

Issue 691

PS

June
2010

THE PREVENTIVE MAINTENANCE MONTHLY

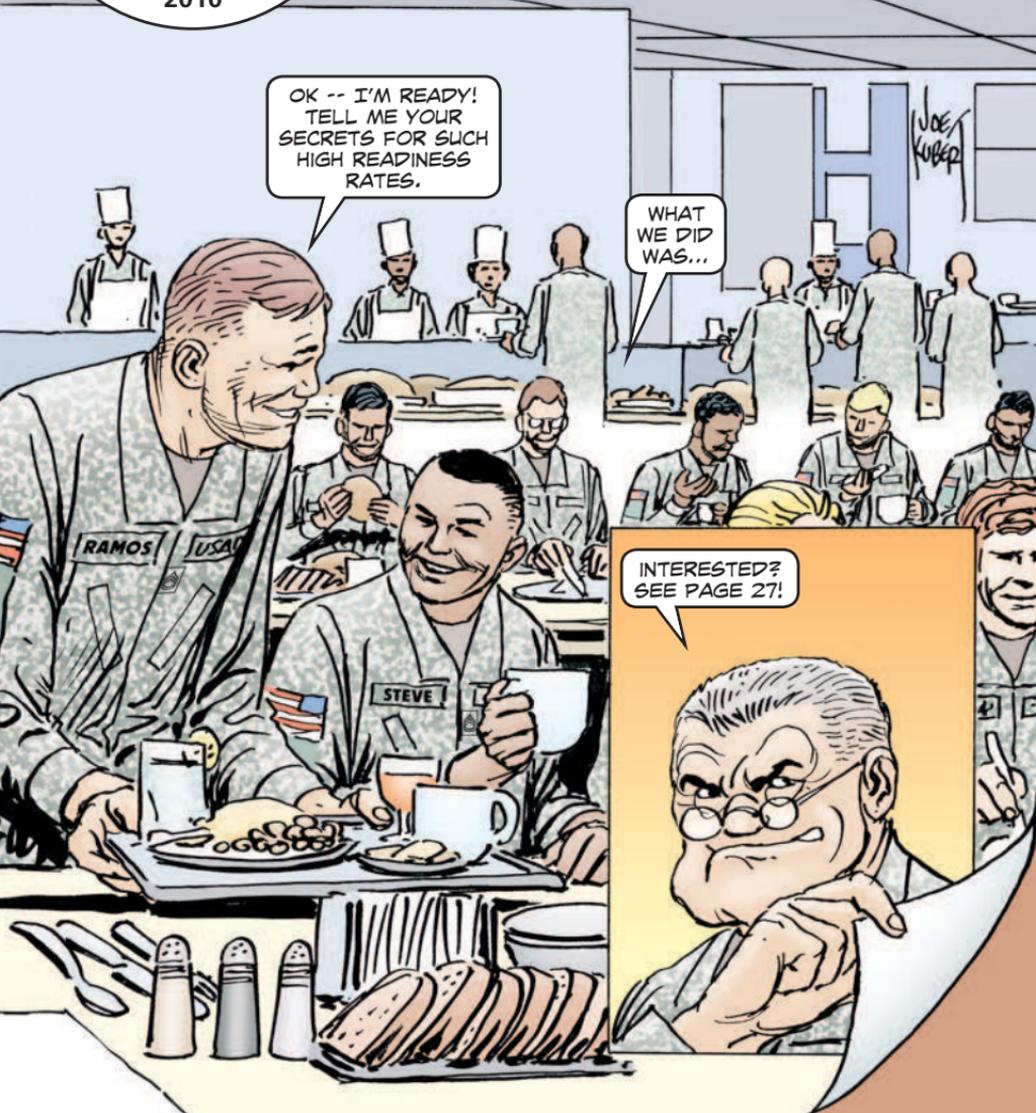
TB 43-PS-691

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OK -- I'M READY!
TELL ME YOUR
SECRETS FOR SUCH
HIGH READINESS
RATES.

WHAT
WE DID
WAS...

INTERESTED?
SEE PAGE 27!





Why Didn't You Report It?

What's that strange noise, you wonder? 'I've never heard a generator make that sound before,' you think. But, it seems to be running fine, you decide, as you walk away.

What's that strange smell, you wonder? 'I've never smelled that smell from an engine before,' you think. Still, it seems to be running fine, you decide, as you walk away.

What's that stuff on the ground under that ECU, you ask? 'I've never seen stuff like that under an air conditioner before,' you think. However, it seems to be running fine, you decide, as you walk away.

You were created with ears to hear, a nose to smell, and eyes to see. All three of these senses are vitally important for good PM. However, they're useless if you don't follow up by reporting what you have heard, smelled and seen.

YOUR PM MISSION IS A 24/7 EFFORT!

WHEN YOU DON'T HAVE A TOOL IN YOUR HAND OR A SPECIFIC PMCS JOB TO DO...

...YOU'RE *STILL* ON THE LISTENING, SNIFFING AND SPOTTING PATROL.

AND THE PATROL IS *NOT DONE* UNTIL YOU REPORT BACK!



PS**THE
PREVENTIVE
MAINTENANCE
MONTHLY**

TB 43-PS-691, 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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You are invited to send PS your ideas for improving maintenance procedures, questions on maintenance and supply problems and questions or comments on material published in PS.

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:

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 General, United States Army Chief of Staff

Official:

Joyce E. Morrow

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FEELING A LITTLE COMPLACENT?

Complacent \kəm plās n(t)\ **adj:** *the quality or state of being satisfied accompanied by unawareness of actual dangers or deficiencies.*

Does this describe you, tank crewmen? If so, it's only a matter of time before you suffer an accident, maybe even a fatal one.

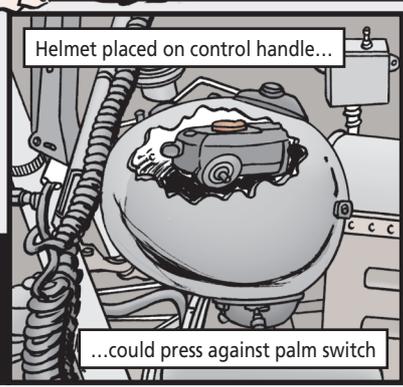
Take, for example, an incident from September of last year. An M1A1 tank crewman was trying to close the driver's hatch by reaching from inside the turret into the driver's compartment. A CVC helmet was resting on the commander's control handle. Turret power was on to provide lighting and the turret lock was unlocked.

When the hatch closed, the driver's hatch interlock was disengaged. The turret suddenly traversed to the left, pinning the crewman between the turret basket and the driver's compartment.



1. When extending **any** part of the body between the turret and driver's compartment, the turret lock must be set.
2. The driver's hatch must remain closed whenever the turret or gun are unlocked and turret power is on. You can operate from the open hatch position only when the turret and gun are locked.

3. Never use the commander's control handle as a place to hang your CVC helmet or other equipment. The helmet can depress the palm switch, allowing the turret to traverse suddenly.



Fortunately, this crewman only sustained injuries to his shoulder. You might not be so lucky.

The next time you're feeling complacent, check out TACOM Safety-of-Use Message 96-08 for more turret safety do's and don'ts. You'll find it on the AEPS website:

https://aeps2.ria.army.mil/Commodity/Soum/Tacom_WN/tsou9608.html

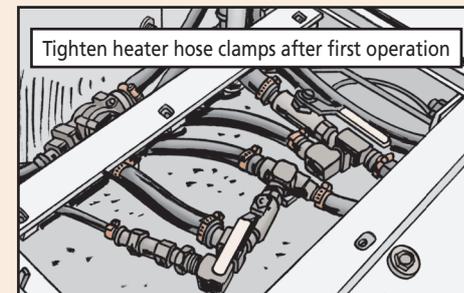
Stryker...

CLAMP DOWN ON LEAKS

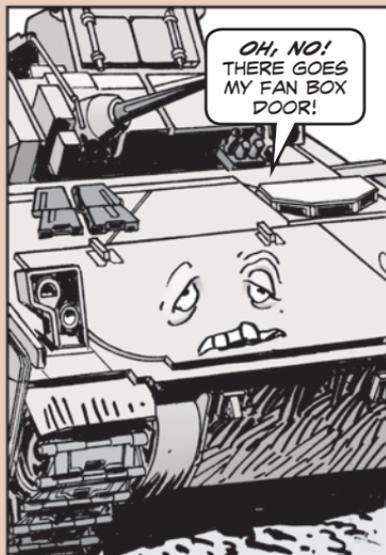
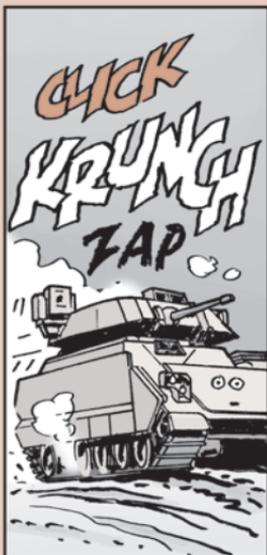
Crewmen, you'd think that having a new heater hose installed in your Stryker would stop leaks. You'd also be wrong.

The rise in temperature during operation will cause that new hose to expand a bit the first time it's used. That can stretch the clamps holding the new hose in place slightly. Then, when the hose cools and shrinks, you get leaks.

The solution is simple. Just check and tighten the clamps after the first operation.



Keep Fan Box Door Closed

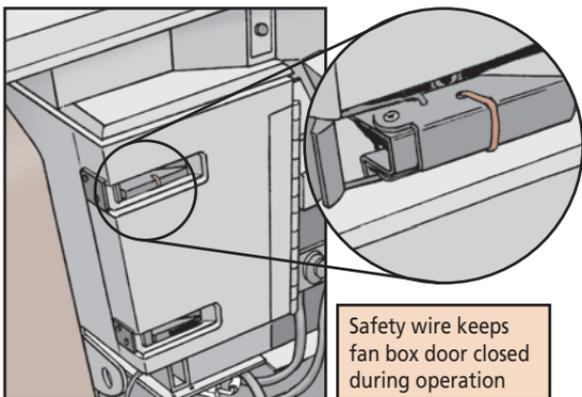


THAT'S THE SOUND OF THE FAN BOX IN YOUR BRADLEY'S TURRET WALL COMING OPEN DURING OPERATION; CREWMEN.

THE SOUND'S NOT PLEASANT, AND IT CAN LEAD TO EVEN MORE UNPLEASANT-AND EXPENSIVE-REPAIRS.

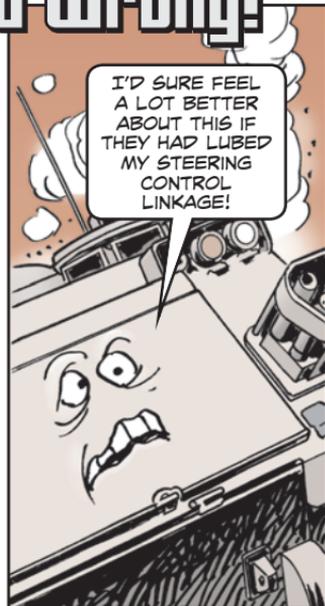
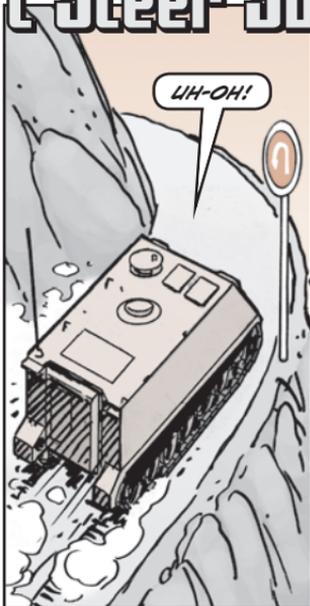
Vibration can pop open the two latches on the fan box. The door falls open and gets crunched big time when the turret is traversed. Even worse, the door can take a lot of electrical cables and connectors along with it, too.

You can put a stop to that damage by safety-wiring the latches after closing the door. The safety wire keeps the latches fastened and the door closed.



Safety wire keeps fan box door closed during operation

PM Won't Steer You Wrong!



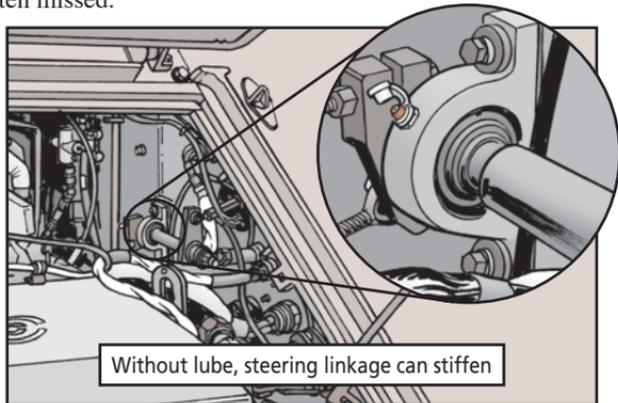
When you're approaching a sharp turn overlooking a long drop, it's a little late to wonder if you've lubed your M113A3's steering control bearings.

Without regular lube, the steering gets stiff and harder to turn. And since the carrier's a little too heavy to fly, that's not a good thing.

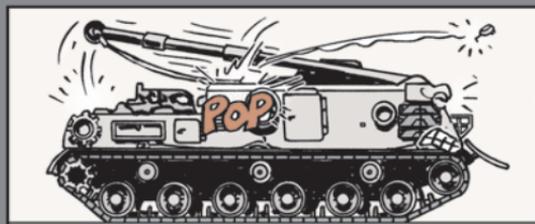
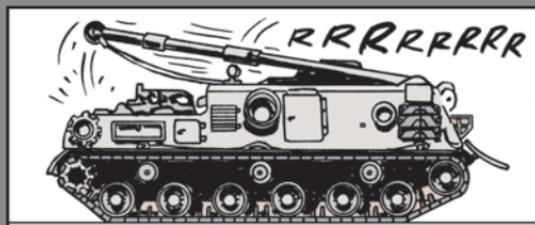
There are three lube points for the steering control bearings. Most crewmen remember the two on the steering shaft. But the third one, which is located in the engine compartment, is often missed.

Lube all three fittings with GAA semiannually or every 1,500 miles, whichever comes first. That'll keep the steering linkage moving and you on the road.

It's also a good idea to check the fittings after washing or fording the vehicle. If they're wet, give the steering control bearings another lubing.



A SPOTLIGHT ON... SPOTLIGHTS

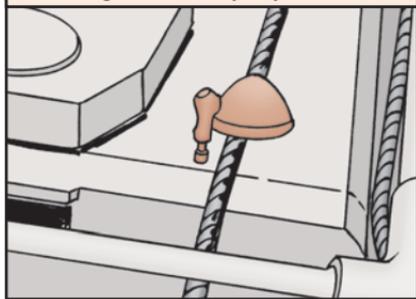


CREWMEN, THE **LAST** THING YOU WANT TO HEAR IS A LOUD **POP!** WHEN YOU RAISE THE BOOM ON YOUR M88A1 RECOVERY VEHICLE.

WHY? BECAUSE THAT MEANS YOU **FORGOT** TO KEEP THE SPOTLIGHT ON TOP OF THE VEHICLE IN THE CORRECT POSITION.

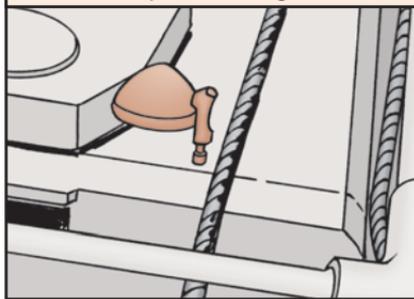
The spotlight has a swivelling base. If you leave it turned toward the **outside** of the vehicle, the boom's stay line can hook it. Then, when the boom comes up, the spotlight gets ripped loose with a loud POP!

Spotlight turned to outside of vehicle gets hooked by stay line



Avoid that damage by keeping the spotlight turned toward the **inside** of the vehicle. That keeps it out of harm's way.

Keep spotlight turned inside to prevent damage



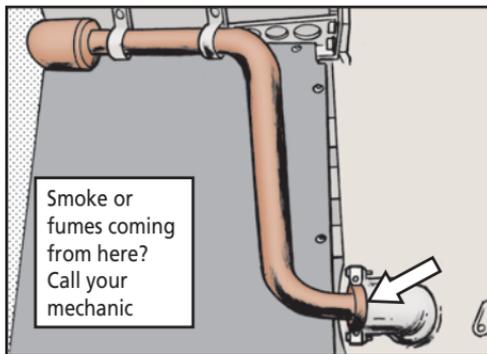
RUSTY PIPE = NASTY FUMES



Water from rain, the wash rack and condensation gets inside the exhaust pipe. That creates rust that eats away at the pipe. Eventually, the pipe develops leaks and crumbles away.

A bad exhaust pipe may not vent the heater's fumes, including carbon monoxide. That's bad news for anyone inside the vehicle.

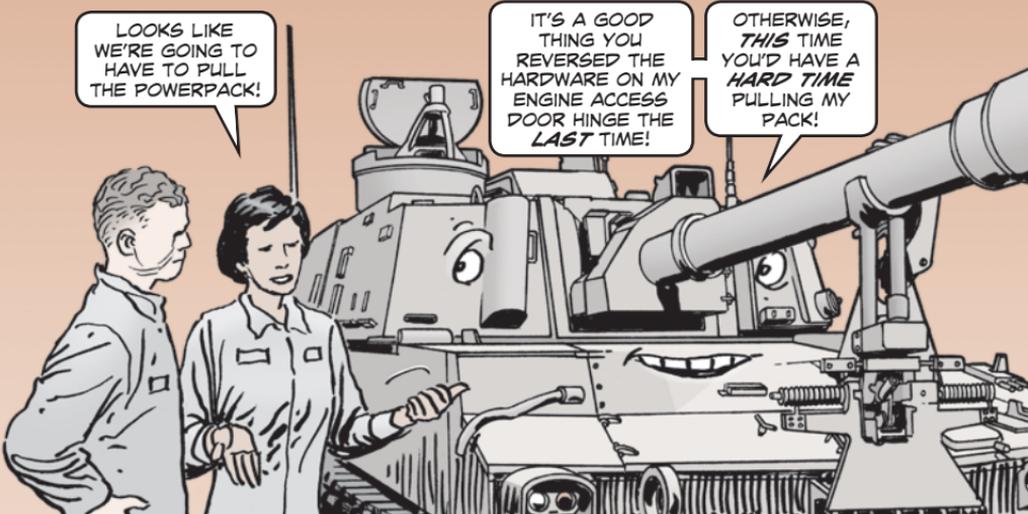
Take a look at the exhaust pipe from the outside the next time the heater's running. If you see smoke or fumes coming from anywhere other than the end of the exhaust pipe, there's a good chance not all exhaust is being properly vented. Call in your mechanic.



The best way to prevent this damage is to keep water out of the exhaust pipe whenever possible. If you're going to the wash rack, cover the pipe with a plastic bag before you start washing. If the vehicle's going to sit in the motor pool for a while, seal the exhaust pipe with a plastic cap or cover it with a tarp to keep out rain. Just remember to remove them before operation.

Taking a few precautions to keep out moisture will let your AVLB—and you—breathe easier.

Run Interference for Deck Bolt

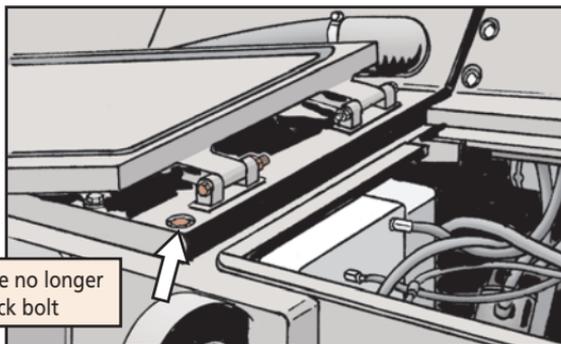


Mechanics, when it's time to remove the powerpack in a Paladin or ammo carrier, you want to get the job done right and quickly. So when something slows you down, your frustration level goes up a notch or two.

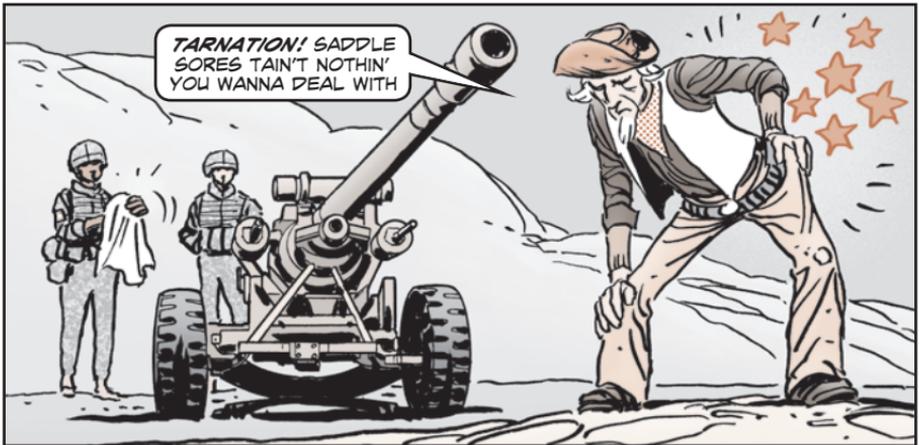
A good example is the hardware for the bottom hinge on the left engine access door, NSN 5342-01-083-5671. Fig 175 of TM 9-2350-314-24P-1 (Feb 99, w/Ch 4, Jan 09) and the M992A2's IETM show the screw placed so the flat washer and self-locking nut are facing the front end of the vehicle.

Problem is, the nut sticks out far enough to interfere with removing one of the engine deck bolts. You have to remove the hardware to get to the deck bolt, then put it all back again when you're finished.

Make this time the last time. When you put the hinge hardware back in place, insert the screw from the bottom. That lets you place the washer and nut on the high side of the hinge and away from the deck bolt.



CLEANING FIRST PREVENTS SADDLE SORES

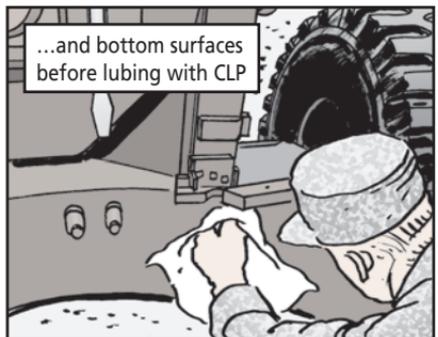


Daily lubing of the saddle bearing surfaces on your M119A2 howitzer is wasted effort if you don't clean them properly first, operators.

It's easy to remember to clean the bottom surfaces. They face up, so they're in plain sight. It's the top surfaces—the ones that face down—that are usually forgotten.

Dirt, sand and oil collect there, too. If you don't clean it off, the combination acts like sandpaper. Soon, those smooth metal surfaces are scratched, pitted and covered with corrosion. Your howitzer is NMC.

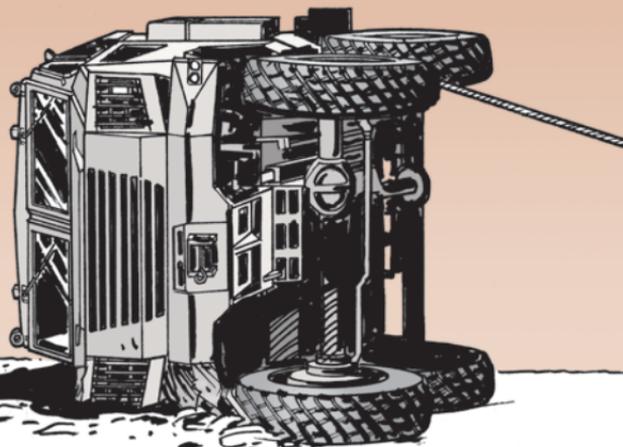
Use a clean cloth to wipe off all of the surfaces. You'll have to get down on your hands and knees to make sure the top surfaces are clean.



When the gunk is gone, cover all the surfaces—top and bottom—with a light coat of CLP, NSN 9150-01-054-6453.

TRAIN BEFORE DEPLOYING!

I'M SURE GLAD
WE'RE PRACTICING
RECOVERY *BEFORE*
WE DEPLOY!



Dear Editor,

Commanders need to get vehicle recovery training for route clearance teams *before deployment*.

ARCENT wants to ensure that as the number of route clearance teams in OEF increases, deploying team members are trained to do this tough mission.

Route clearance teams find and clear roads and minefields using one Buffalo, two Huskies, four RG31s, one M916, one M870 trailer, and one M984 HEMTT wrecker. Depending on the situation and terrain, a recovery mission could become quite complex.

That's why we want to ensure we provide these Soldiers (especially Soldiers who are H8, recovery-qualified) the opportunity to sharpen their recovery skills through training and hands-on experience. Hands-on experience during training builds Soldiers' confidence and helps them perform their wartime missions better.

CW4 Wayne A. Baugh
Theater Maintenance Officer
ARCENT G4 (Maintenance)

Editor's note: Thanks for weighing in on the importance of good advance training, Chief Baugh. Route clearance teams, get the training you need before duty calls! To schedule it, contact Paul Zacher of the US Army Engineer School at Ft Leonard Wood, MO: DSN 676-3982, (573) 563-3982, or paul.a.zacher@us.army.mil. And Soldiers with a 63B, 63S, or 63W MOS can attend wheel vehicle recovery H8 training at Ft Bragg, NC. Contact James Wilkins to set this up: DSN 236-6625, (910) 396-6625 or james.wilkins2@us.army.mil.

MaxxPro
MRAP
Vehicles...

HOW
COULD THE
A/C STOP
WORKING?

I *JUST*
PUT IN THE
REFRIGERANT
OIL THOSE TMS
WERE CALLING
FOR!

THE TMS LIST THE WRONG OIL!
YOU SHOULD HAVE USED NSN 9150-
01-546-5096 TO GET THE RIGHT
PAG 46 REFRIGERANT OIL!

AIR CONDITIONER COMPRESSOR OIL

Reports from the field say MaxxPro MRAP air conditioning compressors are going belly up.

That's because the wrong refrigerant oil is listed as Item 37 in the Expendable and Durable Item List (EDIL) in TM 9-2355-106-23-1, Item 32 of the EDIL in TM 9-2355-318-23-3, and Item 30 of the EDIL in TM 9-2355-324-23-1. That oil causes the compressor to wear out. No compressor—no air conditioning!

So use NSN 9150-01-546-5096 to get the right PAG 46 refrigerant oil. Also, do **not** mix refrigerant oils—that'll only damage the air compressor.

Caiman MRAP...

Watch That Step!

THAT FIRST STEP IS A REAL
DOOZY WHEN YOU EXIT THE
CAIMAN'S REAR ENTRANCE.

SO, WHEN EXITING THE CAIMAN,
LOWER YOURSELF SLOWLY AND
TURN SLIGHTLY SIDeways TO
HELP BALANCE YOURSELF.

THAT'LL HELP
SAVE YOUR
ANKLES.

IT WILL ALSO
PREVENT
SOLDIERS
FROM
FALLING ON
TOP OF EACH
OTHER OR
GETTING IN
EACH OTHER'S
WAY.

THAT'S BECAUSE THE VEHICLE'S
REAR EXIT STEP IS ABOUT 20
INCHES ABOVE THE GROUND!



ELECTRICAL FIRES DEADLINE VEHICLE

MAN-O-MAN!
TELL ME
AGAIN HOW THIS
HAPPENED?

SOMEBODY DIDN'T
READ TACOM
SOLIM 10-003 ON
FIRE HAZARDS ON
HEMTT -A4s.

IF THEY
HAD, WE
MIGHT HAVE
AVOIDED
THIS!

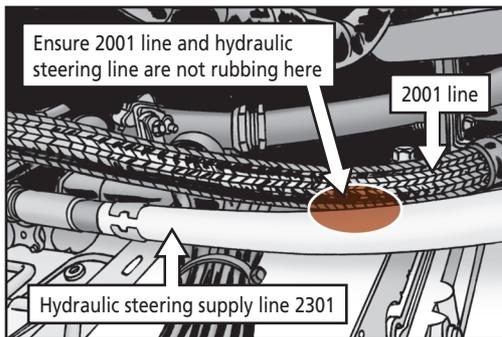


TACOM
SOLIM 10-003
ADDRESSED A
FIRE HAZARD
ON HEMTT -A4
MODELS.

BY NOW, YOUR UNIT
SHOULD HAVE FIXED
THAT PROBLEM, BUT
IF NOT, HERE'S WHAT
NEEDS TO HAPPEN
RIGHT NOW!

Unit commanders should deadline all HEMTT -A4 models that haven't had a hydraulic line inspection and corrective repair performed yet! Park these HEMTTs and set the 24V battery disconnect switch to OFF. Otherwise, a problem with electrical fires could destroy the HEMTT -A4 or kill or hurt Soldiers.

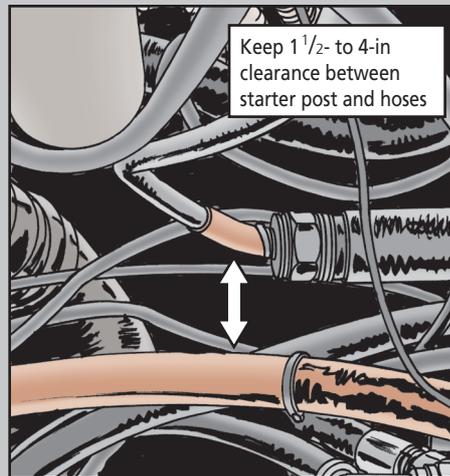
Hydraulic lines rubbing on the positive starter terminal is the root cause of these fires. The outer layer of the hose eventually wears through to the metal reinforcements. That leads to arcing between the starter terminal and the hydraulic line, which sets leaking hydraulic fluid on fire.



Three Repair Options

THERE SHOULD BE AT LEAST 1 1/2 INCHES OF CLEARANCE BETWEEN THE POSITIVE STARTER TERMINAL AND ANY HYDRAULIC HOSE.

Keep 1 1/2- to 4-in
clearance between
starter post and hoses



AND THERE ARE **THREE DIFFERENT FIXES**—EMERGENCY, INTERIM, AND PERMANENT—FOR THE HEMTT -A4 HOSES...

1) *Emergency fix:* This option is only approved for Afghanistan. Just use hose ties to isolate the hydraulic hoses from the starter terminal. Then do the interim fix as soon as possible.

2) *Interim fix:* For this option, worn hoses shall be replaced before applying the interim fix to the vehicles. A standoff bracket and hose-restraining straps attach the hydraulic lines to the charge air cooler posts. This keeps the lines away from the starter terminals and other electrical connections. Use this method until the permanent fix can be applied.

3) *Permanent fix:* As parts become available, the contractor will apply this permanent solution for your unit's HEMTT -A4 fleet. They'll lock the hydraulic and electrical routings into a single configuration using pillow blocks and P-clamps to secure the hoses.

INSTRUCTIONS FOR MOVING THE HOSES AWAY FROM THE STARTER WIRE CAN BE FOUND ON:

https://aeps2.ria.army.mil/commodity/soum/tacom_wn/HEMTT-Rework.ppt



PS MORE

HMMWV...

Service Kit NSN Error

I DON'T THINK THIS HMMWV SERVICE KIT INFO IS RIGHT, I'M GONNA HAVE TO TELL THE EDITOR!

Dear Editor,

Our shop wants to draw your attention to the HMMWV service kit NSNs on Page 15 of PS 684 (Nov 09). You've listed NSN 4910-01-496-0055 as the annual kit, but FED LOG shows it as the *semi-annual* kit! NSN 4330-01-495-6900 is shown as the semi-annual kit, but FED LOG lists it as the annual kit.

Your readers need to reverse the HMMWV kit NSNs. That way, units won't get the wrong kits for the service they are performing.

John F. Tipsword
Senior Shop Leader
AMSA 45, 88th RSC G4
Orland Park, IL

Editor's note: You're right, Mr. Tipsword! Thank your shop for us. And readers, it's always a good idea to make sure the info in FED LOG matches what you need to buy for your unit.

M1151/M1152 Up-Armored HMMWV...

400-AMP Alternator Info

Dear Half-Mast,

I need NSNs for the M1151/M1152 up-armored HMMWV's 400-AMP generator/alternator and the kit that goes with it. Can you help?

CW2 B.M.O.

Dear Chief B.M.O.,

Glad to help, Sir. NSN 2920-01-466-1855 brings the 400-AMP alternator. And NSN 2920-01-509-4688 gets you the engine generator parts kit needed to install the alternator on the truck.

Half-Mast

HYDRAULIC HOSE ASSEMBLY COMPONENTS



Dear Half-Mast,

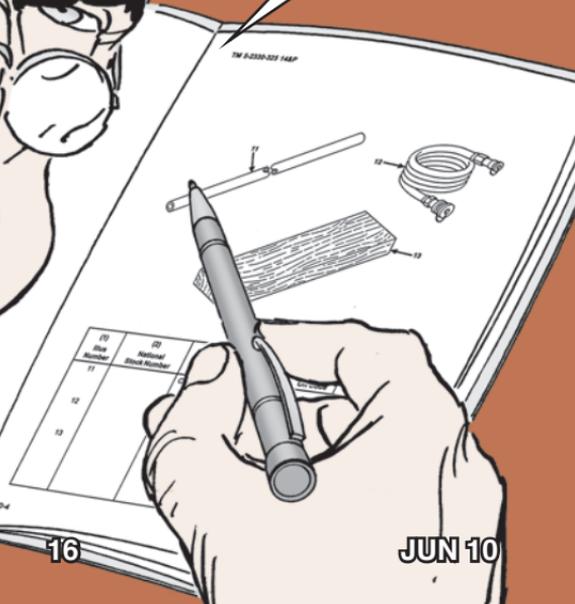
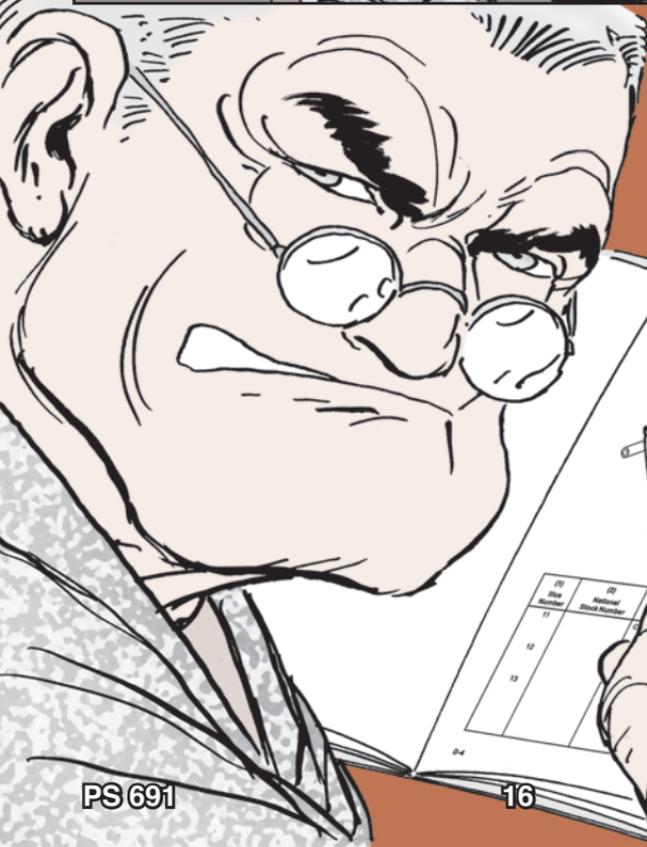
Our unit is serving in Afghanistan. When our M870A3 trailers arrived from CONUS, somehow the hydraulic hose assemblies disappeared from our BII! This prevents us from using our trailers.

Can you give us an NSN for the hose assembly?

SSG S.W.

CAN DO, SERGEANT!
YOU CAN GET THAT HOSE
ASSEMBLY WITH NSN
4720-01-520-6767.

MAKE A NOTE IN COLUMN 2
OF THE BII TABLE UNTIL
TM 5-2330-325-14&P
GETS UPDATED.



»GASP!« THIS INFORMATION *ISN'T* RIGHT! I'VE GOT TO LET PS KNOW...

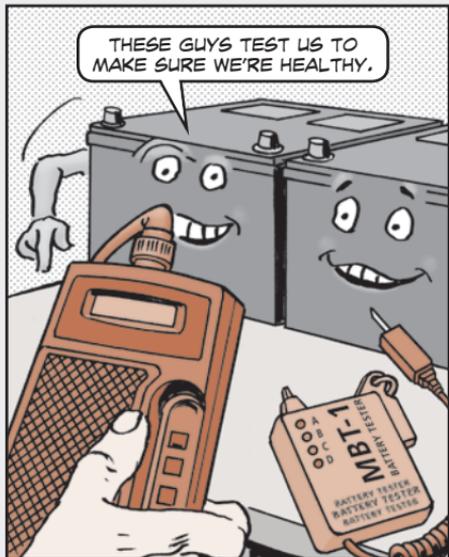
...A BIT MORE ON **BATTERY TESTERS!**

Dear Editor,

I found a mistake on Page 14 of PS 682 (Sep 09) in the article entitled "Protect Vehicle Battery Life." NSN 6130-01-463-8499 is the only NSN for the MBT-1, and it costs \$52.67 each. NSN 6625-01-433-6786 costs \$384.33, and it's not the MBT-1. It's the MCR-400 tester.

Also, the MBT-1 was designed to be used by operators to test each battery in the end item. However, the 490-PT battery analyzer, NSN 6130-01-510-9594, is used by mechanics to determine the actual health and cold cranking amps (CCA) for each battery when in service. It's also used when the operator gets a reading other than all four lights being lit with the MBT-1. This finding would then be recorded on the DA Form 5988-E. Depending on how each shop conducts business, the operator should be able to borrow an MBT-1 from either a mechanic or the tool room.

SFC John A. Rodda
National Maintenance
Training Center
Camp Dodge, IA



Editor's note: Thanks for your helpful feedback, Sergeant Rodda. We'll try to be more clear in the future. Our intent was to show the MBT-1 as one of several options for units needing a battery tester. Note that the MCR-400 battery tester we listed, NSN 6625-01-433-6786, is no longer commercially available.



You may think the right way to add unit identification numbers to wheeled and tracked vehicles is more hush-hush than the Colonel's secret recipe. After all, you'll see it done just about every way possible if you look around your installation.

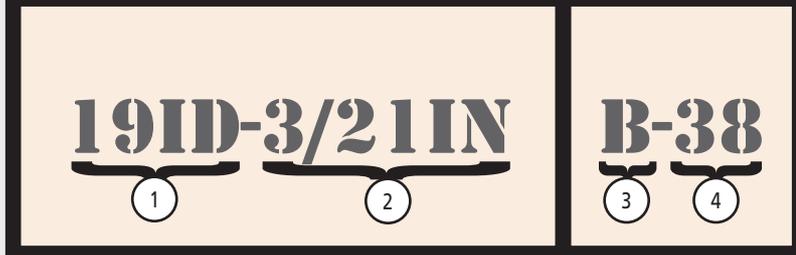
Truth is, it isn't classified info. You just have to know the right publications to use to do it right.

TB 43-0209

Your first step is TB 43-0209, *Color, Marking and Camouflage Painting of Military Vehicles, Construction Equipment and Materials Handling Equipment* (Oct 90 w/Ch 1, May 91). This pub standardizes how vehicle bumper numbers are applied.

Para 9 divides the markings into four positions. Positions 1 and 2 are applied on the left, as you face the surface to be marked, while positions 3 and 4 are applied on the right. The positions identify:

1. The major command, organization, or activity the equipment is associated with.
2. The intermediate organization or activity.
3. The unit that operates and maintains the vehicle.
4. The specific vehicle number (often associated with the order of march).



Anything beyond this policy, such as assigning a specific number against a specific unit position, is a matter of unit SOP.

TM 43-0139

TM 43-0139, *Painting Instructions for Army Materiel* (Jun 08), gives information about how to apply ID markings over camouflage CARC colors. Fig 11-2 in WP 0011 00-8 tells you to use black lettering over brown or green CARC, green lettering over black CARC, and brown lettering over tan CARC. The paint used for marking must be CARC if used on a CARC-painted vehicle.

So you'll be glad to know that WD CARC is now available in aerosol cans and in bottles with a brush-top or roller-top applicator. Use these NSNs to order.

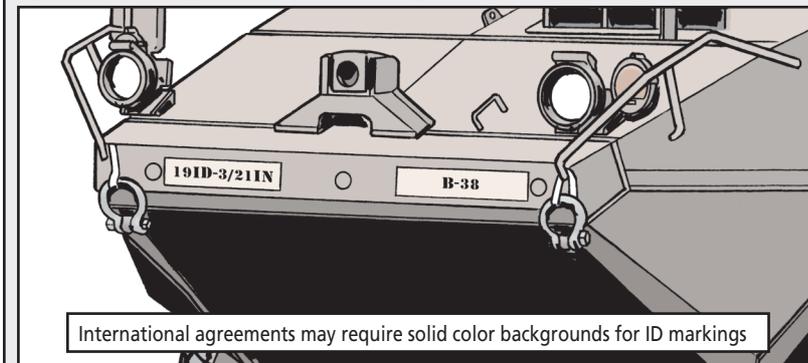
WD CARC Aerosol		WD CARC Brush-Top		WD CARC Roller	
Color	NSN 8010-01-546-	Color	NSN 8010-01-546-	Color	NSN 8010-01-546-
Green	7712	Green	7585	Green	7593
Tan	7711	Tan	7587	Tan	7594
Black	7713	Black	7588	Black	7596
Brown	7709	Brown	7589	Brown	7595

All of these NSNs bring a box of 12 each. So keep that in mind when ordering.

AR 750-1

Para 8-9c(16) of AR 750-1, *Army Materiel Maintenance Policy* (Sep 07), allows MACOM commanders to conceal bumper numbers in tactical conditions. Para 8-9c(17) allows overseas commanders to comply with international agreements regarding how vehicle bumper numbers are displayed.

That's why you'll see vehicles in some overseas commands painted with solid, light-color rectangular boxes as the background for vehicle bumper numbers.



The TB and TM can be found online at LOGSA's ETM website:

<https://www.logsa.army.mil/etms/online.cfm>

AR 750-1 is available on the USAPA website:

https://www.army.mil/usapa/epubs/pdf/r750_1.pdf

Patriot Missile System...

C'MON, GET READY! WE'VE GOT TO HIT THE ROAD!

TOO BAD! MY TRAILER'S CABLES ARE TOO BEAT UP FOR ME TO MOVE.

YOU SHOULD'VE PAID ATTENTION!

Don't Trail on Trailer PM

If the trailers for your Patriot Missile System are in bad shape, you're in bad shape because you can't move your Patriot. Here's how to keep your Patriot mobile:

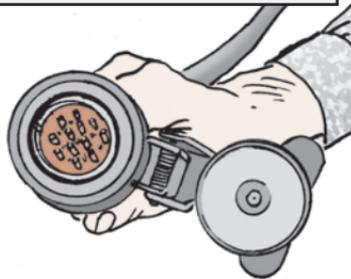
Be careful with the inter-vehicular cables. If you force the cable connectors in place, pins get bent, leaving the trailer with no lights. Line up the connector and the receptacle and then carefully push in the connector. If it won't plug in easily, something is wrong. Get a repairman to check it out.

Also make sure the cables are securely plugged in. If they're not, the cable can come unplugged and drag along the ground, which damages it.

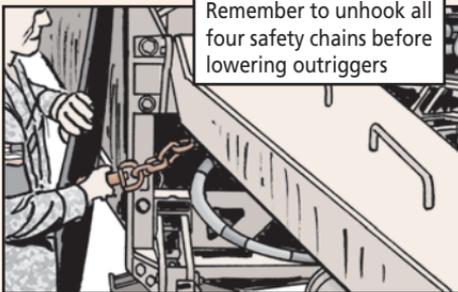
During BEFORE PMCS, check the cables' connectors for bent pins or a damaged metal sleeve. Tell your repairman if you spot problems.

Remember to unhook outrigger safety chains. Lots of safety chains are snapped off each year because Patriot crews forget to unhook them before they lower the outriggers. There are four outriggers on each trailer. Visually check each one's safety chain **before** you lower the outriggers. A snapped chain makes the trailer NMC.

Check cable connectors for bent pins



Remember to unhook all four safety chains before lowering outriggers



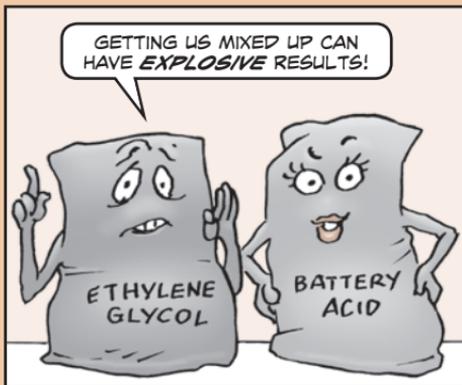
Experience the Voices of Experience

Dear Editor,

An exploding battery in the Patriot missile system is something you want to avoid at all costs. This tip can help:

Label ethylene glycol canisters. Ethylene glycol is used in the radar. Unfortunately, the canister it comes in looks like the one for battery acid. We've had repairmen mistakenly put ethylene glycol in batteries, which could cause them to explode. We avoid that mistake by marking on the bags for the canisters whether they are battery acid or ethylene glycol.

CW2 Peter Wesolowski
CW2 Christopher Weems
HHB, 3-43 AMD
Ft Bliss, TX



Editor's note: Excellent suggestion, Chiefs. Thanks.

MK 19 Machine Gun...

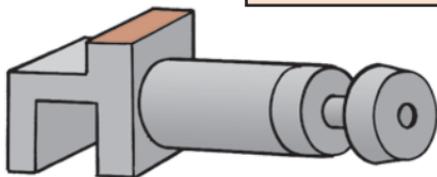
DOUBLE TAKE ON SAFETY SLIDE

Dear Editor,

In PS 684 (Nov 09), you talked about the importance of putting the MK 19 machine gun's safety slide in correctly. If it's installed backwards, the MK 19 could fire even when it's set on SAFETY.

But you said the correct position of the slide is with its tab facing to the rear. That's confusing. You should have said the tab should face the top of the gun and toward the gun's right side.

Tab should face top
and toward right



Brian Smith
FT McCoy, WI

Editor's note: Good point, Brian. When you're standing behind the weapon, the slide's tab should be on the right and should point up. See Item 4 in WP 10700-2 in TM 9-1010-230-23&P.

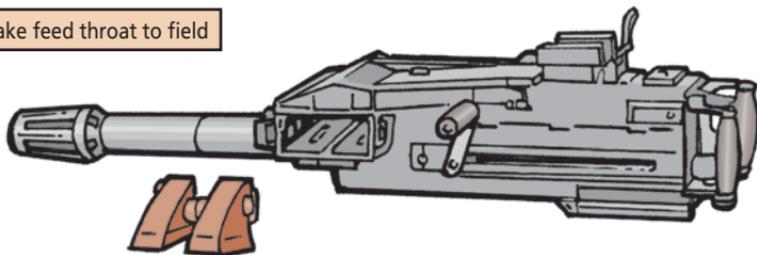
DON'T FORGET FEED THROAT



The MK 19 machine gun's feed throat is often forgotten by units. That's usually because the feed throat is stored separately from the MK 19. But without the feed throat, the MK 19 will suffer firing stoppages.

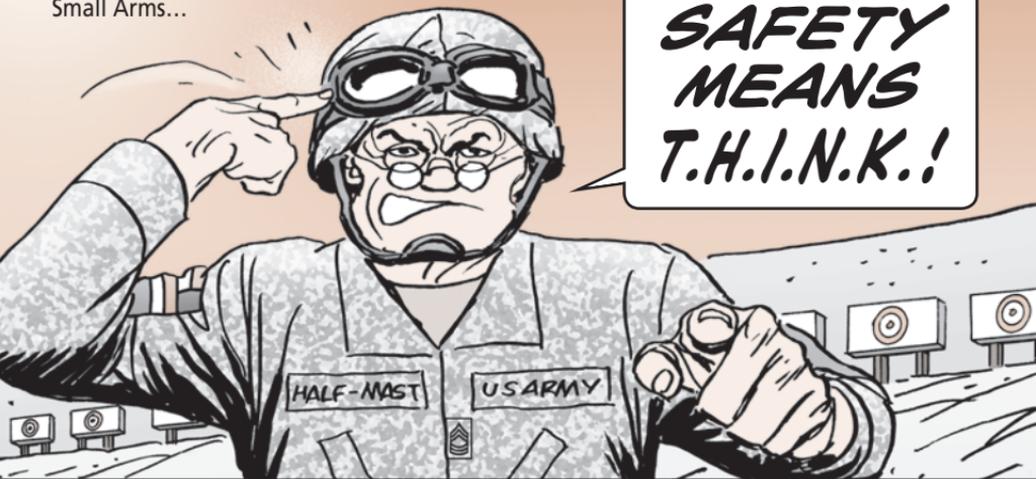
Before you go to the field, check that you have the feed throat and that it's in good shape. Remember the MK 19 is considered NMC without it.

Take feed throat to field



Don't forget the rest of the MK 19's BII items. The round removal tool, bore obstruction detector and LSAT or GMD should be with you in the field, not sitting in the arms room.

If you turn in the MK 19 for Reset, turn in the feed throat, too. The Reset technicians will need the feed throat when they repair the MK 19.



In the span of eight days, two Soldiers were killed in separate accidents involving small arms. Their deaths need not have happened.

One incident occurred while a Soldier was cleaning his rifle. After reassembling it, he performed a function check on the SEMI position, which failed. He then did the check on BURST and the rifle discharged three rounds, killing another Soldier.

In the other incident, a Soldier cleared his shotgun without using a clearing barrel. The shotgun discharged, striking a Soldier in her abdomen, killing her.

Unfortunately, these aren't isolated incidents. In 2008-2009, the Army reported 38 accidental weapon discharges that resulted in six deaths and 33 injuries.

NONE OF THESE DISCHARGES WOULD HAVE HAPPENED IF SOLDIERS HAD REMEMBERED THESE FIVE RULES, THE **THINK** RULES...



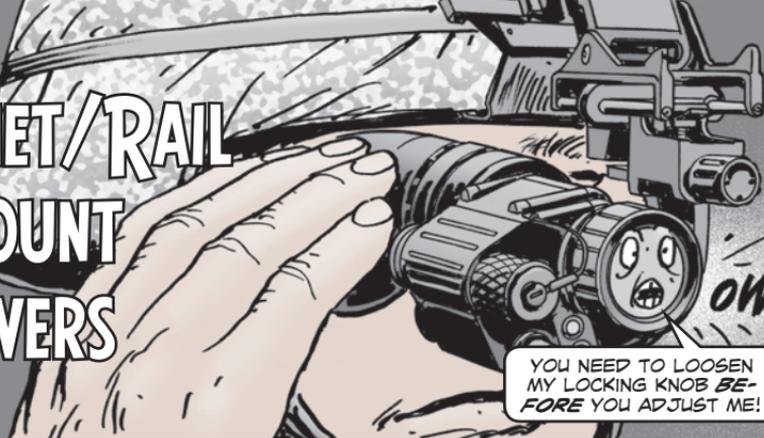
- Treat every weapon as if it's loaded.
- Handle every weapon with care.
- Identify the target before you fire.
- Never point a weapon at anything you don't intend to shoot.
- Keep the weapon on safe and your finger off the trigger until you intend to fire.

During training and Sergeant's Time, commanders and senior NCOs should stress the importance of weapons safety and the proper procedure for clearing a weapon. They should also stress the best source for exactly how to clear a weapon is the weapon's -10 TM.

Every Soldier should watch for and correct unsafe weapons handling. When it comes to handling your weapon, remember to **THINK**.

Sights...

HELMET/RAIL MOUNT SAVERS



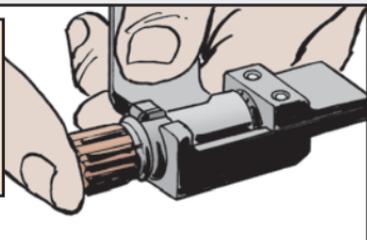
YOU NEED TO LOOSEN MY LOCKING KNOB BEFORE YOU ADJUST ME!

Dear Editor,

We repair sights for the Ft Leonard Wood DOL. By far, our two biggest problems are with the helmet mount for the AN/PVS-14 night sight and the sight mount for the rail system on the M16 rifle, M4 carbine and M249 machine gun. Soldiers break the mounts because they forget these rules:

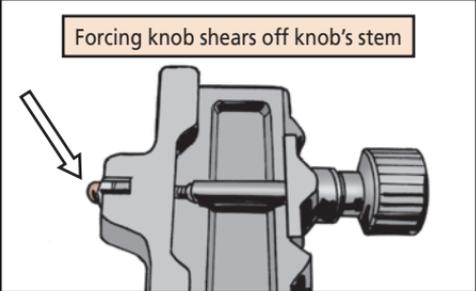
AN/PVS-14 mount—First, unscrew the mount bracket locking knob before you try to adjust it. If you don't, the pin that holds the bracket in place will shear off. Also, some Soldiers try to tighten the bracket with pliers or a pocket tool. That ruins the bracket.

To adjust the bracket, back the locking knob all the way out. Then push in the knob to adjust the bracket. Once you have the bracket in the position you want, tighten the knob finger tight. Don't force it tighter. You'll break it.



Loosen knob all the way out. Press in knob to adjust bracket. Tighten knob finger-tight.

Rail system sight mount—It's the opposite problem with this mount. Soldiers unscrew the mount's locking knob too far back and that shears the stem off the knob. Unscrew the knob until you feel resistance, then stop. You should be able to remove the mount from the rail system. If you can't, tell your armorer. Don't try to force the mount off. That can break it.



Forcing knob shears off knob's stem

Jim York
DOL, Ft Leonard Wood, MO

Editor's note: We hope Soldiers sight in on your sight mount suggestions. They will save a good sight of mounts.

Small Arms...

Homemade CLP Wipes

HEY, BIG GUY,
LOOKS LIKE YOU'VE
GOT A BIT OF DIRT
ON YOUR BARREL.

LET ME
TOUCH YOU
UP WITH MY
CLP WIPES.

THOSE
THINGS
SURE ARE
HANDY!



Dear Editor,

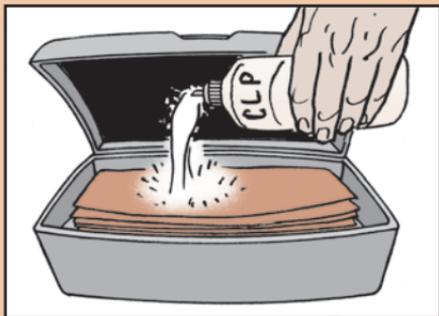
Most units have loads of the wet wipes Soldiers use to clean their hands in the field. I've come up with a way to turn the hard wipes into CLP wipes.

In a clean, protected indoor area, remove all the wipes from the container and put them out where they can air dry for a few days. The alcohol in the wipes needs to completely evaporate.

Wipe out the inside of the wipes container with a paper towel and let it air dry, too.

Put the wipes back in the container and pour enough CLP on them so they are lightly saturated. Close up the container. Whenever you need to clean your weapon, pull out one of the wipes and go to it. These are especially handy for cleaning weapons stored in the arms room that have collected dust.

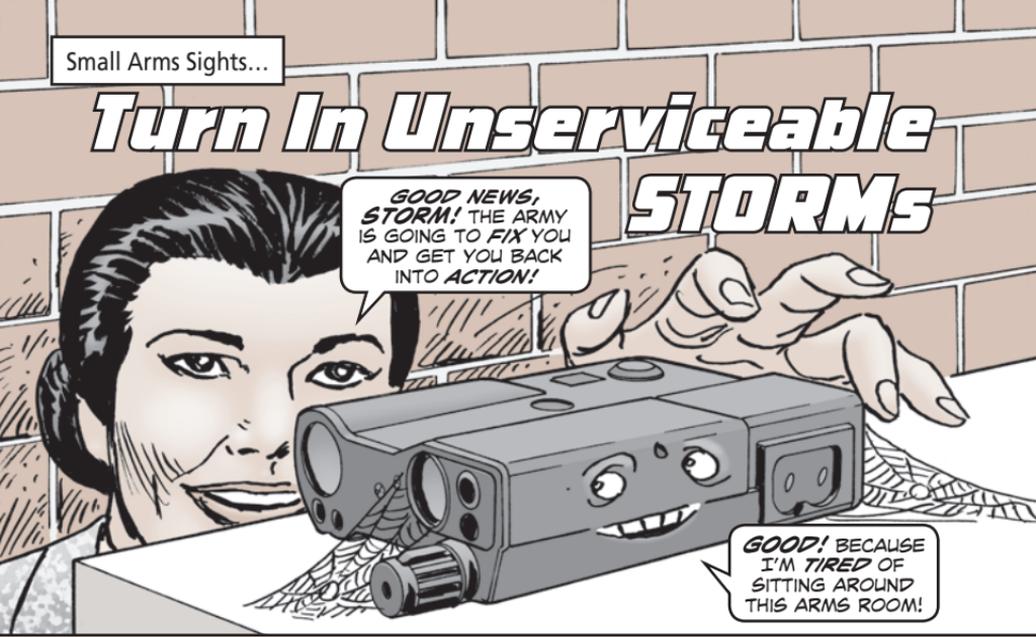
SSG Shane Huneycutt
HHC, 1-153d IN
SWA



Editor's note: A handy idea, Sergeant. But remember in a desert like Iraq you don't want the outside of your weapon covered with CLP. That just attracts sand and causes problems for your weapon.

You can buy ready-made CLP wipes, too. The price is \$5 for 20. They're called Break Free wipes and are available on-line.

Turn In Unserviceable STORMs



GOOD NEWS, STORM! THE ARMY IS GOING TO FIX YOU AND GET YOU BACK INTO ACTION!

GOOD! BECAUSE I'M TIRED OF SITTING AROUND THIS ARMS ROOM!

If you have unserviceable AN/PSQ-23 small arms integrated illuminators (STORM), turn them in ASAP. The Army needs to repair them and get them back in action.

To determine if your STORM is still under warranty, send the STORM's nomenclature, serial number, and a description of the malfunction or damage to RETURNS@INSIGHT-TEK.COM or call (877) 744-4803.

Black STORMS are NSN 5855-01-535-1905 and tan ones are NSN 5855-01-577-5946.

If you have unserviceable STORMS that are no longer covered by warranty, contact your local property book officer (PBO). He will report the STORM to the National Inventory Control Point (NICP) B14 using an FTE (report of excess), following the instructions in Chapter 7 of AR 725-50, *Requisition and Issue of Supplies and Equipment*.

The NICP will respond with final disposition instructions through an FTR (reply to report of excess), directing you to ship the STORM to a depot for repair. A replacement can be ordered from the NICP once the unserviceable STORM has been turned in.



IF YOU HAVE QUESTIONS, CONTACT TACOM-ROCK ISLAND'S VERNE CHRISTOPHERSON AT DSN 793-0077, (309) 782-0077, OR EMAIL: verne.christopherson@us.army.mil

OR MARK JOHNSON, DSN 793-2335, (309) 782-2335, EMAIL: mark.johnsonjr@us.army.mil

A MECHANIC'S PLAN FOR AFGHANISTAN

HEY, PM STEVE -- WE HAVEN'T EVEN HAD CHOW YET--AND YOU'RE RUNNING LIKE YOU'RE TRAINING FOR THE OLYMPICS!

YOU KNOW HOW I DO, RAMOS.



I HEAR YOU GOT BACK FROM AFGHANISTAN LAST YEAR.

YOU HEARD RIGHT.



HEY, MAN, I'VE BEEN TO IRAQ A FEW TIMES, BUT NEVER TO AFGHANISTAN. NOW MY UNIT'S ON ALERT...

...AND I GOTTA GET MY MECHANICS READY TO GO.

YOU'RE SPEAKING MY PM LANGUAGE, RAMOS. CONTINUE.





I HEARD YOUR OLD UNIT HAD A 95% READINESS RATE!

THAT'S **CRAZY**. HOW'D YOU DO IT?

IT WASN'T JUST **ME**, MAN. IT WAS A **TOTAL TEAM EFFORT**.

OUR SUCCESS STARTED **BEFORE** WE DEPLOYED TO AFGHANISTAN.



IT'S A LONG STORY...TELL YOU WHAT.

LET'S FINISH THIS RUN AND MEET IN THE CHOW HALL LATER. I CAN FILL YOU IN OVER BREAKFAST.

ALL RIGHT, THEN.



LATER, IN THE DINING FACILITY...

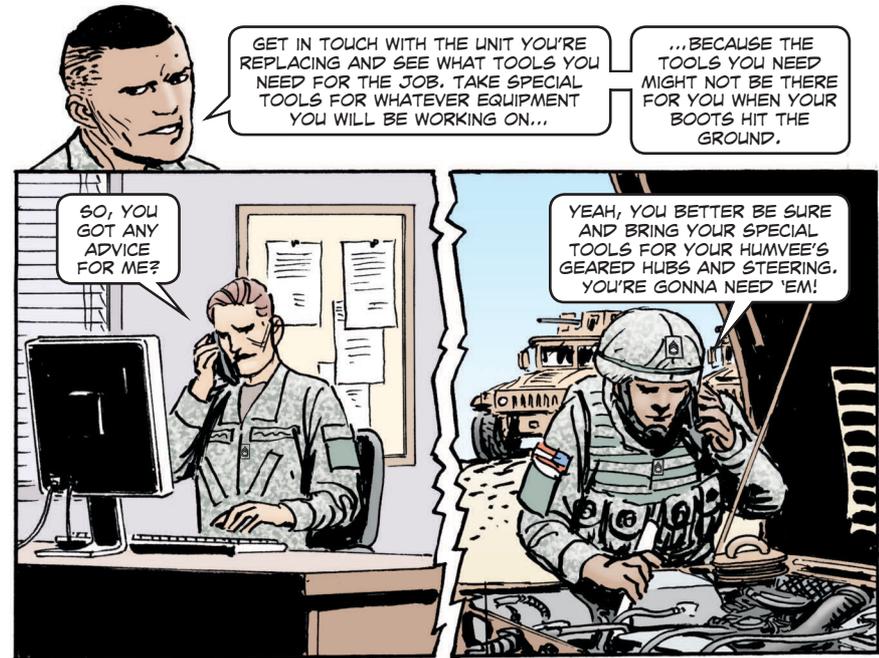
LET'S SIT HERE, RAMOS.

OKAY, PM STEVE.



I'M GONNA GIVE YOU SOME TIPS THAT SHOULD HELP YOUR UNIT HAVE A HIGH READINESS RATE IN AFGHANISTAN.

I'M ALL EARS, MAN.



GET IN TOUCH WITH THE UNIT YOU'RE REPLACING AND SEE WHAT TOOLS YOU NEED FOR THE JOB. TAKE SPECIAL TOOLS FOR WHATEVER EQUIPMENT YOU WILL BE WORKING ON...

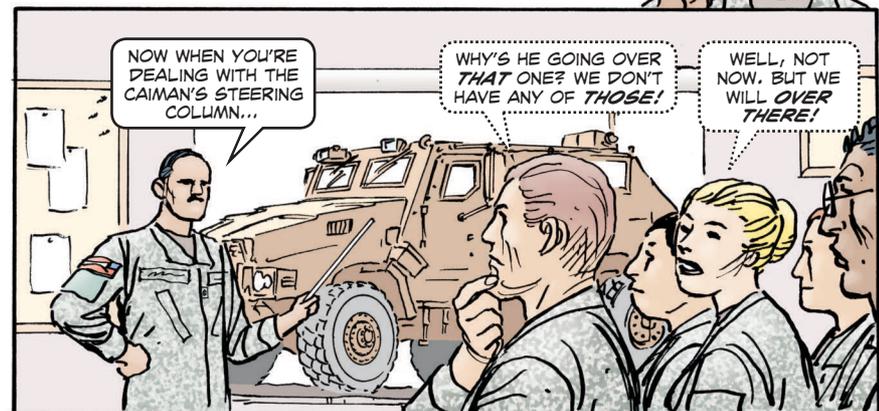
...BECAUSE THE TOOLS YOU NEED MIGHT NOT BE THERE FOR YOU WHEN YOUR BOOTS HIT THE GROUND.

SO, YOU GOT ANY ADVICE FOR ME?

YEAH, YOU BETTER BE SURE AND BRING YOUR SPECIAL TOOLS FOR YOUR HUMVEE'S GEARED HUBS AND STEERING. YOU'RE GONNA NEED 'EM!

TRAIN YOUR MECHANICS ON MRAP MAINTENANCE **IN ADVANCE**. GET THEM FAMILIAR WITH WHATEVER MODELS THEY WILL DEAL WITH OVER THERE.

IN FACT, FIND OUT WHAT TYPES OF VEHICLES YOU'LL FALL IN ON PERIOD! THEN MAKE SURE YOUR MECHANICS KNOW HOW TO **FIX** THEM-**AND** HOW TO **RECOVER** THEM.



NOW WHEN YOU'RE DEALING WITH THE CAIMAN'S STEERING COLUMN...

WHY'S HE GOING OVER **THAT** ONE? WE DON'T HAVE ANY OF **THOSE**!

WELL, NOT NOW. BUT WE WILL **OVER THERE**!

GET RECOVERY TRAINING FOR THOSE VEHICLES IN ADVANCE, TOO. SURE, YOU CAN TRAIN AFTER YOU GET IN COUNTRY...

...BUT THAT JUST PULLS PERSONNEL YOU'LL NEED TO CARRY OUT YOUR MAINTENANCE MISSIONS. AVOID THAT IF YOU CAN.



HAVE A GOOD TAMMS PERSON DOING YOUR SUPPLY, TOO. MAKE SURE HE KNOWS THE RIGHT CODES TO USE AND IS REALLY FAMILIAR WITH THE LOGISTICS MANAGEMENT SOFTWARE HE HAS TO USE, LIKE SAMS.

THAT'LL REALLY SQUARE YOU AWAY.



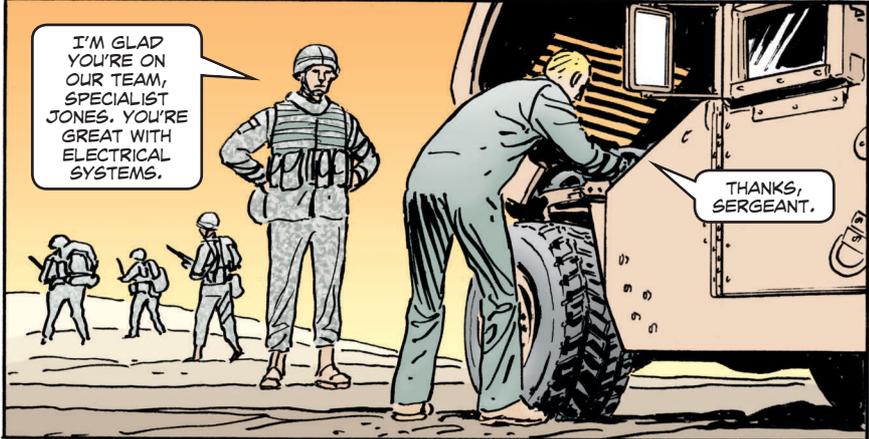
I'VE GOT A SAMS QUESTION.

ASK SMITTY, HE'S THE BEST SAMS GUY AROUND!



OH, AND HERE'S A GOOD ONE... KNOW YOUR MECHANICS! KNOW WHAT EACH PERSON ON YOUR MAINTENANCE TEAM IS CAPABLE OF DOING.

USE THEIR STRENGTHS TO BUILD A BETTER TEAM.

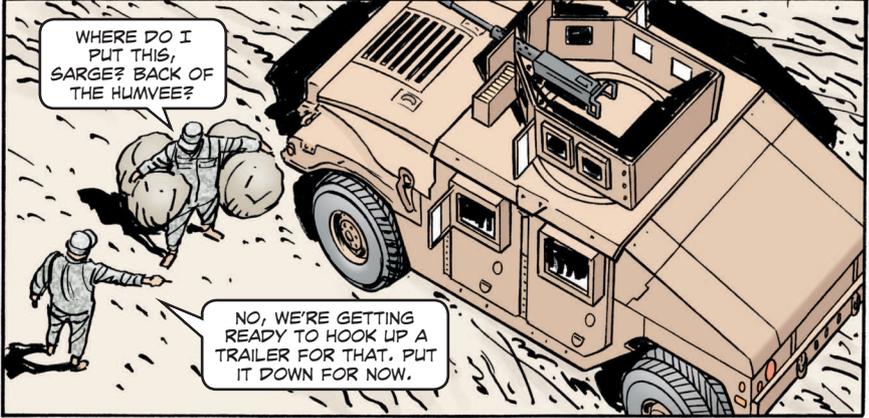


I'M GLAD YOU'RE ON OUR TEAM, SPECIALIST JONES. YOU'RE GREAT WITH ELECTRICAL SYSTEMS.

THANKS, SERGEANT.

WHEN YOU GO OUT IN TEAMS, INSTEAD OF OVERLOADING YOUR HMMVV WITH EQUIPMENT, PULL A TRAILER. THAT'LL SAVE THE SPRINGS ON THE HMMVV.

JUST USING ONE TRUCK IN THE CONVOY FOR PULLING A TRAILER FULL OF EXTRAS WORKED FOR US.



WHERE DO I PUT THIS, SARGE? BACK OF THE HUMVEE?

NO, WE'RE GETTING READY TO HOOK UP A TRAILER FOR THAT. PUT IT DOWN FOR NOW.



DUE TO HIGH OPTEMPO AND CONSTANT DEMAND ON VEHICLES, ANNUAL SERVICES WERE PERFORMED ON EACH VEHICLE SEMI-ANNUALLY. WE SAVED TIME AND EQUIPMENT FOLLOWING THIS PLAN.

PLUS, WE ELIMINATED THE NEED FOR THE QUARTERLY OR SEMI-ANNUAL SERVICES.



DOING ANNUAL SERVICES MORE FREQUENTLY REALLY KEEPS OUR READINESS RATE HIGH!

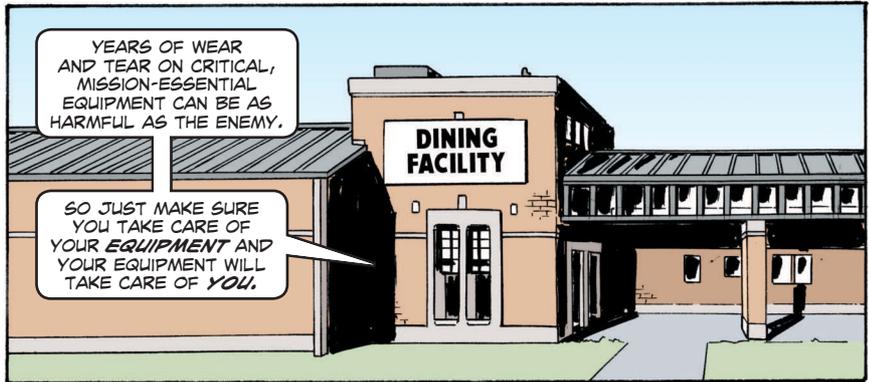
SOME UNITS IN AFGHANISTAN HAD TO GO ON MISSIONS FOR SEVERAL DAYS AT A TIME. THEY TOOK EMBEDDED MAINTENANCE TEAMS AND REPLACEMENT PARTS WITH THEM ON ALL MISSIONS.

THERE WAS NO TELLING WHEN THEY COULD GET SUPPORT FROM OTHER UNITS ALONG THE WAY, SO THE MECHANICS HAD TO BE RESOURCEFUL.



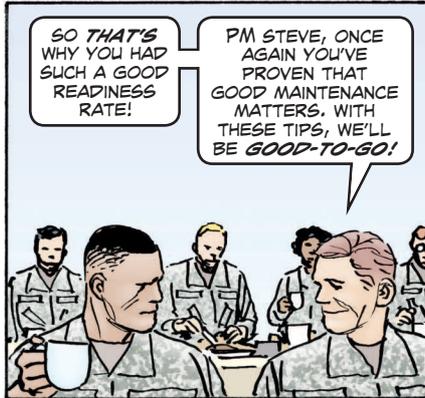
HEY, WHAT ARE YOU GUYS DOING ON THIS MISSION? SHOULDN'T YOU BE BACK AT THE MOTOR POOL DRINKING COFFEE? HAR HAR HAR!

LAUGH ALL YOU WANT, IF ANYTHING CONKS OUT, YOU'LL BE GLAD YOU'VE GOT MECHANICS WITH YOU!



YEARS OF WEAR AND TEAR ON CRITICAL, MISSION-ESSENTIAL EQUIPMENT CAN BE AS HARMFUL AS THE ENEMY.

SO JUST MAKE SURE YOU TAKE CARE OF YOUR EQUIPMENT AND YOUR EQUIPMENT WILL TAKE CARE OF YOU.



SO THAT'S WHY YOU HAD SUCH A GOOD READINESS RATE!

PM STEVE, ONCE AGAIN YOU'VE PROVEN THAT GOOD MAINTENANCE MATTERS. WITH THESE TIPS, WE'LL BE GOOD-TO-GO!

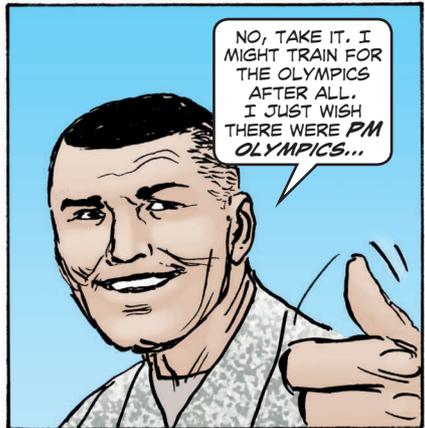


KNOWING WHAT TO EXPECT HELPS. HOLLA IF YOU NEED MORE PM HELP WHILE YOU'RE OVER THERE.



WILL DO.

YOU GONNA EAT THAT LAST BISCUIT?



NO, TAKE IT. I MIGHT TRAIN FOR THE OLYMPICS AFTER ALL. I JUST WISH THERE WERE PM OLYMPICS...



MISSIONS CAN FAIL BECAUSE OF VEHICLE MAINTENANCE PROBLEMS.



IF YOU'RE A MECHANIC GOING TO AFGHANISTAN, OR IF YOU LEAD MECHANICS WHO WILL GO TO AFGHANISTAN, USE PM STEVE'S INFO.



AFTER ALL, DOING GOOD PREVENTIVE MAINTENANCE WILL HELP YOU FEEL SAFE ENOUGH TO *STAKE YOUR LIFE* ON YOUR *EQUIPMENT!*

AH-64/D...

Rounds In, Fingers Out!

IT WAS PAINFUL
WHEN MY FINGER
GOT SMASHED,
BUT NOW I
KNOW BETTER!

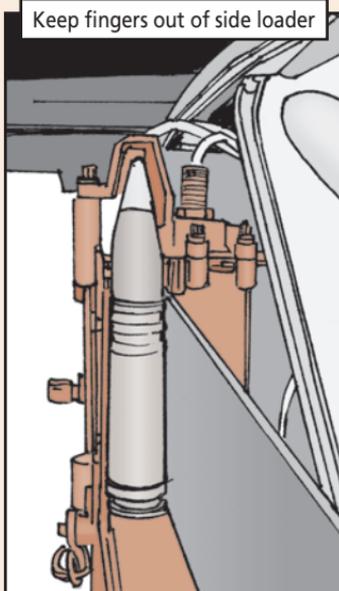
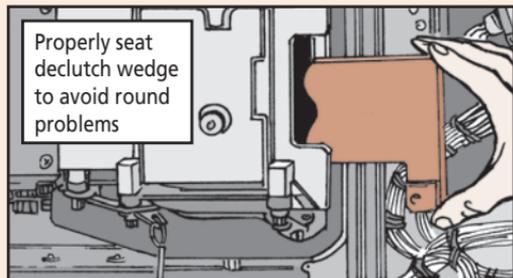
GOOD,
BECAUSE I
FELT YOUR
PAIN, TOO.

Armorers, it is not a good feeling to have your fingers caught in the AH-64's sideloader while loading 30mm ammo.

To help you remember that your fingers are important, place a warning label with black lettering on the side loader as a reminder. It should say, **“WARNING: Keep fingers clear of side loader.”**

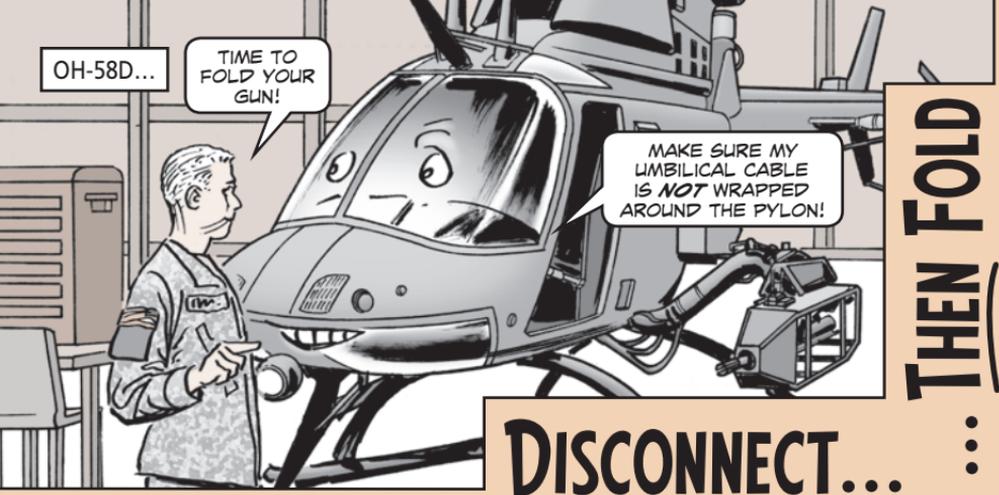
During field exercises, and because of the rapid pace of the forward area, ammo refueling point (FAARP), Soldiers don't always pay attention to the warnings or cautions in the IETM about the sideloader.

The lip inside the loader is damaged when the declutching block is inserted wrong. When ammo trays are damaged, rounds won't load correctly and may fall out. Sometimes Soldiers also try to manually load single rounds.



In either case, an armorer might try to push rounds into the loader with a finger while uploading, and then CRUNCH! Their finger gets smashed or cut off between the round and the loader.

Be safe rather than sorry. Keep your digits clear of the side loader gears and sprockets. And never load damaged ammo or wear gloves while loading.



DISCONNECT... :

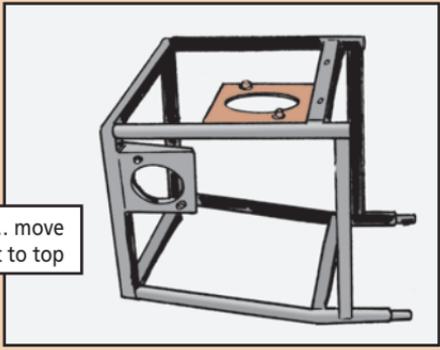
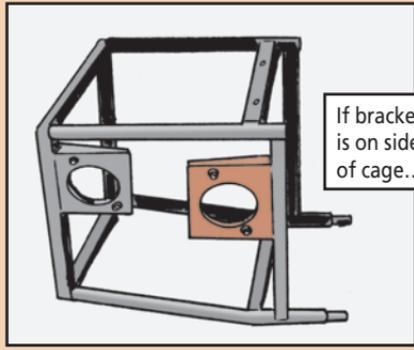
Folding the Kiowa Warrior's M296 machine gun with the umbilical cable still attached to the side-welded aft cage bracket can damage the cable and cage. You can bend or snap off the bracket and pull the connector off the cable.

The cable is not long enough to span the added distance when folding up the universal weapon's pylon (UWP) with the cable connected to the side-welded aft cage bracket.

To make matters worse, the umbilical cable is usually wrapped around the pylon mounting arm to keep it out of harm's way. That just makes the cable even shorter.

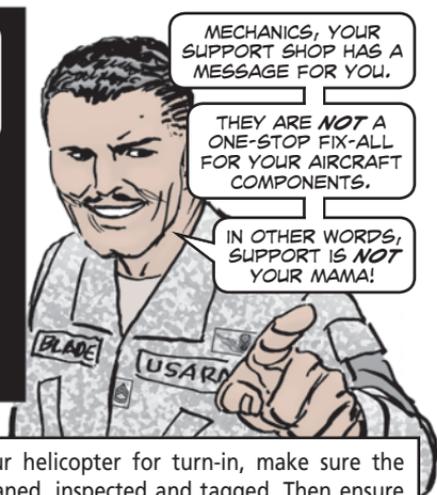
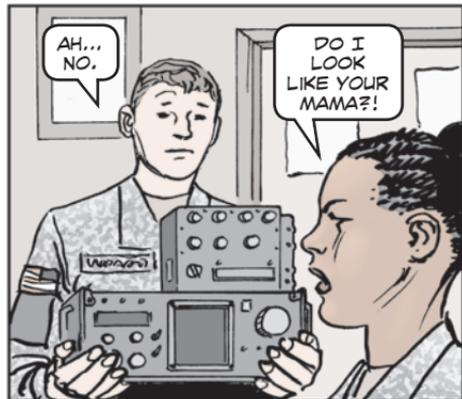
The simple solution is to disconnect the cable before folding the gun.

The permanent solution is to move the bracket from the side to the top of the aft cage. The procedure is in Appendix I-2 of TM 9-1090-214-23&P. With the bracket moved to the top of the cage and the cable not wrapped around the UWP, the cable should be long enough to fold without damaging the cage or the cable.



New aft cages from the supply system will have the bracket mounted on the side. Have your support shop remove and weld the bracket to the top of the aft cage to prevent future damage.

NOT A ONE-STOP FIX-ALL



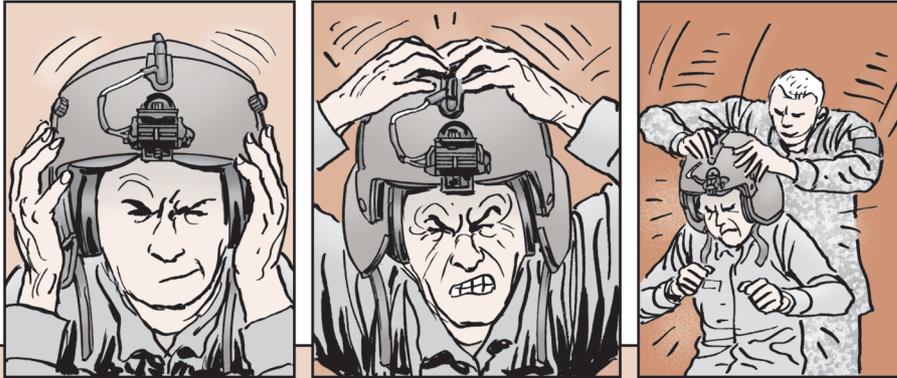
Anytime you remove components from your helicopter for turn-in, make sure the components have been properly evaluated, cleaned, inspected and tagged. Then ensure that the caps and plugs are installed before turning them in to support.

There's a tendency to think that if components have problems, you just remove 'em, tag 'em and turn them in to the support shop because support is a one-stop shop to fix everything.

It's not support's job to clean dirty control heads, or avionic components, drain fluid from removed hydraulic components or perform other tasks that you can do yourself.

Never turn in a component to support until all the cleaning, inspecting, troubleshooting and proper paperwork is complete. That way, the turn-around time for component repair will not be delayed because the unit didn't perform the correct turn-in procedure.

A Snug Fit



HOLD STILL...

BEFORE YOU GET TOO DRASTIC... HERE ARE SOME TIPS FOR PUTTING ON THAT HELMET!



Wearing the aircrew integrated helmet system (AIHS) can be uncomfortable if you just jam it on your noggin.

A good fit starts with the right size helmet. Your beret size is **not** your helmet size! Before you pick up your helmet from CIF, visit the ALSE shop to get your head measured. Measuring instructions can be found in TM 1-1680-377-13&P on IETM EM 0250.

After picking up your helmet, you will need to go back to the ALSE shop. Your technician will use the information in the IETM to fit your helmet.

Your job is to put the helmet on right!



WHEN PUTTING THE HELMET ON, HOOK YOUR THUMBS UNDER THE EARCUPS AND SPREAD THE HELMET SLIGHTLY.

POSITION THE FRONT EDGE OF THE HELMET FIRMLY AGAINST YOUR FOREHEAD AND ROTATE THE HELMET REARWARD AND DOWN ONTO YOUR HEAD.

Press the helmet down firmly with both hands to ensure the helmet is properly positioned on your head. Then fasten and adjust the chinstrap.

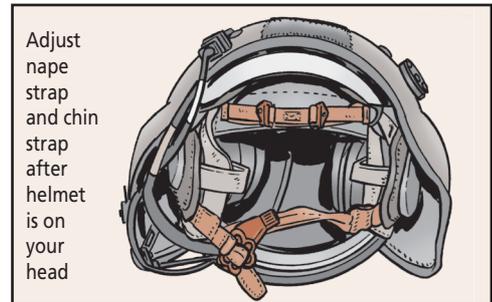
Now adjust the nape strap. Pull the nape strap pad down and tighten the adjustment straps. If you don't, the helmet's unstable and will put your noggin at risk of injury.

If your helmet is too tight or too loose, let your ALSE Tech know so he can adjust your helmet liner to improve comfort.

If you have long hair, make sure it is down and flat in the back. If you change your hairstyle, you'll need to recheck that your helmet fits properly.

If you and your ALSE Tech cannot get a good fit using the procedures in the IETM, the US Army Aviation Research Lab (USAARL) has a special fit program. Your ALSE tech can get you in touch with them. Operator PMCS and cleaning procedures can be found in the IETM too.

A good helmet fit always includes frequent inspections, keeping it clean and dry and looking for parts that are worn or frayed. Let your ALSE techs know what needs attention.



Adjust nape strap and chin strap after helmet is on your head

MAKE SURE YOU DO YOUR ANNUAL HELMET FITTING LIKE IT SAYS ON THE HELMET INSPECTION FORM, DA FORM 2408-22.



Everything You Need to Know



YOU WON'T FIND ANY CHANGES MADE TO TM 11-5985-357-13 (FEB 91) FOR THE OE-254/GRC ANTENNA GROUP, NSN 5985-01-063-1574.

NEITHER WILL YOU FIND ANY CHANGES MADE TO THE ANTENNA'S PARTS' MANUAL, TM 11-5985-357-23P (JUNE 88).

THEREFORE, EVERYTHING YOU NEED TO KNOW ABOUT THE OE-254 ANTENNA, WITHOUT EXCEPTION OR CORRECTION, CAN BE FOUND IN THOSE TWO TMs.

RIGHT? **WRONG!**



STUFF HAS HAPPENED TO THE ANTENNA OVER THE LAST 20 YEARS—STUFF IN SUPPLY AND MAINTENANCE—THAT YOU **NEED** TO KNOW.

AND GUESS WHAT? WE'RE GOING TO TELL YOU ABOUT THAT STUFF!



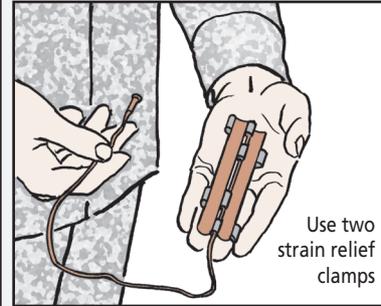
Stuff One

The antenna support sleeve, Item 2 in Fig 5 of the parts manual, is not NSN 5985-01-072-8016. It's NSN 5985-01-326-5533.

The antenna support sleeve, Item 10 in Fig 5 of the parts manual, is not NSN 5985-01-072-8015. It's NSN 5985-01-327-1448.

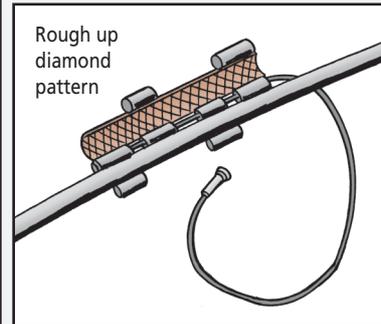
Stuff Two

Item 3 of Fig 5 of the parts manual highlights the strain-relief clamp, NSN 5975-00-563-0229. You are issued one clamp. Para 2-4 of the -13 TM shows you where to attach it to the upper guy plate of the mast. However, one strain relief clamp has been found to be inadequate to relieve the strain. Another is needed at the bottom of the antenna. So, make sure you have two!



Use two strain relief clamps

Also, to keep the clamp from slipping, rough up the diamond pattern a bit with a file. Don't overdo it. Just scuff it a bit. The clamp will hold better.

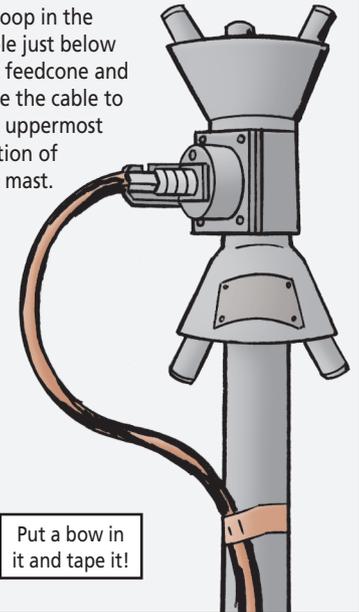


Rough up diamond pattern

Some Soldiers have stopped using the clamp in favor of electrical tape, NSN 5970-00-419-4291 (NSN 5970-00-723-5413 in extremely cold weather), or wire ties. Both of these methods work and give you more flexibility in where to take the strain off the cable. You should already be using the tape about every 5 feet of your cable as you tape the cable to the antenna to keep it from flapping in the wind.

Whatever you choose to use, the most important area to relieve stress is at the cable connector where the cable connects to the feedcone.

Put a small bow or loop in the cable just below the feedcone and tape the cable to the uppermost section of the mast.

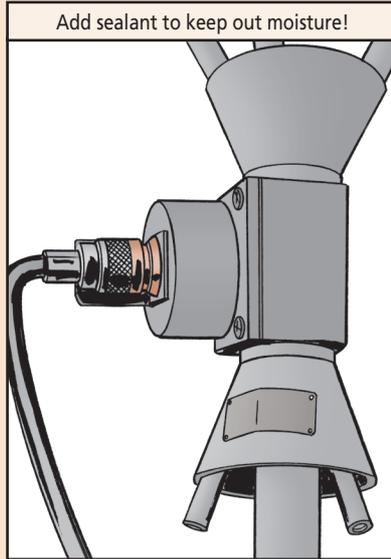


Put a bow in it and tape it!

Stuff Three

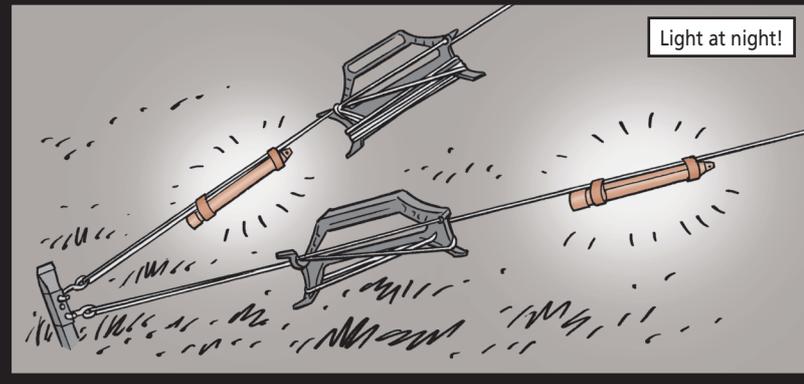
Fig 2-8 of the -13 gives instructions on how to moisture-proof mated RF connectors. The TM recommends using anti-corrosion silicone compound, NSN 6850-00-880-7616, on the threads and then taping each connection with a layer of electrical tape, NSN 5970-00-419-4291. That's good advice, but to be really effective at keeping moisture out of joints and connections, you need to use water-displacing compound, NSN 6850-00-142-9409, on the threads.

And, at the point where the cable connects to the feedcone, you need to use a good coaxial cable connector sealant to keep moisture out! Electrical tape at this juncture dries in the sun, shrinks and wears out. Coaxial cable connector sealant (bought at your local electronics or automotive store) seems to last forever and once removed, the area looks like new.



Stuff Four

The safety instructions in your TMs say to "clearly mark all guy wires and ropes with the warning flags or signs supplied by your unit. Use strips of white cloth as warning streamers." That's good info as far as it goes, but you might also consider using light sticks, NSN 6260-01-230-8596, fastened with electrical tape to the wires for visibility at night in heavily trafficked areas. If you're under blackout conditions, there are infrared light sticks, NSN 6260-01-396-1710, that will do the job.



Stuff Five

Cable assembly CG-1889C/U, NSN 5995-01-085-1665, used with your antenna is 80 feet long. According to your TM, you can cut it down to 50 feet as needed to remove damage, but no further. But, can you lengthen it?

Yes, you can by adding an additional cable or two, but remember, each time you lengthen it, you increase the db attenuation and decrease the power to reach the receivers you need to reach. As is, your 80-ft cable will get about 87 percent of the signal strength to a receiver. If you double the length of the cable, it drops to about 58 percent. Can you tolerate that kind of power loss?

An alternative is to order the RG-213/U cable, NSN 6145-00-660-8711, by the foot and add only what you need to the original 80-ft cable. This added length cable must have connectors, NSN 5935-00-928-3127, installed on both ends to be usable.

If you need to add an adapter to the cable to connect the cable to the radio, order TRU-2064 adapter, NSN 5935-01-375-5085. For a connector adapter that will let you join cables, use NSN 5935-01-035-5650.

Of course, the ideal is to select a site for your antenna that will ensure the 80-ft cable provided reaches to your radio.

NO MATTER THE LENGTH OF THE CABLE, IT SHOULD BE PROTECTED FROM VEHICLES AND PEOPLE WITH BOARDS LAID ON BOTH SIDES OF IT THAT ARE THICKER THAN THE CABLE.



Stuff Six

Your antenna comes with five stakes, NSN 4030-01-073-6103—four to use and one for a spare. In sandy soil, four stakes have proven not to do the job when the strong winds blow. Use two stakes at each tiedown point instead of one. Even then, you still may have to use a dead man anchor, a rock anchor or a screw anchor to hold the antenna in place like it says on Page 2-11 of TM 11-5985-357-13.

Of course, if you're operating in cold weather with frozen ground you might need to use the cold weather stake, NSN 4030-00-187-5265. They're slimmer and easier to drive in the hard ground, but they also slip out easier when the ground thaws.

Stuff Seven

The AS-3166 feedcone assembly is the heart of your antenna. Start your "heart" PM by giving it a little shake. The magnetic core in feedcones can break loose. If you give the feedcone a little shake and hear a rattle, that's probably what has happened. Turn it in and get another feedcone.



Once it passes the shake test, give the RF connector a close look. Wind whipping the RF cable can bend out the copper receptacle pin. A splayed receptacle won't make good contact with the cable pin.

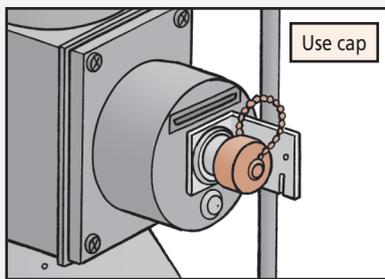


If the pin is splayed, a pair of needle-nose pliers will squeeze it back together. **GENTLY** is the word when using the pliers. The pin is easily broken.

Look inside the RF connector cap. The rubber insert should be there. If it isn't, replace the cap.



Use the cap anytime the feedcone is not connected to the RF cable.



Stuff Eight

Your six antenna feed sockets catch dirt and moisture that lead to corrosion. Keep them clean with isopropyl alcohol, NSN 6810-00-753-4993, and a foam swab, NSN 7045-01-154-1317.



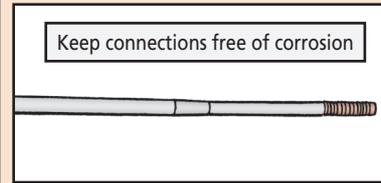
For stubborn corrosion, try using a small-arms bore brush, NSN 1005-00-903-1296. Use handle, NSN 1005-01-113-0321, for a better grip and more twisting force.

Just twist the bore brush down into the socket and turn it several times. The stiff fibers loosen corrosion and clean out the grooves.

Don't overdo it, though. Too much of this good thing can wear out a socket.

Treat the feedcone like the fragile piece of equipment it is. Make the feedcones one of the last things you store. Stencil the OE-254 storage bag to warn folks not to toss things on top of it.

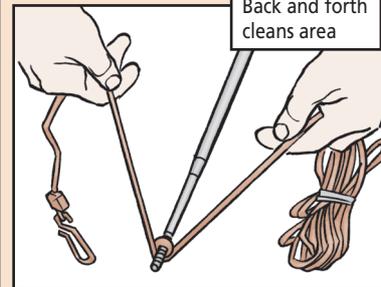
You must keep the connecting areas of the antenna elements free from corrosion. To do that, use water-displacing compound and silicone.



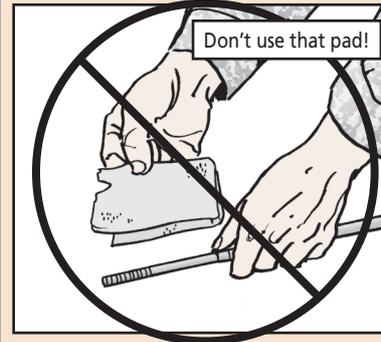
First, though, clean the connecting area of each element with your antenna's guy rope.

Loop the rope around the element. Pull back and forth from both ends of the rope.

The friction created by the rope cleans the connecting area.



Don't use a scouring pad to do this cleaning! Scouring pads wear down the metal and strip the element.



Once the contact areas are clean, spray them with water-displacing compound. Then give them a light coat of silicone compound.

Your element PM will be easier if when the antenna is erected, the elements are attached hand-tight. Elements that have been muscled together get damaged when they're muscled apart.



That's a whole lot of good stuff, but the best stuff for you to remember is the safety stuff. When you're working with the antenna, wear a helmet, safety glasses and gloves and always keep the tip caps, NSN 5985-00-930-7223, on the pointed ends of the exposed AB-24 antenna elements.



PM Suited for Your JSLIST



Wash and Wear

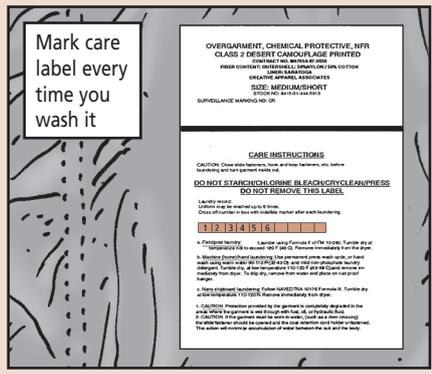
You must keep track of how much you've worn your JSLIST, how long it's been out of the bag, and how many times you've washed it. If you forget, you may have to forget about the suit's protection.

The limit for wearing the suit is 45 days total and the limit for washing it is six times. Once the suit leaves its sealed bag, it's good for 120 days max.

Keep the suit in its clear plastic bag when you're not wearing it. Make sure it's dry before you put it in the bag or you could end up with a nasty case of mildew.

After any of these limits are reached, the suit's good only for training and should have FOR TRAINING ONLY stenciled on it.

Keeping track of the washings is easy. Use an indelible pen to mark the numbered box on the JSLIST care label after each washing.



- Make sure all slide and hook-and-pile fasteners are secured to prevent rips during laundering
- Use a mild, non-phosphate detergent
- Wash on PERMANENT PRESS
- Tumble dry on GENTLE or hang it up on a plastic hanger and let it air dry
- Do not use starch, bleach or fabric softener
- Never dry clean, steam press, or use stain remover on JSLIST

Putting It On

Remember you don't need your mask quick-doff hood with JSLIST (unless you have type VII JSLIST). The jacket has its own hood. And there is a mask second skin that doesn't go as far down your neck and works better with JSLIST. You can order a small skin with NSN 4240-01-413-1540 and a medium/large with NSN 4240-01-413-1543.

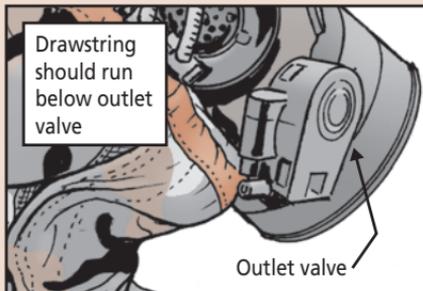


If you have trouble securing the hook-and-pile fasteners for the hood, the drawstring is probably too tight. Work out the kinks in the drawstring to get as much slack in the drawstring as possible and try again.



Secure the bottom of the hood fastener first and work your way up. That way you're less likely to leave gaps.

The drawstring should run just below the outlet valve to make a good seal. The hood **shouldn't** go over the eye lenses. If it does, you could break the seal.



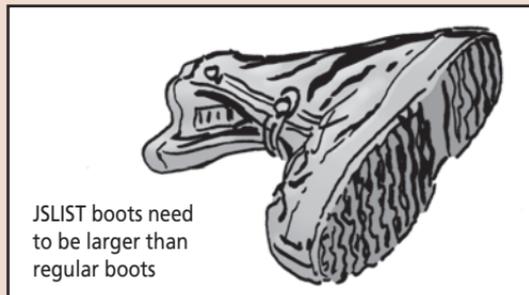
Tie a bow under the drawstring's barrel lock once you have the hood tight. That keeps the barrel lock from being jerked and broken if the drawstring is jerked.

If your suspenders are too long even after adjustment, cross them to take up the slack.

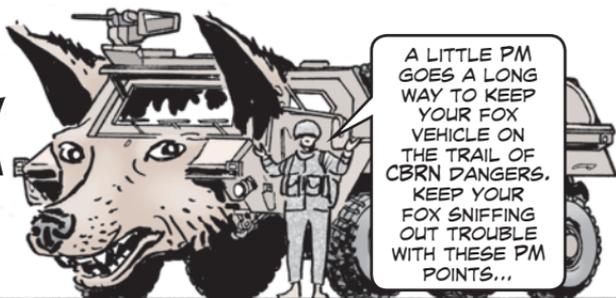


Attaching the strap that runs between your legs may not be comfortable, but it is necessary. If you forget the strap, the back of the jacket can raise up and you lose protection.

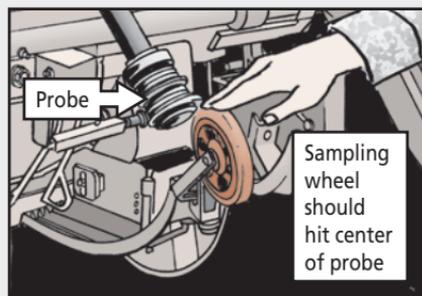
Just because you wear a size 10 boot doesn't automatically mean you'll wear a size 10 JSLIST overboot. Normally, you need an overboot 1 1/2-2 sizes larger than your regular boot. So if you wear a size 10 boot, you probably need a size 12 overboot. A 10 1/2 boot probably needs a 12 overboot, too. But check and make sure.



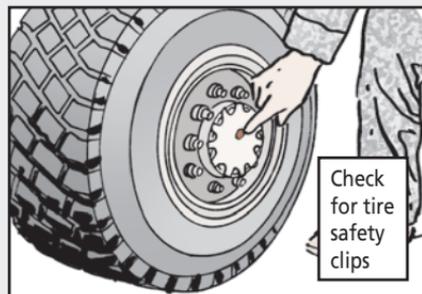
KEEP YOUR FOX ON THE TRAIL



Check sampling wheel position. The sampling wheel should hit the center of the probe if you're to get the best sample. But the wheel can get so out of adjustment that it doesn't even touch the probe. During your BEFORE PMCS, check the sampling wheel position and adjust it if necessary. The procedure is in TM 3-6665-339-10.



Look for tire safety clips. Each of the six tires has a safety clip, which often goes missing. That could cost you a wheel. Make sure every tire has a safety clip before you leave the motor pool.



Post-swim PM. If your Fox has gone through deep water, most of its lube has probably washed out. ASAP, you need to do a complete re-lubing, including the tire hubs, axles, main chassis, drive shafts and propeller shafts.

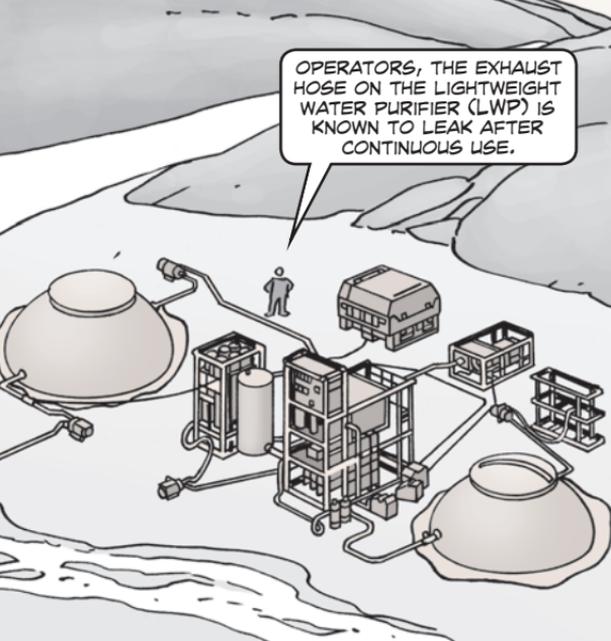
A better way to fight mildew. If the Fox is left completely closed up for long periods, condensation leads to mildew, which leads to a smelly mess. Most units prevent that by leaving the glove port door open. Trouble is, if you forget to close the glove port door before you open the rear door, you break the proximity switches or damage the rear door.

A better way to prevent condensation is to leave the material access port open. If you open the rear door while the access port's open, nothing is damaged.



During your weekly and monthly PMCS, check for moisture inside the Fox. Mop up any you find.

Exhaust Hose Assembly



OPERATORS, THE EXHAUST HOSE ON THE LIGHTWEIGHT WATER PURIFIER (LWP) IS KNOWN TO LEAK AFTER CONTINUOUS USE.



THAT'S A REAL PROBLEM DURING COLD WEATHER OPERATION WHEN FUMES ACCUMULATE INSIDE A HEATED TENT!

SO-O-O, HAVE YOUR MECHANIC REPLACE A LEAKY HOSE WITH A NEW HOSE ASSEMBLY (THE HOSE AND CLAMP) THAT COMES WITH NSN 4720-01-567-1009.

THE HOSE IS SHOWN IN FIG 7 OF WP 0018-6 OF TM 10-4610-310-13.



YOU CAN GET THE HOSE ASSEMBLY **FREE** BY CONTACTING THE LWP ITEM MANAGER, ROSEMARY WELLS AT DSN 786-4146, (586) 574-4146, OR BY EMAIL:

rosemary.wells@us.army.mil

Missing Cartridge O-ring Seals



Word around the tool bench is that some of the lightweight water purifiers (LWP) were fielded with the O-ring seals missing from the purifier's reverse osmosis (RO) filter element cartridges.

You'll know something's up if the product water flow is through the roof and the RO pressure is way too low!

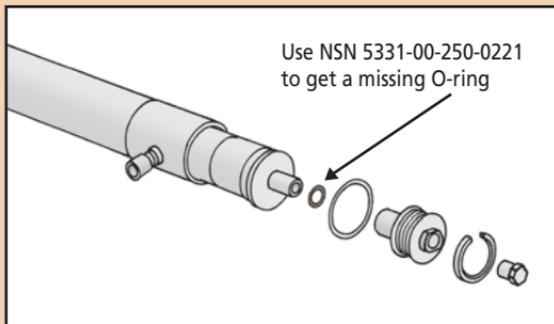
Without the O-ring in place, feed (source) water bypasses the RO element cartridges. The bottom line is unfiltered water that ends up in your stomach. Yuk!

Play it safe. Remove the end caps from the plugged ends of **all** seven RO pressure vessels. Work Package 45 of TM 10-4610-310-13 shows how.

Is an O-ring missing? If so, get a new one using NSN 5331-00-250-0221, shown as Item 27 in Fig 21 of TM 10-4610-310-23P.

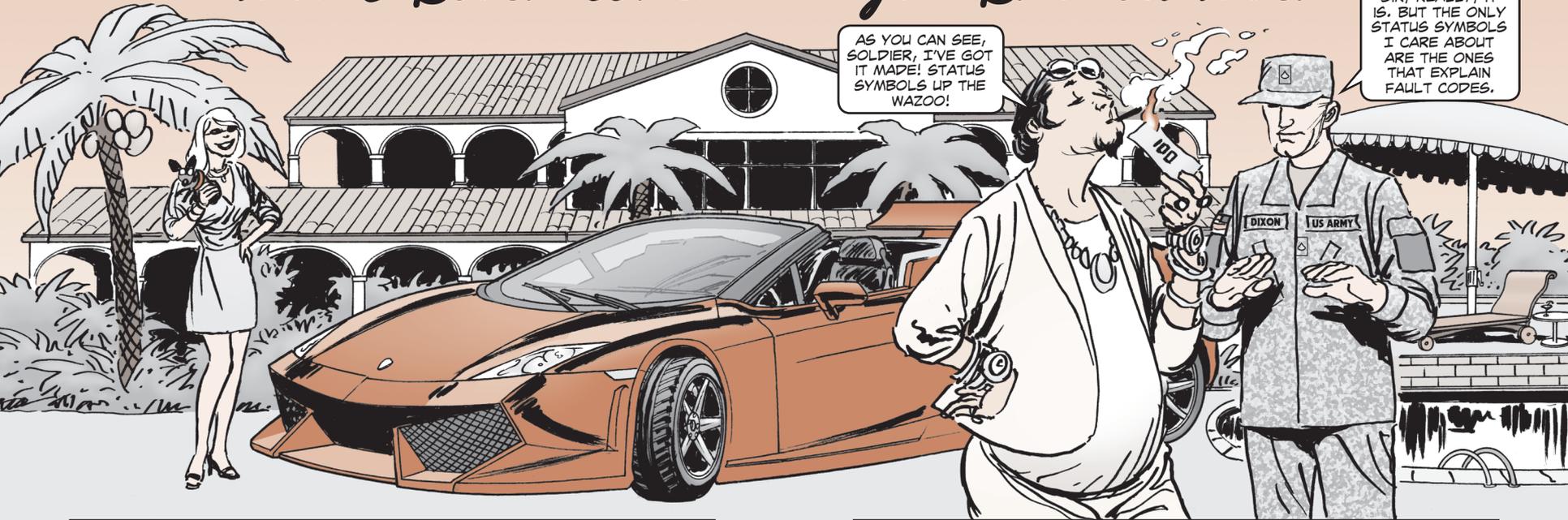
The good news is you can get some O-rings free from the Mechanical Equipment Company (MECO). Contact Kyaw Moe by phone: (281) 276-7628, or by email:

kmoe@meco.com



Don't Slash When

You Should Dash



Dear Half-Mast,

DA Form 2404 (*Equipment Inspection and Maintenance Worksheet*) clearly states that an inspection fault status symbol will be a dash. I am being instructed to use a slash instead. The reason I am being told is that "everyone else does it like this... ."

Would you please address the proper use of status symbols, backed by an Army Regulation?

CW2 D.C.

Dear Chief D.C.,

You bet! DA PAM 750-8, The Army Maintenance Management System (TAMMS) User's Manual, explains the proper use of status symbols (fault codes).

Status symbols detail the seriousness of equipment faults or problems.

Following are the five status symbols used and their meanings:

- X: A deficiency in the equipment places it in an inoperable status.
- Circled X: A deficiency exists where the equipment may be operated under specific limitations authorized by the commander until corrective action can be taken.

- Horizontal dash (-): A required inspection, component replacement, or maintenance operation check/test is due but has not been done, or an overdue MWO has not been completed.

- Diagonal slash (/): A material defect other than a deficiency must be corrected to increase efficiency or make the item serviceable.

- Last name initial: A completely satisfactory condition exists.

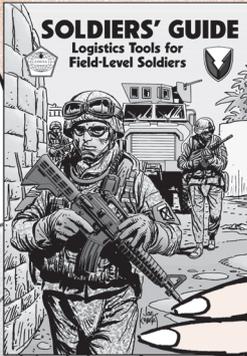
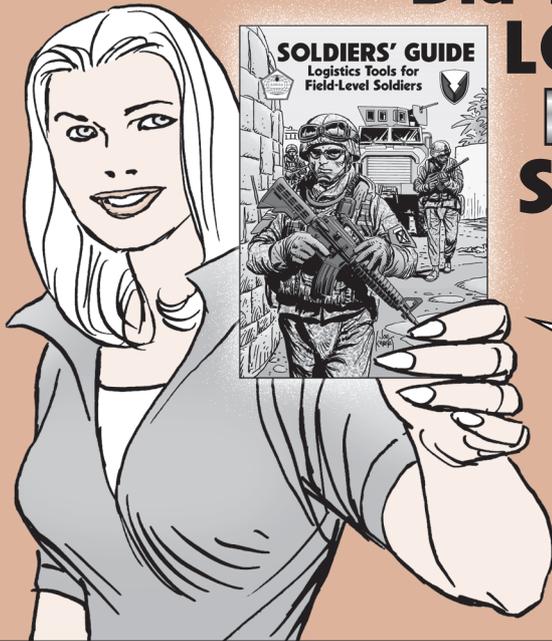
According to DA PAM 750-8, the status symbol chosen reflects the judgment of the person making the inspection, operating the equipment, or doing the maintenance. **No one can order someone else to change a status symbol.**

All changes become permanent, except Circled X, until the fault is corrected or it is otherwise overridden by the commander's designated representative, who is knowledgeable about maintenance.

Limited conditions apply in changing status symbols and are fully explained in Section 6 (a) of DA PAM 750-8. Faults are corrected per the Army -10 and -20 PMCS maintenance standards noted in AR 750-1, Army Materiel Maintenance Policy.

Half-Mast

Did You Get LOGSA's Newest Soldiers' Guide?



LOGISTICS CAN BE COMPLEX AND CHALLENGING.

THAT'S WHY JUST KNOWING WHERE TO GO FOR ANSWERS CAN BE A BIG RELIEF.

For several years now, the Army Materiel Command's Logistics Support Activity (LOGSA) has published a helpful handbook on LOGSA's products and services.

Newly updated for 2010, *Soldiers' Guide: Logistics Tools for Field-Level Soldiers* covers topics ranging from the Army Airlift Clearance Authority to the Wood Packaging Material Program.

Far more than a pamphlet, the 64-page guide is chock full of how-tos, who-knows-how and where-to-gos when it comes to tackling logistics issues. It's also presented in an easy-to-read format by the artistic team that brings you *PS Magazine*.

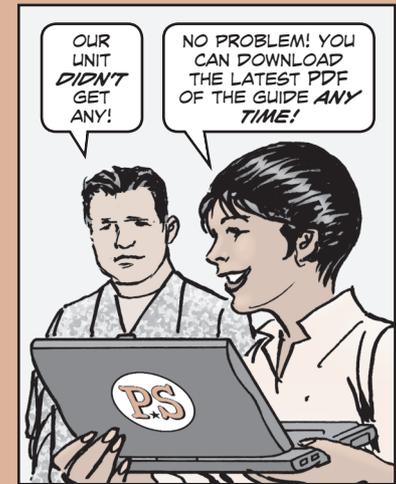
Maybe you need to resolve a serial number conflict or equipment registration problem, or connect with a logistics expert for your geographical region. LOGSA has you covered!

Waiting on vehicle parts and want to know where your parts are in the chain? LOGSA's Parts Tracker has the answer!

LOGSA's business intelligence tools are expanding, too. The latest addition to the toolbox, MyEQUIPMENTLOSS, lets authorized users track combat and non-combat losses.

Check out all that LOGSA has to offer by visiting the website:

<https://www.logsa.army.mil/index.cfm>



PBUSE Code Changes

PBUSE MILSTRIP Requests no longer default to "2B" for advice codes and "N" for demand codes. Now, users need to choose the codes in the drop-down menu on the MILSTRIP transaction screen.

To find code definitions, click the Advice Code or Demand Code hyperlinks.

Questions? Call the PBUSE help desk: DSN 259-8619, (866) 547-1349.

Include TBs in TM Libraries!



Dear Editor,

In PS 677 (Apr 09), there was an article about HMMWV spare tire carrier parts. You gave us parts information for the spare tire carrier, but failed to tell your readers that there is a publication which covers the spare tire carrier and other HMMWV parts. It's TB 9-2320-335-13&P.

We would've had problems finding parts for the M1151 had we not set up our unit's initial TM library. We did this for the first ever Agri-Business Development Team (ADT), which deployed to Afghanistan in January 2008.

The maintenance field is so used to going to a TM that they have forgotten the technical bulletins (TB). More and more information is included in TBs, especially as newer vehicles are fielded.

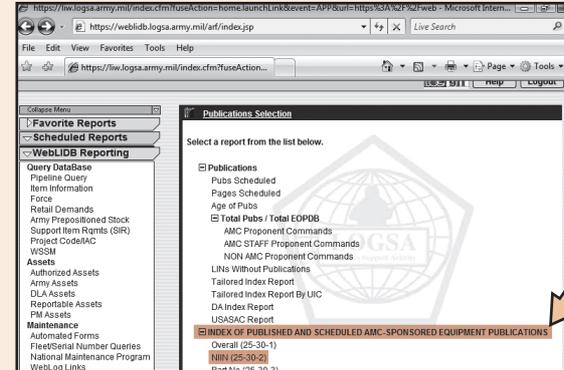
TM library maintainers can get a fairly complete listing of the publications they need for a vehicle by going to LOGSA's Logistics Information Warehouse:

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

After gaining access, they'll need to click on **WebLIDB** in the center column. In the left side column is the **WebLIDB Reporting** menu.

- Under the **Publications** subsection, click on **Publications Selections**
- Scroll down the right-hand column to the **Index of Published and Scheduled AMC-Sponsored Equipment Publications**.

There are several ways to search for publications, but we suggest searching by **NIIN**.

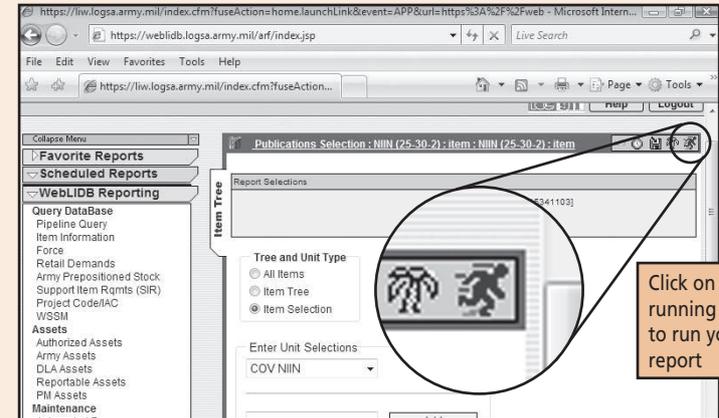


Use NIIN option under Index of Published and Scheduled AMC-Sponsored Equipment Publications in LIW

Click on the **NIIN (25-30-2)** link. Wait for the link to come up and click **yes** for the secure/non-secure question. Note that the next item has three selections. Select **Item Selection** under the **Tree** and **Unit Type**.

Next, put the **NIIN** in the rectangle just to the left of the **Add** button. Then click **Add**. If the NIIN is accepted and placed in the square to the left of the **Delete**, **Clear All**, and **File** buttons, go to the upper right-hand side of the screen.

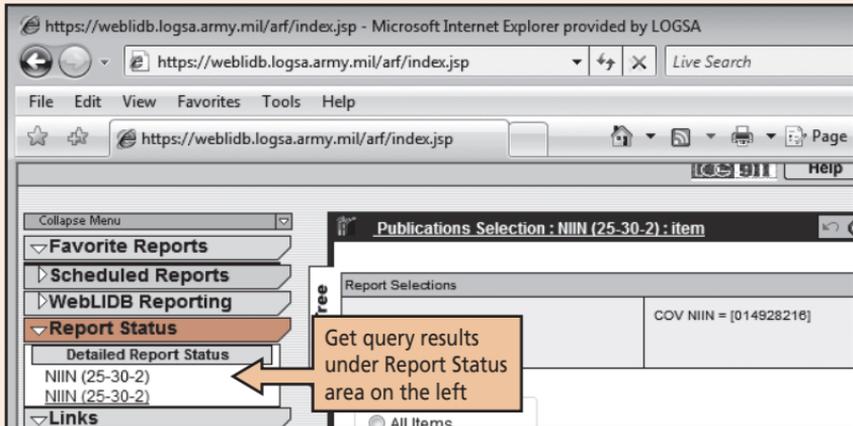
Click on the **running man**.



Click on running man to run your report

The running man is the blue icon of a man running that's found in the upper right-hand corner. It seems like nothing is happening after you click on the man, but a report is generating in the background.

Go to the far left-hand side of the screen and scroll down until you find the "Report Status" area. If you're quick enough, you'll see a lightly-colored report title appear under Detailed Report Status.



This lightly-colored text means the report is still running. Once the text turns black, the report is done.

Click on the report title to see what TMs, TBs and other publications are available in the system.

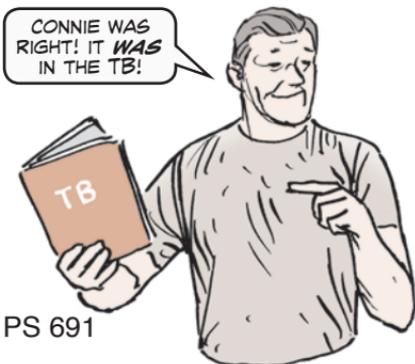
Every piece of equipment in the field (especially in Iraq and Afghanistan) doesn't necessarily have a TM in the normal Army system. Most of the "newly" fielded vehicles have COTS (commercial-off-the-shelf) manuals and, like you mentioned in PS 678 (May 2009), some of those manuals can be found on SustainNet.

Another article in that PS issue stressed the importance of leaders realizing that maintenance and supply personnel need current clearances so they can access the secure sites required to do their jobs. We agree with that, and experienced it with the TM library set-up.

We hope this letter helps other Soldiers.

SFC David R. Williams
SSG William E. Bruce
Missouri Army National Guard

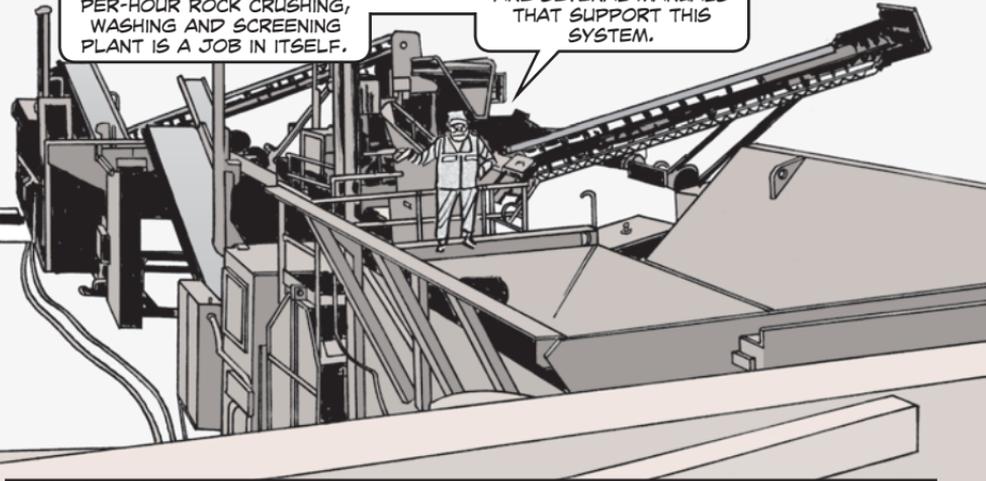
Editor's note: Thanks for the library of knowledge, Sergeants. We're thrilled you pay close attention to PS, yet another TB.



What Are the Right TMs?

TRACKING DOWN TECHNICAL MANUALS FOR THE 150 TON-PER-HOUR ROCK CRUSHING, WASHING AND SCREENING PLANT IS A JOB IN ITSELF.

THAT'S 'CAUSE THERE ARE SEVERAL MANUALS THAT SUPPORT THIS SYSTEM.



HERE'S WHAT YOU NEED...



System Unit	Manuals	NSN 3820-01-
Conveyor Unit	TM 5-3820-262-14&P	435-8025
Water Pump Unit	TM 5-3820-263-14&P	437-6662
Generator Set	TM 5-3820-264-14&P	437-5703
Primary Crushing Unit	TM 5-3820-270-14&P	435-7186
Surge Bin Feeder	TM 5-3820-271-14&P	435-8403
Overall Operations	TM 5-3820-255-12&P	435-5177
Secondary Crushing and Screening Unit	TM 5-3820-258-14&P	435-8402
Tertiary Crushing Unit	TM 5-3820-259-14&P	435-8022
Washing and Screening Unit	TM 5-3820-260-14&P	435-7187

Matter of fact, tracking down the right parts for the rock crushing, washing and screening plant can be a real nightmare. You can take the scare out of that nightmare by calling the manufacturer, Terex Cedarapids Inc, at 1-(800) 821-5600 or (319) 363-3511, or find them at this website: <http://www.cedarapids.com>

For more parts and technical manual info and a CD with these TMs, you can email TACOM's Construction Equipment Group: amsta-lcc-jc@tacom.army.mil

Connie's POST SCRIPTS

ELECTRONIC GUN CARD REVISITED

The electronic gun card article on Pages 2-5 of PS 688 (Mar 10) needs two clarifications. First, Step 1 on Page 4 says to notify Team Armor whenever you transfer, turn in, store or send your equipment for rebuild or overhaul. That applies **only** to M1-series tanks. For other equipment, notify the appropriate POC listed at the bottom of Page 5. Second, the DSN for the mortar POC on Page 5 has an extra digit. The correct DSN is 786-8783.

HMMWV Spring and Shock NSNs

Here are the spring and shock NSNs for M1151, M1151A1 (with B1 kit), M1152, M1152A1 (with B2 kit), M1165, M1165A1 (with B3 kit) and M1167 up-armored HMMWV suspensions:

Item	NSN
Front helical spring	5360-01-457-8029
Rear helical spring	5360-01-524-6029
Front shock service kit (shocks included)	2510-01-554-1785
Rear shock service kit (shocks included)	2510-01-554-1789

HMMWV Traversing Gear Assembly

HMMWV GPK traversing gear assembly, NSN 5340-01-536-2054, has been replaced by an upgraded assembly, NSN 1005-01-563-4655. This upgrade should reduce the failures associated with the original assembly.

The new traversing gear assembly is a direct replacement for the original assembly, but the crank handles are different. The upgraded crank handle, NSN 5340-01-563-6839, fits into the gear shaft and is held in place with a quick-release pin. The original crank handle, NSN 5340-01-536-0999, fits over the gear shaft and is held in place with set screws.

M4K RTFL Engine Warranty

Your rough-terrain forklift's engine re-power kit, NSN 2815-01-529-2006, comes with a one-year warranty. The warranty covers the engine when it's installed on the forklift—not when you receive the kit. Warranty paperwork comes with the kit, so fill it out ASAP after installation. If you lose a copy of the warranty, request a new one from:

CNH America LLC
Attn: Defense Products Group (M4K)
621 State Street
Racine, WI 53402

Make sure you include the engine's serial number and date when it was installed.

Return CBPS Overpack Boxes

If you get the chemical biological protective system (CBPS) basic issue items (BI1) back from Reset, don't throw away the overpack boxes they come in. The boxes are expensive and are needed by Pine Bluff Arsenal to send out more CBPS BI1. Instructions on sending the box back to Pine Bluff are stamped on its outside. If you have questions about the overpack boxes, email Mark Oldham at: mark.oldham1@us.army.mil or call Bryan Janoski at DSN 793-1506, (309) 782-1506, or email:

bryan.janoski@us.army.mil

M1064A3 Ramp Actuator Fitting NSN

Get a new pipe nipple for the ramp actuator on your M1064A3 mortar carrier using NSN 4730-01-569-8035 (PN A733XS-25CFB, CAGE 81346). NSN 4730-01-070-0582, which is shown as Item 6 in Fig 329 of TM 9-2350-277-24P (Oct 03, w/Ch 4, Oct 09), is too large.

FREE BLOWGUN KIT

The first standard automotive tool sets (SATS), NSN 4910-01-490-6453, sent to the field did not include the Blowgun kit used for cleaning air filters. If your SATS has a serial number from KTC-SATS 0001 through KTC-SATS 1119, you can get a free Blowgun kit.

For requisition info, go to the PM-SKOT website: <https://pmskot.army.mil/index.cfm>. Click on [Check your System SKO on Wrty/Rplcmnet web page for Retrofit Availability](#). Then click on [Retrofit](#) and fill out the form.

Questions? Contact TACOM-Rock Island's Robert Drinkall at DSN 793-3385, (309) 782-3385, or email:

robert.drinkall@us.army.mil

TS-4530 RADAR TEST SET UPGRADE

The TS-4530/UPM radar test set (NSN 6625-01-483-1794, LIN T99847, PN 50-1045-70) for identification friend or foe (IFF) testing will soon require an upgrade for Mode 5 (Enhanced) and Mode 5 Crypto. The upgrade will be performed by the field maintenance calibration support facility (military or civilian) nearest to your location.

To receive the upgrade kit, send DA Form 5106, *Mission Support Plan*, with your POC, location, unit identification codes, nearest repair/calibration facility, and the number of test sets authorized and on-hand to the PD TMDE TEMOD Product Office.

Contact Benita Kimbrough-Cross at DSN 788-0146, (256) 842-0146, or email:

benita.cross@us.army.mil

or Paul Aymond, DSN 897-2923, (256) 313-2923, or email:

paul.aymond@us.army.mil

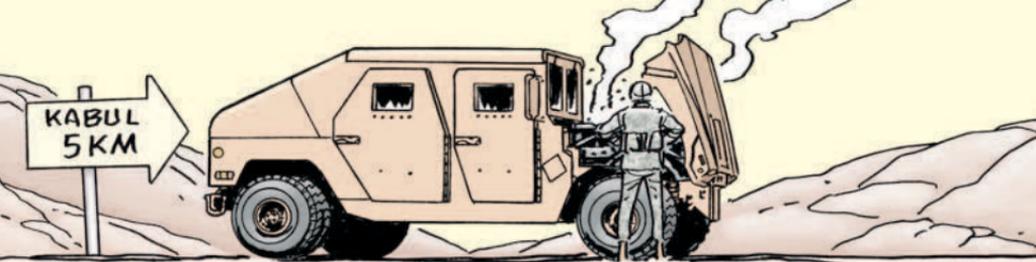
When the TS-4530A/UPM is upgraded, its NSN will change to 6625-01-562-0715 and its part number to 90000125. Its LIN will remain the same.

M1A1 Hub Cap Replacement

Use NSN 2530-01-552-1192 to order a new hub cap for the hub and arm assembly on your M1A1 tank. NSN 2530-01-063-5862, which is shown as Item 14 in Fig 246 of TM 9-2350-264-24P-1 (Mar 03 w/Ch 6, Jun 09), is a terminal item.

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?



***IT'S AMAZING HOW
MANY PROBLEMS
DISAPPEAR...***



***... WHEN YOU FOLLOW
THE INSTRUCTIONS
FOUND IN HERE!***

