



# THE PREVENTIVE MAINTENANCE MONTHLY

ISSUE 784 MARCH 2018



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TB 43-PS-784, 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. The use of product or company names does not constitute endorsement of those products, services or companies by the U.S. Army. The use of non-DoD hyperlinks, along with their content, does not constitute endorsement by DoD or DA. Neither DoD nor DA exercises any editorial control over, and cannot vouch for, content on non-DoD websites.

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**SPECIAL CORROSION ISSUE!**

Issue 784

**PS**



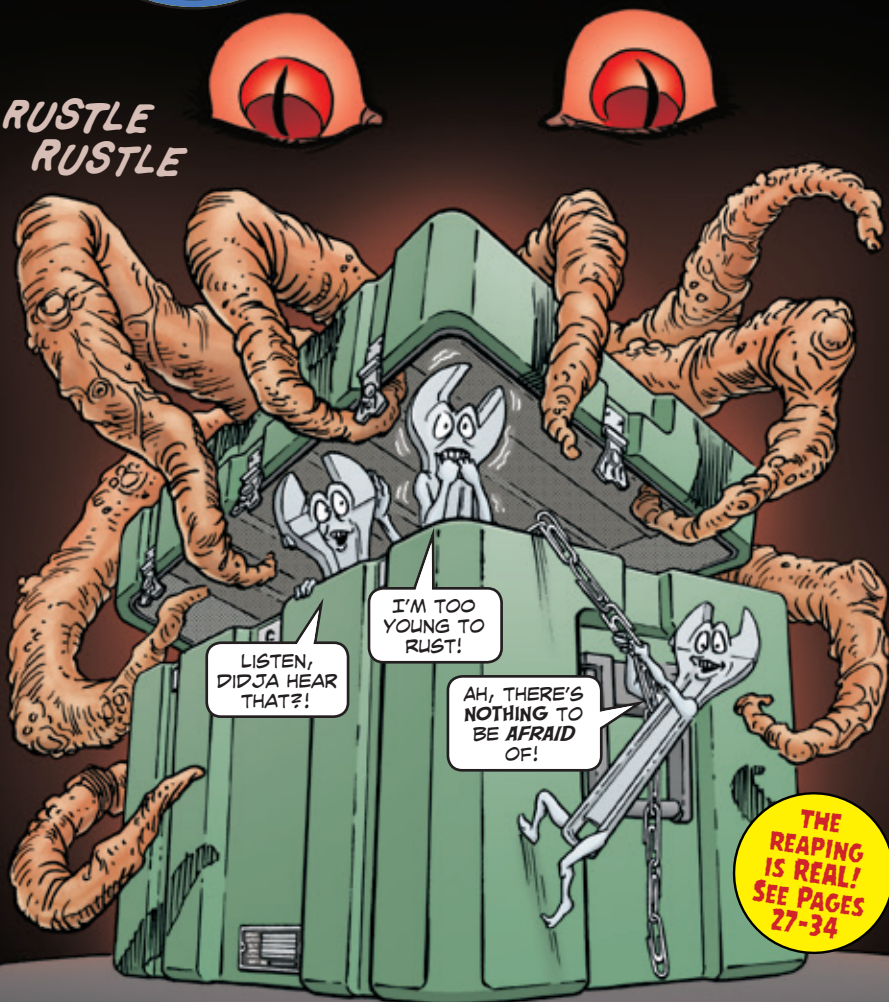
March  
2018

**THE  
PREVENTIVE  
MAINTENANCE  
MONTHLY**

TB 43-PS-784

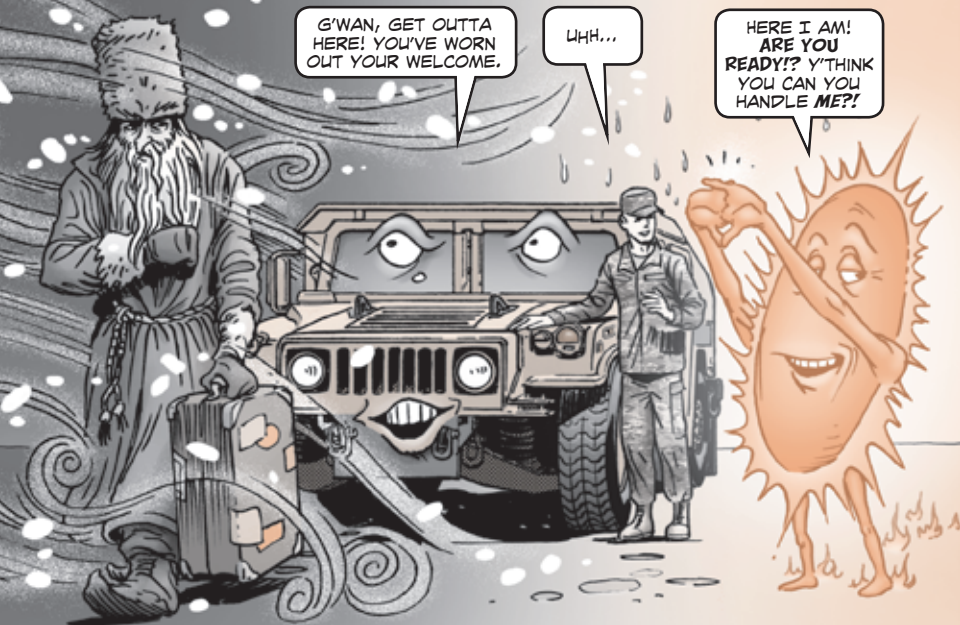
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**RUSTLE  
RUSTLE**



**THE  
REAPING  
IS REAL!  
SEE PAGES  
27-34**

# SPRING INTO ACTION!



SPRING IS THAT TIME BETWEEN WINTER'S ICY GRIP AND SUMMER'S HOT GRILLING, BUT IT'S **NOT** A BREAK FROM MAINTENANCE.



INSTEAD, SPRING'S THE **BEST** TIME TO TACKLE THE AFTERMATH OF WINTER AND PREVENT THE LOOMING PROBLEMS OF SUMMER.

**SPRING  
CLEANING  
IS DUE!**

TAKE IT ONE PIECE AT A TIME. FIND WHERE WINTER HAS DONE ITS WORST TO YOUR EQUIPMENT AND GET IT FIXED.

CHECK ALL THE FLUIDS. LOOK IN ALL THE NOOKS AND CRANNIES FOR **CORROSION, RUST, WEAR AND TEAR.**

ASK YOURSELF ABOUT EACH PIECE OF EQUIPMENT,  
**"WHERE COULD WINTER HAVE  
DONE THE MOST HARM?"**

**A GOOD  
BATTLE  
PLAN BEGINS  
BEFORE THE  
WAR.**

ONCE YOUR  
EQUIPMENT  
IS FIT AGAIN,  
LOOK TO THE  
FUTURE.

**WHERE WILL YOUR  
UNIT BE OPERATING  
THIS SUMMER?  
HOW OFTEN AND IN  
WHAT CONDITIONS?**

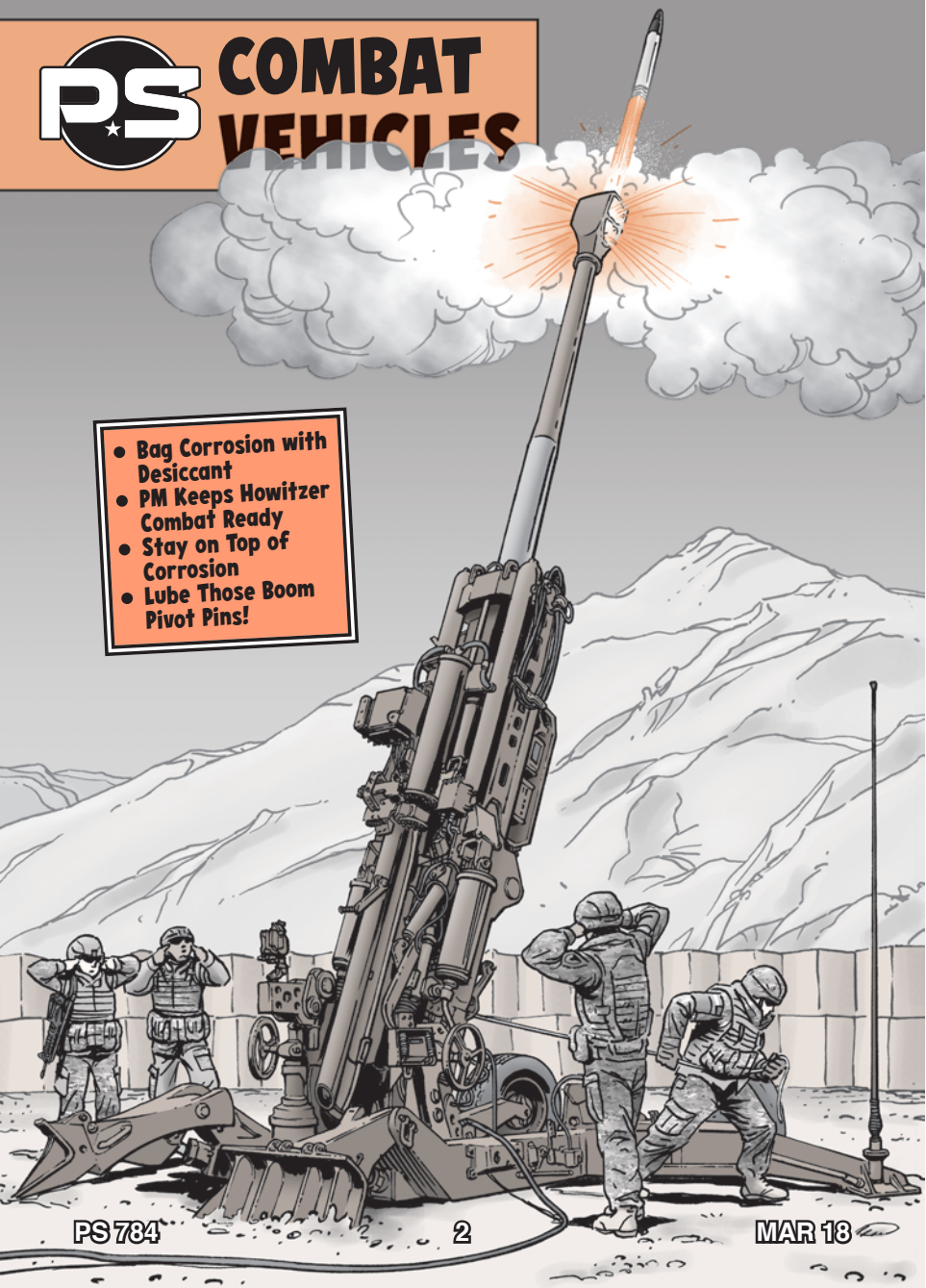
**MOST IMPORTANTLY,  
ASK YOURSELF:**

**HOW CAN SUMMER TRY TO  
DAMAGE MY EQUIPMENT?  
HOW CAN I HEAD OFF  
THE ENEMY?**



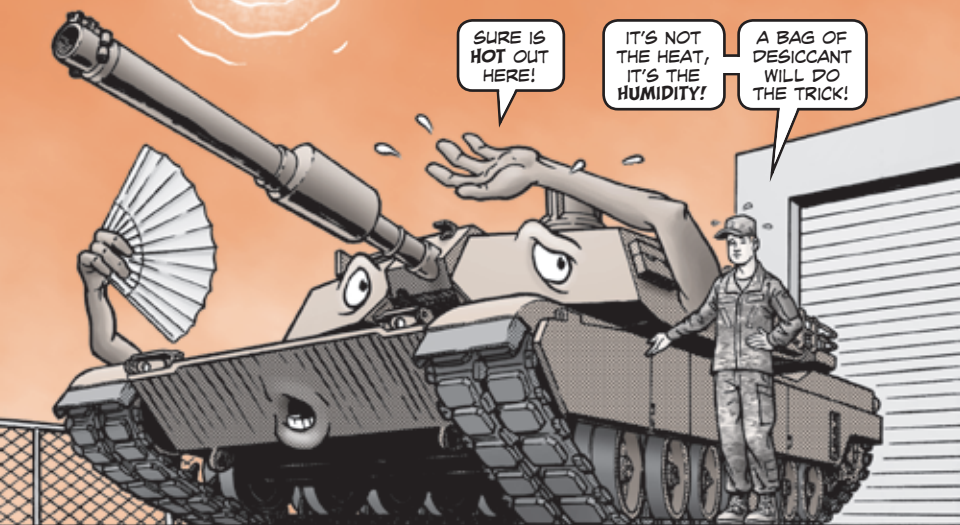
# COMBAT VEHICLES

- Bag Corrosion with Desiccant
- PM Keeps Howitzer Combat Ready
- Stay on Top of Corrosion
- Lube Those Boom Pivot Pins!





# BAG CORROSION WITH DESICCANT

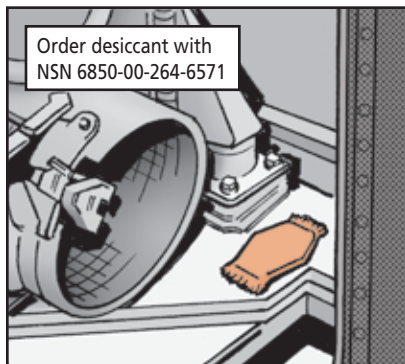


**C**rewmen, there's nothing much worse than humidity in the ammo compartment for your M1-series tank's onboard ammo. That gives rust and corrosion a foothold. Whether your tank stays uploaded all the time or only during exercises, the risk is always there.

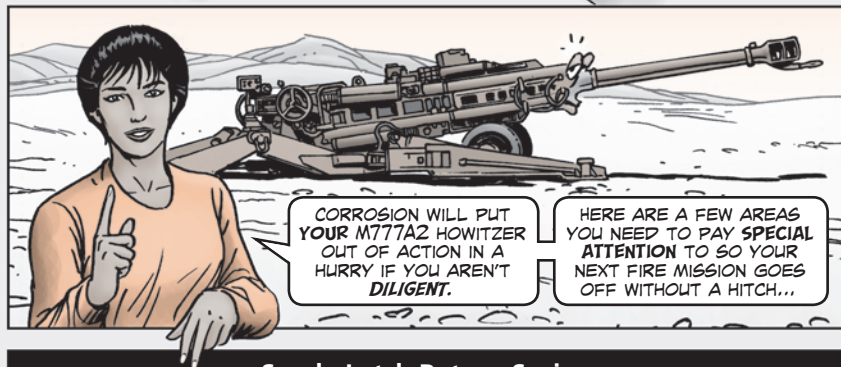
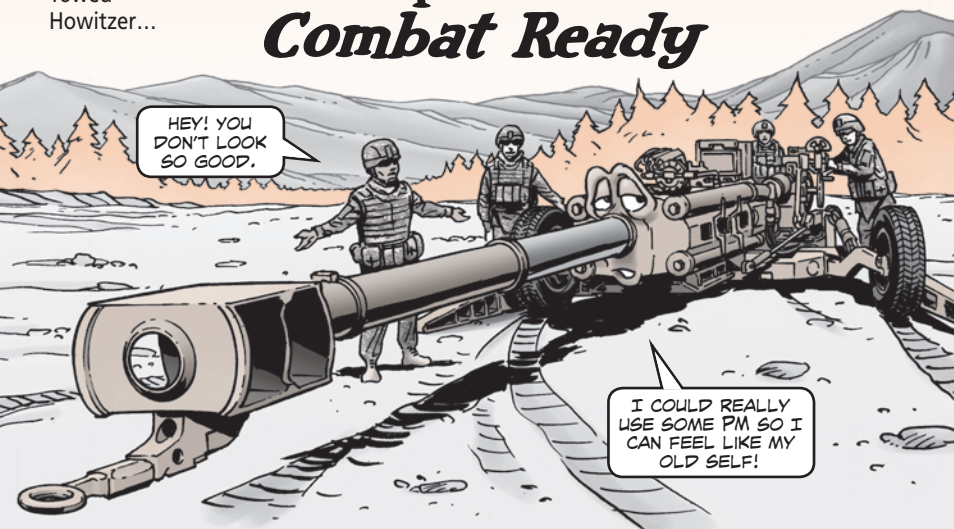
Occasionally wiping away any condensation in the ammo compartment will reduce that risk. But the best way to fight corrosion is to stop moisture in its tracks.

A few bags of desiccant will give you the advantage in the fight against corrosion. Just open each ammo door and put a bag or two on the floor between the ammo tubes and the compartment wall. NSN 6850-00-264-6571 gets a drum of 300 bags of desiccant.

Check the desiccant bags when it's time to do PMCS on the hull ammo compartment. It's time for new desiccant bags if they're moist to the touch or if the compartment walls are wet again.



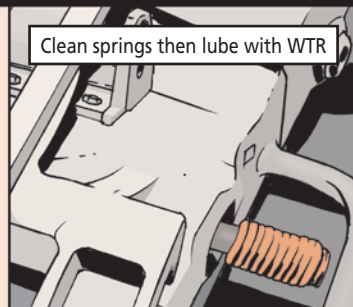
# PM Keeps Howitzer Combat Ready



## Spade Latch Return Spring

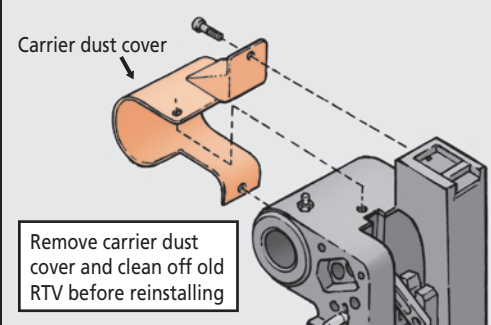
Take a few minutes to check the spring spade assembly. Not cleaning and greasing the two springs, NSNs 5360-99-278-3735 and 5360-99-507-2838, can lead to rust. And then the springs eventually break and have to be replaced.

That's easy to prevent. Remove the housing during PM and give both springs a good cleaning and a light coat of WTR. See WP 0636, WP 0637 and WP 0638 in TM 9-1025-215-23&P in IETM EM 0274 (Sep 16) for the full scoop on removal.



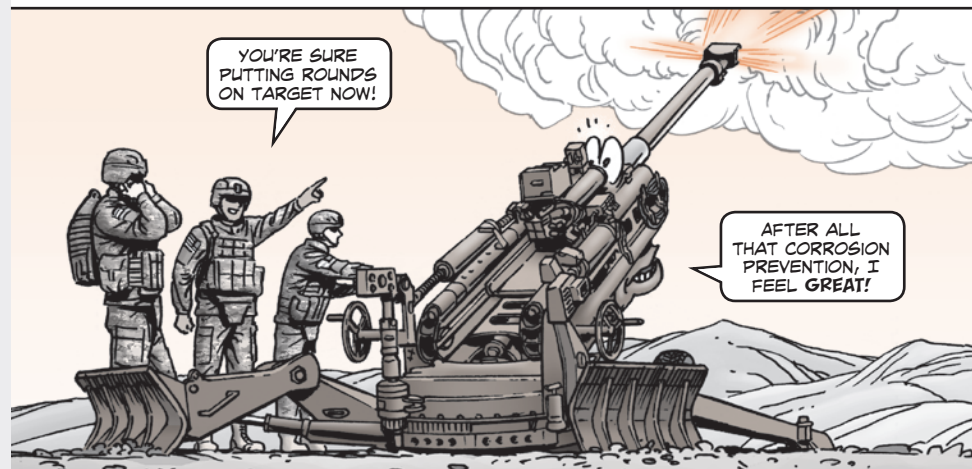
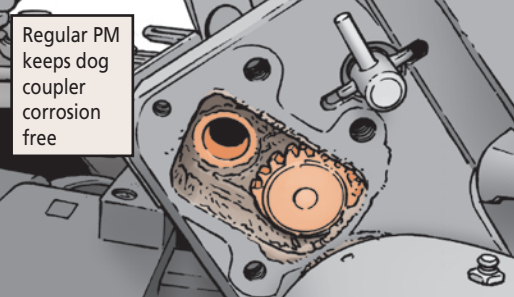
## Breach Carrier

When servicing the breach carrier, remove the carrier dust cover in order to remove all traces of RTV. Clean and dry fit the cover to the carrier before reapplying RTV, NSN 8030-01-299-1762. Before reinstalling the cover, apply RTV around the outside edge of the cover to seal out water and dirt and prevent corrosion.



## Dog Coupler Drive Shaft

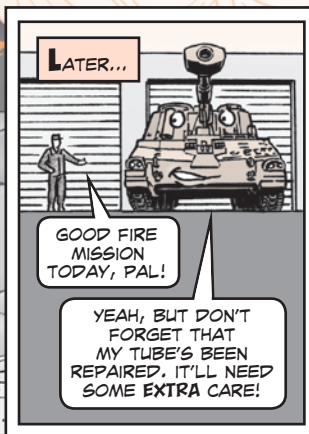
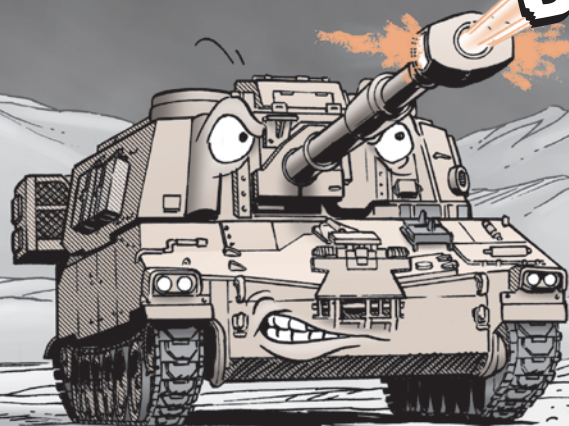
Doing a proper annual service on your M777A2's primer feed mechanism (PFM) will stop corrosion before it can start. Check out WP 0100 and WP 0102 of TM 9-1025-215-23&P for information on keeping the PFM's dog coupler drive shaft corrosion free.





# Stay on Top of CORROSION

BOOM!

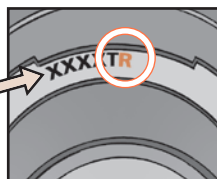


**C**REW MEN, IF YOUR M109A6 PALADIN HAS A REPAIRED M284 GUN TUBE, YOU'LL NEED TO FOLLOW SOME SPECIAL CLEANING, INSPECTING AND LUBING INSTRUCTIONS AFTER FIRING TO STAVE OFF CORROSION.

SO HOW DO YOU KNOW IF YOUR PALADIN'S GUN TUBE HAS BEEN REPAIRED?

**CHECK THE SERIAL NUMBER.**

IF IT HAS AN R AT THE END (EXAMPLE: XXXXTR), IT'S BEEN REPAIRED.



YOU'LL NEED TO TAKE SOME EXTRA PRECAUTIONS AFTER EACH FIRING.

**FIRST, MAKE SURE YOU FOLLOW ALL OF THE AFTER PMCS SHOWN IN ITEM 16, WP 0148-20 OF TM 9-2350-314-10-2 (MAY 14).**

**THEN FOLLOW THESE ADDITIONAL INSTRUCTIONS...**

1. With the bore evacuator disassembled, give the 10 rear evacuator orifices and three forward metering holes a good cleaning with CLP, NSN 9150-01-054-6453, using the cleaning brushes, PNs 8432385 and 11686340, listed in WP 0151-27 of TM 9-2350-314-10-2.

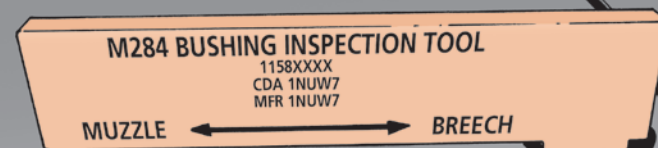
Inspect the 10 rear evacuator orifice brushings for clearance

Get rid of all grease, carbon and corrosion so that you can clearly see the gun tube.

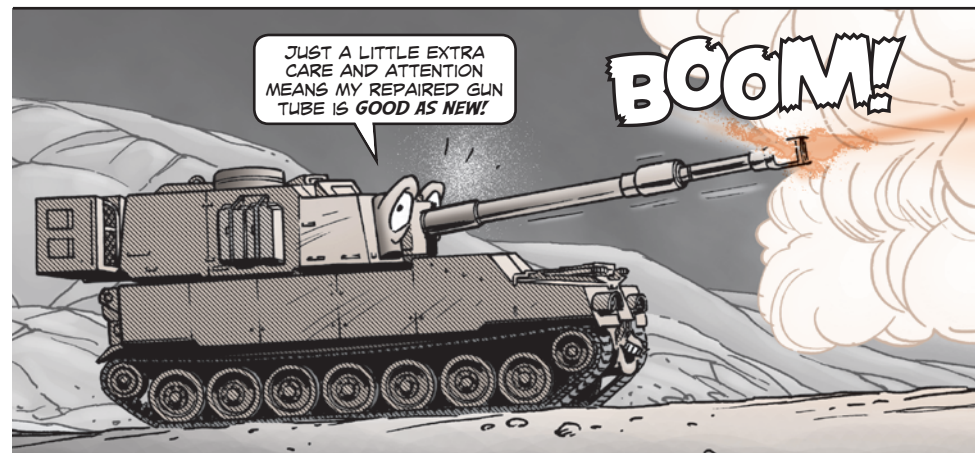
2. Inspect all 13 of the holes closely. The service life of the tube is reduced if any of the bushings around the holes show signs of pitting or other corrosion damage. Tell your mechanic.
3. Check each of the 10 rear evacuator orifice bushings for clearance. The three forward metering holes don't have to be inspected.

Two M284 bushing inspection tools are included with every repaired gun tube. Place one of the tools on the gun tube following the instructions printed on the tool. Make sure the measurement end of the tool hangs over the hole. There should be a gap between the bottom of the tool and the top of the bushing. Tell your mechanic if the tool touches any of the 10 bushings.

Two M284 bushing inspection tools included with every repaired gun tube

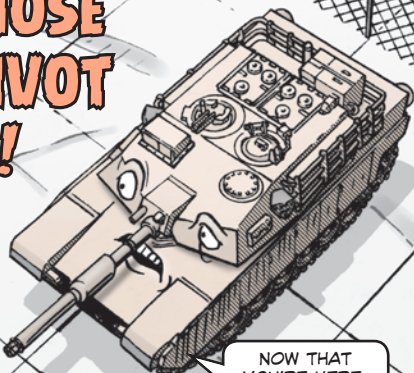
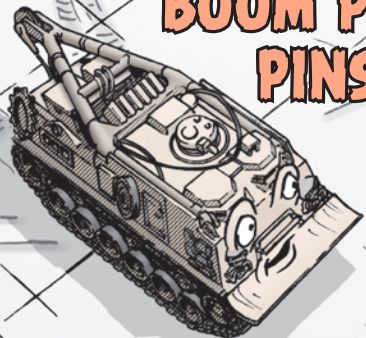


4. Check out WP 0151-27 of TM 9-2350-314-10-2 for instructions on how to clean and lube the gun tube.
5. Use a gloved finger to apply GAA, NSN 9150-01-197-7690, to the head of all 13 bushings. Use enough pressure to force grease into the surrounding chamber area and under the head of the bushing.
6. Make sure each of the 13 holes is completely clear of grease before reassembling the bore evacuator. The bore evacuator may not work properly if any's left behind.



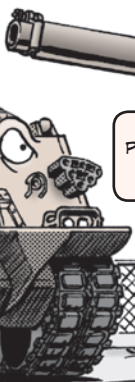
M88A1 Recovery Vehicle...

# **LUBE THOSE BOOM PIVOT PINS!**

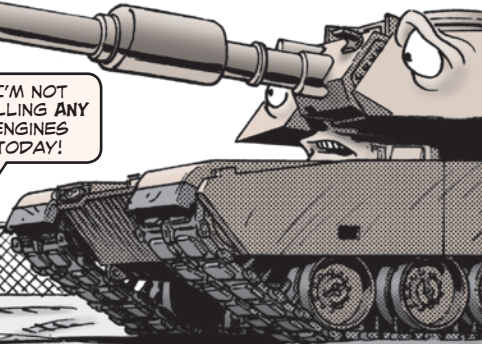


NOW THAT YOU'RE HERE, I CAN **FINALLY** GET THAT NEW ENGINE!

TOO BAD MY BOOM PIVOT PINS HAVEN'T BEEN LUBED IN A WHILE.



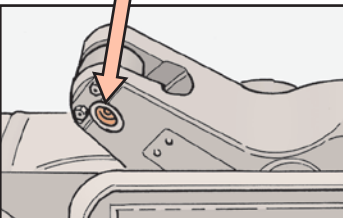
I'M NOT PULLING ANY ENGINES TODAY!



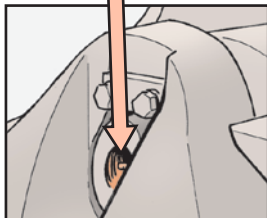
**M**echanics, your M88A1 won't be much use in recovering vehicles if...

...you forget to lube the boom foot pivot pins and the boom pivot pins.

Don't forget to lube boom foot pivot pins...



...and boom pivot pins

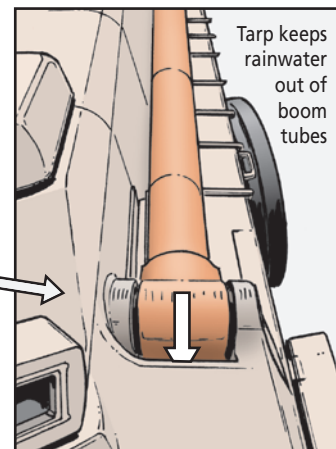


UNLUBED PINS EVENTUALLY RUST IN PLACE. IF THE BOOM PIVOT PIN **ROTATES** AS YOU RAISE OR LOWER THE BOOM, YOU'LL KNOW THE PINS HAVE RUSTED.

**ALWAYS LUBE YOUR M88A1 RECOVERY VEHICLE'S BOOM FOOT PIVOT PINS AND BOOM PIVOT PINS MONTHLY WITH GAA.** GET A 1 3/4-POUND CAN OF GAA WITH NSN 9150-01-197-7690.

COVERING THE TOP OF YOUR VEHICLE WITH A TARP OFFERS RAIN PROTECTION, ESPECIALLY FOR THE BOOM TUBES. RAINWATER FALLS STRAIGHT DOWN THE BOOM TUBES AND FILLS THE HULL. THAT MOISTURE CAUSES THE PIVOT PINS TO RUST, TOO.

USE NSN 2540-01-330-8062 TO ORDER A 12X17-FT TAN TARP, OR NSN 2540-00-653-7589 FOR THE OLIVE DRAB VERSION.



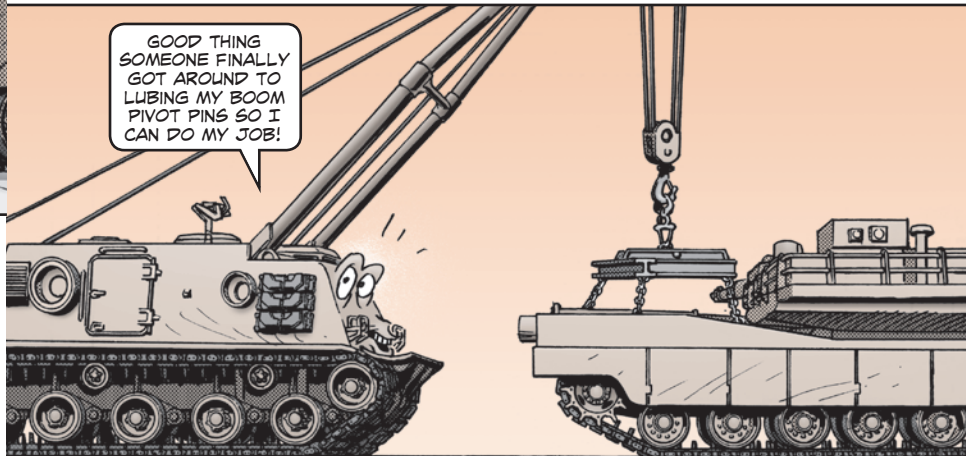
Tarp keeps rainwater out of boom tubes



EVEN IF YOU DRAIN MY HULL REGULARLY, SOME OF THAT WATER IS GOING TO EVAPORATE AND CONDENSE RIGHT ONTO MY MAIN WINCH AND MY HOIST WINCH DRUM.

NEXT THING YOU KNOW, **RUST HAS A FOOTHOLD.** SO USE THE TARP TO KEEP THE WATER OUT!

GOOD THING SOMEONE FINALLY GOT AROUND TO LUBING MY BOOM PIVOT PINS SO I CAN DO MY JOB!





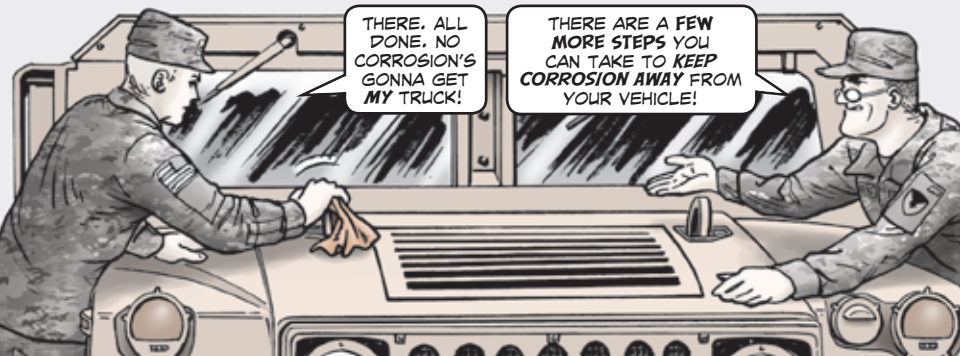
# PS TACTICAL VEHICLES

- Rust Busters Tip of the Month
- CPAC for CPC: What's with the Acronyms?!
- How Many Mechanics Does it Take to Change a Light Bulb?
- Clamp Down on Corrosion!
- Three Steps to Better Battery Installation



# RUST BUSTERS

## TIP OF THE MONTH



THERE. ALL DONE. NO CORROSION'S GONNA GET MY TRUCK!

THERE ARE A FEW MORE STEPS YOU CAN TAKE TO KEEP CORROSION AWAY FROM YOUR VEHICLE!

YOU'VE SCRUBBED YOUR VEHICLE FROM BUMPER TO BUMPER. EVERY NOOK AND CRANNY IS FREE OF DIRT, MOISTURE AND ANYTHING THAT CAN GIVE CORROSION A FOOTHOLD. ALL DONE, RIGHT?

WELL,  
NOT  
QUITE.

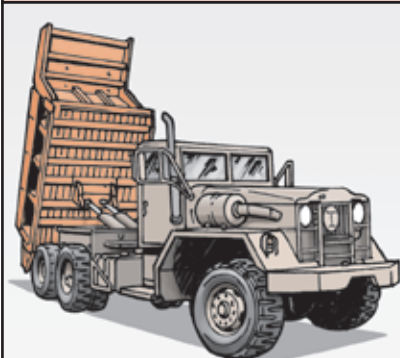
YOU *STILL* NEED TO DO A FEW THINGS TO PREVENT *FUTURE* CORROSION:

- Stop rain water from entering vehicles and equipment by closing doors and hatches.
- Keep moisture out of commo equipment, engine and transmission housings, and other types of closed components. The best way to prevent water damage is with a tarp or parking under cover whenever possible.

- Check drain holes regularly. Keep them clear of dirt and debris so water drains properly.
- Invert or tilt buckets on construction equipment to prevent water buildup. The same goes for dump truck beds.



USE TARPS TO KEEP OUT MOISTURE.



IF THESE TECHNIQUES FAIL, BE SURE TO REMOVE STANDING WATER FROM CREW AREAS AND CLOSED COMPARTMENTS. USE TOWELS, FORCED AIR, OR A VACUUM OR PUMP.

# CPAC for CPC: What's with the Acronyms?!

IS IT AWFUL? GO AHEAD, GIVE ME THE BAD NEWS. I CAN TAKE IT.

RELAX. A LITTLE CPC WILL TAKE CARE OF IT UNTIL WE GET THAT RUST SPOT REPAINTED.

IN THE WORLD OF ARMY ACRONYMS, CPAC IS ONE YOU GOTTA **KNOW** NOW AND FOREVER.

IT STANDS FOR  
**CORROSION  
PREVENTION AND  
CONTROL.**

(SOMETIMES IT'S CALLED CPC.)

IN THE WORLD OF CORROSION PREVENTION, CPC ALSO STANDS FOR SOMETHING YOU'RE GONNA **NEED** NOW AND FOREVER:

**CORROSION  
PREVENTIVE  
COMPOUND**

ALSO KNOWN AS  
**RUST INHIBITOR.**

THIS IS THE STUFF YOU WIPE OR SPRAY ON RUST AND CORROSION-PRONE SURFACES LIKE BARE METALS THAT ARE EXPOSED WHEN PAINT OR COATINGS ARE DAMAGED.

YOU CAN ALSO USE IT ON METAL SURFACES INSIDE VEHICLES OR ON EQUIPMENT.

CPC slows corrosion until rusty surface can be repainted

DON'T BE SLOPPY WHEN APPLYING CPC. BUT IF A LITTLE SPLASHES ON SURROUNDING SURFACES, **DON'T WORRY**. IT WON'T HARM PLASTICS, RUBBER, GLASS OR WIRING.

## How to Use It

CPCs COME IN **MANY DIFFERENT FORMS.**

SELECT THE ONE APPROPRIATE FOR **YOUR** SPECIFIC VEHICLE AND STORAGE CONDITIONS.

FIND GUIDANCE IN WP 0008 OF TB 43-0213, **CORROSION PREVENTION AND CONTROL (CPAC) FOR ARMY WHEELED VEHICLES** (SEP 12), ON THE LOGSA WEBSITE:

<https://liw.logsa.army.mil/etmapp/#/etm/home>

APPLY THE CPC **REGULARLY** TO **SLOW** THE SPREAD OF RUST AFTER CLEANING, BEFORE AND AFTER DEPLOYMENT AND BEFORE ANY LONG-TERM STORAGE.

IT WORKS BY DISPLACING MOISTURE THAT CAN HOLD SALT, DIRT AND OTHER POLLUTANTS.

CPCs TYPICALLY **DON'T** CONTAIN ANYTHING HAZARDOUS, BUT CHECK THE SAFETY DATA SHEET TO BE SURE. REGARDLESS, YOU SHOULD **ALWAYS** WEAR CHEMICAL-PROTECTIVE GOGGLES, A RESPIRATOR AND CHEMICAL-RESISTANT GLOVES WHEN APPLYING THE CPC TO AVOID RESPIRATORY AND SKIN IRRITATIONS.

Wear protective gear when applying CPC



## CPCs CAN BE FLAMMABLE!

KEEP CONTAINERS AWAY FROM STEAM LINES, ELECTRONIC EQUIPMENT AND OTHER HEAT SOURCES.

**DON'T** SPRAY CPCs NEAR OPEN FLAMES, HOT SURFACES OR OTHER SOURCES OF IGNITION.

**NEVER** BURN OR PUNCTURE CPC CANS!

PLAY IT **SAFE** AND **PROTECT** YOURSELF AND THOSE AROUND YOU FROM PERSONAL INJURY.



## How to Get It

NSNs FOR VARIOUS CPCs ARE LISTED IN TB 43-0213'S EXPENDABLE AND DURABLE ITEMS LIST.

FOR EXAMPLE, CORTEC ECOLINE 3220, NSN 6850-01-607-7343, IS A CANOLA OIL-BASED PRODUCT THAT IS ENVIRONMENTALLY FRIENDLY AND USED TO PROTECT VEHICLES IN THE HIGHLY CORROSIVE ENVIRONMENTS OF KOREA, JAPAN AND HAWAII.

**TB 43-0213**

**Corrosion Prevention and Control (CPAC) for Army Wheeled Vehicles (Sep 12)**

## Watch and Learn

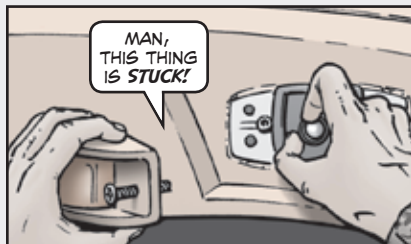


THE TACOM/TARDEC CORROSION PREVENTION TEAM HAS PRODUCED A COOL VIDEO COVERING **EVERYTHING** YOU NEED TO KNOW ABOUT CPCs.

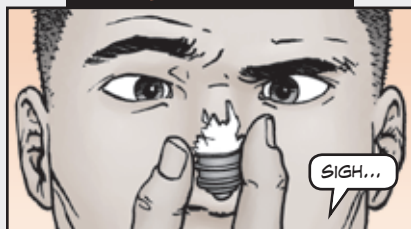
WATCH IT AT: <https://www.milsuite.mil/video/watch/video/17440>



# HOW MANY MECHANICS DOES IT TAKE TO CHANGE A LIGHT BULB?



**CRACK!**



**Y**ou've heard the joke about how many mechanics it takes to change a light bulb. All joking aside, the bulb may require more time and effort than it should if you're not using silicone grease.

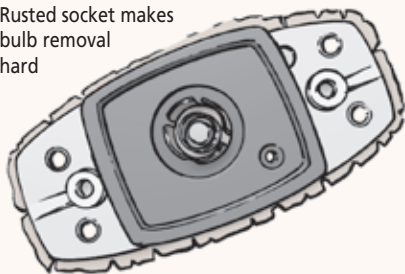
Replacing light bulbs in a HMMWV's side marker light is fairly easy. Remove two screws, take off the door and lens, pop out the old bulb and stick in a new one.

The task gets a little dicey, however, when rust builds up in the socket. It practically welds the bulb in place, making it impossible to get the bulb out without breaking it.

Avoid this problem by applying a light coat of silicone grease, NSN 6850-00-963-5402, on the base of the new bulb before inserting it into the socket. The silicone stops the corrosion and makes it much easier to remove the bulb.

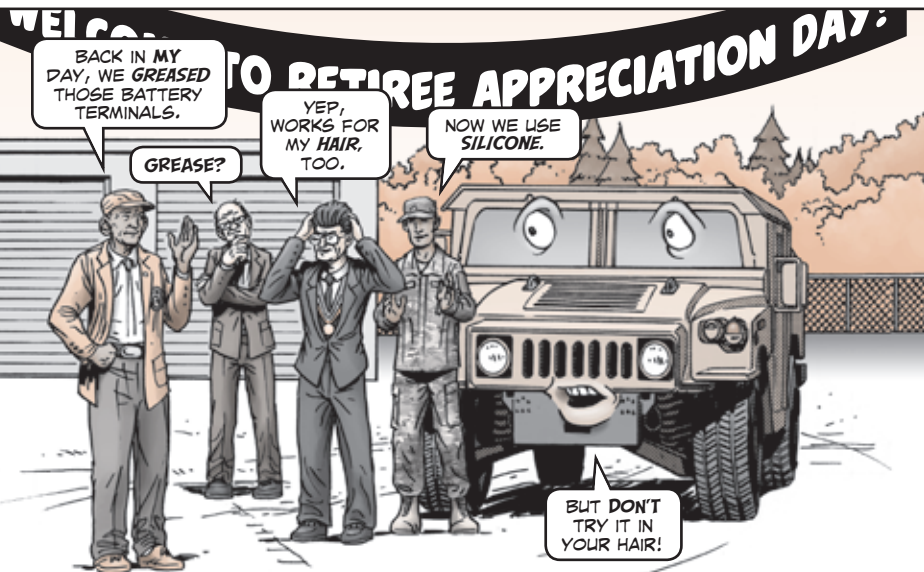
No joke, this stuff really works! Of course, if the marker light assembly is already rusted, you'll need to either clean or replace it before putting in a new bulb.

Rusted socket makes bulb removal hard





# CLAMP DOWN ON CORROSION!



Dear Half-Mast,

Our unit recently hosted a reunion, and a bunch of retirees came to visit. Some of them told me they used grease to coat the terminals on lead-acid batteries. They said it helped prevent corrosion and made the clamps easier to remove.

Is this good advice? If so, what kind of grease is approved?

SGT T.B.S.

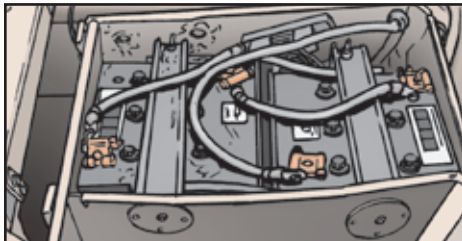
YES, SERGEANT, THE RETIREES ARE RIGHT! YOU ARE WISE TO LISTEN AND LEARN FROM THEIR EXPERIENCE. TACOM LCMC STILL SAYS A LIGHT COAT OF GAA ON A BATTERY'S POSITIVE AND NEGATIVE POSTS WILL HELP PREVENT CORROSION.

BUT TACOM **NOW** RECOMMENDS A **SILICONE COMPOUND** THAT WORKS **EVEN BETTER** THAN GREASE.

PETROLATUM IS MORE COMMON IN THE FIELD AND CAN ALSO BE USED.

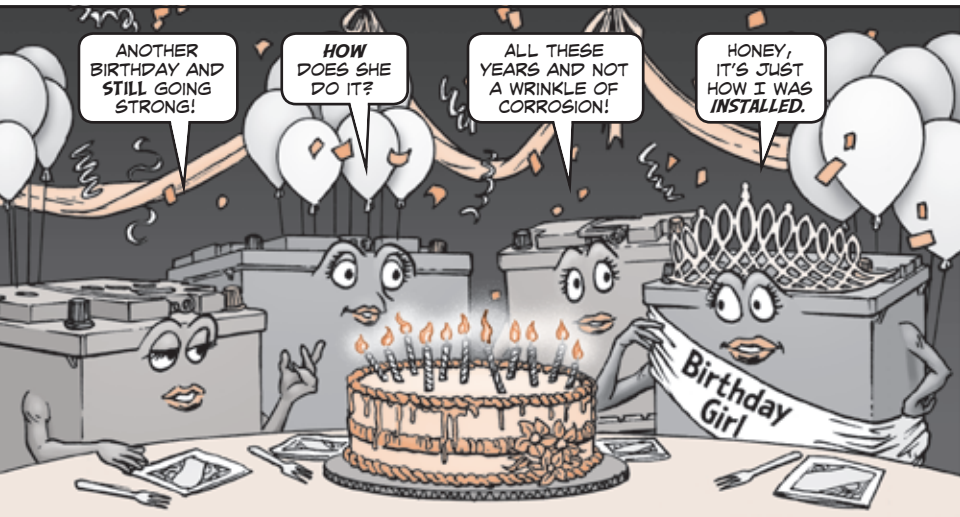


ORDER A 3-OZ TUBE OF SILICONE WITH NSN 8040-01-331-7133 OR A 1-PINT CAN WITH NSN 8040-01-331-7134. ORDER PETROLATUM WITH NSN 9150-00-250-0926.



Silicone compound on battery posts stops corrosion

# THREE STEPS TO BETTER BATTERY INSTALLATION



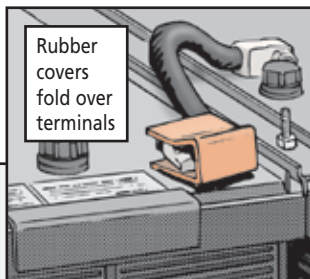
**CORROSION KILLS  
TACTICAL VEHICLE  
BATTERIES...**

**...BUT THREE SIMPLE STEPS** DURING BATTERY  
INSTALLATION CAN HELP **STOP CORROSION** AND  
**EXTEND THE LIFE** OF YOUR BATTERY.

**STEP 1:** INSTALL A FELT INSULATOR WASHER OVER THE BATTERY POST. THE WASHERS ARE TREATED TO HELP STOP CORROSION. THAT'S WHY THEY DO A GOOD JOB PROTECTING ONE OF THE CRITICAL SPOTS ON A BATTERY WHERE CORROSION OFTEN STARTS. ORDER A **PACKAGE OF 100** WITH NSN 5970-01-101-4147.

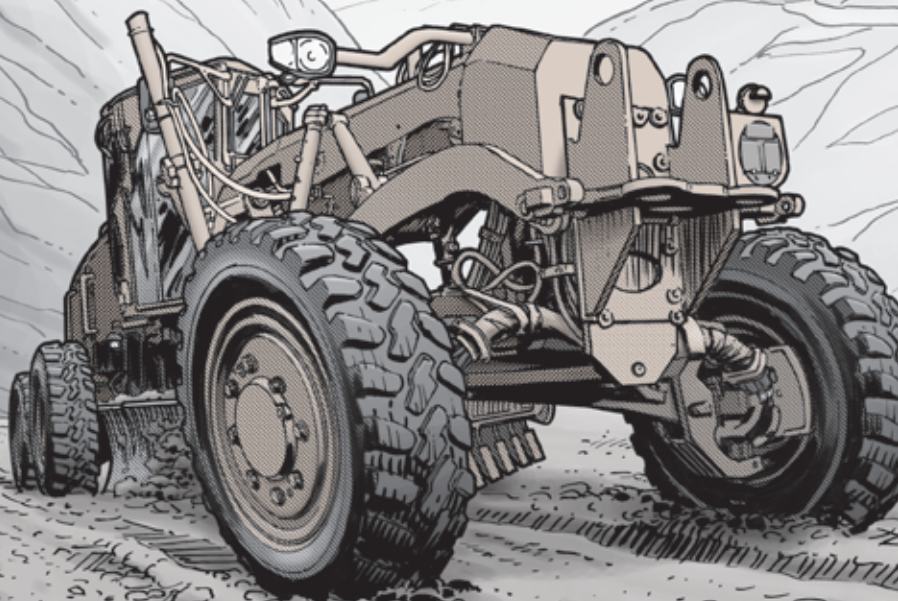
**STEP 2:** GIVE **BOTH** BATTERY POSTS A LIGHT COAT OF **SILICONE COMPOUND**. LET THE SILICONE RUN DOWN AROUND THE BATTERY POST AND TERMINAL TO COMPLETELY SEAL OUT MOISTURE. A **3-OZ TUBE** COMES WITH NSN 8040-01-331-7133 AND **1-PINT** WITH NSN 8040-01-331-7134.

**STEP 3:** INSTALL RUBBER COVERS ON THE BATTERY TERMINALS. THESE KEEP MOISTURE OFF THE TERMINALS AND SLOW THE SPREAD OF CORROSION. THEY ALSO PREVENT ACCIDENTAL ARCING FROM TOOLS OR OTHER OBJECTS MISPLACED NEAR THE TERMINALS.



ORDER A **SINGLE COVER** WITH NSN 2530-01-089-4992 OR A **PACKAGE OF 10** WITH NSN 5940-00-738-6272. A HOLE IN ONE END OF THE COVER SLIDES OVER THE TERMINAL AND FOLDS OVER THE CABLE CONNECTOR.

- Rest the Bucket
- Look for Rusty Leaks
- Articulation Rods Need Scrubbin'





# REST THE BUCKET

IF YOU WANT TO KEEP **RUST AWAY** FROM MY BUCKETS, KEEP THE WATER OUT AND DRAIN HOLES OPEN!

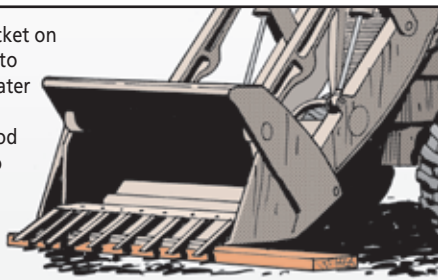


**O**perators, after the day's run, make sure you park your vehicle with the front loader bucket resting on the ground. That not only saves the hydraulics, but also allows any water to drain out.

As an added step, place a piece of wood under the edge to keep the teeth from sticking to muddy ground.

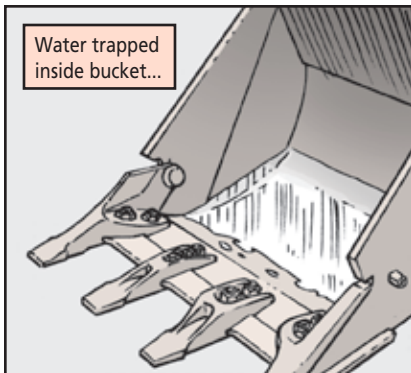
For backhoe buckets, make sure they're stowed so water can drain out. You'll also want to make sure the bucket's drain holes are open for the same reason.

Rest bucket on ground to drain water and add wood plank to protect teeth

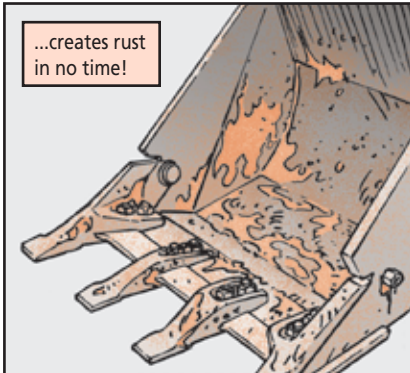


Water that sits in a metal bucket is rust waiting to start. And if that water freezes, it can crack the bucket at its weld seams.

Water trapped inside bucket...

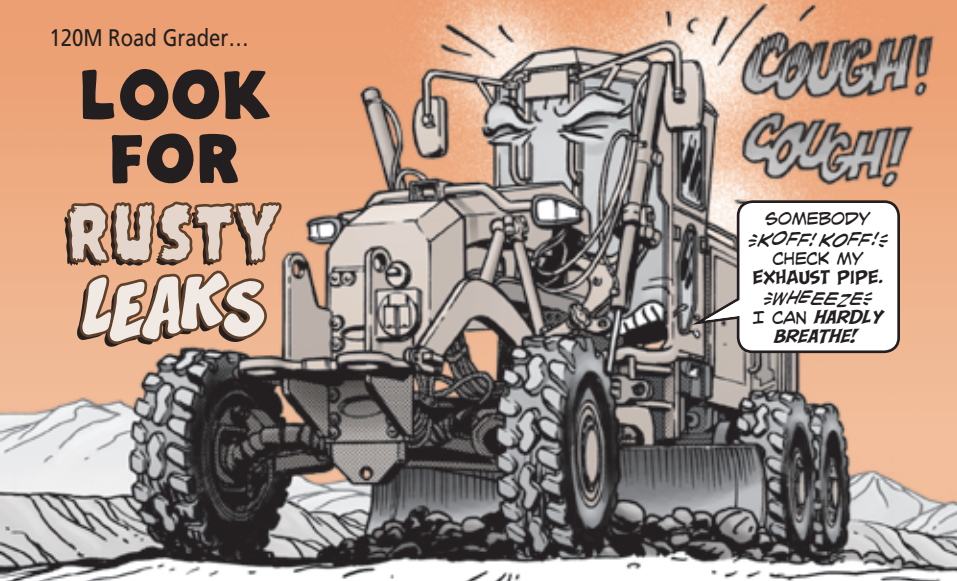


...creates rust in no time!



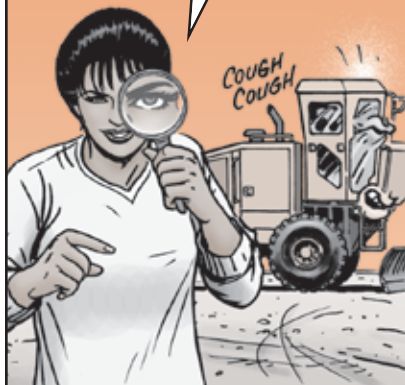


# LOOK FOR RUSTY LEAKS

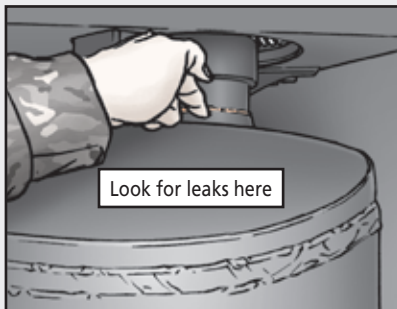


SOMEBODY  
SKOFF! KOFF!  
CHECK MY  
EXHAUST PIPE.  
SWHEEEZE!  
I CAN HARDLY  
BREATHE!

OPERATORS, **BEFORE** THE DAY'S  
RUN, OPEN THE ACCESS DOOR TO  
THE ENGINE COMPARTMENT AND  
TAKE A LOOK AT THE EXHAUST PIPE.  
SPECIFICALLY, LOOK AT WHERE THE  
PIPE IS WELDED TO THE MUFFLER.



OVER TIME, CONDENSATION CAN BUILD  
AND RUST THE AREA RIGHT NEXT TO THE  
WELD. IN SOME CASES, THE METAL RUSTS  
AWAY **COMPLETELY**, CREATING OPEN  
CRACKS THAT ALLOW EXHAUST INTO THE  
ENGINE COMPARTMENT.



Look for leaks here

THAT EXHAUST IS THEN SUCKED RIGHT  
INTO THE NEARBY AIR CLEANER/FILTER  
ASSEMBLY. EVENTUALLY, THE AIR FILTER  
CLOGS UP, RESULTING IN **SEVERE ENGINE  
PERFORMANCE ISSUES**.

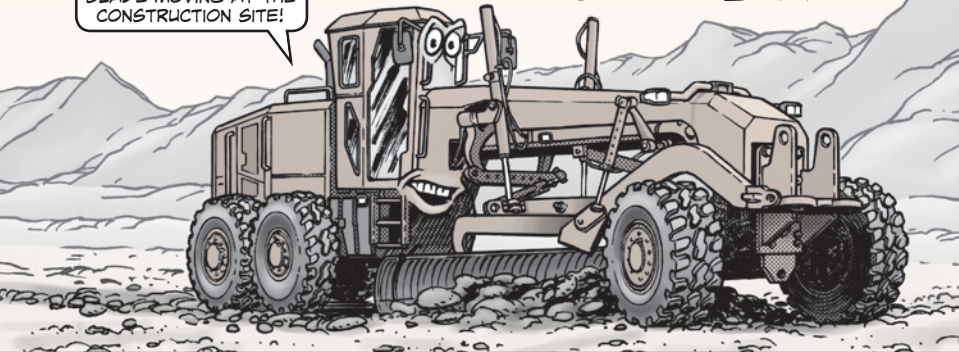
**ANOTHER** WAY TO FIND THIS  
PROBLEM IS WHEN YOU PULL THE  
AIR CLEANER FILTER ELEMENTS  
TO CHECK FOR BUILDUP.

IF THEY'RE CLOGGED  
WITH BLACK SOOT, A  
**RUSTED EXHAUST PIPE** IS  
THE LIKELY SOURCE.

CALL YOUR  
MECHANIC TO  
HAVE IT  
CHECKED OUT.

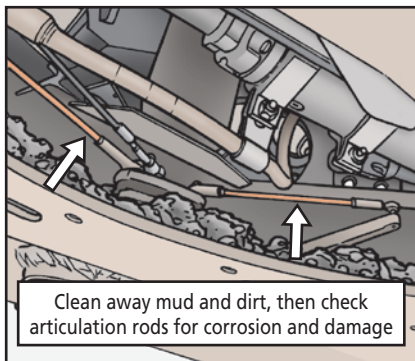
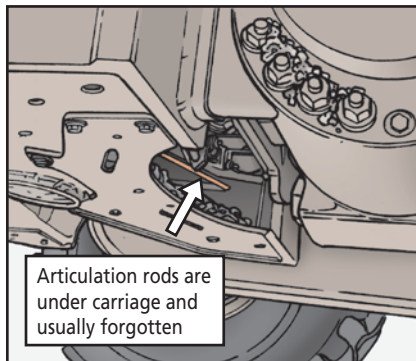
# ARTICULATION RODS NEED SCRUBBIN'

HERE'S A GREAT  
PM TIP TO KEEP MY  
BLADE MOVING AT THE  
CONSTRUCTION SITE!



**O**perators, when cleaning time rolls around, don't forget to wash under the grader's carriage. It's a dirty job—you'll have to get down on your hands and knees and crawl to spray this area with a high-pressure hose.

But it's necessary to clean out the sand, rocks and hard-packed dirt under the cab where the vehicle's articulation rods are located. This area gets packed with snow and ice during the winter and mud the rest of the year. Eventually, it corrodes the articulation rods and they stop moving.



While you're there, take a close look at the rods for any damage or bends. The rods can break when the grader traverses over boulders, logs, tree stumps and other obstacles. A bent or busted rod means you can't articulate the grader's blade.

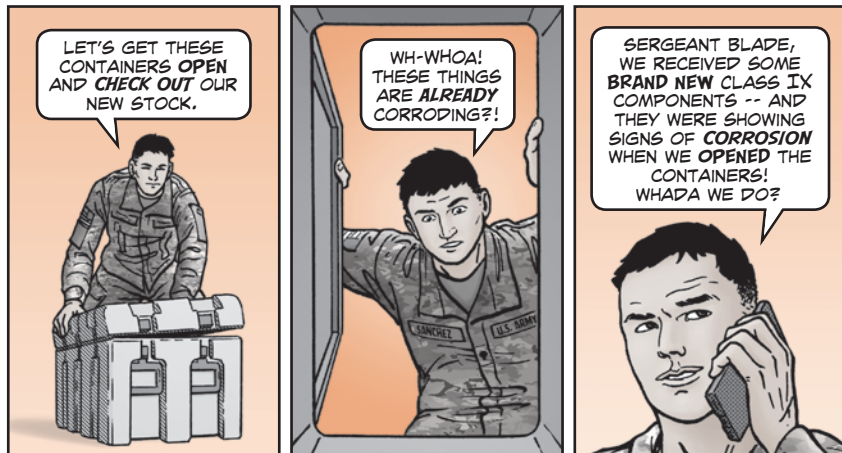
Notify maintenance if you see a damaged rod. You'll know something's up if the warning buzzer goes off inside the cab and you can't articulate the blade.



- The Corrosion Menace
- Turn in Your Unserviceable Aircraft Parts
- Cleaning is the First Step for Fighting Corrosion
- Got Utility Helicopter Safety Questions?
- Got Shadow Questions?
- FARP Helmet Parts Update



# THE CORROSION MENACE



**M**AINTEINERS, CORROSION IS A BATTLE YOU **CAN'T** TAKE YOUR EYES OFF OF. WHENEVER IT REARS ITS UGLY HEAD, YOU MUST BE **READY** TO CHOP IT OFF.

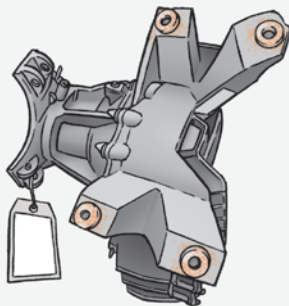
IF **YOU'VE** RECEIVED PACKAGES OR CONTAINERS WITH BRAND NEW CLASS IX PARTS AND THE COMPONENTS SHOW SIGNS OF CORROSION OR OTHER SUPPLY DISCREPANCIES,

## FOLLOW THESE STEPS:

**FIRST**, NOTIFY YOUR QUALITY CONTROL TECHNICAL INSPECTOR. HE WILL DECIDE IF REPAIRS CAN BE MADE AT YOUR UNIT. IF THAT'S THE CASE, YOU'LL REPAIR THE CORROSION BEFORE INSTALLING THE PART ON THE AIRCRAFT.

**SECOND**, NOTIFY AMCOM OF THE PROBLEM SO THEY CAN ADDRESS THE ISSUE IN THE SUPPLY SYSTEM.

Check for corrosion on shipped parts



COMMUNICATION WITH THE AMCOM HEADSHED IS **VITAL** IN MAKING SURE ACTION IS TAKEN TO FIX CORROSION ON OTHER NEW PARTS THAT ARE SHIPPED TO UNITS. THAT ENSURES **EVERYONE** RECEIVES THE PARTS THEY NEED IN **READY-TO-USE** CONDITION.

SUPPLY DISCREPANCY REPORTS (SDRs) OF CLASS IX PARTS CAN BE SUBMITTED THROUGH WEBSDR AT:

<https://www.transactionservices.dla.mil/daashome/websdr.asp>

**NOTE:** FOR ALL U.S. ARMY ORGANIZATIONS, **DO NOT** USE THE PRODUCT QUALITY DEFICIENCY REPORT (PQDR) WEBSITE (PDREP) TO SUBMIT SDRs.

DLM 4000.25, VOLUME 2, CHAPTER 17 (SUPPLY DISCREPANCY REPORTING), IS THE TOOL TO USE WHEN REPORTING SHIPPING OR PACKAGING DISCREPANCIES. DOWNLOAD THE MOST CURRENT VERSION AT:

<http://www.dla.mil/HQ/InformationOperations/DLMS/elibrary/manuals/publications/dlm/dlm-pubs/>

EACH AVIATION UNIT NEEDS TO VISIT WEBSDR, FILL OUT A SYSTEM ACCESS REQUEST (SAR) AND REGISTER THEIR DODAAC ON WEBSDR.

THEN YOU'LL BE READY TO GO IF YOU RECEIVE PARTS THAT **NEED** TO BE REPORTED.



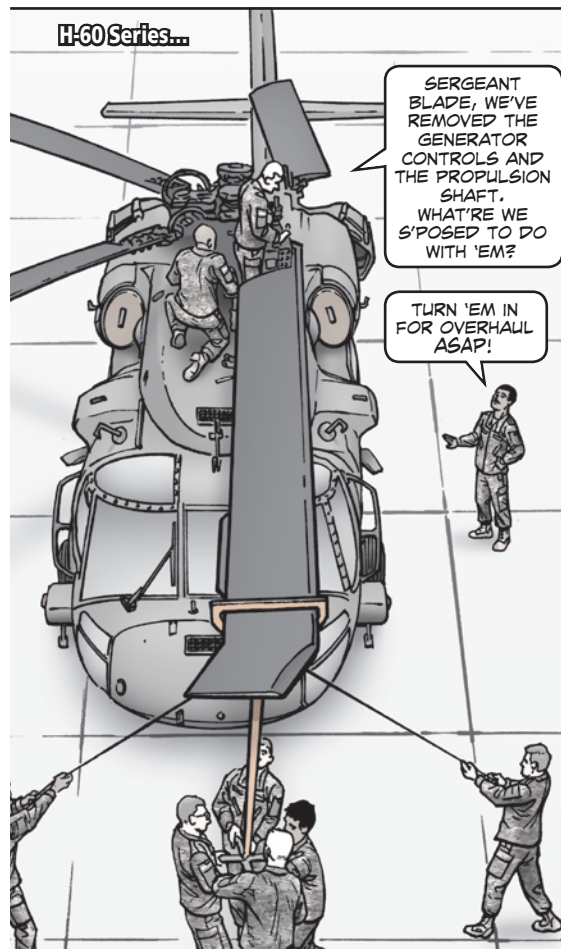
## GOT PACKAGING QUESTIONS?

CONTACT PACKAGING SPECIALIST **EDWARD HUNTER**, (256) 876-0284. YOU CAN ALSO CONTACT **SCOTT HODGEN** IN THE AMCOM CORROSION PROGRAM OFFICE AT DSN (312) 788-5149, OR (256) 842-5149.

THEIR EMAIL ADDRESSES ARE:

[edward.l.hunter2.civ@mail.mil](mailto:edward.l.hunter2.civ@mail.mil)  
[scott.r.hodgen.ctr@mail.mil](mailto:scott.r.hodgen.ctr@mail.mil)

## H-60 Series...



## Turn in Your UNSERVICEABLE Aircraft Parts

**M**ECHANICS, THE MAINTENANCE AND OVERHAUL PROGRAMS NEED **YOUR** HELP!

THE SUPPLY SYSTEM CAN **ONLY** MEET THE DEMAND FOR PARTS WHEN IT HAS PARTS TO REPAIR.

IF YOU HAVE UNSERVICEABLE BLACK HAWK COMPONENTS OR PARTS, TURN THEM IN FOR REPAIR, ASAP. IN PARTICULAR, LOOK FOR THESE TWO PARTS:

**Generator control**,  
 NSN 6110-01-504-6723  
 (PNs 21B17-96 and 70550-02031-115) and  
 NSN 6110-01-335-9743  
 (PNs 21B17-96-A and 70550-02031-114).

**Propulsion shaft**  
 NSN 1615-01-083-2953  
 (PN 70361-05002-045).

## GOT QUESTIONS?

CONTACT  
**REQUINCIA COLLINS** AT  
 DSN 788-0504,  
 (256) 842-0504  
 OR EMAIL:

[requincia.d.collins.civ@mail.mil](mailto:requincia.d.collins.civ@mail.mil)



# CLEANING IS THE FIRST STEP FOR FIGHTING CORROSION



MECHANICS, IF YOU *THINK* IT'S A **GOOD IDEA** TO USE HIGH PRESSURE WATER TO BLAST GRIT AND GRIME FROM YOUR HELICOPTER'S AIRFRAME...



...IT'S **NOT!**

USING HIGH PRESSURE WASHERS AND WANDS ARE NOT AUTHORIZED ON ARMY AIRCRAFT UNLESS THEY'RE REGULATED TO 175 PSI LIKE IT SAYS IN CHAPTER 2-7 OF TM 1-1500-344-23-2.

YOUR SPECIFIC AIRCRAFT PSI LIMITS MAY BE LOWER SO ALWAYS CHECK YOUR IETM FOR SPECIFIC LIMITS.

WHEN CLEANING AIRCRAFT, **ALWAYS** USE THE **AUTHORIZED** CLEANERS IN YOUR IETM AND TM 1-1500-344-23-2, **CLEANING AND CORROSION CONTROL**.

HIGHLY ALKALINE CLEANING COMPOUNDS (pH GREATER THAN 10) ARE **NOT** AUTHORIZED FOR USE ON ARMY AIRCRAFT.

SOME HIGH STRENGTH ALUMINUMS CAN DEVELOP A CONDITION CALLED **HYDROGEN EMBRITTLEMENT** WHEN EXPOSED TO HIGHLY ALKALINE CLEANERS.

ALTHOUGH COMMERCIAL CLEANERS MAY **APPEAR** TO PERFORM AS WELL OR BETTER THAN APPROVED PRODUCTS, THEY **MAY BE CORROSIVE** TO AIRCRAFT ALLOYS.

**SUDDEN CATASTROPHIC FAILURE** MAY OCCUR AS A RESULT OF HYDROGEN EMBRITTLEMENT WHEN THE PART CAN NO LONGER SUSTAIN THE APPLIED STRESSES.

AIRCRAFT WASHED OR CLEANED DURING SCHEDULED OR UNSCHEDULED MAINTENANCE SHOULD BE THOROUGHLY RINSED WITH PLENTY OF **LOW-PRESSURE FRESH WATER** THAT MEETS THE WATER QUALITY GUIDELINES IN TABLE 2-1 OF TM 1-1500-23-2.

AFTER CLEANING AND INSPECTION, TREAT YOUR AIRCRAFT WITH CORROSION PREVENTION COMPOUNDS (CPC) FOR PROTECTION. FOLLOW YOUR AIRCRAFT SPECIFIC IETM GUIDELINES AND PROCEDURES.



ALSO LOOK IN YOUR AIRCRAFT SPECIFIC IETM AND TABLE 2-5 OF TM 1-1500-344-23-4 FOR NSNs AND MILITARY SPECIFICATIONS ON **CORROSION TREATMENT**.



IF YOU NEED **UP-TO-DATE** CORROSION INFORMATION OR CORROSION ASSISTANCE, CHECK OUT CHAPTER 8-5 OF TM 1-1500-328-23.

YOU CAN **ALSO** VISIT THE AMCOM CORROSION PROGRAM OFFICE WEBSITE AT:  
<https://amcomcorrosion.army.mil>

**GOT CORROSION QUESTIONS?**

CONTACT THE **CORROSION** HOTLINE AT DSN 897-0209 OR (256) 313-0209.

## Got Utility Helicopter Safety Questions?

If you have safety questions about your UH-60 aircraft, the PEO Aviation safety office has a direct email for units. Send your safety-related questions to:

[usarmy.redstone.peo-avn.mbx.avn-uh-po-safety@mail.mil](mailto:usarmy.redstone.peo-avn.mbx.avn-uh-po-safety@mail.mil)

## Got Shadow Questions?

If you need support for your Shadow unmanned aircraft, send your questions and inquiries to the headshed by email at: [usarmy.redstone.peo-avn.list.shadow-help@mail.mil](mailto:usarmy.redstone.peo-avn.list.shadow-help@mail.mil)

# FARP Helmet Parts Update



**HEY! THE MICROPHONE HEADSET ON THIS FARP HELMET WORKS PRETTY GOOD!**

**GOOD NEWS! YOU CAN USE THE HELMET WITH EITHER ONE OF THESE MICROPHONE HEADSETS.**

**THE ONE YOU'VE GOT IS GREAT FOR CRAWLING AROUND UNDER THE AIRCRAFT FOR RE-ARMING.**



PAGES 37-38 OF PS 721 (DEC 12) TOLD YOU HOW TO BUILD A FORWARD AREA REFUELING POINT (FARP) HELMET WITH A LIST OF ALL THE PARTS.

HOWEVER, THE **MICROPHONE HEADSET**, NSN 5965-01-204-8505, THAT'S LISTED COMES WITH A MOUTHPIECE THAT STRAPS OVER YOUR MOUTH. FOR THOSE FLYING APACHE E-MODEL AIRCRAFT, THE HEADSET MOUTHPIECE CAN MOVE AROUND AND GET IN THE WAY WHILE CRAWLING UNDER AND AROUND THE AIRCRAFT DURING RE-ARMING.

THERE IS AN **ALTERNATIVE** MICROPHONE HEADSET THAT AVIATORS CAN USE INSTEAD. IT COMES WITH NSN 5965-01-390-9240.

NSN 5965-01-204-8505  
CAGE 81348  
P/N 10987A  
TYPE P/N M87819/1-01  
HEADSET-MICROPHONE  
SPE7M5-15-M-C920



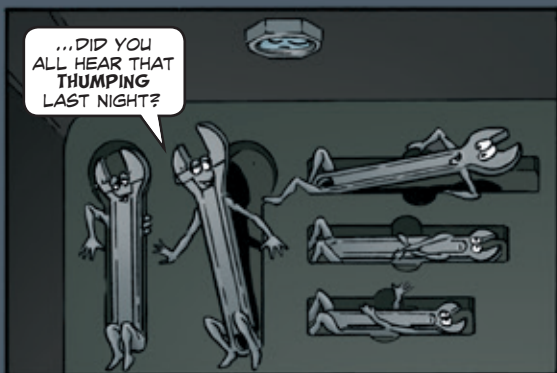
NSN 5965-01-390-9240  
CAGE 71483  
P/N 12510G-21  
HEADSET-MICROPHONE H10-76  
SPM7MX-13-D-0014-0139



**ORDER THE MICROPHONE HEADSET THAT WORKS BEST FOR YOU DURING FARP OPERATIONS.**



## IRON OXIDE OGRE, THE REAPING, PART 7: CORROSION EXPLOSION



...DID YOU  
ALL HEAR THAT  
**THUMPING**  
LAST NIGHT?

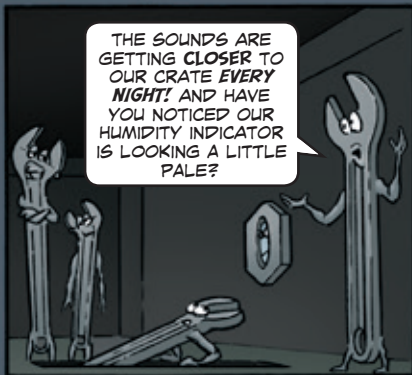


THAT'S THE *THIRD*  
NIGHT IN A ROW! I  
HAVEN'T HAD A WINK  
OF SLEEP SINCE IT  
STARTED.



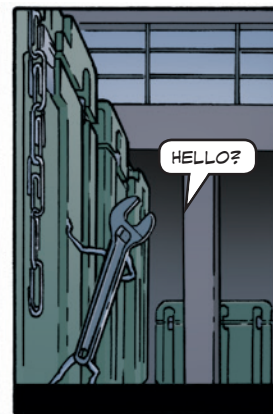
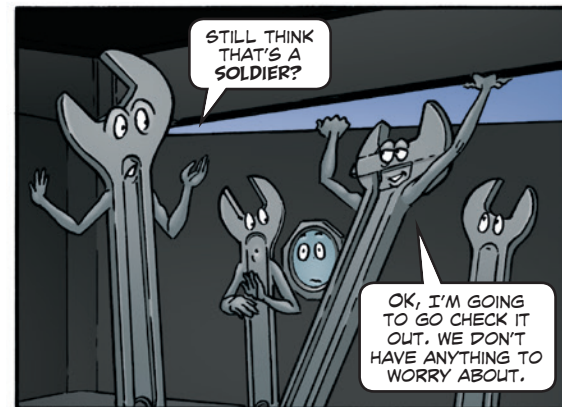
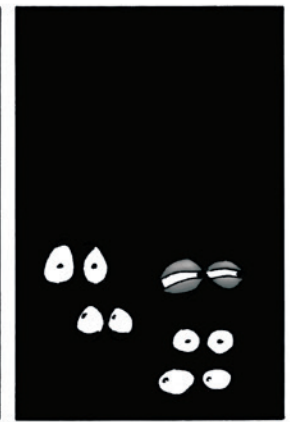
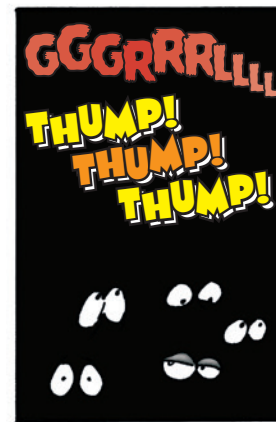
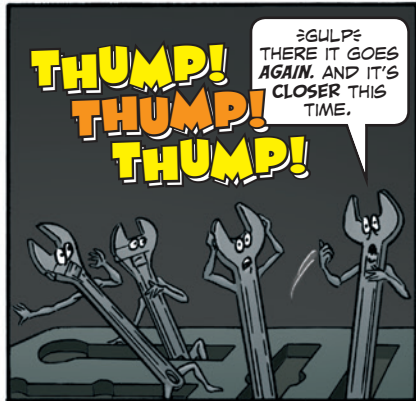
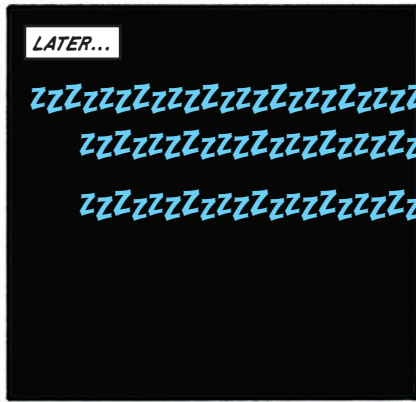
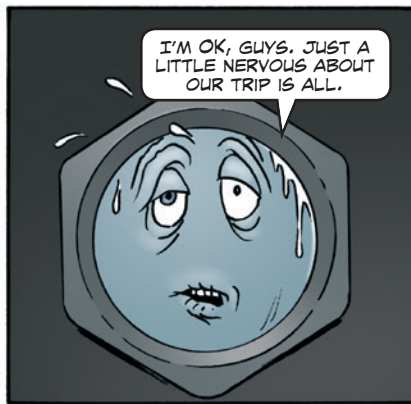
C'MON GUYS. THE SOLDIERS ARE  
JUST WORKING LATE TO PREPARE  
FOR THAT NTC DEPLOYMENT.

NO ONE WORKS  
*THAT* LATE!

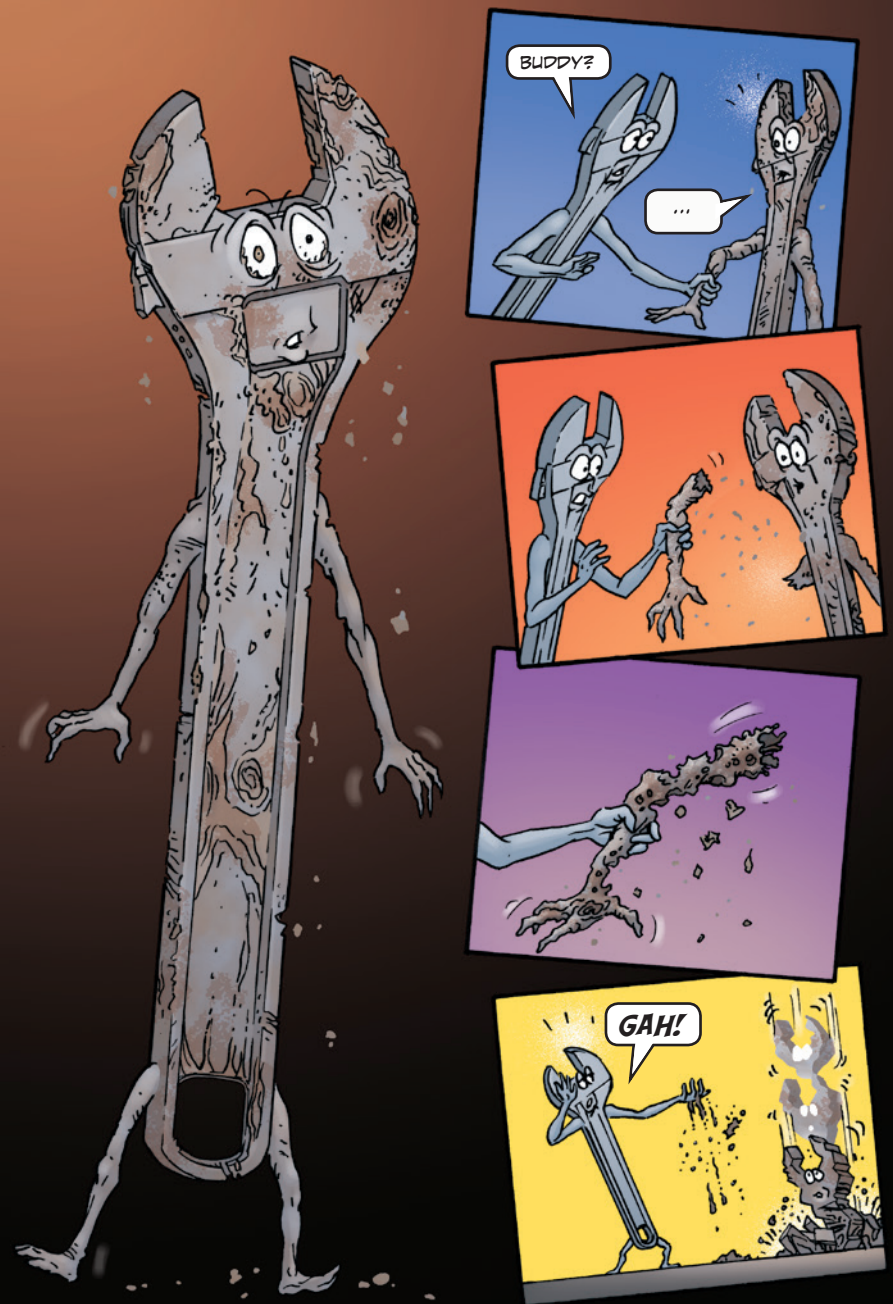
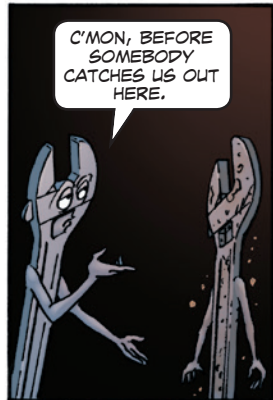
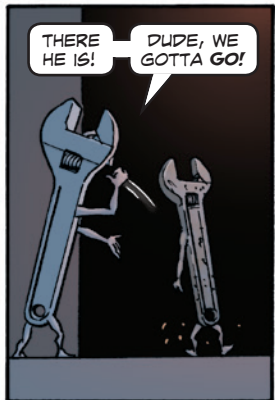


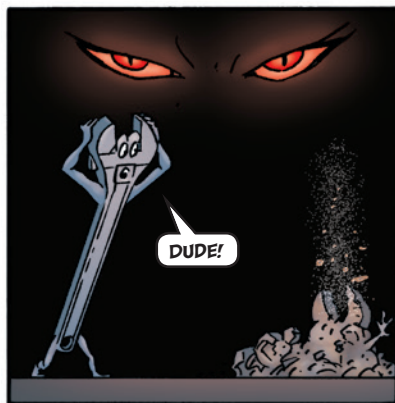
THE SOUNDS ARE  
GETTING **CLOSER** TO  
OUR CRATE *EVERY*  
**NIGHT!** AND HAVE  
YOU NOTICED OUR  
HUMIDITY INDICATOR  
IS LOOKING A LITTLE  
PALE?



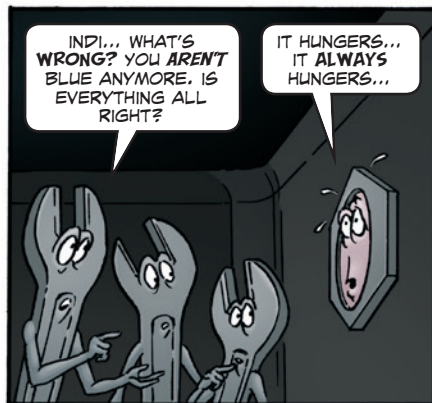






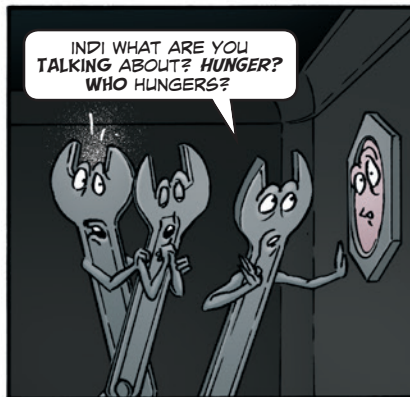


DUDE!

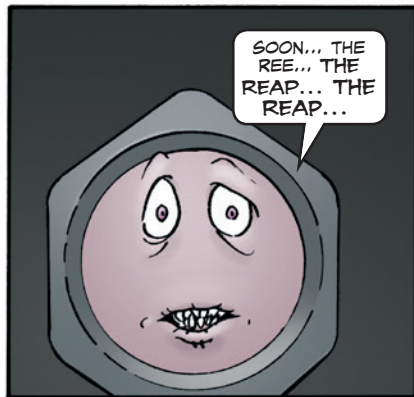


INDI... WHAT'S WRONG? YOU **AREN'T** BLUE ANYMORE. IS EVERYTHING ALL RIGHT?

IT HUNGERS... IT **ALWAYS** HUNGERS...



INDI WHAT ARE YOU TALKING ABOUT? **HUNGER?** WHO HUNGERS?



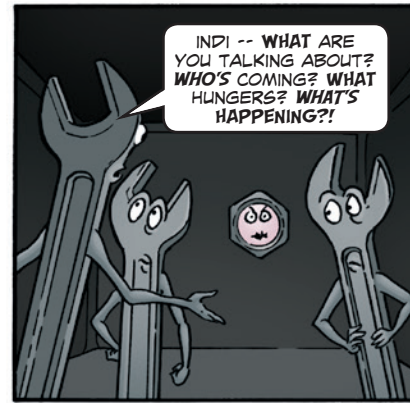
SOON... THE REE... THE REAP... THE REAP...



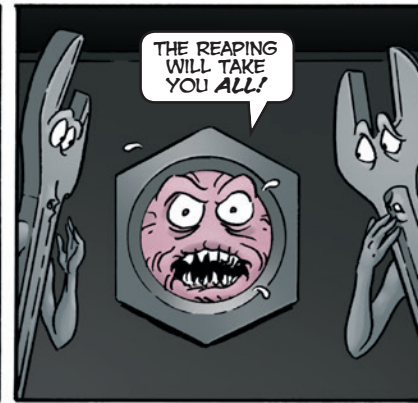
WHO'S THERE!?



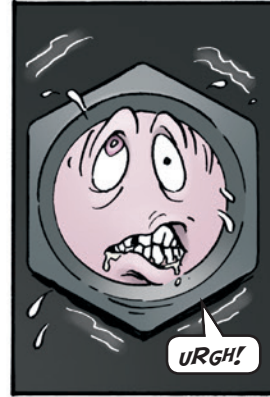
**THE REAPING BEGINS...**



INDI -- WHAT ARE YOU TALKING ABOUT? WHO'S COMING? WHAT HUNGERS? WHAT'S HAPPENING?!



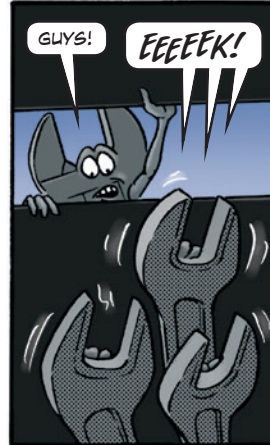
THE REAPING WILL TAKE YOU **ALL!**



URGH!



WHAT'S GOING ON?!

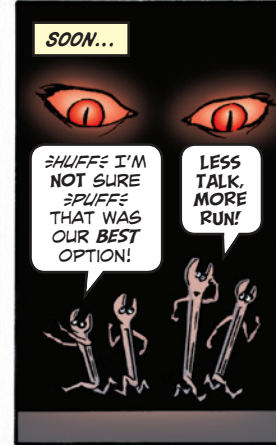


GUYS!

EEEEEEK!



WE GOTTA GET OUTTA HERE!



SOON...

SHUFFE I'M NOT SURE SHUFFE THAT WAS OUR **BEST** OPTION!

LESS TALK. MORE RUN!





HURRY!



OOF!



ARGHHHHHHH-\*



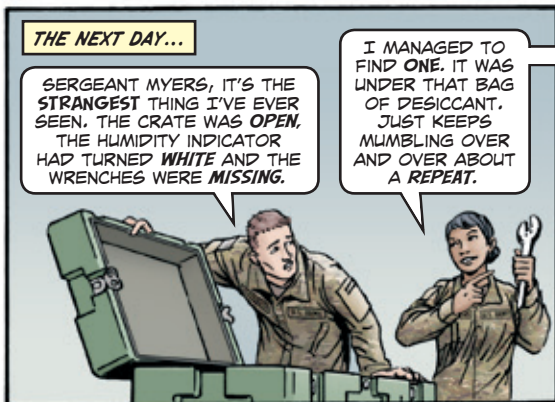
WE HAVE  
TO SPLIT  
UP AND  
HIDE!



LATER...

PSST!  
D'YOU THINK  
IT'S SAFE

ARGHHHHHHHH-\*



THE NEXT DAY...

SERGEANT MYERS, IT'S THE  
STRANGEST THING I'VE EVER  
SEEN. THE CRATE WAS OPEN.  
THE HUMIDITY INDICATOR  
HAD TURNED WHITE AND THE  
WRENCHES WERE MISSING.

I MANAGED TO  
FIND ONE. IT WAS  
UNDER THAT BAG  
OF DESICCANT.  
JUST KEEPS  
MUMBLING OVER  
AND OVER ABOUT  
A REPEAT.

CHIEF KRUGER ISN'T  
GONNA LIKE THIS AT ALL.



THE REAPING IS  
REAL... THE REAPING  
IS REAL... THE  
REAPING IS REAL...

IS THE REAPING HAPPENING  
IN *YOUR* WAREHOUSE?

IF YOU'RE *NOT* CHECKING YOUR HUMIDITY  
INDICATORS MONTHLY, IT MIGHT BE...



# PS SMALL ARMS



- Your Guide to Lubes
- Clear Bore for Clear Firing
- New Polymer Magazines Available
- How Often Should Weapons Be Cleaned?
- Cleaning Tanks Do's and Don'ts

ALSO  
FEATURING  
**CBRN**

- How Do You Turn in CBRN?
- MPHS: the ONLY Hydration System OK for CBRN!

Small Arms...



WHAT IS THE **BEST LUBE** TO USE ON YOUR RIFLE, MACHINE GUN OR PISTOL?

THERE ARE CHOICES BUT SOMETIMES IT'S **DIFFICULT** TO KNOW WHAT'S THE BEST CHOICE. HERE'S...

# ...YOUR GUIDE TO LUBES

SMALL ARMS LUBRICANTS DIFFER IN **VISCOSITY** (HOW EASILY THEY FLOW), **CHEMICAL COMPOSITION** AND **HEAT RESISTANCE**.

THESE CHARACTERISTICS DICTATE **WHICH** LUBRICANT TO USE DEPENDING ON THE WEAPON AND ENVIRONMENTAL CONDITIONS

YOUR -10 TM IS **ALWAYS** THE **BEST** GUIDE TO CLEANING AND LUBING YOUR WEAPONS, BUT HERE ARE SOME **GENERAL GUIDELINES** ON LUBRICANTS...

**RBC**  
(RIFLE BORE CLEANER)  
IS NOT A LUBRICANT.

IT'S **STRICTLY** FOR **CLEANING OUT CARBON AND POWDER** FROM THE CHAMBER AND BORE.

REMEMBER, WHEN YOU'VE FINISHED USING RBC, YOU NEED TO LUBE YOUR WEAPON.

**CLP**  
(CLEANER, LUBRICANT, PRESERVATIVE)  
IS USUALLY THE **BEST** CHOICE FOR TAKING CARE OF YOUR WEAPON SINCE IT CLEANS, LUBES AND PRESERVES IN ONE STEP.

**CLP AND LSA CAN BE USED ON MOST WEAPONS AS LONG AS THE TEMPERATURE IS -10°F OR HIGHER.**

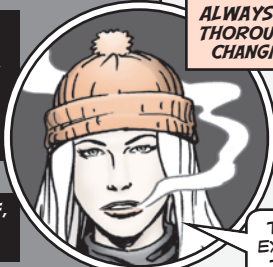
**LSA**  
(LUBRICANT, SEMI-FLUID, AUTOMATIC WEAPONS) AND **LSA-T**  
(LUBRICANT, SEMI-FLUID, AUTOMATIC WEAPONS WITH TEFLON®) ARE **STRICTLY LUBRICANTS**.

SO, BEFORE USING THEM YOU MUST FIRST CLEAN YOUR WEAPONS WITH DRY CLEANING SOLVENT, MIL-PRF-680 TYPE II.

**ALWAYS DE-GREASE THOROUGHLY WHEN CHANGING LUBES.**

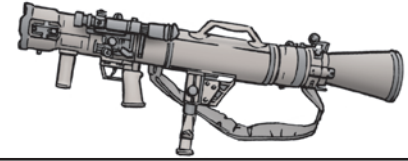
WHEN THE TEMPERATURE DROPS BELOW 10°F, YOU CAN USE **LAW** (LUBRICATING OIL, ARCTIC, WEAPONS).

IF IT'S BELOW -10°F, USE ONLY LAW ON MOST WEAPONS.



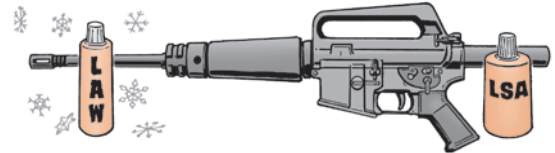
THERE ARE EXCEPTIONS, THOUGH...

...FOR THE **M3 RECOILLESS RIFLE**, USE **ONLY CLP** REGARDLESS OF THE TEMPERATURE.



ON THE **M231 FIRING PORT WEAPON**, **DON'T** USE CLP.

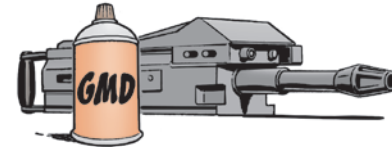
USE **ONLY LSA** IN NORMAL CONDITIONS AND **LAW** IN EXTREME COLD.



FOR THE **MK 19**, **NEVER** USE CLP-IT'S NOT STRONG ENOUGH. USE

**GMD**

(GREASE, MOLYBDENUM DISULFIDE) IF YOU CAN GET IT.



IF YOU CAN'T, USE **LSA** OR **LSA-T**. IF THE TEMPERATURE DROPS BELOW 0°F, IT'S OK TO USE **LAW**.



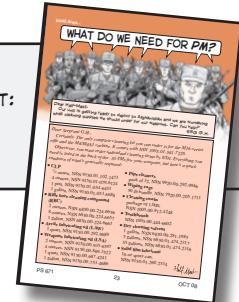
WHEN YOU'RE LUBING, REMEMBER A **LIGHT LUBE** MEANS A FILM **BARELY VISIBLE** TO THE EYE.

A **HEAVY LUBE** MEANS A FILM THICK ENOUGH TO SPREAD WITH YOUR FINGER.



IF YOU NEED THE NSNS FOR THESE LUBRICANTS AND CLEANERS, SEE YOUR -10 TM OR PAGE 23 IN PS 671 (OCT 08) AT:

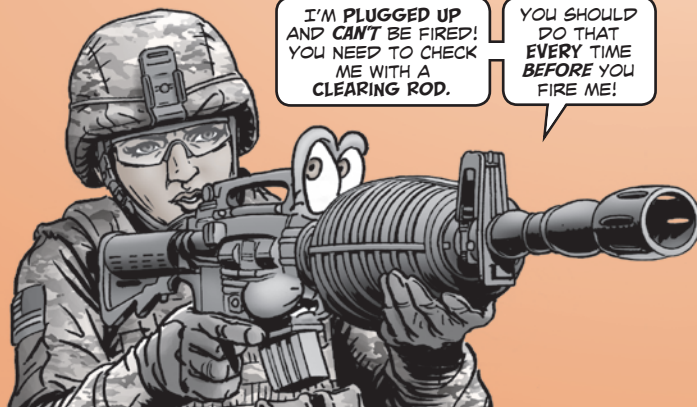
<https://www.logsa.army.mil/psmag/archives/PS2008/671/671-23.pdf>





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

# CLEAR BORE FOR CLEAR FIRING



ANY OBSTRUCTION IN YOUR M16 RIFLE OR M4/M4A1'S BORE CAN SPELL CURTAINS FOR YOUR WEAPON AND *MAYBE* FOR YOU.

WHAT KIND OF OBSTRUCTION ARE WE TALKING ABOUT?



PRACTICALLY ANYTHING: A STUCK ROUND, A CLEANING ROD SECTION, A CLEANING PATCH, DIRT, OR THE SLEEVE FROM A TRAINING ROUND.

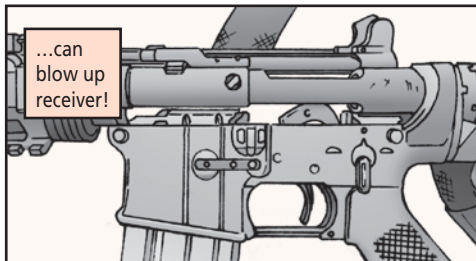
A BULLET FIRED AT 3,000 FEET PER SECOND **DOES NOT** PUSH OBSTRUCTIONS OUT OF A BARREL.

THE 60,000 PSI HAS NOWHERE TO GO BUT **BACK** INTO THE RECEIVER. THE WHOLE TOP OF THE RECEIVER CAN **BLOW UP** IN YOUR FACE.

Bullet that hits obstruction in barrel...



...can blow up receiver!



THAT'S WHY IT'S **CRITICAL** YOU CHECK THAT THE BORE IS **CLEAR** ANY TIME BEFORE FIRING WHETHER YOU'RE IN THE FIELD OR AT THE RANGE.

AT THE RANGE, IT'S BETTER TO CHECK WITH A **CLEARING ROD** RATHER THAN A CLEANING ROD.

## CLEARING ROD

Bend end of welding rod 90° for a handle

A **CLEANING ROD** CAN UNSCREW AND COME APART IN THE BARREL. IF YOU DON'T NOTICE, THE BARREL BLOWS UP WHEN YOU FIRE.

MAKE A CLEARING ROD WITH A 36-IN LONG, 3/16-IN DIAMETER **BRASS WELDING ROD**. NSN 3439-00-244-4541.

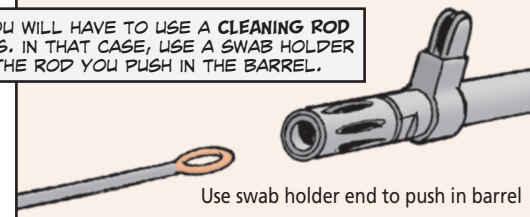
PUT A 90-DEGREE BEND THREE INCHES FROM ONE END TO MAKE A HANDLE. FILE OFF ANY BURRS OR SHARP EDGES.

**EASY DOES IT** INSERTING THE CLEARING ROD SO THAT YOU DON'T DAMAGE THE MUZZLE CROWN. DON'T SLAM THE ROD INTO THE BOLT FACE, EITHER.

IF YOU FIND A STUCK ROUND, DON'T TRY TO REMOVE IT WITH THE ROD. TELL YOUR SMALL ARMS REPAIRMAN. IT'S THEIR JOB TO REMOVE THE STUCK ROUND FOLLOWING THE PROCEDURE IN THE M16/M4 -10 TM.

OF COURSE, IN THE FIELD YOU WILL HAVE TO USE A **CLEANING ROD** TO CHECK FOR OBSTRUCTIONS. IN THAT CASE, USE A SWAB HOLDER SECTION AT THE END OF THE ROD YOU PUSH IN THE BARREL.

WHEN YOU PULL OUT THE ROD, CHECK FOR THE SWAB HOLDER. THAT WAY YOU KNOW PART OF THE ROD ISN'T STILL IN THE BARREL.

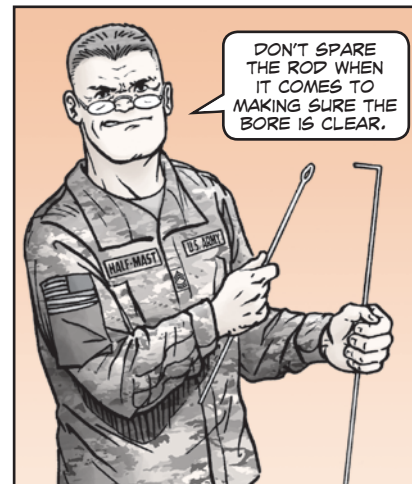


IF AN OBSTRUCTION IS FOUND IN THE BORE, A MALFUNCTION/ACCIDENT/INCIDENT REPORT (MAIR) SHOULD BE SUBMITTED BY THE LOCAL TACOM LAR.

IF SAFETY AND PROTECTING WEAPONS **AREN'T** GOOD ENOUGH REASONS FOR ALWAYS CHECKING FOR OBSTRUCTIONS BEFORE FIRING, BE AWARE THAT **EVERYONE** FROM THE SOLDIER FIRING THE WEAPON TO THE PLATOON SERGEANT TO THE OFFICER RUNNING THE RANGE CAN BE FOUND **LIABLE** FOR A DAMAGED WEAPON.

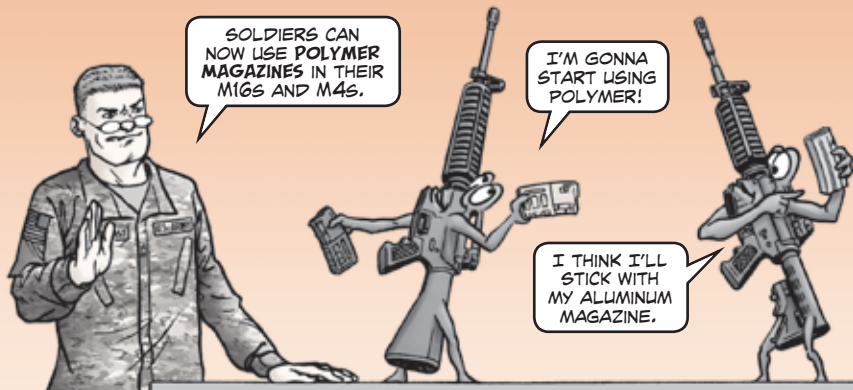


DON'T SPARE THE ROD WHEN IT COMES TO MAKING SURE THE BORE IS CLEAR.





# NEW POLYMER MAGAZINES AVAILABLE

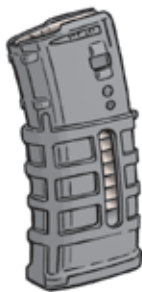


UNITS NOW HAVE A NEW MAGAZINE CHOICE FOR THEIR M16-SERIES RIFLES AND M4/M4A1 CARBINES.

THE ARMY HAS AUTHORIZED UNITS TO USE POLYMER MAGAZINES.

NSN 1005-01-615-5169 BRINGS A BLACK MAGAZINE AND NSN 1005-01-659-7086 A TAN ONE. THEY COST A LITTLE OVER \$13.

SOLDIERS CAN CHOOSE A BLACK...



...OR TAN POLYMER MAGAZINE...



...OR STANDARD ALUMINUM ENHANCED PERFORMANCE MAGAZINE



BE CAREFUL USING THE POLYMER MAGAZINES AT TEMPERATURES BELOW 0°F. THEY CAN CRACK OR SHATTER IF DROPPED WHEN IT'S THAT COLD. IT'S SAFER TO USE THE STANDARD ALUMINUM ENHANCED PERFORMANCE MAGAZINE, NSN 1005-01-630-9508, IN THOSE TEMPERATURES.

THE ENHANCED PERFORMANCE MAGAZINE IS STILL THE PRIMARY MAGAZINE AND IS INCLUDED AS AN M16 AND M4 COMPONENT OF END ITEM (COEI) IN TM 9-1005-319-10 AND -23&P. THE POLYMER MAGAZINES ARE BEING ADDED TO THE ADDITIONAL AUTHORIZATION LIST (AAL).

FOR MORE INFORMATION, SEE TACOM LCMC MAINTENANCE INFORMATION MESSAGE 17-045 AT:

<https://tulsa.tacom.army.mil/Maintenance/message.cfm?id=MI17-045.html>

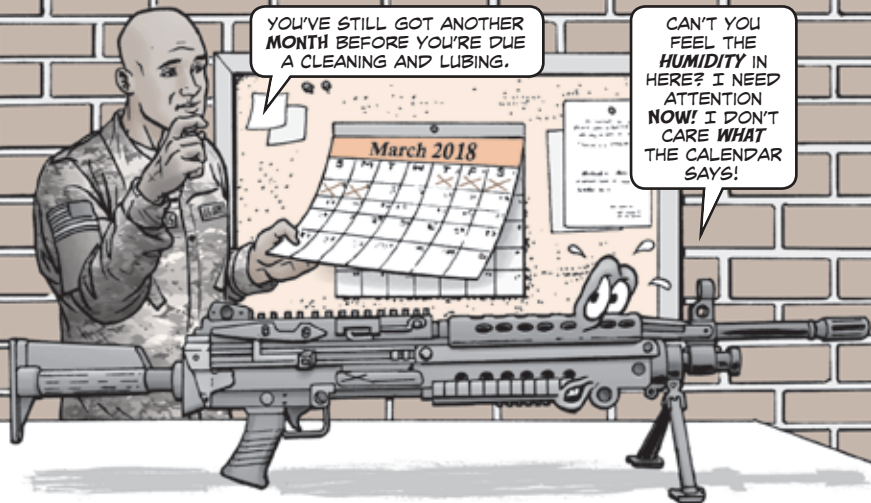
# How Often Should Weapons Be Cleaned?



DON'T  
LOOK  
AT ME!

YOU'VE STILL GOT ANOTHER  
MONTH BEFORE YOU'RE DUE  
A CLEANING AND LUBING.

CAN'T YOU  
FEEL THE  
**HUMIDITY** IN  
HERE? I NEED  
ATTENTION  
**NOW!** I DON'T  
CARE **WHAT**  
THE CALENDAR  
SAYS!



Dear Half-Mast,  
Page 37 in PS 764  
(Jul 16) said that at  
least every 90 days  
an M16 rifle or M4  
carbine should be  
cleaned and lubed. Is  
that true for all the  
weapons?

SPC B.M.

Dear Specialist,

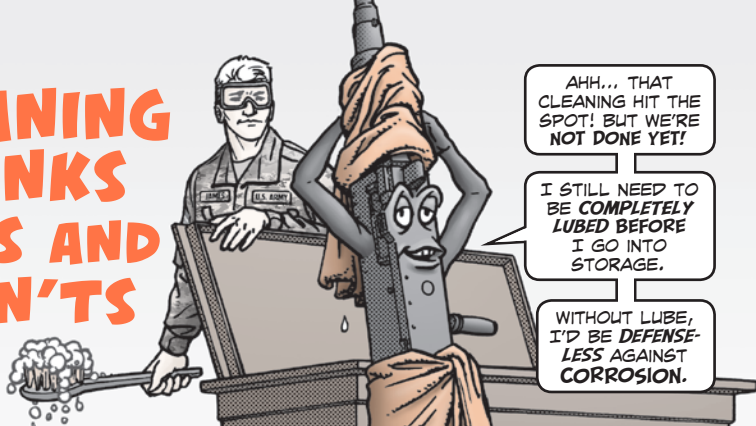
Yes! No matter if it's a pistol, rifle or machine gun, it needs to be cleaned and lubed at least every 90 days, whether it's been fired or not. And that goes for every Army unit: Active, Reserves and National Guard.

But particularly in very humid areas where corrosion is more of a problem, cleaning and lubing will need to be done more often. If you wait until 90 days are up, you may find corrosion has ruined the weapon.

When it's time to take the weapon to the field, a complete BEFORE PMCS also needs to be done by the operator. All of this is spelled out in most of the weapons' -10 TMs. And if it isn't, it will be in the TM's next revision.

*Half-Mast*

# CLEANING TANKS DO'S AND DON'TS



Units are better off never using cleaning tanks for their weapons, mainly because it's too easy to mix up bolts when many weapons are run through the tanks. If a bolt is used with a weapon it wasn't headspaced for, the barrel can rupture during firing.

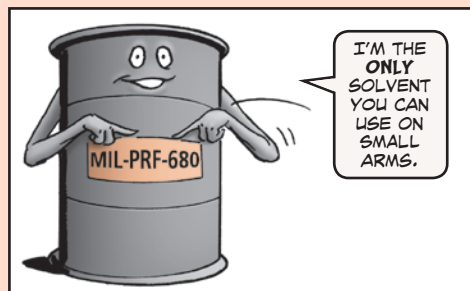
But cleaning tanks are a fact of life at many installations, so remember these do's and don'ts:

There are two **nevers** on cleaning tanks: **Never** use an ultrasonic cleaning system. It can completely remove a weapon's protective coating, which leaves the weapon defenseless against corrosion. And **never** use a water-based cleaning fluid. That can also lead to corrosion.

- Do use **only** dry cleaning solvent Type II (81349), MIL-PRF-680. This is the **only** solvent authorized for small arms.

Here's what the NSNs bring:

NSN 6850-	Size
01-474-2316	55 gallons
01-474-2317	5 gallons
01-474-2319	1 gallon



- Don't clean small arms in the same cleaning tank you use for things like vehicle parts. They may have contaminants that could damage weapons.
- Do protect yourself from solvent. It's strong stuff. Wear goggles, rubber gloves and coveralls with the sleeves rolled down.
- Do remember that some weapon parts should never be dunked in solvent. Examples are the M2 and M48 machine gun back plates, the MK 19 bolt assembly and anything plastic. Solvent will eat up these parts. Check the operator TMs for info on what parts to keep away from solvent.
- Do use a metal basket in the tank to ensure no parts disappear during cleaning.

- Do wipe clean and thoroughly dry all weapons that come out of the tank. But here's the important part: **The weapons must then be completely lubricated before storage.**

Solvent removes every bit of lubrication from weapons. If weapons are stored without being re-lubed, they will be ruined by corrosion.



## HOW DO YOU TURN IN CBRN?



Dear Editor,

As part of Ft Hood's Command Maintenance Evaluation and Training Team (COMET), we find units are unsure what to do with CBRN items like masks and JSLIST that they no longer need. Usually they turn in the items to the Supply Support Activity, where they sit and collect dust.

It would be a big help if you let CBRN specialists know where to turn for turn-in help.

Terry Lewis  
Ft Hood, TX

**Editor's note:** Certainly, Terry.

For turn-in instructions on JSLIST, email:

[usarmy.detroit.tacom.mbx.ilsc-icemp@mail.mil](mailto:usarmy.detroit.tacom.mbx.ilsc-icemp@mail.mil)

For turn-in instructions on masks, PATS, uniform integrated protective ensemble (UIPE), all purpose-personal protective ensemble (AP-PPE) and other individual protective equipment (IPE) items, email:

[usarmy.detroit.tacom.mbx.ilsc-masks@mail.mil](mailto:usarmy.detroit.tacom.mbx.ilsc-masks@mail.mil)



# MPHS: the *ONLY* Hydration System OK for CBRN!



THE ARMY HAS DECIDED **ONLY** ONE HYDRATION SYSTEM IS OK FOR USE WITH ANY OF THE PROTECTIVE MASKS...

...THE MULTI-PURPOSE PERSONAL HYDRATION SYSTEM (MPHS), NSN 8465-01-643-5606.

THIS MEANS THAT ONCE YOU'RE ISSUED AN MPHS, THE 1-QT, 2-QT, AND STEEL COLD WEATHER CANTEENS ARE **NO LONGER OK** TO USE WITH MASKS.

OF COURSE, COMMERCIAL HYDRATION SYSTEMS SUCH AS CAMELBAK® HAVE **NEVER** BEEN APPROVED FOR USE WITH MASKS.

THE MPHS IS SIMILAR TO THE MOLLE HYDRATION SYSTEM BUT WITH THE **CRITICAL DIFFERENCE** THAT IT HAS BEEN SPECIFICALLY ENGINEERED TO **PROTECT** ITS CONTENTS FROM CHEMICAL CONTAMINATION.

THESE ARE THE COMPONENTS OF THE NEW MPHS

Drink tube link connector

Link button

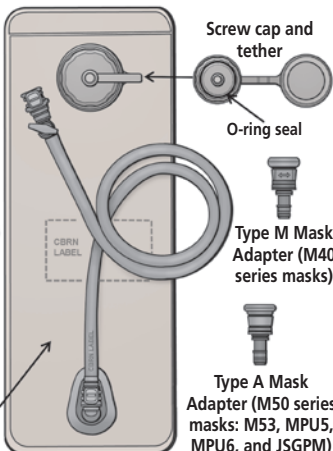
Water valve



MOLLE carrier (not provided)

Bite valve and cover

Reservoir



Screw cap and tether

O-ring seal

Type M Mask Adapter (M40 series masks)

Type A Mask Adapter (M50 series masks: M53, MPU5, MPU6, and JSGPM)

THE MPHS IS **STRICTLY** FOR USE IN A CBRN ENVIRONMENT.

IT SHOULD REMAIN IN ITS FOIL PACKAGE UNTIL NEEDED.

THE MPHS CAN BE USED FOR UP TO 30 DAYS OF NON-EXPOSURE ONCE IT'S REMOVED FROM ITS PACKAGING...

...AND IT WILL PROTECT ITS CONTENTS FOR UP TO SIX HOURS FOLLOWING EXPOSURE TO TOXIC CHEMICALS.

IN HIGH THREAT SITUATIONS, SOLDIERS SHOULD KEEP THE MPHS FULL, REFILLING IT IN A TOXIC ENVIRONMENT RISKS **CONTAMINATION**.

BECAUSE THE MPHS SHOULD BE USED **ONLY** WHEN NECESSARY, AN MPHS TRAINING KIT, NSN 8465-01-643-6221, IS AVAILABLE.

THE TRAINING KIT MAKES IT POSSIBLE TO CONNECT YOUR MOLLE HYDRATION SYSTEM TO YOUR MASK.

**NEVER** USE **ANY** OF THE ITEMS FROM THE TRAINING KIT IN A LIVE THREAT ENVIRONMENT.

EVERYTHING NEEDED FOR DRINKING IN A CONTAMINATED ENVIRONMENT IS INCLUDED IN THE MPHS PACKAGE EXCEPT THE CARRIER.

USE THE MOLLE HYDRATION CARRIER AS THE MPHS CARRIER.



THE TRAINING KIT INCLUDES **ONE EACH** OF THESE COMPONENTS:

• M40 mask adapter (box of 25), NSN 8465-01-657-5386

• Bite valve with cover (box of 25), NSN 8465-01-657-6603

• M50 mask adapter (box of 25), NSN 8465-01-657-6646

• Drink tube link tube connector and water valve (box of 25), NSN 8465-01-657-6628

CHECK OUT THESE TRAINING GUIDES AND VIDEOS!

FOR A TRAINING GUIDE ON THE MPHS, GO TO:  
<https://tulsa.tacom.army.mil/Safety/?t=soum&f=MPHSUserGuide.pdf>

FOR A TRAINING GUIDE ON THE TRAINING KIT, GO TO:  
<https://tulsa.tacom.army.mil/Safety/?t=soum&f=CBRNHydTrainKit.pdf>

FOR A TRAINING/FAMILIARIZATION VIDEO, GO TO:  
[https://www.youtube.com/watch?v=OLznJLW2\\_j4](https://www.youtube.com/watch?v=OLznJLW2_j4)

THE MPHS IS BEING FIELDIED THROUGH THE INDIVIDUAL CHEMICAL EQUIPMENT MANAGEMENT PROGRAM (ICEMP). SOLDIERS WILL BE ISSUED AN MPHS DURING THEIR UNIT'S DEPLOYMENT PHASE. AN INITIAL ISSUE OF THE TRAINING KITS HAS BEEN SHIPPED TO INSTALLATION CENTRAL ISSUE FACILITIES (CIF).

ANY REPLACEMENT COMPONENTS FOR THE TRAINING KITS **MUST** BE ORDERED THROUGH NORMAL SUPPLY CHANNELS. IF YOUR UNIT HASN'T RECEIVED REPLACEMENTS, CHECK WITH YOUR UNIT SUPPLY.

QUESTIONS?

CONTACT DEBI DAWSON.

(703) 704-2802, OR EMAIL:

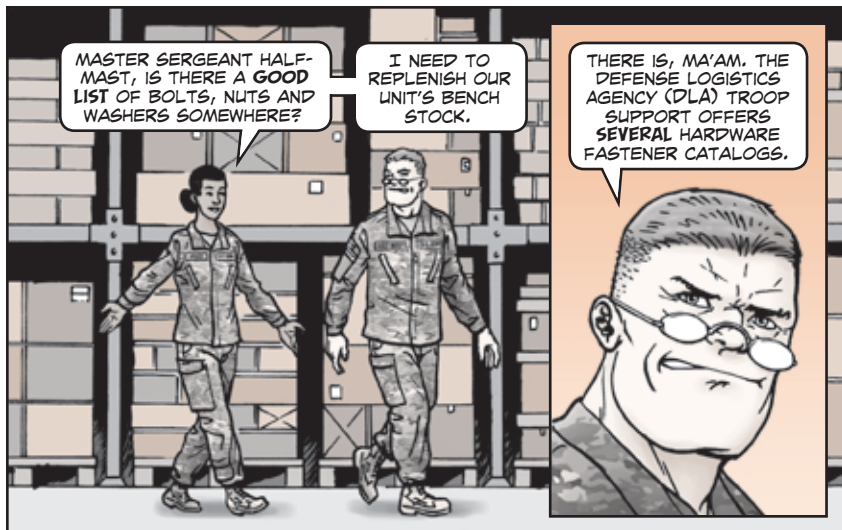
[debra.a.dawson.civ@mail.mil](mailto:debra.a.dawson.civ@mail.mil)

FOR MORE INFORMATION, SEE TACOM SAFETY OF USE MESSAGE 17-010:  
<https://tulsa.tacom.army.mil/Safety/message.cfm?id=SOUM17-010.html>

- Hardware Lists at Your Fingertips
- Lenses Recalled for Cracking
- Fuel Can Etiquette



# Supply... **HARDWARE LISTS AT YOUR FINGERTIPS**



LOOK FOR THE CATALOG LINKS AT THE BOTTOM OF THIS PAGE:

<http://www.dla.mil/TroopSupport/IndustrialHardware.aspx>





Safety...

# LENSES RECALLED FOR CRACKING



BEFORE  
YOU HIT THE  
FIELD, MAKE  
SURE YOUR  
SPECS ARE  
GOOD TO GO!

**LOOK ALERT,  
SOLDIERS!**

EIGHT LOTS OF WILEY X VALOR BRAND LENSES WERE RECALLED AFTER THEY FAILED DURING TESTING. THE LENSES CRACKED DURING CHEMICAL, SOLAR RADIATION AND BALLISTICS FRAGMENTATION TESTING.

**THIS FAILURE COULD LEAD TO LENS PENETRATION,  
CAUSING EYE INJURY OR EVEN LOSS OF EYESIGHT.**

THE PROBLEM HAS BEEN FIXED FOR FUTURE LENSES. ANY RECALLED LENSES WILL BE REPLACED FOR FREE BY THE MANUFACTURER, WILEY X.

## Steps to Identify and Replace Affected Lens

1. Wiley X Valor Spectacle Kit, NSN 4240-01-630-7802, is the main item. Look for the word "Valor" on the spectacles' inside right temple arm. If the "Valor" marking is not present, your spectacles are OK and not part of the recall. If the "Valor" mark is there, continue to Step 2.

Check inside of  
right temple arm  
for word "Valor"



2. Remove both lenses from the frame and look for the lot number etched on the top outer corner of the lens. If you have any spare lenses, check those as well.
3. Check the lens lot number. The lot number is a four or five-digit number following the letters FA, FB or FC. Look for any of the following eight lot numbers: 9961, 9962, 9979, 9980, 10034, 10035, 10121 or 10122. If none of these lot numbers are present, your lenses are OK. If any of these codes are found, continue to Step 4.
4. Email Wiley X with the subject line "Valor Lens Exchange" at:

[valorensexchange@wileyx.com](mailto:valorensexchange@wileyx.com)

Include your name, rank, shipping address, the lot number of affected lenses and total number of lenses (right and left) that need replacement. The company will ship replacement lenses directly to you.

5. Remove defective lenses and destroy them. Use alternate eye protection until your replacement lenses arrive.

For more info, see TACOM safety of use message (SOUM) 17-013 at:

<https://tulsa.tacom.army.mil/Safety/message.cfm?id=SOUM17-013.html>

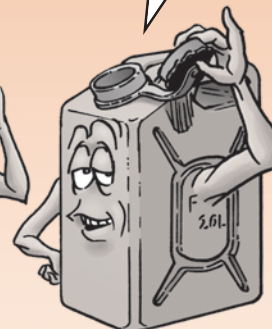
Questions? Contact your TACOM LAR or Robert Middleton at DSN 256-5531, (508) 233-5531, or email: [robert.a.middleton.civ@mail.mil](mailto:robert.a.middleton.civ@mail.mil)

## Fuel Can Etiquette

I'M FEELIN'  
KINDA WOOLY  
HERE.



TAKE A CLUE  
FROM ME, AND  
TOSS YOUR CAP  
TO THE WIND!



AHHH... NOW  
YOU'RE JUST  
PUTTING ON  
AIRS!



Dear Half-Mast,  
How should we  
store empty F-24  
or JP-8 fuel cans  
when they're  
not mounted on  
vehicles?

SGT J.D.



IF THE FUEL CANS ARE  
EMPTY AND HAVE NEVER HAD  
ANY FUEL IN THEM, JUST  
STORE THE CANS THE SAME  
WAY YOU WOULD STORE ANY  
OTHER PLASTIC CONTAINER.

**BUT** IF THE CANS HELD  
FUEL IN THE PAST, THEY MAY  
**STILL** CONTAIN SOME FUEL  
AND FUMES EVEN THOUGH  
THEY LOOK EMPTY.



IN THAT CASE, TAKE THE  
CAPS OFF THE CANS. DRAIN  
ANY LEFTOVER FUEL INTO  
APPROVED CONTAINERS.

STORE THE OPEN CANS IN A  
WELL-VENTILATED AREA AWAY  
FROM HEAT OR FLAMES.

GIVE THEM A FEW DAYS TO AIR OUT  
AND LET THE FUMES EVAPORATE.  
THEN CAP THE CANS TO KEEP OUT  
DIRT, BUGS AND WATER.

NOW YOU CAN STORE THE FUEL  
CANS AS IF THEY HAD NEVER HAD  
ANY FUEL IN THEM.

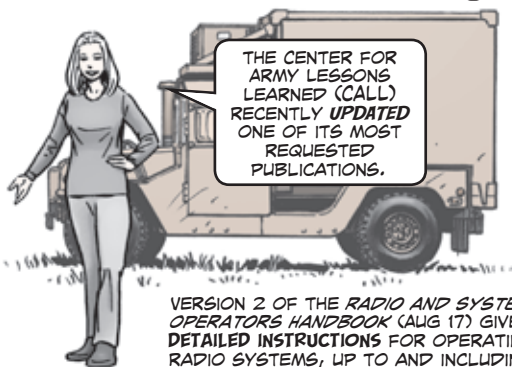
- CALL Handbook Spotlights Radio Systems
- Unpack PDISE Promptly to K.O. Corrosion!
- PS Mag Live!







## CALL Handbook Spotlights Radio Systems



VERSION 2 OF THE **RADIO AND SYSTEM OPERATORS HANDBOOK** (AUG 17) GIVES DETAILED INSTRUCTIONS FOR OPERATING RADIO SYSTEMS, UP TO AND INCLUDING CAPABILITY SET 15.

### OTHER SUBJECTS COVERED INCLUDE:

- Joint Tactical Radio System rifleman radio
- Force XXI Battle Command Brigade and Below-Joint Capabilities Release (FBCB2-JCR)
- Mission Command Systems and AN/PRC 117G/152/155.

TODAY'S RADIO SYSTEMS ARE **COMPLEX**. THEY OFFER VERTICAL AND HORIZONTAL CONNECTIVITY AND AN INTEGRATED NETWORK BASELINE FROM THE STATIC TACTICAL OPERATIONS CENTER TO DISMOUNTED SOLDIERS.

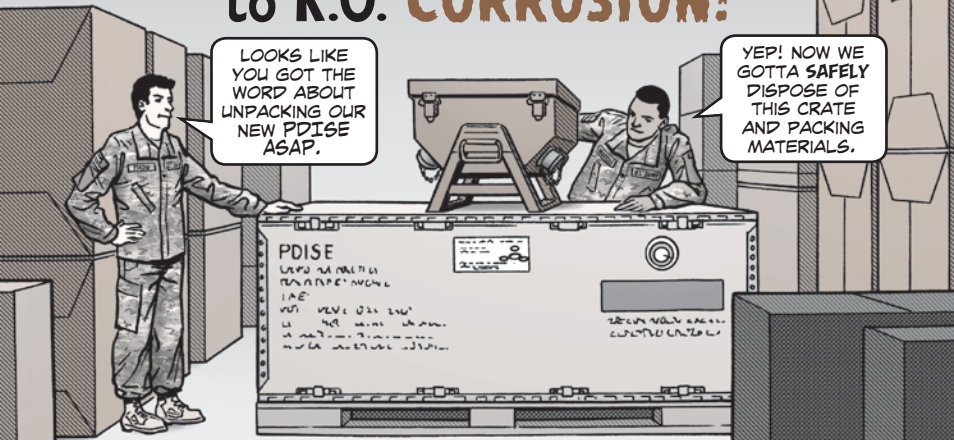
THIS HANDBOOK GIVES USERS A QUICK REFERENCE GUIDE AND STEP-BY-STEP INSTRUCTIONS TO **QUICKLY AND SECURELY** GET COMMUNICATIONS SYSTEMS INTO OPERATION.

THIS HANDBOOK IS MARKED **US UNCLASSIFIED//FOUO**. TO VIEW OR DOWNLOAD HANDBOOK NO. 17-20 OR OTHER CALL PRODUCTS, GRAB YOUR COMMON ACCESS CARD (CAC) AND VISIT: <https://call2.army.mil/>





# Unpack PDISE Promptly to K.O. CORROSION!



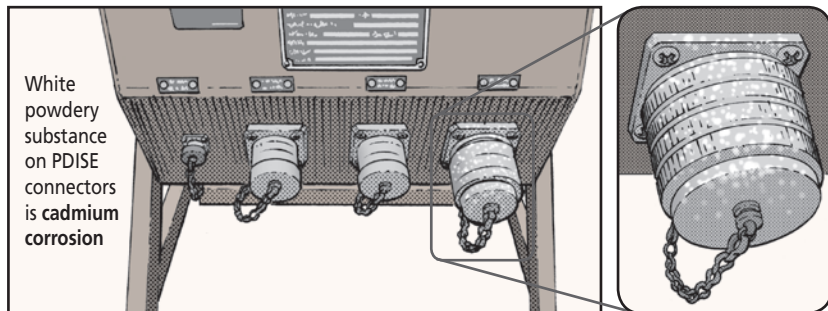
All models of the Power Distribution Illumination System, Electrical (PDISE), except the M46 electrical utility assembly, are shipped from the manufacturer in sealed wooden shipping crates. Inside are the PDISE, its cables, accessories and TM.

An Army investigation determined that new PDISEs, stored in shipping crates that were exposed to weather, showed corrosion on the connectors and mounting hardware when unpacked.

Further detective work revealed that the shipping crates were manufactured using formaldehyde. Formaldehyde speeds up corrosion. It causes cadmium "bloom." Bloom occurs when cadmium transforms into cadmium oxide, a powder-like residue that forms on cadmium-plated components.

#### This problem impacts the following PDISE models:

- M40 A/P, NSN 6150-01-307-9446
- M60 A/P, NSN 6150-01-307-9445
- M100 A/P, NSN 6150-01-308-5671
- M200 A/P, NSN 6150-01-308-5672



To help slow corrosion, a mitigation plan was added to the PDISE technical data package.

But you should still unpack PDISE right away and remove all contents from the shipping crate. Store the unpacked PDISE inside, out of the weather.

Safely dispose of shipping crates and any packing materials, including plastic bags. If cadmium oxide is found, follow the cleaning and disposal procedures in WP 0021 of TM 9-6150-226-13. Also review the cadmium safety tips on Pages 45-47 in PS 723:

<https://www.logsa.army.mil/psmag/archives/PS2013/723/723-45-47.pdf>

Questions? Contact CECOM's John Mansfield at (410) 220-5576, or email:

[john.k.mansfield2.civ@mail.mil](mailto:john.k.mansfield2.civ@mail.mil)

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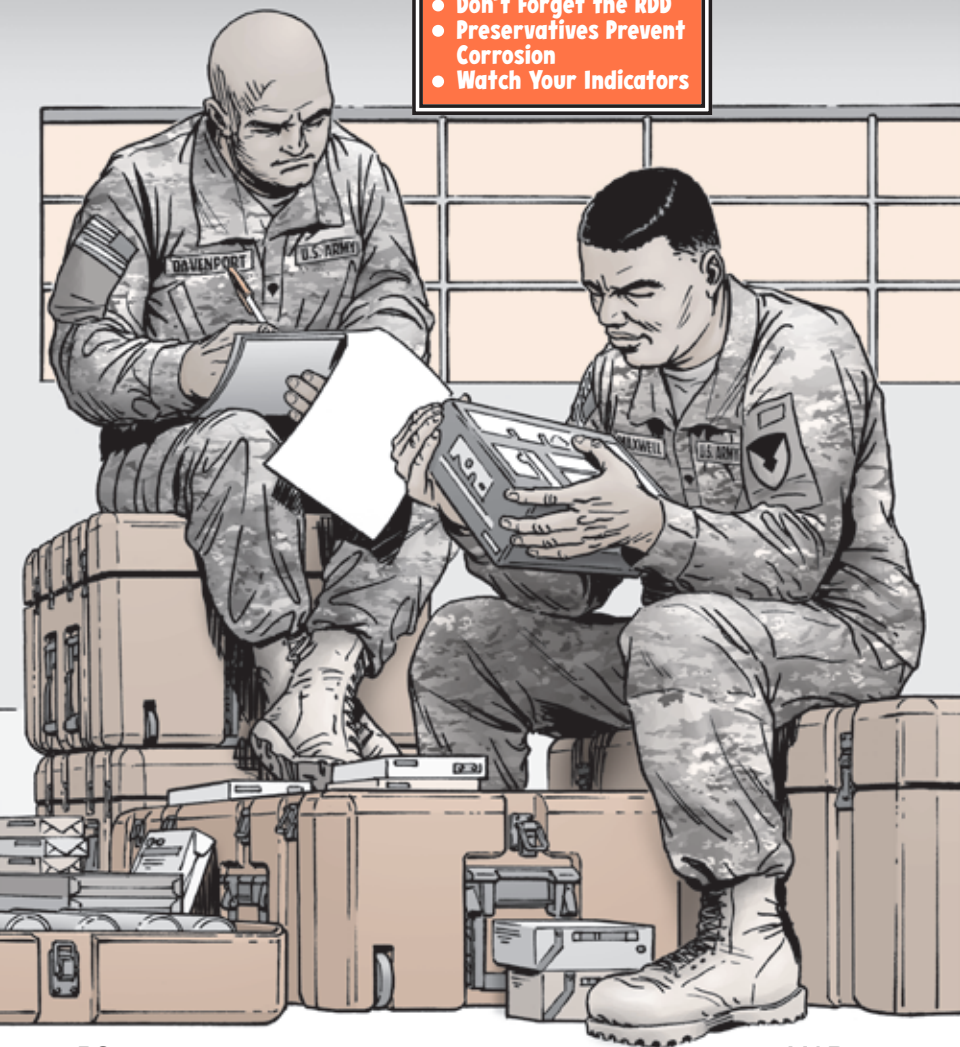
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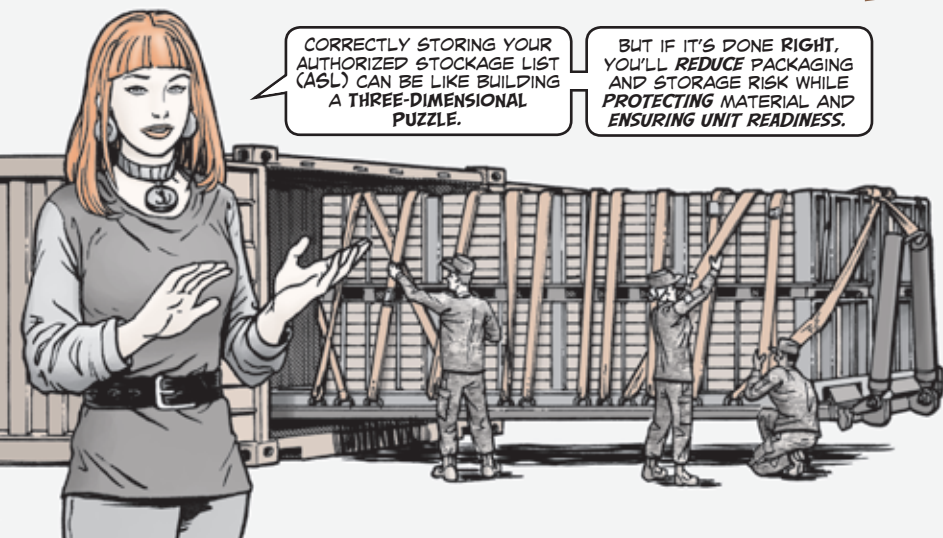
Email: [usarmy.redstone.logsa.mbx.psmag@mail.mil](mailto:usarmy.redstone.logsa.mbx.psmag@mail.mil)



- LOGSA PSCC Provides ASL Help
- Don't Forget the RDD
- Preservatives Prevent Corrosion
- Watch Your Indicators



# LOGSA PSSC Provides ASL Help



CORRECTLY STORING YOUR AUTHORIZED STOCKAGE LIST (ASL) CAN BE LIKE BUILDING A THREE-DIMENSIONAL PUZZLE.

BUT IF IT'S DONE RIGHT, YOU'LL **REDUCE** PACKAGING AND STORAGE RISK WHILE **PROTECTING** MATERIAL AND **ENSURING** UNIT READINESS.

## SECTION IV OF

**TM 38-400**  
**Joint Service**  
**Manual for**  
**Storage and**  
**Materials**  
**Handling 1994**

EXPLAINS  
THE **MAIN**  
**FACTORS**  
THAT  
AFFECT  
CONTAINER  
LAYOUT  
PLANS:

- Store items with similar handling requirements together whenever possible. That makes it easier to issue those items and keeps them in good condition.
- Pack stocks that are needed most often within easy reach inside the container.
- Pay close attention to the number of items packed, as well as their size and weight. You'll need to account for the weight of the shipping container and the lift capacity of the vehicle used to move them, too.



...26,  
27, 28...

- HAZMAT, sensitive and shelf-life items add their own challenges. They're usually stored together by type, but make sure those items are compatible.



## Planograph Development

ONCE YOU'VE COMPLETED THESE STEPS AND USED THE DETERMINATION OF STORAGE SPACE REQUIREMENTS (DOSSR) PROCEDURES, YOU'RE READY FOR PLANOGRAPH DEVELOPMENT.

PLANOGRAPHS ARE DRAWINGS THAT TELL YOU WHERE IN THE CONTAINER TO STACK CERTAIN ITEMS. LOGSA PSCC'S STORAGE AND DISTRIBUTION ANALYSIS TEAM CAN CREATE PLANOGRAPHS IN A NUMBER OF FORMATS, INCLUDING CAD AND MICROSOFT EXCEL.

A SIMILAR PROCESS IS AVAILABLE TO BRIGADE COMBAT TEAMS (BCTs) WITH COMMON ASLS.

**STANDARDIZED CONTAINERIZATION** MEANS EVERY BCT WILL STORE EACH ASL ITEM IN THE **SAME** LOCATION IN THE CONTAINER REGARDLESS OF WHICH UNIT THE CONTAINER BELONGS TO.



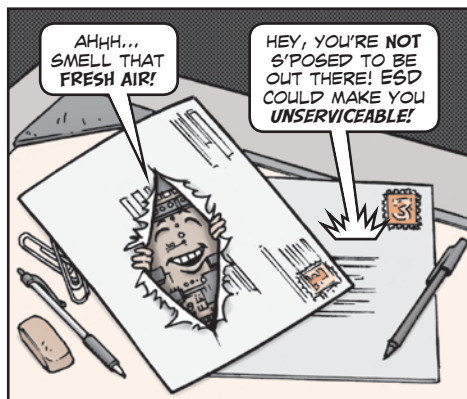
## COSIS

CARE OF SUPPLIES IN STORAGE (COSIS) ENSURES ARMY CONTAINERIZED ASL PARTS ARE READY FOR ISSUE WHEN AND WHERE THEY'RE NEEDED. IT ALLOWS UNITS TO UNDERSTAND THE **TRUE CONDITION** OF THEIR ASL ITEMS, PROVIDING AN **ACCURATE** ASSESSMENT OF READINESS.

THAT NOT ONLY **CONSERVES RESOURCES**, BUT PROVIDES **SUFFICIENT TIME TO FIX PROBLEMS** WHEN THEY'RE DISCOVERED.

### FOLLOW THESE COSIS PM CHECKS FOR YOUR CONTAINERIZED ASL ITEMS:

- Keep unit packaging in place. That layer of protection guards against deterioration and damage. If you find an item with an open package, check it first, then reseal it as best you can. However, if the item is electrostatic discharge sensitive (ESDS), compromised packaging that exposes the asset may have already resulted in the item being unserviceable. For these ESDS items, the packaging should still be resealed, but the items should be downgraded to batch code "f" and retested before issue.
- To prevent corrosion, containerized items will need additional inspections. At a minimum, conduct routine COSIS visual inspections on containerized items stored indoors on an annual basis. Containerized items stored outside need to be inspected on a monthly basis. Routine visual inspections are especially critical when items are stored outside. COSIS inspections are easy and, for example, can be accomplished when inspecting fire extinguishers.
- Temperature-sensitive items shouldn't be stored in ISO containers. These items won't last in the extreme hot and cold temperatures inside containerized ASL vans.



## Need Help?

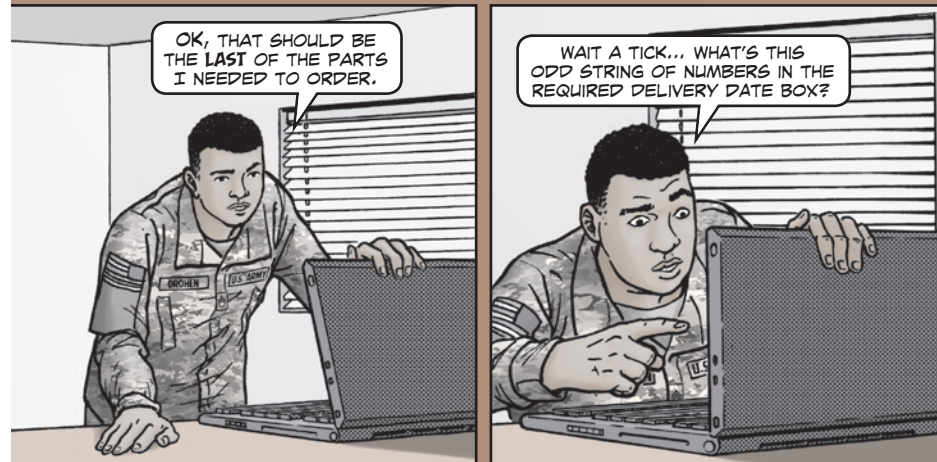
THE LOGISTICS SUPPORT ACTIVITY'S PACKAGING, STORAGE AND CONTAINERIZATION CENTER (LOGSA PSCC) CAN PROVIDE HELP WITH DOSSR METHODS, PLANOGRAPHS, HAZMAT, COSIS AND OTHER ASL STORAGE QUESTIONS.

SEND AN EMAIL TO: [usarmy.tyad.usamc.mbx.iltad@mail.mil](mailto:usarmy.tyad.usamc.mbx.iltad@mail.mil)



GCSS-Army...

## Don't Forget the RDD



Dear Editor,

Here at the Defense Logistics Agency (DLA), we've noticed that units are ordering O2 parts for Not Mission Capable-Supply (NMCS) equipment without annotating the Required Delivery Date (RDD) as N01 or 999 in GCSS-Army.

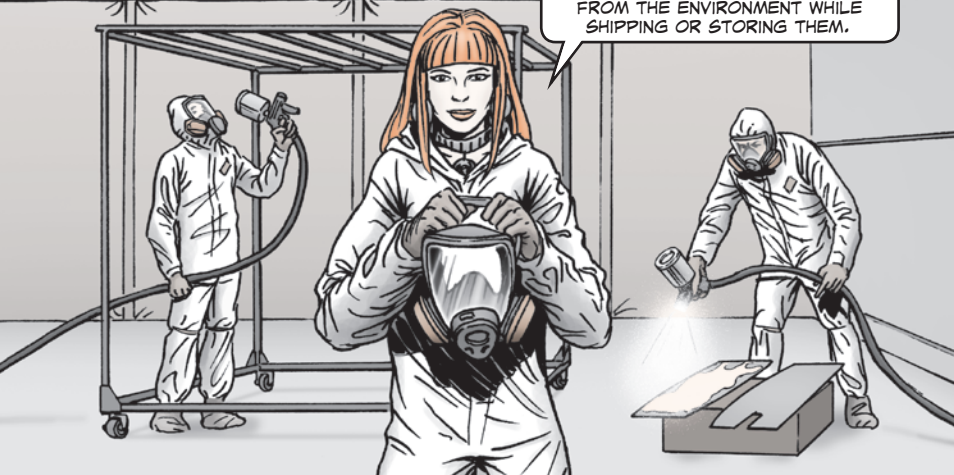
This causes backlogs in the system because an RDD that's left blank is automatically filled with the Julian date. The system thinks that the part is not a priority and ships it later or on a slower mode of transportation. That can really slow things down if a unit needs the part urgently.

CW3 Donald Sherman  
DLA Land and Maritime

**Editor's note:** Thanks for the tip! Units, don't forget to properly annotate your RDD to avoid delays.

# PRESERVATIVES PREVENT CORROSION

ONE WAY TO PREVENT CORROSION IS TO USE **CONTACT PRESERVATIVES** TO PROTECT PARTS AND EQUIPMENT FROM THE ENVIRONMENT WHILE SHIPPING OR STORING THEM.



NO SINGLE CONTACT PRESERVATIVE IS RIGHT FOR EVERY PIECE OF EQUIPMENT, SO YOU'LL HAVE TO CHOOSE **CAREFULLY** WHEN DECIDING WHICH ONE TO USE.

SOME PRESERVATIVES ARE **PERMANENT**. PAINT, RUBBER COATINGS AND PORCELAIN FALL INTO THIS CATEGORY.

TEMPORARY PRESERVATIVES INCLUDE **LUBRICATING OILS AND GREASES**.

THERE ARE **SEVERAL WAYS** TO APPLY THEM TO THE EQUIPMENT YOU'RE PROTECTING.

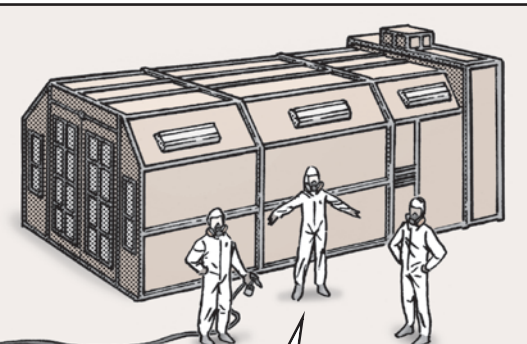


- **Dipping:** This is the preferred method of applying contact preservatives because it's the easiest and offers total coverage of the item. Stir the preservative frequently to prevent air bubbles from forming. After the coating dries, place the item on a piece of greaseproof barrier plastic.
- **Flowcoating:** Use flowcoating for interior surfaces. Pour preservative into a tube, allow the preservative to coat the surface and drain excess preservative from the tube back into the tank.
- **Slushing:** Pour the preservative into the part and rotate, agitate and slant the object as needed to coat all interior surfaces. After slushing, seal off all holes to prevent dust and dirt from entering the part. You can use rubber plugs to do that.

- **Brushing:** Only use this method if no other method is available. Brushing is usually only for very small portions of items.
- **Filling or Flushing:** Use this method for larger items that aren't easily handled. Fill the item with preservative to coat all interior surfaces. For some items you won't drain the preservative, but make sure to leave space for heat expansion.
- **Fogging:** This method uses preservatives injected as a fog or a mist into gas tanks and interior engine cylinder walls.
- **Spraying:** Apply the preservative to internal and external surfaces as a spray.



SEVERAL OF THESE PRESERVATIVES CAN CAUSE **SKIN AND EYE IRRITATION**, SO YOU'LL WANT TO...



MAKE SURE TO USE **PROPER PROTECTIVE EQUIPMENT** FOR THE TYPE OF PRESERVATIVE YOU'RE USING AND EQUIPMENT YOU'RE PRESERVING.

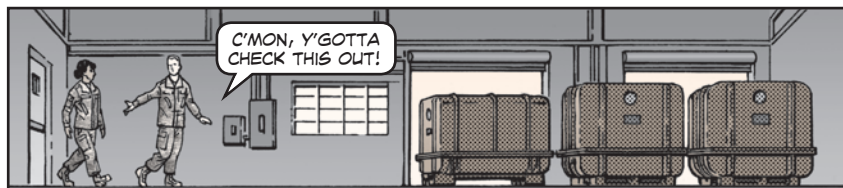
CLOE, I'M WONDERING WHICH PRESERVATIVE I NEED TO USE?



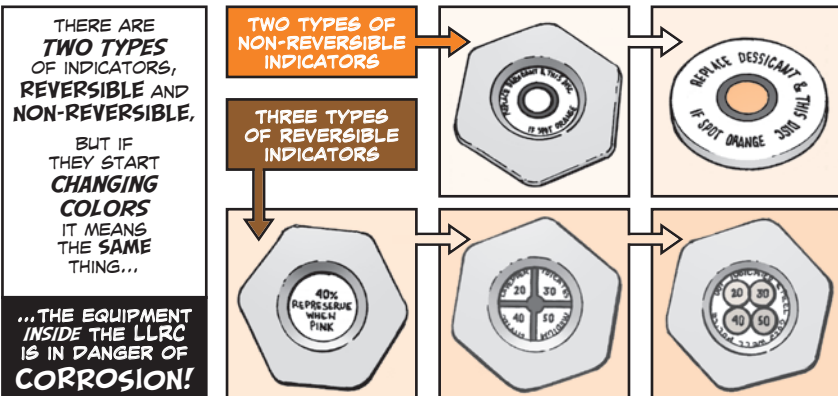
CHECK OUT MIL-STD-2073-1E, **STANDARD PRACTICE FOR MILITARY PACKAGING**, OR THE APPROPRIATE **TECHNICAL MANUAL**, FOR GUIDANCE.



# WATCH YOUR INDICATORS



ONE OF THE BEST THINGS YOU CAN DO TO **PREVENT CORROSION** IS TO PAY ATTENTION TO THE HUMIDITY INDICATORS ON YOUR LONG-LIFE REUSABLE CONTAINERS (LLRCs).

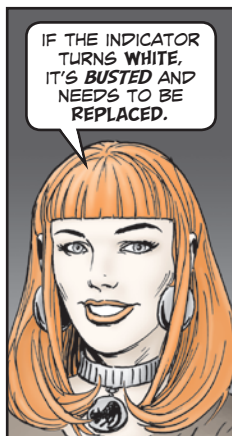


FOR **ANY** TYPE OF **REVERSIBLE INDICATORS**, THE INDICATORS WILL CHANGE FROM **BLUE** TO **LAVENDER** OR **PINK** ONCE THE LEVEL OF HUMIDITY **RISES** IN THE LLRC.

IF THE INDICATOR IS **BLUE**, THE HUMIDITY LEVEL IS **LESS** THAN THE NUMBER INDICATED ON THE DISC. THIS MEANS EVERYTHING IS AS IT SHOULD BE INSIDE THE LLRC.

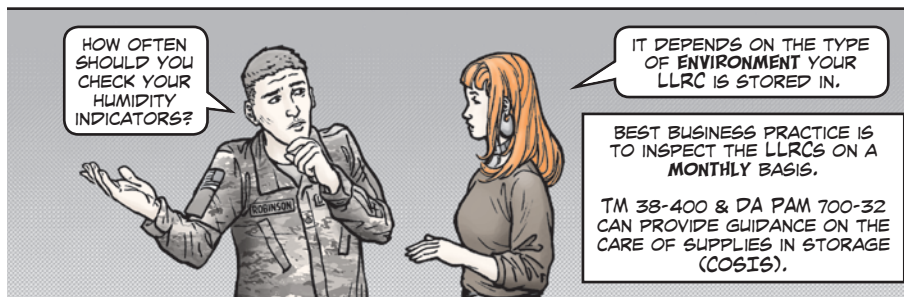
THE INDICATOR WILL TURN **LAVENDER** IF THE HUMIDITY IS WITHIN 10% OF THE NUMBER ON THE DISC. THIS IS A **WARNING** THAT THE HUMIDITY COULD START TO CAUSE A PROBLEM.

IF THE INDICATOR IS **PINK**, THEN THE HUMIDITY IS HIGHER THAN THE NUMBER INDICATED ON THE DISC AND YOUR EQUIPMENT IS IN **REAL DANGER** FROM CORROSION.



ON THE **NON-REVERSIBLE INDICATOR**, LOOK FOR THE COLOR TO CHANGE FROM **WHITE** TO **ORANGE** OR **BROWN**.

IF THE COLOR **CHANGES** TO **ORANGE** OR **BROWN**, **REPLACE** THE INDICATOR AND INSPECT THE EQUIPMENT IN THE LLRC FOR SIGNS OF **CORROSION**.



IF YOU HAVE ANY **QUESTIONS**, THE LOGSA PACKAGING, CONTAINERIZATION AND STORAGE CENTER (PSCC) IS HAPPY TO HELP. EMAIL THEM AT: [usarmy.tyad.usamc.mbx.pt@mail.mil](mailto:usarmy.tyad.usamc.mbx.pt@mail.mil)

LOOKING FOR **MORE TIPS**? DOWNLOAD PACKAGING - THE BASICS AT: [https://www.logsa.army.mil/documents/LOGSAP\\_746-1.pdf](https://www.logsa.army.mil/documents/LOGSAP_746-1.pdf)

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



# ALWAYS FOLLOW THE LUBE ORDER!

THE ONLY  
GREASE  
AUTHORIZED  
FOR ME IS  
WTR!

