

PS**THE
PREVENTIVE
MAINTENANCE
MONTHLY**

TB 43-PS-678, The Preventive Maintenance Monthly, is an official publication of the Department of the Army, providing information for all soldiers assigned to combat and combat support units and all soldiers with unit maintenance and supply duties. All information published has been reviewed and approved by the agency responsible for the equipment, publication or policy discussed. Application of the information is optional with the user. Masculine pronouns may refer to both genders.

ISSUE 678 MAY 2009**COMBAT VEHICLES**

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M113-Series FOV Powerpack Removal
M2/M3-Series Bradley LRU Repairs
M2/M3-Series Bradley Diagnostic Testing Prep
M109A6 Paladin Shock Absorber PM
M198 Towed Howitzer Gun Tube Protection
M88A1 Recovery Vehicle Pintle Lubing

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HMMWV Brake Warning Light
HMMWV West Coast Mirror
M872-Series Semitrailer Storage Boxes
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HEMTT Turn Stop Caution
M939/A1/A2-Series Truck Steering Shaft Lube
M989A1 HEMAT Trailer Tow Bar Lock
Wheeled Vehicle Tow Bar Info

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SARET Gaging Documentation
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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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Administrative Assistant to the Secretary of the Army

0904805

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

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

Issue 678

PS

May
2009

THE PREVENTIVE MAINTENANCE MONTHLY

TB 43-PS-678

Approved for
Public Release;
Distribution is
Unlimited

JOE
UBER

THIS JUST IN!
A BLACKHAWK HELICOPTER
HAD TO MAKE AN EMERGENCY
LANDING ON THE COMMANDING
GENERAL'S LAWN.
DETAILS AT ELEVEN.

MAN!

I HOPE
THAT
WASN'T
MY BIRD!

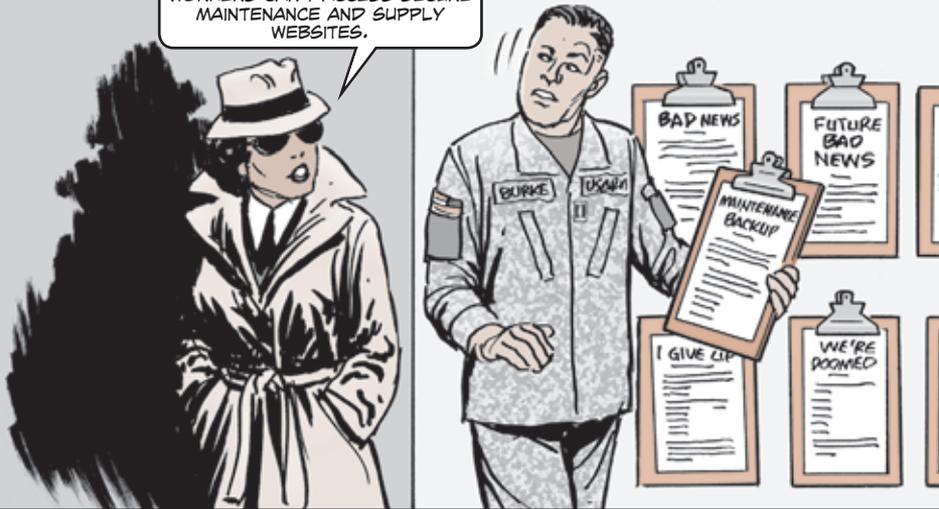


*Distracted
from your
PM lately?
See page 27!*

HELP SOLDIERS ACCESS NEEDED TOOLS

PS3357

...PART OF THE PROBLEM MAY BE THAT YOUR MAINTENANCE WORKERS CAN'T ACCESS SECURE MAINTENANCE AND SUPPLY WEBSITES.



Some military and civilian positions are obviously sensitive enough to require security investigations. Unfortunately, PS has heard that some leaders don't realize that maintenance and supply personnel are among those people who deal with sensitive information.

If information is power, the Internet has become the Army's data bank. Increasingly, information is being put behind secure portals. Some of the more sensitive information requires security investigations for the people who request access.

Maintenance and supply personnel are increasingly the intended users of the information behind these secure portals.

Whether it's registering ground equipment, tracking parts requests, matching end item and spare parts NSNs, matching LINs to NIINs, keeping visibility of your equipment or working with restricted technical manuals—the data is now on restricted access websites. And your maintenance and supply people need access.

MAKE SURE THEIR INVESTIGATIONS ARE CURRENT SO THEY CAN USE THESE RESTRICTED TOOLS.



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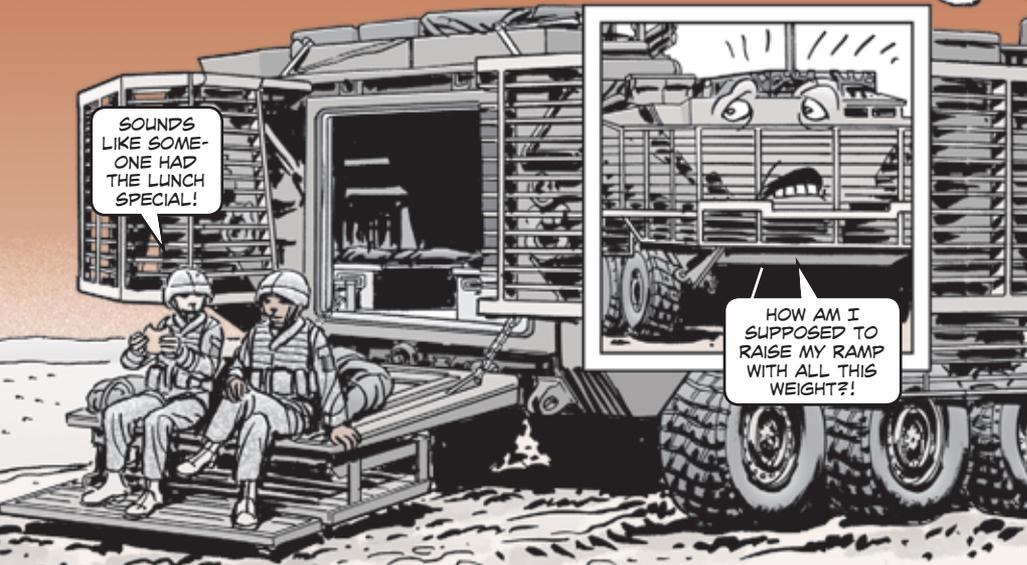
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Ramp PM

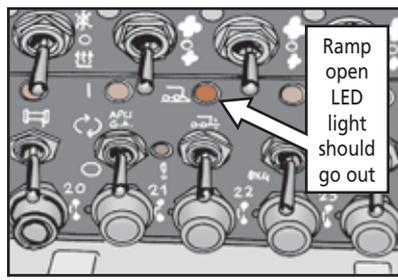
Always a PLUS

ARRRGH



Divers, if your Stryker is equipped with slat armor, ramp PM and safety become more important than ever. So follow these tips to keep your ramp—and everyone around it—functioning properly.

- Tap the horn twice and then wait a few seconds before raising or lowering the ramp. That gives others a warning and enough time to get out of the way.
- Before closing the ramp, make sure the vehicle has enough air pressure built up—above 90 psi. Otherwise, the ramp locks may not engage completely. Check to make sure the ramp open LED goes out.



If you're closing the ramp from the squad compartment, make sure the cam locks rotate all the way to the closed position.

A Stryker pointed downhill on a slope of more than 15° may need a push from inside the vehicle to open the ramp.

- You cannot lower the ramp fully if the tow pintle is installed. The ramp will hit and bend the pintle shaft. So remove and stow the pintle until it's needed.

When removing the tow pintle, make sure you install the pintle plug, NSN 5340-20-001-0203. That keeps dirt and moisture out of the vehicle. You'll also need an O-ring, NSN 5331-00-585-1068, and a lock pin, NSN 5315-01-328-5286, to install the plug.

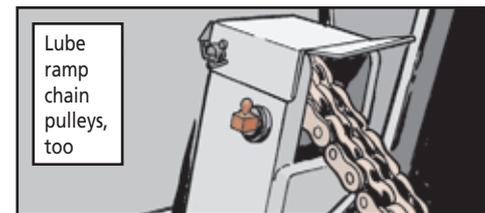
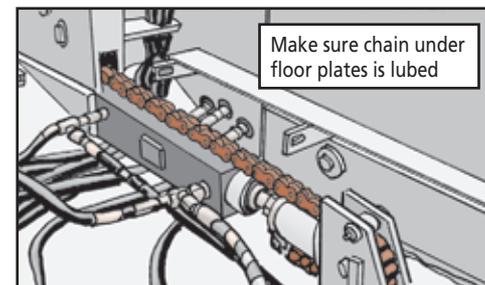
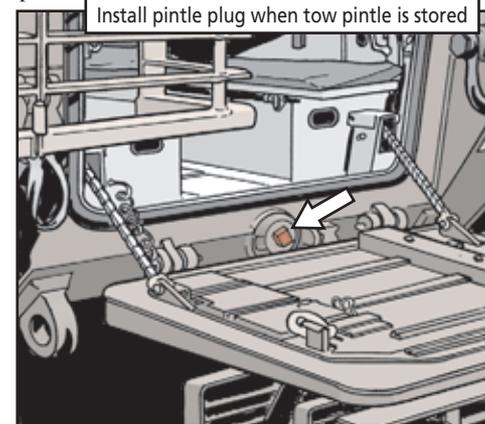
- Never exceed the load capacity for the ramp and ramp door. The ramp chains may stretch or break and you can ruin the hydraulics.

The ramp's load capacity is 1,000 pounds. The door's load capacity is 500 pounds.

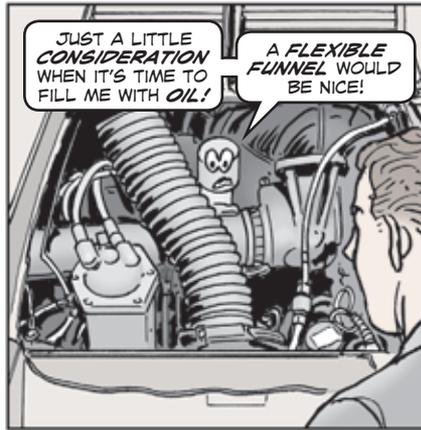
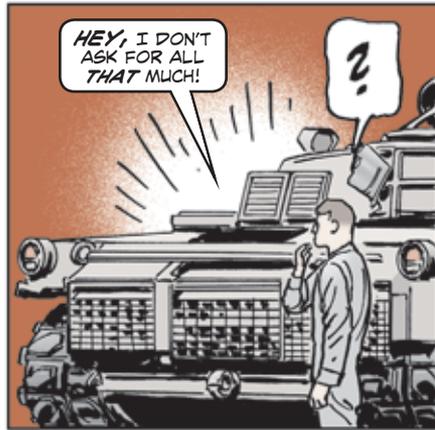
Always raise or lower the ramp completely. Don't lower the ramp partially to give soldiers a seat or to carry equipment, especially when slat armor is installed.

- Remove any water buildup under the floor plates, then have your mechanic give the ramp chains a light coat of GAA semiannually to prevent rust. Make sure he gets all of the chain, too. Sometimes only the portion of the chain that shows when the ramp is down gets lubed. With slat armor installed, there's about another three feet of chain that's hidden under the floor plates.

- Give the ramp chain pulleys a few shots of GAA, too. A well-greased ramp chain won't do much good if the pulleys seize up.



KEEP OIL WHERE IT BELONGS



The M1-series tank's transmission filler neck doesn't have a very big opening, mechanics.

How small is it? Well, let's just say it's too small to try pouring transmission fluid directly from the can.

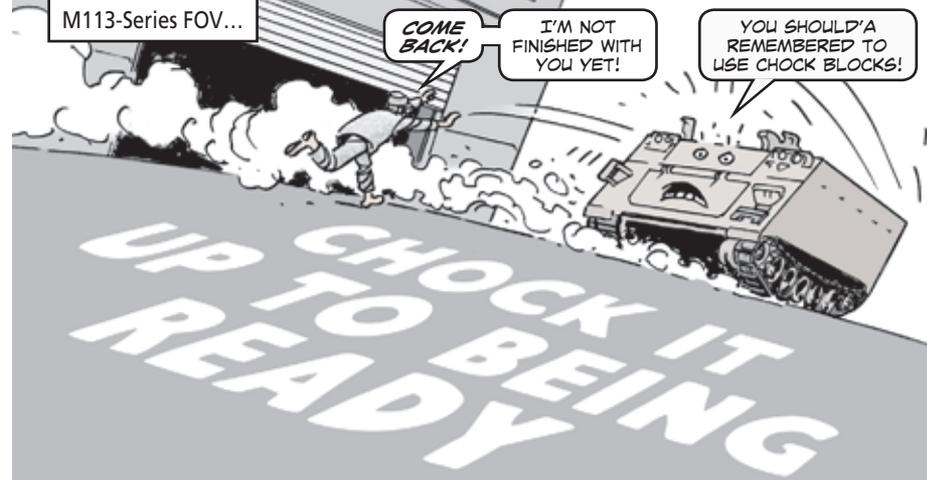
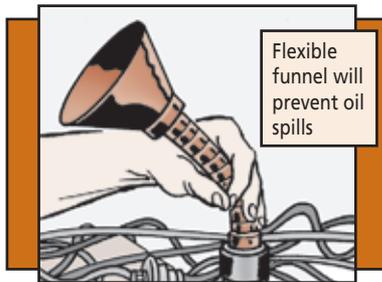
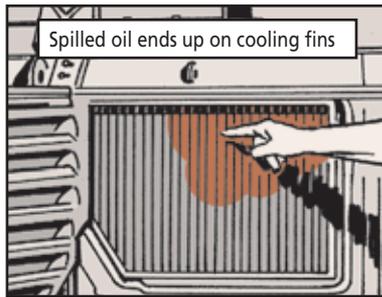
No matter how careful you are, some of that fluid is going to spill. When it does, the oil cooler fans are going to blow it all over the cooling fins on the oil coolers.

That oil residue attracts dirt and dust like a magnet. The gooey mess that forms on the cooling fins won't let the heat radiate away from the oil inside the coolers. That results in transmission damage.

So, never add oil without a funnel. If your tank's oil funnel tip is broken or too large for the transmission filler opening, get a new funnel.

A flexible funnel does the best job. NSN 7240-00-559-7364 brings a box of 12.

Each funnel holds one quart, so use it carefully. Don't pour more than a quart into the funnel at one time or it'll overflow. If that happens, make sure you wipe up any spilled oil right away.



UP TO BEING READY

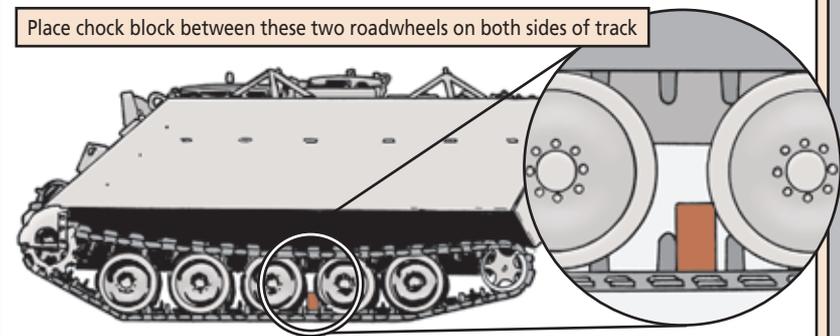
Mechanics, when you remove the powerpack on an M113-series vehicle, you'll feel mighty foolish if the carrier goes rolling off across the motorpool.

Once you disconnect the final drives, that vehicle is free to go where gravity takes it. And a free-rolling vehicle is bad news for everybody and every thing that stands in its way!

Head off serious injury to others and damage to the vehicle by always chocking both tracks. Here's how:

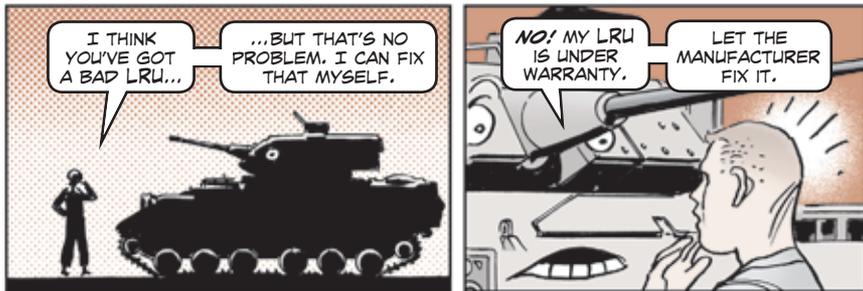
- Make sure the vehicle is on a hard, level surface to lessen the chance of rolling. That also lowers the risk of damage to the hull and powerpack when you lift it out.
- Slide a block of wood or other suitable object between the track guides and roadwheels. Make sure the chock block extends the full width between **both** roadwheels.

Place chock block between these two roadwheels on both sides of track



Just don't forget to remove the chock blocks once the powerpack is installed. Otherwise, your next repair job will be to the tracks!

LRU Seal Stays Sealed



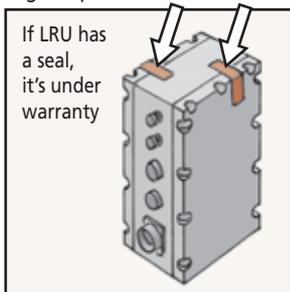
The good news is that eight Bradley line replaceable units (LRU) are being fielded that are covered by warranty at the wholesale level. That means if they quit working, you can turn them in through your normal supply channels and receive credit for a new LRU.

The bad news is that many Bradley units don't realize that. Currently, a large percent of the LRUs being turned in have broken seals and thus voided warranties. This results in higher prices for the LRUs, a higher number of back orders, and a longer repair turnaround.

Part of the problem is that the old LRUs could be repaired at unit level, so repairmen assume the new ones can be repaired there, too.

But it's easy to spot the new LRUs. They have tamper-resistant seals that say "CPU TECH" or "WARRANTED ITEM, WARRANTY IS VOID IF SEAL IS BROKEN. RECOVERABLE ITEM—NO REPAIR AUTHORIZED." Removing the LRU cover breaks the seal—and voids the warranty.

The LRUs covered by warranty should be turned in for repair through normal supply channels. The old LRUs can still be fixed by field maintenance.



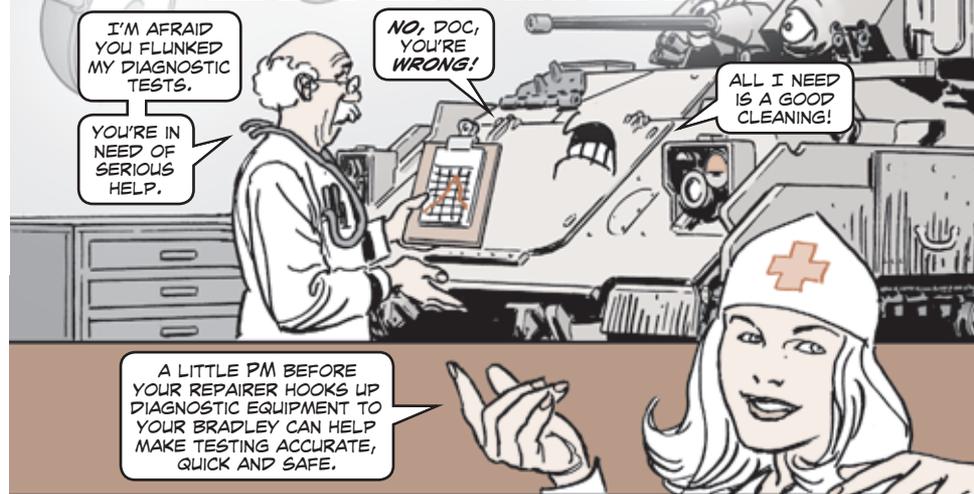
HERE'S A LIST OF THE NEW LRUs COVERED BY WARRANTY...

LRU	New P/N	NSN
Position indicator box (PIB)	12992057	1290-01-508-7223
Gun control unit (GCU)	13007291	1005-01-541-7231
System control box (SCB)	12992083	1005-01-541-9684
Commander's sight control panel (CSCP)	12992085	5895-01-541-8031
Gunner's sight control panel (GSCP)	12992093	5895-01-541-8030
Power control module 1 and 2 (PCM 1/2)	12992098	1010-01-541-9685
Power control module 3 (PCM 3)	12479532	1650-01-542-1185
Turret power box (TPB)	12992104	1010-01-541-9683

If you have questions about the LRUs, contact TACOM-RI's at DSN 793-8628, (309) 782-8628, or email:

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

Easily Pass the Test with PM



Thoroughly sweeping out the inside of the Bradley should be your first step. Be especially careful to clean underneath the gunner's seat where the main diagnostic connections are. Dirt can foul the connectors, which hurts the accuracy of the tests.

There's not much room underneath the gunner's seat to connect the diagnostic equipment, so remove anything that has been stored there, like TMs or field gear.

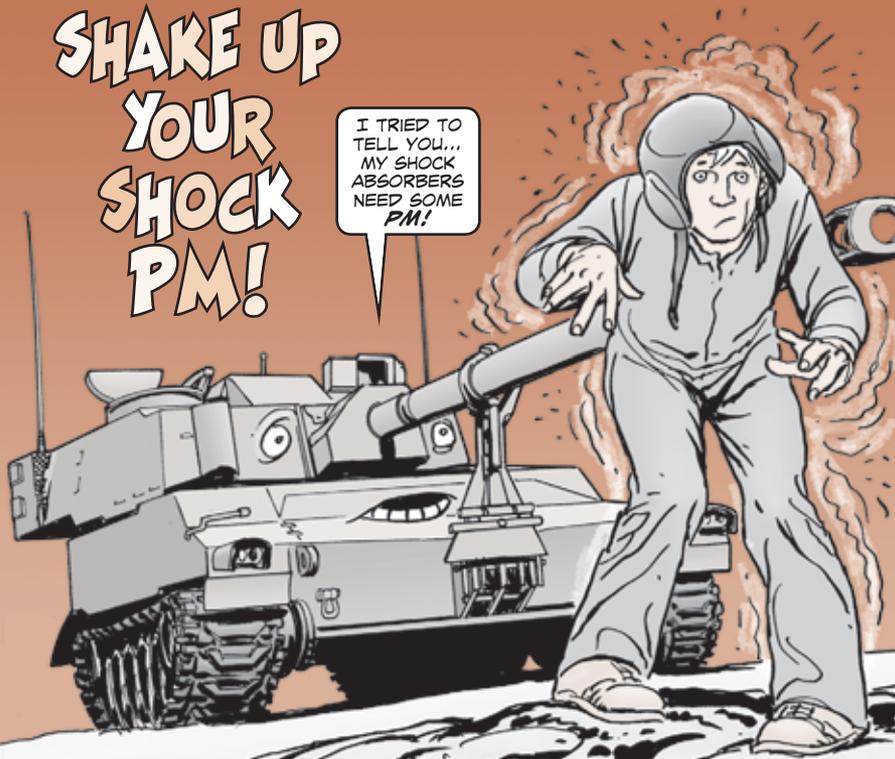
If you've put a screen over the periscope face, remove it before testing. The screen makes it difficult to hook up diagnostics. For the same reason, remove the M242's feed tray.

Sweep out Bradley and clean out any equipment around diagnostic connections



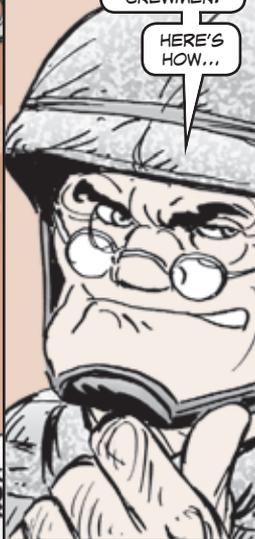
SHAKE UP YOUR SHOCK PM!

I TRIED TO TELL YOU... MY SHOCK ABSORBERS NEED SOME PM!

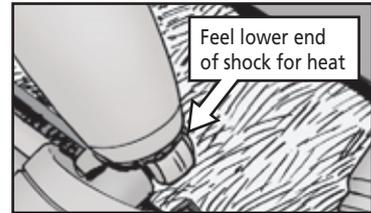


IT TAKES AN ALL-OVER, AFTER-OPERATIONS CHECK OF THE SHOCK ABSORBERS TO MAKE SURE YOUR PALADIN ISN'T ALL SHOOK UP, CREWMEN.

HERE'S HOW...

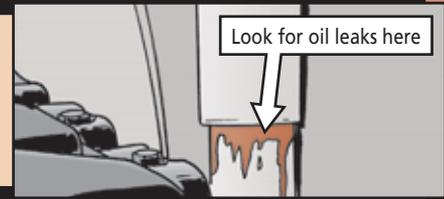


● Good shocks generate heat during operation. Cautiously feel the lower end of each shock absorber for heat. The shock should be warmer than the hull area around it, but not so hot that it could burn you. If the shock absorber is cool or too hot, report it.



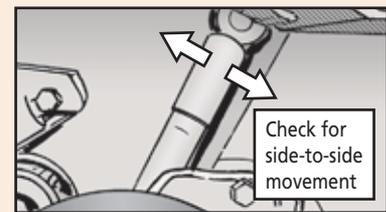
Feel lower end of shock for heat

● Take a close look at the joint line in the center of each shock absorber. If you spot any oil leakage, tell your mechanic.



Look for oil leaks here

● Check the shock absorbers for lateral movement. Some rotation on the bearing is OK, but your mechanic needs to know if there is any side-to-side lateral movement between the inner and outer bearing assembly.



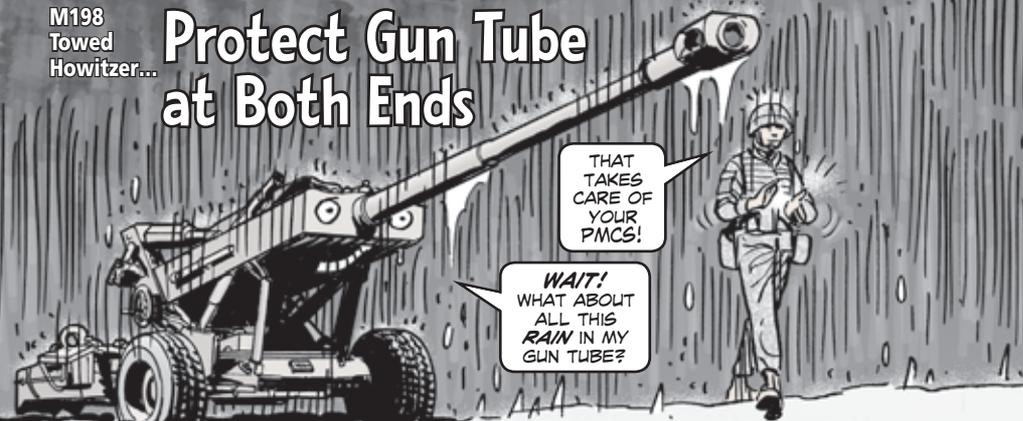
Check for side-to-side movement

● Eyeball the hydraulic bump stops for damage or leaks and to make sure they are properly mounted. Good bump stops keep the shock absorbers from moving beyond their limits.

Protect Gun Tube at Both Ends

THAT TAKES CARE OF YOUR PMCS!

WAIT! WHAT ABOUT ALL THIS RAIN IN MY GUN TUBE?



Operators, you're not done with PM on your M198 howitzer until you make sure the muzzle brake plug and breech cover are in place.

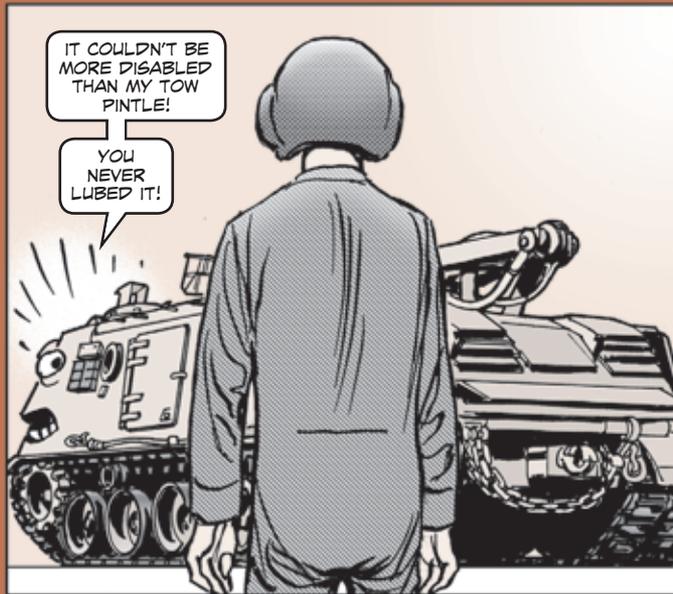
Without the muzzle brake plug, NSN 1025-00-566-3789, rainwater drains down the gun tube to the breech. That rusts both the gun tube and the breech.

The breech cover, NSN 1025-01-038-6060, protects the outside of the breech from water and rust. If either the plug or cover is damaged or missing, order a new one.

Don't forget to install breech cover for protection



Pintle Needs PM, Too



DRIVERS, THE TOW PINTLE ON YOUR M88A1 RECOVERY VEHICLE COMES IN REAL HANDY WHEN YOU NEED TO TOW A DISABLED VEHICLE.



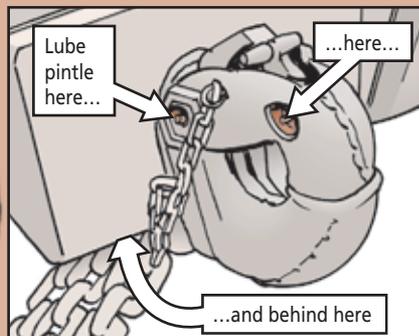
THAT'S WHY IT'S IMPORTANT TO KEEP THE TOW PINTLE LUBED REGULARLY.

IF YOU NEGLECT IT, THE PINTLE SEIZES UP AND WON'T OPEN WHEN YOU NEED IT.

SO LUBE THE PINTLE MONTHLY WITH GAA.

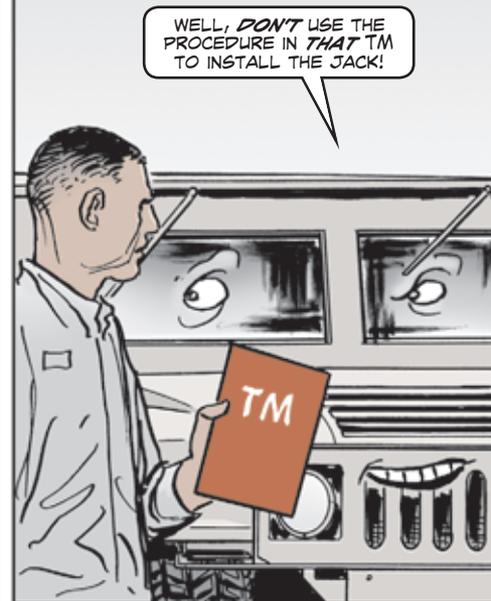
THERE ARE TWO LUBE POINTS THAT ARE EASY TO SPOT AND ONE THAT IS HIDDEN BEHIND THE PINTLE.

SO MAKE SURE YOU HIT ALL THREE WITH THE GREASE GUN.



HMMWV...

TRANSFER THE TRANSMISSION JACK

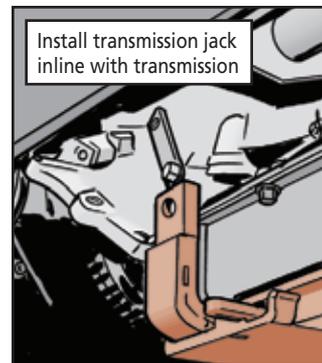


Word from the field is that the Gray model MM-2000 transmission jack, NSN 4910-00-585-3622, can't be installed correctly from the side of the vehicle shown in the drawing in Task 7-6 on Page 7-11 of TM 9-2320-280-34 (Jan 96, w/Ch 2, Jul 04). So TACOM LCMC plans to make this clear in a future update to this TM and TM 9-2320-387-24-2.

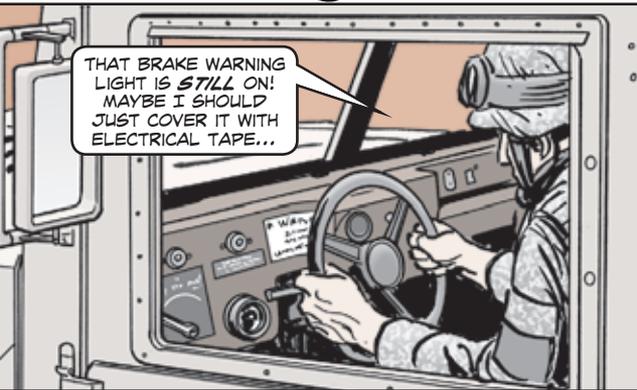
The transmission jack should only be installed inline with the transmission, **not** at a 90° angle to the transmission. The open front of the jack should face the front of the vehicle. This allows a support to be placed near the rear of the engine. It also allows you to properly install the transmission on the jack.

This same information is found in TACOM MAM 08-035. Use this link to eyeball it online:

https://aeps2.ria.army.mil/commodity/Mam/Tacom_WN/08/mam08-035.html



Brake Warning Light On?



Something is wrong when the brake warning light stays on (no kidding!). But before you replace any parts, make sure you bleed the vehicle's brake lines.

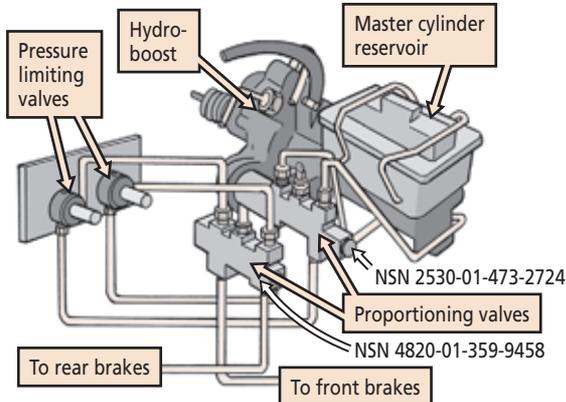
Air trapped in the lines can cause the light. Your time and new parts can be wasted if you don't bleed the brakes first.

If the light stays on after bleeding, use the troubleshooting info starting on Page 2-342 of TM 9-2320-280-20-1 and Page 2-328 of TM 9-2320-387-24-1. If the proportioning valve is the culprit, replace it. Use NSN 4820-01-186-0822 to get the valve for basic HMMWVs.

For A1 and A2 HMMWVs, use proportioning valve, NSN 4820-01-359-9458. The ECV-series HMMWVs come with two proportioning valves. For the valve closest to the master cylinder, use NSN 2530-01-473-2724. For the other valve use NSN 4820-01-359-9458.

Do not try to save a "bad" valve by taking it apart and adjusting it. Any tampering ruins the calibration set at the factory.

When you replace the proportioning valve, add a light coat of lube, NSN 9150-00-273-2389, to the valve's electrical connector pins. A little lube heads off corrosion.

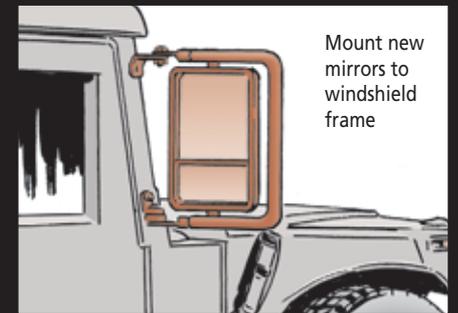


West Coast Mirror



The mirror in this kit is larger than the older-style side view mirror, and also has a convex, wide-angle view area that improves the driver's field of view.

Use riveter, NSN 5180-01-201-4978, from the vehicle's special tools, to install the blind rivnuts that come with the kit. They provide the threaded holes for the bolts that hold the mirrors on the truck.



PLANS FOR STORAGE BOXES

Need new storage boxes or compartments for your M872-series semitrailer? Well, you've probably noticed that the vehicle's parts manual is no help, so listen up.

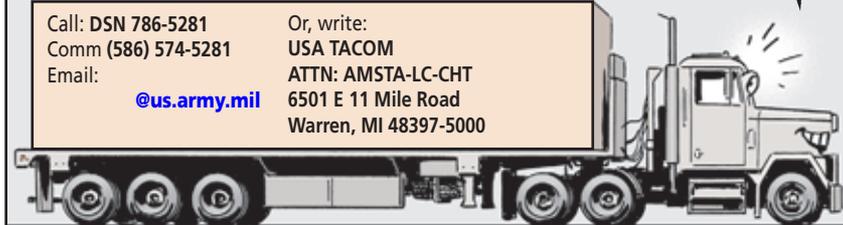
The boxes are not available through the supply system. They must be fabricated at your support shop.

TO GET PLANS FOR THE BOXES AND COMPARTMENTS, CONTACT AT TACOM'S TRAILERS & TACTICAL FLEET ASSESSMENT GROUP.

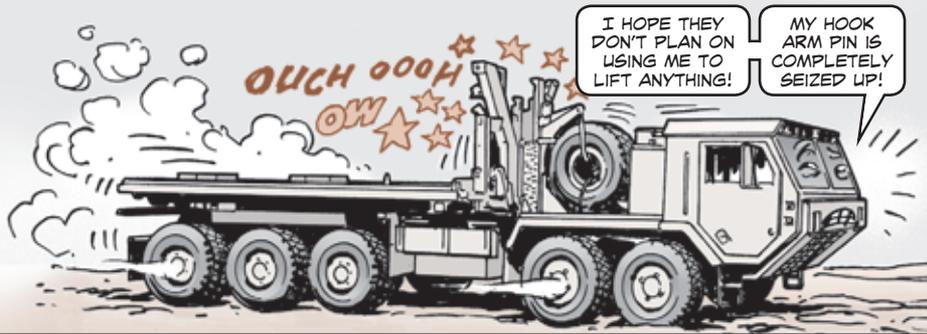
Call: DSN 786-5281
Comm (586) 574-5281
Email:

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

Or, write:
USA TACOM
ATTN: AMSTA-LC-CHT
6501 E 11 Mile Road
Warren, MI 48397-5000

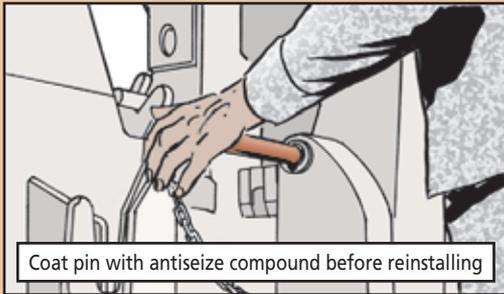


STUCK PIN WON'T PIVOT



Drivers, the load handling system (LHS) hook arm on your PLS or HEMTT won't be grabbing many loads if you don't keep its pin, NSN 5315-01-361-2721, lubed. Some of those pins are going unlubed so long that they have to be removed with a sledgehammer!

Just lube the pin according to App G in TM 9-2320-364-10 (Nov 05) and Page 3-2 of TM 9-2320-304-14&P (Aug 00 w/Ch 1, Sep 01). That means removing the pin, cleaning it, and giving it a coat of antiseize compound every 1,500 miles or semiannually, whichever comes first.



Coat pin with antiseize compound before reinstalling

ANTISEIZE COMPOUND COMES IN VARIOUS SIZED CONTAINERS, SO ORDER WHAT YOU NEED FROM THIS LIST...

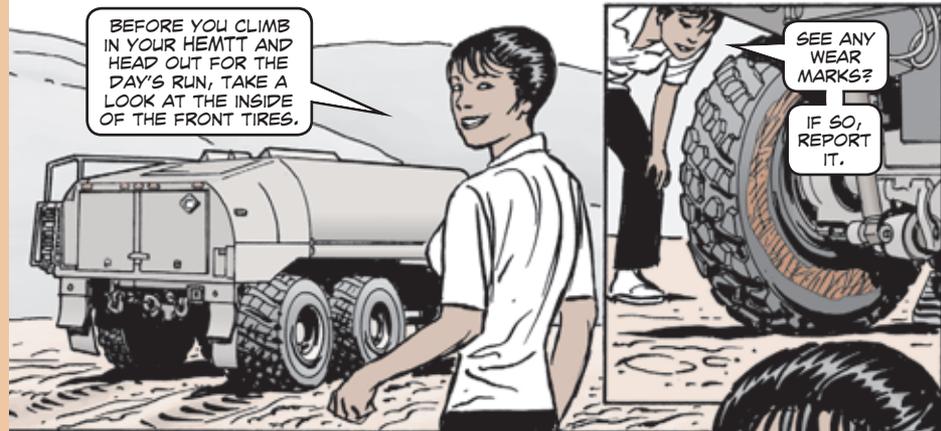


Container Size	NSN 8030-
1/4-lb	00-059-2761
1/2-lb	01-087-8254
1-lb	00-251-3980
2 1/2-lb	00-597-5367
5-lb	00-286-5453

Before reinstalling the pin, eyeball the flat washer, NSN 5310-01-216-2799, and safety pin, NSN 5315-01-355-3744, that hold it in place. Replace them if they're missing or damaged.

Then, make sure you use a bore brush to clean out the bore where the pin goes. If you don't, all that old antiseize compound, along with any dirt and sand that has collected, will still be there. That newly lubricated pin won't last very long.

Put a STOP to Rubbing Tires



FRONT TIRES THAT RUB AGAINST THE FRAME OR EQUALIZER BEAM DURING TURNS CAN EVENTUALLY WEAR ENOUGH TO CAUSE A BLOWOUT.

IT'S TIME FOR A WHEEL ADJUSTMENT. HAVE YOUR MECHANIC ADJUST THE TURN STOP BOLTS TO KEEP THE TIRES FROM HITTING ANYTHING DURING TURNS.



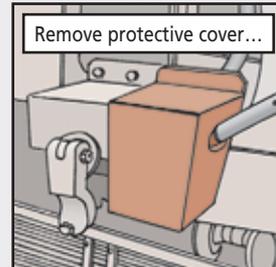
M939/A1/A2-Series Trucks...

Steering Gear Shaft Lube

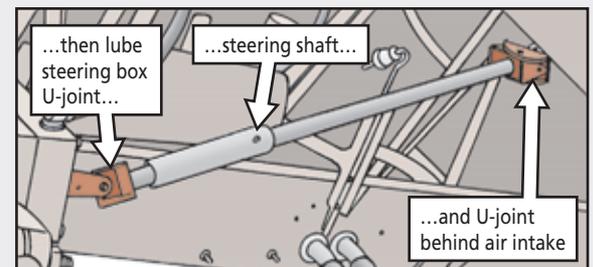
Hard or erratic steering usually means the grease fittings on the 5-ton's steering gear shaft need lube.

These fittings are overlooked. Especially overlooked is the one at the U-joint under the steering pump's protective box.

So make sure each fitting gets four or five shots of grease during scheduled service.



Remove protective cover...



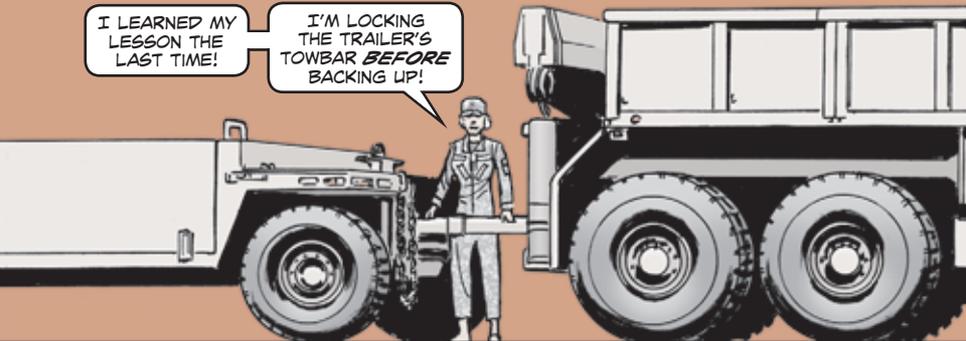
...then lube steering box U-joint...

...steering shaft...

...and U-joint behind air intake

I LEARNED MY LESSON THE LAST TIME!

I'M LOCKING THE TRAILER'S TOWBAR **BEFORE** BACKING UP!



LOCK UP BEFORE YOU BACK UP



DRIVERS, DO YOU REMEMBER TO LOCK YOUR HEMAT TRAILER'S TOWBAR IN PLACE BEFORE YOU BACK UP?

IF NOT, YOU COULD CREATE A PROBLEM FOR YOUR UNIT THAT CAN EASILY BE AVOIDED.

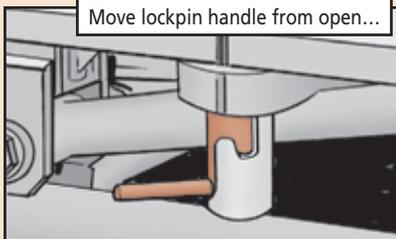
Not locking the tow bar in place can lead to damage to the trailer and the back of the truck when the trailer jackknives. Your unit will end up replacing broken tow bar lock pins more often than necessary, too.

So **before** backing the trailer, get out of your truck and lock the trailer's towbar in place. Straighten the tow bar to get rid of the tension. Then remove the hitch pin, raise the lockpin handle, rotate it counterclockwise to the short slot, and replace the hitch pin. After that, get a couple of ground guides to help you back up.

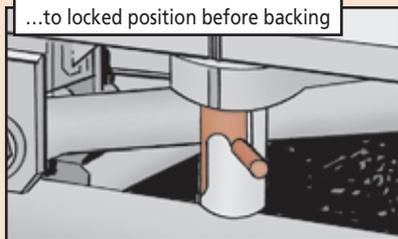
If the hitch pin and chain are missing, replace them with NSN 4010-01-353-9428. You can also order the parts individually. The pin comes with NSN 5315-01-098-6455 and the chain with NSN 4010-01-353-9368.

When you're finished backing, unlock the towbar so you don't forget when it's time to move out again.

Move lockpin handle from open...



...to locked position before backing



Tow Bar Help Needed

Dear Half-Mast,

I found the article on M113A3 tow bar parts in PS 637 (Dec 05) to be a lot of help. Do you have any similar info on the wheeled vehicle tow bar, NSN 4910-00-433-7094?

We have a big problem with missing pins and haven't been able to locate the parts or numbers. Anything you can provide would be greatly appreciated!

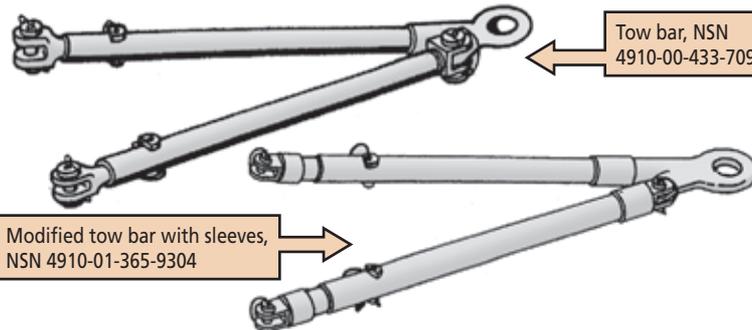
CW2 A.H.E.

Dear Mr. A.H.E.,

This one's a little complicated, but I think we can help you out, Sir.

First, if you're still using tow bar, NSN 4910-00-433-7094, stop! TACOM Safety-of-Use Message 05-001 deadlined these tow bars because of a potentially dangerous design deficiency.

The SOUM tells you to inspect the tow bar to see if it has been modified. Modified tow bars will have a sleeve welded to the fixed leg, the moveable leg, and to each of the two male insert legs. Once modified, the tow bar's NSN changes to 4910-01-365-9304.



You'll find SOUM 05-001 at the AEPS website:

https://aeps2.ria.army.mil/commodity/soum/tacom_wn/05/soum05-001.html

If your tow bar doesn't have the sleeves, it'll need to be modified following the instructions in MWO 9-4910-593-20-1. Use your AKO login and password to access it at the LOGSA ETM website:

<https://www.logsa.army.mil/etmpdf/files/070000/072000/073192.pdf>

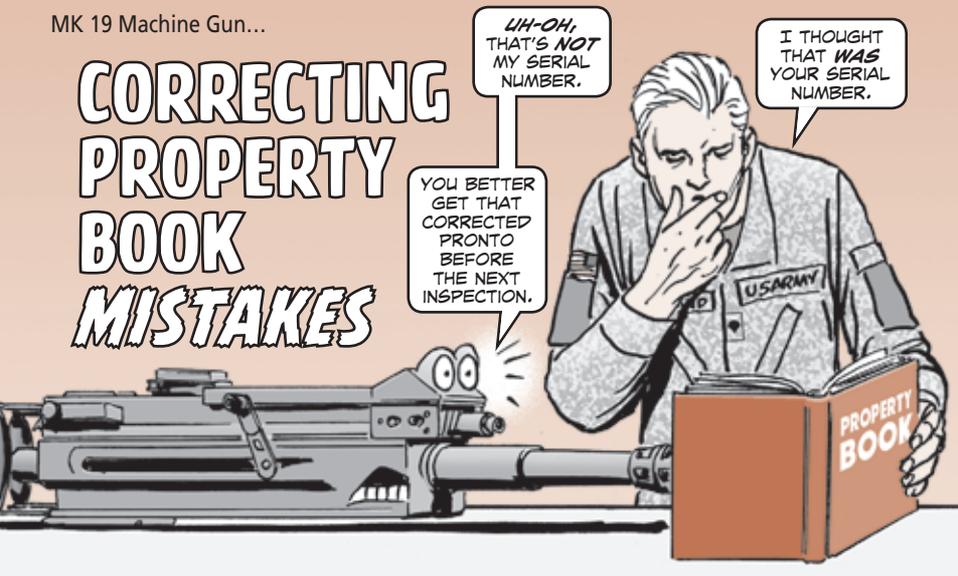
The modified tow bar, NSN 4910-01-365-9304, is covered by TM 9-4910-593-12&P:

<https://www.logsa.army.mil/etmpdf/files/050000/050000/052965.pdf>

You'll need your AKO login and password to access the TM. The repair parts for the tow bar are in Appendix C of the TM.

Half-Mast

CORRECTING PROPERTY BOOK MISTAKES

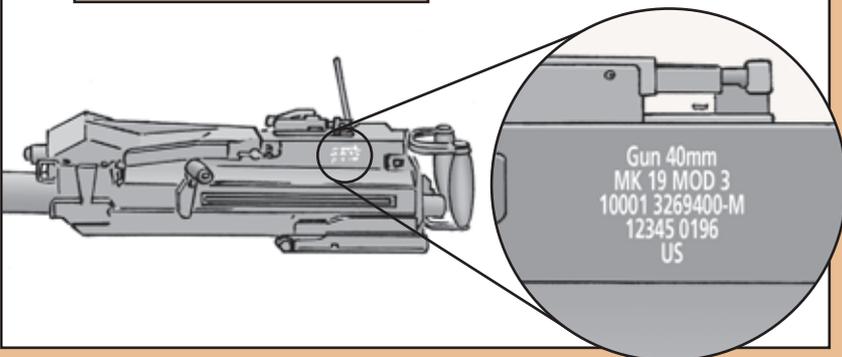


Almost half of the MK 19 machine gun serial numbers being recorded in property books or unique item tracking (UIT) are wrong. These property book mistakes will come back and bite armorers when it's time for inventory or turn-in.

The usual mistake is adding the date stamp or extra zeroes to the serial number.

Here's an example of how to correctly read the ID stamp on the left side of the receiver.

Serial number is on left side of receiver

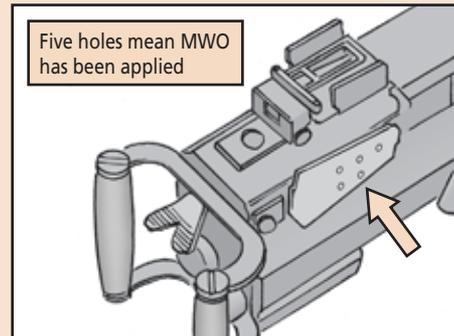


- Line 1: Gun 40mm
 - Line 2: MK 19 MOD 3
 - Line 3: 10001 (CAGE code) and 3269400-M (part number)
 - Line 4: 12345 (four or five digit serial number) and 0196 (month and year of manufacture)
 - Line 5: US
- The serial number is 12345, not 123450196.

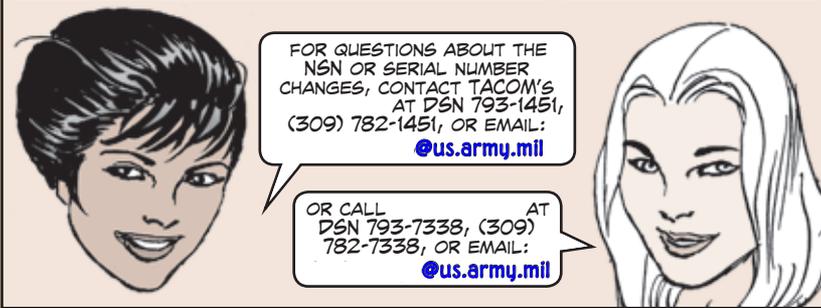
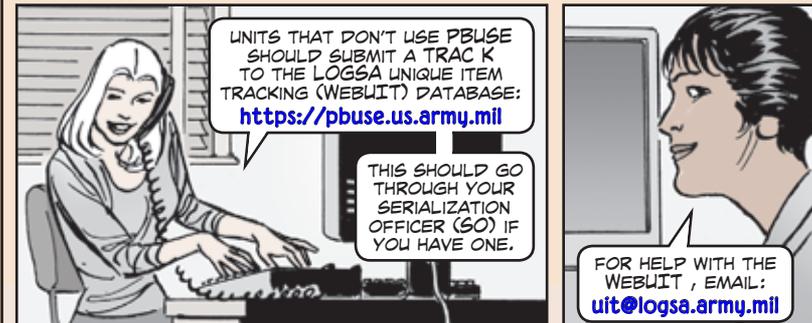
NSN Changes with MWO

Another common property book mistake is not changing the MK 19's NSN after MWO 9-1010-230-50-1 has been applied. The NSN should be changed from 1010-01-126-9063 to 1010-01-490-9697. LIN M92362 stays the same, but "-M" must be added to the part number.

How do you tell if the MWO has been applied? The MK 19 will have five holes drilled on the right side of the receiver, a new sight mounting bracket, new firing pin, new firing pin sear, a two-piece cocking lever, and adjustable secondary drive assembly. If your MK 19s haven't been modified, notify your MWO officer. The MWO should have been completed by June 07.



To report a serial number or NSN change to the LOGSA small arms registry, units using PBUSE need to do an asset adjustment report (AAR) for serial numbers or an asset description update (ADU) for NSNs.



Document SARET Gaging Help



SARET is ready to help any unit returning from SWA with their small arms. Normally, SARET plans for a brigade-sized mission (5,000 to 6,000 weapons), but they will assist units with as few as 1,500 weapons.



- Inventory your weapons. SARET needs an accurate count of each weapon you have. That lets them estimate how many repair parts and people and how much time they'll need for the mission.
- Contact SARET. To schedule a visit, contact the POCs listed below or fill out the online request form on AEPS:

<https://aeaps2.ria.army.mil/commodity/saret/request.cfm>

Use your AKO name and password or common access card (CAC) to access the form. Provide SARET your unit name; a POC with name, phone number and email; and a desired time frame for your visit. Units should receive a briefing on their SARET options 150 days before they return from SWA.

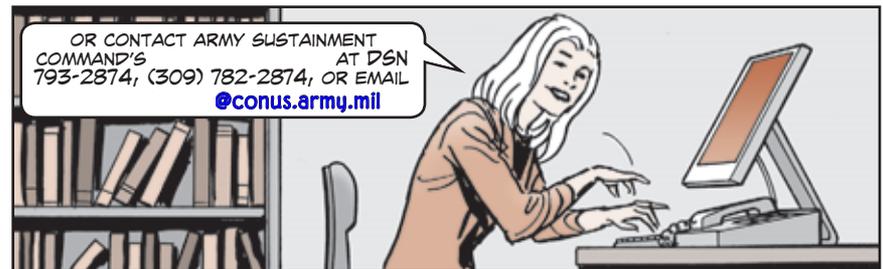
- SARET may also contact you with further instructions and requirements.

The best time to have a SARET visit is shortly after you return from SWA. Set a date by contacting them 60 to 90 days before you return home.

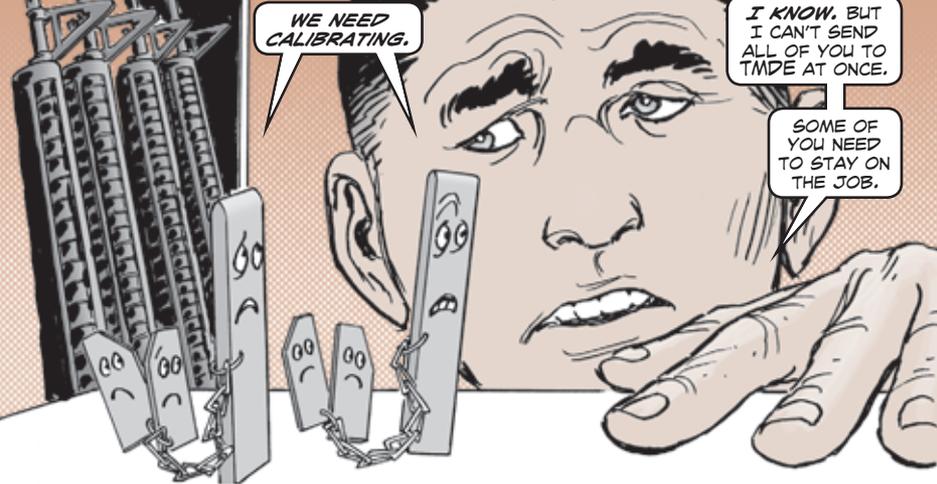


SARET's job is to inspect and repair your weapons and get them back in fighting shape after your unit returns from SWA.

But if SARET's help also takes care of your required annual inspection and gaging for your small arms, you need to document that work. That way you can prove during other inspections the gaging was done. Use the SARET copy of DA Form 2404 or 5998-E to support a job order into the unit electronic record system. Keep a copy in your own files until the next required annual gaging or pre-embarkation gaging/inspection.



STAGGER GAGE CALIBRATION



Dear Half-Mast,

We saw on Page 20 in PS 672 (Nov 08) that the M2, M3P, and M296 headspace and timing gages should be calibrated every 360 days according to TB 43-180.

Many units probably have never had the gages calibrated. If they send all their gages in at the same time, their machine guns will be considered NMC until the gages come back from TMDE. How should armorers handle this difficult problem?

CWS J.P.

Dear Chief J.P.,

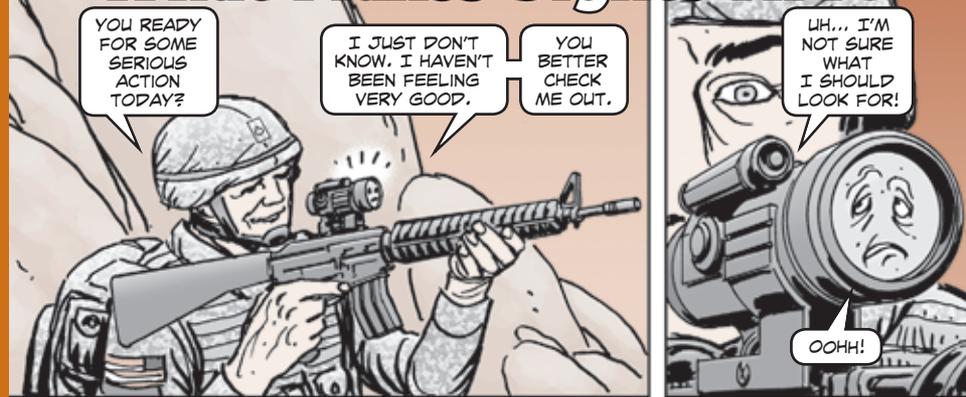
There is no perfect solution to this problem. The best course of action is to send a few gages in at a time for calibration, holding some back at the unit until TMDE returns the other gages. Then send more gages in, again holding some back. Do this until all the gages have been calibrated. By staggering the calibration, you will always have some gages on hand.

Of course, gages disappear over time in the field and you will need replacements. If your commander approves, order extra timing and headspacing gages with these NSNs:

- M2 and M296, NSN 5220-00-535-1217
- M3P, NSN 5280-13-116-6359

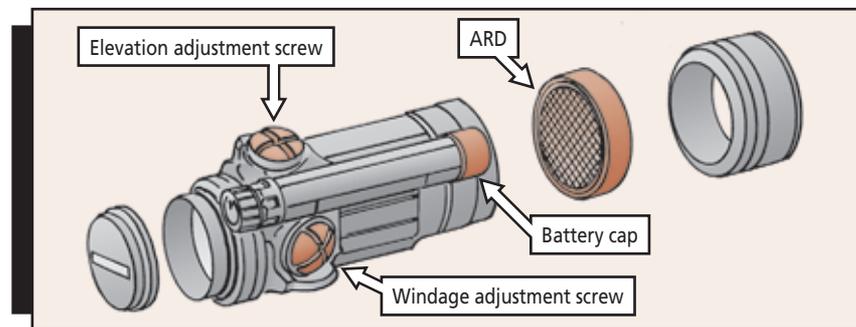
Half-Mast

What Makes Sights NMC



It's important to know whether your small arms sights—the M68, the M145, and ACOG/M150—are up to the job. If the sights are seeing poorly, you have a poor chance of hitting the enemy. Here's how to tell if your sight is **not** ready for action:

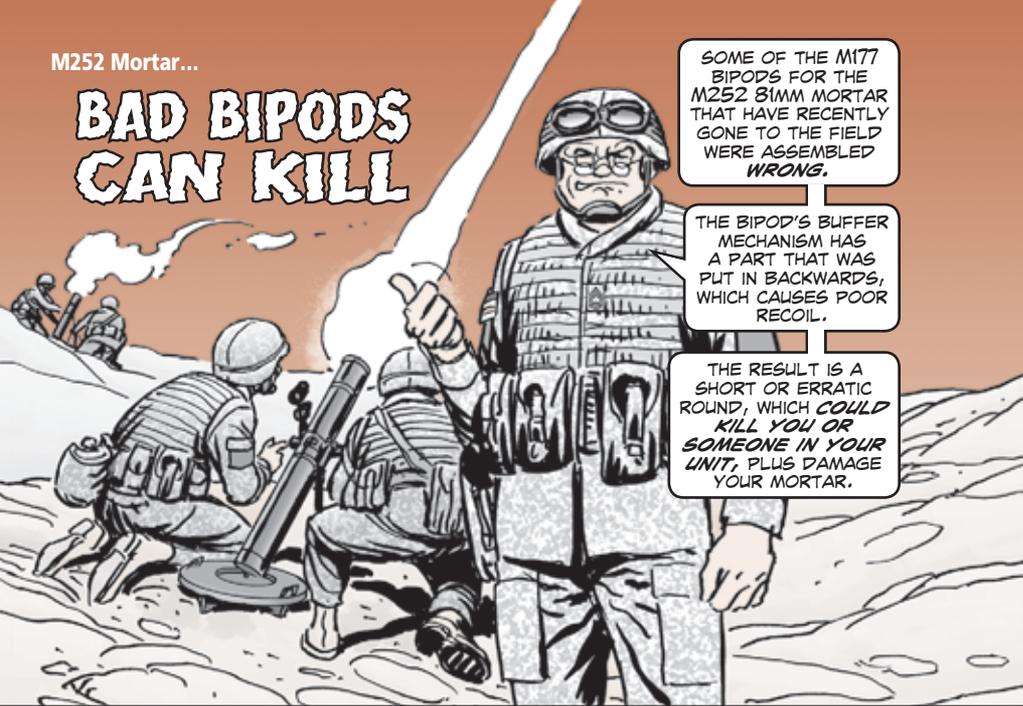
- unable to mount an anti-reflective device (ARD) on it
- lens is heavily scratched or the view is otherwise obstructed
- loose or broken lenses
- moisture inside the sight
- unable to install battery cap cover
- internal red dot or chevron won't illuminate
- windage or elevation knob adjustments don't hold or knobs don't make a distinct click when you turn them



If your sight flunks even one of these checks, tell your repairman.

When you clean your sights, use only acetone-free glass cleaner, NSN 6850-00-392-9751, and lens paper, NSN 6640-00-240-5851. Other cleaners can ruin the protective coating on the lenses.

BAD BIPODS CAN KILL



SOME OF THE M177 BIPODS FOR THE M252 81MM MORTAR THAT HAVE RECENTLY GONE TO THE FIELD WERE ASSEMBLED **WRONG.**

THE BIPOD'S BUFFER MECHANISM HAS A PART THAT WAS PUT IN BACKWARDS, WHICH CAUSES POOR RECOIL.

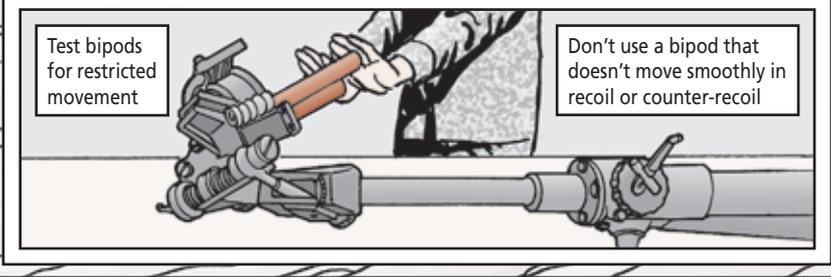
THE RESULT IS A SHORT OR ERRATIC ROUND, WHICH **COULD KILL YOU OR SOMEONE IN YOUR UNIT, PLUS DAMAGE YOUR MORTAR.**

Operators should immediately check out all bipods that were received from 1 Aug 07 to present. Use the BEFORE/DURING PMCS inspections that begin on Page 2-14 in TM 9-1015-249-10. Make sure the buffers can move fully in both recoil and counter-recoil. If recoil is restricted in any way or shows signs of free play or slackness, **don't use the bipod.** It should be sent to support for repair.

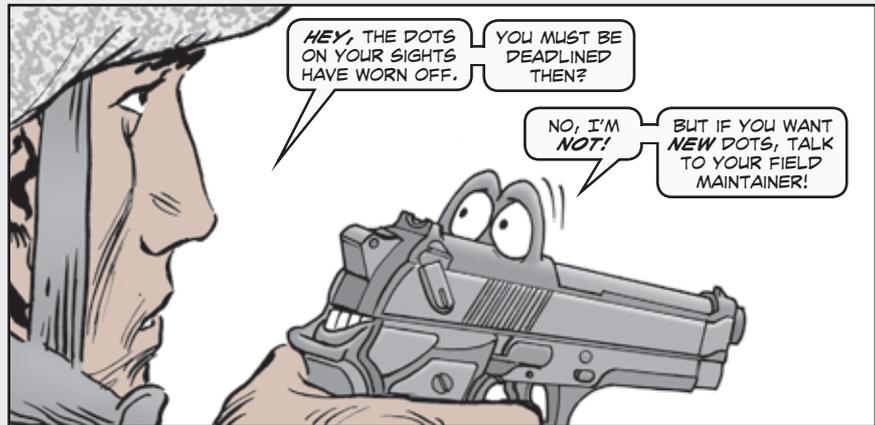
Also make these changes to your -10 TM:
Page 2-14, paragraph c—Add to the end of paragraph c: "Buffers must allow for full movement in both recoil and counter-recoil travel without any free play/slackness." In the paragraph c EQUIPMENT NOT READY//AVAILABLE IF remarks, add the following after "inoperative": "in either recoil travel, or has free play/slackness."

Page 3-9, paragraph 4— Add the following at the end of the first sentence: "Check that buffers recoil and counter recoil without any free play or slackness."

For more information, see TACOM safety of use message 09-005:
https://aeps2.ria.army.mil/commodity/soum/tacom_wn/soum09-005.html



Dot Disappeared? Don't Despair



HEY, THE DOTS ON YOUR SIGHTS HAVE WORN OFF.

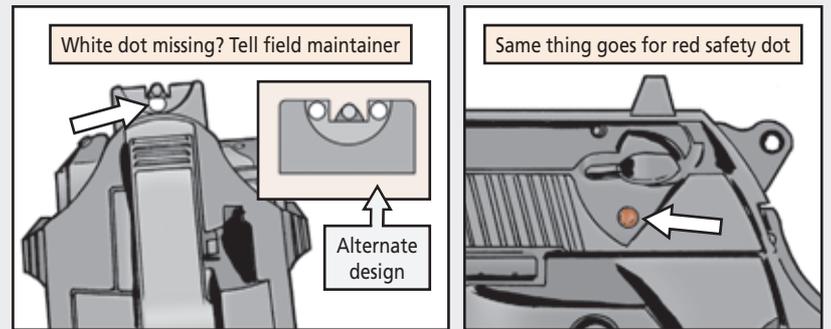
YOU MUST BE DEADLINED THEN?

NO, I'M NOT!

BUT IF YOU WANT NEW DOTS, TALK TO YOUR FIELD MAINTAINER!

The M9 pistol comes from the manufacturer with a white dot on both the front and rear sights that helps the shooter sight on a target. The pistol also has a red dot on either side of the slide assembly that shows when the safety is disengaged. But the dots wear off over time.

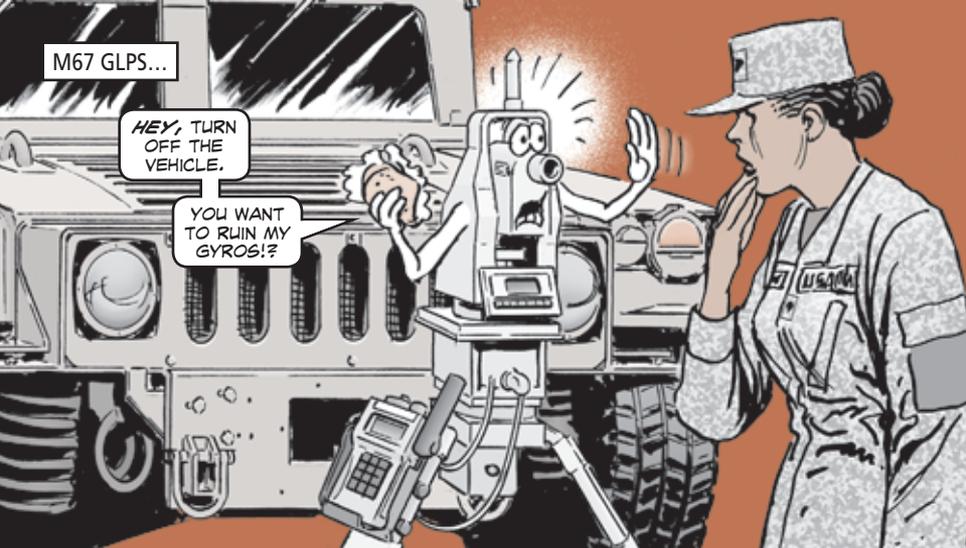
No dots doesn't mean your M9 is deadlined. It's OK to keep firing your M9 without dots. But if you think the dots help your shooting or safety, ask your field maintainer to put them back on. He should thoroughly clean both sights and then use any high quality white metal enamel paint to put dots back on the sights. Allow the paint to completely dry. Same thing goes for the red safety dots, except of course use red paint.



M67 GLPS...

HEY, TURN OFF THE VEHICLE.

YOU WANT TO RUIN MY GYROS!?



TURN OFF VEHICLE FIRST!

POWERING UP THE M67 GUN LAYING AND POSITIONING SYSTEM (GLPS) CAN CAUSE COSTLY DAMAGE IF YOU DO IT WRONG.

The GLPS can be powered up through its own battery power or by using its power adapter and connecting it to the vehicle power supply through the NATO plug.

However, many GLPS batteries have reached the end of their life and no longer charge properly. (If you charge a battery like it says in Section II of TM 9-6675-347-13&P and the battery shows a charge of less than 80 percent, the battery needs to go to maintenance.) So the only power choice then is vehicle power. And that's where the damage can occur.

The GLPS gyros are very sensitive to voltage spikes from the vehicle. The way to prevent these spikes is to first shut off the vehicle before you power up the GLPS. **And leave the vehicle off while the GLPS is on.**

WATCH PS FOR INFO ON ORDERING NEW GLPS BATTERY PACKS.



PS 678

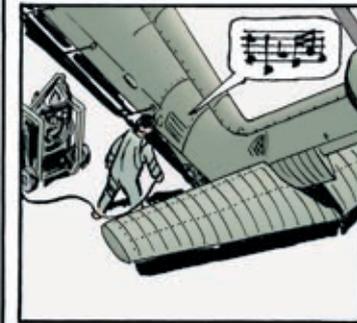
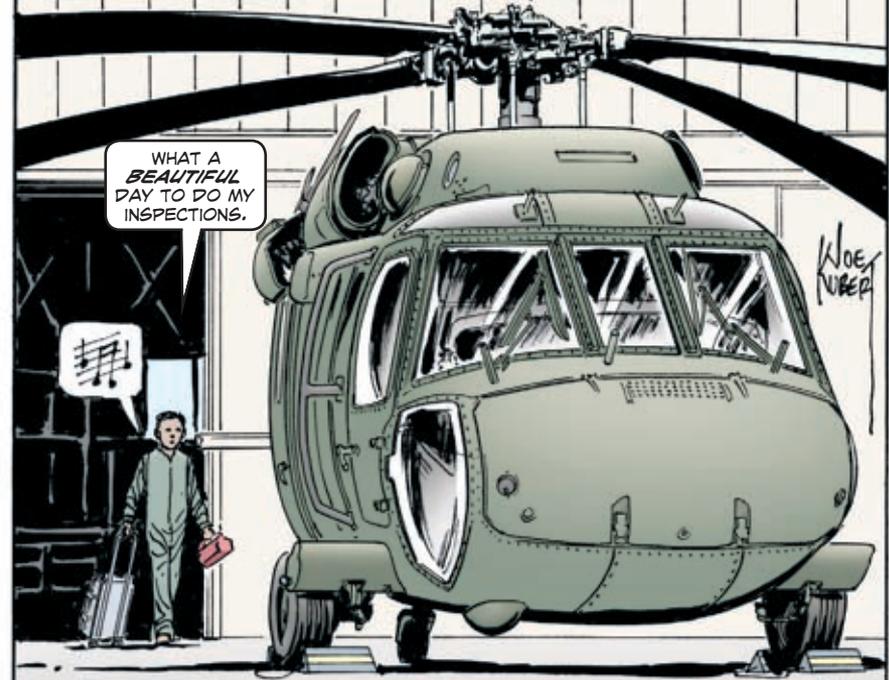
26

MAY 09

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

INTERRUPTIONS CAUSE DISTRACTIONS

WHAT A BEAUTIFUL DAY TO DO MY INSPECTIONS.



GOOD! THE TIRES CHECK OUT. SO NO PROBLEM HERE.

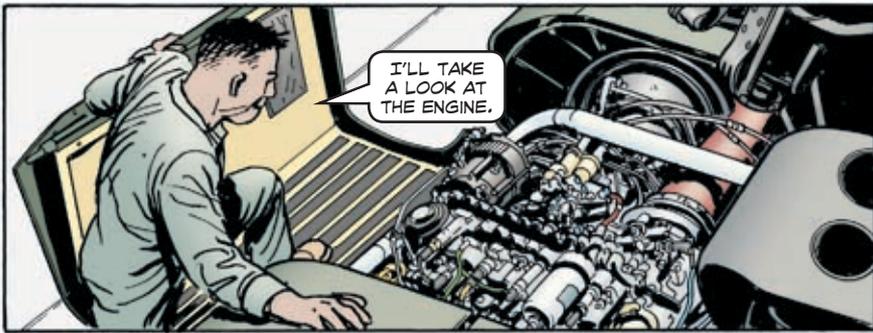
I'LL JUST CHECK THE REST OF THIS BIRD.

PS 678

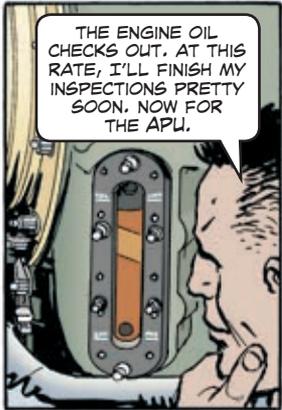
27

MAY 09

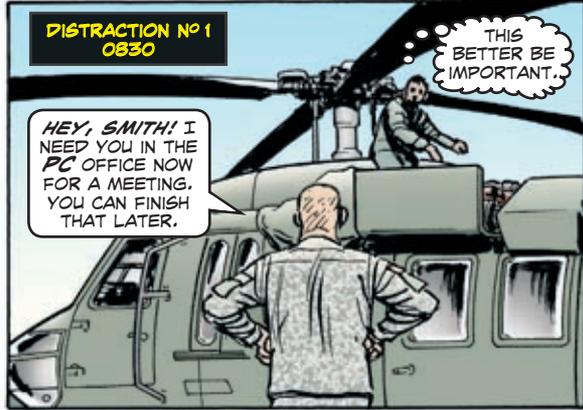
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I'LL TAKE A LOOK AT THE ENGINE.



THE ENGINE OIL CHECKS OUT. AT THIS RATE, I'LL FINISH MY INSPECTIONS PRETTY SOON. NOW FOR THE APU.



DISTRACTION № 1
0830

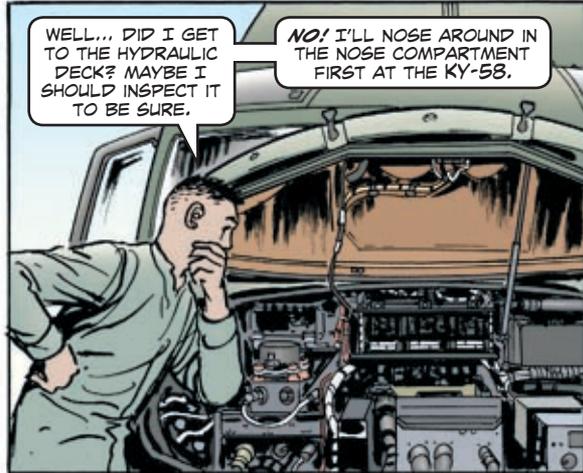
HEY, SMITH! I NEED YOU IN THE PC OFFICE NOW FOR A MEETING. YOU CAN FINISH THAT LATER.

THIS BETTER BE IMPORTANT.



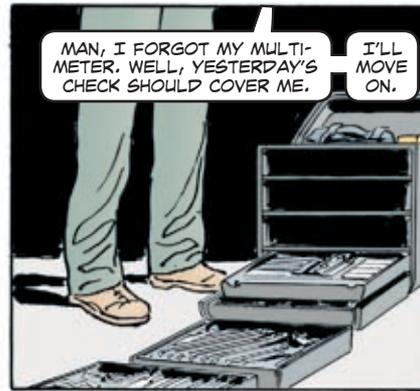
LATER...

HMMPH! COMMANDER'S CALL. IT'S 0915 ALREADY. LET ME SEE... WHERE WAS I...?



WELL... DID I GET TO THE HYDRAULIC DECK? MAYBE I SHOULD INSPECT IT TO BE SURE.

NO! I'LL NOSE AROUND IN THE NOSE COMPARTMENT FIRST AT THE KY-58.



MAN, I FORGOT MY MULTI-METER. WELL, YESTERDAY'S CHECK SHOULD COVER ME.

I'LL MOVE ON.



DISTRACTION № 2 - 0930

SMITH! NEED YOU TO GO HELP UNLOAD A TRUCKLOAD OF SUPPLIES.

BE RIGHT THERE, SERGEANT.



1000 HOURS...

OK... MY DAY ISN'T GOING SO WELL.

OH! LET ME CHECK FOR BIRD NESTS IN THE TAIL ROTOR SECTION.



SMITH, DON'T FORGET THAT MANDATORY CLASS AT 1030. SORRY... YOU'LL HAVE TO FINISH UP THAT BIRD LATER.



WAIT! BEFORE YOU RUN OFF-IS MY HAWK READY TO GO?



WHAT SHOULD I TELL HIM? I'VE BEEN CALLED AWAY SO MANY TIMES. BUT I DID CHECK THE BIRD GOOD YESTER-DAY AT LEAST.



NOT QUITE, SIR. I'LL FINISH UP AS SOON AS I GET BACK.



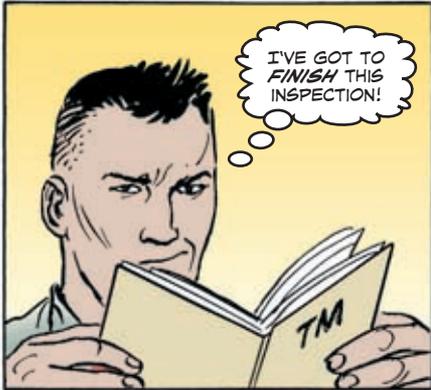
MINUTES LATER...

NOW MAYBE I CAN GET MY INSPECTION DONE.

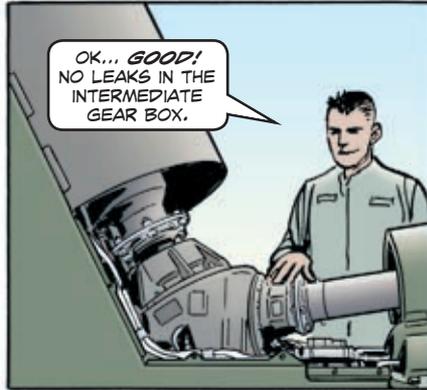


WHERE WAS I?

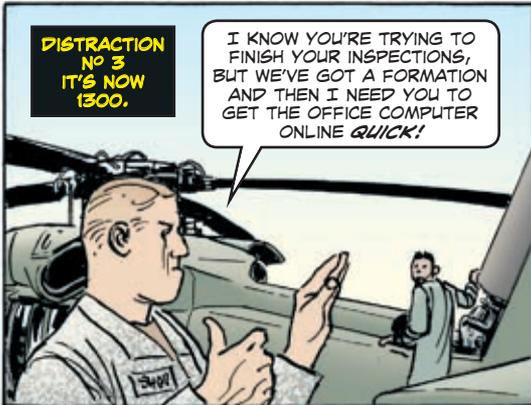
I REALLY DIDN'T NEED THAT CLASS! WHAT'S NEXT ON MY LIST?



I'VE GOT TO FINISH THIS INSPECTION!



OK... GOOD! NO LEAKS IN THE INTERMEDIATE GEAR BOX.



DISTRACTION No 3 IT'S NOW 1300.

I KNOW YOU'RE TRYING TO FINISH YOUR INSPECTIONS, BUT WE'VE GOT A FORMATION AND THEN I NEED YOU TO GET THE OFFICE COMPUTER ONLINE QUICK!



AFTER THE FORMATION...

THIS COMPUTER JUST NEEDED REBOOTING. I GOTTA GET BACK TO THE BIRD.



IT'S 1600 ALREADY, AND I'VE STILL GOT LOTS TO DO!



THE PILOT'S BEEN WAITING ALL DAY TO FLY. I THINK MY WORK YESTERDAY WILL COVER ME FOR TODAY ON WHAT I MISSED.

SMITH!



IS MY BIRD READY TO FLY THE COOP?

YES, SIR!

AT LEAST I HOPE SO!



LATER... AT HOME...

AHH... NOW TO RELAX A LITTLE. MAYBE I'LL WATCH THE NEWS...

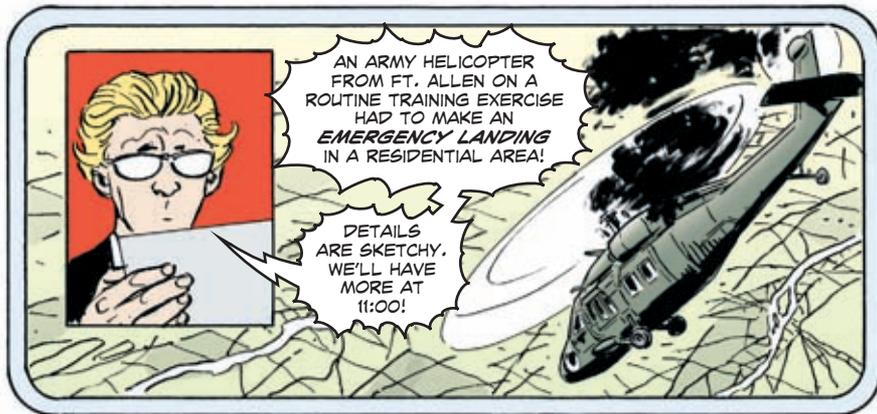
KLICK



WE INTERRUPT THIS REGULARLY SCHEDULED PROGRAM...



...TO BRING YOU BREAKING NEWS!



PM AND INSPECTIONS ARE IMPORTANT. DISTRACTIONS CAN LEAD TO DISASTERS!



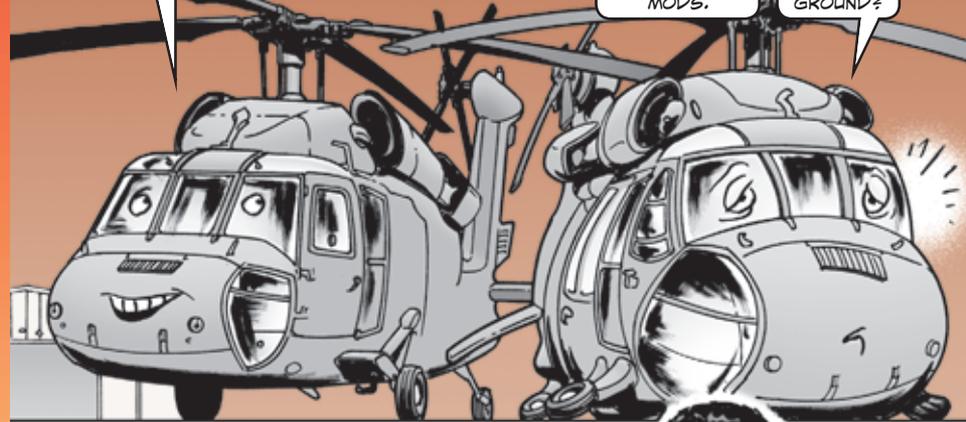
All Aircraft... + MODIFICATIONS ADD UP! +

I'M A LEAN MEAN FLYIN' MACHINE!

I'M A LITTLE OVERWEIGHT.

I'VE EATEN TOO MANY ECP AND MWO MODS.

NOW HOW DO I GET OFF THE GROUND?



A NEW BIRD IS A LEAN, MEAN FLYIN' MACHINE.

BUT LATELY, AS DOZENS OF MWOS AND ECPs ARE ADDED, WEIGHT AND BALANCE BECOME A CONCERN.



An overweight aircraft can't do its mission and believe it or not, every little bit counts when it comes to weight and balance.

This is especially true when the instructions state, "Weight and balance are not significantly affected" or "Weight and balance impact negligible" but it's obvious a weight change occurs. Wires, clamps and hardware collectively have weight, in some cases, significant weight!

Fill out the forms like it says in [TM 55-1500-342-23, Army Aviation Maintenance Engineering Manual Weight and Balance](#), and keep your aircraft airworthy!

If you suspect an error in aircraft modification instructions, you need to submit a DA Form 2028, *Recommended Changes To Publications and Blank Forms*.

REMEMBER, THE MASS PROPERTIES TEAM (MPT) AT REDSTONE ARSENAL DETERMINES "NEGLIGIBLE" CHANGES IN AIRCRAFT WEIGHT AND BALANCE.

EVERY LITTLE BIT COUNTS!

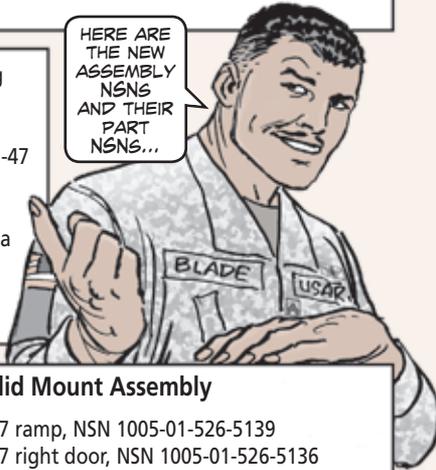


AIRCRAFT MOUNT IMPROVED

The M240H machine gun has replaced the M60D on all Army aircraft. To make the M240H easier to use, the Army is improving the UH-60 and CH-47 gun mounts. These improvements include:

- clevis pins, washers and cotter pins replacing the E clips
 - roller-bearing style cam follower assembly replacing the three cam followers on the CH-47
 - new quick-release pin and lanyard for the UH-60 travel lock
 - more durable brass-and-links catch bag and a shorter, more durable collector assembly
- The catch bags and collector assemblies will be issued as no-cost replacements during FY 09.

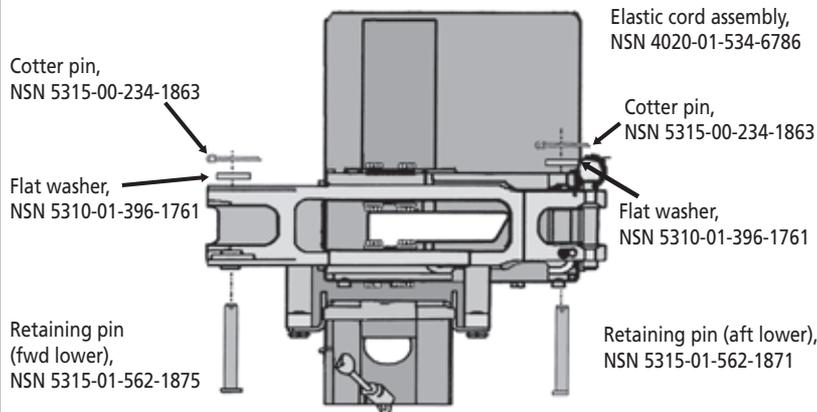
HERE ARE THE NEW ASSEMBLY NSNs AND THEIR PART NSNs...



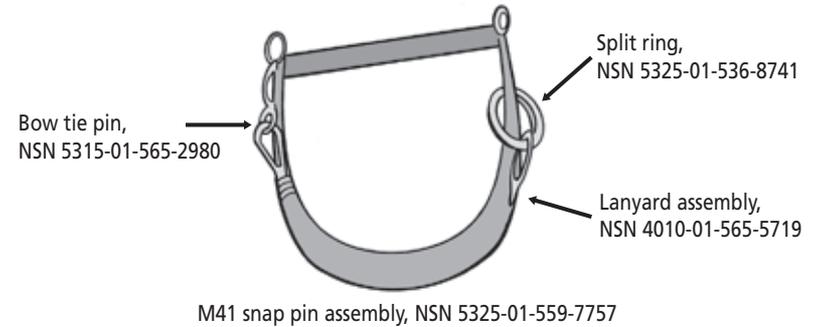
UH-60/CH-47 M240H Solid Mount Assembly

- | | |
|--------------------------------|---|
| LH UH-60, NSN 1005-01-526-5134 | CH-47 ramp, NSN 1005-01-526-5139 |
| RH UH-60, NSN 1005-01-526-5135 | CH-47 right door, NSN 1005-01-526-5136 |
| | CH-47 left window, NSN 1005-01-526-5137 |

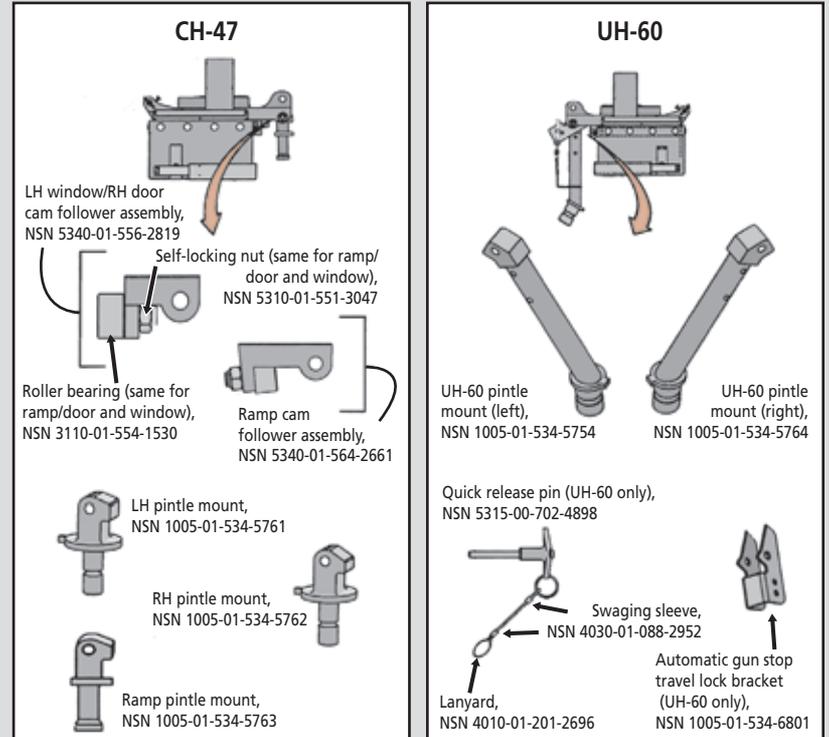
M240 Solid Mount Assembly Parts



CH-47 M240H Machine Gun Rear Ramp Mount Assembly

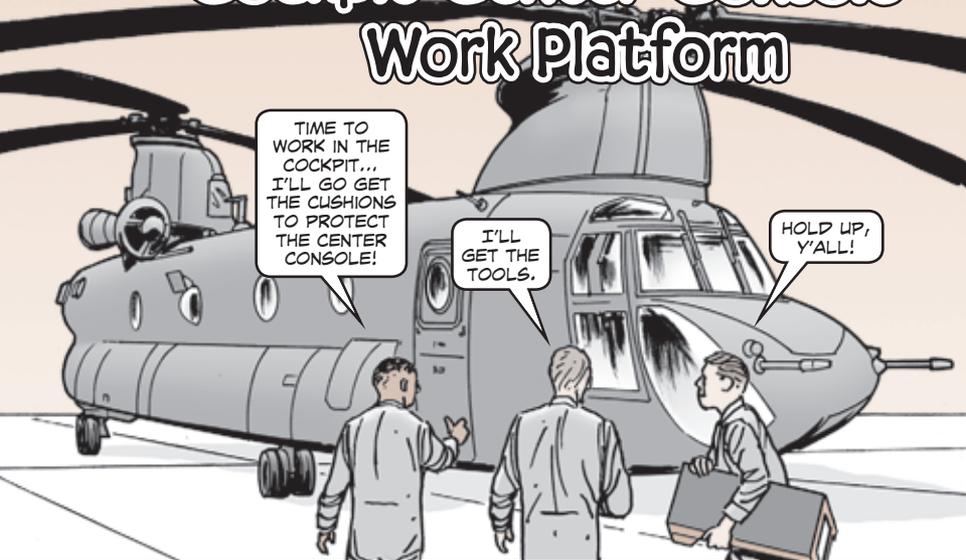


M240H Solid Mount Assembly Pintles and Associated Equipment



For more maintenance info on the mount, see TM 9-1005-262-13 (up to Ch 5).
For more info on repair parts, see TM 9-1005-262-23p (up to Ch 3).

Cockpit Center Console Work Platform



TIME TO WORK IN THE COCKPIT... I'LL GO GET THE CUSHIONS TO PROTECT THE CENTER CONSOLE!

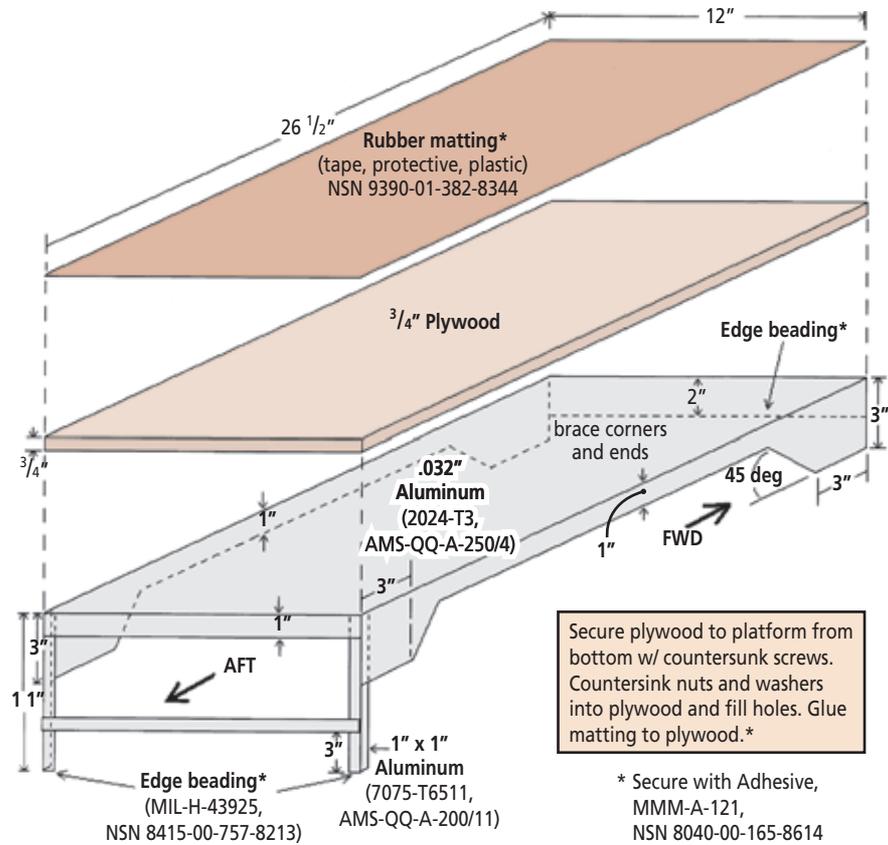
I'LL GET THE TOOLS.

HOLD UP, Y'ALL!



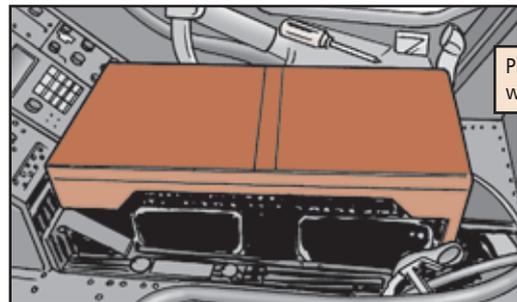
I MADE THIS STAND FOR THE CENTER CONSOLE SO YOU CAN FORGET THE CUSHIONS!

Dear Editor,
 Our maintenance personnel are working hard to prepare, maintain and repair our CH-47D and F model Chinooks. Our biggest issue is protecting the center console while working in the cockpit.
 We tried using piles of cushions on the center console in an effort to protect the radios and other equipment. But we still managed to damage electronics and other center console components.
 To prevent damage, we developed a cockpit work stand. It fits over the center console and protects the console from knees, dropped tools and swift kicks. The stand also provides a more comfortable work area.
 We made the stand from bench stock items found in the shop. Using the diagram, anyone can make it. 'Course, all the items in the diagram can be substituted as required, while keeping the basic dimensions.
 SSG R.B.
 AASF SCARNG



Secure plywood to platform from bottom w/ countersunk screws. Countersink nuts and washers into plywood and fill holes. Glue matting to plywood.*

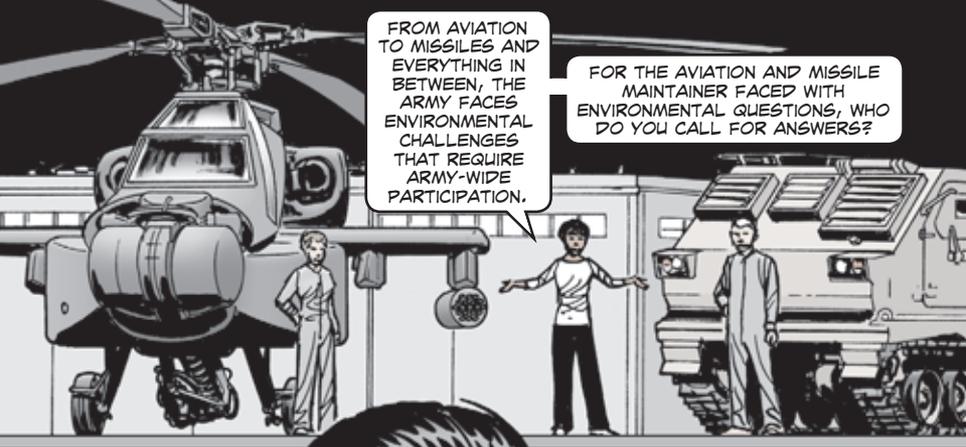
* Secure with Adhesive, MMM-A-121, NSN 8040-00-165-8614



Place stand over center console when working in cockpit

Editor's Note:
 Good job! Sometimes PM requires taking a little initiative to solve a problem.

AMCOM Environmental Hotline Goes **HOT**



FROM AVIATION TO MISSILES AND EVERYTHING IN BETWEEN, THE ARMY FACES ENVIRONMENTAL CHALLENGES THAT REQUIRE ARMY-WIDE PARTICIPATION.

FOR THE AVIATION AND MISSILE MAINTAINER FACED WITH ENVIRONMENTAL QUESTIONS, WHO DO YOU CALL FOR ANSWERS?

CONTACT THE AMCOM G-4 ENVIRONMENTAL HOTLINE AND THEY WILL HELP YOU WITH MAINTENANCE QUESTIONS CONCERNING ENVIRONMENTAL ISSUES.

Email: et-hotline@conus.army.mil
Phone: (256) 313-1711, or
Fax: (256) 955-0749.



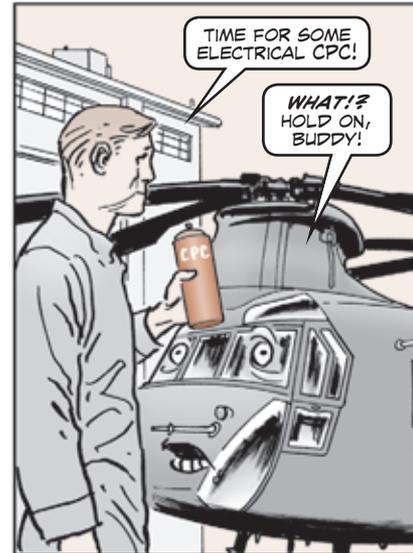
AMCOM G-4 has a list of approved alternative materials for use. They are working with the Integrated Material Management Center (IMMC) to update all manuals. All the headsheds are working on developments and alternatives to address current and future environmental regulations for coatings, paint strippers, surface treatments, adhesives and cleaners.

Everyone has a part to play in complying with the Environmental, Safety and Occupational Health (ESOH) requirements.

Compliance with the Environmental Protection Agency (EPA), the Occupational Health and Safety Administration (OSHA) and state agencies does affect maintenance. Regulations can affect painting, cleaning, paint stripping, plating and surface treatments and application of sealants and adhesives. Environmental compliance also involves changing materials and processes used in maintenance, especially non-available consumables. So be prepared—changes are coming.

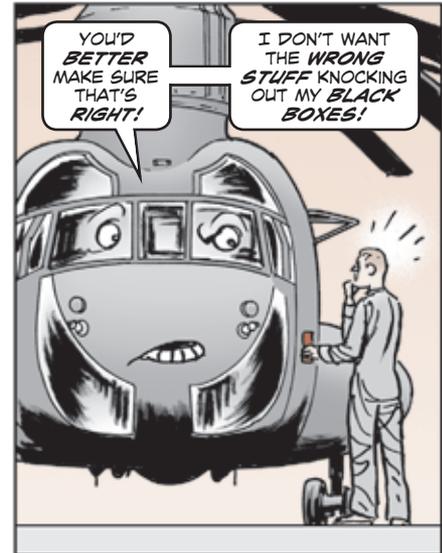
General Aircraft...

CORROSION CONTROL



TIME FOR SOME ELECTRICAL CPC!

WHAT? HOLD ON, BUDDY!



YOU'D BETTER MAKE SURE THAT'S RIGHT!

I DON'T WANT THE WRONG STUFF KNOCKING OUT MY BLACK BOXES!

Did you know that spraying water-displacing corrosion preventive compound (CPC) inside and outside of cannon plugs and receptacles is OK?

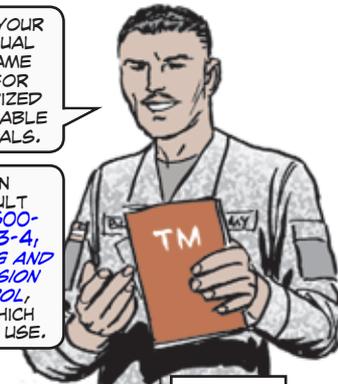
Many soldiers are not aware of this, especially in the aviation world. Using CPC inside and outside of cannon plugs extends the life of the plugs and pushes out moisture inside the connector. It is true that some CPCs will fry your black boxes, but that happens only if you use the wrong or unauthorized CPC on connectors.

When electronic systems have problems or don't work, the quick fix is to reseat (disconnect and reconnect) the cannon plug to clean off the corrosion from the pins. After that, the plugs usually have good connectivity until the corrosion returns. Using electronic grade CPC, MIL-PRF-81309, type III, NSN 8030-00-546-8637, stops the corrosion from returning.

Make sure you don't use excessive amounts of CPC. If you do, tilt the connector and let the excess drain out, then wipe off the connector with a clean, dry cloth.

CHECK YOUR INDIVIDUAL AIRFRAME TMS FOR AUTHORIZED CONSUMABLE MATERIALS.

THEN CONSULT TM 1-1500-344-23-4, CLEANING AND CORROSION CONTROL, FOR WHICH CPC TO USE.



Non-rechargeable Batteries...

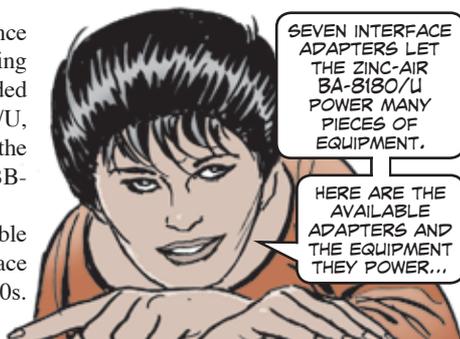
The ZINC-AIR CHOICE

YOU MEAN I HAVE A CHOICE!?



Your patience and your endurance can be stretched to the limit by hauling all the batteries you need for extended missions. A zinc-air battery, BA-8180/U, NSN 6135-01-500-0572, can reduce the number of BA-5590s, BB-390s and BB-2590s you need to haul.

For example, one non-rechargeable zinc-air connected to a reusable interface adapter can replace up to five BA-5590s.



SEVEN INTERFACE ADAPTERS LET THE ZINC-AIR BA-8180/U POWER MANY PIECES OF EQUIPMENT.

HERE ARE THE AVAILABLE ADAPTERS AND THE EQUIPMENT THEY POWER...

- J-6632/U, NSN 5940-01-504-3217, battery eliminator adapter
- J-6633/U, NSN 5940-01-504-3218, powers the ASIP AN/PRC-119F
- J-6634/U, NSN 5940-01-504-5597, powers the non-ASIP AN/PRC-119
- J-6685/U, NSN 5940-01-516-9785, powers the M22 chemical alarm
- J-6686/U, NSN 5940-01-517-3990, powers the MBITR AN/PRC-148
- J-6687/U, NSN 5940-01-516-9787, powers SATCOM radios AN/PRC-117/150 and AN/PSC-5
- J-6688/U, NSN 5940-01-517-1026, powers the Javelin CLU

The zinc-air battery is made of two 12-volt strings which will provide 56 Amp-hours (Ah) or will provide 27Ah at 24 volts.

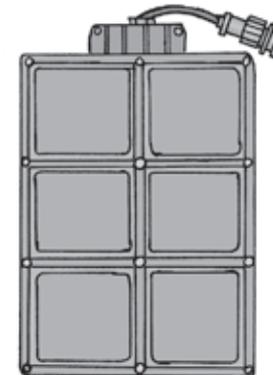
Another zinc-air battery, BA-8140/U, NSN 6135-01-517-0952, is also available to power the MIBTR—AN/PRC-148—radio with adapter J-6686/U, NSN 5940-01-517-3990. The BA-8140 is half the size and weight of the BA-8180/U and is only 12 volts. It cannot be used in 24-volt systems.

For more info on this new battery, check out the CECOM LCMC website:

<https://lrteams.monmouth.army.mil/ipm>

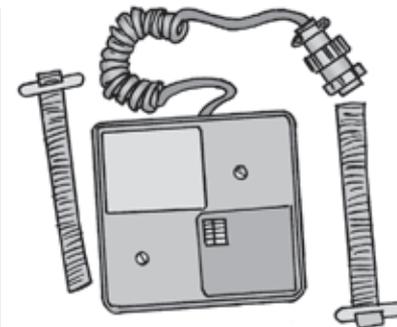
BA-8180/U non-rechargeable zinc-air battery, NSN 6135-01-500-0572

This BA-8180/U is a 12/24 volt, 800 watt-hour, 56Ah primary (non-rechargeable) zinc-air battery pack. The bottom line: One 6-lb. BA-8180/U connected to a reusable interface adapter can replace up to 5 BA-5590s for extended missions. Example: 7 days in an AN/PRC-119F, 20 hours in JAVELIN CLU (surveillance mode only), 5 days in older AN/PRC-119B. Re-supply is reduced, spare battery "dead" weight on your back is reduced and impact on unit's budget is reduced. Save your BA-5590s, BB-390s or BB-2590s for shorter 12-36 hour missions.



BA-8140/U non-rechargeable zinc-air battery, NSN 6135-01-517-0952

This BA-8140/U is a 12 volt, 400 watt-hour, 28Ah primary (non-rechargeable) zinc-air battery pack. The bottom line: One 3-lb. BA-8180/U connected to a reusable MBITR interface adapter can significantly increase mission run times. MBITR rechargeables should run 8 hours, but many units have not upgraded their MBITR batteries (they should) for short missions. The BA-8140 takes the worry about dead batteries off your back. Use the rechargeable as a back-up for the long missions.



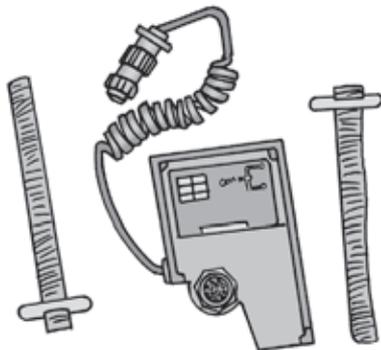
Adaptors for BA-8180 zinc-air battery J-6632/U DPEI BA-5590 battery eliminator adaptor, NSN 5940-01-504-3217

This interface adaptor provides compatibility between the BA-8180/U zinc-air battery and various items of military equipment. The BA-8180/U is a 12/24 volt 800 watt-hour, 56Ah primary (nonrechargeable) zinc-air battery pack.



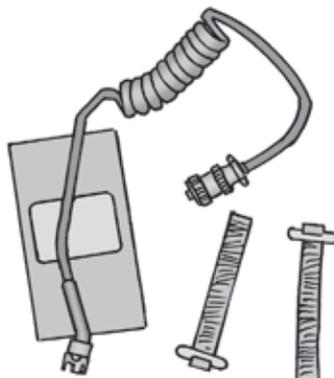
**Operating instructions for
J-6633/U 119 FEI ASIP (119 F)
adaptor, NSN 5940-01-504-3218**

Remove existing battery. Close cover. Connect the adaptor to SINGGARS (ASIP). Connect black connector of the adaptor to a BA-8180/U and operate the radio. To save battery power, disconnect adaptor from battery when radio is not in use.



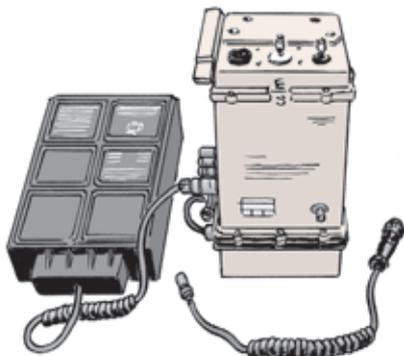
**J-6634/U SINGGARS 119 B adaptor
for BA-8180 zinc-air battery,
NSN 5940-01-504-5597**

This interface adaptor provides compatibility between the BA-8180/U zinc-air battery and the AN/PRC-119, SINGGARS (non-ASIP version) radio. The BA-8180/U is a 12/24 volt, 800 watt-hour, 56Ah primary (non-rechargeable) zinc-air battery pack. One 6-lb BA-8180/U connected to this reusable interface adaptor can replace up to 5 BA-5590s for extended missions, up to 5 days in AN/PRC-119B. Resupply is reduced, spare battery "dead" weight on your back is reduced and impact on unit's budget is reduced.



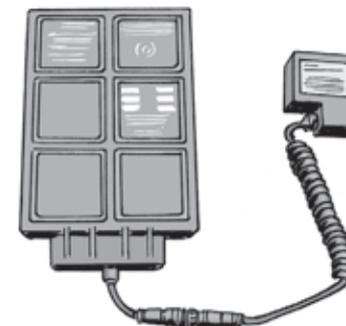
**J-6885/U M22 ACADA adaptor,
NSN 5940-01-516-9785**

This interface adaptor should be with every M22 chemical alarm to ensure alternative power and may in fact become your primary power source. One 6-lb BA-8180/U connected to this reusable interface adaptor can run the M22 for 2 days. That could be four fewer trips to the remotely placed chemical alarm to replace standard batteries and less chance of getting hit by enemy fire. Resupply is reduced, spare battery weight and volume reduced and frees the supply train up for other critically needed supplies. Your BA-5590s and other 90 type of batteries can be used for more mobile missions.



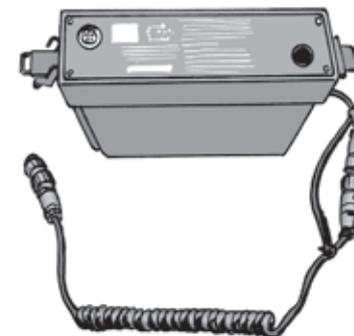
**J-6686/U MBITR AN/PRC-148 adaptor,
NSN 5940-01-517-3990**

This interface adaptor provides the compatibility to power the AN/PRC-148, MBITR hand held radio with the BA-8140/U or BA-8180/U zinc-air batteries. The BA-8140/U is a 12 Volt, 400 watt hour, 28Ah primary (non-rechargeable) zinc-air battery pack. One 3-lb BA-8140/U and this reusable interface adaptor can run the MIBITR up to 5 days. The adapter also includes a "90" adapter which allows use with other standard Army radio batteries. This will allow you to run the MBITR with any 5590 type of battery like: BA-5590, BA-5390, BB-2590, & BB-390.



**J-6687/U adaptor for SATCOM radios &
other 24 volt radio systems
NSN 5940-01-516-9787**

This interface adaptor and the BA-8180/U zinc-air battery provides the compatibility to power the AN/PRC-117, AN/PRC-150, AN/PSC-5 and other 24 volt radios systems that typically use two BA-5590 batteries to operate. The BA-8180/U is a 12/24 volt, 800 watt-hour, 56Ah primary (non-rechargeable) zinc-air battery pack. One 6-lb BA-8180/U connected to this reusable interface adaptor can replace multi BA-5590s and run for 4-6 days. Resupply is reduced, spare battery "dead" weight on your back is reduced and impact on unit's budget is reduced.



**J-6688/U JAVELIN CLU adaptor,
NSN 5940-01-517-1026**

Using the Javelin CLU for surveillance missions? Dragging tons of batteries to the mountain top? Reduce your battery load with this interface adaptor and the BA-8180/U zinc-air battery. The BA-8180/U is a 12/24 volt, 800 watt-hour, 56Ah primary (non-rechargeable) zinc-air battery pack will run the LCU for 12-14 hours, six times longer than a BA-5590. This reusable interface adaptor and two BA-8180s can replace up to 10 A-5590s for one day extended mission. Resupply is reduced and spare battery "dead" weight on your back is reduced.



I HAVEN'T SPOTTED AN ENEMY.

I HAVE... IT'S OUR SUPPORT TEAM!

THEY'RE USING ONLY *ONE* GENERATOR!

ONE IS NOT ENOUGH!

Dear Half-Mast,

We have two 5-kW generators as part of our rapid aerostat initial deployment (RAID) system. Each generator is supposed to run 12-hours on and 12-hours off. Unfortunately, one of our generators is down for maintenance and we're running one generator all the time! I think this defeats the purpose of the RAID system. What do you think?

SGT D. L. A.

I'M BEING WORKED TO DEATH!

ALL I NEED IS A PART TO DO MY PART!

Dear Sergeant D. L. A.,

You are right! Both generators must be mission capable at all times. Hear me all troops using the RAID system! Your system may have two 5-kW generators or two 15-kW generators. Both must be in working condition. If one is not, **immediately contact your field service representative (FSR) for the RAID system.** If you need help finding that representative, call DSN 318-847-2423 or email:

RAID_helpdesk@mnd-b.army.smil.mil

The grapevine has been singing to me that too many of you are sticking the inoperative generator in a corner and forgetting about it. Then, you're running one generator 24/7. Stop doing that!

Also, start doing preventive maintenance. Here are the technical manuals for the 5-kW generators: TM 9-6115-641-10; TM 9-6115-641-24; TM 9-2815-252-24; and LO 9-6115-641-12. And for the 15-kW generators: TM 9-6115-643-10; TM 9-6115-643-24; TM 9-2815-254-24; and LO 9-6115-643-12. These manuals will get you on track for doing regular lubes; inspecting the oil, fuel, and battery electrolyte levels; checking all the filters and cables; and knowing when to, and how to, purge the fuel-water separator.

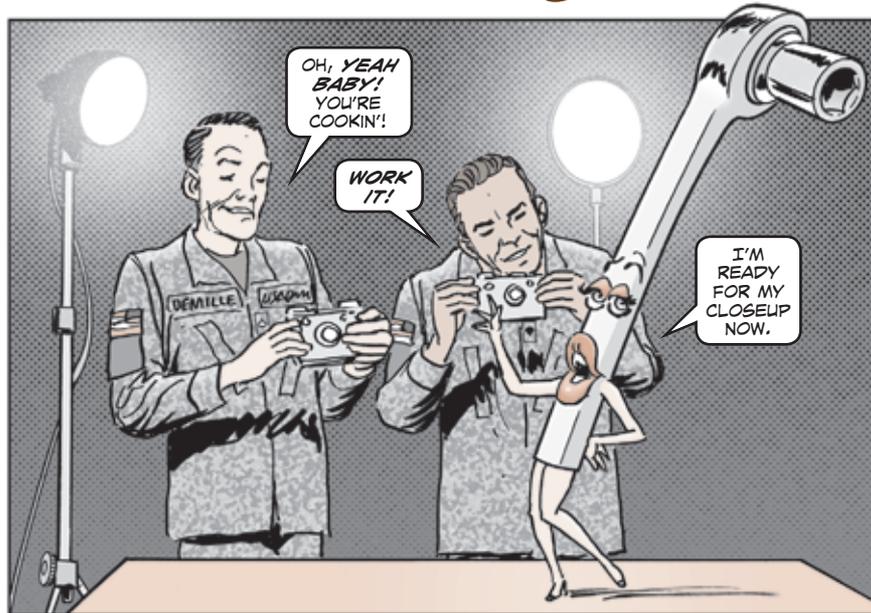
One final word on generator maintenance: be alert to wetstacking! Wetstacking happens when unburned fuel passes directly into the exhaust system. The cause of wetstacking is running your generator at too low of a load for too long of a time.

If you notice a wetstacking problem, load your generator up to at least 80 percent of its capacity. You can do this by operating your air-conditioning unit or heater. Run the generator for at least an hour or until the engine starts running smoother and the exhaust port is no longer wet.

Half-Mast

Tools...

Take Inventory Digital



Dear Editor,

Digital cameras make it very easy to take pictures of equipment and then transfer it to your computer. So we've used digital technology to make keeping track of our inventory simpler.

We lay out all the items we're responsible for and take a digital picture of each item. After we transfer the pictures to a computer, we add the nomenclature, LIN, NSN, serial number, hand receipt number, and on-hand quantity to each item's picture. All of that should be available in the property book. Once you have all the pictures and information stored in the computer, it's simple to make any needed changes as inventory changes.

This method greatly eases the transition for a new CO because he may not be familiar with all the equipment he's assuming responsibility for. With this, he can match the pictures to his equipment to see what he's getting.

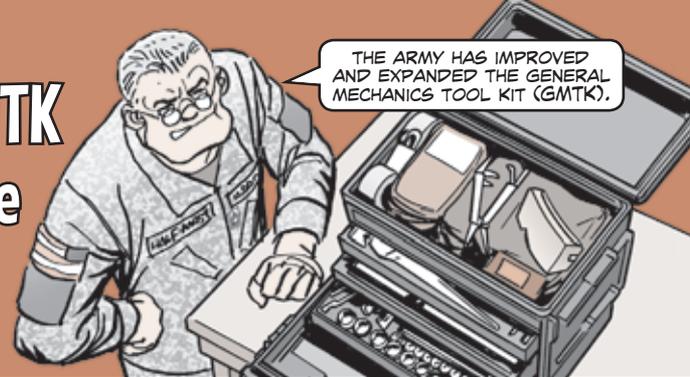
Of course, once you have all this information stored in your computer, make a copy of it in case your computer crashes.

SGT S.L.
CW2 W.R.
D Co, 1-82d ARB
Ft Bragg, NC

Editor's note: A picture is worth a 1,000 LINS. Thanks for the suggestion.

Tools...

New GMTK Available



- sealed head ratchets
- full set of 1/2- and 3/8-in drive sockets
- flexible neck LED flashlight
- screwdrivers with comfort grip handles
- roll-head pry bar that replaces the standard pry bar
- a Fluke multimeter
- tools from the multi-capable maintainer drawer have been incorporated into the basic GMTK
- 90+ percent of the tools are covered by a lifetime "no questions asked" warranty



- the wheelbase is wider, giving the chest better stability
- the handle is a single-stop pullout handle, instead of a multi-stop handle, which will give the handle a longer life
- the hole in the case for a padlock has been strengthened with a stainless steel reinforced insert
- the side handles are larger for comfort and easier access
- the shelving can be adjusted in the field and can hold 1-, 2-, and 4-in deep drawers
- the case is waterproof and can withstand temperature extremes and is impact resistant
- the case is manufactured by Pelican and includes a lifetime "no questions asked" warranty

There are two versions of the GMTK available. The Army version comes with NSN 5180-01-548-7634. The Marine version comes with NSN 5180-01-554-4224 and has additional tools like ratcheting wrenches.

There is also an accessory drawer available with NSN 5180-01-553-6559 that has ratcheting combination wrenches and deep well sockets.

...GRAB YOUR SOCKS!

I'M REALLY ALARMED!



HERE ARE A FEW WAYS TO MAKE SURE YOUR ACADA IS READY TO ALARM...



Clear the air. When you have clearing problems inside, it may be because the air is not clean enough. Cologne, smoke and other vapors affect the ACADA. Try running the ACADA outside for a few minutes. Turning the ACADA off and then turning it back on sometimes helps clear the ACADA, too.



WE'VE GOT A CHEMICAL ATTACK GOING ON!

WHEN THERE'S SOMETHING TO BE ALARMED ABOUT, YOU'LL BE GLAD YOU DID YOUR ACADA PM!

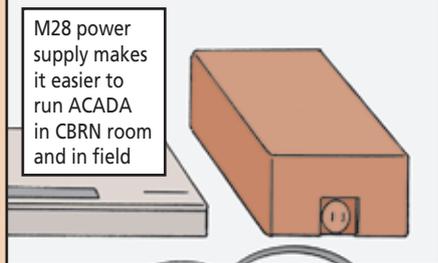


ARE YOU ALARMED?



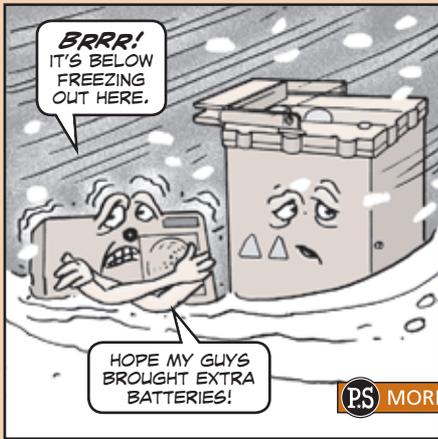
IF THERE'S THE THREAT OF A CHEMICAL ATTACK, YOU DEFINITELY WANT YOUR M22 AUTOMATIC CHEMICAL AGENT ALARM (ACADA) TO BE WORKING.

Power it up. Many units do not have the M28 power supply, NSN 6130-01-438-6960. The M28 is a good thing to have because it lets the ACADA run off AC in the CBRN room. The M281 mounting kit, NSN 6665-01-438-6959, allows anti-vibration vehicle mounting of the M22. Vehicle power is connected directly to the M22 or indirectly through the M281.



M28 power supply makes it easier to run ACADA in CBRN room and in field

The ACADA can use rechargeable battery BB-2590/U, NSN 6140-01-490-4316, rechargeable battery BB-390A/U, NSN 6140-01-490-4317, as well as the non-rechargeable BA-5590/U, NSN 6135-01-438-9450. But you'll need the PP-8498/U battery charger, NSN 6130-01-495-2839, for charging the BB-2590/U or the BB-390A/U.

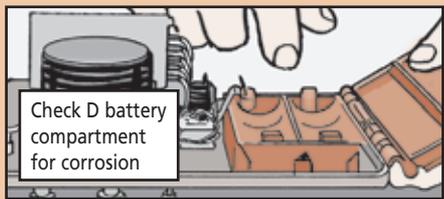


BRRR! IT'S BELOW FREEZING OUT HERE.

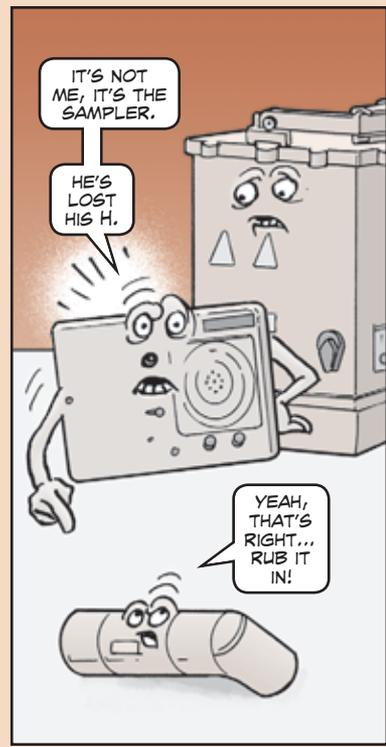
HOPE MY GUYS BROUGHT EXTRA BATTERIES!



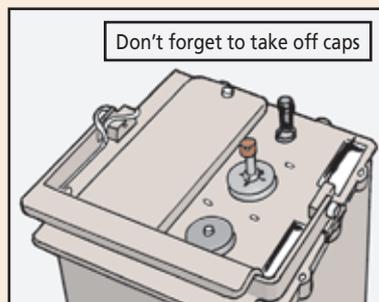
When you store the ACADA, don't leave D batteries in the M42 alarm. They can leak and cause corrosion. When you do PMCS on the ACADA, look for corrosion in the battery compartment. Wipe out corrosion with a cloth.



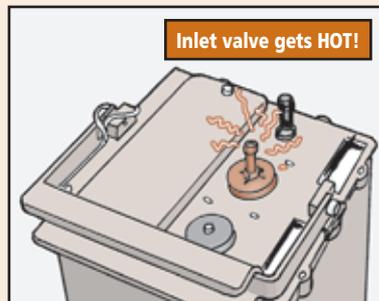
Sampler help. If your ACADA doesn't seem to recognize the sampler in the H mode, don't automatically assume it's a problem with the ACADA. You may need a new sampler. Try another sampler before troubleshooting the ACADA. Order a new sampler with NSN 6665-01-382-7081.



Ins and outs of ports. Remember to remove the inlet and exhaust caps before you turn on the ACADA. If you forget, air can't circulate through and the ACADA can't check for nerve or blister agent.



Don't touch the inlet port while the ACADA is running. The metal part of the port becomes very hot.



If you lose the inlet or outlet caps, order more with NSN 5340-01-454-6322.



CBRN...

CBERT to the Rescue



If your unit is returning from SWA, your CBRN equipment will probably need lots of help getting back in shape. That's where the chemical/biological equipment repair team (CBERT) comes in.

CBERT will inspect and repair your M40/M42/M45/M48 masks, M22 ACADAs, M17 decons, and ICAMs and bring them back to 10/20 standards.

Normally, CBERT plans for brigade-sized missions (2,500 to 4,000 masks), but they will assist a unit with as few as 1,500 masks. Usually, a team can finish a mission in two weeks. CBERT even performs the repairs on-site, right in the brigade's own backyard.

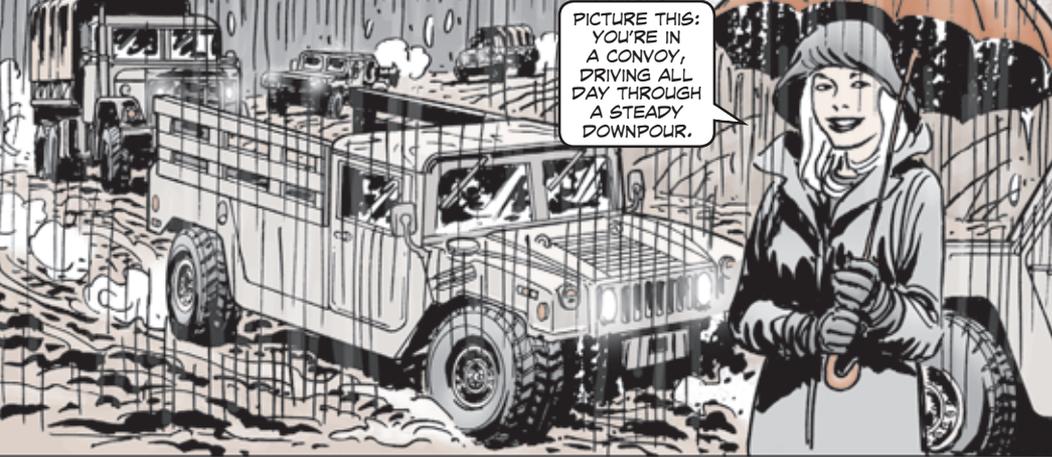
Here's how to schedule CBERT for your unit:

- Inventory your CBRN equipment by NSN. CBERT needs an accurate count of how much of each item you have. That way they can estimate what repair parts will be needed and how long and how many people the job will take.
- Contact CBERT. To schedule a visit for BCT-size elements, contact _____ at DSN 793-1498, (309) 782-1498, or email: [@us.army.mil](mailto:us.army.mil)
- All other units should contact _____ at DSN 793-7233, (309) 782-7233, or email: [@us.army.mil](mailto:us.army.mil)
- Be ready to provide them your unit name, a POC with phone number and email, and a time frame for the visit.

CBERT will contact you with further instructions and requirements.

The best time for CBERT to visit is shortly after you return from SWA. The best time to contact them is 60 to 90 days before you're scheduled to return home.

DRIPS CAN DRIVE YOU DAFFY



PICTURE THIS: YOU'RE IN A CONVOY, DRIVING ALL DAY THROUGH A STEADY DOWNPOUR.



IT'S TOUGH GOING; ROADS ARE SLICK; VISIBILITY'S BAD; NERVES ARE FRAID.



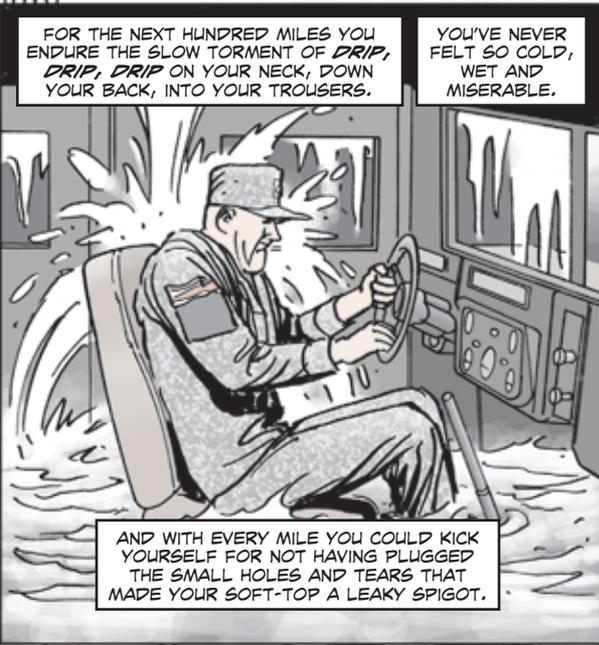
JUST WHEN YOU THINK THINGS *CAN'T* GET WORSE-



A COLD RAINDROP SPLASHES ON THE BACK OF YOUR NECK, FOLLOWED BY ANOTHER, AND ANOTHER.



YOUR WORST FEARS HAVE COME TO PASS: YOUR CAB'S SOFT-TOP IS LEAKING.



FOR THE NEXT HUNDRED MILES YOU ENDURE THE SLOW TORMENT OF *DRIP, DRIP, DRIP* ON YOUR NECK, DOWN YOUR BACK, INTO YOUR TROUSERS.

YOU'VE NEVER FELT SO COLD, WET AND MISERABLE.

AND WITH EVERY MILE YOU COULD KICK YOURSELF FOR NOT HAVING PLUGGED THE SMALL HOLES AND TEARS THAT MADE YOUR SOFT-TOP A LEAKY SPIGOT.



NOW PICTURE A MORE PLEASANT SCENE: ONCE AGAIN YOU'RE IN A CONVOY, DRIVING THE SAME VEHICLE THROUGH THE SAME DOWNPOUR.

ONLY *THIS* TIME YOU INSPECTED THE SOFT-TOP *BEFORE* YOU LEFT THE GARRISON.

YOU FOUND THOSE PESKY HOLES AND TEARS, AND YOU PATCHED THEM FROM THE INSIDE WITH THE SOFT-TOP REPAIR KIT, NSN 2540-01-496-4442.



NOW, NO MATTER HOW HARD IT RAINS, YOUR CAB OFFERS SHELTER FROM THE STORM.

YOU'RE WARM, DRY AND COMFORTABLE.



THE REPAIR KIT IS **NOT** FOR USE ON CANVAS.

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

The repair kit mends...

... vinyl-coated soft-tops...

...cargo covers...

...tarps...

...and tents



HERE'S HOW TO USE IT...

- Find the hole or tear on the inside 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.



Clean area to be taped

- Let the fabric dry.
- Spread the fabric on a flat surface.
- Cut the tape 2 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 the tape 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 to 30 minutes.

Tentage Repair Kit

You can also mend vinyl-coated fabrics by using the updated tentage repair kit, NSN 8340-00-262-5767. The canvas sheets that originally came with the kit are no longer available. The Army has replaced them with 60-in polyester sheets for field repairs. They come in both green and tan. If you don't need the entire kit, order the sheets separately:

Sheet color	NSN 8305-01-238-
Green	0342
Tan	8076

The kit also comes with adhesive for applying polyester patches.



Mechanic's Coveralls in Universal Camo

You can now order mechanic's coveralls in universal camouflage. Here are the NSNs:

NSN 8415-01-534-	Size
7375	Small
7376	Medium
7377	Large
7383	X-large
7387	XX-large

Order them through the DoD EMALL website: <http://www.dlis.dla.mil/emall.asp>

Shop Equipment,
Welder...

SEW Trailers Need Registration Numbers

I DON'T
GET IT!

WHERE'S YOUR
REGISTRATION
NUMBER?

THE NUMBER IS
MISSING!

MOST SHOP
EQUIPMENT,
WELDER (SEW)
TRAILERS,
NSN 4940-
01-454-9877,
ARE MISSING
THEIR VEHICLE
REGISTRATION
NUMBERS.

The registration numbers are missing from 1,300 fielded trailers because the data plate wasn't designed to include this essential information.

Sporadic registrations by individual units occurred, but only 10 percent of the trailers have any kind of registration number. Worse, at the end of 2008, less than 20 of the 1,300 fielded SEW trailers had valid PBUSE records.

SO, WHAT'S
THE FIX?

NEW REGISTRATION NUMBERS
HAVE BEEN ASSIGNED FOR THE
1,300 FIELDED TRAILERS.

NEW TRAILERS WILL COME WITH
THEIR REGISTRATION NUMBERS
APPLIED TO THEIR DATA PLATES.



UNITS
WILL
NEED
TO...

Identify

First, on the data plate for each SEW trailer, find the four character vehicle serial number. The data plates are located on front-right panel of the enclosure.

NOMENCLATURE: Shop Equipment, Welding

NSN: 4940-010-454-9877

LIN: W48391

SPECIFICATION DATA: DFP419

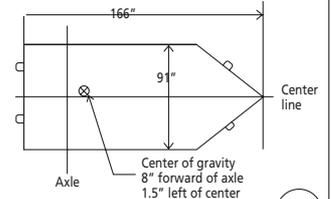
MANUFACTURER: Cage #08EE1

SERIAL NUMBER: 0835

CONTRACT NUMBER: DAAE20-03-D-0092

Already stamped
on vehicle, unique
for each vehicle

- Height - 81"
- Tongue weight - 520 lbs.
- Rear wheel weight - 4,680 lbs.
- Total weight - 5,200 lbs.
- Cubic volume - 708 cu. ft.
-  Tiedown & lifting points



Registration #
must be stamped
with tool and dye
set at unit.

WE01C6

To match the correct registration numbers for each trailer with its serial number, units will need to access the vehicle registration records in LOGSA's Logistics Information Warehouse:

https://weblog.logsa.army.mil/Veh_reg/main_input.cfm

Enter the NIIN, 014549877, and click **Submit**. Find the four-character serial numbers for your unit's trailers and match the associated registration numbers. Serial numbers below 1000 are prefixed with zeros.

Die Stamp

Use a die set to stamp the matching registration number on the lower left corner of the trailer data plate.

Update PBUSE Records

For PBUSE accountability, the correct serial numbers are four characters in length and range from 0100 to 1800 (projected production). Do not use serial numbers of any other length.

Find Unit POCs in DODAACs

When it comes to communicating with units concerning acquisition and supply issues, the process has just improved.

Until January 2009, you could use a unit's DODAAC to find a unit's mailing or shipping address. But then you had to use snail mail to contact the unit. That changed when the Logistics Support Activity (LOGSA) enhanced the DODAAC search menu on its Logistics Information Warehouse (LIW) website. Now you'll be able to email the unit POC.

Users will use LIW to access the DODAAC search menu. They will need to complete a one-time security access request to register. Then they'll be able to login using their CAC cards.

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

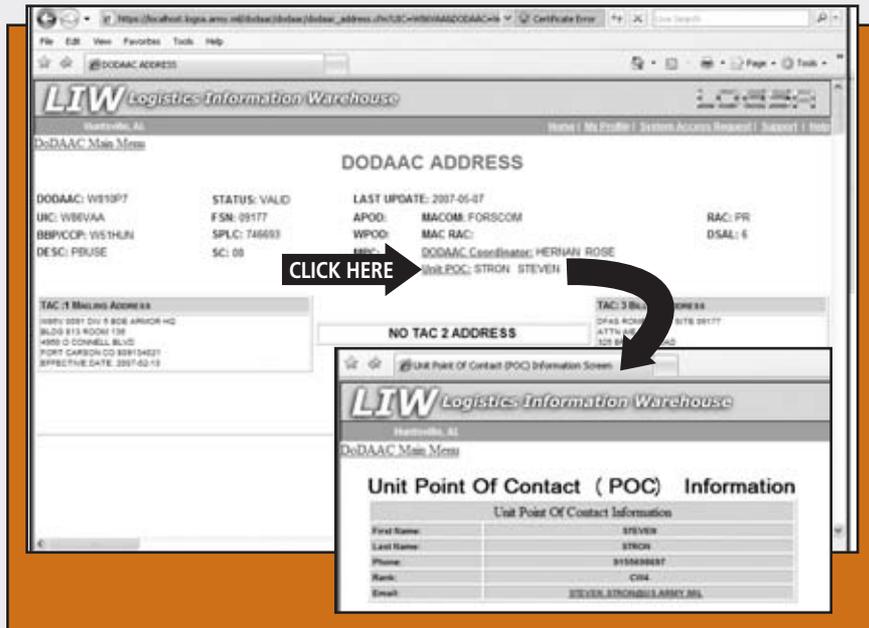
From the LIW homepage expand the Force listing under Queries and Reports. Click on DODAAC Information and in the DODAAC Information menu box click on DODAAC Search.

Enter the DODAAC of the unit you need to contact and click on the Unit POC hyperlink displayed with the unit's DODAAC information. You'll get the unit POC's name, email address, and phone number.

The contact information will be updated automatically as units update their accounts.

If you have questions about this change to the DODAAC search screen you can email:

logsa.acsp@conus.army.mil



★ Connie's Post Scripts ★

FMTV AIR Service Kit CORRECTION

We provided NSNs for tactical vehicle annual service kits on page 17 of PS 661 (Dec 07). But FMTV users may have wondered why they couldn't find kits for their MTV or LMTV A1Rs. That's because AR1 should have read A1R instead. That was our mistake.

M1114 Front Evaporator Motor Shroud NSN

TM 9-2320-387-24P says to use NSN 6105-01-460-4950 to order your M1114 HMMWV's front evaporator/heater's direct current motor and shroud, but that will only get you the motor. If you want only the shroud, use NSN 4140-01-563-8482.

MRAP Technical Manuals on LOGNet

For information about technical manuals that support the Mine Resistant Ambush Protected (MRAP) vehicles, look online on LOGNet:

<https://forums.bcks.army.mil/secure/communitybrowser.aspx?id=645544&lang=en-US>

Once in LOGNet, find the PS Magazine webpages within the NEWS ITEMS/LOGISTICS MAGAZINES AND NEWSLETTERS community. Click on the MRAP button.

OIL NSN UPDATE

Several stock numbers have changed for engine oils used in combat, tactical and commercial construction equipment vehicles. Keep this list handy in the motor pool until the NSNs catch up with your vehicle's technical manuals.

Item	NSN 9150-01-
30W oil – quart	422-9250
30W oil – 5 gallons	433-7986
15/40W oil – quart	518-9477
15/40W oil – 5 gallons	421-1424
15/40W oil – 55 gallons	421-1432

ARDEC TM Address Change

If you find errors in TMs managed by ARDEC (Armament Research, Development and Engineering Center) or you have suggestions for improving the TMs, send them to:

U.S. Army RDECOM, ARDEC
Logistical Research and Engineering Directorate

ATTN: AMSRD-AAR-EIL-LS
Picatinny Arsenal, NJ 07806-5000
Email: PICAPubChanges@conus.army.mil

This is different from what's listed in the TMs.

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

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

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



**USE DRIP PANS UNDER
VEHICLES TO CATCH
HAZMAT SPILLS!**