

Issue 716

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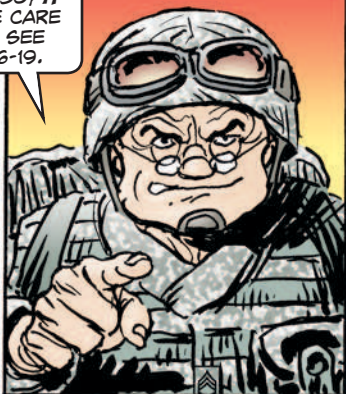
July  
2012

# THE PREVENTIVE MAINTENANCE MONTHLY

TB 43-PS-716

Approved for  
Public Release;  
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TAKING CARE OF  
YOUR M1GO LIGHT  
FLAIL? IF SO, IT  
WILL TAKE CARE  
OF YOU! SEE  
PAGES 16-19.



HOE  
UBER

# The Making of Maintenance Experts



Aviation mechanic graduates at the US Army Aviation Logistics School have spent a lot of hours learning about Chinooks, AH-64s, Kiowa Warriors, Black Hawks and ground support equipment.

They have turned wrenches, used TMs and IETMs, studied structures and pneudraulics, installed rivets, repaired airframes, studied electrical systems, flight controls, weapons, navigation and avionic systems, power plants, and propulsion and a host of other aircraft functions.

You'd think they'd be experts when they hit the flight line. But they aren't. And treating them as though they are experts can lead to equipment damage, accidents and personal injury.

When mechanics arrive at their units, training needs to continue. They should shadow senior mechanics who can show them the maintenance by the book, not on-the-fly or by the seat of their pants. New mechanics should also be introduced to standard operating procedures (SOP) in their units.



**PS****THE  
PREVENTIVE  
MAINTENANCE  
MONTHLY****ISSUE 716 JULY 2012**

TB 43-PS-716, *The Preventive Maintenance Monthly*, is an official publication of the Department of the Army, providing information for all Soldiers assigned to combat and combat support units and all Soldiers with unit maintenance and supply duties. All information published has been reviewed and approved by the agency responsible for the equipment, publication or policy discussed. Application of the information is optional with the user. Masculine pronouns may refer to both genders. The use of product or company names does not constitute endorsement of those products, services or companies by the U.S. Army. The use of non-DoD hyperlinks, along with their content, does not constitute endorsement by DoD or DA. Neither DoD nor DA exercises any editorial control over, and cannot vouch for, content on non-DoD websites.

**COMBAT VEHICLES**

M1-Series Tank Engine Lifting Eyes  
Stryker Water Protection and Draining  
M777A2 Towed Howitzer Hydraulic Fluids  
M88A1 Ground Hop Kit  
M2/M3-Series Bradley ISU Azimuth Knob  
DA Form 2408-4 Gun Card Requirement  
MLRS Carrier LRU Tarp

**WHEELED VEHICLES**

Preparing Tactical Vehicles for Extreme Heat  
HMMWV Battery Power Drain  
Safety Reminders for Drivers  
Proper Entering, Exiting of Trucks

**MRAP/ROUTE CLEARANCE**

M160 Light Flail Vehicle Operations  
M160 Light Flail Track Adjustment

**COMBAT ENGINEERING**

DEUCE Swing Shaft Arm Lubing  
DEUCE Roadwheel Rubber Check  
REBS Under-Ride Bar Kit and Video

**AVIATION**

AH-64D IHADSS Damage Prevention  
Securing Aircraft Doors for Flight  
UH-60A/L/M Center Console Caution  
Maintaining Maintenance Records  
CEPS Kit for IHADSS Helmet  
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Chem Light Inspection, Disposal

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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-GP)****5307 Sparkman Circle****Redstone Arsenal, AL 35898**

Or email to:

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

Internet address:

**https://www.logsa.army.mil/psmag/pshome.cfm**

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# THE "EYES" DON'T HAVE IT!



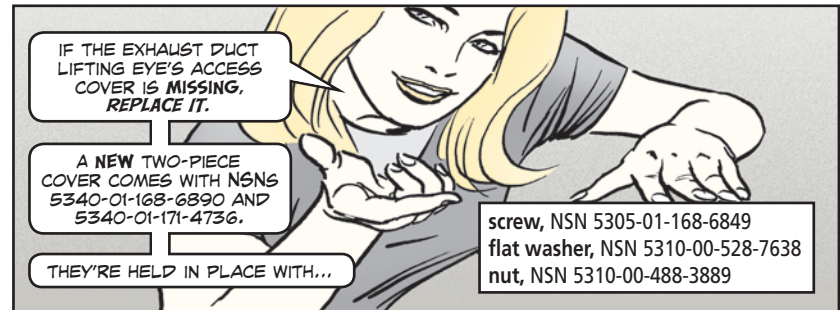
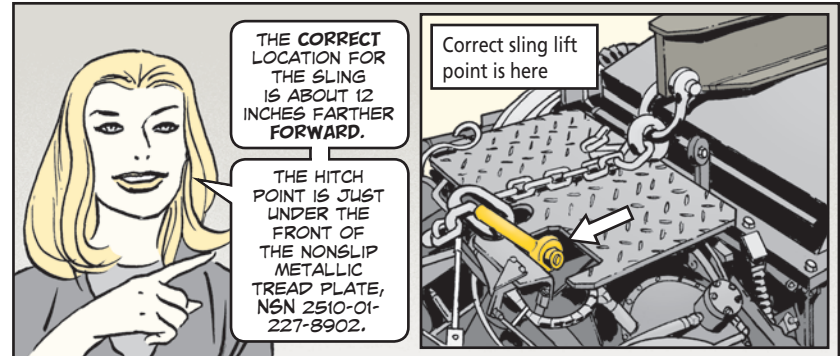
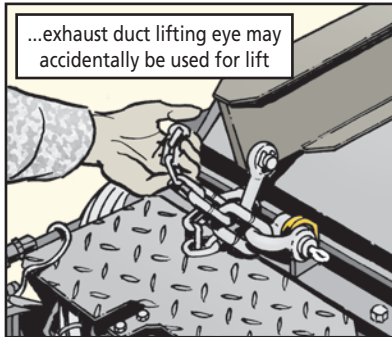
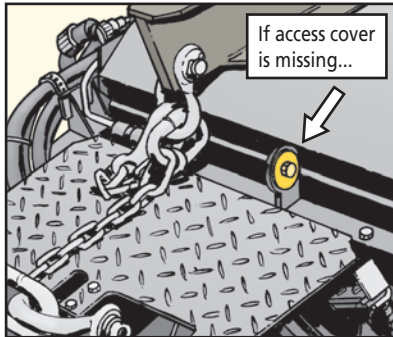
**W**hen you're pulling the powerpack on an M1-series tank, you can't just hook the lifting sling to whatever's handy.

Some crewmen and mechanics are making the mistake of using the exhaust duct lifting eye. That eye just doesn't have the strength to hold up under the weight of the pack. It can snap in the middle of the lift, damaging the pack and injuring anyone who might be in its way.

Normally, the lifting eye is closed off with an access cover to prevent accidental use. There's even a stencil with a big red arrow pointing to the eye that reads:

**CAUTION**  
**EXHAUST-DUCT LIFT ONLY**  
**NOT POWERPACK**

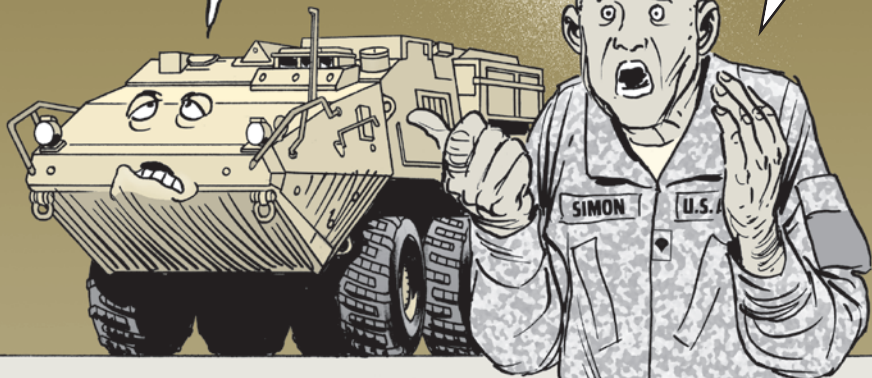
Trouble is, the access cover is sometimes missing and the stencil is often covered with dirt. So it's really easy to hook up to the lifting eye if you're not paying attention.



Stryker...

**GURGLE,  
GURGLE!**

HEY!  
HE'S  
CHOKING!  
DOES  
ANYONE  
KNOW  
CPR?!

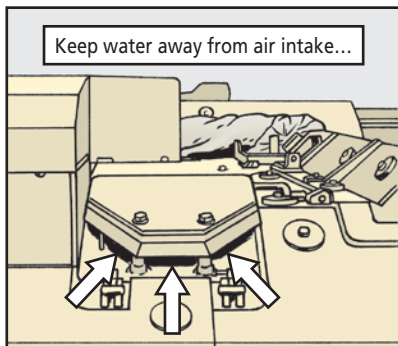


**W**hat's that sound, you ask? Could it be your Stryker's engine drowning in wash water?

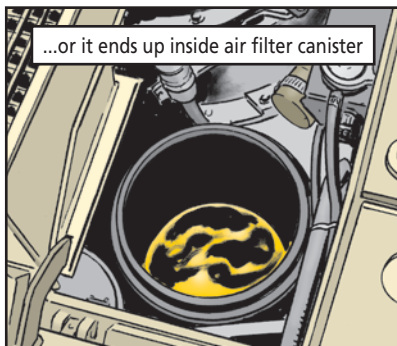
Sure, you want to give your Stryker a good washing, but that doesn't mean you need to spray every nook and cranny. And the air intake definitely rates as an important cranny!

Even low-pressure water can get inside an uncovered air intake. Then the next time your Stryker is started, all that water gets sucked straight into the air filter canister. A wet filter blocks good air flow, choking the engine. That's a sound that's sure to make you cringe.

Before you wash your Stryker, make sure the air intake is properly covered with the environmental cover, NSN 5340-20-000-0188.

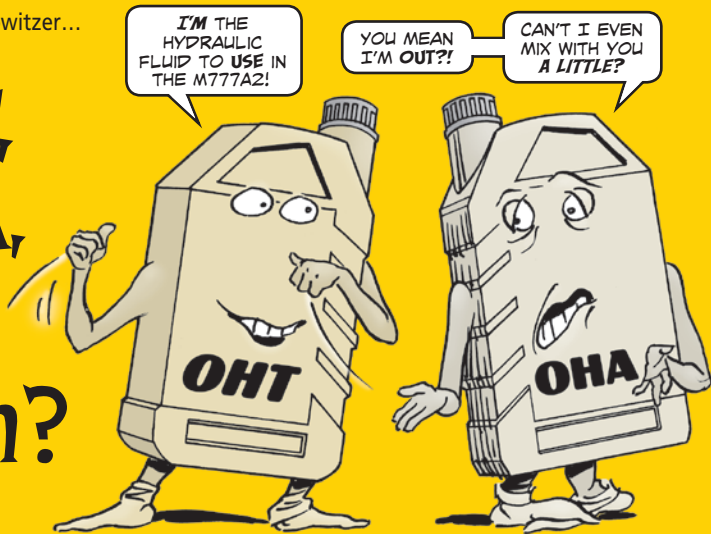


Keep water away from air intake...



...or it ends up inside air filter canister

# OHT, OHA, or Both?



Dear Half-Mast,

The lubrication order in TM 9-1025-215-10 (May 10) says to use OHT hydraulic fluid (MIL-PFR-6083) for our M777A2 towed howitzers. It comes in a 1-qt bottle, NSN 9150-00-935-9807, or a 1-gal bottle, NSN 9150-00-935-9808.

We recently found that some of our organizational maintenance personnel are using OHA hydraulic fluid (MIL-PRF-5606), NSN 9150-00-252-6383, instead.

Is it OK to use OHA in these howitzers? If so, can you mix OHT and OHA?

Hans-Juergen Pirner  
Peter Kohler  
Rainer Doerner  
Maintenance Activity  
Vilseck Armament Team  
Germany

Dear Gentlemen,

*The answer to your question is a little tricky. First of all, OHT is definitely the hydraulic fluid to use.*

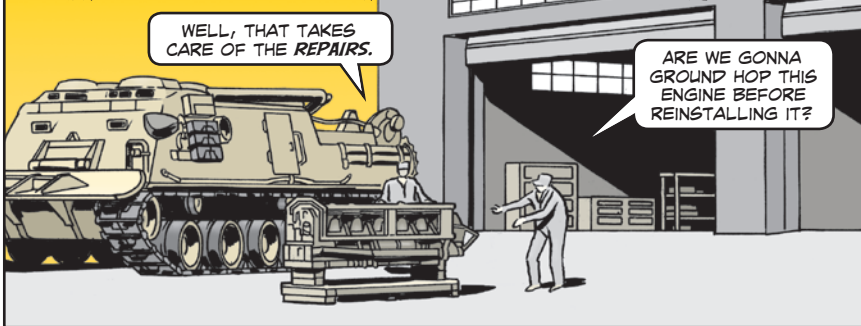
*It is possible for OHA to be used, but **only in a worst case scenario while in a combat environment.** See Note 2 in Appendix D of IETM 9-1025-215-24&P, Battle Damage Assessment and Repair (BDAR).*

*Also note that the Remarks column for OHT in Appendix D states, "Not interchangeable with any other type or grade of hydraulic fluid. It is compatible with MIL-H-5606, MIL-H-46170, and MIL-H-83282. It can be mixed with these fluids, but cannot be used as a substitute."*

*So as far as your question about mixing the two hydraulic fluids, the answer is a tentative yes, but **only** in the extreme circumstances listed above. Mixing the two will degrade seals and lead to component damage.*

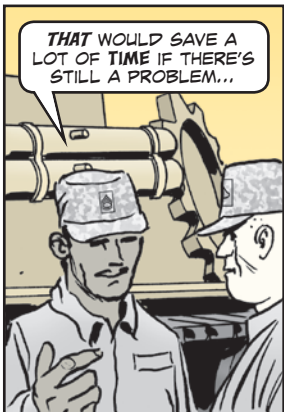
*Half-Mast*

# GROUND-HOPPING YOUR M88A1



WELL, THAT TAKES CARE OF THE REPAIRS.

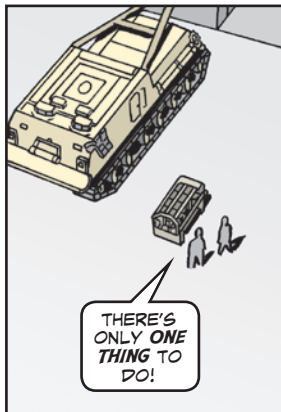
ARE WE GONNA GROUND HOP THIS ENGINE BEFORE REINSTALLING IT?



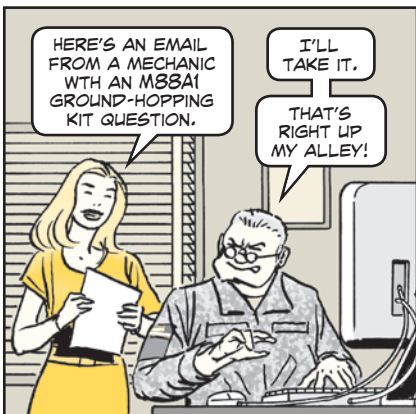
THAT WOULD SAVE A LOT OF TIME IF THERE'S STILL A PROBLEM...



...BUT WE DON'T HAVE A GROUND HOP KIT!



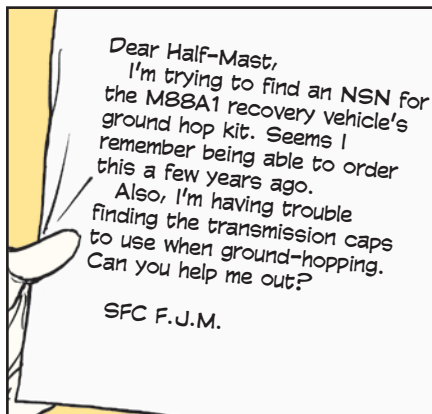
THERE'S ONLY ONE THING TO DO!



HERE'S AN EMAIL FROM A MECHANIC WITH AN M88A1 GROUND-HOPPING KIT QUESTION.

I'LL TAKE IT.

THAT'S RIGHT UP MY ALLEY!



Dear Half-Mast,  
I'm trying to find an NSN for the M88A1 recovery vehicle's ground hop kit. Seems I remember being able to order this a few years ago.  
Also, I'm having trouble finding the transmission caps to use when ground-hopping. Can you help me out?

SFC F.J.M.

Dear Sergeant F.J.M.,

You bet! At one time there was a single NSN for the ground hop kit. Unfortunately, it was discontinued. Now you have to order the kit by its individual components:

Component	NSN/PN
Accessories cable assembly	6150-00-615-8737
Generator cable assembly	2920-00-614-7203
Starter cable assembly	6150-00-614-7543
Ground cable assembly	6150-00-674-8738
Engine primer (purge pump) hose assembly	4720-01-044-8393
Main and return fuel line hose assembly	4720-01-041-3375
Ground hop air filtration kit	2815-01-334-3270

You'll find these components listed in WP 0488 00-32 of TM 9-2350-256-20-2 (Jun 05).

The transmission caps are a little tougher to find. They're in TM 9-2520-215-34P, Cross-drive Transmission Assembly. You'll find them listed as Item 2 in Fig 36 of WP 0038 00-2. A set of caps plus the storage case come with NSN 2590-00-330-8642.

*Half-Mast*

## M2/M3-Series Bradleys...

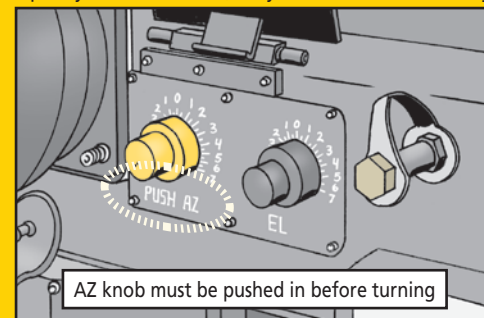
# Push the AZ Knob First!

Crewmen, the integrated sight unit (ISU) on your Bradley has elevation and azimuth knobs to adjust the gun reticle up and down and left and right. Couldn't be simpler, huh?

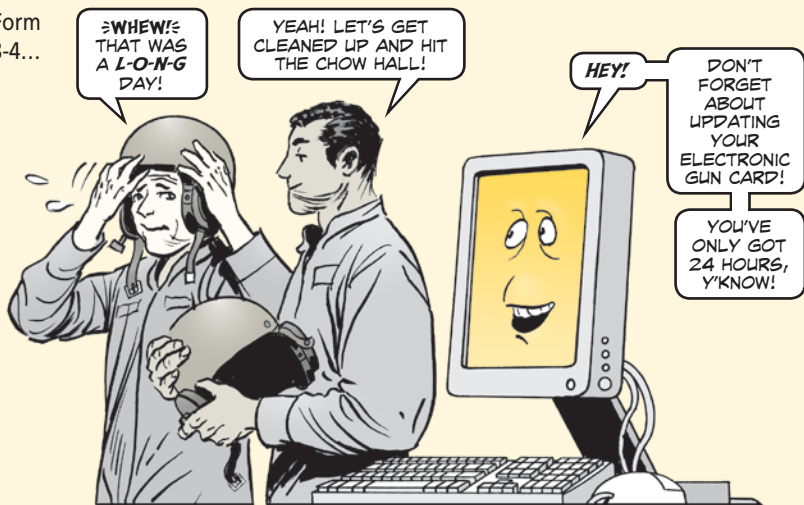
Not so fast. Though the knobs look pretty much the same, they work a little differently. The elevation knob works by simply turning it. But to adjust the azimuth, you have to first push in the knob and then turn it. Look carefully and you'll notice there's even a small PUSH label right beside the AZ under the knob.

Problem is, some crewmen are forgetting this extra step for the azimuth knob. They try forcing the knob without pushing it in and it snaps.

So remember: It's turn for elevation and push and turn for azimuth.



AZ knob must be pushed in before turning



# ELECTRONIC GUN CARD REQUIRED!

Tankers, by now you're probably aware that DA Form 2408-4, *Weapon Record Data Card*, can be updated electronically on the TACOM-Unique Logistics Support Applications (TULSA) web site:

<https://tulsa.tacom.army.mil/guncard/index.cfm>

It's a convenient and efficient way to report any activity on the gun tube for your tank, mortar, artillery piece, or Stryker.

What you may not know is that the electronic gun card is now the **required** method for updating your DA Form 2408-4.

The next update to DA Pam 750-8, *The Army Maintenance Management System*, will have a few changes in Para 5-3 and 5-4 that you need to know about. First, all references to mailing in hard copy gun cards will be removed. Second, gun cards will no longer be mailed in at six month intervals. Instead, crews are required to update the electronic gun card within 24 hours after returning from combat operations or firing the gun. Jot down those changes now.

In extreme cases, such as a combat environment, hard copies of the DA Form 2408-4 can still be mailed in. But the hard copy form is acceptable **only** when the electronic gun cards cannot be used. In those cases, you'll still need to update the electronic gun card as soon as you return from combat operations. Here's the mailing address:

**US Army TACOM**  
6501 E 11 Mile  
Mail Stop 510  
Warren, MI 48397

When a tank is overhauled or rebuilt, a new electronic gun card must be established in the TULSA database. DA Pam 750-8 also requires that when a vehicle is put in storage or is transferred or turned in, an updated hard copy DA Form 2408-4 must accompany the vehicle.

Need more info on electronic gun cards? Check out these POCs:

### Armor

Brad Charneski or Kevin McCammon -- DSN 786-0433/0434 or (586) 282-0433/0434  
[brad.a.charneski.civ@mail.mil](mailto:brad.a.charneski.civ@mail.mil) or [kevin.a.mccammon.civ@mail.mil](mailto:kevin.a.mccammon.civ@mail.mil) or  
[usarmy.detroit.tacom.mbx.ilsc-armor-gun-cards@mail.mil](mailto:usarmy.detroit.tacom.mbx.ilsc-armor-gun-cards@mail.mil)

### Artillery

Jeffrey Shoemaker or Brian Lindeman -- DSN 786-5617/5618 or (586) 282-5617/5618  
[jeffrey.j.shoemaker.civ@mail.mil](mailto:jeffrey.j.shoemaker.civ@mail.mil) or [brian.d.lindeman.civ@mail.mil](mailto:brian.d.lindeman.civ@mail.mil) or  
[tacom-lcmc.ilsc\\_artillery\\_gun\\_cards@mail.mil](mailto:tacom-lcmc.ilsc_artillery_gun_cards@mail.mil)

### Mortars

Joel Schmidt -- DSN 786-1216 or (586) 282-1216  
[joel.e.schmidt.civ@mail.mil](mailto:joel.e.schmidt.civ@mail.mil) or [tacom-lcmc.ilsc\\_mortar\\_gun\\_cards@mail.mil](mailto:tacom-lcmc.ilsc_mortar_gun_cards@mail.mil)

### Stryker

Tim Joyce -- (586) 770-6756  
[timothy.s.joyce.civ@mail.mil](mailto:timothy.s.joyce.civ@mail.mil) or [usarmy.detroit.peo-gcs.mbx.stryker-gun-cards@mail.mil](mailto:usarmy.detroit.peo-gcs.mbx.stryker-gun-cards@mail.mil)

### Technical Problems

TULSA Help Desk -- DSN 786-3406 or (586) 282-3406  
[tacom-lcmc.ilsc\\_tulsa@mail.mil](mailto:tacom-lcmc.ilsc_tulsa@mail.mil)

MLRS Carrier...



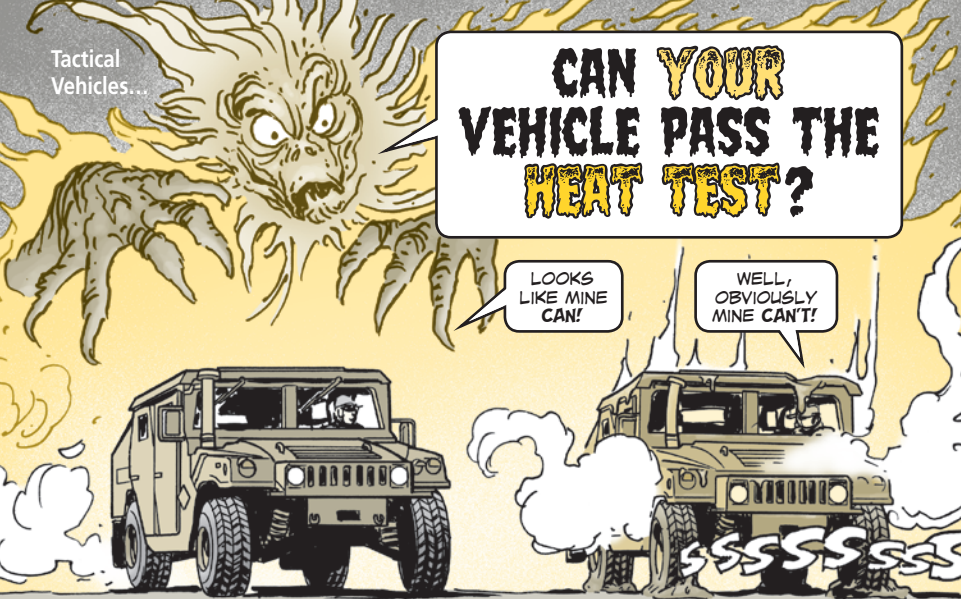
**W**hen rainwater collects in the hull of your MLRS, it shorts out cables, corrodes connectors and gets inside line replaceable units (LRUs).

Leaving the hull drain plugs open will let out excess water, but it won't keep components from getting wet in the first place.

Prevent water damage by covering the cab and engine portion of your MLRS with a waterproof tarp. A 12x17-ft OD green tarp, NSN 2540-00-587-2532, will do the trick. Or order a 12x17-ft tan tarp with NSN 2540-01-330-8062.



# CAN YOUR VEHICLE PASS THE HEAT TEST?



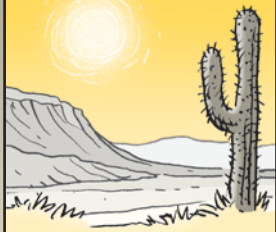
LOOKS LIKE MINE CAN!

WELL, OBVIOUSLY MINE CAN!

ENGINES CRANK OUT A LOT OF HEAT...



...AND SUMMER OR DESERT TEMPERATURES JUST PILE ON MORE.



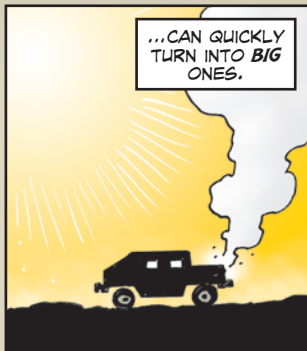
YOUR VEHICLE'S COOLING SYSTEM MUST **KNOCK DOWN** OR **CONTROL HEAT** TO KEEP THE WHEELS ROLLING.



EVEN **SMALL** PROBLEMS IN COOLING SYSTEMS, LIKE **LOW COOLANT LEVELS** OR **CRACKED HOSES**...



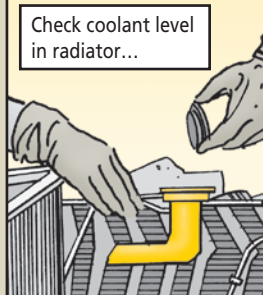
...CAN QUICKLY TURN INTO **BIG** ONES.



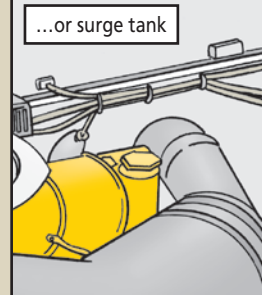
HERE'S HOW TO HELP YOUR ENGINE KEEP ITS **COOL**...



CHECK THE COOLANT LEVEL OFTEN. BEFORE YOU ROLL, WHILE THE ENGINE IS STILL COOL, MAKE SURE THE COOLANT IS BETWEEN THE ADD AND FILL MARKS.



Check coolant level in radiator...



...or surge tank

IF IT'S LOW, ADD COOLANT TO BRING THE LEVEL UP. NEVER OVERFILL, THOUGH. WHEN THE ENGINE HEATS UP, THE EXTRA COOLANT WILL OVERFLOW.

ADD COOLANT **ONLY** WHILE THE ENGINE IS COOL. ADDING COOLANT TO A HOT ENGINE CAN CRACK THE ENGINE BLOCK OR BURST A SEAM IN THE RADIATOR.



DUDE! WAIT FOR ME TO COOL DOWN!

A 60-40 MIX OF ANTIFREEZE AND WATER IS BEST, BUT KEEP AT LEAST A 50-50 MIX TO RAISE THE BOILING POINT OF THE COOLANT SO IT WON'T BOIL AWAY LIKE PLAIN WATER.

Plain water...



BOILING POINT 212°

50% antifreeze  
50% water



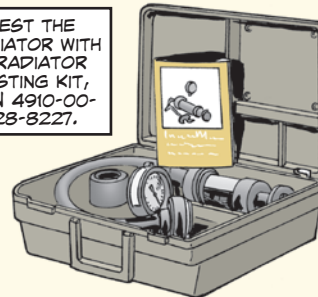
BOILING POINT 226°

60% antifreeze  
40% water



BOILING POINT 230°

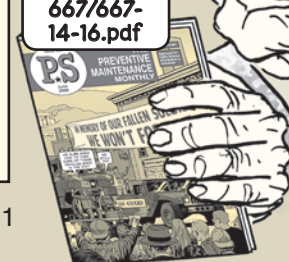
TEST THE RADIATOR WITH A RADIATOR TESTING KIT, NSN 4910-00-728-8227.



TO CHECK 2 1/2-TON OR LARGER TRUCKS, ORDER THE ADAPTER THAT COMES WITH NSN 4910-01-447-5586.

FOR STEP-BY-STEP INSTRUCTIONS ON USING THE RADIATOR TESTING KIT, SEE PAGES 14-16 IN PS 667:

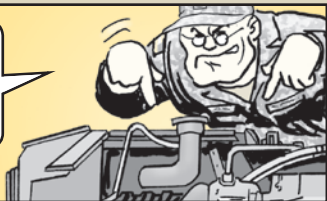
<https://www.logsa.army.mil/psmag/archives/PS2008/667/667-14-16.pdf>



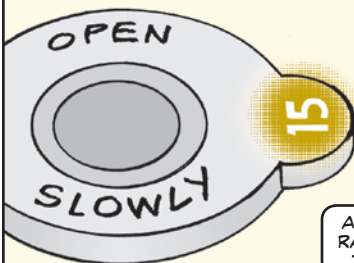
PS MORE

USE DISTILLED-DEIONIZED WATER, NSN 6810-00-356-4936, IN RADIATORS IF POSSIBLE. IF NOT, USE POTABLE WATER. GROUND WATER CONTAINS CHEMICALS AND CONTAMINANTS THAT CAN CLOG UP THE RADIATOR.

REMEMBER!  
USE ONLY  
**CLEAN**  
WATER FROM  
A **RELIABLE**  
SOURCE!

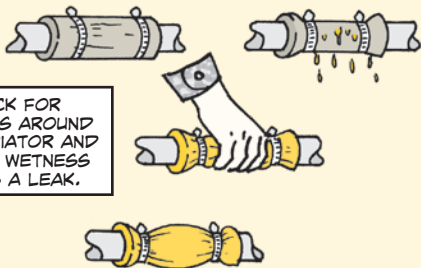


WHEN YOU'RE ADDING COOLANT, TAKE A CLOSE LOOK AT THE RADIATOR CAP. CHECK THAT IT'S IN TOP-NOTCH CONDITION AND THE RIGHT CAP FOR YOUR ENGINE.

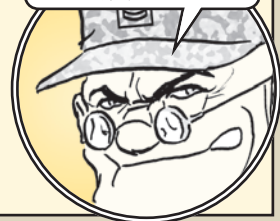


ALSO CHECK THE PRESSURE RATING ON THE CAP AGAINST THAT LISTED IN YOUR TM.

CHECK FOR WETNESS AROUND THE RADIATOR AND HOSES. WETNESS MEANS A LEAK.



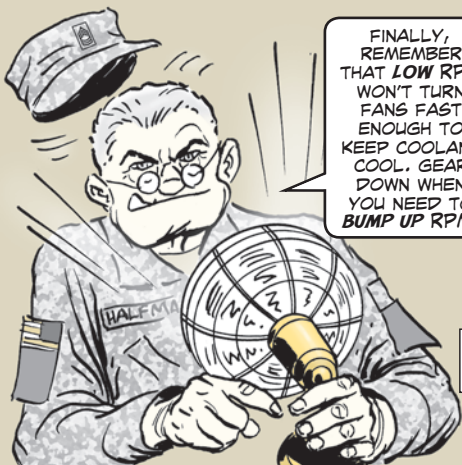
FEEL THE HOSES AND REPLACE ANY THAT ARE **MUSHY, CRACKED** OR **LEAKING**.



DURING OPERATIONS, KEEP AN EYE ON THE TEMPERATURE GAUGE. IF IT GOES ABOVE THE NORMAL OPERATING RANGE LISTED IN YOUR TM, SHUT 'ER DOWN AND FIND OUT WHY.



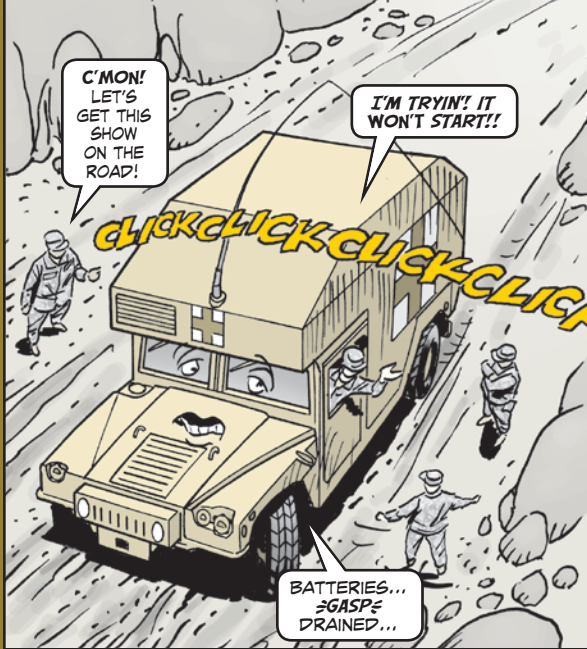
FINALLY, REMEMBER THAT **LOW RPM** WON'T TURN FANS FAST ENOUGH TO KEEP COOLANT COOL. GEAR DOWN WHEN YOU NEED TO **BUMP UP RPM**.



HMMWV...

OPERATORS, THERE'S ONE QUESTION YOU'VE GOTTA ANSWER **YES** TO AFTER OPERATING YOUR HMMWV...

**HAVE YOU TURNED OFF ALL SWITCHES?**



That's because special equipment mounted in or on your HMMWV—like a rear-mounted radio, a commo shelter, an ambulance body, or an arctic personnel shelter—often draws electricity directly from the truck's batteries.

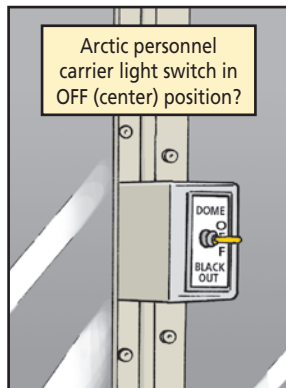
Turning off the master switch on the dashboard does **not** turn off the battery power to the equipment in back.

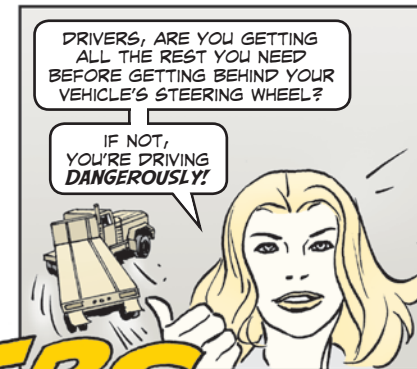
If a switch is left on, power will continue to drain from the batteries. Then you could be left with no power to start your truck.

Following your -10 TM, make sure **all** electrical switches in your HMMWV are off before you leave the truck. If you don't know where all of them are located, get a medic (if you're driving an ambulance) or a mechanic to show you what to look for.

The white lights inside the ambulance are a battery drain that is often missed at shutdown. Their switch has three positions and only one ensures that no lights come on when the doors are opened or closed. Make sure it's switched **OFF**.

Another switch that gets left ON is the one for the rear overhead lights in the arctic personnel carrier. It has three positions, but only the middle position turns the lights out when the rear door is closed.



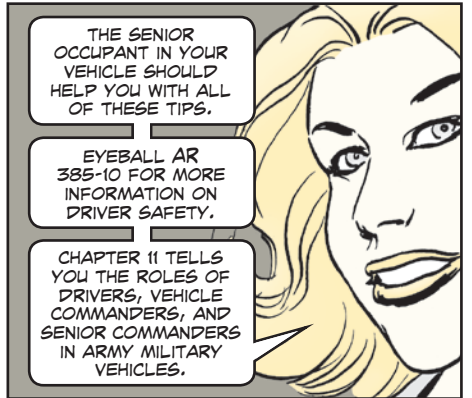


# SAFETY REMINDERS FOR DRIVERS ...



- Don't operate your vehicle when you're fatigued or physically, mentally or emotionally impaired.  
Para 11-4b of AR 385-10, *The Army Safety Program*, says: "Operators will be provided with at least 8 consecutive hours of rest during any 24-hour period. An operator will not drive more than 10 hours in a duty period (including rest and meal breaks)." Of course, if the mission takes more than 10 hours to complete, this shouldn't be a show stopper. Just make sure you have an assistant driver.
- Recognize when traffic or your vehicle is unsafe.

- Make sure you don't carry more passengers than authorized for your vehicle.
- Make sure everyone in the vehicle uses the restraint system.
- Use a ground guide to help you back up or perform tough maneuvers.
- Obey road signs and posted speed limits. Also, make adjustments as needed for weather, traffic and road conditions.
- If your vehicle breaks down, be sure you properly display highway warning devices.



Wheeled Vehicles...

## DON'T HANG ON THE DOOR!



**W**ord from the field is that some Soldiers are hopping out of their trucks the wrong way. They hang on the door while getting out!

That extra stress pulls the truck's doors out of alignment. Then the doors won't close properly and protect you like they should.

So get out of your truck the **right** way. Don't hang on the door. Instead, use the handles and steps that are installed on your truck to help you get in and out of it safely.



# M160 Light Flail

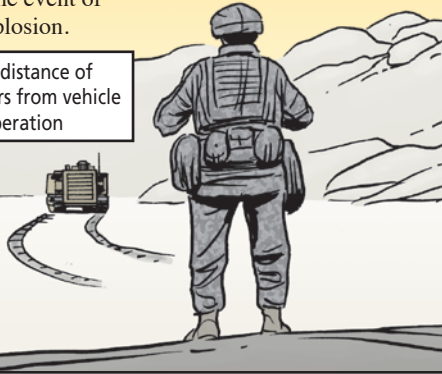
# Vehicle Operations

OPERATORS, THE M160 LIGHT FLAIL ROBOTIC SYSTEM HAS UNIQUE VEHICLE CHARACTERISTICS YOU NEED TO **KEEP IN MIND** WHILE CLEARING ANTI-PERSONNEL MINES FROM FIELDS, ROADS AND URBAN AREAS.

## Operating Distance

Always maintain a safe distance of 300 meters from the vehicle during operation in a minefield or when the flail is engaged. This distance prevents injury from thrown hammers and from fragmentation and flying debris in the event of a mine explosion.

Maintain distance of 300 meters from vehicle during operation



## Vehicle Range Obstacles

THE RANGE AT WHICH THE LIGHT FLAIL CAN BE EFFECTIVELY CONTROLLED BY THE OPERATOR CONTROL UNIT (OCU) VARIES WITH THE TERRAIN, WEATHER, ELECTROMAGNETIC ENVIRONMENT, AND THE DENSITY OF ANY OBSTACLES BETWEEN THE VEHICLE AND THE OCU.

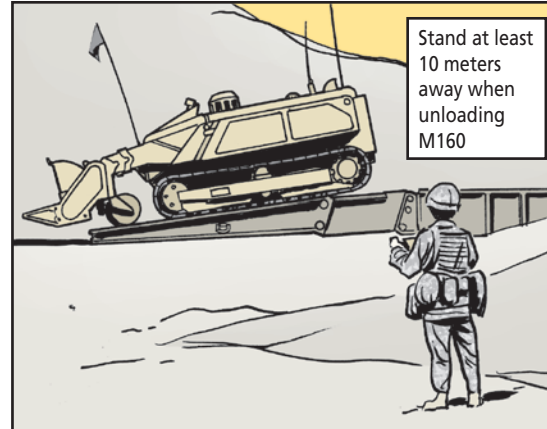
SO, AT THE FIRST SIGN OF ERRATIC BEHAVIOR, ALL OPERATIONS MUST **CEASE** UNTIL THE CAUSE IS IDENTIFIED AND ELIMINATED.



## Standoff Distance

The standoff distance around the light flail during loading and unloading operations must be a minimum of 10 meters.

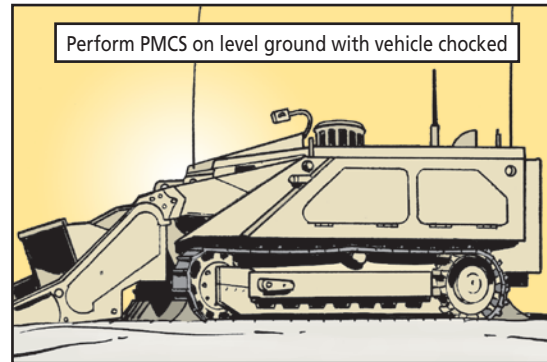
Stand at least 10 meters away when unloading M160



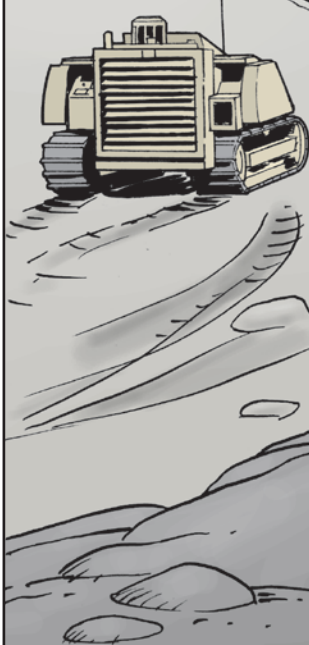
## Vehicle Movement

The light flail's hydraulic system, with or without the engine running, will not hold it stationary on a slope. To prevent any injury, perform maintenance and PMCS on level ground, and use chocks to keep the vehicle from moving.

Perform PMCS on level ground with vehicle chocked



YOU'LL FIND MOST OF THESE POINTERS IN THE WARNING SECTION OF TM 9-2350-392-10 (SEP 10).



# TRACK ADJUSTMENT



SOLDIER, I WOULDN'T TAKE THIS M160 OUT RIGHT NOW.

THESE TRACKS NEED ADJUSTING!

Operators, the well-being of the light flail's undercarriage components hinge on good track adjustment.

If the track's too tight, it puts a lot of stress on undercarriage and drive train components. If it's too loose, the track flaps, wearing out roller flanges and sprocket teeth.

So, take a sag measurement in the middle of the track. If the track sags more than 4 inches or less than 3 inches, it's time for an adjustment.

### Here's what to do:

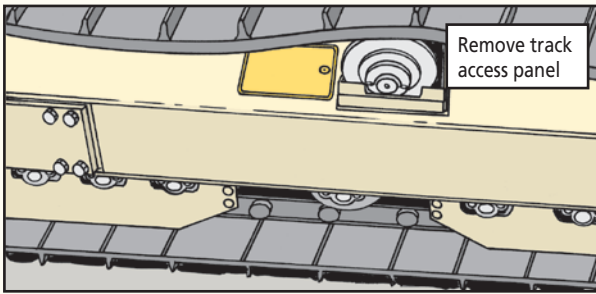
1. Make sure the light flail is on level ground.
2. Shut down the engine.
3. Remove the access panel.

4. Use a grease gun to pump grease into the grease fitting until you have the right track tension.

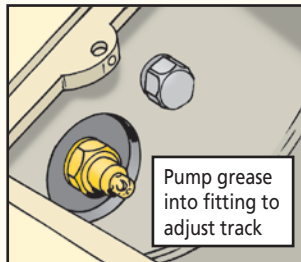
That's between 3 and 4 inches from the bottom of the hull to the flat portion of the track shoe.

5. Reinstall the access panel. You'll want to do this same procedure for the track on the other side of the vehicle.

If the track is too tight, follow the procedure shown in WP 0028-5 in TM 9-2350-392-10 (Sep 11) to loosen it.



Remove track access panel

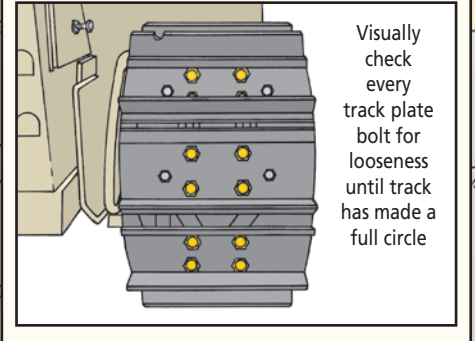


Pump grease into fitting to adjust track



ONCE YOUR LIGHT FLAIL IS BACK ON THE JOB, FOLLOW THIS CHECKLIST FOR A LONGER UNDERCARRIAGE LIFE...

- Slow down, especially in reverse.
- Clean mud and debris from the undercarriage.
- Never spin the track.
- Check for loose or missing hardware. Make sure all hardware is properly torqued.



Visually check every track plate bolt for looseness until track has made a full circle

### DEUCE...

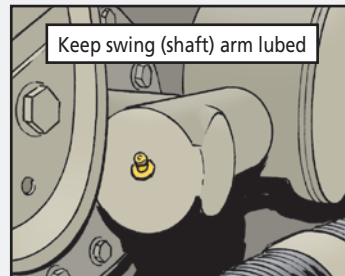
## LUBE SWING SHAFT ARM

Operators, two grease fittings on the excavator can mean the difference between productive construction operations—or serious downtime.

Without lube, a swing arm seizes, causing the suspension to break apart.

The swing arm grease fitting is a little tricky to find. It's located behind the bogie cylinder accumulator on the swing arm, facing toward the front of the vehicle. There's one on each side of the vehicle.

So, lube each swing arm weekly or every 50 hours of operation. You'll find this info on Page 125 in TM 5-2430-200-10 (Mar 01, w/Ch 1, May 08). The complete lube chart is on Page 104.

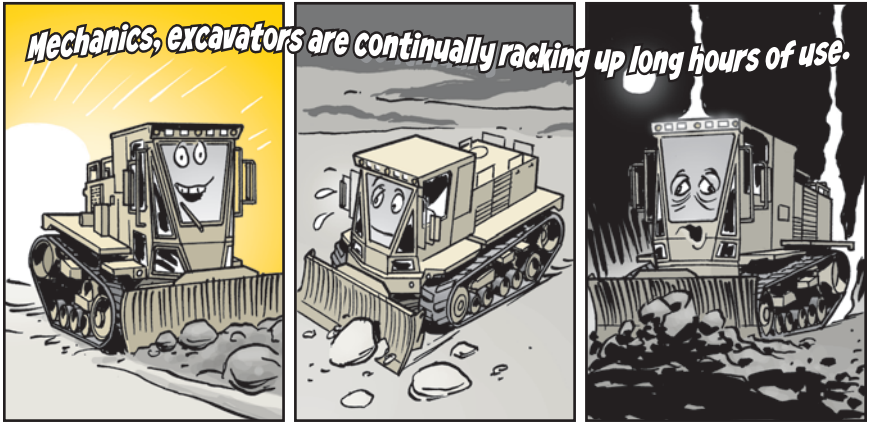


Keep swing (shaft) arm lubed



YOU'LL FIND THE GREASE FITTING BACK UNDER AND BELOW THE TRACK.

# Is There Enough Rubber?



SO HOW MUCH RUBBER ON YOUR WHEELS IS ENOUGH?

AFTER TAKING A WALK AROUND THE EXCAVATOR, GET DOWN ON YOUR HANDS AND KNEES NEXT TO THE TRACK.

TAKE A GOOD LOOK AT THE RUBBER ON THE MID-ROLLERS AND FRONT AND REAR IDLER WHEELS.

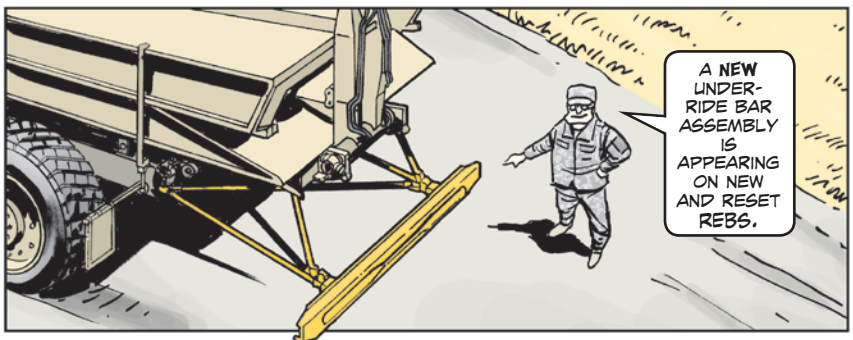
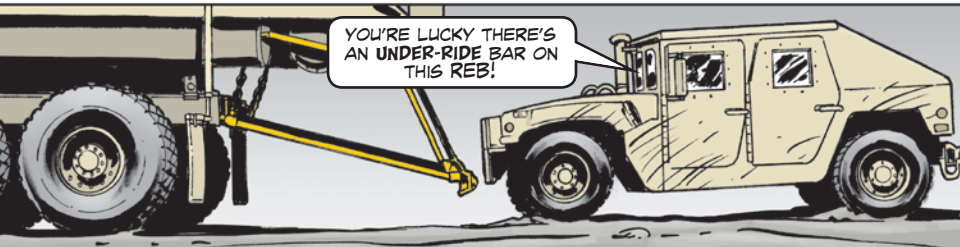
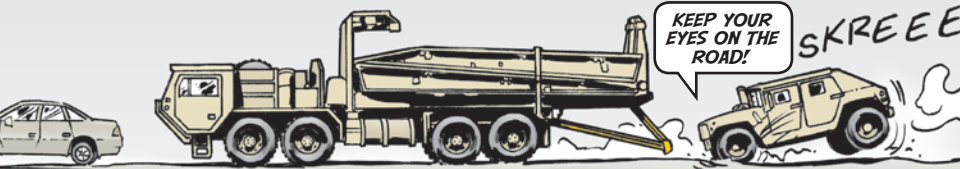
ACCORDING TO THE PMCS CHECK ON PAGE A-4.01 OF TM 5-2430-200-10 (MAR 01, W/Ch 1, MAY 08), THE MID-ROLLERS NEED 50 PERCENT OF THEIR RUBBER TO STAY FUNCTIONAL.

ALSO, THE FRONT AND REAR IDLER WHEELS ARE NMC IF THEY'RE MISSING MORE THAN 25 PERCENT OF THEIR RUBBER.

THAT'S IT—PLAIN AND SIMPLE.

KEEP YOUR EXCAVATOR MISSION CAPABLE BY DOING YOUR PMCS LIKE THE TM SAYS!

# REBS UNDER-RIDE BAR KIT



The under-ride bar kit is used anytime the Rapidly Emplaced Bridge System (REBS) is transported on the Common Bridge Transporter (CBT) in convoys. It works as an extended bumper that reduces the risk of a vehicle, like a Stryker or HMMWV, hitting the back of the REBS. Such accidents can cause serious injury and may disrupt vehicle operations.

The REBS under-ride bar assembly is removed and stowed prior to launch and retrieval of the bridge, connection of the PLS trailer (PLST) to the CBT, or whenever the pallet is unloaded to the ground.

Units that have earlier REBS will find under-ride bar assemblies added to RESET REBS they receive.

REBS users can access the under-ride bar training video on the Library of TACOM Training Information Site (LOTTIS). Go to: <https://utap.army.mil>

Then click on the VIDEOS tab and do a search for **Under Ride Bar Video**.

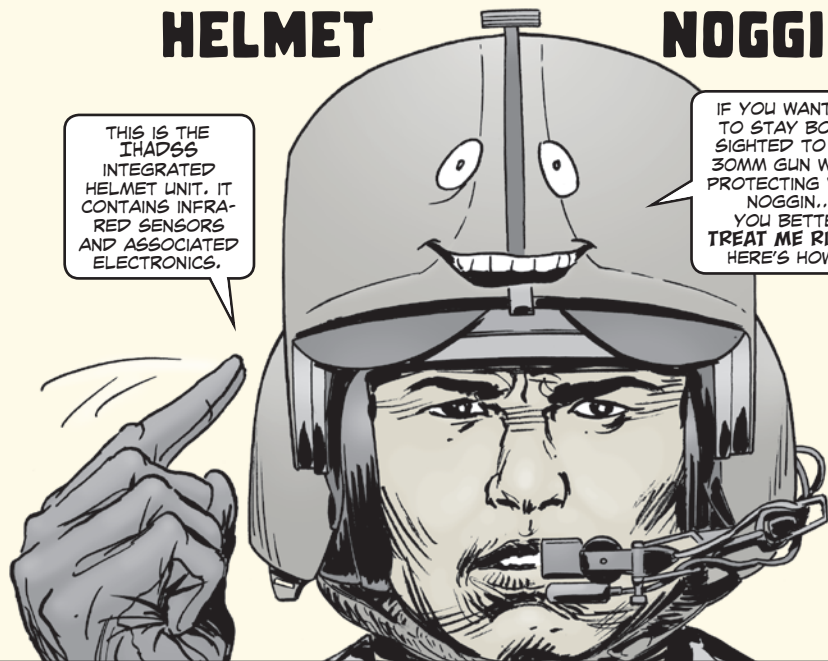


# KEEP THE HELMET

# ON YOUR NOGGIN!

THIS IS THE  
IHADSS  
INTEGRATED  
HELMET UNIT. IT  
CONTAINS INFRA-  
RED SENSORS  
AND ASSOCIATED  
ELECTRONICS.

IF YOU WANT ME  
TO STAY BORE-  
SIGHTED TO THE  
30MM GUN WHILE  
PROTECTING YOUR  
NOGGIN...  
YOU BETTER  
TREAT ME RIGHT!  
HERE'S HOW...



When exiting aircraft, some pilots and gunners like to remove their helmet and lay it on the extended forward avionics bay (EFAB).

That's a problem. When you exit the bird the helmet can get accidentally kicked off the EFAB. When it hits the ground, you can be sure damage will occur.

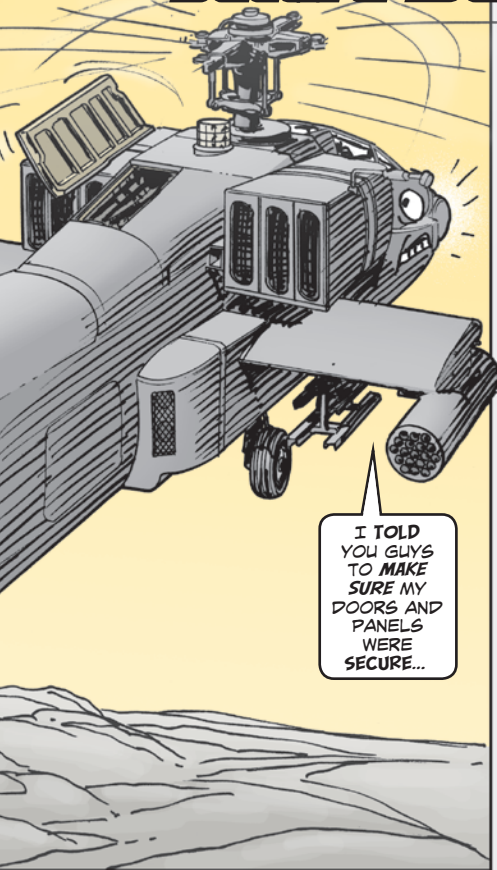
That's means it's better to keep the helmet on your head when getting out of the cockpit. That way you won't accidentally kick it off the EFAB and damage the helmet shell, visors, and the IR harness.

Even if you manage to keep your feet clear, you still have to worry about high winds or rotor wash that can blow your helmet to the ground!

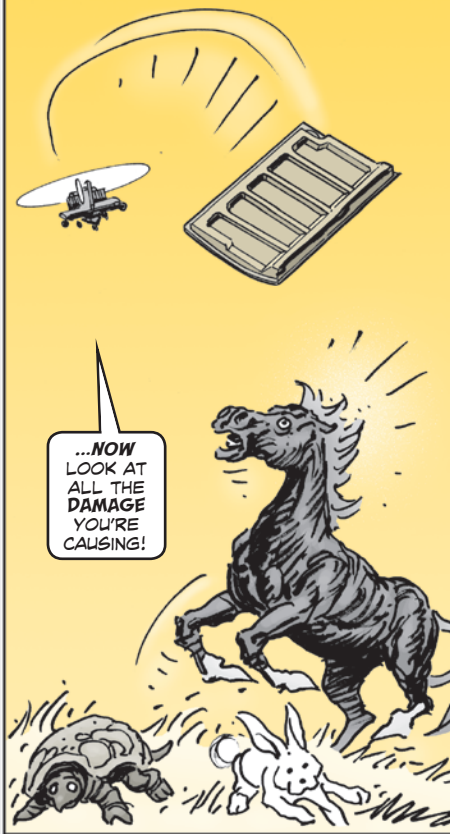
This is **not** a good place  
for your helmet!



# Secure Before Flying



I TOLD  
YOU GUYS  
TO **MAKE  
SURE** MY  
DOORS AND  
PANELS  
WERE  
**SECURE...**



**...NOW  
LOOK AT  
ALL THE  
DAMAGE  
YOU'RE  
CAUSING!**

**F**lying is more than just hopping in your aircraft and taking off into the wild blue yonder.

The first order of business is taking care of pre-flight inspections. No door, latch, panel, fastener or quick release pin should be left unchecked or unsecured. That means making sure every door, latch, panel, fastener and pin is locked down and buttoned up.

Unsecured doors or panels can fly off their hinges in flight, damaging the aircraft or worse.

But rotor wash in flight isn't the only wind that can cause damage. High winds can also blow open unsecured doors on the flight line and flap them around. If doors or panels fly off their hinges in high winds, they can become deadly, damaging, not so foreign debris!

Always secure doors and panels so when high winds occur or flight time comes, mishaps will stay missing.

# WATCH OUT FOR THE FEET!



**M**echanics, entering the Black Hawk cockpit from the cabin during maintenance can be a double-jointed exercise that puts the center console in harm's way.

It's best to use the cockpit doors to enter the cockpit. Getting out of the cabin and entering the cockpit using the cockpit doors may seem like a waste of time and energy, but it is necessary to avoid damage.

Every time you climb into the cockpit from the cabin and don't lift your feet high enough to clear the center console, chances are you'll kick and knock off a knob, switch or button.

For example, if you kick any of the center console components like the intercommunications control system (ICS) component and its knobs, buttons and switches, you could be without communication.

Keep in mind that if you knock off buttons, knobs and switches on some of the components, the entire component has to be replaced.



# MAINTAINING MAINTENANCE RECORDS

MECHANICS, WE'D LIKE TO INTRODUCE YOU TO THE NEW MAN'S BEST FRIEND!



# APROOOOOOOOOOO

OK!  
OK!

IT'S MAN'S SECOND BEST FRIEND!



**M**echanics, DA Pam 738-751, *Functional Users Manual for the Army Maintenance Management System (TAMMS-A)* should rank up there with a man's best friend when it comes to learning how to fill out aviation paperwork.

Sometimes, that is not the case because DA Form 2410, *Component Removal and Repair/Overhaul Record* is being filled out partially or not at all when a TB 1-1500-341-01 tracked component is removed.

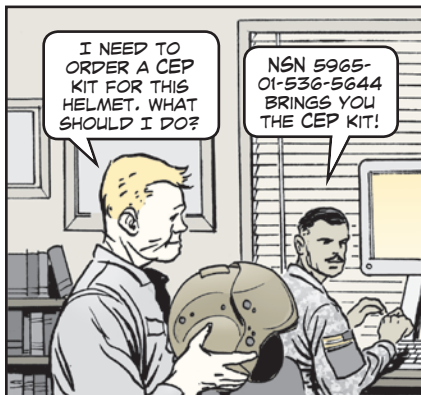
No matter what else you do after a component is removed, you must record all maintenance information on the 2410 detailing what was done before you send it off to support. Now that the 2410 is online, it's important to make sure every tracked component is accurately updated on the maintenance consolidated database system (MCDS) before you step foot out of the hangar and head off to support for equipment turn-in and repair. Remember, the 2410 feeds the MCDS database.

Knowing what components are tracked is important. Not knowing is bad for you and your aircraft.

Some parts are tracked by time while others are tracked by flight hours. Failure to document any tracked component, part or circuit card when it's removed from an aircraft could lead to over-flying them by time or flight hours. If there is incomplete or partial 2410 tracking, that leads to needless and premature replacement of parts and components. You could also face extended aircraft on ground (AOG) time, and waste lots of money changing out good parts that have not reached their limits.

Flying an aircraft with expired components or parts puts you and your aircraft in harm's way. So eyeball that 2410 and make sure you annotate every maintenance detail so a complete history can be maintained on tracked items.

# CEPS FOR IHADSS HELMET



If you maintain the Apache integrated helmet unit (IHU) and need the communication earplug (CEP) to repair an IHU, NSN 5965-01-536-5644 brings you the kit.

You can find installation instructions, associated downparts and air worthiness release (AWR) information on the CEP website: <http://www.cep-usa.com>

If you have problems getting the instructions from the site, contact David Jirak at DSN 786-1091, (586) 282-1091 or email: [david.e.jirak.civ@mail.mil](mailto:david.e.jirak.civ@mail.mil)

## Marking of Airfields and the Compass Rose Challenge!

Got questions about how to mark airfields and runways for helicopters? Check out the good words in *UFC 3-260-05A Marking of Army Airfield Heliport Operational and Maintenance Facilities, with Change 1* (formally TM 5-823-4). You can get a copy of the manual at the World Building Design Guide web site:

[http://www.wbdg.org/ccb/browse\\_cat.php?0=29&c=4](http://www.wbdg.org/ccb/browse_cat.php?0=29&c=4)

If you need to set up or repaint your airfield's Compass Rose, then you also need to check out the compass calibration information found in Chapter 4 of TM 11-4920-292-15, *Magnetic Compass Calibrator Set, AN/ASM-339(V)1*. It's available on the LOGSA website:

<https://www.logsa.army.mil/etmpdf/files/010000/017500/018643.pdf>

## What To Do With Chem Lights

When chem lights expire, mechanics, they must be removed from the aircraft modular survival system (AMSS) kit. It does not matter if the chem light packaging is still in good condition. Make sure you follow the good words in Item 10 of WP 0637 00-5 in TM 1-1680-377-13&P-7. You must inspect all chem lights. Replace them once they are expired, if the outer foil has illegible instructions, or if the case is punctured.

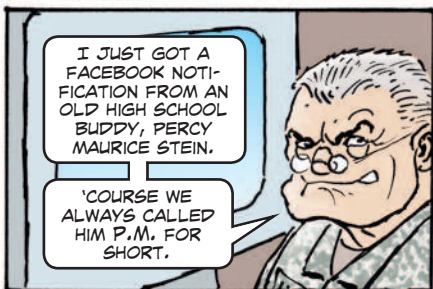
# THE P.M. STEIN MONSTER



AT THE PS OFFICE...

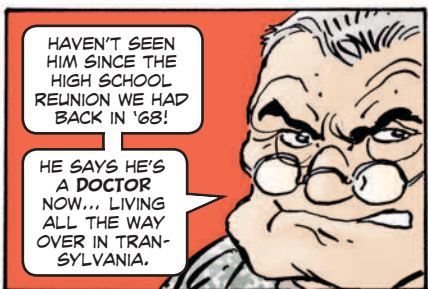
WELL I'LL BE PARNED!

WHAT IS IT, HALF-MAST?



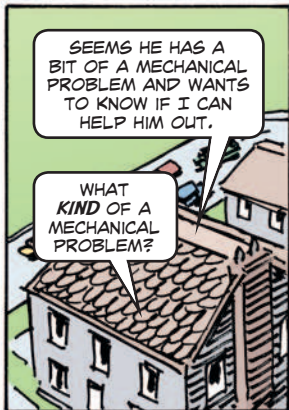
I JUST GOT A FACEBOOK NOTIFICATION FROM AN OLD HIGH SCHOOL BUDDY, PERCY MAURICE STEIN.

COURSE WE ALWAYS CALLED HIM P.M. FOR SHORT.



HAVEN'T SEEN HIM SINCE THE HIGH SCHOOL REUNION WE HAD BACK IN '68!

HE SAYS HE'S A DOCTOR NOW... LIVING ALL THE WAY OVER IN TRANSYLVANIA.



SEEMS HE HAS A BIT OF A MECHANICAL PROBLEM AND WANTS TO KNOW IF I CAN HELP HIM OUT.

WHAT KIND OF A MECHANICAL PROBLEM?



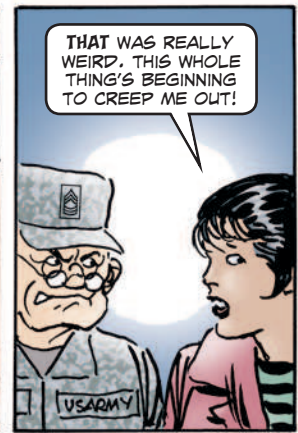
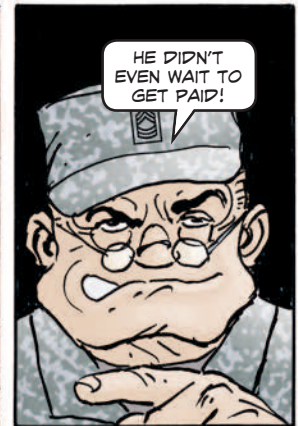
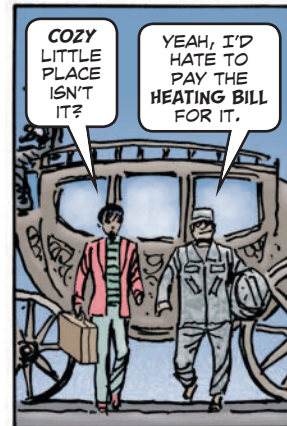
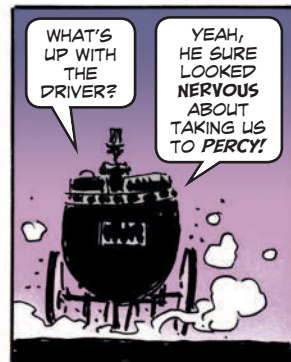
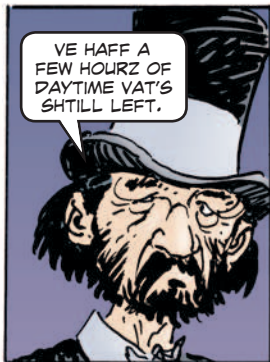
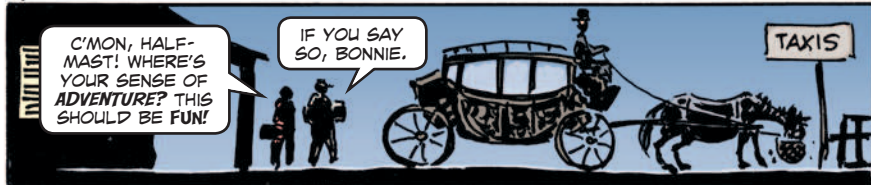
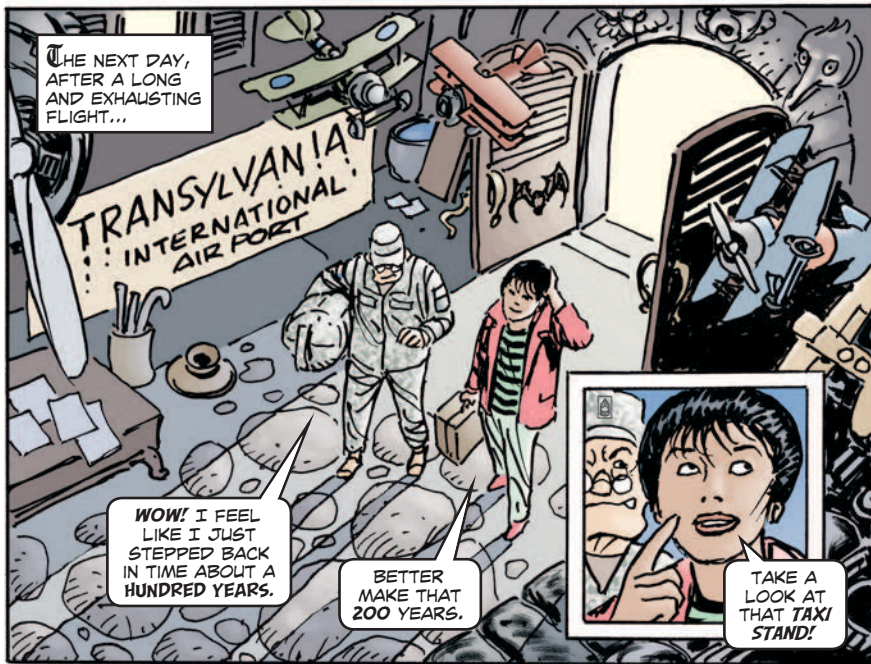
HE DIDN'T SAY.

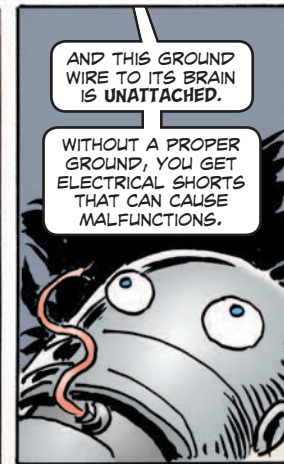
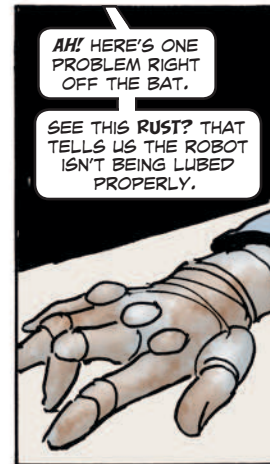
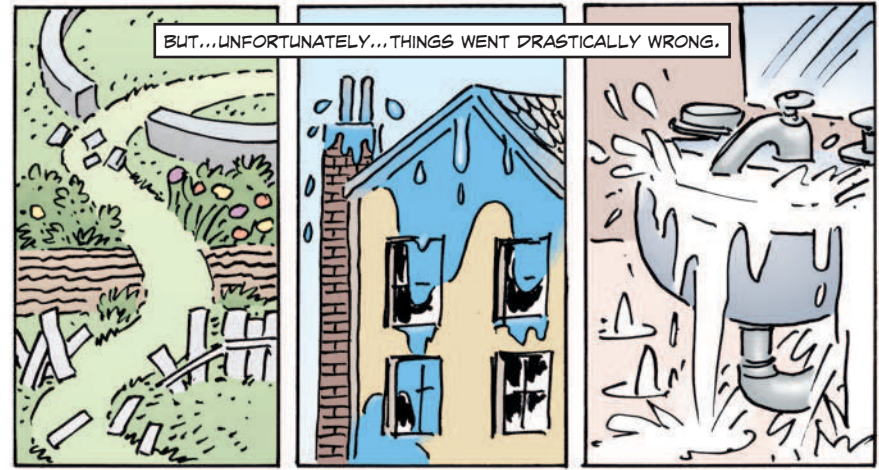
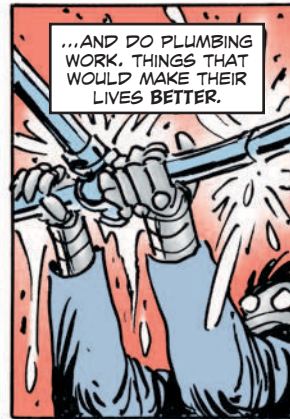
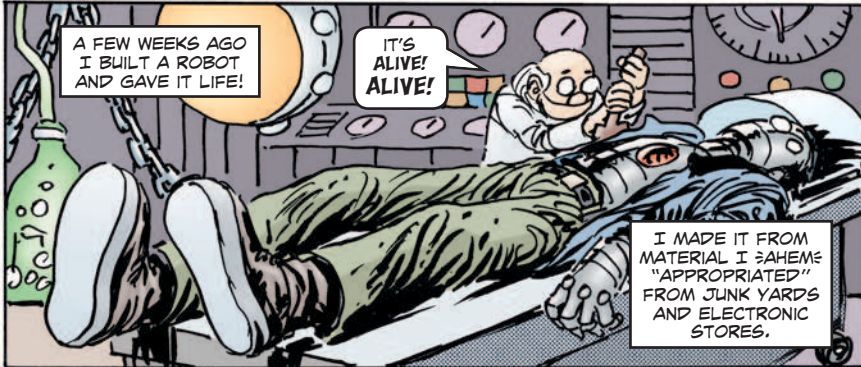
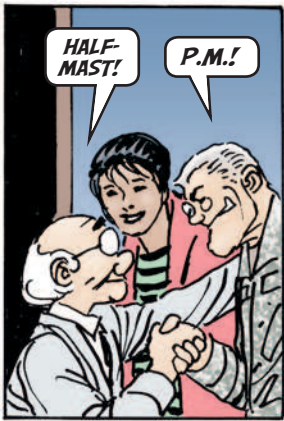
THE WHOLE THING SOUNDS A BIT MYSTERIOUS!

I'VE GOT A FEW WEEKS OF VACATION SAVED UP. HOW 'BOUT I GO WITH YOU?

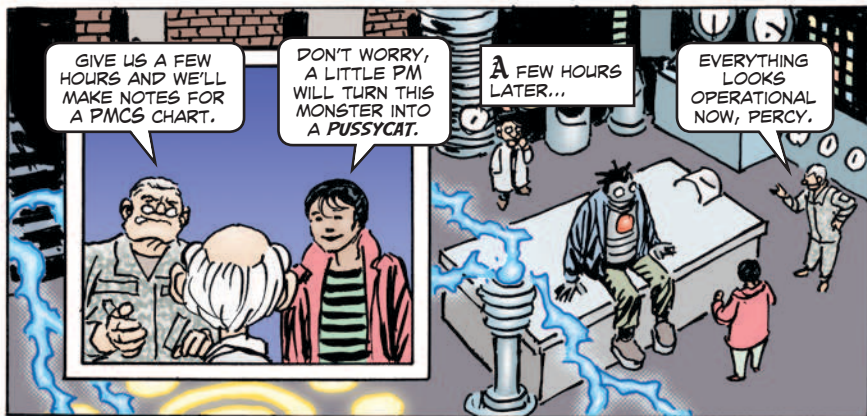


GREAT! GO AHEAD AND GET PACKED. I'LL MAKE THE ARRANGEMENTS AND MEET YOU AT THE AIRPORT TOMORROW.







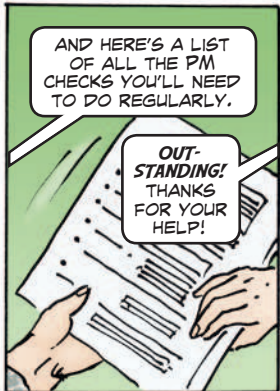


GIVE US A FEW HOURS AND WE'LL MAKE NOTES FOR A PMCS CHART.

DON'T WORRY, A LITTLE PM WILL TURN THIS MONSTER INTO A PUSSYCAT.

A FEW HOURS LATER...

EVERYTHING LOOKS OPERATIONAL NOW, PERCY.



AND HERE'S A LIST OF ALL THE PM CHECKS YOU'LL NEED TO DO REGULARLY.

OUT-  
STANDING!  
THANKS  
FOR YOUR  
HELP!



IT'S REALLY LATE. I WONDER WHO COULD BE CALLING THIS TIME OF NIGHT?



UH, OH!

I THINK YOU NEED TO TAKE A LOOK DOWN IN THE COURTYARD!

BRING OUT THE P.M. STEIN MONSTER!

SOMEBODY'S GOTTA PAY FOR MY HOUSE!



PERCY...YOU'D BETTER LET US TALK TO THEM. I DON'T THINK THEY'D LISTEN TO YOU.

TH-THANKS, HALF-MAST.

PLEASE! LISTEN!

PERCY MEANT WELL...HE JUST DIDN'T UNDERSTAND THE IMPORTANCE OF PM!

HIS ROBOT ISN'T REALLY A MONSTER, IT JUST NEEDED SOME PM.



ALL RIGHT, ALL RIGHT! BUT HE BETTER MAKE DIS GOOT! VE ARE ALL PRETTY DARN MAD!

YAH!  
YAH!



AND OVER THE NEXT FEW DAYS...



ONE WEEK LATER,  
THE HAPPY VILLAGERS  
ASSEMBLE...

★ MONSTER  
★ OF THE  
★ YEAR

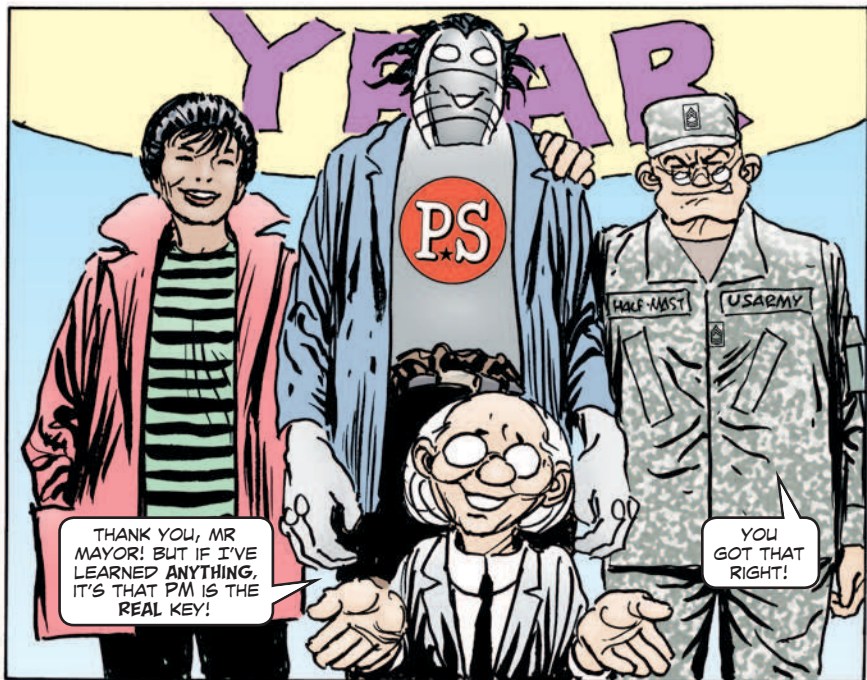


...TO HONOR  
THE WONDERFUL  
ACCOMPLISHMENTS  
WROUGHT BY THE  
GENTLE ROBOT...



...AND THE IMPORTANCE  
OF CONTINUAL  
MAINTENANCE.

...AND FOR HIS  
OUTSTANDING  
CONTRIBUTION, WE  
PRESENT DR. P.M.  
STEIN WITH ZE KEY  
TO ZE CITY!



THANK YOU, MR  
MAYOR! BUT IF I'VE  
LEARNED ANYTHING,  
IT'S THAT P.M. IS THE  
REAL KEY!

YOU  
GOT THAT  
RIGHT!

# NEW MAGAZINE MORE RELIABLE



THE NEW MAGAZINE FOR THE M16 AND M4 SHOULD CUT MAGAZINE JAMMING IN HALF...

...MAKING IT A LOT MORE RELIABLE!

Dear Half-Mast,

I saw in PS 713 (Apr 12) that there is a new, improved magazine for the M16 rifle and M4/M4A1 carbine. Does this new magazine have a better anti-tilt follower?

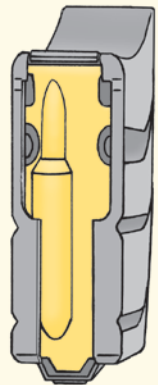
SSG B.J.

Dear Sergeant B.J.,

*Indeed it does. Much of the new magazine's greater reliability is the result of the redesigned follower. The self-leveling/anti-tilt follower minimizes jamming, while a wider spring coil distributes force evenly. The new follower also has an extended rear leg and modified bullet protrusion for improved round stacking.*

*The Army expects the new magazine to reduce magazine-related firing problems by 50 percent.*

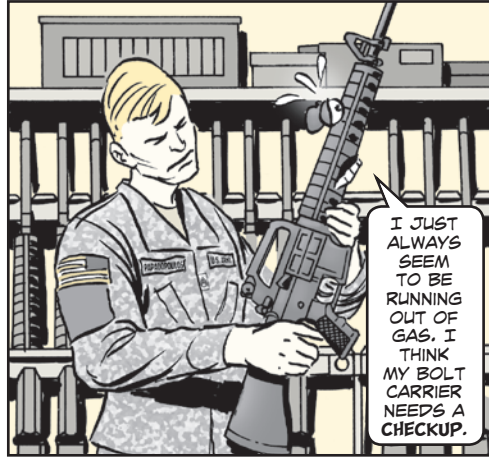
*The new magazine can be identified by its tan follower. It can be ordered with NSN 1005-01-561-7200. Magazines with a green follower can continue to be used. If you spot any magazines with black followers, turn them in. They are old and unreliable.*



*Half-Mast*

New magazine has tan follower

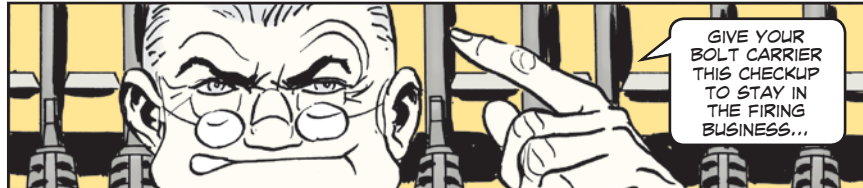
# BOLT CARRIER CHECKUP!



I JUST ALWAYS SEEM TO BE RUNNING OUT OF GAS. I THINK MY BOLT CARRIER NEEDS A CHECKUP.



IF YOUR M16 RIFLE OR M4/M4A1 CARBINE'S BOLT CARRIER ISN'T CARRYING ITS LOAD, YOUR WEAPON WILL SOON BE OUT OF BUSINESS!

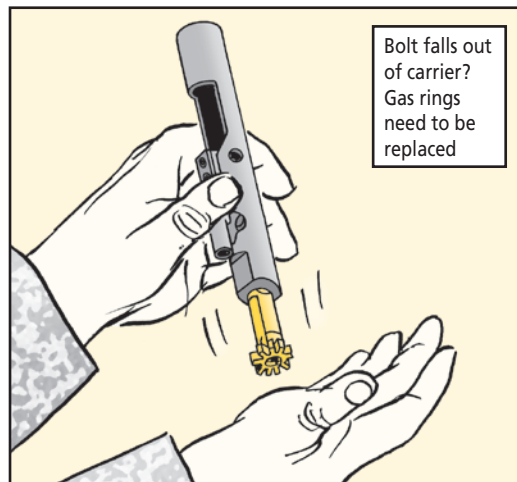


GIVE YOUR BOLT CARRIER THIS CHECKUP TO STAY IN THE FIRING BUSINESS...

## Test for bad gas rings—

If the gas rings on the bolt are worn out, there isn't enough gas pressure to push the bolt back correctly. The rate of fire slows or the weapon jams.

But it's easy to see if the gas rings are OK. Remove the bolt cam pin and push the bolt up into the carrier until it locks in place. Turn the carrier so that the bolt is pointing down. If the bolt drops out of the carrier, the gas rings need to be replaced.

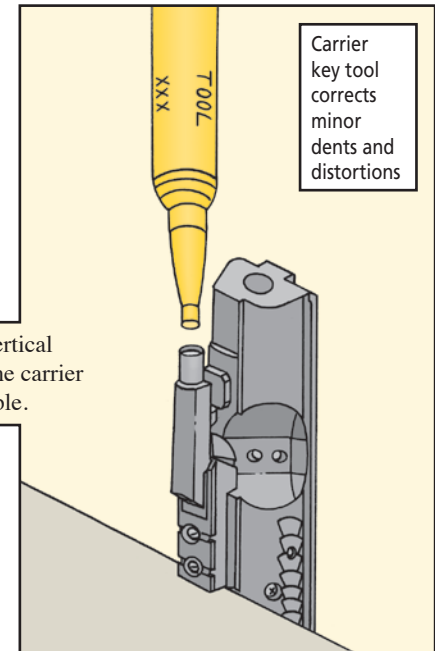


Bolt falls out of carrier? Gas rings need to be replaced

**Spot carrier key problems**—If the bolt carrier key doesn't mate properly with the gas tube, gas escapes and the weapon will fire slowly or not at all. Plus the gas tube can be damaged.

Check to see if the carrier key is mating easily with the gas tube. If it's not, your repairman can use the carrier key tool, NSN 5315-01-310-0370, to repair small dents or distortions in the carrier key. Here's how:

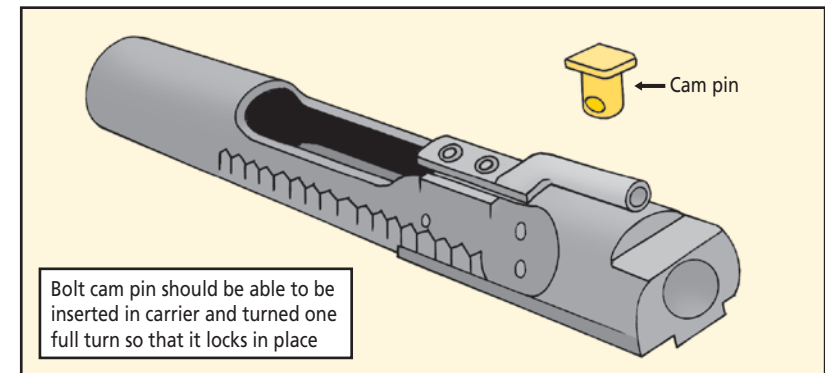
1. Place the key and bolt carrier in a vertical position so that the rear surface of the carrier key is supported on the edge of a table.
2. Insert the small end of the tool into the tube of the carrier key.
3. Gently strike the tool's large end with the 4-oz soft-brass hammer that's part of the small arms repair kit.
4. Keep doing this until the carrier key is back to its original shape.



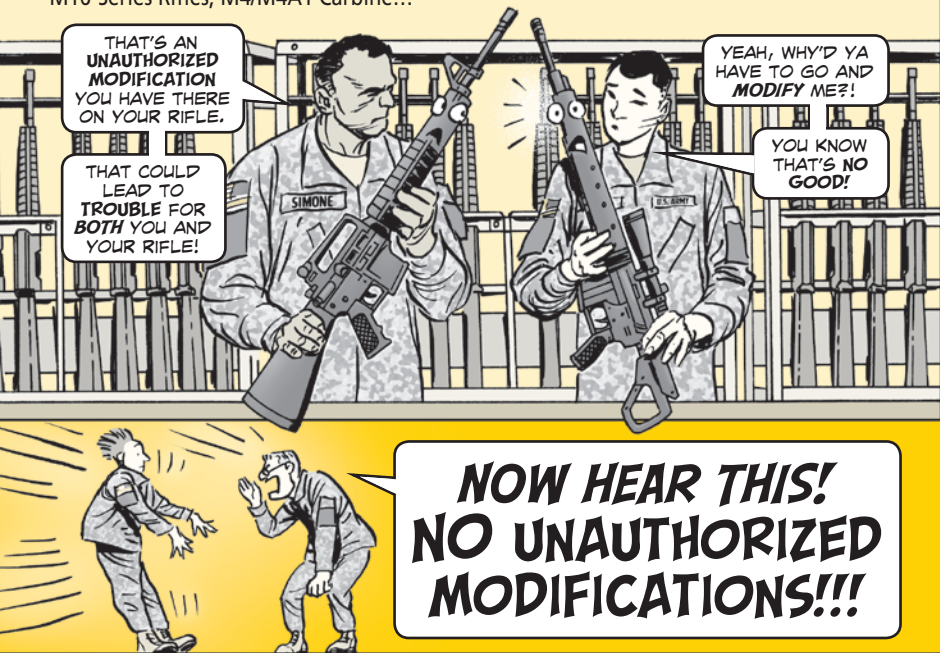
Carrier key tool corrects minor dents and distortions

If the carrier key still won't mate easily with the gas tube, then it needs to be replaced. The procedure is in WP 0013 of TM 9-1005-319-23&P (Nov 08).

**Make sure bolt cam pin fits**—Some bolt cam pins won't lock in the bolt carrier. You should be able to stick the cam pin in the carrier and rotate it one full turn to lock it in place. If you can't do that, you need a new bolt carrier. Tell your armorer. He should file a PQDR.



Bolt cam pin should be able to be inserted in carrier and turned one full turn so that it locks in place



Units are still trying to make unauthorized modifications to their M16s and M4s. That will get you in trouble and could endanger you, your unit and your weapon.

The latest unauthorized modification that has reared its ugly head is converting an M16 to something called a squad designated marksman rifle. This involves a different barrel and trigger group. Needless to say, this is NOT authorized.

The only time a weapon can be modified is if the Army has approved a modification work order (MWO). This is spelled out in Para 3-1e of AR 750-10: "Commanders will not allow their equipment to be modified unless there is an official MWO."

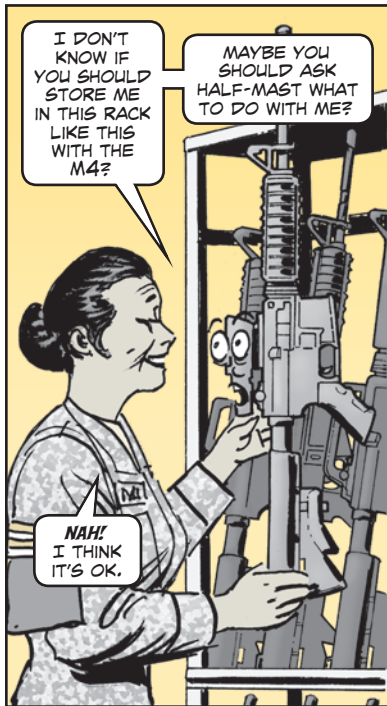
MWO 9-1005-319-30-1 authorized units to convert M16A2s to M16A4s. That MWO has expired. No more M16A2s can be converted.

What items can you mount on your M16/M4? Only those listed in TM 9-1005-319-10 and -23&P. The *Small Arms Integration Book* also lists authorized equipment. Download it at: <https://www.us.army.mil/suite/folder/4718898>

If your M16A2 uses the M5 adapter rail system for mounting, remember that the rail system is considered AAL. If the M16A2 is turned in, you need to keep the rail system and reinstall the original handguards.

Do what the M16/M4's TM tells you to and you and your weapon will do fine. Go beyond that and trouble is near.

# HOW DO YOU STORE SIGHTS?



Dear Half-Mast,

Can you store M16 rifles and M4/M4A1 carbines in the M12 rack with sights like the CCO and ACOG attached?

SSG E.M.

Dear SSG E.M.,

Yes and no. If a locking bar is added to the M12 rack, it is possible to store M16s and M4s in the rack with the sights installed. (The instructions for your support to make the locking bar are in TM 9-1005-319-23&P (Nov 08). After the bar is added, the rack must be certified by your local TACOM logistics assistance representative.)

But it is also possible to remove the sights from the weapons stored in the rack, which leaves them vulnerable to theft. So your best option is to remove the sights and store them in a locked cabinet or locker inside the arms room. That way they're under double lock and key.

*Half-Mast*



Dear Half-Mast,

I have several old zero targets for the M16A2 rifle and M4/M4A1 carbine that came with NSN 6920-01-395-2949. But when I try to order more of that NSN it comes up as discontinued. What NSN should I use?

SSG A.O.

Dear Sergeant A.O.,

Use NSN 6920-01-482-0098 to get 500 zero targets. One side of the target is for the M16A2 and the other is for the M4/M4A1.

*Half-Mast*

M500 Shotgun...

## TM Correct on Extractors



Dear Editor,

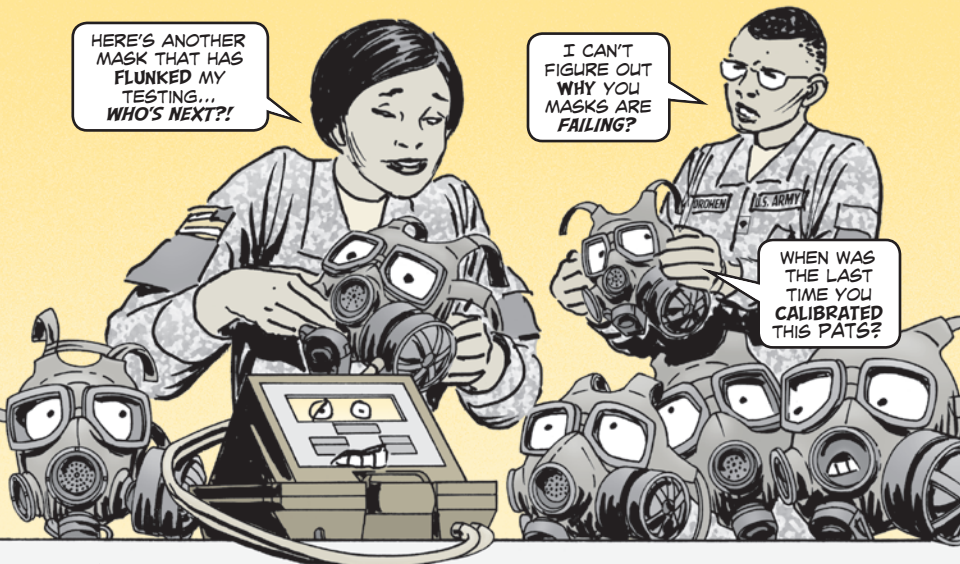
In PS 711 (Feb 12), you said the M500 shotgun's TM 9-1005-338-13&P had the cartridge extractors reversed in WP 0029 00-1. That is wrong. In this case, the TM is absolutely correct. The extractors are not reversed.

Please get the word out ASAP to prevent confusion in the field.

Brian Smith  
Ft McCoy, WI

*Editor's note: PS articles are reviewed not once but twice by subject matter experts. Unfortunately, mistakes sometime occur. This is one of those cases. Thanks for pointing this out, Brian.*

# CALIBRATE... OR ELSE



**T**he M41 PATS (protection assessment test system) is a very precise instrument that is a superb tool for weeding out bad protective masks, CBRN specialists.

But if it isn't calibrated religiously every 18 months, you soon won't have a prayer of getting accurate PATS results. PATS will start flunking perfectly good masks.

Sadly, the Army reports a huge number of PATS aren't being calibrated, particularly in OCONUS. An inaccurate PATS will just cause you more work, CBRN specialists, as you try to figure out why masks aren't passing the PATS test.

Make life easier for yourself and your masks by sending your PATS to TMDE for calibration every 18 months. TMDE completely disassembles PATS, cleans it, checks out all components and accessories, repairs them if necessary, and re-calibrates it. They also install a diagnostic upgrade. When they're finished, your PATS is better than new.

It's easy to tell if your PATS needs a trip to TMDE. Look at its calibration sticker to see the due date for the next calibration. If it's missing the sticker, your TMDE should have a record of when the PATS was last calibrated.



Check sticker for next calibration due date

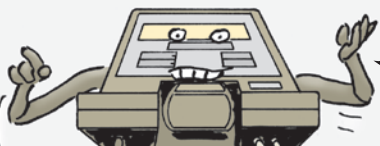




OCONUS  
TMDES  
SHOULD  
SEND THE  
PATS TO...

Pirmasens Army Depot  
ATTN: AMSAM-TMD-EP  
SUPV TMDE SPT METRO: Larry Williams  
CMR 434  
APO AE 09138

YOU CAN CONTACT LARRY WILLIAMS  
AT DSN (314) 495-7264 OR EMAIL:  
[larry.williams.civ@mail.mil](mailto:larry.williams.civ@mail.mil)



IF YOU'RE  
IN CONUS,  
SEND  
PATS TO...

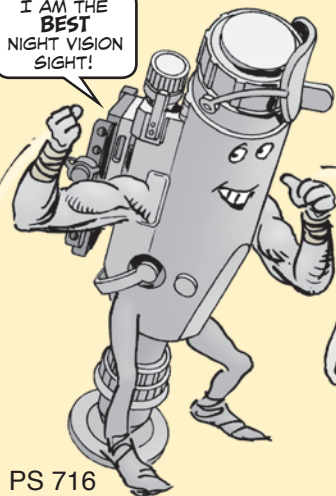
US Army TMDE Activity  
ATTN: AMSAM-TMD-SS (Greg Boggs or Bill Walton)  
Building 5435, Fowler Rd  
Redstone Arsenal, AL  
35898-5400

CONTACT GREG BOGGS AT DSN  
645-6367, (256) 955-6367, OR  
EMAIL: [greg.boggs@us.army.mil](mailto:greg.boggs@us.army.mil)

Night Vision  
Weapon Sights...

## Order Only AN/PAS-13

I AM THE  
**BEST**  
NIGHT VISION  
SIGHT!



YOU CAN  
FORGET  
ABOUT THE  
AN/PVS-4  
AND  
AN/TVS-5!



**N**ight vision weapon sights AN/PVS-4 and -4A (LIN: N04732, NSN 5855-00-629-5334 and NSN 5855-01-422-8782) and AN/TVS-5 and -5A (LIN: N04596, NSN 5855-00-629-5327 and 5855-01-422-8777) should not be ordered.

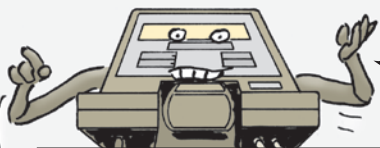
When they need to be replaced, order the AN/PAS-13 thermal weapon sight, LIN S60356, NSN 5855-01-524-4308. It is the latest in image intensifiers because it requires no outside light and will not be affected if hit by direct light.



OCONUS  
TMDES  
SHOULD  
SEND THE  
PATS TO...

Pirmasens Army Depot  
ATTN: AMSAM-TMD-EP  
SUPV TMDE SPT METRO: Larry Williams  
CMR 434  
APO AE 09138

YOU CAN CONTACT LARRY WILLIAMS  
AT DSN (314) 495-7264 OR EMAIL:  
[larry.williams.civ@mail.mil](mailto:larry.williams.civ@mail.mil)



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35898-5400

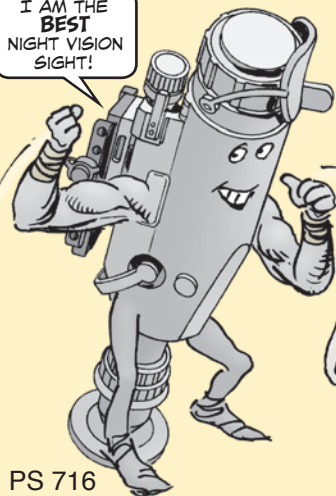
CONTACT GREG BOGGS AT DSN  
645-6367, (256) 955-6367, OR  
EMAIL: [greg.boggs@us.army.mil](mailto:greg.boggs@us.army.mil)



Night Vision  
Weapon Sights...

## Order Only AN/PAS-13

I AM THE  
**BEST**  
NIGHT VISION  
SIGHT!



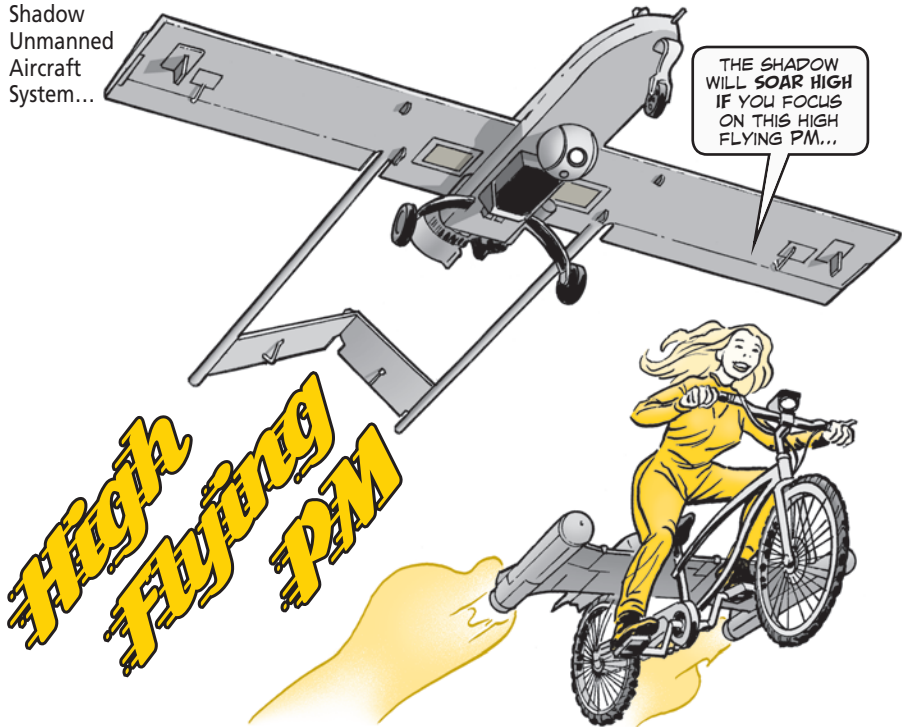
YOU CAN  
FORGET  
ABOUT THE  
AN/PVS-4  
AND  
AN/TVS-5!



**N**ight vision weapon sights AN/PVS-4 and -4A (LIN: N04732, NSN 5855-00-629-5334 and NSN 5855-01-422-8782) and AN/TVS-5 and -5A (LIN: N04596, NSN 5855-00-629-5327 and 5855-01-422-8777) should not be ordered.

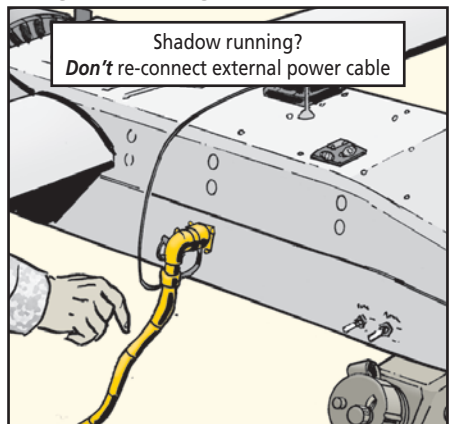
When they need to be replaced, order the AN/PAS-13 thermal weapon sight, LIN S60356, NSN 5855-01-524-4308. It is the latest in image intensifiers because it requires no outside light and will not be affected if hit by direct light.

Shadow  
Unmanned  
Aircraft  
System...



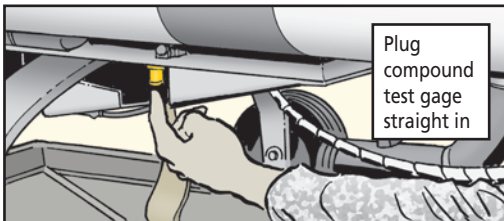
**Do not reconnect the quick-disconnect portion of the external power cable once the Shadow engine is running.**

Often the quick-disconnect power cable is accidentally knocked loose when the crew is doing the pre-flight checks or loading the Shadow on its launcher. If the cable is re-connected while the engine is already running, it can fry the cable. Since the Shadow is already powered up, there is no need to re-connect the power cable anyway. But remember to disconnect the cable portion connected to the air vehicle along with the cooling fans when you get to that part of the checklist.



## Be careful connecting the compound test gage.

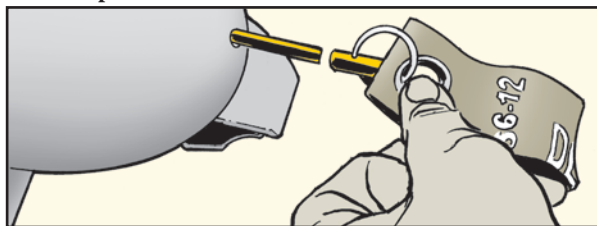
If you don't line up the gage/AV connector end straight before you push it in place on the AV, the O-ring on the AV connection could be sliced. That can affect the fuel system's vacuum.



## When pushing or turning the Shadow by hand, keep the nose wheel off the ground.



## Check pitot tube and the tube's cover for debris before installing the cover.



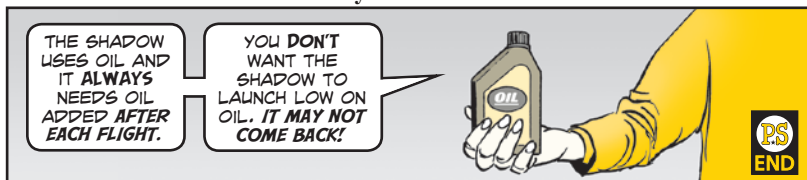
If you don't, trash can be pushed into the pitot tube, which will affect air speed readings. That could cause a crash.

## Don't let launcher ramps drop down when you pull them out of the launcher.

The ramps can hit launcher hydraulic lines, which causes them to leak. Soon you've got launcher problems. Pull the ramps all the way out and guide them to the ground.



## Always check the oil.



Tents...

# HOW DRASH BEATS THE HEAT

DRAT! I'VE GIVEN  
IT MY BEST SHOT  
AND I CAN'T MELT  
YOUR EQUIPMENT!

YOU'LL HAVE TO  
DO BETTER THAN  
THAT, SOL!



THE HOT WEATHER IS  
CLOSING IN FAST!

IT'S  
ALREADY  
HERE!

BEFORE YOU  
KNOW IT, YOU'LL  
BE SWEATING OUT  
THE SUMMER'S  
FIRST HEAT WAVE.

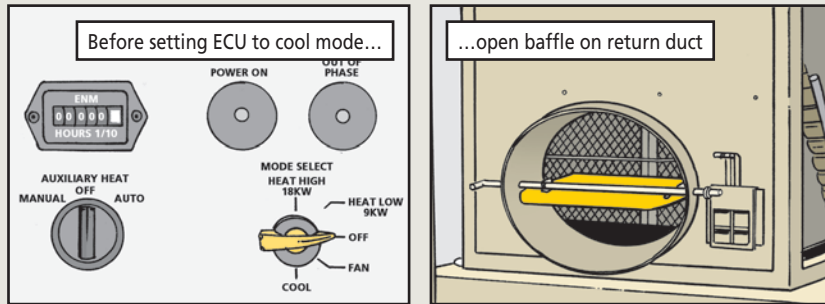
I'M GONNA  
FRY AN  
EGG ON MY  
HELMET!

THAT'S A COOL REASON TO HEED THE FOLLOWING  
ADVICE ABOUT YOUR DEPLOYABLE RAPID ASSEMBLY  
SHELTERS (DRASH®) TRAILER-MOUNTED SUPPORT  
SYSTEM (TMSS) MX MEDIUM SHELTER.

C'MON IN,  
GUYS. GET  
OUTTA THAT  
SCORCHING  
HEAT!

PS MORE

When you operate the environmental control unit (ECU) on COOL mode, open the baffle on the return duct port.



You see, the ECU is always stored or transported with the baffle closed. That helps keep debris out of the return duct and air filters.

The problem comes when some Soldiers run the ECU in COOL mode without opening the baffle. When this happens, not enough air passes through the return duct, across the evaporator coil (where it's cooled) and out the supply duct.

Without enough air flow, the evaporator coil starts to freeze up. As the freezing continues, less and less air flows across the coil. Finally, no air moves across it at all—and no cool air goes into the shelter. Run the ECU too long in this condition and you'll damage the compressor or fan components.

SO, IF THE ECU IS ALREADY UP AND RUNNING IN THE COOL MODE, BUT THE SHELTER'S NOT GETTING COOLER, TRY THIS REMEDY...

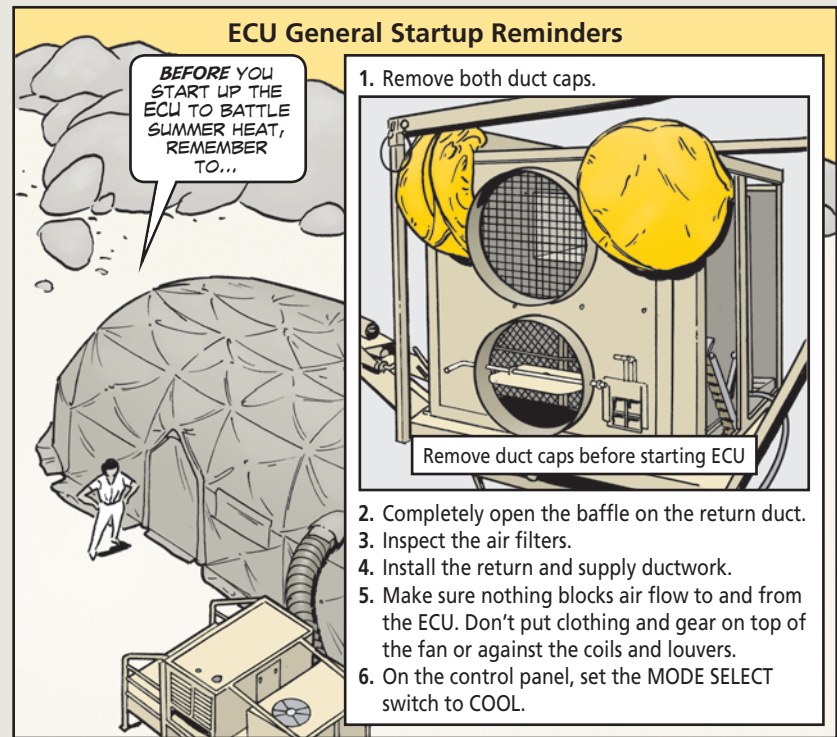
1. Shut off power to the ECU.
2. Inspect the air filters. If they're dirty and clogged, they'll block air flow and cause the evaporator coil to freeze. Clean or replace filters as needed.

To clean the filter, wash it in warm water and a mild detergent. Rinse it thoroughly in clean water. Then let it air-dry. Never use a high-pressure washer; that can damage the filter. You can also clean the filter with compressed air. But again, no high pressure.

There are no replacement filters in the Army supply system. To replace the filter, you need to contact DHS Systems LLC, the company that makes DRASH shelters. DHS points of contact are listed at the end of this article. The filter's DHS part number is PECU05T38.

3. Completely open the baffle on the return duct.
4. Wait a full 30 minutes with the ECU power off. This allows time to equalize the refrigerant temperature and pressure in the evaporator and condenser. It also lets the evaporator thaw.
5. After 30 minutes, adjust the thermostat to around 70°F. Then power up the ECU.

## ECU General Startup Reminders



1. Remove both duct caps.

2. Completely open the baffle on the return duct.
3. Inspect the air filters.
4. Install the return and supply ductwork.
5. Make sure nothing blocks air flow to and from the ECU. Don't put clothing and gear on top of the fan or against the coils and louvers.
6. On the control panel, set the MODE SELECT switch to COOL.

## Points of Contact

NEED MORE HELP?

HERE ARE POINTS OF CONTACT FOR ANY ISSUES CONCERNING DRASH.

THERE'S ALSO A WEBSITE SUPPORTING DRASH PRODUCTS:  
<http://www.drash.com>

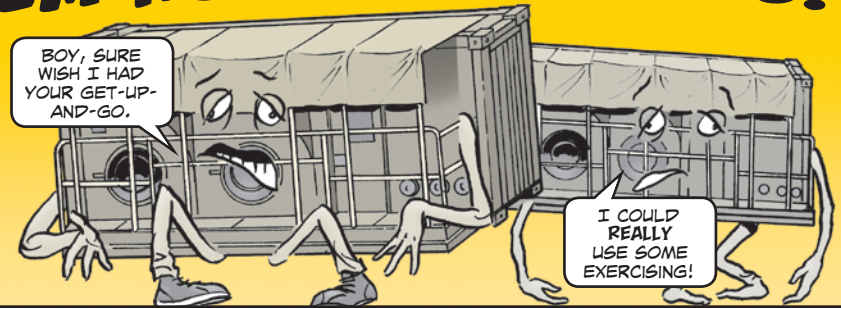
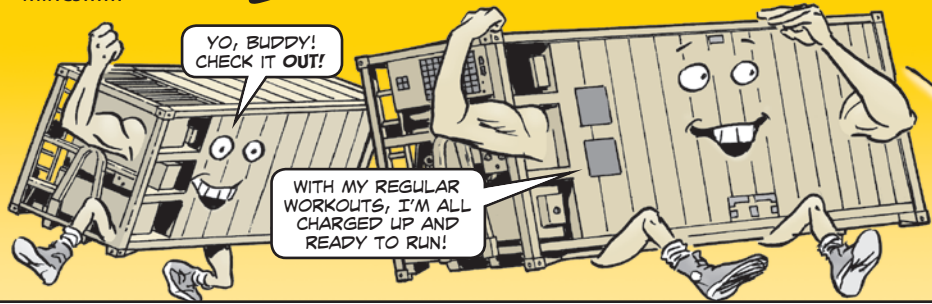


Phone:  
(877) 463-7274 or (850) 537-9947  
Or email:  
[customersupport@drash.com](mailto:customersupport@drash.com)



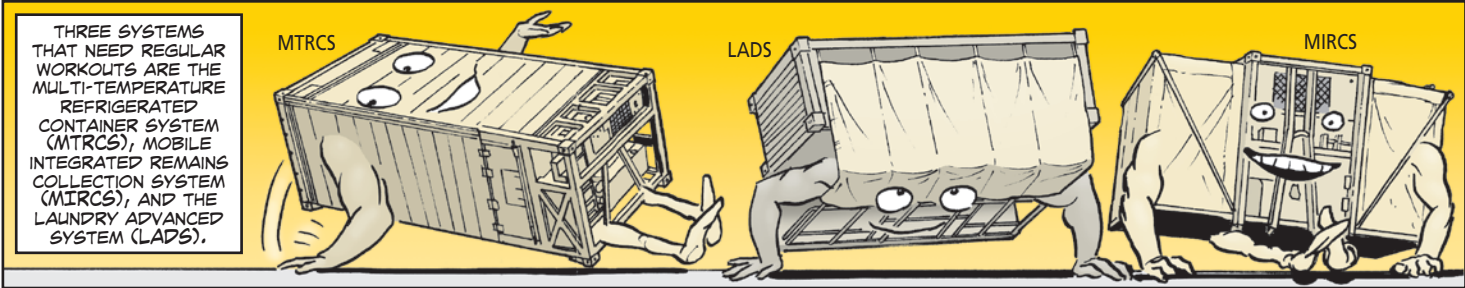
PS END

# EXERCISE KEEPS 'EM HUMMING ALONG!



JUST LIKE HUMAN BODIES, EQUIPMENT STARTS TO SUFFER WHEN IT'S NOT REGULARLY EXERCISED.

EVEN NEW SYSTEMS CAN TURN NMC IF THEY SIT IDLE TOO LONG.



THREE SYSTEMS THAT NEED REGULAR WORKOUTS ARE THE MULTI-TEMPERATURE REFRIGERATED CONTAINER SYSTEM (MTRCS), MOBILE INTEGRATED REMAINS COLLECTION SYSTEM (MIRCS), AND THE LAUNDRY ADVANCED SYSTEM (LADS).

**MTRCS**

Units should exercise the MTRCS monthly. Otherwise the seals within the refrigeration unit can dry out and refrigerant can escape. Refrigerant loss means an MTRCS that will not cool properly. Units have reported low refrigerant levels in MTRCS after fully-charged systems sat idle for an extended time.

To help prevent refrigerant from escaping, operate the MTRCS monthly for at least two hours. When the system is not going to be used for 90 days or longer, the refrigerant should be pumped down into the receiving tank. Follow the pump-down procedures in WP 0032 of TM 10-8145-222-13 (Sep 10).

**LADS**

Proper shutdown of systems is just as important as regular workouts. With LADS, this includes draining all the water from the system to prevent damage from freezing. Follow the shutdown/cool down and draining/storage procedures in WP 0016 of TM 10-3510-221-10 (Jul 08).

**MIRCS**

The MIRCS has three key components that need exercise: the generator (15-kW tactical quiet generator), environmental control unit (ECU) and refrigeration unit (RU). The RU and generator need to run at least once a month for a minimum of two hours. The ECU should be run quarterly.

The generator and RU benefit from exercise by keeping their batteries charged. Exercise lubricates the moving parts of the engine and fuel injectors, and prevents engine seals from drying out. Additionally, exercise prevents the RU compressor shaft seal from drying out and leaking refrigerant.

Before starting the generator, deploy the generator supports in accordance with WP 0008-7 through 0008-11 in TM 10-4110-263-10 (Jun 10).

Follow procedures in WP 0009-1 for operating the RU. Before operation, remove the RU cover and install the exhaust extension.

After operation, allow the exhaust extension to cool, remove it, stow it and replace the cover. Failure to replace the cover will allow water to get into the system, causing severe damage.

The ECU is helped when moving parts such as the compressor and fans are exercised. To properly start the ECU, the MIRCS must be set up IAW WP 0008 in TM 10-4110-263-10 (Jun 10), which means the platforms must be lowered and the softwalls deployed with support rods.

Follow the PMCS guidelines in WP 0023 of TM 10-4110-263-10 (Jun 10).

# Tracking Down **BENCHSTOCK**



WE'VE GOT HARDLY ANY BENCHSTOCK LEFT AND I CAN'T TRACK DOWN THE WEBSITE THAT CAN SEND US MORE!

WHAT AM I GOING TO DO?

DON'T WORRY, SOLDIER.

I'LL SHOW YOU HOW TO TRACK DOWN THAT WEBSITE!



ON PAGES 58 AND 59 OF PS 671, WE RECOMMENDED A DEFENSE LOGISTICS AGENCY (DLA) WEBSITE FOR VIEWING BENCHSTOCK AND THEIR NSNs.

**THE WEBSITE HAS SINCE MOVED!**

HERE'S HOW TO TRACK IT DOWN...

1. Go to the DLA Troop Support website: <http://www.troopsupport.dla.mil/>
2. Once you get there, expand Supply Chains in the left-hand banner.
3. Click on Construction & Equip't.
4. On the next screen, expand Customer Information.
5. Click on Fastener Catalogs.
6. On the next screen, you'll find links to Fastener Catalog (on line), Fastener Assortments, and Nuts & Washers (5310) Catalogs.



THESE LINKS TAKE YOU TO...

- a fastener catalog of bolts, cap screws and machine screws, along with their composition, diameters, lengths, NIINs, NSNs or part numbers
- catalogs of self-locking nuts, flat washers and lock washers
- assortments of screws, bolts, nuts, washers and threaded rods—each with its own NSN

**DEFENSE LOGISTICS AGENCY Troop Support**  
Construction and Equipment

Home | Site Index | Policy Statements | Contact Us

Product Line

Customer Information

Vendor Information: LA Lookup

Executive Agent

Engineer's/Tech Support

Hardware

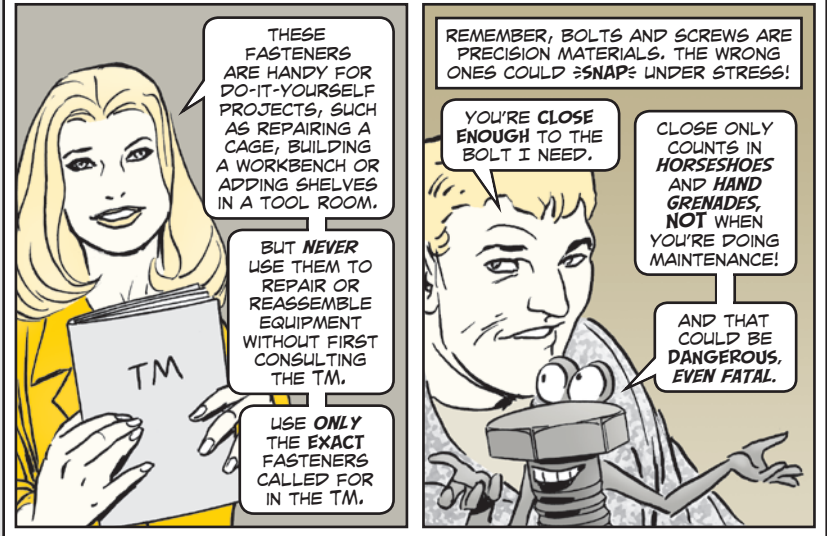
Quality Assurance

**Fastener Catalog and Assortments**

- Fastener Catalog - On-Line
- Fastener Assortments
- Nuts and Washers (5310) Catalogs
  - Nut, Self-Locking Plate, Catalog
  - Washer, Flat, Catalog
  - Washer, Lock, Catalog

These links lead to screws, bolts, nuts and washers

## Not Just Any Old Fasteners



THESE FASTENERS ARE HANDY FOR DO-IT-YOURSELF PROJECTS, SUCH AS REPAIRING A CAGE, BUILDING A WORKBENCH OR ADDING SHELVES IN A TOOL ROOM.

BUT NEVER USE THEM TO REPAIR OR REASSEMBLE EQUIPMENT WITHOUT FIRST CONSULTING THE TM.

USE ONLY THE EXACT FASTENERS CALLED FOR IN THE TM.

REMEMBER, BOLTS AND SCREWS ARE PRECISION MATERIALS. THE WRONG ONES COULD SNAP UNDER STRESS!

YOU'RE CLOSE ENOUGH TO THE BOLT I NEED.

CLOSE ONLY COUNTS IN HORSESHOES AND HAND GRENADES, NOT WHEN YOU'RE DOING MAINTENANCE!

AND THAT COULD BE DANGEROUS, EVEN FATAL.



YOU CAN GO DIRECTLY TO FASTENER CATALOGS AND ASSORTMENTS BY USING THIS URL:  
<http://www.troopsupport.dla.mil/CE/Fasteners>

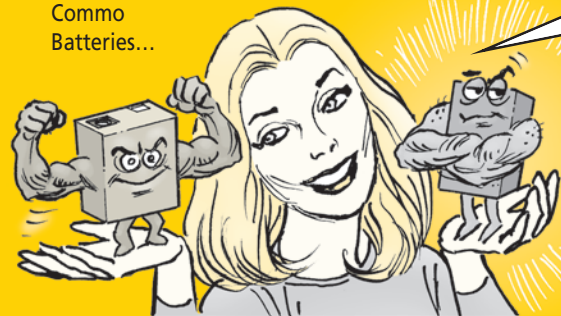
## Old Camo Still Serving

Do you have old lightweight camouflage screening systems (LCSS), their support systems or repair kits? Do you need replacement parts? Order them from the CECOM Life Cycle Management Command (LCMC). CECOM has some LCSS desert and woodland stock in Ownership/Condition Code AA. Once the LCSS stock is exhausted, CECOM will tell the field to order the replacement ultralightweight camouflage net systems (ULCANS).

At present, CECOM is not releasing the LCSS for snow because stocks are low. Appendix D of TM 5-1080-200-13&P lists part numbers and NSNs for the LCSS. Appendix C of TM 5-1080-250-12&P lists part numbers and NSNs for the ULCANS. You'll find the TMs online at the Electronic Technical Manuals website:  
<https://www.logsa.army.mil/etms/online.cfm>



Commo  
Batteries...



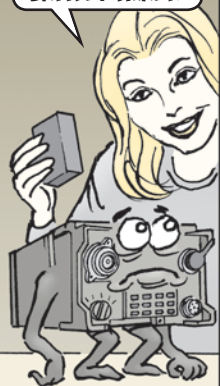
# WHAT WILL YOU DO WITH THIS POWER?

WITHOUT BATTERIES TO POWER THEM, MANY OF YOUR RADIOS AND ELECTRONICS ARE JUST LIFELESS HEAPS OF METAL, PLASTIC AND WIRE.

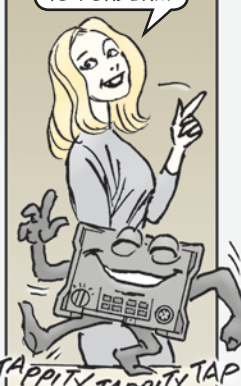
MAN...I COULD USE A POWER DRINK RIGHT ABOUT NOW!



THAT'S WHY IT PAYS TO BE BATTERY SMART.



HERE ARE A FEW POINTS TO PONDER...



● **Don't hoard batteries.** If you're the kind who usually stockpiles supplies, change your ways: Set a limit to the number of batteries you order. Have enough on hand to fill your unit's battery needs—no more, no less.

You see, batteries need to be used in equipment. Left lying around too long, they begin to lose their power. So, rotate your stock. First in, first out.

● **Determine your unit's battery needs.** Use CECOM-LCMC's Power Optimizer for the Warfighter's Energy Requirements (POWER). It's a Microsoft® Excel-based application that helps you manage battery supplies. Here's what POWER can do:

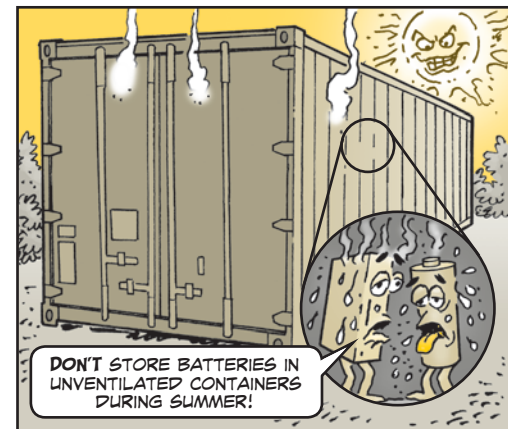
- ✓ present battery options for your equipment
- ✓ figure out a battery's run time based on surrounding temperature
- ✓ estimate how many batteries you need to support your mission

Get POWER by emailing Ari Herman at CECOM-LCMC:

[ari.c.herman.civ@mail.mil](mailto:ari.c.herman.civ@mail.mil)

● **Stay out of the heat.** High temperatures drain the life out of batteries. They cause the loss of capacity. Capacity is the amount of energy a battery can deliver in a single discharge (normally expressed in ampere hours).

Most commo batteries can withstand 110°F for a few days without harm. But when the temperature reaches 130°F for more than a few days, any battery can be seriously degraded.



So, keep batteries cool during storage to preserve their shelf-life. Never store them in direct sunlight during hot weather. Never store them in a closed, unventilated shelter, CONEX or MILVAN in the summer. That's when temperatures soar inside these containers.

For ideas on how to keep batteries cool, read SB 11-6, *Communications-Electronics Batteries Supply and Management Data* (Feb 10). You'll find it on the USAMC Logistics Support Activity (LOGSA) Electronic Technical Manuals Online website:

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

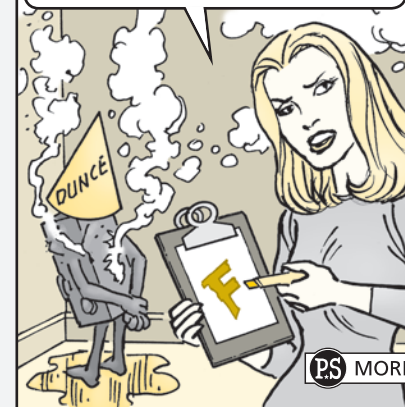
● **Keep batteries in their original packaging while in storage.**

The packaging:

- ✓ identifies batteries by stock number, lot number, manufacturer and type
- ✓ helps prevent damage from high humidity or dryness
- ✓ protects against crushing, puncturing and shorting
- ✓ contains battery leaks

Take rechargeable batteries out of their original packaging and charge them. Return them to their original packaging for long-term storage. Charge the batteries at least once a year from then on.

REPORT BATTERY FAILURES—CRACKS, STAINS, BULGES, ODORS OR LEAKS—ON A STANDARD FORM 368, PRODUCT QUALITY DEFICIENCY REPORT.



PS MORE

● **Before you go on mission, make sure your batteries work.** Test them with a simple tester. Or run a radio/equipment check like your TM says. If you have large quantities of the same battery with the same date codes, test a small sample to make sure your batteries have power.

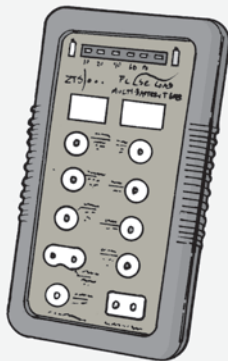
Here's a tester in the Army supply system that tests a variety of batteries:

MBT-MIL Multi-Battery Tester™, NSN 6625-01-494-9163.

HERE'S WHAT IT TESTS...



Make sure batteries work



Use a battery tester

1.5V button cell—S76, A76, A625, A640, LR44, 357, 303



1.2V nickel-metal hydride/nickel-cadmium (NiMH/NiCd) rechargeable—AA, AAA, C, D

1.5V lithium—AA L91, AAA L92



3V lithium coin—CR1616, CR1620, CR2016, CR2025, CR2320, CR2032, CR2430, CR2450, 58L, 1/3N

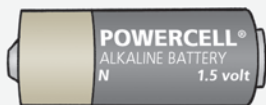
6V lithium—BA-5372/U




3V lithium cylindrical—CR123, CR2, CRV3

12V alkaline—A23

1.5V alkaline—AA, AAA, C, D, N



9V alkaline & carbon zinc



FOR MORE THAN 60 YEARS, PS HAS ANSWERED QUESTIONS FROM YOU, OUR VALUED READERS.

WE'RE GLAD TO HELP. IF YOU'RE STUMPED ABOUT SOMETHING IN ANY OF OUR TOPIC AREAS, ASK US.

IF WE DON'T KNOW THE ANSWER, WE CAN USUALLY FIND SOMEONE WHO DOES.

HERE'S WHAT YOU CAN DO TO HELP US RESPOND FASTER...

## YOU ASK... WE ANSWER!

- Send your email from a valid .mil or .gov email address
- Include your full name and rank, current unit and location, and phone number with your question. Some of you do not show up in Global and AKO contact info is often outdated. Include your mailing address when requesting hard copies of articles or CDs/DVDs of back issues.
- Be specific about any equipment, vehicles or weapons questions. Include model numbers and series/versions. For example, not just "truck" but "M915A4." Serial numbers are also helpful.
- Describe the issue, tell us why it's important and what needs to be changed or fixed. Be equally specific when suggesting solutions.
- Include NSNs, LINs or any additional info you have on an end item or any components, repair parts or materials.
- Give us numbers and dates of any TMs you reference. Include specifics from TMs (figure and parts numbers, etc).
- If you find the answer yourself after you've written us, but before we have responded, please let us know. And tell us the answer you found. We may be able to share it with other readers who have the same problem.
- If we've answered the same question before, you should hear from us quickly.
- If we have to research or get info from other sources, it may take up to 30 days. If you don't hear back from us within a month, please follow up. It's rare, but sometimes email gets caught in spam filters or otherwise goes astray.

Here's how to send your questions and suggestions to PS:

Email (we prefer email):

[logsa.psmag@conus.army.mil](mailto:logsa.psmag@conus.army.mil)

or

[half.mast@us.army.mil](mailto:half.mast@us.army.mil)

Letter:

USAMC LOGSA GSC  
ATTN: PS Magazine (AMXLS-GP)  
5307 Sparkman Circle  
Redstone Arsenal, AL 35898

Phone: DSN 645-0959, (256) 955-0959

Fax: DSN 645-0961, (256) 955-0961

Half-Mast on Facebook:

<http://www.facebook.com/#!/halfmast.mccanick>

Half-Mast on Twitter:

<http://twitter.com/#!/HalfMastPSMag>

Half-Mast's Blog:

<http://halfmastpsmag.wordpress.com/>

# Power Supply... **Good to Glow: CPS Equipment List**

SARGE LEFT ME THIS LIST OF CPS EQUIPMENT TO ORDER FOR OUR UNIT... BUT I DON'T KNOW WHERE TO START!

NO WORRIES, SOLDIER! WITH THIS NSN CHART, YOU'LL BE 'GOOD TO GLOW!'



**H**ere's a handy list to keep around in case your unit needs to order any central power solution (CPS) equipment, including basic issue items (BIIs):

Description	Model	NSN	LIN
60-kW TQG power plant, 50/60 Hz, trailer-mounted	AN-MJQ-41	6115-01-303-7896	P42194
60-kW TQG power plant, 50/60 Hz, trailer-mounted	AN-MJQ-41B	6115-01-474-3776	P42194
<b>Under this NSN, the following is included:</b>			
2 1/2-ton modified trailer, M200A1, 2 (ea)			
Generator set, TQ DED, 60-kW, 2 (ea)			
Accessory box, 2 (ea)			
Fire extinguisher, 5 lb, A-A-1106, 2 (ea)		4210-01-361-6921	
Switch box (unit A), 1 (ea)			
Cable assembly (unit B), 200 AMP interconnecting 1 (ea)		6150-01-440-5706	
Paralleling cable assembly, 30554-88-22209, 2 (ea)		6150-01-406-9533	
30-kW TQG power unit, 50/60 Hz, trailer-mounted	AN-MJQ-40	6115-01-299-6033	P42126
30-kW TQG power unit, 50/60 Hz, trailer-mounted	AN-MJQ-40B	6115-01-474-3783	P42126
<b>Under this NSN, the following is included:</b>			
2 1/2-ton modified trailer, M200A1			
Generator set, TQG DED, 30-kW, 2 (ea)			
Accessory box, 1 (ea)			
Fire extinguisher, 5 lb., A-A-1106, 2 (ea)		4210-01-361-6921	
Switch box (unit A), 1 (ea)			
Cable assembly (unit B), 100 AMP interconnecting, 1 (ea)		6150-01-444-2430	
Paralleling cable assembly, 30554-88-22209, 2 (ea)		6150-01-406-9533	
Hammer, slide assembly		5120-01-013-1676	
Surface wire grounding kit (SWGK) MK-2551 A/U		5820-01-263-1760	

Description	Model	NSN	LIN
15-kW TQG power unit, 50/60 Hz, trailer-mounted	AN-MJQ-48	6115-01-540-9465	P63530
15-kW TQG power unit, 50/60 Hz, trailer-mounted	AN-MJQ-48A	6115-01-540-8433	P63530
<b>Under this NSN, the following is included:</b>			
1-ton trailer or light tactical trailer (LTT)			
Generator set, TQ DED, 15-kW, 2 (ea)			
Accessory box (unit A), 1 (ea)			
Fire extinguisher, 5 lb, A-A-1106, 2 (ea)		4210-01-361-6921	
Switch box (unit A), 1 (ea)			
Cable assembly (unit B), 40/60 AMP interconnecting, 1 (ea)		6150-01-457-0884	
Paralleling cable assembly, 30554-88-22209, 2 (ea)		6150-01-406-9533	
PDISE, center, electrical feeder, 1 (ea)	M100	6150-01-308-5671	F55621
Cable, service feeder, 50-ft, 100-AMP 2 (ea)		6150-01-256-6304	
Cable, pigtail, 4-ft, 100-AMP, 1 (ea)		6150-01-256-6300	
Strap, cable carrying, 8 (ea)		5340-01-256-6299	
Center, distribution, 1 (ea)	M40	6150-01-307-9446	F55485
Box, receptacle, 1 (ea)		6150-01-251-9125	
Cable, extension, 25-ft, 20 AMP 120VAC, 3 (ea)		6150-01-250-0044	
Cable, extension, 50-ft, 20 AMP 120VAC, 3 (ea)		6150-01-250-3643	
Cable, light set, 25 outlet, 2 (ea)		6150-01-253-4290	
Cable, pigtail, 4-ft, 40/60 AMP, 1 (ea)		6150-01-256-6301	
Cable, service feeder, 50-ft, 40/60 AMP, 1 (ea)		6150-01-247-4781	
Container, transit storage, 1 (ea)		6150-01-256-6298	
Strap, cable carrying, 18 (ea)		6150-01-256-6299	
Distribution system, electrical	M46	6150-01-208-9751	U89185
Cable assembly, branch circuit, 20 AMP, 25-ft, 2 (ea)		6150-01-251-9124	
Cable, extension, 20 AMP, 25-ft, 6 (ea)		6150-01-250-0044	
Light, fluorescent 50W, 2 (ea)		6230-01-485-6375	
Box, receptacle, 6 (ea)		6150-01-251-9125	
Rope assembly, support, 2 (ea)		6150-01-256-6302	
Strap, cable securing, 6 (ea)		6150-01-250-0045	
Adapter assembly, fuel drum	BII	5342-00-066-1235	
Sledge hammer, 8 lb	BII	5120-00-251-4489	
Ground rod assembly, 9-ft, 3 sections	BII	5975-00-878-3791	
Elbow, pipe to hose	BII	4730-00-809-9703	
Clamp, hose	BII	4730-00-908-3195	
Hose, non-metallic, oil drain	BII	4720-00-670-6037	
Fire extinguisher, 5 lb, A-A-1106 2 (ea)	BII	4210-01-361-6921	
Aux, fuel line, (2 ea)	BII	4720-00-021-3320	
Ground rod clamp, 1/2-in		5999-00-186-3912	
Ground rod clamp, 5/8-in		5999-00-496-5834	
Ground rod assembly, 6-ft, 1 section		5975-00-224-5260	
Ground rod assembly, 9-ft, 3 sections		5975-00-878-3791	

Training...

# UTAP Lets You Know: Proceed with Caution or Good to Go!

HOW DO I KNOW IF THE MAINTENANCE INFO I FOUND FOR MY BRADLEY IS CURRENT?

EASY! SEE IF UTAP GIVES IT THE GREEN LIGHT!



The Unit Training Assistance Program (UTAP) at TACOM Life Cycle Management Command offers operator and maintenance training materials for TACOM-managed equipment. UTAP constantly adds or updates materials, and verifies content with program managers.

Now all UTAP materials include a status light on the website to mark the timeliness of the content.

A green light means info is current within a one-year window. An amber light means it's been a year or more since UTAP has been able to revalidate the material with the equipment's PM or their representative. An amber-flagged entry tells you it's the most current info on hand, but also means the UTAP team is actively working to revalidate or update the info, so you should check back soon.

File Name	Status
M2A3-M3A3 OPNET Instructor Guide Volume 1 (ARMY).pdf	●
M2A3-M3A3 OPNET Instructor Guide Volume 2 (ARMY).pdf	●
M2A3-M3A3 OPNET Instructor Guide Volume 3 (ARMY).pdf	●
M2A3-M3A3 OPNET Instructor Guide Volume 4 (ARMY).pdf	●

Green light means info is current and good to go

File Name	Status
M2A2 BFV OPNET Engagement Process PMCS (ARMY).pdf	●
M2A2 BFV OPNET Hull PMCS (ARMY).pdf	●
M2A2 BFV OPNET Operate TOW Launcher in Power Mode (ARMY).pdf	●
M2A2 BFV OPNET Precision Gunnery System (ARMY).pdf	●
M2A2 BFV OPNET Turret Familiarization (ARMY).pdf	●

Amber light means info needs revalidation

Most training material is updated annually, unless it's a piece of equipment that is modified more frequently.

Operator new equipment training usually includes programs of instruction, instructor/student guides and slideshow presentations for associated lesson plans. Field level maintenance info often includes bonus material on individual items like engines and transmissions.

UTAP also keeps materials on older equipment. So if your unit has inherited equipment that you need to learn how to operate or maintain, you can still find out how.



SOME RECENTLY ADDED OR UPDATED ARMY TRAINING MATERIALS INCLUDE...

- D7R Series II Dozer Type II with ripper
- M984A4 HEMTT wrecker with C-kit
- MaxxPro recovery vehicle
- M14 enhanced battle rifle
- 120M motorized grader
- M777A2 howitzer, medium towed
- M983A4 HEMTT tractor with C-kit
- M2A1 .50 cal machine gun
- MaxxPro Dash DXM ambulance
- IHMEE with crew protection kit
- Advanced aviation forward area refueling system
- Assault hose line system
- M1117 ASV
- M88A2 HERCULES
- TA31F advanced combat optical gun sight

SO GRAB YOUR CAC AND CHECK OUT THE LATEST GREEN-LIGHT SPECIALS: <https://utap.army.mil>

IF YOU CAN'T FIND WHAT YOU'RE LOOKING FOR AT THE UTAP WEBSITE, HAVE QUESTIONS OR NEED ASSISTANCE...

CHOOSE THE CUSTOMER ASSISTANCE TAB, CALL DSN 786-4276, (586) 282-4276, OR EMAIL: [tacom-icmc.ilsc\\_utap@mail.mil](mailto:tacom-icmc.ilsc_utap@mail.mil)

Maintenance  
Excellence...

# AAME for the Stars! ★★

Y'KNOW...  
I'M ALWAYS  
BRAGGIN'  
'BOUT HOW OUR  
UNIT PULLS  
THE BEST  
MAINTENANCE IN  
THE ARMY...

...BUT LIKE  
SARGE SAYS, 'IT'S  
NOT BRAGGING  
WHEN IT'S TRUE.'



JUST IMAGINE  
ENTERING THE AAME  
COMPETITION THIS  
YEAR! WE COULD  
TOTALLY WIN IT!

## AWARDS



WELL, STOP  
DAYDREAMING  
AND LET'S  
ENTER THE AAME  
COMPETITION  
ALREADY!



**N**omination packets for Fiscal Year 2012 (FY12) Chief of Staff Army Award for Maintenance Excellence (AAME) are due 1 Nov 12 for field-level entries and 15 Feb 13 for depot-level entries.

The annual AAME competition recognizes units and depots that excel in maintenance and help improve and sustain combat readiness. For a complete list of categories and submission guidelines, visit:

<https://www.us.army.mil/suite/doc/30790715>

Additional info on the AAME competition and its history can be found at:

<http://www.goordnance.army.mil/AAME/aame.html>



FY12 AAME  
WINNERS WILL BE  
HONORED AT AN  
AWARDS CEREMONY IN  
CALENDAR YEAR 2013.

THE TOP  
WINNERS WILL  
ALSO GO ON TO  
COMPETE AT THE  
DOD LEVEL.

Questions? Contact Nelson Williams at  
DSN 224-0753, (703) 614-0753, or email:

[nelson.k.williams.civ@mail.mil](mailto:nelson.k.williams.civ@mail.mil)

## M25 BINOCULARS GO TO DEPOT, NOT DLA DISPOSITION SERVICES

When the M25 stabilized binoculars, NSN 1240-01-410-7418, break, some units are sending them to DLA Disposition Services (formerly DRMO). That's **wrong**. The M24 has an SMR code of PAODD, which means it's repaired or disposed of at depot. Turn in broken M25s so they can be shipped to depot for repair.

## TOOLBOX BRIMS WITH HANDY INFO

The Range & Weapons Safety Toolbox at the US Army Combat Readiness/Safety Center is a one-stop shop for many resources on range operations and safe weapons handling. The toolbox also links to recently updated range and safety publications, so the most current info is at your fingertips. Visit:

<https://safety.army.mil/rangeweaponssafety/>

For help, call DSN 558-1390, (334) 255-1390, or email: [usarmy.rucker.hqda-secarmy.mbx.safe-helpdesk@mail.mil](mailto:usarmy.rucker.hqda-secarmy.mbx.safe-helpdesk@mail.mil)

## GRAT Adds New Features

The Ground Risk Assessment Tool (GRAT) at the US Army Combat Readiness/Safety Center (USACR/Safety Center) helps you identify hazards and controls for missions or activities. GRAT's recent upgrades include electronic signatures and a draft-saving feature so you can back up your work while completing the worksheet. To access GRAT, visit:

<https://grat.safety.army.mil/GRAT/>

For help, call DSN 558-1390, (334) 255-1390, or email: [usarmy.rucker.hqda-secarmy.mbx.safe-helpdesk@mail.mil](mailto:usarmy.rucker.hqda-secarmy.mbx.safe-helpdesk@mail.mil)

## M1-Series Tank Fuel Pump Sealing Compound

Mechanics, get a 50ml tube of sealing compound (commonly referred to as "grape jelly") for installing the in-tank electrical fuel pump gaskets by ordering NSN 5330-01-325-6993. NSN 8030-01-262-3560, which is listed as Item 119 in Appendix C of TM 9-2350-264-20-1-5 (Mar 03, w/Ch 5, Jun 09) and Item 139 in WP 1434 of TM 9-2350-388-23-1-7 (Feb 09), has been removed from the supply system.

## LRT-110 Crane Wire Rope

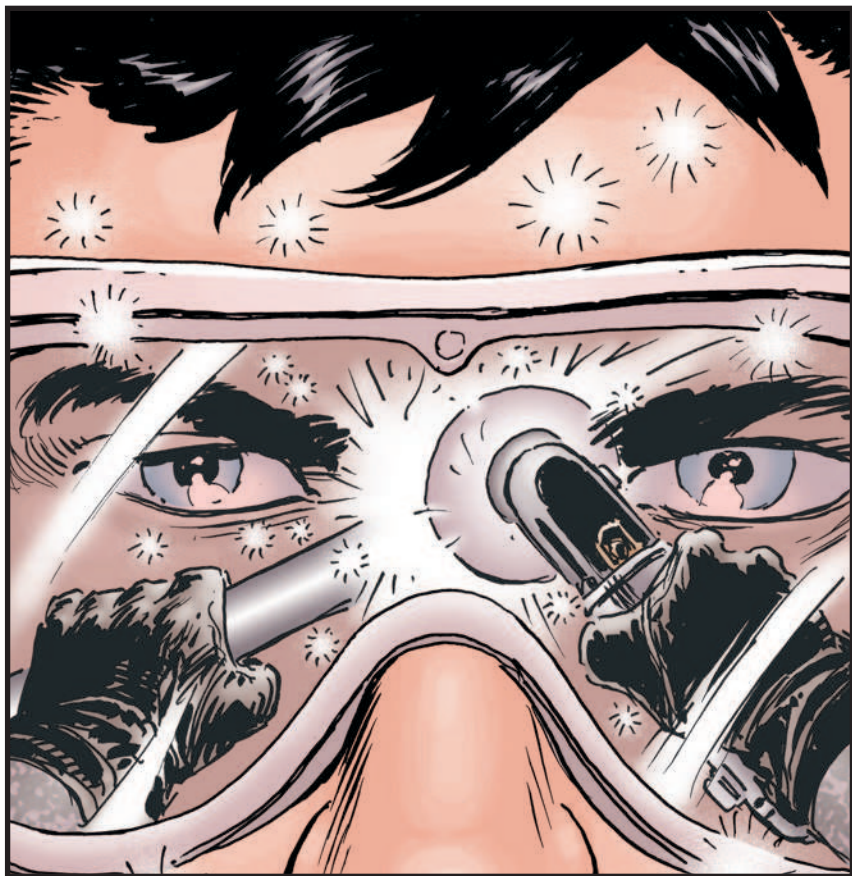
Get a replacement wire rope (cable) for your LRT-110 7 1/2-ton crane's winch with NSN 4010-00-171-6315 (PN 8694151, CAGE 19207). PN 1269-180, which is listed as Item 3 in Fig 13-1 of TM 5-3810-305-24P (Jul 91), does not cross to an NSN. When you receive the new wire rope, cut it to a length of 180 feet to fit the winch.

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?

# ***See it Our Way!***

WHEN A MAINTENANCE TASK CALLS FOR ***EYE PROTECTION***, WEAR YOUR **GOGGLES OR SAFETY GLASSES.**



THAT'LL KEEP YOUR EYES SEEING  
***CLEARLY!***