

Issue 693

PS

August
2010

THE PREVENTIVE MAINTENANCE MONTHLY

TB 43-PS-693

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Public Release;
Distribution is
Unlimited



WANT TO
PREVENT
CORROSION?
See Page 27

KILT HIM A B'AR WHEN HE WAS ONLY THREE

HE WAS BORN ON A MOUNTAINTOP IN TENNESSEE 224 YEARS AGO ON THE 17TH OF THIS MONTH. HE DIED IN THE ALAMO ON MARCH 6, 1836.

HE WAS DAVY CROCKETT.

HE WAS, IT WAS LATER SAID IN SONG, "THE RIP-ROARINEST FIGHTINEST MAN, THE FRONTIER EVER KNEW."

A LOT ABOUT DAVY CROCKETT IS LEGEND THAT MAY STRETCH THE TRUTH A MITE. HOWEVER, ONE THING WE KNOW FOR SURE WAS HE DID PREVENTIVE MAINTENANCE ON HIS RIFLE. HOW DO WE KNOW?



WE KNOW BECAUSE HE WOULD NOT HAVE SURVIVED THE "WILD FRONTIER" UNLESS HE DID PM. THERE WAS NO SUPPORT TEAM TO RUN TO FOR RIFLE REPAIRS OR REPLACEMENTS WHERE DAVY BIVOUQUED.

DAVY TOTED HIS RIFLE. YOU CARRY YOURS. DAVY HAD NO MAINTENANCE SUPPORT. YOU HAVE PLenty. BUT THERE IS ONE THING YOU HAVE IN COMMON.

WHEN YOU POINT, SIGHT AND FIRE, YOUR LIFE DEPENDS ON YOUR RIFLE BEING IN THE BEST SHAPE PM CAN PROVIDE.

THERE IS NO SUBSTITUTE FOR PM. THERE WASN'T ON THE WILD FRONTIER AND THERE ISN'T IN WILD AFGHANISTAN.



DAVY'S FAVORITE RIFLE WAS A .40 CALIBER FLINTLOCK HE CALLED **BETSY**. DAVY SAID THAT FROM 1825-1834, HE KILLED 125 BEARS WITH OLD BETSY.



ALTHOUGH THE RECORD IS NOT CLEAR, WE CAN BE SURE THAT BETSY GOT HIM OUT OF PLenty OF SCRAPES WITH VILLAINS AS WELL AS BEARS.



THE PREVENTIVE MAINTENANCE MONTHLY

TB 43-PS-693, The Preventive Maintenance Monthly, is an official publication of the Department of the Army, providing information for all soldiers assigned to combat and combat support units and all soldiers with unit maintenance and supply duties. All information published has been reviewed and approved by the agency responsible for the equipment, publication or policy discussed. Application of the information is optional with the user. Masculine pronouns may refer to both genders.

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

Just write to:

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

Or email to:

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

Internet address:

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

By order of the Secretary of the Army:

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GETTING THE WET OUT!



Dear Half-Mast,

We're constantly finding standing water inside the ammo compartments of our tanks.

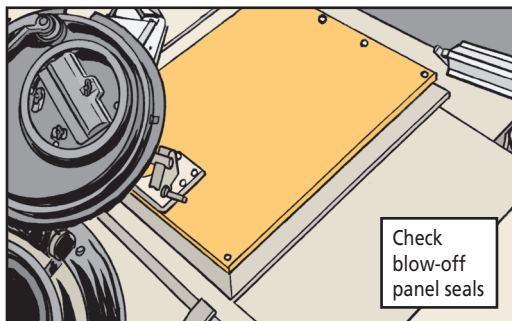
We thought it was simple condensation, so we used desiccant bags, NSN 6850-00-264-6571, like you said on Page 7 of PS 685 (Dec 09). That helped some, but we kept getting more water than the desiccant bags could handle.

Any ideas on what could be causing this water problem and what we can do to stop it?

SSG H.M.P.

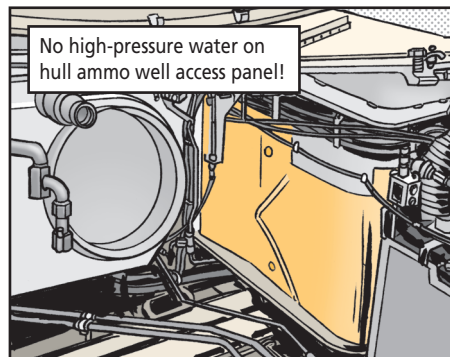
Dear Sergeant H.M.P.,

I've got a few ideas that might help. Take a close look at the blow-off panels. Sometimes the seals under these panels wear out and allow water to leak through to the ammo compartment.



There's also a small environmental cover to the rear of the blow-off panels you should check. Cracked welds, broken or missing bolts, or a leaky seal can all lead to water problems in the ammo compartment.

If those aren't causing the problem, are you using high-pressure water or steam to clean the engine compartment when the powerpack is removed? That can force water past the gasket on the hull ammo well access panel and into the ammo compartment. Check the gasket and try to avoid spraying this panel in the future.



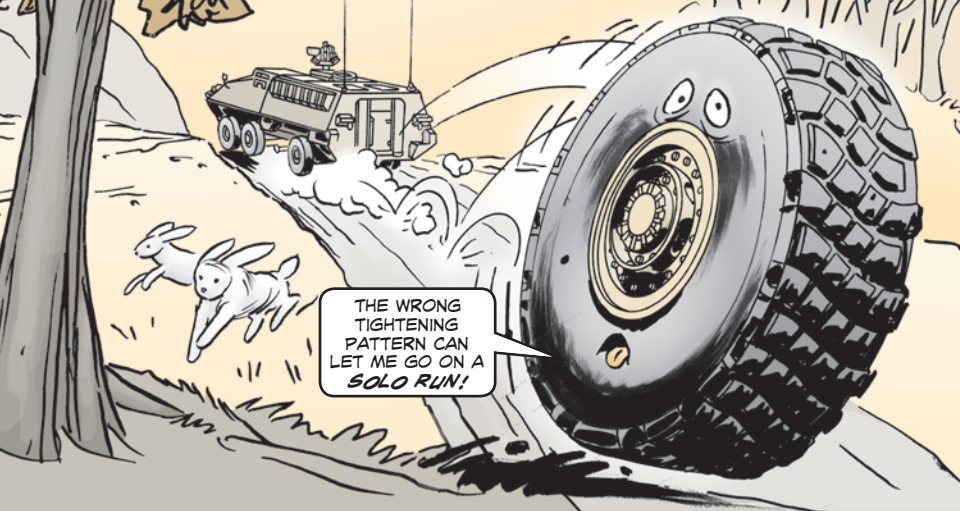
Keep using the desiccant bags, too. They really help.

Last, but not least, make sure you keep your tank covered with a tarp, especially when it's going to be stored for a while.

There are two new form-fitting tarps available for M1A1 tanks that work especially well. Use NSN 2540-01-568-9376 to get a tan tarp. NSN 2540-01-568-9379 brings a green tarp. NSNs for specially designed M1A2 tarps aren't yet available, so use the tarp from your BII.

Half-Mast

THE PROOF IS IN THE PATTERN

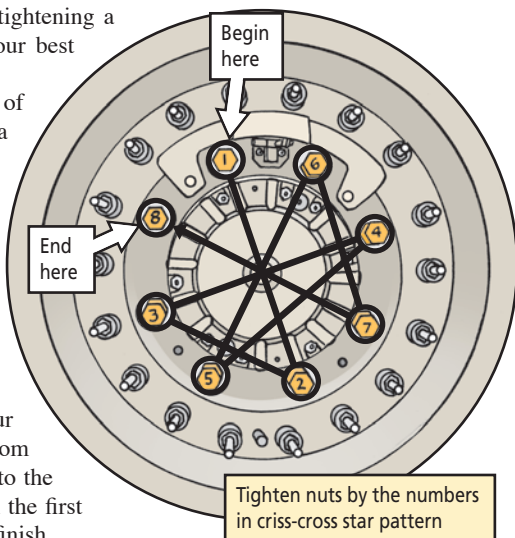


Crewmen, when replacing or tightening a wheel assembly in the field, your best bet is to shoot for the “stars.”

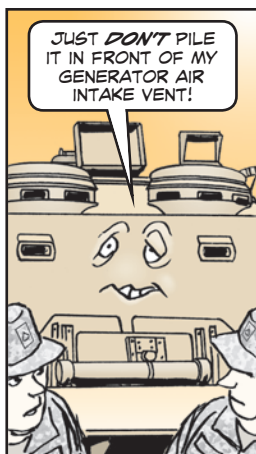
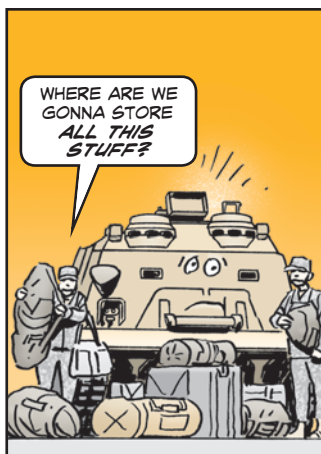
Some crewmen are guilty of tightening those wheel nuts in a clockwise or counterclockwise pattern. They’re the same ones who end up with stripped lugs and nuts that loosen and fall off.

Instead, tighten the nuts in a criss-cross star pattern. That evens out the torque and keeps the nuts in place.

Just make sure you tell your mechanic when you get back from the field. He’ll tighten the nuts to the correct torque: 157-173 lb-ft on the first go-around and 214-236 lb-ft to finish.



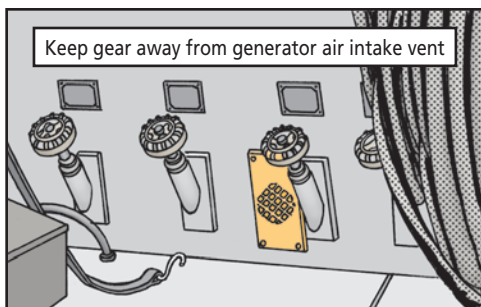
Keep Gear AWAY From Vent!



Crewmen, it gets really hot in the engine compartment of your M88A1 recovery vehicle during operation. In fact, it gets hot enough to cook the generator without a little help on your part.

The small air intake vent at the bottom of the back wall in the crew compartment provides that help. The vent allows cooling air to get to the generator, but only if you let it.

Tossing field packs, helmets, and other gear against the vent blocks airflow. No more air, no more generator. It's as simple as that.

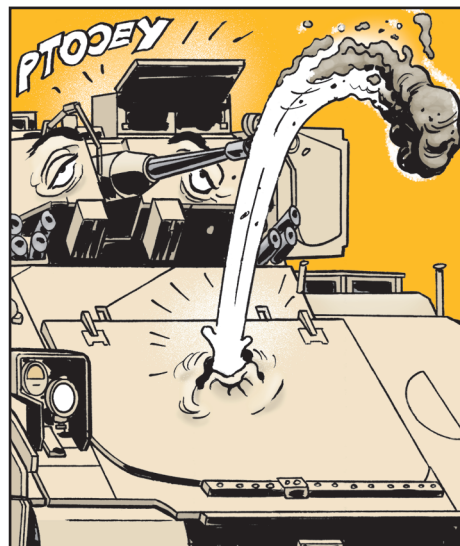
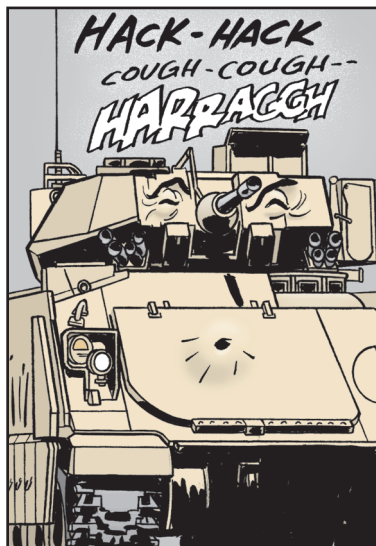


Of course, keeping the vent clear won't help a bit if the air intake tube that leads to the generator comes loose. Check the hose clamps, NSN 4730-00-908-6292, that hold the tube in place. If they're loose, tighten 'em.

While you're at it, eyeball the tube for cuts or cracks. Any damage will let in hot air from the engine compartment that can overheat the generator. If you find any problems, replace the tube with NSN 9330-01-054-9780.



KEEP THE GUNK OUT!



Water, sand and dirt combined with fuel make a toxic mixture for your Bradley's engine, crewmen. And the first line of defense is the vehicle's fuel cap, gasket and strainer.

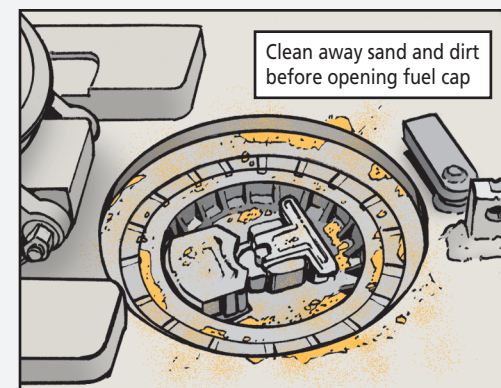
Dirt and sand collect around the filler neck. If you don't keep it clean, that buildup can make it hard to close the cap properly. Forcing the cap tears the fuel gasket. That allows rain water to trickle down into the fuel system along with the dirt and sand.

You'll know there's a problem when engine performance suffers. The condition can worsen until the fuel pump fails. If that happens, your Bradley will be out of action until the pump is replaced and the injectors are cleaned.

AFTER EVERY OPERATION, CHECK THE FUEL CAP, GASKET, AND STRAINER LIKE THIS...



1. Blow away any dirt that has collected around the filler neck before removing the fuel cap. If there's water there, soak it up with a clean rag.
2. Remove the fuel cap. Turn it upside down and look at the gasket. If it shows damage, get a new one with NSN 2590-01-482-1662.
3. Now look at the fuel gasket, NSN 5330-01-207-9163, in the filler neck. Any cuts, nicks or gouges mean the gasket needs to be replaced.
4. Pull out the fuel strainer and look for tears or holes. Replace a damaged strainer with NSN 4730-01-108-5253.



M1064 Heater Kit Fitting NSN

Order a new pipe-to-tube elbow for the heater kit on your M1064 mortar carrier with NSN 4730-01-570-2492 (PN SAE J514 6-4 070203CZ, CAGE 81343). It replaces NSN 4730-00-289-2378, which is shown as Item 2 in Fig 327 of TM 9-2350-261-24P (Aug 05).

M2A3/M3A3 Bradley BUSK Bench Seats

Need a new seatbelt screw for the IED bench seats on your M2A3/M3A3 Bradley urban survivability kit (BUSK)? PN B183A038C038HSHS, which is shown as Item 30 in WP 0058 00-11 and Item 24 in WP 0059 00-5 of TB 9-2350-395-13&P (Jun 08, w/Ch 1, Aug 08), doesn't cross to an NSN and is being replaced. Get the new screw with NSN 5305-01-566-3834 (PN 12517379, CAGE 19207). Make a note until the TB can be updated.

AVLB...

**WEAK
SPRING
CAN
CAUSE
LEAK!**

OH,
GREAT!
AN FRH
SPILL!!

WE'D BETTER NOTIFY
THE ENVIRONMENTAL
FOLKS. THERE GOES
OUR DAY!

Nobody likes to see an FRH spill.

Cleanup's a hassle and your environmental folks will be breathing down your neck all day.

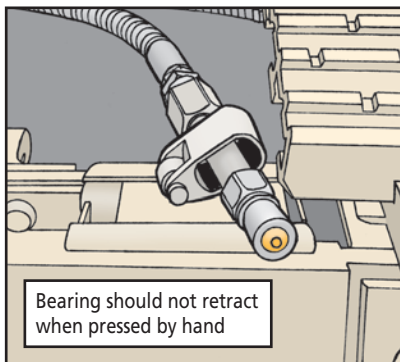
That's why it's important to keep the hydraulic line quick-disconnect couplings on your AVLB's bridge in good shape. Pay particular attention to the coupling plug used to mate the bridge and launcher.

On the mating end of the bridge, the male coupling, NSN 4730-00-182-9086, has a bearing at the end that retracts to let FRH flow once the bridge is mated.

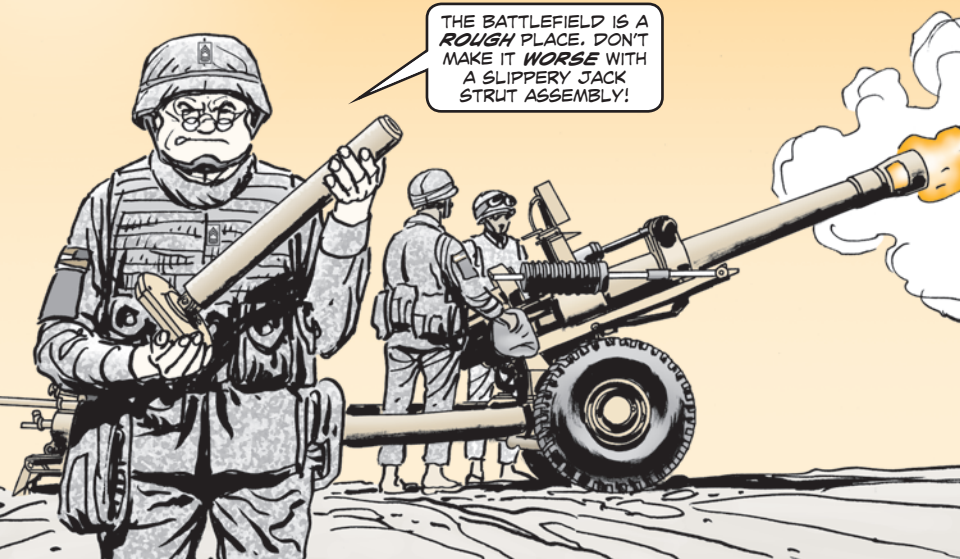
The rest of the time, the bearing is kept firmly extended by an internal spring. Over time, that spring can weaken. When that happens, FRH oozes out past the bearing and ends up in a puddle on the ground.

The best way to prevent that mess is with a quick inspection of the coupling.

If you can push the bearing in with your finger, the spring is too weak and the coupling should be replaced. If the bearing won't move, the coupling's good to go.



PUT A STOP TO SLIPPERY STRUTS

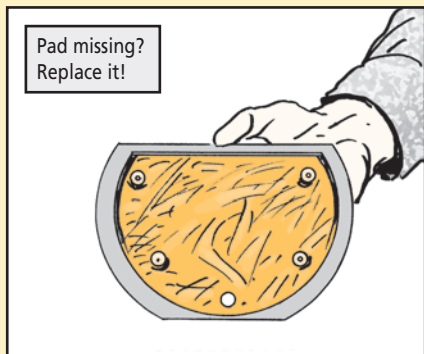


A slippery jack strut assembly can be a real danger to you and your M119A2 howitzer.

The jack strut is designed to hold the howitzer up so you can remove the tire and swing the gun tube around to the towing or firing positions. If it slips, the howitzer can fall on you or someone else.

That's why it's so important to keep an eye on the jack strut's rubber cushioning pad. The strut can slip if the pad is damaged or missing, especially if it's used on wet concrete or muddy ground.

So, during PMCS, take a look at the bottom of the jack strut. If the pad is damaged or missing entirely, replace it with NSN 2590-01-462-0746. It's held in place with four blind rivets, NSN 5320-00-081-8307.



Slow Down Tire Wear

Nowadays, people want things quick, fast, and in a hurry. But no one wants rapid tire wear on their M939-series 5-ton trucks.

Premature tire wear shouldn't be a problem **IF**:

- your -A2 truck's CTIS maintains the right tire pressure
- the front wheels disengage when the front wheel drive selector lever is moved to the OUT position
- you have a functioning linear valve that engages and disengages 6-wheel drive
- the front end is aligned

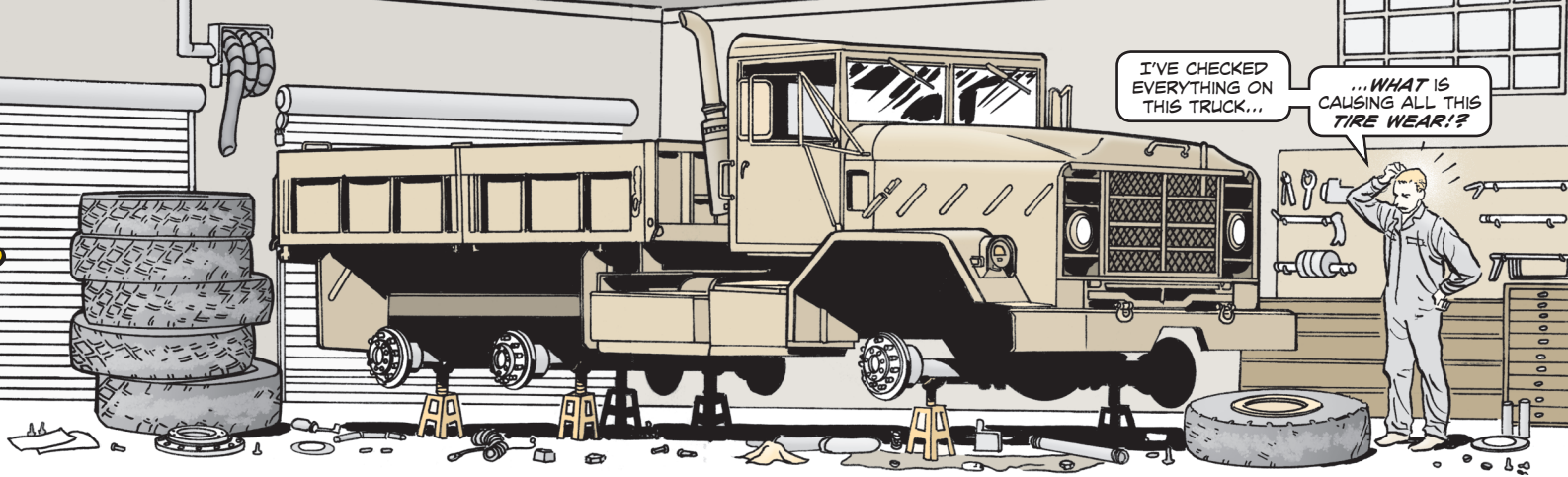
But if premature tire wear is still a problem, you may be able to slow it down by giving some attention to your truck's Cardan and CV joint's front internal axles. If the Cardan and CV joints are worn, they can cause premature tire wear, especially on older trucks. Get your mechanic to replace the Cardan and CV joint internal axles when necessary.

You may find different combinations of internal front axle shafts on the M939 FOV due to unscheduled maintenance. Determine which joints need replacing on these trucks. You can figure out which internal front axle to remove and replace by measuring the outside diameter of the seal surface of the axle.

For M939A2s, if the outside diameter measures approximately 2.44 inches (and no less), your truck has the Cardan joint internal axle, also known as the U-joint style internal axle.

The M939A2-series truck's front internal axles have Cardan joint axle left hand shafts, NSN 2529-01-271-8024, and right hand shafts, NSN 2520-01-271-8025. To replace the seal retainer assembly, order retainer assembly, NSN 5330-01-271-9490. The seal that's used with the retainer assembly is NSN 5330-01-271-9362.

Note: If you want to change just the seal itself, you'll need a special tool that's called out in the TM for that procedure. If that tool's not available, the truck headshed recommends that you just order the retainer assembly.



For M939s and M939A1s, if the outside diameter on the same seal surface area measures about 2.122 inches (and no less), your truck has Cardan joint internal axles. Order replacement shafts for M939 and M939A1 truck front axles equipped with Cardan joint axle shafts using NSNs 2520-00-734-6985 (left-hand) and 2520-00-734-6984 (right-hand).

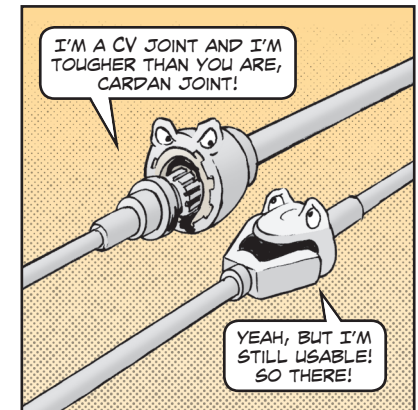
By the way, these NSNs will bring you CV joint internal front axles with the same seal surface outside diameter measuring 2.122 inches. They are a suitable replacement internal axle. Cardan internal axles measuring 2.122 inches have been discontinued, so you can't order them.

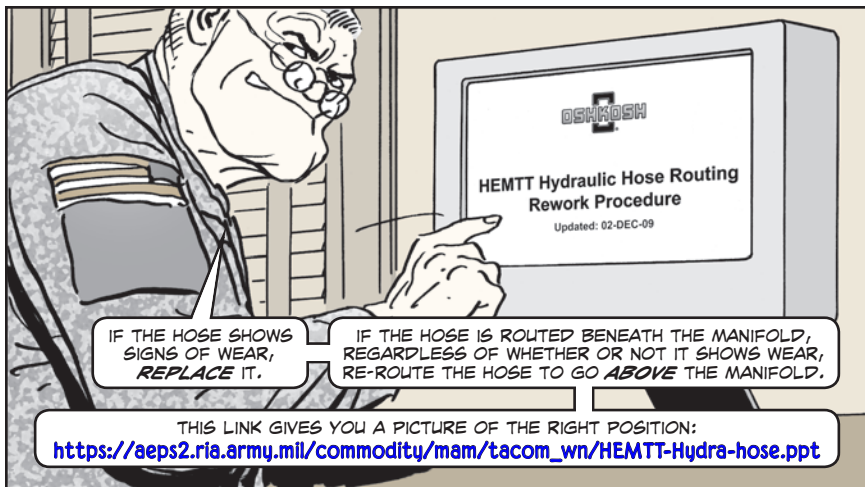
You can replace the seal retainer assembly using NSN 4320-00-734-6951. The seal itself that's used in this retainer assembly comes with NSN 5330-00-145-8355. You can change this seal using common tools.

Note that the measurements of the internal axle seal surface outside diameters mentioned are the only possible measurements you can have with the Cardan joint/U-joint style internal axles.

M939, M939A1, and M939A2 front axles equipped with constant velocity (CV) internal axle shafts, NSN 2520-00-734-6985 (left hand) and NSN 2520-00-734-6984 (right hand), use retainer assembly, NSN 4320-00-734-6951.

The seal used in this retainer assembly is NSN 5330-00-145-8355. This seal can be changed using common tools.

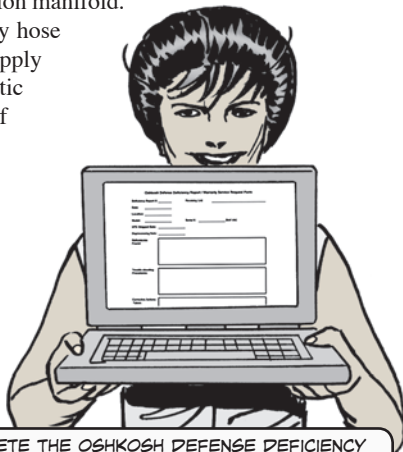




If the hose does not show wear, and is not routed beneath the distribution manifold, but still is not in the proper location above the manifold, just leave it alone for now. The contractor will re-route the hose to the correct position during installation of the production fix to HEMTT -A4s mentioned in TACOM SOUM 10-003.

Also, you may need extra slack to re-route an existing hose. Loosen the hose clamps and pull enough of the hose through to get the slack needed to route the hose above the distribution manifold. The drain hose can be zip-tied to the supply hose for the radiator hydraulic motor fan. This supply hose is line 2976 in the hydraulic schematic and comes out of a T-fitting at the front of the distribution manifold.

If wear causes you to order a replacement hose, use PMCS guidance to inspect your -A4 HEMTT hose daily for leaks while waiting for the part to arrive. Deadline the truck if you find class III leaks in the hydraulic drain hose.



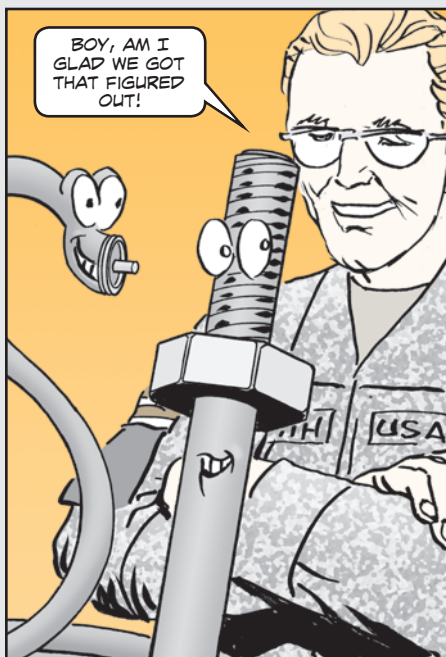
TO ORDER A REPLACEMENT HOSE, COMPLETE THE OSHKOSH DEFENSE DEFICIENCY REPORT/WARRANTY SERVICE REQUEST FORM ON THE FOLLOWING LINK:
https://aeps2.ria.army.mil/commodity/mam/tacom_wn/BLANK-Deficiency-Rpt.xls

THEN EMAIL IT TO:
dami_hemtt@conus.army.mil

THE HOSE ASSEMBLY WILL BE ISSUED BY THE CONTRACTOR AT NO COST TO YOUR UNIT.



PTO Linkage NSN Correction



Dear Editor,

I'm a contractor in Kuwait, and we found an issue with the power takeoff (PTO) control assemblies for M939-series trucks.

TM 9-2320-272-24P-2 gives the same NSN for Item 13 of Fig 525 and Item 16 of Fig 528. The problem is that these are actually two different items.

We later learned the correct NSNs: Item 13 of Fig 525 is NSN 2590-01-083-1155 (PN 11669342-1) and Item 16 of Fig 528 is NSN 2590-01-106-2060 (PN 11669463).

Would you do me a favor and tell your readers about this correction? That will help out units and other contractors who run into this problem.

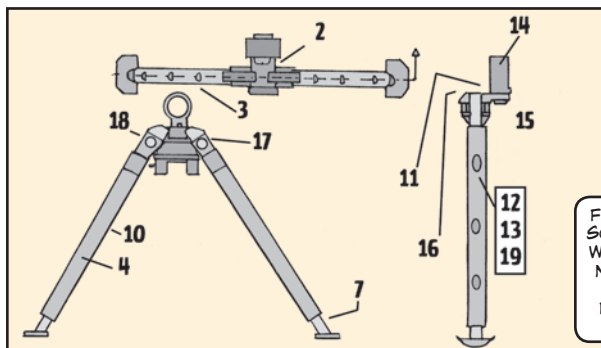
Mohammad Al-Ma'ani
Honeywell Contractor
Kuwait

Editor's note: Consider that favor done, Mr. Al-Ma'ani. Thanks for looking out for Soldiers.

NSNs for New Bipod Parts

The M249 machine gun has a new bipod, which means eventually you and your support will need to order parts for it. It will be some time before the parts are added to TM 9-1005-201-23&P, so keep these NSNs on hand for replacements.

	Item	PN	NSN	SMR	DEMIL
1	Bipod assembly	13002190	1005-01-521-7962	PAOFF	C
2	Pivot rod	13002195	1005-01-527-1696	PAFZZ	B
3	Leg assembly	13002196	1005-01-525-7971	PAFZZ	C
4	Outer leg assembly	13002197	1005-01-525-7972	PAFZZ	D
5	Outer support leg	13002199	no NSN	XAFZZ	D
6	Outer bipod leg	13002198	no NSN	XAFZZ	D
7	Inner leg assembly	13002200	1005-01-525-7970	PAFZZ	C
8	Inner bipod leg sole	12002202	no NSN	XAFZZ	D
9	Inner bipod leg	13002201	no NSN	XAFZZ	D
10	Tubular spring pin	MS16562-128	5315-00-846-1791	PAFZZ	C
11	Headless straight pin	13002206	1005-01-526-4779	PAFZZ	B
12	Compression helical spring	13002207	5360-01-525-7968	PAFZZ	B
13	Leg bipod latch	13002205	1005-01-525-9320	PAFZZ	B
14	Bipod yoke	13002191	1005-01-525-7020	PAFZZ	B
15	Retaining ring	13002208	5325-01-525-7017	PAFZZ	B
16	Bipod collar	13002192	1005-01-525-9318	PAFZZ	B
17	Tubular spring pin	13002203	5315-01-525-7969	PAFZZ	B
18	Helical spring	13002204	5360-01-525-7018	PAFZZ	B
19	Spring pin	MS39086-90	5315-01-834-0741	PAFZZ	A



FOR THOSE PARTS WITH A SOURCE CODE OF XA, YOU WILL NEED TO ORDER THE NEXT HIGHER ASSEMBLY. SEE THE NEXT PAGE FOR AN UPDATE TO THE BIPOD PARTS.

New Yoke Fixes Bipod Problem

Dear Editor,

On the previous page, you provide a list of the parts for the new M249 machine gun bipod. In my work as a TACOM LAR, I found that every armorer in the brigade I support has had two problems with the new bipods:

- The spring pin (19) is being sheared off or is rounding the corners of the bipod yoke (14). This lets the bipod legs spin freely under the weapon, striking the soldier.

- The retaining ring (15) is coming off during normal use, allowing the entire lower bipod assembly to come off the pivot post of the yoke.

Fortunately, Rock Island has fixed the problem with a new bipod design that is welded around the yoke, which keeps the bipod legs from spinning and coming off. NSN 1005-01-557-2453 brings a welded bipod yoke that replaces the bipod yoke (14), retaining ring (15), bipod collar (16), and spring pin (19).

The new bipod yoke must be installed by field support.

Gerald Knipe
TACOM LAR
Ft Riley, KS

Editor's note: Great information, Gerald! Thanks for alerting PS readers to the new bipod parts.



The Army strives to provide Soldiers with the best lubricants possible for their weapons. And as a result sometimes the lube manufacturers change.

That's what is happening with CLP, the workhorse lube for most small arms. When you order it, you may get CLP that comes in a bottle that looks nothing like what it's come in before. But this CLP is just as good or even better than the old CLP. Use it with total confidence. Of course, use up the CLP you have on hand before you order more.

Don't depend on commercial websites for information on lubes. There are forms of CLP out there that don't meet Army performance standards.

If you ever have any questions about CLP or any lube used on small arms, contact your local TACOM logistics assistance representative.

Let your -10 TM always be your guide on what to use to clean and lube your weapon.

Adapting Racks for M16A4s and M4A1s

HEY!
WE'RE NOT
SECURE IN
HERE!

WE HAVE TO BE
LOCKED IN TIGHT
WHEN YOU LEAVE
US ALONE!

The M16A4 rifles and the M4A1 carbines won't fit securely in the M12 rack unless you get the rack modified.

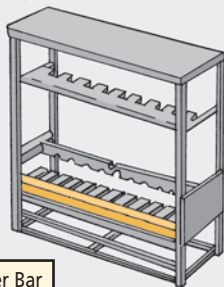
To lock the M4A1s in the M12 rack, you need an adapter bar on the rear of the arms rack. Your support (or field maintenance) makes the bar following the instructions beginning in WP 0036-1 in TM 9-1005-319-23&P.

To lock an M16A4 with a carrying handle in the M12 rack, you may need to move the carrying handle back one notch to the rear. The carrying handle must be returned to the original position for firing to maintain the zero.

The standard adapter rail system installed on the M16A4 or M4/M4A1 will prevent the rack from closing. In that case, a single locking bar is needed. To get instructions for fabricating a single locking bar, contact TACOM-Rock Island's James Rollins at DSN 793-1797, (309) 782-1797, or email:

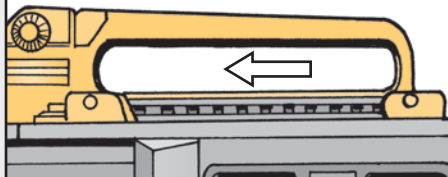
james.rollins@us.army.mil

Any M12 racks that are fitted with the adapter bar or single locking bar must be certified as secure. Contact your local TACOM-Rock Island logistics assistance representative or James Rollins for details.



Adapter Bar

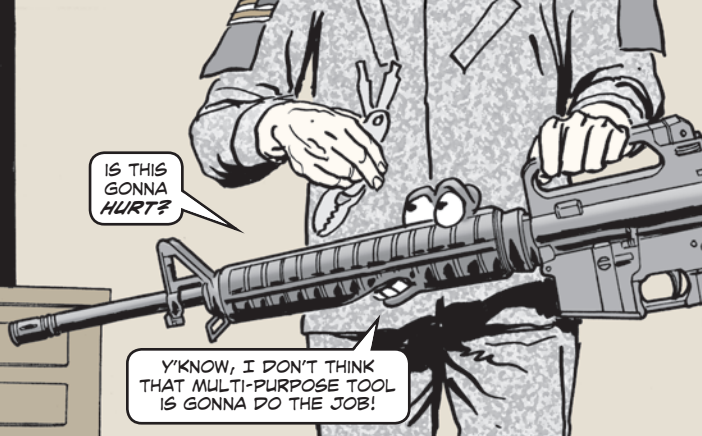
Move M16A4 carrying handle back one notch



Mounting rail installed?
Rack locking bar may be needed

Small Arms...

WRONG TOOL BLINDS SIGHT



Using a bullet or multi-purpose tool to adjust the front sight on your rifle or machine gun will soon leave you with a ruined sight.

The M16-series rifle, M4/M4A1 carbine and M240B machine gun all have special sight adjustment tools that let you set the sight without damaging it.

The M16/M4 tool can't be ordered with an NSN. You can either have your support make the tool using the diagram in WP 0030-3 in TM 9-1005-319-23&P or you can go to your local gun shop and buy the tool. Most units have found it easier and cheaper to just buy the tool.

Order the M240B tool with NSN 1005-01-458-7004 for around \$25.

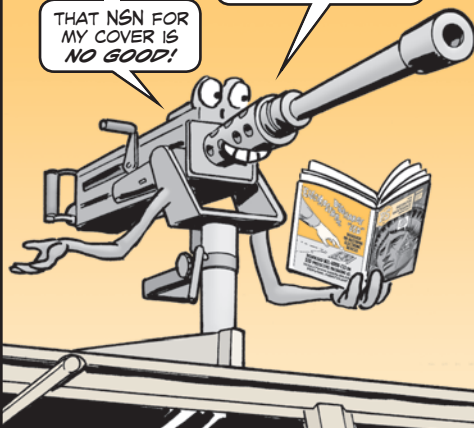
M2 Machine Gun...

Cover NSN Changed

HEY, WAIT
A MINUTE!

THAT NSN FOR
MY COVER IS
NO GOOD!

HALF-MAST NEEDS
TO STRAIGHTEN
THIS OUT!



Dear Half-Mast,

In PS 644 (July 06), you gave the NSN for the M2 machine gun's cover as NSN 1005-00-781-9108. But the FED LOG shows this NSN as unavailable. Is there a new NSN for the cover?

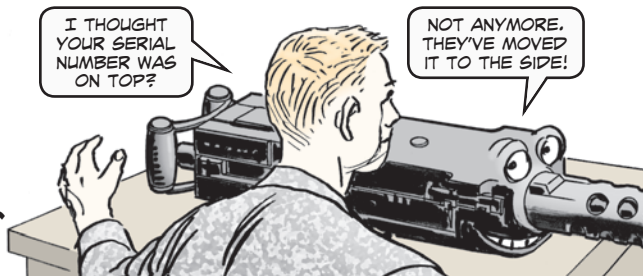
SSG T.S.

Dear Sergeant T.S.,

Yes, the NSN has been changed to 1005-00-487-4100.

Half-Mast

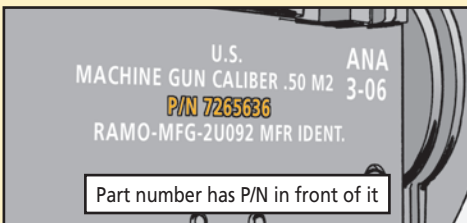
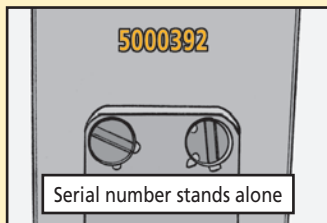
Spotting Serial Numbers



Depending on the age of your M2 machine gun, its serial number may be on the top or the side of the weapon. That has caused confusion about which is the serial number.

It's important to use the correct serial number since that's how you track the M2 in the property book.

Some units have mixed up the serial number with the part number. To avoid that mistake, just remember that the serial number stands alone, but the part number has "P/N" in front of it.



M16-Series Rifle, M4/M4A1 Carbine...

No Buffer Help Needed



Some riflemen have tried to improve the accuracy of their M16 rifle or M4 carbine by adding a small plastic buffer inside the lower receiver.

That's hardly accurate help. When you close the upper and lower receivers with the added buffer, the pivot pin gets broken. Then the weapon won't align right and you must get the pivot pin replaced.

The only help your M16 or M4 needs from you is to faithfully do the PMCS in TM 9-1005-319-10. Accuracy comes from practice.

M9 Pistol...

LOOK FOR BARREL GUIDE

FOR SAFETY, ALL
YOUR M9 PISTOLS
SHOULD BE STORED
WITH THE BARREL
GUIDE.

SO MAKE SURE
THE GUIDES
ARE THERE AND
REPLACE MISSING
GUIDES.



Dear Editor,

I recently was in an arms room where I noticed that several of the M9 pistols stored in the M14 racks were missing their barrel guides. Although the missing guides don't affect the storage security of the pistols, they do affect the safety of the M9s. The guides are the last check for barrel obstructions or ammo present in the M9.

So I recommend all commanders have their arms rooms inspected for missing M9 barrel guides. They can order replacements with NSN 1005-01-259-2897.

Terry Blount
TACOM LCMC
Vicenza, Italy

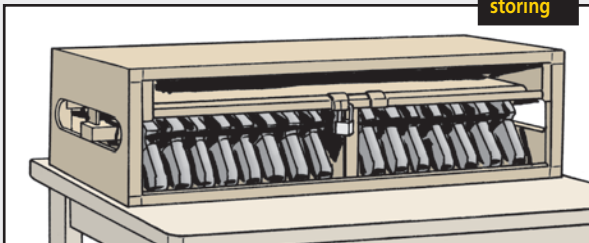


Use guide in
weapon...

...before
storing

Editor's note:

We'll let your
suggestion be
a guide for
commanders.
Thanks, Terry.



M14 Rifle...

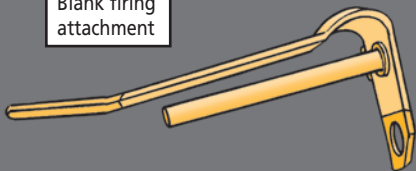
Is There a BFA?

Dear Half-Mast,

Is there a blank firing attachment
(BFA) for the M14 rifle?

MAJ R.S.

Blank firing
attachment

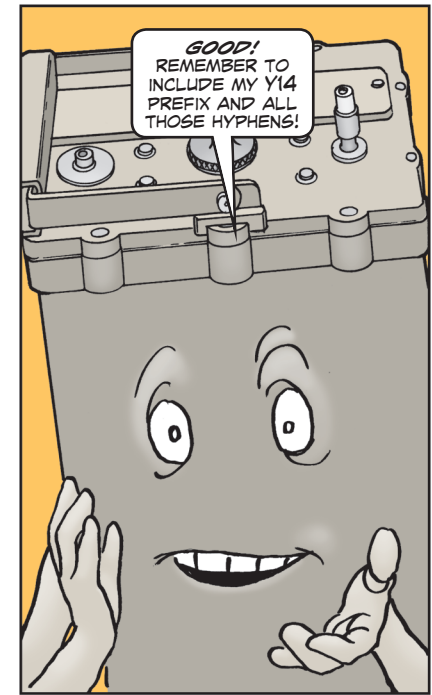
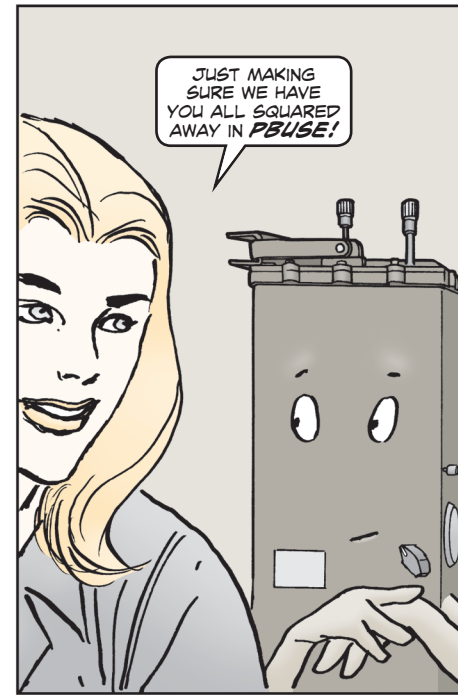
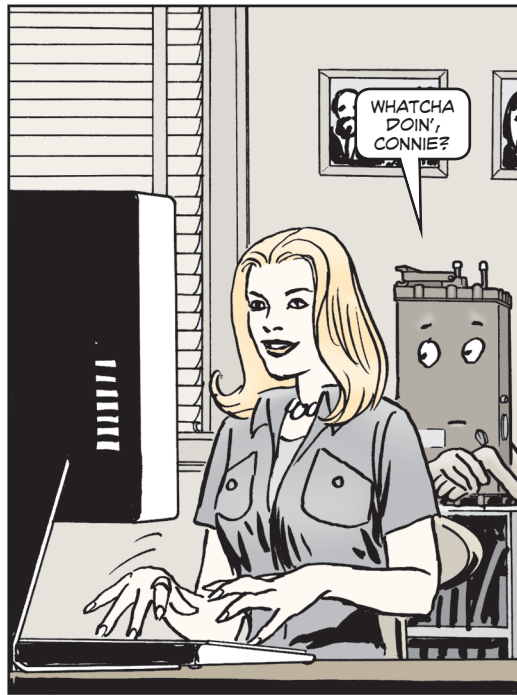


Dear Major R.S.,

Indeed there is. The M14 BFA and
breech shield come with NSN 1005-00-
893-0902.

Half-Mast

Reporting M88 Detectors and ACADAs Correctly



It's about unit and depot accountability! So, take the time and effort to **correctly** report M88 detectors and automatic chemical agent detector alarms (ACADAs) in PBUSE or WebUIT. Follow the instructions below for each system.

PBUSE Users M88 Detector

For an M88 detector going into a Stryker, enter NSN 6665-01-438-3673 with LIN FG654E.

Enter the prefix Y14-M- and the cell serial number (SN) in the PBUSE "Serial_Num" field (Example: Y14-M-12345). Enter the prefix Y14-D- and the detector SN into the PBUSE "Detect_SN" field (Example: Y14-D-12345).

Note: When reporting a spare M88 detector, follow the instructions in the example above; however, there is no associated vehicle SN/registration number.

ACADA

For an ACADA **not** going into a Stryker, enter NSN 6665-01-438-6963 with LIN A33020.

Enter the prefix Y14-M- and cell SN into the PBUSE "Serial_Num" field (Example: Y14-M-12345). Enter the prefix Y14-D- and the detector SN into the PBUSE "Detect_SN" field (Example: Y14-D-12345).

WebUIT Users (Non-PBUSE units/depots)

WebUIT uses the radiation testing and tracking system SN prefix for deriving NSNs. For M88 detectors and ACADAs, use prefix Y14 and NSN 6665-01-438-6963.

M88 Detector

For an M88 detector going into a Stryker, use the prefix Y14- and cell SN in the WebUIT SN field (Example: Y14-M-12345). Enter the detector SN (always Y14-D-NODET) in the WebUIT detector SN field.

Report a spare M88 detector the same way as an M88 going into a Stryker.

ACADA

For an ACADA not going into a Stryker, enter the prefix Y14-M- into the WebUIT "Serial_Number" field (Example: Y14-M-12345). Enter the prefix Y14-D- in the WebUIT "Detect_SN" field (Example: Y14-D-12345).

Important: Always use the Y14 prefix and include the hyphens as shown in all entries.

If you have questions, contact Cynthia Ackerman at DSN 793-0861, (309) 782-0861 or email: cynthia.ackerman@us.army.mil

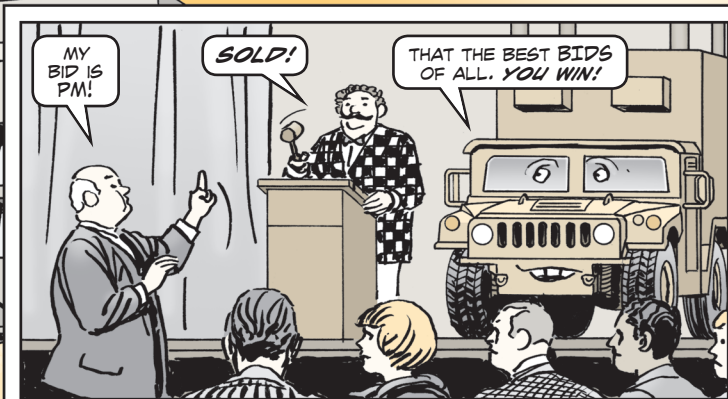
For more information, see TACOM supply advisory message 09-250:

<https://aeaps2.ria.army.mil/commodity/sam/tacom-sbc/sam-09-250a.html>

Best Bid is BIDS PM!

WELL HERE WE GO AGAIN. WHADDAYA GONNA' GIMME FOR 'EM? AH, AH. FIVE HUNDRED TWENTY-FIVE. WILL YA' GIMME THIRTY? MAKE IT THIRTY BID-A-FOR-A THIRTY DOLLAR, WILL YA' GIMME THIRTY-FIVE - FIVE? MAKE IT FORTY. WILL YA' GIMME FORTY? WILL YA' GIMME FORTY-FIVE - FIVE? MAKE IT FIFTY. WILL YA' GIMME FIFTY? WILL YA GIMME FIFTY-FIVE - FIVE - FIVE - FIVE - FIVE?

AUCTION TODAY



THE BIDS (BIOLOGICAL INTEGRATED DETECTION SYSTEM) IS AN EXTREMELY SENSITIVE DETECTOR OF BIOLOGICAL THREATS, BUT ONLY IF YOU ARE EXTREMELY SENSITIVE IN HOW YOU TREAT IT.

YOUR BEST BID FOR SUPERB DETECTION IS THIS BIDS PM...

P3I Version

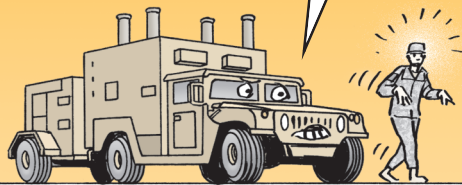
Don't rush shutdown.

If you just shut down the P3I without following the complete shutdown procedure, you'll have all sorts of problems next time you crank up BIDS. A **complete** shutdown automatically purges the lines to the mini-flow cytometer and liquid sampler. If liquid is left in the lines, it can freeze and/or clog the valves, leading to a big mess.

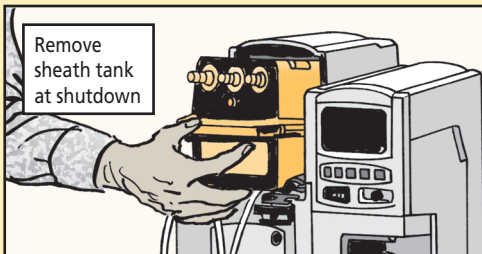
Same thing happens if you leave the sheath tank installed at shutdown. Fluid clogs the valves and plugs up the filters.

YOU CALL THAT A SHUTDOWN!?

I NEED COMPLETE PURGING BEFORE YOU CALL IT A DAY.

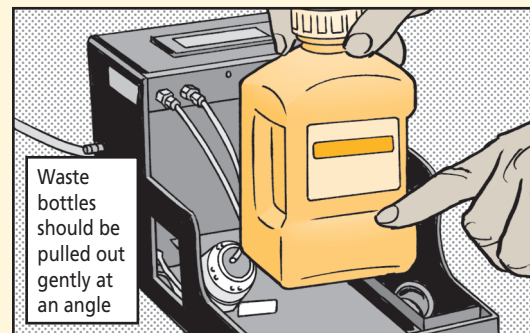


Remove sheath tank at shutdown



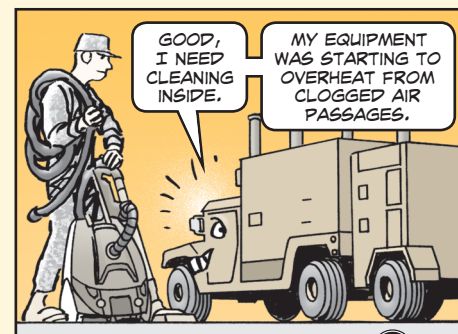
JPBDS Version

Don't waste waste bottles. Many waste bottles for the fluid transfer system are broken because operators try to pull them straight out. Pull them out gently at an angle. If the bottles are cracked, they leak, which leads to corrosion in the basic biological suite unit.



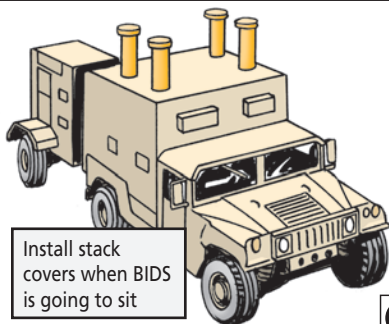
Be a good housekeeper.

Clean up any spills inside the shelter ASAP. Moisture trapped in the shelter quickly leads to corrosion. Keep the shelter door closed as much as possible and vacuum daily while operating. The more dirt that is in the shelter, the more likely dirt will clog the air passages of the BIDS equipment and cause failures and bad readings.

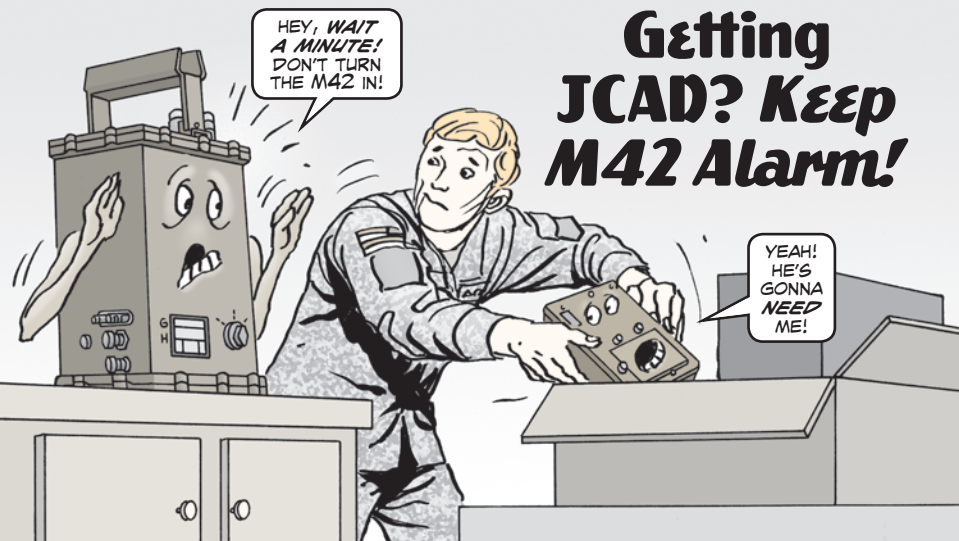


Shut down right. It's just as important to shut down the JBPDS correctly as it is for the P3I. If you skip shutdown steps, you end up with clogged lines and sticking valves.

If you're not going to be using JBPDS for a while, put the stack covers on. They keep water from filling up the internal collector concentrator, which can cause a major hazard. After a storm, make sure the covers haven't blown off.



PS
END



When your unit receives the new JCAD (joint chemical agent detector), NSN 6665-01-552-2704, you should turn in the M22 ACADA (alarm, chemical agent, automatic) or M43A1 chemical agent detector.

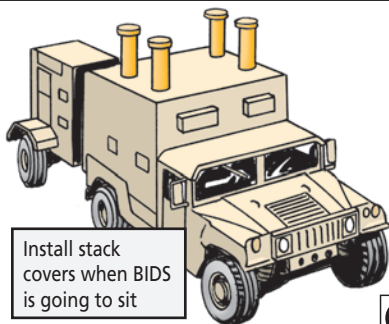
But don't turn in the M42 alarm, NSN 6665-00-859-2215. You will need that to use with the JCAD. Turn in the M42 only if it's excess. For more info, see Supply Advisory Message 09-01-107 or -016:

<https://aeps2.ria.army.mil/commodity/sam/tacom-sbc/sam-09-01-107.html>

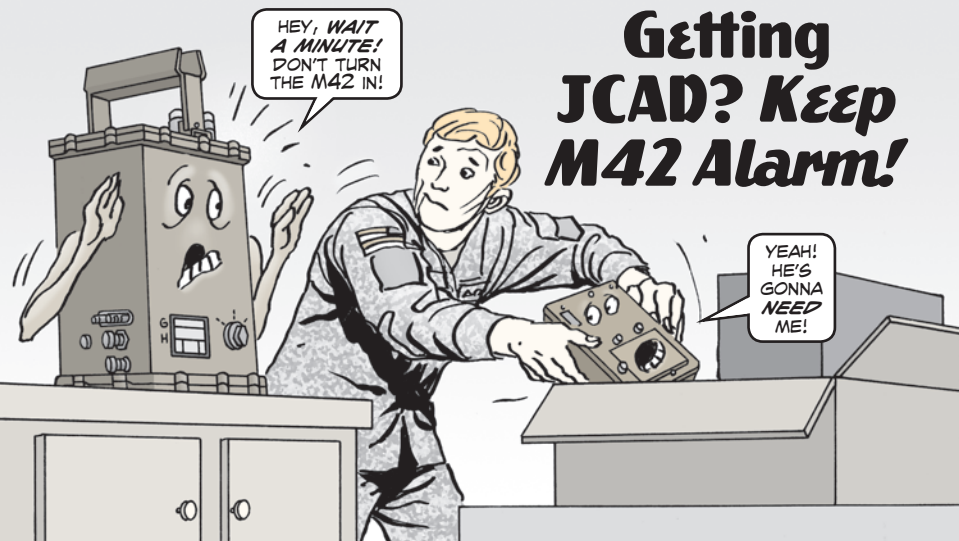
If you have questions, contact TACOM-Rock Island's Megan Kirby at DSN 793-3725, (309) 782-3725, or email megan.m.kirby@us.army.mil

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<https://aeps2.ria.army.mil/commodity/sam/tacom-sbc/sam-09-01-107.html>

If you have questions, contact TACOM-Rock Island's Megan Kirby at DSN 793-3725, (309) 782-3725, or email megan.m.kirby@us.army.mil

Tactical Vehicles...

CUTTING CORROSION



HOW CAN WE
HOPE TO *DEFEAT*
THESE CORROSION
CREATURES IF WE
CAN'T *IDENTIFY*
'EM!?



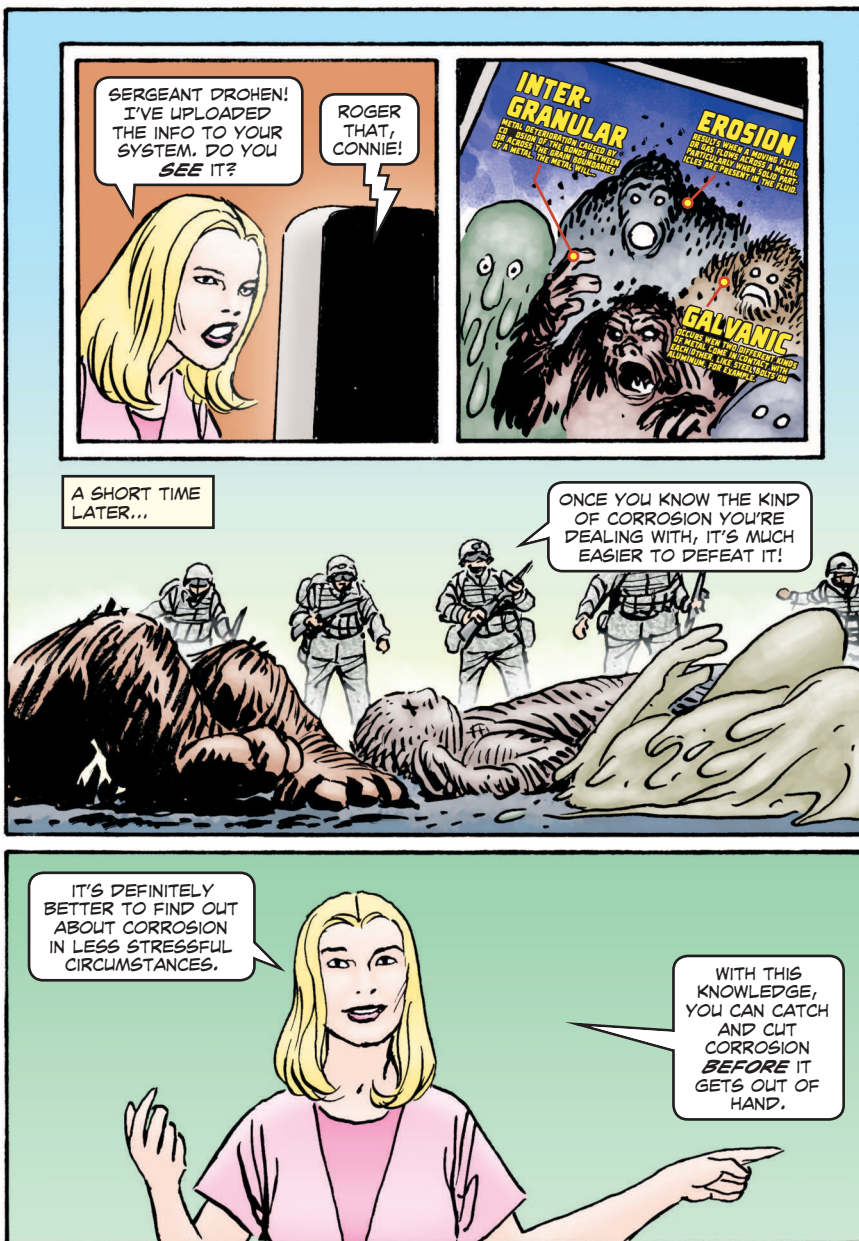
CONNIE, WE
COULD *REALLY*
USE A HAND
HERE!



I'M UPLOADING THE
SPECS TO YOUR
HELMET NOW!



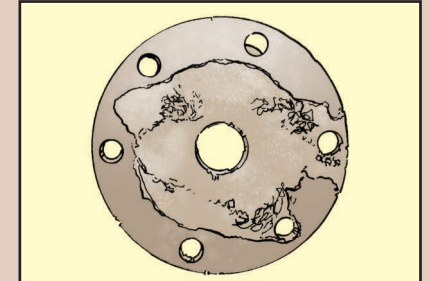
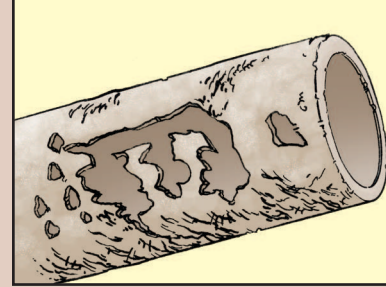
THE SOONER THE
BETTER! WE'RE IN
A *TOUGH SPOT*!



9 Types of Corrosion

UNIFORM (or general attack):

Affects a large area of exposed metal surface, like rust on steel or tarnish on silver. It gradually reduces the thickness of the metal until it fails.

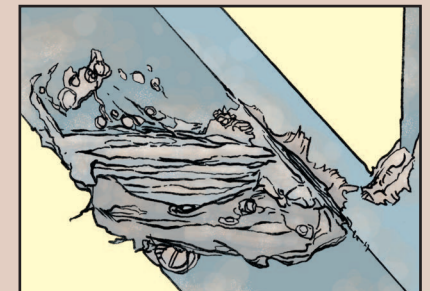
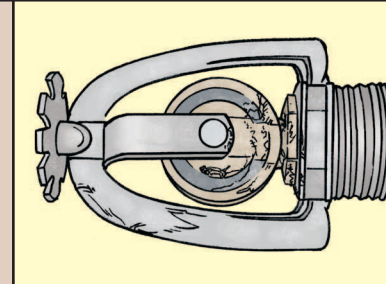


CREVICE:

Occurs in crevices created by rubber seals, gaskets, bolt heads, lap joints, dirt or other surface deposits. It will develop anywhere moisture or other corrosive agents are trapped and unable to drain or evaporate.

SELECTIVE LEACHING:

One element, usually the anodic element of an alloy, corrodes away, leaving the cathodic element. This can create holes in metal.

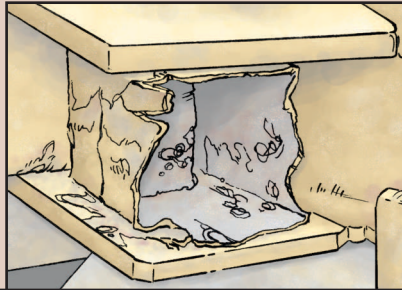


INTERGRANULAR:

Metal deterioration caused by corrosion of the bonds between or across the grain boundaries of a metal. The metal will appear to be peeling off in sheets, flaking, or being pushed apart by layers. A particular type of intergranular corrosion is exfoliation.

PITTING:

This can result from conditions similar to those for crevice corrosion. Pits can develop on various materials due to their composition. Rifle bores are big victims of pitting.

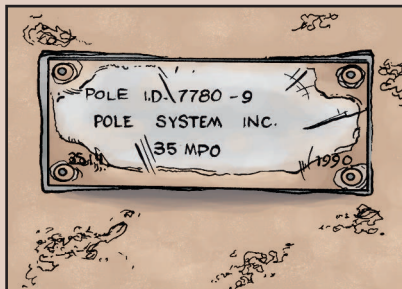
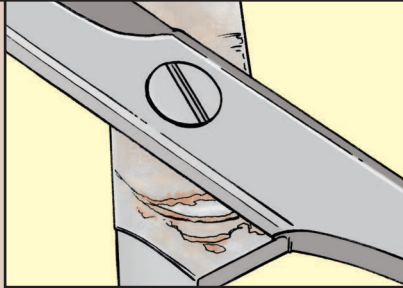


EROSION:

Results when a moving fluid (or gas) flows across a metal, particularly when solid particles are present in the fluid. Corrosion actually occurs on the surface of the metal, but the moving fluid washes away the corrosion and exposes a new metal surface, which also corrodes.

FRETTING:

Occurs between two pieces of weight-bearing metal in contact with each other. It's usually identified by a black powder corrosion product or pits on the surface.

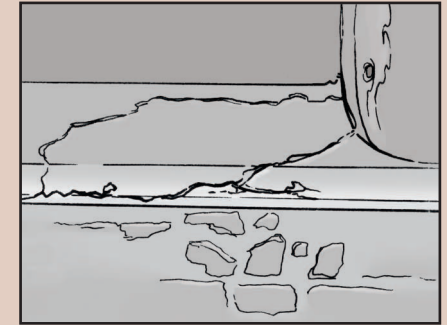


GALVANIC:

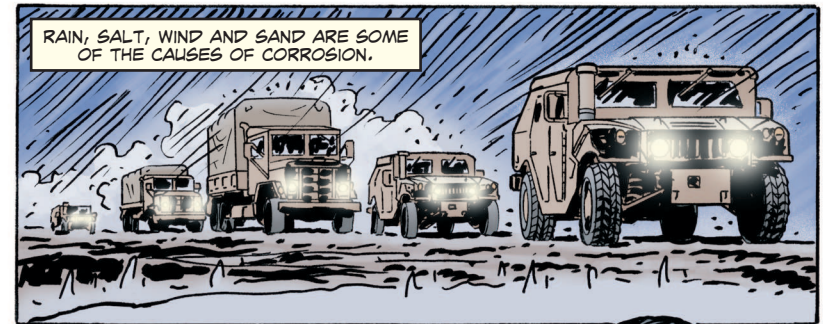
Occurs when two different kinds of metal come in contact with each other, like steel bolts on aluminum, for example. This is a common problem on aircraft because of their mix of metals.

STRESS:

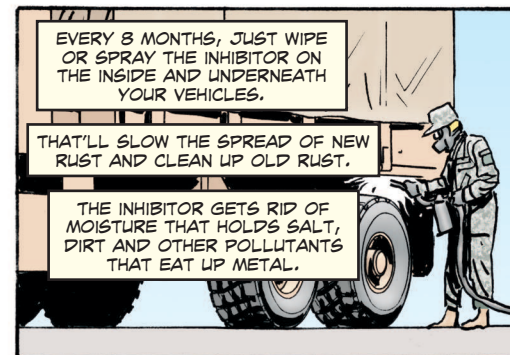
Term used to describe corrosion cracking and corrosion fatigue.



Reach for Rust Inhibitor

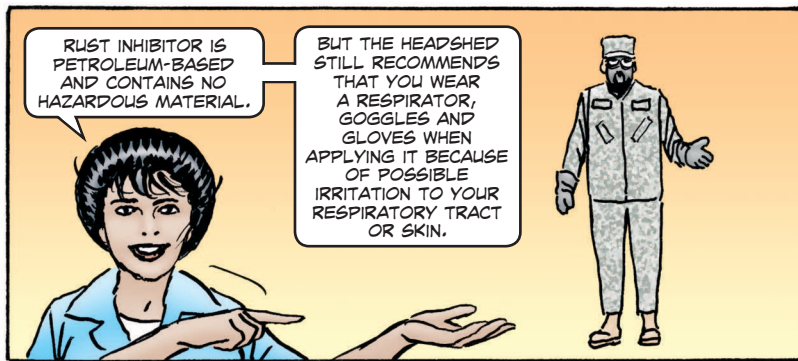


BUT YOU CAN CURB THEIR EFFECTS AND LOWER REPAIR COSTS BY USING **RUST INHIBITOR**, ALSO KNOWN AS CORROSION PREVENTIVE COMPOUND.




RUST INHIBITOR IS PETROLEUM-BASED AND CONTAINS NO HAZARDOUS MATERIAL.

BUT THE HEADSHED STILL RECOMMENDS THAT YOU WEAR A RESPIRATOR, GOGGLES AND GLOVES WHEN APPLYING IT BECAUSE OF POSSIBLE IRRITATION TO YOUR RESPIRATORY TRACT OR SKIN.



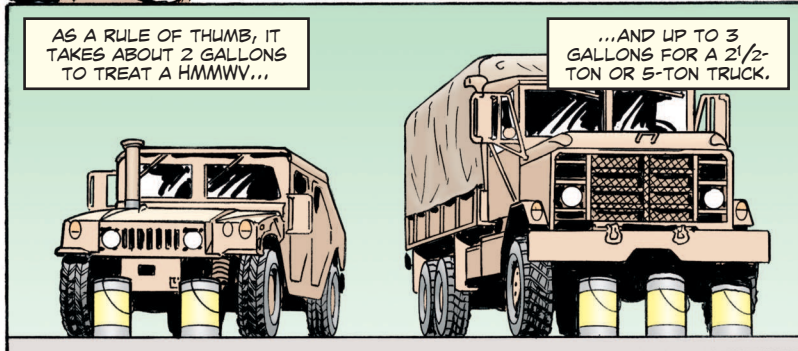
ORDER THE AMOUNT OF INHIBITOR YOU NEED...

Quantity	NSN 8030-01-414-
16-oz bottles (12)	7423
5-gal container	8947

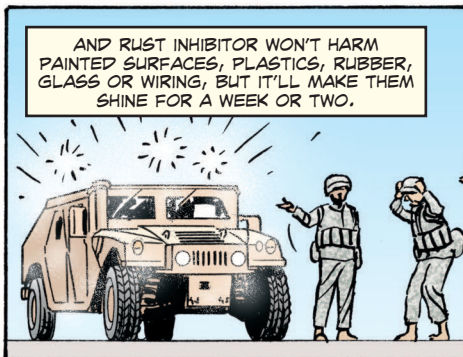


AS A RULE OF THUMB, IT TAKES ABOUT 2 GALLONS TO TREAT A HUMVY...

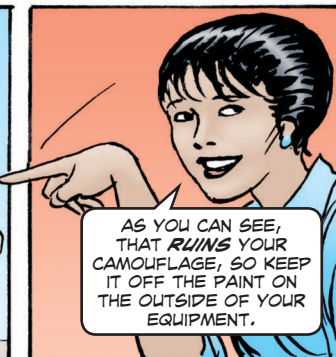
...AND UP TO 3 GALLONS FOR A 2 1/2-TON OR 5-TON TRUCK.



AND RUST INHIBITOR WON'T HARM PAINTED SURFACES, PLASTICS, RUBBER, GLASS OR WIRING, BUT IT'LL MAKE THEM SHINE FOR A WEEK OR TWO.



AS YOU CAN SEE, THAT RUINS YOUR CAMOUFLAGE, SO KEEP IT OFF THE PAINT ON THE OUTSIDE OF YOUR EQUIPMENT.

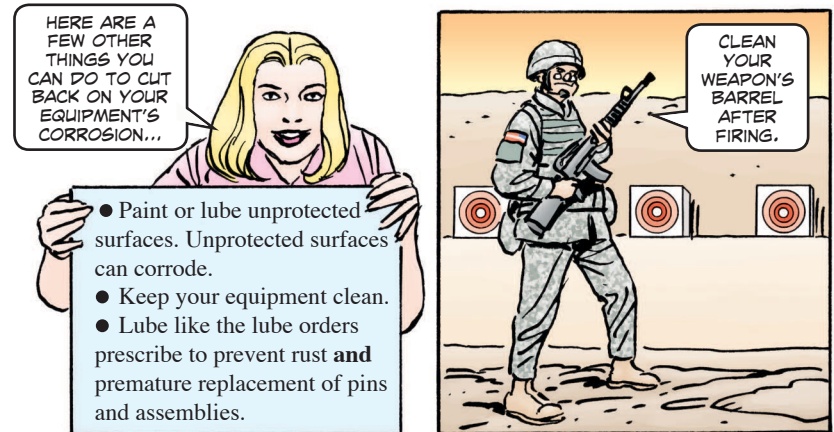


Counteract Corrosion

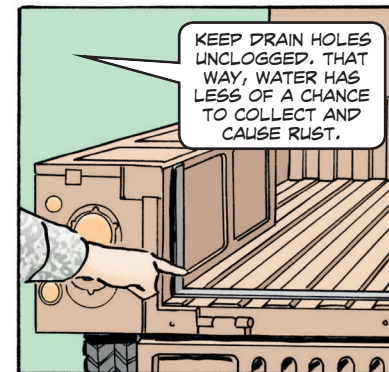
HERE ARE A FEW OTHER THINGS YOU CAN DO TO CUT BACK ON YOUR EQUIPMENT'S CORROSION...

- Paint or lube unprotected surfaces. Unprotected surfaces can corrode.
- Keep your equipment clean.
- Lube like the lube orders prescribe to prevent rust and premature replacement of pins and assemblies.

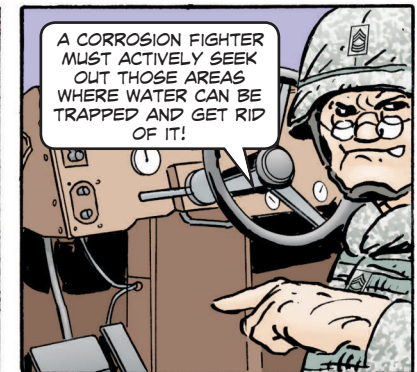
CLEAN YOUR WEAPON'S BARREL AFTER FIRING.



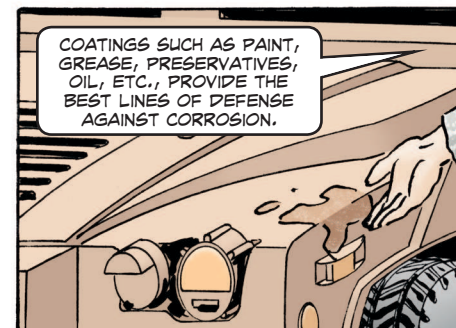
KEEP DRAIN HOLES UNCLOGGED. THAT WAY, WATER HAS LESS OF A CHANCE TO COLLECT AND CAUSE RUST.



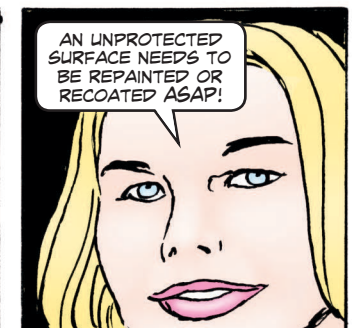
A CORROSION FIGHTER MUST ACTIVELY SEEK OUT THOSE AREAS WHERE WATER CAN BE TRAPPED AND GET RID OF IT!



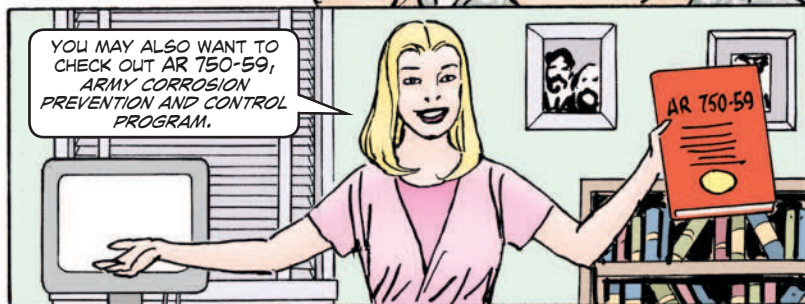
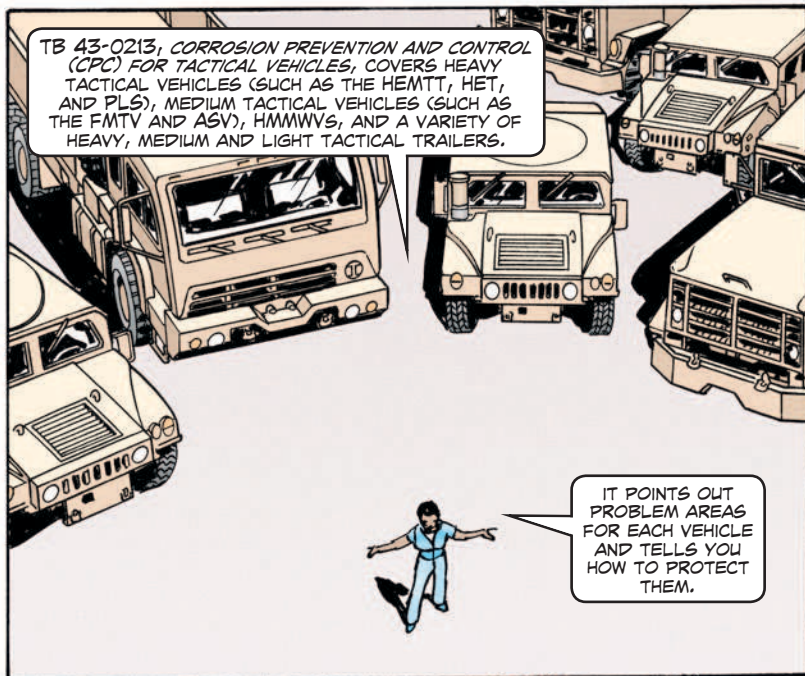
COATINGS SUCH AS PAINT, GREASE, PRESERVATIVES, OIL, ETC., PROVIDE THE BEST LINES OF DEFENSE AGAINST CORROSION.



AN UNPROTECTED SURFACE NEEDS TO BE REPAINTED OR RECOATED ASAP!



Helpful Pubs



I BETTER LOCK DOWN AND
BUTTON UP THIS APACHE BEFORE
THAT STORM BLOWS IN!

CLOSIN' UP SHOP

Mechanics, at the end of the day, it's not enough to just close your AH-64A/D doors.

Every door, latch, and quick-release pin must be secured on your aircraft to protect it from high winds.

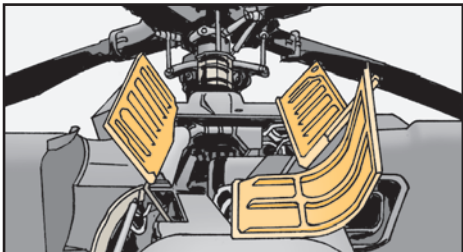
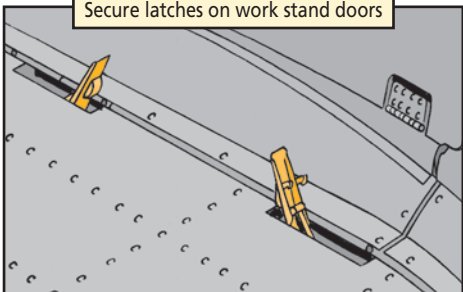
In flight, loose doors can fly open, and crack, break or rip off hinges, mounting hardware or shims. If that happens, your bird could suffer major structural and engine damage. That could put crew and aircraft at risk.

Even on the ground, when aircraft doors are not fully secured, high winds can damage your bird. If the winds rip open loose doors, the flapping doors can damage the airframe.

Even securing the latches on the catwalk area alone won't keep the doors closed. You must secure the quick-release pins, too.

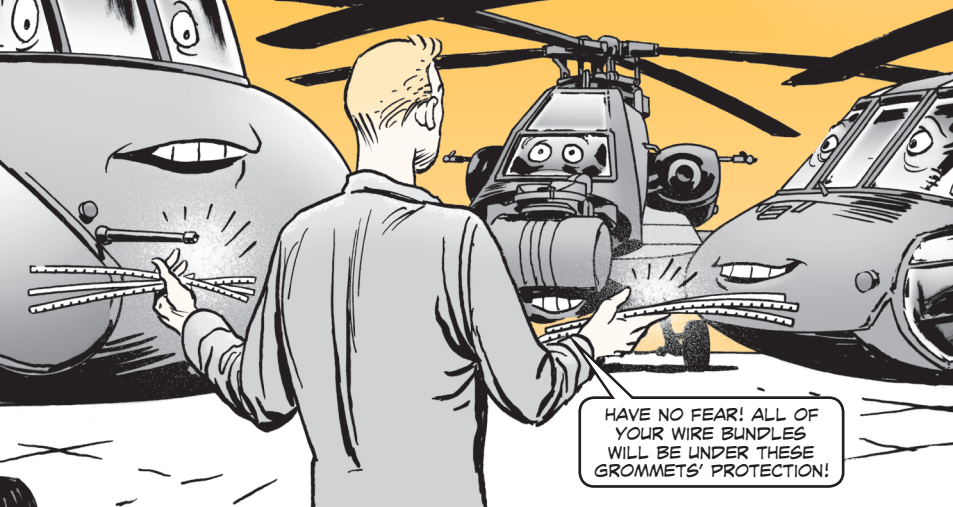
So after maintenance or inspections, take time to lock down and button up all your bird's doors.

Secure latches on work stand doors



Don't leave catwalk doors open to flap in the wind

Protecting Aircraft Wire Bundles



HAVE NO FEAR! ALL OF YOUR WIRE BUNDLES WILL BE UNDER THESE GROMMETS' PROTECTION!

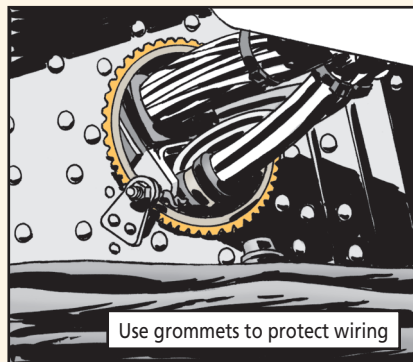


MECHANICS, WIRE CHAFING IN THE CHINOOK, BLACK HAWK AND AH-64 AIRCRAFT IS NOT UNUSUAL.

A LOT OF CHAFING IS CAUSED BY AIRCRAFT VIBRATION.

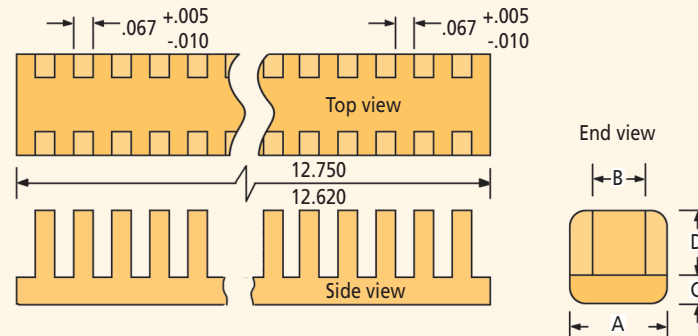
THE QUESTION FOR MECHANICS IS HOW CAN YOU REDUCE WIRE CHAFING?

Wiring and wire bundles are found passing through bulkheads, against kick plates and wrapped against metal lips, ledges and framing. One way to protect wires is to use non-metallic nylon edging grommets.



Use grommets to protect wiring

When applying grommets, make sure there are no sharp edges and burrs. Use edging grommets for odd shaped holes in addition to the circular hole sizes shown in the table below. Keep in mind that the maximum allowable end gap after edging is installed flush against the hole periphery is .025 inches. When positioning grommets in odd shaped holes, apply Armstrong-type A-12 adhesive cement, NSN 8040-00-068-8668, or equivalent to the cleaned edges of the material and the grommet.



ORDER THE RIGHT SIZE GROMMET TO FIT YOUR AIRCRAFT USING THIS TABLE...

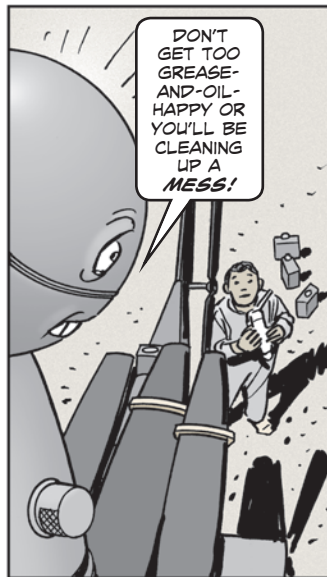
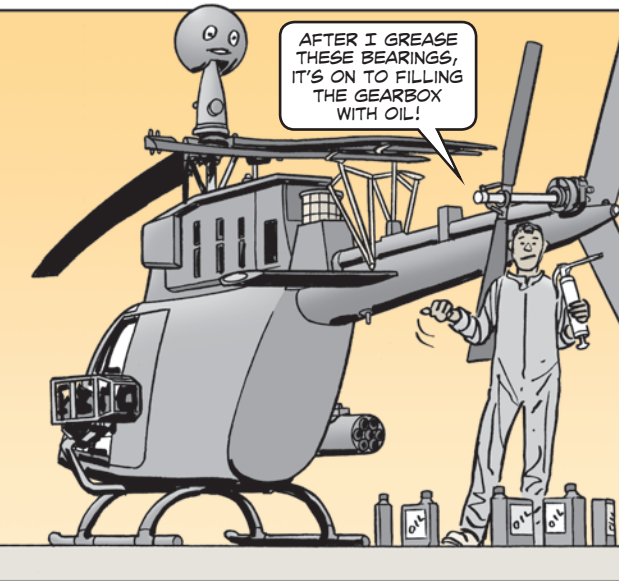
Dash No.	NSN 5325-00-	Sheet Thickness (Ref)	A + .015 - .005	B + .015 - .005	C + .015 - .005	D + .020 - .005
(-1)	960-2410	.015-.052	.150	.056	.055	.100
(-2)	074-3301	.052-.085	.175	.090	.055	.100
(-3)	926-1394	.085-.128	.220	.131	.055	.100
(-4)	923-9512	.128-.192	.325	.195	.070	.160
(-5)	783-4754	.192-.255	.385	.260	.070	.170
(-6)	783-4753	.255-.318	.445	.320	.075	.180
(-7)	238-6037	.318-.380	.515	.390	.075	.180
(-8)	946-4275	.380-.510	.640	.515	.075	.180

HERE'S A GUIDE TO HOW LONG A GROMMET YOU'LL NEED FOR DIFFERENT SIZE HOLES.

Structural Hole Dia (in)	Length of Grommet (in)
1.000	3.141
1.125	3.534
1.250	3.927
1.375	4.319
1.500	4.712
1.625	5.105
1.750	5.497
1.875	5.890
2.000	6.283

ALL DETAILS CAN BE FOUND IN SPECIFICATION MIL-DTL-22529.





THAT'S ENOUGH OIL AND GREASE!

Mechanics, the results are always bad if you go overboard and overfill your Kiowa Warrior's tail rotor gearbox and overgrease the bearings inside the pitch control mechanism.

Do only what TM 1-1520-248-23 says and consider it enough. As you add oil to the gearbox, allow a few seconds for the oil to stabilize before you read the site gage to see if the oil is at the indicator line. That way you won't add too much.

If you're too hasty, you'll overfill the gearbox. The excess oil runs down the output shaft during operation and gets into the trunnion and Teflon® bearings.

When you use too much grease on the pitch control mechanism bearing, the extra grease gets into the boot, fills it up and pumps it into the gearbox, contaminating it.



**I'M STRONG! I
THINK I'LL REMOVE
THIS SWASHPLATE
BY HAND.**

**STRENGTH
IS NOT
ENOUGH!**

**YOU MAY BE ARMY STRONG,
BUT YOU'LL STILL NEED TO
USE A SLING AND A HOIST
TO LIFT MY SWASHPLATE!**



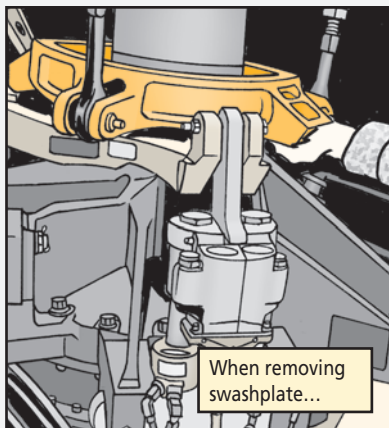
Every now and then brute strength is needed to move bulky, heavy items.

When it comes to Chinook components, there's one problem, though. Overconfidence in your muscle power to lift heavy components can get you and others hurt and damage equipment.

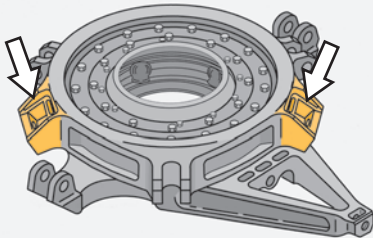
When removing either the forward or aft swash plate from the aircraft, always use a sling, NSN 1730-00-179-1326, and a hoist to lift it like it says in TM 1-1520-271-23&P and TM 1-1520-240-23&P. Search the IETM on the LOGSA website using EM-0281.

Some mechanics mistakenly think they can lift the swashplate using the drive arm lugs as carrying handles. The drive arm lugs are not safe handholds for lifting the swashplate! When lifting the swashplate by the drive arm lugs with your hands, the lower portion of the swashplate can rotate and crush or break your fingers and hands. If that happens, you'll drop the plate, damage it and further injure yourself or someone else.

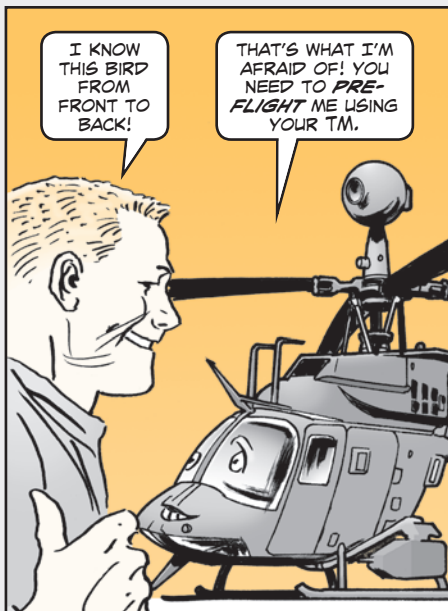
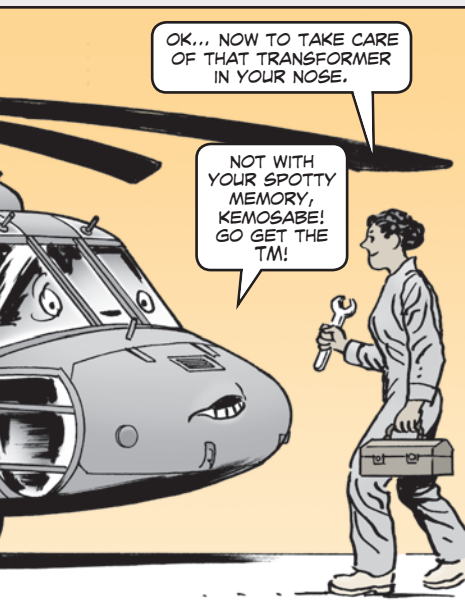
Remember, brute strength is not enough to maneuver heavy components in every maintenance task. That's why you should use lifting devices when handling heavy components.



...never lift it using drive arm lugs



MAINTENANCE BY MEMORY



Mechanics, have you gotten so familiar with aircraft that you now think maintenance is a job best done by memory?

Maybe you said, "HM-MMM... If I remember right, this wrench will do the trick."

That's not the way to go! Just because you think your way works doesn't mean it's OK to troubleshoot, repair, perform maintenance and inspect your bird without a TM.

It's easy to forget what the TM says or get things wrong. Your memory may be powerful, but it is not your best PM option because procedures change. That means you could damage the bird or components if the maintenance steps have changed or if a new warning, caution or note gets added to the task.

Operating and maintaining aircraft by the book—the technical manuals— ensures your birds stay in a mission capable status.

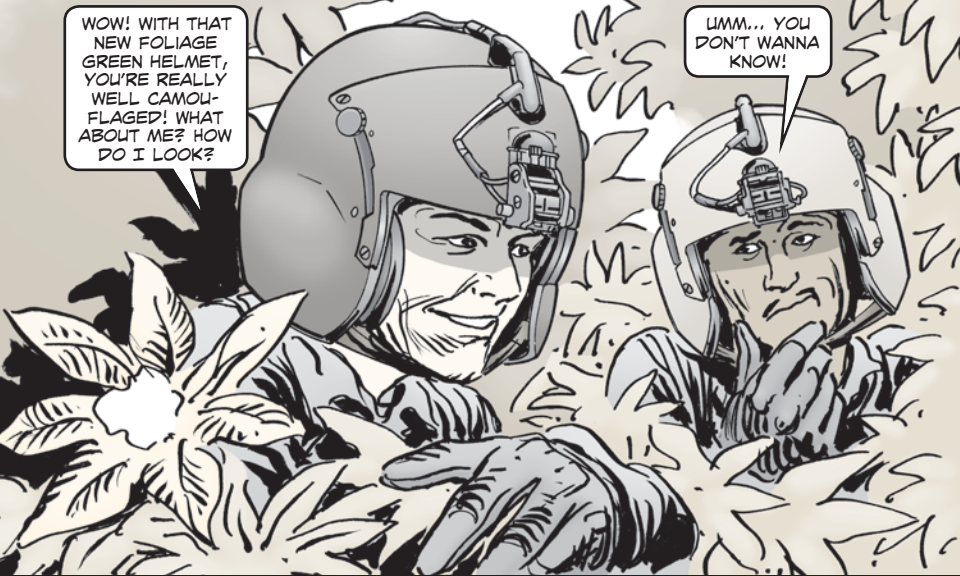
Remember, aircraft PM begins with your number one tool—your TMs. And that's something you should never forget.

ELSE...

LOOK FOR NEW GREEN HELMET

WOW! WITH THAT
NEW FOLIAGE
GREEN HELMET,
YOU'RE REALLY
WELL CAMOU-
FLAGED! WHAT
ABOUT ME? HOW
DO I LOOK?

UMM... YOU
DON'T WANNA
KNOW!



ELSE Techs, if you haven't noticed, your HGU-56/P aviation integrated helmet system (AIHS) is changing color.

The helmet is now foliage green, so don't be concerned if you order one and the color doesn't match the old helmet. The color change will not affect form, fit or function and there won't be a change in the NSNs either.

If you still have helmets that do not have the communications ear plugs (CEP) installed, you can modify your helmets to install the CEP using MWO 1-8415-216-20-1. You have until 14 October 2011 to complete the modification work order.

ALSO, YOU
CAN ORDER
HELMETS
WITH
THE CEP
INSTALLED
BY NSN.

HERE ARE
THE LIST
AND SIZES.



NSN 8415-01-522-	Size
5310	XXS
5339	XS
5344	S
5347	M
5348	L
5364	XL

SINCGARS TEST SET UPDATE

DOC, DID YOU
KNOW THAT THE
PRM-34B HAS NO
TMDE SUPPORT
FOR IT!?

YES, I DO! I ALSO KNOW
THAT IN THE *FUTURE* THERE
IS A MILITARY SYSTEM
CALLED AN/PRM-36 THAT
IS TMDE-SUPPORTED!



Dear Editor,

On Pages 46 and 47 of PS 685 the December 2009 issue, you wrote about the PRM-34B as a replacement radio test set for the obsolete AN/PRM-34. I would like to give you a bit more info on that subject.

First, the PRM-34B is a commercial off-the-shelf item. There is **NO** TMDE calibration, maintenance or repair support within the Army TMDE network for it.

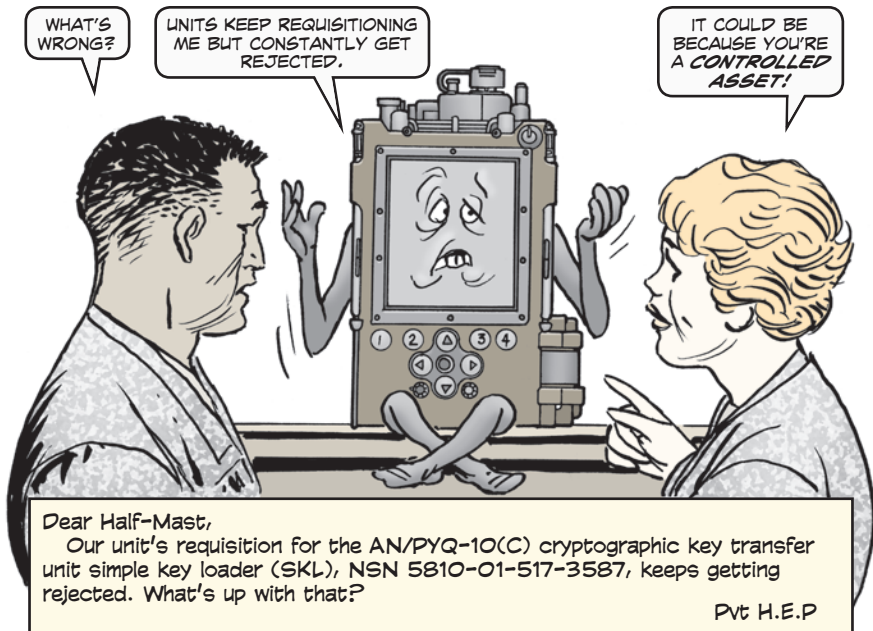
Second, in the future there will be a new military system supplied that is fully TMDE-supported called the AN/PRM-36, which will take the place of the AN/PRM-34.

George J. Mitchell
Product Director, TMDE
Redstone Arsenal, AL

Editor's note: Thanks, Mr. Mitchell, for the update.

Users, the acquisition process is in its early stages for the replacement. When it is in the Army supply system, users with an authorized requirement will receive the replacement. Until then, the PRM-34B is one of the options you have. There are others in the commercial market, too. If you use the PRM-34B or one of the other options, keep in mind that you're on-your-own for support.

Simple Key Loader Supply Process



Dear Private H.E.P.,

What's up with that is you're making the requisition through the wrong supply system. Regular automated supply system channels won't do the job with a controlled asset like the COMSEC SKL. You must submit a requisition through the Information Systems Security Program (ISSP): <https://issp.army.mil>

Not sure how to do that submission? Call or email the ISSP help desk: DSN 879-1829, (520) 538-1829, or csla.issp@us.army.mil.

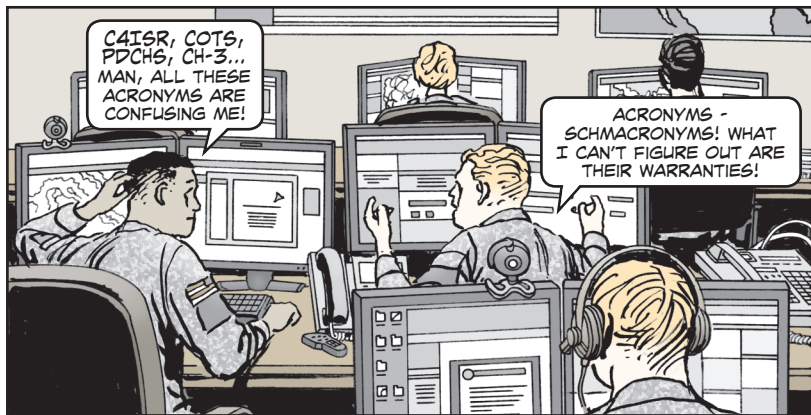
The help desk can determine whether someone in your command has user access to the ISSP website and, if not, help you get access.

Some of you flyboys are asking, "What about us Air Force types?" Well, you have to request an SKL through your base COMSEC office. You can't get it through normal supply channels, either!

Swabs and grunts should call their EKMS technical support center at 1-877-NAVEKMS (628-3567) to find out how they can get the SKL.

Half-Mast

Warranty



Warranty Program Explained

The Command, Control, Communications, Computers, Intelligence, Surveillance and Reconnaissance (C4ISR) program has a wealth of commercial off-the-shelf (COTS) equipment. The Product Director Common Hardware Systems (Pd CHS) is the program manager of that COTS and ruggedized equipment. The common hardware/software-3 (CHS-3) program consists of V1, V1+, V2 and V3 designated equipment. The designations are assigned based on military-hardened applications for the equipment.

This CHS equipment—such as voice terminals, handheld and laptop computers, printers, routers and cabling—is typically under a five-year warranty from General Dynamics. The warranty expiration date is on the CHS-3 warranty label on each piece of equipment. Warranty repairs are returned within 72 hours of receipt.

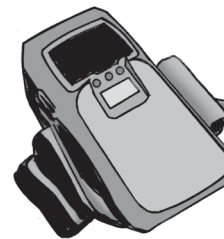
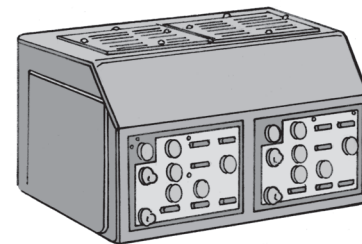
To help you use that warranty on equipment needing repair, the CHS-3 integrated logistic support (ILS) program has established regional support centers, remote CHS repair centers, a 24-hour hotline and web-based access for status checks of repairs.



Once you have established that you have a piece of CHS-3 equipment, which is still under warranty, fill out a maintenance request form—either DA Form 2407 or DA Form 5504—and report the failure to your support unit.

The support unit will determine whether the piece of equipment falls under the warranty specifications. If it does, they will issue you a replacement, if they have one, and send the failed piece of equipment to General Dynamics. If they don't have a replacement, you will need to wait for the return of your piece of equipment.

If the failed equipment does not meet the standards for warranty repair, you will be quoted a repair price that will come out of your unit funds.



The support facility will make use of the General Dynamics' Regional Support Centers, which maintain repair parts and have technical expertise. A DA Form 2407 must accompany all equipment delivered to the RSC.

To help you further understand the warranty program, contact CHS Logistics:

Catherine Neil: email

catherine.neil@us.army.mil

David Van Bogert: email

david.bogert@us.army.mil

Robert Saia: email

robert.saia@us.army.mil

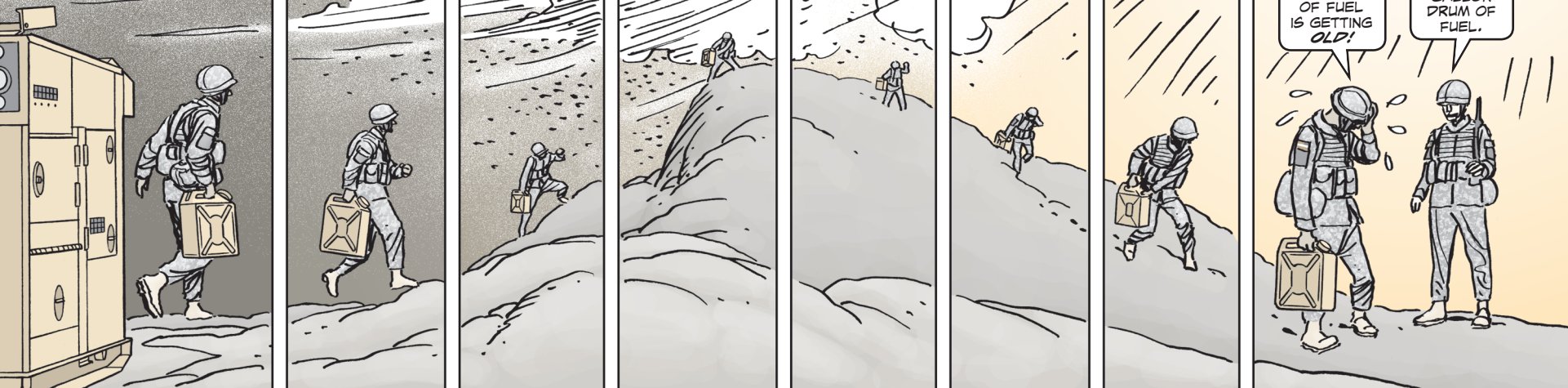
Nick Esposito: email

nick.esposito@us.army.mil

General Dynamics repair order hotline number, 1-877-247-7711, and email

CHS-3-Warranty@GDC4S.com will help you track turned-in equipment.

AVOID ANOTHER LONG, HARD WALK



Dear Half-Mast,

I'm stationed in Iraq and I'm looking for a way to hook up a 55-gal fuel drum to use as a fuel supply for a tactical quiet generator (TQG). I have looked in the operator's and parts TMs and can't find any parts or instructions on how to do this. Any help is appreciated. The mile walk to the fuel point twice a day for 5 gallons of fuel is getting old.

SPC A. T.

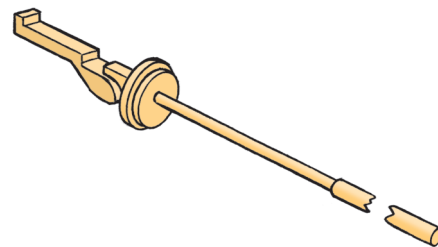
Dear Specialist A. T.,

I feel your pain. Back when I was a private, I lugged Jerry cans of fuel until my arms ached, my back broke and my dogs barked! Fortunately for you, there is a system to hook up a 55-gal drum as an auxiliary fuel point for your generator.

Let's start with the parts you need. Somewhere, in your generator TM—probably in the Additional Authorized List (AAL) or the Basic Issue Items (BI) list—there should be an entry for an adapter assembly or an adapter container, NSN 2910-00-066-1235. That adapter is what you need to connect the auxiliary fuel hose of your generator set to an auxiliary fuel source.

You'll find the auxiliary fuel hose stored behind the generator's battery access door. If it's not there, look for the hose behind other access doors. Replace a worn hose.

The adapter consists of a strainer clamp, a plug, a pipe, NSN 4710-00-185-6948, and an extension pipe, NSN 4710-00-597-8731. The pipe and extension pipe come with the adapter. But, replacements can be ordered separately. The extension pipe is not needed if the fuel source is a 5-gal can, but is needed if the fuel source is a 55-gal drum. The extension pipe will reach about 30 inches into the drum.

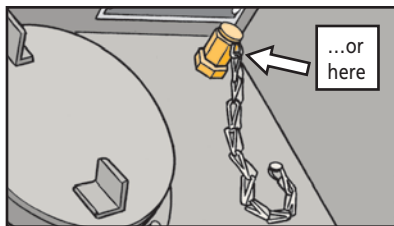
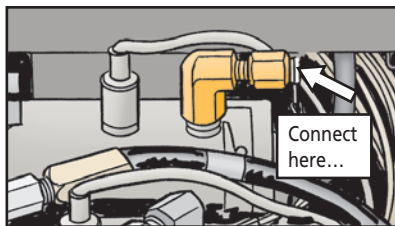


You need this adapter!

Now that you have the parts, put the external fuel source a safe distance away from the generator, but no more than 25 feet—the length of the auxiliary hose. Make sure you meet all local and unit safety requirements for a fuel point.

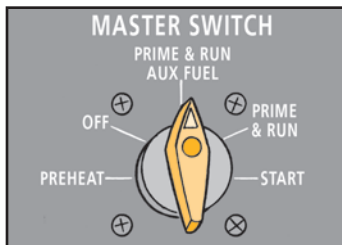
Assemble the adapter by threading the main pipe into the plug and then the extension pipe into the main pipe, if you're using a 55-gal drum. Now thread one end of the auxiliary hose into the adapter. Make sure all adapter parts and the hose are clean.

Connect the other end of the auxiliary hose to the generator set external fuel supply connection and tighten. The connection is located near the generator's fuel tank fill cap. It should be labeled with an identification plate that reads, **External Fuel Supply**.



Now, take the fuel container adapter and fit it into the external fuel supply's 5-gal can or 55-gal drum. Secure the adapter in place by pressing down on the strainer clamp.

To get the fuel flowing, turn the Master Switch on the generator control panel to the **PRIME & RUN AUX FUEL** position. This activates the auxiliary fuel pump and transfers fuel from the external fuel supply to the generator fuel tank. All TQGs have a fuel level float in their fuel tank that shuts off the auxiliary pump when the tank is full and starts it again when needed to refill the tank.



It's important to remember that the auxiliary fuel pump has a filter, NSN 2940-01-365-6535, that must be clean. The auxiliary fuel pump and filter are located behind the front housing panel on the left side. If you use an auxiliary fuel source, replacing this filter must be a part of your regular PMCS. Replace it when it's clogged or when the primary fuel filter is changed.

Here are a few other things to remember when using an auxiliary fuel source:

- The auxiliary pump should never be operated unless the pump is connected to a fuel source.
- Keep the fuel hose between the fuel source and the generator well identified and away from boots that could kick it loose.
- Keep the fuel hose as straight as possible to ensure a free flow of fuel.
- The length of your stay in the area should be considered when planning your auxiliary fuel point. A longer stay may mean more security and greater safety requirements.
- Examine the area for possible sources of fuel contamination and eliminate those sources before you start pumping fuel.
- Direct the exhaust from the generator away from the auxiliary fuel supply point.

Well, Specialist A. T., that should get you started pumping fuel and spare your feet.

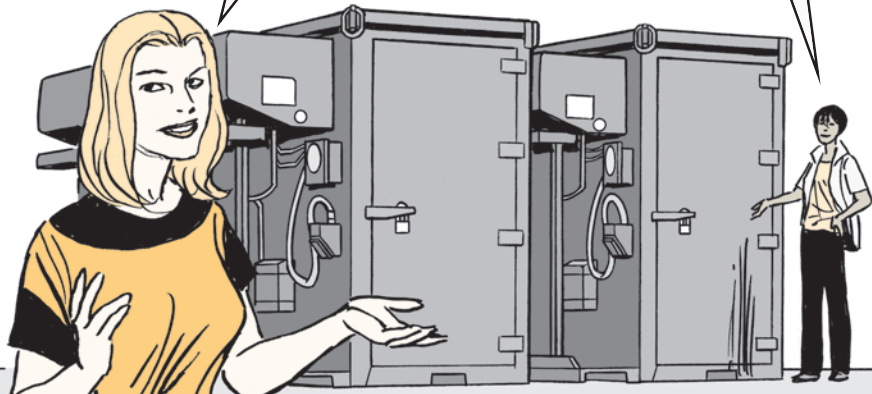
Half-Mast



Two Sources for Repair Parts

THE ARMY SUPPLY SYSTEM NOW OFFERS 34 REPAIR PARTS WITH NSNs FOR THE ISU-96 REFRIGERATION CONTAINER (ISU-96RC).

YOU CAN USE THE PARTS ON **BOTH** THE FOREST GREEN CONTAINER, NSN 8145-01-325-2243, AND DESERT TAN CONTAINER, NSN 8145-01-422-9084.



TO ORDER STOCK-NUMBERED REPAIR PARTS, YOUR UNIT MUST SUBMIT A **FUNDED REQUISITION**.

IF YOU NEED PARTS OTHER THAN THOSE WITH NSNs, CONTACT THE MANUFACTURER, AAR MOBILITY SYSTEMS...

201 Haynes Street
PO Box 550
Cadillac, MI 49601
(231) 779-4808

<http://www.aarmobilitysystems.com>

AAR CAN ALSO HELP WITH MAINTENANCE, OPERATION AND TROUBLE-SHOOTING PROBLEMS.



THERE ARE NO ARMY TMS FOR THE ISU-96RC.

THE ONLY REPAIR AND PARTS MANUAL IS THE COMMERCIAL CARRIER SUPRA 750 SERVICE AND PARTS MANUAL.

IT'S SHIPPED WITH THE REFRIGERATION CONTAINER.

IF YOUR ISU-96RC IS NON-MISSION CAPABLE, CONTACT BRAD LIVINGSTON, THE SERVICES AND REPAIR COORDINATOR, AT AAR: (231) 779-6386, (800) 355-2015, OR EMAIL brad.livingston@aacorp.com

A Little Background

A FEW FACTS ABOUT THE ISU-96RC MIGHT INTEREST YOU...

- The ISU-96RC is a commercial off-the-shelf (COTS) item made by AAR. Order it through the Defense Logistics Agency (DLA).
- It's authorized by CTA 50-909. More than 400 of them have been purchased by the military. They're widely used in SWA.
- The ISU-96RC is a field refrigerator. It can get its electrical power in three different ways:
 - from a stand-alone power generator
 - from other external power sources
 - from its own built-in diesel generator

WHEN IT'S RUNNING ON ITS OWN GENERATOR, IT CAN COOL WHILE ON THE MOVE.

- The ISU-96RC's temperature range is -22°F to +86°F.
- The exterior measures 9 feet long x 7 feet 4 inches wide x 8 feet high. The interior contains 260 cubic feet.
- The tare weight is 3,250 pounds with a full fuel tank.

HERE ARE THE NSNs FOR THE ISU-96RC REPAIR PARTS...

Item Description	Carrier Supra 750 Service Parts Manual Page & Item Number	CAGE	Part Number	NSN
Relay	Page 63 Item # 11 & Page 67 Item # 16	5DBW3	10-00286-04	5945-01-570-0288
On/off switch	Page 3 Bulk & Page 61 Item # 6	5DBW3	10-01129-155V	5930-01-570-0289
On/off switch	Page 3 Bulk & Page 66 Item # 9	5DBW3	10-01129-165V	5930-01-569-2084
Solenoid, speed/stop 12VDC	Page 1 Bulk & Page 37 Item # 1	5DBW3	10-60018-00SV	6695-01-569-2085
Transducer, suction pressure (SPT)	Page 3 Bulk & Page 25 Item # 10	5DBW3	12-00283-00SV	5910-01-570-2858
Switch, pressure 465/350 psig (HPT)	Page 3 Bulk & Page 25 Item # 6	5DBW3	12-00309-04	5930-01-570-2861
Switch, air adjustable	Page 3 Bulk & Page 23 Item # 7	5DBW3	12-01039-08	5930-01-569-2086
Return air sensor	Page 3 Bulk & Page 59 Item # 9	5DBW3	22-60010-00	2990-01-569-2088
Thermistor, probe, engine coolant temp.	Page 3 Bulk & Page 51 Item # 12	5DBW3	12-01145-03	5905-01-572-4142
Expansion valve	Page 2 Bulk & Page 19 Item # 3	5DBW3	14-60039-02	4820-01-569-2091
Unloader coil	Page 1 Bulk	5DBW3	22-02804-00	5910-01-569-2087
Starter assy	Page 1 Bulk	5DBW3	25-35465-00	2920-01-569-2089
Oil bypass	Page 1 Bulk & Page 43 Item # 7	5DBW3	30-00304-00	2940-01-569-2090
Fuel filter	Page 1 Bulk & Page 45 Item # 9	5DBW3	30-01090-05	2940-01-572-5489
Air filter	Page 1 Bulk & Page 48 Item # 4	5DBW3	30-60049-20P12	2940-01-570-0293
Alternator, 14V/17A	Page 1 Bulk & Page 39 Item # 1	5DBW3	30-60050-04	2920-01-569-3035
Belt, alternator to compressor	Page 1 Bulk & Page 39, Item # 11	5DBW3	50-00162-25	3030-01-569-2094
Belt, motor, section B	Page 1 Bulk & Page 33 Item # 8	5DBW3	50-01170-00	3030-01-569-2092
Clutch assy	Page 35 Item # 11	5DBW3	50-01165-01	2520-01-569-2093
Water pump belt	Page 1 Bulk, Page 35 Item # 2	5DBW3	50-60296-01	3030-01-569-2095
Belt, motor, section A	Page 1 Bulk & Page 33 Item # 7	5DBW3	50-60198-49	3030-01-570-5726
Fan motor assy	Page 1 Bulk, Page 17 item # 12	5DBW3	54-60006-13	2930-01-569-2096
Brush assy	Page 17 Item # 13	5DBW3	54-60006-30SV	5999-01-572-4140
Linkage rod fuel	Page 37 Item # 6	5DBW3	73-00332-00	3040-01-569-2098
Linkage rod speed	Page 37 Item # 12	5DBW3	73-00333-00	3040-01-569-2097
Discharge vibrasorber clutch assy	Page 2 Bulk & Page 29 item # 2	5DBW3	73-60010-00	5365-01-569-2066
Coolant bottle kit	Page 51 Item # 1	5DBW3	76-00382-00	1440-01-569-2067
Oil filter	Page # 1 Bulk & Page 35 Item # 3 & Page 41 Item # 6	10855	941172P12	2940-01-360-5464
Relay	Page 21 Item # 21	10855	10-00385-02	5945-01-536-4805
Thermistor, compressor discharge (CDT)	Page 3 Bulk & Page 25 Item # 8	10855	12-00284-00	2990-01-536-4794
Switch oil pressure (OPS)	Page 3 Bulk & Page 41 Item # 1	10855	12-00592-00	5930-01-536-4801
Drier assy	Page 1 Bulk & Page 25 Item # 17	10855	14-00326-03	4130-01-536-4787
Glow plug, 10mm	Page 1 Bulk	10855	25-36482-01	2920-01-454-6560
Evaporator fan blade	Page 17 Item # 6	10855	38-00545-00	4140-01-115-9033

OUT OF THE DARK, INTO THE (FLUORESCENT) LIGHT

HEY, BUDDY. YOU'RE PRETTY CASUAL ABOUT TOSSING AWAY BURNED-OUT FLUORESCENT LAMPS.

GOOD GRIEF! A TALKING LAMP! I NEED R&R.

YEAH. HOW DO YOU KNOW WE'RE NOT HAZARDOUS WASTE?

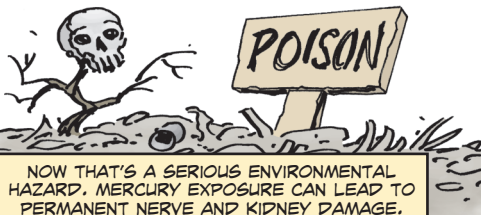
I DON'T KNOW?

THEN IT'S TIME YOU LEARNED.

YA SEE, EACH FLUORESCENT LAMP CONTAINS MERCURY. ADD UP ALL THE FLUORESCENT LAMPS YOU DISPOSE OF IN A YEAR AND THAT'S A LOT OF MERCURY.

ENOUGH TO BE CONSIDERED HAZARDOUS WASTE.

IF YOU TOSS ALL OF US OUT LIKE COMMON TRASH, WE'LL GET DUMPED IN A LANDFILL. OUR MERCURY CAN LEACH INTO THE GROUND, POISONING SOIL AND WATER.



NOW THAT'S A SERIOUS ENVIRONMENTAL HAZARD. MERCURY EXPOSURE CAN LEAD TO PERMANENT NERVE AND KIDNEY DAMAGE.

YOU DON'T HAVE KIDNEYS.

I GOT A MOUTH, THOUGH.

AND YOU DON'T HAVE NERVES.

BUT I GOT EYES, AND I THINK I GOT EYEBROWS.

THOSE ARE NOSE HAIRS.

JUST TO MAKE THINGS MORE CONFUSING, HERE'S ANOTHER TIDBIT OF INFO: THESE DAYS, SEVERAL COMPANIES MAKE FLUORESCENT LAMPS WITH LOW LEVELS OF MERCURY.

THEY'RE USUALLY CONSIDERED NON-HAZARDOUS WASTE FOR THE PURPOSE OF DISPOSAL.

HOW CAN I TELL IF I HAVE A LOW-MERCURY FLUORESCENT LAMP?

GOOD QUESTION! LOW-MERCURY LAMPS HAVE GREEN TIPS OR GREEN LETTERING.

IT'S SO CONFUSING. HIGH AND LOW LEVELS OF MERCURY. HAZARDOUS AND NON-HAZARDOUS WASTE. TO TRASH OR NOT TO TRASH. I'M STILL IN THE DARK.

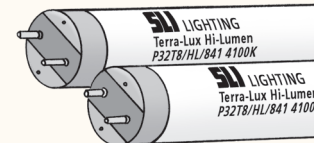
ALLOW ME TO SHED SOME LIGHT ON ALL OF THIS. THERE ARE TWO MAIN POINTS TO REMEMBER ABOUT HANDLING USED FLUORESCENT LAMPS...

1. Fluorescent lamps are classified hazardous or non-hazardous waste depending on:

- the amount of mercury in the lamp
- how many lamps you're disposing of
- federal, state and local environmental regulations

2. Don't be left in the dark. Before you dispose of any fluorescent lamp, talk with your unit's **HAZMAT officer or NCO**. He can fill you in on environmental regs. He can also identify low-mercury lamps. And he can determine which lamps should be recycled, handled as hazardous waste or put in a bin as common trash.

Low-mercury lamps have green tips or green lettering



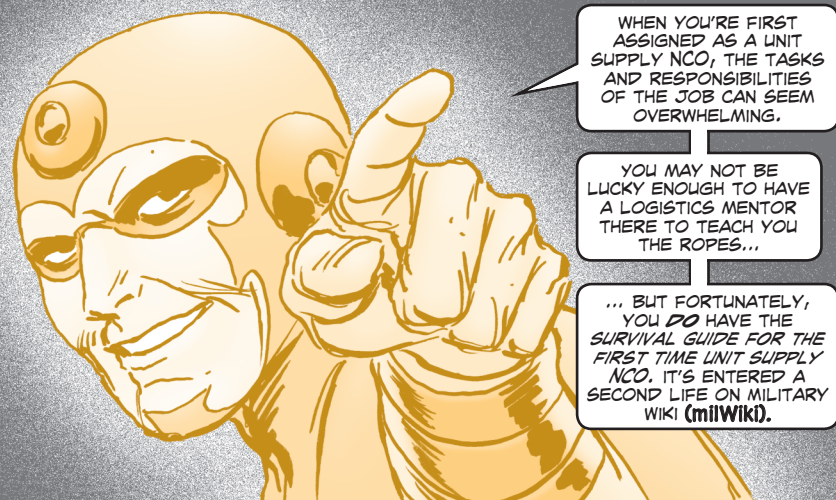
NOW I'VE GOT ME AN ADVANCED EDUCATION IN FLUORESCENT LAMP DISPOSAL.

I DO TOO HAVE EYEBROWS! NEXT TIME, I'M TELLING THE ARTIST TO GIVE ME ARMS AND LEGS...

THAT'LL BE THE DAY.

...AND WAVY BLONDE HAIR, LIKE CONNIE'S.

Classic Guide Thrives Online

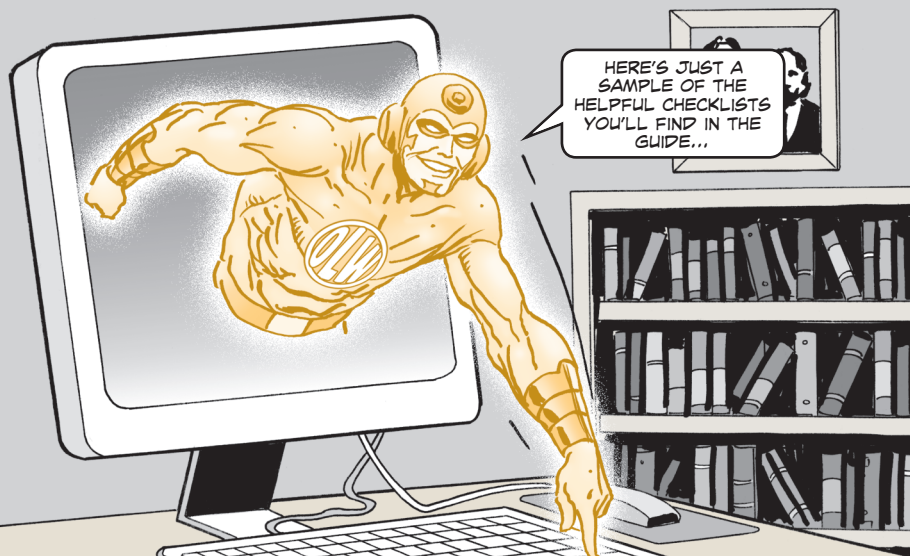


MilWiki is a Knowledge Management tool used by the AKO/DKO communities. Its contents can be edited by all authorized users, but you must log in with AKO credentials or a CAC card to view, edit, contribute or print pages.

And while it's true that the Internet can quickly render information obsolete, the bright side of the coin is that golden nuggets such as this classic guide can be continuously updated in a living knowledge bank like milWiki.

The author of the guide uploaded it to milWiki hoping that will happen. Retired MSG Bob Dalton invites Army supply and logistics professionals to help improve, maintain and update the guide that has helped many Soldiers over the years.

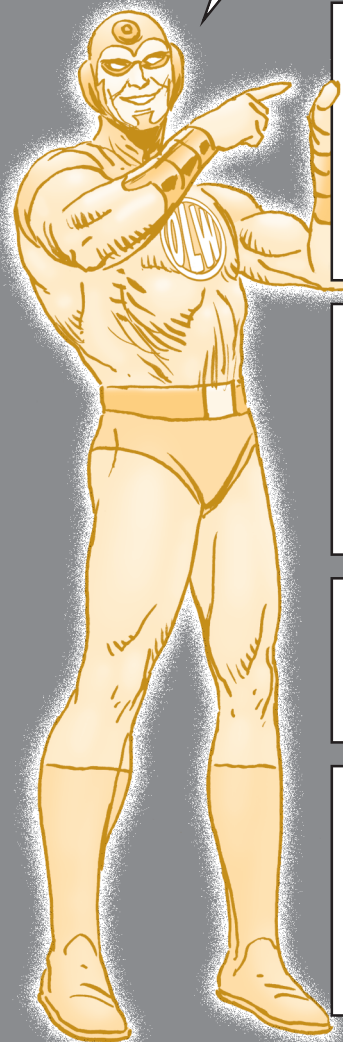
The guide's purpose is to build a solid foundation for those in the supply arena, including company commanders or company and battalion XO's and S4s who deal with unit-level logistics.



Tips for Conducting a Successful 100% Inventory

- Verify all technical manuals and supply catalogs are current prior to the inventory, and make sure an adequate number of copies are in the hands of those conducting the inventory.
- All sub-hand receipt holders should perform the inventory with the unit supply NCO and XO or company commander walking around and spot checking to ensure it's being done right. Items not on sub-hand receipts should be inventoried personally by the sub-hand receipt holder and the unit supply NCO, XO or company commander.
- Inventory everything! This includes Modified Tables of Organization and Equipment/Tables of Distribution and Allowances; Common Table of Allowances; Sets, Kits and Outfits; and Basic Issue Items. For the Reserves, be sure to also schedule and conduct an inventory of Soldier Organizational Clothing and Individual Equipment.
- Ensure shortage annexes cover all losses and that replacement items are requisitioned within a reasonable time after the inventory.
- Check serial and/or registration numbers. In battalions with line companies, it's not uncommon for equipment to get swapped around between units. This happens more often than you think.
- Document the inventory in writing. It's also good practice to update all sub-hand receipts and shortage annexes by having them re-signed and dated by the responsible individuals.
- Consider handling equipment maintenance issues at inventory time, since the equipment and troops are often both there anyway.

TO CHECK OUT THE ENTIRE SUPPLY GUIDE (AND LET YOUR FINGERS DO THE WIKI-ING) VISIT:
https://wiki.kc.us.army.mil/wiki/Survival_Guide_for_the_First_Time_Unit_Supply_NCO



Tip Top

Make sure unit inventories are done by holding an old-fashioned stand down 100 percent inspection and inventory at least once a year.

Did You Know...?

AR 735-5, *Policies and Procedures for Property Accountability*, requires inventorying and documenting **every** piece of non-expendable and durable unit property and equipment at least once a year. Not doing this task is a surefire way for a unit commander to end up with a large and expensive property loss investigation!

Helpful Hint

Hold a Command Supply Discipline Program (CSDP) unit "dry run" using Appendix B of AR 710-2, *Supply Policy Below the National Level*. Running a unit self-check before the CSDP evaluator shows up ensures you won't be surprised with the evaluator's findings.

The Key to Controlling Losses

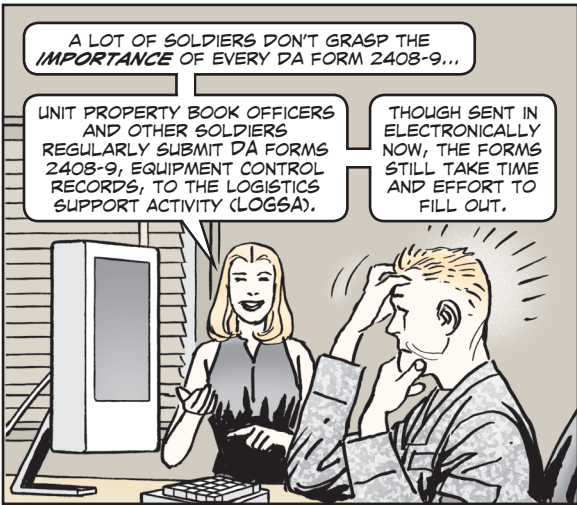
Every unit is required to have a key control custodian. Lack of key control leads to equipment losses. Get a handle on key control to keep unit losses and your workload down!

Follow the Crowd

All unit supply NCOs should join the Army Sustainment Network (SustainNet) Community of Practice. Here you can connect with peers and learn the latest news in the field:

<https://forums.bcks.army.mil/default.aspx?id=239599&lang=en-US>

TAKE THE TIME-DO IT RIGHT!



BUT, IMPORTANT DETAILS ARE SOMETIMES *MISSING* OR *INCORRECT*. AND ANY DATABASE IS ONLY AS GOOD AS THE DATA THAT GOES INTO IT.

LOGSA MAINTAINS THE TAMMS EQUIPMENT DATABASE (TEDB), A RECORD OF EQUIPMENT BY SERIAL AND REGISTRATION NUMBERS.

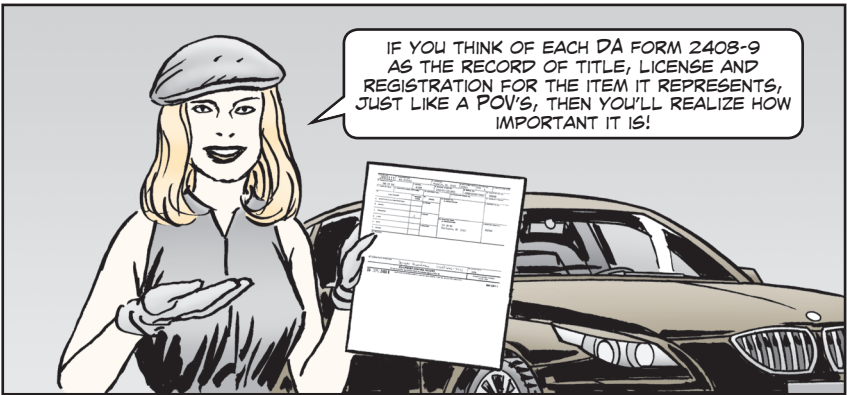
THE TEDB STORES ALL DATA SUBMITTED ON A DA FORM 2408-9. THIS DATA HELPS THE ARMY TRACK REPORTABLE ITEMS FROM THE TIME THEY ENTER THE INVENTORY UNTIL FINAL DISPOSITION.

BUT *WITHOUT* ACCURATE INFORMATION, THE ARMY CANNOT CORRECTLY GAUGE ITS INVENTORY OR READINESS.

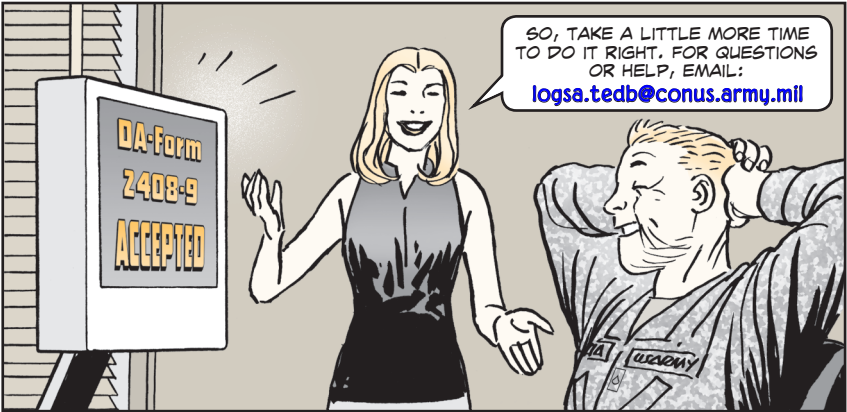


DA Form 2408-9 - Form Types	
Form Type	Purpose - Used for/to report
Acceptance	Initial entry of serial-numbered item into TEDB Army inventory
Transfer 1	Transfer from your unit to another unit (Ship To)
Transfer 2	Receipt by your unit from another unit (Received From)
Loss	Transfer of equipment out of Army inventory (to DRMO)
Gain	Recovery of item previously owned by U.S. military
NSN Redesignation	NSN changes - modifications and conversions
Overhaul	Overhaul, rebuild, recap
Usage	Cumulative miles or hours*

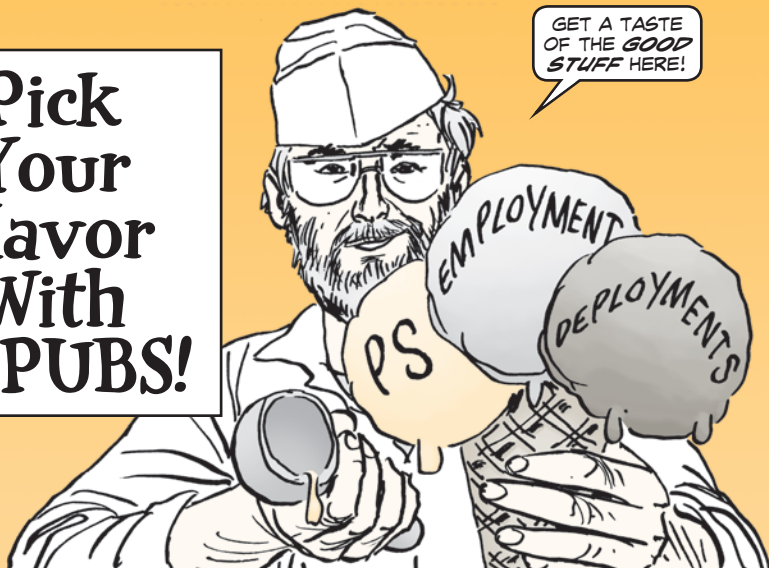
*NOTE: Only used by units without ULLS-G/SAMS-1E.



Common DA Form 2408-9 Errors		
Note	Incorrect	Correct
Incorrect NSN	2350000771616	2320000771616
Incomplete serial number	310063	JXHF310063
Incorrect serial number	JZ0078	D12456U
Incomplete registration number	4L7694	4L769470
Incorrect registration number	NG0789	NG0789
Registration number field is left blank		
Hand receipt UICs are used (For example, "W1HDAM")		
Year of MFG is missing—This info must appear on all DA Form 2408-9 reports		
Usage quantities unacceptable (too high or less than previous month)		



Pick Your Flavor With AEPUBS!



The Army in Europe Library & Publishing System (AEPUBS) is the official source of Army in Europe publications and forms. AEPUBS resources are available in Europe, Africa and Southwest Asia for these users:

- Soldiers and their families
- DOD civilians
- Local nationals (LNs)

Plus, Army in Europe publications managers will find it a snap to manage their accounts from this one-stop shop.

The newly-enhanced AEPUBS site offers a heap of useful resources, such as up-to-date forms, publications and action officer toolkits. Other cool tools include an NSN-to-publication cross-reference and an abbreviations index you can check if you get stumped by an acronym.

The AEPUBS' assortment of tasty topics includes:

- Official publications such as PS
- Voting materials
- Employment for DOD civilians/LNs
- Privately owned vehicle registration
- Traffic rules
- ID cards/passports
- Birth registrations
- School services/education entitlements
- Deployments/reunions

You can access AEPUBS from a government network (.mil or .gov) or via your AKO login at:

<https://aepubs.army.mil>

The site is available on SIPRNET:

<https://www.aepubs.eur.army.smil.mil>

Questions? Contact AEPUBS Customer Service at DSN (314) 379-6438/6419 or email:

customer.service.aepubs@eur.army.mil

Connie's POST SCRIPTS

M939A2 Thermostat NSN

To get the cooling system's thermostat (used on the internal bypass system only) for the M939A2 5-ton series trucks, use NSN 6685-01-425-7336. This replaces NSN 6620-01-272-1716, which is listed as Item 12 in Fig 115 of TM 9-2320-272-24P-1.

SOAK UP OIL SPILLS!

Stop injuries that are caused by slipping on oil spills. Get a 44-lb container of absorbent compound, NSN 7930-00-269-1272, to soak 'em up. It's authorized by Table 1 of CTA 50-970.

HMMWV Spare Tire Carrier

NSN 2590-01-525-1995 gets a spare tire carrier only for HMMWV vehicles with an airlift bumper: M1113 expanded capacity HMMWVs (not carrying a shelter), M1114 up-armored armament carriers, M1025A2 armament carriers, and M1097, M1097A1 and M1097A2 heavy-variant cargo/troop carriers.

ONE-STOP LOGISTICS LINK

Now, you can bookmark one URL that leads to a ton of DOD and private/commercial logistics-related tools. The Logistics Toolbox (Logtool) works as an operational logistics portal for DOD personnel worldwide. Check out Logtool. Remember, private/commercial websites may be helpful, but don't depend on them as official information sources.

<http://www.logtool.net/>

NEED SOME 550 CORD?

Need some fibrous cord, better known as 550 cord? Order a spool of OD green cord with NSN 4020-00-246-0688. It will cost about \$64.00.

AIRCRAFT WEIGHT AND BALANCE

For the latest and greatest information on weight and balance issues with your aircraft, check out the good words in Change 12 to TM 55-1500-342-23, *Army Aviation Maintenance Engineering Manual, Weight and Balance*. You can view the updates on the LOGSA ETM website:

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

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?**



THERE'S A SAYING...
'JUST DO IT'.

BUT WHEN IT COMES
TO MAINTENANCE,
YOU SHOULD...

...*JUST DO IT*
SAFELY!