

Issue 641

PS

April
2006

THE PREVENTIVE MAINTENANCE MONTHLY

TB 43-PS-641

Approved for
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Distribution is
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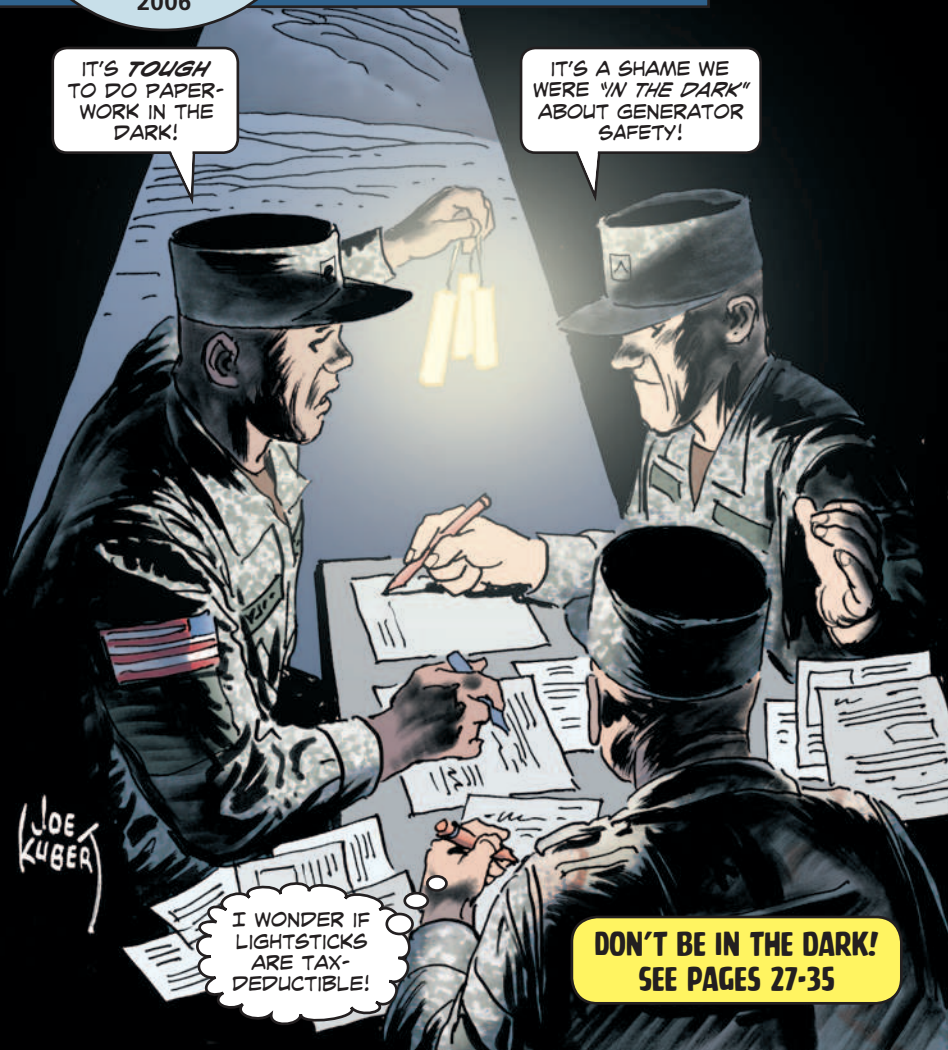
IT'S **TOUGH**
TO DO PAPER-
WORK IN THE
DARK!

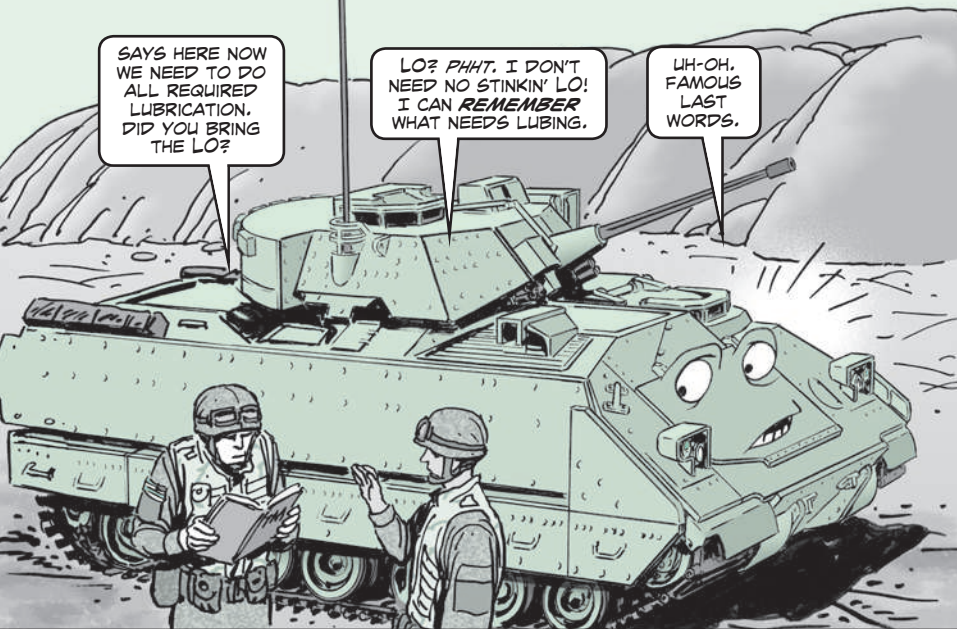
IT'S A SHAME WE
WERE "IN THE DARK"
ABOUT GENERATOR
SAFETY!

I WONDER IF
LIGHTSTICKS
ARE TAX-
DEDUCTIBLE!

DON'T BE IN THE DARK!
SEE PAGES 27-35

(JOE
KUBER)





PMCS With No LO? No GO!

Some soldiers try to PMCS their equipment just with the steps listed in the operator's TM. When it comes to the specific items that need lubrication, they work from memory.

Unfortunately, memory isn't always reliable. As a result, lube points are missed or the wrong lubes are used. Eventually, moving parts lock up from no lube or the wrong lube. In war, that could mean a death sentence. During normal operations you could find yourself stuck in the middle of nowhere with equipment needing major work.

So PMCS without the LO is a no go. When you go to do PMCS, take the -10 TM AND the LO. Follow them both to the letter, remembering these tips:

- Look at the back of the LO first. The notes there have critical info you'll need for the lubing instructions in the front, like how many squirts of the lube gun to give each fitting.
- Remember that dirt (or sand) and lube don't mix. If you pump lube in that has dirt or sand in it, you're hurting—not helping—your equipment. So wipe off fittings before you connect the grease gun and keep grease containers capped to seal out dirt.
- If grease doesn't seem to be going into the fitting and you feel backpressure, try cleaning the fitting with a piece of wire. Then make sure the grease gun snaps on the fitting. Most of the time that should unplug fittings. If it doesn't, tell your mechanic.

Just remember the LO is the way to go at PMCS time.



THE PREVENTIVE MAINTENANCE MONTHLY

TB 43-PS-641, The Preventive Maintenance Monthly, is an official publication of the Department of the Army, providing information for all soldiers assigned to combat and combat support units and all soldiers with unit maintenance and supply duties. All information published has been reviewed and approved by the agency responsible for the equipment, publication or policy discussed. Application of the information is optional with the user. Masculine pronouns may refer to both genders.

ISSUE 641 APRIL 2006



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Stryker Ramp Problems
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M1 Tank Breech Block Plunger Tool
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You are invited to send PS your ideas for improving maintenance procedures, questions on maintenance and supply problems and questions or comments on material published in PS.

Just write to:

MSG Half-Mast

PS, the Preventive Maintenance Monthly

USAMC LOGSA (AMXLS-AM)

5307 Sparkman Circle

Redstone Arsenal, AL 35898-5000

Or e-mail to:

psmag@logsa.redstone.army.mil or

half.mast@us.army.mil

Internet address:

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

By order of the Secretary of the Army:

PETER J. SCHOOMAKER

General, United States Army Chief of Staff

Official:

Joyce E. Morrow

JOYCE E. MORROW

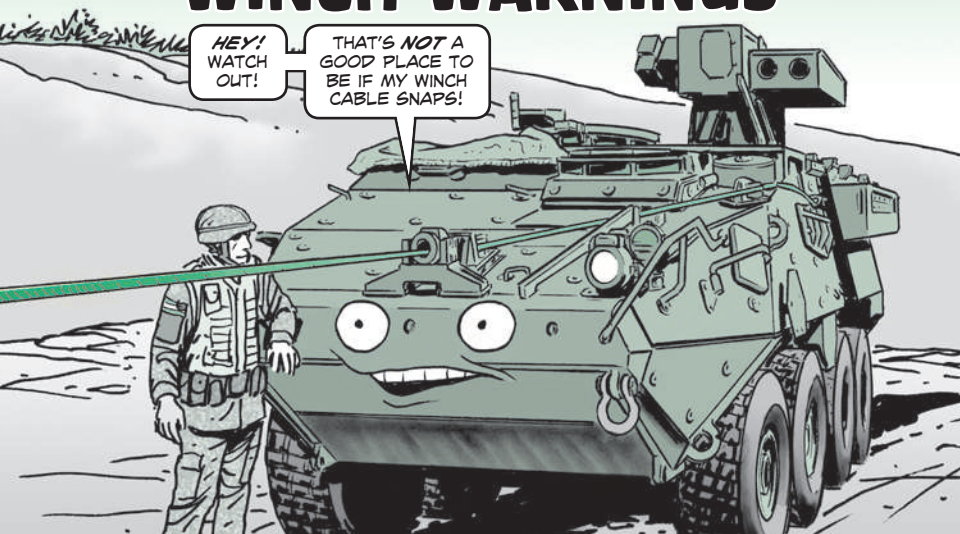
Administrative Assistant to the Secretary of the Army

0604003

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

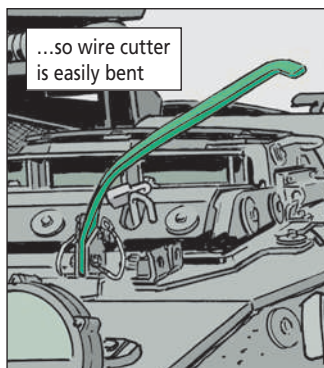
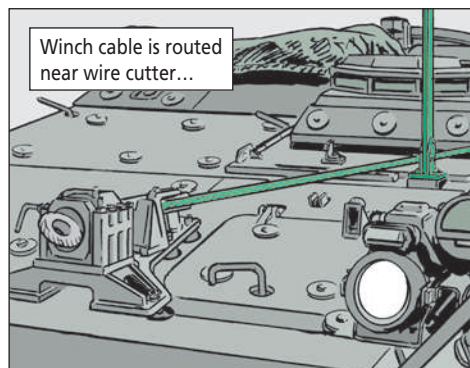
Postmaster: Send address changes to PS, The Preventive Maintenance Monthly, USAMC LOGSA (AMXLS-AM), 5307 Sparkman Circle, Redstone Arsenal, AL 35898-5000.

WINCH WARNINGS



Think **safety** when performing self-recovery and recovery operations with your Stryker's winch. Here are two things to pay special attention to:

- Make sure the driver's hatch is closed and no one is standing closer than twice the distance of the payed-out cable. That's in case the cable snaps under load. If that happens, the cable can whip back and injure or kill anyone in its path.
- Lower the wire cutter during winching operations. The cable is routed very close to the wire cutter, so it can hit and bend the cutter. That rubbing can also wear on the cable and make it more likely to snap.



GOT RAMP PROBLEMS?

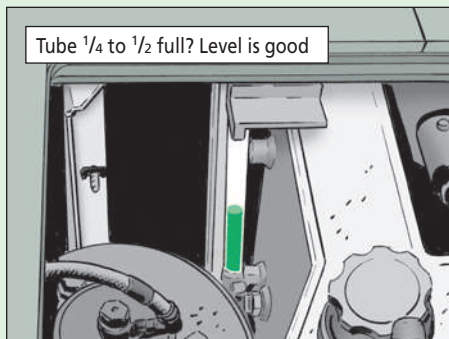


A slow or balky ramp could be a sign of hydraulic problems on your Stryker, crewmen. A quick check of the hydraulic level will tell you for sure.

Open the rear service hatch and eyeball the vertical tube at the back. If the fluid is $\frac{1}{4}$ to $\frac{1}{2}$ full in the tube, the hydraulic level is OK.

If the hydraulic level is too high—above $\frac{1}{2}$ full—hydraulic seals will blow. Too low—below $\frac{1}{4}$ full—and you'll have trouble raising and lowering the ramp.

The annunciator panel should flash and sound if the hydraulic fluid drops below 6 $\frac{1}{2}$ gallons.



BACK OFF THE PRESSURE

WHOA!
MY MUZZLE
REFERENCE
SENSOR MAY
BE DIRTY, BUT
THAT'S **NOT** THE
RIGHT WAY TO
CLEAN IT!



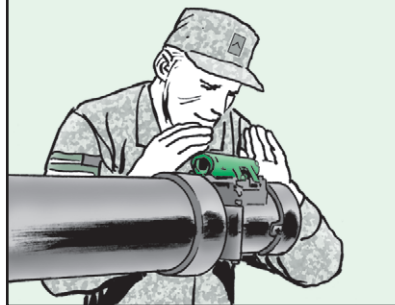
High-pressure water is a sure way to remove stubborn dirt from your tank, crewmen. It's also a sure way to damage components like the muzzle reference sensor (MRS).

The PMCS section of the -10-1 TMs specifically prohibits the use of high-pressure water on the MRS. High-pressure forces water inside the MRS and it's damaged.

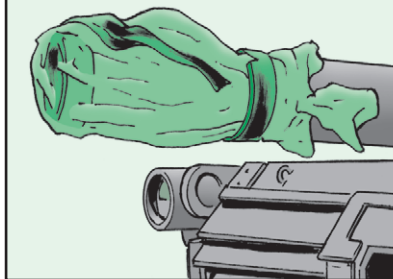
So how do you clean the MRS? Follow these steps:

1. Depress the main gun until the MRS can be reached. If the MRS on your tank is tritium-powered, handle it carefully. If you can't see any illumination through the inspection window lens, double-wrap the MRS in plastic. If you see illumination, go to step 2.

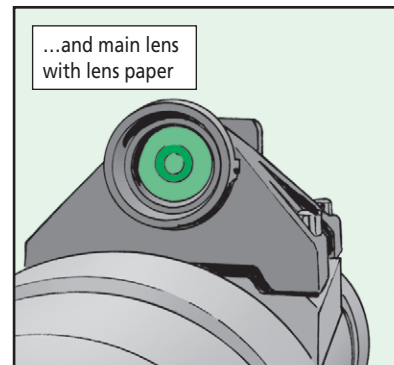
Look for illumination through inspection window lens



No illumination? Double-wrap MRS in plastic



- 2.** Fill the plastic squeeze bottle, NSN 8125-01-134-5409, from the crosswind sensor cleaning kit with clean water.
- 3.** Squirt a gentle stream of water at the two MRS lenses to flush away dirt and dust particles.
- 4.** Soak lens paper, NSN 6640-00-285-4694, with lens cleaning compound, NSN 6850-00-227-1887. Clean both lenses with a gentle, circular motion.



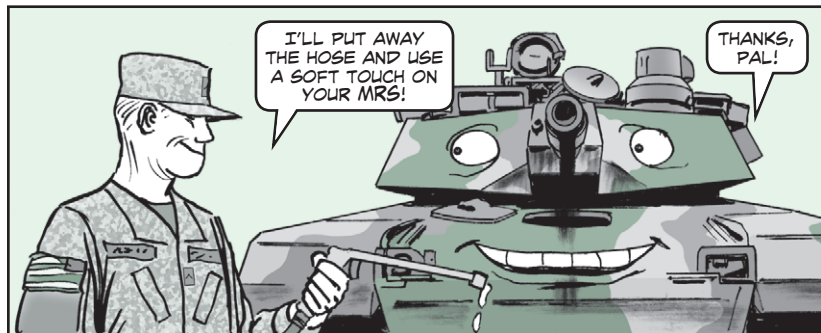
5. Let the lenses air-dry.

6. Eyeball the lenses. If you see gouges or scratches, tell your mechanic.



MECHANICS,
IF YOU **HAVE**
TO REPLACE
THE MRS,
MAKE SURE
YOU ORDER THE
NEW BATTERY-
POWERED
ELECTRONIC
MRS. ORDER
FROM THIS
LIST...

Tank	Tritium MRS, NSN 1240-01-	Electronic MRS, NSN 1240-01-
M1/IPM1	324-2217 275-0077	475-0278
M1A1	409-0784 380-3125 276-6628 313-8932	475-0276
M1A2 SEP	444-6558 356-5887	475-0275



M1-Series
Tanks...

GUESS I'D
BETTER GET
STARTED
CLEANING
YOUR
BREECH-
BLOCK!

WHOA! HAVEN'T
YOU *HEARD*?
THAT BREECH-
BLOCK PLUNGER
TOOL NEEDS TO
BE *MODIFIED*!!

Tool Change Is Good!

Mechanics, the tank's breechblock plunger tool, shown as Fig 9 in App D of TM 9-2350-388-20-2-4, has been modified to make your job a little easier.

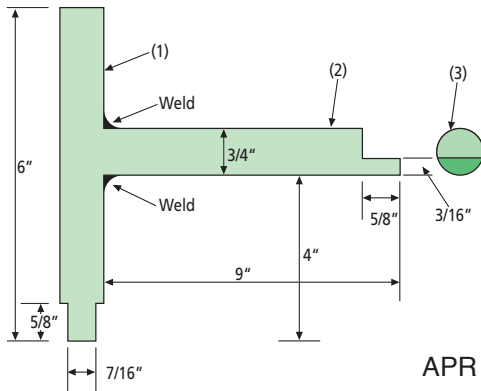
The tool is used to depress the detent plunger so you can remove the extractor shaft when disassembling the 120mm main gun's breechblock for cleaning during PMCS.

A dirty or damaged plunger sometimes gets stuck. So wrench flats were added to one end of the handle. Once the extractor shaft has been removed, the wrench flats can be inserted into the hole to turn, loosen and help remove the plunger.

The tool's tip size has changed, too. It should be machined to 3/16 inch instead of 1/4 inch. So you can get new ones made or get your old tools modified.

The newly modified tool is also being added to App D of TM 9-2350-264-20-2-4 and TM 9-2350-288-20-2-4. Your DS maintenance will fabricate the tool using the following materials and instructions:

Material		
Stock	Description	Fabricating Requirements
1015/1025	Steel, round stock, 3/4-in dia x 14 inches	1. Cut two pieces, one 5 inches and one 9 inches.
MIL-E-22200	Electrode, welding, steel filler, 1/8 inch	2. Weld two pieces forming a 5-inch handle (1) and 9-inch shaft (2). Grind or machine shaft tip (3) to size shown.



M2A3/M3A3
Bradleys,
M7A3 BFIST...

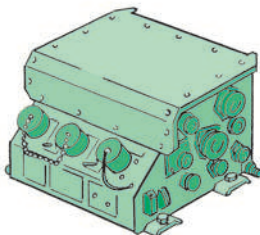
Check VDB PDQ

I DON'T
GET IT... WE
KEEP LOSING
ELECTRICAL
POWER!

HMM... SEEMS LIKE I
REMEMBER READING
SOMETHING ABOUT A VDB
PROBLEM CAUSING THAT.

Loose hardware may be a problem on some -A3 Bradley and BFIST vehicle distribution boxes (VDB), NSN 6110-01-465-1847.

Some VDBs
have loose
internal
hardware



Loose bolts and washers can hold the bus bar against the circuit breakers, causing intermittent power loss and arcing. The VDB circuit breakers affected are CB13 (50-amp cold start switch), CB14 (105-amp power unit access door switch), and CB20 (105-amp rear ramp switch).

MECHANICS, CHECK
THE VDBS ON ALL
OF YOUR UNIT'S -A3
BRADLEYS FOR THE
FOLLOWING SERIAL
NUMBERS...



L0433-S, L0441-S, L0442-S, L0448-S
through L0472-S, L0474-S through
L0479-S, L0481-S, L0483-S through
L0495-S, L0497-S through L0518-S,
L0520-S, L0523-S, L0527-S through
L0530-S, L0532-S, L0533-S, L0536-S,
L0537-S, L0540-S, L0544-S, L0545-S,
L0547-S through L0551-S, L0554-S
through L0560-S, L0563-S through
L0565-S, L0567-S, L0568-S, L0570-S,
L0573-S through L0577-S, L0579-S
through L0584-S, L0589-S, L0590-S,
L0594-S through L0598-S, L0600-S,
L0603-S through L0609-S, L0611-S,
L0613-S through L0616-S, L0619-S,
L0621-S, L0622-S, L0625-S, L0628-S,
L0633-S, L0663-S, and L0667-S.

If you find a VDB with one of the serial numbers, remove the vehicle ground cable—if the VDB is inside the vehicle—following the instructions in WP 0582 00 in TM 9-2350-294-20-1-4. Then flip over to WP 0621 00 and follow the instructions for removing the VDB so you can turn it in to DS maintenance.

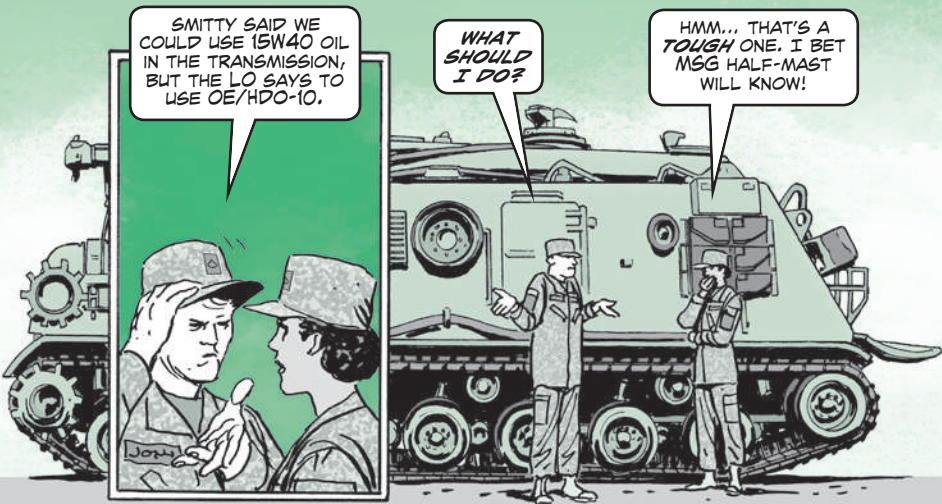
The complete scoop is in TACOM maintenance advisory message 06-003.

What's the Right Oil?

SMITTY SAID WE
COULD USE 15W40 OIL
IN THE TRANSMISSION,
BUT THE LO SAYS TO
USE OE/HDO-10.

WHAT
SHOULD
I DO?

HMM... THAT'S A
TOUGH ONE. I BET
MSG HALF-MAST
WILL KNOW!



Dear Half-Mast,

Can you give me the straight scoop on what type of oil to use in our M88A1 recovery vehicle's transmission? We've heard that it's okay to use 15W40 oil, but the lube instructions say to use OE/HDO-10.

SFC D.C.

Dear Sergeant D.C.,

Sure can. The use of 15W40 oil is **not authorized** for the M88A1's XT1410-4 transmission. The viscosity of multi-grade oil causes pressure problems that can damage the transmission and make your vehicle NMC.

OE/HDO-10 is what's authorized for the transmission. However, TACOM is changing the lubrication chart from OE/HDO-10 to the CAT 10 oil currently used in the M88A2's XT1410-5A transmission.

Initial testing with CAT 10 oil in M88A1s in Kuwait has shown an improvement in steering response and a decrease in the need to change out clutch plates.

Get a quart of CAT 10 with NSN 9150-01-424-7696, five gallons with NSN 9150-01-424-7692, and 55 gallons with NSN 9150-01-424-7698.

Half-Mast

M109A6 Paladin,
M992A2 Ammo Carrier...

A CASE OF MISTAKEN IDENTITY

HEY, *GOOD NEWS!* I GOT A NEW T-HANDLE FOR YOUR GEAR SELECTOR!

GREAT! NO MORE CASES OF MISTAKEN IDENTITY!

The gear selector lever and hand throttle control lever knobs on some Paladins and ammo carriers are nearly identical. Both are round, ball-type knobs that feel the same to the touch. That can lead to a case of mistaken identity.

Recently, an accident happened when a Paladin driver reached over to move the throttle lever. Instead, he accidentally grabbed and moved the gear selector. The vehicle lunged forward, injuring another soldier and damaging other equipment near the vehicle.

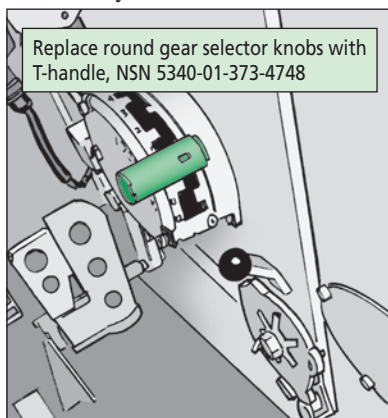
To prevent such accidents, you should inspect your vehicles now and replace any round gear selector knobs you find with a T-handle assembly.

The new T-handle comes with NSN 5340-01-373-4748. You'll also need a roll pin, NSN 5315-00-814-3531, to mount the T-handle.

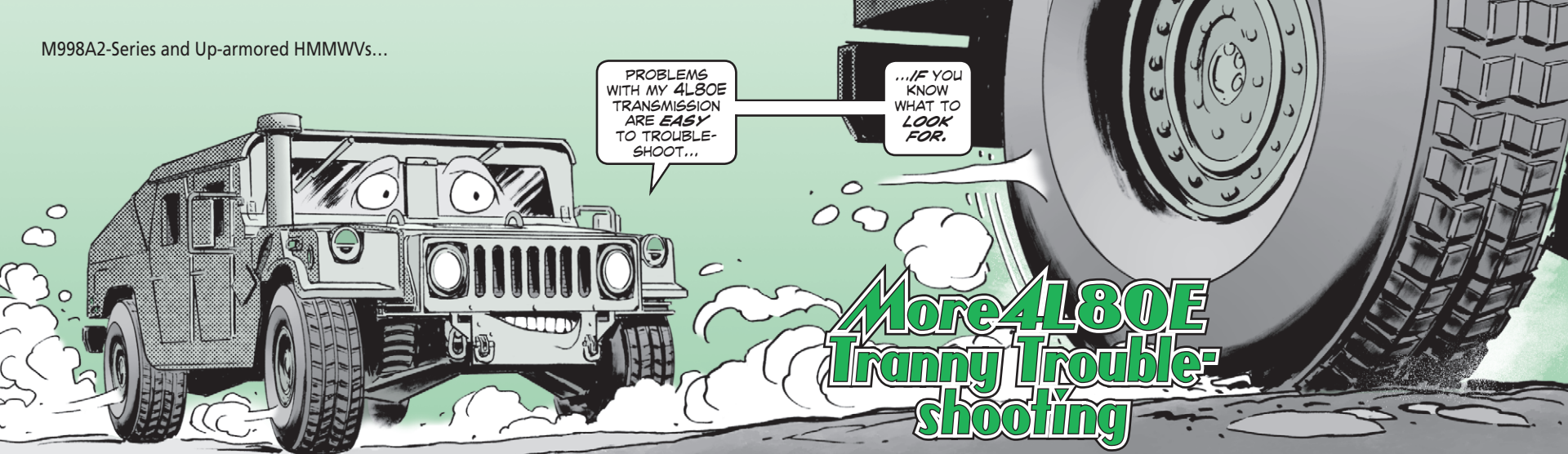
The complete scoop's in TACOM ground precautionary message 05-011. Need a copy? Check it out on the AEPS website:

https://aeps2.ria.army.mil/commodity/gpm/tacom_wn/05/gpm05-011.html

You'll need your AKO or AEPS username and password to access the site.



Replace round gear selector knobs with T-handle, NSN 5340-01-373-4748

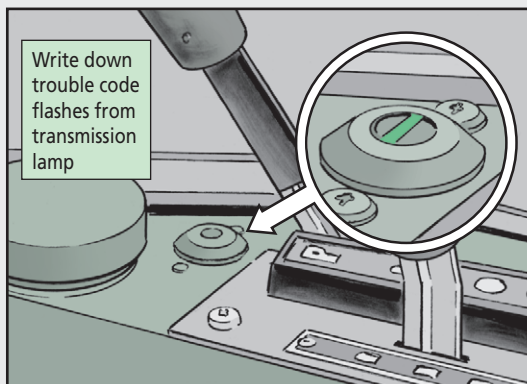


Dear Editor,

Your article on Pages 10-11 of PS 637 (Dec 05) for troubleshooting HMMWVs with the 4L80E electronic transmissions was very helpful. But we've come up with a few more things that can help save units a lot of time when troubleshooting.

Before you attempt to diagnose electronic transmission problems:

- Write down the trouble codes from the vehicle's computer as they flash over the transmission lamp located next to the shift lever. Remember, codes 12 and 63 will always appear and should be disregarded. Next, clear the codes and road test the vehicle. Then check to see which trouble codes are still reported. That eliminates false codes and saves troubleshooting time.



- Check all transmission sensor connections. Most problems are caused by loose or corroded wiring connections. After checking the connections, clear the trouble codes and road test the vehicle to see if that clears up the problems.

- When multiple codes are reported by the computer, always troubleshoot the lowest code first and then work your way up. The higher-numbered codes are sometimes the result of the lower-numbered codes. So if you fix the lower codes first, you'll often find some of the higher codes will disappear.

Before changing out an "inoperable" 4L80E transmission, do the following:

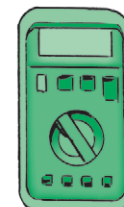
- Make sure you have all of the proper diagnostic test equipment you need. That includes a multimeter, the throttle positioning sensor (TPS) block gauge, NSN 4820-01-179-4869, and the special purpose tool kit, NSN 5180-01-410-8467. This kit includes the following:

Item	NSN
Diagnostic switch cable	6150-01-410-8215
TPS cable	6150-01-412-7774
Seal installer*	5120-01-414-1849
Seal installer*	5120-01-437-0480
Drive handle*	5120-01-026-1666

*These items are not required for diagnostic testing.

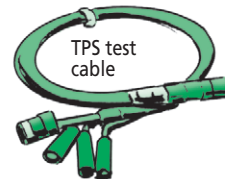
Get special tools for testing

Diagnostic switch cable



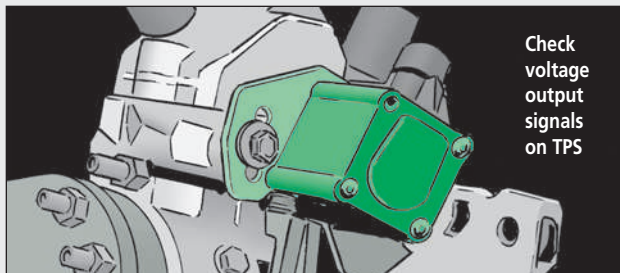
Multimeter

TPS block gauge



TPS test cable

- If you've never worked with this type of transmission, consult with an experienced mechanic or TACOM LAR to get the help you need.
- If the truck's batteries have been serviced or replaced, it is important to properly reconnect the two power wires for the transmission control module (TCM). Do it wrong and the TCM gets 24 volts instead of the required 12. That burns up the TCM.
- Eyeball the transmission relay harness, which is located next to the batteries. If this harness ends up on top of the panel that separates the batteries and the relays, it may get cut when the passenger's seat is taken out and put back in. This will result in a no-shift mode and the transmission will be unable to change gears.
- Check the TPS voltage output signals. The TPS is used to send a signal to the TCM letting it know when to shift. The TPS may need to be adjusted or replaced.



A training video—*TVT 55-62, HMMWV A2 Electronic 4-speed Transmission*—is also available. The video focuses on the transmission's electronic components' location, function and interaction and includes a section on "common problems" that covers diagnostic test codes.

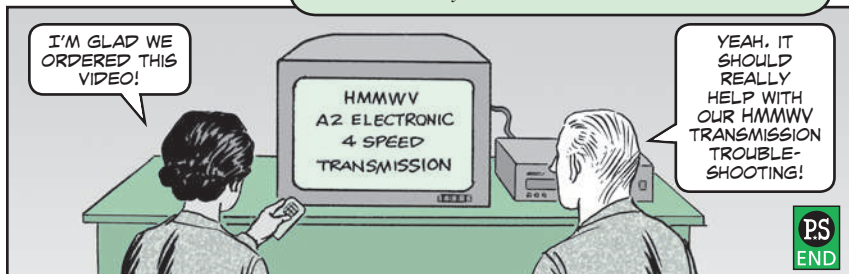
Check with your local TACOM LAR for a copy, or order it direct from the Defense Automated Visual Information System/Defense Instructional Technology Information System (DAVIS/DITIS) website:

<http://dodimagery.afis.osd.mil>

Click on PIN/ICN Search in the left-hand column. On the next page, enter 711363 in the PIN/ICN block and click Search. Click on the video title, add the item to your shopping cart and follow the instructions.

Jim Hillman
TACOM LAR
Korea

Editor's note: Whew! That's a lot of troubleshooting help, Mr. Hillman. And very much appreciated by mechanics everywhere!



Keep Wheel Studs and Nuts in Place



Dear Half-Mast,

We are experiencing problems with the wheel studs on our unit's HMMWVs. The studs are shearing off while the vehicles are in operation. Are other units having this same problem?

SFC M.S.F.

Dear Sergeant M.S.F.,

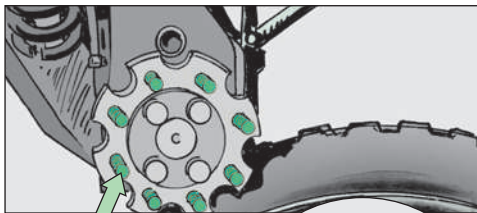
Yep. We've received several inquiries about HMMWV wheel studs and nuts.

The high op-tempo of HMMWVs in theater (southwest Asia) means you have to inspect for loose or damaged studs and nuts more often than semi-annually.

Loose stud nuts lead to serious shaking problems. So make sure studs and nuts are properly cleaned, inspected and tightened. Here's how:

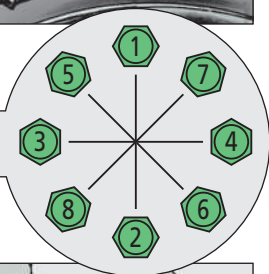
- While the wheel is off, use a wire brush to break loose sand from studs. Clean the studs with soap and water and allow them to dry completely.
- Look for studs that are cracked, broken, rusted, pitted, bent or loose. Pay special attention to the threads. Replace damaged studs.
- Stud nuts have to be tightened gradually and in the proper sequence to avoid bent and broken studs. Follow the tightening order shown on Page 8-7 of TM 9-2320-280-20-2 and -387-24-1 and to the right.

Tighten all the nuts by hand first, then torque the nuts to 90-110 lb-ft following the proper pattern.

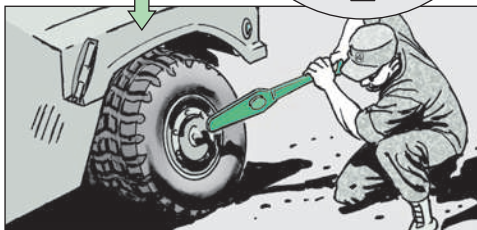


Check stud threads for damage

Tighten and torque nuts using this pattern



Torque nuts to 90-110 lb-ft

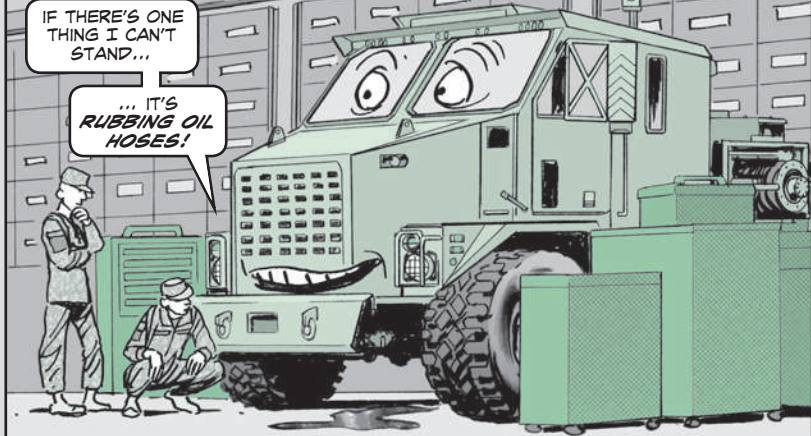


M1070 HET...

Keep Oil Lines Separate

IF THERE'S ONE
THING I CAN'T
STAND...

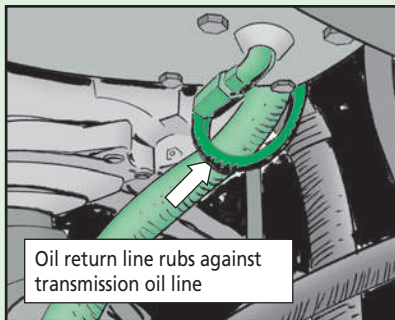
... IT'S
**RUBBING OIL
HOSES!**



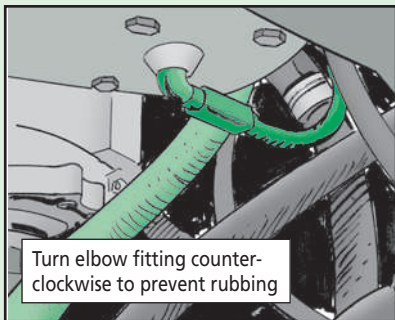
Dear Editor,

The angle of the oil return line on the rear of the M1070 tractor's air compressor allows it to rub against the transmission oil line just below it.

Enough rubbing results in a leak. And a leaking oil return line makes your truck NMC.



Oil return line rubs against
transmission oil line



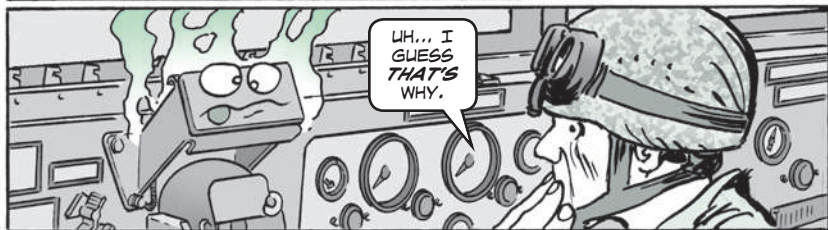
Turn elbow fitting counter-
clockwise to prevent rubbing

We put a stop to this rubbing problem by turning the oil return line's elbow fitting, NSN 4730-00-231-4009, counterclockwise slightly. That raises the oil return line enough to keep the two lines from touching.

Curtis Knott
Technical Inspector
ITT/AMC Qatar

Editor's note: An excellent suggestion, Mr. Knott! Mechanics, snub those rubs by making this elbow adjustment.

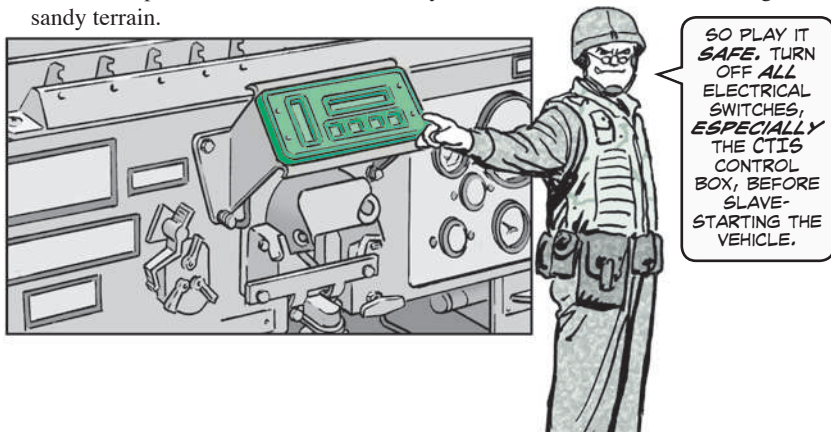
TURN OFF SWITCHES!



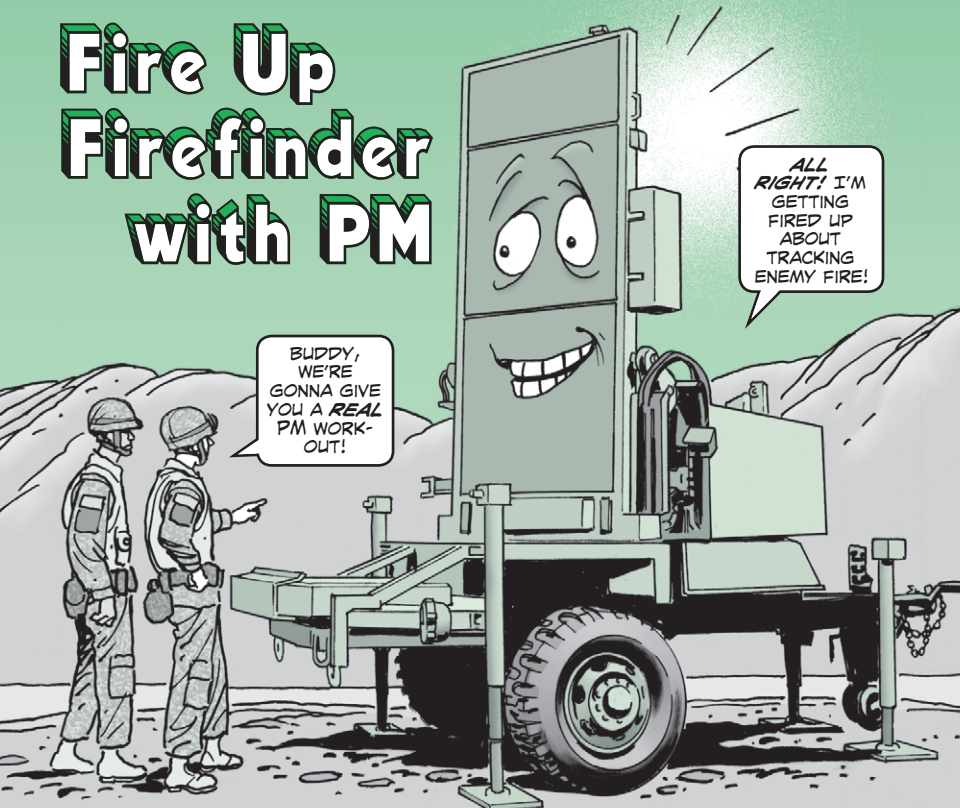
Operators, read and heed the info on Page 2-69 of TM 9-2320-386-10 when it comes to slave-starting the 2 1/2-ton extended service program (ESP) trucks.

That is, turn off all electrical switches, **especially** the CTIS control box, before slaving the vehicle.

If the control box is left on while slaving, a high electrical spike can short out the box, causing it to fail. A burned out control box means you can't regulate the truck's tire pressure. That's bad news if you need the extra traction in rough or sandy terrain.

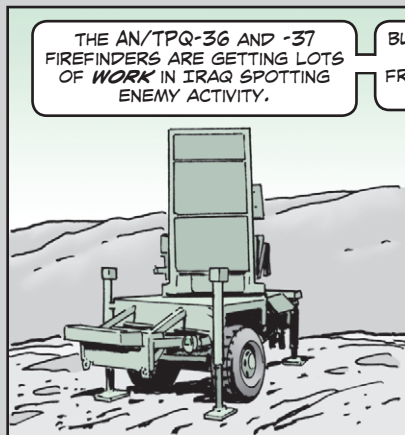


Fire Up Firefinder with PM



BUDDY,
WE'RE
GONNA GIVE
YOU A **REAL**
PM WORK-
OUT!

ALL
RIGHT! I'M
GETTING
FIRED UP
ABOUT
TRACKING
ENEMY FIRE!



THE AN/TPQ-36 AND -37
FIREFINDERS ARE GETTING LOTS
OF **WORK** IN IRAQ SPOTTING
ENEMY ACTIVITY.



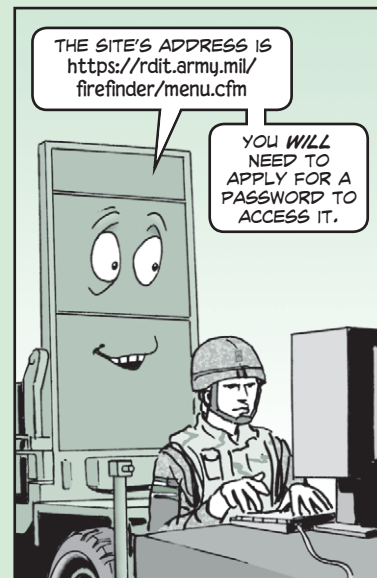
BUT THE FIREFINDER TAKES
LOTS OF **ATTENTION**
FROM YOU IF IT'S GOING TO
FIND MUCH FIRE.

HERE'S
HOW TO
KEEP YOUR
FIREFINDER
FIRED UP...

Go online. The FIREFINDER GLOBAL SUPPORT CENTER website has a wealth of info:

- technical publications
- knowledge database, including a means to report a problem/incident
- system description and contact info
- field incident reports
- online support and user manual
- links to other helpful Internet sites

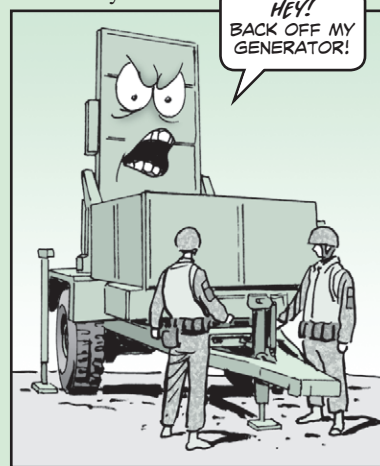
Be sure to check out the three maintenance bulletins (MB) that Tobyhanna Army Depot has put on the site to help AN/TPQ-36(V)8 Firefinder units: MB 171, *Relocation of the CD-ROM*; MB 172, *Relocation of the SINCGARS Radios and W55 Cable Repair*; and MB 173, *Radar Processor Coherent Oscillator Modification and Shelter Door Ground Replacement*.



THE SITE'S ADDRESS IS
[https://rdit.army.mil/
firefinder/menu.cfm](https://rdit.army.mil/firefinder/menu.cfm)

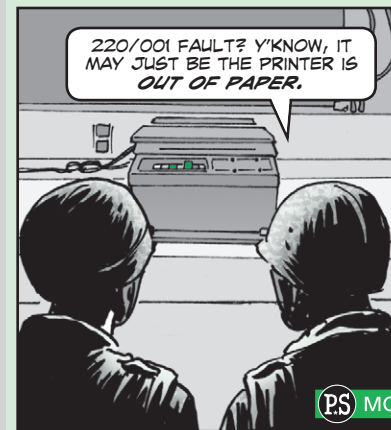
YOU **WILL**
NEED TO
APPLY FOR A
PASSWORD TO
ACCESS IT.

Never push the AN/TPQ-37 60-KW generator past 115 volts. That can cause the power distribution box and low-voltage power supply drawer to overheat. The output of the generator is set at 115 volts and that's where it should stay.



HEY!
BACK OFF MY
GENERATOR!

If you get a 220/001 shelter fault isolation test failure when you try to print AN/TPQ-36(V)8 Firefinder output, check to see if the printer has jammed or is out of paper. Codes of 140 or 210 can also be caused by printer problems. Save troubleshooting by making the printer the first check.



220/001 FAULT? Y'KNOW, IT
MAY JUST BE THE PRINTER IS
OUT OF PAPER.

Pay attention to the Firefinder transmitter cooler. The cooler is what keeps the transmitter cool enough to operate. To operate correctly, the cooler needs the correct glycol, NSN 6810-00-006-4205. To make sure you have enough glycol in the cooler, you must do a specific gravity test every other week.

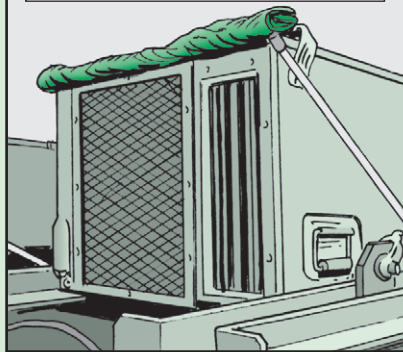
Check cooler with specific gravity test every other week

INFO ON CHECKING THE COOLER IS ON PAGE 3-62 IN TM 11-5840-355-20-1 AND INFO ON MIXING THE GLYCOL IS ON PAGE 3-113.



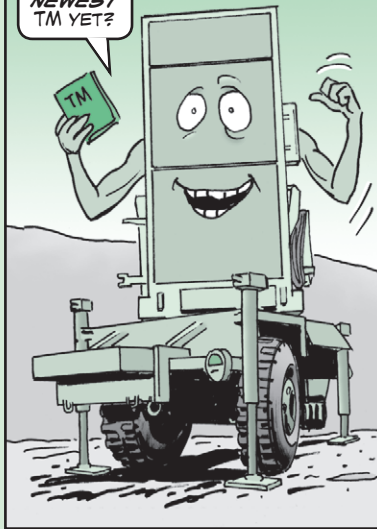
Remember to roll up the air intake cover before start up. Otherwise, the air conditioning unit relay trips and you can't operate. To reset the relay, remove the intake cover and use a pencil or small screwdriver to push down on the relay switch located at the bottom of the control panel. Depress the switch until you hear a click. There will be a 30-second delay before the system powers up.

Roll up air intake cover before start up



Update your pubs. A new edition of the Firefinder's TM 11-6605-308-12&P for MAPS and MAPS-H comes out in 2006. Make sure you get a copy.

GOT MY NEWEST TM YET?



Turn-in and Shipment

The Army is running short of Firefinder dynamic reference units-hybrid (DRUH) and -37 speedometer interface units (SIU). If you have DRUHs or SIUs that aren't being used or need repair, send them to Tobyhanna ASAP. For shipping instructions, contact Tobyhanna's Ed Sabecky at (570) 895-8792 or email:

edward.f.sabecky@tobyhanna.army.mil

or contact Cindy Evans at (570) 895-8098 or email:

cindy.evans@tobyhanna.army.mil

If you have the old dynamic reference unit (NSN 6605-01-334-9447, PN HG9083D), turn it in so it can be upgraded to a DRUH.

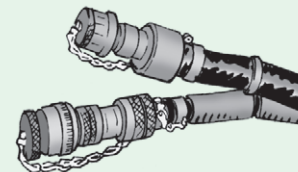
DON'T REMOVE LINE REPLACEABLE UNITS (LRU) BEFORE SENDING YOUR FIRE-FINDER TO DEPOT FOR REPAIR.

LRUs ARE IN *SHORT SUPPLY* AND WITHOUT THEM THE FIREFINDER'S RETURN TO THE FIELD WILL BE *DELAYED*.



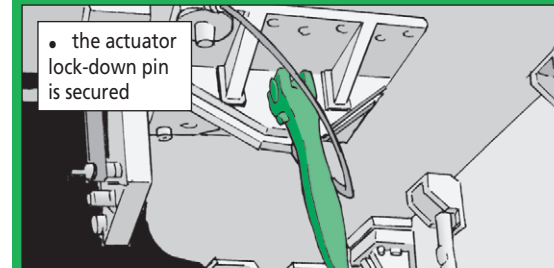
Make sure:

- all MAPS (modular azimuth positioning system) cables and air lines are disconnected before you pull the truck away from the ATG (antenna transceiver group)



- the -37 trailer tracks are aligned right

- the actuator lock-down pin is secured

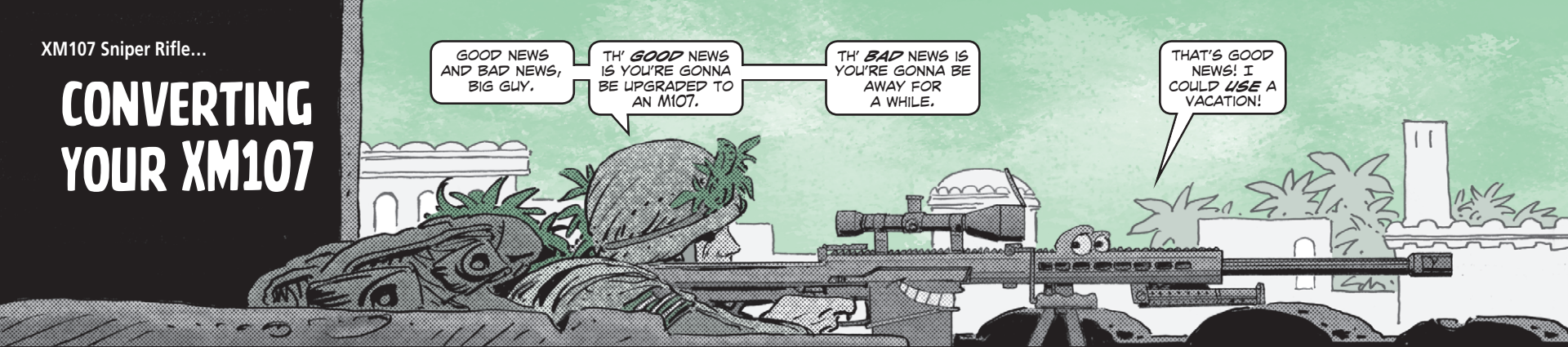


IF YOU ARE HAVING PROBLEMS LIKE "KEYBOARD WORKS ONLY SOMETIMES", WRITE THE PROBLEM ON A TAG AND ATTACH IT TO THE FIREFINDER. THIS *SPEEDS UP* REPAIR.

EVERY FIREFINDER IS SHIPPED WITH A PROTECTIVE COVER. *KEEP* THE COVER AND USE IT ANY TIME THE FIREFINDER IS TRANSPORTED TO PROTECT THE SYSTEM FROM DAMAGE.



CONVERTING YOUR XM107



GOOD NEWS AND BAD NEWS, BIG GUY.

TH' *GOOD* NEWS IS YOU'RE GONNA BE UPGRADED TO AN M107.

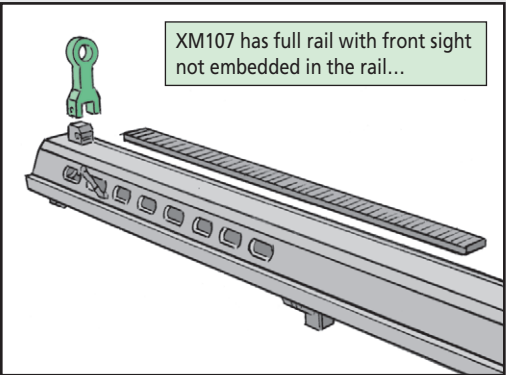
TH' *BAD* NEWS IS YOU'RE GONNA BE AWAY FOR A WHILE.

THAT'S GOOD NEWS! I COULD *USE* A VACATION!

Snipers need to check if their rifle is the XM107 version. If it is, it should be upgraded to an M107 by having MWO 9-1005-239-55-1 applied.

The MWO adds a new bolt carrier pin and a cheek pad, modifies the charging handle, and moves the set bump.

How do you tell if you have an XM107 and not an M82 or M107 sniper rifle? The XM107 has a full rail with a front sight that is not embedded in the rail. Most XM107s have “XM107” stamped on the receiver, although this isn’t always true. If the rifle’s serial number is lower than 7269, it’s an XM107. If the XM107 has been modified, the “X” will be stamped out.



If you have an XM107, **do not try to send it to the manufacturer to have the MWO done.** You will just waste your time and to the manufacturer’s. **You must go through TACOM for the MWO.** There are no ifs, ands or buts—that’s the only way.

If you have a local TACOM logistics assistance representative (LAR), contact him for help on what forms you need to fill out and for shipping instructions for your

XM107. No LAR? Contact TACOM- Rock Island at DSN 793-5854/(309) 782- 5854 or DSN 793-7625/(309) 782-7625 or email debon@ria.army.mil

Repair

If your XM107 or M107 ever needs repair, contact your TACOM LAR or the phone numbers or email listed above. They will give you instructions on how to send your rifle to the manufacturer for repair.

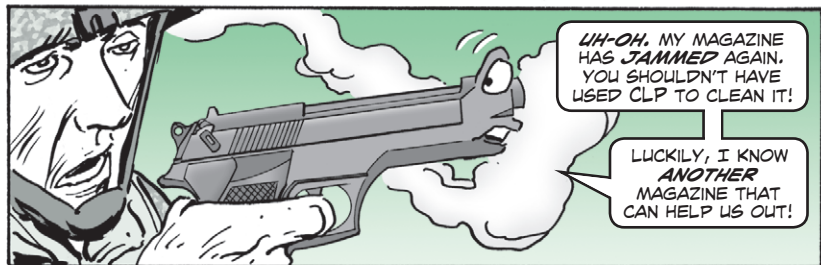
Small Arms...



Not enough dummy ammo around the arms room, armorers? Here’s what you need to order more:

Weapon	Dummy NSN
M2 machine gun	1305-00-028-6384
M249 machine gun/M16 rifle	1305-00-764-8437
M60/M240 machine gun	1305-00-926-4009 (100 rounds linked) 1305-00-460-2600 (220 rounds linked)
MK 19 machine gun	1310-01-154-6525
M9 pistol	1305-01-206-8351

M9 Pistol... Read Up on Desert Magazine PM



Dear Half-Mast,

We are having a real problem with the M9 pistol magazines not feeding right in the desert. If you load them with more than five rounds, they jam. Any suggestions?

LT D.T.

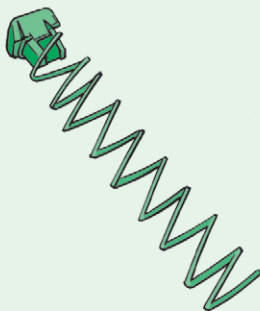
Dear Lieutenant D.T.,

Sure. Part of the problem may be that you have older magazines that have excessive phosphate coating inside the magazine tube. This can cause jamming. The solution is to use a metal bore or chamber brush to remove the finish. Then coat the magazine inside and out, along with the spring and follower, with solid film lubricant. Do this with any magazine not marked "May 04".

Clean off phosphate coating with bore brush



Clean magazine, follower, spring and ammo with brush and rag



Magazines the Army purchased after May 04 don't have the phosphate coating, so that's no longer a problem (it usually says "May 04" on these newer magazines). You can order these magazines with NSN 1005-01-204-4376.

But much of preventing magazine problems boils down to basic PM. Take apart all magazines that have been exposed to sand during a mission and clean them thoroughly with a toothbrush and rag, including the ammo itself. But don't use CLP or any other lube. They attract sand.

Half-Mast

IT ALSO HELPS TO KEEP SPARE MAGAZINES IN A ZIPLOC BAG THAT SEALS OUT SAND.



M240-Series Machine Gun...

WHAT SETTING FOR BLANKS?

Dear Half-Mast,

When you're firing blanks with the M240 machine gun, what is the best setting for the gas regulator?

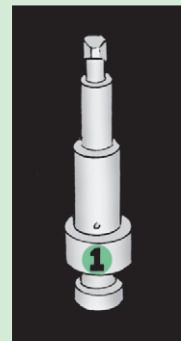
SSG M.B.

Dear Sergeant M.B.,

Good question. WP 0008 00-1 in TM 9-1005-313-10 used to say to switch to #2 setting if blanks are producing so much carbon that it's slowing down the M240. But that's been changed in the new change to the TM to fire only on the #1 setting. If the gun slows down from too much carbon, you should stop and clean the weapon. #2 should be used only in combat emergencies with live ammo. The best way to prevent blank problems is to properly clean and lube your M240.

Eventually, the M240B version will use only a single port gas plug.

Half-Mast



Turn in Old Masks



If you have any of the following masks sitting around the NBC room, it's time to turn them in. They're no longer supported by the Army and are going to be type classified as obsolete.

- M25A1 combat vehicle mask
- M24 aircraft mask
- M43/M43A1 types I and II aviator mask
- M49 aviation mask

The M25A1 has been replaced by the M42A2 combat vehicle mask, NSN 4240-01-413-4100 (small), -4101 (medium), -4102 (large).

If you fly AH-64s, the M24, M43 type I, and M43A1 type I are replaced with the M48 AH-64 aviator mask, NSN 4240-01-386-0198 (small), -4686 (medium), -0201 (large), and -0207 (X-large).

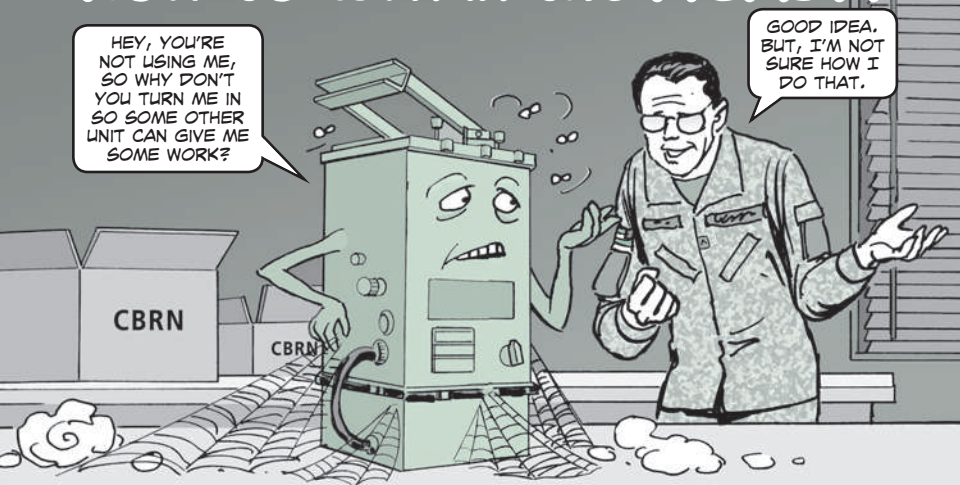
If you fly aircraft other than AH-64s, the M24, M43 type II, M43A1 type II, and M49 are replaced by the M45 aircraft mask, NSN 4240-01-414-4034 (X-small), -4035 (small), -4051 (medium), -4052 (large).



FOR MORE INFO, SEE
TACOM MAINTENANCE
ADVISORY MESSAGE
05-047.

QUESTIONS? CONTACT
TACOM'S DOUGLAS
VANATTA AT DSN 793-
3053/(309) 782-3053
OR EMAIL
douglas.e.vanatta@
us.army.mil

How to Turn in the ACADA



Units are turning in the ACADA or its M88 detector without following proper turn-in procedures—and that's causing problems.

Proper turn-in of the ACADA or M88 means it must first meet -10/20 PMCS standards. If it doesn't, the ACADA or M88 can't be reissued to a unit that needs it. And you must include your unit identification and any radiation testing and tracking system (RATTS) transactions.

If your ACADA or M88 does meet -10/20 standards, turn it in as serviceable excess following the FTE document identifier code (DIC) report of excess in AR 725-50, *Requisitioning, Receipt, and Issue System*.

If for some reason you can't submit an FTE, contact the ACADA item manager listed at the end of this article for instructions.

If your ACADA or M88 can't be repaired locally to meet -10/20 PMCS standards, contact your local warranty POC to check if it's still under warranty. If it is, the warranty POC will give you shipping instructions so you can get the ACADA or M88 repaired for free.

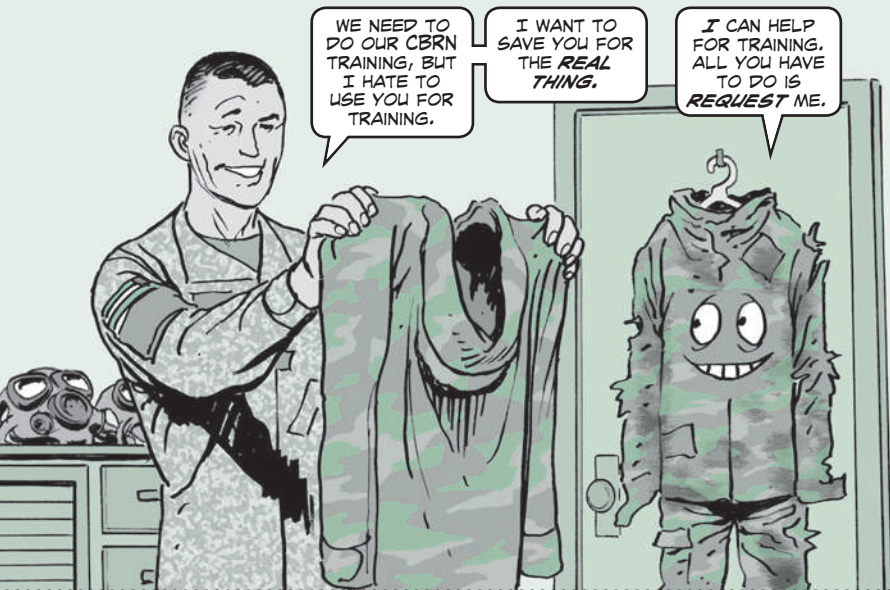
If it's not under warranty, contact the ACADA item manager for instructions on where to send it. You will need to fill out a Contamination Verification Status Report verifying that the ACADA or M88 hasn't been exposed to chemical agent. The item manager will give you the report form.

For questions or shipping instructions, contact the item manager at DSN 793-5680/(309) 782-5680 or email:

patricia.henderkott@us.army.mil

For more info, see TACOM supply advisory message 05-09-016.

CBRN Training Help and...



If you need to do CBRN training, but don't want to use your "go-to-war" assets, the Joint Equipment Assessment Program (JEAP) Accountability and Disposal Project can help. They have chemical protection suits, gloves, and boots available for training. Send a written request for the clothing to:

smblogcomjeap@usmc.mil

or fax it to DSN 567-7961/6882 or (229) 639-7961/6882. Or you can submit your request online:

<http://shelflife.pmnbc.com>

Questions? Call DSN 567-7961/6528, (229) 639-7961/6528.

Requests should include justification for the training gear, quantity needed, nomenclature and NSN of requested equipment, shipping address, delivery date request, and mode of shipping. You pay a handling fee and the shipping costs.

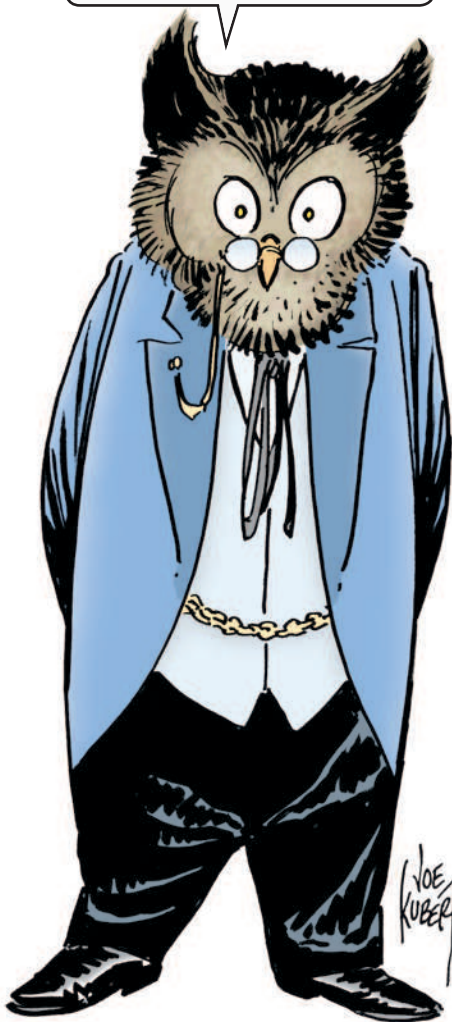
...New CBRN Website

For info on chemical, biological, radiological, and nuclear (CBRN) defense equipment characteristics, capabilities, and acquisition, go to the Joint Acquisition CBRN Knowledge System (JACKS):

<https://jacks.jpeocbd.osd.mil>

DO TQG PM, BUT DO IT SAFELY!

IT *DOESN'T* TAKE A GREAT DEAL OF WISDOM TO KNOW THAT GENERATORS PRESENT SOME SAFETY HAZARDS TO YOU WHEN YOU'RE DOING PREVENTIVE MAINTENANCE.

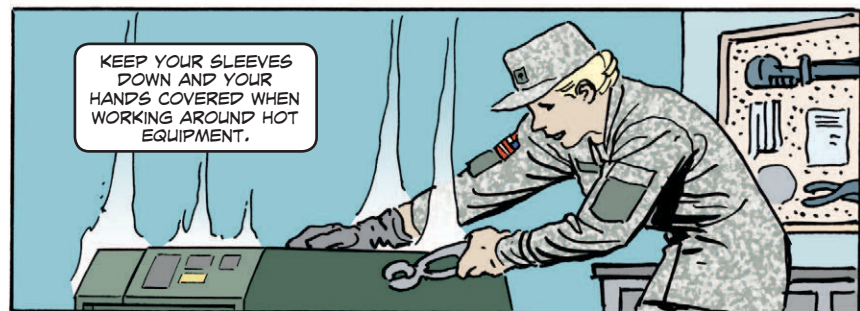
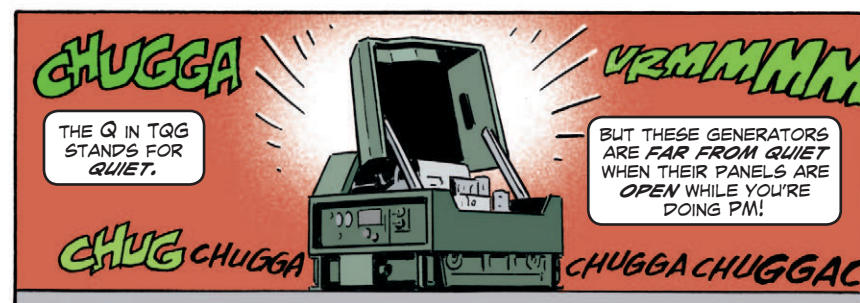
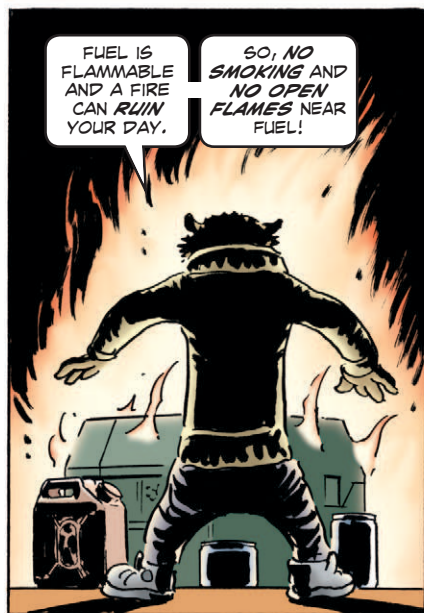


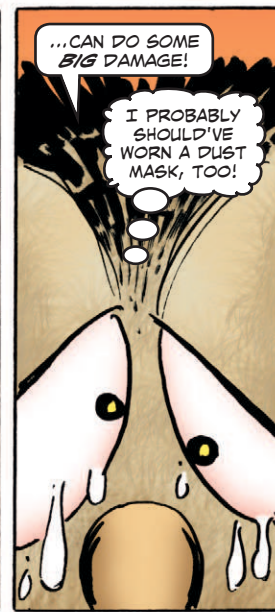
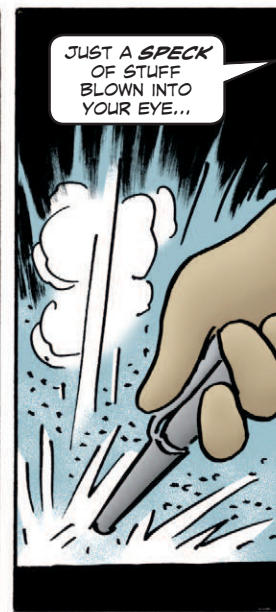
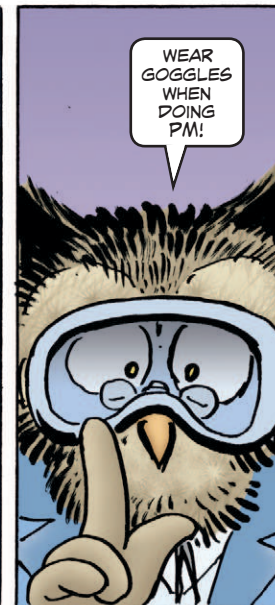
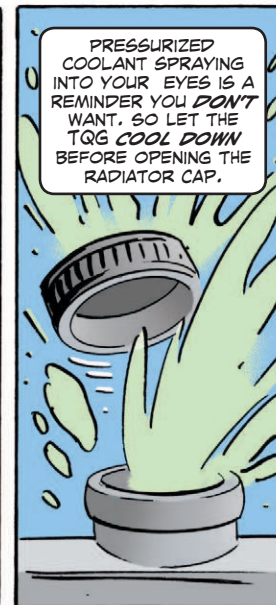
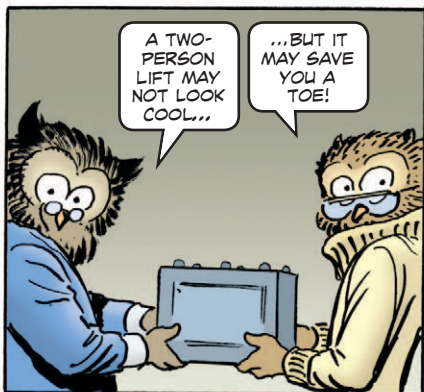
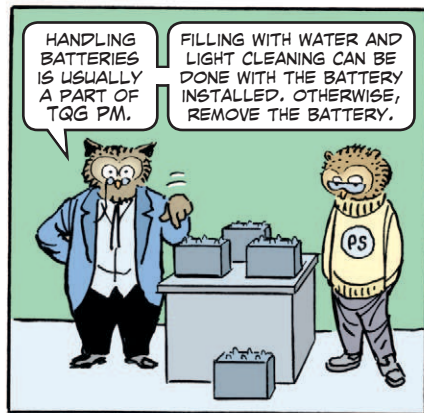
PS 641

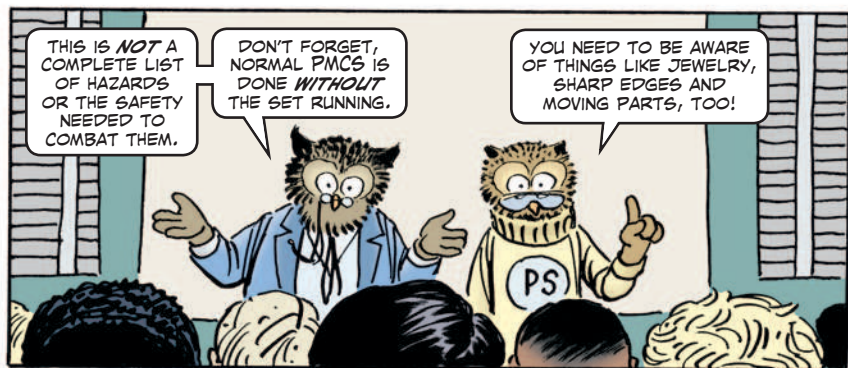


27

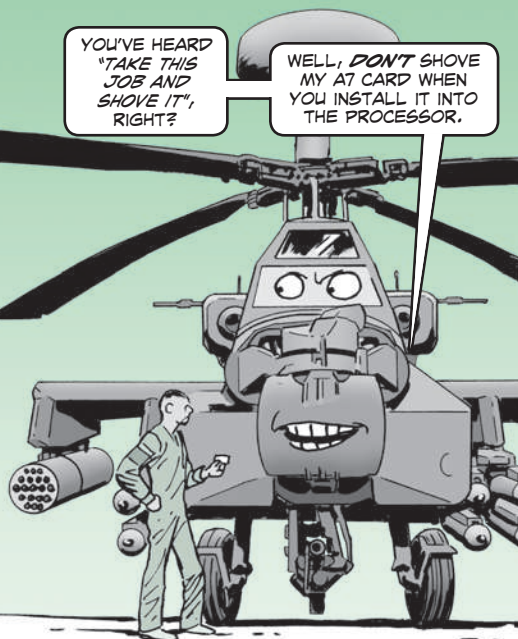
APR 06







TAKE IT EASY

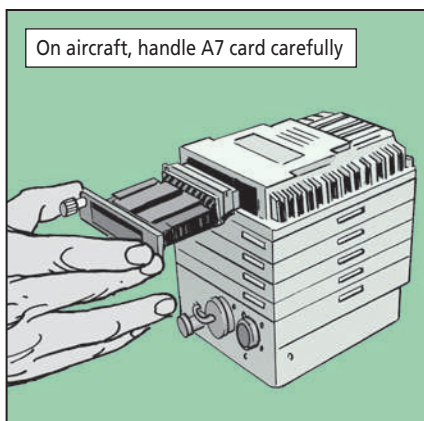


Pilots, easy does it when handing the AN/APR-39 processor's A7 card.

Before a flight, don't take the card—also called the user data module (UDM) NSN 5841-01-201-8645—and just shove it into the box. It's not a VCR tape!

Rough handling when you load or unload the card can damage its delicate internal pins. That won't go over well with the AVIM shop if they have to repair or replace an A7 card because of negligence. Always be careful with the card.

If damage does occur, your bird won't be identifying any hostile enemy weapons. And if it can't do that, your bird is NMC.



OVERFILLING IS OVERBOARD

YOU'RE COOLED DOWN ENOUGH, TIME TO CHECK YOUR GEARBOXES.

GOOD. THE LAST MECHANIC *DIDN'T* WAIT 15 MINUTES AND OVERFILLED MY GEARBOXES.

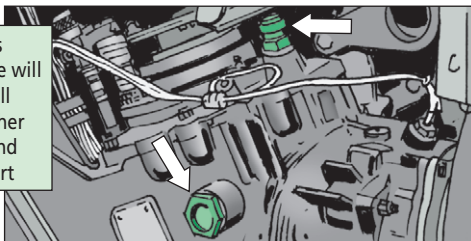


Mechanics, don't be in a hurry to service your AH-64's tail rotor, intermediate and nose gearboxes after aircraft shutdown.

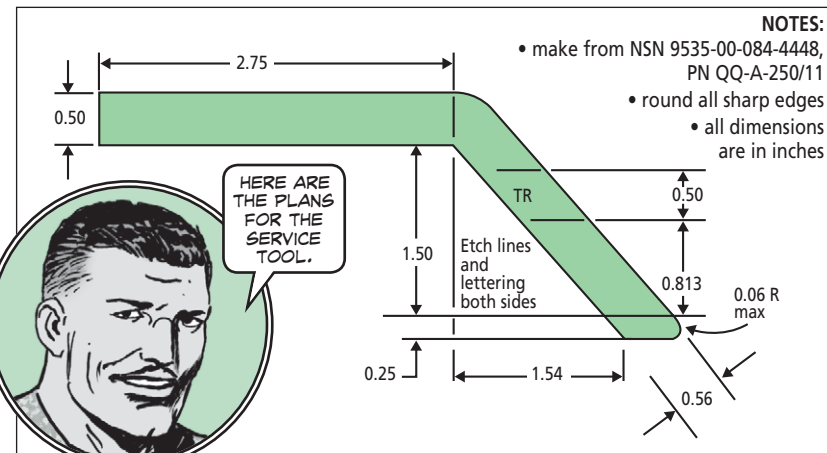
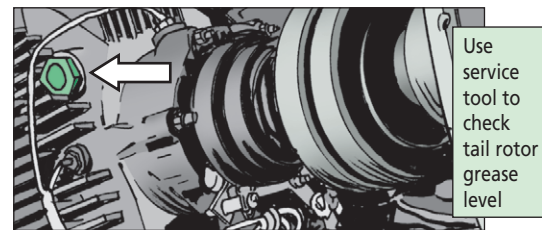
First things first. Allow the grease to cool down for 15 minutes after helicopter rotor shutdown and be sure the bird is on level ground before servicing the gearboxes. That lets the grease cool and settle to the bottom of the gearbox. Otherwise, the inevitable happens—overfilling.

Overfilling the gearboxes can blow out seals and ground your bird. Grease can also leak from the tail rotor and the intermediate gearbox breather top and fill port. That leaves a greasy mess for you to clean up.

Excess grease will overfill breather top and fill port

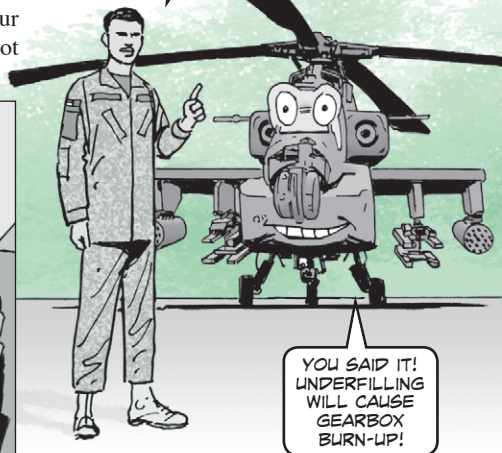
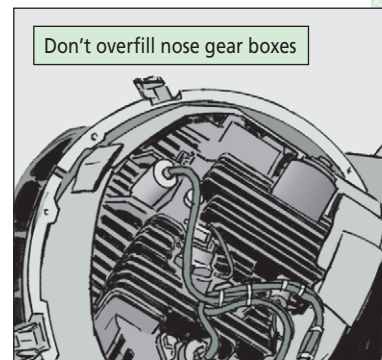


To avoid overfilling the gearboxes, check the level with the service tool, PN 2807, described in the IETM for the Longbow D-model or in Figure D-462 of TM 1-1520-238-23-9 for the A-model.



During pre-flight inspections, check both gearboxes for excess grease and the nose gearboxes for excess oil and wipe them off with rags. Never use your finger as a dipstick unless you want hot grease to burn your fingers.

ONE FINAL NOTE... **UNDERFILLING IS JUST AS BAD AS OVERFILLING.**



DESERT CREATURES STRIKE!



Pilots and mechanics have discovered that desert critters can find any hole to live and nest.

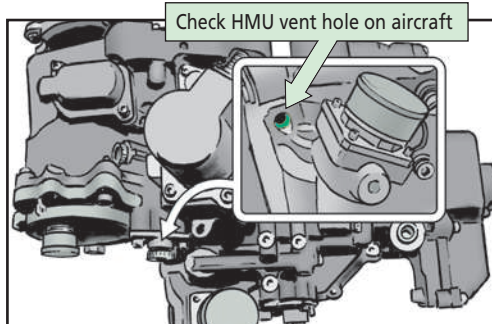
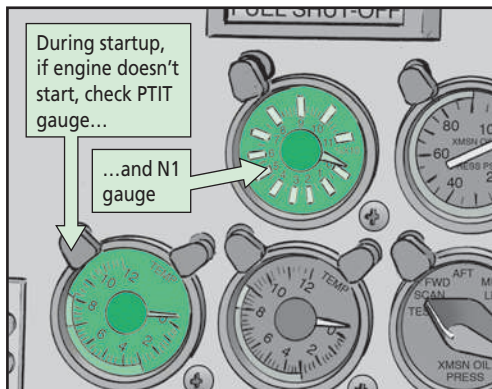
If engine startup on your Chinook sounds hung or like it's choking on sand, the culprit could just be a desert bug in the engine hydro-mechanical unit (HMU) vent hole. Believe it!

You know there's a problem because as soon as you crank engine 1 or 2, the power turbine inlet temperature (PTIT) rises and the N1 gauge doesn't increase past 40 percent.

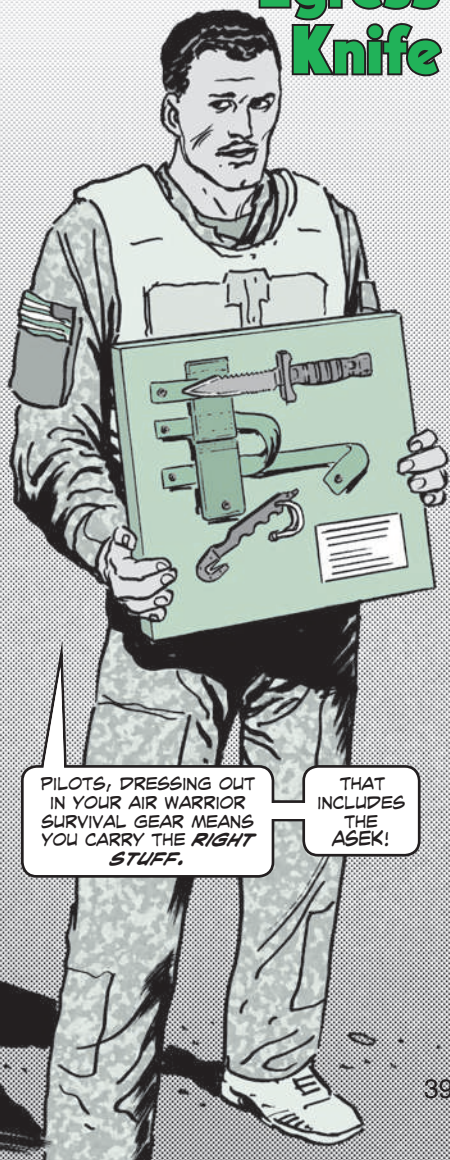
Have a mechanic inspect the HMU's atmospheric vent hole. It could have a bug in the hole.

Bugs make the hole a nest and plug up the vent. This prevents engine startup because the atmospheric vent helps the engines to start properly—as long as the vent hole is clear.

Clear up engine startup problems by clearing out the vent hole with a pipe cleaner, NSN 9920-00-292-9946. This can be done on the aircraft without removing the HMU.



Aircrew Survival Egress Knife



PILOTS, DRESSING OUT
IN YOUR AIR WARRIOR
SURVIVAL GEAR MEANS
YOU CARRY THE **RIGHT
STUFF.**

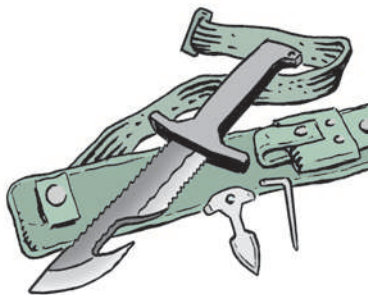
THAT
INCLUDES
THE
ASEK!

ALSE techs, although there are many brands of ASEK knives, you're only authorized to carry the knife approved by PM Air Warrior. And that's the one from the Ontario Knife company.

The approved knife is being fielded with the Air Warrior gear.

If you've been ordering an ASEK knife, NSN 1095-12-361-3908, that looks like the one below, **stop! It's not approved.**

ALSE techs, **do not** order this knife. It is not authorized.

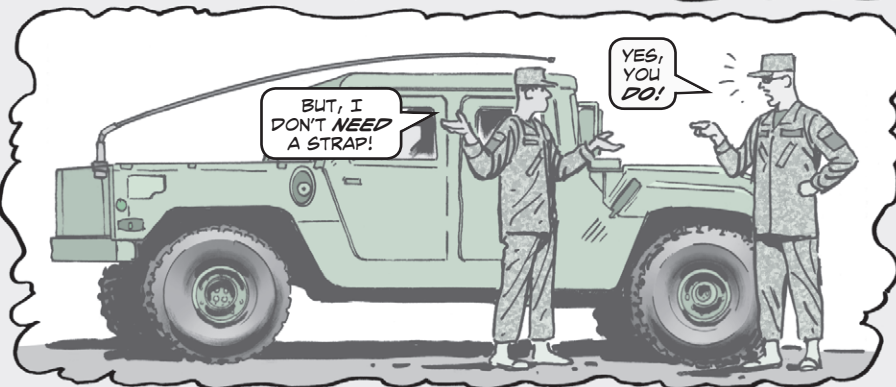


Here are the approved ASEK knife NSNs that'll be fielded with the Air Warrior ensemble:

Item	NSN 1095-01-518-
Knife system	6832
Knife only	6898
Sheath only	6875
Strap cutter	6877
Replacement blade on strap cutter	6879

For info on the ASEK knife, contact John Jolly, DSN 876-6538, email john.jolly@peoavn.redstone.army.mil

AN ANTENNA DILEMMA



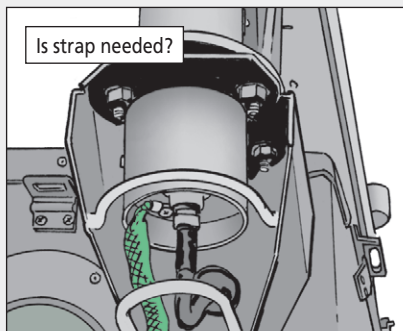
Dear MSG Half-Mast,

I got gigged for not having a ground strap on the base matching unit of the AS-3900A/VRC antenna, NSN 5985-01-308-8988.

I argued that a ground strap was not necessary since the antenna was grounded by the RF cable. Since we couldn't settle the argument, we said we'd ask you, and whatever you say, goes.

So, does the AS-3900A antenna really need that ground strap?

PVT L.C.N.



Dear Private L.C.N.,

Unless the ground strap that runs from the base matching unit to the vehicle is in place and working, your vehicle's radio is not fully mission capable. So, yes, you really need that ground strap.

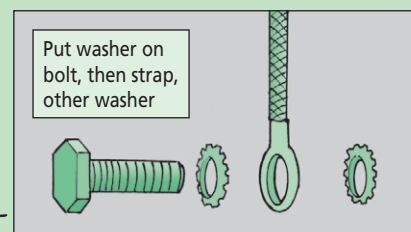
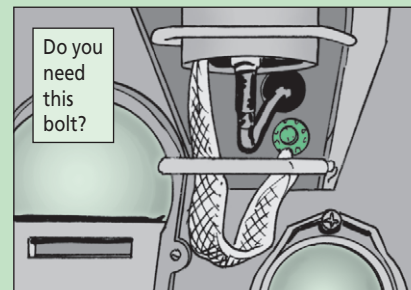
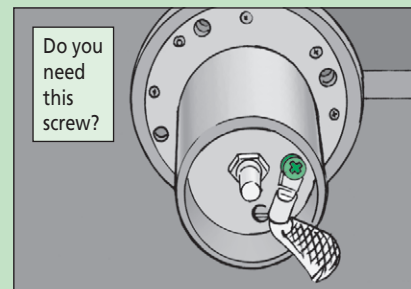
It is true that the shield braid on the RF cable has some continuity and offers some DC grounding. But the cable offers a poor RF ground. The braid of the cable itself offers a DC path back to ground, but has length all the way back to the radio. This length may render the braid useless as it may no longer be at ground potential for RF frequencies even if it is for DC. As a rule of thumb, keep the connection to ground as short as possible, which is best accomplished by using the ground strap. Furthermore, although the antenna is a center-fed dipole and predominately ground-plane independent, there are still currents on the antenna which need to be "tied-off" right at the base of the antenna. The little ground strap, NSN 6150-01-214-5750, takes care of these currents, too.

That ground strap also helps in equalizing the electrical difference between the antenna and the vehicle it's mounted on. This is vitally important to your health and the health of your equipment if the antenna comes in contact with a power line, suffers from a direct or nearby lightning strike or is tagged by an electro-magnetic pulse.

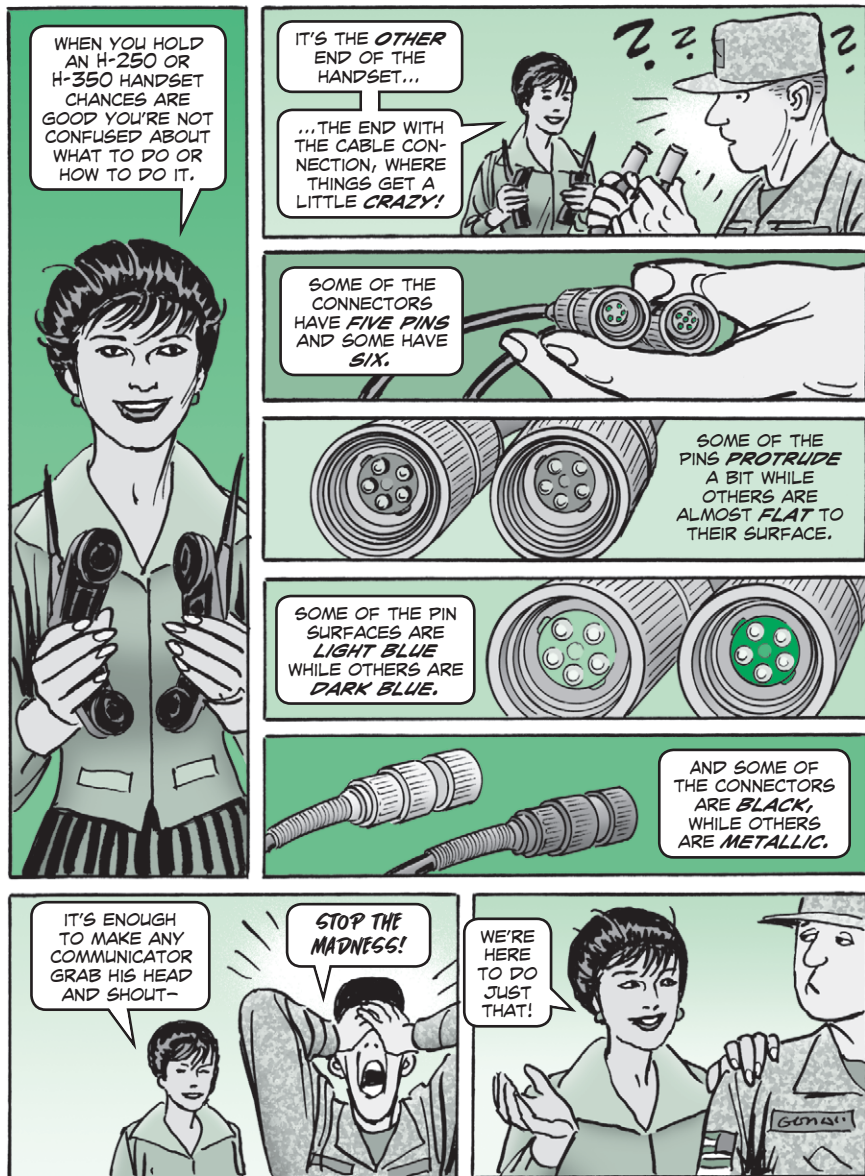
So, make sure the ground strap from the AS-3900A/VRC antenna base matching unit is there and in good shape. If you need the screw that holds the ground strap to the base, order it with NSN 5305-01-225-2589. You'll also need lock washer, NSN 5310-01-205-9199.

The bolt holding the ground strap to the vehicle can be ordered with NSN 5306-00-225-9086. You'll also need two lock washers, NSN 5310-00-889-2527. This is a lock washer with gripping teeth. It will scar the paint on the HMMWV where you put it and ensure good metal to metal contact. Put one lock washer on the bolt, then the strap and the other washer. Finally, screw the bolt into place.

Half-Mast



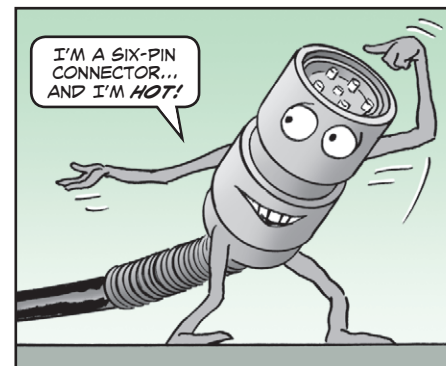
IT CAN BE CONFUSIN'



The H-350 handset, NSN 5965-01-128-3944, was made for the Air Force and has a six-pin connector with a part number of SI-329/U or AP-116. The H-350 has a wider microphone frequency response range than the H-250. The H-350 is now the standard handset for tactical field telephone sets.

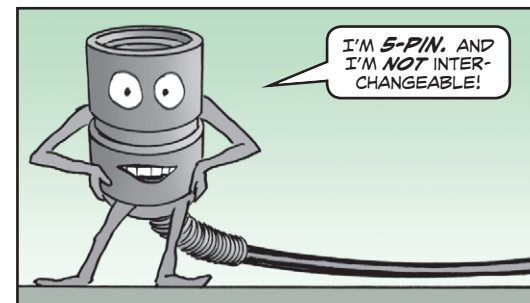
The sixth pin on the H-350 is often called Pin F. Pin F is “hot” and gives the H-350 full-duplex operation over telephone circuits.

H-350



H-250

The H-250, NSN 5935-00-043-3463, has a five-pin metallic connector plug, U-229A/U, NSN 5935-00-992-2035. Other plugs are obsolete. The H-250 is wired differently than the H-350 and they are not interchangeable. The H-250 is used on Army tactical radios only.

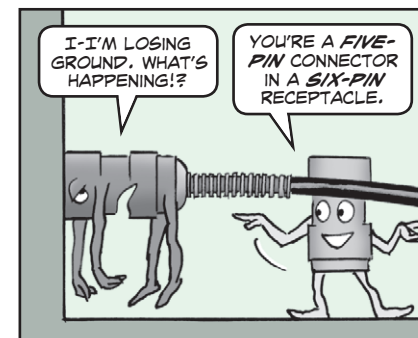


Compatibility

The fly-in-the-ointment for these two handsets is compatibility. If the piece of equipment you are connecting up to is set to receive 5 pins, you can use both the H-250 and the H-350. The sixth pin on the H-350 will do nothing—no harm, no foul.

However, if you hook up a five-pin connector to a six-pin receptacle, you will lose either a ground or duplex capabilities depending upon the piece of equipment.

Finally, do not hook the H-350 six-pin connector up to a six-pin receptacle when that sixth pin is expecting a ground and instead getting a “hot” pin. This will cause static and feedback over your handset.



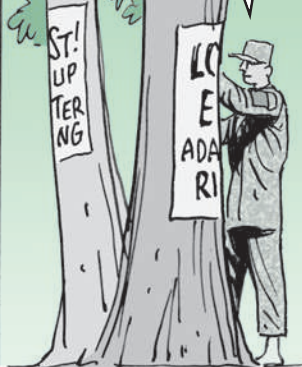
AN/PVS-14 MNVD...

DARNIT!
I LOST
ANOTHER
EYECUP!



LOST!
EYECUP
ADAPTER
RING

MAYBE
THESE'LL
HELP US
FIND IT!



Dear MSG Half-Mast,

I have inspected many units that use the *newest* AN/PVS-14 monocular night vision device (MNVD). I have been surprised at how many of these MNVDs don't have the threaded eyecup adapter ring or have a loose one ready to back off and fall off.

What's with these non-threaded adapter rings? Should soldiers using the AN/PVS-14 check these rings for threads?

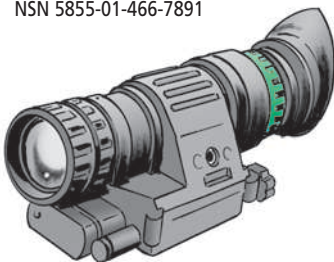
SFC D. A. J.

Dear Sergeant D. A. J.,

You've grabbed the brass ring and identified a problem that needs to be solved. A batch of eyecup adapter rings got in the supply system without threads. The supply system has been purged of these non-threaded rings so turn them in and order new threaded rings with NSN 5855-01-466-7891. Don't try to glue the non-threaded rings in place! They are a little bit bigger than the threaded ones and glue won't hold them.

Half-Mast

Order threaded rings with
NSN 5855-01-466-7891



RUNNING THEM AT LOAD



Dear MSG Half-Mast,
What is the minimum
amount of load a
generator can have and
still run efficiently?

PVT F.C.



Dear Private F.C.,

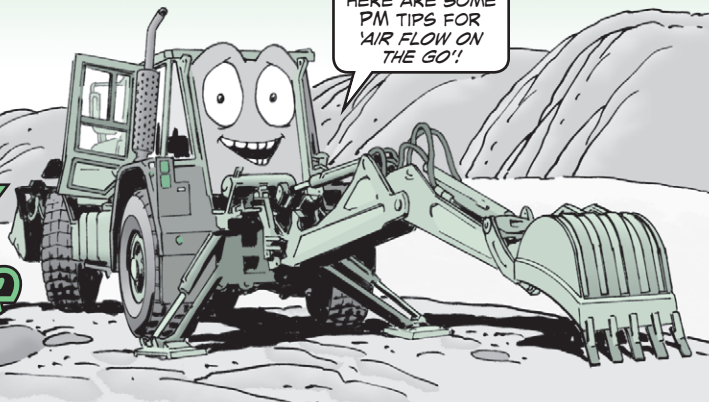
The minimum designed load for any generator set is 50 percent of its rated load. This is the industry—and Army—standard. A generator set will run at a lighter load, but when it does, it is susceptible to wet stacking.

Wet stacking can cause excessive carbon buildup in the exhaust system, cylinder wall glazing and stuck rings. This leads to blow-by past the rings, and drops of unburned fuel oil and condensation in the engine and premature engine failure.

If a generator must run under light-load conditions, you should operate the set at rated load for at least one hour after every oil change. This will burn the excess carbon out of the exhaust system and reduce the damage from wet stacking.

Half-Mast

Air Flow on the Go!

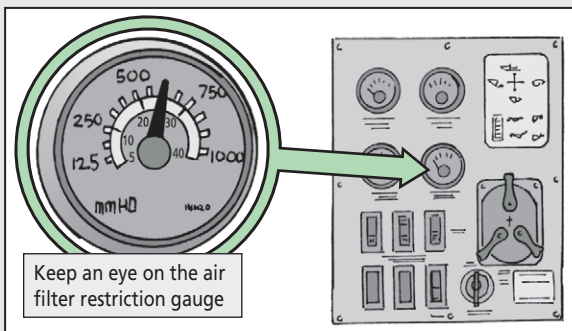


The new interim high mobility engineer excavator (IHMEE) is a real workhorse for excavating, moving and dumping dirt and sand at the worksite.

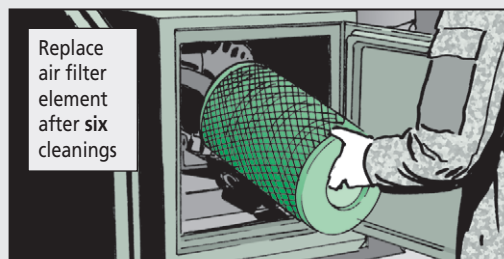
To keep your IHMEE on the job, get real familiar with TM 5-2420-230-10. You can find it on LOGSA's ETM site if your copy grew legs. Also heed these PM tips for smooth airflow through the excavator's air filters.

Air Filter Brushoff

A clean air filter element is crucial in dusty and sandy areas. Keep an eye on the air filter restriction gauge. It's located on the dash board. If the gauge reads above 25 in H₂O (625 mmH₂O), it means the air filter element is dirty and needs to be cleaned.



Your mechanic will use low-pressure air—30 psi or less—from inside to outside to loosen dirt and sand from the filter element. Never bang the element on a hard surface. That damages it. Replace the element once a year, or after six cleanings.



Squeeze the dust and sand out of the dust cap on the bottom of the air filter element canister. Do this before the day's run.

Also, make sure the cap is in place on the canister. It has a bad habit of getting knocked off when the air hose or tools are removed from the canister's storage compartment.

Dust Bowl Precleaner

The dust bowl precleaner collects fine dust before it gets into the cab air system's air filter element. It's located on the back of the excavator's curbside rear fender.

Remove the precleaner lid by unscrewing the wing-nut. Use a clean rag to wipe out dust and sand that collects inside the precleaner.

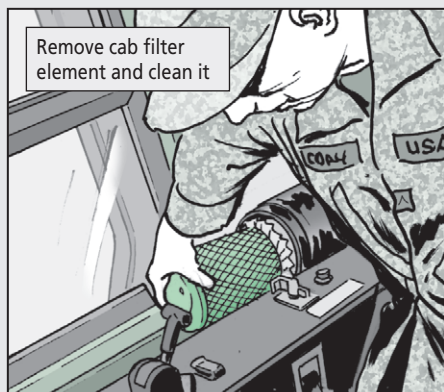


Cab Air System

The filter element for the cab's air system is located next to your right elbow while sitting in the driver's seat.

Most of the time, the air system keeps clean air circulating inside the cab, no matter how dusty the worksite is.

But a loss of fresh air inside the cab is a signal for you to remove the filter element to see if it's clogged with dust and sand. If so, clean it with low-pressure air, blowing from the inside to the outside.



REMEMBER...
FOR A **SMOOTH**
AIRFLOW, DO
YOUR PROPER
PM ON THESE
FILTERS!

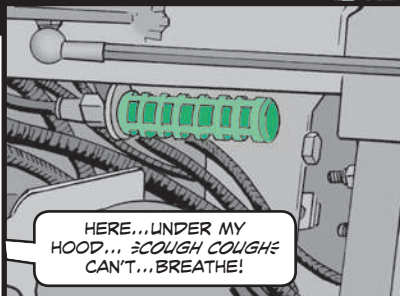


IHMEE...

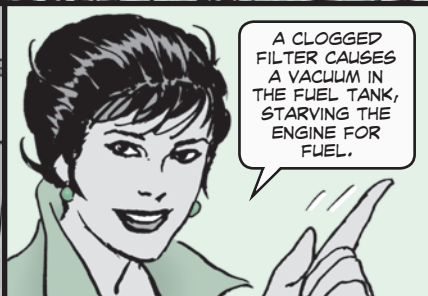
NEED TO VENT

WHERE'S
THAT
COUGHING
COMING
FROM?

COUGH COUGH COUGH
GRAH



HERE...UNDER MY
HOOD... ~~COUGH COUGH~~
CAN'T...BREATHE!



A CLOGGED
FILTER CAUSES
A VACUUM IN
THE FUEL TANK,
STARVING THE
ENGINE FOR
FUEL.

Operators, the excavator's fuel tank needs to vent...but that's OK!

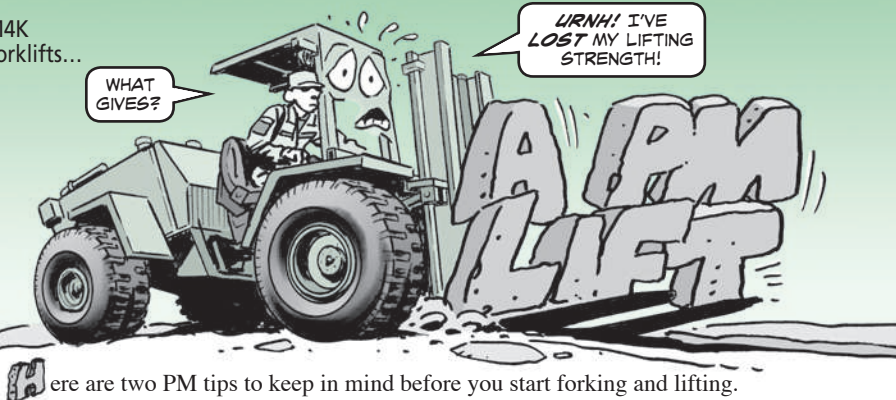
There's a breather under the hood on the curbside that allows filtered air to vent in-and-out of the excavator's fuel tank. In dusty conditions the filter gets clogged.

A clogged filter causes a vacuum in the fuel tank, starving the engine for fuel. No fuel...no engine running...no construction operations!

So, when the engine runs rough or not at all, eyeball the fuel tank's breather.

Look dirty?

If so, at the work site, remove the breather, tap it to remove dust and sand and replace it. Back in the motorpool, clean the breather with cleaning compound solvent, MIL-PRF-680, when it gets real dirty and clogged. Just make sure it's dry before reinstalling.



Here are two PM tips to keep in mind before you start forking and lifting.

Loose Fitting

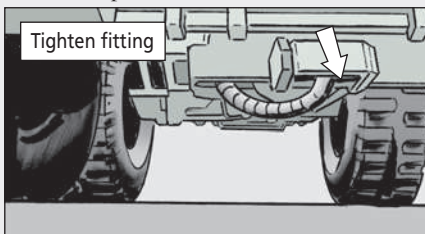
An M4K forklift that can't lift a load isn't a forklift—it's NMC!

If your forklift lifts erratically, it probably has a hydraulic leak. The usual suspect is the elbow fitting that connects the hydraulic line to the main hydraulic lift cylinder.

Vehicle vibration loosens the fitting and lets hydraulic fluid leak out. A loss of fluid starves the vehicle's hydraulic pump. Then the forklift won't lift.

Before that happens, check out that elbow. Raise the forks a foot off the ground and put jack stands under them. Turn off the engine, then get on your hands and knees and eyeball the elbow fitting. It's directly under the forklift's lift rack.

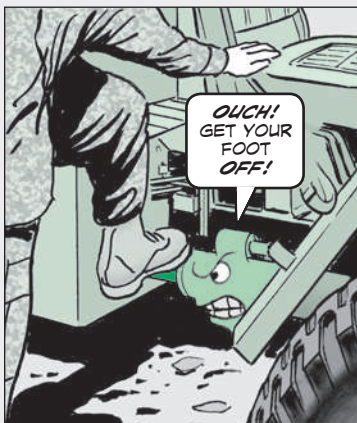
If it's leaking, get your mechanic to tighten the fitting and add hydraulic fluid until the dipstick shows FULL.



No Step Here

The cylinder rod for the forklift's steering arm seems to make a handy step when you climb into the cab from the curbside.

Problem is, your boot can scratch the cylinder rod. A scarred rod ruins the wiper seal, causing a hydraulic fluid leak.

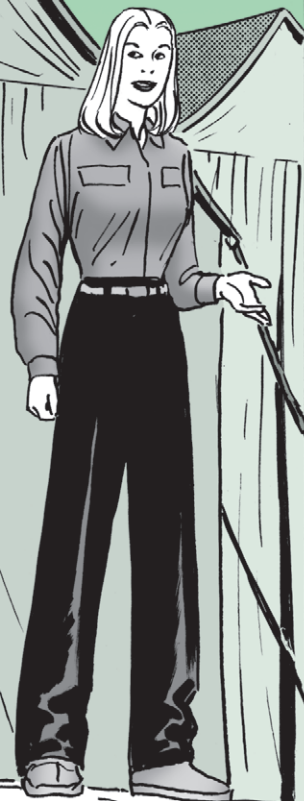


To save costly repairs and downtime, get on the forklift from the roadside and keep your feet off the cylinder rods.

LAWS OF TENT LIVING

ROUGHING IT IN A TENT MONTH AFTER MONTH IS TOUGH DUTY.

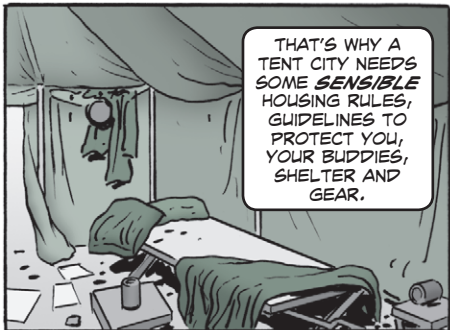
WHO KNOWS THAT BETTER THAN *YOU*?



TENT LIVING MAKES SPECIAL DEMANDS ON YOUR SAFETY, HEALTH AND SANITATION.



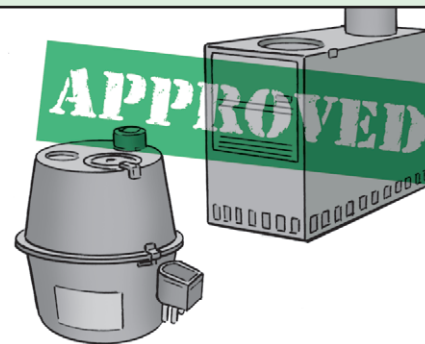
THAT'S WHY A TENT CITY NEEDS SOME *SENSIBLE* HOUSING RULES, GUIDELINES TO PROTECT YOU, YOUR BUDDIES, SHELTER AND GEAR.



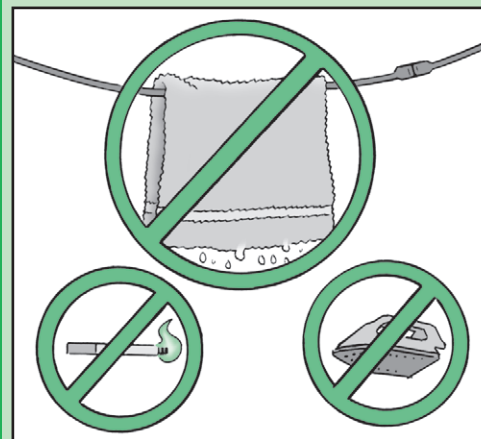
WE'VE COMPILED A FEW "LAWS OF TENT LIVING" YOU MAY WANT TO CONSIDER...



Fire Safety



- Use only heaters approved for military use—like those in the family of space heaters (FOSH).

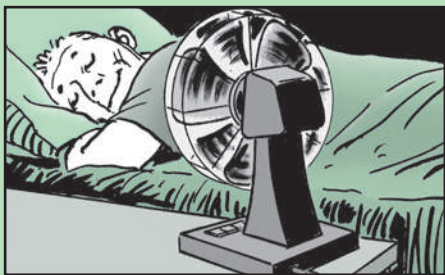


- Never use hot plates, microwaves or irons.
- Make sure all lights and electrical devices are turned off when you leave.
- Don't use frayed, spliced or damaged extension cords.
- Don't hang wet clothes or put other objects on top of interior wiring.
- Make sure the voltage entering your tent matches the voltage of your appliances. For instance, don't plug a 110-volt appliance into an outlet providing 220-volt power. You'll not only lose the appliance, but you could start a fire. You need to get a transformer.
- No smoking within 50 feet of tents. And no smoking on decks or additions. Keeping your distance is especially important if your tent has been soaked in kerosene to repel insects.



- Station a fire extinguisher by each door.

Health and Sanitation



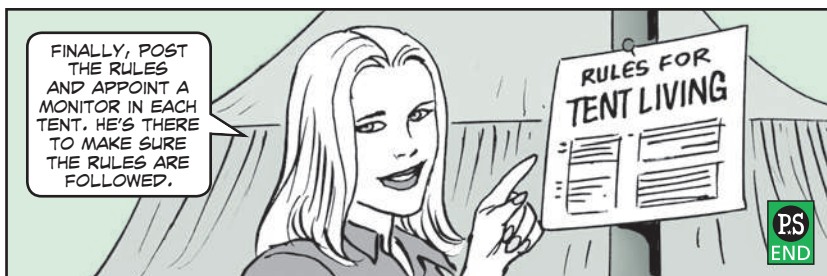
- In the heat of summer it's hard to keep a tent cool. Consider buying a fan at the PX to help circulate air.



- Don't play with the air conditioner controls. If you set the unit below 68°F, it could freeze up. Then you'll have no cool air for the two to three hours it takes for the unit to thaw out.
- Don't eat or store food in tents. Food attracts insects, mice, rats and snakes—and you don't need extra bunk mates.



- Depending on local SOP, generators might be taken down daily for maintenance. Be prepared for those times you'll have no air conditioning and possibly no electrical power.
- Do not block doors. Make sure to keep the halls and doorways clean and free of obstructions.
- Inspect the tents monthly or as needed.
- Take out the garbage each day.



Wet Weather
Parka and
Trousers...

THE UNSAFE SAUNA

There's nothing quite like a relaxing sauna at the gym after a stressful day. Just lie back, close your eyes and feel the warmth blanket you while your muscles relax. Feels good to unwind.

But there's another kind of sauna that doesn't feel so good. It's the kind you get while working in your wet weather parka and trousers on a hot day. They're made of nylon coated on both sides with polyurethane. The fabric doesn't breathe.

In other words, the material blocks air from getting in and body heat from escaping.

Imagine what happens if you're bundled up tight in parka and trousers, doing hard physical work on a hot day. At first you'll sweat buckets and later you'll suffer from heat exhaustion.

SO, LOOSEN
OR OPEN THE
FASTENERS ON
YOUR PARKA
AND TROUSERS
TO GET SOME
VENTILATION.

On the parka, loosen
or open the following
fasteners:

- hook-and-pile fastener where the front of the hood meets the body of the parka

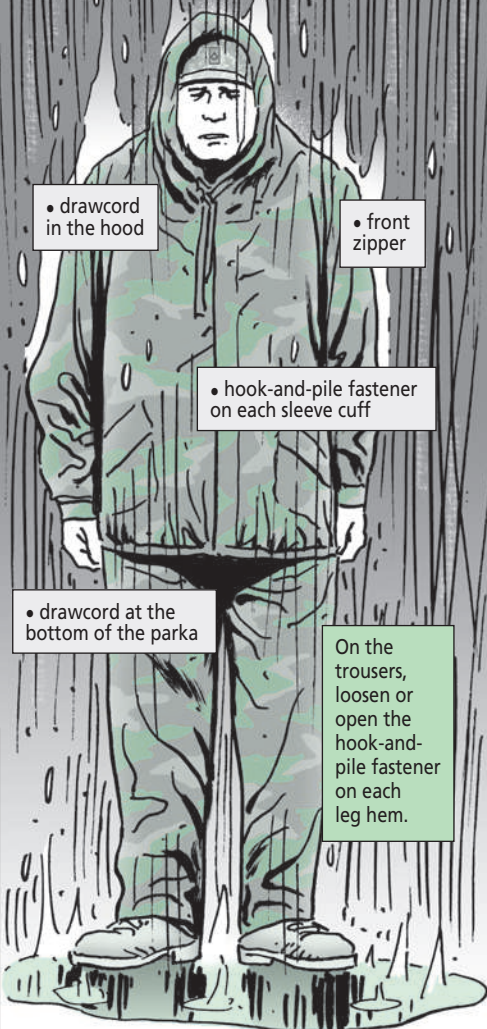
- drawcord in the hood

- front zipper

- hook-and-pile fastener on each sleeve cuff

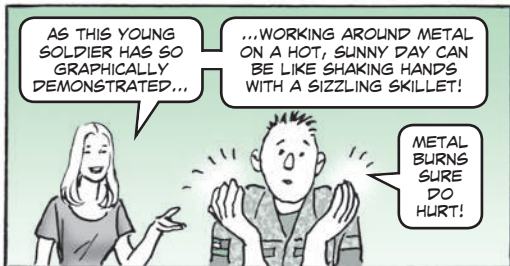
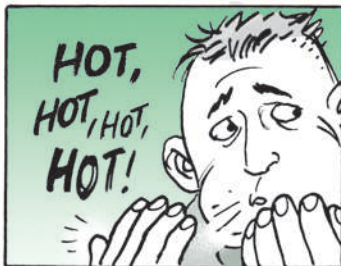
- drawcord at the bottom of the parka

On the
trousers,
loosen or
open the
hook-and-
pile fastener
on each
leg hem.



Gloves...

How to **AVOID** the **HOT METAL HANDSHAKE**



Heavy Duty Work Gloves
Leather with gauntlet cuff.
Strap and buckle for tightening.
For men and women.

Size	NSN 8415-00-268-
1	7871
2	7872
3	7869
4	7870
5	7868

Anti-Contact Glove
Cotton with leather palm
and finger. Gauntlet cuff.
For men and women.

Size	NSN 8415-00-227-
Small	1220
Medium	1221
Large	1222

IF YOU WANT TO AVOID THE
HOT METAL HANDSHAKE,
COVER UP WITH GLOVES.

THEY'RE **NOT** JUST
FOR COLD WEATHER
ANYMORE.



Know the Difference

MISTAKING A 5-GAL FUEL CAN FOR A 5-GAL WATER CAN COULD BE A FORMULA FOR **DISASTER!**

THESE DISASTERS INCLUDE: DAMAGED EQUIPMENT, LOST PROPERTY, AND THIRD-DEGREE BURNS.

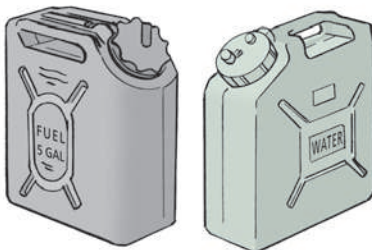
FOR SAFETY'S SAKE, LEARN TO TELL CANS APART. HERE'S A GOOD PLACE TO START YOUR SCHOOLING...



Similarities

Fuel and water cans are alike in some ways. Both have the same size and basically the same shape. They have an X depressed into the surrounding plastic surface. And both come in olive drab and sand colors.

Fuel and water cans have basically the same shape



Differences

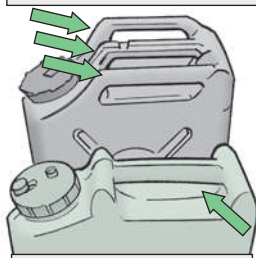
In outward appearance, fuel and water cans differ in three ways: by the **labels**, **caps** and **handles**. Get to know all three.

	Fuel Cans	Water Cans
Label	FUEL	WATER
Cap	Smooth on top. Retaining strap fixed to its center.	Has two small caps within the larger cap: one for the breather, another for the pouring spout.
Handle	Has three handles.	Has one handle.

Remember to use your senses to tell the difference between the cans:

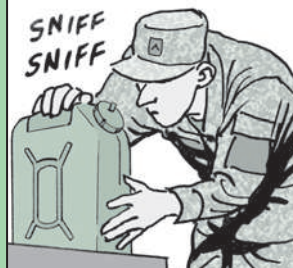
- **Sight:** See the number of handles and the FUEL or WATER label.
- **Touch:** Feel the number of handles and the shape of the cap.
- **Smell:** Smell for fuel odor.
- **Hearing:** Listen when you unscrew the cap. A fuel can has pent-up vapors and will always make a hissing sound.

Fuel can has three handles

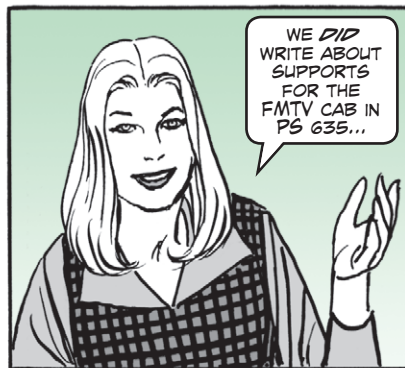


Water can has one handle

Smell for fuel odor



How to Order Publications



Dear Half-Mast:

We get requests for tech manuals all the time. It seems that soldiers don't know where or how to get them. PS Magazine has written about how units can find out what publications they need. Could you do an article that tells soldiers *how* to order their TMs?

J.S.
TACOM-RI

MR J.S.,
I SURE CAN!

THE SIMPLE ANSWER IS TO VISIT THE UNIT PUBLICATIONS CLERK AND TELL HIM WHAT AND HOW MANY ARE NEEDED.

BUT, THAT'S NOT QUITE THE WHOLE STORY. HERE'S THE LOW-DOWN...



Individual Efforts

You won't help your cause by just telling your pubs clerk to order the HMMWV -10 TMs. Provide them the pub's full number and title, and the date of publication.

Tell the pubs clerk why you need the number of copies you're requesting. They'll have to justify it with the unit pubs officer.

Know whether you're asking for a printed tech manual, an electronic manual (EM) compact disc, an interactive electronic tech manual CD (IETM), or a publication such as PS Magazine.

Getting Pubs at Your Home Base

If your home base is in CONUS or PACOM, you'll use the normal method of ordering pubs from the Army Publishing Directorate (APD) using the -12-series ordering form.

First, your pubs clerk and officer have to be appointed, in writing, by the commander. Then the pubs clerk has to set up an account with APD.

The APD has an 18-page PowerPoint tutorial for pubs clerks to establish and maintain unit accounts:

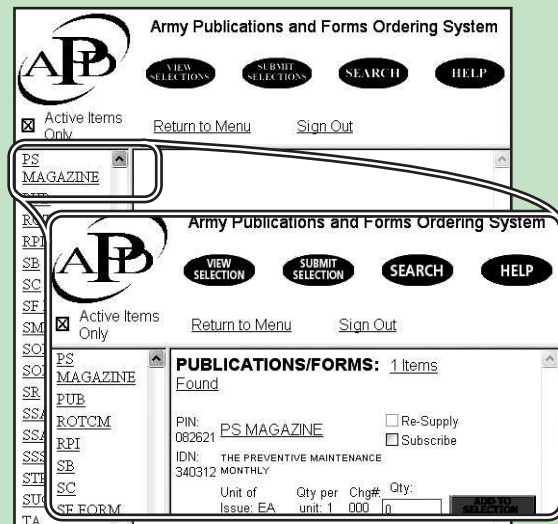
<http://www.apd.army.mil/>

On the APD homepage use the "Orders/Subscriptions/Reports" tab to locate "Establish an Account" and read the TUTORIAL.

Finding PS Magazine on the APD pubs listing used to be confusing. You had to know we were listed as TB 43-PS-xxx.

This year APD added PS Magazine to the alphabetical listing in the left-hand column on the APD ON-LINE ORDERING web page. You can scroll down to and click on PS Magazine. Click on SUBSCRIBE, enter the quantity needed, and click on ADD TO SELECTION.

To order a tech manual, you scroll down the same left-hand column to TMs, click on it, then scroll down the main column to the TM you need.



PS MORE

Getting Pubs in Europe and SWA

If you're stationed in Europe, you'll use the Army in Europe Publishing System (AEPUBS) to order your pubs.


If your CONUS/PACOM unit is deployed to SWA your rear detachment can maintain your APD account, but your deployed force must establish a V-account through AEPUBS to get any -12-series publications.


Units deploying from Europe to SWA will also open a V-account. Their normal pubs account remains open for use by the rear detachment.

To establish a deployed V-account visit the AEPUBS website:

<https://aepubs.army.mil>

Click on "Frequently Asked Questions" and go to the third question: "How Do I Establish a Deployed Publications Account?"

Address  https://aepubs.army.mil/ae/public/aepubs_main.asp



[Opening Page](#)
[Login](#)
[Forms](#)
[Publications](#)

Frequently Asked Questions (FAQ) Reference Page

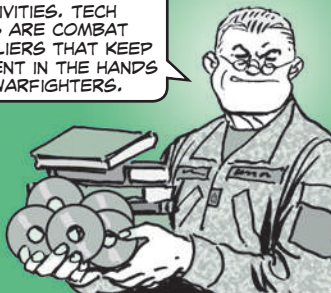
TOP 4 QUESTIONS:

- [1. How Do I Establish a New Publications Account?](#)**
- [2. How Do I Submit Changes to Existing Account?](#)**
- [3. How Do I Establish a Deployed Publications Account?](#)**
- [4. What are Personal Subscription Notifications?](#)**

AEPUBS customer service telephone numbers are: DSN 314-384-6881/6882/6883/6884. Their fax number is DSN 314-370-6568, or commercial 0149-6221-57-6568. Or, use their email address:

customer.service@usapdce.aepubs.army.mil

DON'T GO WITHOUT THE PUBS THAT SUPPORT YOUR MAINTENANCE ACTIVITIES. TECH PUBS ARE COMBAT MULTIPLIERS THAT KEEP EQUIPMENT IN THE HANDS OF WARFIGHTERS.



APD Rear Detachment Accounts

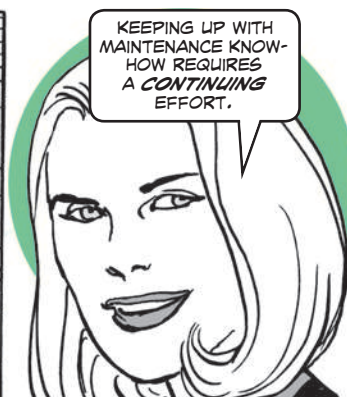
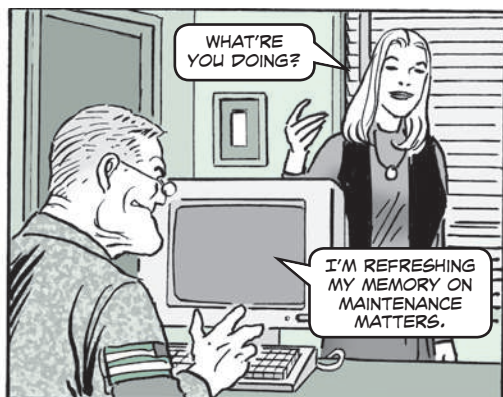
When units with APD -12-series accounts deploy to SWA the deployment is not handled as the change of address we described in PS 591, Page 59:

https://www.logsa.army.mil/pub/psissues/ps_591.pdf

Instead, rear detachments can keep the normal account open at normal or reduced distribution levels.

PS END

Education for Ordnance Soldiers



Soldiers forget things they were taught at MOS school. Throw in new equipment, MWOs, SOUMs, changing levels of maintenance, revised publications, combat deployments and the resulting lack of TMs and it's easy to see that even motivated maintenance soldiers have a hard time keeping their skills sharp.

An online university helps fill the gap. The electronic Ordnance University (eOrdnanceU) is an online service offered by the Ordnance Center and Schools.

Ordnance soldiers and civilians can access courses through the OMMU Blackboard, download training materials, and hold discussions with their peers and subject matter experts.

Access is available using your AKO login and password.

HERE'S A
SAMPLE OF
WHAT YOU
MAY FIND AT
eOrdnanceU.



DOWNLOADS and FORUMS	
BDAR training information	General/mission-specific discussions
Tracked vehicle schematics, TSPs, simulations and other documentation	Maintenance tips and questions
General maintenance — basic knowledge/skills	Military packaging technology
Wheeled vehicle manuals, TSPs, simulations, CBTs and other documentation	Ordnance NCO Academy/officer training

Visit the eOrdnanceU website:

<https://ordnanceu.army.mil>

If you encounter problems on the OMMU website you can contact:

eoadmin@apg.army.mil



Upgraded M915A4 Transmission ECU

If your unit has M915A4 tractor trucks, there's an upgraded transmission electronic control unit (ECU). It allows the vehicle to reach speeds up to 65 mph for those times you need speed to stay out of danger. The NSN is 2920-01-521-7476.

Notebook Computer Battery Fires

Do you have one of these Dell laptop computers? Models: Latitude D410, D505, D510, D600, D610, D800, D810; Inspiron 510M, 600M, 6000, 8600, 9200, 9300; XPS Gen 2 Precision M20, and M70. If so, you need to check the batteries. The batteries which were bundled with Dell notebooks and also sold as add-ons can overheat and catch fire. Affected batteries were shipped between 05 Oct 04 and 13 Oct 05. These batteries are now being recalled by Dell. To find out if you have a battery subject to this recall go to website:

<http://www.dellbatteryprogram.com/batterymodels.ASPX>

REPAIRING THE RT-1539 CORRECTION

The General Dynamics Bragg location for sending RT-1539's for repair listed on Page 42 of PS 621 is wrong. Cross it out and replace it with:

General Dynamics, RSC
Bldg 8-6812
Butner and Letterman Street
Ft Bragg, NC 28310

DUFFEL BUCKLES

You know those little buckles that hold together the shoulder straps on your duffel bag, NSN 8465-01-117-8699? Don't waste your time trying to order them. They're not available in the Army supply system. The only way to get the buckles is through salvage. Ask the people at your clothing issue facility (CIF). They may have a few buckles lying around.

Firefinder Seat NSN Changed

The AN/TPQ-36(V)8 Firefinder vehicular seat shown on Page B-4 in TM 11-5840-380-10 is no longer available. Order folding chair, NSN 7105-00-269-8463, instead.

BATTERY TESTING FOR TS-24B

Need to know how to test the BA-5368/U battery used in the AN/PRC-90 survival radio, NSN 6135-01-455-7947, part of the TS-24B radio set? Go to

<http://www.monmouth.army.mil/cecom/lrc/lrc.html>

Click on [Battery Support](#). In the tools search box, type in BA-5368 and click on [Advisory Message Number 8](#). It'll instruct you how to test the BA-5368 battery.

CARD FOR M2 HEADSPACING, TIMING

Armorsers, thanks to a pocket-sized card now available on the Internet, you never need to worry about your M2 gunners having the correct headspacing and timing procedures. The card lists all the steps. Download it at https://aeps2.ria.army.mil/commodity/win/tacom/M2_Head.pdf

Use your AKO password to log in. Print enough cards for all your gunners and a few more for spares. Get them laminated so they'll last.

Turn In Unserviceable Hellfire LEA

Hellfire M299 LEAs (launcher electronics assemblies), NSN 1440-01-484-9151, are in critically short supply. If you have unserviceable ones, turn them in ASAP so they can be repaired and put into the supply system. Send the assemblies to:

Defense Distribution Depot Anniston
SW3120 (Josephine Boyd)
Bldg 382 (Mark for B64 Account)
7 Frankford Ave
Anniston, AL 36201-4199

If you have questions, contact the Joint Attack Munition Systems Project Office at DSN 746-7052/(256) 876-7052.

Send In Unserviceable M40/M42 Facepieces

If you have unserviceable or excess M40A1/M42A2 mask facepieces, send them to Pine Bluff Arsenal for repair. Facepieces are a critical item that the Army needs to keep in stock. Facepieces have a 06 priority. The DODAAC is W41CE8. They should be sent to:

XU WOK4 USA OSC
Pine Bluff Arsenal
Army Non-Ammo Field Service ACCT
53990 507th St
Pine Bluff, AR 71602-9500

Questions? Contact TACOM at DSN 793-3053/(309) 782-3053 or email:

Vanattad@ria.army.mil

Get New PATS DVD

Technology has run ahead of the instructional DVD that came with the M41 PATS. The DVD no longer works on most computers. So the Army has produced an up-to-date PATS DVD that does work. When your PATS comes back from calibration or maintenance at Redstone Arsenal, AL, the new DVD will come, too. If you don't want to wait, get a free one by calling David May at DSN 584-5961/(410)-436-5961 or emailing david.may3@us.army.mil

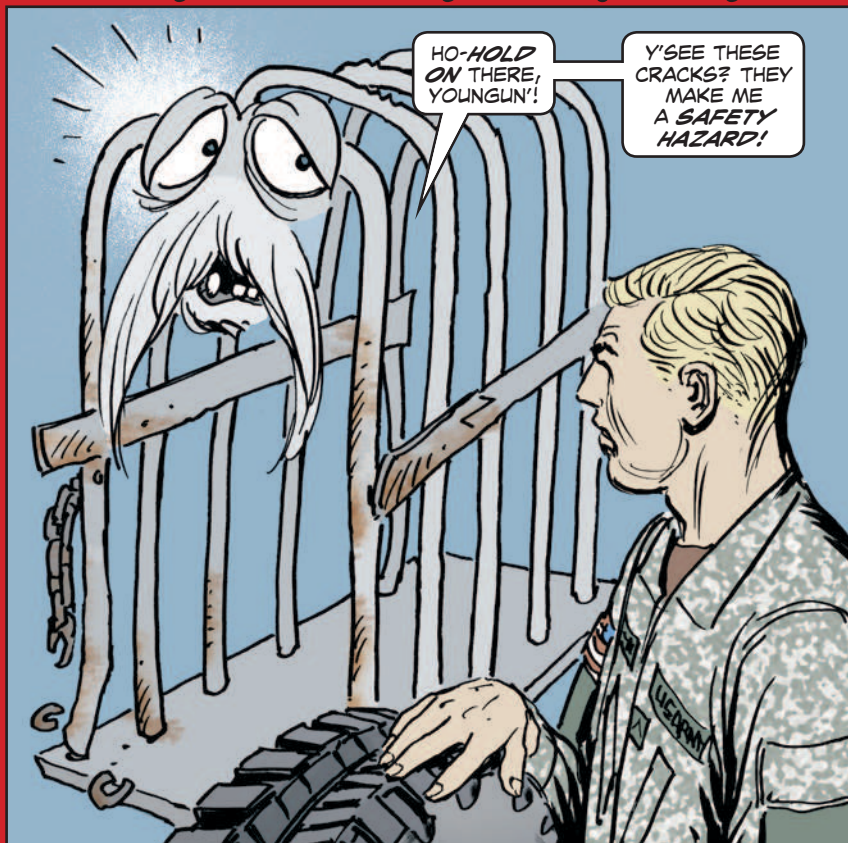
Safeguarding COMSEC

Equipment like the AN/CYZ-10 data transfer device needs special safeguarding, accounting and storage procedures, whether it has crypto loaded or not. If you use this type of equipment, keep a copy of AR 380-40, *Policy for Safeguarding and Controlling Communications Security*, and TB 380-41, *Procedures for Safeguarding, Accounting and Supply Control of COMSEC Material*, on hand. It's also good to have the CCI security pamphlet, DA Pam 25-380-2, *Security Procedures for Controlled Cryptographic Items*.

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

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

TIRE CAGES AGE!



Replace tire cages when you find:

- cracked or bent components
- pitting from corrosion
- cracked welds

For more tire and cage info: TM 9-2610-200-14