

Issue 638

PS

January  
2006

# THE PREVENTIVE MAINTENANCE MONTHLY

TB 43-PS-638

Approved for  
Public Release;  
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Unlimited

ARMY  
TRANSPORTATION  
MUSEUM

2006

2090

TIME  
MACHINE

I'VE  
GOT IT!

THE  
2005 PS  
ANNUAL  
INDEX!

HMMWV

MAYBE  
WE'LL GET  
THIS OLD  
RELIC  
WORKING  
AFTER ALL.

JOE  
KUBER

See the  
2005 PS Index,  
page 27!



**G**hosts, Freddie Kruger, vampires, Hannibal Lecter, witches and aliens.

All have filled the silver screen with frightful horrors. And we went to see them for entertainment.

There are some frightening images, however, that we'd prefer not to see.

An out-of-battery tank cannon when an enemy tank is zeroing in.



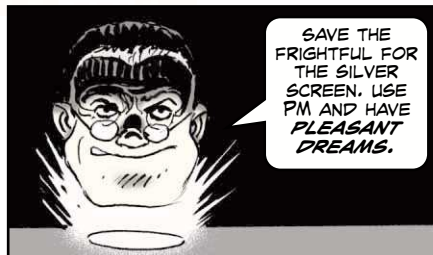
A Bradley hatch crashing shut on a crew member's hand.



Brake failure on a HEMTT headed down a steep hill.



Name your equipment failure nightmare. Each can become reality when equipment isn't maintained. Preventive maintenance is the work we do so we don't have to view the truly frightful, nor have the nightmares that follow "accidents"—accidents that PM could have avoided.



THE  
PREVENTIVE  
MAINTENANCE  
MONTHLY

TB 43-PS-638, 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.

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You are invited to send PS your ideas for improving maintenance procedures, questions on maintenance and supply problems and questions or comments on material published in PS.

Just write to:

**MSG Half-Mast**  
**PS, the Preventive Maintenance Monthly**  
**USAMC LOGSA (AMXLS-AM)**  
**5307 Sparkman Circle**  
**Redstone Arsenal, AL 35898-5000**

Or e-mail to:

**psmag@logsa.redstone.army.mil** or  
**half.mast@us.army.mil**

Internet address:

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

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General, United States Army Chief of Staff

Official:

*Sandra R. Riley*  
**SANDRA R. RILEY**

Administrative Assistant to the Secretary of the Army

0529901

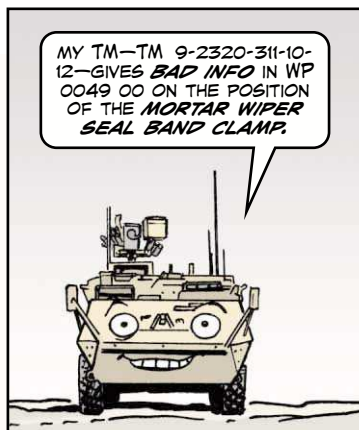
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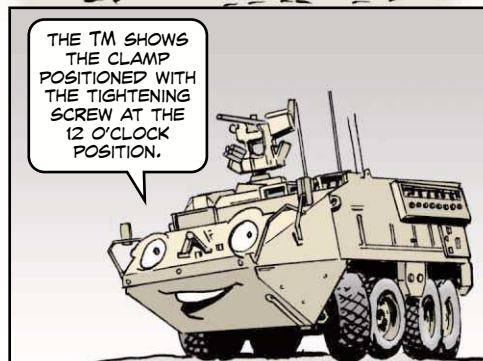
# TM Wrong on Mortar Clamp



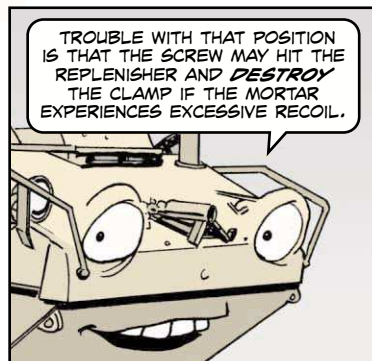
Hi,  
I'M A  
MORTAR  
CARRIER  
VEHICLE  
STRYKER.



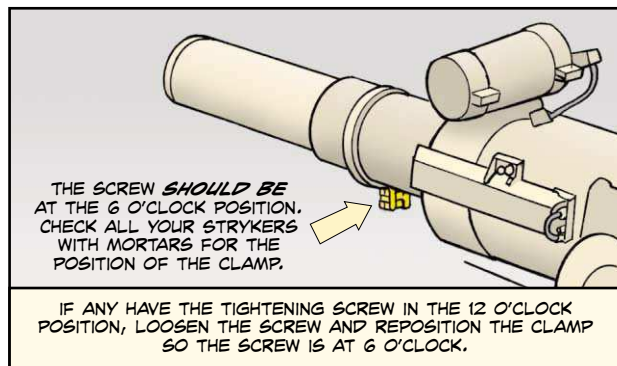
MY TM—TM 9-2320-311-10-12—GIVES **BAD INFO** IN WP 0049 00 ON THE POSITION OF THE **MORTAR WIPER SEAL BAND CLAMP**.



THE TM SHOWS THE CLAMP POSITIONED WITH THE TIGHTENING SCREW AT THE 12 O'CLOCK POSITION.



TROUBLE WITH THAT POSITION IS THAT THE SCREW MAY HIT THE REPLENISHER AND **DESTROY** THE CLAMP IF THE MORTAR EXPERIENCES EXCESSIVE RECOIL.



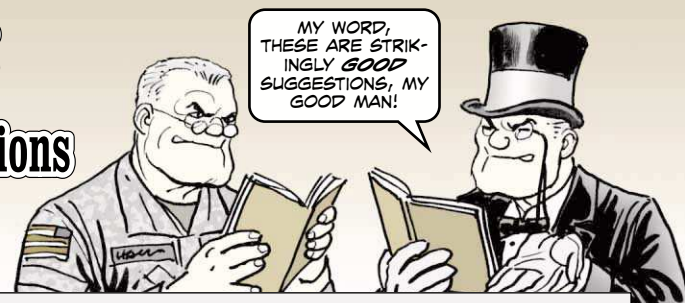
THE SCREW **SHOULD BE** AT THE 6 O'CLOCK POSITION. CHECK ALL YOUR STRYKERS WITH MORTARS FOR THE POSITION OF THE CLAMP.

IF ANY HAVE THE TIGHTENING SCREW IN THE 12 O'CLOCK POSITION, LOOSEN THE SCREW AND REPOSITION THE CLAMP SO THE SCREW IS AT 6 O'CLOCK.



FOR **MORE** INFO, SEE TACOM SAFETY-OF-USE MESSAGE 05-043.

# Striking Stryker Suggestions



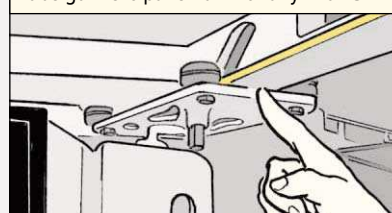
MY WORD, THESE ARE STRIKINGLY **GOOD** SUGGESTIONS, MY GOOD MAN!

Dear Editor,

These suggestions will keep crews from striking out because of Stryker problems:

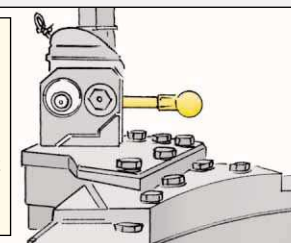
- The gunner's panel must be moved in order to fire missiles. But if the rail that the panel slides on is never lubed, eventually the panel won't move. We've found giving the rail a light coat of GMD every month keeps the panel moving smoothly. After you lube the rail, move the panel back and forth to work in the grease.

Lube gunner's panel rail monthly with GMD

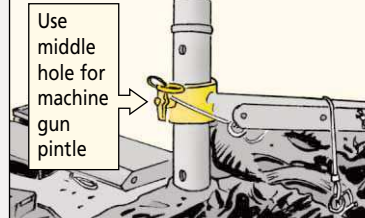


- The locking handle for the machine gun ring mount can also freeze if it's not lubed. Then you can't move the machine gun out of the way to fire missiles. Each month we spray a light silicone lubricant on the locking handle and work the handle back and forth until it moves freely. Of course, where sand is a problem you shouldn't do this since lube attracts more sand.

Lube ring mount locking handle monthly with light silicone lubricant



- When you mount the Stryker's machine gun, use the middle hole on the mount to lock in the pintle. If you use the bottom hole, the weapon sits too low, which limits how close you can shoot around the vehicle. If you use the top hole, you have to stand too far out of the commander's hatch to fire, exposing yourself more.



Use middle hole for machine gun pintle

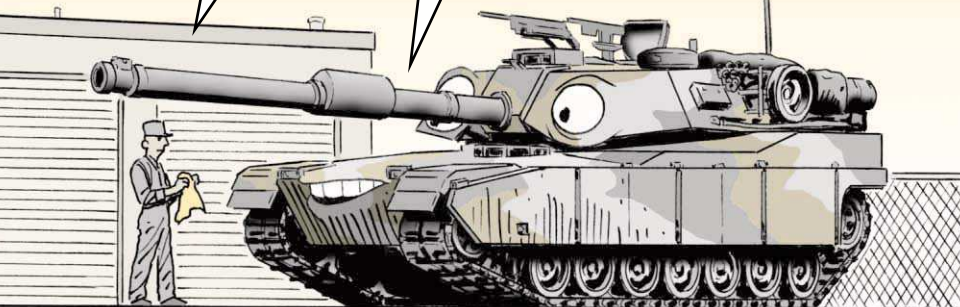
SGT Adams Bowley  
PFC John Velez  
C Co, 52d Inf  
Ft Lewis, WA

**Editor's note:** You've struck pay dirt with your Stryker suggestions. Thanks and good work.

# THE FUTURE IS HERE, TODAY

I NEED SOME HELP TROUBLE-SHOOTING YOUR PROBLEM!

I BET THE FOLKS AT TEAM ARMOR DIAGNOSTICS CAN HELP!

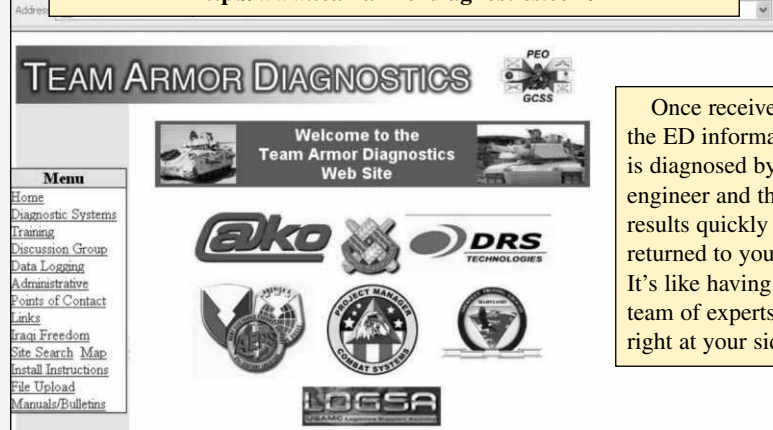


Troubleshooting your M1A1 AIM tank is getting easier all the time. With the introduction of embedded diagnostics (ED), your tank has an on-board history and malfunction identifier that can recognize faults on the tank in real-time.

By using the maintenance support device (MSD), you can connect to the tank and run a full diagnostic (FD) scan to aid in diagnosing the tank's symptoms. Soon, ED will be accessible wirelessly via a laptop, so mechanics won't have to be on the tank to troubleshoot.

If you need more info, download it from the tank's ED memory and upload it to PM Combat Systems' new web site:

<http://www.teamarmordiagnostics.com/>



THE WEB SITE ALSO PROVIDES A HOST OF OTHER INFORMATION.



• **Diagnostic systems.** This link illustrates the major Direct Support Electrical System Test Set (DSESTS) components needed to run diagnostics on line replaceable units (LRU) for the M1, M1A1, M1A2SEP, M2A2/M3A2 ODS and A3 Bradleys, M6 Linebacker, M7 BFIST, and M104 Wolverine.

• **Training.** This link covers the functional description, exterior, interior, DSESTS cable connections and test program set that the DSESTS test systematically runs for each LRU. DSESTS components are covered the same way. You'll also find info on soldering, use of the Daniels kit, and instructions covering the DSESTS van.

• **Data logging.** This link allows you to upload data from either DSESTS data logger or the history from an ED tank. You can also review submitted tests from other users listed by LRU and site submitted. ED history or test results can be sent through the link labeled File Upload.

• **Install instructions.** This link covers new and updated software that you can install on your equipment.

• **Manuals/bulletins.** This link covers maintenance advisory messages, TMs and TBs. In the future, this link will accommodate new part numbers and NSNs that have not made the cutoff for TM printing.

• **Links.** This link allows you to search other web sites of interest.

# HALT THE HANG-UPS!

Crewmen, some of you have a real hang-up with the turret safety screens in your tanks.

The problem comes when you decide to hang gear, helmets and other items from the screens. The extra weight cracks and bends the screens. Bent screens get hung up on electrical cables and hydraulic lines when the turret is traversed. That's damage you just don't need.

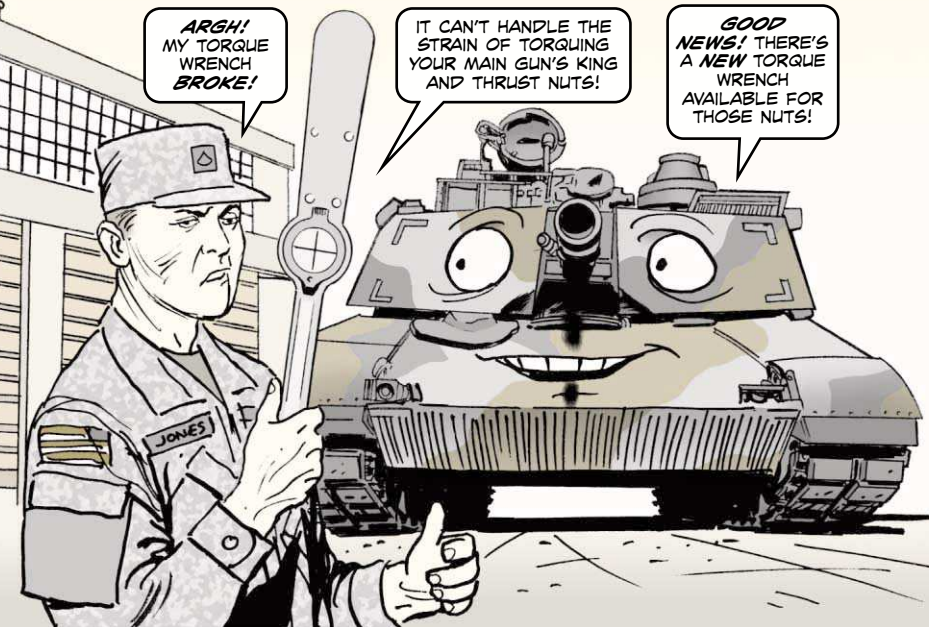
So keep your gear off the screens and put a halt to the hang-ups.

Don't hang gear on turret safety screens





# NEW WRENCH BRINGS RELIEF

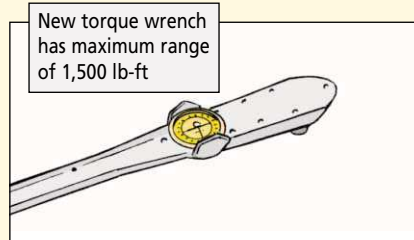


**T**ightening the king and thrust nuts during a tank's gun tube replacement requires a **minimum** of 1,000 lb-ft of torque.

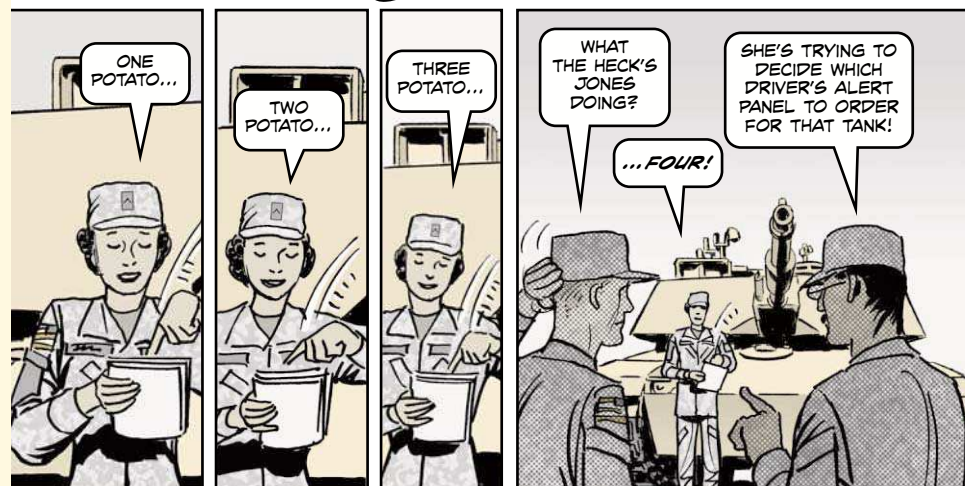
Problem is, the current torque wrench, NSN 5120-00-555-1521, has a **maximum** range of 1,000 lb-ft. The strain can break the wrench or apply too little torque.

And if you don't follow the gun tube replacement procedure exactly as it's outlined in the TMs, the piston won't seat properly against the breech ring and the main gun won't maintain accuracy.

A new torque wrench, NSN 5120-01-355-1827, with a maximum range of 1,500 lb-ft, is now available. Pencil in the replacement NSN as Item 167 on Page D-6 of TM 9-2350-264-34-2-2, Item 98 on Page D-5 of TM 9-2350-288-34-2-2, and Item 96 on Page D-5 of TM 9-2350-388-34-2-2.



# Solving the Panel Puzzle



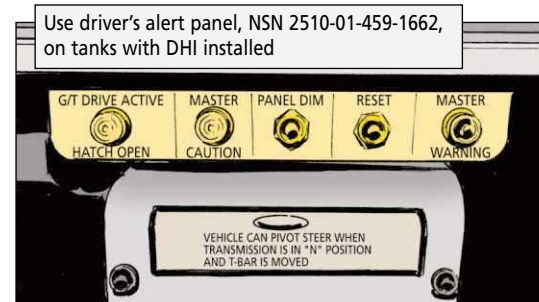
**T**ACOM reports that the number of requisitions for the old configuration of the M1A1 tank's driver's alert panel (DAP), NSN 2510-01-073-0020, is pretty high, especially from Southwest Asia.

"So what?" you might ask.

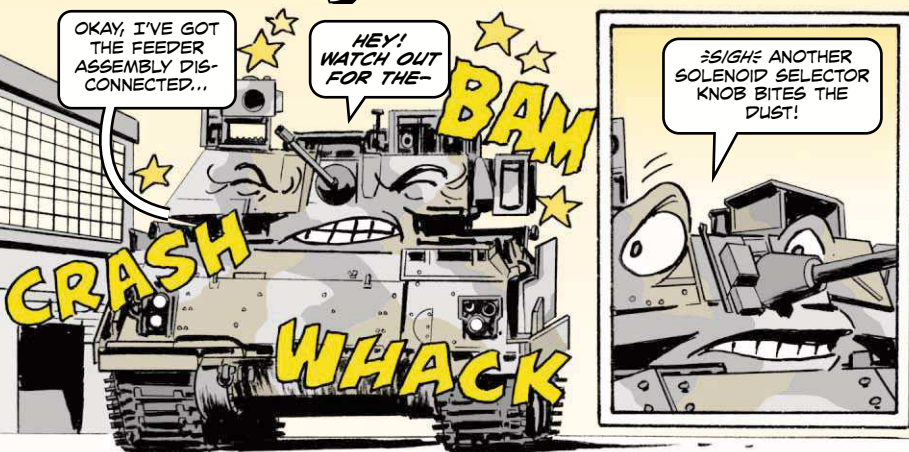
Well, the old DAP was designed for use on tanks that **have not** been equipped with the driver's hatch interlock (DHI). And since all active Army tanks should have had the DHI installed with MWO 9-2350-264-50-11, demand for the old DAP should actually be going down.

Figs 114 and 115 of TM 9-2350-264-24P-1 (Mar 03) list both DAPs, but don't make a clear distinction between the two configurations. That, combined with the number of orders for the old DAP, makes it likely that some units are ordering the wrong panel.

For active Army tanks that have the DHI installed, order DAP, NSN 2501-01-459-1662. National Guard and war reserve tanks that have **not** been modified with the DHI should continue to use the old configuration DAP.



# Protect Against Knob Knockers



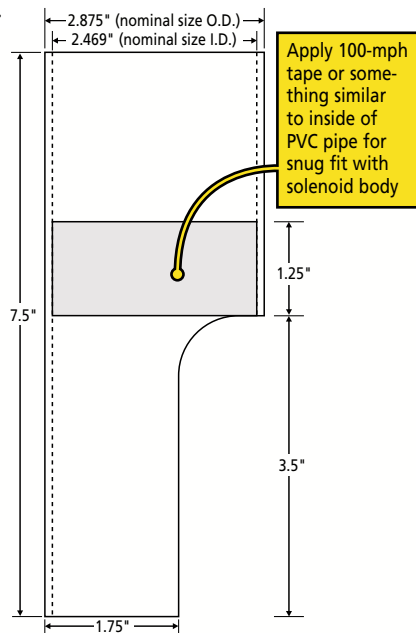
Dear Editor,

The feeder assembly on the Bradley's 25mm gun should probably be added to the endangered species list.

When the feeder assembly is removed for cleaning and maintenance, it's sometimes dropped or knocked against other components. Once it makes it out of the turret, the feeder assembly is usually placed on the troop bench where gear and other stuff is piled on top of it.

The weak spot is the red knob on the electrical feed select solenoid. Knocks, bangs and bumps can bend the knob or snap it off. That means replacing the solenoid body assembly, NSN 5945-01-460-5121. With a replacement cost of more than \$1,000, it's an expense that most units can live without.

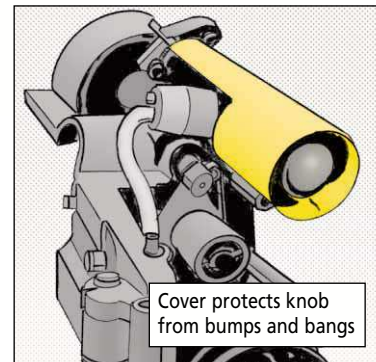
We've developed a homemade cover that protects the knob from damage. The cover is fabricated from standard 2 1/2-in Schedule 40 PVC pipe that's available at any local home improvement store. Here's how to make it:



The cover requires no tools to remove or install, so it's a snap to use. It protects the knob whether it's in the AP or HE position. When not needed, we just store it in the rear of the Bradley's troop area.

Michael Mumford  
TACOM Armament LAR  
3d Bde, 1st ID  
Vilseck, Germany

**Editor's note:** Looks like you've got that expensive knob problem well covered! Be sure to identify the guard so it won't be discarded. Use a permanent marker to write **SOLENOID GUARD** on the PVC. This item is scheduled to be added to the list of manufactured items in TM 9-1005-200-23&P.



M2/M3-Series Bradley...

# CLP OK for All M242 Barrels



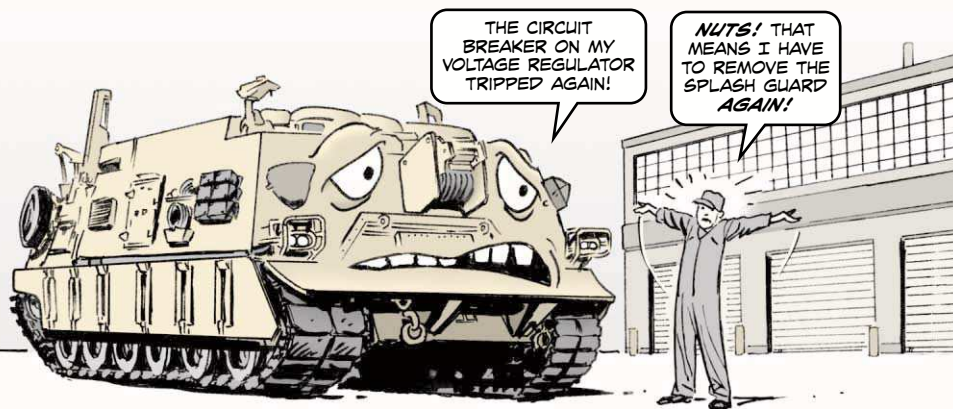
The word used to be that you cleaned the Bradley's M242 automatic gun's two kinds of barrels differently: For the chrome-lined barrel, you used CLP, and for the nitride-lined barrel, you used RBC (rifle bore cleaner).

Well, no more. The Army has decided after thorough study that CLP is fine for both barrels.

This change will be included in the next changes to the Bradley -10 TMs.



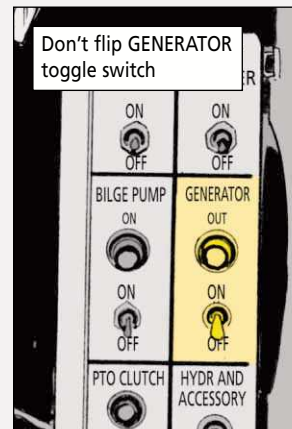
# VOLTAGE REGULATOR A REAL TRIP



Tripping the circuit breaker on top of the voltage regulator of your Hercules can be a real pain. The metal splash shield, NSN 5340-01-421-2084, that covers the circuit breaker has to be removed before you can reset the breaker.

Your best bet is to keep from tripping the circuit breaker in the first place. Here are the main causes:

- **Generator toggle switch.** Flipping the GENERATOR toggle switch back and forth while the engine is above idle speed can trip the breaker. There's no need to use the toggle switch at all since the Hercules has the 650-amp oil-cooled generator. The switch should **always** stay in the down position.



- **Poor battery condition.** Dirty or corroded batteries can trip the circuit breaker. Keep 'em clean.
- **Loose generator connections.** Loose or corroded generator connections can trip the circuit breaker. Keep connections tight and clean.
- **Corroded voltage regulator.** Corrosion on the voltage regulator itself can lead to a tripped breaker. Keeping it clean is your best defense.

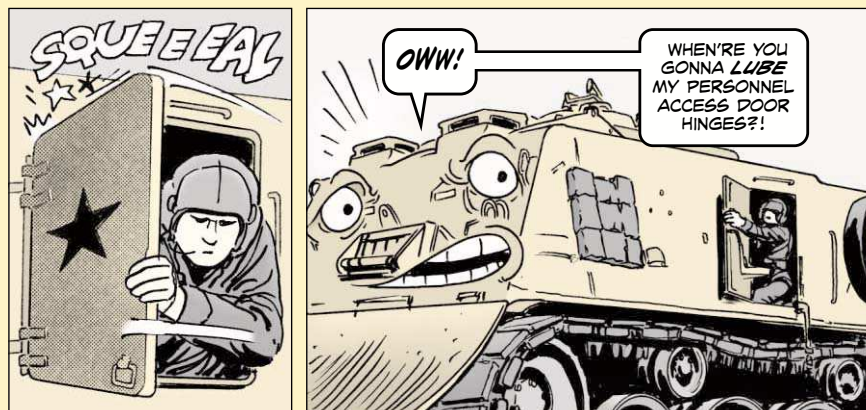
A new kit is being fielded to replace the metal splash guard with a flexible rubber guard. Once installed, the rubber guard is easily lifted up so you can reset the circuit breaker. The new guard will be provided by TACOM's Recovery Vehicle Management Office as part of a contractor-applied modification.

TACOM maintenance advisory message (MAM) 05-039 has the straight scoop. See your TACOM LAR for a copy, or check it out on the AEPS website at:

[https://aeps2.ria.army.mil/commodity/mam/tacom\\_wn/05/mam05-039.html](https://aeps2.ria.army.mil/commodity/mam/tacom_wn/05/mam05-039.html)

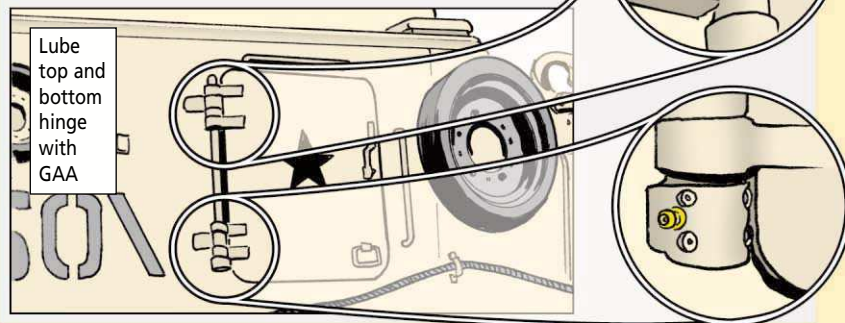
Your AKO username and password will give you access to the site.

# DOOR HINGES NEED LUBE, TOO

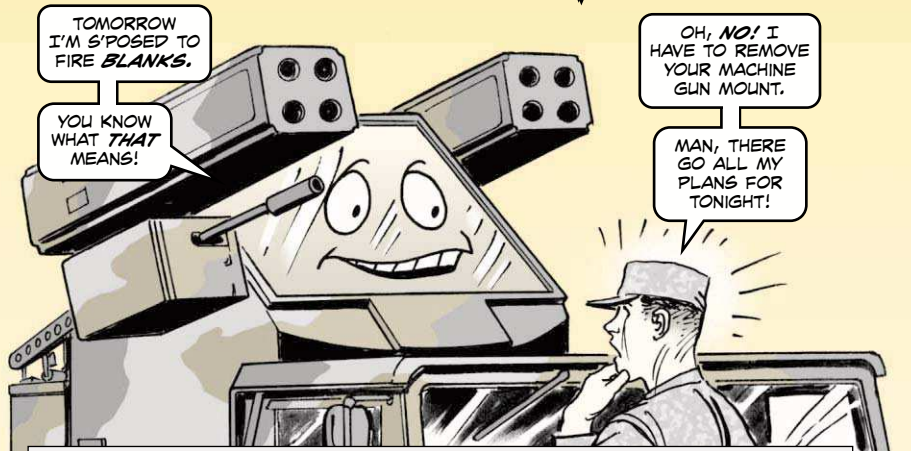


The two side personnel access doors on your M88A1 recovery vehicle are heavy and hard to open. But they won't get any easier to open if you don't lube the hinges on a regular basis.

Lube the hinges quarterly with GAA like it says on Page J-8 of TM 9-2350-256-20. Swing the doors open and closed to help spread the lube. That'll make the doors a lot easier to open next time.



# EASIER MOUNT DISMOUNTING

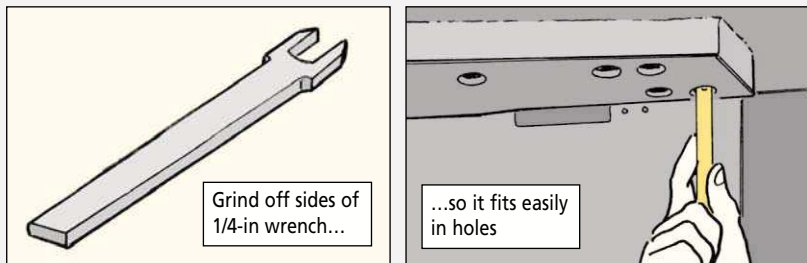


Dear Editor,

To fire blanks with the Avenger's M3P machine gun you must first install a blank adapter and that means removing the machine gun mount.

Any Avenger repairman can tell you that's an industrial-strength headache. The holes on the mount are too small to easily fit a wrench through to get at the four nuts that hold the mount in place. It can take hours of maneuvering to remove the mount.

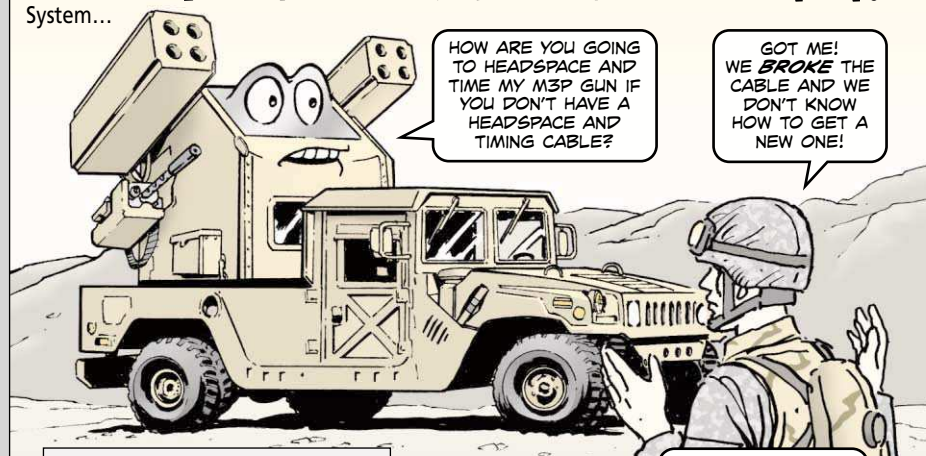
I've found you can cut the job to 15 minutes by taking a 1/4-in open-end wrench and grinding off its sides until the wrench fits easily in the holes for the nuts. Then, of course, put that wrench someplace where you can find it next time you need to remove the mount again.



SGT Cliff Peterson  
C Co, 1/62 ADA  
Ft Lewis, WA

**Editor's note:** What a good way to ease into tight spots! Thanks for the tip.

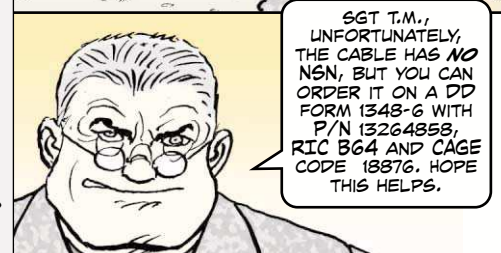
# HEADSPACE & TIMING CABLE NSN?



Dear Half-Mast,

Thanks for running the NSNs for the on-board Avenger M3P machine gun tool kit in PS 630 (May 05). But you left out the headspace and timing cable—and our Avenger unit needs seven of them. Can you help?

SGT T.M.



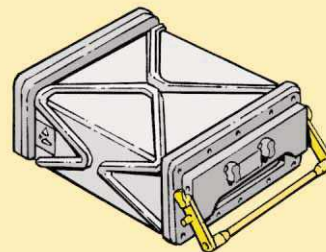
MLRS, HIMARS...

## MSU Not a Coat Rack

The mass storage unit (MSU) on your MLRS or HIMARS (high mobility artillery rocket system) is not something you should be using as a coat rack.

If you hang stuff from the MSU handles, the weight causes the handles to break or work loose. Find somewhere else to hang your equipment.

Don't hang stuff from MSU handles





# TIPS FOR TRUCKS WITH AOA



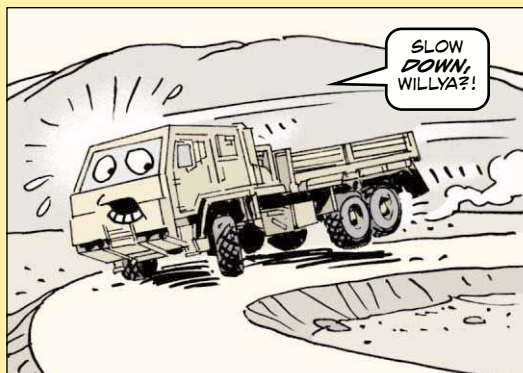
FMTVS EQUIPPED WITH ADD-ON ARMOR (AOA) HANDLE AND OPERATE A WHOLE LOT DIFFERENTLY THAN REGULAR TRUCKS.

HERE ARE A FEW THINGS YOU SHOULD **KEEP IN MIND...**



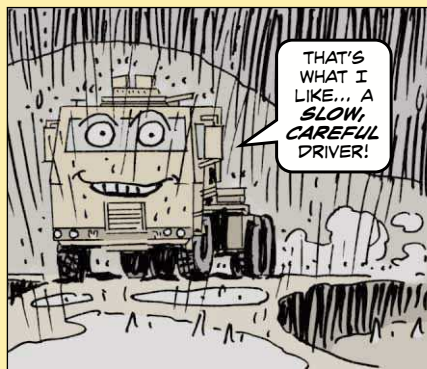
## Steering and Turning

- Greater force is needed to turn the steering wheel when the truck is not moving or moving slowly.
- At higher speeds, the truck will under-steer. That means the amount the vehicle turns will be less than what the steering wheel is turned.
- Reduce speed prior to negotiating turns to make steering safer.



## Braking

- Allow for greater stopping distances. The extra weight from the AoA means it will take longer to stop the truck.
- Do not park the truck on a grade of more than 30 percent (16.625°). The parking brake may not hold. Unsure of the grade? Park somewhere else.
- The additional AoA weight affects operation of the engine exhaust brake. Be especially careful when driving on wet, slippery roads.
- Use caution when descending hills. There is very little weight on the rear axle.



## General Operation

- Make sure a trailer is coupled to the M1088 tractor with AoA at all times.
- Do not operate your truck on inclines that exceed 40 percent (approximately 22°). You'll lose control.
- Be careful climbing into and out of the cab. The cab step is recessed inside the cab edge so it's easy to slip.
- Use a lifting device to load and unload the spare tire in the cargo bed. Keep the spare tire firmly secured.
- Make sure the cab is properly ventilated at all times. A damaged air conditioner hose could let R134 coolant leak into the cab area.
- The AoA kit covers up the cab marker lights. That reduces the truck's visibility, so be aware.



## PMCS

- Inspect the entire AoA kit weekly for loose or missing bolts.
- Never over-tighten the AoA bolts. Refer to the torque tables in App F of TM 9-2320-366-20-1.
- Any extra weight beyond the AoA will impact steering and suspension components. Make sure you strictly follow all required PMCS requirements.



## Transportation

- Do not air-drop.
- Do not sling-load.
- Do not transport on a C130 aircraft.

DEUCE...



The DEUCE is a tough workhorse that needs lots of PM while working in the rough stuff. Operators, here are some PM pointers that will help your earthmover at the worksite.

### Hydraulic Oil Strainer

Keep your oil supply covered and protected. Wipe off any sand around the earthmover's filler cap before removing it to add hydraulic fluid.

When it's dusty, use a clean rag around the oil can nozzle and filler hole while you add oil to block out the dust.

Also, be careful when adding oil. The oil can nozzle can tear a hole in the side of the strainer or knock out its bottom. Then sand has a straight path to the tank.

If the strainer is damaged or missing, tell your mechanic.

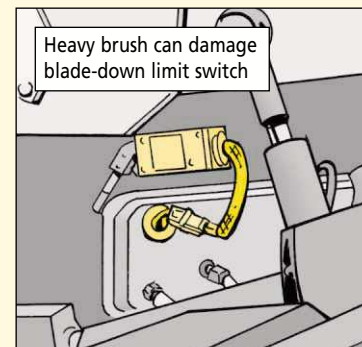


### Blade Switch Brush-Off

Bulldozing through heavy brush can damage the blade-down limit switch that's mounted below the cab door. Limbs pull wires off the switch or tear it off the vehicle's frame.

Without the switch, the DEUCE can't run in the EARTHMOVING mode. Then your construction operations come to a halt.

So, eyeball the switch to make sure it's in place and not damaged or disconnected. Call in your mechanic if it's damaged or dangling.

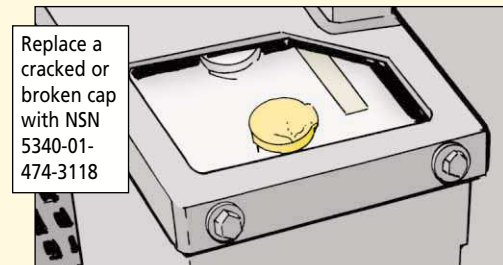


### Coolant Tank Snap-Cap

Constant exposure to the elements causes the cap on the coolant level tank to deteriorate.

Eventually, the cap breaks apart, allowing water, dust and sand to get into the coolant. That's not good!

Eyeball the cap for cracks. If you find any or if the cap is missing, get a new one that snaps in place with NSN 5340-01-474-3118.



### Battery Clamp

Bouncing around in the rough stuff loosens battery clamps. A loose connection keeps your battery from recharging and your dozer from starting.

Before the day's operation, gently test the tightness of the battery clamps. Using your thumb and two fingers, try to move battery clamp connections.

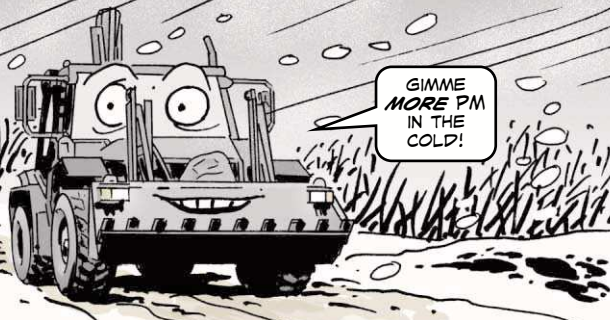
Then make sure the battery indicator and ammeter gauge are into the CHARGE range before you go.





IHMEE...

**COLD  
DAYS A  
COMIN'**



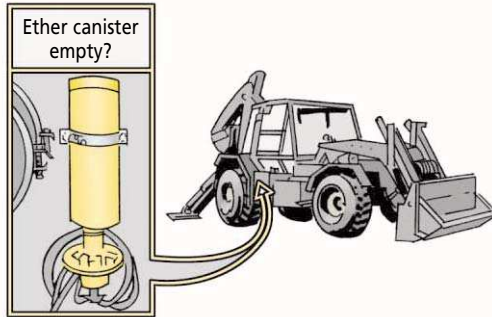
Routine checks and services won't hack it when it comes to interim high-mobility engineer excavator PM during cold weather. Read the good info in TM 5-2420-230-10 and keep these pointers in mind.

### Rough Start?

Operators, your excavator could be hard to start when the temperature drops below freezing.

Some IHMEEs have an ether canister that automatically injects ether into the engine for cold weather starting.

If your excavator is hard to start, chances are the ether canister is empty. Have your mechanic check it to be sure.



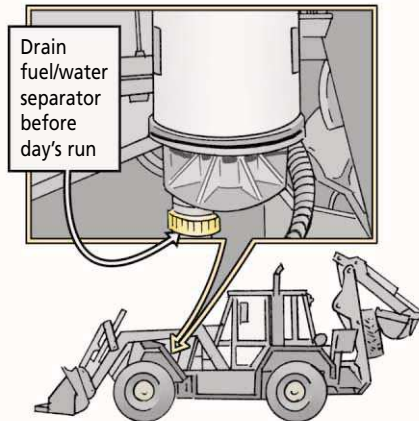
### Drain Out Water

Warm days and cool nights form condensation in the excavator's fuel tank. That means you have to drain the fuel/water separator before the day's run.

Not draining the separator will leave water and crud in the vehicle's fuel system. Then the engine runs rough, or not at all.

Open the separator (located on the engine's road side) by turning its drain-cock counterclockwise. Use a clear container to catch the fuel. If the fuel is clear, you're OK. If the fuel doesn't run clear, close the valve and report it to your mechanic. Clean up your mess and dispose of rags properly.

Store drained fuel in an approved hazardous waste container. Never dump it down a drain or on the ground.



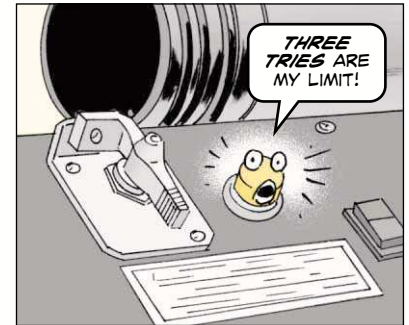
### Starter Reminder

It's a known fact that more engine starters end up at support for service and repair during cold weather.

All it takes is one itchy finger stuck on the starter switch to burn out a good starter motor.

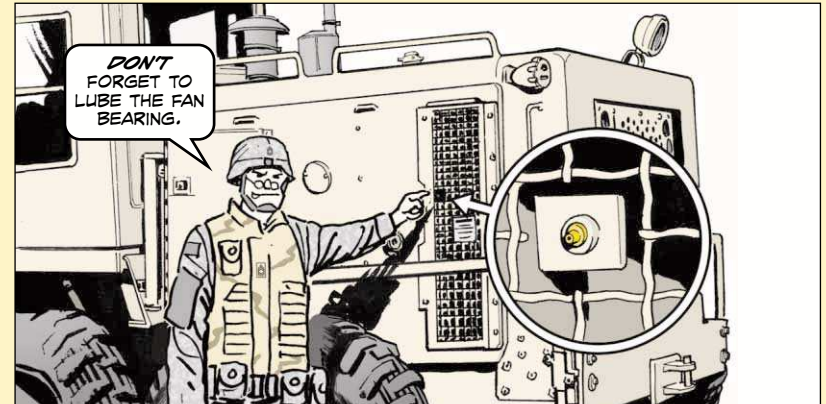
So, when you try to start your excavator's engine, never keep the starter engaged for more than 15 seconds. **Stop!** Then give the starter at least two minutes to cool off before trying again.

If the IHMEE won't start after three tries, call it quits. Call in your mechanic to find out what's wrong.



130G  
Road  
Grader...

## PULLEY LUBING



One small PM tip that really matters on this road grader is the grease fitting for the fan bearing.

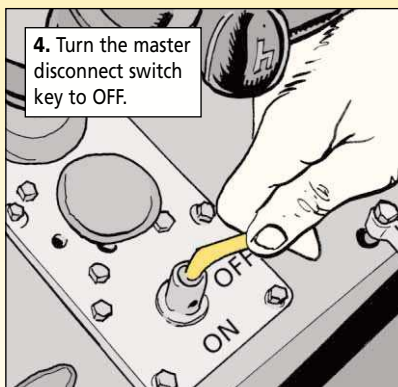
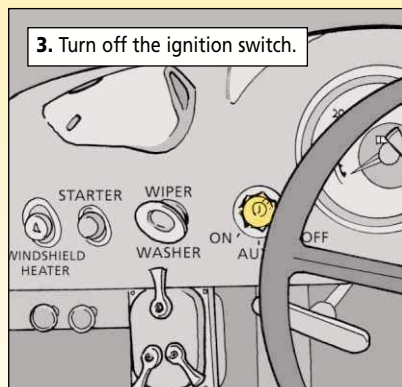
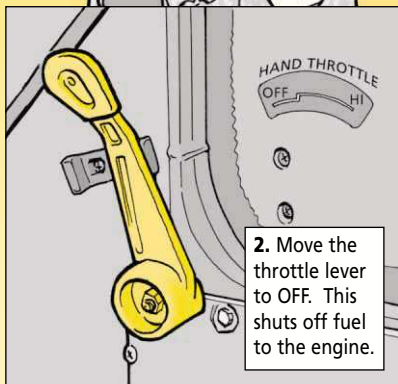
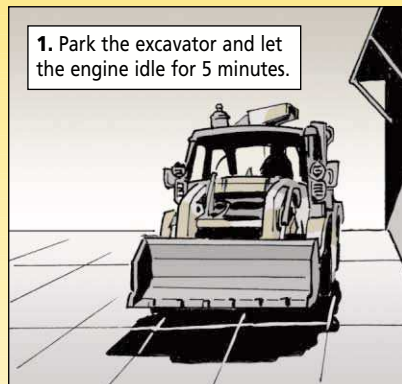
The fitting is located behind the engine's screen door (roadside). Without lube, the bearing seizes up. Then the blade stops turning, causing the engine and transmission to overheat.

So keep the fan pulley bearings lubed. During scheduled services, give the fitting four to five shots of grease.

# SEE... **SHUTDOWN REMINDER**

**O**perators, follow the word on Pages 2-84 and 2-85 of TM 5-2420-224-10 when you shut down the excavator. Doing it wrong can cost your unit about \$300 for a new generator.

The right way is real simple:

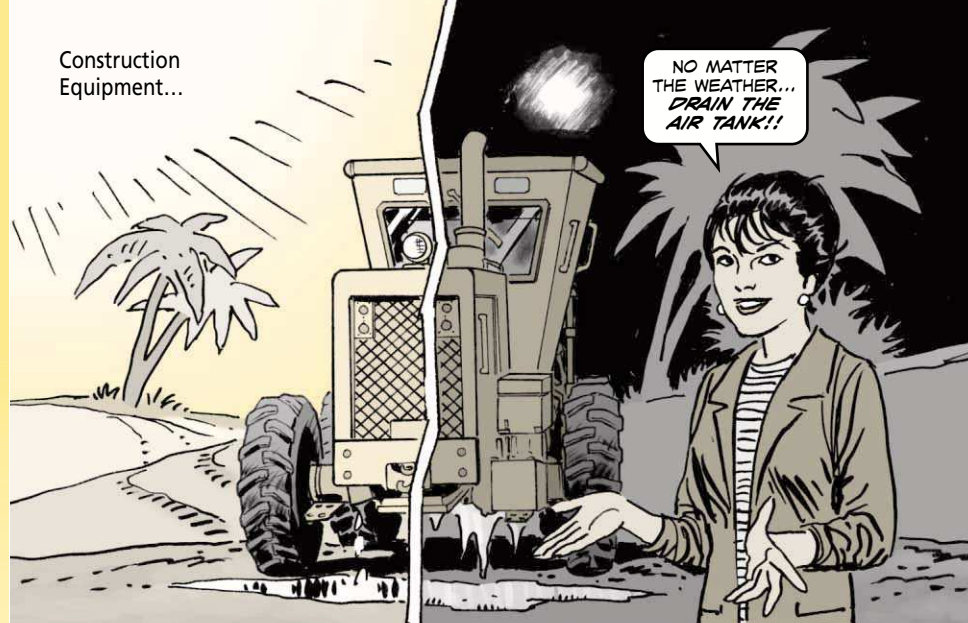


Never turn off the master disconnect switch key or the ignition switch before setting the throttle to OFF.

If you don't shut off the fuel first, the generator will build up a load beyond its capacity and burn out.



Construction Equipment...



## **AIR DRAIN REMINDER**

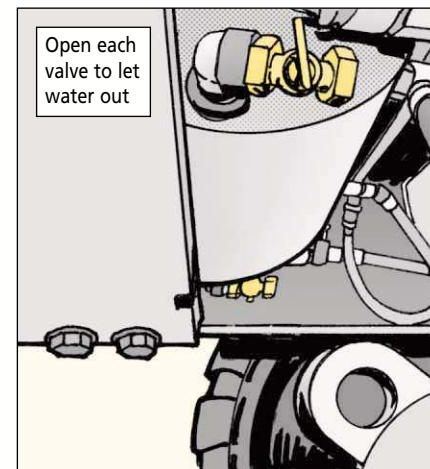
**T**emperatures drop when the sun goes down. Nature puts the thermometer into a nosedive. The days may be warm, but the nights are cold!

A change in temperature means trouble is brewing if you don't drain your vehicle's air tanks. That's because moisture corrodes air lines, relief valves, safety valves and even the tank itself.

But frozen water (ice) in your vehicle's brake system is double trouble!

Water expands when it turns to ice. The pressure will burst most anything. You lose your brakes, control of your vehicle, maybe your life.

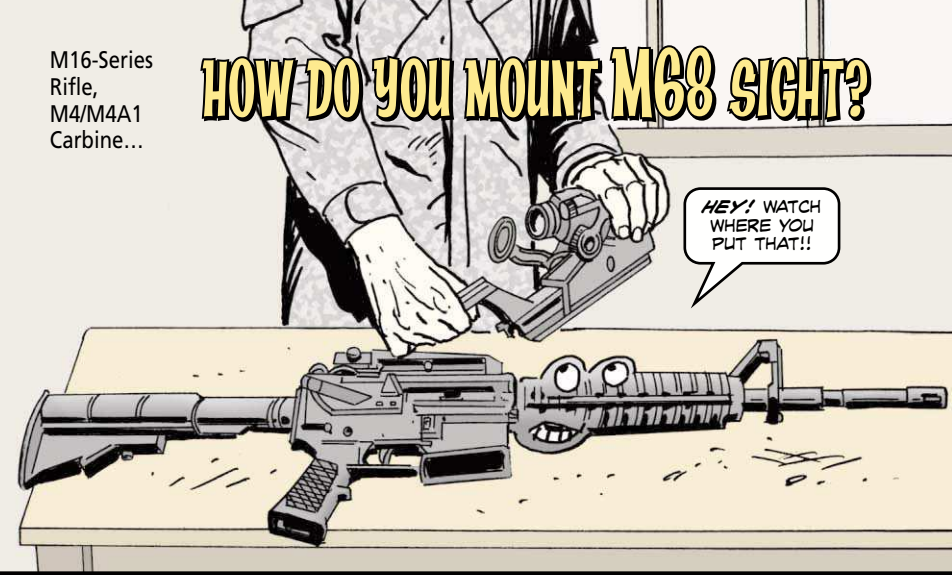
The solution is simple—after the day's run, no matter the weather, drain the vehicle's air tanks.





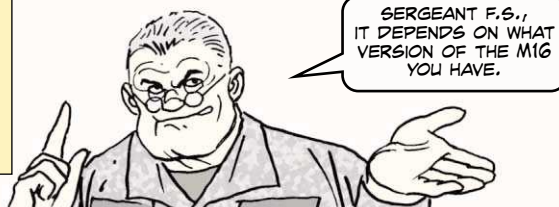
M16-Series  
Rifle,  
M4/M4A1  
Carbine...

# HOW DO YOU MOUNT M68 SIGHT?



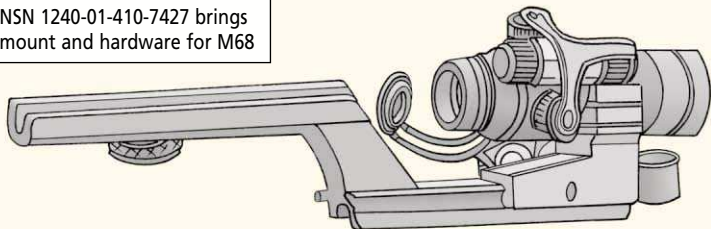
Dear Half-Mast,  
How do you mount  
the M68 reflex sight  
on the M16 rifle and  
M4 carbine?

SGT F.S.



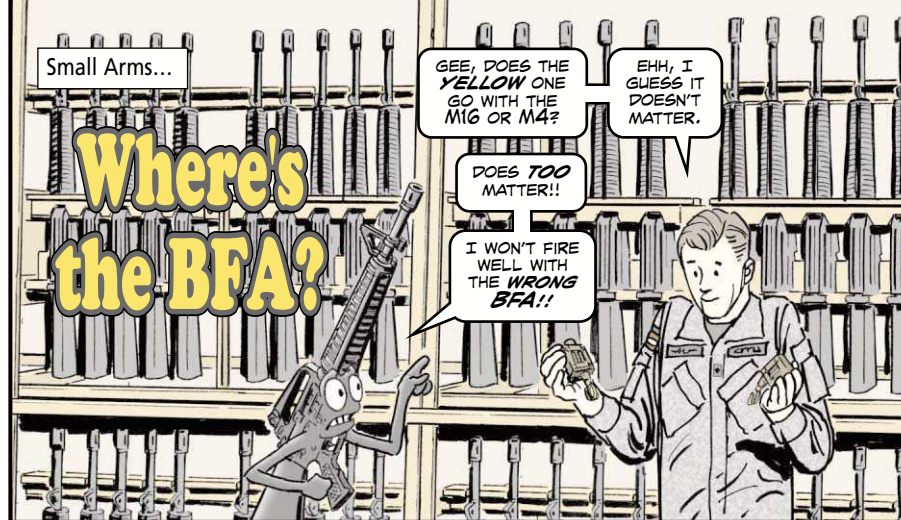
For mounting the M68 on an M16A2, you need a mount, NSN 1240-01-410-7427, which should be assembled with short machine screws, NSN 5306-01-442-2407. But for the M4/M4A1 carbine and M16A4 rifle, you also need a spacer, NSN 5365-01-448-8912, and different machine screws, NSN 5305-01-448-9826. See WP 0019 00-2 through 0020 00-3 in the M68's TM 9-1240-413-12&P for more details. The mount comes with the spacer and both types of screws.

NSN 1240-01-410-7427 brings  
mount and hardware for M68



Small Arms...

# Where's the BFA?



Dear Half-Mast,

I found very helpful your layout in PS 615 on what can be mounted on the different rifles, carbines, and machine guns.

Could you do something similar on what blank firing attachments (BFA) to use for each weapon and why it's important to use the correct one?

Richard Scott  
Safety Specialist  
Ft Carson, CO

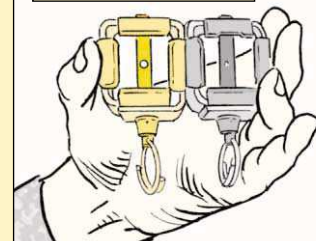
Dear Mr. Scott,

You bet. It's important to use the correct BFA because the weapon will function better with the BFA designed specifically for it. You can use the M16 rifle BFA on the M4 carbine or M249 machine gun and it won't damage the weapon, but you're more likely to have firing problems.

Here are the BFA NSNs for each weapon:

- M16-series rifle, NSN 1005-00-118-6192
- M4/M4A1 carbine, NSN 1005-01-361-8208 (The best way to tell the difference between the M16 and M4 BFA's is to remember the M16's is red and the M4's is yellow. The M4's has a slightly larger hole for bleeding gas.)
- M249 machine gun, NSN 1005-21-912-8997
- M240 machine gun:
  - M240B, NSN 1005-01-480-0289
  - M240 and M240C, NSN 1005-01-148-7437
- M60/M60D machine gun, NSN 1005-00-140-3515
- M2 machine gun, NSN 1005-01-091-7510
- The MK 19 machine gun has no BFA.

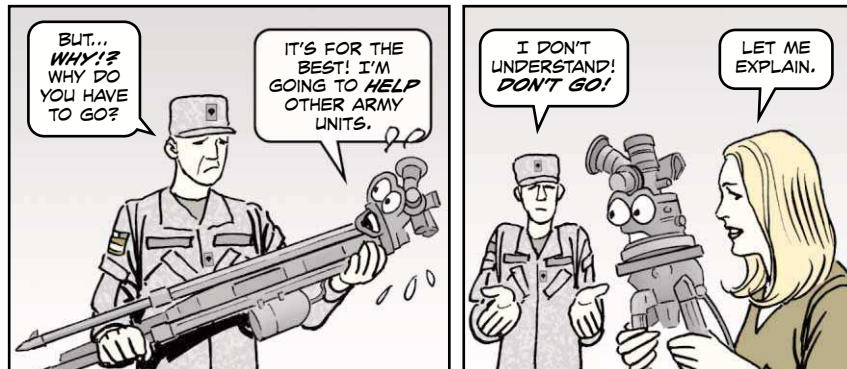
M4/M4A1 BFA is yellow,  
the M16's is red



Half-Mast

# Unserviceable M2A2

## Aiming Circles Needed Now!

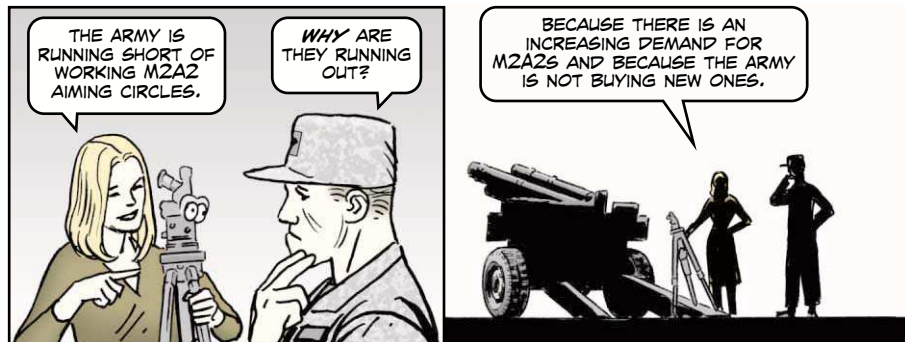


THE **ONLY** WAY TO MEET THIS DEMAND IS WITH REFURBISHED M2A2s.

SO IF YOU HAVE UNSERVICEABLE M2A2 AIMING CIRCLES SITTING ON THE SHELF, THE ARMY NEEDS YOU TO TURN THEM IN NOW SO THEY CAN BE FIXED AND RETURNED TO THE FIELD.



YOU CAN ORDER A REPLACEMENT M2A2 WITH NSN 6675-01-067-0687. DUE TO THE M2A2 SHORTAGE, THE ARMY CAN'T OFFER A DIRECT EXCHANGE REPLACEMENT.



BECAUSE THERE IS AN INCREASING DEMAND FOR M2A2s AND BECAUSE THE ARMY IS NOT BUYING NEW ONES.



WHEN YOU TURN IN AN AIMING CIRCLE, REMEMBER IT INCLUDES THESE ITEMS...



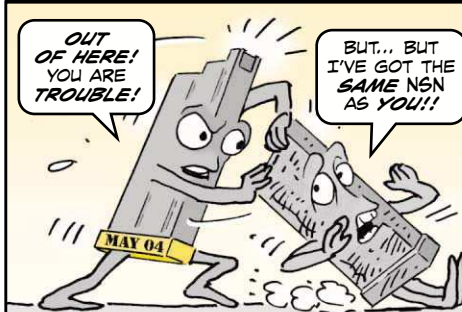
- aiming circle transit, NSN 1290-01-510-0540
- access cover, NSN 5340-00-346-8171
- lamp extractor, NSN 5120-00-505-5477
- instrument light, NSN 6695-00-346-8186
- tarpaulin, NSN 2540-00-346-8147
- access cover, NSN 5340-00-346-8177
- plumb bob assembly, NSN 1290-00-346-8185
- fire control assembly tripod, NSN 1290-00-346-8184
- incandescent lamp, NSN 6240-00-635-9800
- TM 9-1290-262-10 and TM 9-1290-262-HR

FOR SHIPPING INSTRUCTIONS, CALL TACOM'S AIMEE WREN AT DSN 793-5321/(309) 782-5321, FAX DSN 793-1931/(309) 782-1931 OR EMAIL: [aimee.j.wren@us.army.mil](mailto:aimee.j.wren@us.army.mil)



M9 Pistol...

## MAGAZINES WITH CORRECT COATING?



Dear Half-Mast,

We received a message that we needed to replace the magazines for our M9 pistols because they had the wrong coating. But we can't find the NSN for the new magazines. Can you help?

SSG N. B.

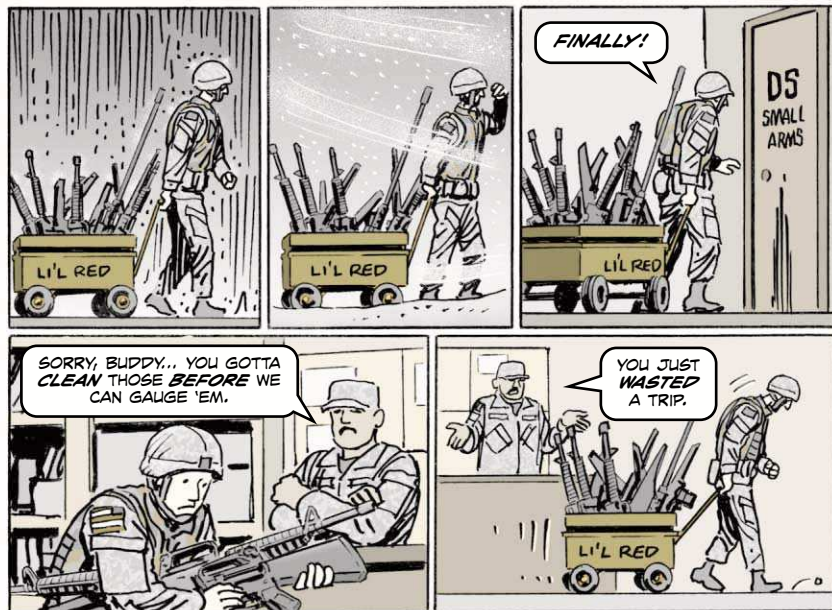
Dear Sergeant N.B.,

Sure can. Use the same NSN as the NSN for the bad magazines: 1005-01-204-4376. It will bring you magazines with the right coating this time. It should have "May 04" stamped on it or the contract paperwork should show "04".

*Half-Mast*



# YOU WANT IT GAUGED? CLEAN IT FIRST



Dear Editor,

Here at Ft Stewart's DOL small arms shop, we have a problem with units bringing dirty weapons to us for gauging and inspection. Sometimes it appears that the weapons haven't even been cleaned since they were last fired. And I suspect other DOL and direct support small arms shops have the same problem.

Armorers need to realize that there is no way we can gauge dirty weapons. A dirty weapon can actually ruin our gauges, plus carbon and dirt will hide cracks and hurt function tests.

Armorers will save themselves and us time and work by making sure soldiers clean their weapons before they turn them in to the arms room. That's because if armorers show up with dirty weapons, we're just going to send the guns right back for cleaning.

James Barlow  
DOL  
Ft Stewart, GA

**Editor's note:** Listen up to Mr. Barlow, armorers. You don't want to make needless trips lugging weapons to DS or DOL. Get your solders to clean 'em first.

## INDEX PAGE 1

# INDEX

## PAGE 8

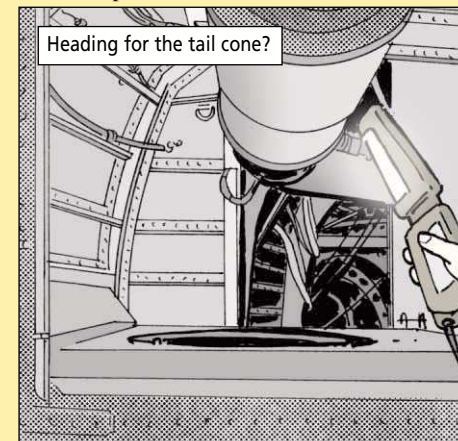
UH-60 Series...

# WATCH YOUR STEP!



**M**echanics, trying to fit into small spaces like the Black Hawk's tail cone is a daunting task.

As you low crawl through the maze in the transition area to perform checks or inspections on avionic radio and antenna cables in the tail cone, keep your feet on the work platform.



Take a flashlight to help steer your feet clear of every wire, cable or line. It's better to see the ledge you're stepping on with a light rather than guessin' in the dark.

Step down onto the work platform

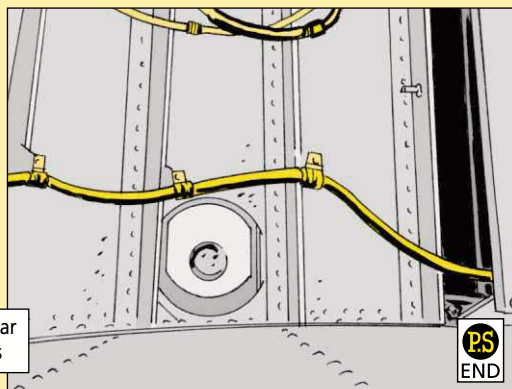


**PS** MORE



Remember, some lines and cables for avionic equipment run from the center console all the way back to the tail cone. Stepping on the work platform and not the cables means you won't hear those ugly sounds coming from the AVIM shop about unnecessary repairs.

Use light to steer feet clear of wires, cables, and lines



ELSE...

## ANOTHER FIRE STARTER

NOW *THIS* IS THE WAY TO START A FIRE!!

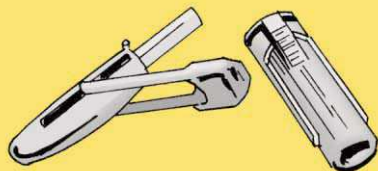


ELSE techs, your aircrew integrated recovery survival armor vest and equipment (AIRSAVE) gets another optional item to carry.

You can order an all-weather use firestarter from GSA's website:

<https://www.gsaadvantage.gov>  
(Do a search for "fire starter")

However, you're not required to replace the current fire starter kit, NSN 4240-01-160-5618.



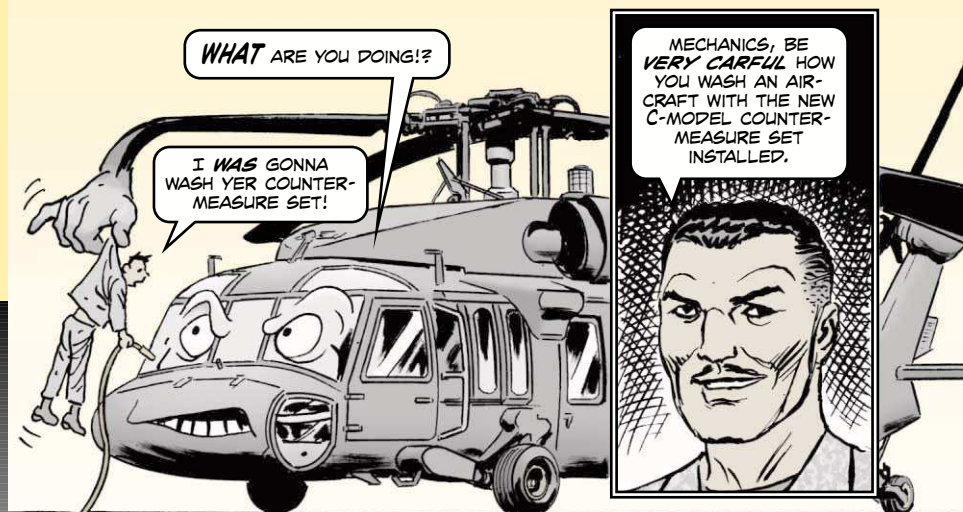
Need a fire starter?  
Order it

## PROTECT COUNTERMEASURE SET FROM WATER

WHAT ARE YOU DOING!?

I *WAS* GONNA WASH YER COUNTER-MEASURE SET!

MECHANICS, BE *VERY CAREFUL* HOW YOU WASH AN AIRCRAFT WITH THE NEW C-MODEL COUNTER-MEASURE SET INSTALLED.



The sets have been modified with a new air filtration system both top and bottom that cannot take wash water.

After shutdown, always allow the set to cool down. Otherwise the cover can stick to a hot set. Then place a cover, NSN 5865-01-109-1800 on the countermeasure set before you wash your bird. Never get hasty and begin washing aircraft with an uncovered set or while the set is still hot.

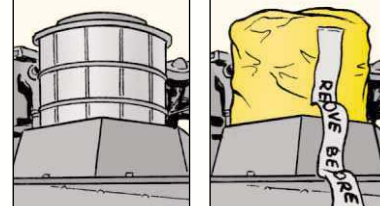
Washing your bird without covering the countermeasure set will destroy the filtration system and make the equipment NMC. Water directed at an uncovered set soaks the filters.

The saturated filters have soaked up water like a sponge. During start-up, water is pulled into the unit, creating havoc on electrical parts and bearings.

A washed-out countermeasure set will cost your unit \$50,000.00. That's an expensive wash! So let the set cool and make sure it's covered before washing aircraft. Also, **do not** direct water at the set.

Make a note until changes to TM 11-5865-200-12 are added.

Use cover to keep water away from set when washing bird



# A LITTLE LESS



# TIGHTENING

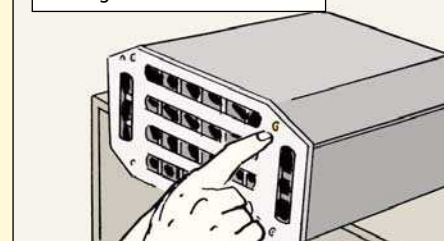


**M**echanics, maintenance on the M130 chaff dispenser shouldn't turn into a job for the AVIM shop.

When doing any repair on the payload module's retaining plate or installing the payload module, don't overtighten the stud nuts. Snug is enough—too much torque and damage occurs. Always use the ball screwdriver, NSN 5120-01-079-9644 and don't use a T-handle.



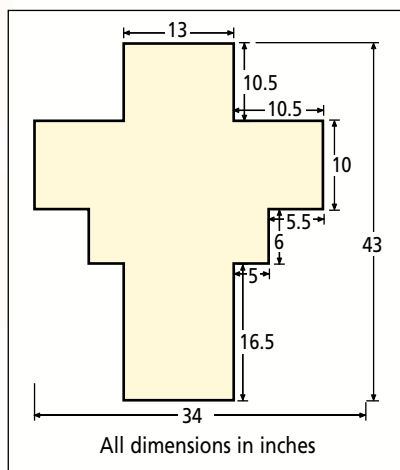
Over-tightened studs will break



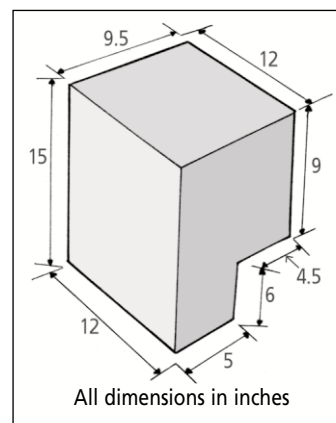
Overtightening can break the stud nuts or the screws on the back end of the retaining plate. That means your chaff dispenser is NMC until AVIM can repair it.

Of course, always protect the dispenser when it's on an aircraft on the ground with a nylon cover, NSN 1730-01-456-2557.

IF YOU *DON'T* HAVE ONE ON HAND, GET YOUR CANVAS SHOP TO FABRICATE A CANVAS COVER WITH THE FOLLOWING MATERIALS AND USING THESE DIMENSIONS...



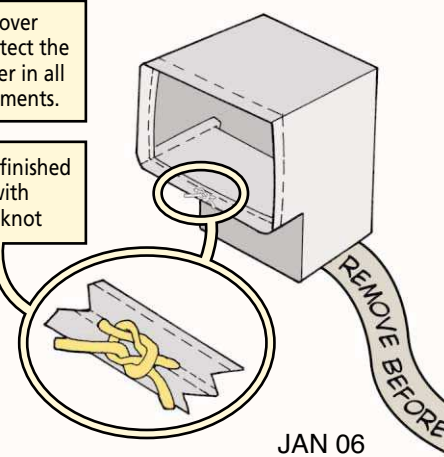
Item	NSN	QTY
Coated cloth	8305-00-515-4244	1.2 yd
Elastic cord	8305-00-267-3114	1 yd
Warning streamer	8345-00-673-9992	1 ea



PS 638

Either cover will protect the dispenser in all environments.

Secure finished cover with square knot



39

JAN 06



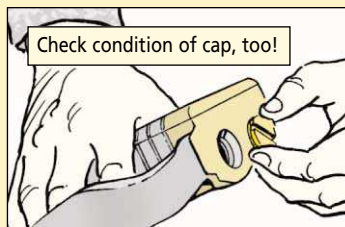
# There's Only **ONE** PLGR Memory Battery!

Dear Editor,

I inspect PLGRs. I can't begin to tell you how many I find with the "Low Memory Battery" message that have a standard AA battery installed. An AA is a 1.5 volt battery. The PLGR memory battery, NSN 6135-01-301-8776, is a 3.6 volt lithium battery. Someone has to tell PLGR users that a 1.5 volt battery will *not* do the job of holding memory. They *must* use the 3.6 volt battery.

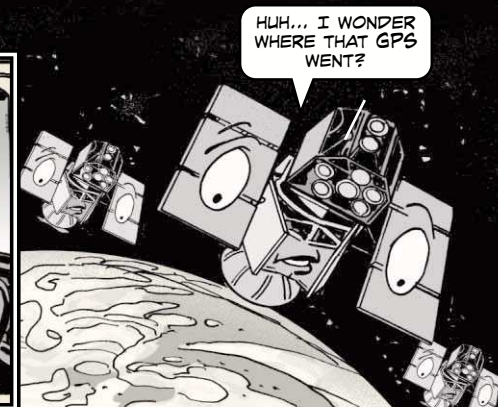
David A. Jones  
Electronics Mechanic  
Ft Drum, NY

**Editor's note:** It looks like that someone is you! Good job spreading the word, Mr. Jones. Also, PLGR users, when you're making sure you have the right memory battery, check the condition of the cap assembly. You can get a new assembly with NSN 5340-01-449-1033.



JUST BECAUSE  
YOU *FIT*,  
DOESN'T MAKE  
YOU *RIGHT*!

GACKT!



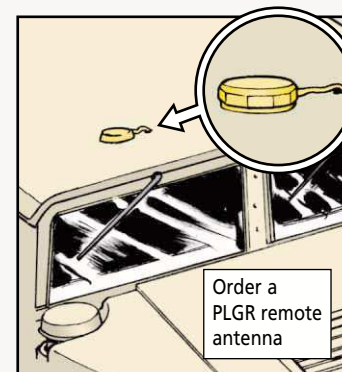
## IT'S ALL ABOUT GOOD RECEPTION

**G**lobal positioning systems (GPS) like the AN/PSN-11 PLGR rely on line-of-sight (LOS) access to satellite signals.

That means you'll get your best reception when there is nothing between your GPS antenna and the satellites but the clear sky.

So when you're riding in a vehicle with a metal roof, the integral antenna hidden in the top of the GPS receiver is not going to get decent LOS reception. And waving your receiver out the window is not the answer to the problem. You need to install a remote antenna outside the vehicle.

Order a PLGR remote antenna with NSN 5985-01-375-4660 and its cable with NSN 6150-01-375-8662. To install this antenna on an M1114 HMMWV, you'll need installation kit, NSN 2590-01-529-9541.



To install this antenna on any other type of HMMWV except the ambulance series, you'll need installation kit, NSN 2590-01-530-2947.

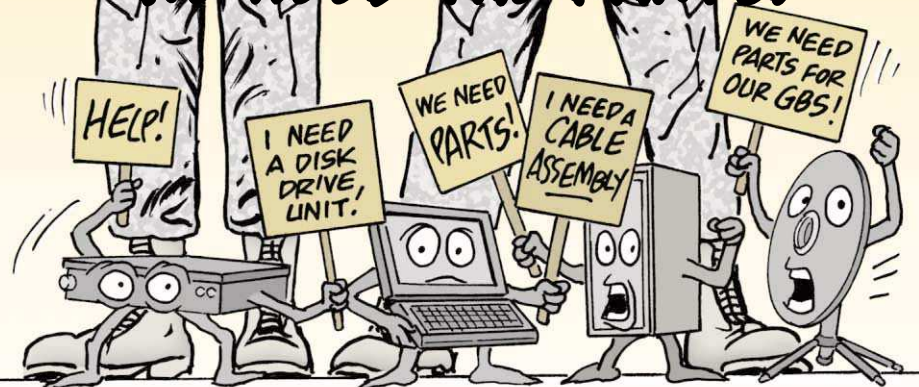
For more information about installing a PLGR in a HMMWV or guidance on installing the new AN/PSN-13 DAGR, call DSN 468-1109 or (478) 926-1109. Or email the WRALC/LSAGA GPS Help Desk at [wralc.lsaga.gpshelp@robins.af.mil](mailto:wralc.lsaga.gpshelp@robins.af.mil)

You will get access to the ground receivers integration team internet website that has lots of technical assistance for GPS installation.



GBS TGRS...

# WE NEED THE PARTS!



The global broadcast service (GBS) transportable ground receive suite (TGRS) models AN/TSR-4 and AN/TSR-7 are being replaced by the internet protocol versions, AN/TSR-8 and AN/TSR-9.

Until this replacement is done, repair parts for the -4 and -7 must come from **you**. New parts are no longer being made, so old, failed parts must be refurbished and reissued. This can't be done unless you turn them in!

The parts needed most are components of the asynchronous transfer mode receive broadcast manager and the ground receive terminal.

Here are the parts needed most:

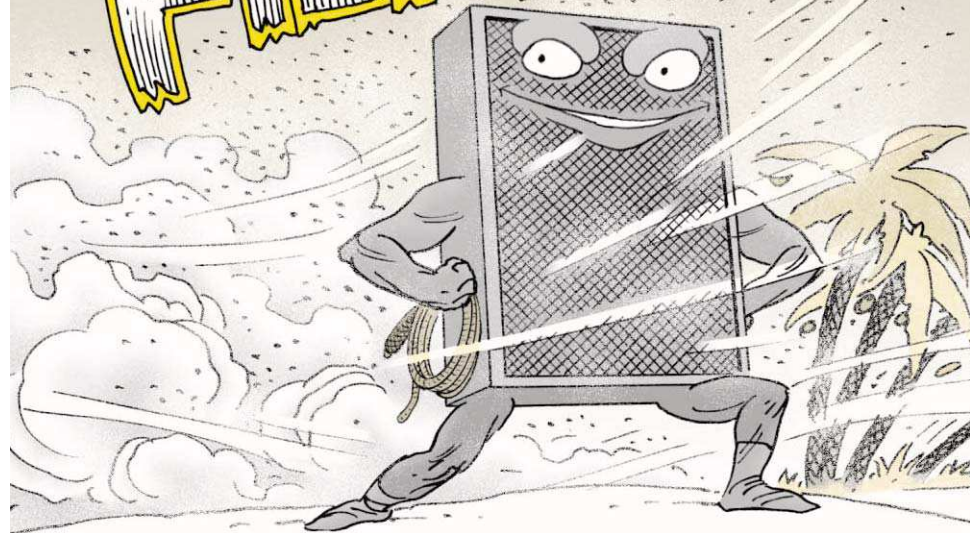
Part	PN	NSN
Digital computer system	726628-802	7010-01-478-8648
Digital computer system	9900-06000-9004	none
Circuit card assembly	2600QPSK	none
Circuit card assembly	VG-250L-N	5998-01-476-4909
Antenna control	726663-801	5985-01-483-5317
Data processing terminal	9900-06041-0001	7025-01-484-6729
Disk drive unit	9800-06030-0000	7025-01-483-0231
GRT antenna assembly	G772514-1	5985-01-476-3684
GRT pedestal assembly	G774409-1	5985-01-476-3649
GRT reflector assembly	G772396-1	5985-01-476-0544
Antenna tripod	4-63120-SAT	5985-01-476-3646
GRT feedome assembly	G772503-1	5985-01-476-0545
GRT RF cable assembly	G772732-1	5995-01-476-1032

FOR MORE HELP ON *WHAT* TO RETURN AND *HOW*, CONTACT THE NORFOLK DEPOT AT (757) 852-2185 OR -2157.



AN/TRC-170(V)2 & 3...

# FILTER OUT THE DESERT



Your radio terminal set AN/TRC-170 (V)2 or 3 needs a strong defense against desert sand. Part of that defense is having on hand a good supply of air and gas particle filters. But some of the filters in TM 11-5820-934-23P-1 and -2 have changed NSNs.



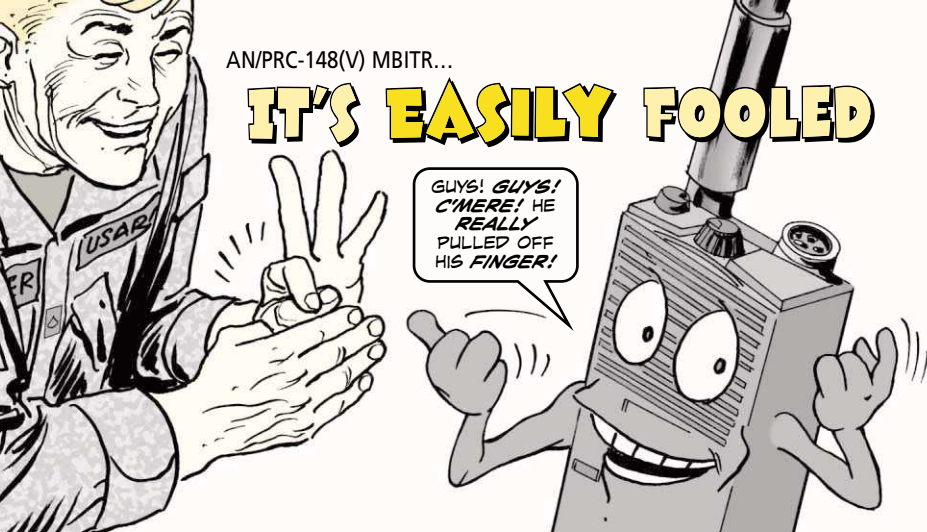
HERE'S WHAT YOU NEED TO ORDER NOW...

Filter	NSN
Air element (V)2	4130-01-519-1181 (replaces Item 78, Fig 4, TM P-1)
Air element (V)2 & 3	4130-01-519-1183 (replaces Item 85 & 87, Fig 4, TM P-1) (replaces Item 4, Fig 4, TM P-2)
Air element (V)2 & 3	4130-01-519-1185 (replaces Item 69, Fig 4, TM P-1) (replaces Item 84, Fig 3, TM P-2)
Gas particle set (V)2	4240-01-519-1188 (brings filters -1181, -1183, & -1185)
Air element (V)3	4130-01-519-0920 (replaces Item 9, Fig 4, TM P-2)
Gas particle set (V)3	4240-01-519-1189 (brings filters -1183, -1185 & -0920)



AN/PRC-148(V) MBITR...

# IT'S EASILY FOOLED

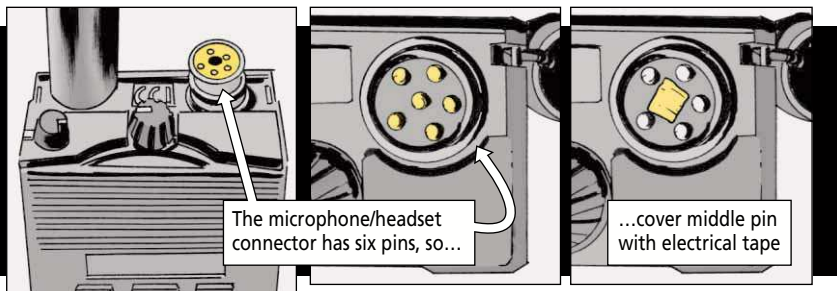


The microphone-handset connection on the AN/PRC-148 (V) multiband inter/intra team radio (MBITR) needs to be fooled if you want to connect the improved tactical headset (ITH) to it.

The microphone-handset connection has six pins. One pin is in the middle and five surround it. The pin in the middle has a 5-volt current running through it. This current lets you connect a powered electret microphone.

However, the Bose Tactical TriPort ITH needs to operate either unpowered or powered by 12 to 24 volts. The low five volts put out by the MBITR center pin causes the ITH to switch back and forth between powered and unpowered mode leading to unreliable operation.

So fool the MBITR into thinking it's connected to a generic handset like the H-250 by putting a small piece of electrical tape over the center pin on the microphone-handset connection. When the center pin is covered, getting good comms with the ITH should be no problem.



TQG Generator Batteries...

# You've Got Some Choices



When it comes to the 12-volt, lead-acid batteries that get your 5-KW tactical quiet generators up and humming, you have several choices.

The cheapest, and the one that requires the most maintenance is 2HN, NSN 6140-00-057-2553. With this battery you'll have to keep an eye on the fluid levels, add fluid when needed, and risk acid leaks and spills.

The current favorite battery, at nearly twice the price is the Optima D51R, NSN 6140-01-529-7226. This is a maintenance free, sealed, spill-proof battery. Its case is plastic, not rubber like the older battery, and it's a bit smaller. But when it comes to eliminating fuss and muss, this battery is your baby.

There is also a maintenance-free battery for the 10-, 15-, 30-, and 60-KW TQGs, the Optima 800U, NSN 6140-01-374-2243. For these batteries to fit right in the 15-, 30-, and 60-KW TQGs, you'll need adapter tray, NSN 6160-01-453-0858.

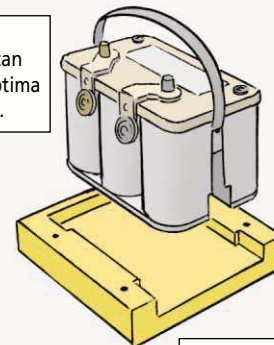
With the new Optima D51R for the 5-KW, the Optima 800U for the 10-KW, and the Optima 800U with adapter tray for the 15-, 30-, and 60-KW TQG, all batteries for the TQG fleet of generators can be maintenance free.

Need more info on generator batteries? Email the CECOM POC:

[jose.santos@us.army.mil](mailto:jose.santos@us.army.mil)

Or call him at DSN 654-3865 or (703) 704-3865.

Bigger TQGs can use Optima 800U...



...in tray, NSN 6160-01-453-0858

**GREASE,  
ACID  
DESTROY  
PARKAS!**

TELL ME  
SOMETHING I  
DON'T KNOW!



**M**otor pools and your extended cold weather parka don't mix well. If acid and grease get on your parka, they will leave it spotted and holey.

When battery acid gets on your parka, nothing can stop it from eating away at the fabric. You will have to get a new parka.



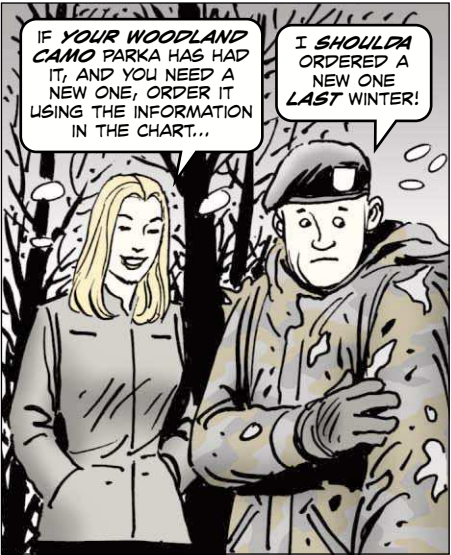
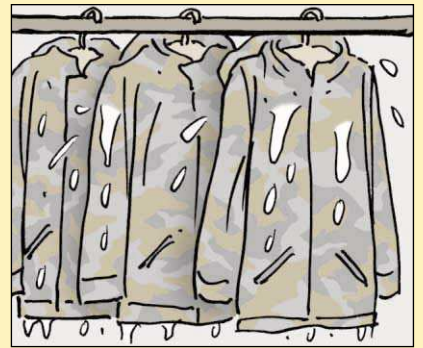
Grease spots are not removable because you can't clean your parka at a high enough heat to get out the stain without damaging the parka's seam tape.

Follow the laundering instructions on the care label if your parka gets dirty from substances other than grease and acid.



**Washing Instructions**

- Use warm water and detergent.
- Put it in the washing machine on permanent press cycle.
- Thoroughly rinse in clean, warm water.
- If hand washing, don't wring or twist; rough handling can damage the waterproofing.
- Do not bleach or starch.
- Tumble dry on low heat (do not exceed 90°F) or air dry the parka on a rust-proof hanger. If the hanger is not rust-proof it can stain your parka.



IF YOUR WOODLAND CAMO PARKA HAS HAD IT, AND YOU NEED A NEW ONE, ORDER IT USING THE INFORMATION IN THE CHART...

I SHOULD'VE ORDERED A NEW ONE LAST WINTER!

NSN 8415-01-228-	Size	Length
1306	X-small	X-short
1307	X-small	Short
1308	X-small	Regular
1309	X-small	Long
1310	Small	X-short
1311	Small	Short
1312	Small	Regular
1313	Small	Long
1314	Medium	X-Short
1315	Medium	Short
1316	Medium	Regular
1317	Medium	Long
1318	Large	Short
1319	Large	Regular
1320	Large	Long
1321	X-large	Regular
1322	X-large	Long



# GRIP IT, THEN ZIP IT!



IS **YOUR** COLD-WEATHER SLEEPING BAG'S ZIPPER DEVELOPING A MIND OF ITS OWN?

ZIPPER TEETH THAT SEPARATE CAN BE **CHILL-ING**, TO SAY THE LEAST. HERE ARE A FEW TIPS ON HOW TO **FIX** THE COLD AIR BLUES ON YOUR OWN.

IF THE ZIPPER GOES OFF TRACK, PULL IT TO THE VERY BOTTOM OF THE BAG. SLOWLY AND GENTLY PULL THE ZIPPER BACK UP. MOST OF THE TIME THE ZIPPER WILL RE-TRACK ITSELF AND YOUR PROBLEM WILL BE SOLVED.



Work zipper all the way down, then back up

IF THAT DOESN'T DO THE TRICK, TRY IT A FEW MORE TIMES.

IT'S **STILL** NOT WORKING!

THEN IT'S TIME TO **TURN IT IN**.



THE **BEST** SOLUTION IS **PREVENTING** THE PROBLEM IN THE FIRST PLACE.

USE THE FOLLOWING PM TIPS TO KEEP YOUR BAG'S ZIPPER IN GOOD WORKING ORDER...

- KEEP GRIT FROM GETTING CAUGHT IN THE ZIPPER BY BRUSHING DIRT AND DEBRIS OFF THE SLEEPING BAG.

- PULL THE ZIPPER LEVER SLOWLY AND EVENLY RATHER THAN JERKING ON THE THONG THAT IS ATTACHED TO IT. THIS WILL SAVE WEAR AND TEAR ON THE ZIPPER.

- ON NEW ZIPPERS—OR WHEN THE ZIPPER STARTS TO STICK—USE ZIPPER LUBE, NSN 9150-00-999-7548. CLOSE THE ZIPPER AND RUB A LITTLE LUBE OVER THE ZIPPER TEETH. THEN MOVE THE ZIPPER UP AND DOWN UNTIL IT IS EASY TO MOVE.

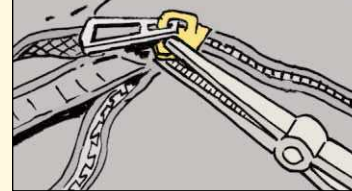
IN A BIND YOU CAN USE SOME SOAP OR A CANDLE. RUN EITHER OF THEM UP AND DOWN THE ZIPPER, THEN MOVE IT UP AND DOWN TO SPREAD THE WAX OR SOAP.

Zipper lube, soap or candle wax makes zipping easier



- IF THE ZIPPER TEETH STILL SEPARATE, THE SLIDER BODY MAY HAVE OPENED A BIT FROM CONTINUED USE OR HARD PULLS. AN OPEN SLIDER KEEPS THE TEETH FROM MESHING PROPERLY. TAKE A PAIR OF NEEDLE-NOSE PLIERS AND GENTLY SQUEEZE DOWN THE FLAT PORTION OF THE SLIDER BODY.

Squeeze slider to mesh teeth





# A CAN COULD FREEZE

HEY, BUDDY, IS THIS ANY WAY TO TREAT A PLASTIC 5-GAL WATER CAN?

YEAH, I'M FREEZING MY CAN OFF. HOW MUCH WATER DO YOU THINK YOU'LL GET OUTTA ME THEN?

ARE THOSE CANS TALKING, OLLIE?



IT APPEARS SO, STANLEY.

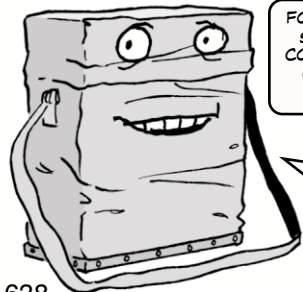


OH, DEAR. I'M AFRAID WE'VE BEEN OUT IN THE COLD TOO LONG, OLLIE. WE'RE *IMAGINING* THINGS.

*YOU'VE BEEN OUT IN THE COLD TOO LONG?!! HOW ABOUT US?!! IT'S YOUR JOB TO KEEP OUR WATER FROM FREEZING.*

*YOU'RE S'POSED TO PROTECT US WHEN THE TEMPERATURE PLUNGES*

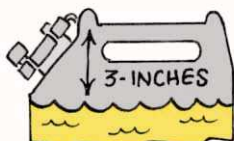
*PROTECT YOU? HOW?*



FOR STARTERS, USE SOME INSULATED COVERS, NSN 7240-00-125-9061, TO KEEP US WARM.

EITHER THAT, OR YOU'LL HAVE TO SHARE YOUR LONGJOHNS.

WHEN YOU FILL US CANS WITH WATER, LEAVE ROOM FOR EXPANSION. FILL NO MORE THAN THREE INCHES FROM THE TOP.

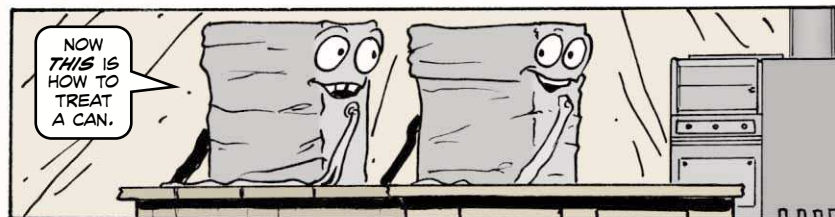


AND KEEP US OUT OF THE CHILLING WIND. WE PREFER THE INSIDE OF A TENT OR VEHICLE.

KEEP US OFF THE FROZEN GROUND. SET US ON PLANKS OR PALLETS.



AND NEVER HEAT A FROZEN CAN-THE PLASTIC WILL MELT!



NOW *THIS* IS HOW TO TREAT A CAN.

Clothing...

## FREE UP YOUR FINGERS

**C**old-weather mittens keep your fingers warm, but they're too bulky to do too much more than shoot a rifle. But ice-cold metal can freeze your skin if you touch it with bare hands. So what do you do when you need to free up your fingers to do a little PM?

Thin, anti-contact gloves will save the day. They are cotton gloves with deerskin palms. They give your hands quick contact protection, keeping you hands from sticking to the metal in freezing conditions while allowing you to get things done.

NEVER WEAR THE GLOVES LONGER THAN YOU NEED TO.

THEY *WON'T* PROTECT YOUR HANDS FROM THE FREEZING TEMPS—JUST FROM THE METAL.



HERE'S WHAT'S AVAILABLE!

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





# Make Beret a Good Fit



ONE BLAST FROM THE NORTH WIND CAN SNATCH THAT LOOSE BERET **RIGHT OFF** YOUR HEAD.

IT NEEDS TO FIT **SNUG** SO YOU WON'T HAVE TO MAKE LIKE A GOLDEN RETRIEVER AND FETCH IT.

SOME HOT WATER AND A LITTLE KNOW-HOW CAN SHRINK YOUR BERET DOWN TO A **PERFECT FIT**.



DRAW HOT WATER FROM THE FAUCET INTO A PAN OR BUCKET. YOU DON'T WANT TO USE WATER ANY HOTTER THAN THAT. SOAK THE BERET UNTIL IT'S COMPLETELY WET, ABOUT ONE TO TWO MINUTES.



MAKE SURE YOU KEEP THE FLASH **OUT** OF THE WATER. YOU **DON'T** WANT TO SHRINK THAT.

SHAKE MOST OF THE WATER OUT OF THE BERET. DON'T WRING OR TWIST IT. YOU'LL DISTORT ITS SHAPE.



PUT THE BERET ON YOUR HEAD, WITH THE FLASH OVER YOUR LEFT EYE. FOLD IT TO THE RIGHT, DOWN OVER YOUR RIGHT EAR.



IF THE BERET'S **TOO LOOSE**, PULL ON THE RIBBONS, ONE AT A TIME, UNTIL IT'S **SNUG**.

KNOT THE RIBBONS AND CUT OFF THE ENDS.

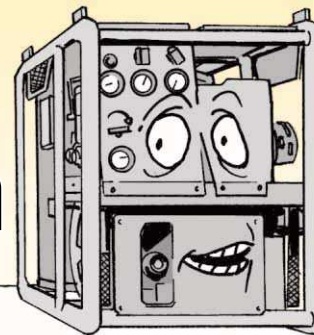


AIR DRY THE BERET. NEVER PUT IT IN A DRYER. DRYER HEAT CAN SHRINK IT AND CRACK ITS RIM.

THE BERET'S MADE OF WOOL, SO IF IT NEEDS CLEANING, TAKE IT TO THE DRY CLEANERS. **NEVER** HAND WASH IT OR CLEAN IT IN A WASHING MACHINE. IT'LL SHRINK AND THEN YOU'LL HAVE **TOO TIGHT** A FIT.



# Left Out M17 Decon NSNs



I HAVE **TWO DIFFERENT ENGINES**, WHICH MEANS I HAVE **DIFFERENT NSNs** FOR SOME PARTS.

GET OUT YOUR PENCILS AND MAKE THESE **CHANGES** IN YOUR TM.

The M17 decon has two versions of the Cuyuna/2SI engine. Those engines with serial numbers below 63427 are one version and those with numbers 63427 and higher are the other.

The NSN differences in parts for the engines are covered in TM 3-4230-228-23&P, except for these:

## Serial numbers below 63247

Fig C-28, Item 4, electronics amplifier, NSN 6110-01-358-7886, PN 1389, SMR PAOZZ

Fig C-28, Item 9, ignition coil, NSN 2920-01-356-6928, PN 3040, SMR PAOZZ

## Serial numbers 63247 and above

Fig C-29, Item 20, ignition trigger, NSN 2920-01-498-8351, PN 3500, SMR PAOZZ

Fig C-29, add Item 23, ignition coil and wire assembly, NSN 2920-01-498-8916, PN 5035, SMR PAOZZ

## Fig. C-28

Ignition coil



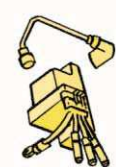
Electronics amplifier



MAKE A NOTE OF THESE CHANGES UNTIL TM 3-4230-228-23&P IS REVISED.



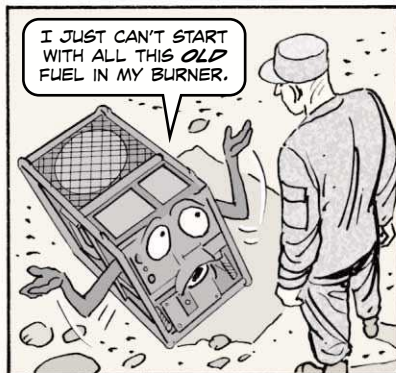
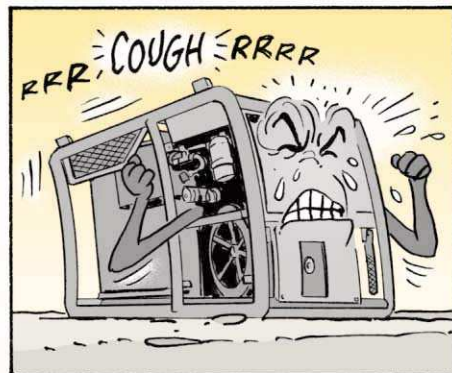
## Fig. C-29



Ignition coil and wire assembly

Ignition trigger

# STARTING MADE EASY



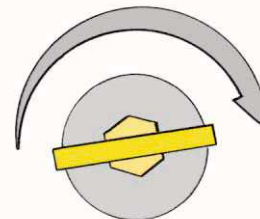
Dear Editor,

Through our work supporting units with the M17-series decon, we've come up with these three tips to make starting easier:

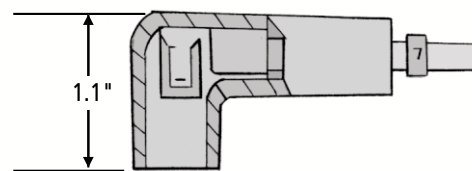
- Page 2-35 of the M17 TM 3-4230-228-10 says the burner fuel knob at startup should be turned fully clockwise. Actually it's often better to turn the knob only 3/4 of a turn clockwise. Each M17 is different, so you will need to experiment.
- If you're having trouble getting a spark out of the igniter plug for the burner, try cutting off the boot assemblies for the power supply and for the igniter so they're 1.1 inch from the top to the opening for the plug. Sometimes the boots are too long and prevent the power supply and igniter from making a connection.
- Repairmen, when you have your M17s disassembled for maintenance, clean out all old fuel in the burners. That will make it easier for the burners to fire up next time.

Phillip Fellers  
Wichita, KS

Try turning  
fuel pressure  
knob  $\frac{3}{4}$  turn  
clockwise

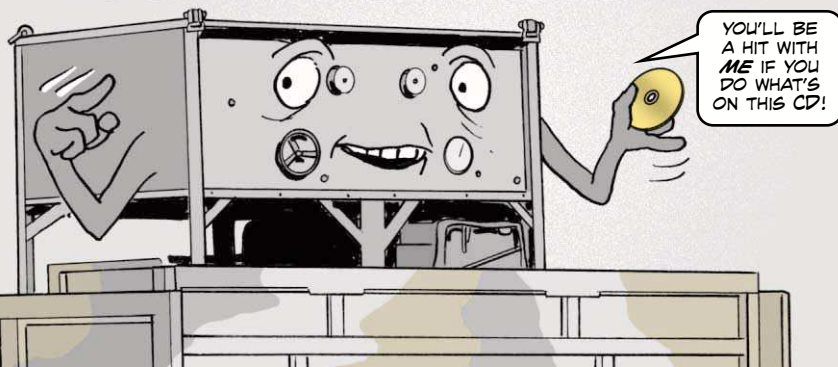


Cut off part of igniter and power supply boots



**Editor's note:** Get started on these suggestions, deconners. They'll start making starting a breeze.

## How Do I Get CD?



Dear Half-Mast,

We've heard there is a CD available that gives a good rundown on using and taking care of the new M12 diesel decon. How can I get a copy?

SGT P.F.

Dear Sergeant P.F.,

When you received your new M12, you should have also received the CD, which contains all of the M12 diesel ETMs and a briefing on the M12 diesel. If you didn't, contact TACOM's Stephen LeFebvre at DSN 793-6885/(309) 782-6885 or email:

lefebvres@ria.army.mil

He'll send you the CD.

TM 3-4230-237-10 and TB 3-4230-209-23 are on the LOGSA website:

<https://www.army.mil/etms/online.htm>

*Half-Mast*



# SB 38-101 FUNCTIONS ARE NOW ONLINE



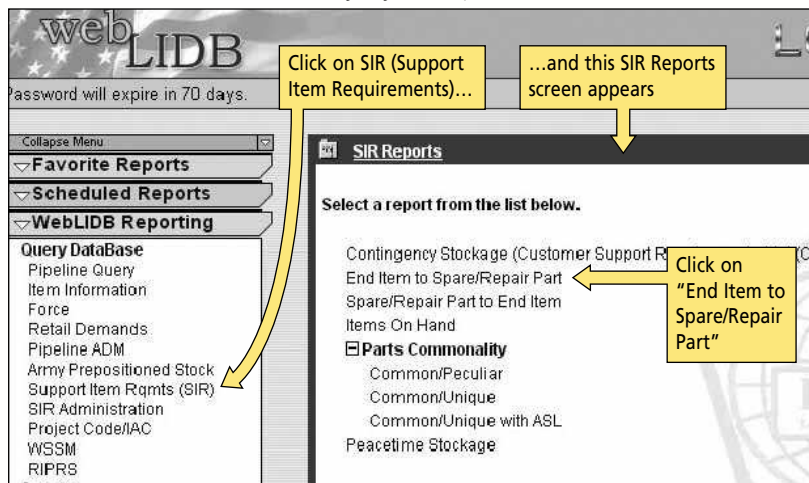
Dear Half-Mast  
I've been running a copy of SB 38-101 EM-0010 (1 Jul 00) for the end use of miscellaneous parts. Is a newer version available, and does it track parts info faster than the 1 Jul 00 version?  
Thank you.

Sgt L.K.

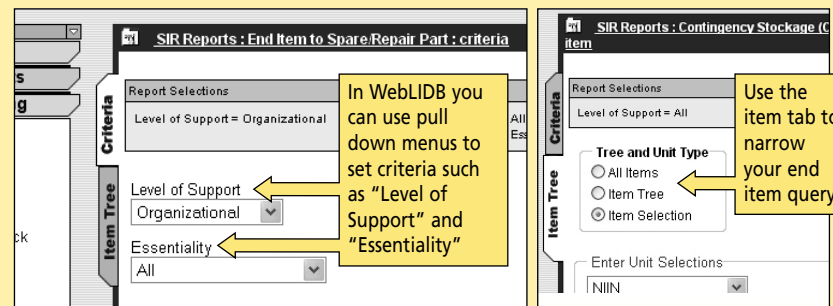
SERGEANT L.K., SB 38-101 IS NO LONGER PUBLISHED

HOWEVER, ITS FUNCTIONS CAN NOW BE FOUND AS A WEB-BASED PRODUCT IN THE LOGISTICS INTEGRATED DATABASE (WEBLIDB) ON THE LOGISTICS SUPPORT ACTIVITY'S (LOGSA) WEBLOG WEBSITE...

<https://weblog.logsa.army.mil/index.shtml>



YOU'LL NEED TO COMPLETE A SYSTEMS ACCESS REQUEST FOUND AT THE TOP OF THE WEBLOG HOMEPAGE. ONCE YOU HAVE A LOGSA LOGON AND PASSWORD, CLICK ON THE WEBLIDB LINK AT THE TOP OF THE WEBLOG HOMEPAGE.



In WeBLIDB you can use pull down menus to set criteria such as "Level of Support" and "Essentiality"

Use the item tab to narrow your end item query

IN WEBLIDB, THE SUPPORT ITEM REQUIREMENTS (SIR) MODULE OFFERS ALL THE PREVIOUS FEATURES OF SB 38-101 AS WELL AS SOME NEW CAPABILITIES. IT HAS THE ADVANTAGE OF BEING UPDATED **ALMOST DAILY**.

THE END ITEM TO SPARE/REPAIR PART, SPARE/REPAIR PART TO END ITEM, AND PARTS COMMONALITY REPORTS ARE THE CURRENT SB CAPABILITIES.

THE MODULE ALSO ALLOWS YOU TO VIEW ON-HAND END ITEM DENSITIES FOR YOUR UNIT, AND TO DEVELOP PEACETIME AND CONTINGENCY PLLS AND ASLS.



# Who Keeps DA Form 348?



**M**any units are confused about what to do with the DA Form 348, *Equipment Operator's Qualification Record (Except Aircraft)*, after its information is entered into ULLS-G.

Para 4-1b(10) on Page 8 of AR 600-55 (31 Dec 93), *The Army Driver and Operator Standardization Program (Selection, Training, Testing, and Licensing)*, says the unit no longer needs the form and to return it to the driver for his personal records.

AR 600-55, Para 4-1b(10) Misstatement: After information is put into ULLS, there is no requirement for the unit to maintain or retain DA Form 348s. Return the manual form to the individual for the soldier's personal records.

On the other hand, Para 2-1c on Page 4 of DA Pam 750-8 (25 Feb 05), *The Army Maintenance Management System (TAMMS) Users Manual*, says you must keep the DA Form 348 on file in the motorpool.

So what do you do?

Keep the form on file. AR 600-55 is currently being revised and will eventually reflect the guidance from DA Pam 750-8.

The original thought behind transferring the information into ULLS-G was to make it easier to cross check training when units try to dispatch a vehicle. However, the DA Form 348 must remain the official document of record because it contains important information that is never transferred to ULLS-G.

You should continue inputting the data into ULLS-G. Then you can print a DA Form 348-E for local command requirements. But you must keep the original DA Form 348 on file.

HQDA IS CURRENTLY WORKING ON A WAY TO ELIMINATE THE DA FORM 348 PAPER TRAIL BY LINKING THE DATA BACK INTO SAMS-E (AND LATER GCSS-A) USING THE DIGITAL TRAINING MANAGEMENT SYSTEM (DTMS).

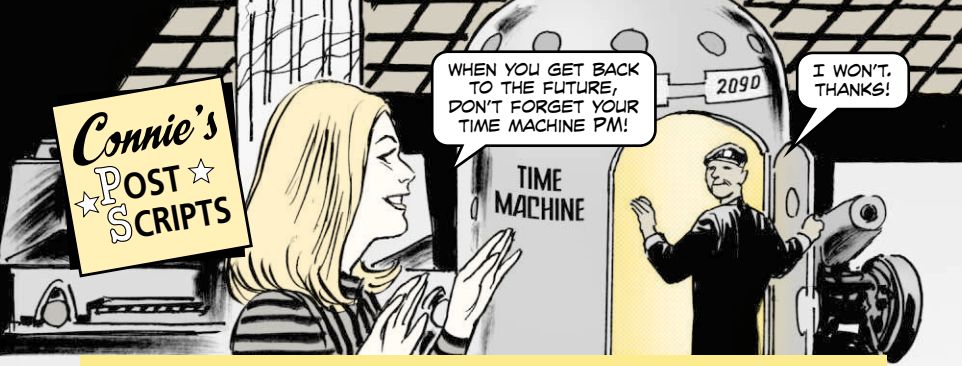
WHEN THAT HAPPENS, DTMS WILL BECOME THE AUTHORIZED SOURCE FOR ALL SOLDIER TRAINING AND SAMS-E WILL PROVIDE THE DATA FOR THE DISPATCHING PROCESS.

UNTIL THEN, THOUGH, KEEP THOSE DA FORM 348s ON FILE.

NAME (Last, first, initial) AND SERVICE NUMBER Jones, John L. 111-41-7119					PERMIT (Initial) NUMBER J-7119 DATE ISSUED 10 JUN 93 TYPE ARMY STANDARD LIMITATIONS (Physical or operational) R 1 POSITION TITLE (If civilian)	
SEX M	DATE OF BIRTH 1 May 64	COLOR HAIR Brown	COLOR EYES Green	HEIGHT 5' 9"	WEIGHT 160	
SECTION I - OFFICIAL QUALIFICATIONS						
TYPE OF EQUIPMENT HEMTT, M977	SIZE 10 TON	SPECIAL QUALIFICATION <sup>1</sup> SE	DATE QUALIFIED 10 JUN 93	QUALIFIED AT Ft. Evans, VA	NAME OF EXAMINER Guy F. Smith	
DA Pam 750-8, Para 2-1c — DA Form 348 is the only authorized permanent record for documenting equipment operator's qualifications.						
SECTION II - BACKGROUND AND EXPERIENCE						
TYPE OF EQUIPMENT SEDAN	SIZE 5 PASS	TYPE OF DRIVING OF OPERATION <sup>2</sup> CITY/RURAL	ADDITIONAL DRIVER'S LICENSES (Date or agency) VA	NUMBER OF OTHER DRIVER'S LICENSES 31 MAY 94 T-4143-243	SATISFACTORY EXPERIENCE VERIFIED BY Guy F. Smith	
ULLS-G produces a temporary Form 348-E to help streamline automated dispatch procedures ...however, this is not a replacement for DA Form 348.						
DATE	CREDITS	DEBTS	TYPE OR NATURE	ACTION TAKEN		
4 JUN 93	40 HRS		QUALIFICATION	COMPLETED DRIVER TNG		
10 JUN 93	2 HRS		TESTING/ LICENSING	IAW AR 600-55, ROBERT COOK		
10 JUN 93	1 HR		ACCIDENT AND DAMAGE	ARMY STANDARD, GUY F. SMITH		
12 OCT 93	1 HR		WINTER DRIVER TNG	IAW 600-55, SAM WILSON		
				IAW TCPE REG 21-305, GUY F. SMITH		
EQUIPMENT OPERATOR'S QUALIFICATION RECORD (EXCEPT AIRCRAFT) (AR 600-55 and AR 385-55)						

Units maintain all authorized operator's DA Form 348s on file.





## RFID Customer Support Desk Opens

User assistance for traditional "help desk" type questions concerning radio frequency identification (RFIDs) is now available through PM J-AIT Customer Support.

For answers to your questions, call the RFID Customer Support Desk at 1-800-877-7925 or email: [help@rfitv.army.mil](mailto:help@rfitv.army.mil)

Assistance can cover setting up and re-registering write/read sites, troubleshooting site problems, solving interrogator issues, using the TIPS write/read software and getting answers to questions about the ITV Server.

The support desk doesn't issue ITV Server passwords. If you need an ITV Server password, either complete the New User Registration form:

[https://national.rfitv.army.mil/open\\_docs/index.html](https://national.rfitv.army.mil/open_docs/index.html)

or log on to the ITV Server by using your AKO username and password.

## Tool Kit Upgrade for R-12, R-134A Refrigeration

To enable repairmen to work on both R-12 and R-134A refrigeration systems, the service refrigeration ordnance tool kit, NSN 5180-00-596-1474, has been upgraded. To get the kit's new components, order the supplemental tool kit, NSN 5180-01-531-1677. For more info on the kit, visit PM-SKOT at <http://pmskot.army.mil> or email: [PM-SKOT@ria.army.mil](mailto:PM-SKOT@ria.army.mil)

## HOLEY MITTEN LINERS?

Don't buy new mittens yet! Replace the liners. Nylon liners in your arctic mitten set, NSN 8415-00-782-6715 through -6717, can wear out quicker than the mittens.

The liner NSNs are:

NSN 8415-01-323-	Size
2174	Small
2175	Medium
2176	Large

## ICE SCRAPER

Be ready for winter by ordering an ice scraper with NSN 7920-01-383-8023. The scraper comes with a plastic bristle brush on one end.

## SIDEWALK SALT

With winter just around the corner, it's time to stock up on sidewalk salt to melt slippery snow and ice. NSN 6810-00-227-0437 brings an 80-lb bag.

## Medical Equipment Tool Kit

The medical equipment tool kit, NSN 5180-00-117-3414, contains dozens of tools. Do you know where each one goes? There's no supply bulletin, hand receipt or diagram to show you how to pack the kit. For that, you need to talk with the supplier, Kipper Tool Company. The government sales department at Kipper can help you figure out where the tools go. Contact them at:

[info@kippertool.com](mailto:info@kippertool.com)

or 1-800-295-9595.

## DON'T USE SWAMPER TIRE!

Say it once, then say it again. "Don't use the Super-Swamper tires on your HMMWV!" Word from the field is these tires are still showing up on trucks. Tests show this type of tire does not hold up to heat and puts extra wear and tear on the HMMWV's suspension.

## Doppler GPS Components Needed!

Black Hawk and Chinook mechanics, AN/ASN-128B Doppler GPS radar navigation system components are in critically short supply! You can help. Turn in all unserviceable signal data converters (SDC), NSN 5895-01-399-4918, and computer display units (CDU), NSN 5841-01-399-5513, now! Then they can be repaired and you'll have serviceable SDCs and CDUs in the supply system to keep your aircraft mission ready.

Ship unserviceable components to:

Tobyhanna Army Depot  
W25G1W (DDTP-Receiving)  
Bldg 1C, Bay 6 (Post to B16 Account)  
11 Hap Arnold Blvd  
Tobyhanna, PA 18466

Contact CECOM at DSN 992-3654 or (732) 532-3654.

## Black Hawk Greasing Info Wrong

Oops, we goofed. In PS 629, Page 38, we said rotate the rotor to lube grease points on the Black Hawk's swashplate. That was incorrect. Once the swashplate index marks are lined up, engage the gust lock. Remove the inner retainer ring, and lube each grease fitting. But never rotate the rotor head while the retainer is removed!

## SEE Shock Mount Bolts

Use CAGE 64678 and PN 308765 020010 (until an NSN is available) when you order the upper rear shock mount bolt for the small emplacement excavator. It's shown as Item 3, Fig 190 of TM 5-2420-224-24P-1. Order the lower bolt that's shown as Item 17 in Fig 193 with NSN 5305-01-291-9074. Both the upper and lower bolts use the same washer and nut, shown as Items 1 & 2 in Fig 190. Make a note of these changes until they're added to a revision or change to the technical manual.

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

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PM isn't just the table...

...use the whole PMCS section!