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August  
2014

# THE PREVENTIVE MAINTENANCE MONTHLY

TB 43-PS-741

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***Read How the Vest Was Won, Pages 27-34***

# ARE YOU READY FOR GCSS- ARMY?

SOLDIERS,  
GCSS-ARMY  
IS NOT YOUR  
SERGEANT  
MAJOR'S  
OLD SARSS,  
IT'S **NEW!**

GCSS-ARMY IS  
A WEB-BASED  
APPLICATION  
THAT GIVES THE  
ARMY VISIBILITY  
AT LOGISTICS  
LEVELS.

REPLACING SARSS IS JUST THE  
**BEGINNING!** NEXT YEAR, THE ARMY  
WILL START FIELDING GCSS-ARMY  
AS A REPLACEMENT FOR PBUSE AND  
SAMS. HERE ARE SOME KEYS TO  
HELP YOUR UNIT MAKE A **SUCCESSFUL**  
GCSS-ARMY TRANSITION...









SGM MARK A. CHANCE,  
HQDA, ARMY G-4, LOGISTICS

- **Do the checklist.** Complete all activities on the customer conversion checklist (CCC) at the D-180 preparation brief.
- **Get to know your resource manager (RM).** GCSS-Army is more than a replacement for the Standard Army Retail Supply System (SARSS). It's the future financial system of record for units. Supply support activities (SSAs) and their customers need RM expertise to make a successful transition. After conversion, RMs will take a lead role as finances become part of the supply and maintenance activities.
- **Complete data cleansing.** All items must be "converted" before your SSA is a functioning GCSS-Army warehouse. Tracking and completing data cleansing using the PM's templates are keys to success. This includes converting UIC/DODAAC information into the "new force element" structure.
- **Train before, during and after conversion.** Units that complete both live and web-based GCSS-Army training are more successful during the fielding process and transition. After fielding, use GCSS-Army's new equipment training materials to stay current and to train new Soldiers.
- **Leave nobody behind.** The most successful conversions happen in units where personnel attend all planned events, including specific cutover training.
- **Check in with the SASMO.** Your unit's SASMO will play a big role in keeping your GCSS-Army system humming. Get them involved early and your conversion will go smoother.
- **Bookmark it.** Check out your one-stop shop for GCSS-Army info, training materials and more: <http://www.gcss.army.mil/>
- **Subscribe to GCSS-Army updates.** Sign up to get automatic notifications at: <http://www.gcss.army.mil/Support/register.aspx>



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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:

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# RUST PROOF THE SPARE ROADWHEEL

HA HA HA  
HA HA HA  
HYUK!

...ARE YOU  
KIDDING?! AN  
UMBRELLA'?

HEY! YOU **WON'T** BE LAUGHING  
WHEN **YOUR SPARE ROADWHEEL**  
STARTS **RUSTING!**

Mechanics, you all know that rust and metal don't mix. That's especially true with the spare roadwheel hanging on the side of your M88-series recovery vehicle.

The spare roadwheel is bolted to the side of the vehicle at an angle, just hanging around waiting to be used. But that leaves it exposed to rain and washwater, which pools in the bottom of the roadwheel until it evaporates.

Standing water doesn't do the spare roadwheel any favors. The bottom of the roadwheel can develop severe rust. And the lug nuts can rust in place on the mounting bolts. Then the bolts can snap when you try to remove the nuts.

But just a little elbow grease will make sure your M88's spare roadwheel is ready to bail you out of a jam when needed.

Use a little antiseize compound on the lug nuts and bolts when mounting the roadwheel. That'll prevent rust and make the nuts easier to remove later. Get a 4-oz tube of antiseize compound with NSN 8030-00-059-2761.

Be sure to take a few rags and soak up the pool of water in the bottom of the roadwheel after it rains or you've washed your vehicle. That'll keep the rust at bay and the spare roadwheel ready for action.

Better yet, if you have access to a canvas shop, get them to make a cover for the roadwheel. That'll keep water at bay all the time.

Standing water  
creates rust  
at bottom of  
roadwheel...

...and on mounting bolts, which can snap

# SAFEGUARD THE TOUCH SCREEN

YOU READY FOR  
A FIRE MISSION?

ONLY AFTER YOU  
CLEAN MY FCC'S TOUCH  
SCREEN. IT'S KINDA  
**DUSTY** OUT HERE!

Crewmen, your M119A3 howitzer's fire control computer (FCC) is wrapped in a hard case designed to protect its sophisticated components from damage.

But the FCC's fragile touch screen is still its weak spot. A replacement FCC, NSN 1220-01-604-0729, will set your unit back nearly \$27,000!

So take care to protect the FCC's touch screen, especially during missions when it's exposed to the elements.

When using the FCC outside of its docking station, don't drop it, lay it down on the screen or use anything except the stylus that came with it on the touch screen.

IT'S ALSO A  
GOOD IDEA  
INSPECT THE  
FCC **BEFORE**  
EACH USE.

REMOVE  
ANY SAND OR  
DEBRIS THAT  
CAN CAUSE  
**SCRATCHES.**

**ZAP!** I THINK YOU LEFT THE COVER **ZAP!** OFF MY **ZAP!** B-BATTERY BOX!

## BOOT BATTERY TERMINALS FOR SAFETY!

Crewmen, the rubber boots that cover the positive and negative terminals on your mobile gun system (MGS) Stryker's auxiliary battery box play an important role. If they're missing or damaged, an electrical short could happen. That short can cause a vehicle fire!

The rubber boots can get damaged or slide down the battery cables, exposing the terminals.

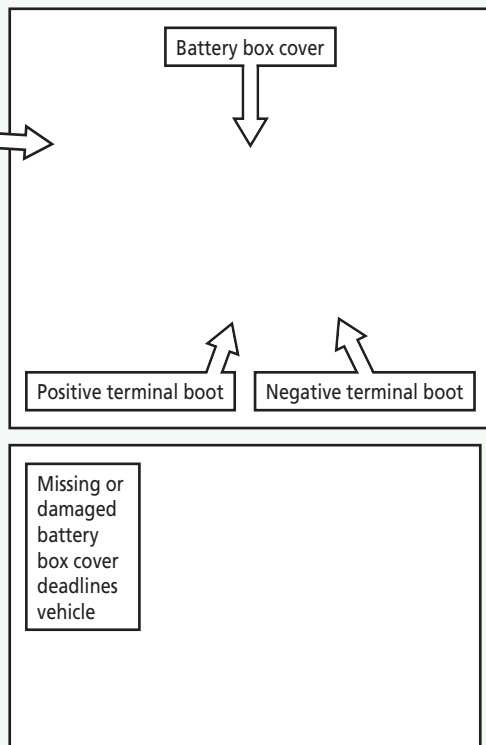
Battery terminal boots and battery box cover should be in place and undamaged

Investigators believe missing or improperly installed battery terminal boots caused a recent fire that destroyed an MGS Stryker.

The rubber boots prevent metal objects—like dropped tools and other items—from coming into contact with the terminals and causing electrical shorts and arcing.

During AFTER and WEEKLY PMCS, make sure the boots are installed correctly and are in good condition. If you find any that are missing or damaged, your vehicle is NMC until they're replaced. The negative terminal boot comes with NSN 5975-01-432-5846. Get the positive terminal boot with 5930-01-590-9078. Also, the battery box cover should be in place and fastened tight.

Don't forget to inspect the auxiliary batteries for cleanliness and signs of arcing such as burned areas or melted spots on the rubber covers or metal parts. If you find problems, report them.



## Care for MCS So It Takes Care Of You

WELL, I'VE  
DRAINED THE  
WATER FROM  
YOUR MCS.

THANKS! NOW  
DON'T FORGET  
TO RUN MY MCS  
MONTHLY SO IT  
DOESN'T GET  
DAMAGED!

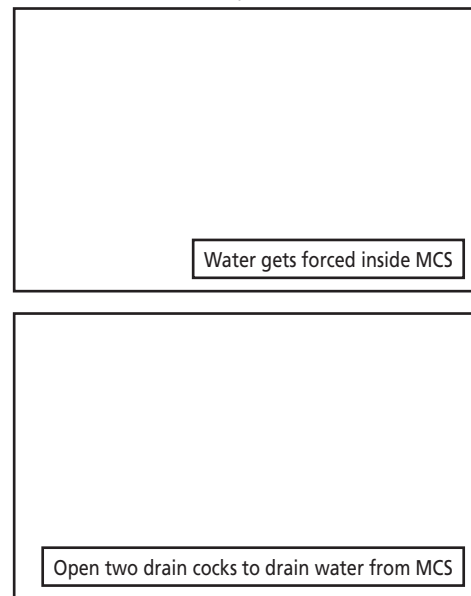
Crewmen, the microclimate conditioning system (MCS) on your M109A6 Paladin provides a safe environment inside your vehicle when operating under NBC conditions.

But the MCS needs regular attention so it'll work when you need it most.

In addition to the weekly visual checks called for in the -10 TM, be sure to operate the MCS once a month. That'll keep the refrigerant loop from being damaged and causing leaks.

Also, high-pressure water at the wash rack gets forced inside the MCS and is trapped there. That's bad news for the circuit boards and other components. Corrosion follows and that can be expensive to repair.

It's easy for you to prevent corrosion. After running your vehicle through the wash rack, open the two drain cocks on the cab's ceiling just under the MCS. Be sure to use a bucket to catch the water so it doesn't mess up the turret.





# BATTERY RETAINER FIT FIX

**GULP!** WHAT  
ARE YOU GONNA  
DO WITH **THAT!?!?**

THE BATTERY  
RETAINER  
WON'T FIT OVER  
YOUR NEW  
BATTERIES...

...SO I'M  
GONNA **MAKE**  
IT FIT!

NOW, HOLD  
ON A MINUTE!  
THERE'S A **MUCH**  
BETTER WAY!

A NEW  
BATTERY  
HAS BEEN  
APPROVED  
FOR M1-SERIES  
TANKS AND  
THE M104  
WOLVERINE.

IT COMES  
WITH NSN  
6140-01-485-  
1472, JUST  
LIKE THE  
PREVIOUS  
BATTERY.

BUT THE NEW BATTERY, MADE BY EXIDE,  
IS 2MM WIDER THAN THE OLD HAWKER  
BATTERY. THAT MIGHT SEEM LIKE A TINY  
DIFFERENCE, BUT IT'S JUST ENOUGH TO  
MAKE IT HARD TO PROPERLY INSTALL  
THE BATTERY RETAINER.

New  
Exide  
battery  
is slightly  
wider  
than  
Hawker  
battery

TO GET THE BATTERY RETAINER, NSN 6160-01-101-8402, TO FIT OVER THE EXIDE BATTERIES, SOME MECHANICS HAVE MADE **UNAPPROVED** MODIFICATIONS TO THE RETAINER OR EVEN GOTTEN RID OF SOME OF THE INSTALLATION HARDWARE.

THAT'S **NOT** A GOOD IDEA BECAUSE THE BATTERIES CAN COME LOOSE FROM THE RETAINERS AND CAUSE DAMAGE.

Battery  
retainer  
must be  
modified to  
fit new  
batteries

MECHANICS, HERE'S THE  
**RIGHT WAY** TO MODIFY THE  
RETAINERS TO FIT THOSE  
EXIDE BATTERIES...

Shave plastic coating from these areas on inboard side...

1. Shave off a **thin** portion  
of the plastic coating on  
the retainer's inboard  
and outboard sides in  
these locations:

2. Do a trial fit to make sure the retainer will fit over the Exide batteries. It'll probably be tight at first, so you might have to apply a little bit of elbow grease.
3. Once the fit is correct, remove the battery retainer and apply light coat of corrosive inhibitor spray, NSN 8030-00-524-9487, to the areas where the plastic coating was removed.
4. Install the retainer by following the guidance in WP 0637 of TM 9-2350-388-23-1-4 (Feb 09, w/Ch 1, Mar 12) for A2-series tanks and WP 0914 of TM 9-2350-264-23-1-5 (Jul 11, w/Ch 1, Nov 12) for A1-series tanks.

...and outboard side

Do a trial fit to make sure  
retainer fits over batteries before final installation

# WHOSE JOB IS IT?

WHADAYA MEAN I DON'T INSTALL THE TRANSMISSION'S INTERNAL FILTER?

IT COMES WITH THE ANNUAL SERVICE KIT!

THAT'S RIGHT!

BUT IT SHOULD **ONLY** BE REPLACED BY SUSTAINMENT MAINTENANCE!

**W**ord from the field is that units are removing the transmission pan to replace the internal filter on M1117 ASVs and M1200 Armored Knights.

That's understandable since the internal filter is included in the annual service kit, NSN 4910-01-526-7869.

Problem is, replacing the filter is not a field-level task. That's why you don't see a work package for replacing the filter in any of the TM 9-2320-307-23 manuals.

Mechanics that remove the transmission pan to do the work are damaging the transmission. That's why the filter replacement should **only** be done by sustainment maintenance.

Paperwork is underway to get the internal filter removed from the annual service kit. But until then, **don't** try to install it.

Transmission's internal filter should only be replaced by sustainment maintenance

**Mechanics are not authorized to remove transmission pan**

# STOW SAFETY CONCERNS WITH NEW SEAT

**BING! BANG!** LOOSE TOOLS!  
**AMMO BOX COMIN' ATCHA!** **THUD!** **OW!**

**LOOK OUT!** **CLANG!** **KRASH!** **OOH, THAT'S GONNA LEAVE A MARK!**

**UH-OH! I TOLD THEM NOT TO LEAVE THEIR GEAR LYING AROUND INSIDE!**

**C**rewmen, you gotta be careful how you store tools, ammo boxes and other gear in your vehicle during a mission. It's tempting to just throw all that stuff in a box or on the floor and go on your way.

But loose items lying around inside your M113A3 can be a real hazard, especially during a rollover. One engineering crew found that out the hard way when a Soldier was seriously injured by a loose tool when his vehicle rolled over during a training mission.

A much better way to store gear is to use the new stowage seat kit, NSN 2540-01-620-0873. The area under the new seat is the perfect place to safely stow tools and other items that, if not properly secured, can fly around in an accident and hurt someone.

Each kit comes with four seat belts and two seat cushions. Keep in mind that means your vehicle will have one less seat belt per seat when using this kit.

Order storage kit with  
NSN 2540-01-620-0873

HMMWV...

BONNIE, I NEED  
HELMET HARDTOP  
COVERS FOR MY  
UNIT'S HMMWVS.

HERE'S  
WHAT YOU  
SHOULD  
KNOW...

USE THIS  
LIST OF  
**AUTHORIZED**  
HELMET  
HARDTOP  
OPTIONS...

## How to Find *Authorized* Hardtop Covers

ALTHOUGH  
HMMWV  
HELMET  
HARDTOPS  
ARE  
AUTHORIZED,  
THE ARMY  
**DOESN'T**  
SUPPORT  
THEM.

THAT'S WHY  
YOU **WON'T**  
FIND THEM IN  
THE TM.

WE HAVE A LIST  
OF AUTHORIZED  
HELMET HARDTOP  
OPTIONS ON THE  
NEXT PAGE.

MAKE SURE  
YOU **SELECT**  
**ONLY FROM**  
**THESE OPTIONS**  
BECAUSE THE  
ARMY HASN'T  
APPROVED ALL  
VARIATIONS.

IF YOU NEED HELP CHOOSING WHICH COVER BEST MEETS **YOUR** NEEDS, CONTACT  
AMTECH AT 509-877-2228 (MAIN OFFICE), 509-877-6271 (CUSTOMER SUPPORT) OR  
GO TO THEIR WEBSITE: [http://amtechcorp.com/military/mp\\_home.php](http://amtechcorp.com/military/mp_home.php)

BY THE WAY, THE HMMWV'S LIN  
**WON'T** CHANGE WHEN YOU INSTALL  
THE HELMET HARDTOP.

AND REMEMBER  
TO GET  
APPROVAL  
FROM YOUR UNIT  
COMMANDER  
AND COMPLY  
WITH LOCAL  
REGULATIONS  
REGARDING  
CARC PAINTING  
BEFORE PLACING  
YOUR ORDER.

NSN 2510-	Part Number	Description
01-446-3535	1551	Unit for four-door HMMWV with side storage compartments, OD green
01-502-7721	1551-C	OD green CARC-painted version of 1551
01-446-3542	1551-0	Unit for four-door HMMWV with no side storage compartments and no windows, OD green
01-502-8840	1551-0-C	OD green CARC-painted version of 1551-0
01-439-9949	1551-1	Unit for four-door HMMWV with side storage compartments, left side antenna door and ground plane in roof, OD green
01-503-4573	1551-1-C	OD green CARC-painted version of 1551-1
01-446-3550	1551-3	Unit for two-door HMMWV with side storage compartments, OD green
01-502-8304	1551-3-C	OD green CARC-painted version of 1551-3
01-446-3553	1551-4	Unit for four-door HMMWV with left storage compartment only, OD green
01-502-8364	1551-4-C	OD green CARC-painted version of 1551-4
01-502-8485	1551-5	Unit for two-door HMMWV with no side storage compartments and no windows, OD green
01-502-7668	1551-5-C	OD green CARC-painted version of 1551-5
01-462-9095	1551-6	Unit for two-door HMMWV with side storage compartments and bulkhead kit with roof vents, OD green
01-502-7711	1551-6-C	OD green CARC-painted version of 1551-6
01-446-3558	1552	Unit for four-door HMMWV with side storage compartments, Sand
01-502-6659	1552-C	Sand CARC-painted version of 1552
01-446-3562	1552-0	Unit for four-door HMMWV with no side storage compartments and no windows, Sand
01-502-9088	1552-0-C	Sand CARC-painted version of 1552-0
01-446-3568	1552-1	Unit for four-door HMMWV with side storage compartments, left side antenna door and ground plane in roof, Sand
01-502-8314	1552-1-C	Sand CARC-painted version of 1552-1
01-446-3575	1552-3	Unit for two-door HMMWV with side storage compartments, Sand
01-502-8296	1552-3-C	Sand CARC-painted version of 1552-3
01-446-3576	1552-4	Unit for four-door HMMWV with left storage compartment only, Sand
01-502-8842	1552-4-C	Sand CARC-painted version of 1552-4
01-503-4569	1552-5	Unit for two-door HMMWV with no side storage compartments and no windows, Sand
01-502-6664	1552-5-C	Sand CARC-painted version of 1552-5
01-502-6668	1552-6-C	Sand CARC-painted unit for two-door HMMWV with side kit with roof vents

# CARING FOR CARGO COVERS

UHH...  
WHAT'S  
UP?

SINCE OUR  
CARGO COVER  
LEAKS SO BAD,  
I THOUGHT I'D  
GET A LITTLE  
FISHING IN THIS  
AFTERNOON.

ONE **SMART** IDEA THAT  
CAN HELP YOU PRESERVE  
YOUR FMTV'S CARGO  
COVERS IS **PMCS!**

WITHOUT IT, YOU CAN END UP  
WITH A RIPPED CARGO COVER  
AND A LOT OF THINGS WET THAT  
YOU WANTED TO KEEP DRY.

SO CHECK FOR HOLES AND TEARS  
IN YOUR TRUCK'S CARGO COVER  
**BEFORE** MOVING OUT ON A MISSION.  
THEN PLUG UP ANY THAT YOU SEE.  
PATCH THEM WITH REPAIR KIT,  
NSN 2540-01-496-4442.

THAT SHOULD  
SOLVE MY  
PROBLEM  
WITH KEEPING  
CARGO DRY!

## Cargo Cover Repair

THE REPAIR KIT  
MENDS **VINYL-COATED**  
CARGO COVERS.

**DON'T** USE IT ON CANVAS  
BECAUSE IT WASN'T MADE  
FOR THAT.

THE KIT COMES WITH AN INSTRUCTION  
CARD, ALCOHOL PADS FOR CLEANING  
THE VINYL, SCISSORS AND A ROLL OF  
REPAIR TAPE.

HERE'S  
HOW TO  
USE IT...

- Make sure your cargo cover is dry and is placed in an area that is 50°F or higher.
- Find the hole or tear on the **inside** (or underside) of the fabric. Make all repairs on this side.
- **Brush off loose soil or dirt from the area to be taped. Clean the area with an alcohol pad. Wipe a large enough surface so that the tape will fit well inside the cleaned area.**
- Let the fabric dry.
- Spread the fabric on a flat surface.
- Cut the tape two inches longer than the hole you want to cover.
- Using the scissors, round off the four corners of the tape. Rounded corners make the tape less likely to peel off.
- Peel off the film liner from the tape as you apply it to the inside of the fabric.
- Press the tape firmly against the fabric. Allow the tape to set, the longer the better. Overnight is best, but give it at least 20 minutes.

## Seam Repair

IF RAIN STILL GETS IN  
**AFTER** YOU'VE REPAIRED  
YOUR TRUCK'S CANVAS  
COVER, YOU MAY NEED  
TO SEAL THE SEAMS.

APPLY SEALANT TO THE SEAMS USING A SMALL  
BRUSH. SEAM SEALANT **DOESN'T** COME WITH THE  
REPAIR KIT, BUT YOU CAN ORDER A PINT WITH  
NSN 8040-00-262-9028. OR GET A GALLON OF  
SEALANT WITH NSN 8040-00-281-1972.

MY  
LUCKY  
DAY!

NOT ANY  
MORE. I JUST  
GOT A NEW  
REPAIR KIT.

YOU'LL HAVE  
TO FIND A NEW  
FISHING HOLE!



BREAKING OUT THE BRAKE PARTS

MY HAND BRAKES ARE SHOT! WHEN ARE YOU GONNA FIX 'EM?

SOON AS THEY GET THE PARTS INFO FIXED IN THE TM.

MAYBE I SHOULD CHECK WITH HALF-MAST.

LATER...

THESE NEW BRAKES ARE GREAT!

HALF-MAST CAME THROUGH AGAIN!

Dear Half-Mast,

TM 9-2330-397-14&P comes up a little short on repair parts for the hand brakes on our M1112 water trailer. A lot of the part numbers listed don't cross to NSNs and using the part number and CAGE to order sometimes gets the wrong part.

We've been going to a local vendor to get the parts we need, but it seems like the best solution would be to fix the parts info in the manual. Can you give us some help?

SSG R.S.S.

Dear Sergeant,

As funding continues to fall, this is a problem that's likely to continue. But I have good news! Most of the hand brake parts do have NSNs.

First of all, use NSN 2530-01-396-7770 if you need the entire brake drum assembly. It's listed as Item 24 in Fig 13 of the TM.

THEN USE THE INFO IN THIS TABLE TO ORDER THE PARTS THAT MAKE UP THE ASSEMBLY FROM FIG 7...

Item	Description	Part Number	NSN
1	Brake assembly, right hand	42030	2530-01-414-9317
1	Brake assembly, left hand	42031	2530-01-414-9319
2	Pin, toggle	18508	5315-01-287-8770
3	Cover, dust brake	9254	5342-01-087-9679
5	Screw assembly	23457	5305-01-321-3522
6	Plate, backing brake	18496	2530-01-287-6869
7	Cylinder assembly, hydraulic brake, left-hand	9777	2530-00-161-7576
7	Cylinder assembly, hydraulic brake, right-hand	0977600	2530-00-161-7575
8	Spacer, plate	5-113	5365-01-396-3906
9	Spring, helical, extension (orange)	9786	5360-01-288-5870
10	Cup, hydraulic brake cylinder	9789	2530-01-263-7061
11	Spring, helical, compression (black)	9791	5360-01-287-7297
12	Strut, parking brake	11686278	2530-01-074-7001
13	Spring, helical, extension, parking	046-130-00	5360-01-454-5761
14	Spring, helical, compression (yellow)	9784	5360-01-320-5815
15	Adjusting screw assembly, brake	23323	2530-01-288-3979
16	Socket, brake adjusting screw	18836	2530-01-287-9409
17	Clip, spring tension (retainer)	9795	5340-01-277-0300
18	Washer, spring tension	9794	5310-01-466-0901
19	Washer, flat	44869	5310-01-462-3212
20	Lever, parking brake right-hand	N/A	N/A*
20	Lever, parking brake left-hand	N/A	N/A*
21	Brake shoe, front	23492	2530-01-289-2365
22	Brake shoe, rear	18503	2530-01-287-4451
23	Washer, flat	MS27183-14	5310-00-080-6004
24	Screw, cap, hexagon head	B1821BH038C112N	5305-01-407-9006
NA	Brake shoe kit, right-hand	71-270	2530-01-395-5262
NA	Brake shoe kit, left-hand	71-269	2530-01-395-2297
NA	Adjusting screw	043-029-00	2530-01-482-5731

Note that Item 4 has been **deleted**. It's no longer part of the hand brake group.

\*The left and right parking brake levers (Fig 20) are no longer available by NSN. However, you can get the levers by ordering the right brake shoe kit, NSN 2530-01-414-9317, and left brake shoe kit, NSN 2530-01-414-9314.

Half-Mast



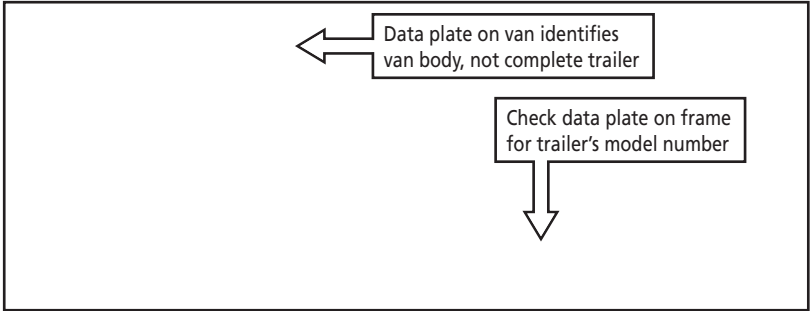
# Check the **Right** Data Plate

**M**ore than a few drivers are scratching their heads over a data plate mix-up for the M129A3/A4 12-ton van semi-trailer.

New trailers delivered from the manufacturer have a data plate attached to the van body. The data plate identifies the trailer as an M129A4M, so Soldiers logically assume the trailer is an M129A4. Problem is, that's an incorrect assumption!

Refurbished M129A3 trailers received a modified M129A4 van body. That's why the van body data plate reads M129A4M (modified).

If the data plate on your trailer's van body reads M129A4M, go to the data plate on the frame. It'll list the trailer as either an M129A3 or M129A4 and will not have the M after it.



Safety...

# **MORE TIPS FOR TOWING THE MARK**



- Dear Editor,
- After reading the towing safety article on Pages 10-11 of PS 735 (Feb 14), I came up with a few more tips that might be useful to your readers:
- Check the TMs for both the towed and towing vehicles for any special towing instructions.
  - Never substitute anything for the tow bar pins or safety clips. Use only the authorized hardware that is listed in the tow bar's TM.
  - Always insert tow bar pins with the head facing up and the safety clip on the bottom. That way, if the safety clip fails, the pin is less likely to fall out.
  - Be sure to put the cotter pin in the pintle hook. This keeps the tow bar and towed vehicle from disconnecting during stops.
  - The towing vehicle operator should always make a final safety check of the tow bar pins and safety clips before moving out and at all rest stops.

CW4 Steve Locascio, USA, Ret.  
Redstone Arsenal, AL

*Editor's note: Great advice for anyone to take along on a tow, Steve. Thanks for passing it on.*

WITH ALL  
THIS AIR  
FORCED  
DOWN MY  
EXHAUST  
PIPE...

...MY TURBO-  
CHARGER HAS  
**HAD IT!**

## Turn the Tables on Turbo Burnout

**D**uring checks and services, you may find that your 130G road grader's turbocharger is shot. Talk about an unwelcome surprise!

So what gives?

When the grader is transported on the back of a semitrailer, the exhaust pipe faces directly into the wind. That forces air down the exhaust pipe and into the turbocharger.

All that forced air causes the turbocharger's impeller to spin. But since the grader isn't running, no oil is being pumped to the impeller bearings. No lubrication means a damaged turbocharger.

So how do you prevent turbocharger burnout? Try one of these two methods:

1. Put a few strips of duct tape, NSN 5640-00-103-2254, over the exhaust stack opening. The duct tape keeps air out of the stack and away from the turbocharger. Just remember to remove the tape before startup.
2. Have your mechanic loosen the exhaust pipe's pipe clamp. Turn the pipe so its opening faces the back of the trailer. Then re-tighten the clamp. There's no need to reposition the exhaust pipe once you arrive at the construction site.

Make sure opening faces back of trailer

### Construction Equipment...

WITH MY  
TREAD TURNED  
IN DIFFERENT  
DIRECTIONS, I  
DON'T KNOW IF  
I'M COMING OR  
GOING!

## JUST FOLLOW THE ARROW!

Dear Half-Mast,

While chewing the fat in the break room of our engineering battalion, we had a little maintenance disagreement about tires.

Some say it doesn't matter which way the tread pattern on a tire faces. Others argue that mounting a tire with the tread facing the wrong way results in lost traction and faster wear.

We finally decided you could set us straight. So which is it? Does the direction of tread pattern matter or not?

SFC G.V.J.

Dear Sergeant,

Unfortunately, the answer is both yes **and** no. It all depends on the vehicle.

Tactical vehicles, like HEMTTs and M939-series trucks, use non-directional tires. That means the tread pattern can go either direction. Of course, it's always a good idea to make sure the tread pattern faces the same direction for all tires on the same axle.

But with the large tires used on construction equipment, it's a whole different story. Those tires are designed for off-road use in loose sand, dirt, mud and gravel. When pointed in the right direction, the chevron pattern on the tires provides the traction the vehicle needs.

If you're not sure which way to mount one of these tires, take a close look at the sidewall. You'll see a direction arrow that points the way the tire should turn when going forward.

Note  
rotation  
arrow

Half-Mast

COEI

BII

# BII and COEI Updated

You probably have an engineer excavator that’s coming up short on its Components of End Item (COEI) and Basic Issue Items (BII). That’s because the COEI and BII lists in TM 5-2420-232-10 (Mar 09, w/Ch 1, Sep 12) need some serious updating.

So make a note of the following changes and additions until the TM can be updated. Only the items changed are included. Bolded info highlighted below signifies the change to the TM. Green is abbreviated as (G) and tan as (T).

Item	NSN	Description	PN	CAGE
1	3830-01-606-3157 (G) 3830-01-606-7798 (T)	4-in-1 multipurpose loader bucket	332/D8766 (G) 332/D6861 (T)	OJKF0
3	3695-01-581-1516	Chain saw bar sheath	28933	0C280
4	3920-01-599-7968 (G) 3920-01-620-0378 (T)	Dipper dolly	347/00424 (G) 347/00427 (T)	OJKF0
5	3815-01-621-0800 (G) 3815-01-621-0795 (T)	General purpose excavator bucket	347/00031 (G) 347/00032 (T)	OJKF0
7	3820-01-618-2696	Hammer drill carbide bit, 3/4-in dia, 24 in. long, Skil #736 hex shank	02280	54252
15	2590-01-604-8500 (G) 5340-01-608-7820 (T)	Spare tire carrier	332/C6430 (G) 332/C7176 (T)	OJKF0
16	2530-01-618-8466 (G) 2530-01-598-4010 (T)	Spare tire	347/20197 (G) 347/20198 (T)	OJKF0
17	2510-01-594-5661 (G) 2510-01-620-0659 (T)	Strut, backhoe w/light assy, travel, 29.5 in. (750 mm)	332/C4519 (G) 332/C4523 (T)	OJKF0
18	5340-01-605-1242 (G) 5340-01-620-0389 (T)	Strut, loader crowd cylinder, travel, 22.25 in. (565 mm)	332/C4520 (G) 332/C4524 (T)	OJKF0
19	5340-01-605-1243 (G) 5340-01-620-0386 (T)	Strut, loader lift cylinder, maintenance, 31.1 in. (790 mm)	332/C4522 (G) 332/4526 (T)	OJKF0
20	5340-01-605-1241 (G) 5340-01-620-0382 (T)	Strut, loader lift cylinder, travel, 8.9 in. (227 mm)	332/C4521 (G) 332/C4525 (T)	OJKF0

Item	NSN	Description	PN	CAGE
3	5110-01-581-1533	Chain saw adjustment wrench	57-016	OC280
4	5130-01-581-1531	Chain saw sharpening kit, 3/8-in. pitch	38275	OC280
6	5120-01-618-7986	Drift, pin removal	347/10456	OJKF0
12	5120-00-900-6111	Hammer, machinist's, ball peen, 3 lb	347/22133	K7599
13	6150-01-619-0515	Harness assembly, headlights relocation	332/C7647	OJKF0

BII (continued)

Item	NSN	Description	PN	CAGE
14	4720-01-619-0512	Hose, duct, defrost	332/D6636	OJKF0
15	4730-01-619-0510	Hose clamp, duct, defrost	2201/0016	OJKF0
16	4720-01-619-0508	Inflator assembly, tire	347/00452	OJKF0
18	5340-01-612-4747	Padlock	332/X4458	OJKF0
20	5120-00-062-5413	Screwdriver, combination, general purpose	CK3	65LN0
21	4030-01-618-6566	Shackle, lifting	918/66900	OJKF0
22	3940-01-618-6571	Sling assembly, lifting-bridle	ASJCB-16427	OCR59
23	5120-01-400-0270	Socket, deep, 10 mm, 3/8-in. drive, 6 pt	J5010MH	1CV05
24	5120-01-400-0271	Socket, deep, 13 mm, 3/8-in. drive, 6 pt	J5013MH	1CV05
25	5120-01-400-0277	Socket, deep, 17 mm, 3/8-in. drive, 6 pt	J5017MH	1CV05
26	5120-01-400-0280	Socket, deep, 19 mm, 3/8-in. drive, 6 pt	J5019MH	1CV05
27	5120-01-398-7673	Socket extension, 3/8-in. drive, 6 in.	J5260-06	1CV05
28	5120-01-619-4322	Socket wrench, ratchet, 3/8-in. drive 28	J5249XL	1CV05
29	5130-01-400-0182	Socket, impact, deep, 1 1/8-in., 3/4-in. sq drive, 6 pt	J07518L	1CV05
30	5130-01-400-0146	Socket, impact, 3/4-in., 3/4-in. sq drive, 6 pt	J07512	1CV05
31	5130-01-400-0155	Socket, impact, 1 in., 3/4-in. sq drive, 6 pt	J07516	1CV05
32	5130-01-400-0135	Socket, impact, 1 1/16-in., 3/4-in. sq drive, 6 pt	J07521	1CV05
33	5130-01-619-4321	Socket, impact, 17 mm, 3/4-in. sq drive, 6 pt	J07517M	1CV05
34	5130-01-400-0290	Socket, impact, 19 mm, 3/4-in. sq drive, 6 pt	J07519M	1CV05
35	5130-01-400-0298	Socket, impact, 22 mm, 3/4-in. sq drive, 6 pt	J07522M	1CV05
36	5130-01-400-0302	Socket, impact, 24 mm, 3/4-in. sq drive, 6 pt	J07524M	1CV05
37	5130-01-400-0198	Socket, impact, 30 mm, 3/4-in. sq drive, 6 pt	J07530M	1CV05
39	5140-01-618-7979	Socket set metal box	J05400	1CV05
44	5120-00-264-3795	Wrench, adjustable, 6 in.	5385A12	39428
46	5120-00-423-6728	Wrench, adjustable, 15 in.	J715	1CV05
47	5120-01-113-7134	Wrench, combination, 10 mm	J1210MASD	1CV05
49	5120-01-349-0743	Wrench, combination, 19 mm	J1219MASD	1CV05



ALSE...

I HEAR WHAT YOU'RE THINKING... AND I AGREE! YOU NEED TO TAKE ME TO THE ALSE SHOP AS SOON AS WE LAND. I NEED SOME TENDING TO.

## Get the **RIGHT** Helmet

WHEN IT'S TIME TO SIGN OUT A HELMET FROM THE AVIATION LIFE SUPPORT EQUIPMENT (ALSE) SHOP, ONE SIZE DOES NOT FIT ALL.

MISSION SUCCESS MEANS GETTING THE **RIGHT SIZED** HELMET AND GEAR.

WHATEVER YOU NEED TO KNOW ABOUT HELMETS AND GEAR, YOU'LL FIND IN TM 1-1680-377-13&P-1.

Problems with your helmet? Don't delay! Take it to ALSE

HERE'S A SHORT LIST OF HELMETS BY SIZE AND THE OTHER ITEMS TO GET YOU STARTED.

YOUR FIRST STEP FOR CHOOSING THE RIGHT HELMET IS GETTING YOUR HEAD MEASURED BY THE ALSE TECH.


Item	NSN	Size
Ensemble	1680-01-510-1593	N/A
Item	NSN 8145-	Size
HGU-56/P	01-394-6474	XL
HGU-56/P	01-394-8035	LG
HGU-56/P	01-394-8034	M
HGU-56/P	01-394-8036	S
HGU-56/P	01-394-8033	XS
HGU-56/P	01-394-8032	XXS
Item	NSN 8145-	Size
HGU-56/P with CEP	01-522-5364	XL
HGU-56/P with CEP	01-522-5368	LG
HGU-56/P with CEP	01-522-5347	M
HGU-56/P with CEP	01-522-5344	S
HGU-56/P with CEP	01-522-5339	XS
HGU-56/P with CEP	01-522-5310	XXS
Item	NSN	
PSGC	8415-01-513-8143	

AGSE...

## MODIFYING THE DIGITAL AIRCRAFT WEIGHING SCALE

WHEN YOU APPLY THE MWO TO THE OLD 4-SCALE DAWS...

OOPS! IT'S SUPPOSED TO CHANGE INTO A **NICE, NEW** 3-SCALE DAWS!

 Mechanics, the AGSE headshed needs your help to close out MWO 1-6670-389-50-1, *Inspection, Repair, Reset and Reconfiguration of Digital Aircraft Weighing Scales (DAWS)*, by Aug 2014.

The MWO requires inspection of all 4-scale DAWS, NSN 6670-01-389-3887 (P/N AC1-25LP-410), returning from OEF/OIF operations to determine if they need repair or replacement and to convert the DAWS from a 4-scale to a 3-scale configuration.

Apply MWO to old, 4-scale configuration DAWS...

...to make it a 3-scale configuration

If your DAWS was not in SWA but still has the 4-scale configuration, you can still apply the MWO to change your DAWS to the 3-scale configuration.

If you have questions about the process, contact Robert Love at DSN 746-9198, (256) 876-9198 or by email: [robert.m.love14.civ@mail.mil](mailto:robert.m.love14.civ@mail.mil)

Get a copy of the MWO at the CAPS website: <https://www.caps.peoavn.army.mil>

You'll need to register to access the site. Once you log in, click the **AGSE** tab. Click on Equipment, then Digital Aircraft Weighing Scale (DAWS). Finally, click on DAWS 4-scale to 3-scale MWO 1-6670-389-50-1 to download a PDF copy.

OH-58D...

LOOKS LIKE  
YOU'RE GOIN'  
FOR A RIDE!

I GOT SOME  
NICE WHEELS,  
DONCHA  
THINK?

LET'S  
JACK THIS  
BABY!

HEY! WHERE  
ARE YOUR **SAFETY  
GOGGLES?**

CH-47D/F...

THE DOOR  
LOOKS GOOD  
HERE IN THE  
FRONT!

WHAT  
ABOUT  
YOU?

**HANG  
ON!**

## Jacking Up Aircraft With Wheels

**M**echanics, lifting your Kiowa Warrior for ground handling may seem simple, but there's one important protection you shouldn't forget. Make sure you're wearing safety goggles.

Because the ground handling wheels (GHW), NSN 1730-01-382-8031 and NSN 1730-01-133-9204, operate under hydraulic pressure, you'll need to protect your eyes.

That's because when using the GHW's hydraulic hand pump to apply lift pressure to the aircraft, a mishap can sometimes happen. For instance, hydraulic lines can break or a loose line may pop off. When that happens to a pressurized line, hydraulic fluid spews out with a lot of force. Wearing goggles keeps your eyes out of harm's way.

Course, when using GHWs, always make sure you and your fellow mechanic pump the wheels on both sides of the skids in unison. This keeps the aircraft level and equalizes the pressure in both GHW's.

As with any piece of hydraulic equipment, don't ignore your GHW's PMCS or general maintenance. Check oil reservoirs for proper levels and lube as required. Do all your **Before** and **Monthly** PMCS like it says in TM 1-1730-232-13&P and the wheels will perform like a champ every time you need them to lift and move your aircraft.

WEAR  
SAFETY  
GOGGLES  
WHEN  
JACKING  
AIRCRAFT.

## INSPECT WORK PLATFORM ACCESS DOORS

I WANNA  
CHECK THE  
DOOR LATCH  
PINS WHILE  
I'M UP  
HERE!

**S**ome of the smallest things can cause some of the biggest problems when you rush through the details of Chinook PMCS, mechanics.

Checking the forward and aft work platform doors isn't optional or something you do on a whim. You must inspect the doors **daily** like it says in TM 1-1520-240-PMS1 and TM 1-1520-271-PMS1, *Preventative Maintenance Services Modular Daily Inspection Checklist*.

For example, the right and left forward/ aft pylon work platform door latches may seem like small things, but if you don't check the latch pins for wear, security and elongation, the doors can come open suddenly during flight. And if the cables or hinges break, the door could fly off and hit the rotors.

Doing daily inspections catches that problem before it occurs.

Here's a question: Would you stake your life right now on the condition of your work platform doors? Remember, when you're standing high up on the aft work platform, you're only supported by two cables.

So take care of the small things now to avoid the big problems later.

Check  
platform  
latches...

...and  
cables  
daily

# GET RID OF STANDING WATER

THIS TURNED  
OUT TO BE A  
GOOD WASH,  
RINSE AND DRY.

I DON'T  
SEE *ANY*  
WATER!

GOOD! THEN I  
DON'T HAVE TO  
WORRY ABOUT  
*CORROSION*.

When you think of the word clean, what should come to mind is wash, rinse and dry. Well, that same process applies to your AH-64 aircraft.

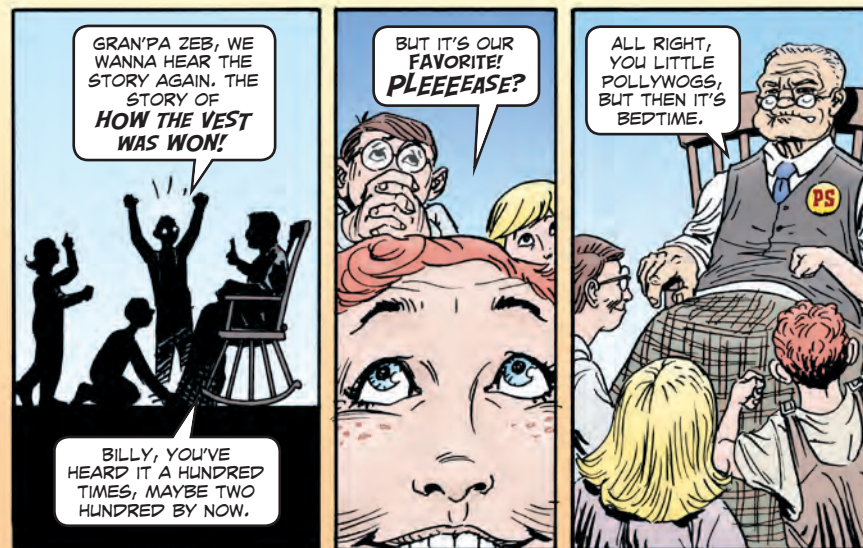
Before you get your wash on, don't forget to bag and tie your electronic components to protect them from water like it says in the IETM's caution statement. The same goes for the pitot static tubes. You don't want water to affect the tubes so that you won't be able to tell your airspeed and wind speed.

After a thorough washing of your aircraft, water can pool in certain areas. Not drying up that water invites corrosion. Stopping corrosion dead in its tracks requires that you look for water in the most likely—and unlikely—places.

For example, after washing your AH-64, you need to check for leftover water in the rotating swashplate area. If you see water, use shop towels to soak it up. Allow the area to dry and then apply some corrosion preventive compound to the swashplate like it says in the IETM.

An aircraft wash should not turn into a major repair exercise, so take precautions to protect parts and components from water intrusion and corrosion.

If water pools in swashplate area, dry it up

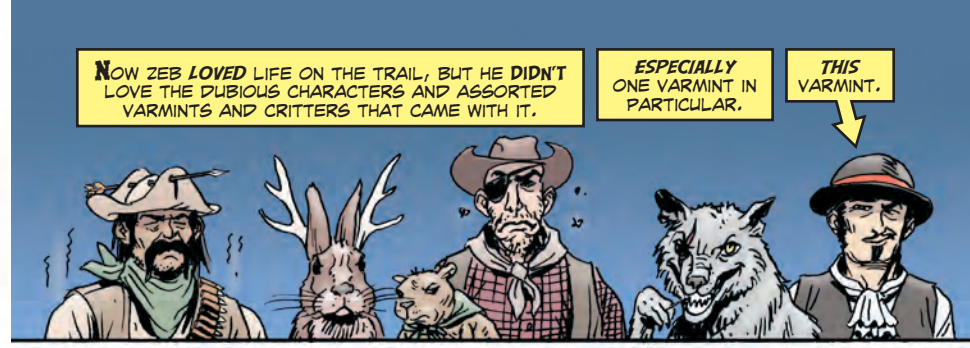
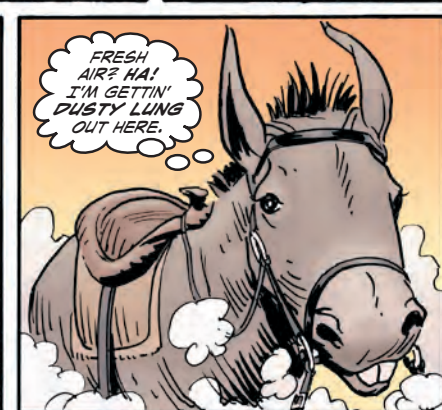
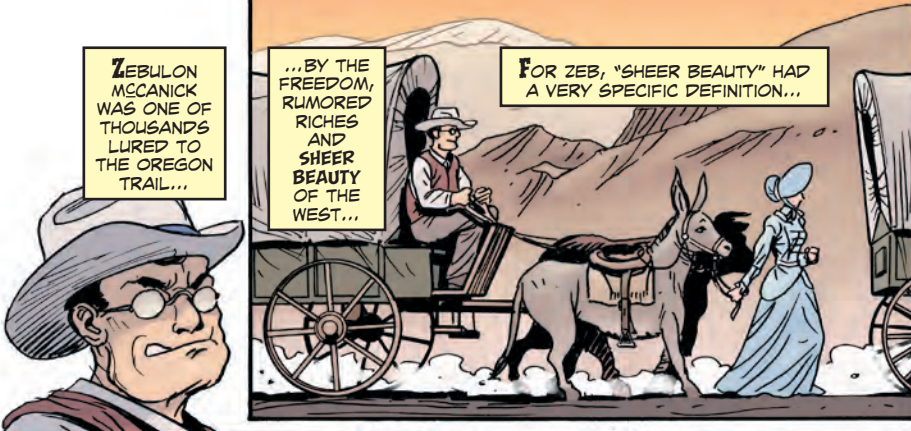


## How The Vest Was Won Part 1

THE OLD WEST. NOTHING LEFT OF IT NOW BUT A FEW DUSTY MEMENTOES, LIKE A TATTERED PATCH SEWN ON AN OLD MAN'S VEST.











IT WON'T STAY THAT WAY LONG.



I HAVEN'T SEEN HIM CHECK THOSE FLASHY RED WHEELS *ONCE* SINCE WE LEFT INDEPENDENCE.



HIS RATTLIN' HUBS SOUND MIGHTY LOOSE TO ME.



THEN SOMEONE SHOULD WARN LEX.



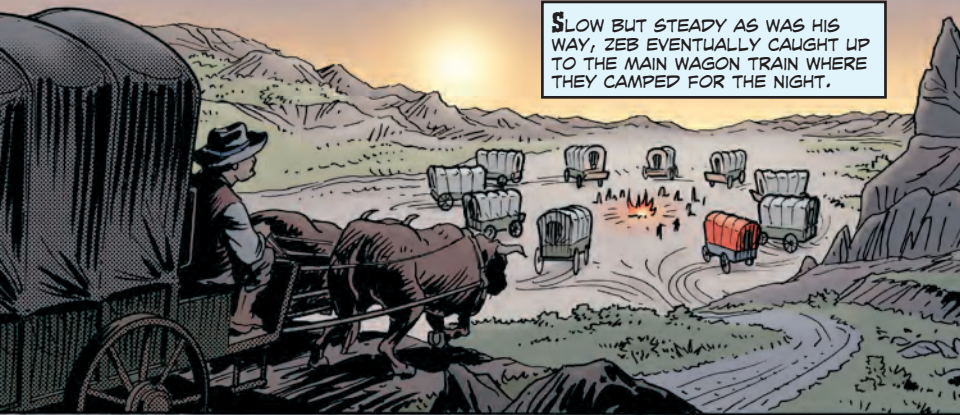
I'LL DO IT! GIDDYUP, GIRL!



SIGH...

CLIP  
CLOP  
CLIP

SLOW BUT STEADY AS WAS HIS WAY, ZEB EVENTUALLY CAUGHT UP TO THE MAIN WAGON TRAIN WHERE THEY CAMPED FOR THE NIGHT.

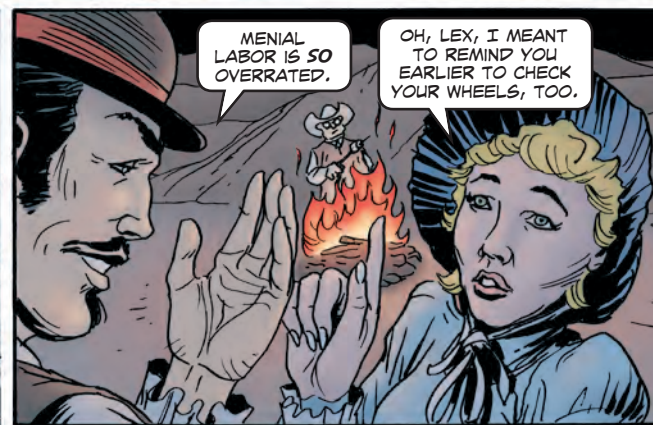


WELL, LOOKIE WHAT THE SUN-SET DRUG IN.

THOUGHT I'D LEFT YOU IN THE DUST AT RATTLER CREEK, ZEB.



HARDLY. JUST STOPPED TO GREASE THE AXLES ON MY WAGON.



MENIAL LABOR IS *SO* OVERRATED.

OH, LEX, I MEANT TO REMIND YOU EARLIER TO CHECK YOUR WHEELS, TOO.



NOW MISS JENNY, YOU NEEDN'T FRET ABOUT MY ACCOUTREMENTS. I RECKON THOSE WHEELS COST ME MORE THAN ZEB'S ENTIRE RIG.

TWICE THE PRICE, TWICE THE QUALITY, I ALWAYS SAY.



NOT WORTH A LICK OF LIZARD SPIT IF THEY AREN'T MAINTAINED.



WHAT'S THAT, ZEB? DIDN'T QUITE CATCH THAT.





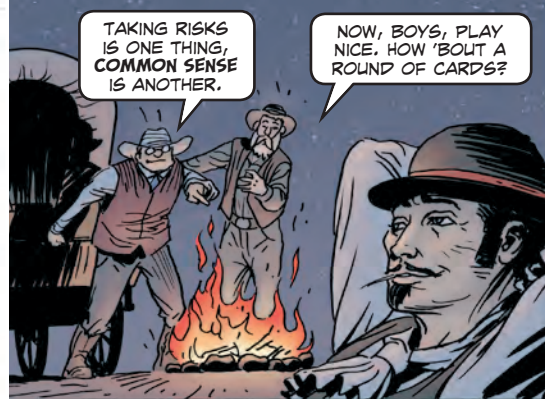
BUT I S'PECT  
YOU STILL GOT A  
TOUCH OF DUSTY  
THROAT FROM  
THE TRAIL.



I SAVED YOU  
SOME BEANS AND  
BISCUITS, MISTER  
MCCANICK.

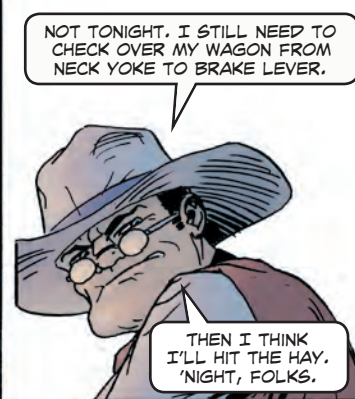


MUCH OBLIGED,  
MISS WILSON.



TAKING RISKS  
IS ONE THING,  
**COMMON SENSE**  
IS ANOTHER.

NOW, BOYS, PLAY  
NICE. HOW 'BOUT A  
ROUND OF CARDS?



NOT TONIGHT. I STILL NEED TO  
CHECK OVER MY WAGON FROM  
NECK YOKE TO BRAKE LEVER.

THEN I THINK  
I'LL HIT THE HAY.  
'NIGHT, FOLKS.



WHATCHA  
DOIN'  
THERE,  
ZEB?

OH, JUST  
SECURING THIS  
HARNESS PIECE  
BEFORE IT SNAPS  
ON THE TRAIL.



GOOD-  
NIGHT, MISTER  
MCCANICK.

SWEET DREAMS,  
MISTER GREASY!



RAZZIN'  
FRAZZIN'  
RAZZIN'...



AFORE? WHY  
MAKE EXTRY  
WORK FER  
YERSELF,  
ZEB?

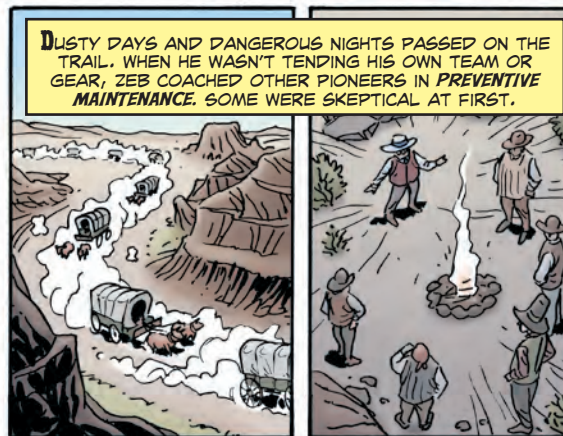
IF IT  
BREAKS,  
WORRY  
'BOUT IT  
THEN.



I MIGHT LOSE MY  
TEAM. NO, SAM, I  
CAN'T TAKE THAT  
CHANCE.



SOME  
MEN JEST  
AIN'T RISK-  
TAKERS.



DUSTY DAYS AND DANGEROUS NIGHTS PASSED ON THE TRAIL. WHEN HE WASN'T TENDING HIS OWN TEAM OR GEAR, ZEB COACHED OTHER PIONEERS IN **PREVENTIVE MAINTENANCE**. SOME WERE SKEPTICAL AT FIRST.



BUT OVER THE WEEKS, MANY A TRAVELER WHO FOLLOWED HIS ADVICE WAS SAVED FROM MISFORTUNE.



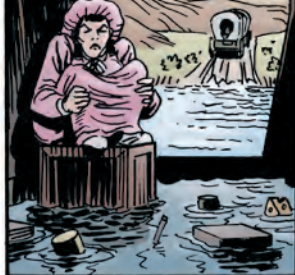
**STORIES ABOUT ZEB'S PM SKILLS SPREAD UP AND DOWN THE TRAIL.**



**EVEN THE CRUSTY OLD WAGON MASTER, SAM, WAS WON OVER WHEN ZEB SHOWED HIM HOW TO CAULK HIS WAGON BED BEFORE FORDING A RIVER.**



**MEN WHO DIDN'T BOTHER WERE LEFT WITH SOAKED SUPPLIES AND DOWNRIGHT CRANKY WIVES.**



NEVER ASKED YOU  
A'FORE, SON, BUT  
WHERE'D YOU LEARN  
ALL THESE NIFTY  
TRICKS?



WHEN I WAS IN  
THE ARMY, I WAS  
STATIONED ON THE  
FRONTIER, SAM.



LUCKILY, THAT KNOWLEDGE WASN'T TURNED IN WITH MY WEAPONS WHEN I MUSTERED OUT, SO IT CAME ALONG WITH ME.

CAVALRY LIFE TAUGHT  
ME HOW TO CARE FOR  
MY MOUNT, MY WEAPONS  
AND MY GEAR.



LUCKY  
FOR US,  
TOO!



SAY, DID  
YOU KNOW  
THERE ARE  
RUMORS OF  
OTHER FOLKS  
LIKE YOU?



FOLKS WHO CHECK  
AND FIX UP THE GEAR  
AND WAGONS RIGHT  
PLUMB NICE. SOME  
SAY THEY SET UP  
SHOP IN FORT HALL.



HMMM.  
MEBBE  
I'LL POKE  
AROUND A  
BIT WHEN WE  
GET THERE.

WHAT  
WILL ZEB  
FIND AT  
FT HALL-  
HELPFUL  
FOLKS  
OR  
**HEART-  
BREAK?**  
FIND OUT  
NEXT  
MONTH IN  
PART 2!



M40-Series Masks...

## Can M40 Convert to M40A1?

FED LOG  
SAYS YOU M40  
MASKS ARE  
NO LONGER  
SUPPORTED.

I GUESS  
I CAN  
CONVERT  
YOU TO AN  
M40A1.

**SIGH**  
NO, YOU  
**CAN'T.**

BUT YOU CAN  
USE SOME OF  
THE M40A1  
PARTS AND KEEP  
USING ME UNTIL  
I WEAR OUT.

I CAN  
STILL  
**PROTECT**  
YOU!

Dear Half-Mast,

We have several old M40 masks. FED LOG says the M40 is no longer supported. Can we convert them to M40A1s?

SSG P.H.

*Dear Sergeant,*

*No. The M40 and M40A1 internal drink tube couplings are glued to the facepiece and to the internal drink tube itself. Because these are different parts for the M40 and M40A1, there's no way to convert an M40 to an M40A1. In addition, the M40 requires a hood, but the M40A1 uses a second skin instead.*

*To order an M40A1, use these NSNs:*

- Small, NSN 4240-01-370-3821
- Medium, NSN 4240-01-370-3822
- Large, NSN 4240-01-370-3823

*Of course, as long as the M40 is still in good shape, you can continue to use it. Many of the M40A1 parts, like the head harness and outserts, can also be used on the M40.*

*If you have any M40 questions,  
contact TACOM's Bipin Patel at DSN  
786-1562, (586) 282-1562, or email:*

**bipin.b.patel.civ@mail.mil**

## Half-Mast

YOU **CAN'T** USE THE OLD BFA WITH THE M240L'S NEW SHORT BARREL.

YOU NEED THE **NEW** M26 BFA. HERE'S THE **WHOLE** BFA STORY.

# Short Barrel Needs **New** BFA

Dear Editor,  
MWO 9-1005-313-23-4 added a short barrel to the M240L. But the M24 blank firing attachment (BFA) can't be used with the short barrel.  
For the short barrel, you must use the M26 BFA, NSN 1005-01-565-6693. Until it arrives, continue to train with the standard barrel and the M24 BFA, NSN 1005-01-480-0289. Never use the M26 on the standard barrel or the M24 on the short barrel. You'll damage the barrels.  
I thought your readers would want to know.

M26 BFA should be used with M240L short barrel

Charles "George" King  
TACOM LAR  
Ft Riley, KS

THEY CERTAINLY WOULD. THANKS FOR LETTING US KNOW.

WHILE WE'RE ON THE SUBJECT, LET'S **REVIEW** ALL THE M240 BFAs.

THERE ARE **TWO DIFFERENT** BFAs BESIDES THE M26 THAT CAN BE USED ON THE M240s. BUT THEY **AREN'T** INTERCHANGEABLE.



M224,  
M224A1  
Mortar...

# GET THE TORQUE RIGHT

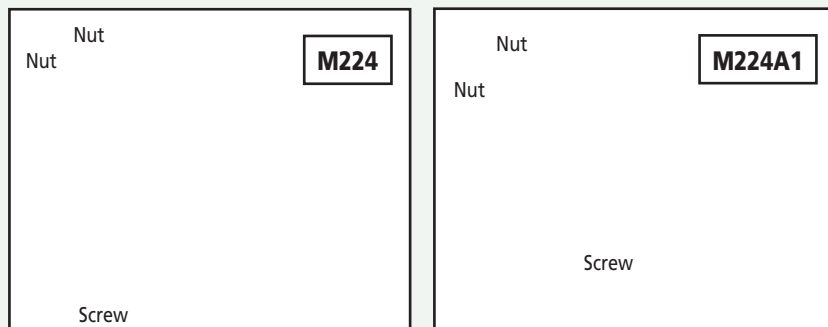
WHY  
WON'T YOU  
FIRE?!

YOU  
TORQUED  
ME **WRONG!**  
MY FIRING  
MECHANISM  
IS **LOOSE.**

If the hardware for the handle and firing mechanism on the M224 and M224A1 mortars isn't torqued correctly, the mortars may not fire.

Here's the correct torque:

\*M224: Tighten the self-locking screw and nuts to 10 + 2 lb-ft (13.6 + 2.7 N·m).



\*M224A1: Torque the two new self-locking nuts to 10 + 2 lb-ft (13.6 + 2.7 N·m). Torque the shoulder screw into the loop clamp to 12.5 + 2 lb-ft (17.0 + 2.7 N·m).

Make a note until this info is added to TM 9-1010-223-23&P and TM 9-1010-233-23&P.

And check out the complete scoop in TACOM maintenance information message 14-022:

<https://tulsa.tacom.army.mil/Maintenance/message.cfm?id=M114-022.html>

\*Torque references are industry standard.

M120/M121 Mortar System...

## Remove MSK Legs Only for Shipment

PAGE 42 IN PS 734 (JAN 14) SAID TO REMOVE THE M120/M121 MORTAR STOWAGE KITS (MSK) LEGS FOR TRAVEL. THIS RAISED A COUPLE OF QUESTIONS FROM READERS...

SHOULD THE MSK LEGS BE REMOVED WHEN YOU'RE CHANGING LOCATIONS IN A TACTICAL ENVIRONMENT?

SHOULD THE BASEPLATE OR BIPOD BE EMPLACED ON A PIECE OF PLYWOOD AS SHOWN IN THE ILLUSTRATION?

Remove guide rail  
legs **before** travel

NO. REMOVE THE LEGS **ONLY** WHEN THE MORTAR IS BEING SHIPPED. IN A TACTICAL ENVIRONMENT, LEAVE THE LEGS ON.

NO PLYWOOD IS REQUIRED FOR EITHER THE BASEPLATE OR BIPOD. THE BASEPLATE SHOULD BE EMPLACED ON THE BARE GROUND FOLLOWING THE EMPLACEMENT PROCEDURE IN THE TM.

AN/PED-5 Laser Target  
Locator Module...

Easy  
Does It  
with I/O  
Cable

OUCH!

YOU JUST  
RUINED MY  
I/O CABLE  
WHEN YOU  
JERKED IT!

SORRY. I CAN BE SUCH A JERK SOMETIMES.

It's very easy to damage the AN/PED-5 laser target locator module's external input/output (I/O) cable.

If you jerk the 90-degree connector off the laser target locator module I/O interface connector, you damage both the cable and the connection port.

Avoid that by pulling the connector straight off with a slight rocking motion.

Jerking out I/O  
cable damages  
cable and port

# NO IMAGE? CHECK RETAINING RING

I CAN'T SEE **ANYTHING** THROUGH YOU! GUESS WE'RE GOING TO HAVE TO REPLACE YOUR IMAGE INTENSIFIER TUBE. THAT'S A BIG HIT FOR OUR BUDGET.

TRY TIGHTENING MY IMAGE INTENSIFIER TUBE RETAINING RING **BEFORE** YOU REPLACE ANYTHING.

THAT'S USUALLY THE PROBLEM.

NOT SO FAST!

Repairmen are replacing the AN/PVS-14 night vision device's image intensifier tube when the problem may be just a loose retaining ring. That's a \$1,500 fix for a ring that just needs tightening.

When the retaining ring isn't installed right, it can loosen. That allows the light pipe and image intensifier to shift in the housing. The light pipe can no longer project the IR indicator light or low battery indicator in the field of view. That makes the AN/PVS-14 NMC.

And if the retaining ring loosens completely, the image intensifier won't work at all.

The following faults are indicators of a loose retaining ring:

- Low battery indicator doesn't light
- Image intensifier doesn't glow green
- IR illuminator fails
- IR indicator light doesn't work
- A noticeable rattle when the NVD is handled

THE **ONLY** WAY TO VERIFY THE RETAINING RING IS LOOSE IS TO **DISASSEMBLE** THE AN/PVS-14.

If the problem is a loose retaining ring, remember you must use the retainer wrench, NSN 5120-01-170-5088, to tighten the ring or it won't stay tight.

The troubleshooting table in TM 11-5855-306-23&P will be revised to add a check for a loose image intensifier tube retaining ring. There will also be an enhanced maintenance training package coming out for the AN/PVS-14.

Tighten loose image intensifier tube retaining ring with retainer wrench so ring stays tight

Retainer wrench



MK 19 Machine Gun...

I THINK I'VE GOT AN SMR PROBLEM!

WE'LL CORRECT THAT ASAP!

## Sear, Feed Slide SMR Codes Wrong

Dear Half-Mast,

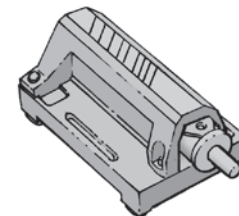
We are having trouble ordering the sear assembly and feed slide assembly for our MK 19s. Fig 2 in TM 9-1010-230-23&P (Aug 12) lists NSN 1010-01-133-6990 for the sear assembly and NSN 1010-01-133-6980 for the feed slide assembly. But FED LOG shows these NSNs as unavailable. Can you help?

MSG C.T.

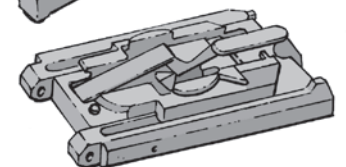
Dear Master Sergeant,

Sure can. The TM lists an SMR code of PAFFF for both items. That's wrong. The correct SMR code is AFFFF, which means you order the individual components and assemble them at field-level maintenance. See Fig 11 for the feed slide assembly components and Fig 12 for the sear assembly components. The SMR codes will be corrected in the next revision to the TM.

Half-Mast



Feed slide and sear SMR code is AFFFF



# OLD BARREL COVER DOESN'T FIT

I DON'T THINK THIS IS GONNA FIT YOUR SPARE BARREL. YOURS IS LONGER THAN THE M2'S.

ONLY ONE SOLUTION. TAKE OFF MY FLASH SUPPRESSOR. THEN IT'LL FIT!

Dear Half-Mast,

We have started receiving the new M2A1 machine guns and have discovered the old M2 spare barrel cover, NSN 1005-00-659-1031, doesn't fit. It's about two inches too short. Is there a longer M2A1 cover available?

CW4 P.A.M.

NOT YET, CHIEF. TACOM IS WORKING ON PUTTING AN M2A1 BARREL COVER IN THE SYSTEM, BUT THAT MAY BE SOME TIME YET.

THE SOLUTION IN THE MEANTIME IS TO REMOVE THE SPARE BARREL'S FLASH SUPPRESSOR. THEN THE M2 COVER FITS. STORE THE SUPPRESSOR IN THE BAG FOR THE SPARE BARREL SO IT WON'T GET LOST.

OPERATORS ARE AUTHORIZED TO REMOVE THE M2A1 FLASH SUPPRESSOR.

Flash  
suppressor



Removing flash suppressor on spare barrel allows cover to fit

# WHERE'S THE TOOL?

SAYS HERE YOU'RE S'POSED TO HAVE A BARREL SUPPORT REMOVAL TOOL!

NEWS TO ME! I'VE NEVER SEEN ONE.

Dear Half-Mast,

The M2A1 machine gun's TM 9-1005-347-23&P lists a barrel support removal tool in WP 0026 under the removal and installation instructions. But we can't find an NSN for the tool. Is there one?

SGT B.B.

Dear Sergeant,

There is no NSN because there is no tool. The tool was included in the TM by mistake. All references to the tool will be removed in the next revision to the TM.

Half-Mast

# Check for Loose M240L Pistol Grip

WHEN OPERATORS AND SMALL ARMS REPAIRMEN DO THE PMCS FOR THE M240L MACHINE GUN, THEY **ALSO** NEED TO CHECK FOR A **LOOSE PISTOL GRIP**.

Look in pistol grip for loose or missing bolt

Look inside the pistol grip and make sure the bolt and washer are securely installed. If the bolt is loose or missing, the M240L is NMC.

This check will be added to the PMCS for both TM 9-1005-313-10 and -23&P.

Remember, the M240B and M240L trigger assemblies are not interchangeable. Use the correct trigger.



# WHICH LUBE GOES

# ON WHICH WEAPON?

DO  
SOLDIERS  
KNOW?

IF THEY DON'T,  
I HOPE THEY  
READ THIS!

Dear Editor,

As an armament tech, I correct armorers about using the wrong lubes on weapons all the time. I think it would be a great idea for *PS* to summarize which lubes can be used on which weapons. That would clear up some of the confusion.

CW2 Ryan Harmon  
Camp Casey, Republic of Korea

**Editor's note:** That's a great idea! Here we go:

Small arms lubricants differ in viscosity (how easily they flow), chemical composition and heat resistance. These characteristics dictate which lubricant to use depending on the weapon and environmental conditions. Your -10 TM is always the best guide to cleaning and lubing your weapons, but here are some general guidelines on lubricants:

**RBC** (rifle bore cleaner) is not a lubricant. It's strictly for cleaning out carbon and powder from the chamber and bore. Remember, when you're finished using RBC, you need to lube your weapon.

**CLP** (cleaner, lubricant, preservative) is usually the best choice for taking care of your weapon since it cleans, lubes and preserves in one step.

**LSA** (lubricant, semi-fluid, automatic weapons) and **LSA-T** (lubricant, semi-fluid, automatic weapons with Teflon®) are strictly lubricants. So before using them you must first clean your weapons with dry cleaning solvent, MIL-PRF-680 Type II. **Always de-grease thoroughly when changing lubes.**

CLP and LSA can be used on most weapons as long as the temperature is -10°F or higher. When the temperature drops below 10°F, you can use **LAW** (lubricating oil, arctic, weapons). If it's below -10°F, use only LAW on most weapons.

There are exceptions, though. For the **M249 machine gun** and the **M3 recoilless rifle**, use only CLP regardless of the temperature.

On the **M231 firing port weapon**, don't use CLP. Use only LSA in normal conditions and LAW in extreme cold.

For the **MK 19**, never use CLP—it's not strong enough. Use **GMD** (grease, molybdenum disulfide) if you can get it. If you can't, use LSA or LSA-T. If the temperature drops below 0°F, it's OK to use LAW.

When you're lubing, remember a light lube means a film barely visible to the eye. A heavy lube means a film thick enough to spread with your finger.

If you need the NSNs for these lubricants and cleaners, see your -10 TM or Page 23 in PS 671 (Oct 08) at:

<https://www.logsa.army.mil/psmag/archives/PS2008/671/671-23.pdf>

Now that you've got the whole lube story, make sure armorers and Soldiers read the story. Copy this article and hand it out at the next Sergeant's Time. Post it on bulletin boards, too.

CLP ISN'T  
STRONG ENOUGH  
FOR YOUR MK 19.  
USE GMD, LSA,  
OR LSA-T.

# HEAT KILLS, PART II

ON PAGES 50-51 OF PS 740 (JUL 14), WE DISCUSSED THE CAUSES, RISKS AND SOURCES OF INFORMATION FOR HEAT INJURY.

IN THIS ARTICLE, WE'LL DISCUSS TYPES OF HEAT INJURIES, THEIR SYMPTOMS, TREATMENT AND PREVENTION.

EXERTIONAL HEAT ILLNESS (EHI) REFERS TO DISORDERS CAUSED BY TOTAL BODY HEAT STRESS...

...PRIMARILY MUSCLE CRAMPS, HEAT EXHAUSTION AND HEAT STROKE.

THE TWO **MAJOR** KINDS OF EHI ARE HEAT EXHAUSTION AND HEAT STROKE.

## Heat Exhaustion

**HEAT EXHAUSTION** IS THE INABILITY TO CONTINUE WORKING OR EXERCISING BECAUSE OF EXPOSURE TO HEAT.

IT USUALLY OCCURS DURING HARD PHYSICAL LABOR IN THE HOT SUN AND HIGH TEMPERATURES.

IT INVOLVES A LOSS OF BODY FLUIDS THROUGH SWEATING.

IF YOU DON'T REPLACE THE FLUIDS YOU'VE LOST, YOU'LL SUFFER HEAT EXHAUSTION.

HERE ARE THE SYMPTOMS...

- Sweating
- Weakness
- Dark-colored urine
- Muscle cramps
- Dizziness
- Nausea
- Headache
- Confusion
- Clumsiness/lack of coordination
- Fainting

AND HERE'S THE **TREATMENT** FOR SOMEONE SUFFERING FROM HEAT EXHAUSTION...

- Move the person out of the heat and into an air-conditioned room where he can rest. If you can't get him inside, move him to the nearest cool, shady place.
- Loosen his uniform; remove head gear.
- Have him drink 2 quarts of water over a 1-hour period. (Make sure he doesn't drink more than 2 quarts.)
- If he doesn't improve within 30 minutes, or if his condition worsens, get him to a medic or doctor.

## Heat Stroke

LEFT UNTREATED, HEAT **EXHAUSTION** CAN PROGRESS TO HEAT **STROKE**.

A BODY SUFFERING FROM HEAT **STROKE** CAN'T CONTROL ITS OWN TEMPERATURE.

CORE BODY TEMPERATURE CLIMBS ABOVE 105°F. THIS IS THE **MOST DANGEROUS** FORM OF HEAT INJURY.

IT CAN DAMAGE THE BRAIN AND OTHER ORGANS. IT CAN EVEN **KILL YOU**.

### Here are the symptoms:

- Heavy sweating
- Vomiting
- Combative
- Convulsions/chills
- Confusion/mumbling
- Fainting

### Here's the treatment for someone suffering from heat stroke:

- Call for immediate evacuation to a hospital.
- While waiting for transportation, begin rapid cooling of the heat stroke victim. The faster the body is cooled, the less damage to the brain and organs.
- Move the person out of the heat and into an air-conditioned room or at least to the nearest cool, shady place.
- Strip off ACU to underwear.
- Fan air over the body while wetting the skin with water from cloths.

- If ice is available, soak sheets in ice water. Cover all of the body except the face with iced sheets.



## Prevention

SOLDIERS SELDOM HAVE THE OPTION OF STAYING IN THE COOL INDOORS ALL THE TIME.

SO WHEN YOU **MUST** GO OUT INTO THE SUN AND HEAT, FOLLOW THESE GUIDELINES TO **PREVENT** HEAT EXHAUSTION AND HEAT STROKE.

- Wear lightweight, loose-fitting clothing and a helmet or boonie hat.
- Slather on sunscreen, SPF 30 or higher.
- Take extra precautions in extreme heat and humidity. Drink 24 ounces of fluid 2 hours before work or exercise. Drink another eight ounces right before. And during work or exercise, drink another eight ounces every 20 minutes whether you're thirsty or not.
- Avoid alcohol. It will make you lose more fluids and worsen the problem.
- Drink extra fluids, at least eight glasses of water, fruit juice or vegetable juice each day. During times of extreme heat and humidity, consider switching to sport drinks with electrolytes.

### Recommended Reading

HERE'S READING MATERIAL TO HELP YOU LEARN EVEN MORE ABOUT PREVENTING AND TREATING HEAT INJURIES.

TRADOC Regulation 350-29, *Prevention of Heat and Cold Casualties* (Jul 12). You'll find it online at the U.S. Army Training and Doctrine Command:

<http://www.tradoc.army.mil/tpubs/regs/tr350-29.pdf>

TB Med 507, *Heat Stress Control and Heat Casualty Management* (Mar 03). You'll find it online at the Army Publishing Directorate:

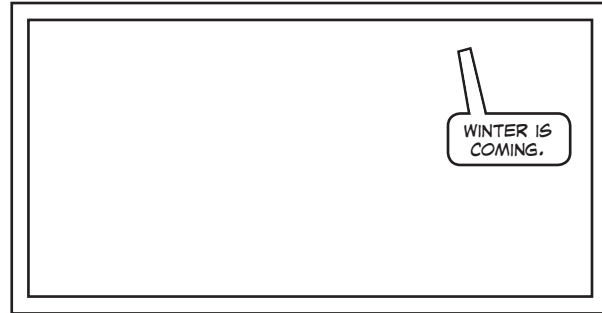
[http://armypubs.army.mil/med/DR\\_pubs/dr\\_a/pdf/tbmed507.pdf](http://armypubs.army.mil/med/DR_pubs/dr_a/pdf/tbmed507.pdf)

The Heat Illness Prevention web page on the U. S. Army Public Health Command website:

<http://phc.amedd.army.mil/topics/discond/hipss/Pages/HeatInjuryPrevention.aspx>



## RECHARGING BATTERY PACK IS REQUIRED!



WINTER IS  
COMING.

THAT'S  
RIGHT!  
I **KNEW**  
THERE WAS  
SOMETHING  
I HAD TO  
DO TO GET  
READY FOR  
WINTER...

...RECHARGE  
MY SPACE  
HEATER'S  
BATTERIES!

**O**perators, **every 6 months, recharge the battery pack**, NSN 4520-01-493-2796, in your 35,000-BTU and 60,000-BTU convective space heaters. A discharged battery pack that sits around for a long time may be impossible to recharge. And replacing the pack costs more than \$900.

When you operate the convective space heater, the battery pack gets recharged by the thermoelectric generator (TEG) on the heater. That's fine during colder months when the heater's running a lot. But it's a different story during warmer months when the heater sits idle for a long time. That's when the pack typically goes uncharged.

Keep battery pack charged

## Battery Pack Recharging Methods

Here are five methods for recharging the battery pack...

1. **During heater operation:** As mentioned before, you can recharge the battery pack by operating the heater. It usually takes about 30 minutes. If the pack is deeply discharged, or if you're recharging in cold weather, it will take longer.
2. **Standard automotive tool set (SATS):** You can also use the SATS 12V battery charger, NSN 6130-01-500-3401, to recharge the heater's battery pack.
3. **Commercial battery charger:** Or you can use a commercial 12V smart charger. A smart charger automatically shuts off when charging is complete. Don't use a manual charger. It could overcharge the pack and make it unserviceable.

All convective space heaters come with a **battery charging adapter**, NSN 4520-01-493-2810, that must be used with a commercial or SATS 12V battery charger. The adapter is a component of end item.

4. **NATO charging system:** The NATO charging system, NSN 4520-01-533-0607, lets you charge the pack by connecting it to any vehicle outfitted with a 24V NATO adapter. The charging system can be directly attached to any 24V NATO slave receptacle. The charging system's battery connector fits onto the pack's connector.  
The NATO charging system is an additional authorized item. It's a complete charging system, not just a jumper cable. When the system is attached to the heater's battery pack and DC power, a small LED blinks to indicate that the pack is charging. When the pack is fully charged, the LED stops blinking and stays lit. The charging system can't be hooked up incorrectly and won't drain the vehicle battery below 18V.
5. **Series battery charger rack:** The charger rack is used for bench charging the battery packs. The rack has three charging trays that allow you to charge a total of 18 packs at one time.

Series  
battery  
charger  
rack is  
used for  
bench  
charging

The rack isn't in the Army supply system. It's a commercial item available through HDT Global. The HDT part number is 301-H003005. To order, call HDT Global at (800) 969-8527, or email: [sales@hdtglobal.com](mailto:sales@hdtglobal.com)



## Battery Pack Charging Tips

- **Keep the pack fully charged.** The convective space heater battery pack works the same as a vehicle battery. The heater uses the pack to start itself. Then, during operation, the heater recharges the pack. If the pack becomes discharged, recharge it right away. Storing a discharged pack will shorten its life and degrade its performance. Later, you may not be able to recharge it. **Charge the pack every 6 months while it's in storage.**
- **Charging under normal conditions:** If the pack has recently been discharged, it can usually be recharged in about an hour or two. It will take longer if the air is cold (20°F or less).
- **Use a 110VAC to 12VDC commercial smart charger.** You can also use the NATO charging system. Attach the charger to the pack like it says in TM 10-4520-262-12&P (35K BTU) and TM 10-4520-264-12&P (60K BTU). When recharging the pack under normal conditions, check the pack's standing voltage with a multimeter every 30 minutes.
- **Charging when the pack is in a deeply discharged condition:** If the pack is deeply discharged (less than 11.5V), it will take longer to recharge, usually about 24 hours. Use a commercial 12V smart charger. Attach the charger to the pack like it says in the TMs and start charging. Every 4 hours, check the pack's standing voltage with a multimeter to find out if it's fully charged.

NATO charging system connects to vehicle's 24V NATO adapter

## Battery Pack's Standing Voltage

To check the standing voltage, disconnect the pack from the charger. Let it stand disconnected for 30 minutes. Then check the voltage with a multimeter. If the standing voltage is not at 100 percent of charge, reconnect the pack to the charger and continue charging.

After you disconnect the pack from the charger, the first voltage reading will be higher than normal. The voltage will decrease slowly, then stabilize at the standing voltage. If, after charging the pack, the standing voltage will not stabilize, the battery pack isn't working.

THIS TABLE RELATES BATTERY PACK STANDING VOLTAGE TO THE PERCENT OF CHARGE IN THE PACK.

Percent of charge in pack	Voltage reading
80	12.4 - 12.5
90	12.5 - 12.6
100	12.6 - 12.7

IN OTHER WORDS, IF THE MULTIMETER READS THE VOLTAGE BETWEEN 12.4V AND 12.5V, IT MEANS THE PACK IS 80 PERCENT CHARGED.

PS END

# How to Use PS Magazine's Search Engine

IT'S EASIER THAN YOU THINK!

LOOKING FOR AN ARTICLE THAT YOU READ IN A PAST ISSUE OF PS?

IT WAS JUST A COUPLE OF MONTHS AGO. I'M ALMOST POSITIVE!

WANT TO SEE WHAT WE'VE WRITTEN ABOUT A SPECIFIC PIECE OF EQUIPMENT?

GOOD NEWS!

PS HAS A SIMPLE SEARCH TOOL THAT MAKES IT EASY FOR YOU TO LOOK UP INFO IN OUR ONLINE ISSUES FROM JANUARY 2000 THROUGH THE CURRENT ISSUE.

YOU CAN ACCESS THE PS SEARCH ENGINE AT:

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

PS MORE

A SOFTWARE UPGRADE HAS CHANGED HOW THE SEARCH ENGINE WORKS. FOLLOW THESE HELPFUL POINTS...

- Searches are not case sensitive.
- Single word searches. To search for an article with a particular word, simply type it in the search box. For example:
  - **tritium** will find all articles that contain the word tritium.
  - **HMMWV** will find all articles that contain the word HMMWV.

HOWEVER, DOING A SEARCH FOR WORDS THAT END IN A SUFFIX WILL **ALSO** RETURN ARTICLES THAT **DON'T** HAVE THE SUFFIX OR HAVE A DIFFERENT SUFFIX. FOR EXAMPLE:

- **alternator** will find articles with alternator, but it will also find alternate, alternative, alternatives, and alternating.
- **follower** will find articles with follower, but will also find follow, follows, following, and followed.
- Multiple word searches. Here's how to search for articles that contain multiple words. For example:
  - **+tripod+hazard** finds all articles with both tripod and hazard in them.
  - **+tripod+hazard+NSN** finds all articles with all three words in them.
- Searching for one word, but not another. Here's how to search for one word but exclude another word:
  - **-HMMWV+tires** will search for all articles with tires, but leave out articles that also contain HMMWV.

Search Criteria: "HMMWV+tires"  
Options Selected: Search All Years  
Display Articles  
Items Found: 435

[Search Again](#)

1...10...11...12...13...14...15...16...17...18...19...20...

- Title:** [Modern Burner Unit... Upgrade Keeps Food from Burning](#)  
**Year:** 2014 **Issue:** 735 **Pages:** 46-47  
**Summary:**  
 Modern Burner Unit ' GUESS I'LL throw IT AWAY . D AGnAbit ! SCORCHED ANOTHER one . NO ! WAIT ! I'LL EAT IT . upgrade keeps food from burning upgrade keeps food fromburning fOoD ' a a re you using the modern burner unit ( MBU ) to heat the griddles , ranges or cooking racks in your field kitchen ' !
- Title:** [Connie's First Script](#)  
**Year:** 2014 **Issue:** 735 **Pages:** 60-61  
**Summary:**  
 I'm not sure what he's signaling to us , coNnie ' but I bet I can find it in this Issue of PS ! 735 60 - 61 . indd 1 - 2 12 / 30 / 13 2 : 31 PM Connie's Post Scripts HET Engine Belt NSN Change Get the HET M1070A1 ' s primary engine belt with NSN 3030 - 01 - 617 - 1203 . The old
- Title:** [Containerized Kitchen... Parts for Trailer Wheels](#)  
**Year:** 2014 **Issue:** 735 **Page:** 50  
**Summary:**  
 The details include NSNs , key features , descriptions , product specifications ,

- Searching for numbers. You can easily search for a string of numbers (for example, **+4587632** will find articles containing the sequence of numbers 4587632). However, because the dash (-) creates a search that filters **out** anything following the dash, searching for NSNs, part numbers, TM numbers and work packages that contain dashes must be done differently. Search like this:
  - **+NSN+1005+01+306+9442** will find all articles with NSN 1005-01-306-9442.
  - **+TM+9+1005+437+13&P** will find all articles with TM 9-1005-437-13&P.
  - **+PN+1005991+1** will find all articles with PN 1005991-1.
  - **+WP+0004+00+6** will find all articles with WP 0004 00-6.

Searches for hyphenated words must also be treated this way. For example:

- **+CAC+enabled** will find articles that contain CAC-enabled.
- **+non+standard** will find articles that contain non-standard.

FOR WILDCARD SEARCHES, USE THE QUESTION MARK (?) TO REPLACE ANY CHARACTER(S) BEFORE OR AFTER THE SEARCH TERM. FOR EXAMPLE:

- **?ank** will find:
  - Articles with the word tank.
  - Articles with the word thanks.
  - Articles with the word cantankerous.
- **up?** will find:
  - Articles with the word up.
  - Articles with the word upgrades.
  - Articles with the word updates.

You'll find these tips and more when you click on [Helpful Hints](#), which appears on the search engine page.

Enter a word or phrase below and click on the Search button

[Helpful Hints](#)

Options:

From:  To:

STILL CAN'T FIND WHAT YOU'RE LOOKING FOR?

DROP US AN EMAIL AT:

[half.mast@us.army.mil](mailto:half.mast@us.army.mil) or [usarmy.redstone.logsa.mbx.psmag@mail.mil](mailto:usarmy.redstone.logsa.mbx.psmag@mail.mil)

PS END



# SOLDIER FORMS A SOLUTION

# How to Suspend Troubleshooting in EMS NG

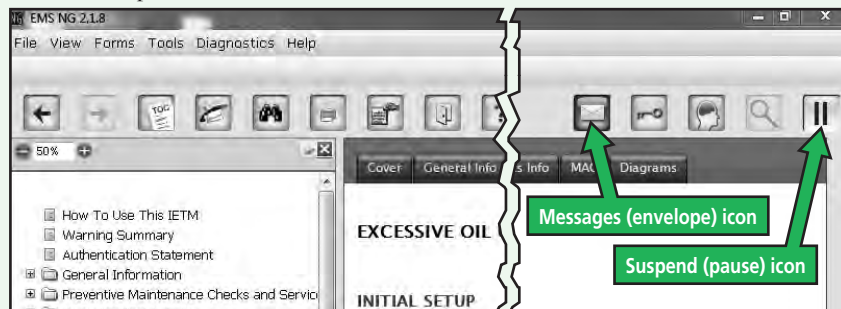
HEY, JONESY! YOU GOTTA CHECK THIS OUT. SARGE IS DOING THE CHICKEN DANCE!

NO WAY!

WHOOOPS!

I BETTER SAVE THIS!

We all know distractions happen, sometimes even when you're troubleshooting. That's why the Suspend Troubleshooting tool was built into the Electronic Maintenance System-Next Generation (EMS NG) Viewer. The tool gives you the option to stop and save progress in the middle of a troubleshooting track. Keep this tool in mind the next time your troubleshooting is interrupted.



Enter a name for the suspended session and include an optional description of the circumstances in the comment field. Press the suspend (pause) icon again, then close that screen to return to the platform selection screen.

## Resuming Suspended Sessions

The most direct way to resume a session is through the messages (envelope) icon, which provides a list of suspended sessions to choose from. Just click on the suspended session you want and continue right where you left off.

You can manage suspended sessions in the History tool (available from an icon or the View>History menu). After the History window loads, click the Suspended Sessions link to view the list. Select one or more sessions by clicking the checkbox to the left of the entry, then select Restart (only available when a single session is selected), Export, or Delete.

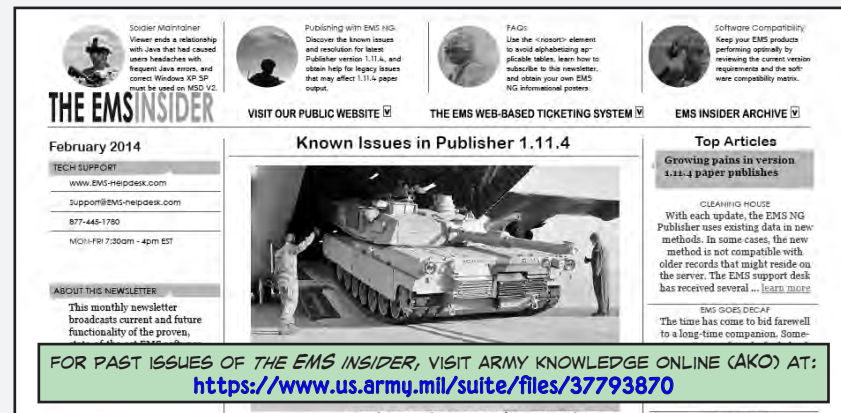
Sessions may also be imported and exported to share between computers.

Publications...

## Newsletter Offers EMS Support

THE TACOM ELECTRONIC MAINTENANCE SYSTEM (EMS) TEAM PUBLISHES A MONTHLY NEWSLETTER, *THE EMS INSIDER*, TO KEEP YOU INFORMED ABOUT THE LATEST EMS SOFTWARE VERSIONS.

THE NEWSLETTER OFFERS USEFUL INFORMATION, TIPS AND TRICKS FOR IMPROVING YOUR INTERACTIVE ELECTRONIC TECHNICAL MANUAL (IETM) EXPERIENCE. TO REQUEST A SUBSCRIPTION, E-MAIL: [support@ems-helpdesk.com](mailto:support@ems-helpdesk.com)



# ★ Connie's POST SCRIPTS ★

## PLS Transmission Control Module

Get a new 4500SP transmission control module (TCM) for your M1074 and M1075 palletized loading system (PLS) with NSN 2520-01-617-7537. That replaces NSN 2990-01-539-3470, which is shown as Item 16 in Fig 123A of TM 9-2320-364-14&P in IETM EM 0206 (Apr 09).

## M4 Carbines Converting to M4A1

TACOM M4 MWO teams began converting all M4 carbines to M4A1s in April. It's important that units document the change in their unit property books. The M4 NSN is 1005-01-231-0973 and its LIN is R97234. The M4A1's NSN is 1005-01-382-0953 and its LIN is C06935. TACOM will provide unit supply sergeants documentation to support DA Form 4949, *Administrative Adjustment Report (AAR)*, to make the change. Questions? Contact Wanda Rowley at (703) 805-4681 or email:

[wanda.a.rowley.ctr@mail.mil](mailto:wanda.a.rowley.ctr@mail.mil)

## HMMWV Nut NSN Change

Self-locking nut, NSN 5310-00-935-9021, is listed 60 times in the HMMWV's TM 9-2320-280-24P-1 and -24P-2. It's also a terminal item. The replacement NSN is 5301-01-542-0395. Be aware that the old NSN brought 100 nuts. The new NSN brings only one each, so order enough for your bench stock or authorized stockage lists.

## DA Pam 385-63 Revised

A major revision to DA Pam 385-63, *Range Safety*, went into effect in April 2014. This revision updates safety signage and flag requirements, covers range safety info and danger zones for various weapons and ammunition, and includes many technical data updates.

Download the pub at: [http://www.apd.army.mil/pdffiles/p385\\_63.pdf](http://www.apd.army.mil/pdffiles/p385_63.pdf)

## M872A4 Bumper Pin NSN

Get a new bumper pin for your M872A4 34-ton semitrailer with NSN 5315-01-627-5133 (PN 98320A660). It replaces NSN 5315-01-521-8342, which is shown as Item 4 in Fig 20 of TM 9-2330-331-14&P. That pin is the wrong size for the bumper.

## 815F Compactor Engine Accessory Belt

A new engine accessory belt for the up-armored 815F compactor with air conditioning comes with NSN 3030-01-479-5467. Make a note of this NSN until it's added to TM 5-3805-380-13&P.

## Husky III CTIS CONTROL UNIT NSN

Get the CTIS pneumatic control unit for the Husky III with NSN 3040-01-605-0390 (PN MTU-H002-CT-APE-00, CAGE 69L84). It replaces the parts information for Item 1 in Fig 89 of TM 9-2355-316-23P (Mar 12).

## NEED BLACK HAWK WINDSHIELD WIPERS?

If you order the replacement windshield wiper assembly, NSN 1680-01-611-2467, from DLA, your order will be cancelled! There is no stock on hand. Instead order the older wiper assembly, NSN 1680-01-106-1906.

## GCSS-Army Reminder

Remember to check the GCSS-Army website for alerts, updated fielding and training schedules and other important info. Visit:

<https://gcss.army.mil/>

Or sign up to get automatic notifications at:

<https://gcss.army.mil/Support/register.aspx>

## Got AGSE Questions?

If you have questions about aviation ground support equipment (AGSE), visit the PM AGSE help ticket website:

<https://agse.peoavn.army.mil>

You can also call the AGSE help desk at (256) 313-1824.

## ARMY REVISES CORROSION PUBLICATION

A major revision to AR 750-59, *Corrosion Prevention and Control for Army Materiel (Maintenance of Supplies and Equipment)*, went into effect in March 2014. The AR covers policies and responsibilities for corrosion prevention and control (CPC) for Army materiel, including required training to support CPC at the field and sustainment levels. Download the pub at:

[http://www.apd.army.mil/pdffiles/r750\\_59.pdf](http://www.apd.army.mil/pdffiles/r750_59.pdf)

## HMMWV Heated LED Headlight

Page 60 of PS 736 listed a new NSN for the heated LED headlight for PLS-, HEMTT-, and HET-series trucks. That same headlight, NSN 6220-01-616-1079, also works as a replacement for the HMMWV's old headlight, NSN 6220-01-547-9043, which is a terminal item.

## BATTERY ACID NSNS

Do you have dry 12V storage batteries in need of battery acid? Here are three NSNs for battery acid:

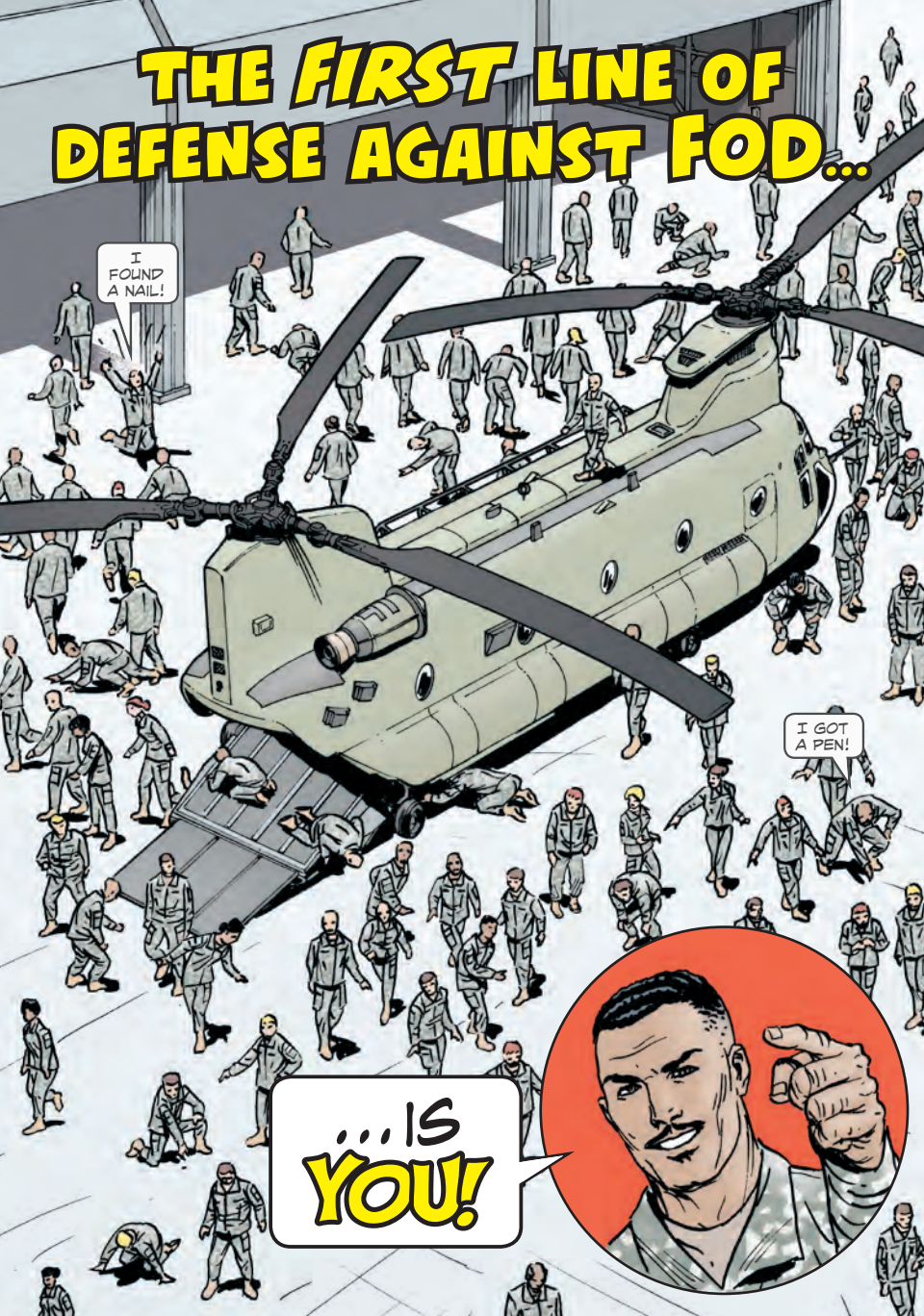
NSN 6810-	Qty in Gallons
00-249-9354	1
00-843-1640	5
00-893-8138	15

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

Would You Stake Your Life <sup>right now</sup> on the Condition of Your Equipment?



# THE FIRST LINE OF DEFENSE AGAINST FOD...



I  
FOUND  
A NAIL!

I GOT  
A PEN!

...IS  
**YOU!**

