



THE PREVENTIVE MAINTENANCE MONTHLY

TB 43-PS-626, 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.

ISSUE 626 JANUARY 2005



WHEELED VEHICLES

HEMTT Clutch BDAR Fix, Axle Vent
HEMTT Valve Stem Positioning
M984E1 HEMTT Wheel Seal Reminder
M1000 HET Semitrailer Bogie Maintenance
HMMWV Generator Mounts
FMTV M66 Ring Mount Cover
Tank and Pump Unit Flowmeter, Switch
Semitrailer Kingpin Gauge



MISSILES

Avenger Missile System M3P Gun
Patriot Missile System Van Entrance



SMALL ARMS

M16A4 Rifle, M4/M4A1 Carbine MWS Parts
Machine Gun Barrel Spares
M6 Pedestal Setting for MK19 Machine Gun
MK19 Machine Gun Drive Levers
MK19 Machine Gun Tool List



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M88A1 Recovery Vehicle Hose Clamps
M2/M3-Series Bradley Sand Removal
MLRS Lessons Learned
M113-Series FOV Fuel Cap PM
M992A2 Ammo Carrier Thermal Wires



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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 35898-5000

Or e-mail to:

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

Internet address:

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

By order of the Secretary of the Army:

PETER J. SCHOOMAKER

General, United States Army Chief of Staff

Official:



SANDRA R. RILEY

Administrative Assistant to the Secretary of the Army

0429203

PS, The Preventive Maintenance Monthly (ISSN 0475-2953) is published monthly by the Department of the Army, Redstone Arsenal, AL 35898-5000. Periodical postage is paid at the Huntsville, AL post office and at additional mailing offices.

Postmaster: Send address changes to PS, The Preventive Maintenance Monthly, USAMC LOGSA (AMXLS-AM), 5307 Sparkman Circle, Redstone Arsenal, AL 35898-5000.

Issue 626

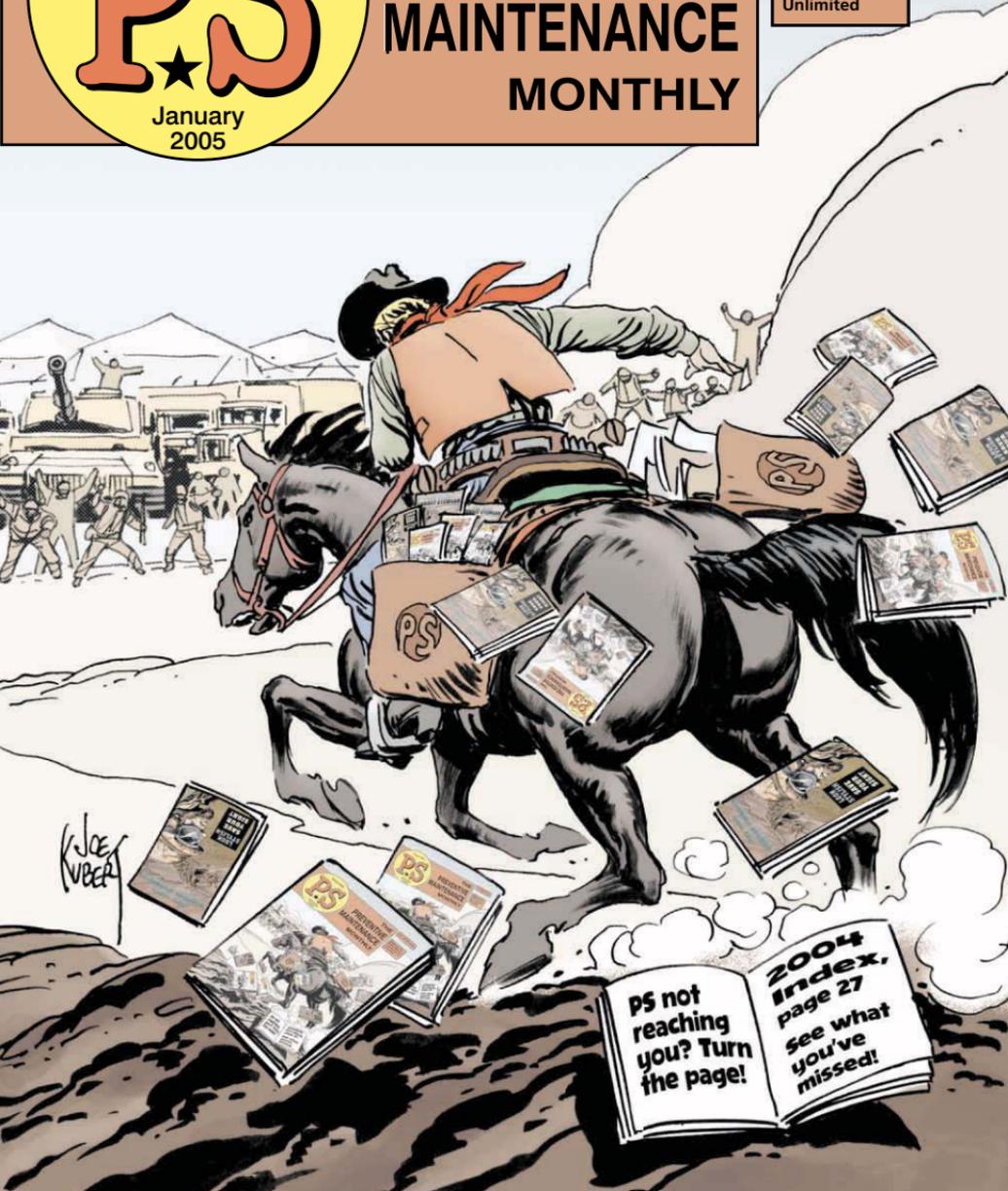
PS

January
2005

**THE
PREVENTIVE
MAINTENANCE
MONTHLY**

TB 43-PS-626

Approved for
Public Release;
Distribution is
Unlimited



**PS not
reaching
you? Turn
the page!**

**2004
Index,
page 27
see what
you've
missed!**

GET PS TO THE TROOPS



The goal of PS Magazine is to help operators and unit-level maintainers perform better preventive maintenance. Unfortunately, it seems PS isn't getting down to the troops as much as it should.

Whatever the reason, when troops don't get PS, the unit loses a real maintenance multiplier. Maintenance tips, NSN changes, and other maintenance updates improve maintenance ops, train troops, and improve readiness—all at no cost to the unit.

Help PS help your unit. Get the pubs clerk to order enough copies. Get PS out of offices and into dayrooms and motor pools. See that PS is available for your soldiers to read—and use.

GETTING PS IN THE DESERT

Units which are deployed to Iraq and have APO AE addresses use the Army in Europe Publications System (AEPUBS) for their publication accounts.

To get PS Magazine delivered to their units, pubs clerks should follow AEPUBS instructions for *How Do I Establish a Deployed Publications Account?* on their website at:

<https://aepubs.army.mil>

While waiting for AEPUBS to start delivery of PS, units should have their stateside rear detachments repackage and forward the PS Magazines that are still being delivered there.



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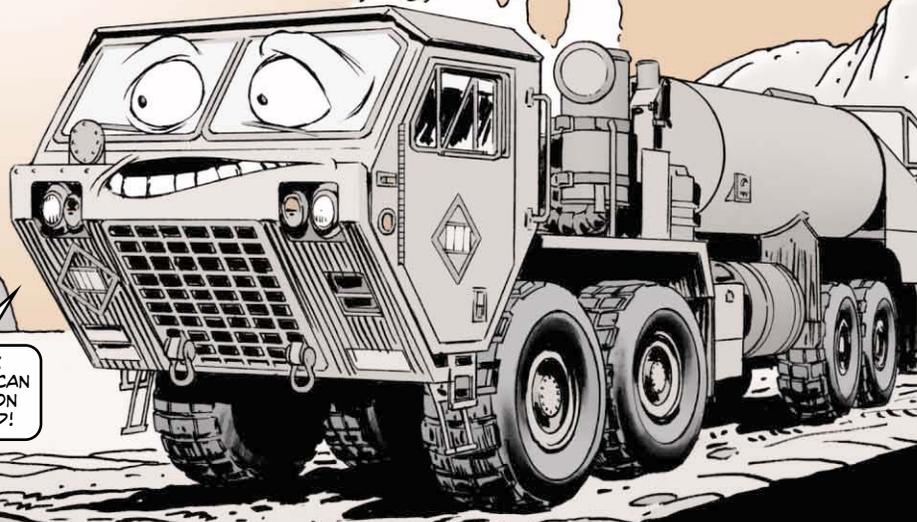
[Click here for a copy of this article to send to a friend](#)

KEEP COOL IN THE CLUTCH

OH, MAN! THIS IS THE LAST PLACE I WANT TO BE STUCK WITH AN OVERHEATED ENGINE!

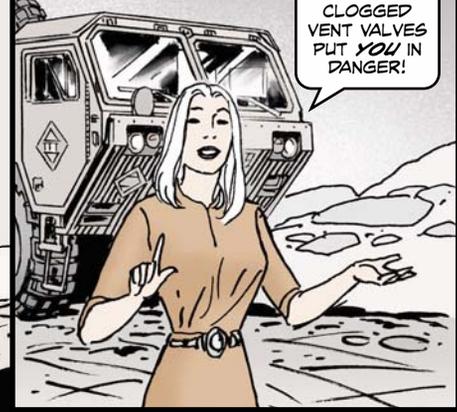


A QUICK BDAR FIX CAN GET ME ON THE ROAD!



BRAKELESS IN BAGHDAD?

DON'T LET CLOGGED VENT VALVES PUT YOU IN DANGER!



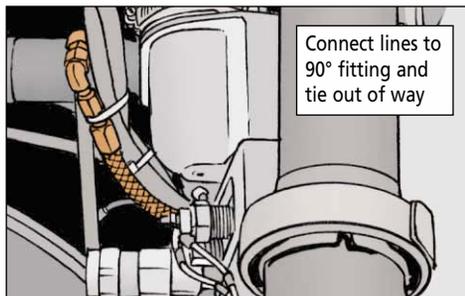
Dear Editor,

While stationed in Iraq, the heat sometimes got so bad that the thermostat inside our HEMTT's fan clutch actuator would lock in the closed position. If the cooling fan can't come on, the engine overheats.

Cargo is too precious to leave beside the road and you don't want to be stuck by yourself in the boonies. So we came up with a quick fix to keep the fan turning and the truck in action.

If the engine starts to overheat and the cooling fan isn't turning, follow these steps:

1. Disconnect the intake and outtake lines on the actuator.
2. Remove the 90° fitting from the actuator.
3. Screw the intake and outtake lines into the 90° fitting. The threading on one side isn't perfect, but it will hold enough air pressure to activate the fan.



Connect lines to 90° fitting and tie out of way

4. Use a wire tie to hold the lines out of the way of the fan.

With the actuator bypassed, the fan will work continuously. That keeps the engine cool and allows you to complete the mission.

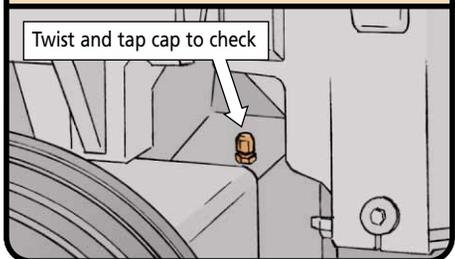
SSG Brad K. Brubaker
3/69th AR
Ft Stewart, GA

(Editor's note: An excellent BDAR fix, Sergeant. Just remember to report it immediately after the mission so a mechanic can fix the problem.)

Drivers, remember to check the vent valves on all four axles during the weekly checks.

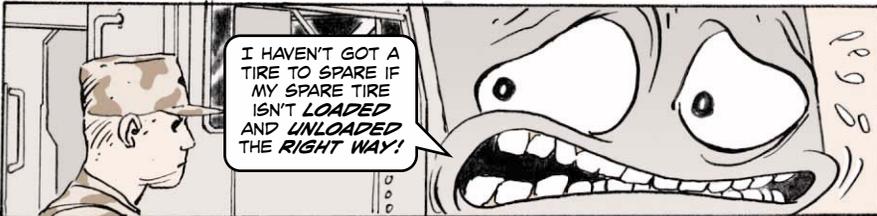
If the valves won't vent, your HEMTT blows seals. Oil leaks out. Enough leakage and the oil seeps into the brake pads. Then you'll have a hard time stopping.

It's easy enough to check a vent valve. Crawl underneath the vehicle and twist the cap to loosen any dirt inside. Tap the cap. it should depress and spring right back.



Twist and tap cap to check

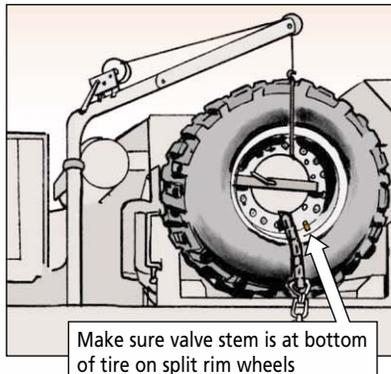
HIGH NOON DOOMS VALVE STEM



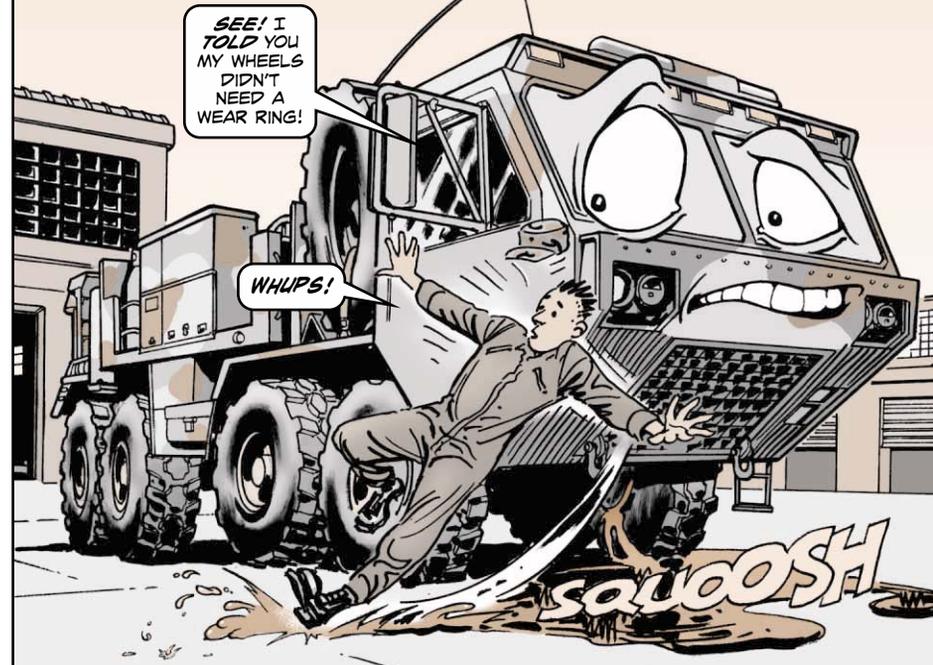
Drivers, the only thing worse than a flat tire on a loaded HEMTT is two flat tires, especially if one of 'em is the spare.

But a flat spare is exactly what you get if you load and unload the spare tire with the valve stem at the 12 o'clock position. The winch cable hooks the valve stem and then tears or cuts it when the tire is lifted.

So play it safe. For split rim wheels, make sure the valve stem is at the bottom of the wheel before you lift. If your spare is on a bolt-together wheel, position the valve stem between the 7 and 8 o'clock positions.



WHEEL SEAL REMINDER



Dear Editor,

We've come across a serious number of leaking wheel seals, NSN 5330-01-048-6240, on our fleet of M984E1 HEMTT wreckers.

After investigating, we discovered that the inner wear ring was being mistakenly installed on the wreckers' wheels. The note on Page 12-21 of TM 9-2320-279-20-2 (Apr 87 w/C4) specifically says the M984E1 **does not** take wear rings.

When installed, the ring damages the seal. The result is a Class III leak and damage to the brake shoes and other internal parts, not to mention a big mess on the ground.

Could you remind mechanics to leave the wear ring off when installing a new wheel seal on the M984E1?

CW2 Carlos A. Acevedo
448th Eng Bn
Camp Arifjan, Kuwait

(Editor's note: You've done a pretty persuasive job of that already, Chief. Thanks for the info!)

CLEAN BOGIES A CLASSIC



Mechanics, with 10 bogies to maintain, the last things you need are chewed up brake lines and suspension cylinder seals on an M1000 HET semitrailer.

But that's what will happen if your operators don't keep the bogie bottoms free of crud and you don't keep the suspension cylinder's wiper seal in place.

Each of those 10 bogies collects lots of dirt, sand and mud during operation, mainly because of how the bottom of the bogie is shaped. What goes in won't come out unless it's removed by the operator.

The longer the gunk stays, the more concrete-like it becomes. And that will flat wear out the air brake lines.

Operators must make sure the bogie bottoms are free of crud after every operation. Pressurized water gets rid of most of it, but a little elbow grease may be needed to get all the gunk out from around the air lines.

Clean out crud from bogie bottom after every operation



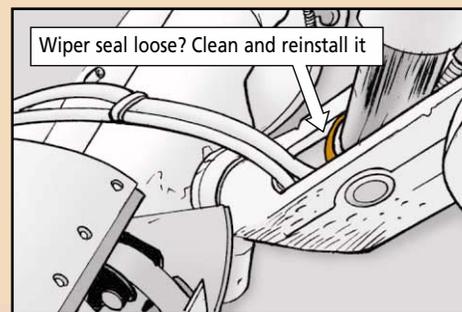
The wiper seal on the suspension cylinder is supposed to keep the cylinder surface clean and prevent dirt from scoring the oil seal at the top of the cylinder.

Problem is, field conditions can loosen the seal, so it does no good at all.

Eyeball the cylinders on each bogie. If the wiper seal is not securely in place at the bottom of the cylinder, look at it closely. If it's not damaged, clean it with dry cleaning solvent.

Then coat the outer metal shell with sealing compound, NSN 8030-01-158-6070. Tap the ring back into place in the groove of the packing nut.

Wiper seal loose? Clean and reinstall it



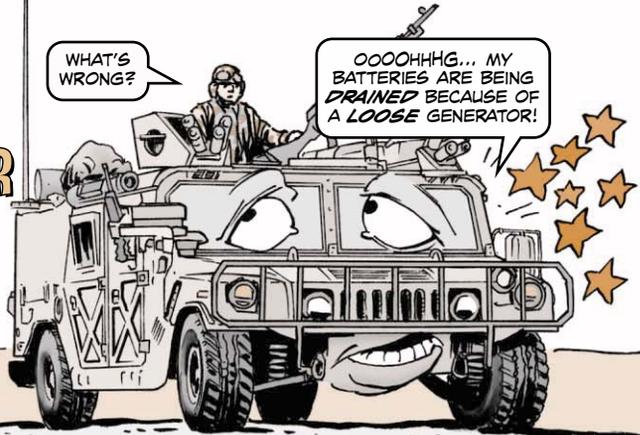
DON'T LET THE SEALING COMPOUND DRY ON THE CYLINDER PISTON, THOUGH.

IT'LL JUST ATTRACT DIRT, SCHWEET-HEART



HMMWV...

GIVE GENERATOR A SQUEEZE

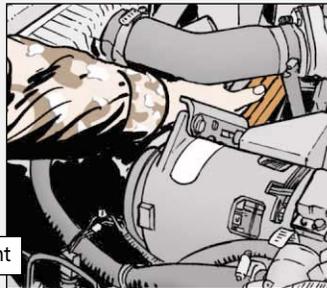


A loose generator mount is a big problem, drivers. If it's bouncing around, it won't do its job properly. And continued vibration is just going to loosen it more.

Problem is, it's hard to tell by sight alone whether the mounting bracket bolts are loose.

Here's a quick way to check for loose bolts:

Grab the belts—top and bottom—and give 'em a squeeze. Watch for any movement of the generator or bracket. If you see anything more than a tiny amount of movement, the bolts are loose. Get your mechanic to tighten 'em.



Squeeze belts and watch for generator movement

FMTV...



IS THERE A COVER FOR THE M66 RING MOUNT?

Dear Half-Mast,

Is there a cover for the M66 ring mount when it's mounted on an FMTV? A cover would help us protect the M66 from corrosion.

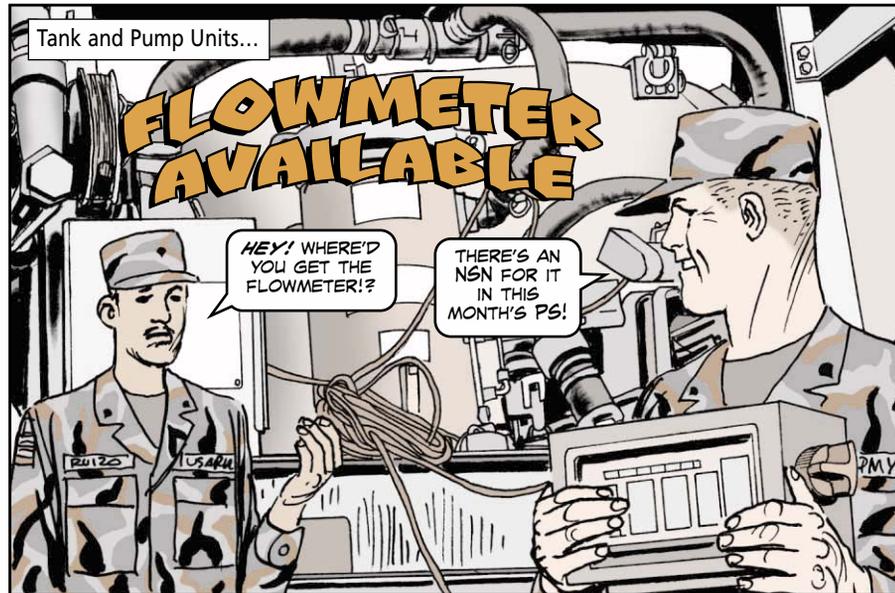
CW2 D.C.

Dear Chief D.C.,

Yes, there is a cover. Order it with NSN 1005-00-707-0725. It costs about \$90. And it works with all M66 ring mounts, not just the FMTV's.

Half-Mast

Tank and Pump Units...



Dear Half-Mast,

We have a tank and pump unit model (97403) 13217E7130. Is there a flowmeter available to help us keep track of fuel as it's pumped?

SSG C.L.
HHC 1st Armor Div
Baghdad Intl Airport

Dear Sergeant C. L.,

Your commander can OK using flowmeter assembly, NSN 4930-01-108-9568, with that tank and pump unit. It doesn't come with the tank and pump unit, so order it separately. It comes with all hoses and hardware you need to mount it and hook it up. The flowmeter lets you keep track of fuel as it's dispensed. There are no Army TMs covering parts, maintenance or calibration, however.

Half-Mast

600-Gal TPU Switch

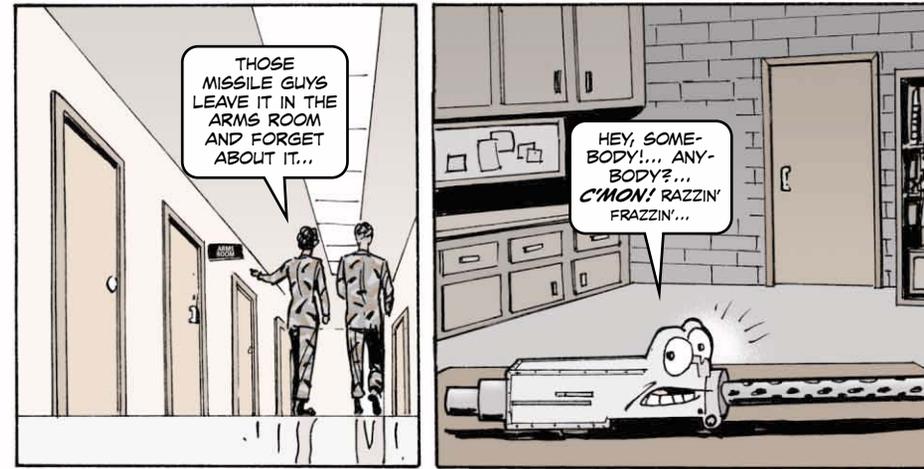
Use NSN 5945-01-252-1412 to get the relay switch for the junction box assembly on the 600-gal tank and pump unit. This NSN replaces the parts info shown as Item 7, Fig 3 of TM 5-4930-230-23P.

Semitrailer Kingpin Gauge

Order NSN 5220-01-521-8643 to get a kingpin gauge for any semitrailer that uses a 21/2-in or 3-in kingpin. The gauge is used to measure kingpin length, wear, straightness and flatness of the bolster plate. Use the gauge during the kingpin's semiannual PMCS check.

SHOOT DOWN

GUN PROBLEMS



Don't forget the Avenger not only shoots Stingers but bullets as well. Often, however, the M3P machine gun is forgotten during PMCS, which leads to jamming instead of shooting when you go to the field. Here are ways to shoot down M3P problems.

Don't let the M3P sit in the arms room for weeks with no attention. Too many times Avenger crews pull the machine guns out of storage and find corrosion has made a deadly appearance. The drill is that you're supposed to clean and lube the M3P after firing. If the M3P is going into storage, it's OK to give all parts (except the bolt face) a heavy coat of TW-25B (not CLP!). But as Page 4-2 in TM 9-1425-433-10 clearly states, you're supposed to "inspect, clean and lubricate every 5 days"—not forget the M3P exists.

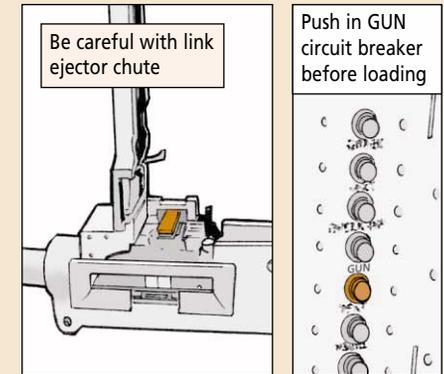
Then when you take the machine gun out for firing, clean and lube it like it shows beginning on Page 4-3, making sure not to lube the bore, chamber, T-slot on the bolt, the top of the trunnion block, or in the buffer tube.



When you're installing the M3P, be careful not to bend the link ejector chute. A bent chute causes the gun to jam. If you do accidentally bend the chute, you can usually bend it back into position with pliers.

Remember that before you load ammo you must push in the GUN circuit breaker on the gunner's console. If you forget, you risk an accidental firing, which could cause your popularity to sink in what's left of your unit.

When you're loading ammo in the gun, you should hear two distinct clicks when the rounds are in place. If you don't hear two, push the rounds in until you hear a second click.



Making Your Entrance



The modular protection entrance that's used on the Patriot's vans is not a high-density item with lots of repair parts in the supply system. If the entrance is damaged, you probably won't be able to repair it unless you can fabricate parts locally. So you could end up completely replacing the entrance just because of some minor damage. And it's not cheap. But there are a few ways to make your entrance last.

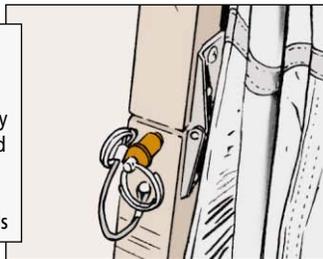
Use at least three people to set up the entrance. Two is not enough to erect it without risking damage.

Be careful carrying stuff in and out of the vans. If you keep banging the entrance's door frame, eventually it will bend. That will probably mean buying a new entrance.

During your weekly PMCS, check that the six quick-release pins in each entrance are inserted all the way and they're connected to lanyards. The pins work out and disappear. Missing pins can cause the entrance to collapse.

Of course, don't jerk on the door. Its hinges can break or pull out of the frame.

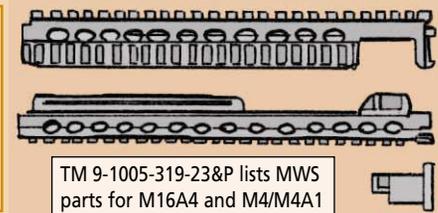
Make sure all 6 pins are fully inserted and tied to lanyards



Where Do I Find MWS Parts?



Dear Half-Mast,
We are having trouble finding modular weapon system parts for our M16A4 rifles and M4/M4A1 carbines. Where should we look?
CPT J.P.

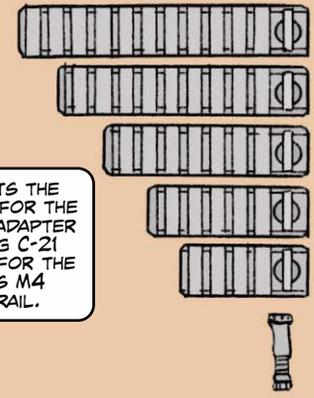


TM 9-1005-319-23&P lists MWS parts for M16A4 and M4/M4A1

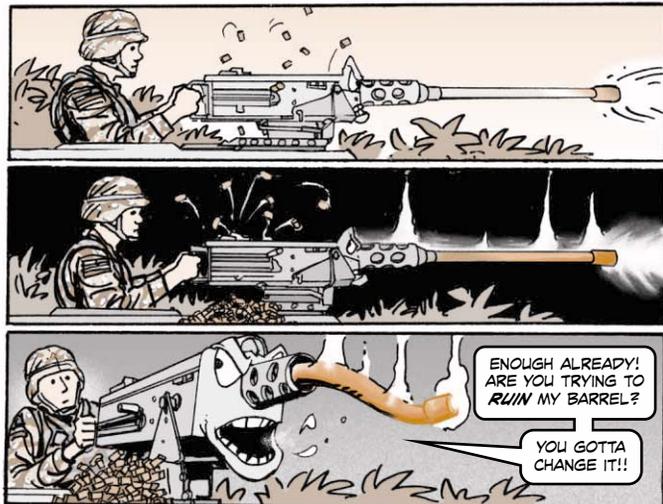


CAPTAIN, LOOK IN CHANGE 6 TO TM 9-1005-319-23&P.

FIG C-17 LISTS THE COMPONENTS FOR THE M16A4'S M5 ADAPTER RAIL AND FIG C-21 LISTS THOSE FOR THE M4/M4A1'S M4 ADAPTER RAIL.



DON'T SPARE THE SPARE BARREL



Terrible things happen when you fire and fire your machine gun without switching barrels. The barrel becomes VERY HOT, which can cause:

- a cookoff
- a warped barrel
- a worn-out bolt and barrel
- ruined headspacing, which can cause the machine gun to explode during firing

That's why the M2, M240, and M249 machine guns come with a spare barrel and why it's important you keep track of rounds fired and rate of fire. Take the spare to the field and change barrels when your machine gun needs it.

M2 Limits Changed

The rule on when you change the M2 machine gun's barrel has changed. The old rule was that you changed the M2 barrel at the end of a day of firing no matter how many rounds were fired. No more. If you're firing single shot, you can still wait until the end of the day to change barrels. But if you're firing slow fire (40 or fewer rounds per minute), change the barrel every hour and if you're firing rapid fire (200 rounds per minute), change it every 1/2 hour.



Other Machine Gun Limits

For the M240, change the barrel every 10 minutes during sustained fire (100 rounds per minute) and every two minutes during rapid fire (200 rounds per minute).

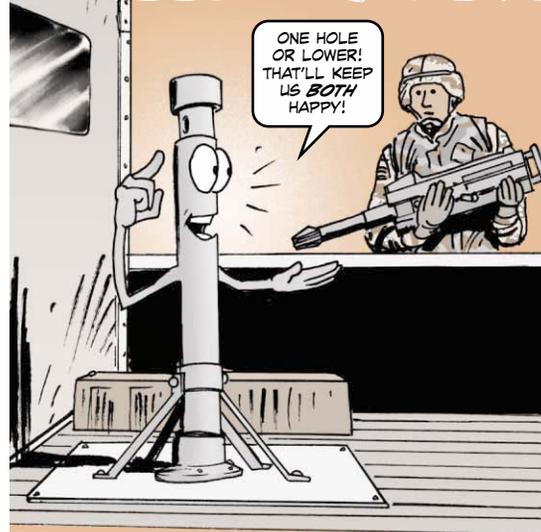
For the M249, during both sustained fire (40 rounds per minute) and rapid fire (100 rounds per minute), change the barrel every 200 rounds.

Change the barrel even more frequently on hot days. Heat heats up the barrel quicker. And remember blanks heat up a barrel just as much as live rounds.



Machine Gun Mounts...

KEEP M6 PEDESTAL LOW

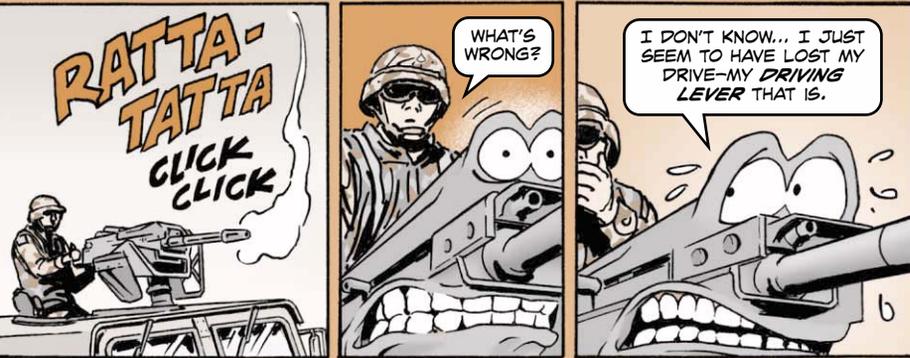


Low is the way to go while firing the MK19 machine gun on the M6 pedestal.

When the M6 is set any higher than one hole exposed, it can interfere with the recoil of the MK19, especially in the cold. So set the M6 at one hole exposed or lower to fire the MK19.

In very cold weather (-50° F or below), fire the M2 machine gun on the M6 no higher than one hole exposed. The M6 can also interfere with M2 recoil, but only in extreme cold.

Good Leverage for Feeding



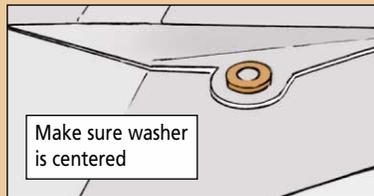
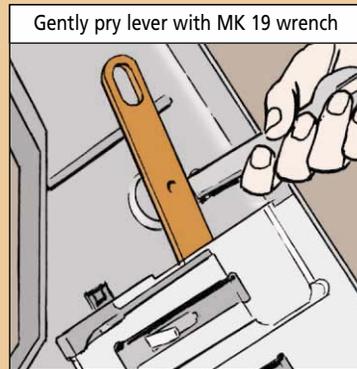
If the MK19 machine gun drive levers can't move ammo forward, it comes to a dead stop on firing. Keep the drive levers on the move with these points:

- MWO 9-1010-230-50-1 replaces the secondary drive with an adjustable lever. But you must be careful how you remove the new lever. If you use a hammer to knock it out of the top cover assembly, you could damage the area in the cap screw where the hex head fits. Then you may have to replace the cap screw because it will create adjustment and disassembly problems.

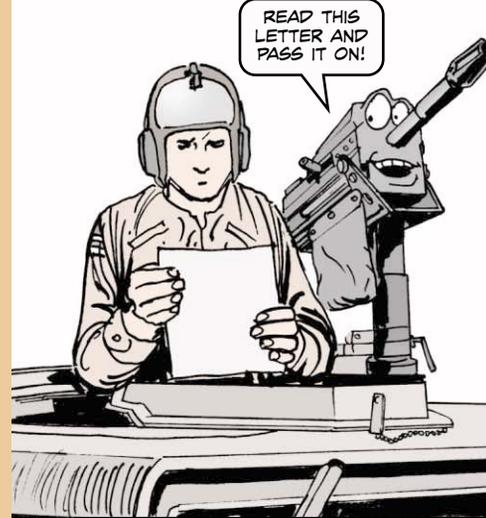
Use a small rubber mallet or block of wood to push out the lever or gently pry it off on the bottom of the cover with the MK19 wrench.

- Once the MWO has been applied, you can't switch levers between MK19s. Each machine gun's lever has been adjusted to that particular gun. A different lever may put rounds in the wrong position, which causes jamming.

- When you put the secondary drive lever back together, make sure its washer is centered. If you put it on upside down, the washer is off-center and the secondary drive lever assembly will be difficult to install. And if you do get it in, it will be difficult to remove the drive lever later.



TOOLS EVERY ARMORER NEEDS



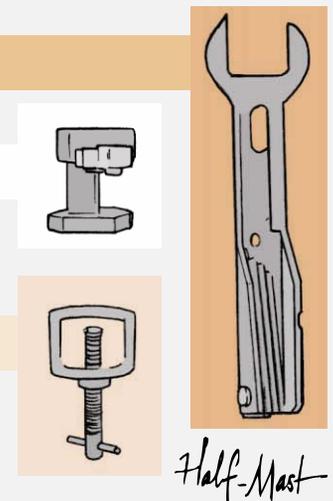
Dear Half-Mast,
I think there are too many armorers who don't have all the special tools needed to work on the MK19 machine gun. It would help if you would put a list of the special tools and their NSNs in PS so armorers would know what they're missing.

Kent Hubert
DOL
Ft Richardson, AK



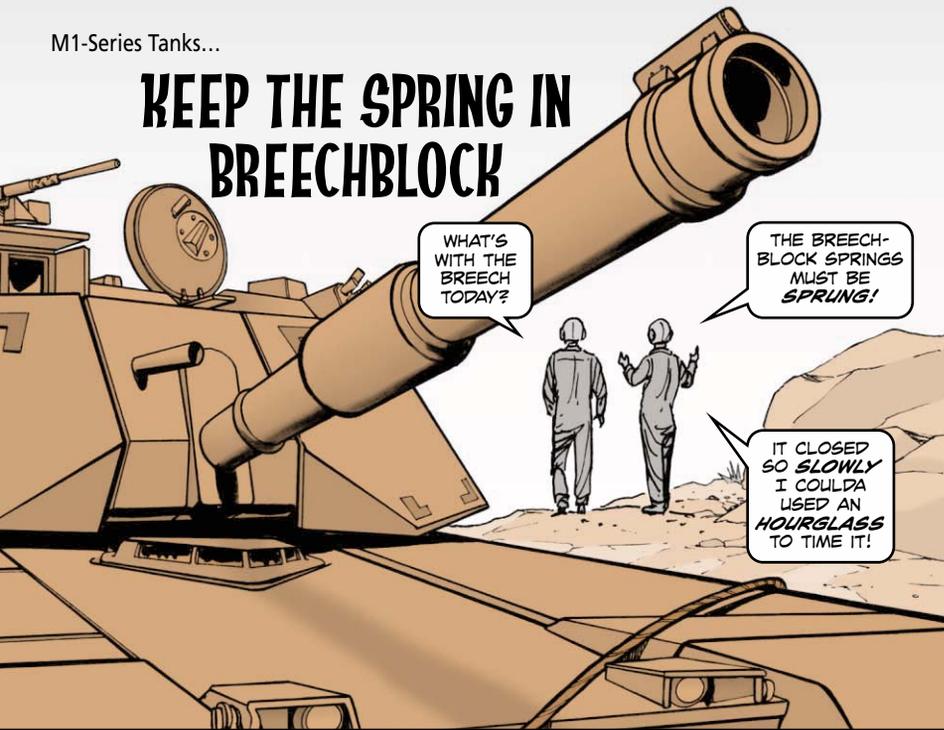
- **barrel wrench**,
NSN 5120-01-138-4797
- **round removal tool**,
NSN 5120-01-347-1884
- **combination assembly tool**,
NSN 1010-01-130-3435
- **7-in slip-joint recoupling/relinking pliers**,
NSN 5120-01-021-7472
- **feed slide adjustment tool**,
NSN 1005-01-467-9435
- **adjustable secondary drive lever**,
NSN 3040-01-475-2685
- **bore constriction gauge assembly**,
NSN 1010-01-138-4862
- **ogive plunger assembly tool**,
NSN 1010-01-130-3434

All of these tools can be found on WP 0100 00-1 in TM 9-1010-230-23&P and on WP 0017 00-6 in TM 9-1010-230-10.



Half-Mast

KEEP THE SPRING IN BREECHBLOCK



WHAT'S WITH THE BREECH TODAY?

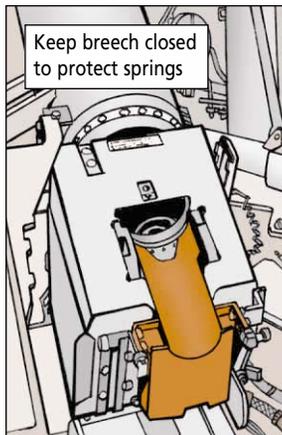
THE BREECH-BLOCK SPRINGS MUST BE **SPRING!**

IT CLOSED **SO SLOWLY** I COULDA USED AN **HOURLASS** TO TIME IT!

Tankers, if the breech on your tank seems to take forever to close, deformed breech-block springs could be the culprit.

If they're left compressed for extended periods of time, the springs lose their spring. They just don't have enough oomph left to close the breech quickly.

So if you're going to park your tank for a while, make sure the breech is **closed** when you leave. That not only releases the pressure on the springs, but it helps keep dust and corrosion-causing moisture out of the breech, too.

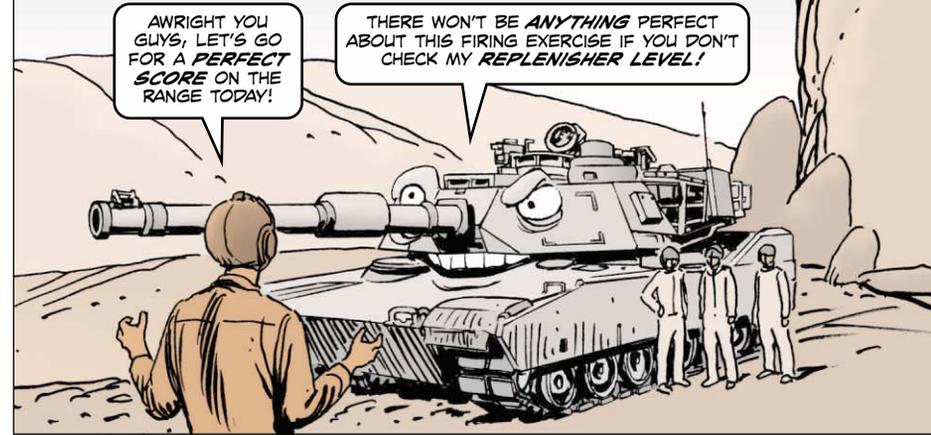


Keep breech closed to protect springs



YOUR MECHANIC CAN REPLACE SPRING SPRINGS WITH NSN 5360-12-179-2979.

Don't Recoil from Recoil Check



AWRIGHT YOU GUYS, LET'S GO FOR A **PERFECT SCORE** ON THE RANGE TODAY!

THERE WON'T BE **ANYTHING PERFECT** ABOUT THIS FIRING EXERCISE IF YOU DON'T CHECK MY **REPLENISHER LEVEL!**

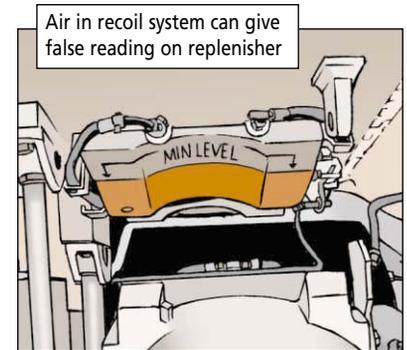
If your tank's replenisher has been drained for maintenance, or if you're preparing for a firing exercise, you **must** remember to check the FRH level in the replenisher, crewmen.

If the recoil system is low on fluid, the main gun could recoil uncontrollably the next time it's fired. When that happens, the cannon shears its retaining bolts and slams into the ammo compartment—bad news for anyone who happens to be in the way!

Just making sure the FRH reaches the MIN LEVEL mark on the replenisher isn't good enough, either. If there's air in the system, the replenisher could give you a false reading.

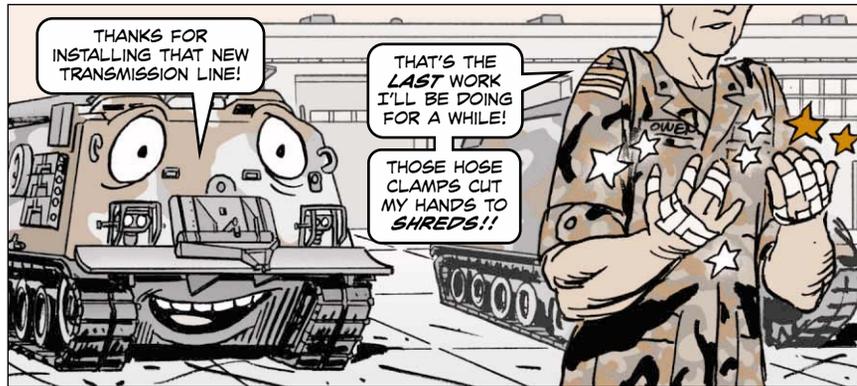
Go ahead and bleed the system, following the instructions on Page 2-344 of TM 9-2350-255-10-1, Page 2-369 of TM 9-2350-264-10-1, Page 2-729 of TM 9-2350-288-10-1 and Page 2-686 of TM 9-2350-388-10-1. Bleeding the recoil system will remove excess air and give you an accurate reading.

Make a note of this requirement until it can be added to the BEFORE operations PMCS tables.



Air in recoil system can give false reading on replenisher

NEW CLAMPS SAVE FINGERS



Dear Editor,

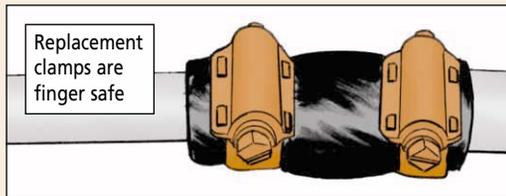
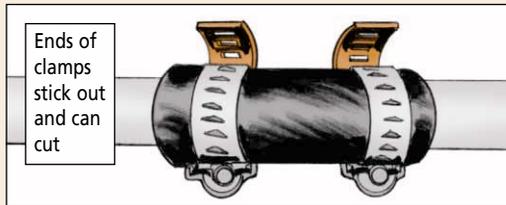
The metal transmission line, NSN 4710-01-184-4896, shown as Item 7 in Fig 179 of TM 9-2350-256-24P-1, comes in two pieces that are joined together with a rubber hose and two hose clamps.

The problem we have is with the clamps, NSN 4730-00-908-3194, that come with the transmission line. They are too large. After tightening the clamps, the ends stick out about two inches.

Those ends are really sharp, so it's very easy to cut yourself.

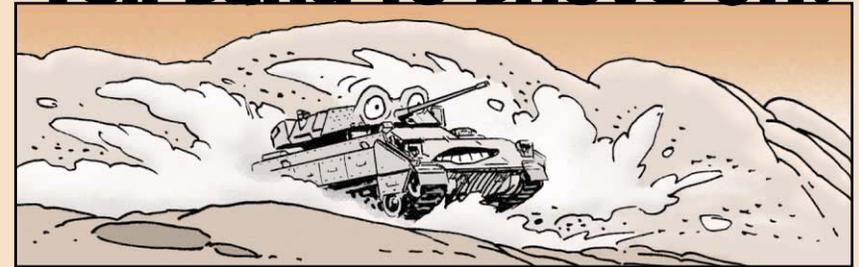
We've started substituting smaller hose clamps, NSN 4730-00-908-3195. Those clamps don't have the longer ends, so you don't have to worry about getting cut.

Peter Kohler
Maintenance Activity
Vilseck, Germany



(Editor's note: That idea's a cut above! If you don't want to replace the bigger clamps, loosen and rotate them so that the ends are underneath the hose instead of on top of it.)

Tell Sand to Shove Off!



For those deployed to Iraq, sand is a constant headache. It gets in your clothes, your food, and if you're not careful, into the fuel tank of your Bradley.

Sand gathers around the cracks and crevices of the fuel cap filler neck. Then it falls into the fuel tank when the cap is removed for refueling.

It may not seem like much, but eventually enough sand will accumulate to clog the fuel filters and burn out the fuel pump.

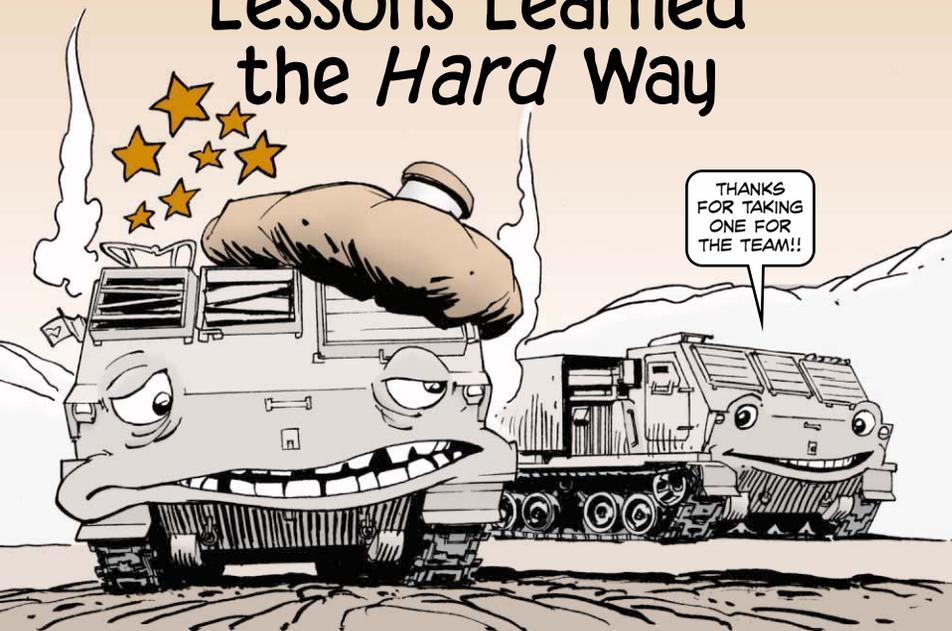
Getting the sand out is a real hassle. Your mechanic will have to remove the fuel canisters and clean 'em. If it's bad enough, the fuel cells may even have to be purged.

Your best bet is to keep that sand from ever getting into the fuel tank. Before opening the fuel cap, blow away all the accumulated sand first. Then, wrap a clean cloth around the fuel nozzle while refueling to keep out blown sand.

Don't forget to drain the fuel filters every day. That'll clear out any contamination that **does** get in.



Lessons Learned the *Hard* Way



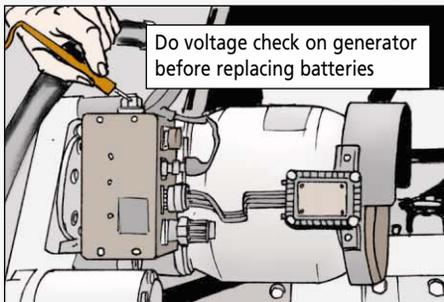
Dear Editor,

Through our experiences with the MLRS in the field, we've learned these lessons the hard way. We hope they make operating easier for other MLRS units.

Check the Generator

One of the first things you learn about the MLRS is how important voltage is for it to operate properly. If the launcher doesn't get 27.5 to 29 volts, it starts having system faults. Most of the time weak batteries are the cause and replacing batteries cures the problem. But sometimes it's the generator that's the culprit, not the batteries. You replace the batteries and soon start getting faults again because of weak voltage.

So before you start swapping out any batteries, dig out your multimeter and do a voltage check on the generator. With the engine running, put the positive lead on the generator's power point and the negative lead to ground. If you don't get a reading between 27.5 to 29, you might have a generator problem. Have your mechanic check it out before replacing any batteries.

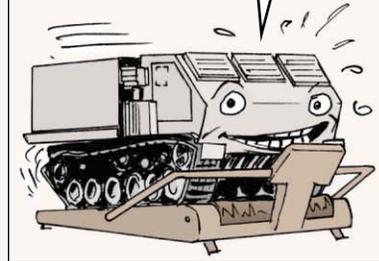


[Click here for a copy of this article to send to a friend](#)

Exercise

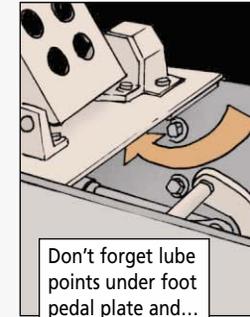
You would have trouble moving if you sat in the same position for days or even weeks. Same goes for your MLRS. If it sits and sits with no exercise, moving parts start having trouble moving. The answer is weekly exercise. If you can actually take your MLRS out on the road, that would be ideal. If that's not possible, start it up and run it at high idle (1,000 rpm) for an hour. That charges the batteries. Bring the firing system up, move the LLM in all directions, and simulate loading and unloading pods. Try to give all the moving parts a chance to move.

I FEEL SO MUCH *BETTER* SINCE I STARTED THIS WEEKLY EXERCISE PROGRAM.



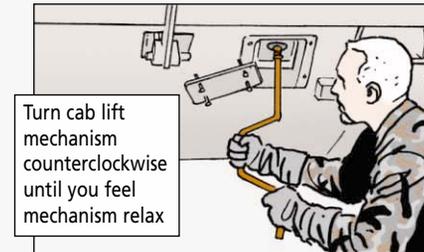
Lube According to the LO

If you try just to remember everything that needs lubing, you'll probably miss some things. One that we find is often missed is the boot for the cab lift. If you don't lube it, the cab will be difficult to raise and lower. Something that the LO doesn't mention and should be under the four lube points are the foot pedal plate. Lube them with a light-weight oil monthly or the accelerator pedal will bind.



Relax the Cab Lift Mechanism

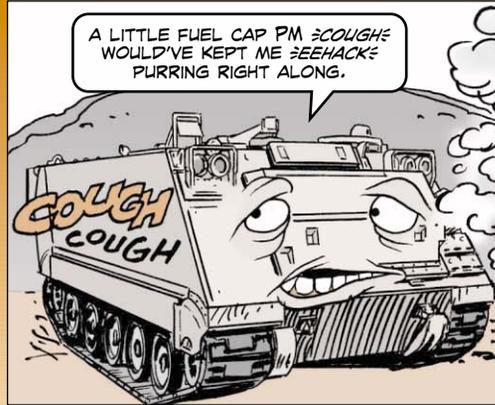
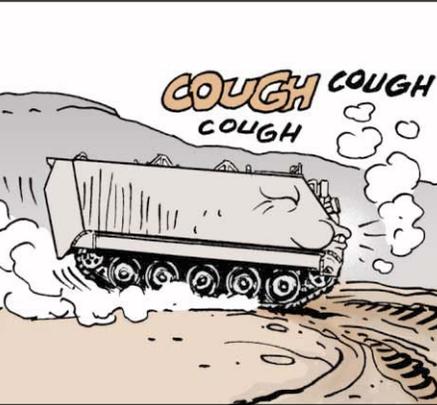
If you leave the mechanism tightened down after securing the cab, the hinge that holds the cab in place could break when the cab bounces up and down on the road. After you lower the cab all the way down, turn the nuts on the two cab anchors 3/4 turn past finger tight. Then turn the cab lift mechanism counterclockwise until you feel it relax.



SGT Kenneth Berry
SPC Joseph Myers
SGT Daniel Bryant
1/39 FA
Ft Stewart, GA

(Editor's note: Your suggestions should fire up MLRS crews everywhere. Thanks for the help.)

Don't Forget Fuel Cap PM



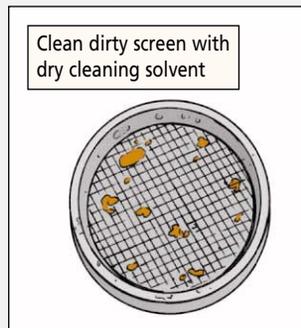
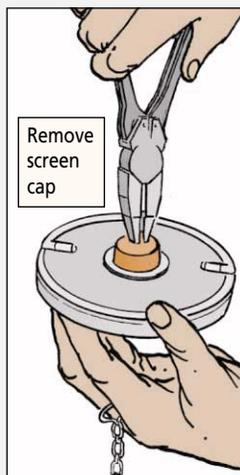
TO KEEP FUEL IN YOUR M113-SERIES CARRIER MOVING TAKES GOOD PM ON EVERY COMPONENT OF THE FUEL SYSTEM—INCLUDING THE FUEL CAP. NSN 5342-01-083-5674.

Topside

Some of you may forget that there's a screen cap and rubber vent grommet on top of the fuel cap. If it's not cleaned every 6 months—more often in dusty, sandy environments—the cap gets plugged with dirt. That creates a vacuum and causes fuel flow problems.

Here's how to inspect and clean the cap and grommet:
 1. Grip the tang in the center of the fuel cap with a pair of pliers and pull the screen cap out.

2. Eyeball the grommet in the fuel cap. If it's damaged, replace the entire fuel cap.
3. Clean the screen cap with dry cleaning solvent.

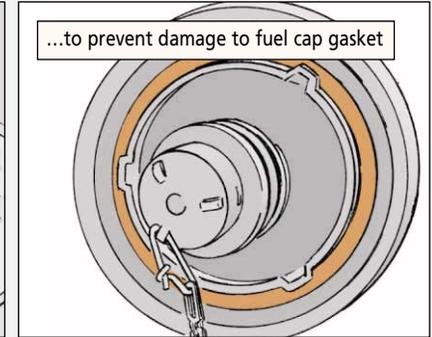
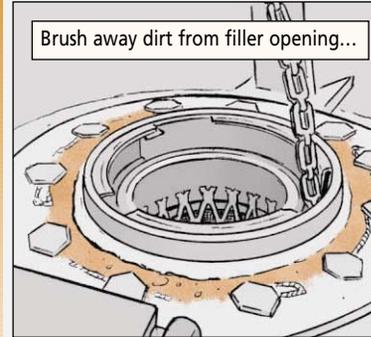


Underneath

Now check the bottom of the fuel cap.

Dirt and sand that collect around the filler neck can keep the cap from screwing on properly. That can bend the metal lip inside the fuel tank opening which, in turn, damages the gasket on the underside of the fuel cap.

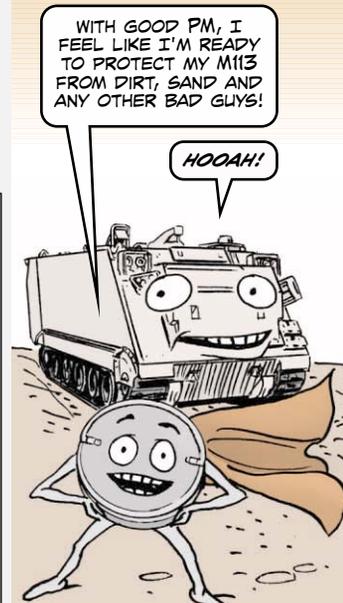
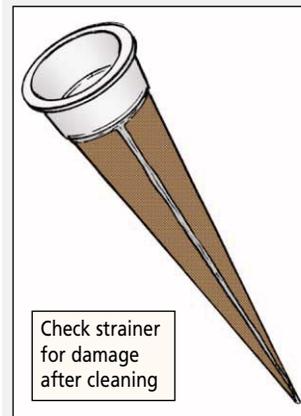
Make sure you brush away any dirt and sand before opening the fuel cap. Then, make sure the filler neck area is completely clean before closing the fuel cap.



Inside

Before screwing the fuel cap back in place, pull out and check the fuel strainer inside the filler neck.

If the strainer is clogged with sediment, clean it thoroughly with dry cleaning solvent. Then inspect the strainer for any cuts or tears.



Don't Forget the Fire Wire

BEFORE YOU PULL THE ENGINE DECK PLATES TO REMOVE THE M992A2'S POWERPACK, ASK YOURSELF **ONE QUESTION**, MECHANICS...

... "DID YOU REMEMBER TO DISCONNECT THE FIRE WIRES FIRST?"



"THE FIRE, OR THERMAL, WIRES ARE CONNECTED TO THE BOTTOM OF THOSE PLATES AND WILL **SNAP OR RIP LOOSE** IF YOU FORGET TO DISCONNECT THEM."

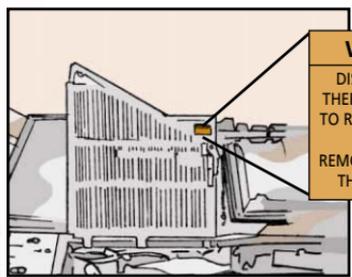
LOOK FOR A REMINDER DECAL UNDER THE AIR INTAKE GRILLE.

IF THE DECAL IS **MISSING**, REPLACE IT WITH NSN 7690-01-329-4634.

"A **NEW FIRE WIRE** WILL COST YOU MORE THAN \$1,300, SO IT'S AN **EXPENSIVE** THING TO FORGET."



FOLLOW THE DECAL INSTRUCTIONS TO AVOID DAMAGING THE FIRE WIRES.



WARNING
DISCONNECT AFES THERMAL WIRE PRIOR TO REMOVING GRILLES AND REMOVING/INSTALLING THE POWER PACK

Aircraft Avionics...



SOMETHING'S *WRONG* WITH THESE GOGGLES.

I'M GONNA SEND 'EM TO AVIM... THEY CAN FIX THE PROBLEM... WHATEVER IT IS...

BIG MISTAKE!

YOU DO THE PAPERWORK FOR GOGGLES REPAIR *FIRST*.

OTHERWISE, YOU'RE *WASTING* YOUR TIME!

PAPERWORK **FIRST!** THEN SEND COMPONENTS

Don't turn in avionic components to your AVIM shop for repair without the right paperwork, mechanics.

For example, aviation night vision goggles are showing up at AVIM shops with no paperwork. Without a completed DA FORM 2408-30, NVG INSPECTION AND MAINTENANCE RECORD, for night vision goggles, AVIM can't fix them.

Also, if AVIM cannot identify what's wrong with a component, they won't repair it! They'll return it to the unit not fixed.

No paperwork or poorly filled out paperwork only slows down turn-around time! Poor turn-around time leads to not-mission-ready equipment.

1 NOMENCLATURE		2 MODEL		3 SERIAL NUMBER		4 NSN		5 UIC	
6 N		7		8		9		10	
FAULT		AD		PART II - CO		E		S	
A/C HRS		WHEN DISC		HOW REC		MAL EFF		WUC	
W.O.		REQ		OTHER		TIPID		DATE	
STATUS		SYS		DATE		NO		TIME	
FAULT/REMARKS		REQ		OTHER		TIPID		TIME	
A/C HRS		WHEN DISC		HOW REC		MAL EFF		WUC	
W.O.		REQ		OTHER		TIPID		TI MAN-HOURS	

FOR EXAMPLE, AVIATION NIGHT VISION GOGGLES NEED A COMPLETED DA FORM 2408-30, NVG INSPECTION AND MAINTENANCE RECORD, FOR AVIM TO FIX THEM.

IF YOU NEED HELP, DA PAM 738-751 GIVES YOU THE DETAILS ON WHAT TO DO.



KIOWA ENGINE BARRIER FILTERS

MY EBF FILTERS
ARE CLOGGING
TOO FAST IN
THIS DESERT!

DON'T WORRY, TAKING
OFF YOUR BLAST SHIELD
WILL DO THE TRICK.

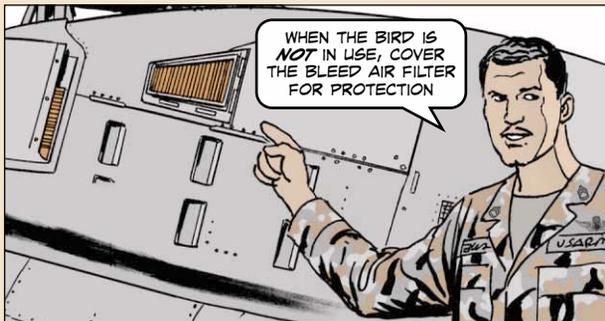
SOME OF THE
SAND CAN BLOW
PAST THE FILTER.

Dear Rotor,

Flying in sandy desert conditions clogs the Kiowa's barrier filters faster than you can say "Hooah."

So, we service, change, clean or shake out the primary filters more than usual to keep clean air going into the engine.

But because the clogging is so much of a problem, we also remove the blast shield (part of the engine cowling) to expose part of the primary filter. This allows some of the sand and dust to blow by and not collect and clog the filter so fast. It sure helps keep us flying.



Sergeant Batrony
Hunter AAF, GA

Dear SGT Batrony,

Good work! Great idea to remove the cowling to extend the usefulness of the primary filters.

Here are some other ideas to help you keep the filters clean:

- Do your full service cleaning of the EBF system like it says in Para 4-2-14 of TM 1-1520-248-23 IETM and the commercial manual. To shake out sand and dirt from the primary filter, use the shaker tool described in the EBF filter system manual.

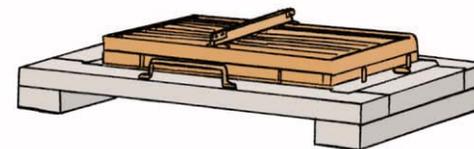
- Keep a cover on the bleed air filter to protect it when your bird is not flying.

- NSN 6850-01-514-3592 brings the 5-gal filter cleaning solvent. NSN 9150-01-514-3640 brings the 5-gal filter oil.

- Contact Tamara Sission of AFS at (636) 498-6003 ext. 218 and use quotation #200221 (29 Jan 03) to get your deployment kit containing pliers to straighten out filter pleats.



Clean filter like IETM and commercial manual says



Order air filter oil and cleaner by NSN

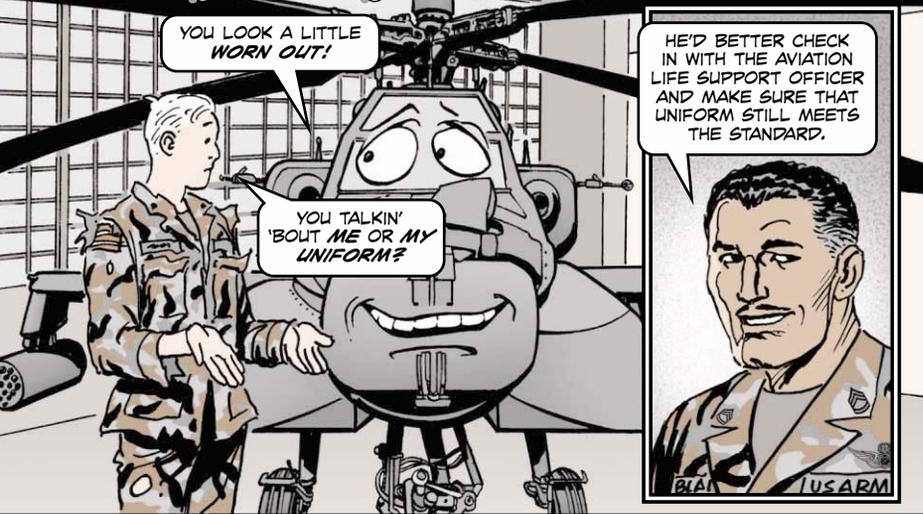


- For a copy of the EBF filter system commercial manual, the shaker training course or the CD, contact Ray Hensley, at (256) 955-7441, DSN 645-7441 or email

raymond.hensley@
peoavn.redstone.army.mil

Rotor Blade

Upkeep of ABDUs

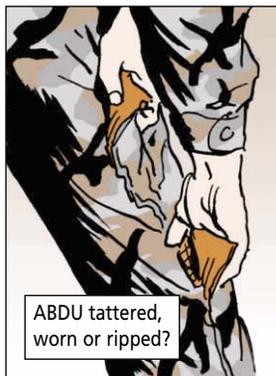


Aviation folks, take a close look at your aviation battle dress uniforms (ABDUs). Does the fabric look tattered and worn out?

If it does, the thermal protection the ABDUs provide has been reduced, too. Have your aviation life support officer determine if your ABDUs still meet serviceability requirements or whether they should be condemned.

ABDUs will be condemned when they no longer present an acceptable military appearance from the standpoint of structural integrity. That means they are too thin to provide thermal protection from an external flame source.

Rips and tears in the fabric or seams should be repaired like it says in Chapter 22 of TM 10-8400-201-23. Ripped or torn ABDUs should be condemned if they are unreparable or if the number of patches needed reduces the military appearance of the ABDUs.



MAKE A NOTE OF THIS INFO. IT WILL BE ADDED IN THE NEXT CHANGE TO TM 10-8400-201-23.



Fight Insect Attacks

After a forced landing in the boonies, the last thing a flight crew needs is to be bothered by insects. Order insect repellent, NSN 6840-01-452-9582, for the primary survival gear carrier (PSGC) vest. And don't leave home without it.

Kiowa Warrior MMS Desiccant

Stop ordering desiccant container, NSN 6850-01-214-3682, for the MMS shroud because the desiccant breaks down too quickly. Use NSN 6850-01-456-0554. It is now the only authorized non-refillable desiccant container for the Kiowa Warrior's mast-mounted sight shroud. This container should be replaced only when the majority of the desiccant granules are pink.

Aviation Life Support Equipment

If you're looking for size 12 flight gloves, order with NSN 8415-01-482-8420. And for all your aviation life support equipment (ALSE) needs, check out the new FM 3-04.508, *Aviation Life Support Maintenance Management and Training Programs*. The new FM supercedes FM 1-508, dated 1 Mar 2000.

Apache Chock Block

Apache crews, finding the right size chock for your bird is like looking for a needle in a haystack. Yes, you can locally make them, but here's one that's a perfect fit. Order the 14x6x4-in wood chock with a cotton rope with NSN 1730-00-294-3695.

Under-floor Paint

You can't get the white epoxy paint for the CH-47D cabin under-floor area top coat listed in TM 55-1520-240-23-1 and -2. Here are the glossy white paint replacement NSNs you can order: 8010-01-383-7889, 2 qt; 8010-01-414-8439, 1 gal; 8010-01-350-4734, 2 gal.



PINS! ATTENTION!



The pins in electrical connectors must stand straight and tall. A bent pin means a poor connection or no connection at all. And, eventually, a bent pin becomes a broken pin.

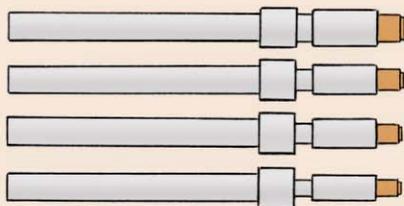
But straightening bent pins is not easy. The tool most often used to straighten pins is needle-nosed pliers. That's the wrong tool for the job. Needle-nosed pliers are too big and too clumsy. While you straighten one pin, you'll bend or break others.

Instead, use NSN 5120-00-765-3688, to get a pin removal tool kit. The kit is not only good for removing pins, but for straightening them, too!

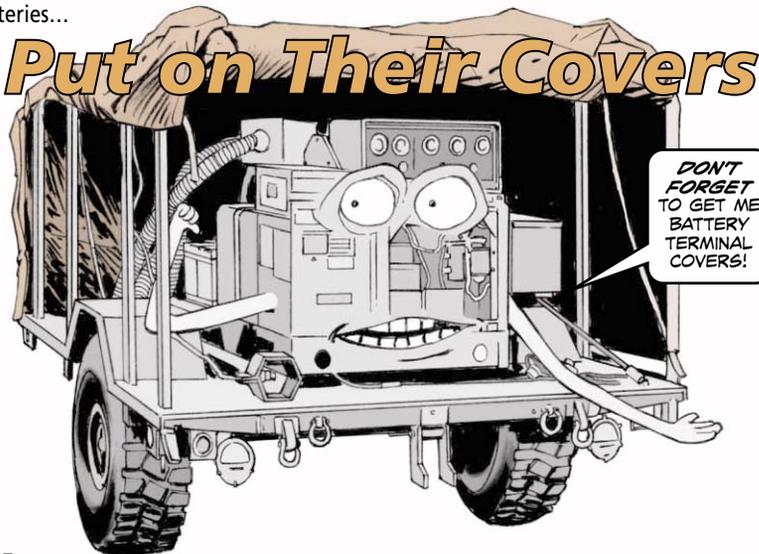
The kit comes with four tips to adjust to different pin sizes. Just slip the right tip over the bent pin and gently, carefully, bend it back in shape.

One more tip. Prevent bent pins from happening by lining up the keyway on a connector with the key on the connection. Lined up right, your pins should always be standing at attention.

Use kit tips to straighten pins



Put on Their Covers



Uncovered battery posts can put a serious crimp in your day.

If a piece of metal touches both terminals—or touches the positive terminal and a ground at the same time—you get a spark.

Throw some fuel fumes or battery gases into the mix and you've got a fire or an explosion. You don't want a fire or an explosion!

So, order battery terminal cover, NSN 5940-00-738-6272. You can get a pack of 10 covers for \$5.

The covers are rubber rectangles folded in the middle with a hole in the bottom side. Just slip the battery post into the hole, replace the cable and you can say bye-bye to spark-related accidents.



GOT AN IDEA TO SHARE?

READERS... DO YOU HAVE AN IDEA TO SHARE WITH OTHER SOLDIERS? LET US HEAR FROM YOU!



CONTACT ME AT half.mast@us.army.mil OR SEND MAIL TO ME AT...
MSG HALFMAST
PS, THE PREVENTIVE MAINTENANCE MONTHLY USAMC LOGSA (AMXLS-AM)
5307 SPARKMAN CIRCLE
REDSTONE ARSENAL, AL
35898-5000

TURN IN UNSERVICABLE PARTS



The demand for long range advanced scout surveillance system (LRAS3) infrared night vision sight (AN/TAS-8) repair parts is high, but the turn-in of unserviceable parts is low.

Unserviceable parts are only unserviceable to you, the user. They are fixed at depot and reissued! But they can't be fixed and reissued if you don't turn them in.

So search your shelves and drawers for those unserviceable parts.



Circuit cards NSN 5998-01-486-

- 5004
- 5005
- 5019
- 5020
- 5021

Laser rangefinder NSN 1240-01-

- 486-5003
- 506-8841

Laser optical assembly NSN 5860-01-

- 486-5044
- 506-8843

Infrared lens, NSN 5855-01-486-5022

Display unit, NSN 7025-01-486-5024

Adapter assembly, NSN 4920-01-486-5029

Adapter assembly, NSN 4920-01-494-5187

Adapter assembly, NSN 4920-01-486-5040

Electrical panel, NSN 5975-01-486-5035

Tripod mount leg, NSN 1020-01-486-5041

Inclinometer, NSN 6605-01-486-6395

Housing, NSN 5999-01-486-6396

Housing, NSN 5999-01-494-3670

Housing, NSN 5999-01-518-8796

Housing, NSN 5999-01-518-8833

ANTENNA CAP CONFUSION



Every vehicular antenna needs a tip cap for safety, but there seems to be some confusion as to which antenna gets which cap. Here are the NSNs you need to get the right cap on the right antenna:

Antenna	Tip Cap NSN
AS-3900A	5999-01-313-0458
AS-3916	5340-01-381-5666
AS-3684	5999-01-313-0458



AB-1339/G Antenna Covers



HAVE WE GOT A DEAL FOR YOU!



FOR JUST A LITTLE MORE THAN THE COST OF A SUPER-SIZED BURGER, BIGGIE FRIES, EXTRA-LARGE DRINK AND A CHERRY PIE,...

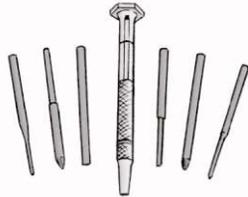
...YOU CAN NOW OWN YOUR VERY OWN JEWELER'S SCREWDRIVER SET.

"YEP, ABOUT \$10 IS ALL IT COSTS!"

"THE SET, NSN 5120-00-288-8739, COMES WITH SIX BLADES—.025, .040, .055, .070, .080, AND .100 INCHES."

"THE BLADES ARE FLAT-TIPPED, AND 2 3/4-INCH LONG. THE WHOLE SCREWDRIVER IS 3 3/4-INCH LONG INCLUDING THE CHUCK-TYPE, KNURLED HANDLE AND THE BLADE.

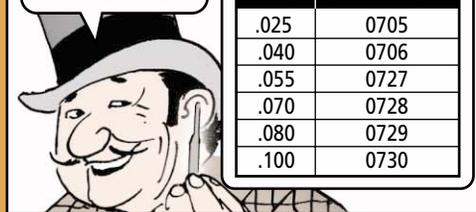
"A JEWELER'S SCREWDRIVER SET WILL COME IN HANDY OVER AND OVER AGAIN WHEN WORKING WITH SMALL SCREWS IN TIGHT PLACES."



IF YOU ALREADY HAVE THE SET IN ONE OF YOUR TOOL KITS, CHANCES ARE GOOD YOU'VE LOST A TIP OR TWO.

THE GOOD NEWS IS YOU CAN REPLACE THEM!

Tip width	NSN 5120-00-180-
.025	0705
.040	0706
.055	0727
.070	0728
.080	0729
.100	0730



IN A BIND OVER BINDING POSTS?



I DON'T THINK THE NSNs FOR NEW BINDING POSTS ARE IN HERE...

NO... BUT THIS HAS IT!

The SB-22 switchboard has three binding posts on its back. These posts let you hook up distant phones.

Replacing the binding posts is a tough task, because the NSN for the posts is not in the parts manuals.

However, we've got it! Order a binding post with NSN 5940-00-272-1477. Each post costs around \$7, which is a small price to pay to get out of—or get into—a bind.

Data Plate Details



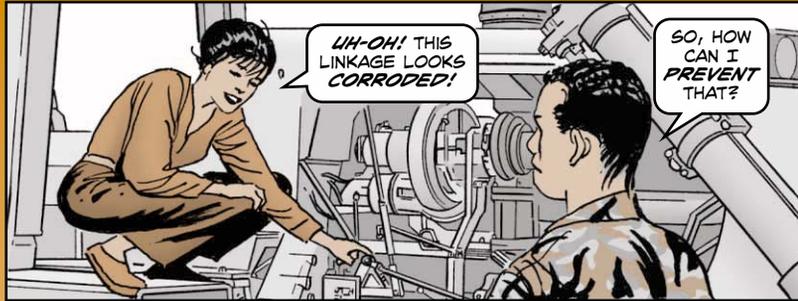
NEED TO REPLACE A MISSING OR DAMAGED IDENTIFICATION DATA (ID) PLATE ON YOUR ANVIS, SNS, MNVD, OR NVGs?

BOY, DO I!

Replacement ID plates come from PM Sensors and Lasers at Ft. Belvoir. To get one, your unit must tell them the type of NVG and the serial number. They will also need the address and phone number of a unit POC.

Just call the POC at DSN 654-1903 or (703) 704-1903. Or email her at: sandy.braithwaite@nvl.army.mil

PM Link for Linkage



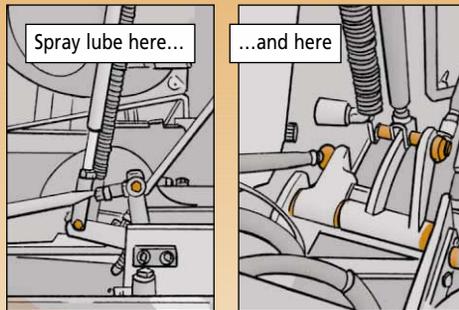
Operators, here are some quick pointers that will link you up to the right PM on the dozer's throttle linkage.

A Stuck Lever

Moisture and mud corrode the linkage for the governor control lever (throttle). Enough corrosion causes the lever to push or pull sluggishly, erratically or not at all. A stuck lever isn't much good when you need to increase or decrease engine speed during construction operations.

Wipe off the dozer's throttle with a brush or clean rag. Then spray a shot of lubricating spray, NSN 9150-00-458-0075. Work the throttle lever back and forth a few times.

Make sure to spray the linkage at every scheduled service. Lube puts the slide and glide back into the linkage for smooth operation.

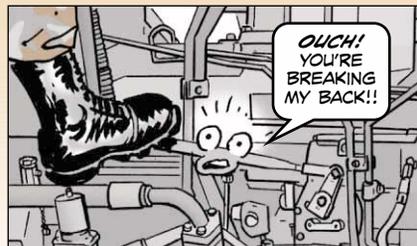


No Step Here

The throttle linkage looks like a convenient footrest while working on the engine.

Problem is, all that weight will bend the linkage and its swivel arms. The end result is erratic movement—not good! If you see wear marks on the linkage, it's the tell-tale sign that someone's boot was there.

So keep your boot off the linkage when cleaning or doing maintenance or a PMCS check.



[Click here for a copy of this article to send to a friend](#)

Fittings Need Lube



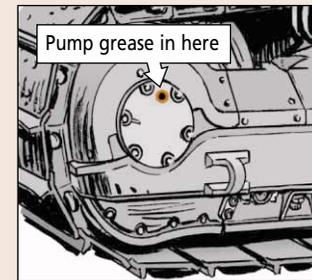
Operators, don't skip the lube for these two grease fittings. They usually get overlooked during scheduled services.

Sprocket Bearings

The dozer's drive sprocket bearings take the brunt while working in sand and mud.

Sand and water get past the seals and into the bearings. That combo causes corrosion and grinds the bearing's polished surfaces. Those worn bearings let the dozer's track get out of alignment, causing excessive wear and tear on the vehicle's undercarriage components.

To head off problems, lube the bearings every time you finish a day's run in sand, mud or water. With a hand grease gun, give the sprocket's fitting four or five shots of grease.

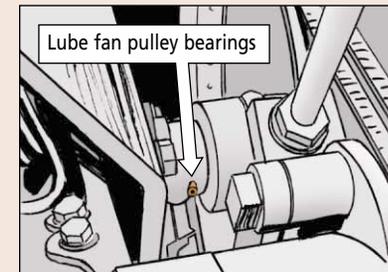


Fan Pulley Bearings

The fan pulley's grease fitting is hidden behind the fan blades. That means it's out of sight unless you hop up on the track, reach in, and find it.

Without lube, the bearings seize up. Then the blade stops turning freely, letting the engine and transmission overheat.

Keep the fan pulley bearing lubed. During scheduled services, give the fitting four to five pumps of grease.



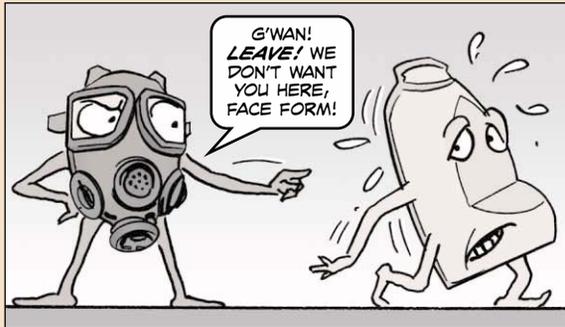
[Click here for a copy of this article to send to a friend](#)

Ways to Breathe Better



YOU AND YOUR M40/M42 MASK CAN **BOTH BREATHE EASIER** IF YOU TAKE A DEEP BREATH AND READ AND REMEMBER THESE TIPS ON MASK CARE...

No faceforms. NBC NCOs and operators, throw away those faceforms. They're no longer considered necessary for mask storage in the NBC room and they were never meant to go to the field. If you need something in writing on getting rid of the faceforms, see SBCCOM Maintenance Advisory Message (MAM) 99-05. Your logistics assistance representative can get you a copy.



Store and carry your mask properly. You'll prevent most mask damage by remembering these three don'ts:

- Don't fold your mask to put it in the carrier.
- Don't use the carrier as a pillow or seat cushion.
- Don't put anything in the carrier besides the mask.

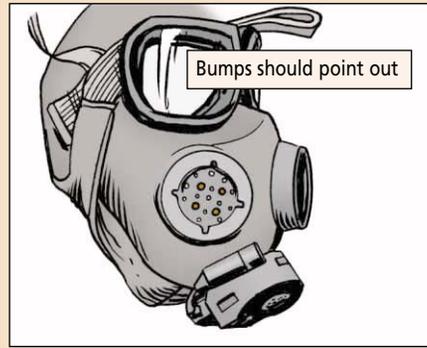


If you ignore any of these don'ts, count on your mask being damaged and unable to protect you.

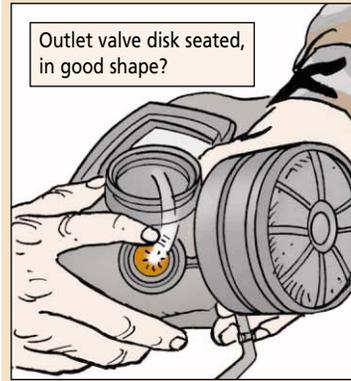
Make sure the internal drink tube is the proper length. If it touches your face, it's too long and will irritate your face when you have to wear the mask a long time. If the drink tube is the right length, you should be able to push on top of the outlet valve cover and grasp the tube with your teeth. Your NBC NCO can trim the tube to fit. Anytime you get a mask that was used by someone else, you should also get a new drink tube. You don't want someone's germs. Remember there are now two different internal drink tubes. Get the correct one.



Look for the bumps on the front and side voicemitters. The four bumps on both voicemitters should point out. The side voicemitter is often installed backwards and then your mask won't be able to protect you.



Check for the outlet valve disk. If it's missing, torn, or not seated tight in the outlet valve body, you'll have no protection.



'I can't hear you.' If you hear that a lot from your fellow soldiers, you need the amplifier, NSN 5996-01-381-9012. It amplifies your voice enough that you don't need to shout.



Riot Control Disperser NSNs Change

The individual riot control agent disperser has been changed from Federal Supply Class V (ammunition) to Class II (individual equipment). As a result, these are the new NSNs for the dispersers.

- pepper, NSN 1040-01-501-4380
- tear gas, NSN 1040-01-501-4384
- simulant, NSN 1040-01-501-4423

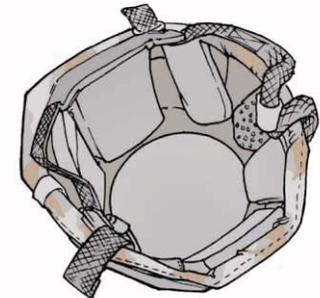
Advanced Combat Helmet...

A New Helmet for a New Age



Some new headgear is making its debut in the Army. Called the advanced combat helmet (ACH), it's replacing the old PASGT kevlar helmet. Maybe you haven't seen an ACH yet, but it's not too soon to get acquainted. Here are some of its features:

- lighter than the old helmet
- improved ballistic protection
- padded to better protect your head against impacts in any kind of operation: riding in vehicles, kicking down doors or jumping out of aircraft.
- allows you to hear better because the sides are cut a bit higher than those of the old helmet
- because the ACH has no visor, it gives you an unobstructed field of view
- suspension pads give you a snug, stable, more comfortable fit
- night vision goggles remain stable as well



Helmets

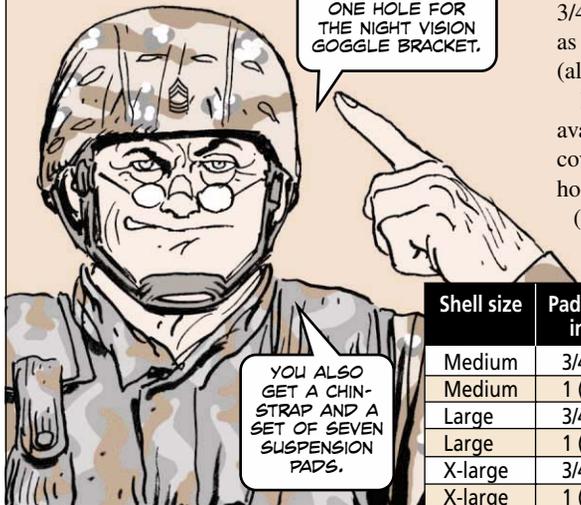
EACH HELMET NSN BRINGS YOU A GREEN SHELL WITH ONE HOLE FOR THE NIGHT VISION GOGGLE BRACKET.

Pads come in two thicknesses: 3/4-in thick (also known as size 6), and 1-in thick (also known as size 8).

Helmet parts are also available, including covers, pads, straps, hook and loop fasteners (hook disks), mounting hardware and more.

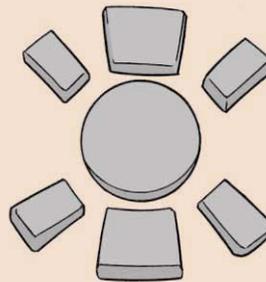
YOU ALSO GET A CHIN-STRAP AND A SET OF SEVEN SUSPENSION PADS.

Shell size	Pad thickness in inches	NSN 8470-01-
Medium	3/4 (size 6)	506-6369
Medium	1 (size 8)	506-6373
Large	3/4 (size 6)	506-6375
Large	1 (size 8)	506-6377
X-large	3/4 (size 6)	513-6411
X-large	1 (size 8)	513-6414



Pads

You can order suspension pads individually or in sets of seven. Each set includes one circular crown pad, two trapezoidal pads and four oblong/oval pads. Pads come in two sizes: 3/4-in thick (size 6) or 1-in thick (size 8).



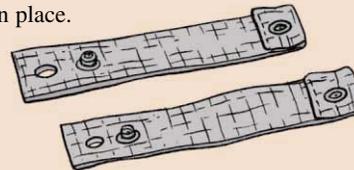
Description	Pad thickness in inches	NSN 8470-01-
Set	3/4 (size 6)	476-5643
Set	1 (size 8)	476-5648
Circular crown	3/4 (size 6)	506-6626
Circular crown	1 (size 8)	506-6627
Trapezoidal	3/4 (size 6)	506-6851
Trapezoidal	1 (size 8)	506-6855
Oblong/oval	3/4 (size 6)	506-6454
Oblong/oval	1 (size 8)	506-6456

Other Parts

Eyewear retention straps

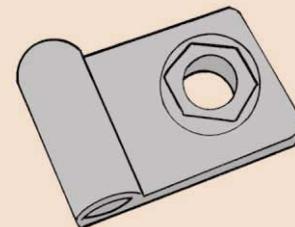
come in green, NSN 8415-01-487-1605, or tan, NSN 8415-01-521-8801. Each NSN brings a pair of straps.

They mount to the rear of the helmet and hold your combat eyewear straps in place.



P-clamp,

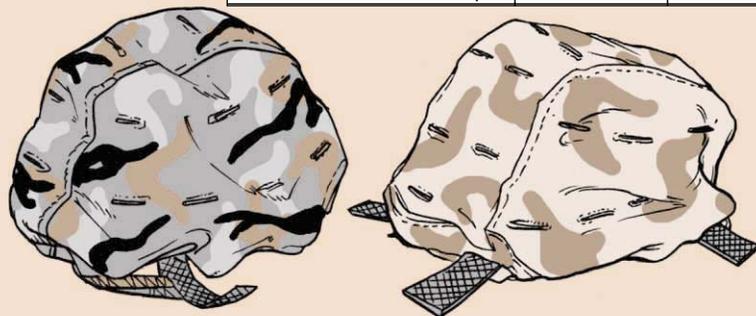
NSN 8470-01-506-6625, mounts the ladder lock to the shell. The NSN brings a box of 50 clamps.



Covers

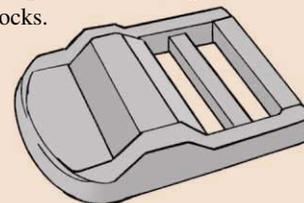
Helmet covers are reversible, with woodland camouflage on one side and desert on the other. They come with a communications flap for storing comms cables. They're available in two sizes: medium/large and large/x-large.

Description	Size	NSN 8415-01
Woodland/desert (reversible) with communications flap for storing comms cables	Medium/large	487-1612
Woodland/desert with communications flap	Large/X-large	515-4663



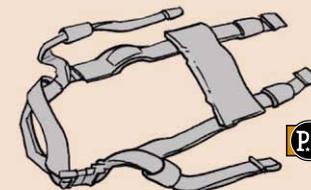
Ladder lock,

NSN 8470-01-506-6451, holds the chinstrap webbing and hooks onto the p-clamp. The NSN brings a box of 50 locks.



Four-point chin strap

comes in two sizes: medium/large, NSN 8470-01-476-2605, and X-large, NSN 8470-01-519-4200.



PS MORE

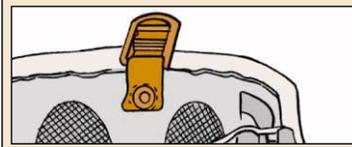
Food Containers...

ALIVE AND KICKING

Mounting screw, NSN 8470-01-506-6503, and **nut,** NSN 8470-01-506-6488, attach the p-clamp to the shell. Each NSN brings a box of 50.



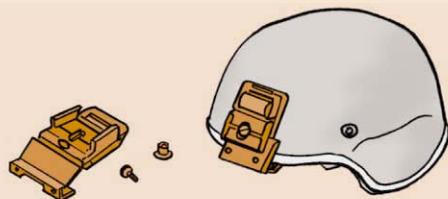
Mounting screw set, NSN 8470-01-476-5631, includes four of each of the following: **p-clamps, ladder locks, mounting screws and nuts.**



Hook fastener tape (hook disks), NSN 8470-01-506-6742, holds the suspension pads in place. The disks have adhesive backing that sticks to the inside of the shell. The other side of the disks are made of hook fastener. The pads are covered with loop fabric on one side, and they cling to the hook fastener. The NSN brings a roll of 500 disks.



Night vision goggles front bracket kit, NSN 5340-01-509-1467, includes a bracket with a threaded post and screw for mounting it to your helmet.



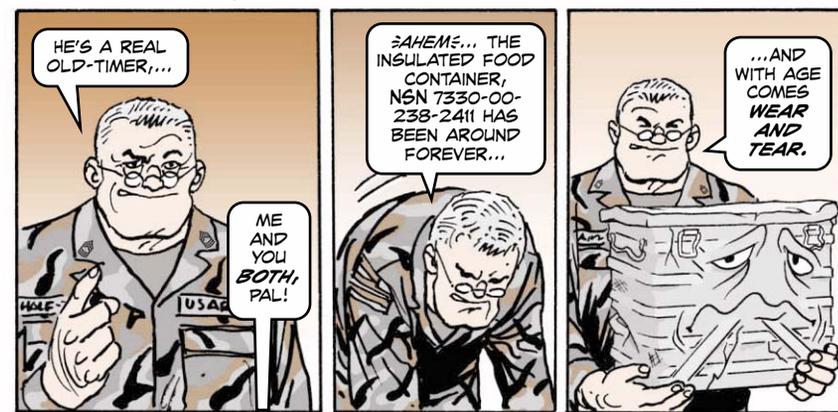
Calipers, NSN 5210-01-434-9493, and a measuring tape, NSN 8315-00-782-3520, are used to measure the head for a correct fit.

Helmet parts kit, NSN 8470-01-506-6721, contains:

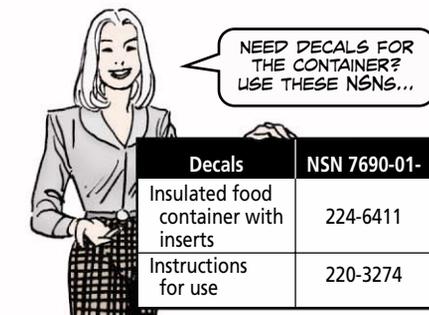
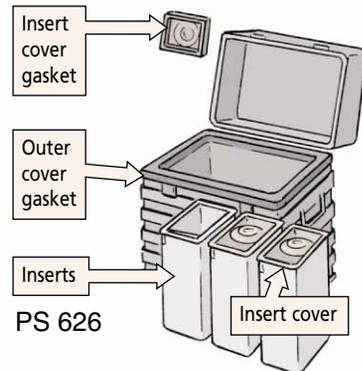
- nine sets of 3/4-in thick pads
- one set of 1-in thick pads
- 400 hook fastener tape disks
- 10 four-point chinstraps
- 10 mounting screw sets
- 10 reversible (woodland/desert) helmet covers

FOR FULL OPERATING INSTRUCTIONS FOR THE ACH, SEE TM 10-8470-204-10.

WHEN THE ARMY FIELDS THE ACH, YOUR UNIT WILL RECEIVE A HELMET PARTS KIT FOR EVERY 100 HELMETS FIELDIED TO IT.



Part	NSN
Complete insert (includes cover and gasket)	7330-00-243-3253
Insert cover	7330-00-243-3254
Insert cover gasket	5330-00-032-2721
Outer cover gasket	5330-00-032-2722



Decals	NSN 7690-01-
Insulated food container with inserts	224-6411
Instructions for use	220-3274

THE MYSTERY OF

THE MISSING ITEMS



On Pages 54-55 of PS 612 we published an article about stocking the combat lifesaver aid bag, NSN 6545-01-254-9551. The article listed the medical items and quantities required for each bag. It reflected the prescribed packing list.

BUT THAT'S NOT THE WHOLE STORY.

IF YOU'RE ISSUED A BAG WITHOUT ALL THE ITEMS OR THE RIGHT QUANTITIES, YOU'LL NEED TO ORDER THEM.

TWO ITEMS IN PARTICULAR MAY BE MISSING WHEN YOU RECEIVE YOUR BAG. THEY ARE...



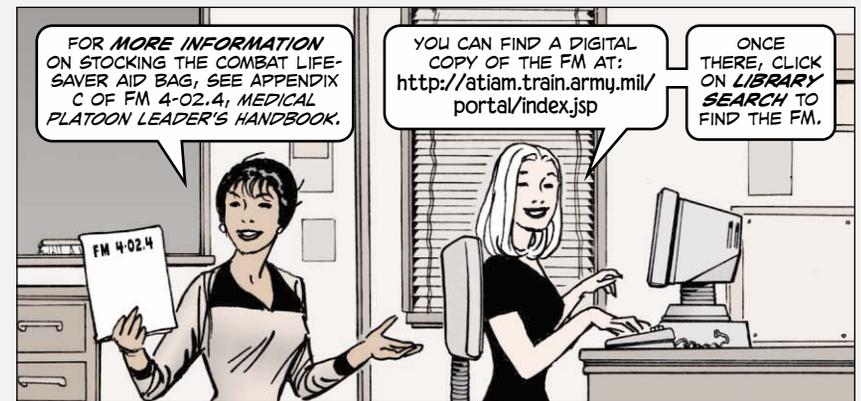
- **diazepam injection, syringe with needle,** NSN 6505-01-274-0951
- **atropine injection, syringe with needle,** NSN 6505-00-926-9083

Diazepam is a controlled substance and it's not issued with the bag. But it is an item needed for deployment or a training exercise.

Atropine is not a controlled substance. The combat lifesaver aid bag is typically issued with atropine. But in some cases, the atropine gets removed somewhere in the supply channel before the bag reaches the combat lifesaver.

Diazepam and atropine are used to offset the effects of chemical agents.

So if you're short either diazepam or atropine, submit a requisition to your medical supply people.



FOR MORE INFORMATION ON STOCKING THE COMBAT LIFE-SAVER AID BAG, SEE APPENDIX C OF FM 4-02.4, MEDICAL PLATOON LEADER'S HANDBOOK.

YOU CAN FIND A DIGITAL COPY OF THE FM AT: <http://atiam.train.army.mil/portal/index.jsp>

ONCE THERE, CLICK ON **LIBRARY SEARCH** TO FIND THE FM.

MSDS Websites

Looking for material safety data sheets (MSDS)? Here are three websites to get you started. The first one is the official DoD website for MSDS.

<http://www.dlis.dla.mil/hmirs/default.asp>

<http://www.lhbindustries.com>

<http://www.hazard.com>

NSN for Medical Litter

Need a folding medical litter? NSN 6530-01-380-7309 brings you a litter with adjustable nylon handles, aluminum poles and polypropylene cover. It's also painted with chemical-resistant agents, so you can decontaminate it. For more information, call Jim Grugan, (215) 737-9097, or Carolyn Fugarino, (215) 737-7897, at the Defense Supply Center Philadelphia.

NEITHER
RAIN,
NOR SNOW,
NOR SLEET...

GAH!!
THERE'S GOTTA
BE SOMETHING
BETTER I CAN
USE TO TAKE
NOTES!



Dear Editor,

Notes concerning our unit and its mission, sketches of terrain, comments about weapon systems—that's the kind of stuff I jot down when our unit goes to the field. The trouble comes when I take notes while huddled outside in rain or snow. Ink runs, lead pencils smear, paper tears.

I need outdoor writing products made specially for people who write outdoors. One such line of products I've found is called Rite in the Rain. Their website is:

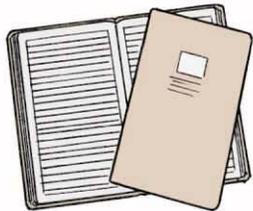
<http://www.riteintherain.com>

Rite in the Rain makes water-resistant, camo-tinted paper products for writing field notes in all kinds of weather. They also offer field ring binders, copier paper, all-weather pens and tactical reference cards. Some of their items have NSNs. Others do not. Here are the ones that currently carry NSNs:

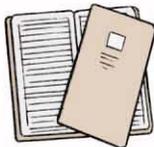
CPT David J. Spess
164th Maintenance Co. (DS)
Ft Lewis, WA

Item	NSN
Tactical field book, green	7530-01-498-1873
Tactical field book, tan	7530-01-505-3661
Loose leaf sheets, green, 4 5/8" x 7" (100 per pack)	7530-01-498-2081
Loose leaf sheets, tan, 4 5/8" x 7" (100 per pack)	7530-01-505-3665
Field ring binder, green, 5 5/8" x 7 3/4"	7510-01-498-2077
Field ring binder, tan, 5 5/8" x 7 3/4"	7510-01-505-3664
Copier paper, green, 8 1/2" x 11" (200 sheets per pack)	7530-01-498-2085
Copier paper, green, 11" x 17" (200 sheets per pack)	7530-01-498-2084
Copier paper, white, 8 1/2" x 11" (200 sheets per pack)	7530-01-498-2083
Copier paper, white, 11" x 17" (200 sheets per pack)	7530-01-498-2082
Shirt pocket notebook, green, 3" x 5"	7530-01-498-2080
Shirt pocket notebook, tan, 3" x 5"	7530-01-505-3705
Hip pocket notebook, green, 4" x 6"	7530-01-498-2078
Hip pocket notebook, tan, 4" x 6"	7530-01-505-3660
All-weather pen, black ink	7520-01-498-1876
All-weather bullet pen	7520-01-498-2079
All-weather pen refill, black ink	7510-01-498-1880

NOW THIS
IS WHAT I'M
TALKING
ABOUT!



Field book



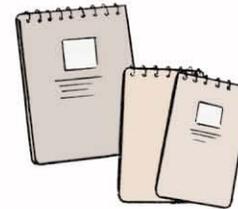
Memo book



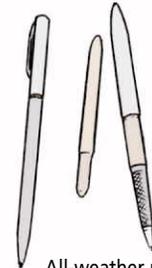
Loose leaf sheets



Tactical reference guides



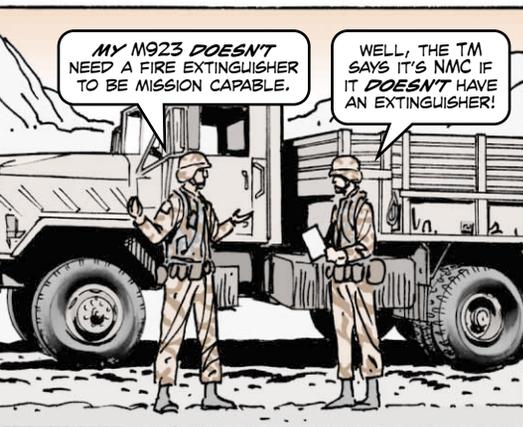
Pocket notebooks



All-weather pens



MISSION CAPABLE OR NOT?



Dear Half-Mast,
I have an M923 5-ton truck that's missing a fire extinguisher. This is an Authorized Additional Item, not a BII item. PS 584, Page 60, tells me it's *not* essential and therefore the truck is FULLY MISSION CAPABLE, unless it's hauling passengers or flammables.

However, the TM 9-2320-272-10 PMCS, item 14, shows it NMC if the fire extinguisher is missing. I maintain that entry is there for the wrecker, but my quality assurance folks disagree.

What is PS Magazine's opinion? FMC or NMC?

M.R.

Dear Mr. M.R.,
You've asked a good question, and the answer is your vehicle is fully mission capable without the fire extinguisher. TACOM provided this response:

"The 5-ton truck team agrees with PS 584 and TM 9-2320-272-10, PMCS Table 2-3, Item 10, as currently written. The NOTE preceding Item 10 refers to the M934 expansible van and the M936 wrecker. The NMC criteria in the right hand column of Table 2-3 pertain only to the M934 and M936 described above."

Half-Mast



CCE WEBSITE

Need info on maintenance, parts support, available TMs, maintenance expenditure limits, excess reporting, PM news or points of contact on the Army's commercial construction equipment? Then take a look at the following CCE website:

<http://tri.army.mil/lc/cj/cjc/cegroup.htm>

PARTS CLEANING CAN

Get a bench-type safety can that's used for cleaning small parts with NSN 4940-00-684-0580. The can stands 6 3/4 inches high and 11 3/4 inches across and holds up to two gallons of cleaning solvent. It comes with side handles and a hinged lid. Appendix A of CTA 50-970 is your ordering authority.

UHF Radio Checks in Tailcone

In PS 622, Page 35, we gave you the incorrect radio for the Black Hawk. It should be the AN/ARC-164 VHF FM radio. It's also incorrect to state that if the UHF radio does not work, the bird is NMC. The final answer is: all aircraft must have an operational UHF or VHF radio to operate. But, one inoperable radio does not make the bird NMC.

Coming Soon to an ALSE Shop Near You

ALSE techs, if you've been wishing for a sewing machine to make repairs to your equipment, your wish is coming true. PM Air Warrior is fielding a sewing machine. The NSN is 3530-00-892-4629. It'll be added in the next change to TM 10-8400-201-23, General Repair Procedures For Clothing. For survival kits check out TM 55-1680-317-23&P.

Paladin NATO Slave Receptacle

Need a new cap for one of the NATO slave receptacles on your M109A6 Paladin? Item 14 in Fig 113 of TM 9-2350-314-24P-1 indicates you need to order a new receptacle to get the cap. You don't. A new cap, including the cord and hardware, comes with NSN 5340-01-059-0114.

DISTRIBUTION: To be distributed in accordance with the initial distribution number (IDN) 340312, requirements for TB 43-PS-Series.

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

[Click here for a copy of this article to send to a friend](#)

USE YOUR COMBAT EYEWEAR



**LOOK
STYLISH
SAVE
YOUR
SIGHT**