

PS**THE
PREVENTIVE
MAINTENANCE
MONTHLY**

TB 43-PS-682, The Preventive Maintenance Monthly, is an official publication of the Department of the Army, providing information for all soldiers assigned to combat and combat support units and all soldiers with unit maintenance and supply duties. All information published has been reviewed and approved by the agency responsible for the equipment, publication or policy discussed. Application of the information is optional with the user. Masculine pronouns may refer to both genders.

ISSUE 682 SEPTEMBER 2009**COMBAT VEHICLES**

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M88-Series APU Hydraulic Pump
M88A1 Recovery Vehicle Exhaust Pipe
M113-Series FOV Track Gauge Check
M109 Howitzer, M992A2 Ammo Carrier Relays
M2/M3-Series Bradley M242 Gun Pawl
MLRS Carrier Air Filter Cleaning

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BAT-GEN Indicator Explained
HMMWV Fuel Tank Access Panel
FMTV Oil Pressure Switch
HEMTT Transmission Oil Level
M102A1 Dolly Set Hydraulic Cylinders

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Mortar Commander's Interface
Unexploded Ordnance Safety
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M2 Machine Gun Ammo Can
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Just write to:

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

Or email to:

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

Internet address:

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

By order of the Secretary of the Army:

GEORGE W. CASEY, JR.
General, United States Army Chief of Staff

Official:

Joyce E. Morrow

JOYCE E. MORROW
Administrative Assistant to the Secretary of the Army

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THE PREVENTIVE MAINTENANCE MONTHLY

TB 43-PS-682

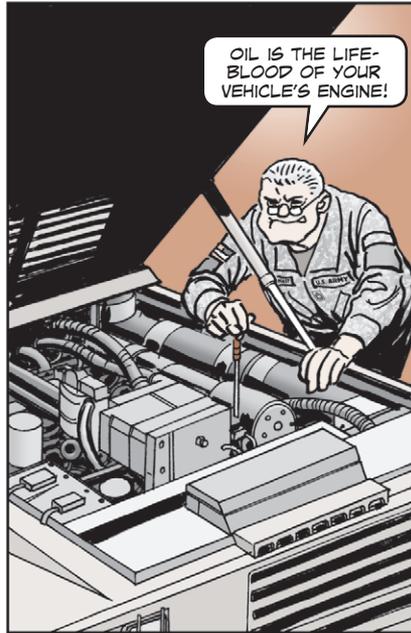
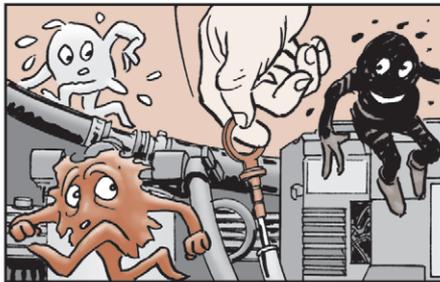
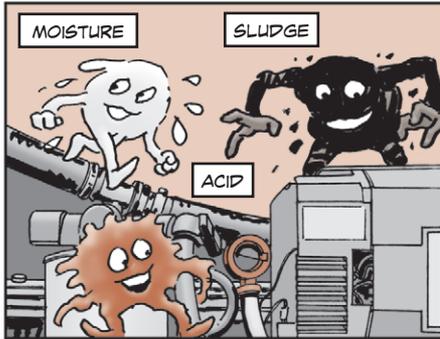
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THE M2 HAS
PROTECTED
SOLDIERS SINCE
WWI. IT WILL
PROTECT YOU,
TOO, IF IT GETS
THE PM IT'S DUE.

SEE
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"No Brainer" Engine PM



You do preventive maintenance to keep your vehicle's engine in good running condition. Part of PM is making sure the engine stays lubricated. Motor oil is key to keeping your vehicle running smoothly.

Not only does motor oil lubricate the engine, it also cools, cleans and protects it from everyday wear-and-tear.

Short-trip driving (7 miles or less) is hard on oil because the engine never warms up enough to boil off the moisture that accumulates inside the crankcase. Moisture comes from combustion gases that blow by the piston rings—especially on older diesel engines. Oil breakdown occurs due to oxidation and combustion, creating corrosive acids that damage engines. Water reacts with these acids to form sludge that results in accelerated engine wear. The only way to get rid of accumulated moisture, acids and sludge is to change the oil and filter. By the way, the filter removes **only** suspended solids such as dirt, carbon and particles—not moisture, acids or sludge.

So-o-o, what's the bottom line? It's real simple. Make sure you check the oil level like it says in the lube order and -10 TM. The same goes for the vehicle's oil changes. Make sure the engine oil gets changed during "scheduled maintenance" and more often in cold weather, when towing a trailer, or driving in dusty conditions.

An oil and filter change is your vehicle engine's main line of defense against abrasion, contaminants and premature wear. It's a "no brainer."

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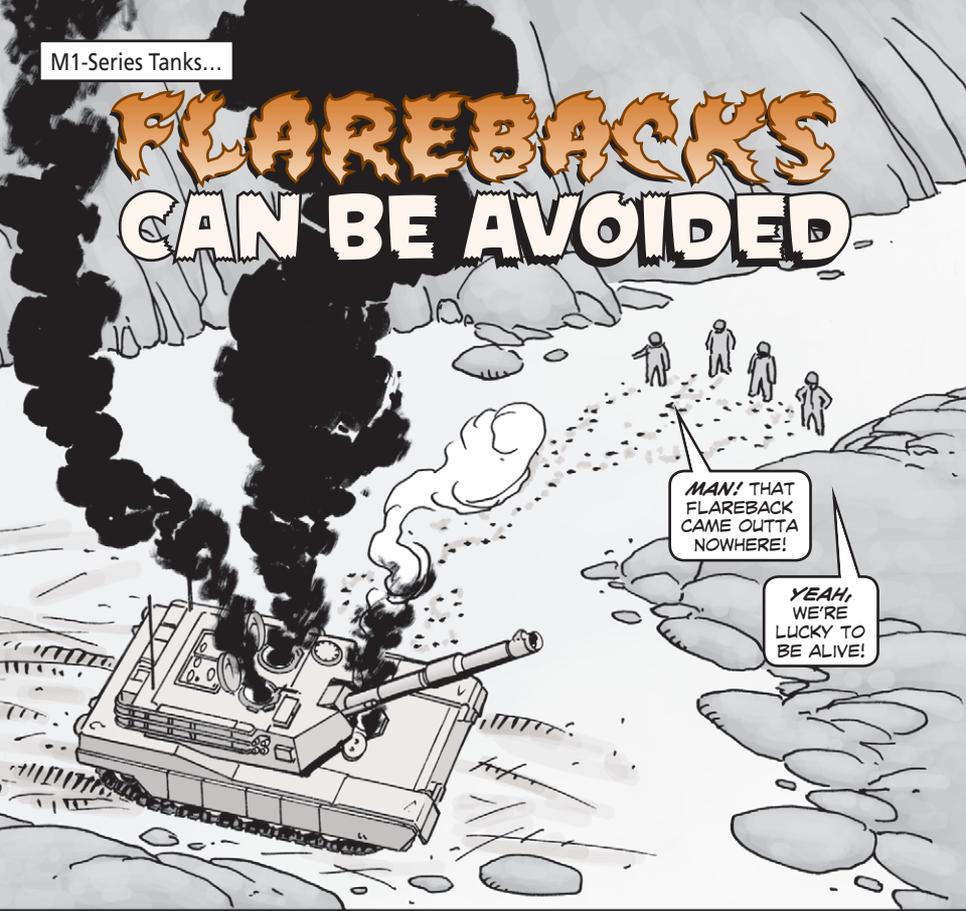
JOYCE E. MORROW

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FLAREBACKS CAN BE AVOIDED



Flareback happens when the fuel-rich gases formed by firing the main gun enter the crew compartment, mix with oxygen, and then are ignited by some source.

During normal operations, the 120mm gun system uses the bore evacuator to remove the combustible and toxic fumes generated during firing. Some of this gas pressure is bled into the bore evacuator chamber through the gun tube gas ports.

After the projectile is fired, pressure in the gun tube falls off almost immediately and the pressure stored in the bore evacuator chamber is discharged through the gas ports. This gas discharge creates small "jet streams" which are directed down the gun tube toward the muzzle.

Fresh air is drawn in through the open breech, combines with the gases from the bore evacuator, and is propelled out the muzzle of the gun tube. That's what keeps those gases from entering the turret.

Maintenance

YOUR FIRST LINE OF DEFENSE AGAINST FLAREBACK IS TO PROPERLY MAINTAIN THE BORE EVACUATOR.

Regular maintenance includes checking seals for damage

THE PMCS CHARTS IN YOUR OPERATOR'S MANUALS DETAIL THE INSPECTION AND SERVICE PROCEDURES FOR THE BORE EVACUATOR.

THEY INVOLVE REMOVING THE BORE EVACUATOR FOR CLEANING AND SERVICING, CLEANING THE GAS PORTS IN THE GUN TUBE, AND INSPECTING THE SEALS FOR TEARS, CUTS, GOUGES, AND OTHER DEFORMITIES.

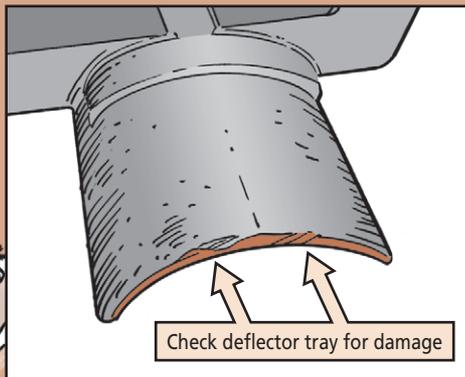
NEW SEALS MUST BE INSTALLED DURING SEMIANNUAL SERVICES, ESPECIALLY IF THEY SHOW DAMAGE.

PMCS

PS MORE

You need an open breach to allow fresh air to be drawn into the gun tube. So if the stub base won't fully eject from the chamber after firing, you've got problems. The usual cause is a faulty stub base deflector tray or damaged chamber extractors.

IF THE DEFLECTOR TRAY IS MISALIGNED, THE EJECTED STUB BASE HITS THE FRONT EDGE OF THE TRAY.



EYEBALL THE DEFLECTOR TRAY FOR DENTS, NICKS, OR GOUGES, ESPECIALLY AT THE FRONT LEADING EDGE.

A MISALIGNED STUB BASE DEFLECTOR TRAY CAN ALSO DAMAGE THE ROUND DURING LOADING. THE DAMAGE ISN'T USUALLY NOTICED SINCE IT HAPPENS WHEN THE ROUND IS CHAMBERED.

MAKE SURE YOU INSPECT THE CHAMBER EXTRACTORS FOR DAMAGE, TOO.



AN EXTRACTOR WITH ROUNDED OR DAMAGED EDGES HAS A HARD TIME EXTRACTING THE STUB BASE.

IF YOU FIND DAMAGE TO THE DEFLECTOR TRAY OR EXTRACTORS, NOTIFY YOUR MECHANIC IMMEDIATELY.

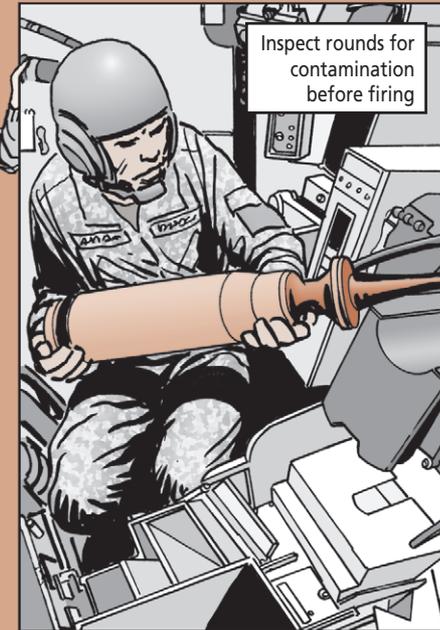
THEY MUST BE REPAIRED OR REPLACED BEFORE THE TANK CAN FIRE LIVE ROUNDS AGAIN.

Inspecting the rounds themselves is also a critical step in flareback prevention. Rounds that are contaminated with water, oil, or other substances might not burn completely. The residue left behind could ignite any gases not expelled by the bore evacuator.

CLOSELY INSPECT YOUR ROUNDS FOR DAMAGE OR CONTAMINATION THAT COULD LEAD TO FLAREBACK.

ROUNDS THAT ARE IN GOOD CONDITION CAN MINIMIZE THE SEVERITY IF A FLAREBACK DOES HAPPEN.

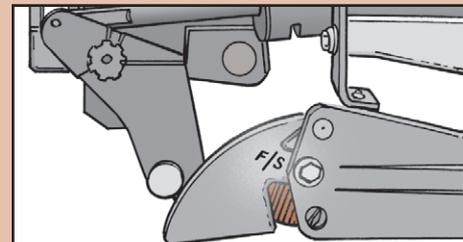
IN ADDITION TO CREW PMCS, SUSTAINMENT MAINTENANCE IS ALSO CRITICAL. PROPER BORE-SCOPING, RECOIL EXERCISES AND THE RIGHT CABLE ADJUSTMENT FOR THE GUN SYSTEM ARE CRITICAL IF THE WEAPONS SYSTEM IS TO FUNCTION PROPERLY.



Cam Speed

THE BEST WAY TO REDUCE FLAREBACK DURING OPERATION IS TO SET THE OPERATING CAM SPEED TO THE 5 POSITION.

HOWEVER, IF THE CAM SETTING IS TOO SLOW, THE STUB BASE WON'T EJECT PROPERLY AND THE BORE EVACUATOR WILL START TO DISCHARGE BEFORE THE BREACH OPENS.



Instructions for setting the cam based on temperature and operating conditions start on Page 3-266 of TM 9-2350-264-10-2 (Mar 03), Page 3-160 of TM 9-2350-288-10-2 (Jul 95) and WP 0518 of TM 9-2350-388-10-3 (Feb 09).

The 2/30 Minute Rule

IF THE BREECHBLOCK DOESN'T FULLY OPEN OR THE STUB BASE DOESN'T FULLY EXTRACT AFTER FIRING, YOU COULD BE FACED WITH A FLAREBACK.

STOP AND FOLLOW THE PROCEDURES OUTLINED IN YOUR OPERATOR'S MANUALS.

DO NOT REMOVE A STUB BASE UNTIL AFTER THE REQUIRED WAIT TIME.

MANUAL

THE SAFETY OF THE ENTIRE CREW COULD DEPEND ON IT!

2/30 MINUTE RULE

THE OPERATOR'S MANUAL PROVIDES TWO WAIT PERIODS, DEPENDING ON THE SITUATION. THIS IS KNOWN AS THE **2/30 MINUTE RULE**.

If the gun system malfunctions, place the tank into full NBC mode and allow the turret to pressurize for **2** minutes. After full pressurization, the loader can safely lower the breechblock. Over-pressurization of the turret will keep any burning gases from entering the crew compartment.

If the NBC system is not operating, you must wait **30** minutes before opening the breechblock. This will allow any burning gases to completely dissipate. After the 30 minutes, the loader can safely lower the breech.

You must then troubleshoot the system and correct any faults you find before the tank can resume firing.

PS END

M88-Series APU Hydraulic Pump

Turning in a bad auxiliary power unit (APU) for your M88-series recovery vehicle? Better make sure it has the hydraulic pump, NSN 4320-00-613-6607, attached. Units have been removing the pump before turn-in, driving up repair costs. If you turn in an APU without the pump, your unit will now be charged \$190 for a replacement pump. So, make sure everything's there before turn-in.

M88A1
Recovery
Vehicle...

EXHAUSTING SEARCH FOR NEW PIPE

I NEED TO GET YOU A NEW EXHAUST PIPE BUT THESE TMS TELL ME TO ORDER TWO DIFFERENT PIPES.

WHICH ONE IS THE RIGHT ONE?

I DON'T KNOW, BUT I BET **HALF-MAST** DOES!



Dear Half-Mast,

We're working on an M88A1 and need to order a new exhaust pipe for the exhaust manifold. Unfortunately, there's a disconnect between the vehicle and engine parts manuals.

According to Item 9 in Fig 13 of TM 9-2350-256-24P-1 (May 92), we're supposed to order NSN 2990-01-017-5187. But Item 16 in Fig 24 of TM 9-2815-220-24P (Dec 05) says to order NSN 2990-01-085-3831. Which one is correct?

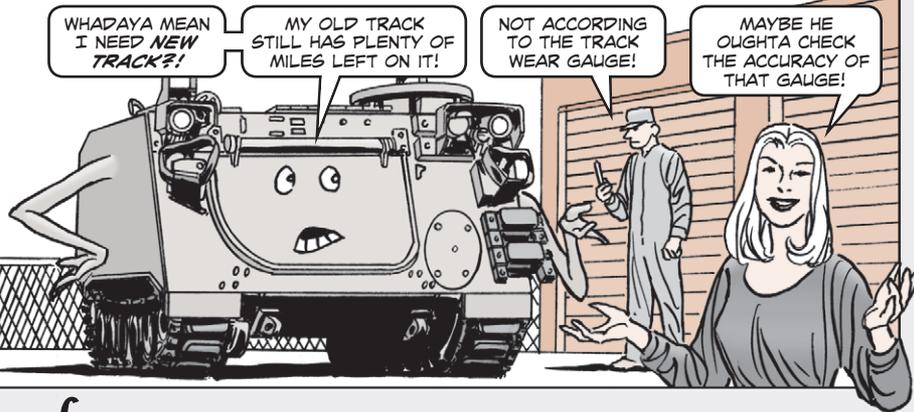
SPC D.J.S.

THE ENGINE PARTS MANUAL, TM 9-2815-220-24P, IS CORRECT. USE NSN 2990-01-085-3831 TO GET THE EXHAUST PIPE YOU NEED.

URNS OUT THE WRONG PART NUMBERS WERE LISTED FOR FOUR OF THE ITEMS IN FIGURES 13 AND 14 OF TM 9-2350-256-24P-1, INCLUDING THE ONE FOR THAT EXHAUST PIPE. JOT DOWN THESE CHANGES UNTIL THE TM CAN BE UPDATED...

Item/Fig	Correct PN	Correct NSN 2990-01-
Item 7, Fig 13	11684193	017-5186
Item 9, Fig 13	11684185-1	085-3831
Item 4, Fig 14	11684194	017-5187
Item 11, Fig 14	11684187-1	085-3832

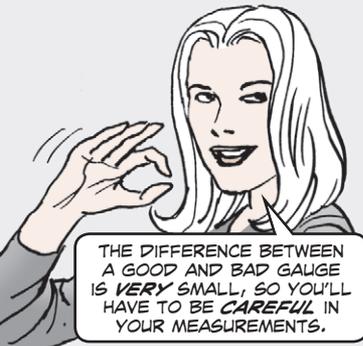
DOUBLE-CHECK TRACK GAUGES



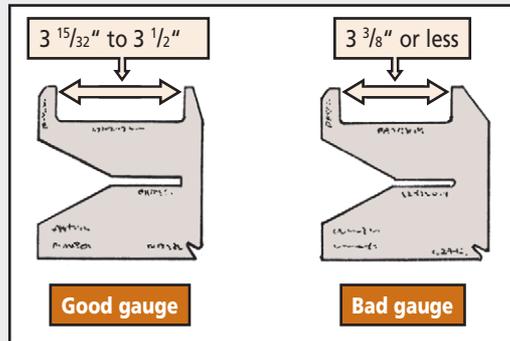
Crewmen, track is expensive. So the last thing you want to do is replace usable track. Unfortunately, that's just what's happening on some M113-series vehicles.

The problem is some bad T150 track wear gauges, NSN 5220-01-496-3692, got into the system. The inner dimension on these gauges is too small. Because the gauge is inaccurate, perfectly good track is being rated as unserviceable and units are spending valuable dollars to replace it.

So inspect all of your T150 track gauges right now. The suspect gauges will be inscribed with part number 12474849. If a gauge measures between $3 \frac{15}{32}$ and $3 \frac{1}{2}$ inches, it's good. Any gauge that measures $3 \frac{3}{8}$ inches or less is scrap metal.



THE DIFFERENCE BETWEEN A GOOD AND BAD GAUGE IS *VERY* SMALL, SO YOU'LL HAVE TO BE *CAREFUL* IN YOUR MEASUREMENTS.



If you find a bad gauge, use it as a template to measure the rest of the gauges in your unit. Just make sure you identify the gauge as bad by scribing or painting it.

Check out the full story in TACOM Maintenance Advisory Message 08-052: https://aeps2.ria.army.mil/commodity/mam/tacom_wn/08/mam08-052.html

Relaying Some Replacement Info



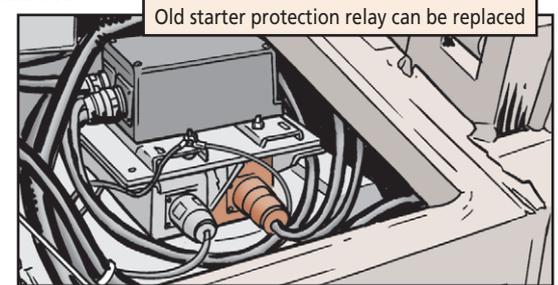
The starter protection relay, NSN 5945-01-291-0734, used in M109 howitzers and ammo carriers doesn't hold up very well, mechanics.

And that can be a real problem. The relays are coded as terminal items, so you can no longer get one.

Fortunately, the low-heat rejection (LHR) engine, which was introduced after the current relay was already in use, is much better at starting in cold temperatures. Unfortunately, that means the battery and starter protection features of the relay are no longer worth the additional cost.

The current relay can now be replaced with a much simpler starter relay, NSN 5945-00-690-2707. You can't just swap the two relays, though. You'll need to make some modifications to your vehicle during the replacement.

You'll find instructions starting on Pages 181 and 191 of TB 43-0001-62-08-4 (Feb 09). If you need a copy, write to Half-Mast: half.mast@us.army.mil



M2/M3-Series Bradley...

Check for Bad M242 Pawl

MORE THAN 500 BAD M242 AUTOMATIC GUN SAFETY PAWLS HAVE BEEN DISTRIBUTED TO THE FIELD.

THE DEFECTIVE PAWLS PREVENT THE FIRING PIN GOING FORWARD, WHICH MEANS NO FIRING.

IF A SAFETY PAWL HAS ALREADY BEEN INSTALLED, CHECK IT LIKE THIS...



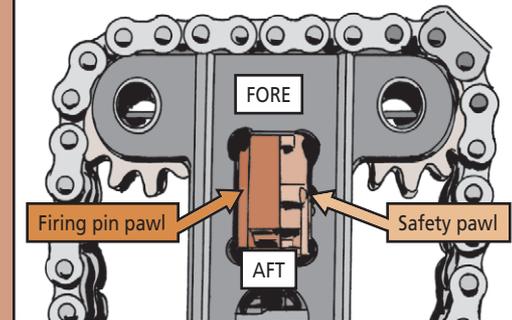
After you remove the bolt and carrier assembly from the track assembly, turn the safety handle while watching the safety pawl. When the pawl is in the SAFE position, it should be about level with the aft end of the firing pin pawl.

As the safety handle is rotated to the FIRE position, the aft end of the safety pawl should drop and be distinctly lower than the firing pin pawl. A bad safety pawl will not drop below the firing pin pawl and may even rise above it.

If you find any defective safety pawls, do a Category II PQDR and request a CREDIT rather than a REPLACEMENT. After you submit a PQDR, you will receive a replacement credit and disposition instructions for the defective pawl.

See TACOM Maintenance Advisory 09-013 for more information.

Does safety pawl drop below firing pin pawl?



Firing pin pawl

Safety pawl

QUESTIONS? CONTACT TACOM-RI'S KEVIN COLLINS AT DSN 793-7961, (309) 782-7961, OR EMAIL: kevin.collins10@us.army.mil



ANY SAFETY PAWLS IN THEIR ORIGINAL PACKAGING MARKED LIKE THIS ARE DEFECTIVE...

Contract No: W52H09-07-D-0140
CAGE: 0EFR2

SAFETY PAWLS THAT HAVE ALREADY BEEN REMOVED FROM THEIR PACKAGES CAN BE CHECKED BY MEASURING THE TANG ON THEIR BOTTOM CENTER.

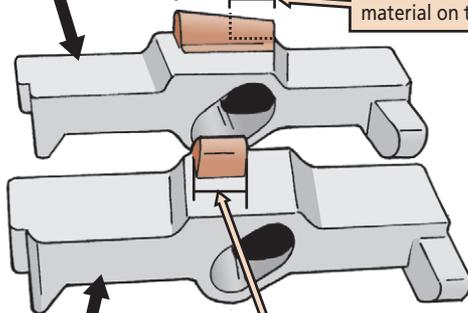
A GOOD PAWL'S TANG MEASURES 0.20 INCH (5.3MM) FORE TO AFT.

A BAD PAWL'S TANG MEASURES 0.47 INCH (12.2MM) FORE TO AFT.

Defective Safety Pawl

Tab too long (0.47 in or 12.2mm)

Unwanted material on tab



Correct length (0.20 in or 5.3mm)

Correct Safety Pawl (PN 12524384)



MLRS Carrier...

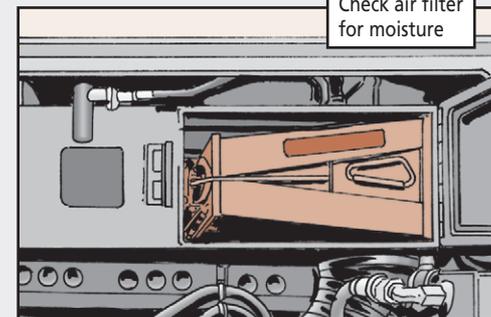
IT'S NOT A WATER FILTER!

High-pressure water is a big-time air filter killer, drivers.

When you wash your MLRS carrier, it's easy to force water into the filter canister where it soaks the element. A water-clogged filter won't let air through to the engine. Pretty soon, no more engine!

Check the air filter after each washing. If the filter is damp, let it air dry thoroughly before using the vehicle.

Check air filter for moisture



Protect Vehicle Battery Life




OPERATORS, YOUR VEHICLE HAS A VALUABLE FEATURE THAT SHOWS THE CONDITION OF ITS BATTERIES.

BY SIMPLY TURNING ON A POWER SWITCH AND LOOKING OBSERVANTLY, YOU CAN DETERMINE THE CHARGING LEVEL AND ACTIVITY OF THE BATTERY CHARGING SYSTEM.

BY NOW, YOU MIGHT HAVE GUESSED THIS FEATURE IS THE BAT-GEN INDICATOR.

PAYING ATTENTION TO THE BAT-GEN INDICATOR ON YOUR INSTRUMENT PANEL CAN MAKE A POSITIVE DIFFERENCE WHEREVER YOU USE YOUR VEHICLE.

BUT YOU'VE GOTTA KNOW HOW TO "READ" THAT GAUGE SO YOU CAN TIP OFF YOUR MECHANIC TO BATTERY TROUBLE...

...AND NOT GET STRANDED IN THE MIDDLE OF NOWHERE!



HERE'S HOW...



TURN OFF ALL ELECTRICAL COMPONENTS, LIKE YOUR LIGHTS AND RADIO.

What Yellow, Red, and Green Mean

Watch the gauge when you turn the power switch to ON and before you crank up the engine. The gauge needle should land in the yellow section, or between 22-26 volts. If the needle goes into the red section at the left of the gauge, your batteries are weak, defective, need charging, or there's a short in the system.

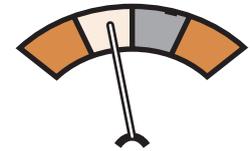
Now, crank up the engine at idle rpm. If the needle hangs to the left after you've started the engine, one battery could have a bad cell.

AFTER THE ENGINE STARTS, RUN IT AT FAST IDLE—ABOUT 1,500 RPM, FOR AT LEAST 20 MINUTES.

THE BATTERY CHARGING SYSTEM IS WORKING FINE IF THE NEEDLE SETTLES AT ABOUT 28.5 VOLTS, IN THE GREEN SECTION.

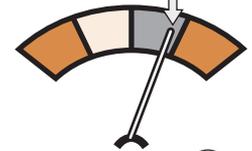
Yellow: 22-26 volts

Charge is OK to start engine



Green: 26-30 volts

Correct charging is about 28.5 volts



Overcharging

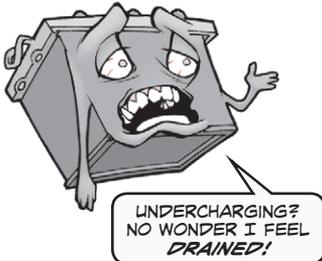
Overcharging is the culprit when the needle hangs in the red section on the right side of the gauge.



If the gauge shows a high rate of charge after the engine's been running for 30 minutes, there's a good chance the batteries are being cooked to death. Get your mechanic to check out the charging system.

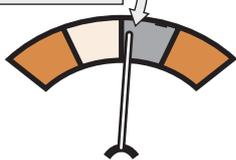
Undercharging

Undercharging is the problem when the needle settles well below that 28.5-volt mark, even though it's still in the green.



Green: 26-30 volts

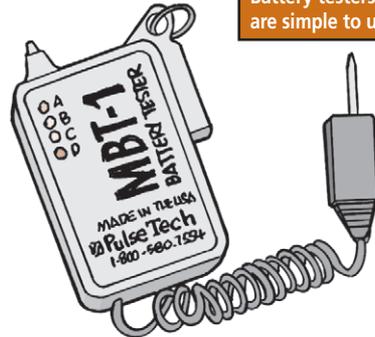
This is UNDERCHARGING



If your BAT-GEN gauge indicates any of these problems, get your mechanic to check out the charging system.

Tester Option

Besides using the BAT-GEN indicator to determine your battery's health, consider using battery testers. These small devices test your vehicle's lead-acid batteries to ensure they're good.



SOME OPTIONS INCLUDE NSN 6625-01-433-6786 AND NSN 6130-01-463-8499.

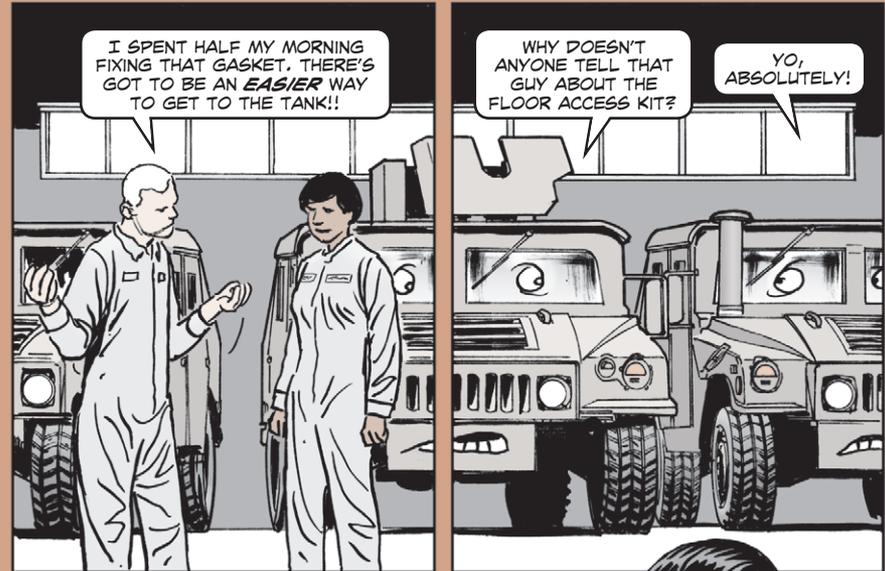
CHECK FED LOG FOR MORE AVAILABLE TESTERS.

THEY COME WITH INSTRUCTIONS ON HOW TO USE THEM.



HMMWV...

FUEL TANK ACCESS MADE EASY



MECHANICS, WANT TO WORK ON A HMMWV FUEL TANK WITHOUT DROPPING IT?

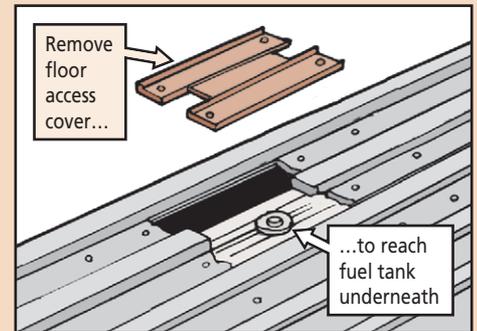
THEN ORDER THE CARGO FLOOR ACCESS HOLE AND COVER KIT, NSN 2510-01-454-7077.



Once the kit is installed, you can work on the sending unit or replace a leaking access cover gasket with the fuel tank in place.

The kit comes with the instructions, hardware and plate you'll need to install the access cover in the truck's cargo floor. Then you'll be good to go the next time you have to drop the tank. Just make the hole and install the cover while the tank's off.

By the way, you can't use this kit on M996 or M997 ambulances or Avengers because of their design.



OIL PRESSURE SWITCH SWITCHES



WHY IS HE THINKING SO HARD?

CAUSE IT'S TIME TO SWITCH MY OLD OIL PRESSURE SWITCH...

...BUT HE HAS NO IDEA WHICH NEW SWITCH TO SWITCH IT WITH!

Dear Half-Mast,

I heard that some of the older oil pressure switches on FMTVs have been replaced with new ones. Can you tell me what the deal is with this?

SSG N.O.C.

Dear Sergeant N.O.C.,

Can do! There are three different oil pressure switches used. Which pressure switch is used depends on which model FMTV you have. The newer switches have an improved diaphragm made out of a more durable material.

Here's what you need to know:

Basic FMTVs with Caterpillar 3116 engines use the analog style 12 psi-activated pressure switch, NSN 5930-01-528-7523, PN 12419189-004. This is used on trucks with serial numbers below 11,438. It replaces NSN 5930-01-384-5419 shown as Item 6 in Fig 68 of TM 9-2320-365-24P.

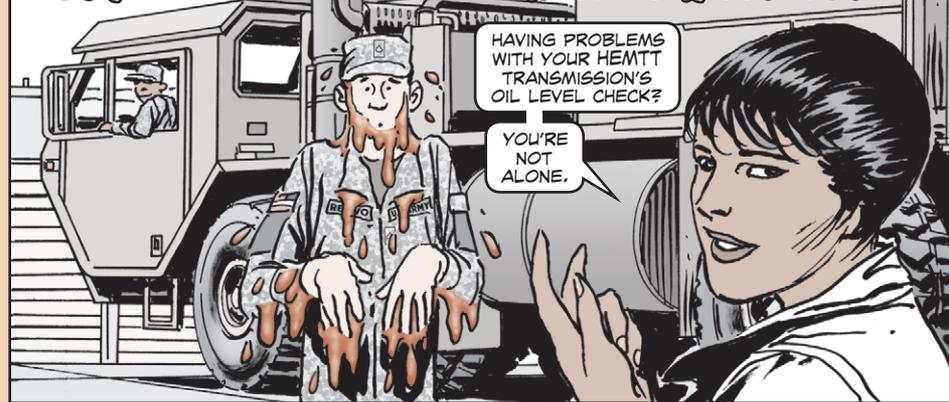
FMTV -A1 models with Caterpillar 3126 engines use the digital style 6 psi-activated pressure switch, NSN 5930-01-515-6564, PN 12419189-003. This is used on trucks within the serial range of 11,438-25,248.

Finally, FMTV -A1 models with Caterpillar C7 engines use a digital style pressure switch, NSN 6620-01-524-9112, PN 161-1705. That's used on trucks with serial numbers higher than 100,000. (There are no trucks within the serial range of 25,249-99,999.)

And that's the deal for FMTV oil pressure switch switches.

Half-Mast

TRANSMISSION OIL CHECK CHALLENGE



HAVING PROBLEMS WITH YOUR HEMTT TRANSMISSION'S OIL LEVEL CHECK?

YOU'RE NOT ALONE.

Word from the field is that HEMTT users have found transmission oil blows out of the vent at startup. That's a sign that the oil level could be too high.

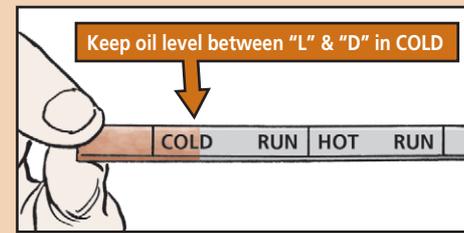
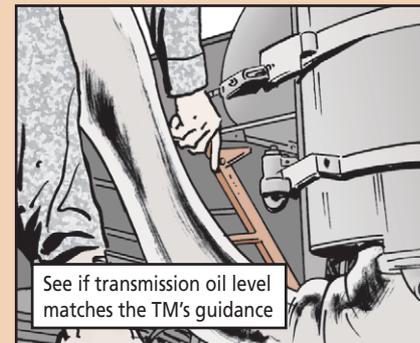
Overfilling is the likely reason for blowoff. That's why making sure the oil levels are within the limits spelled out on Page 2-50 of TM 9-2320-279-10-1 is important.

If that doesn't solve your problem, you may need to back off on the fill level. Your oil level has to be closer to the COLD end of the dipstick than the HOT.

When you make your after operation check described in the -10-1 TM, maintain an oil level between the letters "L" and "D" in COLD. Remember, this after operation check is made with the parking brake set, transmission in neutral, engine running, and with a hot transmission (over 160°F).

The steps listed above are the **only** approved solution whenever you find blowoff. Making the dipstick tube longer won't solve the problem of getting the proper fluid level in the transmission.

Of course, if your HEMTT doesn't blow transmission oil and registers proper (TM-prescribed) levels on the dipstick, you're good. So keep your oil level right where it is.



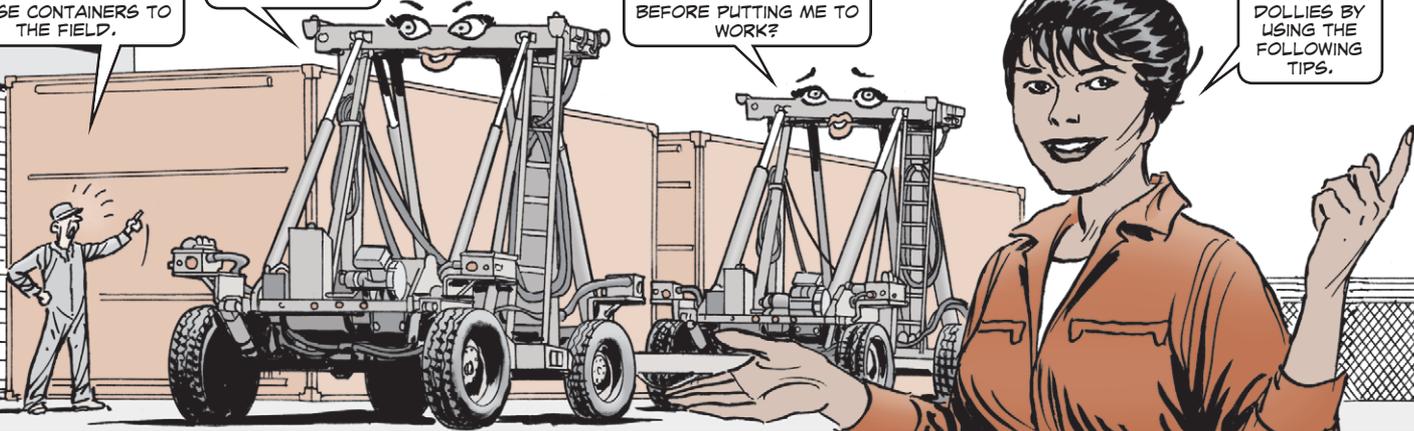
Protect Hydraulic Cylinders

LET'S GO, LADIES. WE'RE GOING TO TAKE THOSE CONTAINERS TO THE FIELD.

I'M READY AND RARIN' TO GO!

I'M A BIT *RUSTY*. CAN YOU FIX MY PROBLEM BEFORE PUTTING ME TO WORK?

YOU CAN HELP *YOUR* DOLLIES BY USING THE FOLLOWING TIPS.



Dear Editor,

I have a good idea to pass on to troops in the field. It'll protect the M1022A1 dolly set's hydraulic cylinders and save the Army money.

Nowhere in TM 9-2330-390-14&P, the TM for the M1022A1 dolly set, are instructions found about protecting the lift cylinders and the positioning cylinders—its hydraulic cylinders—from weather damage. The operator's PMCS only tells you to clean and lube. The organizational PMCS says only how to lube. We need some way to prevent the push rod in the cylinder that's exposed to the weather from pitting, which leads to cylinder replacement.

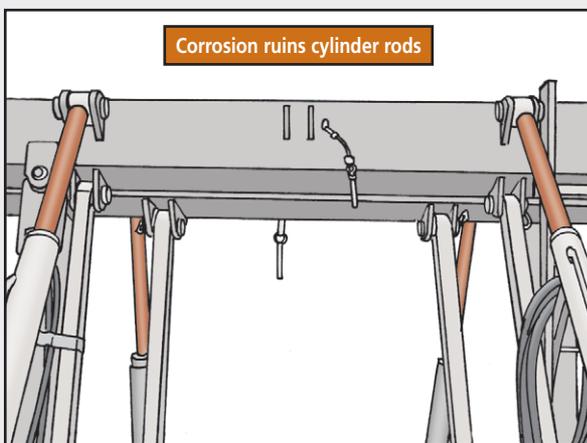
Hydraulic cylinders aren't cheap. A new lift cylinder assembly costs about \$2,273 and a new positional cylinder assembly costs about \$1,562.

I suggest that units get tube-type pipe insulation from a local hardware store and put it around the exposed push rod on the cylinder. This should cut down on cylinder replacement and save money.

Mr. R.H.
Production Supervisor
FLRC Hood

Editor's note:

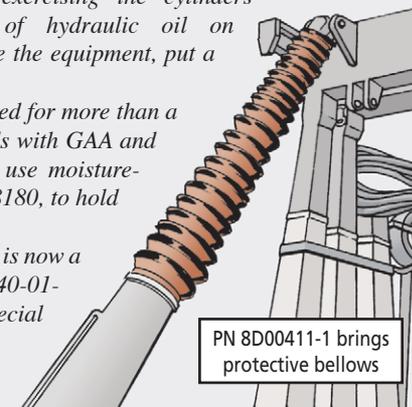
Thanks for that useful tip, Sir. Readers, remember that corrosion is no friend to your dolly set. It ruins cylinder rods. In fact, it can pit the rods so badly that seals can't prevent fluid leaks. Once the leaks go to Class III, your dolly set becomes NMC.



Another way to protect hydraulic cylinders and stop corrosion before pitting starts is by exercising the cylinders weekly. That spreads a thin coat of hydraulic oil on the cylinder rods. But if you can't exercise the equipment, put a thin coat of GAA on the rods.

And if your dolly set is going to sit unused for more than a month, you can also coat the cylinder rods with GAA and wrap them with waterproof paper. Then use moisture-resistant sealing tape, NSN 7510-00-852-8180, to hold the paper in place.

By the way, TACOM LCMC told us there is now a \$300 protective bellows assembly, NSN 5340-01-573-1239, PN 8D00411-1, made from special weather and sun-resistant material.



PN 8D00411-1 brings protective bellows

You Gotta Turn It In

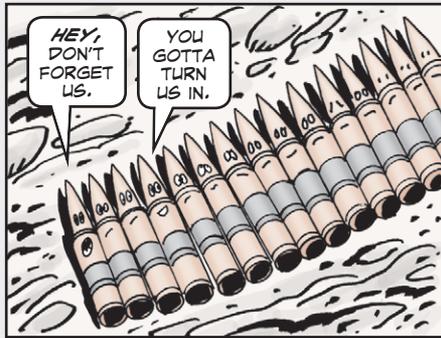


THE ARMY IS *VERY* SERIOUS ABOUT ACCOUNTABILITY WHEN IT COMES TO AMMO.

IF YOU DON'T FIRE OFF ALL YOUR AMMO, YOU'VE GOT TO TURN IN EVERY LAST UNFIRED ROUND OR YOUR UNIT COULD FACE SOME SERIOUS QUESTIONING.

If munitions are discovered abandoned on the range, an AR 15-6 investigation will be conducted to find out who's responsible. Besides, munitions left in the field are like time bombs waiting to go off and injure or kill somebody.

Ammo accountability is important not only to ensure munitions aren't left in the field or stolen, but also to track ownership, quantity and quality of ammo stocks.



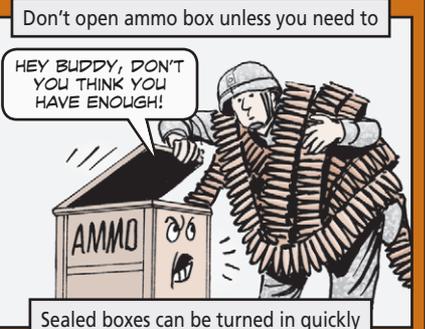
HEY, DON'T FORGET US.

YOU GOTTA TURN US IN.



HERE ARE SOME THINGS YOU CAN DO TO MAKE AMMO TURN-IN EASIER...

- Don't open an ammo box unless you absolutely need to. Boxes that haven't been unsealed are much easier to turn in because they don't require 100 percent inspection.
- If you do open a box, save the packing material. You will need it to re-pack any unused rounds the same way they were originally.
- Make sure the lot numbers on the ammunition (and/or serial numbers) match those on the inner and outer packs of the munitions you're turning in.



Don't open ammo box unless you need to

HEY BUDDY, DON'T YOU THINK YOU HAVE ENOUGH!

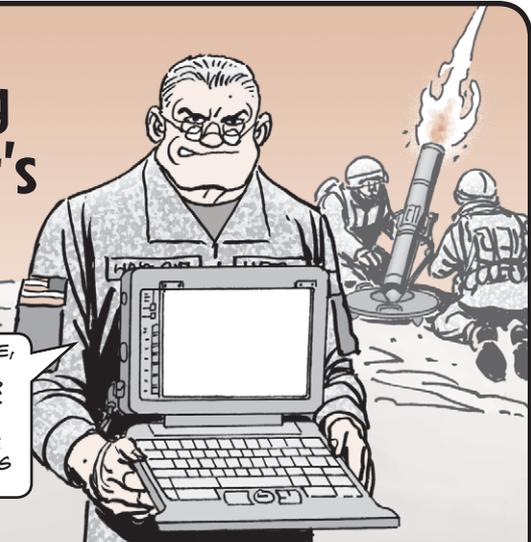
Sealed boxes can be turned in quickly

- Separate explosive items and residue—such as ammo cans, cartridge cases, links, wire-bound boxes—before turn-in.
- If a munition has a safety device or devices, make sure they are installed before the munition is repacked.

Remember that we're fighting two wars and the ammunition is needed. Don't fire off ammo just because you have some left over. Take the time to re-pack it and turn it in. That helps ensure there is no shortage of ammo for the Soldiers on the front line.

If you need more info on ammo accountability and proper turn-in, see chapter 11 in DA PAM 710-2-1, *Using Unit Supply System (Manual Procedures)*.

Exchanging Commander's Interface



IF THE COMMANDER'S INTERFACE, NSN 1220-01-534-9740 OR NSN 1220-01-503-4393, FOR YOUR MORTAR SYSTEM *CAN'T* BE REPAIRED, YOU CAN SWAP IT FOR A GOOD ONE AT THESE SMALL ARMS SUPPORT CENTERS (SASC)...

SASC Baghdad
 W4GG Baghdad SASC
 Operation Iraqi Freedom
 Bldg A5, Armadillo Area, Camp Stryker
 Baghdad, Iraq
 APO AE 09342
 Commercial: (732) 427-5130 (ext 6805/6806)
 email: smallarmsbaghdad@mmcs.army.mil

SASC Balad
 SASC
 1st BN 402nd AFSB
 Joint Base Balad
 Bldg 7038
 APO AE 09391
 DSN: (312) 987-5130 (ext. 6203)
 Commercial: (732) 427-5130 (ext. 6203)
 Email: smallarmsbalad@mmcs.army.mil

A commander's interface can't be shipped to these addresses. It must be turned in and replaced in person. If you have questions, contact

pica.mfchelp@conus.army.mil

3 Rs Protect Against UXO



UXO—UNEXPLODED ORDNANCE—CAN APPEAR HARMLESS.

MINES, SUBMUNITIONS, GRENADES, PROJECTILES, AND MORTAR ROUNDS MAY HAVE LAIN FORGOTTEN FOR MONTHS OR EVEN YEARS AND AS A RESULT BE COVERED WITH MUD AND CORROSION.

BUT JUST BECAUSE THEY LOOK OLD AND IMPOTENT DOESN'T MEAN THEY STILL DON'T HAVE THE POWER TO TAKE YOUR HEAD OFF.

4.2-in mortar round



MK2 fragmentation grenade



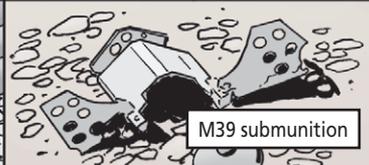
Anti-tank mine



Encrusted projectiles



M39 submunition



THE BEST PROTECTION AGAINST UXO IS TO LEARN AND FOLLOW THE THREE RS OF UXO SAFETY...



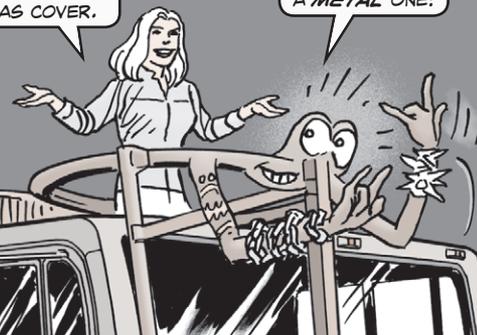
Recognize Retreat Report

- **Recognize** you have encountered a munition—UXO.
- **Retreat!** Do not touch, disturb, or move it in any way. Carefully leave the area and make sure everyone else leaves, too. Mark the area so it can be found later.
- **Report** the UXO. Call 911, your supervisor, the military police, your local quality assurance specialist (ammo surveillance), or unit ammunition officer. Give them a description of the UXO and its location. And let them take it from there. They're trained for the job.

IS THERE A METAL COVER ?

SORRY, BUDDY... ALL WE'VE GOT FOR YOU IS A CANVAS COVER.

GEE, I HAD MY HEART SET ON A METAL ONE!



Dear Half-Mast,
Is there a metal cover for the M66 ring mount? I know there is a canvas one. We're in a National Guard unit where our LMTV trucks often sit much longer than in an active unit, so a metal cover would work—and last—better for us.

SSG T.H.

Dear Sergeant T.H.,
Sorry, but the only cover available for the M66 mount is the canvas cover, NSN 1005-00-707-0725. It costs a bit less than \$150.

Half-Mast

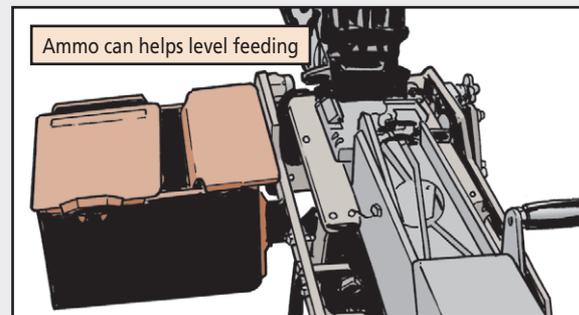
Use Ammo Can for Level Feeding

Ammo feeding into the M2 machine gun should be as level as possible. The more the ammo belt is angled the greater the risk of the M2 jamming when the belt catches on the mount. Then the gunner has to stop firing and take one hand off the weapon to lift the belt above the mount. That could cost lives in a fire fight.

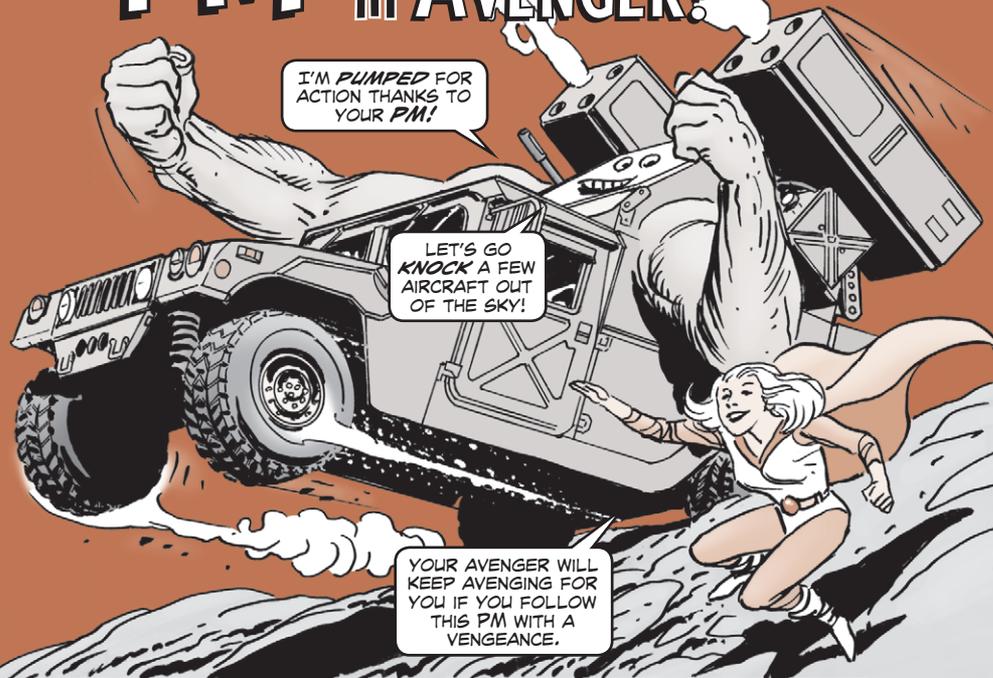
The best way to keep the ammo belt level is to use the .50-cal can holder when you're firing from the MK93 mount.

It will do a better job of feeding than something like the ammo can from other mounts, like the 6650. You can order the MK93 can holder with NSN 8140-01-387-3095.

Ammo can helps level feeding



PM Keeps the "Avenger" in AVENGER!

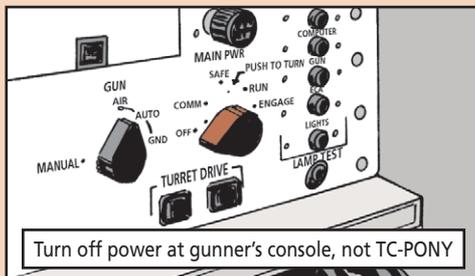


I'M PUMPED FOR ACTION THANKS TO YOUR PM!

LET'S GO KNOCK A FEW AIRCRAFT OUT OF THE SKY!

YOUR AVENGER WILL KEEP AVENGING FOR YOU IF YOU FOLLOW THIS PM WITH A VENGEANCE.

TC-PONY

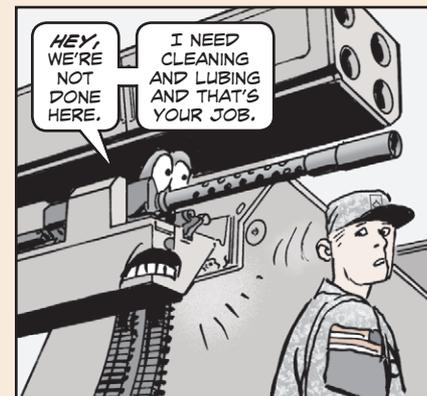


If your Avenger has been equipped with the new PONY tactical computer, it's critical you properly shut down the Avenger, which means turning off the power from the gunner's console, not the TC-PONY. If you turn off power at the TC-PONY, you risk ruining the TC-PONY's hard drive.

It's also critical with the TC-PONY that you carefully plug in the J5 cable. If you force the cable in place, bending pins, you lose communication within the Avenger system.

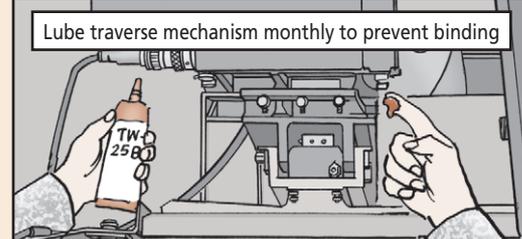
M3P Machine Gun

The M3P machine gun must be cleaned and lubed with TW-25B—nothing else—before it's returned to the arms room. That job is the crew's, not the armorer's. When the M3P goes uncleaned and unlubed, it will jam or fire only single shot next time it makes a trip to the range.

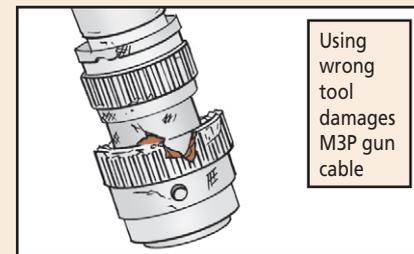


When cleaning, don't dump the bolt in a solvent tank. The solvent gets in all the bolt crevices and makes it impossible to properly lube the bolt. Clean the bolt with a rag and RBC. Then lube it with TW-25B.

Monthly, give the M3P's traverse mechanism a few dabs of TW-25B. Work the traverse mechanism back and forth to spread the lube. That keeps the traverse mechanism from binding and making boresighting difficult.

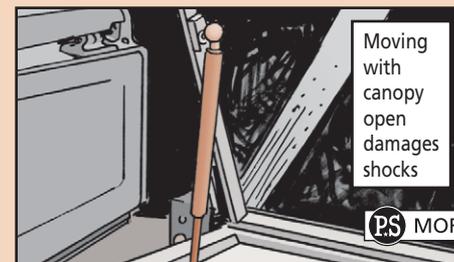


When you install the M3P, don't try to tighten its cable with regular pliers or a multi-purpose tool. They're too short and can damage the connector. Use needle-nose pliers to tighten the cable. When your Avenger goes through overhaul, a new M3P connector will be installed that will make the job easier.



Canopy Caution

Never move the Avenger even a foot with the canopy open. Just that little trip can ruin the canopy's shocks. Then the canopy can come crashing down on your head. Crew drills and M3P live fires are usually when crews forget this important rule.



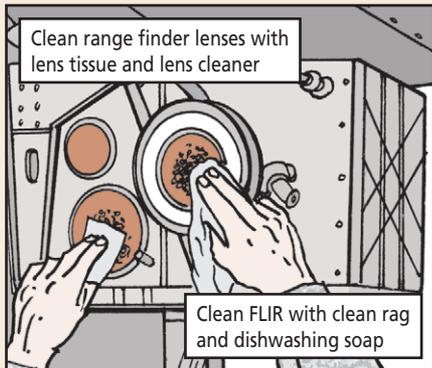
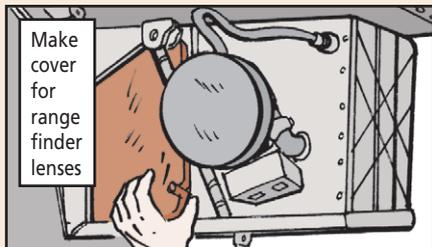
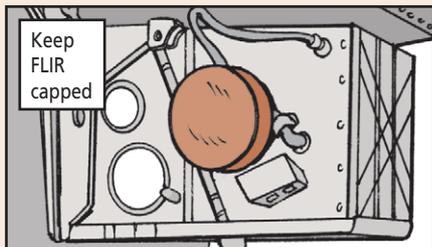
Lens Protection and Cleaning

If the lenses for the FLIR and range finder are ruined by flying sand and pebbles, your Avenger is blinded and your unit is out big bucks. So any time you're not firing, which is most of the time, **keep the FLIR and range finder covered.** The FLIR has its own protective cap, which can be ordered with NSN 5855-01-441-3189.

But the range finder has no cover, so you need to make one with styrofoam. Cut a piece 12 x 18 inches. Punch a hole in it for the boresight guide pin cover. Stick it in front of the range finder lenses so the support bracket holds it in place.

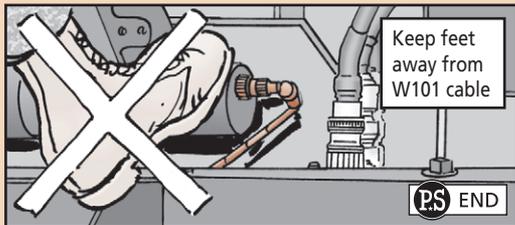
If you clean the delicate lenses with something like a dirty rag, you'll scratch them. Clean the range finder lens only with lens cleaner, NSN 6810-00-201-0906, and lens tissue.

Clean the FLIR lens with dishwashing soap, NSN 7930-00-880-4454, and a clean rag. Remove any soap with a clean rag and denatured alcohol. You can order 50 pounds of clean rags with NSN 7920-00-205-1711.



Watch Your Feet

When you're climbing up and down on the Avenger, make sure your feet stay off the W101 cable for the ECU/PPU. The cable grounds the ECU/PPU. If it's damaged, you have a fire hazard.



M2 Machine Gun: It Won't Quit on You... If You Don't Quit on It

THE M2 MACHINE GUN HAS DONE ITS DUTY AND THEN SOME.



THE M2 CREATED A WALL OF LEAD IN THE TRENCH WARFARE OF THE FIRST BIG ONE.



WE WOULDN'T HAVE MADE IT THROUGH THE BATTLE OF THE BULGE WITHOUT THE M2.



IT SURE GOT US OUT OF SOME TIGHT SPOTS IN KOREA.



IT NEVER LET US DOWN IN THE JUNGLES OF VIETNAM.

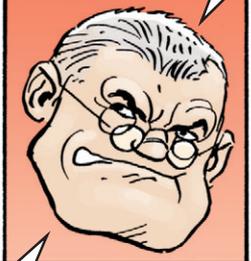


AND IT'S STILL SAVING OUR LIVES IN SW ASIA.



YOU CAN DEPEND ON YOUR M2...

...IF IT CAN DEPEND ON YOU TO GIVE IT THE PM IT NEEDS.



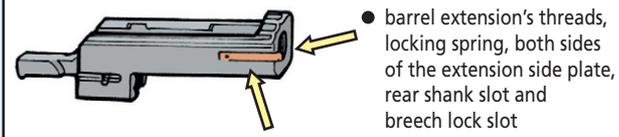
HERE'S THE KIND OF ATTENTION I'M TALKING ABOUT...

Look for Problems

WHEN YOU FIELD STRIP YOUR M2 FOR CLEANING AND LUBING, CHECK THESE AREAS FOR CRACKS...



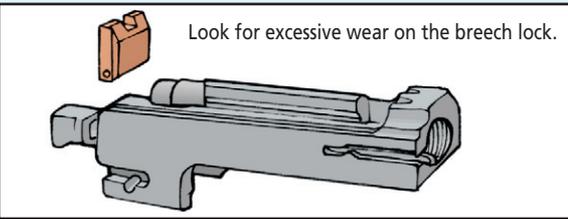
- barrel liner and threads (don't forget the spare barrel)



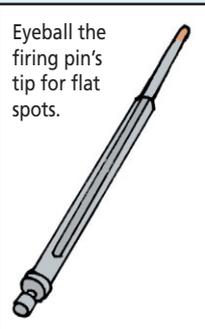
- barrel extension's threads, locking spring, both sides of the extension side plate, rear shank slot and breech lock slot



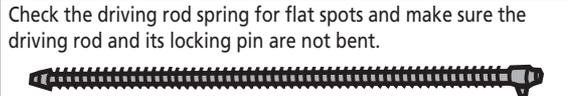
- bolt's firing pin slot, T-slot and breech lock slot



Look for excessive wear on the breech lock.



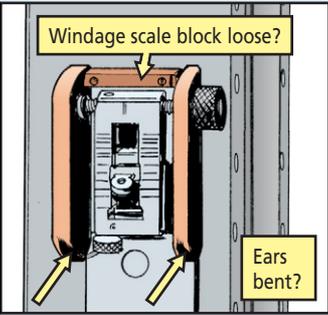
Eyeball the firing pin's tip for flat spots.



Check the driving rod spring for flat spots and make sure the driving rod and its locking pin are not bent.

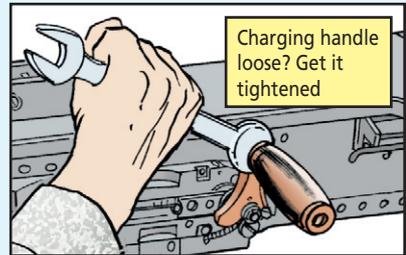
Make sure the rear sight's ears aren't so bent that the sight can't be raised. Check that the block for the rear sight's windage scale isn't loose. If it is, the scale won't stay in position.

Feel the charging handle for looseness. If it gets too loose, it can come off completely during firing. Your repairman can quickly tighten the handle with a 3/4-in wrench. Also feel the charging handle's slide plate for looseness. If it has any play, it could cause charging problems.

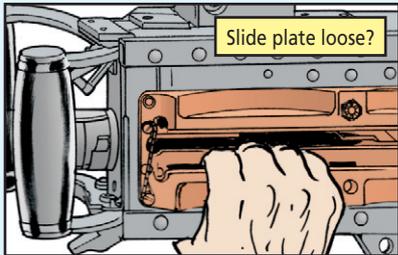


Windage scale block loose?

Ears bent?

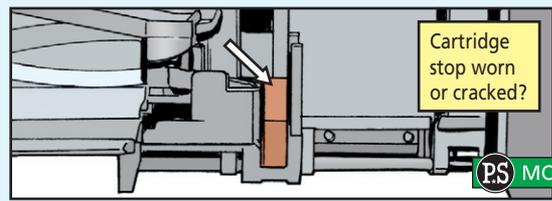


Charging handle loose? Get it tightened



Slide plate loose?

Eyeball the cartridge stop for wear and cracks. A worn stop is often a sign that a feed pawl is out of adjustment. That could cause the M2 to lock up.



Cartridge stop worn or cracked?

PS MORE

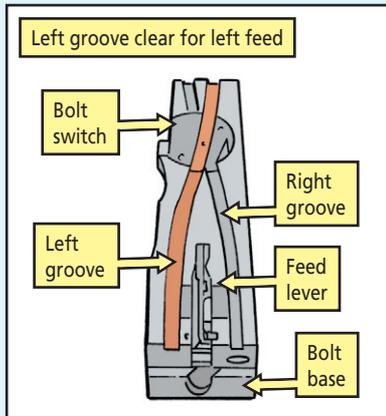


Put It Together Right

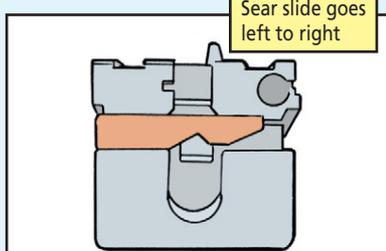
ALL THE CARE YOU GIVE YOUR M2 WILL BE POINTLESS IF YOU DON'T PUT IT BACK TOGETHER RIGHT.

THESE ARE SOME ASSEMBLY MISTAKES...

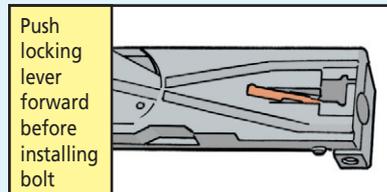
Feed assembly—If the feed assembly is put together wrong, the feed lever lug and bolt switch bang against each other during firing and are damaged. Most gunners feed from the left, so the left groove should be unblocked. If you do feed from the right, turn the bolt switch so the right groove is unblocked.



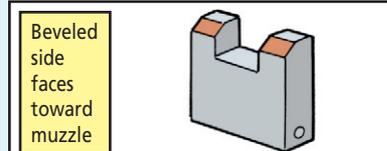
Sear slide—The sear slide always goes in from the left. If you install it from the right, your M2 won't fire from the M63 mount.



Cocking lever—Make sure to push the cocking lever forward before pushing the bolt in the receiver. If you push the bolt in with the lever back, the bolt jams and your repairman has to unjam it.



Breech lock—It's easy to put it in backwards. The beveled side should face forward toward the muzzle. Once installed, the lock should easily move up and down in the guideways of the barrel extension.



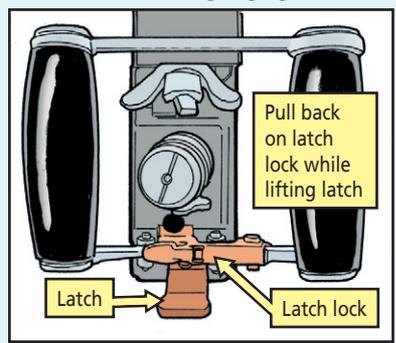
Bolt, buffer and barrel extension—Put them together as one piece before putting them in the receiver. That's much easier than putting them together in the receiver.



Backplate—If you need to take off the backplate, first ease the bolt forward. That takes pressure off the spring and prevents the drive rod from springing out of the receiver and spearing you.

When you put the backplate back on, don't jam it on. That wears out the locking latch. Then the backplate could come off when you lift up on the backplate handles. If the M2's cocked, the drive rod shoots out and into you.

The right way to put on the backplate is to fit it in the receiver grooves and then pull back the latch lock while lifting up on the latch. Slide the backplate down until it locks in the receiver.



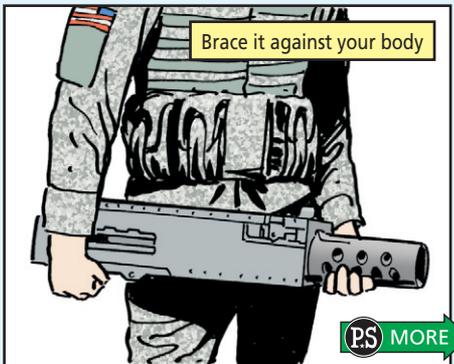
How to Carry

Many M2s have to go for repairs each year because Soldiers don't carry them correctly and end up dropping them. The M2 weighs more than 80 pounds, so the best way to carry it is with four hands.



After the barrel is removed, have a buddy lock his hands under the barrel support while you lock your hands under the receiver five inches from its end.

If you're alone, hold the barrel support with your left palm out and the receiver with your right palm in. Brace the receiver against your legs for more support.

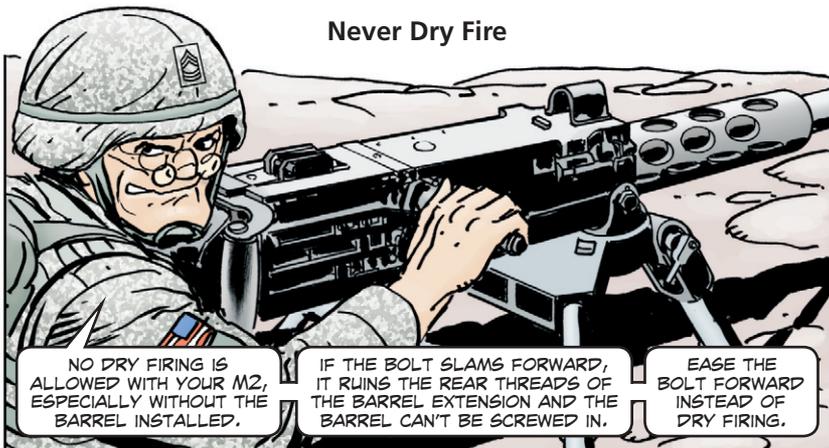


Never use the backplate handles for a carrying handle. The backplate can slip out and the receiver takes a tumble in the vicinity of your toes.

If you don't have a rack, the M2 should be stored flat so it can't fall. But don't put M2s on top of each other. That will break things like sights.



Never Dry Fire



NO DRY FIRING IS ALLOWED WITH YOUR M2, ESPECIALLY WITHOUT THE BARREL INSTALLED.

IF THE BOLT SLAMS FORWARD, IT RUINS THE REAR THREADS OF THE BARREL EXTENSION AND THE BARREL CAN'T BE SCREWED IN.

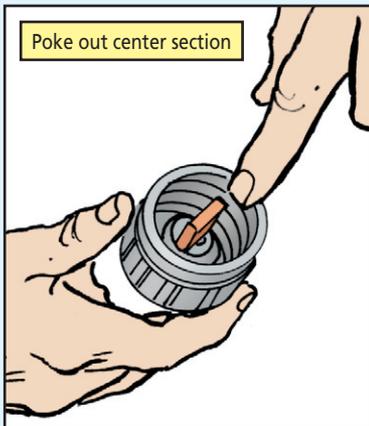
EASE THE BOLT FORWARD INSTEAD OF DRY FIRING.

Protect the Barrel

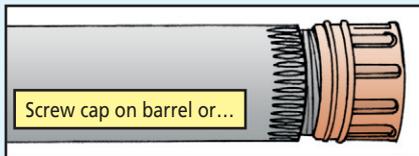
One of the most vulnerable parts of the M2 is the barrel, particularly its threads. If the barrel is tossed around or left to roll around in the back of a truck, its threads are damaged and you can't screw in the barrel. Never leave a barrel standing on end where it can take a fall. During travel, tie down a barrel or block it in place. Don't store heavy items on the barrel.

Some units give the barrel threads extra protection by screwing on an old canteen cap or AOAP bottle. For the canteen cap, push out the cap's center section and then screw it on the barrel. For the AOAP bottle, cut the bottle in half—an inch below the threads—and then screw it on. Keep the cap or bottle on the barrel as much as possible.

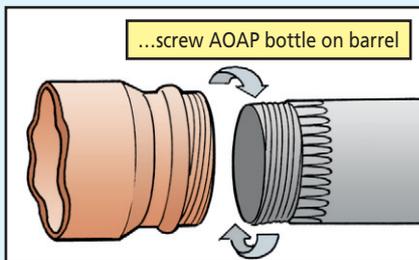
Poke out center section



Screw cap on barrel or...



...screw AOAP bottle on barrel



Timing and Headspacing

ALL YOUR CARE FOR YOUR M2 WILL BE FOR NOTHING IF YOU DON'T HEADSPACE AND TIME IT EVERY TIME BEFORE FIRING OR AFTER CHANGING THE BARREL. BAD HEADSPACE AND TIMING CAUSE RUPTURED CARTRIDGES, WHICH CAN LEAD TO THE M2 EXPLODING.

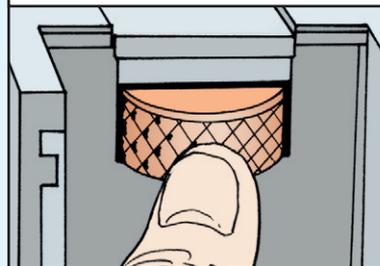


BUT BEFORE HEADSPACING AND TIMING, FIRST DO THESE CHECKS...

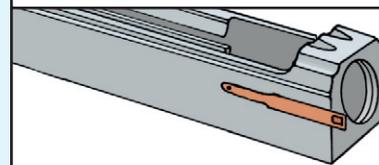
Gages—If the headspace and timing gages are bent, rusted or pitted, you can't accurately gage. Get new gages with NSN 5250-00-535-1217. Also check that the gages have been calibrated in the last year.



Timing nut—If the timing nut can be moved with one finger or it doesn't click as you move it, its spring is weak and it won't hold timing. Tell your repairman.



Barrel locking spring—If the spring can't hold the barrel in place, the barrel can turn during firing and headspace is lost. So test the spring by getting the correct headspace and then trying to unscrew the barrel. If the barrel turns, the spring is weak or loose.

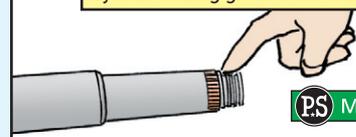


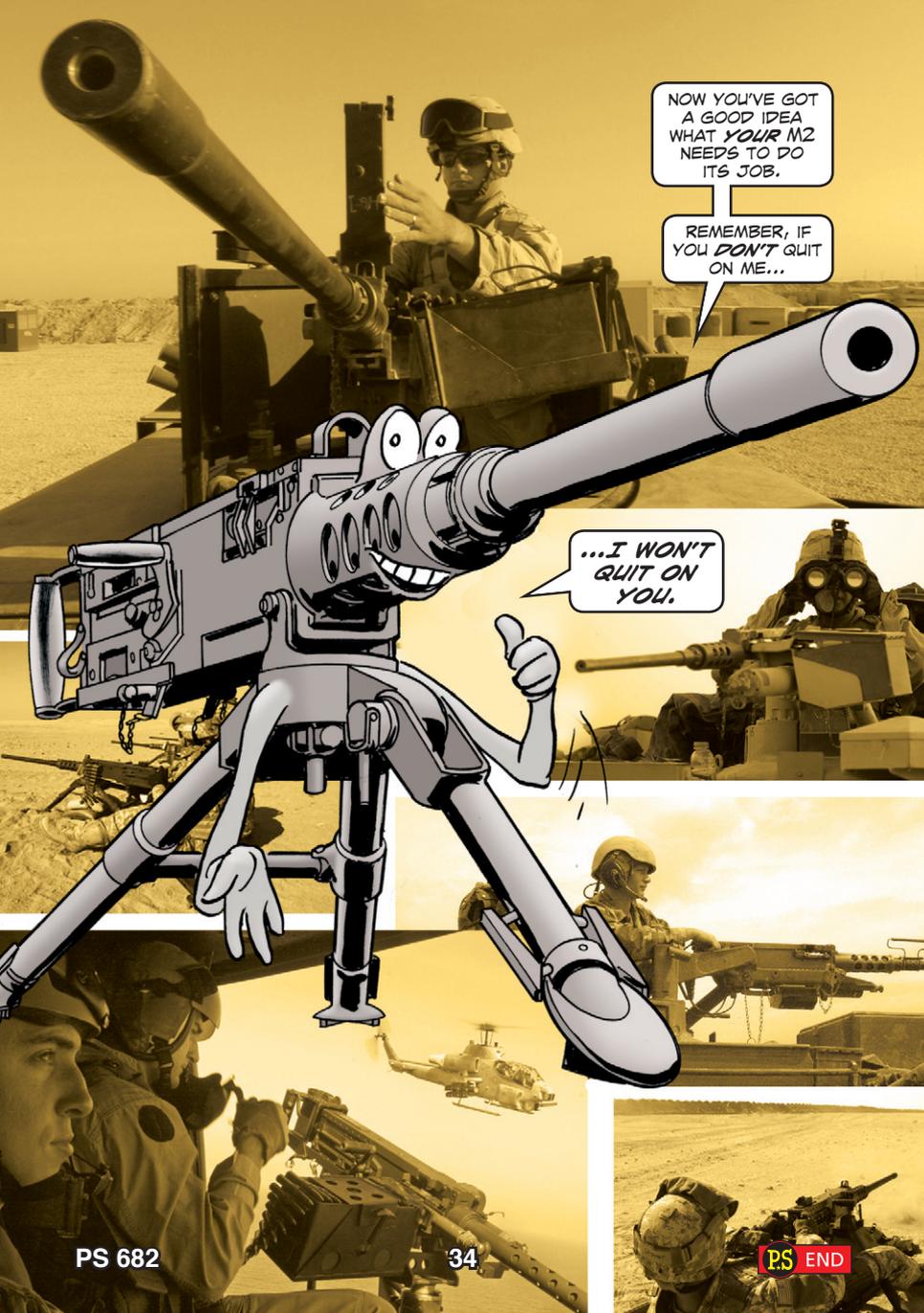
Barrel and barrel extension threads—If the threads are chipped or burred, it will be difficult to screw in the barrel. What's worse, you may think you've screwed in the barrel, but you haven't—that means bad headspace. Your repairman can usually stone chips and burrs smooth.



Also check the barrel locking grooves for wear. If they're too worn, the barrel will work loose. If you have doubts about the grooves, try to turn the barrel with the bolt in the forward position. If the barrel turns at all, either the grooves are too worn or the locking spring is weak.

eyeball locking grooves for wear

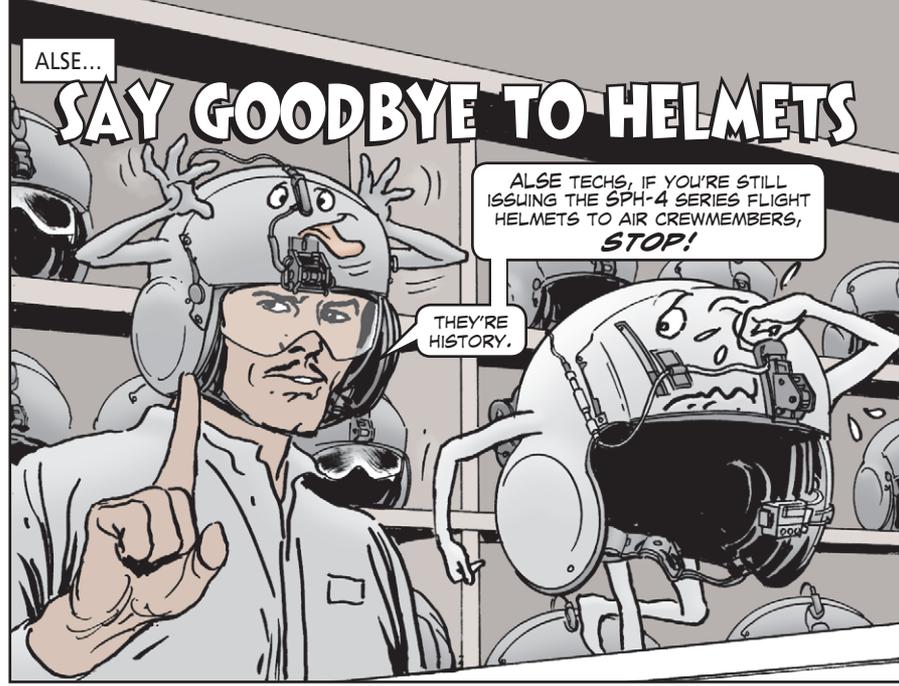




NOW YOU'VE GOT A GOOD IDEA WHAT *YOUR* M2 NEEDS TO DO ITS JOB.

REMEMBER, IF YOU *DON'T* QUIT ON ME...

...I WON'T QUIT ON YOU.



ELSE...

SAY GOODBYE TO HELMETS

ELSE TECHS, IF YOU'RE STILL ISSUING THE SPH-4 SERIES FLIGHT HELMETS TO AIR CREWMEMBERS, **STOP!**

THEY'RE HISTORY.

NOW THAT FIELDING IS COMPLETE FOR THE AIRCREW INTEGRATED HELMET SYSTEM, HGU-56/P, THE AVIATION LIFE SUPPORT EQUIPMENT SCHOOL WILL **NO LONGER** TEACH REPAIR AND MAINTENANCE OF THE SPH-4 HELMETS.



THE **ONLY** HELMET AUTHORIZED FOR AVIATION FLIGHT IS THE HGU-56/P BECAUSE IT PROVIDES IMPACT, HEARING, AND EYE PROTECTION THAT'S BETTER THAN THE OLD HELMETS.



ELSE TECHS SHOULD TURN OLD HELMETS IN TO THE SUPPLY SYSTEM.

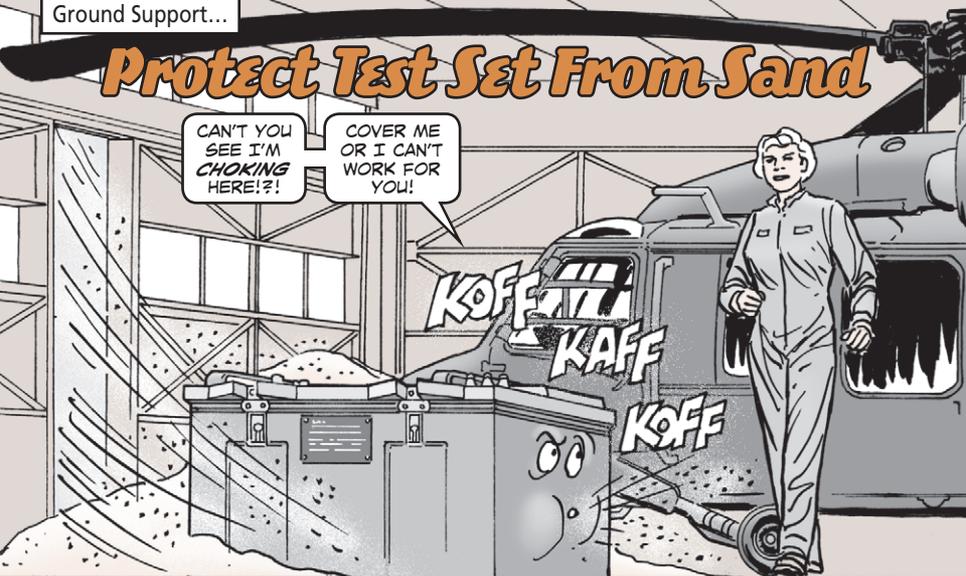
Ground Support...

Protect Test Set From Sand

CAN'T YOU SEE I'M CHOKING HERE!?!?

COVER ME OR I CAN'T WORK FOR YOU!

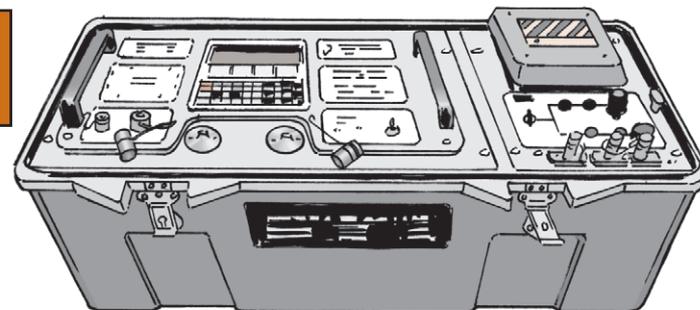
KOFF
KAF
KOFF



Mechanics, if you hear noisy valves that won't actuate or experience severe leak test failures while operating your pitot-static test set, NSN 4920-01-388-6790, shut it down immediately!

The culprit is probably sand contamination. Turning off the set prevents damage to valves. You should turn it in for maintenance.

Protect from sand to keep test set working



Don't use compressed air to blow out dirt when hoses and accessories are hooked to the set. Never blow out the Ps and Pt connectors either. That will damage transducers and force contaminants further into the test set.

Before connecting them to the test make sure you blow out the hoses and accessories with compressed air to remove dirt buildup.

Remember, never operate the test set in a sandstorm unless it is mission essential.

ALSO...

ONE SIZE DOES NOT FIT ALL!

ARE YOU SURE YOU'RE READY TO FLY?

THAT HELMET DOESN'T FIT!



PILOTS AND COPILOTS, HAVING YOUR NOGGIN MEASURED FOR THE RIGHT-SIZED AH-64 INTEGRATED HELMET AND DISPLAY SIGHT SYSTEM (IHADSS) IS IMPORTANT.

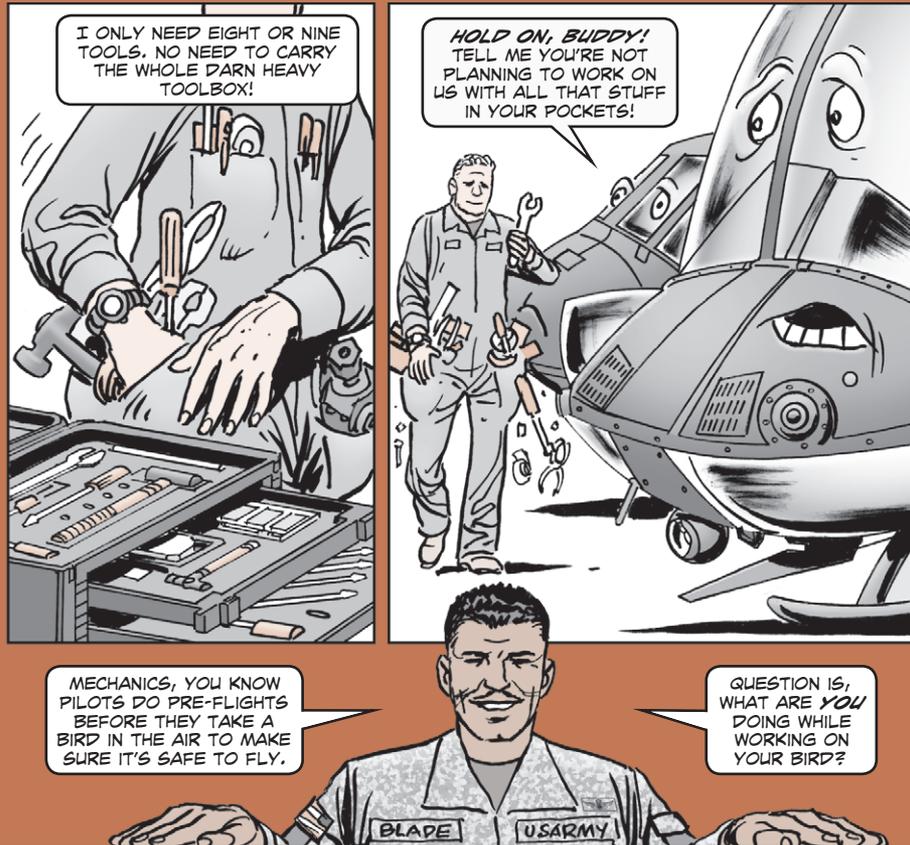
THE HELMET COMES IN **THREE** SIZES. MAKE SURE YOU GET FITTED BY A SCHOOL-TRAINED **ALSO** TECHNICIAN TO DETERMINE THE CORRECT SIZE HELMET AND **ONLY** USE THE HELMET SIZE YOU ARE FITTED FOR BEFORE TAKING FLIGHT.

A HELMET THAT'S **TOO BIG** OR **TOO SMALL** PUTS YOUR NOGGIN IN **HARM'S WAY**.

THE **MEDIUM** HELMET IS NSN 1270-01-295-6255. THE **LARGE** HELMET IS 1270-01-298-3544. THE **EXTRA LARGE** HELMET IS 1270-01-263-2545.



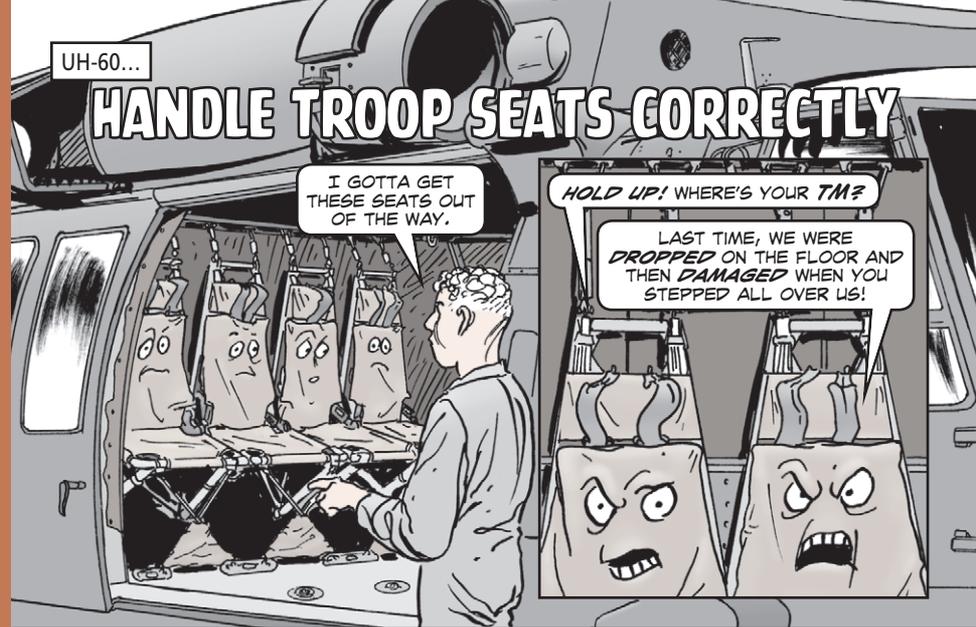
Be Safe Rather Than Sorry



Prior to performing any maintenance, check yourself. You should remove all jewelry, including your watch, rings, neck chains, pin-on rank and symbolic jewelry.

Being safe is better than being sorry. Jewelry can get in rotating and moving parts. That puts your fingers, neck and other body parts in harm's way or worse.

And while you're at it, play it safe and empty your pockets of screwdrivers, glasses, wrenches, lighters and pens that could fall out of your pocket and lodge in aircraft flight controls, rotating components or electrical equipment. They could end up causing severe damage like controls binding, component failure in flight or electrical shorts. That could put your bird on the NMC list or cause a catastrophic accident.

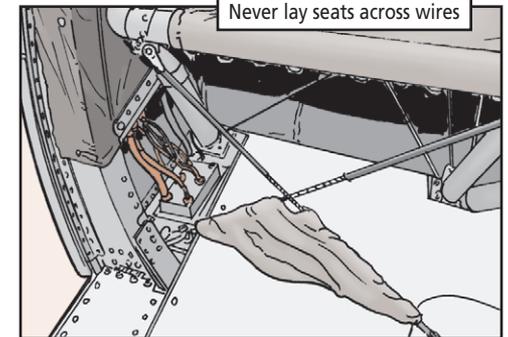


Mechanics, rear troops seats take a beating, so how you take care of them is important.

For instance, when you want to access the transition area of your Black Hawk, there's only one right way.

Disconnecting the top latches of the aft outboard troop seats and dropping them onto the cabin floor is **not** the right way. The right way is to remove the seats like it says in WP 0233 of TM 1-1520-237-23-5.

When the outboard seats are on the cabin floor, the aluminum seat tubes rest on wires that run to the AN/ASN-43 gyro magnetic compass, the communication coaxials, and the AN/APR-39 radar signal detecting set. Then when you step on the seats to access the transition area, your weight will crush the seat tube and damage the wires.



Broken wires mean you won't be computing headings or picking up signals from search radar. Plus you'll have a seat repair bill from stepping on seats. So, keep your feet off the seats. They are not steps.

SINGGARS...

Packing and Shipping CCAs



RETURNING AN UNSERVICEABLE BUT REPAIRABLE CIRCUIT CARD ASSEMBLY (CCA) REQUIRES **CORRECT HANDLING, PACKING AND SHIPPING.**

IF THESE THREE THINGS ARE **NOT** DONE RIGHT, YOU MIGHT FURTHER DAMAGE THE CCA AND INCUR MORE REPAIR COSTS AND REPAIR TIME.

BEFORE YOU REMOVE AN UNSERVICEABLE CCA, MAKE SURE YOU ARE PROPERLY GROUNDED TO PREVENT ELECTROSTATIC DISCHARGE (ESD).

ESD WILL DO **EVEN MORE DAMAGE** TO THE CCA.

HERE'S WHAT YOU NEED TO KNOW!

Using a circuit card removal tool, remove the CCA and put it in an ESD bag. These bags must conform to MIL-DTL-117H, Type I, Class F or MIL-DTL-81997D, Type I or II.

The easiest ESD bags to use are the resealable ones. If you use a non-resealable bag, tape it shut using tape that conforms to ASTM D 5330 or ASTM D 5486 like NSN 7510-00-297-6655 or NSN 7510-00-297-6656.

Ground yourself...

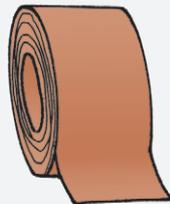


...and use a CCA removal tool

Use safe pouches



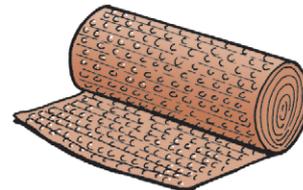
Use the right tape



Do not use cellophane tape! It builds up a static charge when pulled from the roll and could damage the CCA.

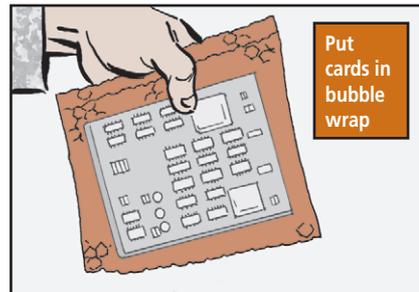
Now, remove the replacement CCA from its shipping box and use that box and all its packing material to ship back the unserviceable CCA. Securely tape the box shut. Clearly mark the outside of the box with the NSN of the CCA and the words "Condition Code F" or just "Bad CCA."

If you do not have a designated CCA shipping box, wrap the unserviceable ESD-bagged CCA in pink bubble wrap. Wrap the bubble wrap in non-cellophane tape to make sure the CCA does not shift within the bubble wrap during transit to the repair facility.

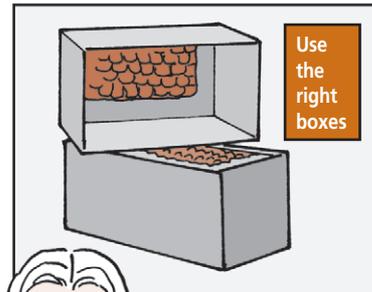


Use pink bubble wrap

Put cards in bubble wrap

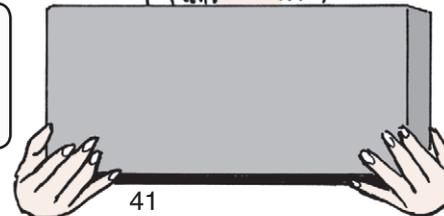


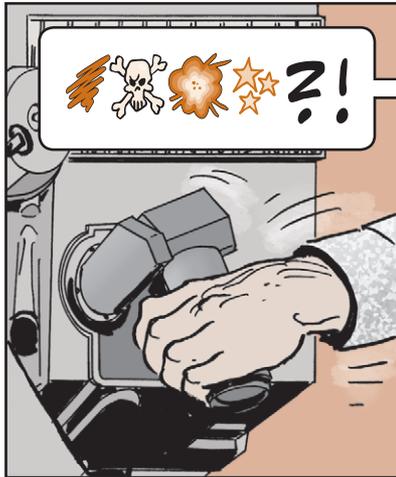
Use the right boxes



MARK THE BUBBLE WRAP WITH THE NSN OF THE CCA AND WORDS "CONDITION CODE F" OR "BAD CCA."

SECURE THE WRAPPED AND IDENTIFIED UNSERVICEABLE CCA IN A SHIPPING CONTAINER THAT APPROXIMATES THE SIZE, SHAPE AND DURABILITY OF THE ORIGINAL CCA BOX.





Dear Editor,

I manage the Long Range Scout Surveillance System (LRAS3) AN/TAS-8A(V)1 & (V)2. We need to get this word out to all 45 Golf's and LRAS3 operators and maintainers, warrant officers and sensor LAR's.

The **WORD** is:

When doing PMCS on the handgrips, follow *exactly* the instructions in the LRAS3 technical manuals and bulletins:

- TM 11-5855-310-12&P-1
- TM 11-5855-310-30&P
- TM 11-5855-321-12&P-2
- TM 11-5855-321-30&P
- TB 11-5855-310-13
- TB 11-5855-321-13

Do not be tempted to lubricate any part of the grip. This will only attract more dirt and dust. Even though the grips pivot, the pivot points do not need lube. The bearings inside are sealed. If your pivots are binding, the problem is something other than a need for lube.

And, we have another **WORD** about the grips:

Most of the LRAS3s handgrips being returned for repair are missing the correct NSN! The correct NSNs are NSN 3040-01-486-5036 for the left side and NSN 3040-01-486-5045 for the right. Without being properly labeled, too many of one side, or the wrong side, might be ordered for replenishment.

If you have an NMC system and are concerned about receiving a critical part, contact at DSN 992-2173 or (732) 532-2173. You can email her:

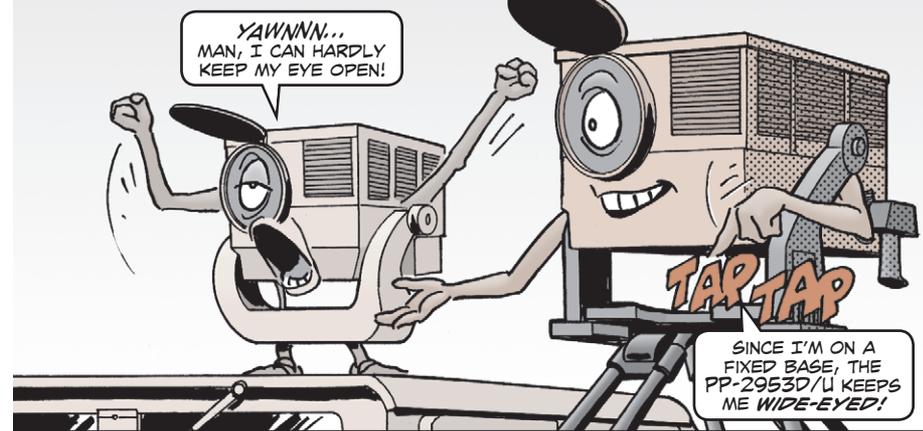
conus.army.mil

Mr. D.W.

Logistics Management DVE/LRAS3
US Army HQ CE-LCMC

Editor's note: Thanks, Sir. The LRAS3 is indispensable in SWA so keep it maintained and have the right parts on hand to keep it repaired.

POWER SUPPLY AVAILABLE



Dear Editor,

I am an ILS manager of the long range scout surveillance system (LRAS3) AN/TAS-8(V)1 & (V)2. I need to get the word out to units using LRAS3 systems that a tactical power supply, PP-2953D/U, NSN 6130-01-522-3494, is available.

The power supply provides the correct operating voltage for the LRAS3 when it is operated in a long-term, fixed-base location.

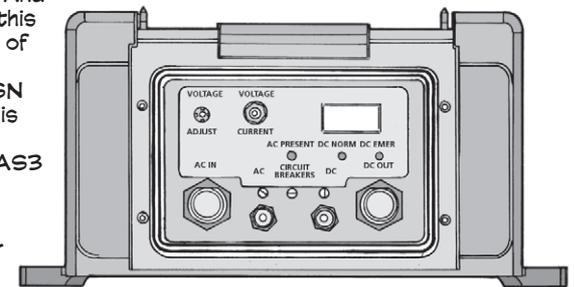
The power supply reduces the need to rely on rechargeable batteries. And units may already have this power supply in support of SINGARS.

A cable assembly, NSN 6150-01-547-6755, is needed to connect the power supply to the LRAS3 system.

Mr. R.E.Y.

LRAS3, ILS Manager
Ft Belvoir, VA

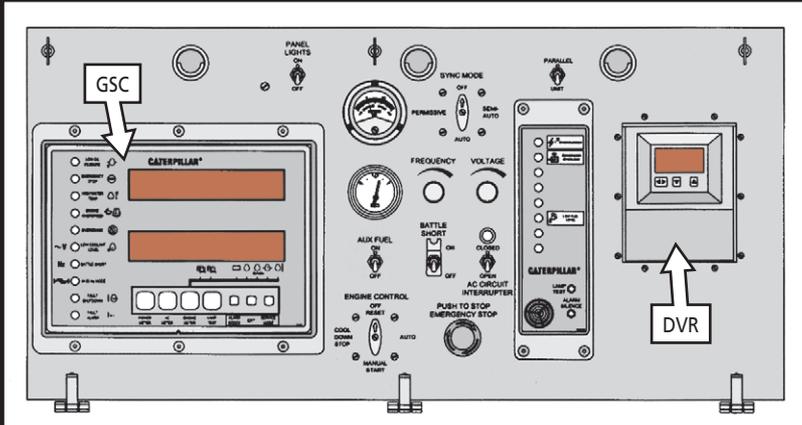
This power supply can power the LRAS3!



Editor's note: LRAS3 users, this will save batteries and save you time in changing them. Order this power supply if you have an LRAS3 in a long-term, fixed-base setup. Also, PS first ran this article in PS 659 (Oct 07) with an older power supply pictured. Update that article in your PS collection with a reference to this one.

DO YOU HAVE A CHAFING PROBLEM?

So, your 100-kW tactical quiet generator is humming quietly along and then suddenly, it's TOO quiet. It's stopped running! The generator set control (GSC) display is blank and so is the digital voltage regulator (DVR) display.



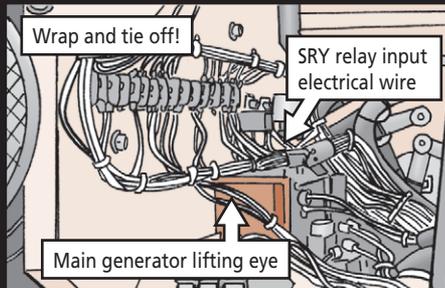
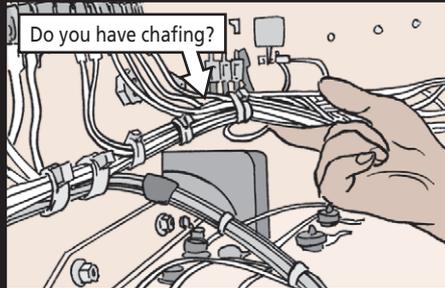
What's wrong?

One of the things it might be is a blown 10-amp fuse that sits behind the GSC.

Check it. If the fuse is blown, then check for another problem—a chafing problem. Open the right rear access door and look at the input wires to the slave relay (SRY). Are they rubbing against the main generator lifting eye? Do you have wires making metal-to-metal contact and blowing that 10-amp fuse?

If you have a chafing problem, wrap the chafed wire with electrical tape and then spiral wrap, NSN 9330-01-466-2483. To further hold the wiring bundle together and off of the lifting eye, use a zip tie, NSN 2920-01-058-9099.

Replace the blown fuse with NSN 5920-00-243-3787.



EXTENDED WARRANTY INFO

TIME TO TAKE A GANDER AT THE DATA PLATE ON YOUR 100-KW TACTICAL QUIET SKID MOUNTED GENERATOR, NSN 6115-01-296-1463, AND TRAILER MOUNTED GENERATOR, NSN 6115-01-471-7088.



U.S. DEPARTMENT OF DEFENSE
NATO STANDARD OTAN

GENERATOR SET, DIESEL ENGINE 100KW 50/60HZ

MODEL 0116-1000 NSN 6115-01-296-1463

SER NO. LM 0000 REG NO.

TM 9-6115-729-10 NAVFAC 19-50-26

TO 35C2-3-519-1 TM 07464C-10

VOLTS 120/208V 3PH, 240/416V 3PH, 50/60 HZ

AMPS 347/174 60HZ, 289/145 50HZ PF 0.8

DRY WT 5500 LB LG 106 IN W 40 IN HGT 65 IN

DATE MFD CONTR NO. DAAB07-00-D-B207

WARRANTY DATE INSP

MFD BY FERMONT INSP STAMP

If the serial number on the data plate starts with an LM followed by four numbers, then Fermont and Marathon Electric have extended your warranty.

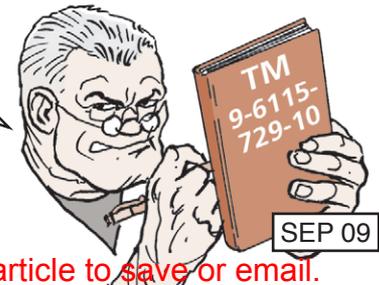
Get out your operator's manual, TM 9-6115-729-10, and go to Page 00-2 of WP 0023. There you'll see that the warranty info provided by Marathon Electric is 12 months from the date of startup or 18 months from the date of shipment.

Table 1. Manufacturer's Warranties for 100-kW Generator Set

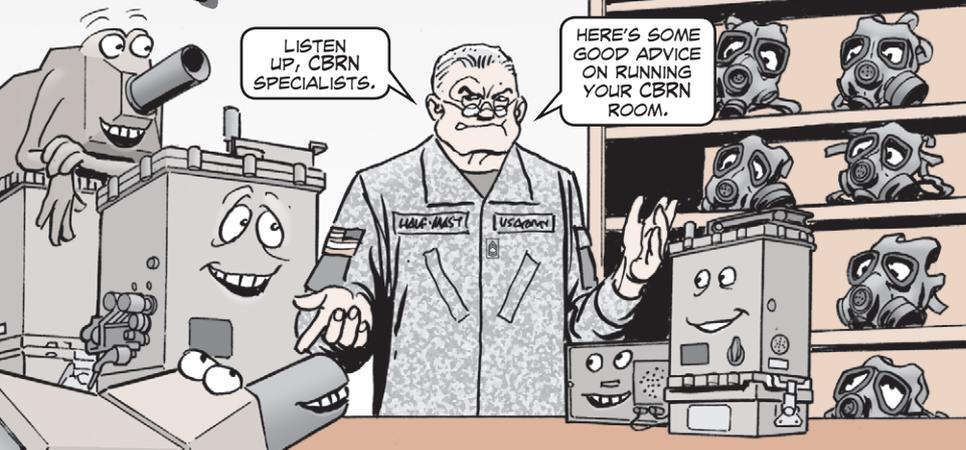
(1) Manufacturer	(2) Component under warranty	(3) Warranty Period
Marathon Electric PO Box 8003 Wausau, WI 54402-8003 Phone: 715-675-8237	Generator PN: 0116-1120, VPN: 431PSL6309	12 months from date of startup or 18 months from date of shipment whichever period shall expire first

However, if you have a serial number starting with LM, you now get 24 months from startup. And, if your generator has had a defective coil windings failure, you get 48 months!

MAKE A NOTE OF THIS EXTENDED WARRANTY IN YOUR TM.



Help for the CBRN Room



LISTEN UP, CBRN SPECIALISTS.

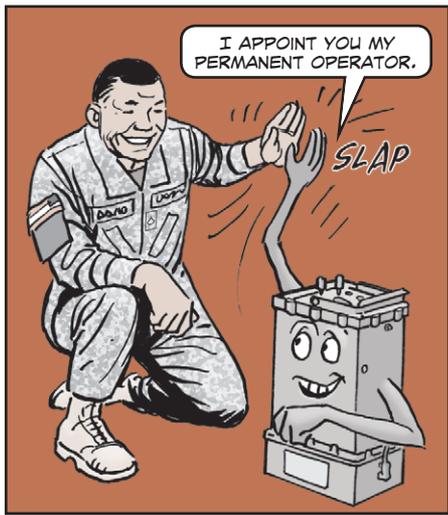
HERE'S SOME GOOD ADVICE ON RUNNING YOUR CBRN ROOM.

Dear Editor,

I've been a CBRN specialist for several years. From my experiences running a CBRN room, I've come up with a few suggestions that will help Soldiers new to the job.

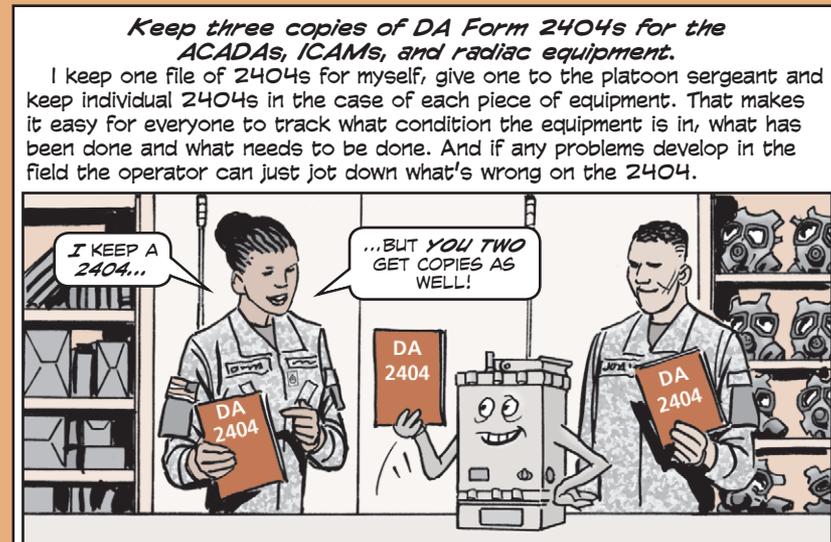
Appoint specific operators and alternates for the unit's ICAMs and ACADAs.

Most units don't use the ICAMs and ACADAs much, so they sit for long periods. That can cause problems, particularly for the ICAM, which has trouble clearing if it's not run 30 minutes weekly. Sometimes the only fix is to send an ICAM to DOL, which costs time and trouble. If each ACADA and ICAM has a specific operator (and alternate), these Soldiers can be responsible for running them weekly and doing a quick PMCS on them under your supervision. And they can also help you keep track of what needs to be ordered, like ICAM protective nozzles. In most units, all of this falls on your shoulders as the CBRN specialist. Sometimes you don't have time to do it all yourself.



I APPOINT YOU MY PERMANENT OPERATOR.

SLAP



Keep three copies of DA Form 2404s for the ACADAs, ICAMs, and radiac equipment.

I keep one file of 2404s for myself, give one to the platoon sergeant and keep individual 2404s in the case of each piece of equipment. That makes it easy for everyone to track what condition the equipment is in, what has been done and what needs to be done. And if any problems develop in the field the operator can just jot down what's wrong on the 2404.

I KEEP A 2404...

...BUT YOU TWO GET COPIES AS WELL!

DA 2404

DA 2404

Send TMs to the field and order extras.

Soldiers need to have the TM handy in the field if there are problems, particularly with the ACADA, ICAM and radiac equipment. But when TMs go to the field, count on some never coming back. So order a few extra TMs for each piece of equipment to have as replacements.

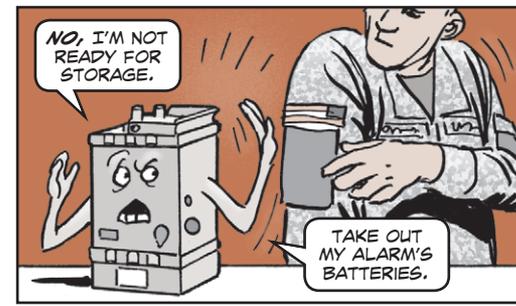


HEY, WHERE'S MY TM?

WE CAN'T GO TO THE FIELD WITHOUT IT.

Remove batteries before storing equipment.

The ACADA's M42 remote alarm, the AN/VDR-2, and the AN/UDR-13 all use regular batteries that will leak if they're left in during storage. That causes corrosion and can damage circuit cards. Before you lock up this equipment, double check that their batteries have been removed.



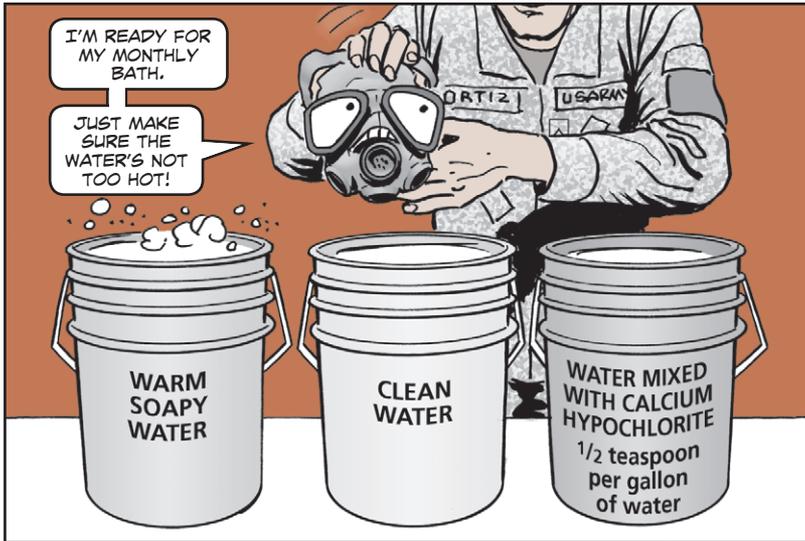
NO, I'M NOT READY FOR STORAGE.

TAKE OUT MY ALARM'S BATTERIES.

Sanitize masks on a regular basis—monthly if you train with them much.

Sanitizing helps a mask smell better, plus it kills germs that can make Soldiers sick. It also gets rid of dirt inside a mask that can hurt its seal.

It's easy to do all the masks at once. Get three pails and fill one with warm, soapy water, one with clear water, and one with water mixed with calcium hypochlorite, NSN 6810-00-238-8115.



After each Soldier removes the filters, valves, deflectors and head harness, have him agitate the mask first in the soapy water, then rinse it in the clear water, and finally dunk it in the water with calcium hypochlorite for five minutes to sanitize it. Rinse the mask again after sanitizing it. The water in all three pails should be changed every 10 masks. Have them completely dry the masks with cheesecloth, NSN 8305-00-222-2423. Paper towels can shred and plug the valves or affect the seal. You should be able to sanitize a whole platoon's masks in an hour.

Make sure the masks are completely dry and totally reassembled before storing them.

If the mask is to be assigned to a new Soldier, replace the outlet valve disk, internal drink tube, and head harness with new ones.

Make sure they turn the carriers inside out and brush out all the dirt. It won't do much good to clean the masks and then put them back into dirty carriers.

For more details, see Page 2-81 or 2-91 in TM 3-4240-346-20&P.

SGT B.C.
51st Chemical Co
Ft Polk, LA

Editor's note: Excellent suggestions, Sergeant. Thanks for letting us hear your voice of experience.



New Gloves for JSLIST

JSLIST (joint service light-weight integrated suit technology) is getting new gloves for protection against chemical and biological hazards.

The gloves, which are called JB2GU (JSLIST block 2 glove upgrade non-flame resistant), consist of an outer glove made of articulated butyl rubber and a liner of a polyester-rayon blend that absorbs sweat. The gloves are designed to provide 24 hours of protection from chemical and biological agents in liquid, vapor or aerosol form when worn with a chemical protective suit and overboots. If not exposed to agents, the gloves can be worn for up to 30 days before they lose their ability to protect.

If liners wear out or are lost, they can be ordered separately.

The gloves come as a pair. JB2GU new equipment training and general info can be found at

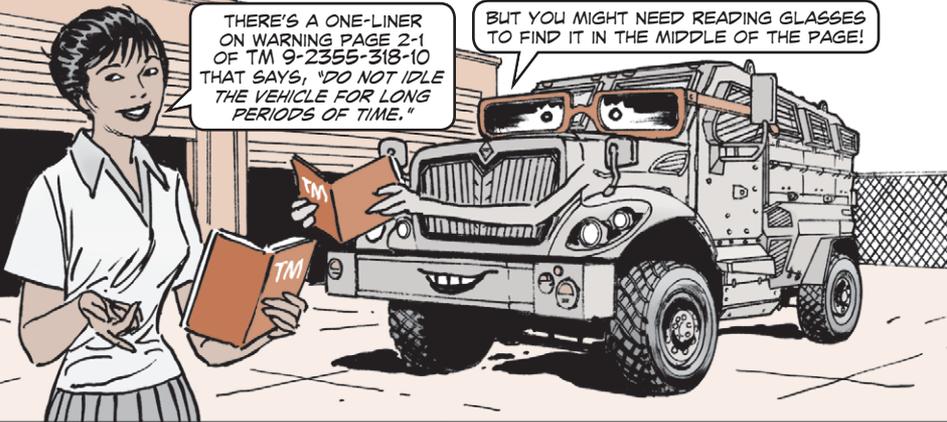
<https://aeps2.ria.army.mil/sbcom/gtw/intro.cfm>

Here are the glove sizes and NSNs:

JB2GU size	NSN 8415-21-921-
Small	2165
Medium narrow	2166
Medium	2167
Large	2170
X-large	2172

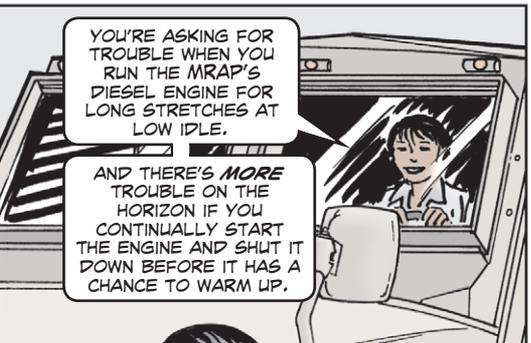
Liner size	NSN 8415-21-921-
Small (for small JB2GU)	2543
Medium (for medium-narrow, medium, and large JB2GU)	2544
Large (for XL JB2GU)	2546

Avoid Long Engine Idle



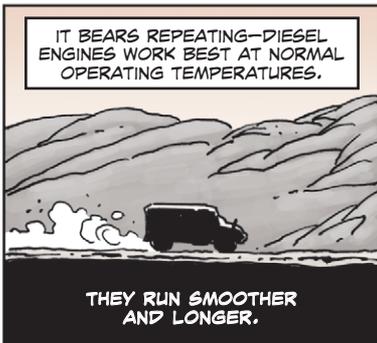
THERE'S A ONE-LINER ON WARNING PAGE 2-1 OF TM 9-2355-318-10 THAT SAYS, "DO NOT IDLE THE VEHICLE FOR LONG PERIODS OF TIME."

BUT YOU MIGHT NEED READING GLASSES TO FIND IT IN THE MIDDLE OF THE PAGE!



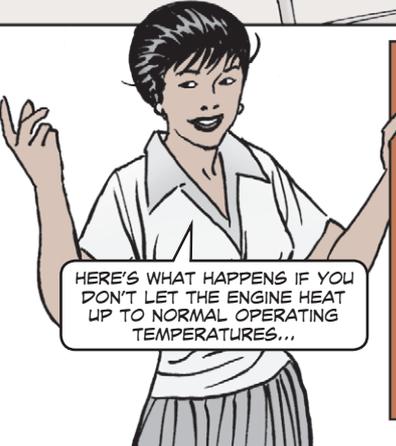
YOU'RE ASKING FOR TROUBLE WHEN YOU RUN THE MRAP'S DIESEL ENGINE FOR LONG STRETCHES AT LOW IDLE.

AND THERE'S MORE TROUBLE ON THE HORIZON IF YOU CONTINUALLY START THE ENGINE AND SHUT IT DOWN BEFORE IT HAS A CHANCE TO WARM UP.



IT BEARS REPEATING—DIESEL ENGINES WORK BEST AT NORMAL OPERATING TEMPERATURES.

THEY RUN SMOOTHER AND LONGER.



HERE'S WHAT HAPPENS IF YOU DON'T LET THE ENGINE HEAT UP TO NORMAL OPERATING TEMPERATURES...

- Fuel and oil are not completely burned in the combustion chambers, leaving carbon deposits on the engine's valve, resulting in burned valves and bent push rods.
- Condensation and unburned fuel—known as blowby—gets past the pistons and into the crankcase. That blowby in the crankcase mixes with oil to make acid and sludge.
- Engine oil breaks down. Poor lubrication burns up bearings.
- Sludge blocks lube passages. Oil can't get through to do its job, so heat and friction tear up your engine.

A SIDE EFFECT OF INCOMPLETE COMBUSTION IS "SLOBBERING" OR "WET-STACKING."

IT LOOKS LIKE BLACK SLUDGE THAT ACCUMULATES AROUND THE ENGINE'S AIR BOX DRAINS AND EXHAUST.

WHAT A MESS!



IS THIS REALLY NECESSARY?

WITH ALL THAT SLOBBER BUILD-UP? YOU BET IT IS!



IF YOUR VEHICLE'S ENGINE IS SLOBBERING, YOU'RE NOT OPERATING IT RIGHT.

HERE'S WHAT TO KEEP IN MIND BEFORE THE DAY'S RUN...

- Avoid idling the engine for longer than 5 minutes when possible. If you have to idle for longer than 5 minutes, make sure the engine rpms have stabilized before you do the following steps to raise the idle speed or increase engine rpms:
 - Set the parking brake
 - Start the vehicle in neutral
 - Press the cruise control button on
 - Press the resume/accel button repeatedly until the tachometer reads 1,200 rpm
 - If needed, press the set/cruise button to lower the engine's rpms, or depress the brake pedal to resume normal idle

AFTER THE DAY'S RUN, MAKE SURE YOU IDLE THE ENGINE FOR 4 TO 5 MINUTES BEFORE SHUTDOWN.

THE ENGINE NEEDS TO COOL DOWN SLOWLY TO AVOID CRACKING THE BLOCK, WARPING A HEAD OR VALVES, OR BAKING THE OIL TILL IT'S NOT SLICK ENOUGH TO LUBE THE BEARINGS.



SHOCK MOUNT BRACKET BOLT JOLT!

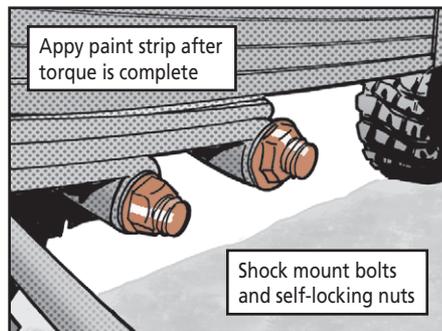


If you have an RG-33L, RG-33 SOCOM, RG-33 HAGA, RG-33L Plus or HAGA Plus MRAP here's a shock about the bolts that attach shock mounts to leaf springs!

You need to replace all the lower forward shock absorber mount bracket bolts and nuts that have not been marked with a torque marking. If you don't have a torque mark or your torque-marked hardware has become loose, use new nuts and bolts to remount the shock mounts. These nuts and bolts are intended for one time use only.

Torque the new mount bolts to 420 ft-lbs. For RG-33 SOCOM, RG-33L or HAGA variants, use NSN 5306-00-177-5672 to get new bolts. NSN 5306-00-576-2624 gets new bolts for the RG 33L Plus and HAGA Plus variants. The replacement nut for all variants comes with NSN 5310-01-484-7860.

After installing and torquing new bolts and nuts, paint a torque mark strip across each set. This will make it easier to see if nuts and bolts are working loose. It is also a visual cue for seeing which of your vehicles have had their nuts and bolts replaced and torqued properly. If nuts and bolts work loose again, replace them with new nuts and bolts and make another torque mark.



Annual Service Kit NSNs

IT'S TIME TO DO CHECKS AND SERVICES ON THIS MRAP, BUT I DON'T KNOW IF SERVICE KITS ARE AVAILABLE!

YOU SHOULD WRITE HALF-MAST, HE'LL KNOW!

Dear Half-Mast,
I am deployed in Iraq and need to know if service kits are available for MRAP vehicles.
SSG M.S.F.

YOU BET, SERGEANT M.S.F.

HERE'S A LIST OF THE SERVICE KITS YOU NEED TO PERFORM SEMI-ANNUAL AND ANNUAL CHECKS AND SERVICES ON YOUR UNIT'S MRAP VEHICLES...

Vehicle	NSN 2990-01-570-
Caiman	3720 (semi-annual) 3716 (annual)
RG-33 CAT II	3753 (semi-annual) 3733 (annual)
RG-31A2/RG-33A2	3763 (semi-annual) 3759 (annual)
FPII CAT I Cougar	3783 (semi-annual) 3778 (annual)
Navistar MaxxPro	3711 (semi-annual) 3792 (annual)

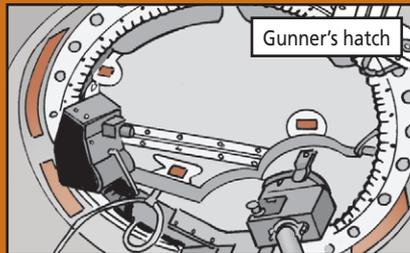
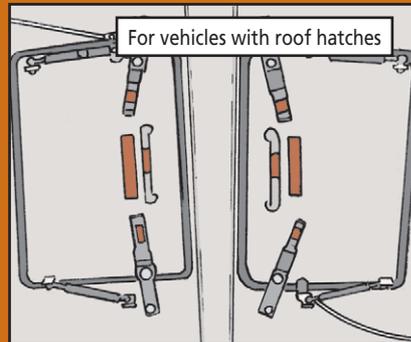
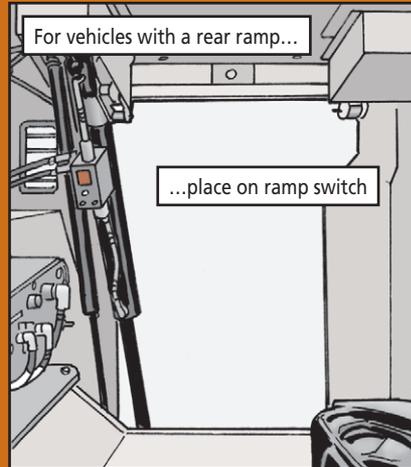
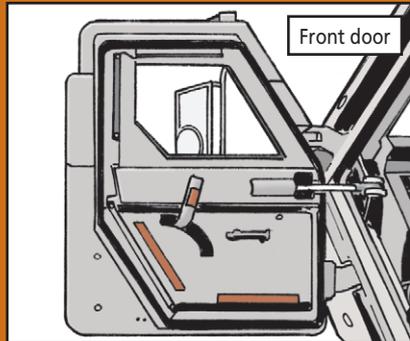
HOPE THIS HELPS.

MAKE A COPY OF THIS LIST FOR OTHER MECHANICS IN THE MOTOR POOL.

TAPE TO SEE WITH

MRAP users, it's no secret the exit and escape hatches inside the vehicle are hard to see in the dark. You can shed some light (or glow) on the situation by adding illumination tape in the right places.

The tape is part of an emergency egress light kit that comes with NSN 9390-01-568-1116 for the Caiman. For RG31s, RG33s, MaxxPros, Buffaloes and Cougars use NSN 9390-01-570-7240 to get the egress light kit. Inside the MRAP, place the tape on the escape hatches and doors like so:



By the way, this magnetic tape does not work on door handles or non-metallic surfaces. Also, make sure you use a clean rag to clean any dirt or dust off the area where the tape is being applied.

Petroleum, Oil and Lubricant...

SEVEN STEPS TO TAMING THE BEAST

A **MOTOR POOL** IS HOME TO FUEL, LUBRICANT, OIL, CLEANING SOLVENT, DEGREASER, ANTIFREEZE, BRAKE FLUID AND MORE.

THEY'RE TAME LIQUIDS WHEN STORED IN TANKS AND DRUMS. BUT ONCE SPILLED, THEY CAN MORPH INTO A WILD PETROLEUM, OIL AND LUBRICANT (POL) BEAST.



YOU NEED TO CONTAIN, CONTROL AND ABSORB POL SPILLS QUICKLY AND SAFELY TO PROTECT YOURSELF AND THE ENVIRONMENT.

IF YOU HAVE A LOCAL SOP FOR SPILLS, FOLLOW IT.

IF YOU DON'T HAVE AN SOP, FOLLOW THESE SAFETY STEPS...

1. Alert your unit's HAZMAT officer or NCO immediately. He has the know-how to clean up POL safely.



PS MORE

2. Take stock of the risk to health, environment and property. Just make sure to put safety first. Identify the spilled liquid. Figure out how much was spilled.

3. Put on suitable **personal protective equipment (PPE)** to safely clean up the spill. PPE may include a mask, an apron, gloves, safety goggles, chemical boots and protective coveralls. If the spilled material is unknown, wear the highest grade of protection.



BEFORE SPILLS HAPPEN, LEARN WHAT KIND OF PPE YOU NEED FOR HANDLING DIFFERENT KINDS OF MOTOR POOL PRODUCTS..

READ MATERIAL SAFETY DATA SHEETS (MSDS) AND VISIT CHEMICAL AND PPE WEBSITES FOR ADVICE.

HERE ARE A FEW WEBSITES TO CONSIDER...



RIGHT-TO-KNOW INFORMATION

MATERIAL SAFETY DATA SHEETS

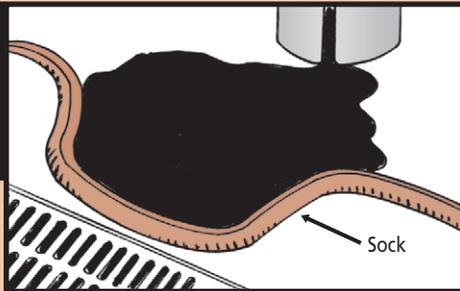
Hazardous Materials Resource Information System
(the central storage place for MSDS for the U.S. government)
<http://www.dlis.dla.mil/hmirs/>

National Institute for Occupational Safety and Health (NIOSH)
<http://www.cdc.gov/niosh/npg/>

Occupational Safety and Health Administration (OSHA)
<http://www.osha.gov>

Centers for Disease Control and Prevention
<http://www.cdc.gov/>

4. **Confine the spill.** Make sure your unit has spill kits. Use them to route the flow of liquid away from drains so that it can't pollute ground water. Position absorbent socks to limit and control the spill.



5. After you've confined the spill, **stop the source.** That could be as simple as turning a drum or container upright.

6. **Absorb the spill.** Use absorbent pads and pillows to soak up the liquid. Place them throughout the spill area. Remember: Once pads and pillows absorb fuel, oil, solvents or the like, they too must be handled as hazardous waste.



7. Depending on how bad the spill is, you may have to **decontaminate** the site, people and vehicles. Only your HAZMAT officer or NCO is qualified to make that call.

YOU CAN'T TAME A WILD, JUNGLE BEAST WITHOUT A WHIP AND CHAIR...



...AND YOU CAN'T TAME POL SPILLS WITHOUT A SPILL KIT. THE ARMY STOCKS SEVERAL. TAKE A LOOK...

Kit	NSN 4235-01-
Tote bag spill clean-up	432-7909
Spill clean-up (25-gal drum)	432-7912
Spill clean-up (55-gal drum)	423-7214
Spill clean-up (55-gal drum)	423-7221
Spill clean-up (55-gal drum)	391-3110



YOU'LL FIND THE CONTENTS OF EACH KIT LISTED IN FED LOG UNDER CHARACTERISTICS DATA.



Anyone handling or responding to spills of POL or hazardous material must be trained according to 29 Code of Federal Regulations 1910.120 *Hazardous Communications Standard.*



Combined Logistics Excellence Awards

2009



ARMY AWARDS FOR MAINTENANCE EXCELLENCE

ACTIVE ARMY

Depot Category

Winner: Red River Army Depot, Texarkana, TX
 Runner-up: Letterkenny Army Depot, Chambersburg, PA

ACTIVE ARMY MTOE

Small Category

Winner: FSC, 54th Engr Bn, Camp Stryker, Iraq (USAREUR)
 Runner-up: B Co, 308th BSB, Ft Lewis, WA (FORSCOM)

Medium Category

Winner: Maint Trp, Regt Spt Sqdn, 3d ACR, Ft Hood, TX (FORSCOM)

Runner-up: B Co, 47th FS, 1AD, Baumholder, Germany (USAREUR)

Large Category

Winner: 1st Sqdn, 3d ACR, Ft Hood, TX (FORSCOM)

Runner-up: HHC, Spt Trps Bn, V Corps, Schwetzingen, Germany (USAREUR)

ACTIVE ARMY TDA

Small Category

Winner: Busan Storage Center, Busan, Korea (EUSA)

Runner-up: 6981st Civ Spt Grp, Mannheim, Germany (NETCOM)

Medium Category

Winner: Maint Acty Vilseck, Vilseck, Germany (USAREUR)

Runner-up: 39th Sig Bde, Chievres, Belgium (NETCOM)

Large Category

Winner: Maint Acty Kaiserslautern, Kaiserslautern, Germany (USAREUR)

Runner-up: 58th Trans Bn, Ft Leonard Wood, MO (TRADOC)

ARMY RESERVE MTOE

Small Category

Winner: 469th Med Co, Wichita, KS

Runner-up: HDD, 341st Med Evac Bn, Mesquite, TX

Medium Category

Winner: 425th Trans Co, Salina, KS

Runner-up: 492d Engr Co, Mankato, MN

ARMY RESERVE TDA

Small Category

Winner: Area Maint Spt Acty #57 (G), New Century, KS

Runner-up: Equipment Concentration Site #33, Ft Riley, KS

NATIONAL GUARD MTOE

Small Category

Winner: 751st Cbt Svc Spt Bn, Eastover, SC
 Runner-up: 133d Personnel Svcs Det, Butner, NC

Medium Category

Winner: 1344th Trans Co, East St Louis, IL
 Runner-up: Spt Co, 3d Bn, 20th SF Grp (Abn), Starke, FL

NATIONAL GUARD TDA

Small Category

Winner: Field Maint Shop #5, Mayaguez, PR
 Runner-up: Field Maint Shop #9, Gate City, VA

Medium Category

Winner: Combined Spt Maint Shop, Eastover, SC
 Runner-up: Combined Spt Maint Shop, Smyrna, TN

INSTALLATION MANAGEMENT COMMAND

Small Category

Winner: Installation Materiel Maint Acty USAG—Vicenza, Italy

Runner-up: USAG—Benelux, Belgium

Medium Category

Winner: USAG—Camp Humphreys, Korea

Runner-up: USAG—Yongsan, Korea

Large Category

Winner: USAG—Camp Red Cloud, Korea
 Runner-up: Materiel Maint Div, Ft Bragg, NC

DEPLOYMENT EXCELLENCE AWARDS

ACTIVE ARMY

Operational Deployment Category

Small Category

Winner: HHB, 2d Bn, 146th FA Regt, Olympia, WA

Large Category

Winner: 172d Inf BCT, Grafenwoehr, Germany

Army Installation Category

Winner: Ft Riley, KS

Runner-up: Ft Campbell, KY

ACTIVE ARMY

Small Category

Winner: 317th Maint Co, Bamberg, Germany
 Runner-up: HHC, Special Trps Bn, 10th Sustainment Bde, Ft Drum, NY

Large Category

Winner: 412th Avn Spt Bn, Ansbach, Germany

Runner-up: Regimental Spt Sqdn, 2d Stryker Cav Regt, Vilseck, Germany

Supporting Unit Category

Winner: 838th Trans Bn, Rotterdam, Netherlands

Runner-up: 836th Trans Bn, Yokohama, Japan

ARMY RESERVE

Small Category

Winner: HHC, 316th Sustainment Cmd (Expeditionary), Coraopolis, PA
 Runner-up: HDD, 332d Trans Bn, Tampa, FL

Large Category

Winner: 311th Sustainment Cmd (Expeditionary), Los Angeles, CA
 Runner-up: 335th Sig Cmd, East Point, GA

Supporting Unit Category

Winner: US Army Civil Affairs and Psychological Operations Command, Ft Bragg, NC

Runner-up: US Army CONUS Replacement Ctr, Ft Benning, GA

CONGRATULATIONS TO THE WINNERS OF THE 2009 CHIEF OF STAFF, ARMY COMBINED LOGISTICS EXCELLENCE AWARDS.

YOUR SELECTION PUTS YOU AMONG THE BEST IN THE ARMY.



MORE PS

SUPPLY EXCELLENCE AWARDS

ACTIVE ARMY

Unit Level MTOE

Winner: 118th MP Co, Ft Bragg, NC (FORSCOM)
 Runner-up: HHC, 206th MI Bn, Ft Gordon, GA (INSCOM)
 Hon. Mention: B Btry, 1st Bn, 1st ADA, Japan (USARPAC)

Unit Level TDA

Winner: 78th Avn Bn, Camp Zama, Japan (USARPAC)
 Runner-up: HHC, 7th JMTC, Grafenwoehr, Germany (USAREUR)
 Honorable Mention: HHC, 516th Sig Bde, HI (NETCOM)

Property Book Level MTOE

Winner: HHC, 30th Med Bde, Heidelberg, Germany (USAREUR)

Runner-up: 17th Fires Bde, Ft Lewis, WA (FORSCOM)

Property Book Level TDA

Winner: 21st Cav Bde, Ft Hood, TX (FORSCOM)
 Runner-up: USAG—Kaiserlautern, Germany (IMCOM)
 Honorable Mention: Univ of CA, Santa Barbara, Army ROTC (TRADOC)

Parent Level MTOE

Winner: 212th Cbt Spt Hospital, Miesau, Germany (USAREUR)

Runner-up: 470th MI Bde, Ft Sam Houston, TX (INSCOM)

Parent Level TDA

Winner: HHC, 7th JMRC, Hohenfels, Germany (USAREUR)

Supply Support Activity MTOE

Winner: 558th Trans Co, Ft Eustis, VA (FORSCOM)

Runner-up: HHC, 160th SOAR, Ft Campbell, KY (USASOC)

Honorable Mention: E Co, 1st Bn, 1st ADA, Japan (USARPAC)

Supply Support Activity TDA

Winner: Avn Ctr Logs Cmd, Ft Rucker, AL (AMC)
 Runner-up: USAG—Vicenza, Italy (IMCOM)
 Honorable Mention: USAG—Ft Campbell, KY (IMCOM)

NATIONAL GUARD

Unit Level MTOE

Winner: 548th Trans Co, Trenton, MO
 Runner-up: HDD, 231st BSBn, Valley City, ND

Unit Level TDA

Winner: HQ Det, Barrigada, Guam
 Runner-up: 55th Civ Spt Team WMD, St Paul, MN

Property Book Level MTOE

Winner: HQ 1st Bn, 265th ADA, Daytona, FL
 Runner-up: HQ 1st BCT, Bloomington, MN
 Honorable Mention: 58th Troop Cmd, Adelphi, MD

Property Book Level TDA

Winner: National Guard Marksmanship Trng Unit, North Little Rock, AR

Runner-up: 84th Trp Cmd, Minneapolis, MN
 Honorable Mention: Joint Forces HQ, Jackson, MS

Parent Level MTOE

Winner: HQ 1st Bn, 135th Avn, Whiteman AFB, MO
 Runner-up: 292d Cbt Spt Bn, Coto Laurel, PR

Parent Level TDA

Winner: 83d Trp Cmd, Tallahassee, FL
 Runner-up: 721st Trp Cmd Bn, Milford, DE

Supply Support Activity

Winner: US Prop and Fiscal Office, Camp Douglas, WI
 Runner-up: US Prop and Fiscal Office, PR
 Honorable Mention: US Prop and Fiscal Office, Kapelei, HI

ARMY RESERVE

Unit Level MTOE

Winner: 406th AG HR, Kaiserslautern, Germany
 Runner-up: 341st MP Co, San Jose, CA

Unit Level TDA

Winner: 5th Bn, 80th Regt, Abingdon, MD
 Runner-up: HHC, 108th Trng Cmd, Charlotte, NC

Property Book Level MTOE

Winner: 311th Expeditionary Sustainment Cmd, Los Angeles, CA

Property Book Level TDA

Winner: HQ, 158th Inf Bde, Daytona, FL
 Runner-up: Med Readiness and Trng Cmd, San Antonio, TX

Honorable Mention: 94th Cbt Svc Spt, Indianapolis, IN

Parent Level TDA

Winner: 4th Bde Cbt Svc Spt, Indianapolis, IN
 Runner-up: Equip Concentration Site 33, Ft Riley, KS

Supply Support Activity

Winner: 889th QM Co, Ogdan, UT
 Runner-up: 238th Component Repair Co, San Antonio, TX
 Honorable Mention: Det 1, 1011th QM Co, Pittsburg, KS

Connie's POST SCRIPTS

Truck Driver Training Moved

New truck drivers have just one location for training now. As of May 2009, Fort Leonard Wood, MO, is the only home of the Army's Motor Transport Operator (88M10) Advanced Individual Training School. The training missions of the 1-56th ADA BN at Fort Bliss, TX, and Fort Leonard Wood's 58th Transportation BN's Motor Transport Operator Course combined into one center of excellence.

M113A3 FOV PERSONNEL HEATER KIT GASKET

Use NSN 5330-01-500-5732 to get a new gasket for the personnel heater kit on your M113A3 FOV. NSN 5330-01-071-9839, which is shown as Item 37 in Fig 348 of TM 9-2350-277-24P (Oct 03), is no longer available.

One Authorized Source for ACH Pads

A number of Soldiers are buying helmet pads from an unauthorized supply source to wear with the advanced combat helmet (ACH). That's the word from PM Soldier Survivability, the people who developed the ACH. Problem is, these unauthorized pads are not being ordered through the Army supply system, so there's no way to make sure the pads meet Army standards. The Army requires its pads to undergo strict testing.

Trust only one authorized supply source for Army-approved ACH pads: The Army supply system. Wear only approved pads, ordered through the supply system, in your ACH. Soldiers are not allowed to requisition, issue or wear pads from any source other than the Army supply system.

Helmet pads are vital components of the ACH; they provide comfort and protection. Make sure they're Army-approved.

HMMWV Lower Ball Joint NSN

Need a good NSN for the lower ball joint on your HMMWV? You can't get it using NSN 2530-01-422-9390 anymore. That's a terminal item. So use NSN 2530-01-554-8307 instead.

PLS Trailer Latch Assembly

Need to replace the latch assembly on the M1076 PLS trailer's drawbar safety chain hook? Order it with NSN 2540-01-068-7567. And make a note until the NSN is added to Item 4 in Fig 32 of TM 9-2330-385-24P.

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

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



**ONE BY ONE,
OR TWO BY TWO,
THESE ELEMENTS
CAN GET YOU...**



**...SO PROTECT YOURSELF,
YOUR EQUIPMENT TOO,
YOU CAN CONTROL THE
HARM THEY'D DO!**

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