

FMTV A1P2...

Protective Cap PROTECTS Hydraulic Fluid!

WHEN IT'S RAINING
OUTSIDE, MY ELECTRIC
HYDRAULIC POWER UNIT
(EHPU) NEEDS PROTECTION
FROM THE WATER!



FMTV A1P2 trucks were fielded without the protective (or breather) cap, NSN 5340-01-590-0054, installed on the EPHU. As a result, the EPHU fluid is getting contaminated with water. That can lead to failing cab lift hydraulic components.

But there's an easy fix to prevent future contamination and the trouble it brings. Make sure your truck's EPHU breather is covered with its cap.

Breather cap



Breather
without cap
installed



M1117 ASV...

MAN, IT'S R-REALY C-C-COLD OUT H-HERE TUH-TODAY!

YOU S-SAID IT!

THE W-WATER IN M-M-MY H-HULL IS FROZEN S-SOLID!

DON'T FORGET DRAIN PLUGS

Crewman, it's a known fact that water collects in the hull of your armored security vehicle (ASV).

That's because water drips off wet boots and uniforms, trickles in from the top of the vehicle, comes in from the wash rack, or seeps in through loose drain plugs during fording.

Water's Three Problems

Solid: If you're in a cold-weather region like Alaska or areas of Afghanistan, the water in the hull and under the floor plates will freeze. And because water expands as it freezes, lines and fittings are ruptured, causing all kinds of damage.

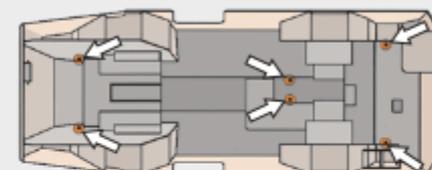
Liquid: Water under the floor plates will rust the vehicle's air brake valves and just about anything else made of metal.

Gas: As temperatures go up, the water evaporates and condenses on radios and other electronic gear. Enough moisture can short out electronic equipment.

Here's the Fix

Open the hull's drain plugs on the bottom of your ASV. There are six of 'em, so make sure you open 'em all or you'll leave water behind.

There are six hull drain plugs



Bottom view

You'll find a plug in all four wheel wells (behind the wheel assembly) of the vehicle. The last two plugs are directly under the vehicle, near the back half of the middle area. You'll see the locator views of the plugs shown in WP 0048-2 of TM 9-2320-307-10 (Sep 10).

By the way, make sure any water drained from the hull goes into a drip pan and is disposed of according to your unit's SOP. That's because any fluid leaks, like coolant, oil and power steering fluid, can end up in the vehicle's hull, too. So never dump contaminated water down a drain or let it run onto the ground.

Also, you don't want water to get back in through the drain plug openings. Make sure you reinstall 'em before operation—and do it right. Plugs that are too loose will vibrate free. And plugs that are too tight are hard to open and more likely to be left closed when draining is needed.

So apply a little anti-seize compound, NSN 8030-01-087-8254, to the threads before installing the plugs. That lets you tighten the plugs enough to keep them from vibrating loose, but makes them easier to open next time.

Just make sure you put the compound on each plug's threads and the threaded portion of the hull. That way, all the threads are coated and the plugs won't stick.

M1152/A1 HMMWV...

SEEKING WINDSHIELD WASHER NOZZLE BRACKET

PSST!
HEY, BUDDY!
Y'WANNA BUY
A WATCH?

I'M
GOOD.

ASK HIM IF HE HAS A
WINDSHIELD WASHER
NOZZLE BRACKET!



Dear Half-Mast,

I'm trying to find the NSN for the windshield washer nozzle bracket for an M1152 HMMWV. The nozzle is shown as Item 23 of Fig 228 in TM 9-2320-387-24P. But the bracket that attaches the nozzle to the windshield deflector isn't there. Can you point me in the right direction?

SGT C.G.

Dear Sergeant C.G.,

Yes, we can. On M1152s with no armor, use NSN 5340-01-596-4594 to get the new-style nozzle bracket. On M1152A1s with B kit armor, NSN 5340-01-596-4595 brings the new-style nozzle bracket. The correct bracket for M1152A1s with underbody armor and no B kit armor comes with NSN 5340-01-596-4592. And if you need the new-style spray nozzle for any of these vehicles, get it with NSN 2540-01-596-1571.

Half-Mast

PS 724

7

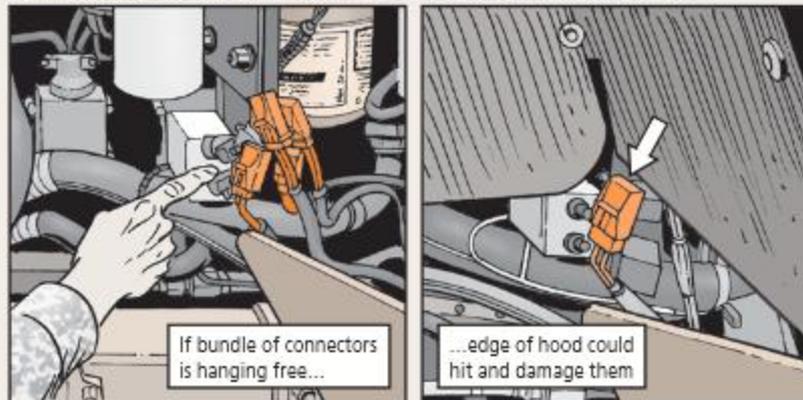
MAR 13

A Little Hood PM Needed



An extra set of hands are what's needed to raise or lower the hood on your M-ATV. That extra help prevents the stress cracks caused by flexing and keeps the hood from slamming shut.

Having a buddy on the other side also allows you to guide the hood past the bundle of electrical connectors on the driver's side. Otherwise, the hood might damage one or more connectors. A damaged connector for the vehicle's washer fluid reservoir, for example, means you can't wash a dirty window. That's a real bummer!



As an added precaution, use a tie strap, NSN 5975-00-156-3253, to secure the connectors together to the cold start bracket and power steering line. That'll keep all of the connectors out of harm's way.

MRAP M-ATV...

Battery Cable Pinch

SNIFF-SNIFF...
MMMMM!
SOMETHING'S
COOKING.

I LOVE
A GOOD
BARBEGUE!



HEY!
WAIT A MINNIT!!
THAT'S ME
COOKING!!



Where there's smoke... there may be fire! Keep that in mind with the M-ATV's battery power cables.

Before the smoke and fire hit your M-ATV, you need to get down on your hands and knees and inspect the vehicle's battery cables, especially behind the transfer case area and hull.

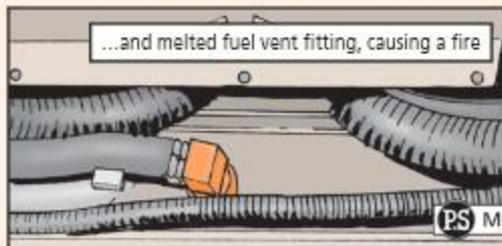
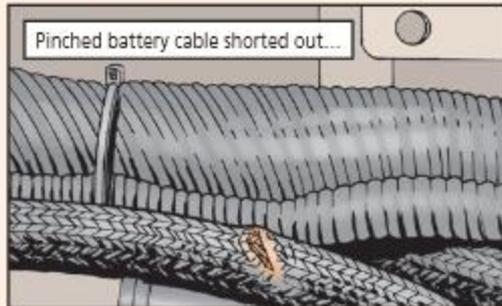
Here's what to look for:

Transfer Case Area

One recent fire came from a battery cable and hose clamp that were pinched against a steel plate in the transfer case area, causing an electrical short.

The short melted a steel vent elbow, which released and ignited fuel vapors, causing a fire beyond the reach of the vehicle's fire suppression system (FSS).

That particular fire melted the engine's fuel return line and damaged all the air, fuel and electrical lines in the transfer case area forward of the fuel tank. The fire had to be put out with a hand-held fire extinguisher.



PS MORE

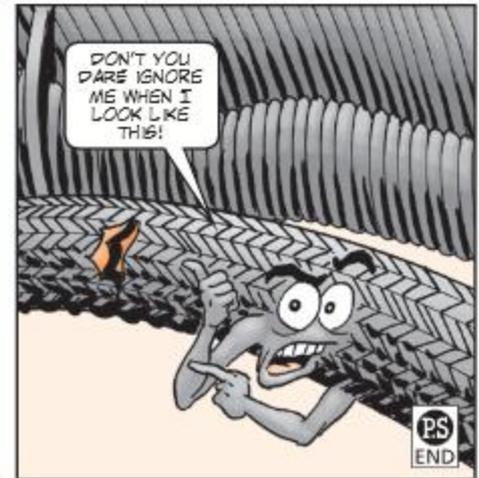
Behind the Hull

In another case, a battery cable behind the hull shorted against the Roxtec armor cover. This fire occurred behind the hull, directly above the front of the fuel tank!

Plain and simple—a damaged or chafed battery power cable renders the M-ATV NMC.

The headshed is working on a solution to stop these fires with added wire insulation or re-routing. But until they do, tell your mechanic about any chafing or damaged cables **PRONTO!**

DON'T YOU
DARE IGNORE
ME WHEN I
LOOK LIKE
THIS!



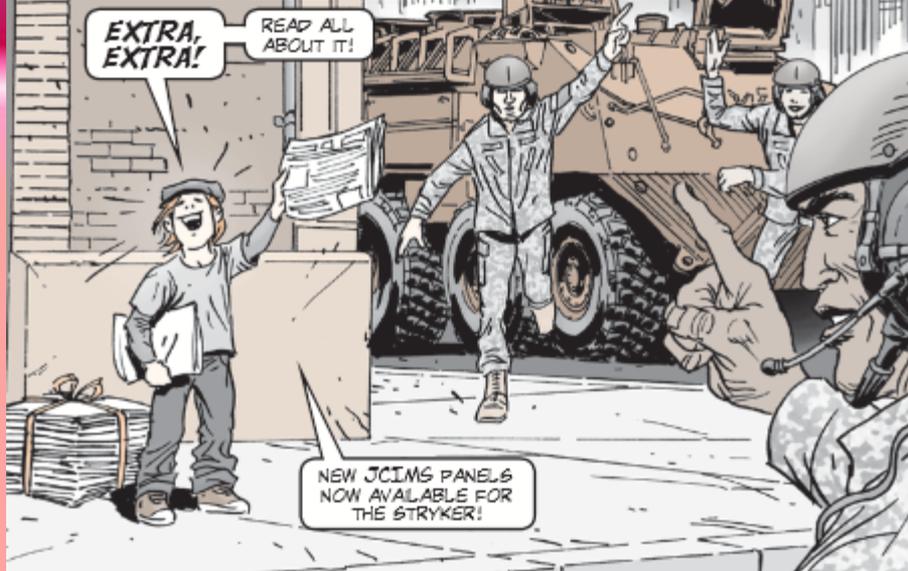
PS
END

Stryker...

JCIMS Panels Added

EXTRA,
EXTRA!

READ ALL
ABOUT IT!



NEW JCIMS PANELS
NOW AVAILABLE FOR
THE STRYKER!

GOOD NEWS, CREWMEN!
THE JCIMS STRYKER
COMMON #1 AND #2
HAVE NEWLY ASSIGNED
COMBAT IDENTIFICATION
PANEL (CIP) NSNs.

HERE'S WHAT'S AVAILABLE...

Stryker Common #1

Item	NSN 2320-	Details
Front panel	01-609-3872	Fits on the front of the vehicle
Side panel	01-609-3876	Fits on both the left and right side of the vehicle

Stryker Common #2

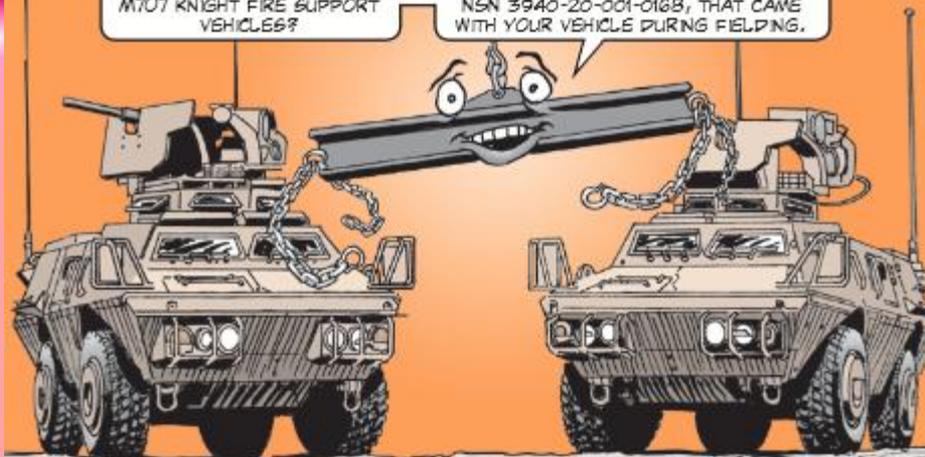
Item	NSN 2320-	Details
Front panel	01-609-3872	Fits on the front of the vehicle
Side panel (toolbox)	01-609-3882	Contains two panels. The first panel fits on the top half of the toolbox on the right side of the vehicle. The second panel fits on the bottom half of the toolbox. (NOTE: It is very important that both panels be mounted as close as possible to the center-mounted hinge so that they are viewed as one panel through a thermal optic instead of two.)
Side panel (escape hatch)	01-609-3878	Contains one panel that mounts on the crew escape/ingress/egress hatch on the left side of the vehicle

M1200 Armored Knight FSV, M707 Knight FSV...

RETURN SPREADER BAR FOR MOD

DOES YOUR UNIT HAVE ANY M1200 ARMORED KNIGHT OR M707 KNIGHT FIRE SUPPORT VEHICLES?

THEN YOU NEED TO LOCATE AND TURN IN *ME*, THE SPREADER BAR ASSEMBLY, NSN 3940-20-004-0168, THAT CAME WITH YOUR VEHICLE DURING FIELDING.



THE SPREADER BARS NEED TO GO BACK TO THE MANUFACTURER FOR A SAFETY MODIFICATION.

SHIP THE OLD ASSEMBLY, FREE OF CHARGE, TO...

DRS Sustainment Systems, Inc.
McDaniel & Stevens
ATTN: Chantele Adams
Bldg 6
West Plains, MO 65775
(417) 257-6216

WHILE YOU'RE AT IT, SEND AN EMAIL TO THE TACOM TECH ASSIST TEAM AT:
tacom-lcmc.ilsc_techassistance@mail.mil

INCLUDE YOUR UNIT ID AND A POC.

THAT WILL HELP PM HBCT KEEP AN UPDATED LIST OF ALL SPREADER BAR ASSEMBLIES THAT HAVE BEEN MODIFIED.

THEY CAN ALSO HELP WITH ANY SHIPPING QUESTIONS.



ONCE MODIFIED, THE SPREADER BAR ASSEMBLY BECOMES A SPECIAL TOOL WITH A NEW NSN OF 3940-20-006-8523.



Night
Vision
Sights...

DARN! YOUR
DATA PLATE HAS
DISAPPEARED!

I WONDER WHO
CAN GET ME A
REPLACEMENT?

CECOM!

HOW TO REPLACE DATA PLATES

Dear Half-Mast,

We have a constant problem with the data plate labels disappearing from night vision weapon sights like the AN/PVS-4 or -4A or the AN/TVS-5 or -5A. Some units are etching the information onto the sights, which isn't a good idea. Is there any way to get replacement labels?

T.H.

Dear Mr. T.H.,

Yes, there is. Contact CECOM's Lauren Scicchitano at DSN 648-1404, (443) 395-1404, or email: lauren.n.scicchitano.civ@mail.mil

Provide her the sight's NSN, how many labels are needed, whether the label is for the sight itself or the sight case, and a valid shipping address. Normally, you will receive the labels within a few days.

Units definitely should not etch numbers on sights. That could damage them or lead to corrosion.

Half-Mast

AN/PAS-13
Thermal
Weapon
Sight...

LITHIUM ONLY, PLEASE!

Sometimes it doesn't pay to try save a few bucks. A case in point is substituting standard alkaline batteries for L91 lithium AA batteries in the AN/PAS-13C, -13D and -13E thermal weapon sights.

The L91 AA batteries last up to 10 times longer than alkaline batteries, which means fewer battery changes during operations and less weight to lug around in your pack. Although alkaline batteries cost less per battery, they are more expensive, considering how many you need to complete a mission. So trying to save money by using cheaper batteries actually costs you money.

Order L91s with NSN 6135-01-333-6101 and use them.

Many thermal weapon sights and night vision goggles are designed to be powered by 1.5V AA batteries. If you use batteries with a higher voltage in these devices, they will be damaged. Use only the batteries specified by the equipment's -10 TM.



Some units have tried using other vehicles. The result was broken MSK guide rails and upper guide plates. They make the MSK NMC, plus they're expensive to fix. So tow with the HMMWV only.

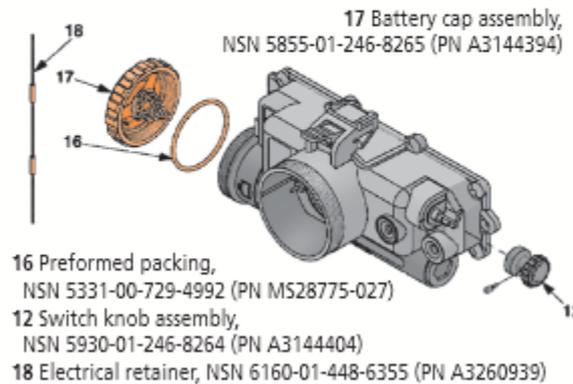
If you have any questions about the MSK, contact TACOM's Erik Jensen at DSN 786-1220, (586) 282-1220, or email: erik.s.jensen4.civ@mail.mil

AN/PVS-7 Night Vision Goggles...

Wired Housing Assembly Brings ALL Parts

If you order the wired housing assembly, NSN 5855-01-381-6048 (PN A3207330), for the AN/PVS-7B and -7D night vision goggles, you don't need to order its components.

The wired housing assembly, which is shown as Fig C-2 in TM 11-5855-262-23&P-2, includes:



CAUTION SIGNS FOR ALL OCCASIONS

SAFETY HAZARDS LURK IN EVERY CORNER OF MOTOR POOLS AND MACHINE SHOPS.



BUT A FEW WELL-PLACED CAUTION SIGNS CAN ALERT SOLDIERS TO DANGER AND PROMOTE A SAFER WORKPLACE.

CAUTION
HAZARDOUS
MATERIAL
STORAGE AREA



THE SIGNS ON THE NEXT PAGES ARE BLACK AND YELLOW. EXCEPT FOR THE FIRE EXTINGUISHER SIGN, WHICH IS RED AND WHITE.

FLIP THE PAGE TO FIND OUT MORE...



PS MORE

CAUTIONHEARING
PROTECTION
REQUIRED**CAUTION**HEARING
PROTECTION
REQUIRED
IN THIS AREA**CAUTION**EYE
PROTECTION
REQUIRED**CAUTION**DO NOT
OPERATE
WITHOUT EYE
PROTECTION**CAUTION**WATCH
YOUR
STEPTHESE SIGNS
ARE 10 X 14
INCHES...

Legend	NSN 9905-
CAUTION Hearing Protection Required	01-100-8205
CAUTION Hearing Protection Required In This Area	01-031-1247
CAUTION Eye Protection Required	01-100-8203
CAUTION Do Not Operate Without Eye Protection	01-100-8204
CAUTION Watch Your Step	01-054-0450*

CAUTION**HAZARDOUS
MATERIAL
STORAGE AREA**These
are
7 x 10-in
signs**CAUTION****HAZARDOUS/TOXIC
CHEMICALS ARE USED IN
THIS PLACE. MATERIAL
SAFETY DATA SHEETS
ARE AVAILABLE IN THE
SUPERVISOR'S OFFICE****CAUTION****RESPIRATOR
REQUIRED IN
THIS AREA**

*These NSNs are not on the AMDF.

Order them on DD Forms 1348-6 and put "NSN not on AMDF" in the REMARKS block.

CAUTION**DO NOT OPERATE
MACHINERY
WITHOUT GUARDS****CAUTION****OPEN DOOR
SLOWLY****CAUTION****HAZARDOUS
MATERIAL
STORAGE AREA****CAUTION****WEAR GOGGLES
WHEN USING
THIS MACHINE**THESE ARE
3 X 5-IN
SIGNS.

Legend	NSN 9905-
CAUTION Do Not Operate Machinery Without Guards	01-342-4854*
CAUTION Open Door Slowly	01-342-4852*
CAUTION Hazardous Material Storage Area	01-342-4859*
CAUTION Wear Goggles When Using This Machine	01-342-4855*

*These NSNs are not on the AMDF. Order them on DD Forms 1348-6 and put "NSN not on AMDF" in the REMARKS block.

LegendCAUTION
Eye Protection Required
In This Area**Size in inches**

7 x 17

NSN 9905-

01-210-5241

Fire Extinguisher

10 x 14

01-195-7682

CAUTION**EYE PROTECTION
REQUIRED
IN THIS AREA**Here are
two more
signs that
contribute
to safety:

If you have noisy gear, slap this black and yellow caution plate on it: CAUTION High Intensity Noise Hearing Protection Required. Get it with NSN 9905-00-198-2728. The plate is 4.6 x 2.13 inches and comes with an adhesive backing.

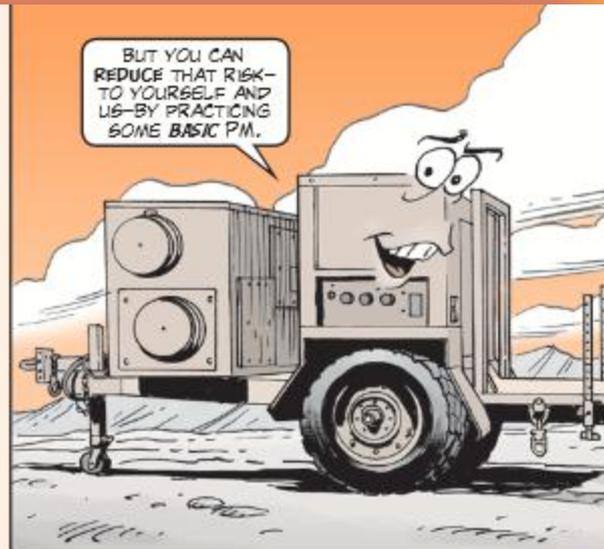
For more information on using signs and symbols in dangerous areas, see OSHA Regulation 29 CFR 1910, Subpart J. You'll find it at the OSHA website at:

<http://www.osha.gov/>

Mobile Power Equipment...

STAY SAFE AROUND ELECTRICITY!

ELECTRICAL CURRENT CAN BE DANGEROUS, EVEN LIFE THREATENING!



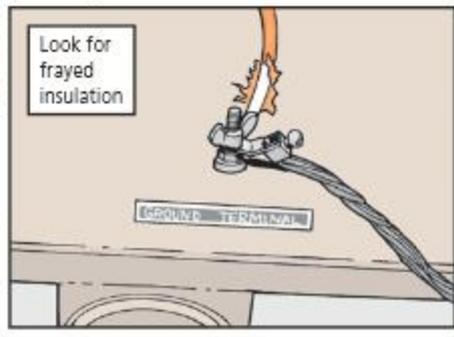
HERE ARE SOME PM TIPS FROM THE PROGRAM MANAGER'S OFFICE FOR MOBILE ELECTRIC POWER.

READ AND APPLY THEM. THEY WILL SAVE LIVES.

1. Inspect wiring regularly.

Look for frayed insulation and insulation worn down to the bare wires. It may not be your job to fix a wiring problem, but it is your job to report it.

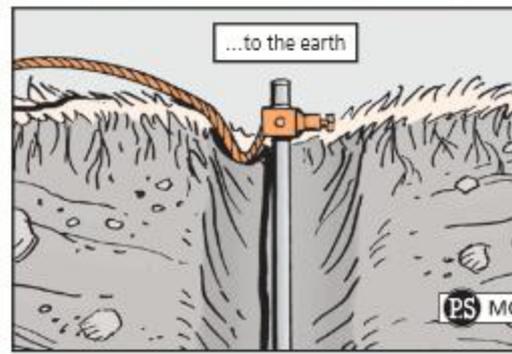
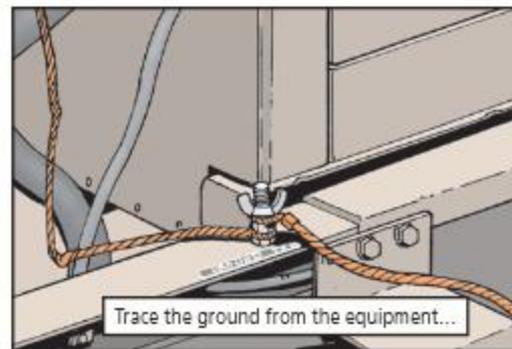
Look for frayed insulation



2. Check for grounds.

Every ground has two ends. At one end, the grounding wire is attached to a piece of equipment or a shelter. At the other end, the grounding wire is attached to a ground rod firmly planted in the earth.

The grounding wire should not be frayed or spliced. Make sure good compression connections, such as a lug-and-bolt, are used to attach the grounding wire to the equipment and the ground rod. Clips won't do the job. Never operate generators or equipment when the grounding electrode conductor is disconnected or you are working on it. If you do, stray voltage could hurt you or your equipment.



PS MORE

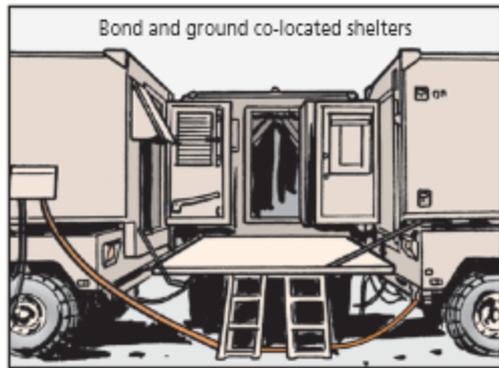
3. Equipment grounding conductors (EGCs) or bonding wires are just as important as earth grounds.

Check them also. They are there for your protection. EGCs are usually the green wire in the cable bundle that connects to the generator. Check to make sure EGCs or bonding wires are in place. Make sure they are not broken. Check connections to make sure they are tight.

Equipment specialists need to ensure that a low-impedance path to clear the mobile power equipment circuit breakers is in place and intact. Use your TM to check for a damaged EGC and the steps to take if you find one.

4. Co-located shelters need to be both grounded and bonded.

Bonding is when you electrically connect two shelters to keep them at the same voltage. A voltage difference between two shelters can lead to shocks and even electrocution. The best place for this bond is at the ground connections of the co-located equipment and shelters.

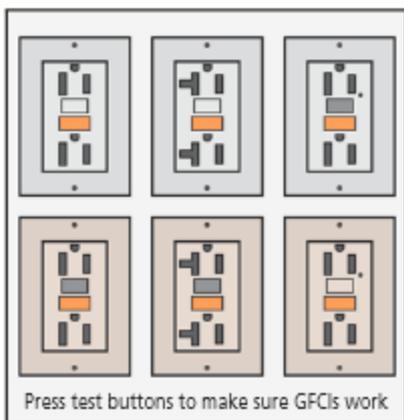


5. Check all ground fault circuit interrupters (GFCIs) and circuit breakers monthly.

They are for your protection. But if they are not maintained, they will not work. And if they don't work, they won't protect anyone.

Check the GFCIs and circuit breakers to make sure they haven't tripped. If they have tripped, the switch or lever will not be fully seated. GFCIs usually have a separate indicator that pops out when tripped. It's also a good idea to turn breakers off and back on to make sure the switches move.

Circuit breakers should never be used as a switch, unless they're designed to be one like on most generators and CE shelters. If a circuit breaker repeatedly trips, there is a reason. There is either an overcurrent, a short to ground or an equipment malfunction. All are dangerous conditions.



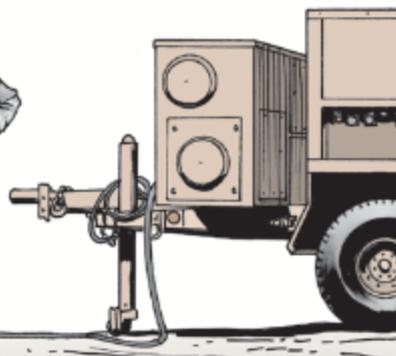
ONE OTHER TIP:
OPENING A GROUND
CIRCUIT DOES NOT
CURE A CIRCUIT
BREAKER TRIPPING
PROBLEM.



IT JUST CREATES
ANOTHER PROBLEM
...A HAZARDOUS ONE.

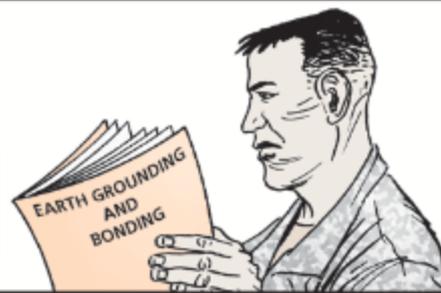
WHEN YOU WORK WITH
ELECTRICAL SYSTEMS...
WHETHER IT'S MOBILE
POWER OR FIXED
INSTALLATIONS...NEVER
TAKE NOMINAL VOLTAGE
FOR GRANTED.

ALL SOLDIERS ARE
RESPONSIBLE FOR
LOOKING OVER
ELECTRICAL EQUIPMENT
AND SPOTTING
PROBLEMS.



QUALIFIED SOLDIERS
MUST VERIFY VOLTAGE,
GOOD GROUNDING,
GOOD WIRING AND
GOOD BONDING.

THEY MUST ALSO
MAKE SURE ALL
ELECTRICAL SAFETY
PROCEDURES ARE
FOLLOWED.



FOR MORE
INFORMATION, GET
CECOM PAMPHLET
TR 98-8, EARTH
GROUNDING AND
BONDING.

CONTACT CECOM DIRECTORATE FOR SAFETY
AT DSN 648-3812, (443) 395-3812, FAX
(443) 395-3836 OR EMAIL:
usarmy.APG.cecom.mbx.amsel-sf@mail.mil

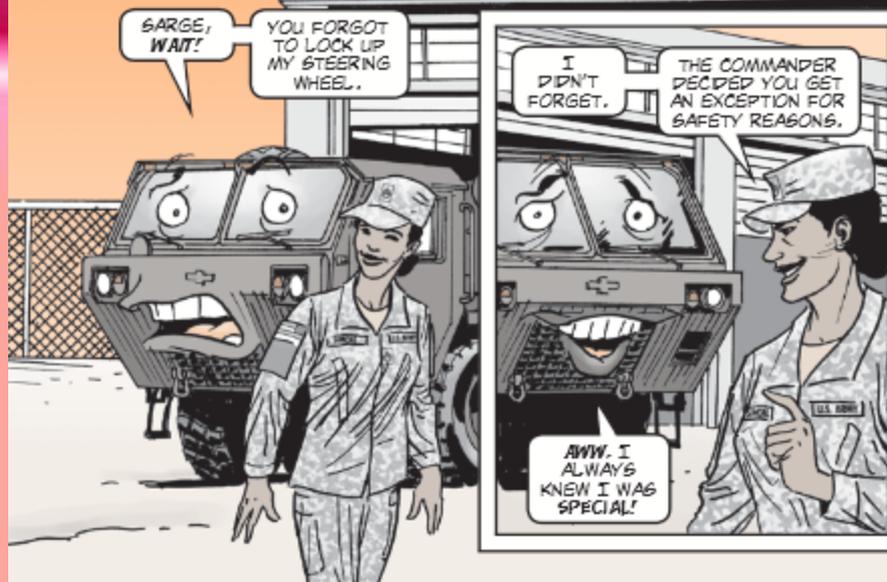
YOU CAN
ALSO
MAIL YOUR
REQUEST
TO...

CECOM Directorate for Safety
ATTN: AMSEL-SF
3200 Raritan Avenue
Aberdeen Proving Ground, MD 21005-1850



Safety...

Fuel Rigs: Lock 'em Up or Not?



For safety reasons, some units used to leave steering wheels unsecured on refueling vehicles and fuel tankers. If there was a fire, then these vehicles could be quickly moved out of danger.

Times change and security at post installations has been beefed up across the board. Now most units secure all of their motor pool vehicles. Some assume there are no exceptions to this rule.

Turns out there is a regulation that exempts fuel vehicles. It's just not easy to find. It's not covered in safety, maintenance, or hazardous waste/environmental publications. It's in a military police regulation.

AR 190-51, *Military Police, Security of Unclassified Army Property (Sensitive and Nonsensitive)* (Sep 93), requires military vehicles be secured.

However, Para 3-5e (2g) lists this exception: "Fuel tanker vehicles when, in the judgment of the installation commander, locking would create a potential unacceptable hazard to life or property."

The AR is available online at the Army Publishing Directorate's website:

http://armypubs.army.mil/epubs/pdf/r190_51.pdf

The key to resolving conflicting safety and security concerns is **risk assessment**. Commanders must weigh all the risks and make the final call.