

**PS****THE  
PREVENTIVE  
MAINTENANCE  
MONTHLY****ISSUE 732 NOVEMBER 2013**

TB 43-PS-732, *The Preventive Maintenance Monthly*, is an official publication of the Department of the Army, providing information for all Soldiers assigned to combat and combat support units and all Soldiers with unit maintenance and supply duties. All information published has been reviewed and approved by the agency responsible for the equipment, publication or policy discussed. Application of the information is optional with the user. Masculine pronouns may refer to both genders. The use of product or company names does not constitute endorsement of those products, services or companies by the U.S. Army. The use of non-DoD hyperlinks, along with their content, does not constitute endorsement by DoD or DA. Neither DoD nor DA exercises any editorial control over, and cannot vouch for, content on non-DoD websites.

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M1-Series Tank Laser Rangefinder Safety  
M113A3 FOV Engine Oil Filter Failure  
M113-Series FOV Fuel Cap PM  
M113A3 FOV Prop Shaft/U-Joint Bolts  
M109A6 Paladin Breechblock Springs

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Construction Equipment Shifting Reminders  
130G Road Grader Unloading Valve Use

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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.

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**MSG Half-Mast**  
**PS, the Preventive Maintenance Monthly**  
**USAMC LOGSA (AMXLS-GP)**  
**Bldg. 3303**  
**Redstone Arsenal, AL 35898**

Or email to:

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

Internet address:

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

By order of the Secretary of the Army:

**RAYMOND T. ODIERNO**  
General, United States Army Chief of Staff

Official:

**GERALD B. O'KEEFE**

Administrative Assistant to the Secretary of the Army

1326901

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2013

# THE PREVENTIVE MAINTENANCE MONTHLY

TB 43-PS-732

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THERE GOES  
ANOTHER ONE.

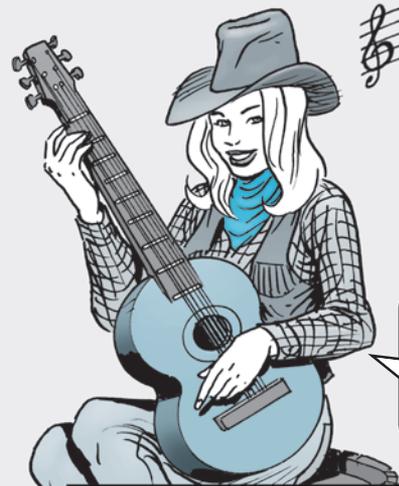
YEP... THIS IS  
BETTER'N TV!

SSC  
REEEECH!  
HH!

Driving on  
SNOW AND ICE  
takes SKILL.  
See PAGE 27.

CRUNCH!

BANG!



# Take This Job- and LOVE It!

DURING YOUR ARMY CAREER, YOU'LL GET **SPECIALIZED TECHNICAL TRAINING**. BUT SOMETIMES, YOUR CURRENT ASSIGNMENT MAY NOT DRAW UPON THOSE TECHNICAL SKILLS ENOUGH.

WHETHER YOU'RE TUNING A PIANO OR TUNING UP A **HMMWV**, ANY SKILL CAN GET RUSTY IF IT'S **NOT USED**.

GEE-WHIZ! IT'S BEEN SO LONG SINCE I TUNED UP ONE OF THESE I DON'T FEEL LIKE I'M DOING IT RIGHT.

NO WORRIES, OLD TIMER! I'M A TUNE-UP MASTER! I'LL BE THERE TO HELP ONCE I TUNE THIS HMMWV!

SO, IF IT'S BEEN AWHILE SINCE YOU GOT YOUR HANDS DIRTY, SET ASIDE THE PAPERWORK AND DIG IN!

YOU MIGHT BE SURPRISED BY HOW MUCH JOB SATISFACTION YOU'LL FIND HIDING UNDER THAT HOOD.

SURE FEELS GREAT TO GET SOME **'HANDS-ON' TIME AGAIN!**

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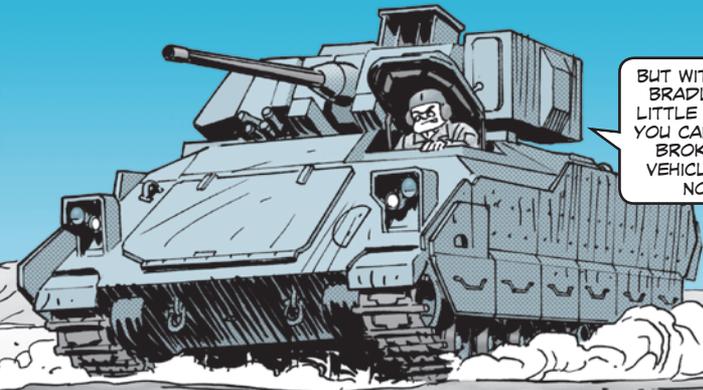
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# IT TAKES TWO TO TOW



HAVING YOUR BRADLEY BREAK DOWN IS A BIG BUMMER...

...ESPECIALLY IF YOU HAVE TO WAIT AROUND FOR A RECOVERY VEHICLE.



BUT WITH ANOTHER BRADLEY AND A LITTLE KNOW-HOW, YOU CAN GET YOUR BROKEN-DOWN VEHICLE HOME IN NO TIME.

## Using Tow Cables

Tow cables should be your first choice for towing your Bradley, unless the propeller shafts have been removed.

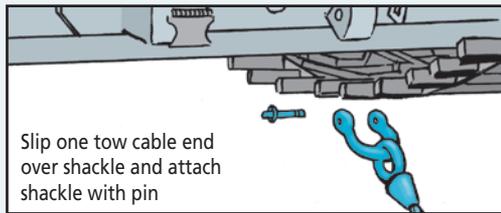
You need to keep the speed low when using tow cables—below 5 mph no matter the terrain.

Also, Bradleys are heavy, making it possible to snap a tow cable. So make sure all the hatches are closed and everyone is a safe distance away before you start towing.

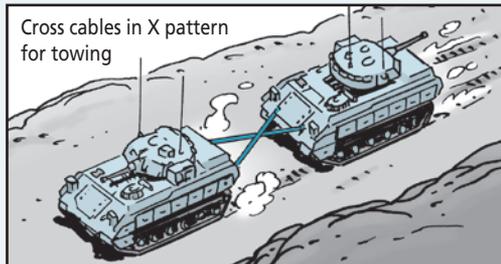
And you'll need to make sure the disabled Bradley has a driver for steering and braking while it's being towed.

It's important that you hook up the cables correctly. Here's the right way:

1. Remove the four pins and shackles from the front of the disabled vehicle and the rear of the towing vehicle.
2. Loop one end of each tow cable through a shackle. Use the pins to connect both shackles to the towing eyes on the back of the towing vehicle.
3. Loop the opposite ends of each tow cable through the remaining two shackles. Before hooking the shackles to the front of the disabled Bradley, cross the cables into an X pattern.



Slip one tow cable end over shackle and attach shackle with pin



Cross cables in X pattern for towing

That'll improve steering control and allow you to make turns without dragging the disabled Bradley.

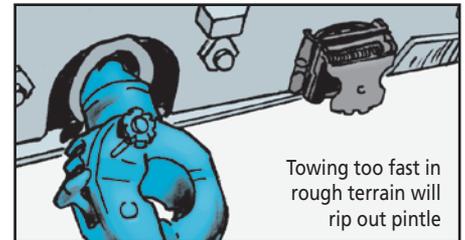
## Using a Tow Bar

Don't tow a Bradley that has a damaged transmission because that ruins the final drives. And don't tow a Bradley with damaged final drives because that ruins the transmission.

Your unit mechanic prevents that by removing the propeller shafts before towing, but that leaves the vehicle with no steering or braking.

Using a tow bar will give you back some steering and braking control. Because the bar is rigid, there's no risk of the two vehicles colliding every time you go downhill. As long as you tow at slow, steady speeds, you shouldn't have problems.

Keep the maximum speed at 15 mph, and that's for smooth, even conditions. But keep the speed at no more than 5 mph when the going gets rough. Speeds higher than 5 mph on rough terrain can bend and ruin the tow bar, and even rip the tow pintle loose from the towing vehicle.

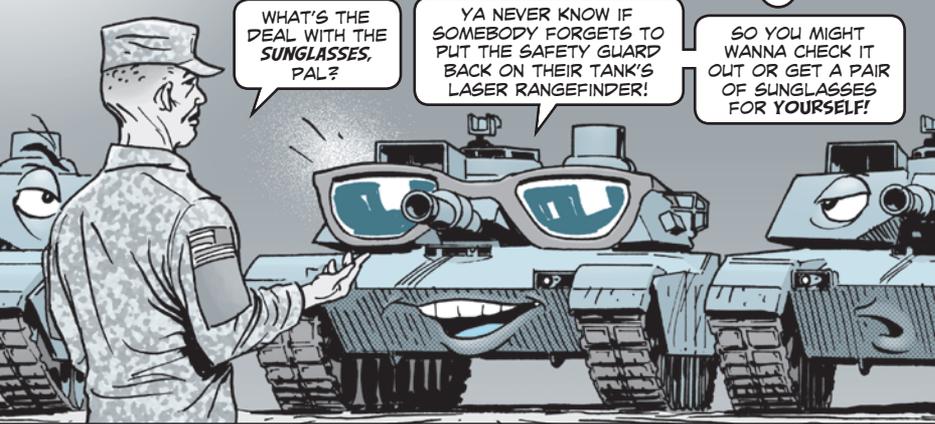


Towing too fast in rough terrain will rip out pintle

FOR MORE INFORMATION, SEE THE "TOW DISABLE VEHICLE UNDER UNUSUAL CONDITIONS" SECTION OF YOUR -10 TM.



# Filter Out Laser Danger



WHAT'S THE DEAL WITH THE SUNGLASSES, PAL?

YA NEVER KNOW IF SOMEBODY FORGETS TO PUT THE SAFETY GUARD BACK ON THEIR TANK'S LASER RANGEFINDER!

SO YOU MIGHT WANNA CHECK IT OUT OR GET A PAIR OF SUNGLASSES FOR YOURSELF!

Your M1's laser rangefinder (LRF) is essential when you're engaging an enemy target or perfecting your gunnery skills on the range. But, without precautions, the LRF can deliver a potentially blinding laser hit to your fellow Soldiers.

If your tank is equipped with a non-eye safe laser, NSN 1240-01-264-2040 or 1240-01-381-5086, remember to always do the following two things:

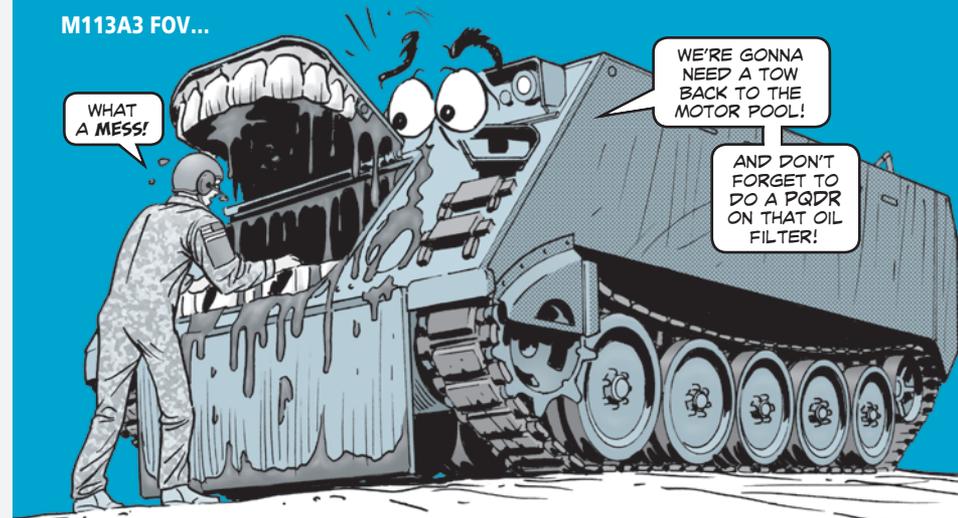
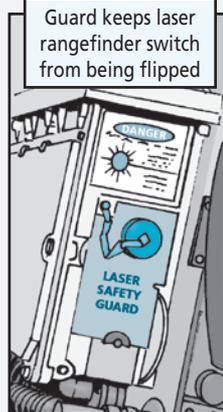
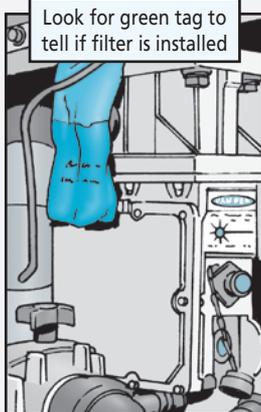
1. Install the eye-safe filter, NSN 1015-01-234-8165, on the LRF. This'll protect Soldiers from eye damage in case the LRF is activated by accident.

You can tell if the filter's installed by the green tag that hangs out of the LRF.

2. Make sure to put the safety guard, NSN 5930-01-171-4788, back in place on the LRF once the mission's done.

The safety guard makes sure the LRF isn't accidentally armed while you're moving around inside the tight confines of the turret. The safety guard keeps the LRF switch from being accidentally moved.

There's no need for the filter and safety guard if your tank has an eye-safe laser, NSN 1240-01-419-2232.



WHAT A MESS!

WE'RE GONNA NEED A TOW BACK TO THE MOTOR POOL!

AND DON'T FORGET TO DO A PQDR ON THAT OIL FILTER!

# BAD ENGINE OIL FILTERS COULD BLOW!

Dear Half-Mast,  
Our mechanics are finding that the oil filter, NSN 2940-01-197-7106, called for in the M113A3's TM 9-2350-277-24P, can fail.  
When taking M113A3s for a road test after a scheduled service, we've experienced several oil filter seals that have blown, causing a real HAZMAT mess and requiring a tow back to the shop for repair.  
We've found a different oil filter, NSN 2940-01-314-1345, that doesn't seem to have any problems. Is it OK to use?  
SGT C.S.

Dear Sergeant C.S.,  
Don't use the substitute oil filter. Only use the oil filter called for in the TM. If that filter has a soft rubber gasket rather than a hard one, it's likely a bad filter. Don't use it.  
The best way to correct this problem is by submitting a PQDR. Go to:  
<https://www.pdrep.csd.disa.mil/>  
Once there, click on EZ PDR Logon in the left-hand column, log in with your CAC and follow the instructions. Make sure you hold on to the filter and packaging. It may be needed as part of the investigation.  
Questions? Contact TACOM's Floyd Perry at DSN 786-3476, (586) 282-3476, or email: [floyd.n.perry.civ@mail.mil](mailto:floyd.n.perry.civ@mail.mil)  
Half-Mast

# Fuel Cap PM Key to Smooth Running

Your M113-series carrier is a reliable workhorse, but only if you take good care of it. That means paying special attention to the fuel system.

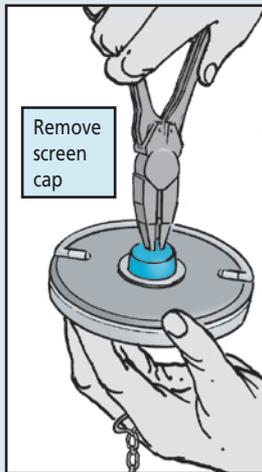
Dirt, sand and other contaminants can land your vehicle in the repair bay if you're not diligent about PM on **every** component of the fuel system, including the fuel cap, NSN 5342-01-083-5674.

If you forget to clean the screen cap and rubber vent grommet on top of the fuel cap, the cap gets plugged with dirt, creating a vacuum and causing fuel flow problems. So clean the cap and grommet every six months—more often in dusty or sandy environments.

HERE'S HOW TO INSPECT AND CLEAN THE CAP AND GROMMET...

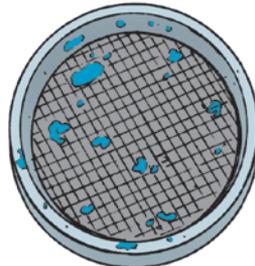


1. Grip the tang in the center of the fuel cap with a pair of pliers and pull the screen out.



2. Take a close look at the grommet in the fuel cap. If it's damaged, replace the entire fuel cap.

3. Clean the screen cap with dry cleaning solvent.



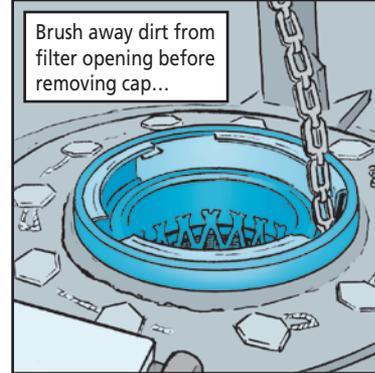
UH-OH! YOU'RE NOT RUNNING GOOD... WHAT'S UP?

EHH... A LACK OF FUEL CAP PM HAS ME DOWN.

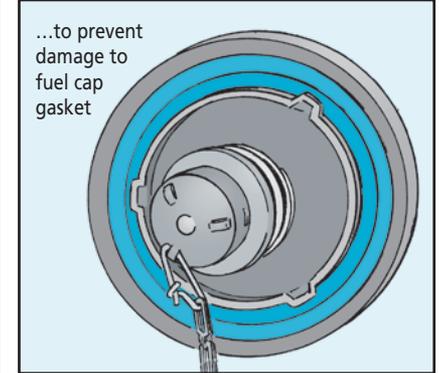
Then check underneath the bottom of the fuel cap. Dirt and sand can collect around the filler neck, keeping the cap from screwing on properly. That can bend the metal lip inside the fuel tank opening, which can damage the gasket on the underside of the fuel cap.

Before you open the fuel cap, make sure to brush away any dirt or sand first. And then make sure the filler neck area is clean before closing the fuel cap.

Brush away dirt from filler opening before removing cap...



...to prevent damage to fuel cap gasket



Pull out the fuel strainer inside the filler neck before screwing the fuel cap back into place. If the strainer is clogged with sediment, clean it with solvent and inspect the strainer for cuts or tears.

Check strainer for damage after cleaning



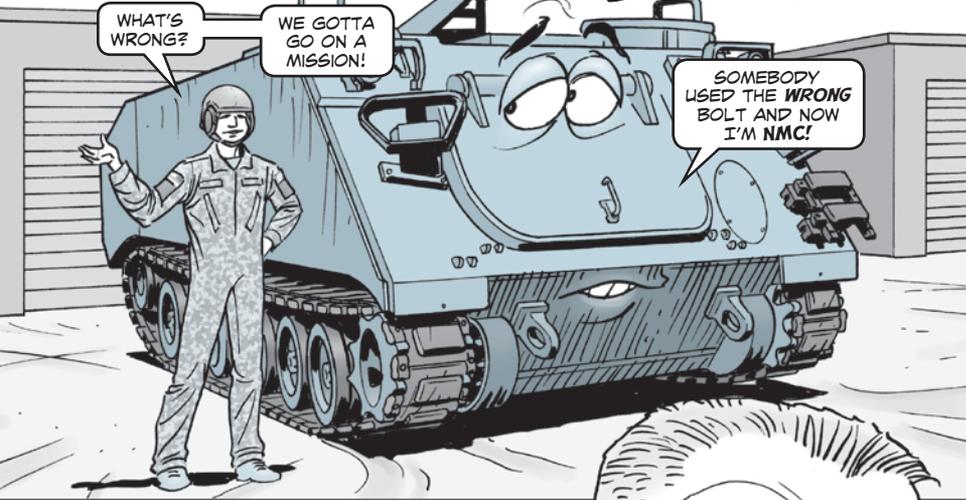
If you find damage, replace the strainer using NSN 4730-00-701-3921.

FOLLOWING THESE STEPS WILL KEEP YOUR FUEL SYSTEM RUNNING STRONG...

...AND CONTAMINANT FREE!



# Use Just The Right Bolt



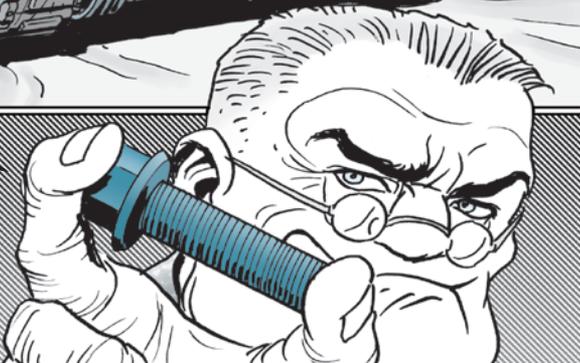
WHAT'S WRONG?

WE GOTTA GO ON A MISSION!

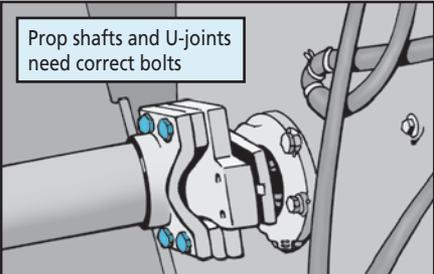
SOMEBODY USED THE **WRONG** BOLT AND NOW I'M NMC!

MECHANICS, ONE **LITTLE** OL' BOLT MIGHT NOT SEEM LIKE SUCH A **BIG** DEAL.

BUT MAKING SURE YOU HAVE THE **RIGHT** BOLT IS A **HUGE** DEAL WHEN IT COMES TO INSTALLING THE PROPELLER SHAFT AND UNIVERSAL JOINTS ON A VEHICLE FROM THE M113A3 FAMILY.



Some mechanics are using the wrong bolt, NSN 5305-01-216-7378. It's supposed to be used for attaching the output flange to the transmission. But this bolt is about one inch too long for securing the prop shafts and U-joints, so it damages the output housing on the transmission. That can make your vehicle NMC!



Prop shafts and U-joints need correct bolts

The right bolt, NSN 5305-01-424-8744, is just the right length for securing the prop shaft and U-joints without damaging the output housing. Be sure to use the right washer, NSN 5310-00-011-5730, too.

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# Don't Let Springs Cramp Your Style



WELL, ANOTHER MISSION DONE!

HEY...



...WAIT?

HOW ABOUT LOOSENING THE TENSION ON MY BREECHBLOCK CLOSING SPRINGS BEFORE YOU LEAVE?

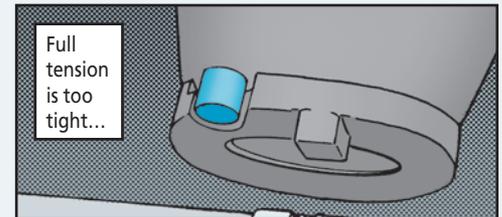
Crewmen, springs that are too tight can be a bummer, especially if they happen to be the closing springs on your Paladin's breechblock.

The breech is heavy, so those springs are essential to helping you swing it shut. If the springs wear out, closing the breechblock is no easy task.

A lot of crewmen keep the springs under full tension. That lets the breechblock close firmly, but the constant pressure wears out the springs and leads to early failure. It can also close the breechblock with enough force to damage its detent plunger and stop surface.

Apply just enough pre-load tension to the springs to securely close the breechblock at the loading elevation—less than 300 mils. That usually means adjusting the springs to half-tension.

Just push in the plunger and rotate the spring adjuster clockwise to release the tension. If the breechblock won't close at loading elevation, return the springs to full tension and tell your mechanic.



Full tension is too tight...



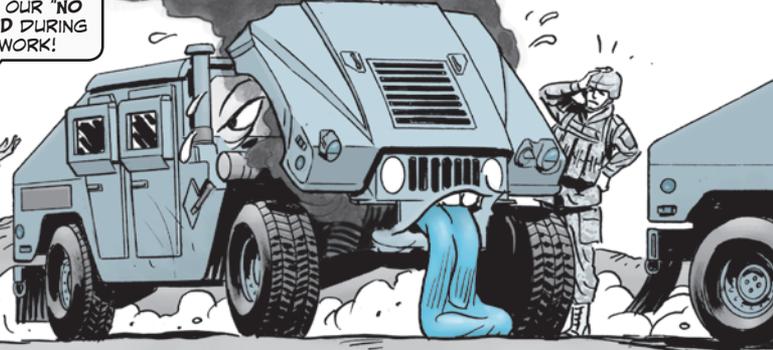
...so turn spring adjuster to half-tension

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LEMME GUESS, BENT RADIATOR FINS ARE THE CULPRIT.

YEAH, THIS IS WHAT WE GET FOR NOT USING OUR "NO STEP" SHIELD DURING ENGINE WORK!



# "NO STEP" Shield Prevents Overheating

Dear Half-Mast,

Soldiers are stepping on the radiator fins in their HMMWVs and bending them. I think they should put "NO STEP" signs on HMMWVs, like those found on helicopters. How about you?

SSG N.O.

Dear Sergeant N.O.,

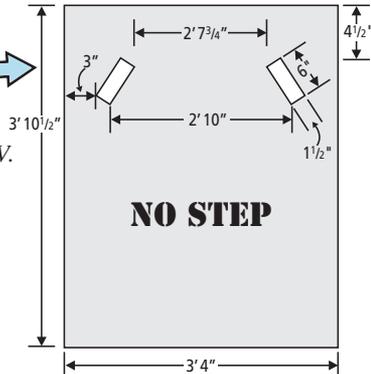
"NO STEP" signs are a great idea! That's because the fins on your HMMWV's radiator and oil cooler protect your HMMWV's engine and transmission from overheating.

Without protection, the fins can bend during PMCS and repair work. And when enough of the fins are bent, the reduced air flow through the radiator and cooler leads to engine and transmission overheating.

So another good idea is to make a fin shield to keep the fins on your HMMWV's radiator straight!

## Making the Fin Shield

Fabricate a fin shield by cutting  $\frac{3}{4}$ -in plywood using these approximate dimensions:

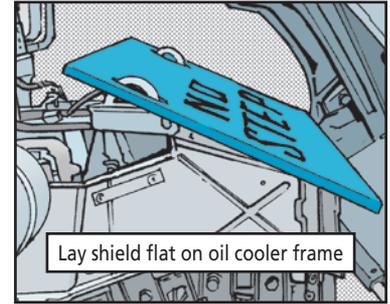


Adjust the dimensions to fit your HMMWV. Then, round off the edges and paint the board to prevent splinters. **And be sure to stencil NO STEP on the board.**

You'll also see this info on Page D-52 of TM 9-2320-280-20-3 and Page D-26 of TM 9-2320-387-24-2.

## Using the Fin Shield

Once you've made a fin shield, you can use it right away. Just remove both plate covers and seals from the airlift buckets, and slip it over the two lifting rings. Then lay it flat on the oil cooler frame. The rings prevent the shield from sliding onto the raised hood.



Lay shield flat on oil cooler frame

**Don't** run the engine with the shield in place! It'll block air flow and lead to engine overheating—the very thing your shield is designed to help prevent!

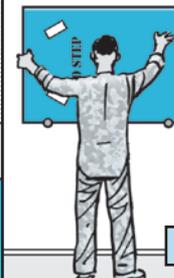
After using your fin shield, replace the eye-hook seals. And even though the board should protect the fins against bending, check for bent fins anyway. Then use the fin-straightening tool, NSN 5120-00-157-2180, if needed.

## Storing the Fin Shield

Take care of the fin shield by storing it flat. That keeps it from warping. Lay it on the floor away from traffic areas, or hang it on the wall against a flat surface.

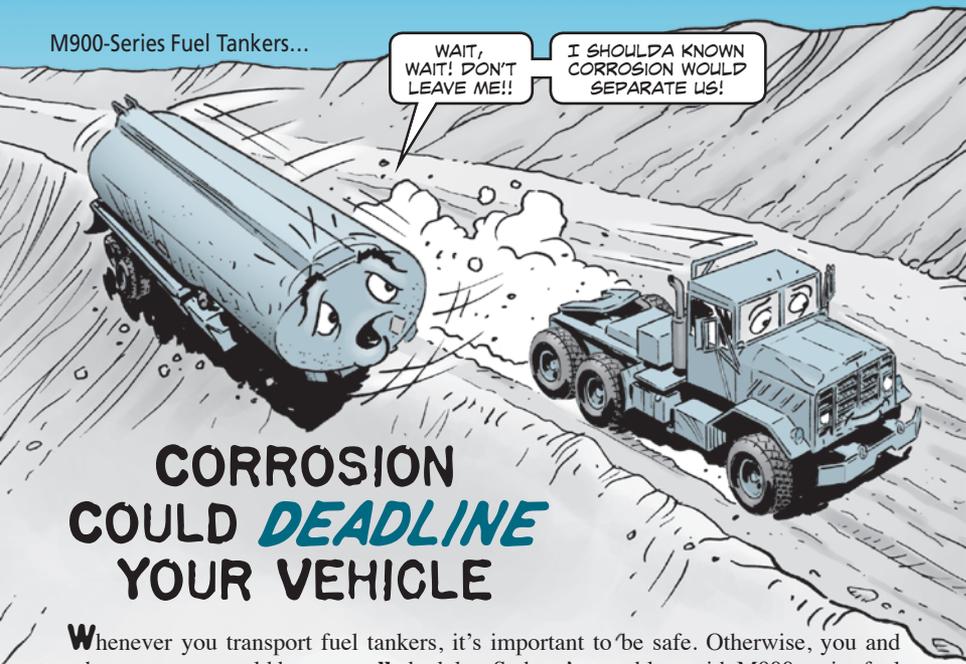


Store shield flat on floor...



...or on wall

Half-Mast



# CORROSION COULD *DEADLINE* YOUR VEHICLE

Whenever you transport fuel tankers, it's important to be safe. Otherwise, you and others near you could have a **really** bad day. So here's a problem with M900-series fuel tankers that you **must** know about to keep yourself and others safe while hauling fuel.

A recent inspection found too much corrosion around the upper coupler plate and frame structure. Corrosion build-up weakens the frame structure and can cause the fuel tanker to separate from the prime mover. But you can prevent this from happening.

If your unit has M967A1, M967A2, M967P1, M967A1P1, M967A2P1, M969A1, M969A2, M969A3, M969P1, M969A1P1, M969A2P1, M969A3P1, and M970A1 fuel tankers, inspect each vehicle. TACOM SOUM 13-008 gives you details on what to do. It's available at:

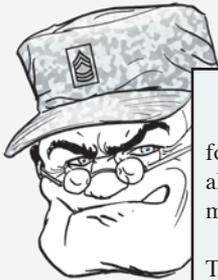
<https://tulsa.tacom.army.mil/SAFETY/message.cfm?id=SOUM13-008.html>

HERE'S WHAT THE SAFETY MESSAGE HAS TO SAY ABOUT CONTROLLING CORROSION ON YOUR UNIT'S FUEL TANKERS...

## Upper Coupler Inspection

Unbolt and lower the kingpin coupler weldment from the tanker following the instructions in the TM that supports your model. That allows you to inspect the kingpin coupler weldment and the tanker's main frame structure.

Remove any rust or paint flakes on the kingpin coupler weldment. That'll help you determine the actual amount of deterioration.



Use a 0 to 6-in vernier caliper to measure the area and thickness of each cleaned corroded area. The vernier caliper is included in the standard automotive tool set (SATS), NSN 4910-01-490-6453.

The original thickness of the upper coupler plate is .375 inches. The kingpin coupler weldment must measure .319 inches or more for the upper coupler to be usable.

This table will help you figure out the extent of corrosion deterioration and loss of material thickness:

Component	Original thickness (inches)	10 percent loss (inches)	15 percent loss (inches)	50 percent loss (inches)	150 percent repaired thickness (inches)
Upper coupler plate	.375	.338	.319	.188	.563
Upper coupler support cross members	.250	.225	.213	.125	.375

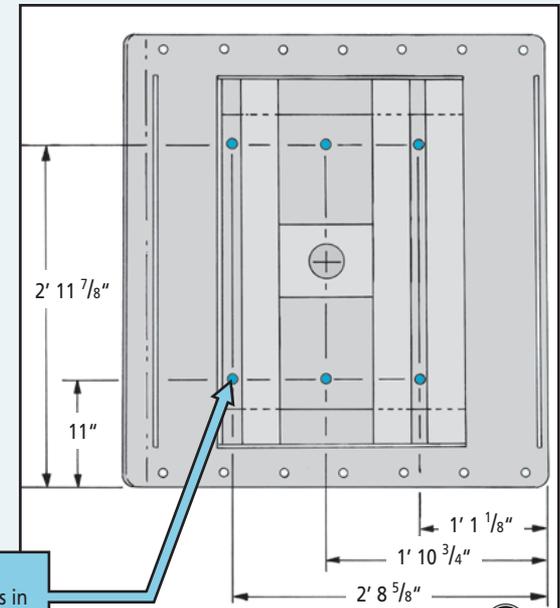
When overall thickness is less than .319 inches, the upper coupler isn't repairable and the tanker is deadlined. You'll have to remove and replace the king coupler weldment to bring your tanker back to a fully mission capable (FMC) status.

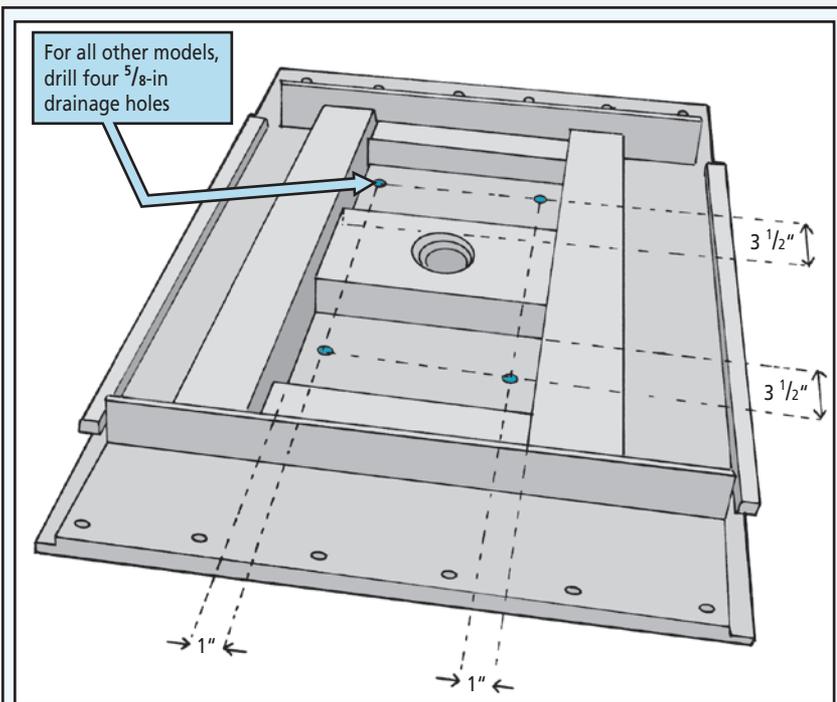
And when overall thickness is .319 inches or more on the upper coupler, it's serviceable, but you still need to take a few corrective steps.

First, remove all corrosion and old paint. Next, treat and repaint the area following the spot painting guidance in TB 43-0242, *WD CARC Spot Painting*. Then insert drainage holes in the kingpin coupler weldment.

Here's where those drainage holes should be located:

For M967A2 and M969A3 models, drill six 5/8-in holes in kingpin coupler weldment.





When you order kingpin couplers again, they will already have drain holes. So all you'll have to do is install them.

### Tanker Frame Inspection

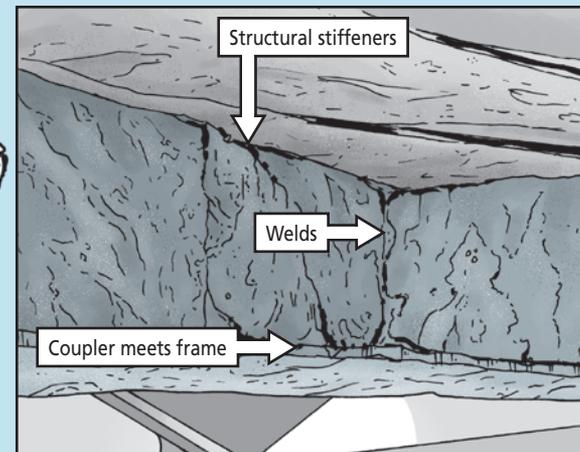
You'll need to inspect your fuel tanker's frame rails and high structural stress areas, too. Take a good look at the frame area under the upper coupler. Clean the corroded areas and then measure them with the caliper. The material must be .213 inches or more for the frame rails and structural components to be usable. See this table for more info:

Component	Original thickness (inches)	10 percent loss (inches)	15 percent loss (inches)	50 percent loss (inches)	150 percent repaired thickness (inches)
Tanker frame	.250	.225	.213	.125	.375
Tanker cross members	.250	.225	.213	.125	.375

You'll find high structural stress areas at structural stiffeners, where cross members connect with frame rails, and where bottom flanges meet with the beam web and weld joints. Even if you see only a little corrosion, you should still measure these areas.



BE SURE TO INSPECT ALL HIGH STRUCTURAL STRESS AREAS!



Determine the cross-sectional thickness of the corroded area using the vernier caliper. When the overall material thickness is .213 inches or more on the frame rails and structural components, remove all corrosion and any old paint. Then treat and repaint using TB 43-0242 for guidance.

If the thickness of the frame rails and structural components is less than .213 inches, the tanker is non-mission capable until repairs are made.

Areas that measure between .125 and .212 inches on the frame rails and structural components should be reinforced to .375 inches. The rebuild will require heavier sectional members, including backing plates. Refer to Para 5-5, Repairing Deterioration Caused by Corrosion, in TB 9-2510-242-40. Section IV of the TB gives you info on the equipment and skills necessary to repair the tankers.

If the frame rails and structural components have a thickness of less than .125 inches, the entire structural section, including the frame rails, cross members and structural stiffeners, must be replaced.

### Add to Annual PMCS

TACOM LCMC plans to update TM 9-2330-329-14&P, TM 9-2330-330-14&P, TM 9-2330-356-14&P, and TM 9-2330-398-24&P in FY14. The TM changes will include requirements to:

- perform an annual PMCS at the field maintenance level for each coupler plate check identified.
- annually inspect the coupler plate area for corrosion.
- disassemble and clean the potential corrosion problem areas as required.



# PLS... GET FLAT RACK DECKED OUT



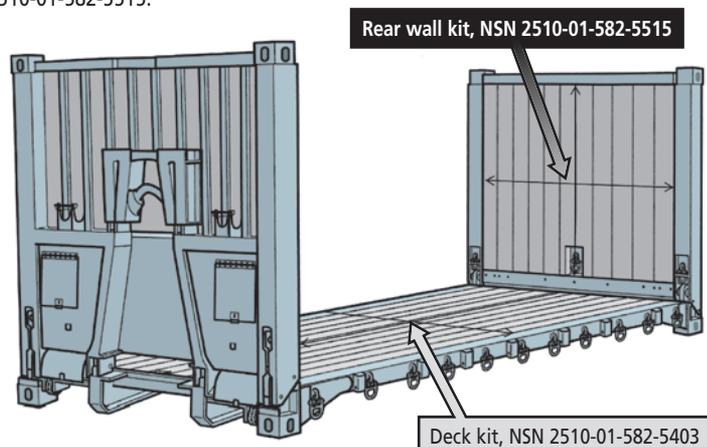
**N**eed to replace the decking on the M1 flat rack for your PLS? Wood decking kit, NSN 2510-01-582-5403, fits the bill. It replaces NSN 2510-01-582-5398, which is no longer available.

The kit actually contains two sub-kits: apitong wood, NSN 2510-01-582-5408, and plywood, NSN 2510-01-582-5396. Apitong is stronger and more durable than most other woods you can use. It resists rotting and ultraviolet rays, repels water and requires little maintenance.

The boards in these kits are not cut to fit or pre-drilled, though. That means you'll need a carbide saw blade and carbide-tipped drill bits to work with the apitong wood.

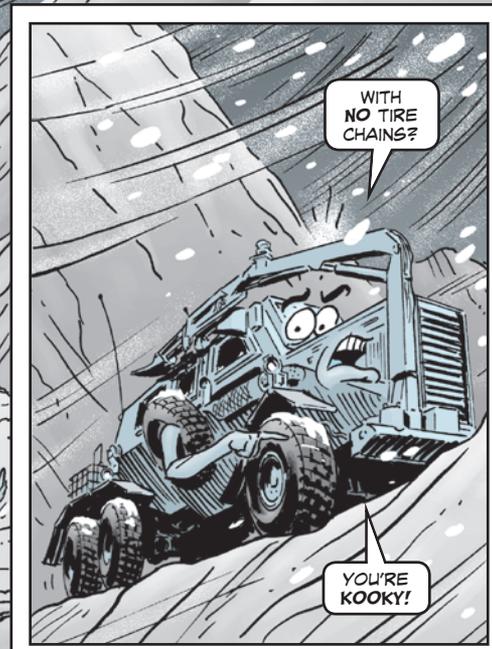
Attaching hardware is also not included, so you'll need to order it separately from Figs 3012 and 3015 in TM 9-2320-319-13&P.

If you need to replace the flat rack's rear folding wall, order the wood kit that comes with NSN 2510-01-582-5515.



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# Route Clearance Vehicles...



# GET TIRE CHAINS FOR SNOWY PASSES

Dear Half-Mast,  
We have several different route clearance protection vehicles that have to travel through the snowy mountain passes of Afghanistan. Are tire chains available for the Husky, M-ATV, MaxxPro, M984A4 HEMTT wrecker and FPI Buffalo?

SSG J.S.

Dear Sergeant J.S.,  
You bet! Here's the list of tire chain NSNs you'll need:

Vehicle	Snow Chain, NSN 2540-
M1240/M1245 M-ATV MRAP	01-492-2989
M1240A1 M-ATV MRAP	01-593-1152
MaxxPro, MaxxPro Plus (front)	01-483-2930
MaxxPro Plus (rear)	01-569-3146
MaxxPro Dash	01-483-2930
MaxxPro Dash ISS	01-597-3332
M984A4 wrecker	01-152-7813
FPI Buffalo	01-152-7813

*Half-Mast*

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### Backhoe Loader...

WOW!  
THIS  
DOESN'T  
LOOK  
GOOD!

YOU'RE  
TELLIN'  
ME!

I'VE BEEN SITTING OUT  
HERE ALL NIGHT AND NOW I'M  
FROZEN TO THE GROUND!



## HEAD FOR HIGH GROUND AT DAY'S END

At the worksite, mud that is wet and soft during the day can freeze hard as concrete at night. That means a backhoe loader (BHL) left sitting in the mud at day's end isn't going anywhere the next morning.

If that happens to you, don't try to rock the vehicle loose. That only damages the vehicle's drive train components.

Your best bet is to avoid that situation entirely. So here's what to do before the sun goes down:

- Park your backhoe on high ground if possible. Water drains downhill, so the mud won't be quite as deep.



- Don't park in deep ruts worn by other vehicles. Some of those ruts can be deep enough to cover or sink the backhoe's wheels.

- Use a shovel to scoop out mud that accumulates on and behind the wheels. If there's no mud, it can't freeze.

- Whenever possible, put boards under the bucket up front and at the rear of the vehicle. That keeps both buckets from freezing to the ground.

NOW MY BUCKETS WON'T  
FREEZE IN THE MUD!



### Construction Equipment...

SPRAY CAN  
ETHER?

NO WAY!



SOME DO-  
SOME DON'T.



THAT IS, SOME VEHICLE  
ENGINES DO HAVE  
STARTING AIDS BUILT-IN  
AND SOME DON'T.

WHETHER OR NOT YOUR  
EQUIPMENT HAS A  
STARTING AID, NEVER  
USE SPRAY-CAN ETHER.



USING ETHER WHERE IT'S NOT  
SUPPOSED TO BE USED WILL  
CRACK PISTONS, BEND RODS  
AND RUIN HEADS.



WHEN YOUR  
CONSTRUCTION  
EQUIPMENT  
WON'T START,  
HERE'S WHAT  
TO DO...



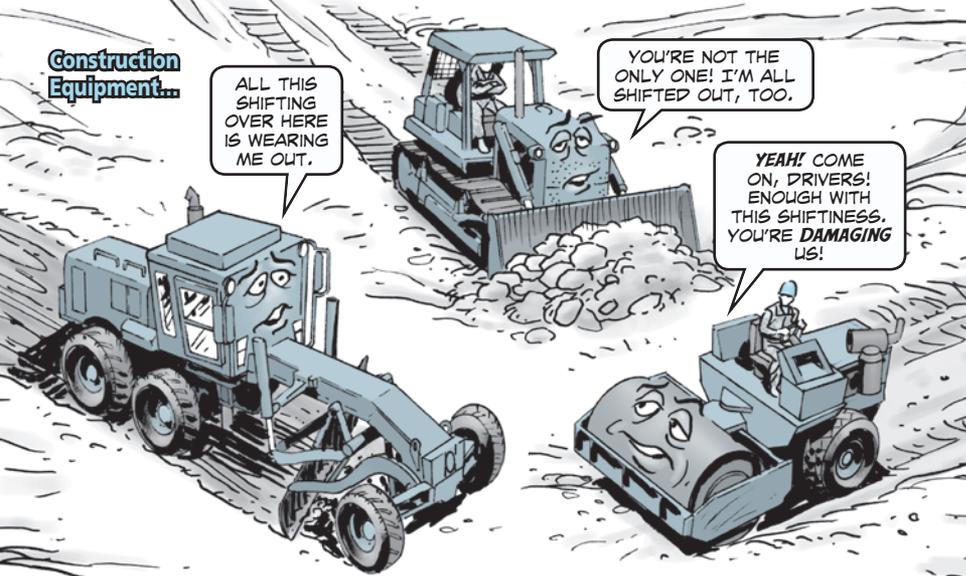
- Troubleshoot your vehicle according to its TM.
- Go easy on the vehicle's starter. Never keep the starter engaged for more than 15 seconds.
- If your vehicle has an empty ether canister, have your mechanic replace it.
- If your vehicle won't start after three tries, call in your mechanic to find out what's wrong.

## Construction Equipment...

ALL THIS SHIFTING OVER HERE IS WEARING ME OUT.

YOU'RE NOT THE ONLY ONE! I'M ALL SHIFTED OUT, TOO.

YEAH! COME ON, DRIVERS! ENOUGH WITH THIS SHIFTINESS. YOU'RE DAMAGING US!



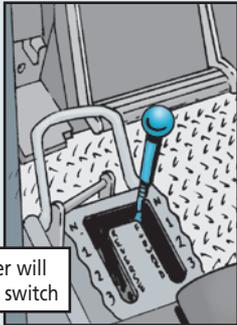
# IT'S A SHIFTY BUSINESS

Some operators are known for their slam-bam mode of shifting at the work site. Problem is, this type of shifting causes lots of unnecessary wear and tear on the vehicle's engine and transmission. It can also damage other components, such as...

### D7/D8 Tractors

Slow and easy is the best way to shift the dozer from neutral to reverse. Slamming the shifter sideways from neutral, then down into reverse, will break the backup alarm's magnetic switch inside the shift console.

A busted switch means the backup alarm won't sound off in reverse. Then the dozer is NMC.

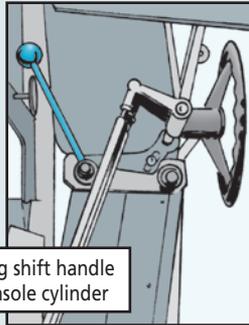


Slamming shifter will break magnetic switch

### 130G Graders

After operation, use a little TLC when you shift the grader's console tower to the upright position. Putting a heavy hand on the tower's shift handle can break the master console cylinder inside the tower.

Once the cylinder is shot, the console tower is NMC and your grader is down for repairs.



Strong-arming shift handle can break console cylinder

### RS28 Tampo Roller

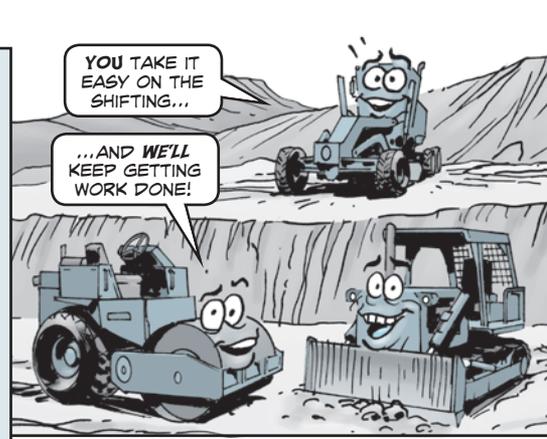
It's really easy to get into the hard-and-fast mode of shifting gears when operating the roller. After all, you're constantly shifting into forward and reverse as the roller compacts a road's gravel bedding.

But, every time you shift into or out of gear without stopping, you're putting lots of stress on the roller's hydrostatic transmission. That's bound to shorten its life.

Plain and simple: bring your roller to a complete stop before shifting.

YOU TAKE IT EASY ON THE SHIFTING...

...AND WE'LL KEEP GETTING WORK DONE!

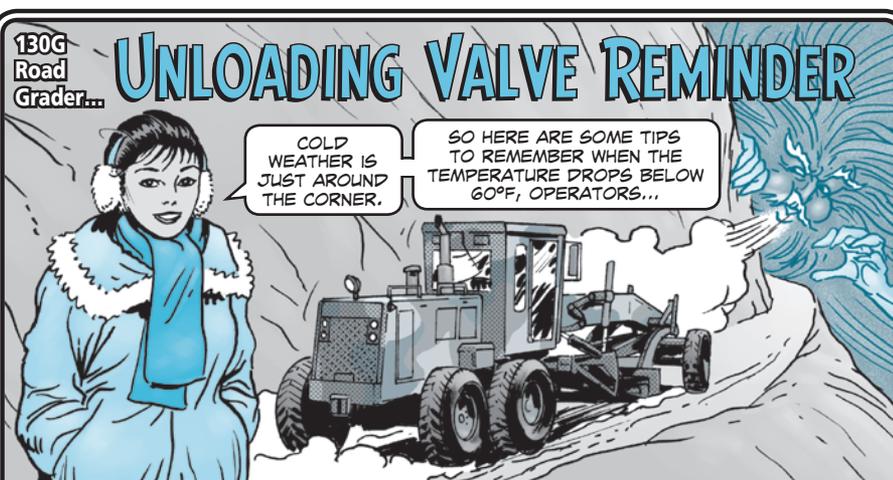


### 130G Road Grader...

# UNLOADING VALVE REMINDER

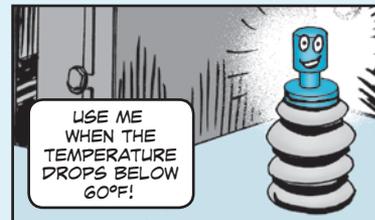
COLD WEATHER IS JUST AROUND THE CORNER.

SO HERE ARE SOME TIPS TO REMEMBER WHEN THE TEMPERATURE DROPS BELOW 60°F, OPERATORS...

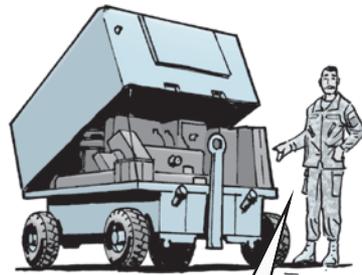


Use the road grader's hydraulic unloading valve when you start the vehicle's engine. When you're sitting in the driver's seat, it's located on the cab floor by your left foot.

As the engine warms up, do not take your foot off the valve too fast. That forces too much pressure from the pump into the system's main hydraulic lines. The result is blown seals with lots of leaks.



# Nitrogen Bottle Fill Kit Parts Needed for GANG

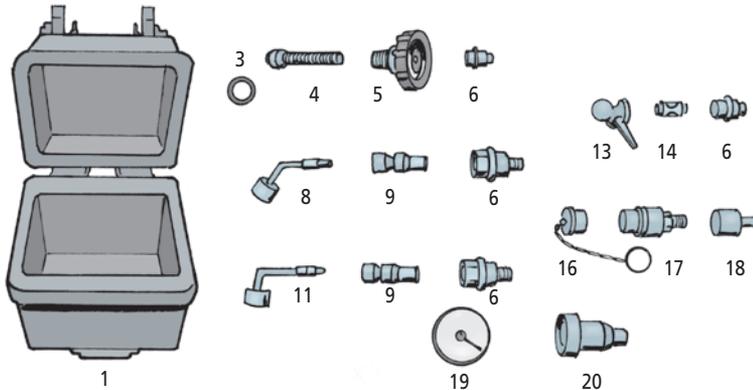


MECHANICS, IF YOU HAVE THE GENERIC AIRCRAFT NITROGEN GENERATOR (GANG)...

...NSNs 3655-01-568-2711, 3655-01-598-1954, AND 3655-01-463-3338...

YOU'RE GOING TO NEED PARTS FOR THE NITROGEN BOTTLE FILL KIT. CHECK OUT THESE PARTS...

Item No.	Nomenclature	NSN	P/N
1	Photographic case	6790-01-491-2028	1300NF black
3	O-ring	5331-00-579-8108	01077C6283U24B7
4	Gas cylinder nipple	4730-01-068-2379	15-4
5	Manifold assembly hand nut	4730-01-300-3048	692P
6	QD male adapter	4730-01-281-4398	3010-2
8	Air inflating chuck	4730-00-142-5207	734114-1
9	Pipe-to-tube straight adapter	4730-01-443-9822	6505-4-4
11	Air inflating chuck	4730-00-142-5164	7347114-30
13	Air inflating chuck	4730-00-277-6948	698
14	Pipe nipple	4730-01-380-0435	5404-04-04
16	Dust & moisture protective plug	5340-00-157-5661	3005-2
17	Self-sealing coupling half	4730-01-281-4399	3050-2
18	Pipe-to-boss straight adapter	4730-00-580-8171	MS51503B4-4S
19	Self-indicating thermometer	6685-01-233-3481	312F
20	QD coupling half	4730-00-511-0794	TL-251-4MP



Make a note that TM 1-3655-245-13&P will have the nitrogen bottle fill kit information added in the next change.

Information on the nitrogen bottles is on the Joint Tactical Data Integration (JTDI) website: <https://upw.jtidi.mil>

It is CAC-enabled. Once there, click on the AGSE tab and then look under Equipment. Click on Generic Aircraft Nitrogen Generator (GANG). Then click on the GANG Nitrogen Bottle Fill Kit Breakdown link to view the parts list.

## OH-58D... Protect Your Aircraft With Covers

HAVE YOU SEEN THE COVERS FOR MY BIRD?

NOPE, BUT I FOUND A LIST OF COVERS IN PS THAT WE CAN ORDER!

GET ME THOSE COVERS! THEN I WON'T HAVE TO STAY INDOORS WHEN THE WEATHER TURNS BAD!

ALL AIRCRAFT NEED PROTECTION FROM THE ELEMENTS, INCLUDING THE KIOWA WARRIOR.

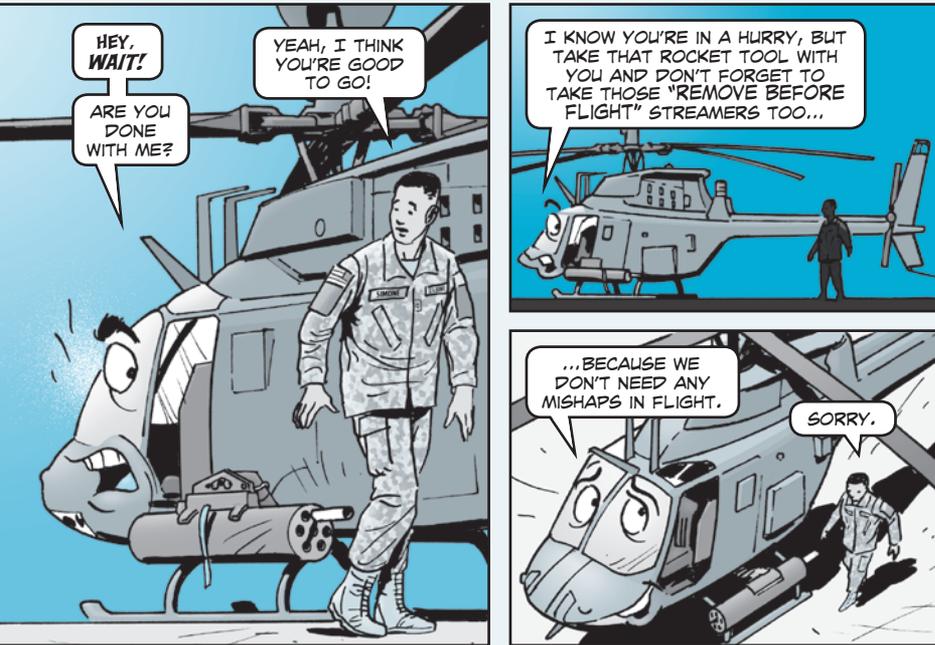
IF YOU DON'T HAVE THE COVERS YOU NEED, CHECK OUT THIS LIST OF AVAILABLE COVERS FOR YOUR AIRCRAFT.

AND MAKE SURE YOU REFER TO TB 1-1520-248-20-84 FOR ALL COVERS.



Item	NSN
Kiowa Warrior operational cover kit	1689-01-587-1025
MMS cover	1730-01-587-7111
AGM-114 Hellfire missile cover - right	1730-01-587-7120
AGM-114 Hellfire missile cover - left	1730-01-587-7125
M3P .50 cal machine gun cover	1730-01-587-7115
Tail rotor cover	1730-01-587-7139
M260 70mm rocket pod launcher cover - right	1730-01-587-7124
M260 70mm rocket pod launcher cover - left	1730-01-587-7141
Nose/windscreen cover	1730-01-587-7108

# DON'T FORGET ROCKET TOOL!



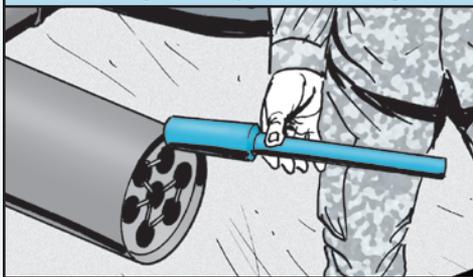
A helicopter brought down by a foreign object is a serious matter, folks. That's why attention to detail is of the utmost importance.

Before a mission, when it's time to load rockets using the rocket loading/unloading tool, NSN 1005-01-536-7961, don't get in too much of a hurry. That could be costly for your aircraft and life threatening to you.

When loading rockets into the launcher, you may have to use the loading/unloading tool to get them all the way in. But when you're done, don't forget the tool! In some cases, the tool has been left in the launcher. When the aircraft takes off, the tool can fly into the main or tail rotor blades, causing major damage that could bring down your aircraft.

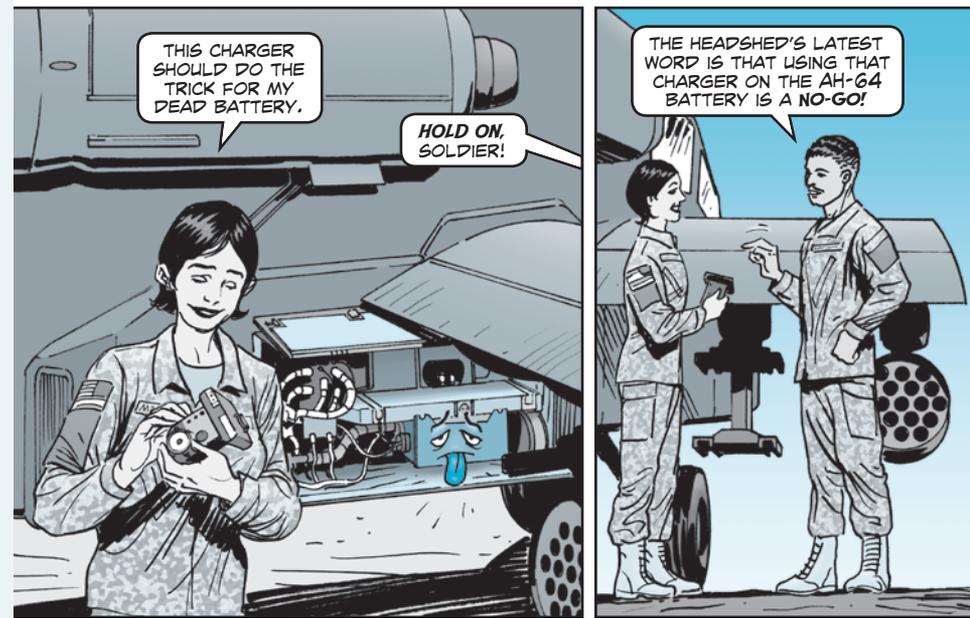
Keep in mind that preventive maintenance also means preventing accidents.

Remove loading/unloading tool after loading rockets



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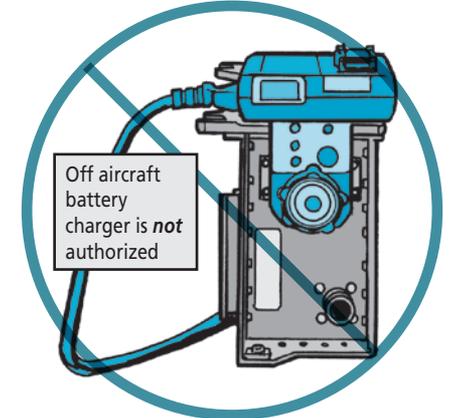
# Battery Charger *Not* Authorized



Mechanics, Page 38 of PS 683 (Oct 09) stated you could use an off-aircraft battery charger, NSN 6130-01-465-2674, for recharging a dead AH-64 battery.

Newsflash! The CECOM headshed now says the battery charger is **not** authorized for recharging dead batteries off the aircraft.

The battery charger may not be strong enough to recharge a dead battery. Until CECOM engineering and the manufacturer evaluates the charger, it's a **no-go!** If your aircraft battery is dead and needs charging, follow the good word in TM 1-1520-Longbow/Apache, EM 0126, which says to charge the battery on the aircraft for one hour using an aviation ground power unit (AGPU).



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# Repair Parts Needed at Depot NOW!

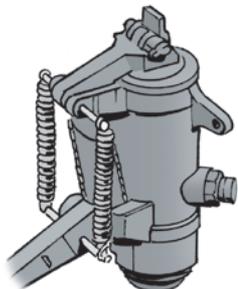


**M**echanics and supply personnel, getting parts for your AH-64 aircraft won't happen if you don't turn in broken parts to a depot for repair.

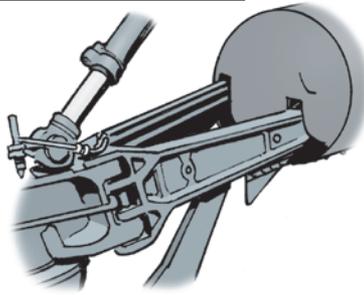
Corpus Christi Army Depot (CCAD) needs you to return unserviceable and defective parts for repair, ASAP! Check your supply rooms and shops for these parts:

- Cylinder assembly, NSN 1650-01-153-2314
- Tail gear assembly arms, NSN 1620-01-154-7057
- Trailing arm assemblies, NSN 1620-01-147-4777

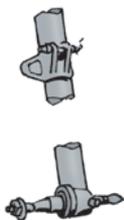
Cylinder assembly...



...tail gear arm assembly...



...and trailing arm assembly...



...all go to CCAD if defective or unserviceable

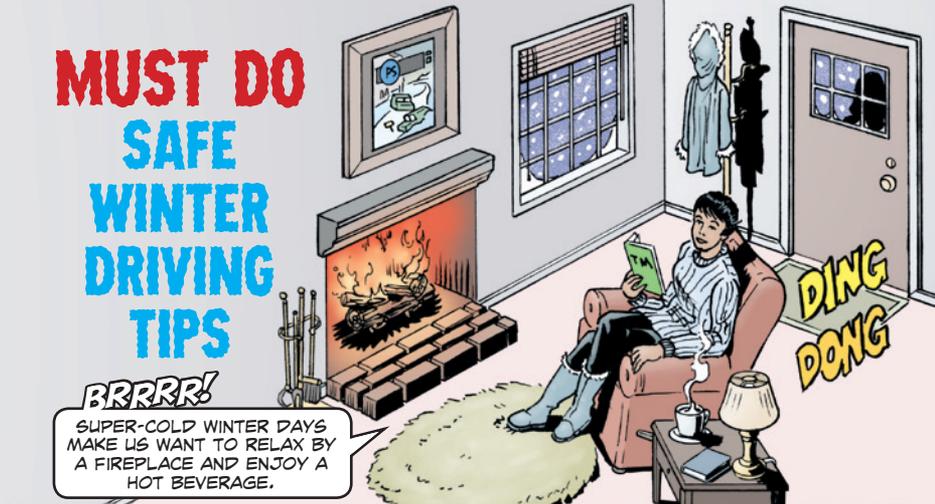
Send the assemblies to Plant 7015/RIC B52, Corpus Christi Army Depot, TX 78419. Serviceable credit became effective in October 2013.

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# MUST DO SAFE WINTER DRIVING TIPS

**BRRRR!**

SUPER-COLD WINTER DAYS MAKE US WANT TO RELAX BY A FIREPLACE AND ENJOY A HOT BEVERAGE.



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# Speed

ADJUST YOUR SPEED TO ROAD CONDITIONS.

STEEP HILLS, SHARP CURVES AND ICE- OR SNOW-COVERED ROADS MEAN TROUBLE IF YOU DON'T!

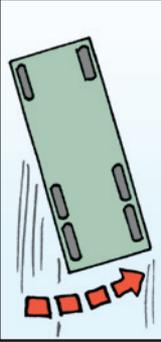
AND ON A SLICK ROAD, DON'T COUNT ON YOUR BRAKES TO STOP YOU IN A HURRY.

SLAMMING ON THE BRAKES WILL MAKE YOUR VEHICLE SLIDE.

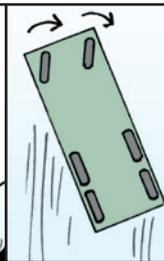
OK, FINE. HOW ABOUT SKIDDING?

EASY!

SUPPOSE YOUR TAIL IS SWINGING TO THE RIGHT...



TAKE YOUR FOOT OFF THE GAS AND TURN YOUR STEERING WHEEL IN THE DIRECTION YOUR REAR IS SKIDDING.



IF DRIVING A TRACTOR-TRAILER, STEER AWAY FROM THE DIRECTION OF THE SLIDING TRAILER.

AND DON'T OVERSTEER. STEER JUST ENOUGH TO CORRECT THE SKID.

ALSO, LOOK AHEAD FOR DANGERS AND KEEP YOUR EYES MOVING. BE READY TO REACT OR STOP AT ALL TIMES. WHEN STOPPING, AIM TO STOP 20 TO 30 FEET SHORT TO ALLOW FOR UNEXPECTED TROUBLE.

USE ENOUGH POWER TO HELP YOU AROUND CURVES AND TO HOLD TRACTION—THE ALL-IMPORTANT GRIP YOUR TIRES HAVE ON THE ROAD.

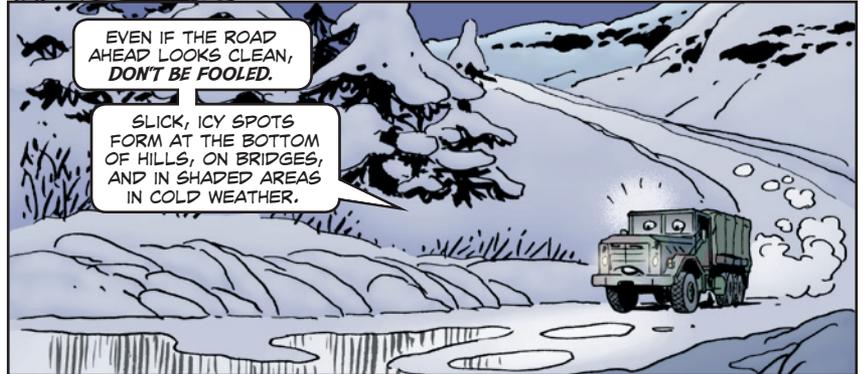
BE SUPER-CAUTIOUS ON SHARP CURVES. IF YOU GO TOO FAST, CENTRIFUGAL FORCE WILL SLING YOU OFF THE ROAD, CREATING A BAD DAY FOR YOU AND YOUR UNIT.

SO SLOW DOWN BEFORE GOING INTO A CURVE OR DOWNGRADE. ENGINE DRAG HELPS, TOO. JUST EASE OFF THE THROTTLE.



EVEN IF THE ROAD AHEAD LOOKS CLEAN, DON'T BE FOOLED.

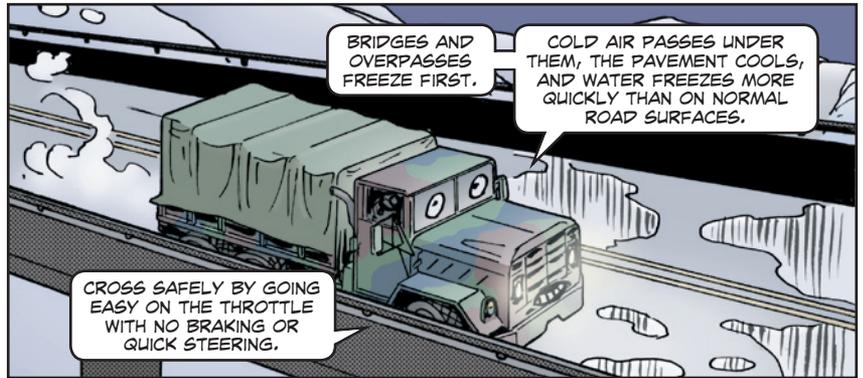
SLICK, ICY SPOTS FORM AT THE BOTTOM OF HILLS, ON BRIDGES, AND IN SHADED AREAS IN COLD WEATHER.



BRIDGES AND OVERPASSES FREEZE FIRST.

COLD AIR PASSES UNDER THEM, THE PAVEMENT COOLS, AND WATER FREEZES MORE QUICKLY THAN ON NORMAL ROAD SURFACES.

CROSS SAFELY BY GOING EASY ON THE THROTTLE WITH NO BRAKING OR QUICK STEERING.



## Hills

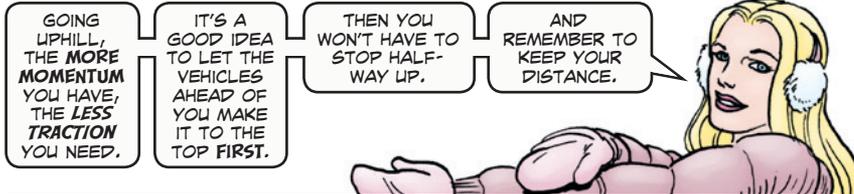


WHEN CLIMBING A HILL, MOMENTUM AND TRACTION ARE YOUR FRIENDS.

THANKS, GUYS!  
I COULDN'T HAVE  
DONE IT WITHOUT  
YOU!

HOWEVER, **YOU** CALL THE SHOTS. REMEMBER...

- If momentum is too slow for wheel speed, the result is lost traction and spinning wheels.
- If momentum is too fast for wheel speed, that also results in lost traction and the vehicle skids.
- If momentum is in tune with wheel speed, you have traction and good control.



GOING UPHILL, THE MORE MOMENTUM YOU HAVE, THE LESS TRACTION YOU NEED.

IT'S A GOOD IDEA TO LET THE VEHICLES AHEAD OF YOU MAKE IT TO THE TOP FIRST.

THEN YOU WON'T HAVE TO STOP HALF-WAY UP.

AND REMEMBER TO KEEP YOUR DISTANCE.



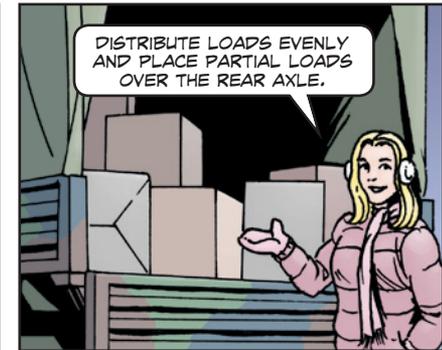
TRY TO GET TO THE TOP OF THE HILL IN ONE **SMOOTH UNINTERRUPTED** RUN.

GET A RUNNING START SO WHEN YOU REACH THE PEAK, YOU'VE GOT ENOUGH MOMENTUM LEFT TO GET YOU OVER.

## Tires



KEEP TIRES PROPERLY INFLATED AND IN GOOD CONDITION TO HELP TRACTION.

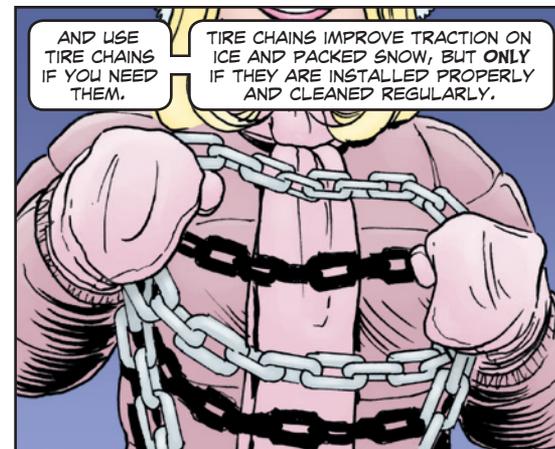


DISTRIBUTE LOADS EVENLY AND PLACE PARTIAL LOADS OVER THE REAR AXLE.



AVOID BAD DRIVING, LIKE QUICK STARTS, SUDDEN STOPS AND SHARP TURNS.

THEY CAUSE YOU TO LOSE TRACTION.



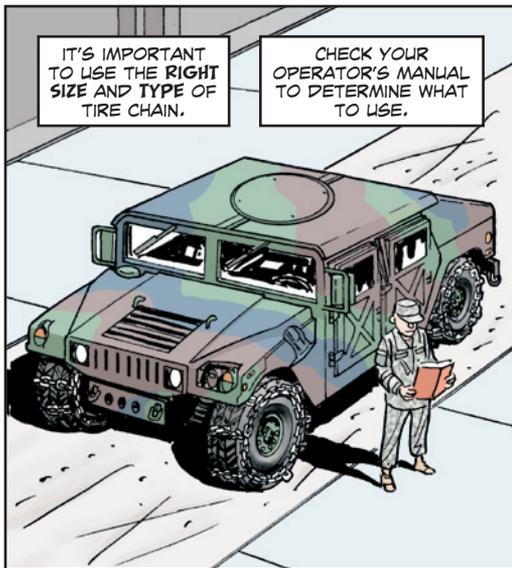
AND USE TIRE CHAINS IF YOU NEED THEM.

TIRE CHAINS IMPROVE TRACTION ON ICE AND PACKED SNOW, BUT ONLY IF THEY ARE INSTALLED PROPERLY AND CLEANED REGULARLY.



CHAINS THAT ARE PACKED WITH ICE WON'T WORK THE WAY THEY SHOULD.

I'D LIKE TO HELP. REALLY I WOULD!



IT'S IMPORTANT TO USE THE RIGHT SIZE AND TYPE OF TIRE CHAIN.

CHECK YOUR OPERATOR'S MANUAL TO DETERMINE WHAT TO USE.

IN MOST CASES, THIS INFORMATION IS FOUND ON THE ADDITIONAL AUTHORIZATION LIST (AAL).

YOU CAN ALSO CHECK OUT TC 21-305-20, MANUAL FOR THE WHEELED VEHICLE OPERATOR, FOR AN EXPLANATION ON HOW TO INSTALL TIRE CHAINS.



IF YOUR VEHICLE ISN'T LISTED IN THE FIRST CHART, GET THE CHAINS YOU NEED USING THIS CHART FOR COMMON TIRE SIZES...

Tire size	Chain assembly (Pair) NSN 2540-	Cross chain NSN 2540-	Swivel hooks NSN
7.50x16	00-528-7360	00-933-6960	4030-00-937-0405
9.00x20	00-933-9024	00-933-6916	2540-00-937-0404
9.50x16.50	00-057-0204	00-933-6916	2540-00-937-0404
10.00x15	01-185-8306	00-933-6916	2540-00-937-0404
10.00x20	00-933-9034	00-933-6916	2540-00-937-0404
10.00x20 (dual tires)	00-933-9034	00-933-6916	2540-00-937-0404
11.00x18	00-933-6933	00-933-6915	2540-00-937-0404
11.00x20	00-933-9022	00-933-6915	2540-00-937-0404
11.00x24	00-933-6935	00-933-6915	2540-00-937-0404
12.00x20	00-933-6922	00-933-6915	2540-00-937-0404
14.00x20	00-933-9033	00-933-6992	2540-00-937-0404
14.00x24	00-933-9023	00-933-6992	2540-00-937-0404
16.00x20	01-152-7813	Not Available	Not Available

USE THIS CHART TO ORDER TIRE CHAIN ASSEMBLIES FOR THE SPECIFIED WHEELED VEHICLE...

Wheeled vehicle	Tire size	Chain assembly NSN 2540-
FMTV	395/85R20	01-483-2930 or 01-492-2989
HEMTT/HET/PLS	16x20	01-152-7813
HMMWV	37x12.5x16.5 (radial)	01-214-1264
M915A2/A3/A4	11R22.5	01-453-0497
M916A1/A2/A3 and M917A1/A2/E1/E2	315/80R22.5	01-396-1914
M939	11x20	00-933-9022
M939A1/A2	14x20	00-933-9033

HAVE YOUR SUPPLY CLERK CHECK FSC 2500 FOR OTHER CHAINS NOT LISTED HERE.

FOR MORE INFORMATION, CONTACT THE DLA CONTACT CENTER AT DSN 661-7766/(877) 353-2255 OR EMAIL: [dlacenter@dlamil](mailto:dlacenter@dlamil)

ALTHOUGH TIRE CHAINS ARE DESIGNED TO FIT SNUGLY, YOU SHOULD STILL ALLOW ROOM FOR SOME CREEP.

ALSO, TIGHTEN THE CHAINS BY HAND, INSTEAD OF USING TOOLS.

THIS HELPS PREVENT OVERTIGHTENING THAT CAN GOUGE TIRES.

IF THE CHAINS ARE TOO LOOSE AFTER YOU TIGHTEN THEM BY HAND, USE TIRE STRAPS TO SNUG DOWN THE TIRE CHAINS.

HERE'S SOME INFO FOR SELECTING STRAPS...

Size (in inches)	Stretch (in inches)	NSN 5340-
15	20-30	01-029-9084
21	26-42	01-231-6015
31	36-42	01-029-9085

## Shifting

USE CARE WHEN SHIFTING DURING WINTER DRIVING, ESPECIALLY WHILE DOWNSHIFTING. DOWNSHIFTS CAN BREAK TRACTION, SO MAKE EACH SHIFT AS **SMOOTH** AS POSSIBLE.

WITH A MANUAL TRANSMISSION, YOU COULD GET OVER THE TOP OF THE HILL USING ONE OR TWO GEARS LOWER THAN YOU'D USE UNDER IDEAL CONDITIONS.

ON A DRY ROAD, YOU MIGHT WANT TO SHIFT DOWN TO A LOWER GEAR TO USE THE ENGINE AS A BRAKE. BUT ON ICE, THAT CAN CAUSE PROBLEMS.

THE ENGINE HOLDING BACK YOUR WHEELS IS APPLYING FORCE TO THEM, JUST AS THE BRAKES WOULD DO. IT CAN THROW YOU INTO A SKID. SO IF YOU FEEL YOUR VEHICLE START TO SLIDE, **SPEED UP** UNTIL YOUR WHEELS ARE NO LONGER SLIDING.



## Braking



IF YOU HAVE CONVENTIONAL HYDRAULIC BRAKES, PUMPING 'EM IS PERMITTED.

BUT IF YOUR VEHICLE HAS ANTI-LOCK BRAKES (ABS), **DO NOT PUMP** THEM.



APPLY FIRM, EVEN PRESSURE INSTEAD.



AND IF YOU HAVE AIR BRAKES, APPLY LIGHT, STEADY PRESSURE.

**DON'T PUMP 'EM!**

IF YOUR VEHICLE HAS A JACOBS BRAKE—KNOWN AS A **JAKE BRAKE**—**DON'T** USE IT IN SLIPPERY CONDITIONS.

IN ICY CONDITIONS, IT TAKES UP TO **12 TIMES** THE NORMAL DISTANCE TO STOP.

SO MAKE SURE YOU ALLOW PLENTY OF ROOM TO STOP.



AND NEVER SLAM ON THE BRAKES!

FRONT WHEELS LOCK WITH HEAVY BRAKING AND YOU LOSE STEERING.



SO DON'T SLIP UP ON YOUR WINTER DRIVING!

THE RESULTS COULD BE **CHILLING!**

Small Arms...

# DON'T GAMBLE WITH AMMO



GAMBLING WITH AMMO IS LIKE PLAYING **RUSSIAN ROULETTE**—YOU DON'T KNOW IF YOU'LL SURVIVE THE EXPERIENCE. IT'S JUST **NOT WORTH THE RISK.**

LOAD UP ON THESE AMMO POINTS TO MAKE YOUR AMMO A **SURE THING...**

USE ONLY **AUTHORIZED** AMMO.

THAT SEEMS PRETTY BASIC, BUT SOLDIERS HAVE BEEN FOUND TO BE USING AMMO FROM OTHER COUNTRIES.

SOMETIMES THEY WEREN'T EVEN AWARE THEY WERE USING UNAUTHORIZED AMMO.

UNAUTHORIZED AMMO CAN'T BE RELIED ON AND **SHOULDN'T** BE USED.



HEY, **BRO!**

I'VE GOT AMMO I CAN LET YOU HAVE FOR **CHEAP.**

PS MORE

HERE IS THE AMMO AUTHORIZED FOR THE M16-SERIES RIFLE, M4/M4A1 CARBINE AND M249 MACHINE GUN...

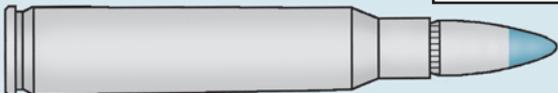
### M16/M16A1

These older weapons are designed to shoot the M193 (ball) and M196 (tracer) cartridge. Because the M16/M16A1 has a one turn in 12 inches twist, it can't accurately shoot the heavier bullets used in the M16A2/M4-series. You can ID M193 cartridges by their unpainted bullet tips and M196s by their red tips.

M193 has an unpainted tip



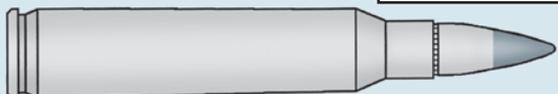
M196's is red



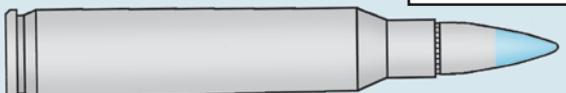
### M16A2/M16A4, M4/M4A1

They have a one turn in seven inch rifling twist and work best with the M855 (ball) and M856 (tracer) cartridges. If you shoot M193 or M196 cartridges, your effective range is reduced 16 percent. M855 cartridges have a green tip and M856s have an orange tip.

M855 has green tip



M856's is orange



### M249

THE M249 ALSO WORKS BEST WITH THE M855 AND M856 CARTRIDGES.

IF YOU SHOOT M193 AND M196 CARTRIDGES, THE M249'S EFFECTIVE RANGE IS REDUCED FROM 1,000 METERS TO 500.



TACOM MAINTENANCE ADVISORY MESSAGE 05-038 AUTHORIZES THE USE OF BRITISH 5.56MM ROUNDS FOR TRAINING ONLY WITH THE M16A2/A4 RIFLE, THE M4/M4A1 CARBINE AND THE M249 MACHINE GUN.

THE BRITISH ROUND LEAVES MORE POWDER RESIDUE, WHICH CAUSES THE WEAPON TO JAM IF IT'S NOT CLEANED FREQUENTLY.



QUITE SO!

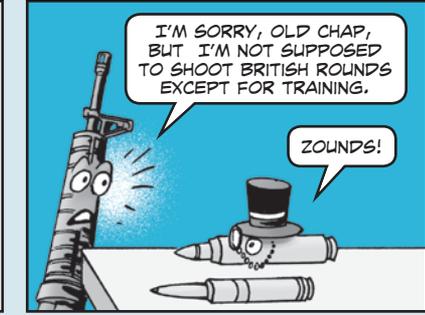
I CAN LEAVE QUITE A MESS.



BRITISH AMMO IS STAMPED ON ITS BASE WITH EITHER LIA2 OR L2A2.



WHEN YOU'RE THROUGH TRAINING, CLEAN YOUR WEAPON AND THEN RE-ZERO IT WITH U.S. AMMO.



I'M SORRY, OLD CHAP, BUT I'M NOT SUPPOSED TO SHOOT BRITISH ROUNDS EXCEPT FOR TRAINING.

ZOUNDS!

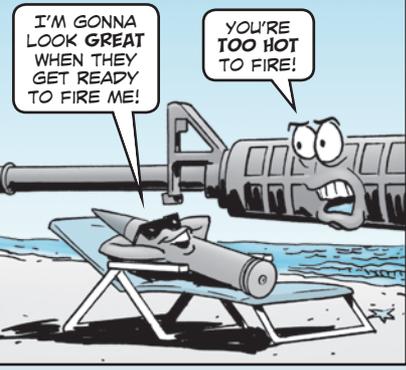
### Protect Ammo

IF AMMO IS LEFT LYING IN THE HOT SUN, ITS PROPELLANT BURNS FASTER, WHICH CREATES GREATER PRESSURE INSIDE YOUR WEAPON.

TOO MUCH PRESSURE CAN DAMAGE YOUR WEAPON.

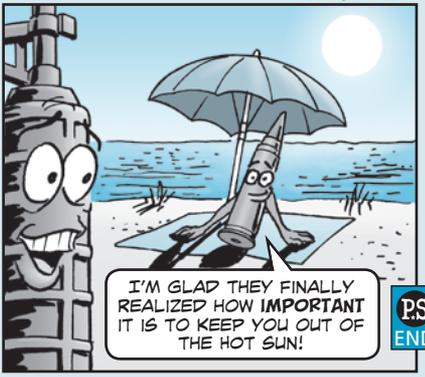


IF AT ALL POSSIBLE, KEEP AMMO SHADED. IF AMMO IS HOT, LET IT COOL BEFORE FIRING.



I'M GONNA LOOK GREAT WHEN THEY GET READY TO FIRE ME!

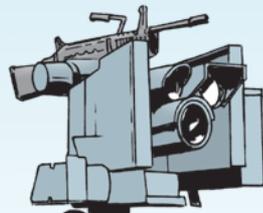
YOU'RE TOO HOT TO FIRE!



I'M GLAD THEY FINALLY REALIZED HOW IMPORTANT IT IS TO KEEP YOU OUT OF THE HOT SUN!

PS END

# New M240B Charging Handle Requires Adapter



HERE'S WHAT YOU'LL NEED TO USE WITH CROWS FOR THE NEW M240B MACHINE GUN CHARGING HANDLE.



Some of the M240B machine guns used on the M153 CROWS II (common remotely operated weapons station) have a new charging handle. But to use the new charging handle with CROWS II requires an adapter.

Weapons configured with the older charging handle can be used with CROWS II without the adapter. Look at the picture on Page 39 to see which charging handle your M240B uses.

The adapter has been issued to most affected units. The adapter comes with NSN 5340-01-578-0847 (PN 13021845, CAGE 19200). If your unit hasn't received it, contact the CROWS II item manager, Catherine Boultinghouse, at DSN 786-1363, (586) 282-1363, or email: [catherine.j.boultinghouse.civ@mail.mil](mailto:catherine.j.boultinghouse.civ@mail.mil)

To install the adapter, you need a 3mm hex-head wrench and a 7mm nut driver. The hex-head wrench is part of the CROWS II operator's tool kit.

The nut driver is being added to the tool kit. You can get a nut driver and the two attaching screws and lock nuts from your local CROWS II new equipment training team (NET) representative, the local CROWS II support group (CROWS Nest), your TACOM LAR or by ordering:

- Nut driver, NSN 5120-01-278-6697
- 2 screws, hex-head socket, NSN 5305-01-577-9519
- 2 nuts, self-locking, NSN 5310-01-577-9651

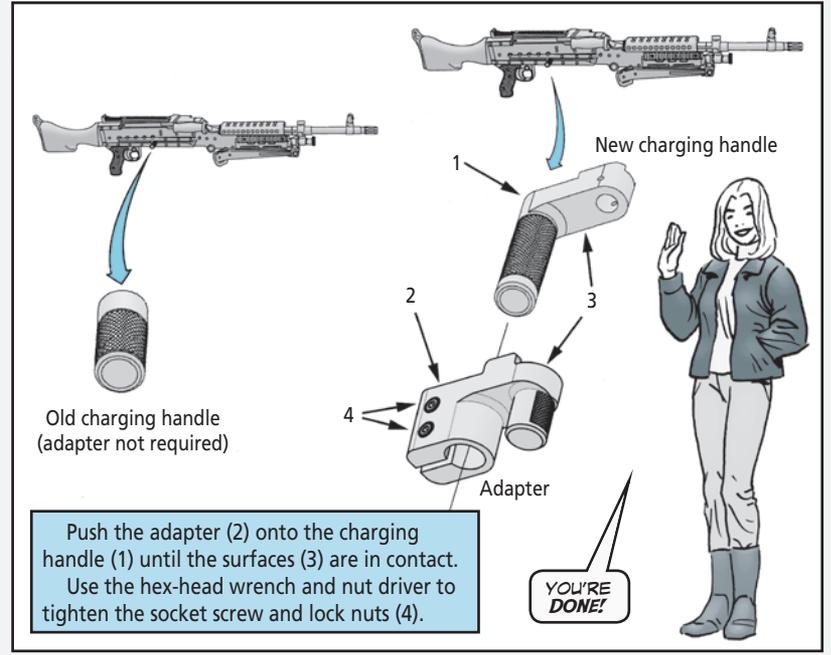
SOME OF THE FIRST ADAPTERS SENT TO THE FIELD HAD THE WRONG SAE 8-32 ATTACHING SCREWS.

REPLACE THEM WITH THE METRIC HARDWARE THAT COMES WITH THE NUT DRIVER.



Click here for a copy of these articles to save or email.

## Install the adapter like this:



Push the adapter (2) onto the charging handle (1) until the surfaces (3) are in contact. Use the hex-head wrench and nut driver to tighten the socket screw and lock nuts (4).

## Storing Modified M249s

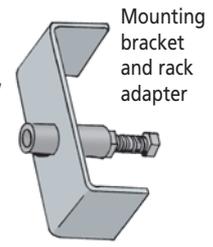
Dear Half-Mast,  
 TM 9-1005-201-23&P says that to store M249s with a short buttstock in the M13 rack, you need two different adaptors. But the TM doesn't tell you how to get the adaptors. Do they have NSNs?  
 Mr. P.R.

Dear Mr. P.R.,  
 The April 2013 edition of the TM does include these NSNs. To secure an M249 with a collapsible buttstock in the M13 rack, you need mounting bracket, NSN 1005-01-606-2583, and storage rack adaptor, NSN 1005-01-606-1875.

If your unit needs the mounting bracket and rack adaptor, contact TACOM's Jasmine Davis at DSN 786-1254, (586) 282-1254 or email: [jasmine.a.davis22.civ@mail.mil](mailto:jasmine.a.davis22.civ@mail.mil) or Jill Gibson at DSN 786-1653, (586) 282-1653, or email:

[jill.a.gibson4.civ@mail.mil](mailto:jill.a.gibson4.civ@mail.mil)

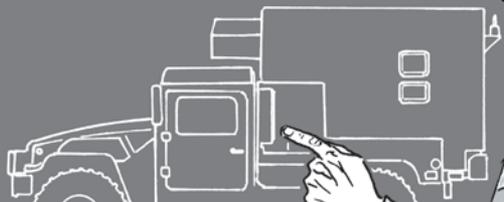
TACOM will send you the bracket and adapter as free issue.



Half-Mast

# The ABCs of JBPDS

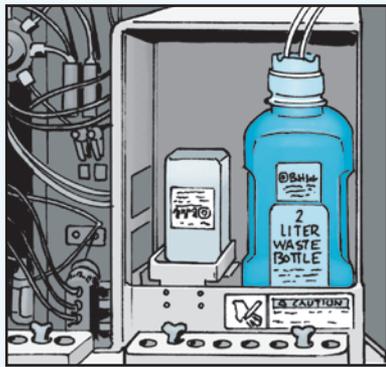
YOUR JOINT BIOLOGICAL POINT DETECTION SYSTEM (JBPDS) WILL SERVE YOU WELL IF YOU REMEMBER THE ABCS OF PM:



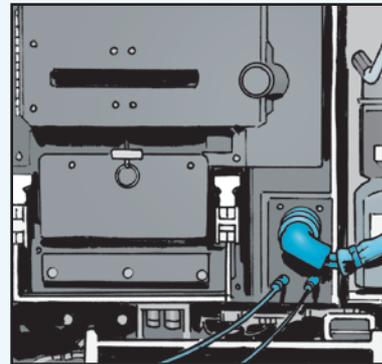
**Easy does it with the local controller sub-system (LCS).** If you bang on it hard, you can break the screen, which is expensive to replace. Tap with the stylus instead of your finger. You'll get better results.



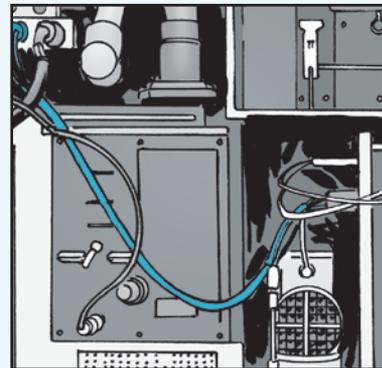
**Don't lose the waste bottles.** They often disappear after they've been emptied. And believe it or not, they're not cheap to replace. A good place to store them is in the basic bio suite unit (BBSU).



**Before removing the Identifier, first disconnect the electrical connection and fluid line.** If you forget, you'll rip out the line.



**If the collector or fluid transfer system (FTS) won't work, try replacing the FL1 lines.** A plugged line is often the culprit.

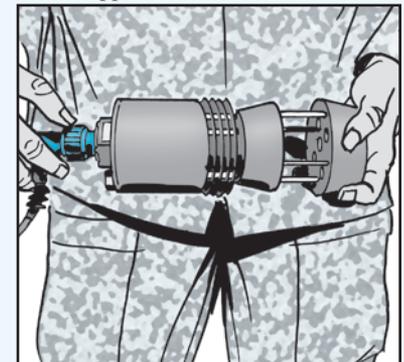


**Before closing the BBSU doors, make sure all cables are secure and out of the way.** Often operators leave cables hanging when they remove the biological agent warning system (BAWS). Then the cables are damaged when the doors are shut.

**Use a spotter when climbing up and down the shelter or working on the roof.** They can help prevent you from taking a long fall to the concrete.



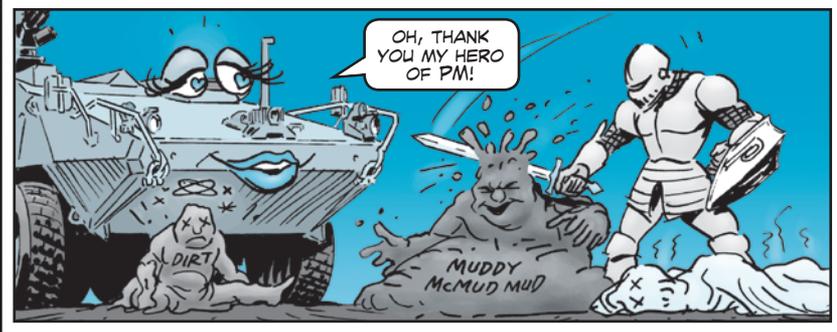
**Disconnect TACMET like this:** Turn the TACMET cable's ring, not the cable. If you twist the cable, its wiring can be ripped loose.



Remove the TACMET pole in two sections. If you try to remove the whole 8-ft pole in one piece, the top-heavy TACMET can come crashing down.

# PM Strikes Down Stryker Problems

THE SWORD OF PM WILL STRIKE DOWN YOUR CRIPPLING PROBLEMS, MY DEAR STRYKER!



**JLSLSCAD:** When you turn off the joint service lightweight standoff chemical agent detector (JLSLSCAD), be sure to finish by pulling out circuit breaker 3. Otherwise, next time you start up, the JLSLSCAD will automatically start scanning. If you're traveling while it's scanning, dirt will coat its lenses, making them less sensitive.

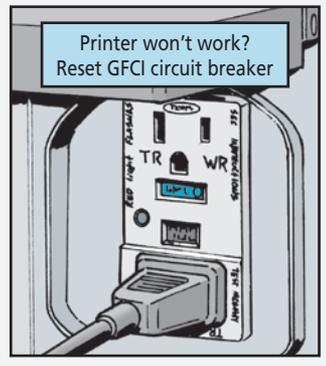
Remember, during travel the lenses should always face the rear. That helps protect them from flying debris. There are covers that come with the JLSLSCAD. If they disappear, TM 3-6665-353-13&P authorizes you to order more through your contractor support.



**Tow pintle:** Because the NBCRV has a rear deck instead of a ramp, it has an extended pintle. To use the extended pintle, go to "Pintle Plug and Pintle Hook Assembly Removal/Installation" in TM 9-2355-326-10 for instructions.

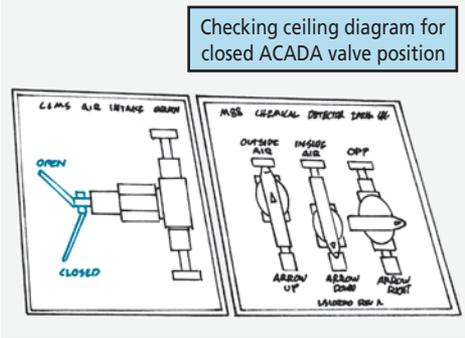
**Tow bar:** If you stow the tow bar wrong, you can't open the surveyor's hatch. That could be fatal in an emergency. The handle for the tow bar must point upward when it's stowed. See WP 0166, "Remove/Install Tow Bar from Stowage Brackets," in TM 9-2355-326-10-1 for the scoop on stowing.

**Printer:** If the GFCI circuit breaker trips, the printer won't work. If the printer doesn't respond, try resetting the circuit breaker (it's for the 110 inverter) before calling for a repairman.



Printer won't work?  
Reset GFCI circuit breaker

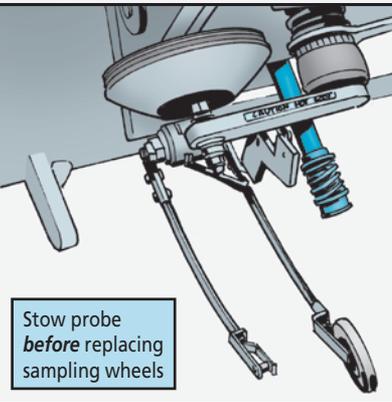
**M88 ACADA:** If you leave the ACADA intake and exhaust valves open all the time, that will eventually foul up the detector cells. At shutdown, close both valves. Check the diagram on the ceiling that shows the ACADA's open and closed positions to make sure you have the valves closed.



Checking ceiling diagram for closed ACADA valve position

**Air conditioning:** It is critical when running the A/C to have the overpressure turned on and the hatches closed. Otherwise, so much condensation collects that water can start blowing out the vents in the suite. That moisture can ruin some very expensive electronic components.

**Probe safety:** Before you replace the sampling wheels, first store the probe. The probe can reach a temperature of 446°F. It's not something you want to accidentally bump into!



Stow probe before replacing sampling wheels



PS  
END

M26 Decon...

# PREVENT FUEL FIRE



ARE YOU SURE I'M PUTTING THIS IN RIGHT?

SHOULDN'T THE LID FACE AWAY FROM THE BURNER?

WELL, THE TM SHOWS THE CAN GOING IN THE WAY YOU HAVE IT.

HOLD ON, SOLDIERS!

THAT'S THE WRONG WAY TO DO IT.

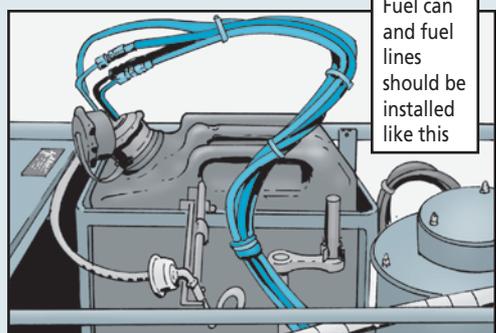
HERE'S THE RIGHT WAY...

If you follow some of the illustrations in the M26 decon's TM 3-4230-238-10 and -23&P, you can end up installing the fuel can wrong.

With the fuel can in the wrong position, the metal braided fuel lines touch the burner assembly. The rubber interior of the fuel lines melt and leak, which could lead to a major fire.

To prevent a fire, install the fuel can so that its lid is on the opposite side of the burner. That way the fuel lines don't touch the burner.

The TM will be corrected, but in the meantime, cross out the incorrect references. If you have any M26 questions, contact TACOM's Emily Santiago at DSN 786-1702, (586) 282-1702, or email: [emily.e.santiago2.civ@mail.mil](mailto:emily.e.santiago2.civ@mail.mil)



Fuel can and fuel lines should be installed like this

HERE ARE FEW QUICK STEPS TOWARDS BETTER DETECTING WITH YOUR AN/PSS-14 MINE DETECTOR...

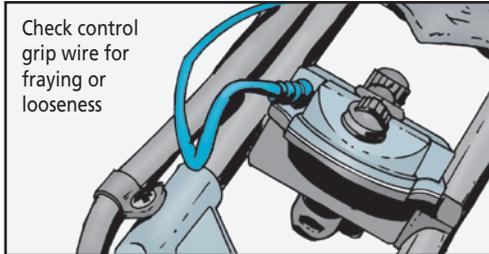


# STEPS TO BETTER DETECTING

## Before You Go to the Field

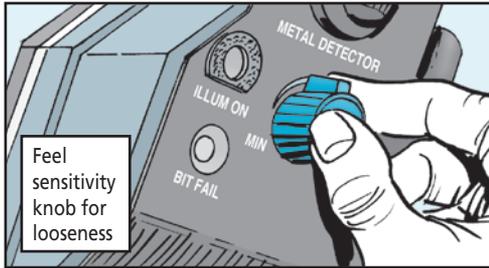
The cable that comes out of the control grip frays through normal use and it can also work loose. If the cable can't do its job, neither can your detector. Check the cable for looseness or fraying and report any problems. The detector will need to be sent to depot for repair.

Check control grip wire for fraying or looseness



The sensitivity knob on the grip can also work loose and come off in the field. If the knob feels loose, tell your repairman so he can tighten the knob's two hexhead screws. The newer version of the detector eliminates the sensitivity knob.

Feel sensitivity knob for looseness



And before you head out the door, make sure a copy of TM 5-6665-373-12&P is in the backpack. Questions may come up in the field that only the TM can answer.

C'MON, WE'VE GOT A MISSION.

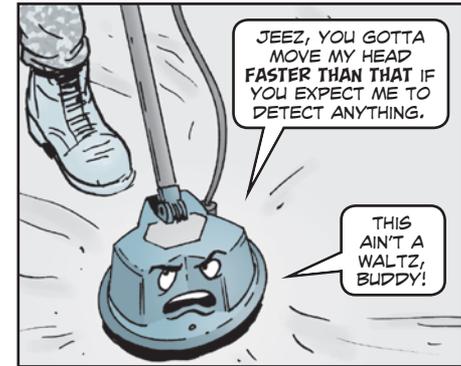
BETTER GRAB A COPY OF MY TM FIRST. WE MIGHT NEED IT OUT THERE!



## Head Speed

Generally, you want to move the detector's head 1 to 3.6 feet per second. If you go faster or slower, the ground penetrating radar can't properly do its job and you might miss a mine. Getting the proper speed down is a good thing to practice.

You can improve your technique with the sweep monitoring system (SMS) from your local TASC. It lets you practice without having to go to training lanes.



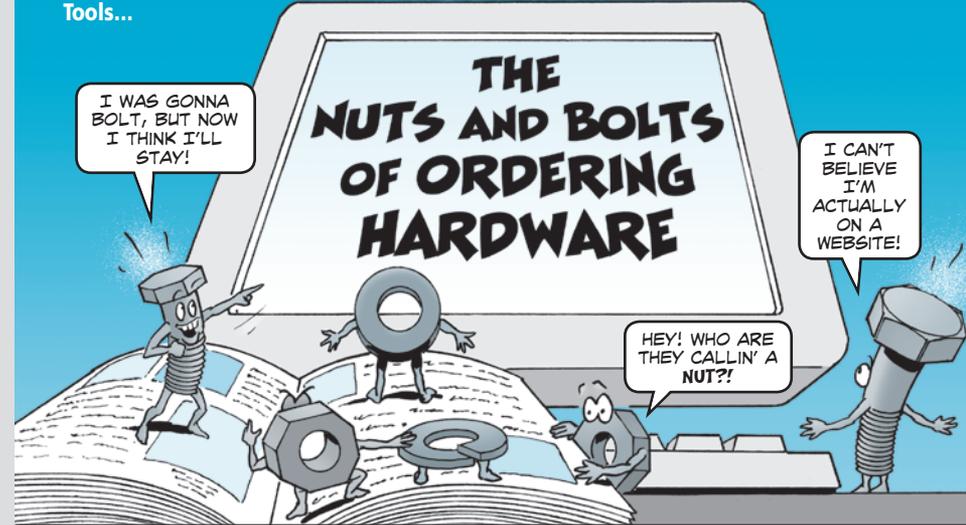
## Tools...

I WAS GONNA BOLT, BUT NOW I THINK I'LL STAY!

I CAN'T BELIEVE I'M ACTUALLY ON A WEBSITE!

# THE NUTS AND BOLTS OF ORDERING HARDWARE

HEY! WHO ARE THEY CALLIN' A NUT?!



**I**f you're looking for a good source for nuts, bolts and other fasteners, then look no further. DLA has a vast selection of hardware at:

<http://www.troopsupport.dla.mil/hardware/fasteners/>

The site has a fastener catalog, fastener assortments and a search engine.

But never use these fasteners to repair or reassemble equipment without first consulting the equipment's TM. Use **only** the exact fasteners called for in the TM. The wrong fasteners could snap under stress or not snap when they should. That could lead to injuries, accidents and major equipment damage.

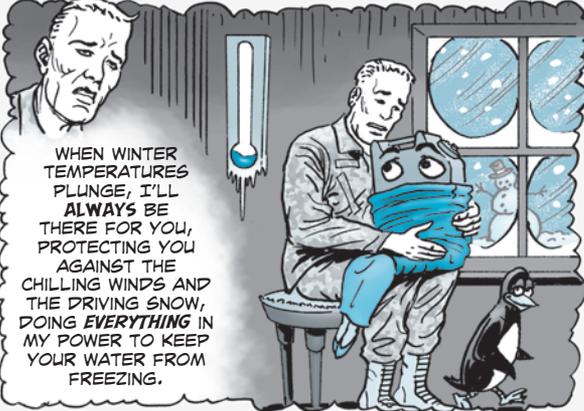
# Show Courtesy to Cans



YOU'RE A TRUE GENTLEMAN.

YOU KNOW JUST HOW TO TREAT A WATER CAN.

TREATING YOU WELL IS A DELIGHT AND *NEVER* A CHORE.



WHEN WINTER TEMPERATURES PLUNGE, I'LL ALWAYS BE THERE FOR YOU, PROTECTING YOU AGAINST THE CHILLING WINDS AND THE DRIVING SNOW, DOING *EVERYTHING* IN MY POWER TO KEEP YOUR WATER FROM FREEZING.



OH! THERE'S A SLIGHT DRAFT!

ALLOW ME TO WARM YOU WITH THIS INSULATED WATER CAN COVER.

NSN 7240-00-125-9061



THERE! YOU LOOK ABSOLUTELY RAVISHING IN YOUR NEW OLIVE DRAB COVER, MY DEAR.

YOU ALWAYS SAY THE NICEST THINGS.



I NOTICE WHEN YOU FILL ME WITH WATER, YOU LEAVE ROOM FOR EXPANSION.

I FILL YOU NO MORE THAN 3 INCHES FROM THE TOP.



A WATER CAN APPRECIATES THAT.

YOU ALSO KEEP ME OFF THE FROZEN GROUND.



YOU KNOW I'LL ALWAYS SET YOU ON PLANKS OR PALLETS.

OR ON A COMFORTABLE CHAIR IN A FIVE-STAR RESTAURANT?



HEY, C'MERE!

WHATSA MATTER? CAN'T STAND THE HEAT?

AND-HEAVEN FORBID-EVEN IF YOU SHOULD FREEZE, I WON'T SET YOU CLOSE TO A HEATER OR FIRE. I'D NEVER FORGIVE MYSELF IF YOUR PLASTIC MELTED.



AND DO YOU PROMISE TO KEEP ME OUT OF THE COLD, MERCILESS WIND?

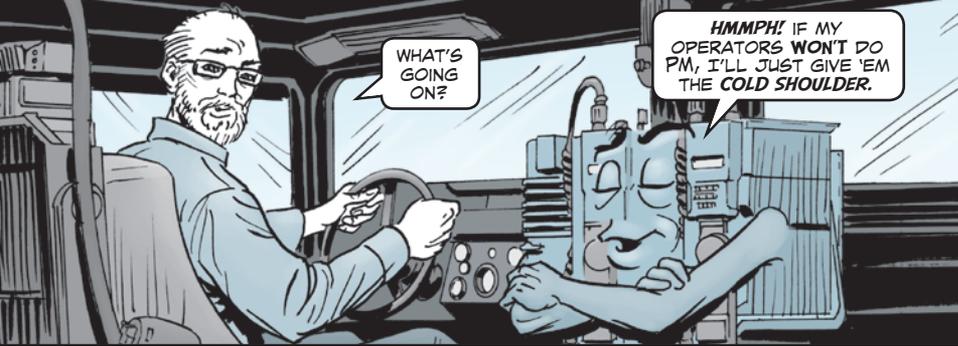
MY DEAR, I PROMISE YOU A WARM, COZY RETREAT INSIDE A TENT OR VEHICLE.

OR INSIDE A RESTAURANT?



NOW THIS IS REALLY HOW TO TREAT A PLASTIC WATER CAN, DAHLING!

# A GOOD STARTING PLACE



WHAT'S GOING ON?

HMMPH! IF MY OPERATORS WON'T DO PM, I'LL JUST GIVE 'EM THE COLD SHOULDER.



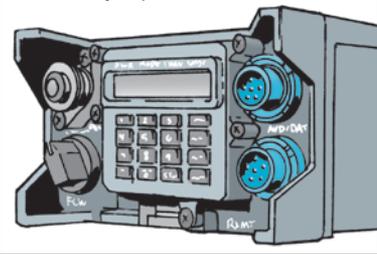
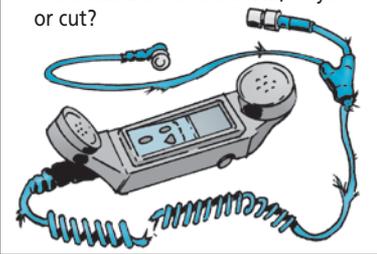
OPERATORS, YOU CAN'T NEGLECT COMMUNICATIONS EQUIPMENT AND EXPECT IT TO SERVE YOU FAITHFULLY.

GIVE YOUR COMMO EQUIPMENT THE ATTENTION IT DESERVES. IT NEEDS YOUR TIME, EFFORT AND CARE.



A GOOD PLACE TO START IS BY LOOKING CLOSELY AT THE EQUIPMENT AND ASKING THESE QUESTIONS...

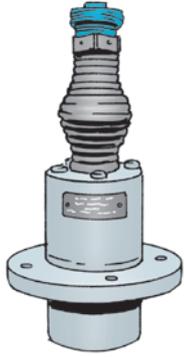
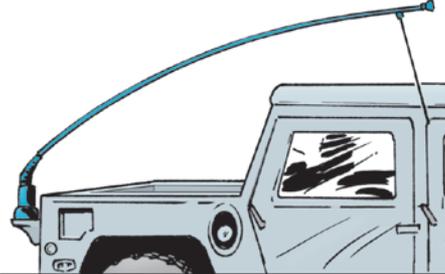
- Are any knobs or switches broken or missing?
- Are any cover screws missing?
- Is there corrosion on the connectors?
- Is the protective rubber cap missing from any exposed connector?
- Does the vehicular amplifier adapter have damaged connectors or bent or broken pins?
- Are cables cracked or dry-rotted? Is the plastic outer jacket worn through?
- Is the handset cord cracked, frayed or cut?

HERE ARE SOME QUESTIONS TO ASK WHEN LOOKING AT YOUR VEHICULAR ANTENNA...



- Is the mounting plate bent or loose? Are any bolts missing?
- Is the matching unit loose? Are any bolts missing?
- If the antenna is detached, is the plastic cap missing from the matching unit?
- Is there paint on the matching unit's ground lug, ground strap eyelet or hardware? (A good ground connection must have metal-to-metal contact.)
- Is the matching unit's ground strap missing, loose or disconnected?
- Is the safety tip missing from the upper antenna element?
- Is the antenna tie-down rope missing or damaged?
- Is the antenna not tied down when the vehicle is moving?
- Is there enough clearance between the antenna and any overhead power lines?
- Are any star washers missing from the matching unit installation?

IF YOU FIND ANY PROBLEMS, READ YOUR -10 TM. IF THE TM ALLOWS YOU TO FIX IT, GO AHEAD AND DO IT.

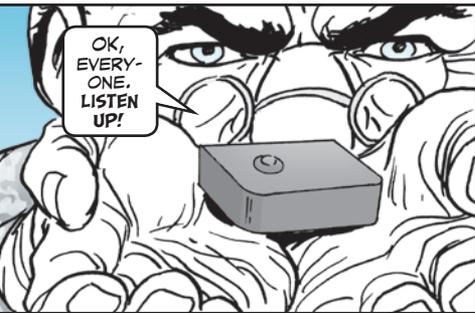
IF NOT, REFER THE PROBLEM TO FIELD LEVEL MAINTENANCE.



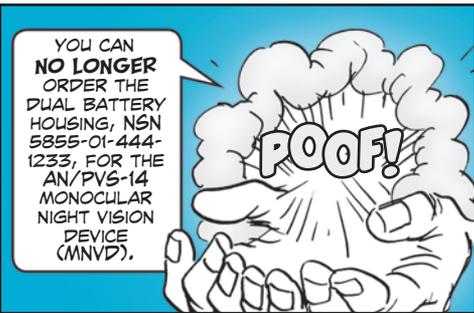
★ **The Most Important Question** ★

There's one last question to ask. And it's the most important one: **Have you recently performed your -10 TM PMCS on your commo equipment and antennas?** If you haven't, do it ASAP.

# JOIN THE SINGLE'S CLUB



OK, EVERYONE, LISTEN UP!

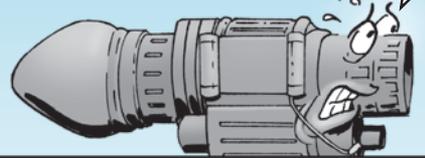


YOU CAN NO LONGER ORDER THE DUAL BATTERY HOUSING, NSN 5855-01-444-1233, FOR THE AN/PVS-14 MONOCULAR NIGHT VISION DEVICE (MNVD).

FED LOG LISTS THE NSN AS A **TERMINAL** ITEM.

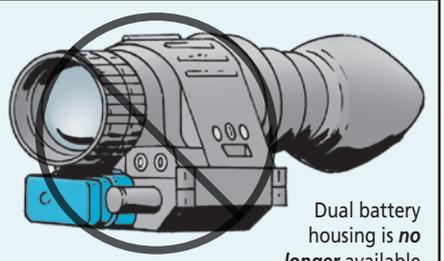
THE ARMY IS **NOT** BUYING THE DUAL HOUSING, AND THERE ARE **NONE** IN STOCK.

WH-WHAT DO I DO?!

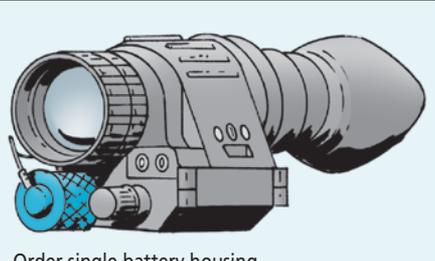


ORDER INSTEAD THE SINGLE BATTERY HOUSING, NSN 5855-01-523-4058.

THE DUAL AND SINGLE HOUSINGS ARE **INTERCHANGEABLE**.



Dual battery housing is **no longer** available



Order single battery housing

THE ARMY PLANS TO REPLACE THE DUAL HOUSING THROUGH ATTRITION.

THE NSN FOR THE SINGLE HOUSING DOESN'T APPEAR IN TM 11-5855-306-23&P.

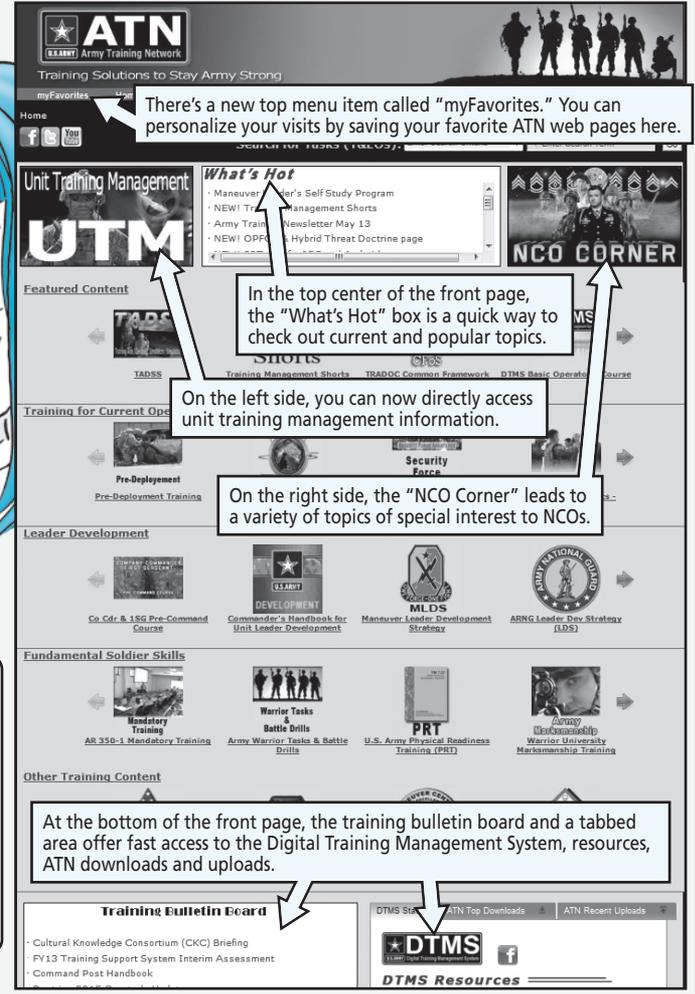


SO, ADD THE NSN TO FIG C-2 UNTIL THE TM IS UPDATED.

Click here for a copy of this article to save or email.

# Check Out Improved ATN Website

A RECENT REDESIGN OF THE ARMY TRAINING NETWORK (ATN) WEBSITE HAS MADE IT EASIER TO FIND TRAINING MATERIALS. HERE ARE SOME OF THE IMPROVEMENTS...



There's a new top menu item called "myFavorites." You can personalize your visits by saving your favorite ATN web pages here.

In the top center of the front page, the "What's Hot" box is a quick way to check out current and popular topics.

On the left side, you can now directly access unit training management information.

On the right side, the "NCO Corner" leads to a variety of topics of special interest to NCOs.

TOPIC SECTIONS ARE CLEARER, LIKE "Featured Content," "Training for Current Operations," "Leader Development" AND "Fundamental Soldier Skills."

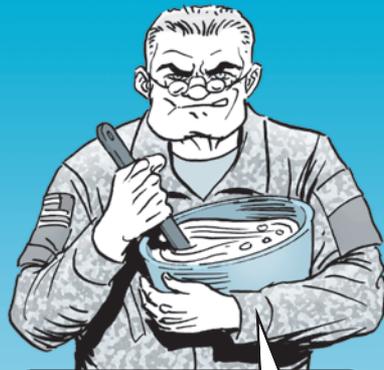
At the bottom of the front page, the training bulletin board and a tabbed area offer fast access to the Digital Training Management System, resources, ATN downloads and uploads.

Check out the improved ATN website at: <https://atn.army.mil/>

Click here for a copy of this article to save or email.

# Recipe for a SAFE Workplace

1. Sort and gather employees.
2. Add a touch of great supervisors.
3. Throw some training into the mix.
4. Stir well.



MAINTENANCE FACILITIES OR REPAIR SHOPS ARE **OBVIOUS** CHOICES FOR SAFETY CHECKS AND CONCERNS.

BUT ALMOST EVERY WORKPLACE HAS **POTENTIAL HAZARDS** WHICH, IF IGNORED OR OVERLOOKED, CAN RESULT IN INJURIES OR DEATHS.

THE **FIRST** MAJOR INGREDIENT IN THE RECIPE FOR A SAFER WORKPLACE IS A HEFTY DOSE OF **TRAINING**.

A GOOD TRAINING PROGRAM CAN OBVIOUSLY REDUCE THE NUMBER OF INJURIES AND EQUIPMENT DAMAGE, BUT IT **ALSO BOOSTS** CONFIDENCE AND MORALE BY INSTILLING A SENSE OF SECURITY.



YES, THERE IS SUCH A THING AS A "SAFETY CULTURE," AND IT'S A **WORTHY GOAL** FOR ANY UNIT.

THE **SECOND** INGREDIENT FOR STIRRING UP SOME SERIOUS SAFETY IS **GOOD HABITS**.

IT ISN'T ENOUGH TO LEARN HOW TO DO THINGS RIGHT; YOU NEED TO PRACTICE SAFETY STEPS UNTIL THEY ARE **SECOND NATURE**.

THAT WAY, YOUR TRAINING WILL KICK IN DURING A REAL EMERGENCY WHEN YOU DON'T HAVE TIME TO STOP AND THINK. HERE ARE A FEW MORE TIPS...



- Keep alert and focused; don't let your attention wander. Boring or repetitive tasks can lead to dangerous complacency. Your job is to outfox the boredom bunny and stay on your toes.
- Practice risk management: Think through your assigned tasks and any potential risks. For example, what could go wrong in the worst-case scenario? How will you respond?

THE **THIRD** AND PERHAPS **MOST IMPORTANT** RECIPE INGREDIENT FOR AN EFFECTIVE SAFETY PROGRAM IS **UNIT LEADERS AND SUPERVISORS** WHO **SET THE EXAMPLE** AND **STAY INVOLVED**.

**GOOD LEADERS** NOT ONLY KNOW THE RULES AND REGS, BUT FOLLOW AND ENFORCE 'EM. THEY MAKE SAFETY A **TOP PRIORITY**, AND CONSTANTLY LOOK FOR WAYS TO **IMPROVE** UNIT MORALE BY ENCOURAGING A **STRONG SAFETY CULTURE**.



FOR SAFETY-RELATED TOOLS AND PROGRAMS YOU CAN PUT INTO PRACTICE **TODAY**, VISIT THE US ARMY COMBAT READINESS/SAFETY CENTER WEBSITE AT:  
<https://safety.army.mil>

## WHEN AND HOW TO TAG DLA FOR HELP

The Defense Logistics Agency (DLA) is the Department of Defense's largest logistics combat support agency, supplying all the military services.

PS is often asked for help with or info on items or equipment managed by DLA. Unfortunately, DLA's item manager database isn't available outside that agency. If you have DLA-managed items or equipment, you must go directly to them for support.

How do you know if your item is managed by DLA? FED LOG can tell you. Once in FED LOG, be sure you're in the Army interactive query tab. Enter your NSN/NIIN, part number or LIN in FED LOG. If you get a hit, the Army Master Data File (AMDF) tab on top gives you lots of info.

You'll probably see many coded boxes. One coded box is the source of supply (SOS). If the code listed in the SOS box is "SMS," that's DLA.

You might find the acquisition advice code (AAC) block helpful. In this example, the AAC of "V" means this equipment is a terminal item.

ARMY

Current record: 1/1 Font: 12 Pt.

AMDF | RELATED NSN | ARMY PACKAGING | SARSSCAT | MANAGER

FSC: 4520  
NIIN: 011620385  
ITEM NAME: HEATER,WATER,LIQUID FUEL

Example of FED LOG AMDF result showing DLA (SMS) as source of supply

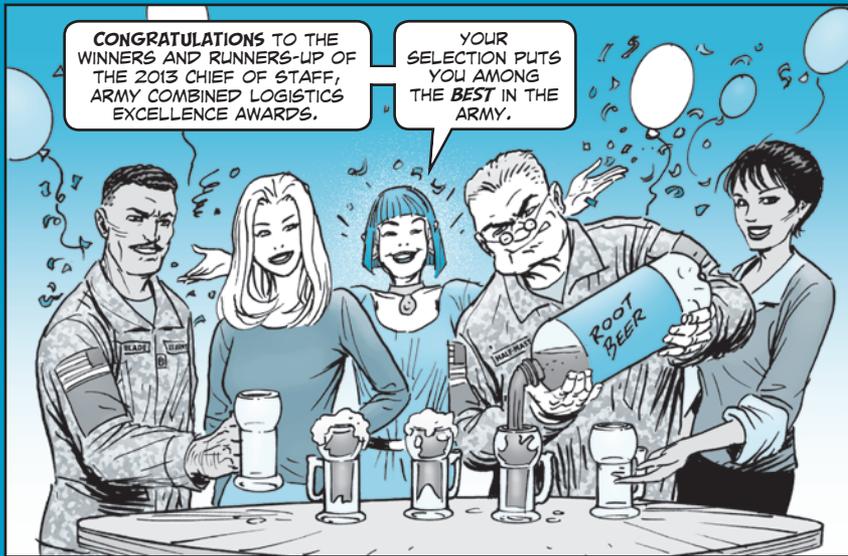
ARMY MASTER DATA FILE (AMDF)													
FSC	NOMENCLATURE	ACT	ADDL	SOS	AAC	PSC	ARMY UNIT PRICE	UI	FC	UM	MEAS QTY	EIC	EC
4520	HEATER,WATER,LIQUID			SMS	V		\$11,820.68	EA			0		C

SCMG	AEC	MATCAT	LIN	LCC	RICC	ARC	SRG	SCIG	CRC	ICG	SLG
9 B	3	J 2 1 00		B	0	X		0	U	4	0

**Nifty Note:** Clicking on any underlined (hot) links in FED LOG will give you that code's meaning, plus a link to the regulation that covers it.

If you need assistance with DLA-managed items, DLA customer support is available 24/7 at 1-877-352-2255, DSN 661-7766, or email: [dlacontactcenter@dla.mil](mailto:dlacontactcenter@dla.mil)

# Combined Logistics Excellence Awards 2013



## "Best of the Best" Crowned

THIS YEAR'S TOP THREE WINNERS IN THE MAINTENANCE, DEPLOYMENT AND SUPPLY CATEGORIES ARE...



### MAINTENANCE:

TACOM, FMX Ft Leonard Wood, Ft Leonard Wood, MO (AMC)

### DEPLOYMENT:

635th Movement Control Team (MCT), Kaiserslautern, Germany

### SUPPLY:

HQ 209th Regl Trng Inst, Ashland, NE

WHAT'S WITH THE FUNNY HEADGEAR?



DON'T YOU GET IT? I'M 'CLEA-PATRA!'

## ARMY AWARDS FOR MAINTENANCE EXCELLENCE

### ACTIVE ARMY Depot Category

Winner: Corpus Christi Army Depot, Corpus Christi, TX  
Runner-up: Anniston Army Depot, Anniston, AL

### ACTIVE ARMY MTOE

#### Small Category

Winner: FSC, 54th Engr Bn, Bamberg, Germany (USAREUR)  
Runner-up: HSC, 204th MI Bn, Ft Bliss, TX (INSCOM)

#### Medium Category

Winner: 524th MI Bn, Seoul, Korea (INSCOM)  
Runner-up: HHSC 224th MI Bn (Aerial Exploitation), Hunter AAF, Savannah, GA (INSCOM)

#### Large Category

Winner: B Co, 225th BSBn, Schofield Barracks, HI (USARPAC)  
Runner-up: 24th MI Bn, Wiesbaden, Germany (INSCOM)

#### Aviation Category

Winner: 3d MI (Aerial Exploitation), Camp Humphreys, Korea (INSCOM)  
Runner-up: D Co, 3/82nd Avn Regt, Ft Bragg, NC (FORSCOM)

### ACTIVE ARMY TDA

#### Small Category

Winner: UN Cmd Security Bn—Joint Security Area, Camp Bonifas, Korea (USARPAC)  
Runner-up: None selected.

#### Medium Category

Winner: 39th Sig Bn, Chievres, Belgium (NETCOM)  
Runner-up: 396th Sig Co, Schofield Barracks, HI (NETCOM)

#### Large Category

Winner: 719th MI Bn, Camp Humphreys, Korea (INSCOM)  
Runner-up: HHC, 7th USA Joint Multinational Trng Cmd, Grafenwoehr, Germany (USAREUR)

### ARMY RESERVE MTOE

#### Small Category

None selected.

#### Medium Category

None selected.

#### Large Category

Winner: 323rd MI Bn, Ft Meade, MD (USARC)  
Runner-up: None selected.

### ARMY RESERVE TDA

#### Small Category

None selected.

#### Medium Category

None selected.

#### Large Category

None selected.

### NATIONAL GUARD MTOE

#### Small Category

Winner: D Co, 128th BSBn, Hamilton, OH  
Runner-up: FSC, 766th Engr Bn, Decatur, IL

#### Medium Category

Winner: 307th Component Repair Co, Central City, KY  
Runner-up: 211th Maint Co, Newark, OH

#### Large Category

None selected.

#### Aviation Category

Winner: HQ, 1/37th Security and Spt Avn Bn, Grand Island, NE  
Runner-up: None selected.

### NATIONAL GUARD TDA

#### Small Category

Winner: Field Maint Shop #4, Decatur, IL  
Runner-up: None selected.

#### Medium Category

Winner: Surface Maint Mgr's Office, Lincoln, NE  
Runner-up: Combined Spt Maint Shop, Pineville, LA

#### Large Category

None selected.

### INSTALLATION MANAGEMENT COMMAND

#### Small Category

Winner: Busan Storage Ctr, Busan, Korea (USARPAC)  
Runner-up: 6981st Civ Spt Grp, Mannheim, Germany (NETCOM)

#### Medium Category

Winner: TACOM, FMX Ft Leonard Wood, Ft Leonard Wood, MO (AMC)  
Runner-up: Maint Acty-Vilseck, Vilseck, Germany (USAREUR)

#### Large Category

Winner: Materiel Spt Ctr-Korea, Camp Carroll, Korea (USARPAC)  
Runner-up: Maint Acty-Kaiserslautern, Kaiserslautern, Germany (USAREUR)

## DEPLOYMENT EXCELLENCE AWARDS

### ALL ARMY

#### Operational Deployment Category

##### Small Category

Winner: HHC, 3d BCT, 1st Cav Div, Ft Hood, TX (FORSCOM)  
 Runner-up: C Btry, 5-7 ADA Bn, Kaiserslautern, Germany (USAREUR)

##### Large Category

Winner: 1st AR Div CAB, Ft Bliss, TX (FORSCOM)  
 Runner-up: 3d BCT, 1st Cav Div, Ft Hood, TX (FORSCOM)

### ACTIVE ARMY

#### Small Deploying Unit Category

Winner: C Btry, 5-7 ADA Bn, Kaiserslautern, Germany (USAREUR)  
 Runner-up: A Btry, 5-7 ADA Bn, Kaiserslautern, Germany (USAREUR)

#### Large Deploying Unit Category

Winner: 173rd BSB (Abn), Bamberg, Germany (USAREUR)  
 Runner-up: 1st BCT, 101st Abn Div (AASLT), Ft Campbell, KY (FORSCOM)

#### Supporting Unit Category

Winner: 635th MCT, 39th Trans Bn, Kaiserslautern, Germany (USAREUR)  
 Runner-up: 39th Trans Bn (Movement Ctl), Kaiserslautern, Germany (USAREUR)

### ACTIVE ARMY continued

#### Army Installation

##### CONUS Category

Winner: Ft Riley, KS  
 Runner-up: Ft Bliss, TX

#### Army Installation

##### OCONUS Category

Winner: USAG-Vicenza, Vicenza, Italy  
 Runner-up: USAG-Grafenwoehr, Grafenwoehr, Germany

### ARMY NATIONAL GUARD

#### Small Deploying Unit Category

Winner: Co B, 3d Bn, 20th SFG (Abn), Roanoke Rapids, NC  
 Runner-up: 742nd Spt Maint Co, Eastover, SC

#### Large Deploying Unit Category

Winner: 130th Financial Mgmt Co, Siler City, NC  
 Runner-up: 113th Sus Bde, Greensboro, NC

#### Supporting Unit Category

Winner: Camp Atterbury Joint Maneuver Trng Ctr, Edinburgh, IN  
 Runner-up: 108th Sus Bde, Chicago, IL

## SUPPLY EXCELLENCE AWARDS

### ACTIVE ARMY

#### Level I (A) Unit Supply MTOE

Winner Onsite: Eng Trp 4th Sqdn, 2d Cav Regt, Grafenwoehr, Germany (USAREUR)

#### Winner Phase I: D Co, 2-1 ADA,

35th ADA Bde, Camp Carroll, Waekwan, Korea (EUSA)

#### Level I (B) Unit Supply TDA

Winner Onsite: 7th Army NCO Academy, Germany (USAREUR)

#### Winner Phase I: A Co, 741st MI Bn

(704th MI Bde), Ft Meade, MD (INSCOM)

#### Level II (A) Property Book MTOE

Winner Onsite: None\*

Winner Phase I: 21st SF Bn, Panzer Kaserne, Germany (USAREUR)

#### Level II (B) Property Book TDA

Winner Onsite: USA John F. Kennedy Special Warfare Ctr and School, Ft Bragg, NC (USASOC)

Winner Phase I: USA Materiel Support Ctr, Camp Carroll, Korea (EUSA)

#### Level III (A) Parent Level MTOE

Winner Onsite: None\*

Winner Phase I: None\*

#### Level III (B) Parent Level TDA

Winner Onsite: None\*

Winner Phase I: None\*

#### Level IV (A) SSA MTOE

Winner Onsite: A Co, 88th BSB, Ft Polk, LA (FORSCOM)

Winner Phase I: F Co, 1-44th ADA, Ft Hood, TX (FORSCOM)

#### Level IV (B) SSA TDA

Winner Onsite: HQ Co, 6th Bn, 162nd Inf, Ft Polk, LA (FORSCOM)

Winner Phase I: 403rd Army FSB-NE Asia, Camp Carroll, Korea (AMC)

### ARMY NATIONAL GUARD

#### Level I (A) Unit Supply MTOE

Winner Onsite: 189th Trans Co, Norfolk, NE

Winner Phase I: HQ Co, 732nd Cbt Sus Spt Bn, Tomah, WI

#### Level I (B) Unit Supply TDA

Winner Onsite: HQ 209th Regl Trng Inst, Ashland, NE

Winner Phase I: Ohio Med Det, Columbus, OH

#### Level II (A) Property Book MTOE

Winner Onsite: No unit met criteria

Winner Phase I: HQ Bn, 49th Ground Missile Defense, Ft Greely, AK

#### Level II (B) Property Book TDA

Winner Onsite: JFHQ-Nebraska, Lincoln, NE

Winner Phase I: CIF-Illinois, Springfield, IL

#### Level III (A) Parent Level MTOE

Winner Onsite: None\*

Winner Phase I: None\*

#### Level III (B) Parent Level TDA

Winner Onsite: None\*

Winner Phase I: None\*

#### Level IV (B) SSA TDA

Winner Onsite: None\*

Winner Phase I: USP&FO, Indiana Supply Spt Acty, Indianapolis, IN

### ARMY RESERVE

#### Level I (A) Unit Supply MTOE

Winner Onsite: 961st QM Co, McAllen, TX

Winner Phase I: 374th MP Co, Chambersburg, PA

#### Level I (B) Unit Supply TDA

Winner Onsite: No unit met criteria

Winner Phase I: None. All nominated units evaluated onsite.

#### Level II (A) Property Book MTOE

Winner Onsite: No unit met criteria

Winner Phase I: None. Eligible units chose not to submit packets.

#### Level II (B) Property Book TDA

Winner Onsite: None\*

Winner Phase I: HQ, 88th Regl Spt Cmd, Ft McCoy, WI

#### Level III (A) Parent MTOE

Winner Onsite: None\*

Winner Phase I: None\*

#### Level III (B) Parent TDA

Winner Onsite: None\*

Winner Phase I: None\*

#### Level IV (B) SSA MTOE

Winner Onsite: No nominations

Winner Phase I: No nominations

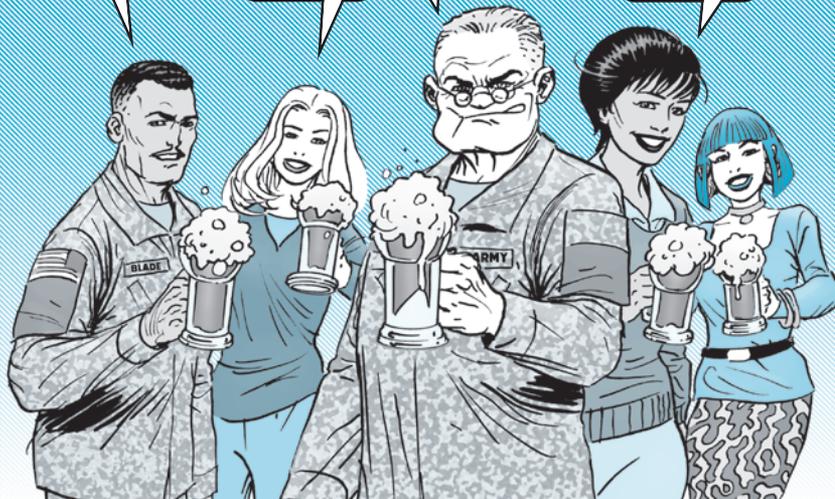


SO HERE'S TO ALL OF YOU...

...WHO WORKED SO HARD...

...IN THIS COMPETITION.

YOU'RE ALL WINNERS IN OUR BOOK!



HOPE TO SEE YOUR UNIT HERE NEXT YEAR, SOLDIER! MAKE IT HAPPEN!



\*Due to budget issues, the SEA was affected during evaluations and a final decision could not be made in some categories.



### AVIATION FLUSH PIN GAGES NOW NEED CALIBRATION

The aviation flush pin gages that are part of the shim kit installation tool, NSN 4920-01-425-6548, now have a yearly calibration requirement. The gages are used with UH-60 and MH-60 helicopters. Turn in the entire kit to your local calibration unit ASAP. If you have questions, contact TMDE's Gary Davenport at DSN 645-8082, (256) 955-8082, or email:

[gary.m.davenport.civ@mail.mil](mailto:gary.m.davenport.civ@mail.mil)

### ORDER SOFT TOP INSTALLATION KIT BY COMPONENTS

If you have a standardized integrated command post system (SICPS), read this carefully. The MK-2727/G soft top installation kit (STIK), NSN 5450-01-359-3350, LIN J87705, is a terminal item and is out of production. But you can order the STIK's components through the Army supply system. If you need a component list or if you have any questions, call CECOM's Cathy Siegel at DSN 648-3933, (443) 395-3933, or email: [cathy.l.siegel2.civ@mail.mil](mailto:cathy.l.siegel2.civ@mail.mil)

### THERE'S AN ARMY APP FOR THAT!

In these times of tight unit budgets, now's a great time to try out free Army training applications. The apps are Army-tested and approved and work on a variety of platforms. HMMWV PMCS, land navigation and weapons zeroing are some examples of the nifty apps available. The Army Training Network can hook you up. Visit:

[https://atn.army.mil/dsp\\_template.aspx?dpID=282](https://atn.army.mil/dsp_template.aspx?dpID=282)

### NEED COLD WEATHER INJURY INFO?

Cold weather is nothing to play around with. And protecting yourself from cold weather injuries is a must. To find out more about injury prevention methods to fight Old Man Winter, go to:

<http://phc.amedd.army.mil/topics/discond/cip>

### Caterpillar DV43 RTCH Seatbelt NSN

Get a new seatbelt for your Caterpillar DV43 rough terrain container handler (RTCH) with NSN 2540-01-063-5730 (PN 8Y4030, CAGE 11083). Make a note until the NSN is added as Item 9 in Fig 177 of TM 10-3930-641-24P.

### M26 Shotgun Buttstock NSN

Need a buttstock for the Army's new M26 shotgun? You won't find it listed in WP 0017-23 of TM 9-1005-341-23&P. Order the buttstock with NSN 1005-01-617-9519. The NSN will be added in the next revision to the TM.

### Go With Your VEHICLE TM'S BATTERY GUIDANCE

Whenever there's a difference between the battery guidance in your vehicle's TM and TM 9-6140-200-13 (May 11), *Operator and Field Maintenance for Automotive Lead-Acid Storage Batteries*, go with your vehicle's TM. And until TM 9-6140-200-13 is updated, add this statement under "How to Use This Manual" on Page ix:

**TM 9-6140-200-13 does not supersede the Vehicular TMs.**

### TRAILER WHEEL ASSEMBLY

The wheel assembly for the M149A2, MKT, M103A3, M200A1 dual, M105A2, M313, M332, M348A2-series, M373A2, M390C, M447, M447C, M750, XM1005, XM1007, XM822E1, XM971, XM971E-series, XM995, XM995E1 and XM995E2 trailers comes with NSN 2530-01-611-7619. **But the wheel assembly won't be available until sometime in early 2014.** Until then, order the assembly's components separately:

Item	NSN
Radial tire (10.00R22.5)	2610-01-063-7947
Wheel rim (single piece)	2640-01-588-9171
Valve stem	2640-01-522-2413
Cap	2640-00-060-3550

### Join GCS Army Worldwide

The next HQDA G-4 GCS Army Worldwide Program Update is slated for January 2014. Check the GCS Army website for the specific date/time and details on how to join the discussion on SKN Live: <http://gcss.army.mil>

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d.(4) Other free	66	60
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f. Total distribution	39,550	37,269
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Submitted by: STUART A. HENDERSON, Production Manager

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Would You Stake Your Life <sup>right now</sup> on the Condition of Your Equipment?

Click here for a copy of these articles to save or email.



**WHEN YOU CAN SEE  
YOUR BREATH...**

**...IT'S TIME FOR  
COLD WEATHER  
PM!**

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