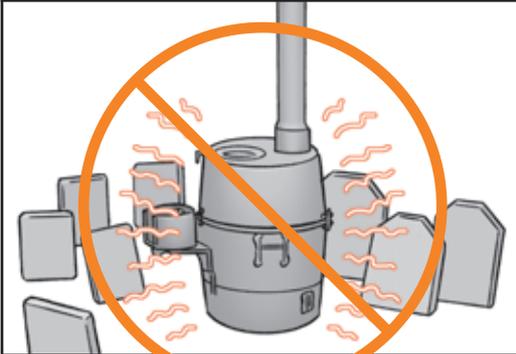
- Never machine wash or dry. That causes too much wear and tear on the ESAPI and ESBI, not to mention the washer and dryer.
- Use a cloth or soft brush to remove loose dirt or lint from the surface. Never use a stiff-bristled brush. You could tear the fabric.

- Wet the ESAPI and ESBI with warm (**not hot**) water. Hand wash with a mild soap or detergent and a cloth or soft brush. Scrub badly soiled areas with GI soap. Scrub only long enough to remove the soil.



- To clean heavy grease and oil, apply a mix of detergent and dry cleaning solvent, NSN 6850-00-110-4498, directly on the spots and scrub with a soft brush.
- After washing, rinse with clean, warm water until all suds are gone.

- Lean the inserts against a post or wall and let them air dry. **Never** dry them near a heater or open flame. That could degrade the ballistic protection.



Storing

ALWAYS CLEAN THE ESAPI AND ESBI BEFORE STORING.



- Put the inserts into the IOTV vest pockets—just like you were going to wear them. That way you'll know exactly where they are.

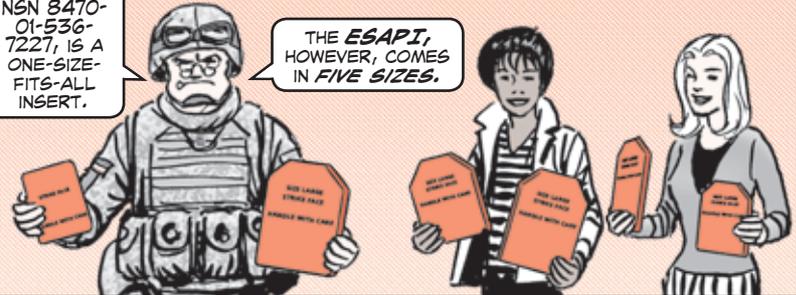


- Put the vest in a plastic bag to keep out dirt, dust and moisture.
- Store the vest as flat as possible to keep the materials from bunching.

NSNs and Sizes

THE **ESBI**, NSN 8470-01-536-7227, IS A ONE-SIZE-FITS-ALL INSERT.

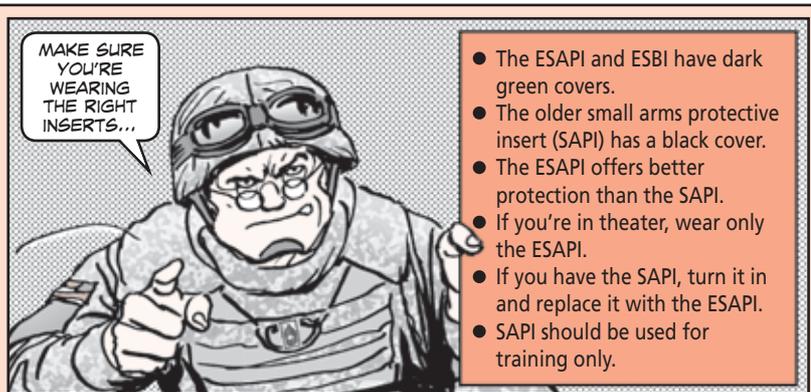
THE **ESAPI**, HOWEVER, COMES IN FIVE SIZES.



As a rule, to fit properly, the ESAPI should be the same size as the vest. For example, if you wear a medium vest, order the medium ESAPI. The exception to the rule is if you wear an XX-, XXX- or XXXX-large vest. The ESAPI doesn't come in those sizes, so order the X-large inserts. All size inserts are interchangeable between front and back pockets.

NSN 8470-01-520-	Size
7360	X-small
7370	small
7373	medium
7385	large
7382	X-large

SOLVING TERMINAL ITEM ISSUES



FOR MORE INFORMATION, CHECK OUT THESE REFERENCES AND THEIR WEBSITES...



TM 10-8400-203-23, *General Repair Procedures for Individual Equipment* (May 90 w/ Ch 12, Nov 08), Chapter 25
<https://www.logsa.army.mil/etms/online.cfm>

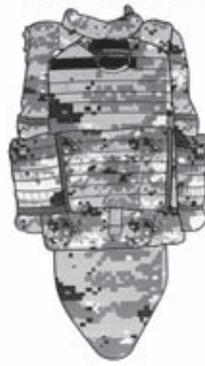
Improved Outer Tactical Vest (IOTV) Use and Care Manual, Specialty Defense Systems, AKO website

PS, *The Preventive Maintenance Monthly*, articles in issues 627 and 644:
<https://www.logsa.army.mil/psmag/archives/PS2005/627/627-46-47.pdf>

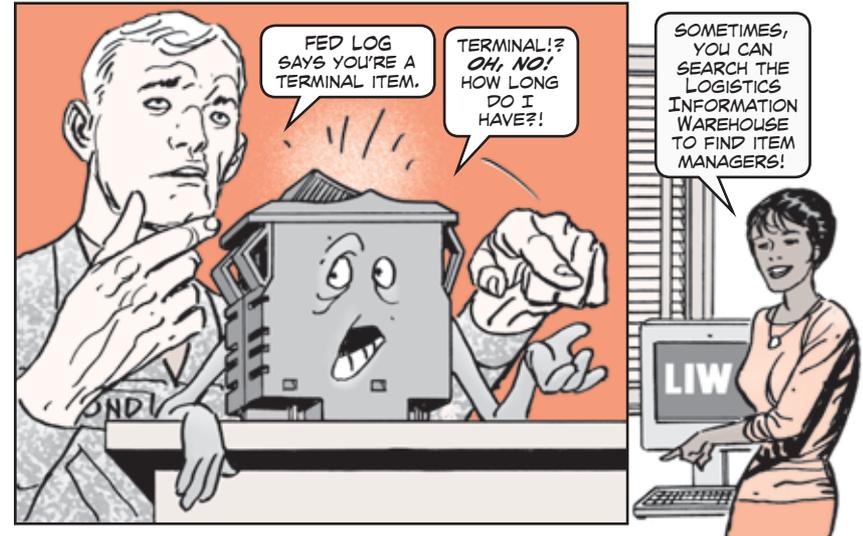
<https://www.logsa.army.mil/psmag/archives/PS2006/644/644-50-52.pdf>

TACOM LCMC MAM 09-005, IOTV, ESAPI/ESBI, DTG 311610Z Oct 08,
<https://aeps.ria.army.mil/aepspublic.cfm>

IMPROVED OUTER TACTICAL VEST (IOTV) USE AND CARE MANUAL



Prepared by:
 Specialty Defense Systems
www.spscorpdefense.com
 1-800-318-7500



Dear Half-Mast,

I need a good NSN for the circuit breaker/switch for the TS-4216/G 33kW load bank, NSN 6625-01-220-2619. The switch is listed as NSN 5925-01-285-6522 in the TM. But this NSN is listed as a terminal item in FED LOG. We've tried ordering it locally, but no one can come up with a suitable replacement. Can you help?

SFC D.H.

Dear SFC D.H.,

Here's the scoop, Sergeant. In this situation, you need to call the item manager for the end item and talk with an equipment specialist to identify the replacement for this switch.

Fortunately, you can go into the Logistics Information Warehouse (LIW) with end item NSNs and look up their respective item managers.

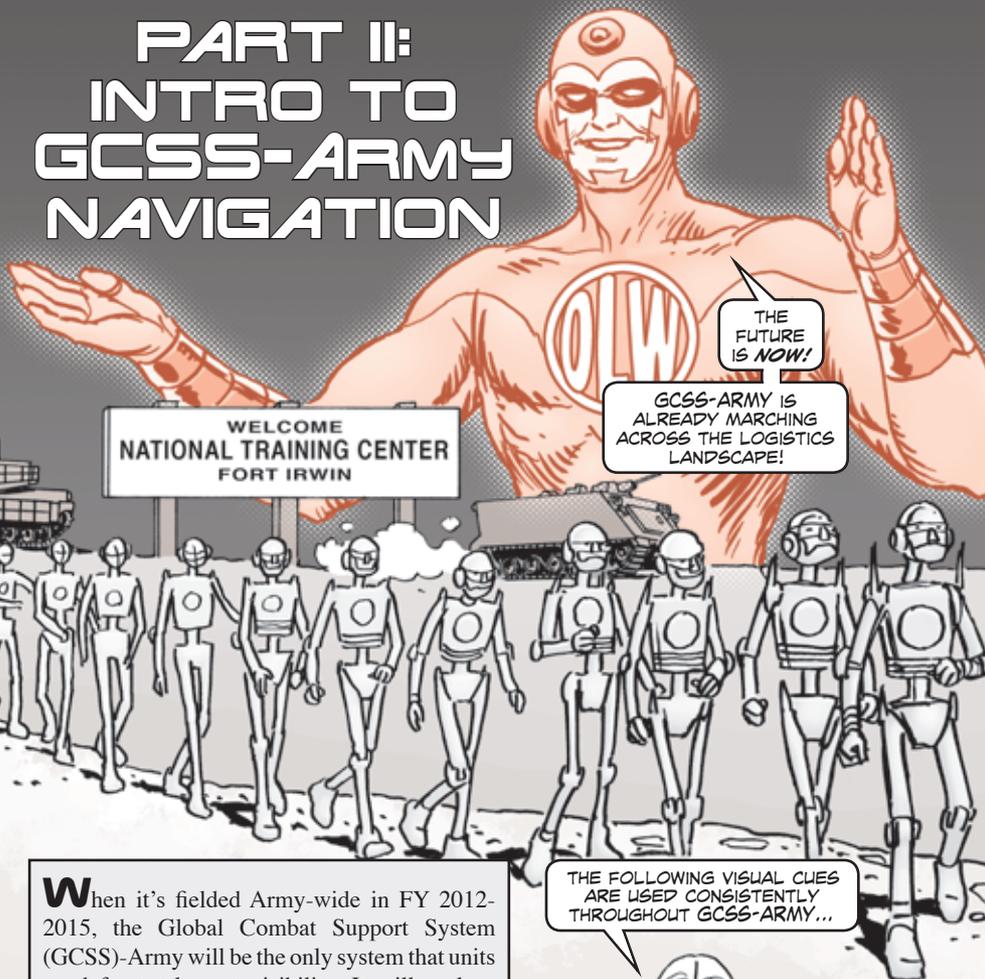
First, log on to LIW on LOGSA's website using your CAC:

<https://liw.logsa.army.mil>

Click on Links, next on AMC Sites, AMC Commodity Manager Locator and then you can enter the end item's NSN. Where you see an SOS showing a red "YES," follow that line over to ANALYST CODE/POC and click on the link for the end item manager's name and phone number.

Half-Mast

PART II: INTRO TO GCCS-ARMY NAVIGATION



THE FUTURE IS NOW!

GCCS-ARMY IS ALREADY MARCHING ACROSS THE LOGISTICS LANDSCAPE!

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THE FOLLOWING VISUAL CUES ARE USED CONSISTENTLY THROUGHOUT GCCS-ARMY...



- Icons
- Folders
- Dropdowns
- Indents
- Colors

When it's fielded Army-wide in FY 2012-2015, the Global Combat Support System (GCSS)-Army will be the only system that units need for total asset visibility. It will replace seven aging Standard Army Management Information Systems (STAMIS).

The new GCSS-Army interface is designed to be consistent and user-friendly. After logging in through AKO, the user sees a menu tree structure that consists of folders and subfolders. This modular organization allows users to "drill down" from general to specific subjects with a folder structure familiar to most computer users.

There are two types of menu trees: standard and user. The standard menu tree contains all the menu options available in GCSS-Army, plus options that some users may not be able to access, depending on their roles and permissions. The user menu tree contains only those menu options users need to accomplish their mission.

User roles determine the level of access in GCSS-Army. A detailed and ongoing analysis of roles and permissions across the modular structure will determine exactly who performs what role at what level. It will also specify the tasks associated with those roles. This analysis will also determine where control of role assignments will reside.

Transaction: The execution of a specific GCSS-Army function triggered by:

1. An alphanumeric entry into the standard action line
2. The clicking of a dialog box
3. The clicking of an icon representing the transaction

EXAMPLES OF TRANSACTIONS INCLUDE...

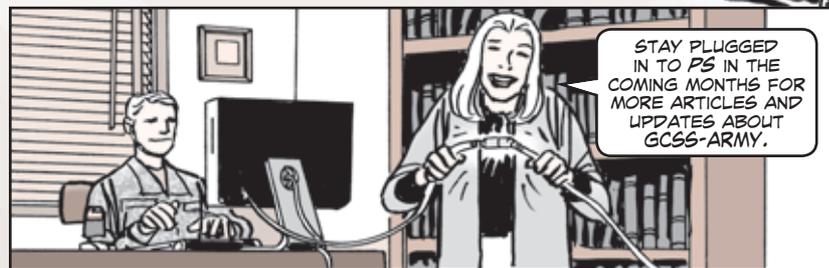
- Displaying material information (on-hand balances)
- Receiving material into inventory
- Issuing material

HERE ARE SOME IMPORTANT POINTERS ABOUT TRANSACTIONS AND TRANSACTION CODES...

- Every transaction is assigned a unique alphanumeric code
- GCSS-Army enhanced transaction codes begin with "Z" or "Y"

The GCSS-Army toolbar also standardizes navigation throughout the system, and provides buttons that enable quick execution of basic functions.

One major improvement is the ability to open up six distinct sessions, allowing managers to perform detailed analysis without having to exit any transactions.



STAY PLUGGED IN TO PS IN THE COMING MONTHS FOR MORE ARTICLES AND UPDATES ABOUT GCCS-ARMY.

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Commander's Call

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ARMY TRAINING NETWORK (ATN) PROVIDES A HOST OF TRAINING PRODUCTS, INCLUDING...

...PACKAGED TRAINING PRODUCTS FOR BATTLE COMMAND AND OUTCOMES-BASED TRAINING.

ATN Training

Want to see how others do some good ideas and successfully?

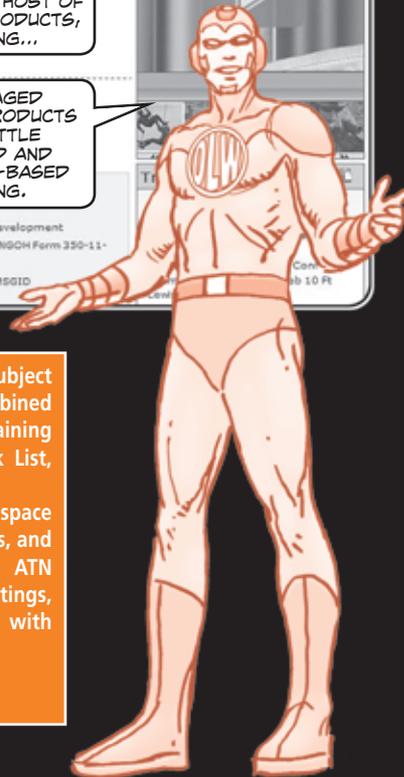
Top Downloads:

1. AR 350-1 Army Training and Leader Development
2. Sergeant's Time Training Worksheet, MSGO Form 350-11-7 (Jan 2009)
3. DTMS Required for Training Records: MSGID

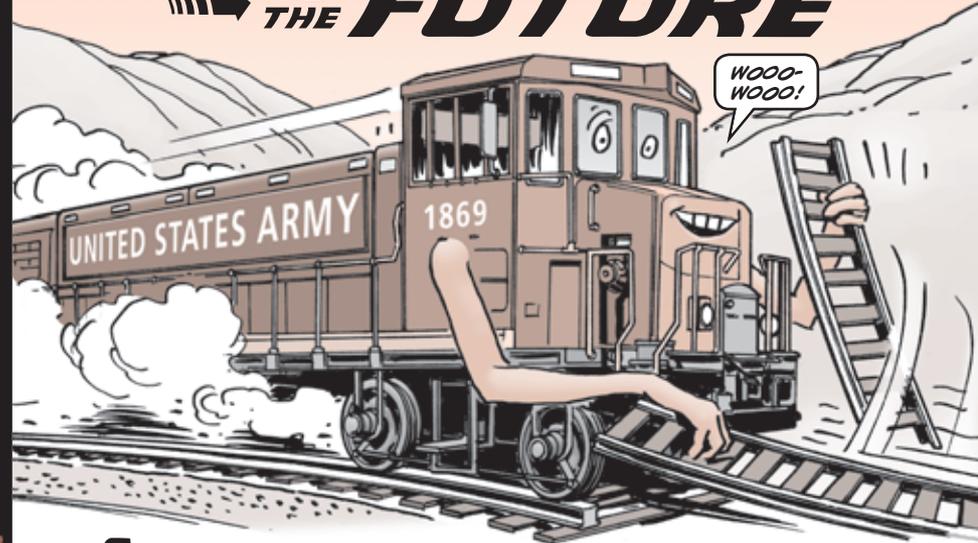
The ATN forum discussions are led by subject matter experts in Army Force Generation, Combined Arms Training Strategies, the Digital Training Management System, Mission Essential Task List, and other topics.

ATN also provides access to Virtual Battlespace 2, which offers realistic battlefield simulations, and the Virtual Training Environment program. ATN now hosts video "how-to's" for training meetings, collateral damage training and ambushes, with more videos to come.

Check out the ATN online:
<https://atn.army.mil>



SWITCHING TRACKS TO THE FUTURE



Armey Regulation 56-3, *Management of Army Rail Equipment*, has had a major revision, effective 30 Sep 09.

This regulation implements DOD 4140.50-R, *Management and Standards for DOD Locomotives*, which prescribes Army policies and command responsibilities for maintaining and operating rolling stock, track maintenance equipment, and locomotives. It also covers the provision of theater military railway service and operating utility railroads.

The updated AR applies to the Active Army, the Army National Guard and the Army Reserves.

AR 56-3 Updates

Some of the major updates include:

- Adding Defense Generator and Rail Center responsibilities
- Reassigning responsibilities of the Installation Management Command
- Implementing the newly-developed Rail Crew Qualification Course
- Detailing responsibilities for installations in field and sustainment maintenance
- Describing new criteria for repair of rail equipment

The AR also outlines a 20-year program to replace the entire Army locomotive fleet.

For more information, call DSN 224-1088, (703) 614-1088, or email [@us.army.mil](mailto:us.army.mil)



New Tarps for M1A1 Tanks

Simply closing the hatches on your M1A1 tank won't guarantee waterproof protection. To avoid getting soggy, tarp your tank! There are now two new tarps available that are specially designed to fit the shape of your M1A1 tank. Order the tan tarp with NSN 2540-01-568-9376 and the green tarp with NSN 2540-01-568-9379. NSNs for specially designed M1A2 tarps are not yet available.

PQDR Websites Revisited

On Page 61 in PS 687 (Feb 10), we told you about the new reporting method for Product Quality Deficiency Reports (PQDRs). Here are important details:

Submit all non-aviation/missile warranty, equipment improvement reports (EIRs), and all CECOM-managed (B16) items, including aviation items and PQDRs at the PQDR website:

<http://www.nslcptsmh.csd.disa.mil/webpqdr/webpqdr.htm>

Set up a new account here:

<http://www.nslcptsmh.csd.disa.mil/accessforms/uarform.htm>

All AMCOM (aviation and missile) deficiency reports (warranty, EIRs and PQDRs) must be submitted through the Joint Deficiency Reporting System (JDRS). Non-registered users submit reports here:

https://jdrs.mil/DR_Initiate.cfm?service=AR

Set up a new account here:

<https://jdrs.mil/>

Click on "Site Access" and then "New User Registration."

HEMTT Tanker Purging Solution

Use NSN 7930-01-350-7034 to get a 6-gal container of cleaning compound (purging solution) for the M978 HEMTT fuel tanker. NSN 7930-01-350-7035 gets a 55-gal drum.

GROVE CRANE PUMP PARTS INFO

Order the emergency steering pump assembly for the RT875CC 40-ton rough terrain crane, shown as Item 8 (Sheet 1 of 3) of Fig 105 in TM 5-3810-306-24P using NSN 2530-01-282-7993. To order the RT875CCS crane's pump assembly shown as Item 8 (Sheet 2 of 3) of Fig 105, use NSN 2530-01-558-9803. Make a note until the parts info is updated for Sheet 2.

M984 Wrecker Cable Assembly

NSN 6150-01-282-1882 gets the remote control cable assembly for the basic M984 wrecker's HIAB crane. This NSN replaces the parts info shown as Item 3, Page B-3 of TM 9-2320-354-10.

POLARIS ATV ENGINE

Use NSN 2805-01-571-0285 to get an engine for the Polaris ATV. If you need ATV parts and commercial manual support, the DLA POC for Army customers is at DSN 850-1634 or email @dla.mil. Also, you can go to the Defense Logistics Agency website:

<http://www.dscc.dla.mil/programs/polaris/>

New HMMWV Halfshaft Bolt Lock Washer

The lock washers on HMMWV halfshaft bolts have been changed from a one-piece (NSN 5310-01-185-7218) to a two-piece lock washer assembly (NSN 5310-01-457-3292). Keep this info handy until you see it in a future change to TM 9-2320-280-24P.

M1037 HMMWV Axle Lower Ball Joint

Need a lower ball joint for your M1037 HMMWV's front and rear axles? Get it with NSN 2530-01-554-8307. NSN 3040-01-422-9390 has been discontinued.

FUEL HANDLING GLOVE NSNs

Need protective gloves for handling fuel? Get 'em with these NSNs:

NSN 8415-01-529-	Size
2612	small
2618	medium
2621	large
2624	X-large
2638	XX-large

M35A3 Spare Tire Parts

Use these NSNs when you need to get the CTIS hardware for the spare tire on your M35A3 2½-ton truck.

Part	NSN
Elbow	4730-00-277-5543
Reducer	4730-00-204-1993
Cap	2640-00-060-3550
Valve core	2640-00-004-8297
Valve	4820-01-363-8002

Make a note until these NSNs are added to TM 9-2320-386-24P.

DSESTS Turn-In Revisited

Turn-in of any unused direct support electrical system test set (DSESTS) is still desperately needed. But there are a few updates to the DSESTS turn-in article that appeared on Page 6 of PS 686 (Jan 10). First, delete **Transfer Standards Adapter (TSA), NSN 6625-01-448-9832**, from the chart. It is no longer part of the DSESTS. Second, add **M1A2 SEP, NSN 6625-01-376-0470**, to the chart. And third, the

TACOM-RI POC info has changed. If you have questions or need help, contact:

DSN 793-1901 or (309) 782-1901
@us.army.mil

or,

DSN 793-5849, (309) 782-5849
@us.army.mil

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Would You Stake Your Life ^{right now} on the Condition of Your Equipment?

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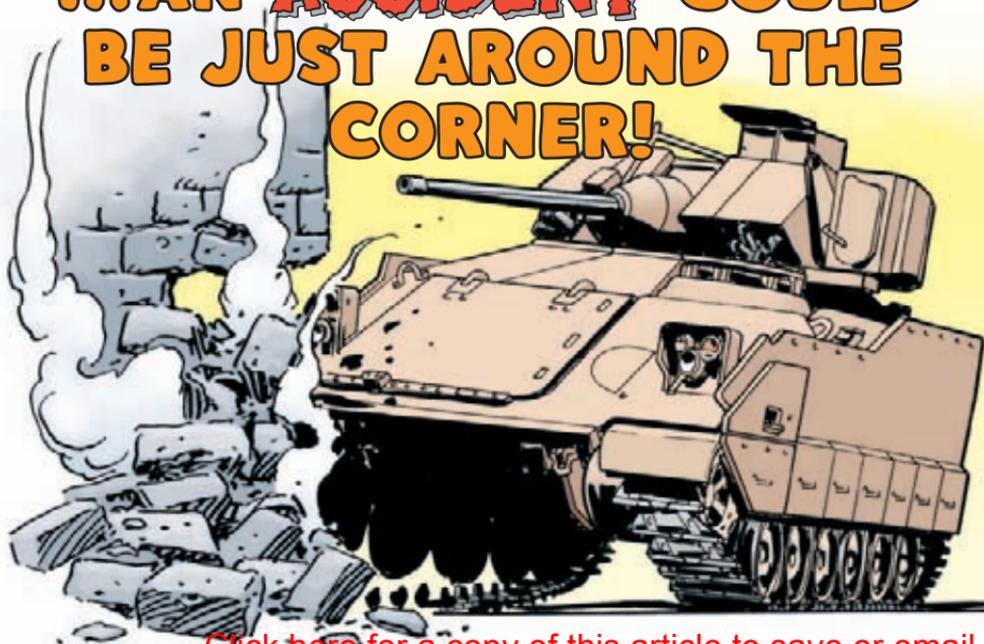
**THIS
IS A
GROUND
GUIDE!**



**IF YOU
DON'T
USE
ONE...**



**...AN ACCIDENT COULD
BE JUST AROUND THE
CORNER!**



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