

Issue 800

# PS

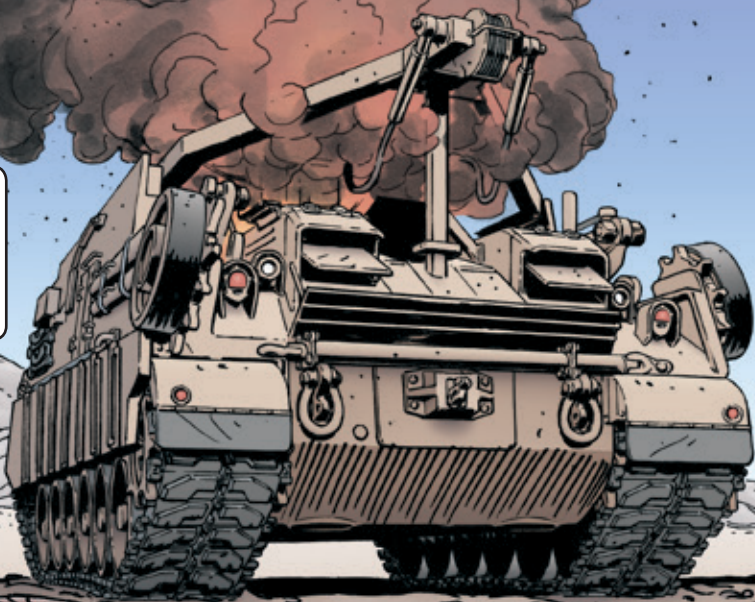
★  
July  
2019

## THE PREVENTIVE MAINTENANCE MONTHLY

TB 43-PS-800

Approved for  
Public Release;  
Distribution is  
Unlimited

WE'RE  
GONNA  
NEED A  
RECOVERY  
VEHICLE  
FOR OUR  
RECOVERY  
VEHICLE!



DON'T LET  
**THIS** HAPPEN TO  
YOU! CHECK OUT  
PAGE 6!





# THE PREVENTIVE MAINTENANCE MONTHLY

ISSUE 800 JULY 2019



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TB 43-PS-800, 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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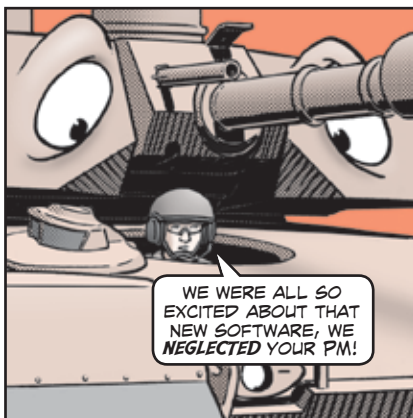
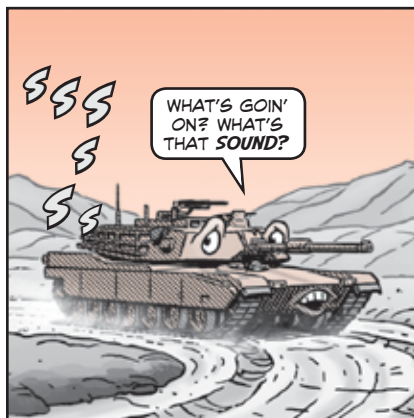
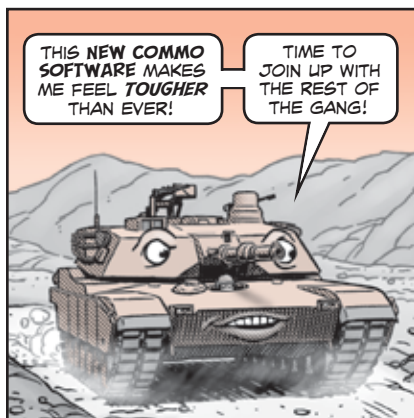
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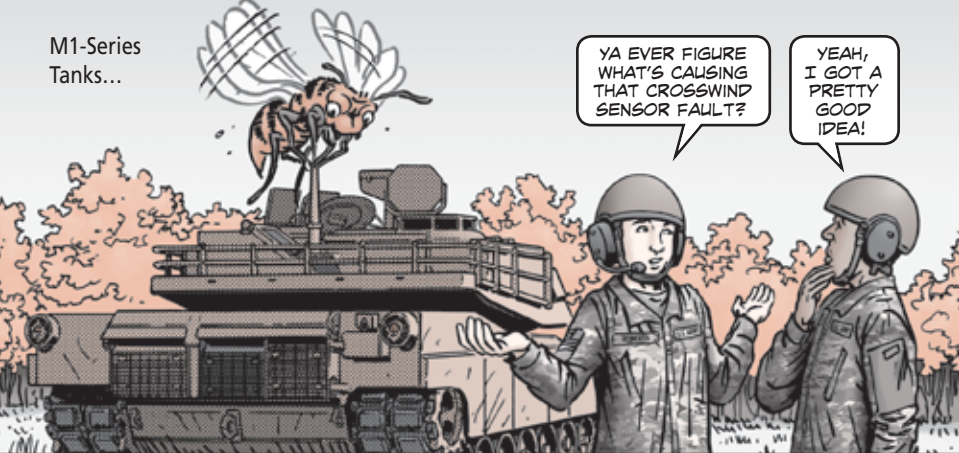
# A Modern Note in an Old Song



**T**he backbone of many high tech Army systems today is **software**. But when the main focus is on keeping software current, it's too easy to treat the actual hardware like it's not important. When that happens, PM drops off and equipment falls apart.

It's simple logic. Having the latest software is pointless if the hardware it's loaded on doesn't work. Sure, updating software is important. But make sure the hardware isn't neglected before equipment hits the field. Software and hardware must go hand-in-hand. **High-tech equipment still needs old-fashioned PM.**

M1-Series  
Tanks...

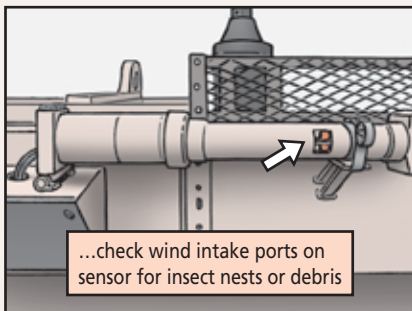
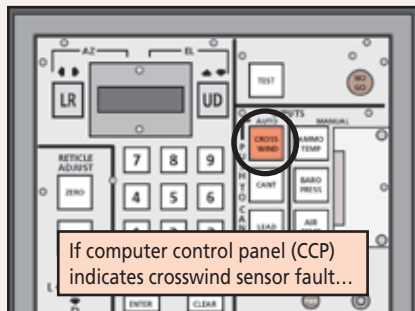


## Tell Crosswind Sensor Faults to **BUZZ OFF**

**C**rewmen, if your M1-series tank's computer control panel (CCP) or improved gunner's control and display panel (IGCDP) acts kinda buggy, the problem might be actual bugs of the flying variety!

A crosswind sensor fault in the CCP or IGCDP could be caused by insects making their home in the wind intake ports. If so, you'll need to clean them out.

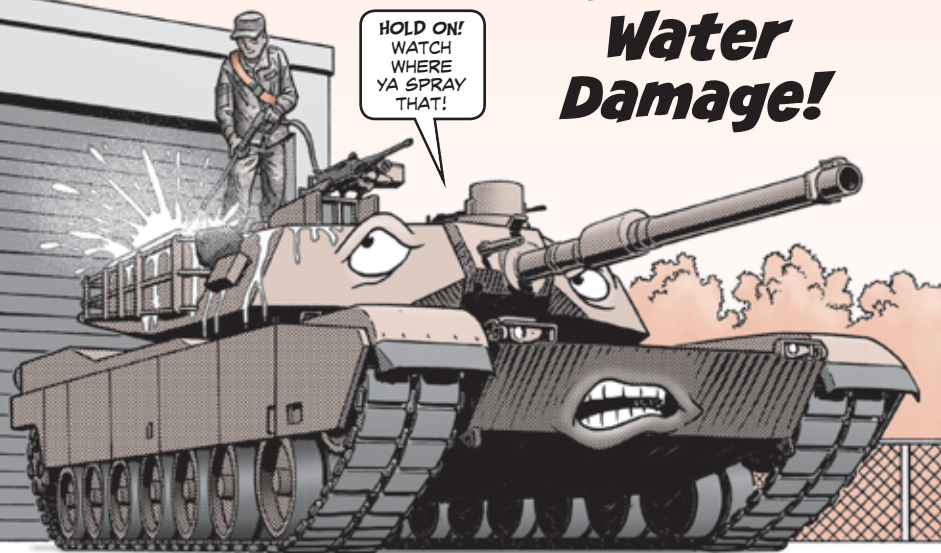
The sensor costs about \$4,500 and isn't repairable. So make sure a fault isn't because of something as simple as a wasp nest blocking a wind intake port. A little bug spray and some elbow grease is a cheaper alternative.



If your CCP gets a crosswind sensor fault, eyeball those wind intake ports for insect nests, mud and other debris. You'll find procedures on how to clean the ports in WP 0461 of TM 9-2350-264-10-3 (Sep 11) for the M1A1 and WP 0566 of TM 9-2350-388-10-4 (Jan 18) for the M1A2 SEPv2. There's also info in the Service Crosswind Sensor section of TM 9-2350-388-13&P (Jan 18).

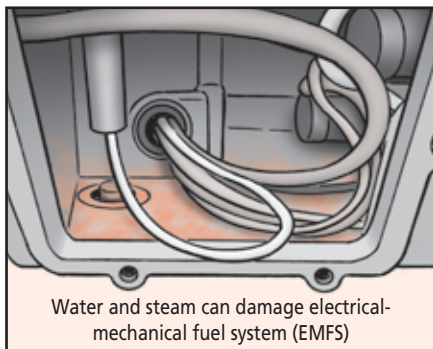


# Protect EMFS From Water Damage!



**C**rewmen, you need to give your M1-series tank a good cleaning inside and out after a mission. But be aware that high-pressure water or steam can damage sensitive and expensive equipment.

One component that's particularly vulnerable is the electro-mechanical fuel system (EMFS). If water or steam gets inside the EMFS, corrosion and electrical short circuits are the likely result. If the EMFS has to be replaced, that'll set your unit back more than \$32,000! And if the EMFS has to be replaced, so does the rotary pump, NSN 4320-01-179-7639. That'll tack on approximately \$770 more to the cost.



Be sure to follow all the steps in the Cleaning and Lubrication PMCS section of your -10 TM. Those steps outline all the precautions needed to keep your tank clean and combat-ready.

# ROUND STOP DAMAGE IS A SHOW STOPPER!

TIME TO  
LOAD YOUR  
AMMO SO  
WE CAN  
GET GOING  
ON OUR  
MISSION!

DON'T FORGET TO  
CHECK OUT THOSE  
ROUND STOPPERS  
FIRST!



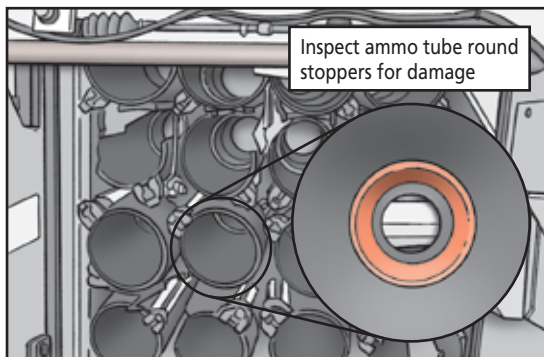
**C**rewmen, inspect your M1-series tank's ammunition tubes right away for damaged or missing round stoppers. Then inspect the tubes each time before loading ammo.

Ammo tubes with missing round stoppers, NSN 1015-01-194-5462, are unserviceable and *shouldn't* be used. Round stoppers that have major tears of one inch or longer are also unserviceable.

Round stoppers with minor damage such as tears less than one inch, small abrasions or small missing pieces are still serviceable. But those tubes need to be inspected **regularly** to ensure they remain serviceable.

Note that replacing ammo round stoppers is no longer a field-level maintenance task. Removing the stoppers requires a special tool and improper installation can cause a stuck round. If an ammo round stopper is damaged, replace the **entire** tube.

New tubes come with a round stopper already installed.



**DO NOT** PERFORM THE AMMO TUBE ROUND STOPPER REPLACEMENT PROCEDURES LISTED IN TM 9-2350-388-13&P. YOU'LL FIND IT IN IETM EM 0334, DATED JAN 18.

THOSE PROCEDURES WILL BE **REMOVED** WHEN THE IETM IS UPDATED.

### Make the following pen and ink changes:

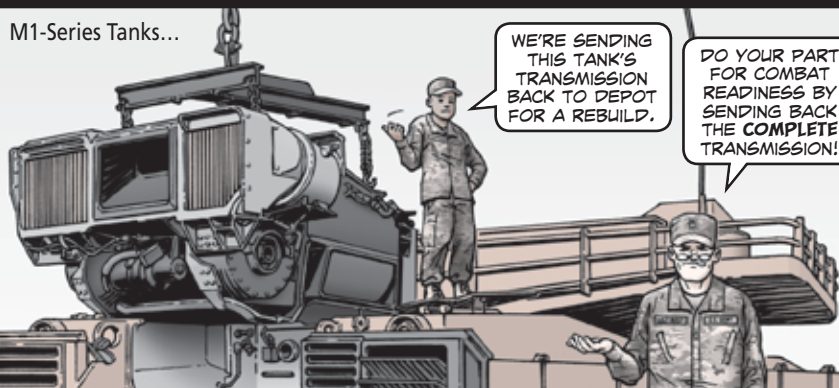
- Item 16 in Fig 306 of TM 9-2350-264-24P-1-2: change the SMR code from PAFZZ to PADZZ.
- Item 7 in Fig 308 of TM 9-2350-264-24P-1-2: change the SMR code from PAFZZ to PADZZ.
- Item 16 in Fig 309 of TM 9-2350-264-24P-1-2: change the SMR Code from PAFZZ to PADZZ.
- Remove WP 1454 from TM 9-2350-264-23-1-7.

Also, using grease and other unauthorized lubricants on ammo tube round stoppers can make it hard to remove rounds. Only use a dry film lubricant as specified by the lube order.

For more info, check out TACOM Ground Precautionary Message 10-015:

<https://tulsa.tacom.army.mil/safety/gpm/tacom-wn/gpa10-015.html>

M1-Series Tanks...

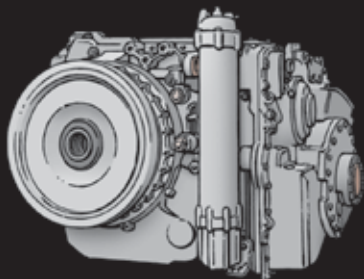


## INCOMPLETE TRANSMISSIONS ARE A READINESS KILLER!

**W**hen turning in an M1-series tank's X1100-3B transmission for repair, make sure it's complete and assembled. Some units are turning in transmissions with missing wiring harnesses and other key components. That hurts combat readiness!

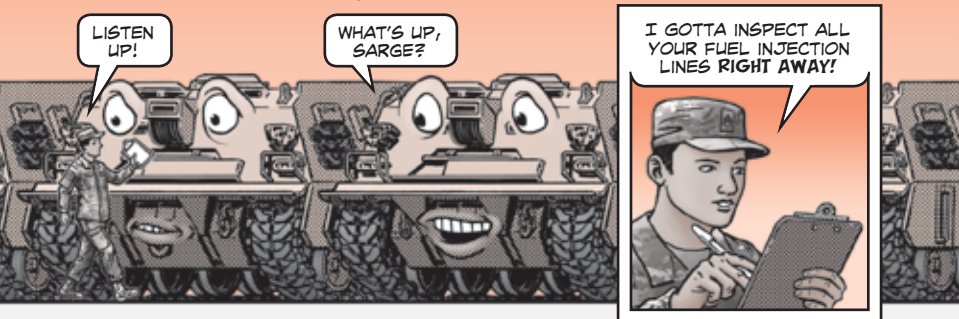
Those components are needed to repair and rebuild transmissions. Missing parts make it a lot harder to keep up with demand. That means other units have to wait longer to get their transmissions.

Rebuilt transmissions come complete with everything needed, so there's no need to strip parts before turning in your transmission. Do your part for combat readiness and turn in everything!



Turn in complete transmission to depot

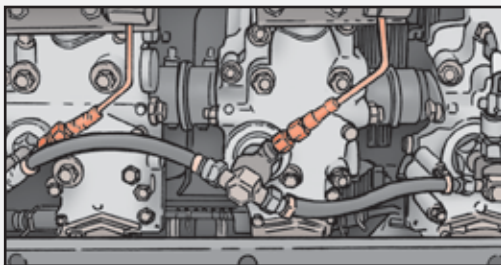
# CHECK FOR **BAD** FUEL INJECTION LINES



**S**ome M88A2 recovery vehicles could have **faulty fuel injection lines** that are at risk of breaking and spraying fuel into the engine compartment. Even though the hazard risk is small, fire isn't something to fool around with.

M88A2s that have had their engines or fuel lines replaced between January 2017 and January 2019 are **at risk**. Any M88A2 that's had its engine or fuel lines replaced during that timeframe should be inspected **immediately**.

There's also a list of 44 serial numbers identifying vehicles that are most likely to be affected.



Some M88A2 vehicles could have bad fuel injection lines

You'll find the list of vehicle serial numbers, as well as instructions on how to conduct the inspections, in TACOM Ground Safety Action Message 19-005. Go to:

<https://tulsa.tacom.army.mil/Safety/message.cfm?id=GSA19-005.html>



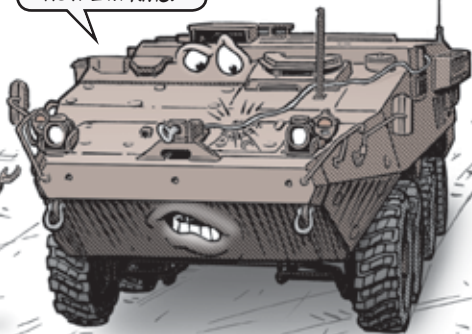


Stryker...

# PROTECT ARMOR PANEL FROM DAMAGE!

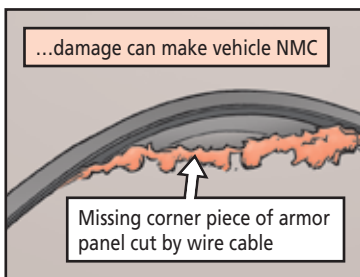
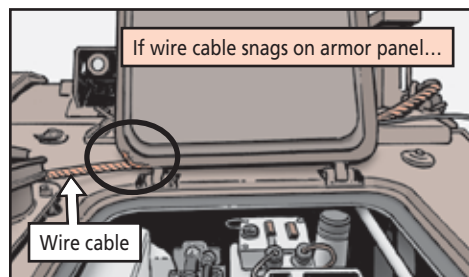
WHAT'S  
WRONG  
WITH  
YOU?

MY FRONT HATCH  
ARMOR PANEL IS  
DAMAGED AND  
NOW I'M NMC!



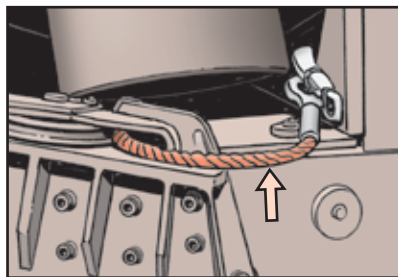
Crewmen, your Stryker's armor panels help keep you safe during missions. But if they're damaged, they can't do their job. And that puts you and your fellow crewmen at risk!

The front hatch armor panel on your Stryker can get damaged if the winch cable isn't stowed properly. The cable can catch on the front, right-hand corner of the armor panel whenever a crewman opens or closes the hatch. This causes scrapes, scratches and nicks on the surface of the panel. Any damage to the panel makes your vehicle NMC!

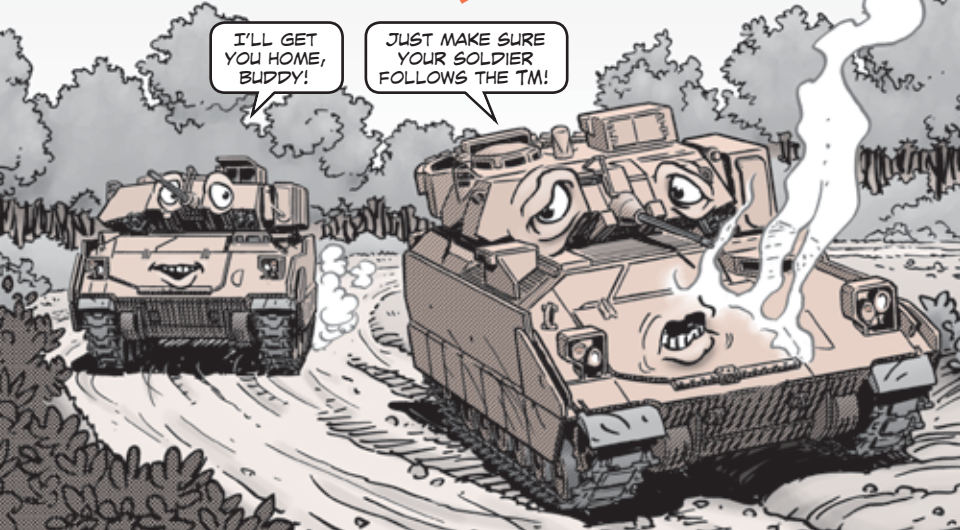


When stowing the cable in the fairlead assembly, make sure it has enough slack so that it remains clear of the hatch. That'll keep the cable from scraping the hatch's armor panel.

Stow cable in fairlead assembly with enough slack to keep cable clear of hatch



# TOW THE RIGHT WAY



Crewmen, keep in mind that the current Bradley tow pintle is **not** configured to tow heavier vehicles. Using it that way can damage your vehicle and even injure you or your fellow Soldiers.

If you don't know how much your vehicle weighs, check the -10 TM's General Information section for the gross vehicle weight (GVW). Be sure to follow the TM and always keep safety in mind when you're towing. A Soldier recently lost a leg due to a towing incident involving a Bradley. Don't let that happen to you!

When towing a lighter or same weight Bradley, here's how to do it the right way:

## Using Tow Cables

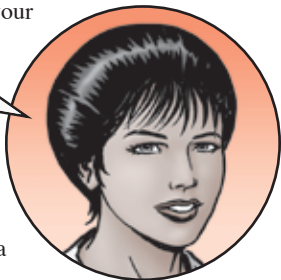
Tow cables should be your first choice for towing your Bradley, unless the propeller shafts have been removed.

KEEP THE SPEED  
**LOW** WHEN USING  
TOW CABLES—

**BELOW 5 MPH**  
NO MATTER THE  
TERRAIN.

Also, tow cables can snap. So make sure all the hatches are closed and everyone is a safe distance away before you start towing.

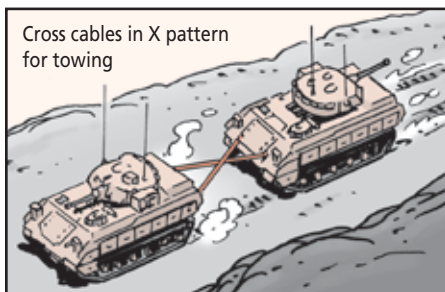
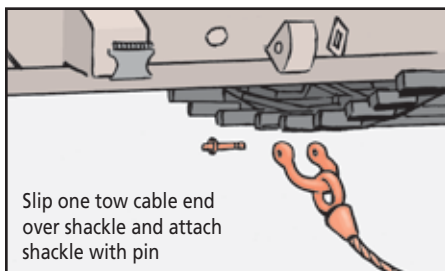
And you'll need to make sure the disabled Bradley has a driver for steering and braking while it's being towed.



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.

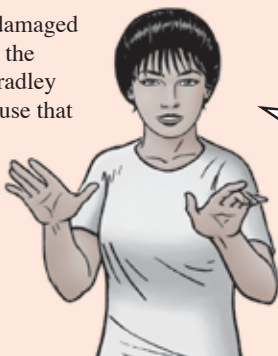
That will improve steering control and allow you to make turns without dragging the disabled Bradley.



### Using a Tow Bar

Don't tow a Bradley with 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 mechanic can prevent that damage by disconnecting the propeller shafts before towing. Unfortunately, that leaves the vehicle with no steering or braking.

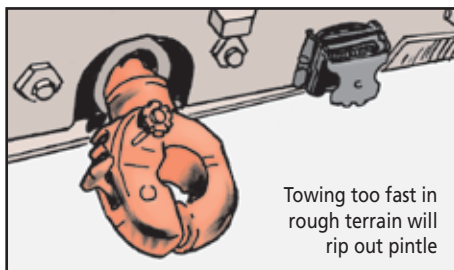


USING A TOW BAR WILL GIVE YOU BACK SOME STEERING AND BRAKING CONTROL. BECAUSE THE BAR IS RIGID, THERE'S NO RISK OF THE TWO VEHICLES COLLIDING EVERY TIME YOU GO DOWNHILL.

AS LONG AS YOU TOW AT SLOW, STEADY SPEEDS, YOU SHOULDN'T HAVE PROBLEMS.

Keep the maximum speed at 15 mph for smooth, even conditions. But don't exceed 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.

For more information, see the "Tow Disabled Vehicle Under Unusual Conditions" section in your -10 TM.



FMTVs...

# STARS AND STRAPS



TROOP SEATS AND SAFETY STRAP ALL IN PLACE; MASTER SERGEANT.

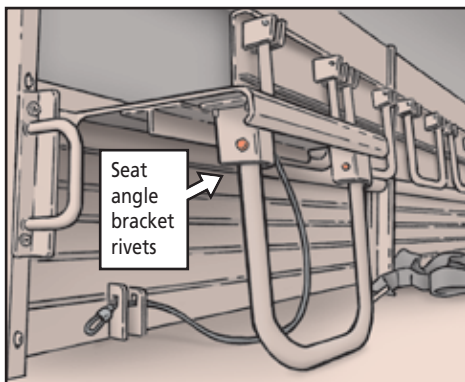
STARS OF THE SHOW, YOU'RE READY TO GO!

Troop transport FMTVs carry the stars of the show: **Soldiers**.

So make sure every item on the FMTV that's designed to protect those stars is in good working order, starting with troop seats and safety straps.

If **troop seat stowage straps** are worn or frayed, replace them with NSN 2540-01-438-5919. That brings a 1½-in wide strap with a buckle cam and J-hook.

To correctly hold up the troop seat, it must be riveted to the seat angle bracket. Order rivets with NSN 5320-01-480-0890.



If the **cargo bed troop safety strap** is worn or frayed, replace it. NSN 5340-01-114-7712 gets a **green strap** and NSN 5340-01-393-9372 a **tan strap**.

THOSE ARE ADJUSTABLE STRAPS WITH HOOKS ON EACH END THAT FASTEN ACROSS THE REAR OF THE CARGO BED.

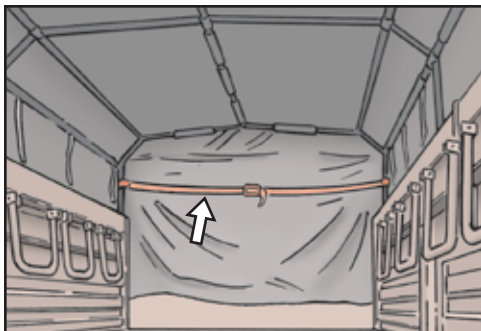






When *not* in use, it's handy to leave the troop safety strap fastened across the front of the cargo bed.

THAT WAY, IT CAN BE MOVED EASILY TO THE BACK AFTER TROOPS HAVE BOARDED.



Fasten troop safety strap across front for easy storage

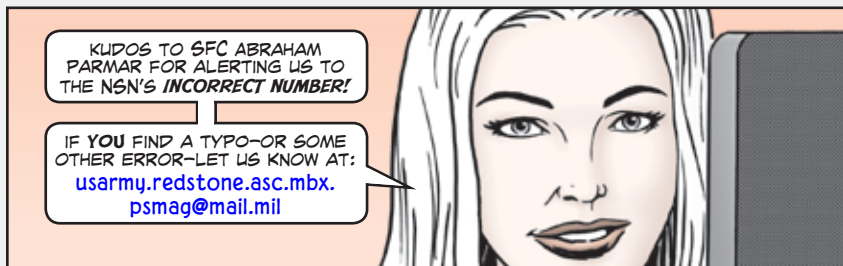
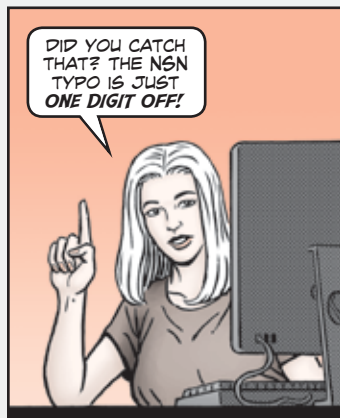
M172A1 Semitrailers...

# Hub Bearing Bears Review



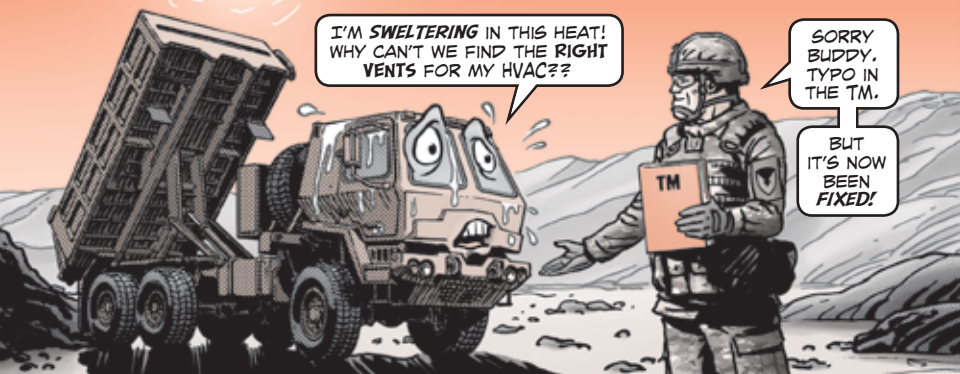
There's a *typo* on Item 16 in Fig 16 of the M172A1 semitrailer's TM 9-2330-211-13&P (Sep 15).

It shows the outer hub bearing as NSN 3110-00-100-0633. The correct NSN is 3110-00-100-**0663**.



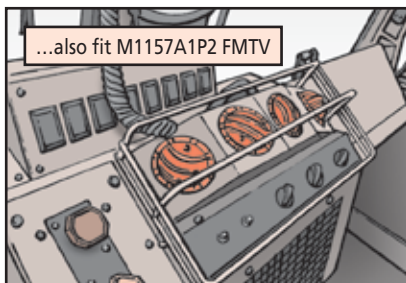
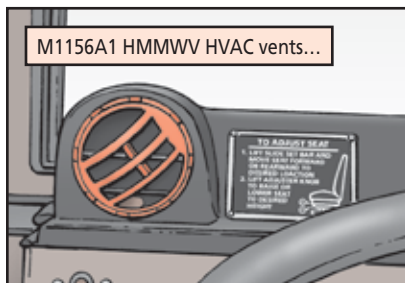
M1157A1P2  
FMTVs...

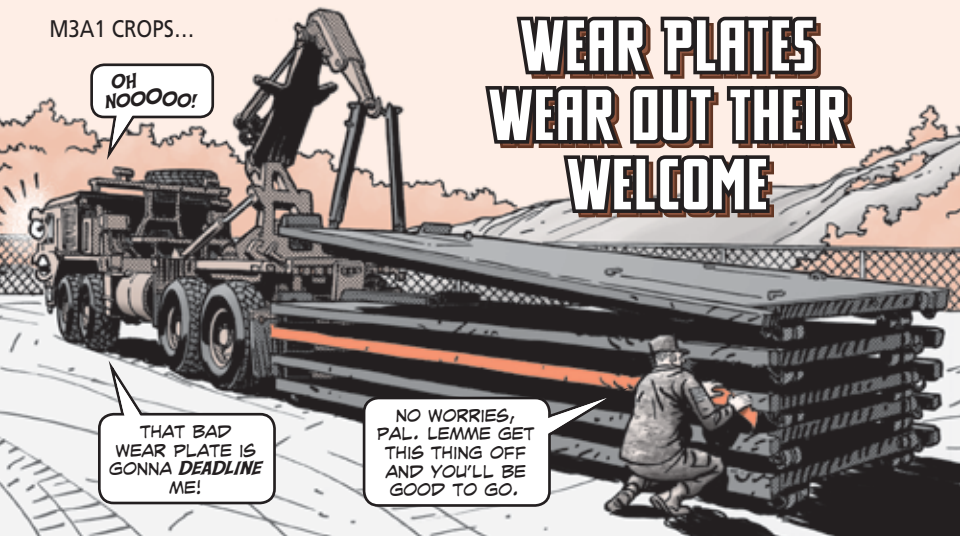
# Replace HVAC Vents for Summer Comfort



**FMTV** trucks aren't exactly loaded with creature comforts. That's why their HVAC systems are a necessity, especially this time of year!

But getting the right HVAC vents for the M1157A1P2 FMTV was a problem because the old TM 9-2320-333-13&P was missing the NSNs for some HVAC parts, like NSN 5340-01-558-9858 for the vents. TM 9-2320-333-23&P (Nov 18) now replaces that old TM and contains all the missing HVAC NSNs.





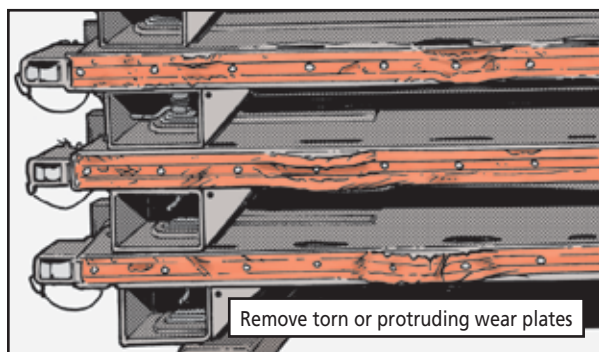
# WEAR PLATES WEAR OUT THEIR WELCOME

No more fretting over wear plates! TACOM has revised TM 9-3990-260-14&P (Jul 01) to say wear plates are no longer needed on the M3A1 CROP to make it fully mission capable for loading an ISO container.

This revision applies to the **front wear plate**, NSN 2590-01-474-9601; **mid wear plate**, NSN 2590-01-474-9603; and **rear wear plate**, NSN 2590-01-474-9605.

The TM revisions are in Before Operations PMCS Item 2 on Page 7-4 of the TM.

If a wear plate is torn or protruding from the side of the M3A1 CROP in such a way that it could snag or cause problems during ISO container insertion, simply remove it.



Previously, this would've caused an immediate headache because it meant the M3A1 CROP was instantly NMC. Now, if a wear plate interferes with loading, just remove it and carry on!

Trucks and  
Trailers...

# EAT MY DUST... BUT NOT WITH DUST CAPS!



YOU LOOK A LITTLE  
**GREEN** AROUND THE  
GILLS. WHAT'S UP?

SOMETHING  
FEELS **OFF**, BUT  
I'M NOT QUITE  
SURE WHAT!



LOOK GUYS! AN  
INVITATION TO  
CAUSE TROUBLE!

OH-HO!  
A **MISSING**  
DUST CAP!

WE LOVE  
THESE  
INVITES!

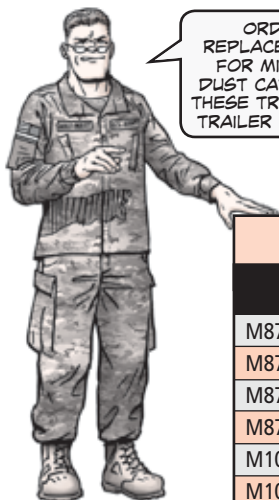


IF THE AIR  
BRAKE CHAMBERS  
ON YOUR TRUCK  
OR TRAILER  
ARE **MISSING**  
DUST CAPS, THE  
CHAMBERS MAY  
LITERALLY **EAT**  
**YOUR DUST!**

Missing dust caps allow contaminants like water and dirt to get inside the chambers. That's a big no-no because it increases the chance of corrosion on the power spring or pressure plate. Even worse, it can affect the performance of your brakes.



Missing dust caps may also be your **first clue** that the air brake chamber needs a **closer inspection** for air leaks or damage.



ORDER REPLACEMENTS FOR MISSING DUST CAPS WITH THESE TRUCK AND TRAILER LISTS...

## Trucks

| Model   | NSN              |
|---|------------------|
| FMTV & M939-series                            | 2530-01-084-6975 |
| HEMTT, M915A3, M915A5, M916A3, M917A1, M917A2 | 2530-01-367-6668 |
| M1070 HET                                     | 5340-01-367-6668 |
| M1074, M1075 PLS                              | 5365-01-385-0000 |

## Trailers

| Model                                      | NSN              |
|--|------------------|
| M870A1                                     | 5340-00-518-5678 |
| M871-series                                | 2530-01-084-6975 |
| M872/A1/A2/A3                              | 3040-01-065-2021 |
| M872A3, M967A1/M969A1/M970A1 tankers       | 2530-01-084-6975 |
| M1000 PLS Trailer                          | 5340-01-614-5753 |
| M1076 PLS trailer                          | 2530-01-367-6668 |
| FMTV M1082 2.5 Trailer & M1095 5.0 Trailer | 2530-01-084-6975 |



**DON'T LEAVE AN AIR BRAKE CHAMBER EXPOSED.**

USE DUCT TAPE TO COVER THE HOLE UNTIL YOUR REPLACEMENT CAP ARRIVES.



## M983A4 LET Fifth Wheel Mount Screws

After hauling many heavy loads on the M983A4 light equipment transporter (LET), the fifth wheel mounting screws tend to loosen. Prevent loosening by torquing those screws to 170 lb-ft during semiannual PMCS.

For more info, contact TACOM's Manuel James, DSN 786-9275, (586) 282-9275 or email: [manuel.l.james.civ@mail.mil](mailto:manuel.l.james.civ@mail.mil)

# YOUR KEY TO THE RIGHT KEY!

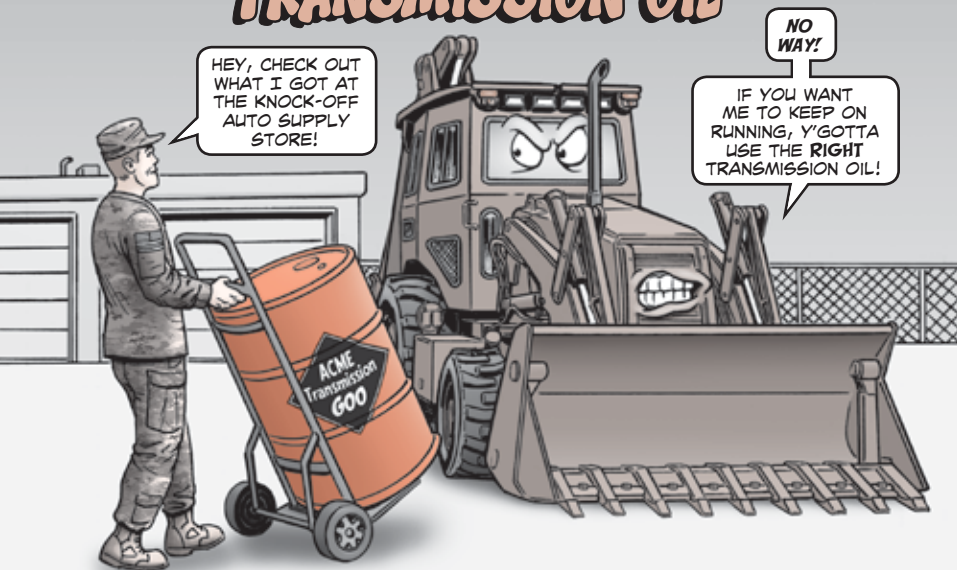


Construction site operations come to a halt if the vehicle key is **LOST**.

Here's a handy list of what's available if you need to order new keys or key blanks:

| Vehicle                           | Key                            | NSN              |
|-----------------------------------|--------------------------------|------------------|
| M915-series trucks                | Ignition switch                | 2920-01-092-9134 |
|                                   | Lock cylinder w/key            | 2540-01-155-3601 |
|                                   | Key blanks                     | 5340-00-357-9269 |
| M917A1 dump truck                 | Ignition key and lock          | 5340-01-371-1658 |
| Small emplacement excavator (SEE) | Ignition switch key            | 5930-01-166-1092 |
|                                   | Door key                       | 5340-01-240-1777 |
|                                   | Battery key                    | 5930-12-121-7198 |
|                                   | Hood wrench                    | 5120-01-235-2605 |
| 621G scraper                      | Disconnect switch key          | 5830-01-715-1939 |
| 120M road grader                  | Battery disconnect key         | 2920-00-775-7691 |
|                                   | Battery disconnect switch key  | 5930-00-715-1939 |
| D6K tractor                       | Battery disconnect switch key  | 5930-00-715-1939 |
| D7R II tractor                    | Battery disconnect switch key  | 5930-00-715-1939 |
| MW24C scoop loader                | Key blank                      | 5340-01-275-7751 |
| 815F compactor                    | Ignition lock switch w/out key | 2920-01-258-3471 |
|                                   | Key only                       | 5340-01-257-6042 |
| HYEX                              | Door/fuel/ignition key         | 5315-01-475-0393 |
| Backhoe loader (BHL)              | Ignition key                   | 5340-01-275-7751 |
| 950B loader                       | Ignition key                   | 5340-01-161-0594 |
| CB534B/C roller                   | Ignition key                   | 5340-01-257-6042 |
| CS563D roller                     | Ignition key                   | 5340-01-257-6042 |
| Portable concrete mixer (PCM)     | Ignition key                   | 5930-01-588-8283 |

# DON'T SHOP AROUND FOR TRANSMISSION OIL



OPERATORS, IT'S BEEN SAID MANY TIMES, BUT BEARS REPEATING: THERE IS **NO SUBSTITUTE TRANSMISSION OIL** IN THE SUPPLY SYSTEM FOR THE BHL!

THE **ONLY** AUTHORIZED OILS ARE THOSE LISTED IN THE EXPENDABLE/ DURABLE ITEMS LIST IN WP 0375 OF TM 5-2420-231-3 (JUL 13)!

ANYTHING ELSE CAN CAUSE COMPONENT OR VEHICLE **FAILURE!**

## HERE'S THE RIGHT STUFF!

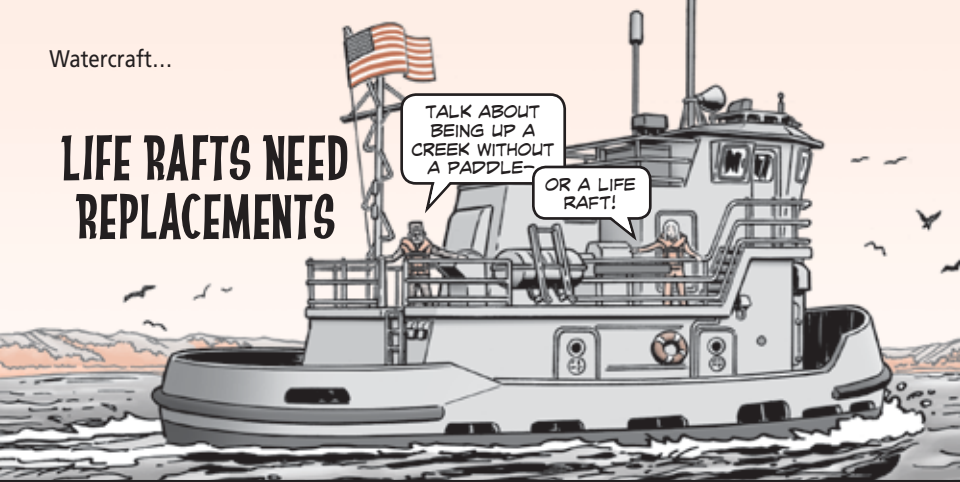
### Hy-Tran Ultra Case AKCELA MS-1209

| Size           | NSN 9150-   |
|----------------|-------------|
| 1-qt container | 01-614-5259 |
| 5-gal can      | 01-614-6424 |
| 55-gal drum    | 01-614-6419 |

### HydroDex Transmission Fluid

| Size       | NSN 9150-   |
|------------|-------------|
| 10-qt can  | 00-657-4959 |
| 30-gal can | 01-114-9968 |

# LIFE RAFTS NEED REPLACEMENTS



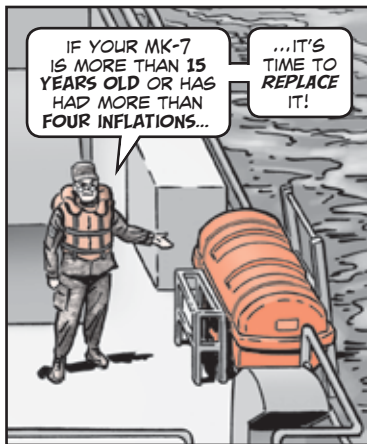
**Units with watercraft that contain the Mark 7 (MK-7) life rafts may need replacements.**

The Navy, which supplies these rafts, recently began a stock swap to replace aging MK-7s. Many are currently onboard Army watercraft.

If your MK-7 is at least 15 years old or has been inflated four or more times, it qualifies for replacement.

Three life raft shops at the depot level are handling replacements. When a raft is sent to a depot for re-certification, it'll automatically be replaced if it meets the age or inflation criteria.

**Be forewarned: Re-certification costs for MK-7 life rafts will increase to cover the replacements.**



For details, see TACOM Water Safety Advisory (WSA) 18-01:

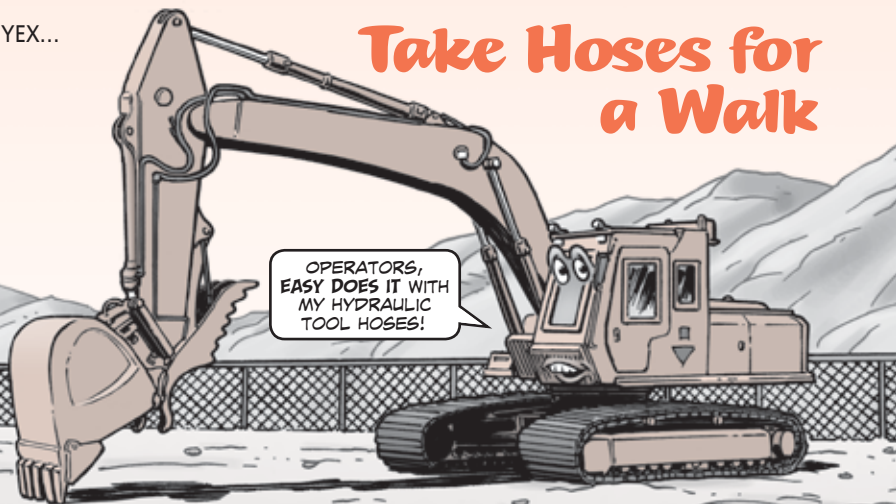
[https://tulsa.tacom.army.mil/safety/Advisory/Watercraft/wsa\\_18-01.html](https://tulsa.tacom.army.mil/safety/Advisory/Watercraft/wsa_18-01.html)





HYEX...

## Take Hoses for a Walk



**Never** yank on the hydraulic hoses or let them snap back into the recoil spool. Sooner or later this yo-yo treatment breaks the spring inside the recoil spool. Then you can't rewind the hoses.

To make the hoses and recoil spool last longer, always walk them out and back to the vehicle every time.

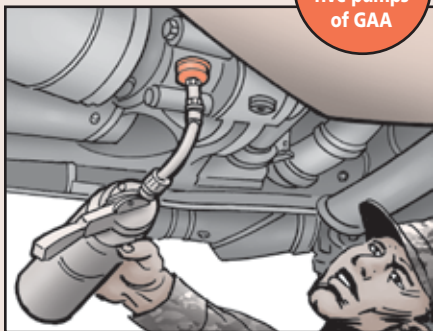
SEE...

## BALL JOINTS NEED *LUBE!*

**O**perators, if you don't lubricate the ball joints on your small emplacement excavator (SEE), rust and friction are right around the corner.

Problem is, the grease fitting that lubes the front and rear drive shaft thrust ball joint gets overlooked. That's because it's directly under the **middle** of the vehicle, which means you've got to crawl under the excavator to find it. Without that lube, friction will "deep six" the SEE's ball joints.

When you're ready to lube, read and heed the CAUTION in Note 18 of LO 5-2420-224-12 (Jul 93). Give the fitting no more than five pumps of lube from a hand-held grease gun. Pumping in too much lube will split the ball joint's rubber torsion boot. If lube leaks out, water gets in.



HGU-56P/AAIH Helmets...

# NEW ZETA III HELMET LINERS AVAILABLE!

THIS NEW ZETA  
III HELMET LINER  
FEELS **GOOD!**

AND THE PS APP  
HAS THE NSNS,  
JONES!



HELMETS ARE  
IMPORTANT  
WHEN FLYING  
AIRCRAFT.

JUST AS IMPORTANT ARE THE  
HELMET LINERS. THEY NEED TO FIT  
YOUR NOGGIN WELL TO ENSURE  
BOTH SAFETY AND COMFORT.

The **newest** in helmet liners, Zeta III,  
is now approved as an alternate for  
the HGU-56/P, the RWH-56/P Rotary  
Wing Helmet and the Apache Crew  
Integrated Helmet (AAIH).



Zeta III helmet liners approved as alternate

The liners come in  
 $\frac{3}{8}$ -,  $\frac{1}{2}$ - and  $\frac{5}{8}$ -in  
thicknesses.

However, Apache pilots who use the AAIH  
version of the HGU-56/P helmet may notice that the  
 $\frac{1}{2}$ - and  $\frac{5}{8}$ -in liners **compress** during flight.



That can have an effect on viewing the integrated helmet and display unit (IHU).

If this happens, switch to the  $\frac{3}{8}$ -inch Zeta III or alternate thermoplastic liner (TPL) or super comfort liner (SCL).

The ZETA III helmet liners will be used for the HGU-56/P rotary wing helmet, the RWH. The RWH will slowly replace the current HGU-56/P flyer's helmet.

#### XXS Helmets

| Thickness         | NSN 8415-   | PN          |
|-------------------|-------------|-------------|
| $\frac{3}{8}$ -in | 01-671-3685 | 9A-0043-102 |
| $\frac{1}{2}$ -in | 01-671-3705 | 9A-0043-103 |
| $\frac{5}{8}$ -in | 01-671-3706 | 9A-0043-104 |

#### XS and Small Helmets

| Thickness         | NSN 8415-   | PN          |
|-------------------|-------------|-------------|
| $\frac{3}{8}$ -in | 01-671-3711 | 9A-0038-102 |
| $\frac{1}{2}$ -in | 01-671-3713 | 9A-0038-103 |
| $\frac{5}{8}$ -in | 01-671-3715 | 9A-0038-104 |

#### Medium Helmets

| Thickness         | NSN 8415-   | PN          |
|-------------------|-------------|-------------|
| $\frac{3}{8}$ -in | 01-671-3740 | 9A-0039-102 |
| $\frac{1}{2}$ -in | 01-671-3742 | 9A-0039-103 |
| $\frac{5}{8}$ -in | 01-671-3744 | 9A-0039-104 |

#### Large Helmets

| Thickness         | NSN 8415-   | PN          |
|-------------------|-------------|-------------|
| $\frac{3}{8}$ -in | 01-671-3758 | 9A-0040-102 |
| $\frac{1}{2}$ -in | 01-671-3761 | 9A-0040-103 |
| $\frac{5}{8}$ -in | 01-671-3768 | 9A-0040-104 |

#### XL Helmets

| Thickness         | NSN 8415-   | PN          |
|-------------------|-------------|-------------|
| $\frac{3}{8}$ -in | 01-671-3772 | 9A-0041-102 |
| $\frac{1}{2}$ -in | 01-671-3779 | 9A-0041-103 |
| $\frac{5}{8}$ -in | 01-671-3781 | 9A-0041-104 |

IF YOU NEED TO ORDER SCL OR TPL HELMET LINERS FOR THE HGU-56/P, THE RWH-56/P OR AATH, CHOOSE FROM THIS LIST...



#### SCL for HGU-56/P

| Size | NSN 8415-   |
|------|-------------|
| XXS  | 01-624-7837 |
| XS   | 01-624-7869 |
| S    | 01-624-7866 |
| M    | 01-624-7865 |
| L    | 01-624-7863 |
| XL   | 01-624-7838 |

#### TPL for RWH HGU-56/P

| Size | NSN 8415-   |
|------|-------------|
| XXS  | 01-666-2501 |
| XS   | 01-666-2498 |
| S    | 01-666-2496 |
| M    | 01-666-2402 |
| L    | 01-666-2399 |
| XL   | 01-666-2388 |

#### TPL for HGU-56/P

| Size | NSN 8415-   |
|------|-------------|
| XXS  | 01-394-9999 |
| XS   | 01-395-0000 |
| S    | 01-395-1555 |
| M    | 01-395-0001 |
| L    | 01-395-0002 |
| XL   | 01-395-0003 |

If you've got questions about the helmets, contact **James Hauser**, (256) 876-3769 or email: [james.j.hauser6.civ@mail.mil](mailto:james.j.hauser6.civ@mail.mil)

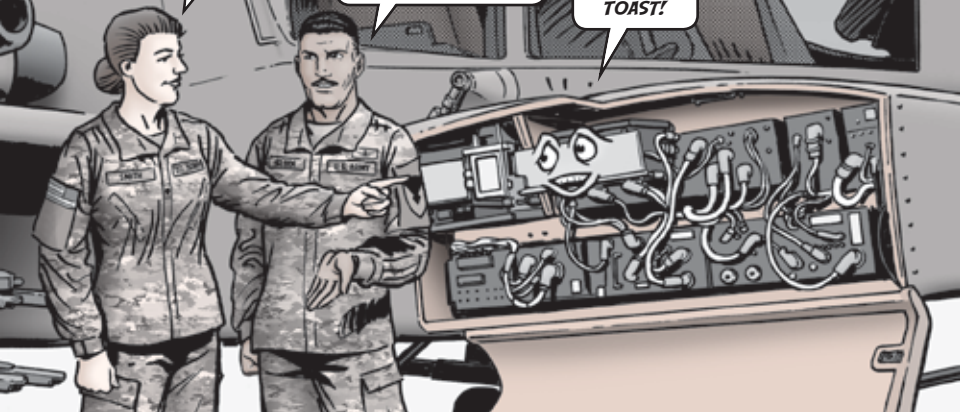
AH-64D/E...

# BE MINDFUL OF M230 GUN PROCEDURES

SERGEANT  
BLADE, THE AUTO  
LOAD IS OUT.

MAKE SURE YOU  
FOLLOW THE IETM  
WORD FOR WORD IN  
MANUAL MODE.

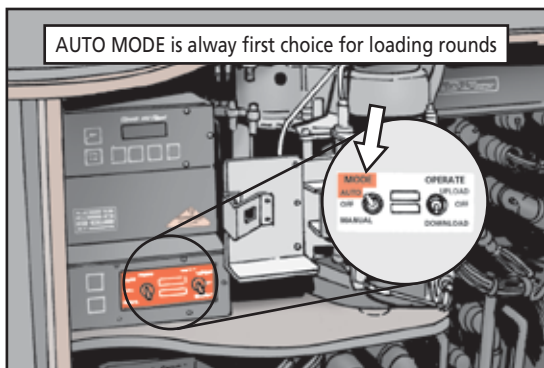
YEAH,  
ONE SMALL  
MISSTEP  
AND I'M  
TOAST!



The primary method for uploading and downloading ammo into the AH-64D/E's sideload is AUTO MODE.

The sideload/magazine controller (SMC) manual mode is used **only** when the AUTO MODE doesn't work. Just be sure you follow the IETM instructions to the letter so you can stay safe.

AUTO MODE is always first choice for loading rounds



IF YOU CUT CORNERS WHEN USING THE SMC MANUAL MODE, YOU COULD **DAMAGE** THE AMMUNITION HANDLING SYSTEM, WHICH ALLOWS YOU TO OVERRIDE NON-FATAL SIDELoader FAILURES AND ERRORS.

PLUS, THE SMC WILL IGNORE CERTAIN INPUT SIGNALS EVEN WITH NO FAILURES OR ERRORS.



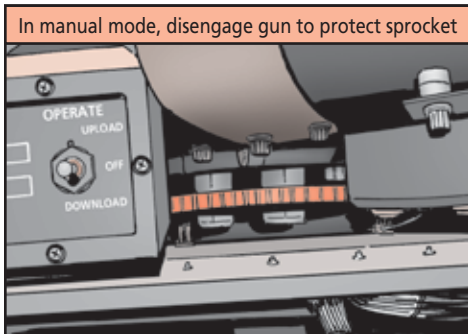
When operating SMC, make sure to **always** disengage and turn off the gun prior to re-clutching it. If you don't, the sideloader clutch is still engaged and will cause the right hand elbow sprocket to twist. That means you'll have to replace it.

It also throws off the timing and may damage the carriers and the sideloader, causing function problems with the ammo handling system (AHS).

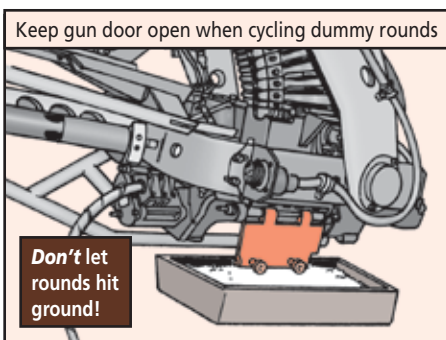


WHEN THE MISSION IS COMPLETE, MAKE APPROPRIATE FORM ENTRIES SO THE AHS CAN BE DIAGNOSED AND REPAIRED AND THE AUTO MODE RESTORED.

WHEN YOU'RE PREPARING TO DRY FIRE OR CYCLE THE 30MM GUN, **ALWAYS** MAKE SURE THE SMC SWITCH IS **DISENGAGED** AND NOT LEFT IN THE AUTO OR MANUAL MODE.



When performing the gun system maintenance operational check (MOC), dummy rounds are fed through the system and down to the gun. When cycling dummy rounds, leave the gun door open and let the rounds fall out into a container with foam cushioning in it. This keeps your dummy rounds in tip-top shape for longer use. Dummy rounds that hit the ground get damaged and become unstable.



**Don't let rounds hit ground!**

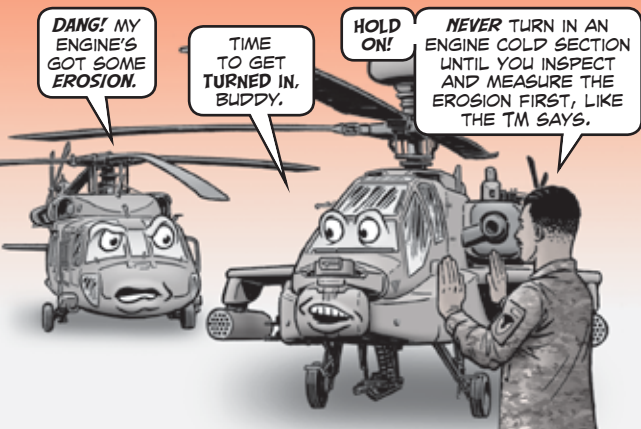
AS A SAFETY PRECAUTION, **ALWAYS STAND CLEAR** OF THE TURRET AND GUN AREA DURING THE MOC.

THE TURRET AND GUN CAN SWING AROUND **VERY FAST**.

THE BARREL CAN TAKE YOU OUT IF YOU'RE **STANDING TOO CLOSE**.

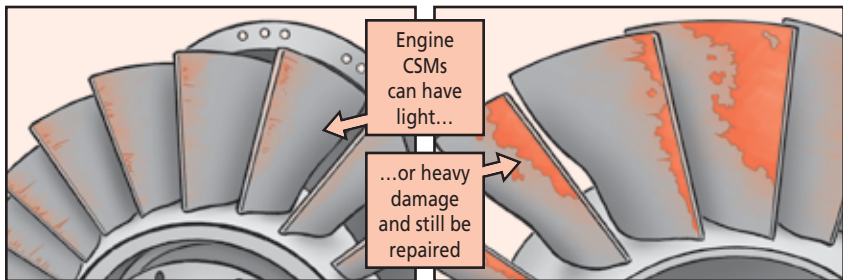


# Inspect Cold Section Modules Before Turn-in



**M**echanics, are you eyeballing the T700-series engine's cold section module (CSM) blades for erosion? That's not good enough! Never rely on your eyes to determine erosion damage. It must be measured.

Before you send in a CSM, do this: Perform a compressor rotor blade inspection to determine if the engine CSM blades are within erosion and damage limits like it says in TM 1-2840-248-23&P (Jun 17). Use the procedure to significantly restore engine performance by blending compressor rotor blades that have eroded or experienced foreign object damage (FOD).



If the CSM can't be repaired, record the information on the DA Form 2410. When you write up the condition code tags and paperwork, be detailed in describing the problem before sending it in with the engine to Corpus Christi Army Depot (CCAD).

Units in need of field-level training on this issue should contact their General Electric contract field service representative (FSR). Training costs the unit nothing, and it can take place when and where you need it.

Take advantage of on-the-job training, and don't forget to request assistance from your Logistics Assistance Representatives (LARs), too. They can help with engine CSM blade erosion checks.

# Take Control of CORROSION



**M**echanics, aircraft multipin electrical connectors are the electrical interface between the aircraft and avionics systems.

The failure of just one electrical connector could lead to a minor system failure at best, or a catastrophic failure at worst. Corrosion to electrical connectors is a serious concern and is an issue that is regularly overlooked. The difference between avionic and airframe corrosion is that relatively small amounts of corrosion in avionic equipment can cause intermittent malfunction or complete failure.


While it's not a common practice among Soldiers, using an avionics grade MIL-PRF-81309, Type III corrosion preventive compound (CPC) assists in displacing any moisture present and prevents corrosion inside connectors. Using the **incorrect** CPCs degrades system performance and can cause failures. So use the **right** CPC.

When electronic system problems arise, reseating cannon plugs is a temporary fix. Refer to your aircraft's IETM or Chap 6 of TM 1-1500-344-23-2. Only use MIL-PRF-81309, Type III, Avionics Grade inside connectors. NSN 8030-00-546-8637 brings a 12-oz aerosol can.



For further corrosion assistance, contact the AMCOM Corrosion Program Office Hotline at (256) 313-0209. You can also visit the website:  
<https://amcomcorrosion.army.mil>

# UNSERVICEABLE AIRCRAFT PARTS NEEDED



I CAN'T DO MY  
JOB WITHOUT  
**YOU** DOING  
YOUR PART.

WHATEVER  
UNSERVICEABLE PARTS  
YOU HAVE ON HAND, GET  
THEM TURNED IN ASAP.

READINESS  
DEPENDS  
ON IT!

**M**echanics, maintenance and overhaul programs rely on you to do your part! In order for the supply system to meet the demands for Utility Helicopter components, unserviceable Black Hawk components or parts must be turned in for repair, **ASAP**.

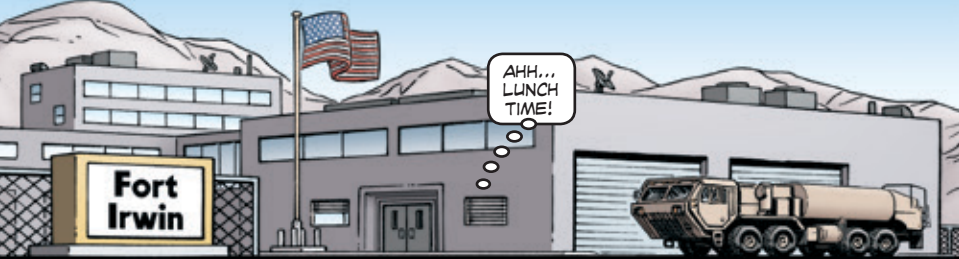
Without those unserviceable components, on-hand inventory decreases, causing critical shortages. That means a longer wait for parts and increased aircraft downtime.

If you have any of these unserviceable components lying around the hangar, get 'em turned in:

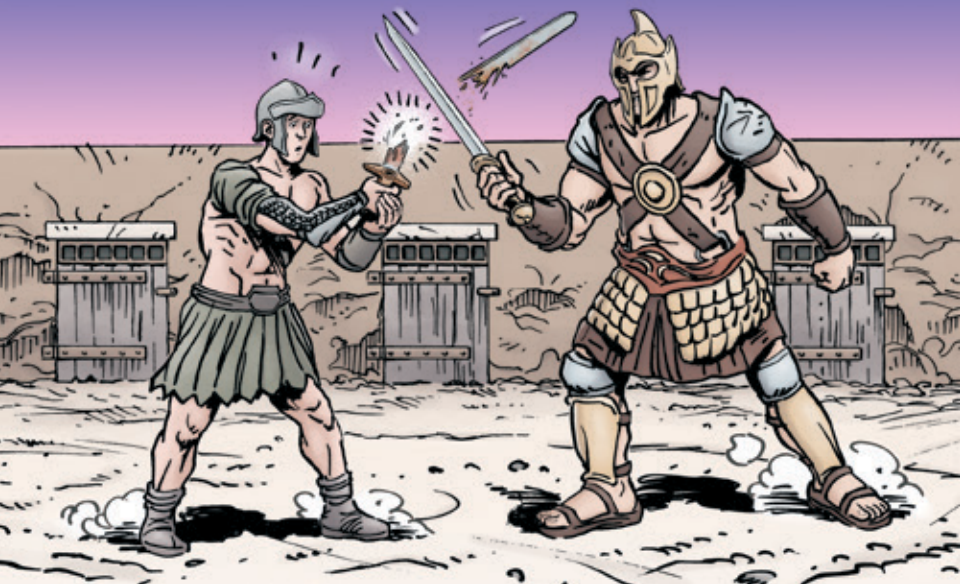
- **Electrical pallet assembly**, NSN 6110-01-597-1482 (PNs 70A144-2 and 70A144-2-SCD)
- **Electrical mechanical actuator**, NSN 1680-01-169-0858 (PNs 70400-02260-117, 7400-02260B and 181950-5).
- **Electrical mechanical actuator**, NSN 1680-01-242-2066 (PNs 70400-02260-121 and CU09609213)
- **Tail rotor plate assembly**, NSN 16151-01-074-5153 (PN 70358-06612-042)

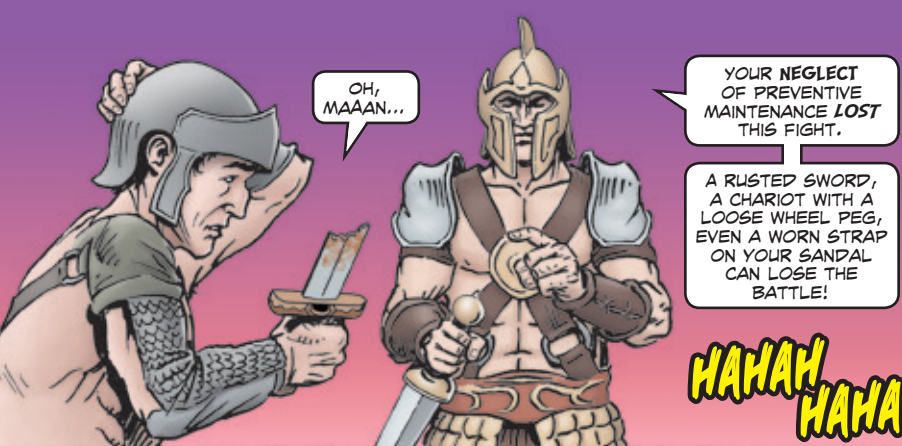
**GOT QUESTIONS?**  
CONTACT KEVIN VALENTINE  
AT DSN 746-4668,  
(256) 876-4668, OR EMAIL:  
[kevin.m.valentine.civ@mail.mil](mailto:kevin.m.valentine.civ@mail.mil)





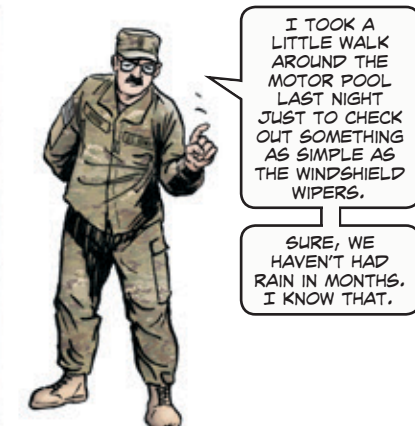
## ***Leaders Train PMCS!***



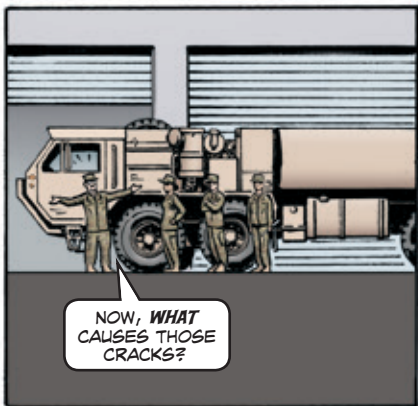


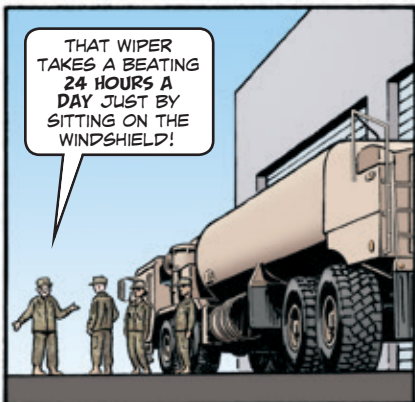
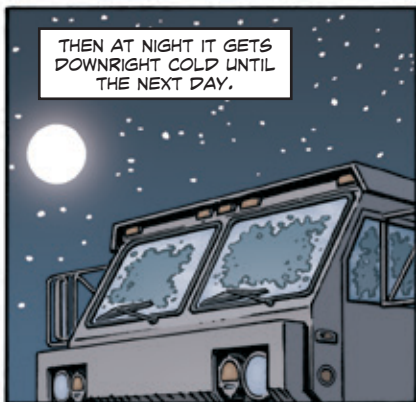
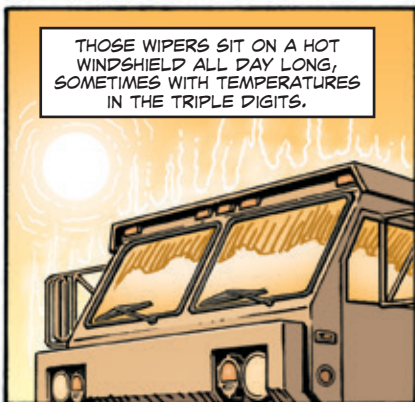
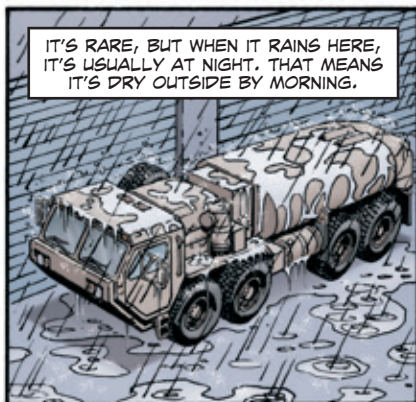
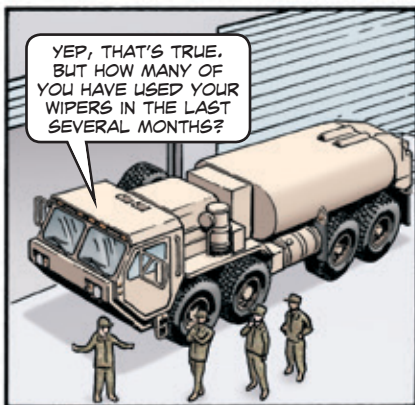




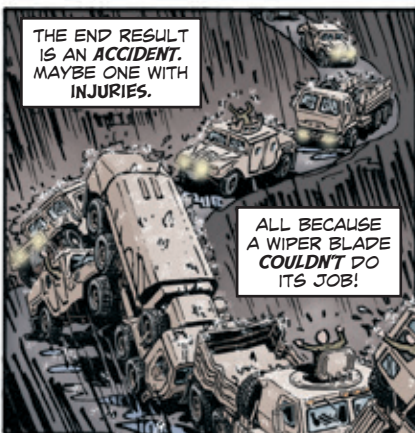
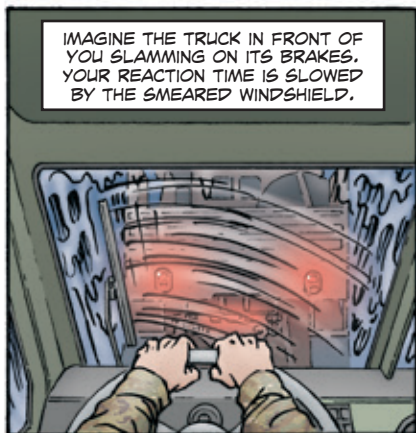
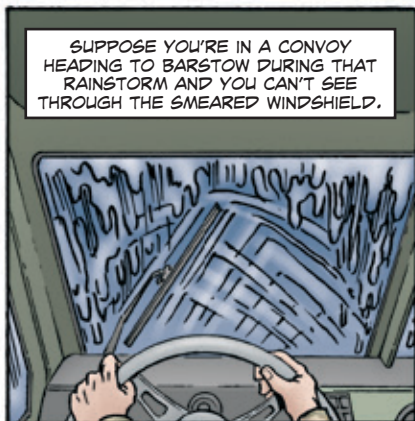
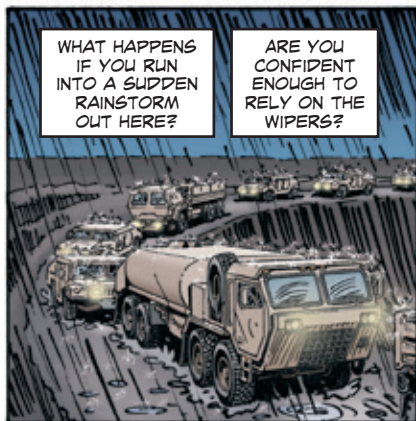
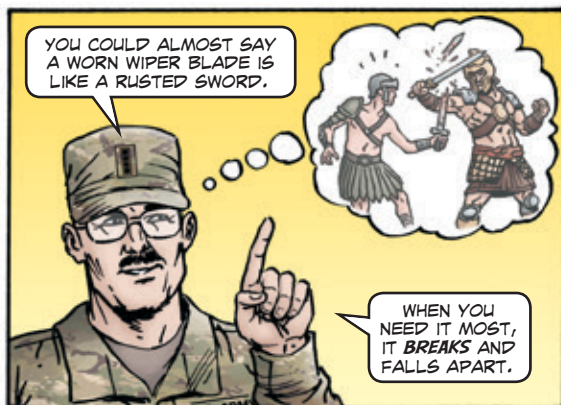


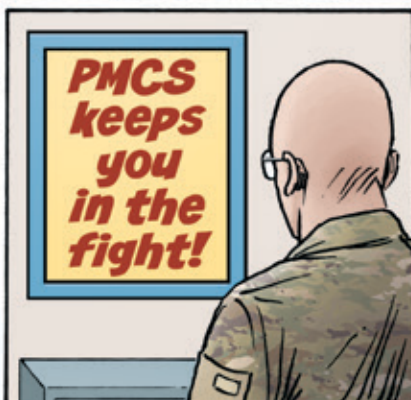






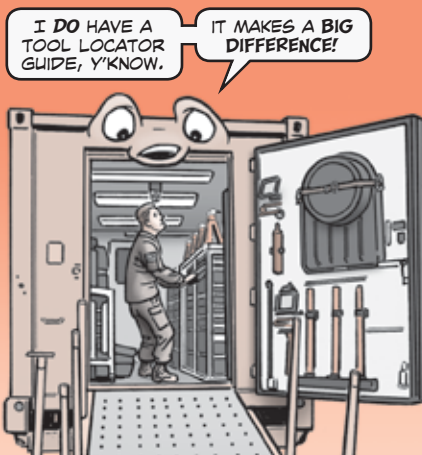








# A GUIDE TO TOOL GUIDES



Few things can be as frustrating as doing inventory on a large tool set. There are so many tools. Even when you have the tool set's component list (CL), it can be quite difficult to locate all the tools.

Fortunately, help is at hand. For many of the large tool sets, tool locator guides are available. They make it much **easier** to inventory tools.



THESE  
TOOL SETS  
HAVE TOOL  
GUIDES!

| Tool Set       | NSN              | Component List |
|----------------|------------------|----------------|
| ARSS           | 4940-01-619-0916 | 4940-95-A70    |
| FRS            | 4940-01-533-1621 | 4940-95-E42    |
| HSTRU          | 4910-01-563-8425 | 4910-95-B36    |
| MWMSS Type 1   | 4940-01-601-1928 | 4940-95-B50    |
| MWMSS Type 2   | 4940-01-601-1930 | 4940-95-B51    |
| SASS           | 4933-01-632-3964 | Pending        |
| SATS           | 4910-01-490-6453 | 4910-95-A81    |
| SECM HW        | 4940-01-333-8471 | 4940-95-B29    |
| SECM LT        | 4940-01-548-9064 | 4940-95-B36    |
| SEW (plastic)  | 4940-01-454-9877 | 4940-95-B33    |
| SEW (aluminum) | 4940-01-591-0265 | 4940-95-B35    |

To get a tool locator guide, email:  
[usarmy.detroit.tacom.mbx.ilsc-skot-group-actions@mail.mil](mailto:usarmy.detroit.tacom.mbx.ilsc-skot-group-actions@mail.mil)

*Remember!*

The tool guide should **always** be used with the CL. The guide is just a guide, **not** the official CL.



NEED  
REPLACEMENT  
SEW DOORS  
AND ROOF  
PANELS?



# Sew Up SEW Parts Problems

Dear Half-Mast,

Our legacy SEWs (shop, equipment welding), NSN 4940-01-454-9877, are in terrible condition. They have worn or missing plastic roof and door parts that need replacing. This has led to water damage, corrosion, pilferage and unserviceable welding components and accessories. Can you help us repair our SEWs?

SGT L.T.

YES, I CAN,  
SERGEANT!  
WE TURNED  
TO OUR SEW  
EXPERT,  
TACOM'S  
CHRISTOPHER  
DAVIS.

TAKE IT  
AWAY, CHRIS!

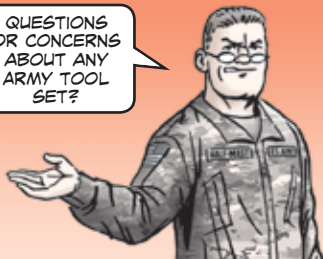


HERE ARE THE  
REPAIR PARTS TO  
GET YOUR SEWS  
BACK IN SHAPE!



| Item  | NSN              | Qty |
|---|------------------|-----|
| Roof top, center (green)                                      | 5340-01-660-3758 | 1   |
| Left side, right side roof top (green)                        | 5340-01-660-3753 | 2   |
| Side door panel, large (green)                                | 2510-01-660-5790 | 2   |
| Side door panel, small (green)                                | 5340-01-660-3751 | 2   |
| Door panel front/rear (green)                                 | 5340-01-676-2247 | 4   |
| Roof top, adapter (required only for center roof top section) | 5340-01-675-1772 | 4   |
| Roof top, center (tan)  | 5340-01-675-1408 | 1   |
| Left side, right side roof top (tan)                          | 5340-01-675-1415 | 2   |
| Side door panel, large (tan)                                  | 2510-01-675-3686 | 2   |
| Side door panel, small (tan)                                  | 5340-01-675-1391 | 2   |
| Door panel front/rear (tan)                                   | 5340-01-676-2246 | 4   |
| Roof top, adapter (required only for center roof top section) | 5340-01-675-1772 | 4   |

QUESTIONS  
OR CONCERNS  
ABOUT ANY  
ARMY TOOL  
SET?

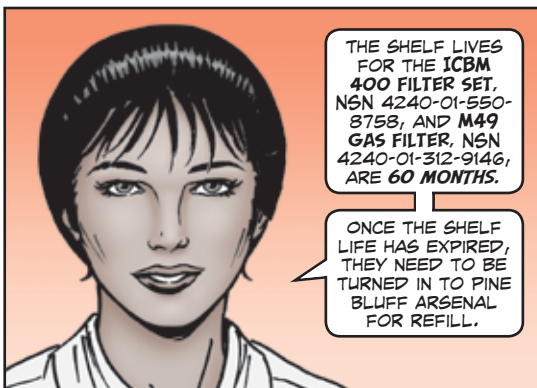


EMAIL:  
usarmy.  
detroit.  
tacomb.mbx.  
ilsc-skot-  
group-  
actions@  
mail.mil



## ***GAS FILTER EXPIRED? TURN IN FOR REFILL***

Filter



THE SHELF LIVES  
FOR THE ICBM  
400 FILTER SET,  
NSN 4240-01-550-  
8758, AND M49  
GAS FILTER, NSN  
4240-01-312-9146,  
ARE 60 MONTHS.

ONCE THE SHELF  
LIFE HAS EXPIRED,  
THEY NEED TO BE  
TURNED IN TO PINE  
BLUFF ARSENAL  
FOR REFILL.

The packing instructions for the ICBM 400 are in PS-19-14295 and those for the M49 are in PS-19-11282. You can find them in JACKS: <https://jacks.jpeocbd.osd.mil>

Send expired, uncontaminated filters to:

### **MAILING ADDRESS (TAC 1):**

US Army, Pine Bluff Arsenal  
504th Street  
Bldg 53990  
Central Receiving Shipping Point  
Pine Bluff AR 71602-9500

### **Required shipping label info**

SPLC: 611860000  
PREFERRED APOD: NONE  
PREFERRED POD: NONE  
RIC: NONE  
DATE EFFECTIVE: 21 May 18  
DATE DELETED: NONE

### **Questions?**

Contact Jason Ellis  
at (586) 282-1680  
or email:  
[jason.r.ellis1.civ@  
mail.mil](mailto:jason.r.ellis1.civ@mail.mil)

MOISTURE AND  
CONTAMINANTS CAN  
DO A NUMBER ON MY  
DETECTION CELLS.

I NEED TO BE  
SEALED **TIGHT**  
FOR STORAGE.

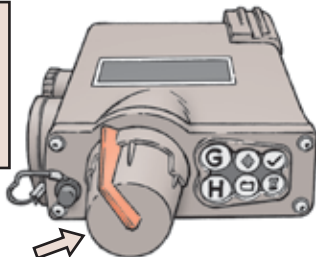
# Seal JCAD for Storage

**T**he M4/M4A1 joint chemical agent detector (JCAD) needs its components locked in for storage.

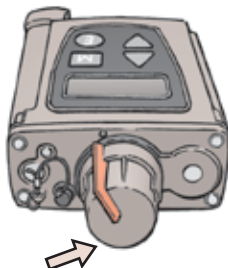
**That means:**

- the rain cap is set to the OFF position.
- the sieve pack is installed and its cover twisted on properly.
- the battery tray is locked in place.

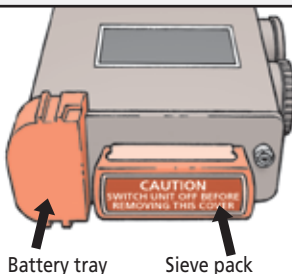
Before storing M4 make sure rain cap is in OFF position...



...and do the same for M4A1



Also lock M4 battery tray and sieve pack in place



Same goes for the M4A1

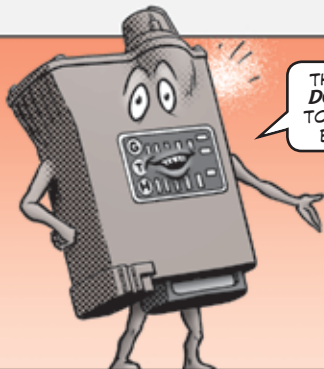


If you forget any of these, the JCAD's interior detection components are exposed to outside contamination and moisture. If the detection components become too contaminated, the JCAD may not come out of the WAIT mode next time it does its built-in tests (BITS).

Inserting a new sieve pack and running the JCAD for hours sometimes fixes the problem. Otherwise, the only solution is to send the JCAD to the next higher level maintenance for repair.



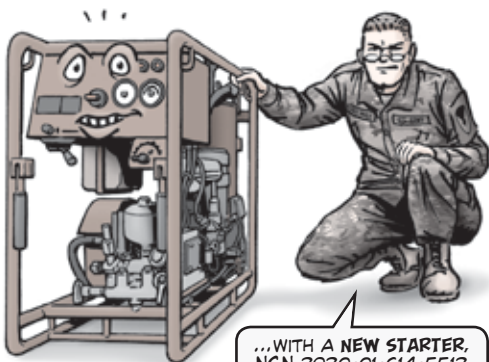
Also, always remove the batteries before storage and reinsert the empty battery tray. If batteries aren't taken out, they can leak and cause all kinds of damage. Sometimes the only fix is a new JCAD.



THAT'S RIGHT!  
**DON'T FORGET  
TO REMOVE MY  
BATTERIES!**

## M26 Decon Starter Replaced!

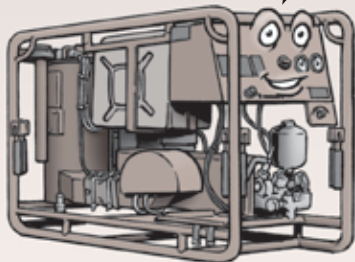
THE OLD M26 DECON  
STARTER, NSN 2920-12-  
375-1690 (PN 547.465.6),  
IS BEING REPLACED...



...WITH A NEW STARTER,  
NSN 2920-01-614-5512  
(PN 5R15N).

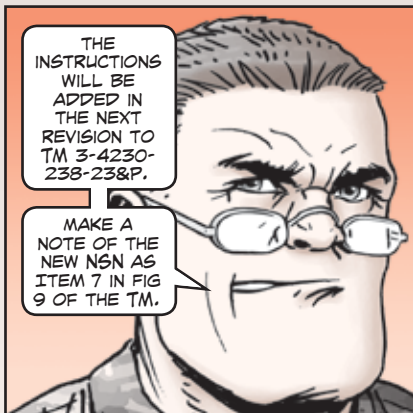
INSTRUCTIONS FOR REPLACING THE  
STARTER ARE AT:

[https://tulsa.tacom.army.mil/  
Maintenance/?t=mam&f=  
M26StartReplace.pdf](https://tulsa.tacom.army.mil/Maintenance/?t=mam&f=M26StartReplace.pdf)

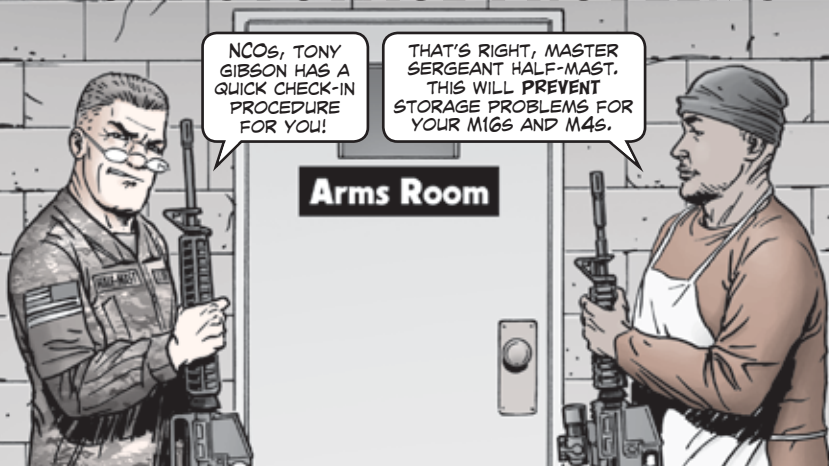


THE  
INSTRUCTIONS  
WILL BE  
ADDED IN  
THE NEXT  
REVISION TO  
TM 3-4230-  
238-23&P.

MAKE A  
NOTE OF THE  
NEW NSN AS  
ITEM 7 IN FIG  
9 OF THE TM.



# TURN-IN PROCEDURE TURNS OFF STORAGE PROBLEMS



Dear Editor,

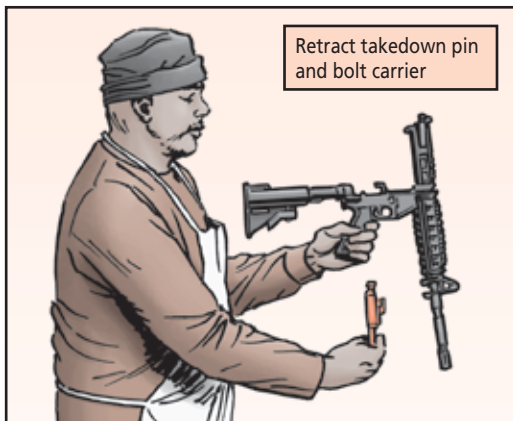
Two of the biggest storage problems for the M16-series rifle and M4/M4A1 carbine are that they're stored dirty and unlubed and also cocked with the bolt locked to the rear.

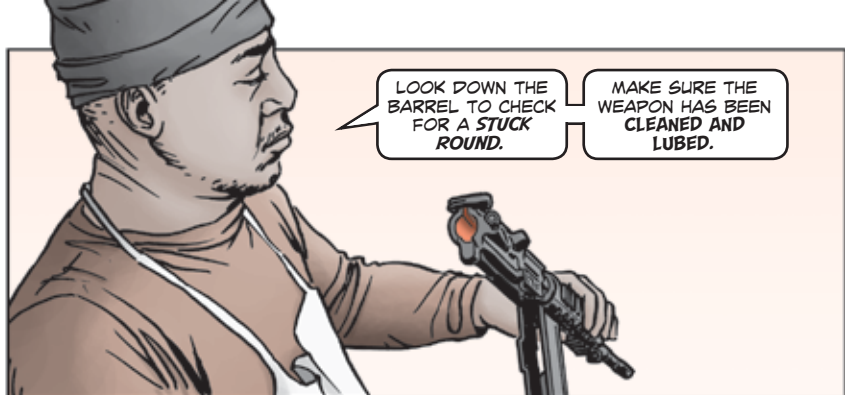
Carbon and lack of lube let corrosion eat up the metal, ruining the weapon in some cases. Storing the weapon cocked causes the hammer spring to lose its spring tension. Leaving the bolt locked back weakens the recoil spring, which leads to jamming.

A simple turn-in procedure eliminates those problems and ensures weapons are ready for action.

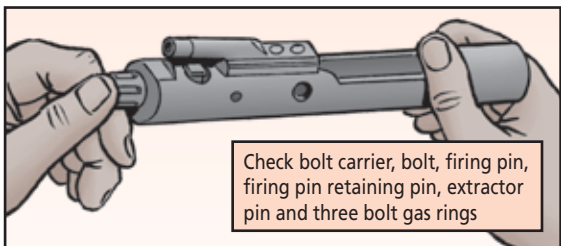
After Soldiers have cleaned and lubed their M16s or M4s, have them release the rear takedown pin and remove the bolt carrier assembly. As they come to the arms room door, they'll be holding the bolt carrier in one hand and the broken down M16 or M4 in the other.

Before accepting the weapon, look down the barrel to check for a stuck round or other debris.





Remove the bolt from the bolt carrier. Check that the bolt carrier, bolt, firing pin, firing pin retaining pin, and extractor pin are clean and in good condition. And make sure the three bolt gas rings are present on the bolt.



If the weapon passes all the checks, reinstall the bolt in the bolt carrier and use the forward assist to lock in the bolt carrier. That ensures the forward assist is working.

Lock the upper and lower receivers together. Make sure the selector is in the SEMI position and pull the trigger. The hammer should fall. Close the dust cover.

Set selector to SEMI and pull trigger



Now you know for sure the weapon is clean, lubed, in good shape and ready for storage. An NCO can do this check for each weapon in just a few minutes.

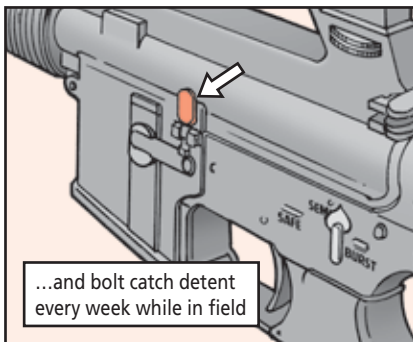
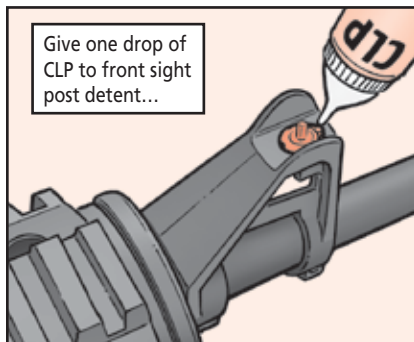
Tony Gibson  
Ft Stewart, GA



# JUST ONE DROP OF OIL, PLEASE



In humid areas like Ft Benning, we see front sight post detents actually freeze from corrosion. Then Soldiers can't adjust the front sight. If we can't free the detent, we have to replace the \$120 barrel. Just one drop of oil prevents that—and saves money!



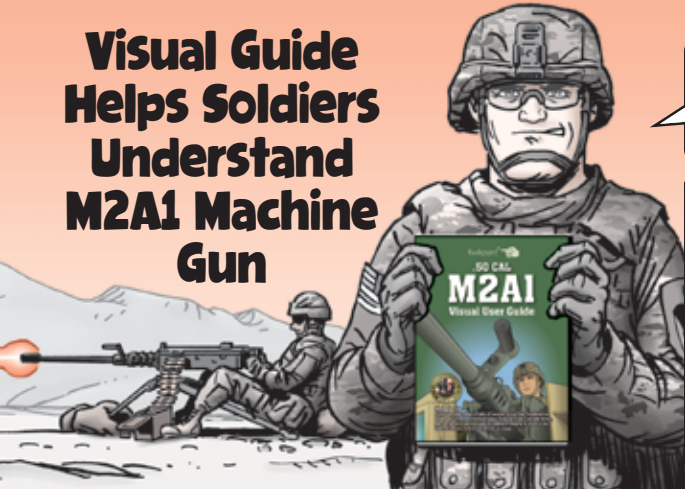
While they're at it, they should give the detent under the bolt catch a drop of oil, too. If the bolt catch freezes in the down position, the whole weapon has to be coded out.

Scott Taylor  
Ft Benning, GA

**Editor's note:** Another slick tip from you, Scott. Two drops of lube can save your weapon, Soldiers.



# Visual Guide Helps Soldiers Understand M2A1 Machine Gun



UNITS WITH THE  
M2A1 MACHINE GUN  
CAN GET **MORE**  
TRAINING HELP WITH  
THE **M2A1 VISUAL  
USER GUIDE**.

The guide is  
especially useful for  
units transitioning  
from the M2 to the  
M2A1, but can help  
all M2A1 gunners  
brush up on firing  
and caring for the  
weapon.

It's an excellent  
tool to use before  
going to the range.

## The visual guide covers:

- differences between  
the M2 and M2A1.
- barrel installation  
procedure.
- visual checks.
- final checks.
- barrel removal.
- M19 BFA prep.

The visual guides were distributed when the  
M2A1s were fielded. If you didn't get the guides or  
need more, email Laura Battista at:

[laura.l.battista.civ@mail.mil](mailto:laura.l.battista.civ@mail.mil)

If you're still using the old M2s, there's a visual guide  
available that takes Soldiers through the headspace  
and timing procedure. Contact Battista for a copy.  
You can also download it from the PS milSuite site:

[https://www.milsuite.mil/book/  
groups/ps-magazine](https://www.milsuite.mil/book/groups/ps-magazine)

## Oops! Armorer Checks M2A1 Headspace

Dear Editor,

The article in PS 794  
(Jan 19) on the importance  
of checking the M2A1  
machine gun's headspacing  
was great except for one  
thing: It's the armorer who  
should check headspacing,  
**not** the 91F small arms  
repairman.

CW5 Danny Taylor  
Ft Campbell, KY

**Editor's note:** You're absolutely right, Chief.  
Field maintenance sets the headspace and timing  
for each M2A1. But it's the job of the unit armorer  
to check an M2A1's headspace and timing before  
it leaves the arms room. And the armorer should  
do the check with the **wear limit/timing gage**,  
NSN 5220-01-580-6602, not with the old M2  
headspace and timing gages.

If the M2A1 fails the wear limit or timing checks,  
it needs to go back to field maintenance for  
adjustment of the headspace and timing.



## Finish Standards Changed For M240, M249 Machine Guns

**F**or years, the rule on small arms — rifles, pistols, machine guns, and mortars — is that if a weapon is missing more than  $\frac{1}{3}$  of its finish, it needs to be turned in for depot overhaul.

That rule still stands, **except for the M240 and M249 machine guns**. It no longer matters how much of their finish is gone. Shiny spots and bare metal, regardless of how big, can be touched up with solid film lubricant (SFL). This new standard will be added to the next revisions of the M240's and M249's -23&Ps.

But remember, you can't just slap on the SFL. First, thoroughly degrease the weapon with MIL-PRF-680 Type II dry cleaning solvent, NSN 6850-01-474-2317. **Wear protective gear.** You don't want solvent on your skin or in your eyes. Wear protective gear to apply the SFL, too.

After the weapon has completely dried, check it for corrosion and damage. Any corrosion must be removed and damage repaired before applying SFL.

There are three SFL choices:

- **16-oz aerosol can,**  
NSN 9150-01-260-2534
- **Paint pen dispenser,**  
NSN 9150-01-646-0099  
Use this only for nicks, scratches and small shiny spots.
- **1-gal can,**  
NSN 9150-00-142-9361

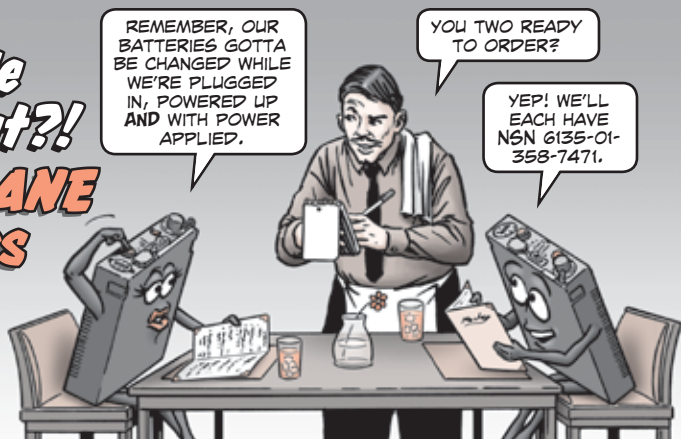


For big jobs, it's best to use the SFL from a can. Since it's applied with a brush, it'll produce a more even application.

Let SFL fully cure for 24 hours before relubing the weapon and returning it to service.

Remember, other weapons missing more than  $\frac{1}{3}$  of their finish can only be refinished at depot. They require a phosphate coating that only a depot can do.

# Battle Blackout?! Do TACLANE Checks



WHEN OBSERVING SIGNAL MAINTENANCE, I NOTICED A LOT OF OPERATORS WERE UNFAMILIAR WITH THE KG-175D TACLANE-MICRO INLINE NETWORK ENCRYPTOR, NSN 5810-01-547-4520, HUMAN-MACHINE INTERFACE IN THE AN/TTC-64 BATTALION COMMAND POST NODE.



Specifically, the operators weren't validating clock drift and battery life for their KG-175D TACLANE. TM 11-5810-422-13 (Nov 08) recommends that operators check clock drift for accuracy once every six months, and make adjustments if needed to prevent communication blackouts.

The TM also recommends a battery change every 12 months or when the BATTERY LOW status LED is lit. This prevents the TACLANE from losing data or going into tamper mode when there is power loss. The instructions for clock drift are found in Para 3.1, Section II, Chap 3 in TM 11-5810-422-13. Battery replacement is covered in Para 3.9, Section II, Chap 3.

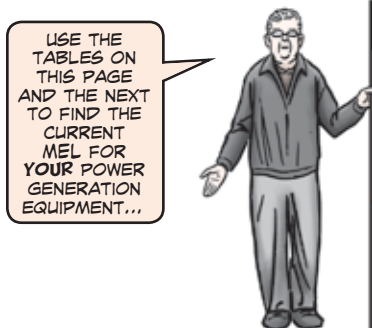
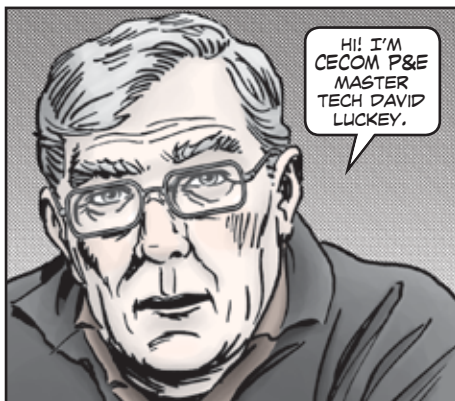
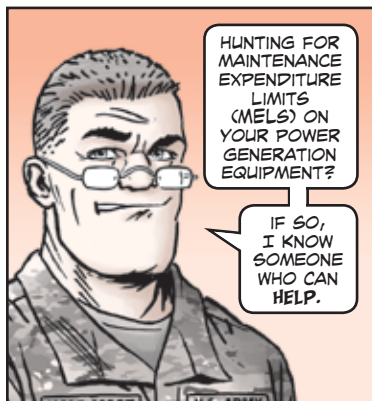
CW3 Kelshall Williams  
Korea

**Editor's note:** *You've communicated some mighty good points here, Chief!*

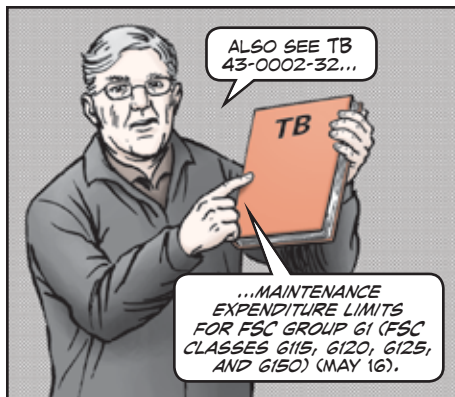
**IMPORTANT!** The Communications Security experts also want to stress that you should make sure the KG-175D is powered ON when changing the battery. If you change out the battery without powering on the device first, you'll trigger the tamper mode and a host of headaches. If that happens, follow the troubleshooting guidance in Section III of the TM.

Also, the KG-175D TACLANE doesn't take a standard AA battery. Order NSN 6135-01-358-7471 when it's time to replace it.

# MEL MYSTERY SOLVED!



| Item Name  | NSN 6150-  | MEL % |
|--|--|-------|
| Distribution Illumination Systems, Electrical (DISE)       | 00-917-2244<br>00-963-6712<br>01-208-9752<br>01-208-9753<br>01-208-9754<br>01-208-9755 | 0     |
| Power Distribution Illumination System, Electrical (PDISE) | 01-208-9151<br>01-307-9445<br>01-307-9446<br>01-308-5671<br>01-308-5672                | 65    |





| Item Name   | NSN 6115-   | MEL %                                     |
|---|---|---|
| 1-kW flex-fuel generator  | 01-612-2549   | 0   |
| 2-kW military tactical generator set, MEP-531A  | 01-435-1565<br>12-912-0393  | 65  |
| 3-kW tactical quiet generator (TQG) MEP-831A  | 01-285-3012   | 75  |
| 5-60-kW TQG   | 01-274-7387<br>01-275-5061<br>01-274-7388<br>01-530-1458<br>01-274-7389<br>01-461-9335<br>01-274-7390<br>01-462-0291                | 45  |
| 10-60-kW TQG 400 Hz power units   | 01-274-7392<br>01-274-7393<br>01-529-9494<br>01-274-7394<br>01-462-0290<br>01-274-7395<br>01-292-0292                               | 85  |
| 100- and 200-kW TQG   | 01-296-1463<br>01-296-1462  | 85  |
| 100- and 200-kW diesel engine driven (DED)  | 01-036-6374<br>01-021-4096  | 65  |
| MEP-903A 10-kW AUX power unit (APU)   | 01-431-3062   | 75  |
| TMSS Medium PU-821/T<br>TMSS Medium PU-822/T<br>TMSS Large PU-823/T<br>TMSS Large PU-824A/T<br>TMSS Large PU-823A/T<br>TMSS Large PU-824B/T | 01-547-6713<br>01-547-6738<br>01-547-8513<br>01-547-8552<br>01-572-3944<br>01-572-4123  | 65  |
| MEP-952B 5-kW APU   | 01-452-6513   | 75  |
| Advanced Medium Mobile Power Sources (AMMPS) (all)  | 01-561-7329<br>01-561-7455<br>01-561-7466<br>01-561-7634<br>01-561-7674<br>01-561-7719<br>01-561-7738<br>01-561-7788<br>01-561-7895 | Under warranty 100;<br>out of warranty 85 |
| Electric Power Plant (EPP) III, including 150-kW generators   | 12-337-8494<br>01-374-5038  | 100                                       |

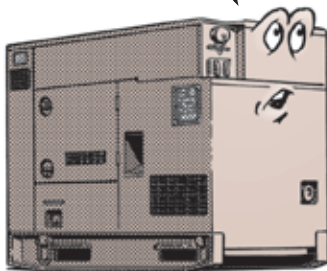
**QUESTIONS?** CONTACT YOUR LOCAL CECOM P&E LOGISTICS ASSISTANCE REPRESENTATIVE OR **DAVID LUCKEY** AT DSN (314) 476-3036, OR EMAIL: [david.c.luckey.civ@mail.mil](mailto:david.c.luckey.civ@mail.mil)

Generators...

# CAN ARMY GENERATE SOME SERVICE KITS?

HEY, BONNIE, A SOLDIER  
EMAILED YOU ABOUT SERVICE  
KITS FOR US GENERATORS...

I'M  
ON IT!



Dear Bonnie,

Do you have a good NSN for an MEP-804B 15-kW tactical quiet generator (TQG) service kit? I have a good kit number for the -804A, but it won't work on the -804B.

SFC D.W.



THERE ARE NO OFFICIAL  
SERVICE KITS FOR MOST  
GENERATORS, SERGEANT,  
WITH THE EXCEPTION OF  
150-KW SERVICE KITS.

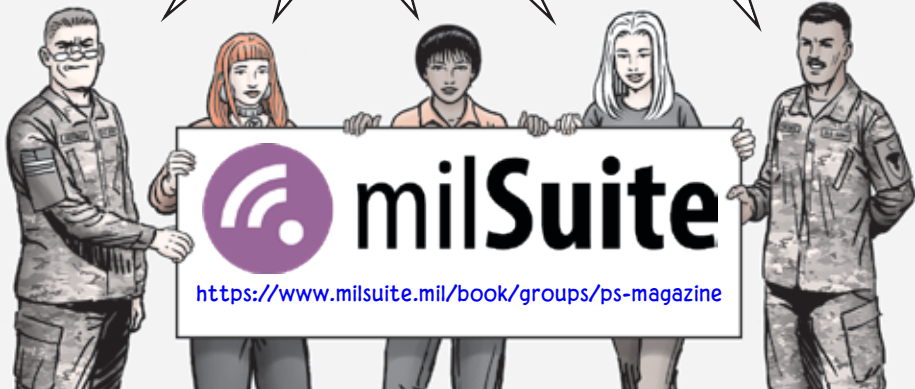
THE AMMPs ALSO  
HAVE HIGH- AND LOW-  
USE KITS, AND TQGs  
HAVE TIER 1 AND 2 KITS  
FOR RESET PURPOSES.

*But keep watch here in PS.  
The Army is looking into this  
request. Maybe one day  
there will be service kits  
for generators, as there  
are for vehicles.*

*In the meantime, we've uploaded a lot of useful  
documents, including generator parts lists, to  
our milSuite group document storage. Each  
parts list starts with service parts and includes  
intervals and notes as well. This info is courtesy  
of CECOM's power and environmental LARs.*

JOIN US IN MILSUITE FOR LOTS OF  
MAINTENANCE-RELATED GOODIES!

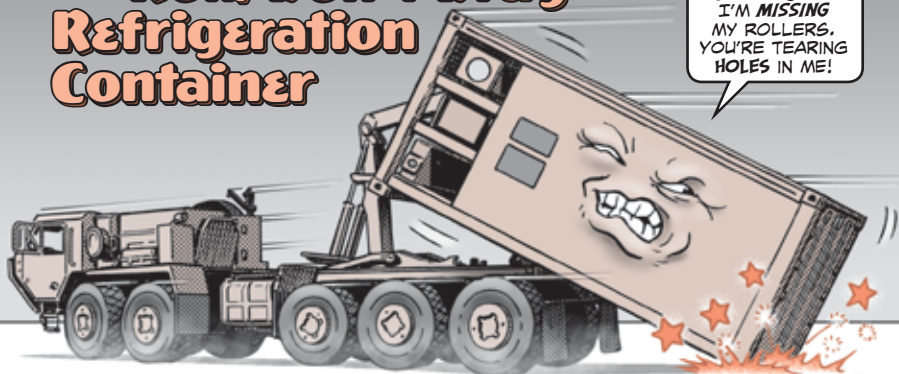
SEE PAGE  
53 FOR  
DETAILS.



MTRCS...

# Roll, Don't Drag Refrigeration Container

**YOWWW!**  
I'M MISSING  
MY ROLLERS.  
YOU'RE TEARING  
HOLES IN ME!



Dear Editor,

While assisting units with their multi-temperature refrigeration container systems (MTRCS), we've found that most of the containers are missing their rollers and associated locking pins and clips.

When the container is loaded or off-loaded from the prime mover, it gets dragged along the concrete instead of rolled. This can cause major damage to the containers and make them NMC.

Units should immediately check all their MTRCSs for PLS rollers, locking pins and locking clips. If the rollers, pins or clips are missing or damaged, your MTRCS is NMC. This is PMCS Step 13 in TM 10-8451-222-10.

Order new rollers with NSN 3990-01-574-2050 and pins with NSN 5315-01-574-2042. The clip comes as part of the pin. Rollers and pins are part of the TM's component of end item list (COEI).

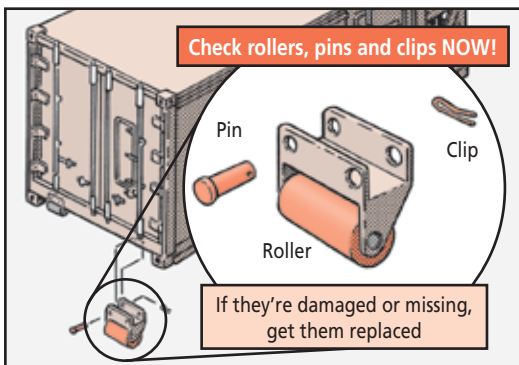
**Never** drag your MTRCS. That's not cool for your refrigeration container.

James Palmer, TACOM LAR  
JBLM, WA

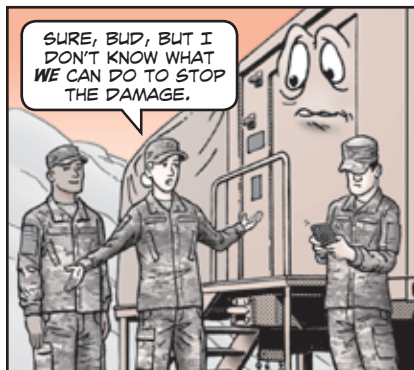


DON'T BE  
A DRAG  
WITH YOUR  
MTRCS!

FOLLOW  
JAMES'  
ADVICE  
AND CHECK  
THOSE  
ROLLERS  
**NOW!**



# A/C Condenser Guard Protects Coils



Dear Editor,

We support containerized kitchens (CKs). We discovered in the back storage area of the CK where the generator is mounted that some of the items stored there, namely the boarding ladders (with guard rail sections for steps), were causing damage to the A/C unit condenser coils.

Our maintainers had to straighten the fins out whenever they serviced the A/C unit. Some of the fins were so damaged they couldn't be straightened.

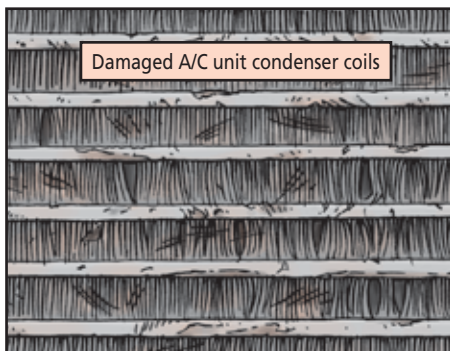
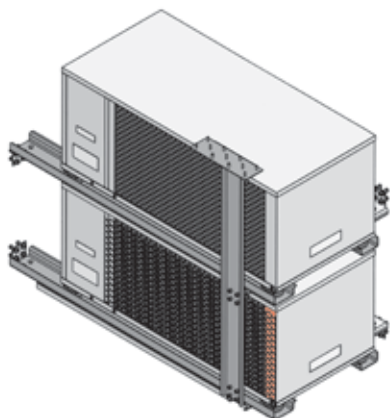
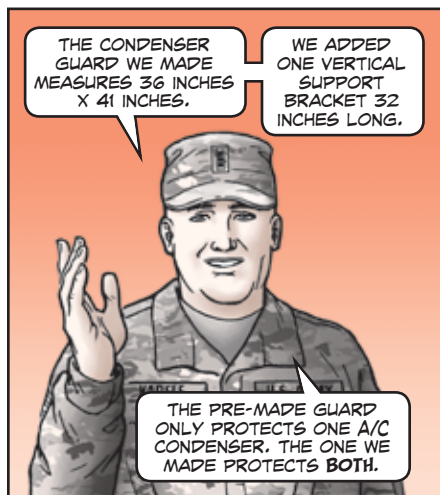
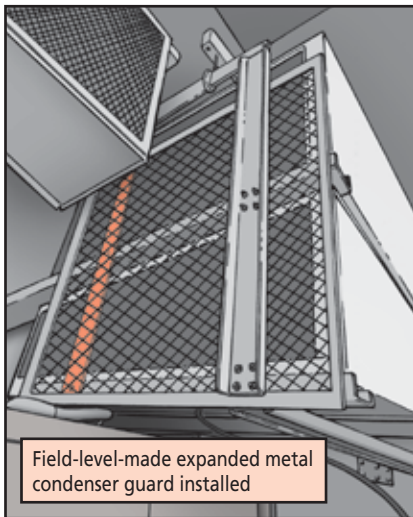




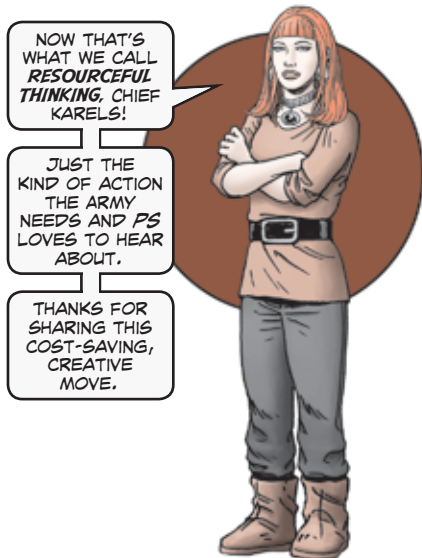
Fig 18 in WP 0019-1 in TM 10-7360-226-23P (Oct 18), *The Field Maintenance Repair Parts and Special Tools List for the Containerized Kitchen (CK) with Trailer (NSN 7360-01-473-3408)*, now shows a **condenser guard** that units can order. It's NSN 5680-01-673-2239 (CAGE 3H7B5, PN 25672904) and costs about a hundred dollars. However, you can fabricate your own guard.



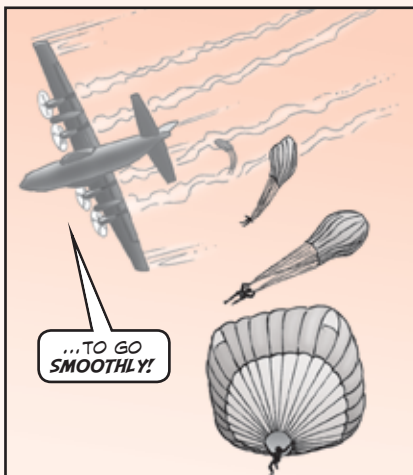
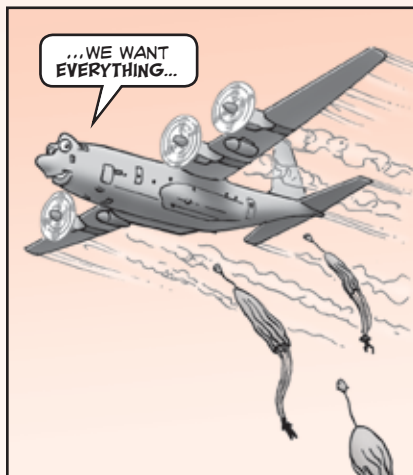
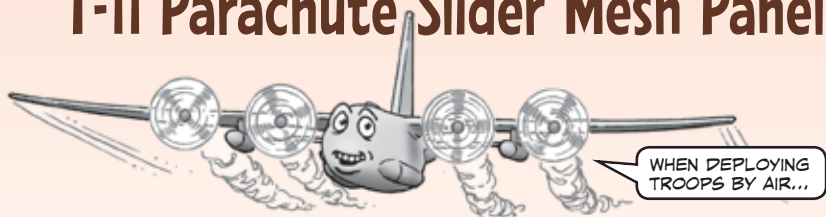
Commercial expanded metal condenser guard



CW3 David Karels  
MNARNG



# Maintenance Bump Authorized on T-11 Parachute Slider Mesh Panels



Units, did you get the word? The maintenance on the T-11 personnel parachute slider system mesh panels has been increased.

The new repair limitation is now eight instead of four, and the distance between repairs is 10 inches instead of 12 inches. The damaged area must still be one inch or less in diameter.

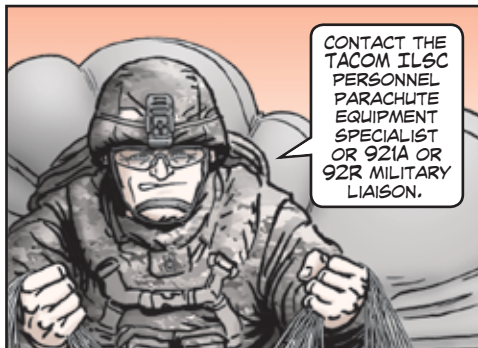
## Equipment affected includes:

|  | Nomenclature                        | NSN 1670-   | PN          | CAGE Code | SN  | LIN    |
|--|-------------------------------------|-------------|-------------|-----------|-----|--------|
|  | T-11 personnel parachute system     | 01-539-4525 | 11-1-7050-1 | 81337     | All | T91035 |
|  | T-11T personnel parachute, training | 01-600-0493 | 11-1-7050-2 | 81337     | All | T91035 |

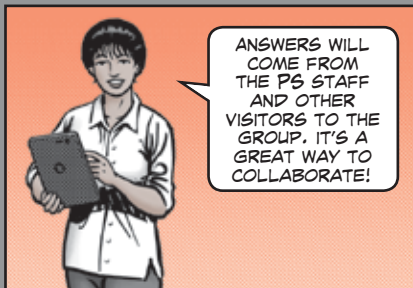
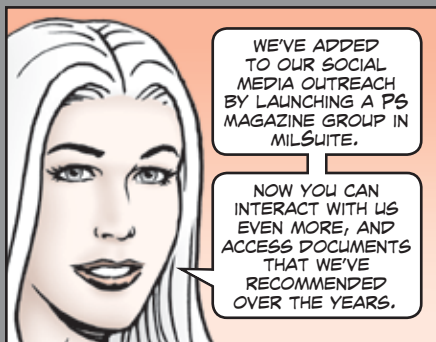
Since maintenance is everyone's responsibility, all maintainers of the T-11 personnel parachute slider system should watch for mesh panel damage such as rips, tears, holes, snags and/or burns. This can be done during normal repacking and doesn't require any ready-for-issue systems to be unpacked.

Repairs will be done at field level, but the **only** personnel authorized to do them are parachute riggers, MOS 92R (skill levels 1-5/921A).

See TM 10-1670-326-23&P (Mar 17) for technical references. For step-by-step repair procedures and required tools for the slider mesh panels, download the PDF attachment to TACOM's Maintenance Information Message (MIM) #19-009 at: <https://tulsa.tacom.army.mil/Maintenance/message.cfm?id=MI19-009.html>

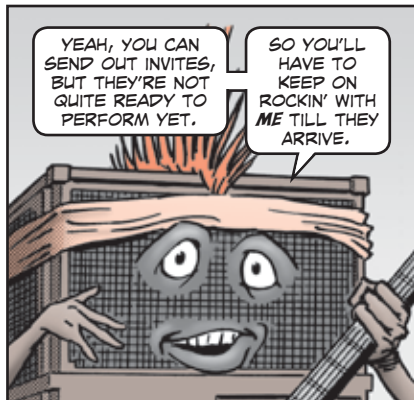
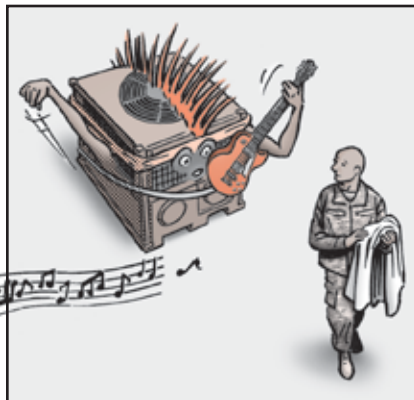
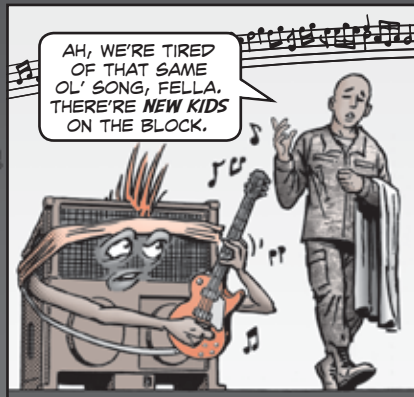


## Meet PS on milSuite



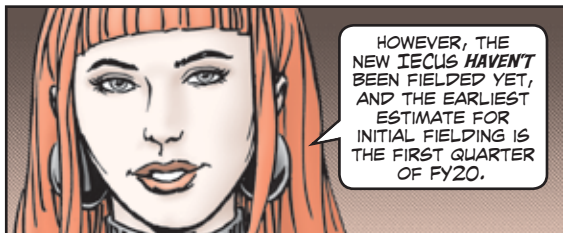
Won't you join us? Go to: <https://www.milsuite.mil/book/groups/ps-magazine>

# LEGACY ROCKS ON TILL NEWBIE ARRIVES



Units, word has leaked out about the new improved environmental control units (IECUs) on the Army horizon.

The enthusiasm for these new IECUs mean some of you have tried to order them already since NSNs were assigned.





In the meantime, plenty of legacy environmental control units (ECUs) are available to fill the void. Order these authorized substitute ECUs through your normal supply channels until the new IECUs officially arrive:

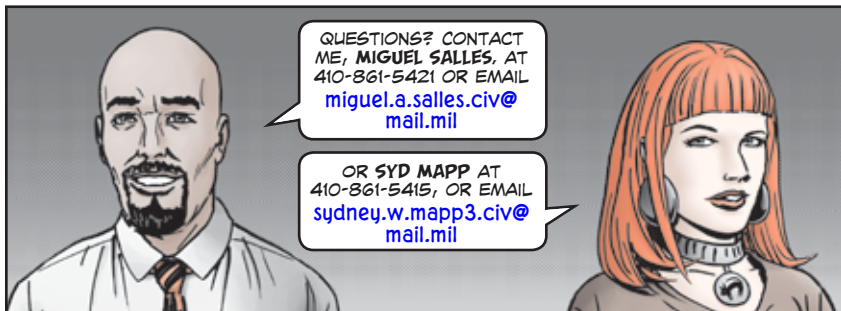
| Nomenclature                     | NSN 4120-  | LIN    |
|----------------------------------|--|--------|
| 9K ECU                           | 00-916-9404 (Prime NSN)<br>01-456-6954<br>01-326-4370<br>01-250-3719<br>01-136-2214<br>00-411-5442   | A23828 |
| 18K 230v ECU (1 phase, 50/60 Hz) | 00-931-4518 (P)<br>01-523-4131<br>01-268-4450  | A24017 |
| 18K 208V ECU (3 phase, 50/60 Hz) | 00-974-7206 (P)<br>01-523-4472<br>01-327-1316<br>01-268-4451<br>01-237-4663<br>01-165-1125<br>01-122-0626<br>01-136-9836<br>01-105-5746<br>01-177-5989<br>01-076-1753<br>00-411-3730 | A24463 |
| 36K, 208V ECU                    | 00-951-9697 (P)<br>01-467-2638<br>01-330-6543<br>01-219-8759<br>01-122-0628<br>01-063-7573<br>00-456-9799<br>01-173-8491   | A24763 |

Once the new IECUs are officially fielded, you can order them with the following info:

| Nomenclature                     | NSN 4120-   | LIN    |
|----------------------------------|-------------|--------|
| 9K ECU                           | 01-592-7940 | A05047 |
| 18K 230v ECU (1 phase, 50/60 Hz) | 01-592-7977 | A05049 |
| 18K 208V ECU (3 phase, 50/60 Hz) | 01-592-7987 | A05048 |
| 36K, 208V ECU                    | 01-592-7949 | A05050 |

DISPOSITION INSTRUCTIONS FOR THE OLD ECUS ARE FOUND IN THE ENTERPRISE LOGISTICS PORTAL'S DECISION SUPPORT TOOL-THE DST- FOUND AT:  
<https://idmng.armyerp.army.mil/>

SHIP ALL RETIRED ECU ASSETS TO TOBYHANNA ARMY DEPOT.

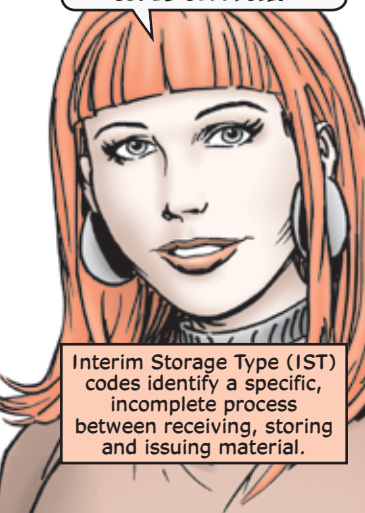


GCSS Army...

# CAVALCADE of TYPE CODES



...WHICH HELPS IMPROVE READINESS, BUT **ONLY** IF YOU'RE USING THE STORAGE CODES **CORRECTLY**.



Interim Storage Type (IST) codes identify a specific, incomplete process between receiving, storing and issuing material.

## GCSS-Army Storage Type Codes

| Interim Storage Unit (IST) | Description  |
|----------------------------|--|
| 902                        | Receipts automatically go to the ST Type 902 with a bin (material document number)   |
| 916                        | This is the outbound bin. All items going to 916 are outbound to customers or the Directorate of Logistics (DOL).            |
| 922                        | Posting changes.   |
| 999                        | Inventory clearance. All inventory posts that are differences go to 999 for research.  |
| NTF                        | Turn-ins go to Not Authorized to Forecast (NTF) and an Outbound Delivery (OBD) is created to send them to DOL automatically. |
| XXX                        | This is an overflow code. If the Pick/Putaway ST is full, the item goes to overflow.   |
| ZZZ                        | This is the research bin. Differences on items that are short or over when picking TOs go here.                              |



KEEP IN MIND THAT STOCK **CAN'T** BE ISSUED OUT OF INTERIM STORAGE TYPES ZZZ, XXX, YYY, NTF, 922 OR 999.

Physical Storage Type (PST) codes segregate materials by the type of containers they are stowed in.

| Physical Storage Type | Description                    |
|-----------------------|--------------------------------|
| CON                   | Container storage              |
| DRW                   | Drawer storage                 |
| HAZ                   | Hazardous storage              |
| PLT                   | Pallet storage                 |
| PSU                   | Physical security unit storage |
| RAK                   | Rack storage                   |
| SHF                   | Shelf storage                  |
| TYR                   | Tire storage                   |
| VAN                   | Van storage                    |
| YRD                   | Yard storage                   |
| WEP                   | Weapons repair part storage    |
| YYY                   | New material                   |

Supply Management...

## Use SAM to Sniff Out CAGE Codes

Dear Editor,

Often when a Soldier needs the point of contact (POC) for a Commercial and Government Entity (CAGE) code, they have to go to a site where registration is necessary.

When I need a CAGE code or POC in a hurry, I use the System for Award Management (SAM). SAM allows you to look up CAGE code numbers and POCs without registering for an account.

I figured this information might save a few Soldiers some time.

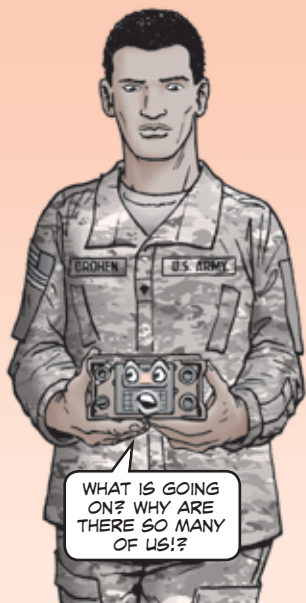
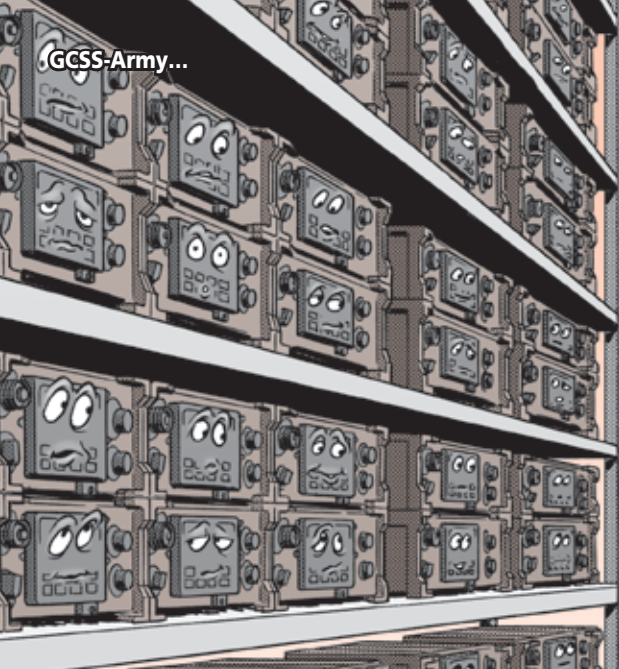
Matt Urbanic  
Army Corps of Engineers

THANKS FOR SHARING, MATT.

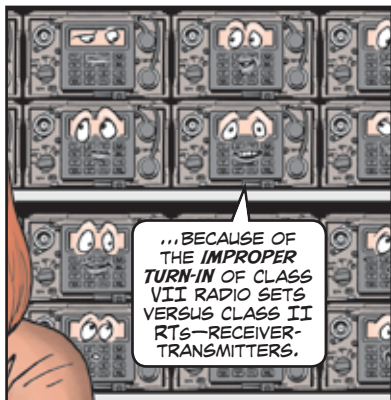
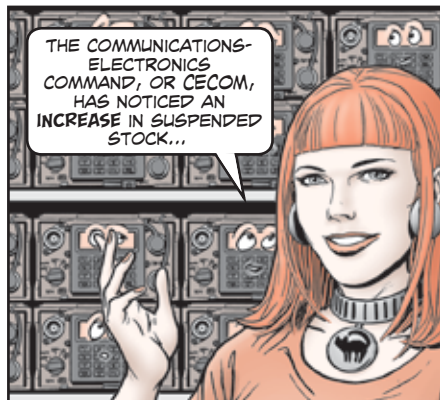
FIND THE SAM SITE HERE:  
<https://www.sam.gov/SAM/>

Click on Search Records  
and scroll down to  
CAGE Code Search





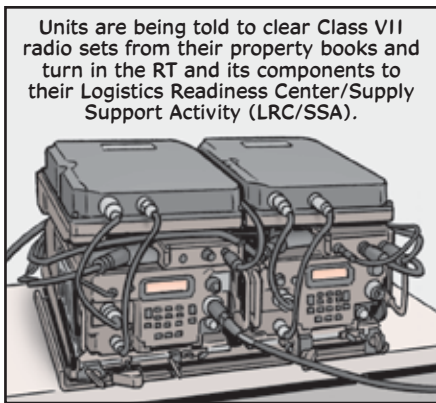
# TURNING IN RADIO SETS: A HOW-TO GUIDE







AS A RESULT, ECEM RADIO SET ITEM MANAGERS (IMS) ARE UPDATING INFORMATION IN LDAC'S DECISION SUPPORT TOOL (DST).



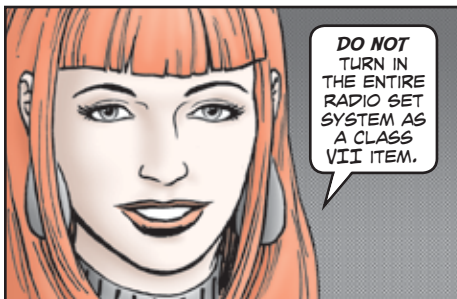
Units are being told to clear Class VII radio sets from their property books and turn in the RT and its components to their Logistics Readiness Center/Supply Support Activity (LRC/SSA).

Unit turn-in of RTs versus radio sets keeps DLA Distribution Centers from suspending stock, which impacts readiness.



YOU NEED A RADIO? NO PROBLEM, WE CAN SEND IT RIGHT OUT!

Clearing Class VII radio sets in GCSS-Army (GCSS-A) requires a disassembly action, a reassembly action or both.



**DO NOT** TURN IN THE ENTIRE RADIO SET SYSTEM AS A CLASS VII ITEM.

KEEP IN MIND THAT ALL TASKS ARE PERFORMED FROM THE APPROPRIATE GCSS-A PROPERTY BOOK OFFICER (PBO), UNIT SUPPLY OR PLANT MAINTENANCE WORKBENCH MENUS.



USING THE WORKBENCHES FOR TRANSACTIONS AUTOMATES SOME ESSENTIAL ACTIONS THAT RUN IN THE BACKGROUND.

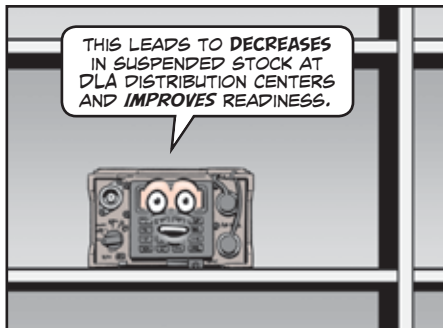
DIRECTLY USING INDIVIDUAL T-CODES CAN CAUSE ERRORS OR BACKGROUND PROCESS FAILURES.



1. Use the most current Bill of Materials (BOM) Component Hand Receipt (CHR) with your technical manual to inventory the components. Complete the adjustment actions for component shortages in accordance with AR 735-5 and have the commander or responsible officer validate the shortages. Confirm if any components are posted separately.
2. Verification is required prior to start of disassembly and turn-in if components are on hand and not already posted to inventory records. If components are verified on hand but not posted to the to the inventory records (GCSS-Army Material Situation ISDPFS/DISP\_MAT\_SIT), use the PBO, unit supply or plant maintenance workbench to process an asset increase for each material number (NSN or part number) and on hand quantity (MIGO 501). This applies to Class II or Class VII with ARC N to PBO, CLASS II with ARC D or X to unit supply or Class IX to maintenance.
3. Turn in all unit supply or maintenance Class II or XI components. The clerk will use the appropriate workbench to create a "Turn-in for Provisions". Follow the appropriate GCSS-A End User Manual (EUM) instructions depending on whether the item is recoverable or non-recoverable while also following the local SOP and Army policy.
4. Turn in the PBO level nonexpendable components. The PBO should request disposition for these items on a PSD through DST. Follow local SOPs and the PSD disposition instructions and use the GCSS-Army PBO workbench to create a Turn-in to External SSA/LRC. The unit is relieved of responsibility for the component once it's been turned in and the SSA completes the Post Goods Receipt. Collect the signed receipts and make copies to accompany the DA Form 4949.
5. To decrease the radio set system from PBO accountability, the unit provides the PBO with a DA Form 4949 showing that the radio set is disassembled for turn-in and a list of radio parts. Include comments about the PSD ID directing radio system disposition as a turn-in and attach the PSD directive to the DA Form 4949 along with receipts for all classes of radio components. You'll need to attach a validated BOM CHR to prove any missing components have been adjusted and reviewed in accordance with AR 735-5. Once PBO confirms that all of the components are either turned in or validated as shortages, the PBO will drop the radio system from accountability using the MIGO 502 movement type with reason for movement 241, disassemble end item. The PBO will add the comments to the DA Form 4949 and file it according to the SOP and ARIMS.



FOLLOWING THESE STEPS ENSURES ALL RADIO SYSTEM COMPONENTS ARE ACCOUNTED FOR AND TURNED IN TO THE PROPER ACTIVITIES AND CREATES A TRANSACTION RECORD FOR EACH COMPONENT IN GCSS-ARMY.



THIS LEADS TO **DECREASES** IN SUSPENDED STOCK AT DLA DISTRIBUTION CENTERS AND **IMPROVES** READINESS.

**Questions?**

Contact Mr. Jacob Dozier at DSN 848-6343, (443) 861-6343 or email: [jacob.s.dozier.civ@mail.mil](mailto:jacob.s.dozier.civ@mail.mil)





## 966H Scoop Loader Joystick NSN

To get a **complete** electrohydraulic joystick for your 966H scoop loader, order NSN 2520-01-619-2035. Use NSN 2520-01-557-4374, which is shown as Item 1 in Fig 151 of TM 5-3805-291-23P (Jan 10), if you want only the top handle control of the joystick.

## M577A3, M1068A3 APU Fuel Line NSN

Need to replace the fuel supply line that connects your M577A3 or M1068A3 command post carrier to the auxiliary power unit (APU)? Get a new one with NSN 4720-01-194-1991. Make a note until the NSN is added to TM 9-2350-277-13&P (IETM EM 0321, Oct 14).

## M915 COOLANT FILTER KIT

Use NSN 2930-01-184-1877 to get a coolant filter kit for the M915-series trucks. The coolant filter keeps the cooling system clean and helps prevent corrosion. Get replacement filters with NSN 2940-00-274-4712. Installation instructions come with the kit.

## R438A REFRIGERANT AVAILABLE

The R438A refrigerant used in environmental control unit systems as a replacement for R22 is available:

| Size (lbs) | NSN 6830-   |
|------------|-------------|
| 24         | 01-675-2895 |
| 43         | 01-675-2905 |
| 125        | 01-675-2899 |

**Note:** OCONUS units should factor in three to six months additional transit time. Shipments occur according to a unit's priority code (1-15), determining priority placement of shipping assets.

## New Engine for 3-kW Generator

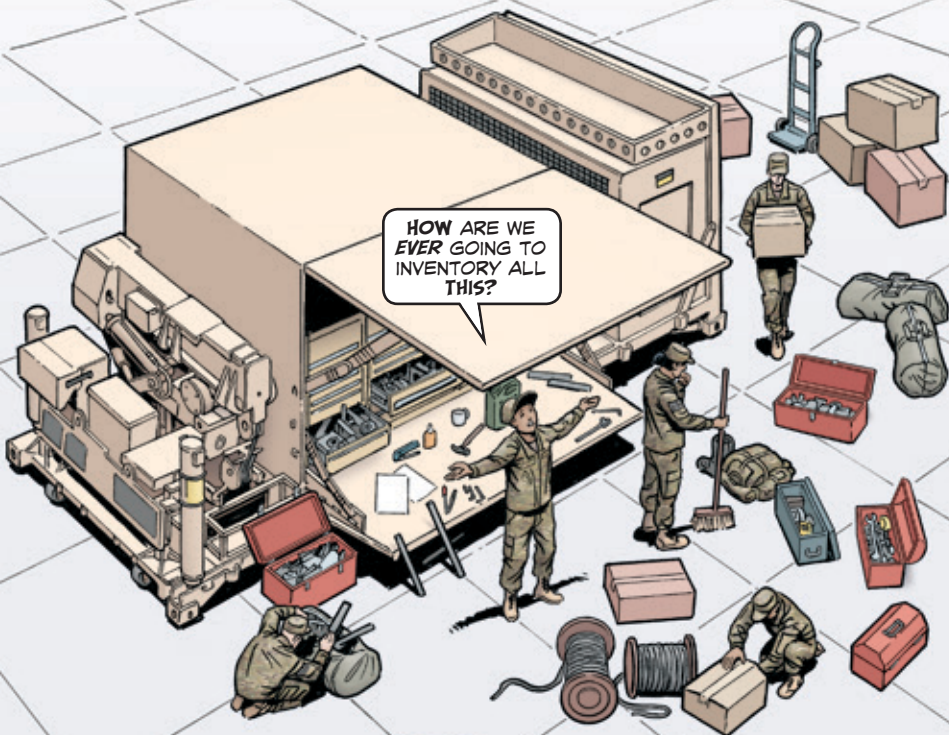
There's a new 3-kW engine for the MEP-831A and -832A 3-kW tactical quiet generator set. Order it with NSN 2815-01-660-5994. It replaces the legacy 3-kW engine, NSN 2815-01-465-5993, shown as Item 1 in Fig 2 of TM 9-6115-639-13&P (Aug 17).

## M10A Forklift Wiper Motor Kit

Get a new windshield wiper motor kit for your M10A rough terrain forklift with NSN 2540-01-346-8773. It replaces PN 1279573H91, which is shown as Item 1 in Fig 178 of TM 10-3930-643-24P (Jan 90). That part number doesn't cross to an NSN.

**Would You Stake Your Life *right now* on  
the Condition of Your Equipment?**

# Let Tool Guide Be Your Guide!

A close-up illustration of a soldier wearing a green cap and glasses, holding a green book titled "FRS Tool Guide". He is pointing at the book with his right index finger. The background is a solid yellow color.

YOU NEED AN FRS TOOL GUIDE.

TOOL GUIDES ARE AVAILABLE FOR MANY OF THE LARGE TOOL SETS...

...AND THEY MAKE INVENTORY SO MUCH EASIER.

**CHECK OUT THE TOOL GUIDE STORY ON PAGE 35!**