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TB 43-PS-764, 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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MSG Half-Mast

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The Long, Hot Summer



You know it's that time of year again when you see heat waves shimmering off the pavement. The days are getting longer and oh so hot.

Many a Soldier has been surprised by summer's intensity. Sometimes heat attacks directly, sizzling right down to your bones, making every move feel slow and awkward as you drip with sweat and struggle to finish simple tasks. Sometimes the attack is indirect, as heat wreaks havoc on your equipment that worked so well when the temperatures were cooler.

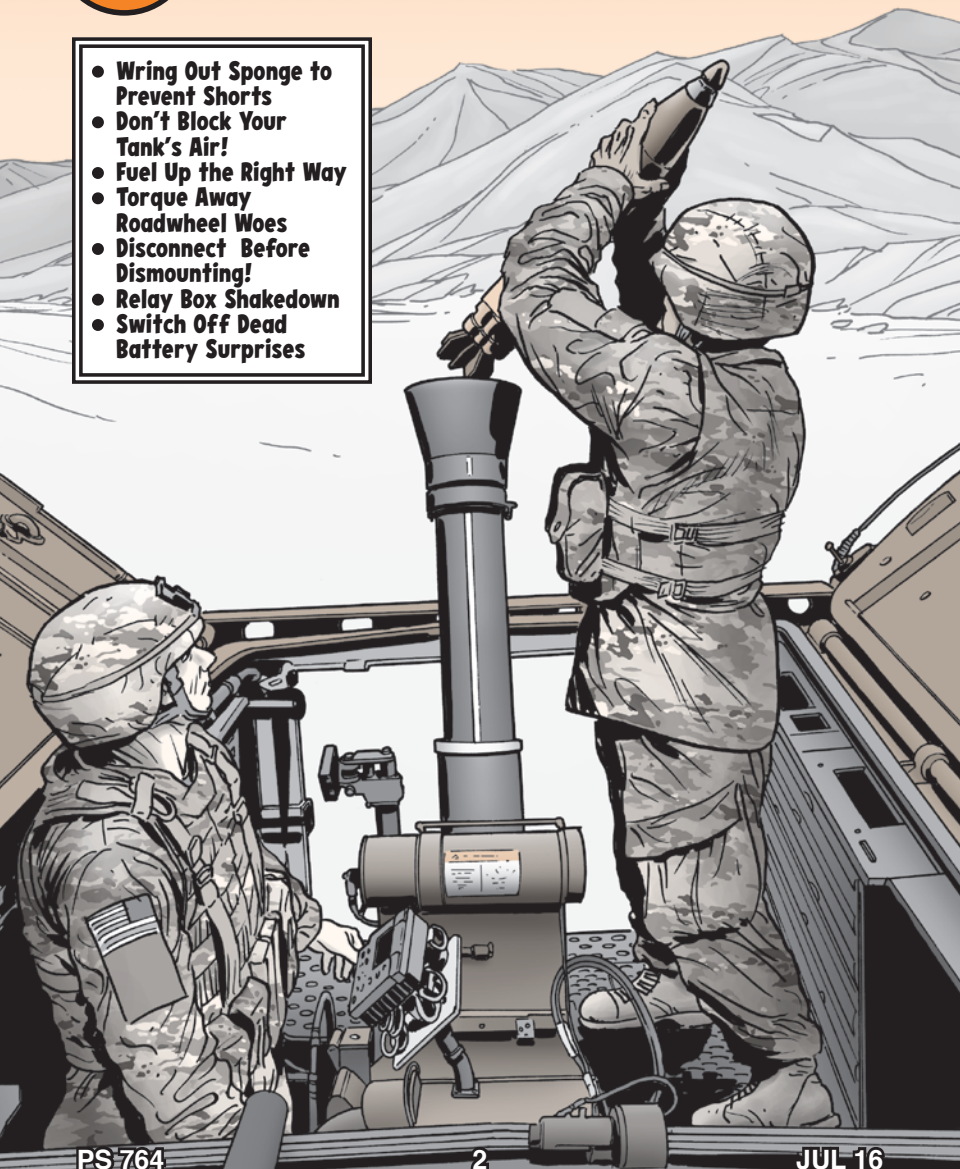
Crave a cool drink, Soldier? Well, so does your rig. Wanna sit a spell in the shade and catch your breath? That generator probably needs a break, too. Both personal and preventive maintenance are key to surviving a brutal summer.

Hot weather brings many challenges to missions and survival. Meeting those challenges demands preparation, long before you feel the beads of sweat rolling down your brow.

You'll find that *PS* articles can help you prepare for the worst summer throws your way. Use *PS* along with the good word in your equipment TMs and you may find that one preventive maintenance tip that saves your mission—or your life.

PS COMBAT VEHICLES

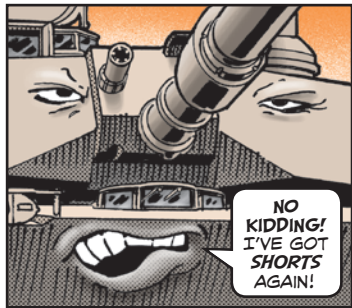
- **Wring Out Sponge to Prevent Shorts**
- **Don't Block Your Tank's Air!**
- **Fuel Up the Right Way**
- **Torque Away Roadwheel Woes**
- **Disconnect Before Dismounting!**
- **Relay Box Shakedown**
- **Switch Off Dead Battery Surprises**



GRRRRRR



WHAT'S THE
MATTER WITH
YOU? YOU LOOK
KINDA *UPSET!*



NO
KIDDING!
I'VE GOT
SHORTS
AGAIN!

WRING OUT SPONGE TO PREVENT SHORTS

Crewmen, taking a minute to wring out a sponge could save you from shorts in the electronic components that sit under the breech of your M1-series tank.

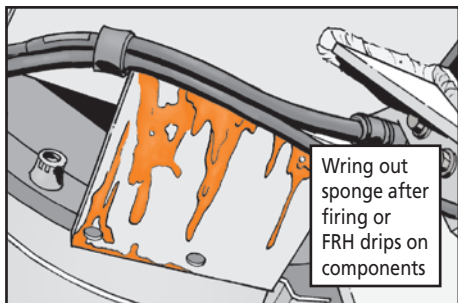
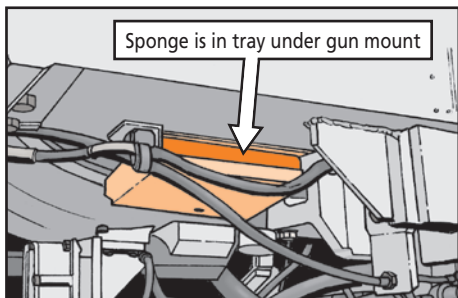
The recoil fluid residue collector sponge is in a tray right under the gun mount. It soaks up excess FRH that leaks out during firing. Leaking FRH is completely normal, by the way.

However, you have to wring out the sponge every day after firing. If you don't, the sponge gets saturated and the excess FRH leaks down onto the electronics gear, causing shorts.

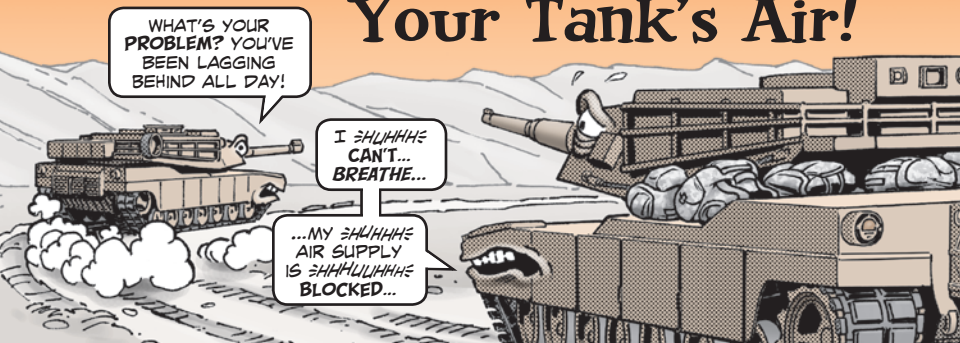
But be sure you wear long sleeves, gloves, goggles and a faceshield when you wring out the sponge. FRH contains a chemical (tricresyl phosphate) that can cause paralysis if it's taken internally, so dispose of it properly. FRH can also be absorbed through the skin, so wash thoroughly with soap and water if you get any on you.

Wringing out the sponge is covered in the AFTER operations tables for your M1A1 and M1A2 tank.

It's listed as Item 65 in TM 9-2350-264-10-3 (Sep 11, w/Ch 2, May 13) and Item 10 in TM 9-2350-388-10-3 (Dec 12).



Don't Block Your Tank's Air!

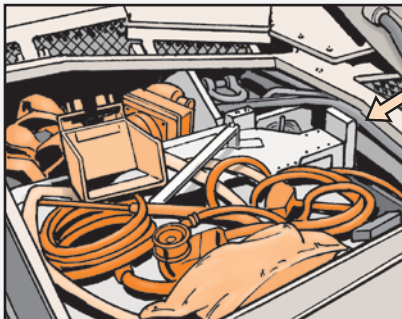
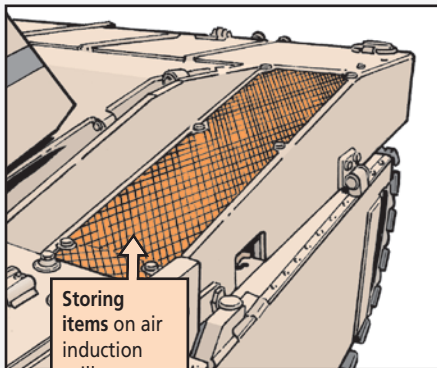


Dear Editor,

MI-series tank crews have a ton of gear to carry when they're on a mission. Not only do they have the basic issue items (BII) for their tank, they also have their personal stuff.

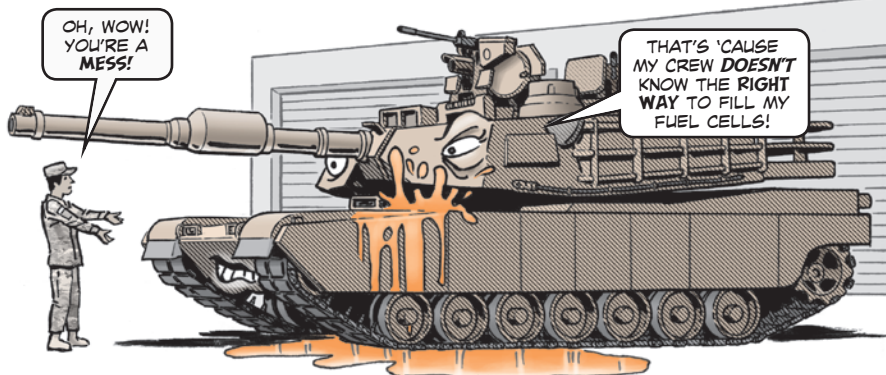
Question is, where do they store it all? A lot of crews stack their stuff on top of the air induction system grille. They also like to put BII and other items in the empty space on top of the precleaner. They figure there's no sense letting that extra room go to waste.

But that's a bad idea because that's where the tank gets the fresh air it needs to stay cool. If the airflow is restricted, the engine overheats and burns up. So crews should look somewhere else to store BII and personal gear.

SSG Eric Rodriguez
3rd BCT

Editor's note: Tankers, a better idea is to install an adjustable cargo net, NSN 3940-01-503-8210, to your tank's bustle rack. That provides the storage you need while keeping your tank breathing easy!

Fuel Up the Right Way



Dear Editor,

Filling the fuel cells on your M1-series tank is a routine task. But that doesn't mean you should get sloppy while you're doing it.

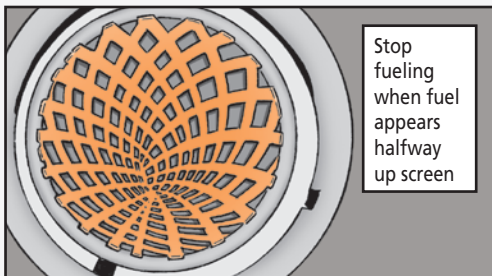
Too many crewmen fill their tank's fuel cells as full as they can. That can cause problems because fuel expands as it heats up. So unless you leave room for expansion when filling the cells, you'll end up with a fuel geyser.

When topping off, stop as soon as you see fuel halfway up the filler neck screen. That'll keep the fuel in the cell where it belongs.

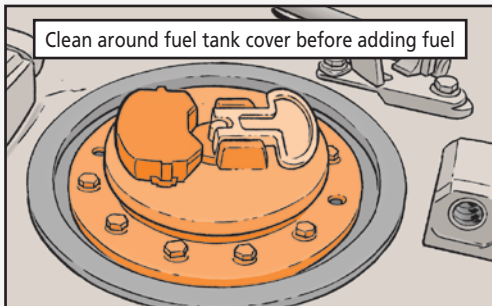
Also, don't forget to clean around the fuel tank cover before adding fuel. Loose dirt can clog fuel filters and cause your tank to lose engine power.

The -10 TM has plenty of good info on the right way to fuel your tank.

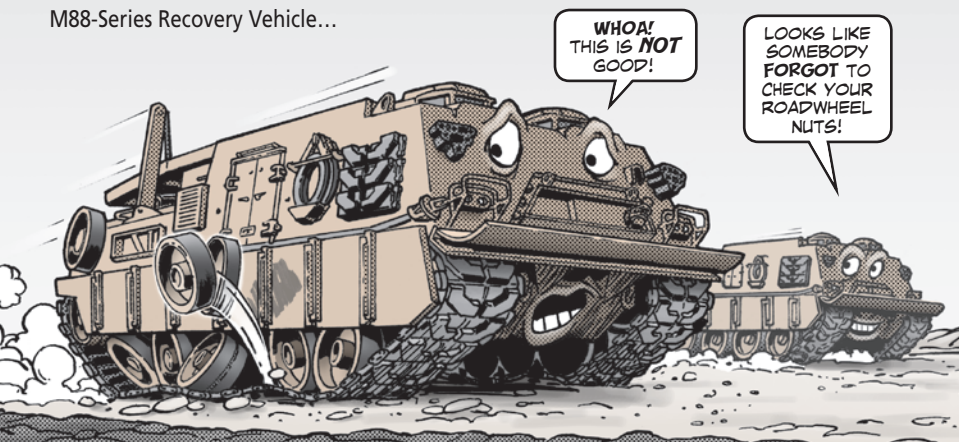
SGT Laurence Simunaci
3rd BCT



Stop
fueling
when fuel
appears
halfway
up screen



Editor's note: *Good stuff to know when it's time to tank up!*



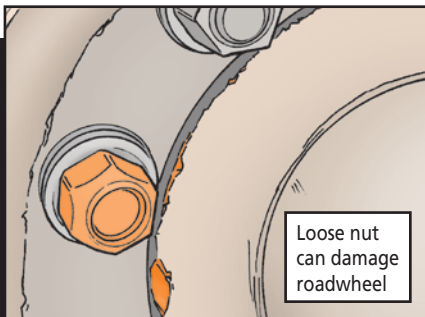
TORQUE AWAY ROADWHEEL WOES

Dear Half-Mast,

As a mechanic at the National Training Center, I see a lot of M88-series recovery vehicles with loose roadwheel nuts. That's common because the rough terrain and heavy workload put a lot of pressure on the nuts.

Can you help spread the word to check those roadwheel nuts on a regular basis?

SSG R.M.



Dear Sergeant,

Sure thing! Crews, remember that just because roadwheel nuts are torqued in place doesn't mean they'll stay that way. If even one nut loosens, that increases the pressure on the rest. Pretty soon, there's a chain reaction of loose nuts, wobbly road-wheels and snapped studs. That can cause a thrown track and put a vehicle out of action.

Mechanics, spot loose nuts before they cause trouble. Look for shiny spots around the flat washer under the roadwheel nut.

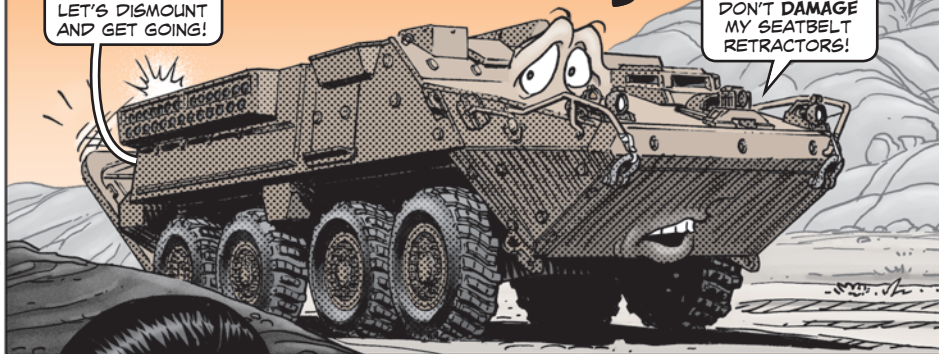
Replace missing nuts with NSN 5310-01-064-3910 and flat washers with NSN 5310-00-809-9514. Retorque loose nuts to 320-350 lb-ft for the M88A1 and 350-400 lb-ft for the M88A2.

Half-Mast

Disconnect BEFORE Dismounting!

ALL RIGHT, WE'RE HERE. LET'S DISMOUNT AND GET GOING!

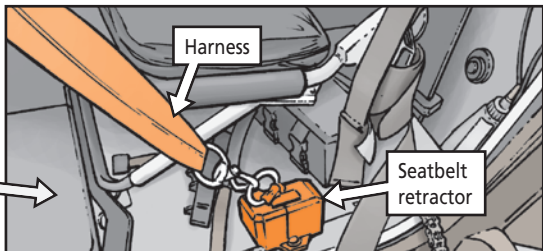
EASY, NOW! MAKE SURE YOU DON'T DAMAGE MY SEATBELT RETRACTORS!



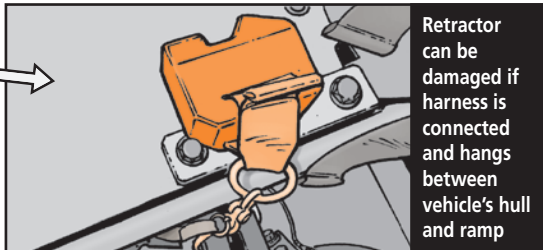
CREWMEN, SOMETIMES YOU'RE IN A HURRY TO GET OUT OF YOUR STRYKER, ESPECIALLY DURING A MISSION.

BUT IF YOU DON'T DISMOUNT THE RIGHT WAY, YOU CAN **DAMAGE** THE GUNNER RESTRAINT SYSTEM (GRS) AND PUT YOURSELF AT RISK.

BE SURE TO DISCONNECT THE GRS HARNESS **BEFORE** YOU DISMOUNT FROM THE LEFT AND RIGHT REAR AIR SENTRY GUARD POSITIONS.



IF YOU **DON'T**, PART OF THE HARNESS AND THE SEATBELT RETRACTOR, NSN 2540-01-593-9742, CAN HANG BETWEEN THE OPEN RAMP AND THE VEHICLE'S HULL.



WHEN THE RAMP IS CLOSED, THE PAW INSIDE THE SEATBELT RETRACTOR CAN GET **BROKEN OR BENT** AND CAUSE THE SEATBELT RETRACTOR TO SEIZE.

YOUR UNIT ENDS UP HAVING TO REPLACE A DAMAGED RETRACTOR, WHICH COSTS TIME AND MONEY.

EVEN WORSE, A GRS THAT **DOESN'T** WORK RIGHT WON'T PROTECT YOU IN AN ACCIDENT! SO TAKE AN EXTRA SECOND OR TWO AND DISCONNECT THE GRS HARNESS **BEFORE** YOU DISMOUNT.

RELAY BOX SHAKEDOWN

YUH-YOU THINK WUH-WE'LL EVER BE AH-ABLE TO T-TAKE A NICE, SUH-SMOOTH ROAD?

THESE BUH-BUMPS ARE SH-SHAKING ME UH-UP INSIDE!

I JUH-JUST HOPE THEY CH-CHECK OUR RELAY BUH-BOXES WHEN WE GEH-GET BACK!

WHO DOESN'T LIKE DRIVING DOWN A **SMOOTH, BUMP-FREE ROAD?**

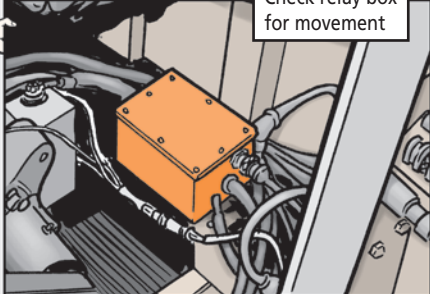
UNFORTUNATELY, MLRS FIRE MISSIONS USUALLY INVOLVE GOING ACROSS **ALL KINDS** OF TERRAIN, AND A LOT OF IT **AIN'T SMOOTH!**

IN OTHER WORDS, YOUR MLRS IS SUBJECTED TO ALL SORTS OF **BUMPS, JOLTS AND BOUNCES** THAT ALL RESULT IN A LOT OF VIBRATION. THAT VIBRATION CAN LEAD TO A **DAMAGED SECOND GENERATOR RELAY BOX.**



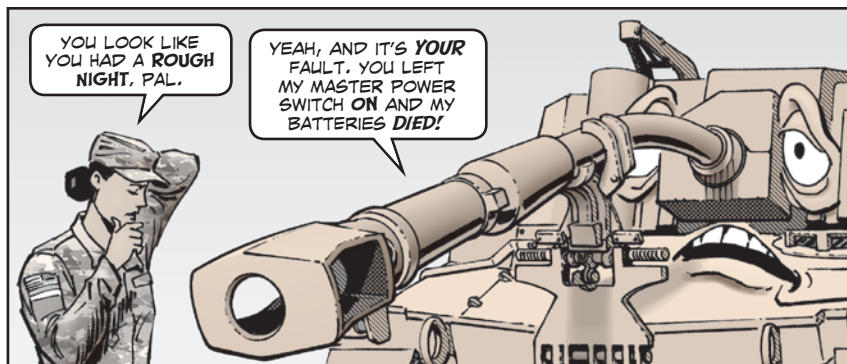
The relay box is welded in place. But the constant vibration from operation and firing can break the welds and allow the box to jump around. Before you know it, the ground for the K1 relay is lost and the LLM batteries won't charge.

Check relay box for movement



During PMCS, take a few seconds to check the relay box. If it moves, tell your mechanic. He'll get it welded securely back in place.

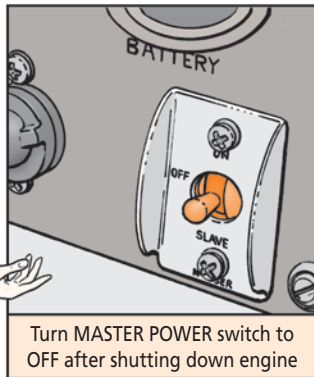
SWITCH OFF DEAD BATTERY SURPRISES



CREWMEN, **DON'T FORGET** TO TURN YOUR M109A6 PALADIN'S MASTER POWER SWITCH TO **OFF** AFTER YOU'VE SHUT DOWN THE ENGINE.

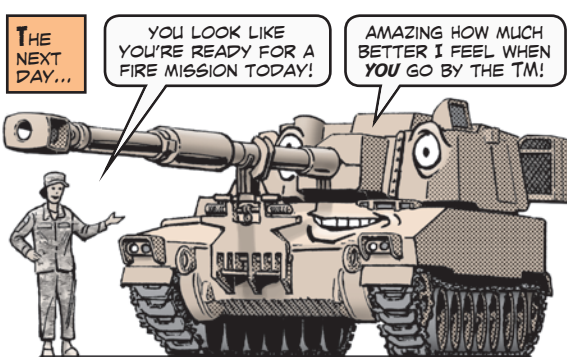
FORGET AND YOU COULD BE IN FOR A **NASTY SURPRISE** THE NEXT TIME YOU TRY TO START UP YOUR PALADIN.

THAT'S BECAUSE LEAVING THE MASTER POWER ON WHEN THE VEHICLE ISN'T RUNNING **DRAINS** THE BATTERIES. AND FINDING YOUR PALADIN HAS DEAD BATTERIES IS NO WAY TO START YOUR DAY.



MAKE SURE YOU FOLLOW THE ENGINE SHUTDOWN PROCEDURES IN THE -10 TMS. THAT KEEPS THE BATTERIES READY TO GO WHEN YOU ARE.

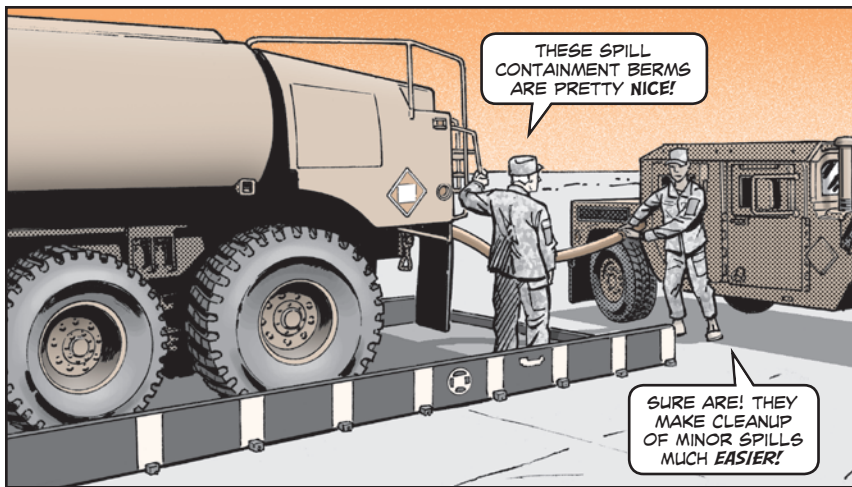
AND REMEMBER: YOU CAN DAMAGE THE ELECTRICAL SYSTEM IF YOU TURN OFF THE MASTER POWER SWITCH WHILE THE ENGINE IS *STILL* RUNNING.



PS TACTICAL VEHICLES

- Contain Spilled Fuel with Containment Berms
- Can You Handle Too Much Lip?
- M1074 PLS Manifold Solenoid NSN
- PLS A1, HEMTT A4 Transfer Case Oil





CONTAIN **SPILLED FUEL** WITH **CONTAINMENT BERMS**

Dear Half-Mast,
We're having trouble finding NSNs for fuel containment berms to put around our fuel tankers. Can you help us out?

CPT J.W.E.

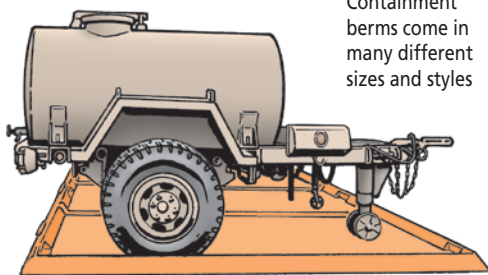
Dear Captain,
You bet, Sir!

Spill containment berms come in many different sizes, styles, and types. They can be used with something as big as a fuel tanker or as small as a 55-gal drum. These flexible berms can be set up quickly on site and used for maintenance or fueling operations to contain oil, fuel, waste water or other hazardous materials.

With so many berms available, there just isn't room to publish them all in PS Magazine. So instead, drop me a line. I'll forward you an extensive list of containment berm NSNs so you can select the one that best meets your needs. Email me at:

usarmy.redstone.logsa.mbx.psmag@mail.mil

Containment berms come in many different sizes and styles

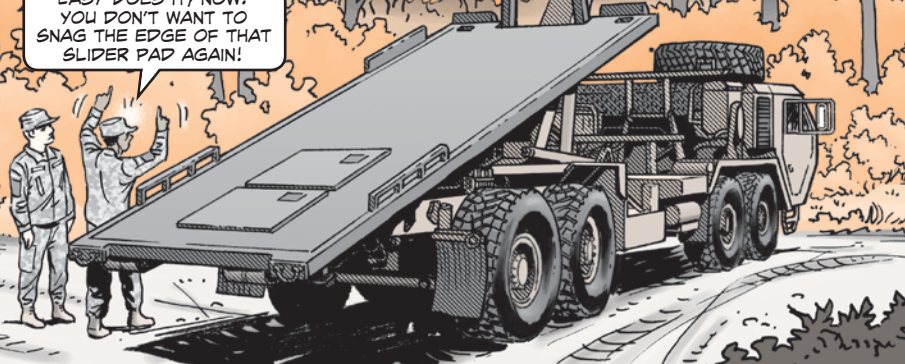


Half-Mast

Enhanced Container Handling Unit...

CAN YOU HANDLE TOO MUCH LIP?

EASY DOES IT, NOW.
YOU DON'T WANT TO
SNAG THE EDGE OF THAT
SLIDER PAD AGAIN!



WHEN LOADING A FLATRACK ONTO
THE ENHANCED CONTAINER HANDLING
UNIT (E-CHU), YOU DEFINITELY DON'T
WANT IT JUMPING OFF THE TRACKS!

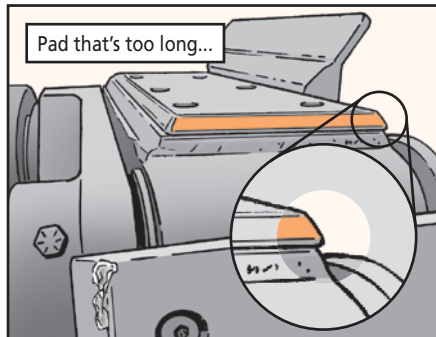
BUT THAT **CAN** HAPPEN IF
THE PAD ON YOUR E-CHU'S
FRONT SLIDER BED IS A
LITTLE TOO LONG.

THE PADS,
NSN 5340-01-573-5856
(RIGHT HAND) AND
NSN 5340-01-573-6003
(LEFT HAND),
ARE **DESIGNED** TO TAKE
THE WEAR OF FLATRACK
LOADING, **PROTECTING**
THE SLIDER BED.

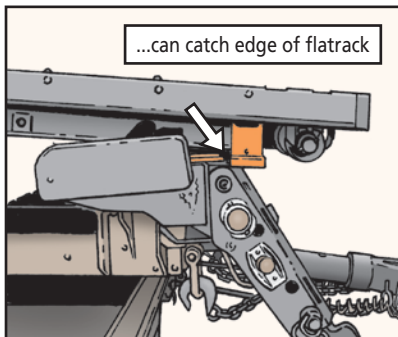
BUT IF ONE OR
BOTH OF THE PADS
ARE **TOO LONG**, THE
EDGE HANGS OVER
THE SLIDER BED,
CREATING A LIP THAT
CAN CATCH OR BIND
AGAINST A LOADING
FLATRACK.



Pad that's too long...



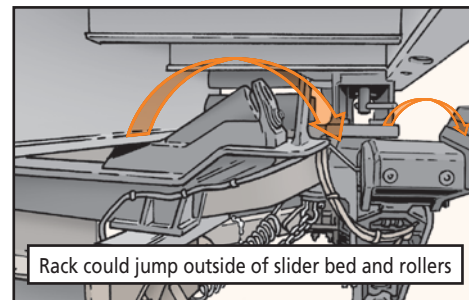
...can catch edge of flatrack



WHEN THAT HAPPENS, THE
FLATRACK CAN **JUMP LOOSE**
FROM THE SLIDER BED.

SOMETIMES, THE RACK CAN
EVEN JUMP **COMPLETELY OFF** THE
SLIDER AND ROLLER ASSEMBLY.

THAT'S A TOUGH ONE TO FIX!

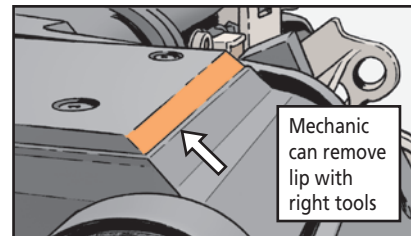


Rack could jump outside of slider bed and rollers

**FEAR
NOT!**

AN OVERHANGING PAD CAN BE
FIXED BY YOUR MECHANIC.

AND WE'VE GOT THE INSTRUCTIONS
STRAIGHT FROM THE MANUFACTURER.
TO GET A COPY, DROP US A LINE AT:
[usarmy.redstone.logsa.mbx.psmag@
mail.mil](mailto:usarmy.redstone.logsa.mbx.psmag@mail.mil)

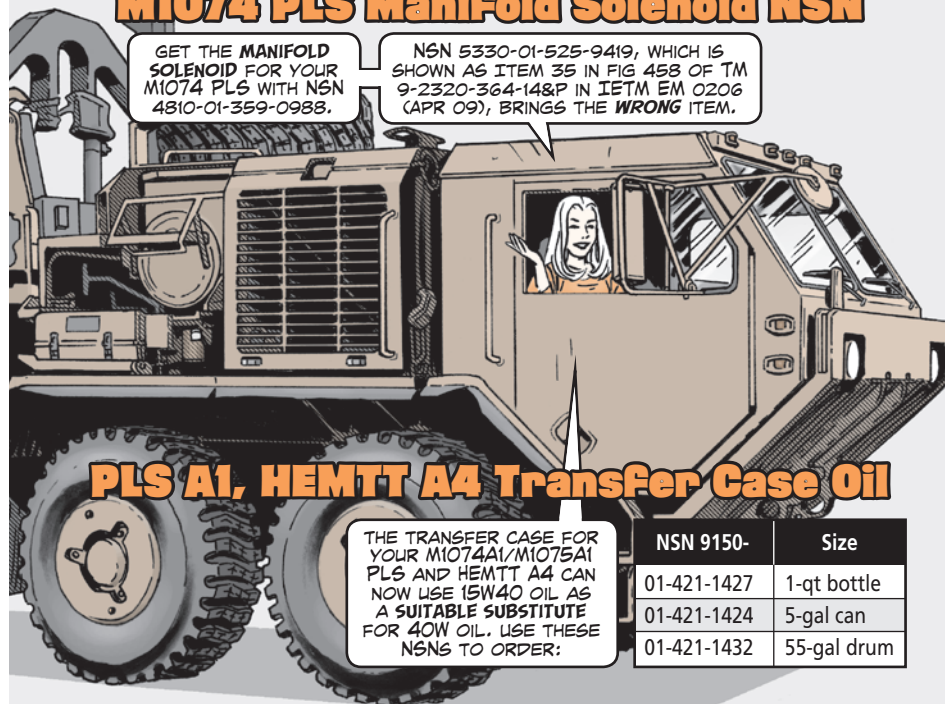


Mechanic
can remove
lip with
right tools

M1074 PLS Manifold Solenoid NSN

GET THE **MANIFOLD
SOLENOID** FOR YOUR
M1074 PLS WITH NSN
4810-01-359-0988.

NSN 5330-01-525-9419, WHICH IS
SHOWN AS ITEM 35 IN FIG 458 OF TM
9-2320-364-14&P IN IETM EM 0206
(APR 09), BRINGS THE **WRONG** ITEM.



PLS A1, HEMTT A4 Transfer Case Oil

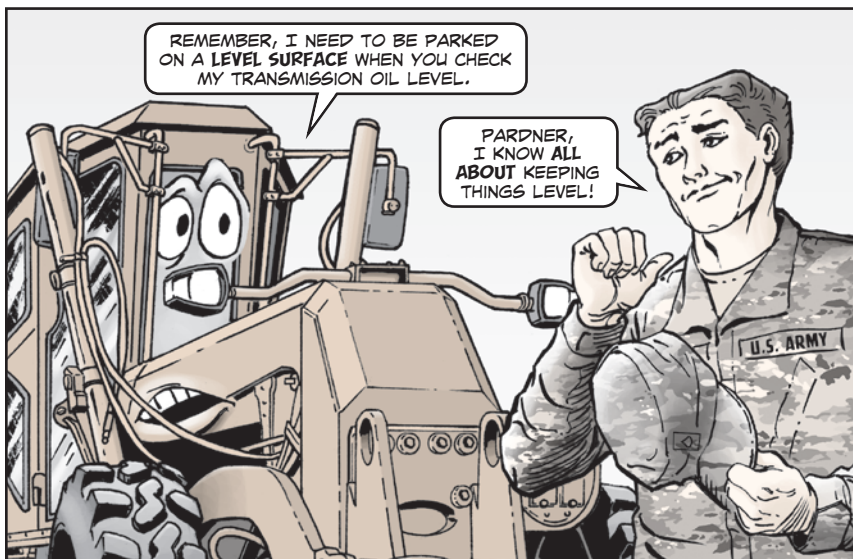
THE TRANSFER CASE FOR
YOUR M1074A1/M1075A1
PLS AND HEMTT A4 CAN
NOW USE 15W40 OIL AS
A **SUITABLE SUBSTITUTE**
FOR 40W OIL. USE THESE
NSNs TO ORDER:

NSN 9150-	Size
01-421-1427	1-qt bottle
01-421-1424	5-gal can
01-421-1432	55-gal drum

- 
- **Keep Transmission Oil on the Level**
 - **One Press Prevents Turbo Burnout**
 - **Make Your Mark!**

PS CONSTRUCTION

Keep Transmission Oil on the Level

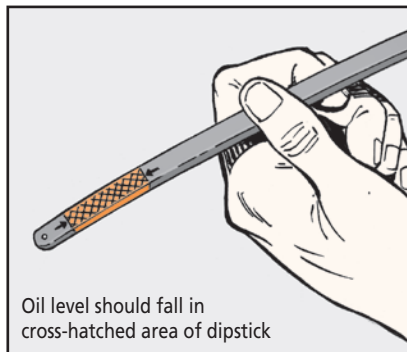


Operators, stay level-headed when it comes to checking your grader's transmission oil level. That also means using the right oil.

This is an after-operations check and must be made under the following conditions:

- The grader must be parked on a level surface.
- Leave the engine running.
- Put the transmission in neutral.
- Make sure the transmission oil is at operating temperature (between 160°F and 230°F).

The oil level should fall in the cross-hatched area of the dipstick. If it's above, call your mechanic. If below, add oil through the oil filler tube until the level is in the cross-hatched area. Under normal operating conditions, OE/HDO-15W40 is the only oil to use in the grader's transmission.



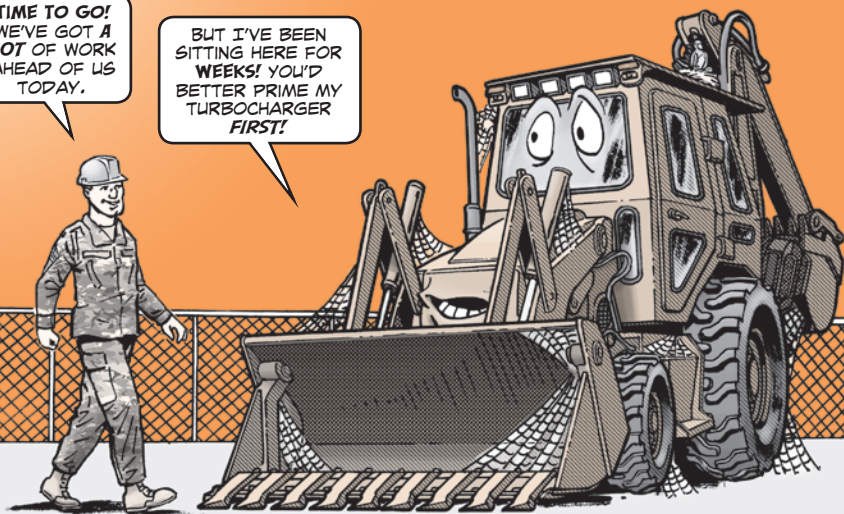
Oil level should fall in cross-hatched area of dipstick

You'll find this information as PMCS check #61 in WP 0013-26 of TM 5-3805-293-10 (Dec 10).

ONE PRESS *PREVENTS* TURBO BURNOUT

TIME TO GO!
WE'VE GOT A
LOT OF WORK
AHEAD OF US
TODAY.

BUT I'VE BEEN
SITTING HERE FOR
WEEKS! YOU'D
BETTER PRIME MY
TURBOCHARGER
FIRST!

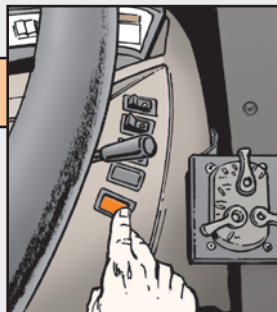


Operators, if your backhoe loader has been idle for a while, remember to use the fuel pump solenoid switch to prime and protect the turbocharger.

The switch is located to the right and just below the steering wheel. Holding the switch down shuts off the engine's fuel pump. The engine won't start, but the turbocharger gets primed and lubricated before actual startup.

To do it right, follow these steps from WP 0010-4 in TM 5-2420-231-10 (Feb 09):

1. Engage the parking brake.
2. Shift the direction control lever to the neutral position.
3. Press and hold the right side of the fuel pump solenoid switch to disengage the fuel pump.
4. From the operator's seat, turn the starter key switch to START and actuate the starter motor for 10 seconds, then turn the starter key switch back to the OFF position.
5. Release the fuel pump solenoid switch. The fuel pump will reengage.
6. Follow the Starting Engine procedure that starts on WP 0010-2 to start the engine.



Remember, the fuel pump solenoid switch is only for when the engine hasn't been started for a long time or whenever the engine oil has been drained completely and not refilled right away.

Backhoe
Loader...

MAKE YOUR MARK!



ALL IT TAKES IS **ONE LOOSE LUG NUT** ON THE WHEEL OF YOUR BACKHOE LOADER (BHL).

BEFORE YOU KNOW IT, A **SECOND** ONE IS LOOSE, THEN **THREE**, THEN... WELL, YOU GET THE PICTURE.

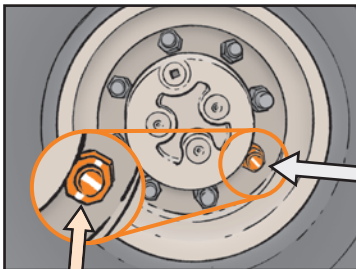
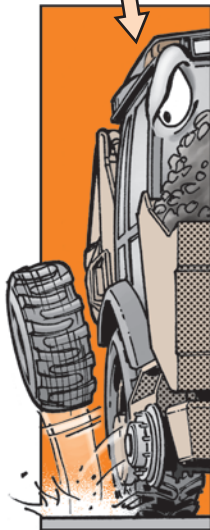
AS THE NUTS LOOSEN, THE WHEEL BEGINS TO **WOBBLE**, SLOWLY WALLOWING OUT THE STUD HOLES AND RUINING THE WHEEL. ENOUGH OF THAT DAMAGE AND THE WHEEL CAN **BREAK OFF** COMPLETELY.

Look for shiny spots or rust around and under nut

SO EYEBALL THOSE NUTS FOR **TIGHTNESS** EVERY WEEK.

LOOK FOR **TWO THINGS: SHINY SPOTS** ON THE NUT'S WASHER AND **CORROSION** AROUND THE NUTS.

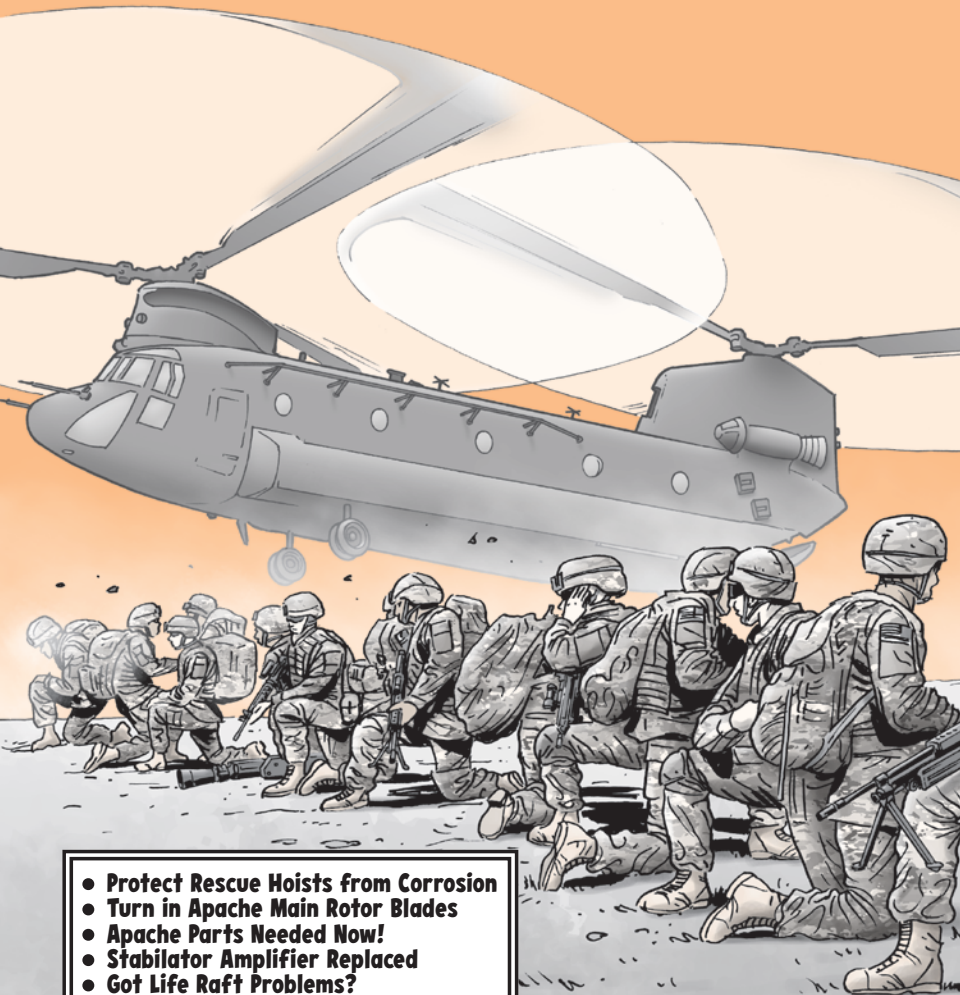
HAVE YOUR MECHANIC TORQUE ANY LOOSE NUTS TO 185 LB-FT.



If white line drawn across nut and stud doesn't line up, nut has loosened

ONCE THEY'RE TIGHTENED, MAKE YOUR MARK SO YOU CAN **QUICKLY** CHECK THE NUTS FOR MOVEMENT IN THE FUTURE. USE A WHITE MARKER PEN OR SOME TORQUE SEAL, NSN 8030-00-408-1137, AND MAKE A LINE ACROSS THE STUD END AND NUT.

THAT MAKES THE WEEKLY CHECK FOR LOOSE NUTS AN **EASY** ONE. IF A NUT MOVES, THE LINE **WON'T** LINE UP ANYMORE.



- **Protect Rescue Hoists from Corrosion**
- **Turn in Apache Main Rotor Blades**
- **Apache Parts Needed Now!**
- **Stabilator Amplifier Replaced**
- **Got Life Raft Problems?**
- **High-Flying Suggestions!**
- **PRT May Have Rivet Problem**
- **Nevermore Forget These Tips, Quoth the Raven**

PS AVIATION

PROTECT RESCUE HOISTS FROM CORROSION

FOSTER, YOU READY TO PACK UP THIS HOIST AND PUT IT AWAY?

YEAH, ADAMS! LET'S PACK THIS BABY UP. BUT WE'LL NEED SOME DESICCANT TO PROTECT THE HOIST FROM CORROSION.

I'M A **CORROSION HUB**. WITHOUT DESICCANT, THAT HOIST IS TOAST!

AN OUNCE OF PREVENTION IS WORTH A POUND OF CURE.

THAT WAS TRUE WHEN BENJAMIN FRANKLIN SAID IT THEN AND IT'S TRUE NOW, **ESPECIALLY** WHEN IT COMES TO PROPER STORAGE OF THE INTERNAL RESCUE HOIST (IRH), NSN 1680-01-552-3442!

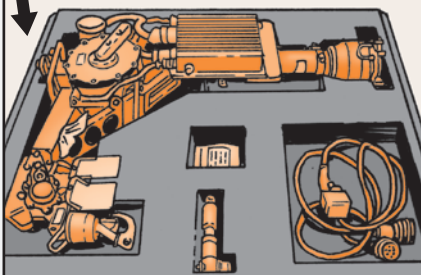
PROPER IRH STORAGE IS ALL ABOUT **PREVENTING AND CONTROLLING CORROSION.**

THAT MEANS KEEPING THE IRH AS **MOISTURE-FREE** AS POSSIBLE.

Properly store internal rescue hoist to prevent corrosion

CORROSION HAPPENS WHEN MOISTURE, ACIDS, BASES OR SALTS COME INTO CONTACT WITH METAL.

DEPENDING ON THE TYPE OF METAL, CORROSION CAN SHOW UP AS TARNISH, PITTING, FOGGING, RESIDUE OR CRACKING.



UNFORTUNATELY, IRHS ARE BEING NEGLECTED AND STORED IN CONDITIONS THAT ALLOW CORROSION TO SPREAD RAPIDLY. AND WITH SPARE PARTS HARDER TO GET, **PREVENTING CORROSION IS MORE IMPORTANT THAN EVER.**

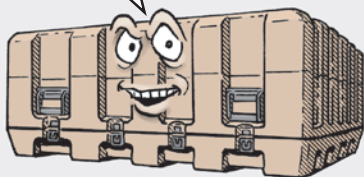
MOISTURE CAN CREATE PROBLEMS FOR EVEN PROPERLY-STORED IRHS. SO WHAT'S A SOLDIER TO DO?

1

CONTROL THE STORAGE ENVIRONMENT.

KEEP IRHS DRY AND PROTECTED. **ALWAYS** STORE THEM IN THEIR CONTAINERS AND MAKE SURE THE CONTAINERS ARE PROPERLY FASTENED TO KEEP MOISTURE OUT. STORE CONTAINERS INDOORS WHEN POSSIBLE AND ALWAYS PROTECT THEM FROM RAIN.

THE RIGHT ENVIRONMENT AND THE RIGHT AMOUNT OF DESICCANT STOPS CORROSION DEAD IN ITS TRACKS.



THE SHIPPING AND STORAGE CONTAINER NSN IS 8145-01-076-7476, PN CW5545-1505.

2

USE DESICCANTS. DESICCANTS ARE DESIGNED TO ABSORB MOISTURE AND KEEP THINGS DRY. WHEN STORING AN IRH, PUT LARGE PACKS OF DESICCANT INSIDE THE CONTAINER TO PROTECT IT FROM THE MOISTURE THAT LEADS TO CORROSION.

THE AMOUNT OF SPACE IN THE CONTAINER THAT NEEDS PROTECTION REQUIRES **46 UNITS OF ABSORPTION.** THERE ARE A FEW WAYS YOU CAN ACCOMPLISH THIS.

FOR INSTANCE, YOU COULD USE **THREE 16-UNIT** OR **SIX 8-UNIT (48 UNITS TOTAL)** DESICCANT POUCHES FOR EACH CONTAINER. USE ANY COMBINATION THAT WILL GET YOU **A TOTAL OF 46 OR MORE** DESICCANT UNITS OR WHATEVER IS CALLED FOR IN YOUR UNIT'S LOCAL SOP.

HERE ARE SOME SUGGESTED DESICCANTS:

16-UNIT DESICCANT POUCHES
(PACKED WITH 150/DRUM),
NSN 6850-00-264-6572, AND
EIGHT-UNIT DESICCANT POUCHES
(PACKED 300/DRUM),
NSN 6850-00-164-6571.

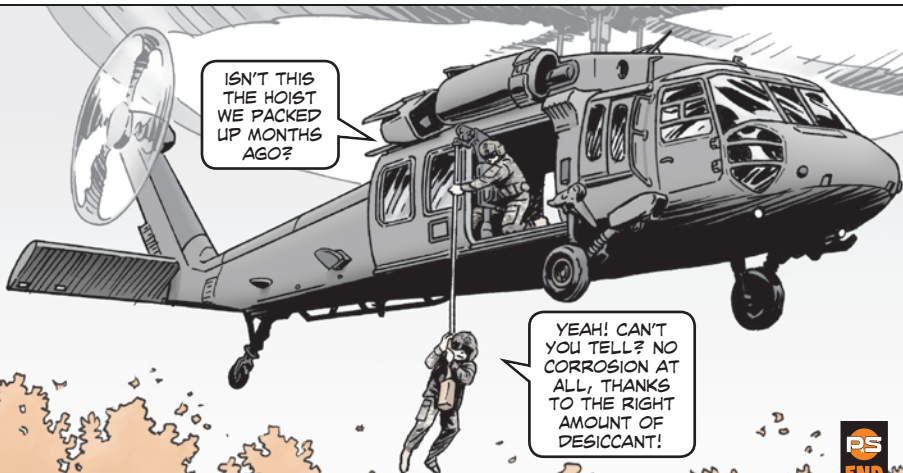
APPLYING AN OUNCE OF PREVENTION IS THE **BEST** WAY TO AVOID COSTLY REPAIRS.

TO KEEP **YOUR IRHS** ON THE JOB FOR YEARS TO COME, SPEND A FEW MINUTES STORING THEM AND THEIR CONTAINERS PROPERLY!

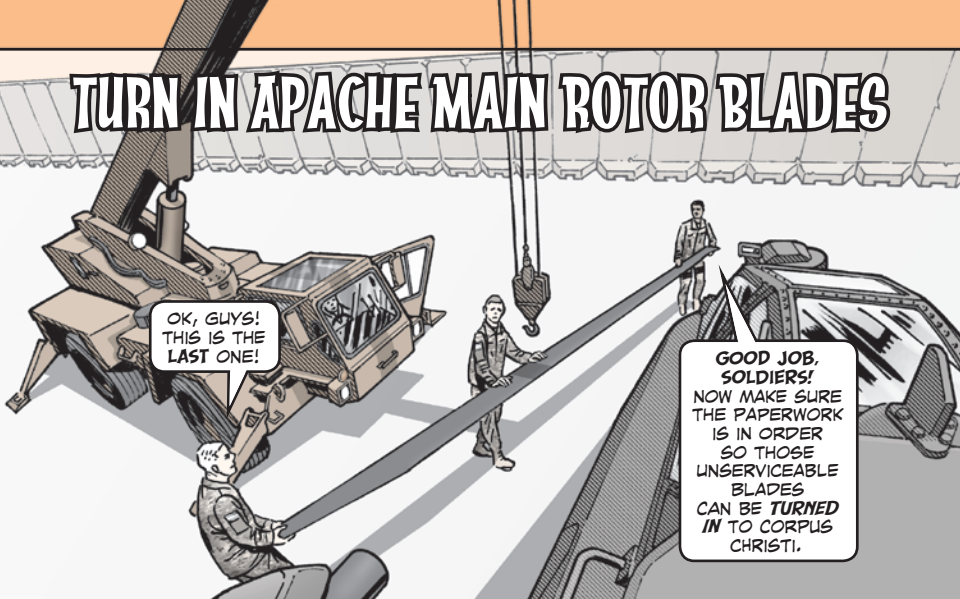


ISN'T THIS THE HOIST WE PACKED UP MONTHS AGO?

YEAH! CAN'T YOU TELL? NO CORROSION AT ALL, THANKS TO THE RIGHT AMOUNT OF DESICCANT!



TURN IN APACHE MAIN ROTOR BLADES



APACHE MAIN ROTOR BLADES ARE EXPERIENCING HIGH **WASHOUT** DUE TO SOFT TRAILING EDGES.

IF YOU HAVE ANY UNSERVICEABLE MAIN ROTOR BLADES, RETURN THEM TO PLANT 7015/RIC B52, CORPUS CHRISTI ARMY DEPOT **ASAP**.

HERE'S A SHORT LIST OF THE NSNs TO LOOK FOR.

1615-01-332-0702
1615-01-553-2853
1615-01-310-4987
1615-01-415-6397
1615-01-330-5098

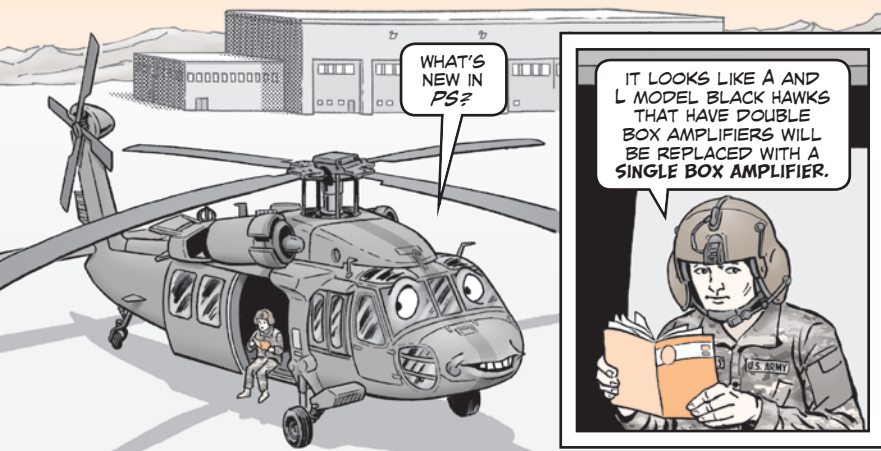
GOT QUESTIONS? CONTACT BRIAN KING, DSN 645-0841, (256) 955-0841 OR BY EMAIL: brian.b.king.civ@mail.mil

Apache Parts Needed Now!

In order to prevent unnecessary downtime and work stoppage, Team Apache is requesting that units return the following unserviceable assets to the depot for repair. If you have any of these components, turn them in ASAP. The main rotor shoe assembly is especially critical.

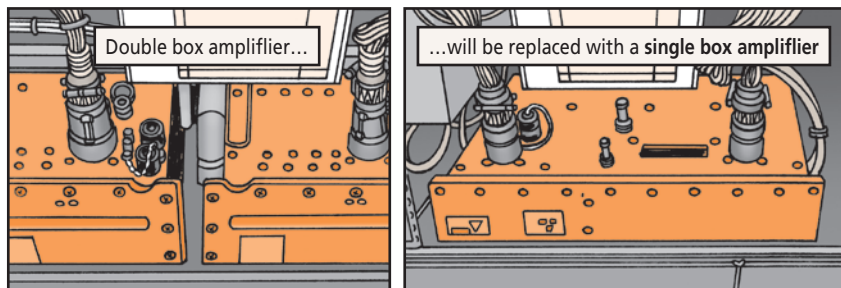
Item	NSN
Main rotor shoe assembly	1615-01-245-9826
Tail rotor coupling	1615-01-154-7077
Tail rotor shaft assembly	1615-01-388-1326
Shouldered shaft	3040-01-156-5372

STABILATOR AMPLIFIER REPLACED



Pilots and mechanics, the time has come for the Black Hawk's 25-year-old original stabilator amplifiers to be put out to pasture.

Because of serious maintenance issues like frequent gyroscope and flex circuit replacement, the old stabilator amplifiers are no longer reliable. They are being replaced with a single-box configuration dual stabilator controller (DSC), NSN 5996-01-547-3452. The legacy stabilator amplifiers were coded terminal back in 2015. The changeover is already underway.



The new DSC is more reliable and less expensive. It comes with built-in-test (BIT) capability and eliminates the need for TS-3920 test set troubleshooting.

In addition to identifying problems internal to the DSC, the BIT capability can identify problems with other line replaceable units (LRUs) that interfere with the stabilator system, such as the actuators, lateral accelerometer and airspeed sensors.

The DSC also has a parameter display mode, allowing stabilator rigging from the DSC controls. The DSC's modern electronics and solid state gyroscope mean it is lighter, consumes less power, and will fail less often than the old legacy stabilator amplifiers. That increases fleet readiness and improves mission performance—always a plus in the maintenance department.



ELSE...

Got Life Raft Problems?



ELSE techs, if your joint service vacuum packed life raft (JSVPLR) has a service/shelf life warranty that's about to expire or you have problem rafts that need attention, contact the PM Air Warrior headshed for help.

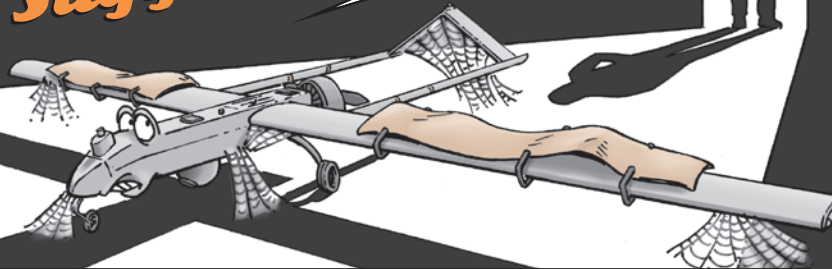
They'll let you know what to do with unserviceable rafts and ones with expiring warranties. Contact Carlos Morris at (256) 808-5082 or email: carlos.morris2.ctr@mail.mil

You can also contact Scott Gonzalez at (256) 876-6545 or email: scott.a.gonzalez.civ@mail.mil

Shadow Unmanned
Aerial Vehicle...

High-Flying Suggestions!

OH, MY! I'VE
BEEN SITTING
HERE FOR
WEEKS AND I
JUST DON'T
THINK I CAN
GET OFF THE
GROUND!



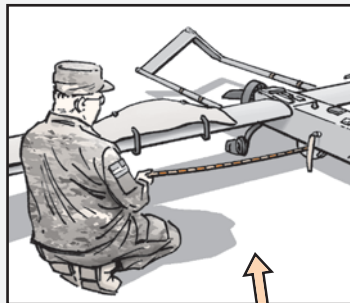
Dear Editor,

I have a few suggestions to keep Shadows Flying high:

Don't let Shadows sit. If Shadows don't get any attention for weeks at a time, they develop problems with components like the servo or the avionics control equipment box. Just doing the Shadow's weekly PMCS will prevent those problems.

Use reflective tape on the aircraft-launcher power cable. If you put strips of reflective tape on the cable, it's much easier to see at night, which makes it easier to check that the cable has been disconnected before the launch. That could save you a power cable.

SSG Devin Seger
86th Inf Bde



Put reflective tape on power cable

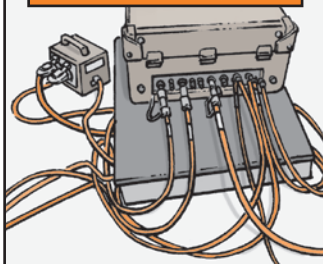


THANKS FOR THE TIPS,
SERGEANT. THEY SHOULD HELP
SHADOWS STAY HIGH IN THE SKY.

ONE CAUTION: SOME UNITS ARE
TYING TOGETHER GROUND DATA
TERMINAL CABLES TO MAKE
THEM EASIER TO SEE AND LESS
LIKELY TO BE STEPPED ON.
THIS IS NOT A GOOD IDEA.

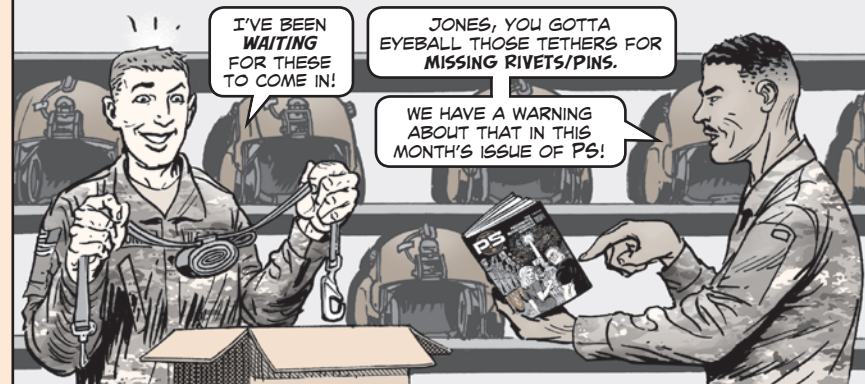
TYING CABLES TOGETHER
CAN CREATE **ELECTROMAGNETIC
INTERFERENCE** AND POSSIBLY
A FIRE HAZARD OR SHORT
CIRCUITING!

**Do not tie ground data
terminal cables together!**



ELSE...

PRT May Have Rivet Problem



I'VE BEEN
WAITING
FOR THESE
TO COME IN!

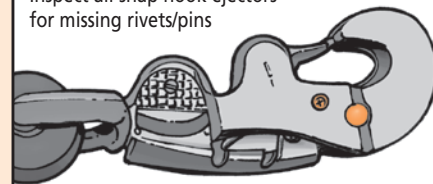
JONES, YOU GOTTA
EYEBALL THOSE TETHERS FOR
MISSING RIVETS/PINS.

WE HAVE A WARNING
ABOUT THAT IN THIS
MONTH'S ISSUE OF PS!

ELSE techs, a potential quality issue was found with the personal restraint tether (PRT), NSN 1680-01-564-6813.

A PRT snap hook ejector was returned due to missing rivets/pins. It's not a widespread problem, but you should visually inspect the snap hook quick ejectors on all PRTs to ensure both rivets/pins on the upper portion of the snap hook quick ejector are present.

Inspect all snap hook ejectors
for missing rivets/pins

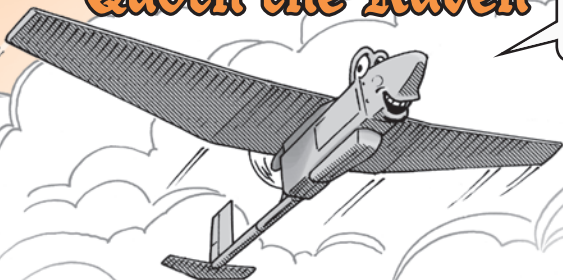


If you find PRTs with missing hardware, complete a Product Quality Deficiency Report (PQDR) at: <https://www.pdrep.csd.disa.mil>

For more information, check out PM Air Warrior message ELSE 1402. Check it out at: <https://airwarrior.redstone.army.mil>

Nevermore Forget These Tips, Quoth the Raven

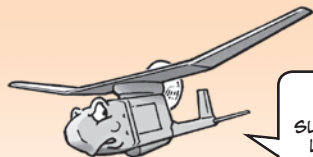
IF YOU WANT
TO KEEP ME
UP IN THE AIR,
THAT IS!



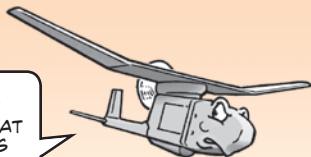
Dear Editor,

Here are few ways to keep your Raven small unmanned aircraft flying where you want it to:

Always keep Ravens at least 400 meters apart. If they fly closer than that, at least one of the Ravens-and maybe both-can lose contact with the digital data link. And, of course, flying too close could also lead to a collision.



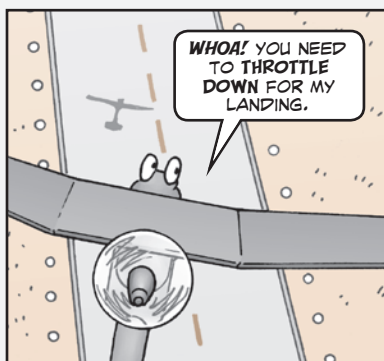
HEY! WHAT'S THE
BIG IDEA?! YOU'RE
SUPPOSED TO STAY AT
LEAST 400 METERS
AWAY FROM ME!



Keep the Raven controls away from any jamming equipment, like Duke or Warlock, or make sure they're turned off. Jamming equipment can make you lose control of the Raven, which leads to an unplanned landing.

Autoland like you're supposed to. If you manually land the Raven at full throttle or the wrong angle, it can crash. If you must manually land, reduce the throttle to drop altitude and the low-level Autoland to let the Raven glide in for a landing.

Richard Yanez
AMCOM LAR



Editor's note: Raven crews should quote your tips often, Richard. Thanks.

The Accidental Martian

IN THE YEAR 2053, THE CREW OF THE **IMPENDING DOOM III** MANNED MISSION TO MARS IS ON DAY 45 OF THEIR **YEAR-LONG** EXPEDITION TO THE RED PLANET.

THINGS ARE A BIT TENSE AMONG THE THREE-PERSON CREW AS AN APPROACHING SAND STORM AND WEEKS OF BAD NASA FOOD TAKE THEIR TOLL ON THE ASTRONAUTS...

SHIT! I COULD SURE USE A **HOTDOG** RIGHT ABOUT NOW.

A MAN CAN ONLY EAT SO MUCH FREEZE-DRIED ZUCCHINI.

MACKNEY, IF YOU'D DONE PREVENTIVE MAINTENANCE ON THE FOOD-O-MATIC LIKE YOU WERE S'POSED TO...

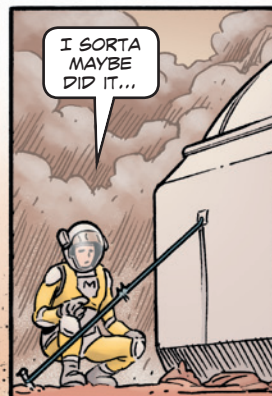
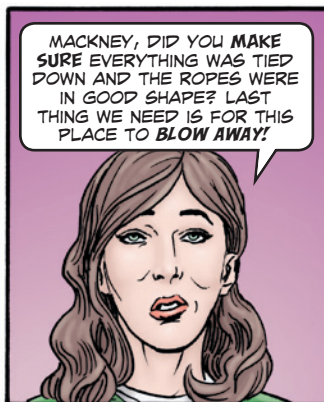
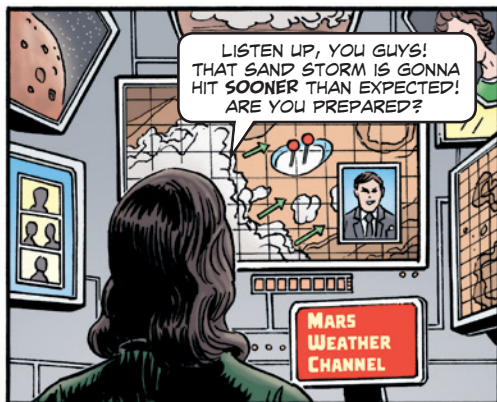
...WE'D ALL BE EATING **STEAK AND LOBSTER** RIGHT NOW!

BOY, I'LL NEVER LIVE THAT ONE DOWN!

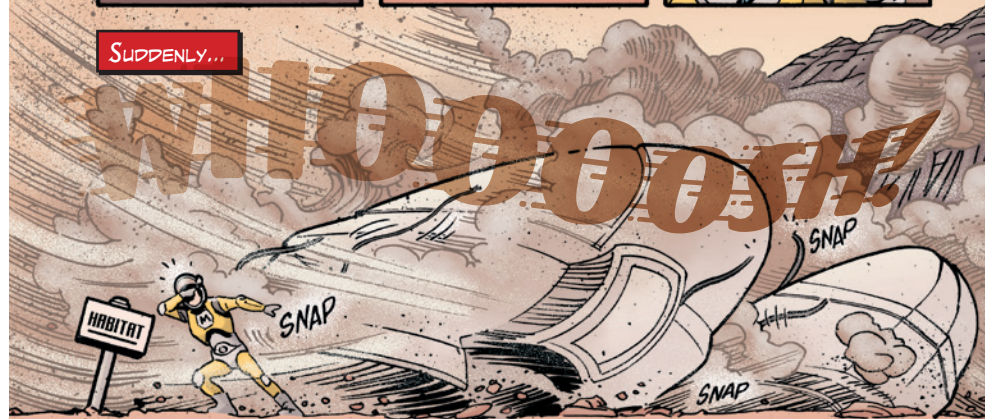
WHOOO WHOOO

WHAT IS THAT?

WHOOO WHOOO WHOOO WHOOO



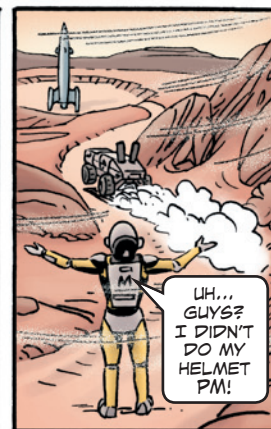
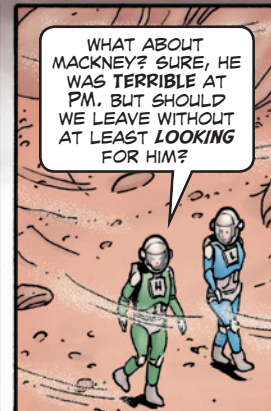
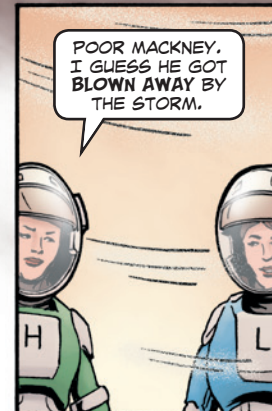
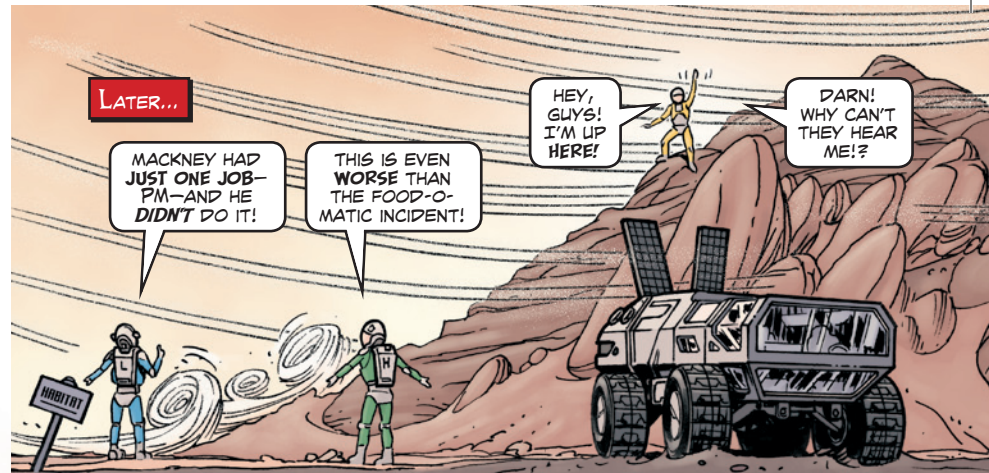
SUDDENLY...

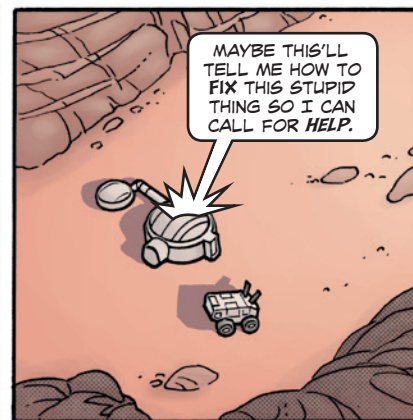
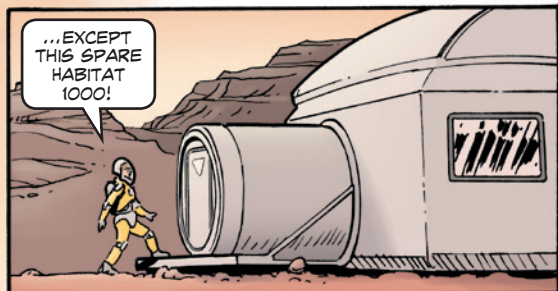
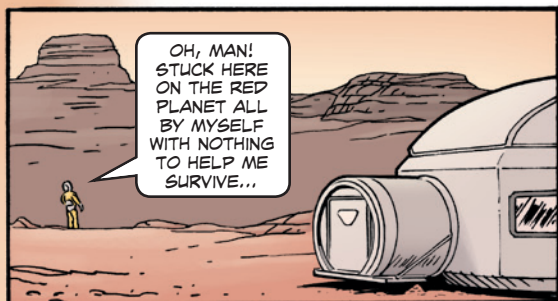


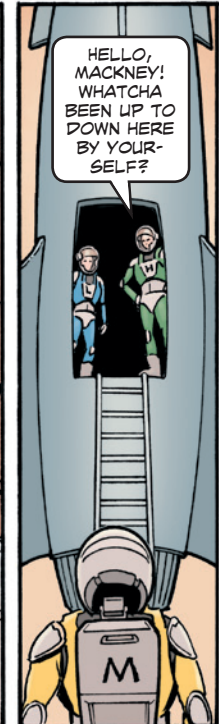
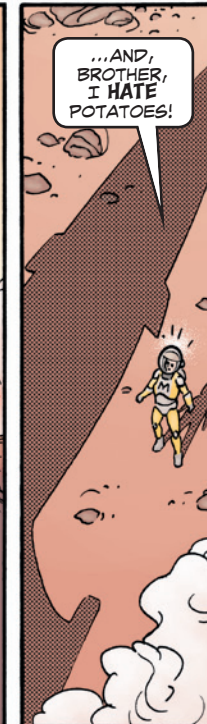
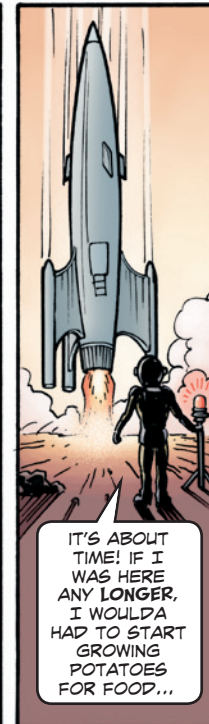
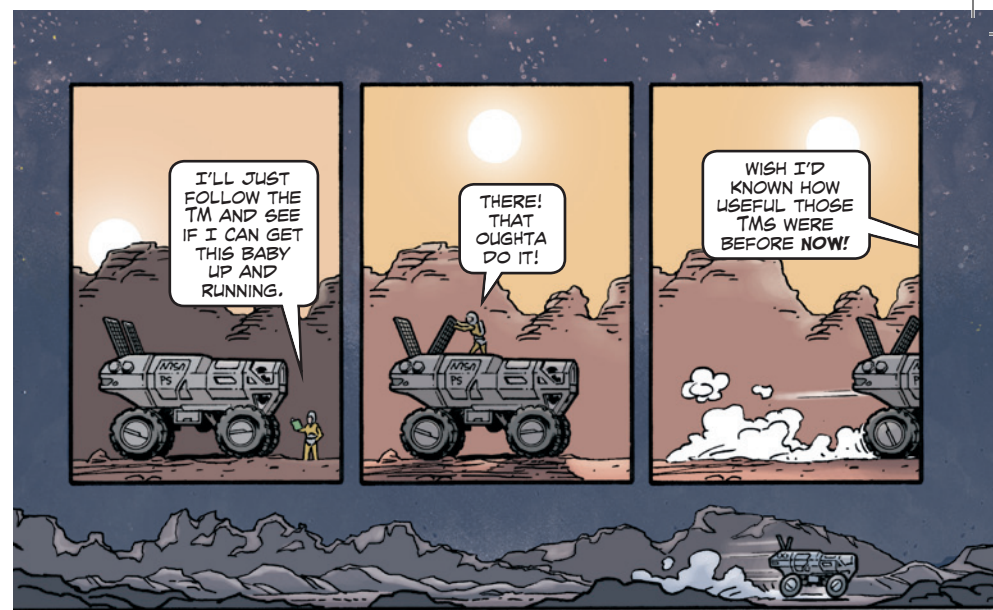
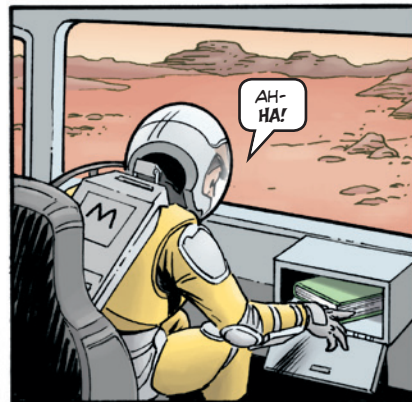
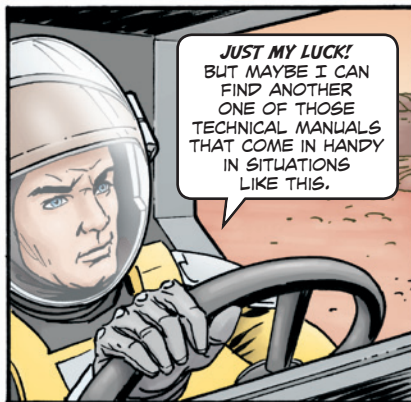
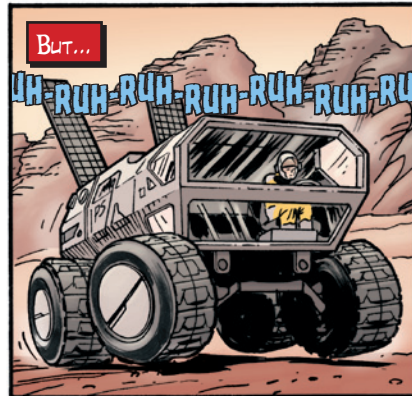
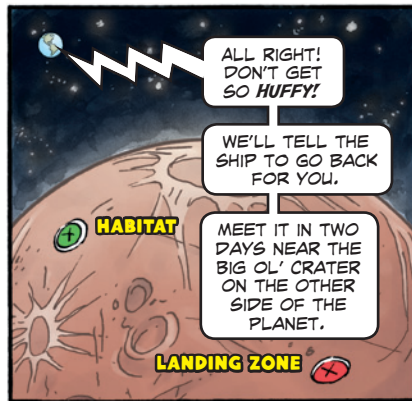
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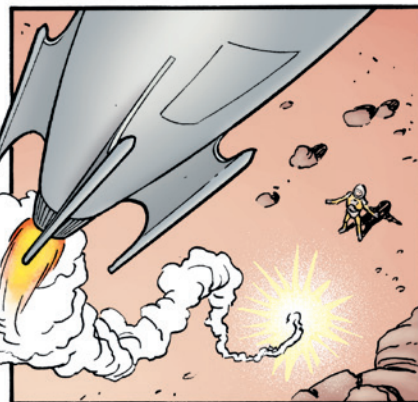
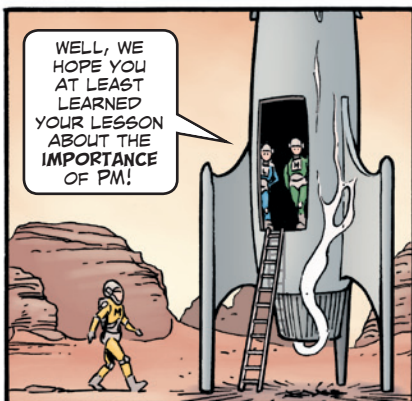
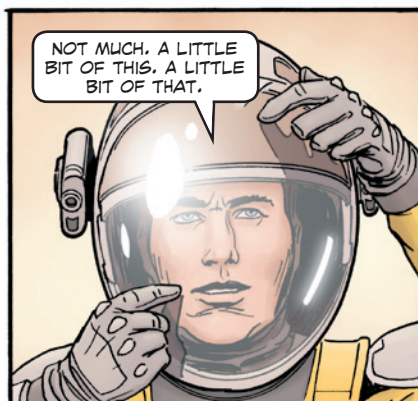
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JUL 16









PS SMALL ARMS

ALSO
FEATURING
**MISSILES,
CBRN, AND
TOOLS**



- Mop Up Moisture Threat
- Unauthorized Mods:
Bad or Illegal?
- Breech Lock Spring Pin
NSN?
- Demil Lasers and Sensors
- Six Steps to Great Radar
Detecting
- ID Plate Fading?
Tell TACOM!
- This and That for SATS

MOP UP MOISTURE THREAT

YOU WANNA DO THIS JOB RIGHT? USE **BOTH** LUBE AND A DEHUMIDIFIER!

YOU'D BE A DAMP FOOL NOT TO!



HOLD ON! I HAVEN'T BEEN LUBED. I'M AS DRY AS A BONE! I CAN'T BE STORED LIKE THIS!



Dear Editor,
We are running into armorsers who believe weapons don't need to be lubed for storage if the arms room has a dehumidifier. That is **absolutely not true** and we're seeing corroded weapons as a result. It would be a good idea for PS to detail how to best protect weapons in storage.

Tony Gibson
Robert Hesch
Alden James
Small Arms Repair,
Logistics
Support Center

NO WEAPON SHOULD **EVER** BE STORED DRY, REGARDLESS OF THE CLIMATE OR NUMBER OF DEHUMIDIFIERS IN THE ARMS ROOM.



WEAPONS NEED LUBRICATION OR CORROSION WILL MAKE SHORT WORK OF THEM.



IT SEEMS LIKE ONLY YESTERDAY I WAS IN FINE WORKING ORDER!



ARMORERS, **DON'T** ACCEPT ANY WEAPON FOR STORAGE **UNTIL** IT'S BEEN CLEANED AND LUBED LIKE IT SAYS IN THE WEAPON'S -10 TM.

ONCE THEY'VE BEEN CLEANED AND LUBED, THE WEAPONS' TMS SAY YOU CAN **STORE WEAPONS FOR UP TO 90 DAYS** WITHOUT CLEANING OR LUBING THEM AGAIN.

MOST ARMS ROOMS ARE GOING TO ALSO NEED A **DEHUMIDIFIER** TO HELP FIGHT CORROSION.

AT THE VERY LEAST, AN ARMS ROOM SHOULD HAVE ONE WITH A 15-PINT CAPACITY.

IN LARGER ARMS ROOMS OR AREAS WITH **HIGH HUMIDITY**, YOU NEED A DEHUMIDIFIER WITH A 30- TO 60-PINT CAPACITY.

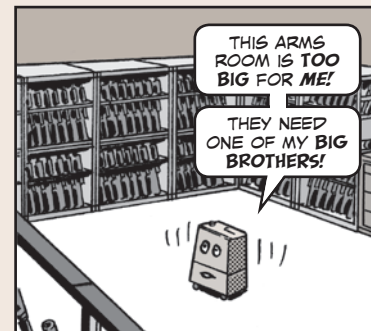
MOST LARGE HOME SUPPLY OUTLETS HAVE A LARGE SELECTION OF DEHUMIDIFIERS.

DEHUMIDIFIERS LOSE THEIR EFFECTIVENESS ABOVE 95°F, SO ARMS ROOMS SHOULD BE KEPT **BELOW** THAT TEMPERATURE IF POSSIBLE.

PUT DEHUMIDIFIERS ON THE FLOOR SINCE THAT'S WHERE THE MOISTURE SETTLES. CIRCULATING THE AIR ALSO HELPS FIGHT HUMIDITY, SO RUNNING A FAN IS A GOOD IDEA, ESPECIALLY IF IT BLOWS INTO CORNERS. IDEALLY, YOU WANT THE HUMIDITY TO **STAY BETWEEN 35 TO 45 PERCENT**.

BUT A DEHUMIDIFIER WON'T DO MUCH GOOD IF YOU DON'T **EMPTY** IT.

IN VERY HUMID ENVIRONMENTS, YOU MAY NEED TO DO THAT **EVERY DAY**. AND IF YOU'RE GOING TO BE GONE, MAKE SURE SOMEONE ELSE DOES IT!



THIS ARMS ROOM IS **TOO BIG** FOR ME!

THEY NEED ONE OF MY **BIG BROTHERS!**

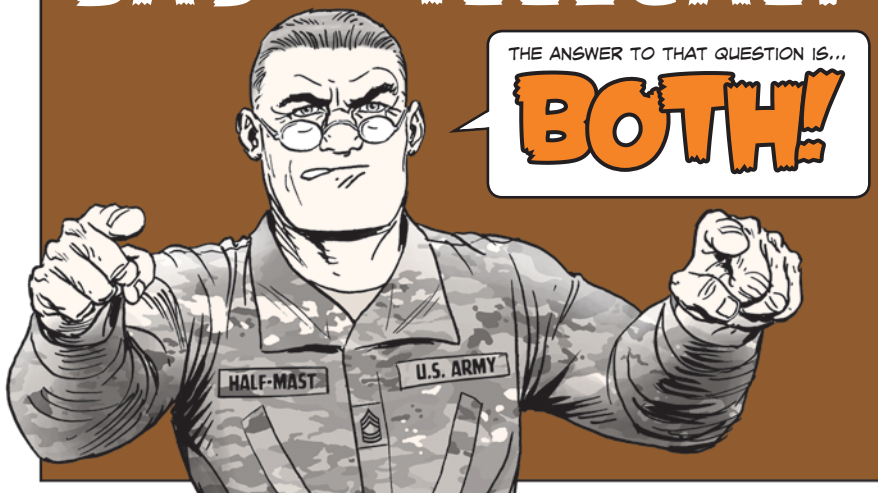
HEY! WILL SOMEBODY **EMPTY** ME?!

I'M ABOUT TO **BURST!**





UNAUTHORIZED MODS: BAD OR ILLEGAL?

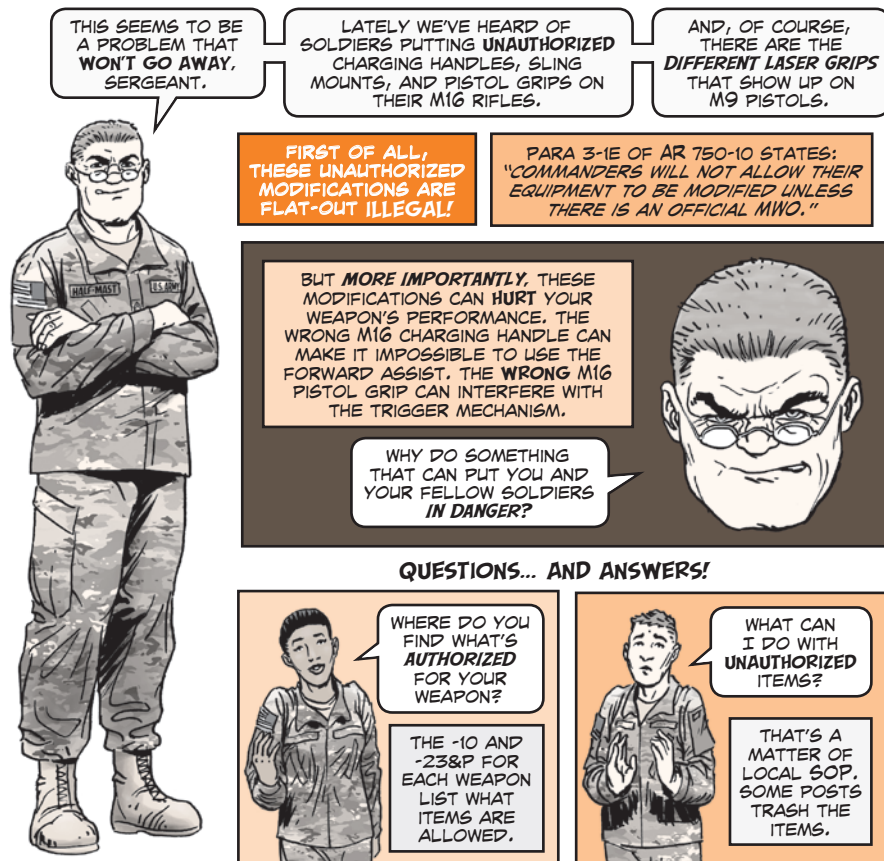


Dear Half-Mast,

In my job as a small arms repairman, I constantly see unauthorized accessories on small arms. These include optics, grips, and buttstocks. Is there someplace that shows what exactly is authorized for each weapon? And is there a procedure for dealing with these unauthorized accessories?

I have been taking them back to my office and telling the armorer that the Soldier can come see me if he wants the item back.

SGT Z.E.



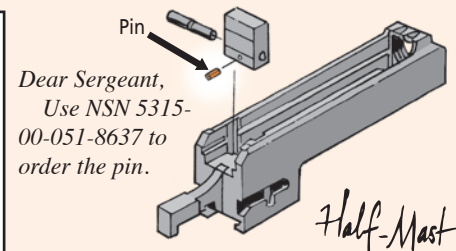
M2A1
Machine
Gun...

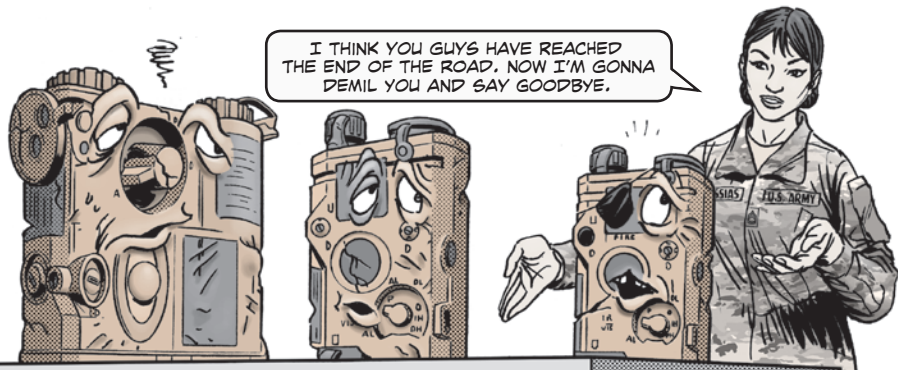
Breech Lock Spring Pin NSN?

Dear Half-Mast,

When you replace the M2A1 machine gun's breech lock, you're also supposed to replace the spring pin, NSN 5315-01-541-7233. It's Item 18 of Fig 1 in TM 9-1005-347-23&P (Jul 11). Unfortunately, that NSN is no good. How do you order the spring pin?

SGT T.G.





DEMIL LASERS *and* SENSORS

TO MAKE IT **EASIER** TO TURN IN LASERS AND SENSORS, THEIR DEMIL CODES ARE BEING CHANGED FROM F TO D.

THAT MEANS YOU CAN DEMIL THEM **WITHOUT** HAVING TO CONTACT TACOM.



HERE'S WHAT YOU GOTTA DO:

REMOVE THEIR BATTERIES AND BREAK THE GLASS ON ALL OF THEM, INCLUDING EACH OF THE LASERS BEFORE TURNING THEM IN TO DLA DISPOSITION SERVICES.

QUESTIONS?

CONTACT ENGELS ARIAS AT
DSN 786-1230, (586) 282-1230
OR EMAIL:
engels.d.arias.civ@mail.mil

Item	NSN
AN/PAQ-4	5855-01-107-5925
M30 boresight	4933-01-394-7781
AN/PEM LBS	5860-01-471-2091
LA-8/P-ALP (left hand)	5860-01-564-8167
LA-8/P-ALP (right hand)	5860-01-558-4706
AN/PEQ-14 ILWP (black)	5855-01-538-0191
AN/PEQ-14 ILWP (tan)	5855-01-571-1258
AN/PEQ-16A MIPIM	5855-01-550-2780
AN/PEQ-16B LED version	5855-01-582-1584
LA-13P GLIS BE Meyers	5860-01-598-6556
LA-12P GLIS L-3	5860-01-598-7398
AN/PEQ-15 ATPIAL (black)	5855-01-534-5931
AN/PEQ-15 ATPIAL (tan)	5855-01-577-7174
AN/PEQ-15A DBAL (black)	5855-01-535-6166
AN/PEQ-15A DBAL (green)	5855-01-579-0062
MFAL	5855-01-537-6000
AN/PAQ-4A	5855-01-312-5160
AN/PAQ-4B	5855-01-361-1362
AN/PAQ-4C	5855-01-398-4315
AN/PEQ-2B TPIAL	5855-01-515-6904
AN/PEQ-2C TPIAL	5855-01-515-6908
AN/PEQ-10 ILWIP	5855-01-529-4726
AN/PEQ-16 IPIM	5855-01-538-5521

SIX STEPS TO GREAT RADAR DETECTING

OHhh, THOSE
ADJUSTMENTS
WERE SOOO GOOD!
I FEEL GRRREAT!

LET'S DO
SOME SERIOUS
RADIATING!



Dear Editor,

If Patriot units have their support make these six adjustments to their AN/MPQ-65 radars semiannually and before they fire, they'll get great radar.

All of these adjustments are from TM 9-1425-1602-34-1. The first three **must** be done in order:

Adjust:

1. TVMAP Front end AGC (WP 00 4300).
2. TVMAP track range channels (WP 00 440v0).
3. TVMAP acquisition range channels (WP 00 4500)

These three adjustments can be done in any order:

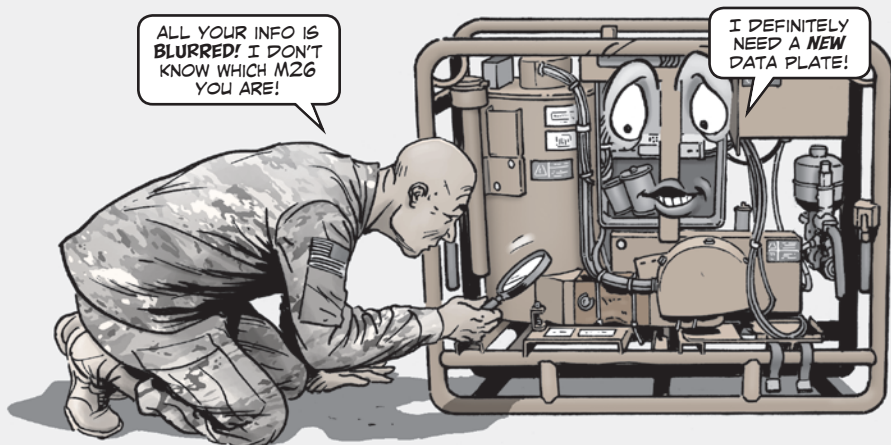
- TVMAP back end AGC (WP 00 4600)
- Quadrature local crystal oscillator (WP 00 4200)
- TVMCP range channels (WP 00 4700)

CW2 Christopher Shackelford
3/43 BN

EVERY PATRIOT
UNIT SHOULD
ADJUST TO YOUR
SUGGESTIONS.
THANKS, CHIEF.



ID Plate Fading? Tell TACOM!



POL PRODUCTS WILL CAUSE THE M26 DECON'S DATA PLATE TO FADE OVER TIME.

EVENTUALLY, ALL THE PLATE'S INFO WILL BE **LOST!**

THIS IS ESPECIALLY A PROBLEM FOR M26S WHOSE DATA PLATE IS CLOSE TO THE FUEL TANK OPENING.

YOUR M26S MAY NEED NEW DATA PLATES.

CHECK THEM NOW.

IF ANY PLATE HAS FADED AT LEAST 50 PERCENT OR THE IUID MARKING CAN'T BE SCANNED, THE PLATE NEEDS TO BE **REPLACED.**

SER. NO. 010071
CONTRACT NO. M67004-06-D-0007

M26 - DECONTAMINATING APPARATUS,
JOINT SERVICE TRANSPORTABLE SMALL SCALE

MFR: DRS

MFR CAGE: 5RQL2

PART NUMBER: 91001-100

NSN: 4230-01-555-0686



IUID

U.S.

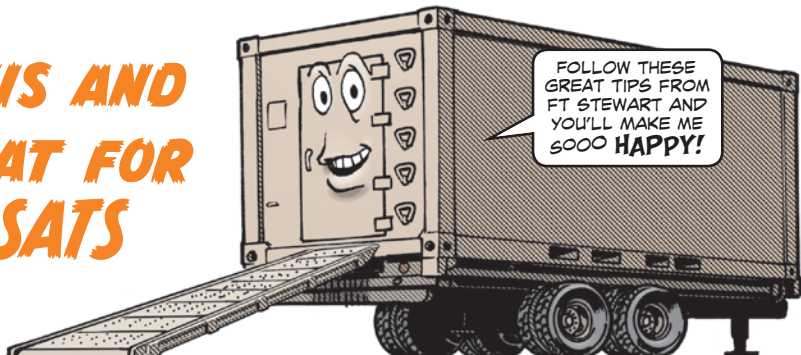
TO GET A **NEW PLATE**, EMAIL THE M26'S SERIAL NUMBER, YOUR UNIT'S MAILING ADDRESS AND A POC'S EMAIL AND PHONE NUMBER TO:

usarmy.detroit.tacom.mbx.ilsc-decon-items@mail.mil

FOR **MORE INFORMATION**, SEE TACOM LCMC MESSAGE MA16-018 AT: <https://tulsa.tacom.army.mil/Maintenance/message.cfm?id=MA16-018.html>

?
QUESTIONS?
CONTACT
YOUR TACOM
LAR.

THIS AND THAT FOR SATS



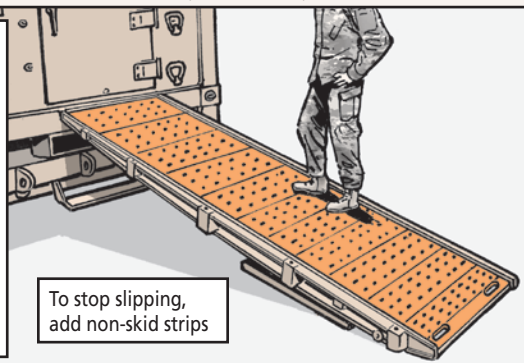
Dear Editor,

I think these tips will help units who use the standard automotive tool sets (SATS)...and that's a fact!

Add Non-skid Strips to Ramp

When the ramp is wet, it gets quite slick. Since you're often going in and out of SATS carrying something, it's very easy to take a spectacular fall. Putting non-skid strips on the ramp can prevent that. NSN 7220-00-823-7419 brings a 60-ft roll of the strips.

To stop slipping,
add non-skid strips



Easy with Fasteners for Landing Legs Crank

It's easy to crossthread them. Once that happens, it's hard to crank the legs. The only fix is to re-tap the threads.

Don't forget to lube the crank and legs quarterly with GAA or any time they're hard to move. Also lube the leveling jack lock pin with penetrating oil or spray lube.

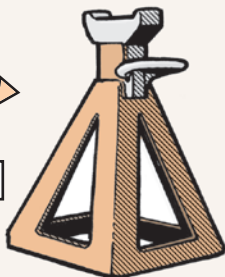
Make Sure Jack Stand Is Load Tested Every 6 Months.

That's often forgotten and it could make the jack stand unsafe. Write the test date on the jack stand so you can easily check when it's next due. See TB 43-0142 for more info.

Get jack stand load tested every year and write test date on stand

Check Container Roof Monthly For Damage, Cracks and Punctures

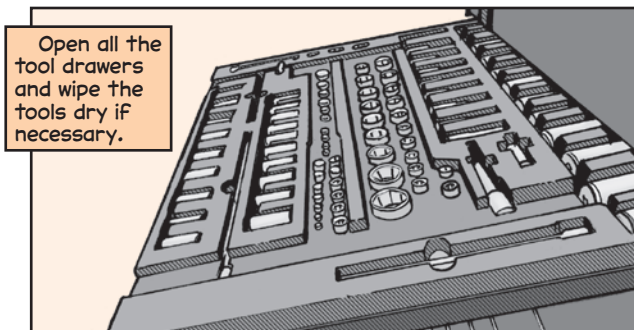
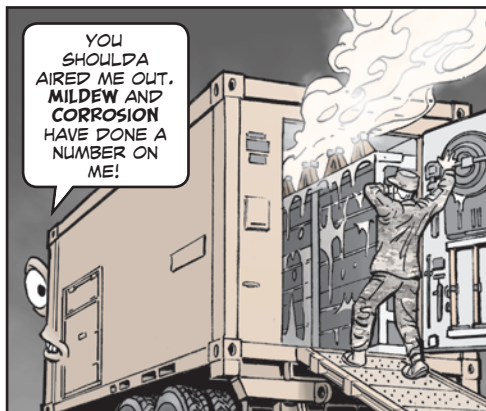
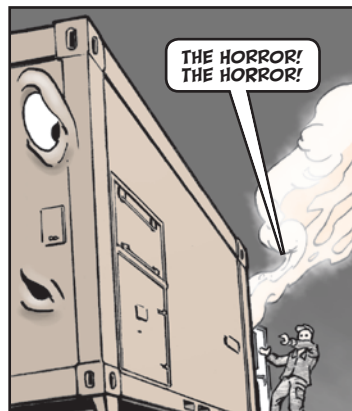
Keep the roof clear of snow and debris to prevent damage. Never store anything on the roof.



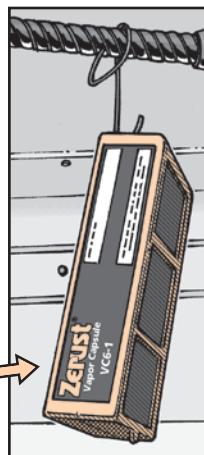
Fight Moisture

When units aren't in the field, they often leave SATS locked up for weeks. Then when they do get ready to use it, they find moisture has corroded tools and left mildew throughout the trailer.

At least monthly (more often in humid places like FtS Stewart and Polk), open up SATS and air it out. Run the ECU to help dry up moisture. Make sure the ECU drain hose is routed through the ECU end wall vent and the drain pan and hose are not clogged before running the ECU. The hose is located in the generator room above the curb-side access door.



NSN 6850-01-590-1676 brings four vapor capsules that can help dry up moisture, but remember to replace them at least yearly. Write the installation date on them to help you remember.



Remember ECU, Its Trailer AND Generator Have Their Own TMs

Use TM 9-6115-642-10 for the MEP 803A generator, TM 9-6115-750-10 for the AMMPS 10K generator and TM 1108A/11080B-01 for the ECU and TM 9-2330-328-14&P for the trailer. All but the ECU TM are on the LOGSA ETM site:

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

To get a copy of the ECU TM, email:

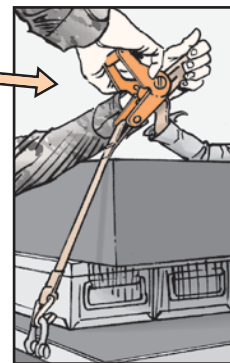
usarmy.detroit.tacom.mbx.ilsc-skot-group-actions@mail.mil

Strap or Lock Everything Down For Travel

You sure don't want things like jack stands bouncing around the trailer during travel. Everything in the trailer has tiedown straps, including the tool drawers. Tug on each strap to make sure it's actually locked in place.

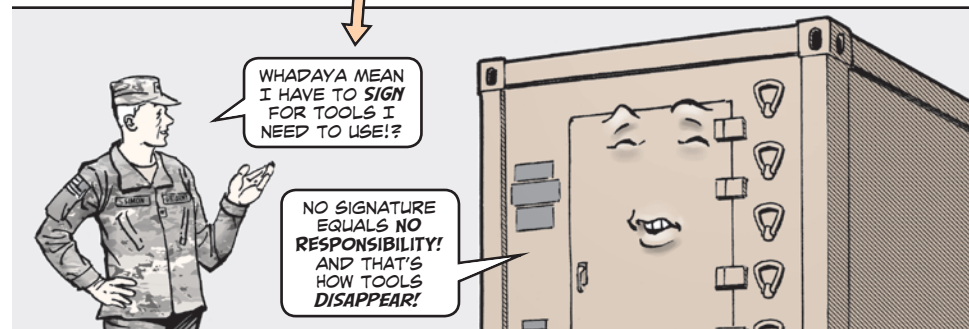
And lock the drawers.

It's a good idea to strap the wheel table to the top of the transmission jack. They make a good fit.



Practice Tool Accountability

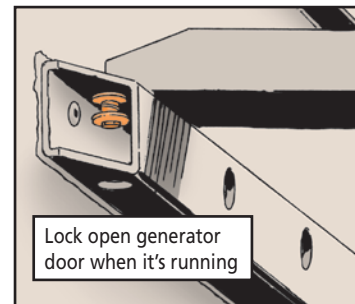
You're responsible for all SATS tools, so if any disappear **you** have to do the explaining. Make sure every tool that leaves SATS is signed out. If it's for one day, use DA Form 5519R. For 30 days, use DA Form 3161. And for more than 30 days, use DA Form 2062.



Run Generator During Every PMCS

If the generator goes weeks without being cranked up, its batteries go bad. No generator means no lights and compressor. Run the generator until it reaches operating temperature. While it's running, try the lights and outlets to make sure they're working.

Remember when you run the generator to lock its door open. Otherwise, fumes can build up in the trailer. Make sure the locking pin is fully engaged so the wind can't blow the door shut. But **don't forget** to remove the pin before shutting the door. You don't want to snap the pin.



SPC Joseph Wesselzyk
FSC, 92nd Engr

Editor's note: Great info, Specialist. And that's the SATS fact!

If you have any SATS questions, email:

usarmy.detroit.tacom.mbx.ilsc-skot-group-actions@mail.mil





- Drained by Battery Hunt
- Battery Replacement Made Easy!
- Leave Installation Kits Behind

Test Sets...

DRAINED BY BATTERY HUNT

I CAN STOMACH
SEVERAL BATTERY
TYPES, BUT BE
SURE TO READ MY
TM TO GET THE
WHOLE SKINNY.

Dear Half-Mast,

I've run out of batteries for the AN/PRM-36 radio test set (RTS),
NSN 6625-01-581-8105. I've hunted but can't find them in the supply system,
so I'm unable to test or troubleshoot SINCARS radio systems. Any leads?

SGT M.W.

SURE THING, SERGEANT! THE
AN/PRM-36 RTS USES THREE SIZE AA,
1.25V, NUMBER NHIS RECHARGEABLE NICKEL
METAL HYDRIDE (NiMH) BATTERIES.

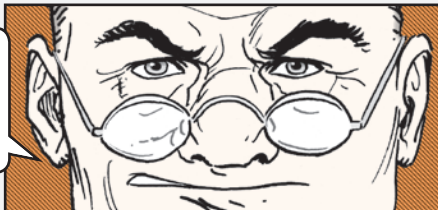
ORDER THE
BATTERIES WITH
NSN 6140-01-
537-5244.

IN A PINCH, YOU CAN **SUBSTITUTE** AA ALKALINE BATTERIES.

THE RTS WILL **ALSO** RUN ON AA NICKEL CADMIUM (NiCd)
RECHARGEABLE BATTERIES, BUT THEY **AREN'T** RECOMMENDED
SINCE USED NiCds REQUIRE **HAZARDOUS MATERIAL DISPOSAL**.

LITHIUM BATTERIES CAN DAMAGE THE RTS, SO DON'T USE 'EM.

WHILE YOU'RE
REBUILDING YOUR
RTS SUPPLIES,
ORDER A NEW
BATTERY CHARGER
WITH NSN 6130-01-
621-5665.

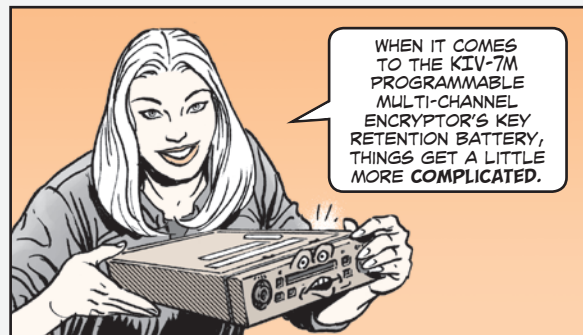
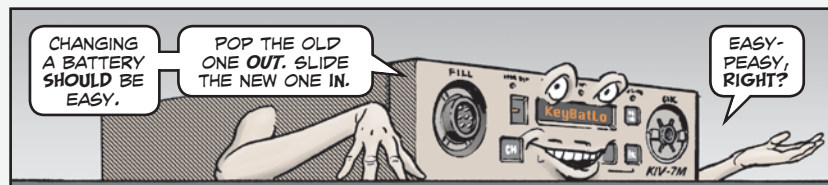
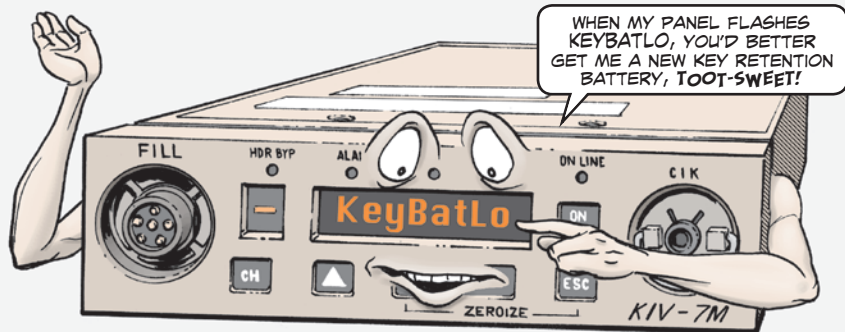


YOU'LL FIND MAINTAINING THE RTS IS EASIER WITH INSTRUCTIONS
AT HAND. SO BE SURE TO DOWNLOAD TM 9-6625-1697-10
(NOV 13, W/CH 1, JUN 14) FROM THE LOGISTICS SUPPORT ACTIVITY
(LOGSA) ELECTRONIC TECHNICAL MANUALS ONLINE WEBSITE:

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



BATTERY REPLACEMENT MADE EASY!

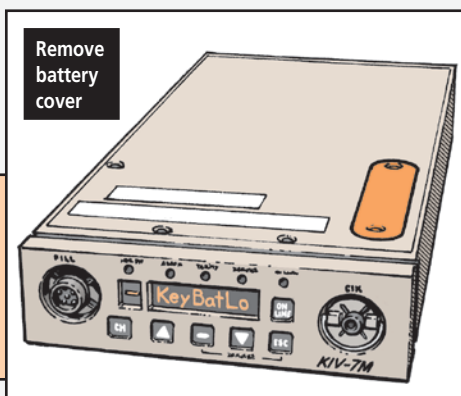


WHEN KeyBatLo POPS UP ON THE DISPLAY PANEL, THE KEY RETENTION BATTERY NEEDS TO BE REPLACED AS SOON AS POSSIBLE.

LEARN HOW TO DO IT ON THE NEXT PAGE!

1. Make sure the KIV-7M is hooked up to AC power. Without AC power, the entire unit will be zeroized and may tamper as soon as the key retention battery is removed. That makes the unit inoperable.

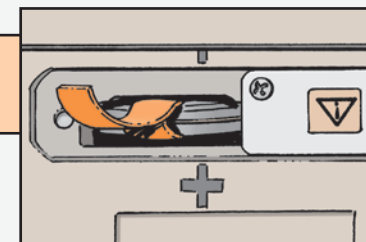
2. Check the battery cover on top of the KIV-7M. It will be held in place with two Phillips head screws. Removing the Phillips head screws is easy. But if the gasket underneath is damaged, replace it with NSN 5970-01-579-8279.



3. With the battery cover removed, note the orientation of the battery. Grasp the small pull-tab and slide the battery from its slot.

4. Check both terminals inside the battery slot. They should be clean and free of corrosion.

5. Remove the new battery, NSN 6135-99-573-7965, from its packaging. If it doesn't already have a pull-tab, attach some non-conductive tape, NSN 8315-01-517-9054, to create one.



6. Slide the new battery into the slot, making sure the positive and negative sides line up with the correct terminals.

7. Reattach the battery cover.

8. Verify that the front panel displays KeyBatGd to reflect a good battery.

9. Wrap the old battery in the new battery's packaging, tape it shut and dispose according to your unit's SOP for lithium batteries.



CERDEC CAN HELP IF YOU HAVE PROBLEMS WITH STRIPPED BATTERY COVER SCREWS OR CORRODED BATTERY TERMINALS.

BATTERY REPLACEMENT INSTRUCTIONS WILL BE INCLUDED IN THE NEXT TM UPDATE.

FOR INSTRUCTIONS ON HOW TO GET A REPLACEMENT UNIT, CONTACT:

KIMOANH (KIM) LE
DSN 648-5717/5887 OR
(443) 395-5717/5887

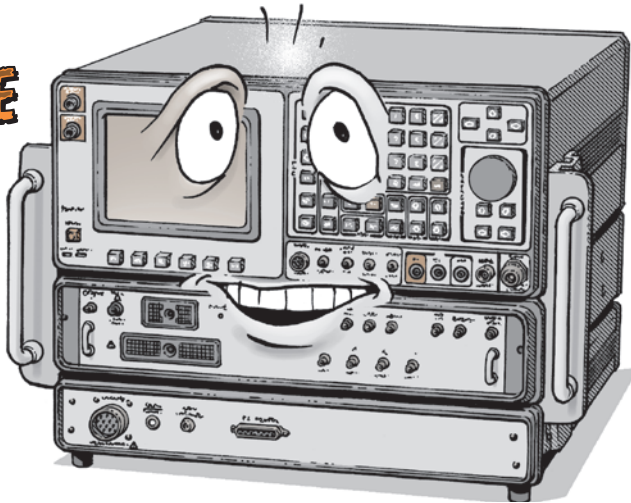
kimoanh.n.le.civ@mail.mil

OR
PATRICK DJONDO
DSN 648-6256 OR
(443) 395-6256

patrick.djondo.civ@mail.mil

PARTS
SHORTAGE
LOOKING
GRIM!

SOME OF
MY PARTS
NEED REPAIR.
SEND 'EM IN
NOW!



THE AN/GRM-122
IS THE MAIN RADIO
TEST SET USED FOR
ALL SINGARS,
AIRBORNE RADIOS AND
AVIATION PLATFORMS.
UNFORTUNATELY, SOME
OF ITS PARTS ARE
HARD TO FIND.

SO A MAJOR REPAIR EFFORT IS
NOW UNDERWAY TO FIX AS MANY
OF THE AN/GRM-122'S AEROFLEX
COMPONENTS AS POSSIBLE.
THE REPAIR CONTRACT RUNS OUT
IN AUG 2016, SO CHECK YOUR
SHOPS NOW FOR ANY OF
THE COMPONENTS LISTED ON
THE CHART!

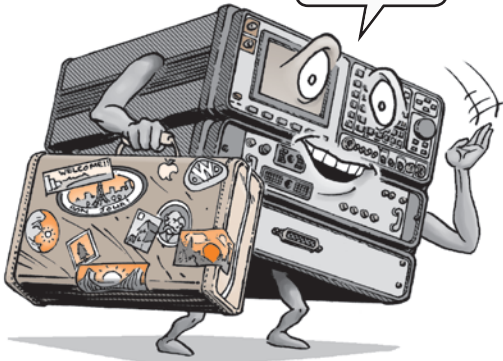
JUST REMEMBER... THIS IS **NOT** A ONE-FOR-ONE SWAP OUT.
YOU **WON'T** RECEIVE A REPLACEMENT FOR YOUR TURN-IN.

MAKE SURE ALL CIRCUIT CARDS
ARE HANDLED PROPERLY
TO PREVENT DAMAGE FROM
ELECTROSTATIC DISCHARGE.

AND PACKAGE THEM
PROPERLY, TOO!

SHIP THE COMPONENTS TO:
W1BG UEF DIST DEPOT TOBYANNA
Gibbs and Fifth Streets
Warehouse 6 Bay 4
Tobyhanna, PA 18466-5059

NEXT STOP,
TOBYHANNA!

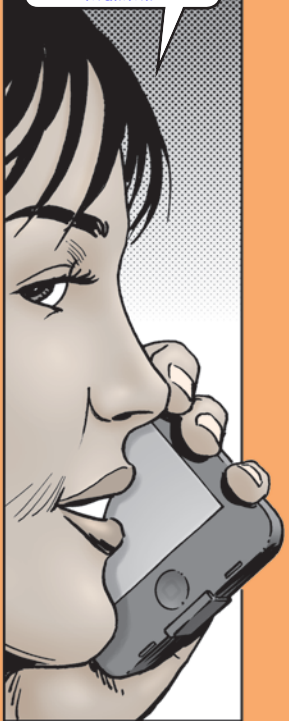


Item	NSN	PN
Circuit card assembly	5998-01-501-0465	7010-2930-600
Tests accessory kit	4920-01-551-6540	AAJ200
Tests accessory kit	4920-01-552-0586	RPM12CK
Tests accessory kit	4920-01-552-0630	RPM2HCK
Power supply	6130-01-573-0829	9001-2902-900
Printed circuit board	5998-01-574-7086	7010-6630-100
Printed circuit board	5998-01-574-8656	7010-6630-400
Electrical plug-in unit	6625-01-558-6903	9001-6602-000
Electrical plug-in unit	6625-01-565-7494	PL-1549/GRM
Cable assembly, special	5995-01-567-7371	6041-6680-100
Cable assembly, special	5995-01-567-7376	6041-6680-200
Cable assembly, special	5995-01-567-7381	6041-6680-300
Cable assembly, special	5995-01-567-7388	6041-6680-400
Cable assembly, special	5995-01-567-7404	6041-2989-000
Cable assembly, special	5995-01-567-7448	6041-2989-100
Cable assembly, special	5995-01-567-7459	6041-2989-200
Cable assembly, special	5995-01-567-7481	6041-2989-300
Cable assembly, special	5995-01-567-7487	6041-2989-400
Cable assembly, special	5995-01-567-7493	6041-2989-500
Cable assembly, special	5995-01-567-7507	6041-2980-100
Cable assembly, special	5995-01-567-7527	6041-2980-200
Cable assembly, special	5995-01-574-5340	6041-6680-101
Tests accessory kit	4920-01-574-8039	7001-2949-600
Tests accessory kit	4920-01-574-9155	7001-6649-800
Test set subassembly	6625-01-432-3819	7010-1530-800
Circuit card assembly	5998-01-435-9240	7010-1530-800
Circuit card assembly	5998-01-435-9243	7010-1531-500
Circuit card assembly	5998-01-435-9244	7010-1530-200
Circuit card assembly	5998-01-435-9245	7011-1542-300
Circuit card assembly	5998-01-490-2919	7010-1531-400
Circuit card assembly	5998-01-533-4944	7011-1549-200
Test adapter	6625-01-432-8368	9001-1502-700
Circuit card assembly	5998-01-532-7760	7011-1549-300
Circuit card assembly	5998-01-575-6790	7010-8330-500
Circuit card assembly	5998-01-436-1888	7010-1530-400
Circuit card assembly	5998-01-490-2919	7010-1531-400

Questions?

FOR SINGARS,
CONTACT
SHELLY COLELLO,
DSN 648-6297,
(443) 395-6297,
OR BY EMAIL:
shelly.a.colello.civ@mail.mil

FOR AVIONICS,
CONTACT
DONNA
STEVENSON,
DSN 648-1305,
(443) 395-1305,
OR BY EMAIL:
donna.a.stevenson.civ@mail.mil



PS SOLDIER SUPPORT

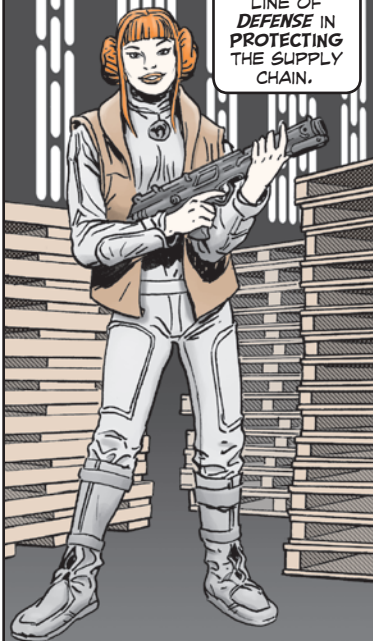
- **Worm Wars:
Episode III
A New Hope -
WPM Compliance**
- **Take Your Pick
from New Pumps!**



Packaging and Shipping...

THE AGE-OLD BATTLE AGAINST WOOD PESTS RAGES ON!

YOU'RE THE FIRST LINE OF **DEFENSE** IN PROTECTING THE SUPPLY CHAIN.



WORM WARS:

Episode III A NEW HOPE

WPM Compliance

We first introduced you to a **MICROSCOPIC ROUNDWORM** called the **PINEWOOD NEMATODE** years ago.

In **PS 645** (Aug 06) and **PS 710** (Jan 12), we ran articles about **PROTECTING** wood packaging materials (**WPM**) from **Pinewood** nematodes.

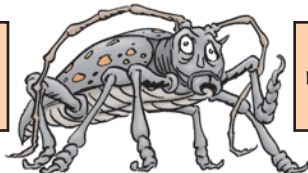
Here's the latest word....

An Expanding Threat

UNFORTUNATELY, THIS LITTLE BUGGER IS **STILL** A THREAT TO WPM. LEFT UNCHECKED, THE **PINEWOOD NEMATODE** CAN **INFEST** AND **KILL** WHOLE **PINE** FORESTS. IF YOU **SHIP** INFESTED **WOOD** PACKAGING, YOU'RE **HELPING** TO **SPREAD** THESE **ROUNDWORMS** **WORLDWIDE**.

THE THREAT **DOESN'T** END WITH THE **PINEWOOD NEMATODE**. THE PROBLEM HAS **MULTIPLIED** WITH THE INTRODUCTION OF **OTHER** DESTRUCTIVE TREE PESTS INTO THE **DOD** SUPPLY CHAIN, LIKE...

...THE **ASIAN** **LONG-HORNED** **BEEBLE...**



...AND THE **EMERALD** **ASH** **BORER**.



WHILE THE SITUATION SEEMS GRIM, THERE'S STILL **HOPE**. IT STARTS WITH **WPM COMPLIANCE**.

PS MORE

WPM Site Program

TO MAKE SURE WPM ARE PEST-FREE, UNITS MUST SET UP A WPM SITE PROGRAM AT THEIR FACILITY.

FOR GUIDANCE, READ DOD 4140.65-M, *ISSUE, USE, AND DISPOSAL OF WOOD PACKAGING MATERIAL (WPM)* (AUG 12). REVIEW IT TO MAKE SURE THAT YOU'RE FOLLOWING INTERNATIONAL AGREEMENTS (ISPM 15) ON SHIPPING PEST-FREE WPM ACROSS BORDERS.

YOU CAN GET THE MANUAL AT THE DOD ISSUANCES WEBSITE:
<http://www.dtic.mil/whs/directives>

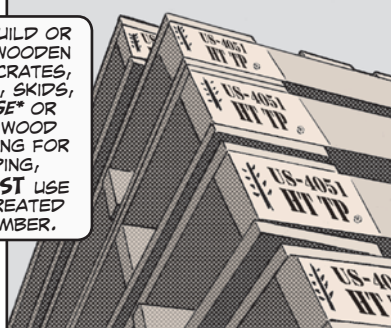
ON THE HOME PAGE, CHOOSE THE PUBS/MANUALS TAB. THE NEXT SCREEN IS A TABLE OF DOD MANUALS. SCROLL DOWN TO FIND DOD 4140.65-M.

DOD 4140.65-M IS THE GUIDELINE FOR OUR WPM SITE PROGRAM.



Heat-treated Lumber

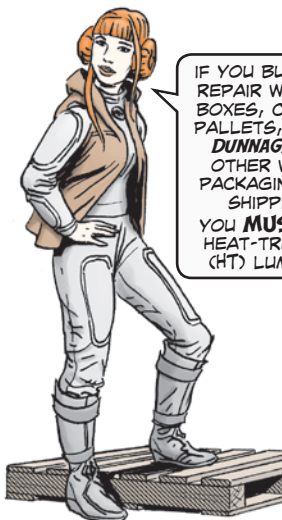
IF YOU BUILD OR REPAIR WOODEN BOXES, CRATES, PALLETS, SKIDS, **DUNNAGE*** OR OTHER WOOD PACKAGING FOR SHIPPING, YOU **MUST** USE HEAT-TREATED (HT) LUMBER.



HEATING LUMBER **KILLS** ANY PESTS LURKING IN THE WOOD. AUTHORITIES AT DOMESTIC AND FOREIGN PORTS AND AIR TERMINALS CAN AND WILL REFUSE TO FORWARD SHIPMENTS IF THE WPM IS NOT HEAT-TREATED OR IF IT LACKS CERTIFICATION MARKINGS.

*DUNNAGE, WHAT IS DUNNAGE?

DUNNAGE IS MATERIAL USED TO **SECURE OR SUPPORT** THE CARGO BEING SHIPPED. EXAMPLES OF WPM USED AS DUNNAGE ARE BRACERS, SLEEPERS, SPACERS, CROSS MEMBERS, HEADERS/FOOTERS, AND KICKERS.

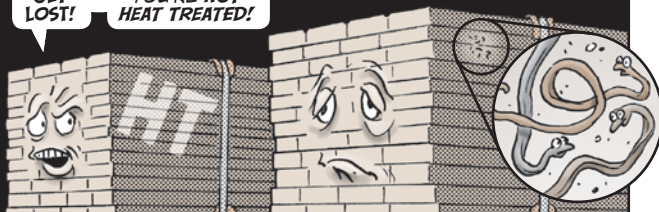


IF YOU SHOP FOR LUMBER LOCALLY, MAKE SURE IT'S MARKED HT.

IF IT ISN'T, DON'T BUY IT.

GET LOST!

YOU'RE **NOT** HEAT TREATED!



TO QUALIFY AS HT, A LUMBER MILL MUST HEAT THE WOOD TO A MINIMUM TEMPERATURE OF 133°F FOR 30 CONTINUOUS MINUTES. THE MILL THEN STAMPS THE LUMBER WITH "HT," WHICH TELLS YOU THE LUMBER IS APPROVED FOR BUILDING WPM AND, IF YOU'RE A CERTIFIED WPM SITE, YOU'LL ALSO APPLY THE ISPM 15 CERTIFICATION MARK.

YOU CAN ALSO ORDER LUMBER AND WOOD PRODUCTS FROM THE DEFENSE LOGISTICS AGENCY (DLA). GO TO THE WOOD PRODUCTS PAGE ON THE DLA TROOP SUPPORT CONSTRUCTION AND EQUIPMENT WEBSITE:

<https://www.troopsupport.dla.mil/CE/WoodProducts/Wood.asp>



YOU CAN BUY HEAT-TREATED (HT) LUMBER AT YOUR LOCAL LUMBER YARD...



...OR YOU CAN ORDER IT THROUGH THE DEFENSE LOGISTICS AGENCY (DLA).

CLICK ON THE **DLA TROOP SUPPORT WOOD PRODUCTS CATALOG** LINK AT THE BOTTOM OF THE PAGE. THE CATALOG INCLUDES A LIST OF **MIL-SPECS, NSNs, TYPES OF WOOD** AND SUGGESTIONS FOR USE. IF YOU ORDER WOOD FROM DLA, LOOK FOR THE HT MARK WHEN IT ARRIVES.

Certification

GET FAMILIAR WITH THE NAVY-RUN DOD WOOD PACKAGING MATERIALS WEBSITE:

<https://tarp.navsisa.navy.mil/wpm>

THE WEBSITE OFFERS TRAINING, RESOURCES AND LINKS. IT **ALSO** HAS A MANAGEMENT TOOL FOR REQUIRED RECORD KEEPING, AUDITING AND INSPECTION.

IF YOU WORK WITH WPM, YOU'RE **REQUIRED** TO TAKE WPM CERTIFICATION TRAINING OFFERED ON THE WEBSITE. YOU MUST RETAKE THE TRAINING EVERY TWO YEARS TO STAY CURRENT WITH POLICY AND PROCEDURES.

WHEN YOU COMPLETE THE TRAINING, YOU MUST SELECT A "WPM RESPONSIBILITY" OR ROLE.

SITE WORKER:

A FRONT-LINE WORKER IN THE PACKAGING, WPM FABRICATION OR SHIPPING AREA WHO APPLIES THE APPROPRIATE CERTIFICATION MARK. SITE WORKERS ARE REQUIRED TO MAINTAIN DAILY HARD-COPY RECORDS. ASK YOUR SHOP LEADER OR WPM SITE CUSTODIAN FOR A MARKING LOG OR A CUT AND FABRICATION WORK ORDER FORM. IF YOU TAKE THE WPM TRAINING FOR GENERAL KNOWLEDGE, YOU SHOULD ALSO SELECT "SITE WORKER."

SITE CUSTODIAN:

RESPONSIBLE FOR SUBMITTING MONTHLY USAGE REPORTS, SECURING CERTIFICATION STAMPS, AND RETAINING WPM DOCUMENTS AND TRAINING RECORDS.

SITE AUDITOR:

RESPONSIBLE FOR CONDUCTING THE ANNUAL WPM SITE AUDIT.

HERE ARE THE THREE CHOICES:

Certification Mark

YOU CAN STAMP, STENCIL OR BRAND THE CERTIFICATION MARK ONTO THE WOOD.

IN APRIL 2009, THE ISPM 15 WAS REVISED, CHANGING THE CERTIFICATION MARK FORMAT. IF YOU **DON'T** HAVE ISPM 15 STAMPS IN THE NEW FORMAT, CONTACT THE USAMC LOGISTICS SUPPORT ACTIVITY (LOGSA) PACKAGING, STORAGE AND CONTAINERIZATION CENTER (PSCC) TO ORDER NEW STAMPS (SEE THE PSCC POC INFO AT THE END OF THIS ARTICLE). IN THE MEANTIME, CONTINUE TO USE YOUR CURRENT STAMPS UNTIL THE NEW ONES ARRIVE.

Final Reminder

BE SURE TO **SECURE** WPM STAMPS, STENCILS AND BRANDS **BEFORE YOU LEAVE** YOUR WORK AREA. YOU DON'T WANT TO **LOSE** THEM.



COUNTERFEITERS WOULD LOVE TO USE YOUR CERTIFICATION CREDENTIALS TO PASS OFF NON-COMPLIANT WPM AS COMPLIANT.

WPM Help

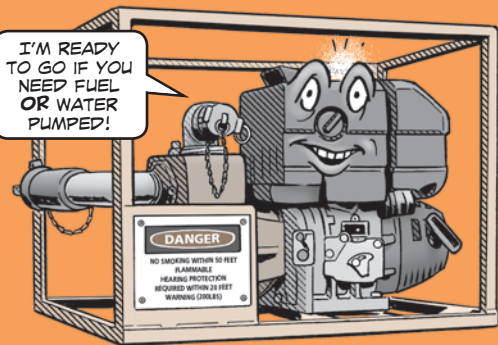


QUESTIONS? CONTACT THE USAMC LOGSA PSCC AT DSN 795-9165, (570) 615-9165, OR EMAIL: usarmy.tyad.usamc.mbx.wpm@mail.mil



Fuel and Water Pumps...

**TAKE
YOUR PICK
FROM NEW
PUMPS!**



NEED A NEW PUMP FOR FUEL OR WATER DELIVERY? **YOU'RE IN LUCK!**

SOME **NEW SMALL PUMPS** ARE NOW AVAILABLE TO HELP WITH DISTRIBUTION AND PUMPING OPERATIONS. USE THESE NSNs TO ORDER:

Pump	NSN 4320-	TM
50-GPM fuel	01-483-1058	10-4320-403-13&P
100-GPM fuel	01-483-1067	10-4320-403-13&P
65-GPM water	01-507-0595	10-4320-404-13&P
125-GPM water	01-507-0598	10-4320-404-13&P

- Twist-Locks Required to Keep Things Secure
- Get a Unit-Tailored Publications List



TWIST-LOCKS REQUIRED TO KEEP THINGS SECURE

WISH US LUCK, YOU GUYS! WE'RE GOING AWAY ON A LONG TRIP!

NOT WITHOUT US, YOU AREN'T!

YEAH! WE'RE REQUIRED TO CONNECT ISO CONTAINERS TO MEET THE INTERNATIONAL CONVENTION FOR SAFE CONTAINERS!

WHAT IF I'M MISSING CONNECTORS? WHERE CAN I GET MORE?

THE ARMY'S CENTRAL CONTAINER COLLECTION POINTS, SUCH AS INSTALLATION TRANSPORTATION OFFICES, LOGISTICS READINESS CENTERS OR CONTAINER CONTROL POINTS FOR REDISTRIBUTION, **MAINTAIN AND DISPERSE** EXCESS CONNECTORS TO FILL SHORTAGES.

FOR MORE INFORMATION ON ISO CONTAINERS, CONTACT THE ARMY INTERMODAL AND DISTRIBUTION PLATFORM MANAGEMENT OFFICE (AIDPMO) AT DSN 770-4486, (618) 220-4486, OR EMAIL: usarmy.scott.sddc.mbx.g3-aidpmo-maintenance@mail.mil

FOR MORE CONTAINER GUIDANCE, INCLUDING POLICY AND REGULATIONS, SEE AR 56-4, DISTRIBUTION OF MATERIEL AND DISTRIBUTION PLATFORM MANAGEMENT (SEP 14), AT: http://www.apd.army.mil/pdf/files/r56_4.pdf AND DEFENSE TRANSPORTATION REGULATION PART VI, MANAGEMENT AND CONTROL OF INTERMODAL, AT: <http://www.ustranscom.mil/dtr/dtrp6.cfm>

GOT TWIST-LOCKS? ISO-CERTIFIED HORIZONTAL TWIST-LOCK COUPLING CONNECTORS, NSN 3040-01-387-4048, ARE USED TO SECURE ISO-CONFIGURED BICONS, QUADCONS, TRICONS AND BOH-TYPE CONTAINERS TOGETHER FOR STACKING (STORAGE) AND TRANSPORTATION.

HERE'S AN IMPORTANT RULE TO NOTE!

QUADCONS, TRICONS AND BOH-TYPE CONTAINERS MUST HAVE A QUANTITY OF THREE (3) AND BICONS MUST HAVE A QUANTITY OF TWO (2) HORIZONTAL TWIST-LOCK COUPLING CONNECTORS.

WHEN NOT USED FOR SHIPMENT OR STORAGE, THE CONNECTORS SHOULD BE STORED ON THE RACK INSIDE THE CONTAINER DOOR OR PLACED ON THE FLOOR IF NO STORAGE RACK IS AVAILABLE.

CONNECTED BICONS, QUADCONS, TRICONS AND BOH-TYPE CONTAINERS HAVE THE SAME FOOTPRINT AS A TWENTY-FOOT EQUIVALENT UNIT (TEU)—A 20-FT ISO CONTAINER.

SOON...

HERE WE GO!

NEXT STOP: ADVENTURE!

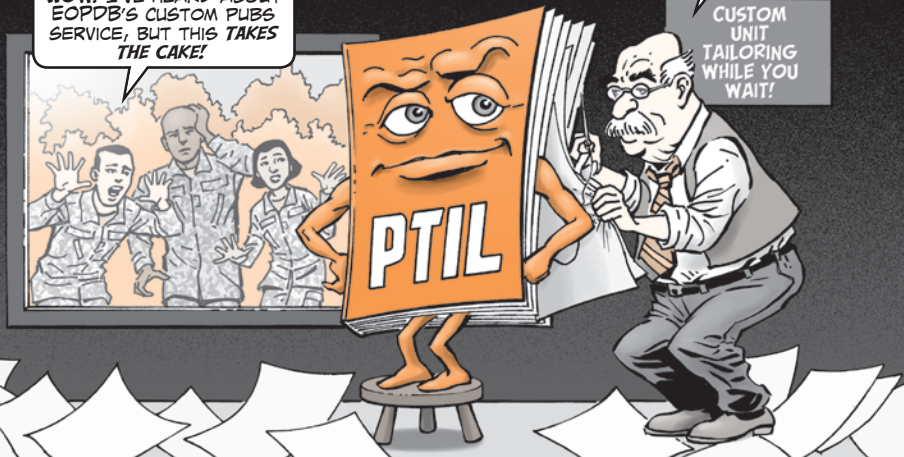
BON VOYAGE!

Get a Unit-Tailored Publications List

WOW! I'VE HEARD ABOUT EOPDB'S CUSTOM PUBS SERVICE, BUT THIS TAKES THE CAKE!

YOU'RE GOING TO LOOK LIKE A MILLION BUCKS!

CUSTOM UNIT TAILORING WHILE YOU WAIT!



We know it can be tough to figure out if your unit has all the publications on hand that it needs to maintain its equipment.

The Logistics Support Activity (LOGSA) Equipment Oriented Publications Database (EOPDB) team can help. They can send you a custom list of the pubs needed to support your unit's specific equipment.

A customized pubs list is especially useful to units getting ready to deploy, returning from deployment or changing command.

To get a unit-specific Publications Tailored Index Listing (PTIL), email your request to: usarmy.redstone.logsa.mbx.eopdb@mail.mil

Include the following info:

- Your unit's six-character Unit Identification Code (UIC)
- Your unit's maintenance levels (10/20, 10/30, etc.)
- Your name, rank/grade, military address, email address and phone number.

Note that LOGSA's EOPDB team can tell you what your unit needs, but they can't order the pubs for you. Your unit's pub clerk must order pubs through the Army Publishing Directorate (APD) at: <http://www.apd.army.mil/>

Or you can find current DA-authenticated equipment manuals, including Interactive Electronic Technical Manuals (IETMs), on LOGSA's Electronic Technical Manuals Online website at: <https://www.logsa.army.mil/etms/>

Questions? Contact the EOPDB team at DSN 897-6115, (256) 313-6115 or DSN 645-8586, (256) 955-8586 or at the email address above.



Connie's POST SCRIPTS



924H Wheel Loader Camera Cable NSN

Get a 124-in long camera cable for your 924H wheel loader with NSN 6150-01-593-5507. NSN 6150-01-596-3828, which is shown as Item 3 in Fig 51 of TM 5-3805-298-24P (Mar 13), is too short.

New CBRN-IRC Email

The CBRN-Information Resource Center (IRC) has a new Enterprise email address. For info on CBRN shelf life, protection levels, storage/shipment requirements or advisories, email:

cbn.irc@mail.mil

Or call (800) 831-4408, DSN 793-7349, or (309) 782-7349.

WATER PURIFICATION TABLETS?

Get a 50 count bottle of 8mg water purification tablets with NSN 6850-01-618-1533. It replaces NSN 6850-00-985-7166, which is now a terminal item.

M915A5 VORAD Sensor

You can no longer get the M915A5 tractor truck's vehicle on-board radar (VORAD) sensor and bracket, NSN 5340-01-576-5334, as a single item. Instead, you'll need to order the sensor, NSN 2590-01-651-2836, and bracket, NSN 5340-01-650-9921, separately. Make a note until Item 13 in Fig 279 of TM 9-2320-426-13&P in IETM EM 0308 (Aug 14) is updated.

BHL Cylinder Hoses Reversed

The NSNs and part numbers for two of the backhoe loader's (BHL) front bucket cylinder hoses were accidentally reversed in TM 5-2420-231-24P (Jun 13). Use NSN 4720-01-549-0815 (PN 183660A1) when ordering Item 2 in Fig 94 and NSN 4720-01-549-2548 (PN 183658A1) to get Item 4. Make a note until the TM is updated.

HARD TARGETS OFFERED FOR RANGES

Military ranges often construct soft targets of plywood or scrap steel to train personnel on artillery and weapon systems. DOD's Range Program offers surplus vehicles for hard targets, making training more realistic and viable. To find out how to get excess vehicles for your range, email DLA Disposition Services' reutilization office at: steven.carter@dla.mil or DRMSRTD@dla.mil

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

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

**Best place
to find PS?**



**In the Motor Pool...
right next to an open TM!**