

Issue 590

PS

January
2002

THE PREVENTIVE MAINTENANCE MONTHLY

TB 43-PS-590

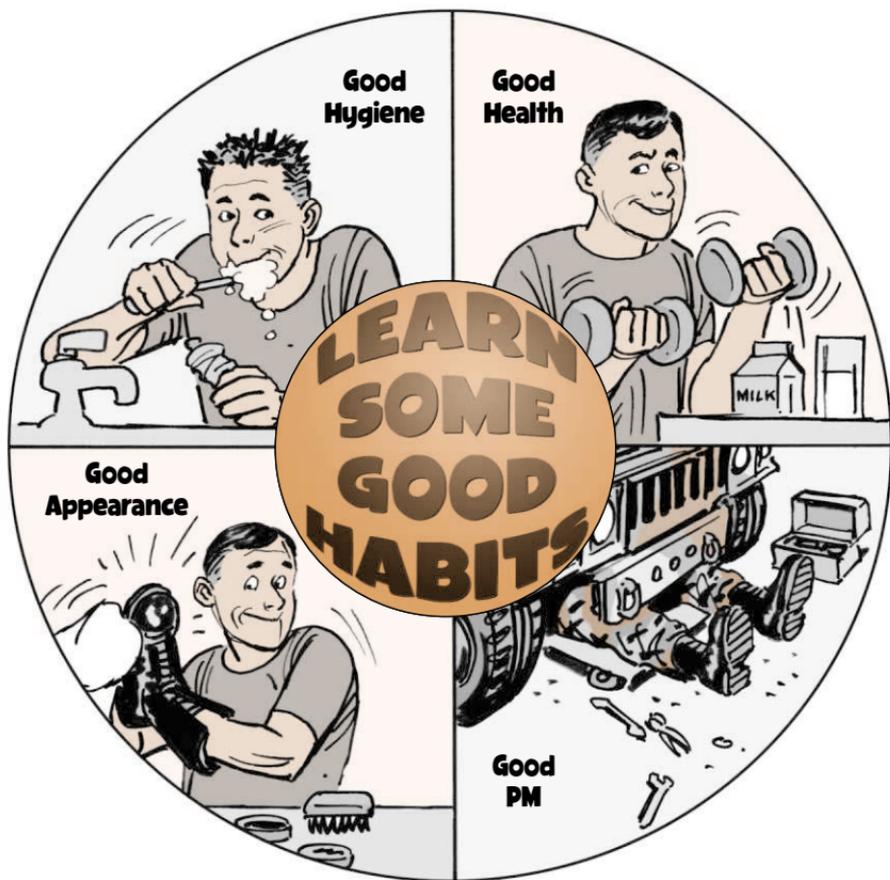
Approved for
Public Release;
Distribution is
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THE PS
INDEX SAYS
THERE WAS AN
ARTICLE ABOUT
THIS FOUR
MONTHS AGO.

I WISH
I'D READ
IT!

KJOE
KUBER

See what you've
missed—page 27



Habits are hard to break!

That's bad if you want to light up a smoke while standing at the neighborhood oxygen bar.

But it's good if you just can't stop yourself from doing PM on your military gear. It means you won't have to worry if you're told to move out. You and your gear will be ready.

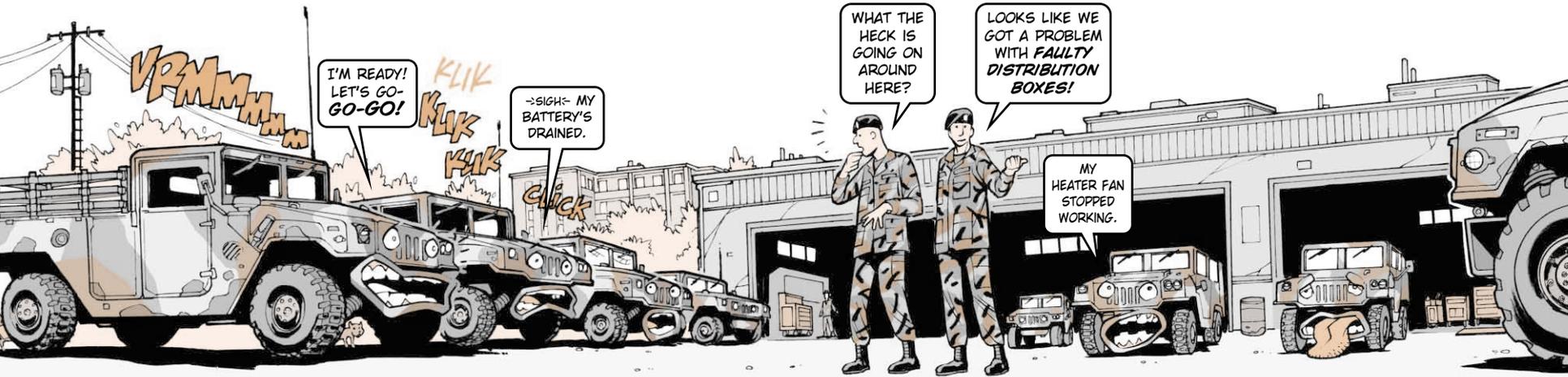
Boy, wouldn't your platoon sergeant or squad leader be glad to see you develop a few habits like that?!

And while you're at it, learn the PM habit the right way. Like before, during and after operation, the way your TM's PMCS chart lays it out.

Eventually you won't be able to get started without PM, operate without PM or leave your equipment for the day without PM.

It'll be a habit. A tough-to-break, good habit.

Distribution Box Check



If your HMMWV is operating with a distribution box, NSN 6110-01-446-7126, that is not marked “Ver: 14.0A,” your truck is deadlined. Period. It has been deadlined since about mid-May 01 by Safety-of-Use Message (SOU) 01-012.

That message told all HMMWV owners to check for the faulty distribution box, which can cause vehicles to try to start themselves, among other things.

You might hear a click or continuous cranking from the starter. Batteries might drain overnight or the windshield wiper or heater motors might work erratically.

The box is under the dashboard above the brake pedal. You can also tell if you have one of these boxes by looking for two cannon plug connectors instead of one next to the windshield washer reservoir under the hood.

If you’ve got the box, inspect the label on the box next to the serial number. If “Ver: 14.0A” is on the label, your truck is not NMC.

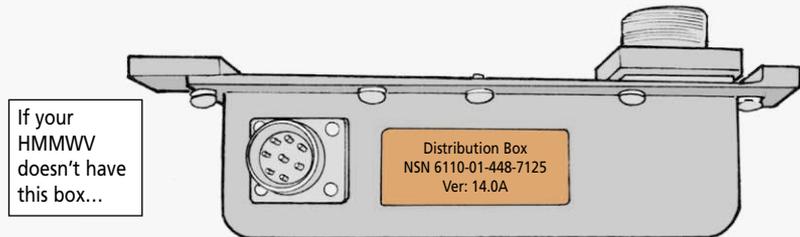
However, SOUM 00-015 still applies. Disconnect the batteries’ negative cables or the engine harness cannon plug from the distribution box any time the truck is parked for more than 24 hours.

If the label is missing or doesn’t indicate “Ver: 14.0A”, remove the box and replace it with the new engine electrical start system (EESS), NSN 6110-01-463-9260. The EESS has one cannon plug under the hood and looks like the original box except for a bright yellow tag.

The EESS will be used to replace all other distribution boxes when they go bad.

If you have had any type of failure with the non-version 14.0A box, send an e-mail message to: HMMWV-Reporting@tacom.army.mil.

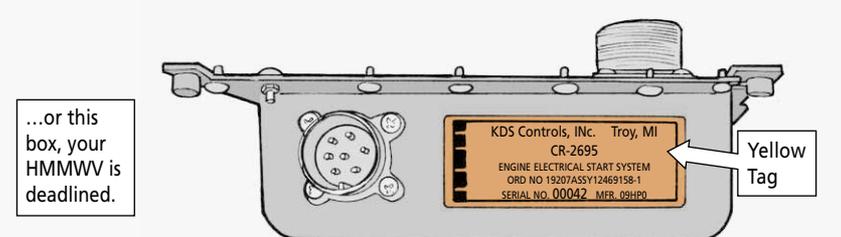
If you need help in identifying or replacing these boxes, contact your local TACOM logistics assistance representative.



PS 590

2

JAN 02



PS 590

3

JAN 02

HMMWV...

SOFT DOORS IN COLORS



YOUR HMMWV PARTS MANUAL IS SHORT ON SOFT-TOP DOOR NSNs, SO HERE'S WHAT'S AVAILABLE...

Left-hand Front

Green*	NSN 2510-01-189-9724
Tan	NSN 2510-01-330-6174
Camouflage	NSN 2510-01-450-5480
Arctic	NSN 2510-01-197-5546
White	NSN 2510-01-407-6037

Right-hand Front

Green*	NSN 2510-01-189-9725
Tan	NSN 2510-01-330-6175
Camouflage	NSN 2510-01-450-5479
Arctic	NSN 2510-01-197-5547
White	NSN 2510-01-407-6036

*Use until supply is exhausted, then use camo NSNs

Left-hand Rear

Green*	NSN 2510-01-189-3459
Tan	NSN 2510-01-330-6576
Camouflage	NSN 2510-01-450-5483
Arctic	NSN 2510-01-330-2249
White	NSN 2510-01-413-8872

Right-hand Rear

Green*	NSN 2510-01-189-3460
Tan	NSN 2510-01-330-6176
Camouflage	NSN 2510-01-450-5482
Arctic	NSN 2510-01-330-2250
White	NSN 2510-01-412-6761



BY THE WAY, ARCTIC DOORS ARE INSULATED. THEY LOOK QUILTED.

Brake Pad Kit Use



HMMV BRAKE PADS GET REPLACED AS A **SET OF FOUR**—TWO EACH FOR BOTH REAR WHEELS **OR** BOTH FRONT WHEELS.



THAT MEANS WHEN YOU CHANGE THE PADS ON ONE FRONT OR REAR WHEEL, YOU **ALSO** CHANGE THE PADS ON THE OTHER FRONT OR REAR WHEEL, **NO MATTER** THE CONDITION OF THE OTHER PADS.

"THINK THAT'S WASTEFUL?
IT'S NOT."

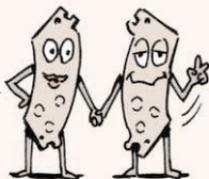


IF YOU DON'T REPLACE **ALL** FOUR FRONT OR REAR BRAKE PADS, YOU'LL GET **UNEVEN BRAKING** AND **ACCELERATED PAD WEAR**. EITHER WAY, IT'S A **SAFETY HAZARD!**

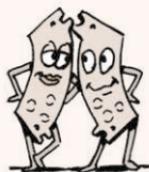


SCREEECH!

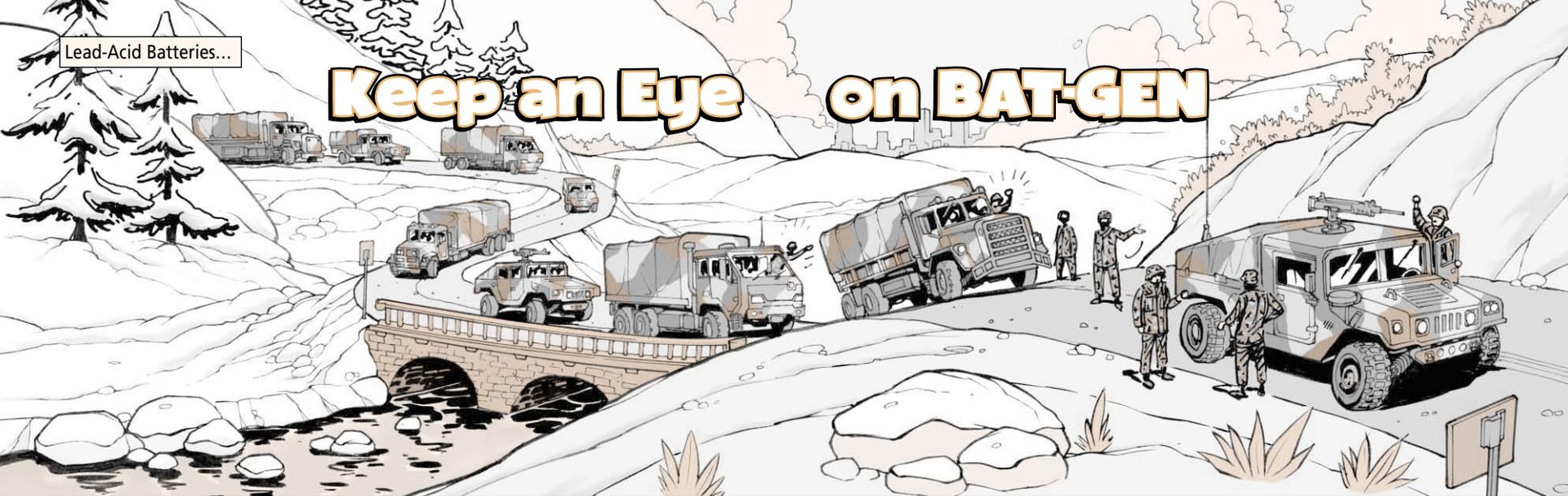
GET THE **4-PAD KITS** WITH THESE NSNs...



Models	NSN 2530-01-
Basic	459-0367
Heavy and A1	407-3977
A2	420-8025



Keep an Eye on BAT-GEN



Most Army vehicles have a BAT-GEN indicator to show you operators the condition of their batteries.

But you must know how to “read” that gauge so you can tip off your mechanic to battery trouble before you get stranded in the boonies.

Here’s how:

Turn off all electrical components. Then it’s just the batteries and your alternator/generator showing up on the gauge.

Color Counts

Watch the gauge when you turn the 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 or need charging, or there’s a short in the system.

Now, crank up the engine. 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. The battery charging system is working OK if the needle settles at about 28.5 volts, shown by the notch in the green section.

Charge is OK to start engine

Yellow: 22-26 volts



Correct charging is about 28.5 volts

Green: 26-30 volts

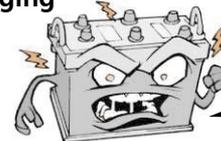


Overcharging

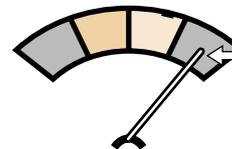
Overcharging is the culprit when the needle hangs in the red section on the right side of the gauge.

Overcharging means that water will boil out of the batteries and the plates inside can be damaged. Another clue to overcharging is a battery that often needs water.

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.



OVER-CHARGING!
THAT BURNS ME UP!



This is OVERCHARGING

Red: 30-34 volts

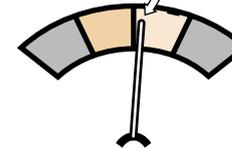
Undercharging

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

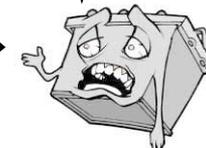
If your BAT/GEN gauge indicates any of these problems, get your mechanic to check out the charging system.

This is UNDERCHARGING

Green: 26-30 volts



UNDER-CHARGING?
NO WONDER I FEEL RUN DOWN!

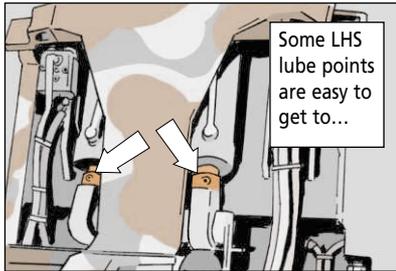


Lube LHS By the Book

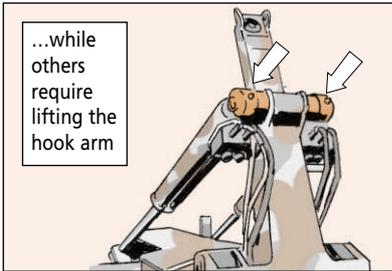


Appendix G of TM 9-2320-364-10 says to lube the load handling system (LHS) on your M1074/M1075 PLS. That means all **12** grease fittings on Page G-10.

Sure, it's easy to lube the fittings that are in plain sight, but do you take the time to raise the hook arm and lube the ones that are harder to get to?



Some LHS lube points are easy to get to...



...while others require lifting the hook arm

If you don't, the LHS' hook arm will start sticking. Eventually it won't do any lifting at all.

LUBE ALL 12 WITH GAA MONTHLY...

...OR EVERY 50 OPERATING HOURS OF THE LHS, WHICHEVER COMES FIRST...

Lube Points	# of fittings
Hook arm cylinder pivot pin (front)	2
Main cylinder pins	2
Hook arm cylinder pivot pin (rear)	2
Hook arm pivot pin (rear)	2
Main cylinder pivot pin (rear)	2
Middle frame pivot pin (rear)	2



LACK OF LUBE BREAKS ARMS

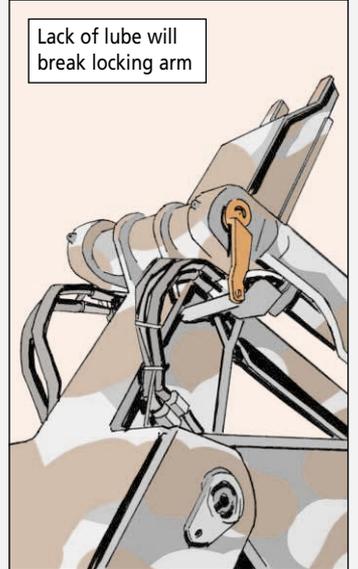
Here's your proof, crewmen, that lack of lube causes real problems—and puts your PLS down for repairs.

Middle frame shaft cylinder locking arms are breaking on the load handling system (LHS). Reason? Lack of lube on the cylinder bushings is causing them to seize. When they seize, the locking arms break as they try to turn with the movement of the LHS.

Broken locking arms deadline your truck, according to Change 2 to TM 9-2320-364-10. The truck has to go to DS for repair and to have the mainframe boss inspected for wear.

Damage to the arms prompted the headshed to update the PMCS, too. Change 2 will make Item 39 to say this:

Check LHS for loose, damaged or missing parts. Any missing or damaged parts make the truck NMC.



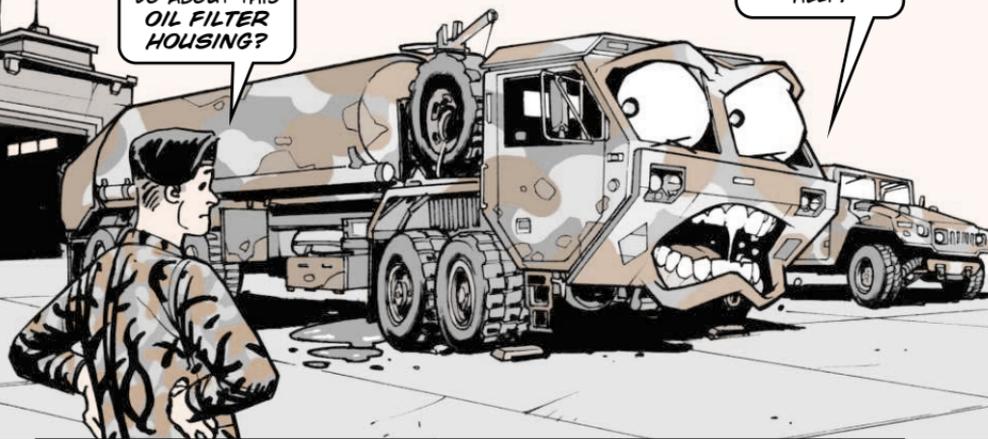
Lack of lube will break locking arm

HEMTT...

LEAKY FILTER GETS WIRED

LEAKING OIL AGAIN! WHAT AM I GOING TO DO ABOUT THIS OIL FILTER HOUSING?

MAYBE A LITTLE SAFETY WIRE WOULD HELP!



Dear Editor,

The engine oil filters on our HEMTTs leak. A little investigation on our part turned up the reason.

The oil filter housing on each HEMTT is made of aluminum, but the plug in the bottom of the housing is steel. Since aluminum heats up faster than steel, the housing expands faster. Add some vibration and the result is a loose plug and an oil leak.

If enough oil leaks, your HEMTT could end up with severe engine damage.

We prevent this problem by drilling a tiny hole through the plug and safety-wiring it to the metal bracket that holds the strap for the transmission cooler lines. The safety wire keeps the plug from turning and stops the leaks.

SGT Michael Graham
MAIT 72, OKARNG
Ft Sill, OK

Safety-wire plug to metal bracket



From the desk
of the *Editor*



That's a quick and easy solution to a messy problem! Good job!

Keep Lenses Matched



BUT, DARLING...

I'M SORRY, LENNIE. BUT WE'RE JUST NOT MADE FOR EACH OTHER.

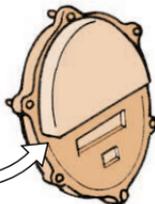
Both plastic and aluminum taillight assemblies can be found on tactical vehicles. Plastic assemblies outnumber metal ones, and eventually the metal assemblies will be gone.

But until then, be aware that the lenses for the different assemblies are not interchangeable. That is, don't try to use a lens meant for a plastic assembly on a metal assembly, and vice versa.

The lenses will not fit correctly if they're mixed. You'll get lots of moisture in the lights—which leads to corrosion and lights out!



Lens, NSN 6220-01-359-2870, for plastic taillight only



Lens, NSN 6220-00-179-4324, for plastic and metal taillight only

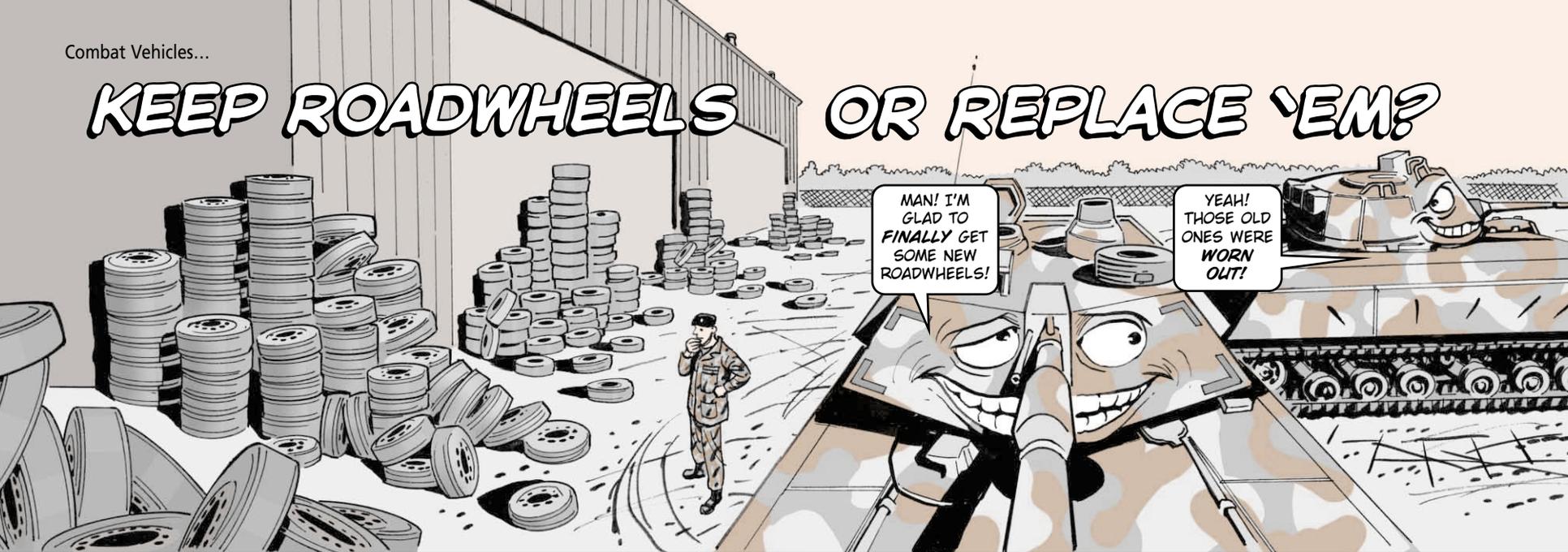
HEY BAYBEE!
MY SIGN IS
ALLUMINUM!

SO IS
MINE!

->SOB-<



KEEP ROADWHEELS OR REPLACE 'EM?



MAN! I'M GLAD TO FINALLY GET SOME NEW ROADWHEELS!

YEAH! THOSE OLD ONES WERE WORN OUT!

SO THE RUBBER ON YOUR COMBAT VEHICLE ROADWHEELS LOOKS A BIT WORN.

QUESTION IS, HOW WORN MUST IT BE BEFORE YOU REPLACE THE ROADWHEEL?

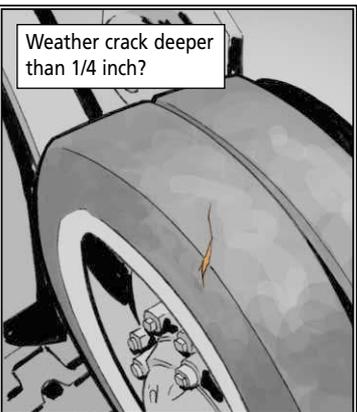
WELL, YOU *COULD* SEARCH THROUGH YOUR VEHICLE TMS AND TM 9-2530-200-24, STANDARDS FOR INSPECTION AND CLASSIFICATION OF TRACKS, TRACK COMPONENTS AND SOLID-RUBBER TIRES.

OR YOU *COULD* JUST KEEP READING...



Weather Cracking

All vehicles: If weather cracks extend completely across the tread surface or are more than 1/4 inch deep, the roadwheel should be replaced.



Weather crack deeper than 1/4 inch?

Chunking

M1-series tanks, M2/M3-series Bradleys, MLRS, M88A1 recovery vehicle and M60 AVLB: Look for large chunks of missing rubber that both measure 3x4 inches or more and expose metal on the roadwheel.



Look for chunking that exposes metal

Also, if the total area of smaller chunks exceeds 20 percent of the tread surface, even with no metal showing, replace the roadwheel.

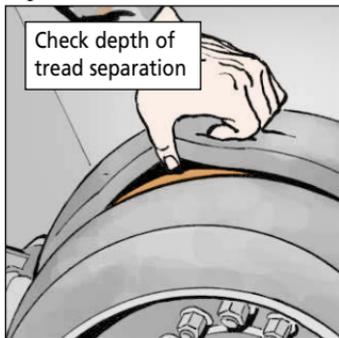
M113-series FOV, M551 Sheridan, M992A2 ammo carrier, and M109-series SP howitzers:

Chunking that covers half the width or more of the roadwheel and exposes metal means the roadwheel should be replaced. Smaller chunks whose total area exceeds 20 percent of the tread surface, require a new roadwheel, too.



Tread Separation

M1-series tanks, M2/M3-series Bradleys, MLRS, M88A1 recovery vehicle and M60 AVLB: If tread separation is 1 inch or wider around 75 percent of the roadwheel, replace it.



M113-series FOV, M551 Sheridan, M992A2 ammo carrier, and M109-series SP howitzers: Replace roadwheels that have tread separation that's $\frac{1}{2}$ inch or wider around 75 percent of the roadwheel.

Extend Roadwheel Life

Of course, you want to get as much life as possible from your roadwheels. Here's how:

- **Maintain proper track tension.** Loose track lets the center guides hit the rubber tread on roadwheels and support rollers. That causes gouging and chunking of the rubber. Refer to your operator's manual for proper track tensioning adjustments.

- **Tighten loose lug nuts.** Loose lug nuts let the roadwheels and support wheels wobble. That further strips the lug bolt threads and eats away at the wheel's mounting holes. The more the wheels move, the greater the chance that the center guides will hit and damage the tread.

Use proper torque and proper torque sequencing—if required by your manuals—on roadwheel locknuts. If a roadwheel needs to be replaced, discard old locknuts and use new ones. Locknuts that are used a second time will loosen and damage the roadwheel and track.

- **Maintain track.** Unserviceable track will damage perfectly good roadwheels. Replace track as required by your TM. Then, keep track and roadwheel arms free of rocks and debris, which can cause binding and accelerate roadwheel wear.



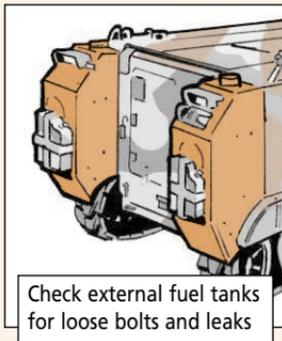
M1064-Series Mortar Carriers...

FUEL LINE SHAKEUP

Vibration can loosen just about anything, including the external fuel tank mounting bolts and fuel lines on your mortar carrier.

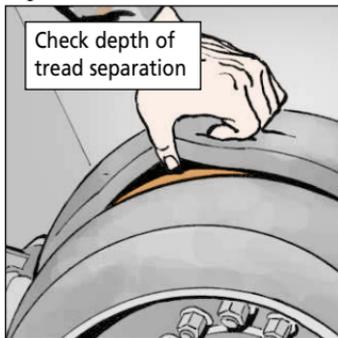
Vibration from firing the mortar loosens those bolts and fittings and creates a fuel leak. That's bad news if there happens to be a spark around to set off the fuel.

As part of your before-operation PMCS and during mortar round firings, take a close look at the external fuel tanks and all fuel lines. Report any problems and remember, any fuel leak makes your carrier NMC.



Tread Separation

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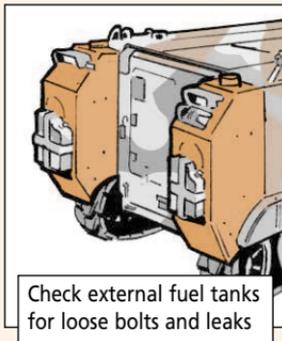
M1064-Series Mortar Carriers...

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New QD Is on the Case



Reconnecting the main hydraulic pump's pretty easy, right mechanics? After all, the supply, return and case drain lines all have quick-disconnects (QDs) that make the job pretty straightforward.

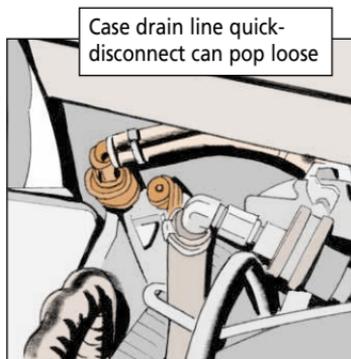
W-e-e-ll, maybe not.

The case drain line sits back in a corner, so its QD, NSN 4730-01-081-2106, is really hard to attach. Yet a loose connection increases the chance of an engine fire and increases hydraulic pressure and temperature that could ruin the hydraulic pump.

That problem has been fixed with a new QD, NSN 4730-01-473-3069. The new "sure lock" QD provides a one-way only connect feature that ensures a positive lock.

The QDs are available as free issue items from the Abrams Program Manager. Individual units are receiving the new QDs as they become available from the manufacturer. All active, National Guard and Reserve units should have the QDs by the end of FY02.

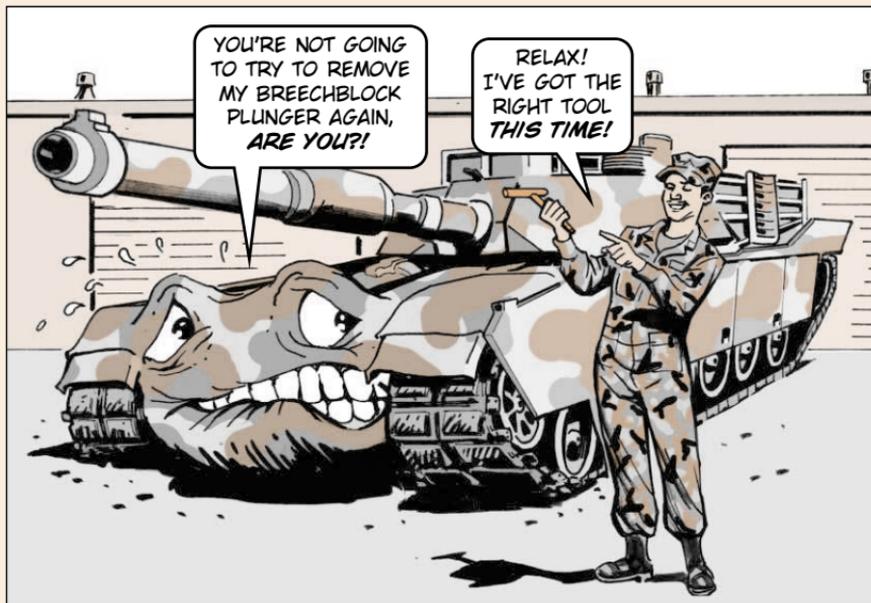
Once you receive the new QDs, make sure they are installed in your vehicle no later than the next scheduled semi-annual service or when the powerpack is pulled for non-scheduled maintenance.



FOR TRACKING PURPOSES, FORWARD A COMPLETED DA FORM 2407 TO THE ABRAMS PM WHEN A NEW QD IS INSTALLED TO...

PM Abrams Tank System
SFAE-GCSS-W-AB-LD
(Michael Calleja)
Warren, MI 48397-5000

Make a Plunger Tool

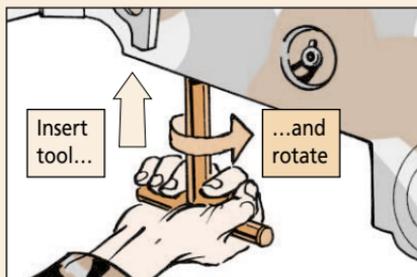
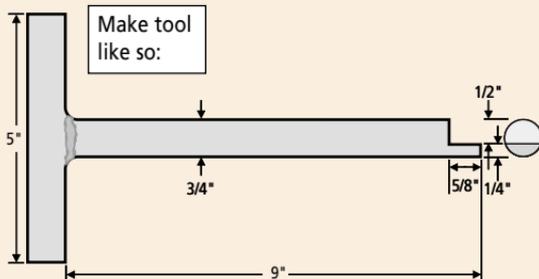


Removing and installing the plunger on the M1A1 tank breechblock is tricky business—especially if you try to do it with a screwdriver.

Keep the job simple and safe by making a plunger removal tool from $\frac{3}{4}$ -in diameter steel. You'll find the plans for making the tool on Page D-11 of TM 9-2350-264-20-2-4.

By using this tool, you avoid jamming a screwdriver between the plunger and the plunger hole. That jams the plunger in place and makes it even harder to remove.

The tool also lets you remove and install the plunger without crawling under the breechblock.



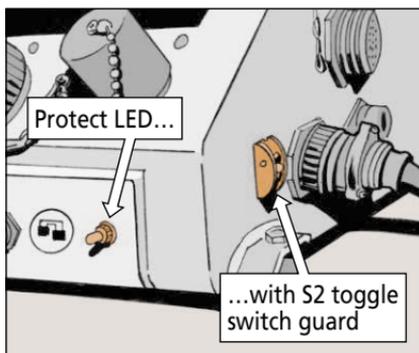
STEP LIGHTLY



A bigfoot guard is what you need to protect the light-emitting diode (LED) on your Bradley's vehicle distribution box.

The SLAVE RECEPTACLE POWER light gets snapped off if a driver or mechanic doesn't watch where he puts his feet when entering or leaving the driver's compartment.

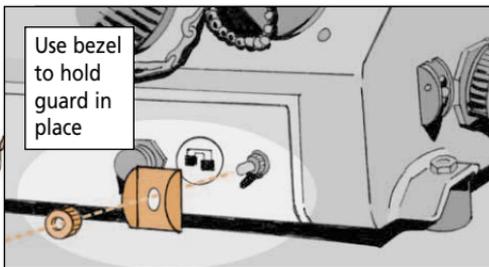
Use guard, NSN 5930-00-687-1079, to protect the LED. That's the guard that's already protecting the S2 toggle switch. Using it on the LED will keep the light burning bright when the slave receptacle is powered.



INSTALL THE GUARD LIKE THIS:



Use bezel to hold guard in place



1. Remove the bezel from the LED socket.
2. Slip the guard over the LED.
3. Replace the bezel to hold the guard in place.

M2/M3-Series Bradleys, MLRS Carrier...

Decal Expands Pressure Limits



WHAT DO I DO?

THE TM GIVES ONE PRESURE LIMIT...

...AND THE DECAL ON YOUR FIRE EXTINGUISHER BOTTLE GIVES A DIFFERENT ONE!

HAVEN'T YOU HEARD?

THE NEW DECAL HAS THE STRAIGHT STUFF!

When you get a new or refilled FM-200 engine compartment fire extinguisher bottle, it may have an unfamiliar decal, Bradley and MLRS crewmen.

The new decal displays a whole new set of pressure and temperature limits for the fire extinguisher bottle. If your bottle has the new decal, it determines whether or not your vehicle is NMC, **not** the original decal or the old PMCS info in your -10-1 TM.

The old decal and the -10-1 TMs say your Bradley is NMC if the pressure gauge doesn't read within ± 25 psi of the pressure shown for the bottle's ambient temperature. The new decal provides a much wider psi range.

FIRE EXTINGUISHER ASSEMBLY

RECHARGE EXTINGUISHER ASSEMBLY WHEN PRESSURE GAGE DOES NOT READ WITHIN PRESSURE SHOWN ON TABLE AT AMBIENT BOTTLE TEMPERATURE

TEMP (°F)	PRESS (PSIG)
-70	340/640
-50	370/490
-30	400/520
-10	425/550
10	450/580
30	480/610
50	515/645

TEMP (°F)	PRESS (PSIG)
70	550/680
80	590/720
90	625/755
100	670/800
120	730/860
140	750/880
160	880/1250

CHARGE WITH 8.3 TO 8.5 HEPTAFLUOROPROPANE (C₃HF₇), MEETING ASTM D6065 AND ASTM 6064, TYPE I - CHARGE WEIGHT FOR C₃HF₇ ONLY, OR TYPE II.

SUPERCHARGE WITH N₂ MEETING FED SPEC A-A-59503, TYPE I, GRADE A OR B, CLASS I, 600 +/- 5 PSIG AT 70°F OR EQUIVALENT (SEE TABLE ABOVE)

FIRE EXTINGUISHER ASSEMBLY

MY FILL WEIGHT HAS BEEN EXPANDED SLIGHTLY, TOO.

MY NEW FILL WEIGHT IS 8.3 TO 8.5 POUNDS.



CHECK BOTH SIDES



LET ME GET THIS STRAIGHT... YOU **BELIEVE** IN PM?

YES MA'AM!



AND YOU **CARE** ABOUT YOUR **MLRS**?

MM-HMM!



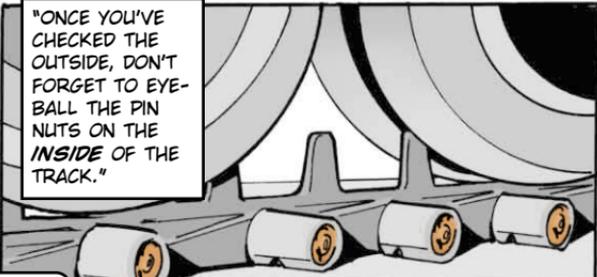
YOU WALK AROUND THE OUTSIDE OF YOUR VEHICLE TO CHECK THE **TRACK PIN NUTS** AFTER **EVERY** OPERATION?

YEP. THAT'S WHAT I DO!



YOU'RE ONLY DOING **HALF** THE JOB!

NO WAY!

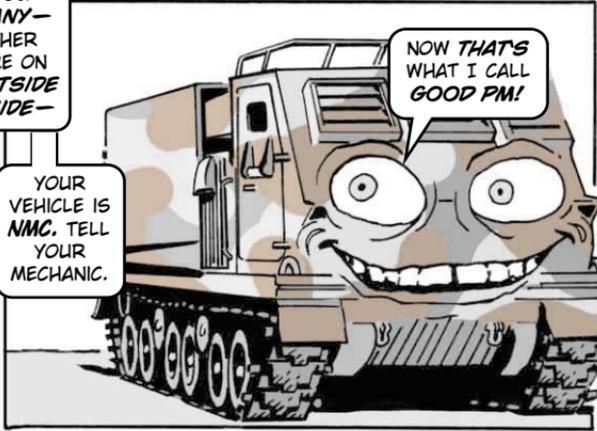


"ONCE YOU'VE CHECKED THE OUTSIDE, DON'T FORGET TO EYE-BALL THE PIN NUTS ON THE **INSIDE** OF THE TRACK."



LOOK FOR MISSING OR OFF-CENTER PIN NUTS AND PROTRUDING PINS.

IF YOU SPOT **ANY**—WHETHER THEY'RE ON THE **OUTSIDE** OR **INSIDE**—



NOW THAT'S WHAT I CALL **GOOD PM!**

YOUR VEHICLE IS **NMC**. TELL YOUR MECHANIC.

Clear Up Shock Check Confusion

WHAT'S GOING ON!? THEY CAN'T ALL BE NMC!

BUT, SERGEANT, ALL THE SHOCK ABSORBERS MOVE WHEN I TRY TO ROTATE 'EM!

Dear Half-Mast,

TM 9-2350-293-10 is a little vague when it comes to checking the shock absorbers on your M992A2 ammo carrier.

Item 40c in the PMCS tables says to turn the shock absorber from side to side. Any movement means the upper end of the shock is damaged and the vehicle is NMC.

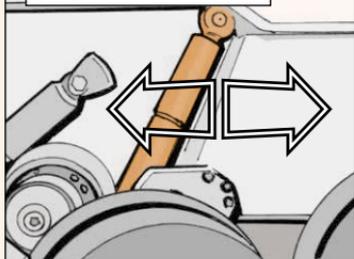
The confusion comes from interpreting the "side to side" movement. Some operators think it means to rotate the upper shock clockwise/counterclockwise to check for movement.

I've always thought it meant left and right lateral movement of the shock absorber. That would better indicate movement between the bearing bore and the shock mounting stud or within the bearing itself.

Can you give us the straight scoop?

CW3 D.D.

Check for left-to-right movement, not rotation



Dear Mr. D.D.,

You're 100 percent right, Sir. You're supposed to check for any lateral movement, not rotation of the shocks. Almost all shock absorbers will rotate slightly. The amount of rotation depends on mileage and how much CARC paint there is on the shock.

Make a note in the -10 TM until it can be updated.

Half-Mast

DRIP, DRIP, DRIP

HEY, I JUST SPOTTED A CLASS III LEAK ON THE ELEVATION CYLINDER!

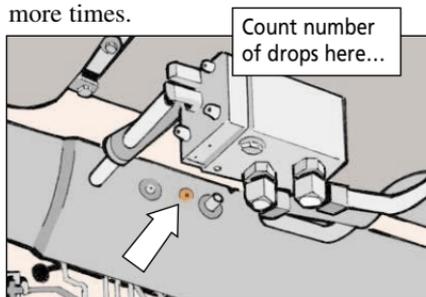
HOLD ON A MINUTE. DID YOU COUNT THE NUMBER OF DROPS?

You've spotted oil dripping from the vent holes on your Paladin's elevation cylinder. Must be a Class III leak, right?

Not necessarily! When the cannon is elevated and depressed, it's normal to see several drops of oil coming from the two vent holes on the elevation cylinder. Just **how many** drops will determine whether there's a problem.

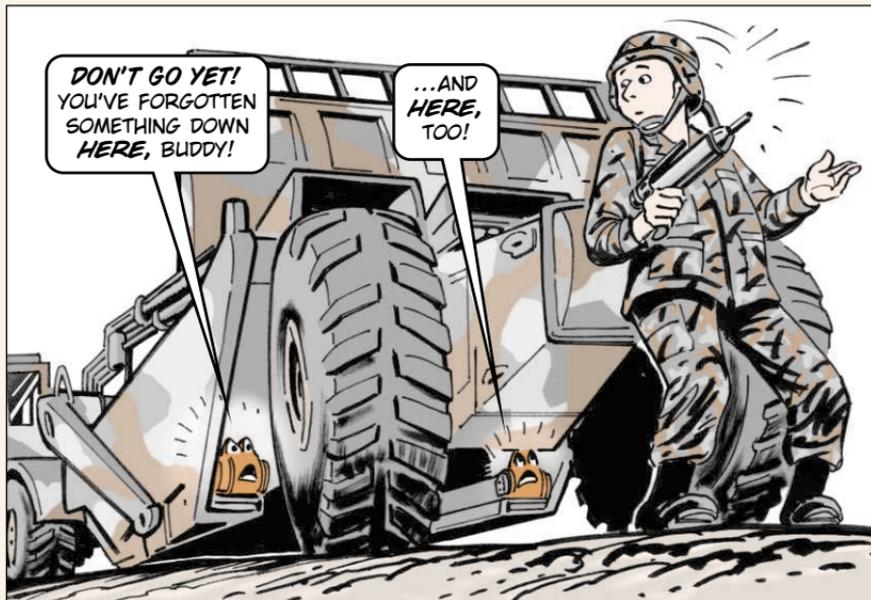
Page 2-75 in Change 1 (Apr 01) to TM 9-2350-314-10 says to check the cylinder monthly like this:

1. Elevate and depress the cannon three times.
2. Wipe down the elevation cylinder with a clean cloth.
3. Watch the vent holes while someone else elevates and depresses the cannon 25 more times.



If you see no more than six drops of oil from each vent hole during this time, everything's OK. But if you see more than six drops from either vent, the elevation cylinder's leaking too much. Call your mechanic. He'll determine if your howitzer needs to go to DS for repair.

KEEP GUIDE ROLLERS LUBED



Two grease fittings that lube the left and right guide rollers on the scraper's bowl are often forgotten because they're under the bowl in the back of the vehicle.



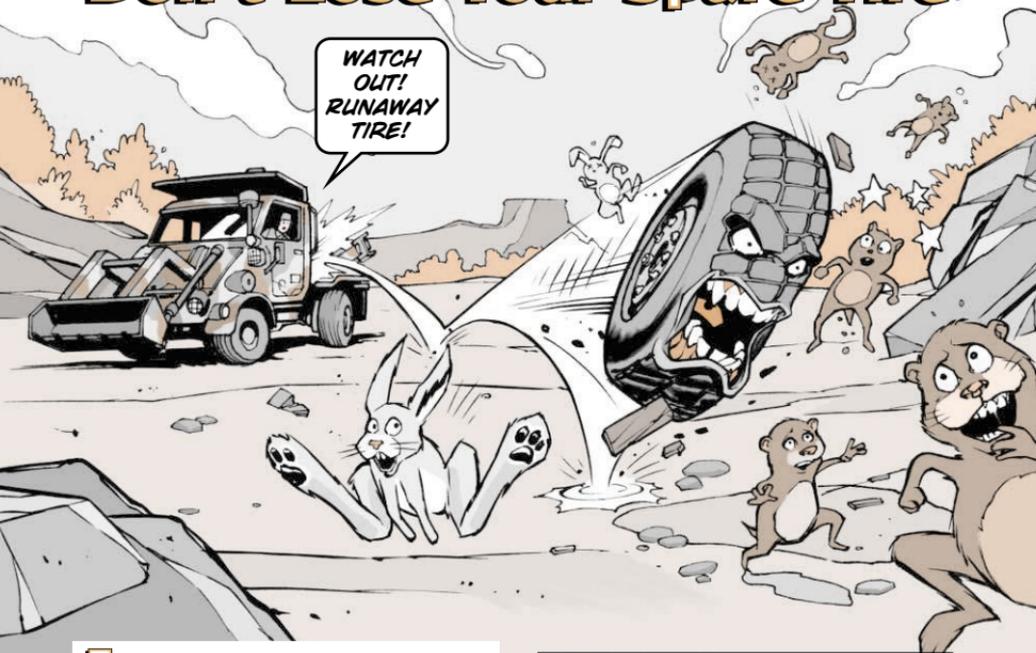
Each roller moves back and forth when the bowl is emptied. Without lube, the rollers lock up and drag along the roller ramp. If you see a groove or slide mark on the ramp, it means the roller isn't turning freely.

A roller that won't turn causes the other side of the bowl to drag. The end result is a lot of wear and tear—and possible damage—to the bowl and its ejector.

So don't let that happen to your scraper. During scheduled services, be sure to lube each roller's fitting.

SEE...

Don't Lose Your Spare Tire

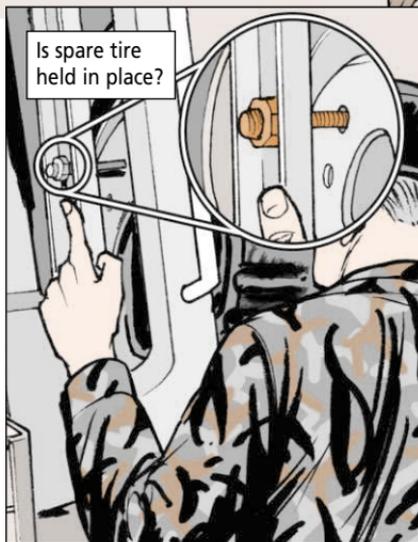


The small emplacement excavator's spare tire weighs 170 pounds. If it's not locked into its mount carrier, it becomes an unguided missile when the SEE takes a turn.

That bouncing 170 pounds can damage another vehicle, cause an accident, or kill someone.

So before operation, make sure the spare tire is held in place with the carrier mount's holder. You'll see the holder inside the spare tire's wheel, right behind the driver's side of the cab.

If the tire holder is missing, have your mechanic replace it with NSN 2590-01-242-6712. The tire lock is Item 5 in Fig 186 of TM 5-2420-224-24P.



Keep MICLIC Kicking Mines



Towing with M113

Towing your MICLIC with an M113A3 personnel carrier takes a little more care than towing it with a truck. The M113A3 has external fuel tanks. If you turn too sharply or back up at the wrong angle, the tanks tear up the MICLIC trailer and the tanks themselves are damaged. So turn as gradually as possible. Have your ground guides watch for clearance between the trailer and fuel tanks.

To fix the problem, get a tow pintle extension, NSN 2540-01-458-4846, installed. It will give you more clearance. The extension comes with mounting instructions and your unit repairman can install it. The extension is being added to TM 9-2350-261-24P.

When you tow with the M113A2 carrier, you'll need a NATO adapter, NSN 5935-00-322-8959, for the MICLIC power cable. The other vehicles used to tow the MICLIC already have a NATO connection.

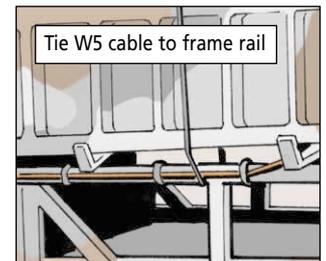
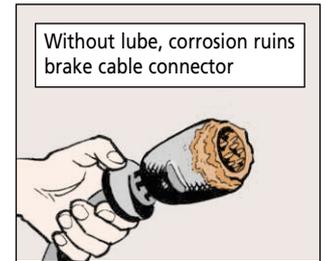


Cables

No matter what you tow with, make sure the MICLIC's brake light cable is securely locked into the rear of the towing vehicle. If the cable's not locked in, it will fall out during travel and be dragged along the road. Of course, that ruins it.

Keep the inside of the cable connector coated with corrosion preventive compound, NSN 8080-00-546-8637. That helps fight corrosion and makes it easier to slide the connector in and out. If corrosion forms in the connector, clean it out before you spray in the connector. Any cleaning pad works.

Always make sure the W5 cable is tied down. Left dangling, it gets snagged by tree limbs and other grabbers during travel. The W5 costs thousands of dollars. Use the pigtails on the upper left side of the launcher frame to tie it off. If the pigtails are missing, use tiedowns, electrical straps, rope or something similar to secure the cable.



Launcher Arm

It's a good idea to tie down the launcher arm with bungee straps or rope before you travel. That keeps the arm from jumping up and down and being damaged. An even better idea is to position an old MRE box or something similar underneath the arm when you tie it down. Just turn the box on its edge. That eliminates practically all movement up and down.

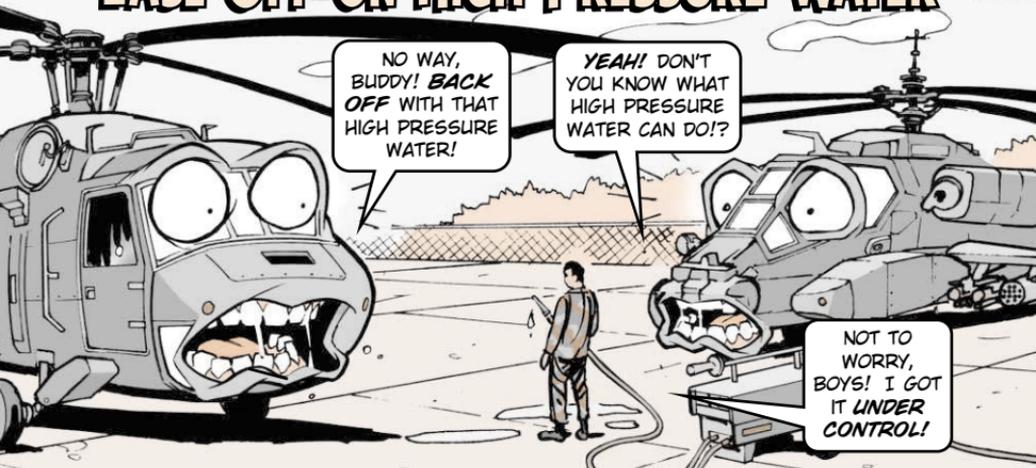


Easy on Pumping

Take it easy pumping up the accumulator. If you pump beyond 3,200 psi, the accumulator starts leaking and then you'll have lots of trouble pumping it up. Pump until the needle hits the green zone and STOP.



EASE OFF ON HIGH-PRESSURE WATER



Crew chiefs, using high-pressure water on your bird is like swatting a fly on a table with a sledge hammer.

The hammer may get the fly but the table is kaput. High-pressure water may clean your aircraft, but you'll damage the finish, wash grease out of lubricated parts, damage seals and short out electrical components. High pressure water can get past seals and access panels and seep into connectors.

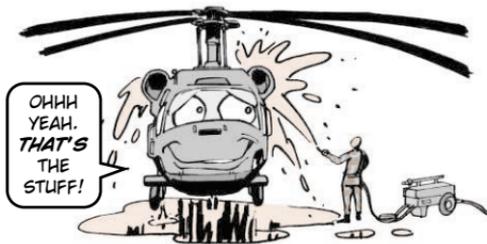
So forget the hammer. Use a little elbow grease while you're washing and never try to blast grime off your bird.

Instead, clean it with the universal wash unit like your TM says.

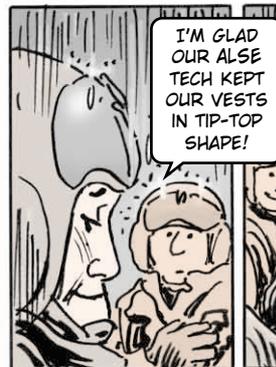
Afterward, check for standing water in the engine accessory gearbox. Corrosion can start there if standing water is not removed.

Take a bite out of any corrosion you find by following the good words in Chapter 3 of TM 1-1500-344-23, *Aircraft Weapons System Cleaning and Corrosion Control*, Chapters 3, 6, and 10 of TM 1-1500-343-23, *Avionic Cleaning and Corrosion Prevention/Control* and Chapter 13 of TM 1-1500-204-23, *General Aircraft Maintenance*.

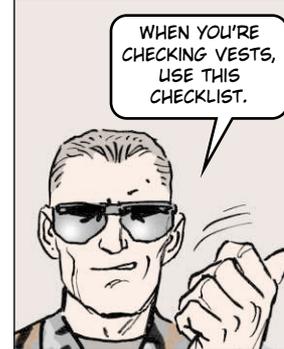
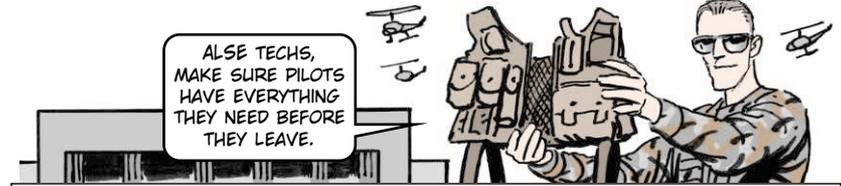
And remember that how often you clean your aircraft and its engines depends on your local operating conditions. So check your bird's engine manual for cleaning intervals in dusty, sandy or salt-water environments.



SURVIVAL COULD



DEPEND ON YOUR VEST



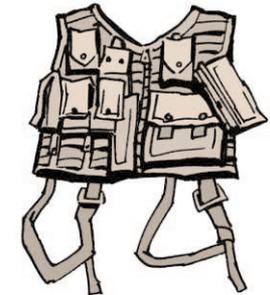
- Is the vest clean? A vest loses its flame-retardant properties if it's dirty.
- Does the distress marker light operate properly?
- Is the dial on the compass face intact?
- Does your pocket knife have a sharp blade?
- Is your water bag free of tears?
- Is the signaling mirror free of scratches?
- Are the survival kit and first aid items packed in separate zip-lock bags?
- Are nutrition items individually wrapped or sealed to prevent moisture damage?

PILOTS, IF YOU HAVE **ANY PROBLEM** WITH YOUR VEST, OR IF **COMPONENTS ARE MISSING** LET YOUR ELSE TECHNICIAN KNOW.

HE CAN SHAPE UP YOUR VEST AND ORDER MISSING COMPONENTS FROM TM 55-1680-317-238P AND THE LATEST PROJECT MANAGER **AIRCREW INTEGRATED SYSTEMS (PM ACIS) MESSAGE AIS00-02.**



"THE AIRSAVE VEST REPLACES THE SRU-21P AND THE **SURVIVAL ARMOR RECOVERY VEST INSERT AND PACKETS (SARVIP).**"



AIRSAVE

HERE ARE THE ITEMS YOU'LL NEED FOR YOUR SURVIVAL VEST...



ITEM	NSN	Qty
Bag, storage, drinking water, 3 pints	8465-00-634-4499	1 EA
Water, drinking, emergency, 4.2 ounces	8960-01-124-4543	1 EA
Blanket, thermal, silver/OD	7210-00-935-6666	1 EA
Compass, magnetic, unmounted, lensatic, luminous, M2	6605-01-196-6971	1 EA
Fire starter, magnesium bar	4240-01-160-5618	1 EA
Knife, multi-tool, Gerber (black)	5110-01-346-5341	1 EA
Kit, signaling, A/P255-5A or L119	1370-00-490-7362	1 EA
Light, marker, distress	6230-01-411-8535	1 EA
Flashguard (AA) battery	6135-00-985-7845	1 EA
Mirror, emergency signaling, 3x2 inches	6350-00-105-1252	1 EA
Radio set		
AN/PRC-90 or	5820-00-782-5308	1 EA
AN/PRC-90-1 or	5820-01-158-6082	1 EA
AN/PRC-90-2	5820-01-238-6603	1 EA
Tourniquet, non-pneumatic	6515-00-383-0565	1 EA

ITEM	NSN	Qty
Plastic bag	8105-00-837-7754	1 EA
Adhesive tape, surgical, 1/2 inch x 3 yards	6510-00-926-8881	1 EA
Aluminum foil, heavy, 2 x 2 feet	9535-01-201-7014	1 EA
Aspirin tablets	6505-00-118-1948	10 EA
Bandage, adhesive	6510-00-913-7909	1 EA
Bacitracin ointment, 10 oz	6505-00-582-4191	2 EA
Doxycycline hyclate caps	6505-00-009-5060	10 EA
Loperamide hydrochloride caps	6505-01-238-5632	8 EA
Cord, fibrous, 32/36 strand (550)	4020-00-246-0688	20 EA
Dressing, first aid, field (camo)	6510-00-159-4883	1 EA
Gloves, patient exam	6515-01-364-8553	4 EA
Insect repellent and sun screen .3 ounce	6840-01-452-9582	3 EA
Moleskin, surgical 3 X 5-in pad	6510-00-203-6010	1 EA
Pad, providone-iodine impregnated	6510-01-203-6285	5 EA
Pin, safety	8315-00-787-8000	6 EA
Plastic wrap, 12X36-in sheet	8135-00-579-6489	1 EA
Sponge, cellulose, Type II	7920-00-240-2559	1/2 EA
Water purification tab	6850-00-985-7166	1 EA

HERE ARE THE **FIRST AID** ITEMS YOU'LL NEED...



IF YOU HAVE ITEMS ON HAND THAT ARE **NOT** LISTED, USE THEM UNTIL YOU CAN REPLACE THEM WITH ITEMS ON THE LIST.



ALSO TECHS, GET A COPY OF AISOO-02 BY GOING TO <http://www.peoavn.redstone.army.mil/acis>

CLICK ON ALSE MESSAGES, THEN SCROLL TO THE END OF THE PAGE.

FILL IN THE REQUESTED INFORMATION AND THE MESSAGE WILL BE E-MAILED TO YOU.

IF YOU **CAN'T** GET ON THE INTERNET, REQUEST A COPY OF THE MESSAGE FROM JOHN JOLLY, PM ACIS AT (256) 313-4262, DSN 897-4262 OR E-MAIL john.jolly@peoavn.redstone.army.mil

HOLD YOUR FIRE! BAM!

THAT
GRENADIER
IS KILLIN' ME
WITH ALL HIS
DRY-FIRING!



A lot of M203 grenade launchers are being dry-fired much too much.

Unnecessary dry-firing loosens the breech inserts. That means a DS trip to cure 'em. If they're not fixed quick, the breech face threads'll be stripped. And you could get primer brass in the firing pin recess.

So-o-o, Grenadiers, dry-fire your M203 only during PMCS or to relieve spring tension before storage.

KEEP TOOLS **AWAY** FROM THE BREECH INSERT DURING CLEANUP. A DROP OF CLP—OR LSA IF THE TEMPERATURE'S **BELOW -10°F**—THROUGH THE BREECH INSERT HOLE IS ALL THE PM THE BREECH NEEDS.



Remove Pins Before Adding MILES

THE TWO HEADLESS PINS ON THE MK93 MOUNT MAKE IT DIFFICULT TO MOUNT THE M2 MACHINE GUN WHEN THE MILES TRANSMITTER IS INSTALLED.

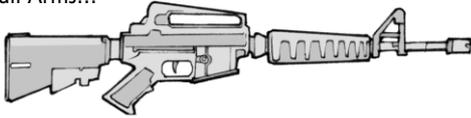


"SO, ARMORERS, BEFORE YOU INSTALL THE MILES TRANSMITTER AND BLANK FIRING ATTACHMENT, REMOVE THE MOUNT'S TWO HEADLESS PINS."



"BUT BE SURE TO PUT THE PINS SOMEPLACE SAFE. YOU CAN'T MOUNT YOUR M2S FOR REGULAR FIRING WITHOUT THEM."





Clean with the Right Stuff



THIS *ISN'T* NECESSARY. I'M SURE EVERY SOLDIER *KNOWS* THIS INFO...

MAYBE NOT

OKAY... I'LL DESCRIBE IT AGAIN, SO...
... LISTEN UP!

CLEANING SMALL ARMS WITH STUFF *OTHER* THAN WHAT THE -10 TMS TELL YOU TO USE IS *NOT* VERY SMART.

THE *WRONG* CLEANERS AND LUBES ACTUALLY HURT YOUR WEAPON INSTEAD OF HELP IT.

"SOME UNITS ARE BIG ON *OVEN AND CARBURETOR CLEANERS* FOR CLEANING OUT ALL CARBON FROM WEAPONS. BUT THOSE CLEANERS ALSO PULL OUT ALL THE OIL FROM A WEAPON'S METAL AND STRIP ITS PROTECTIVE FINISH. WITHOUT OIL, CORROSION CAN RUIN A WEAPON IN MERE DAYS."

"COTTON TIPS SEEM PERFECT FOR CLEANING TIGHT SPOTS LIKE THE BOLT CARRIER KEY. BUT THE COTTON COMES OFF AND MIXES WITH LUBE, PLUGGING THINGS LIKE GAS PORTS. BEFORE YOU KNOW IT, YOUR WEAPON STOPS FIRING. PIPE CLEANERS ARE WHAT'S BEST FOR CLEANING THOSE TIGHT SPOTS."

"PAPER TOWELS AND OLD RAGS AREN'T GOOD REPLACEMENTS FOR CLEANING PATCHES OR NEW CLEANING RAGS. PAPER TOWELS AND OLD RAGS SHRED AND CLOG AREAS LIKE THE BUFFER TUBE."

SMART CLEANING DOESN'T HAVE ANYTHING TO DO WITH BARRACKS GOSSIP ABOUT BETTER WAYS TO CLEAN YOUR WEAPON.

SMART CLEANING MEANS CLEANING WITH THE STUFF YOUR *TM* TELLS YOU TO USE:

CLP, LAW, RBC, LSA, PIPE CLEANERS, BORE AND CHAMBER BRUSHES, AND CLEANING PATCHES.

THEY HAVE BEEN **TRIED AND TESTED-** AND THEY **WORK!**



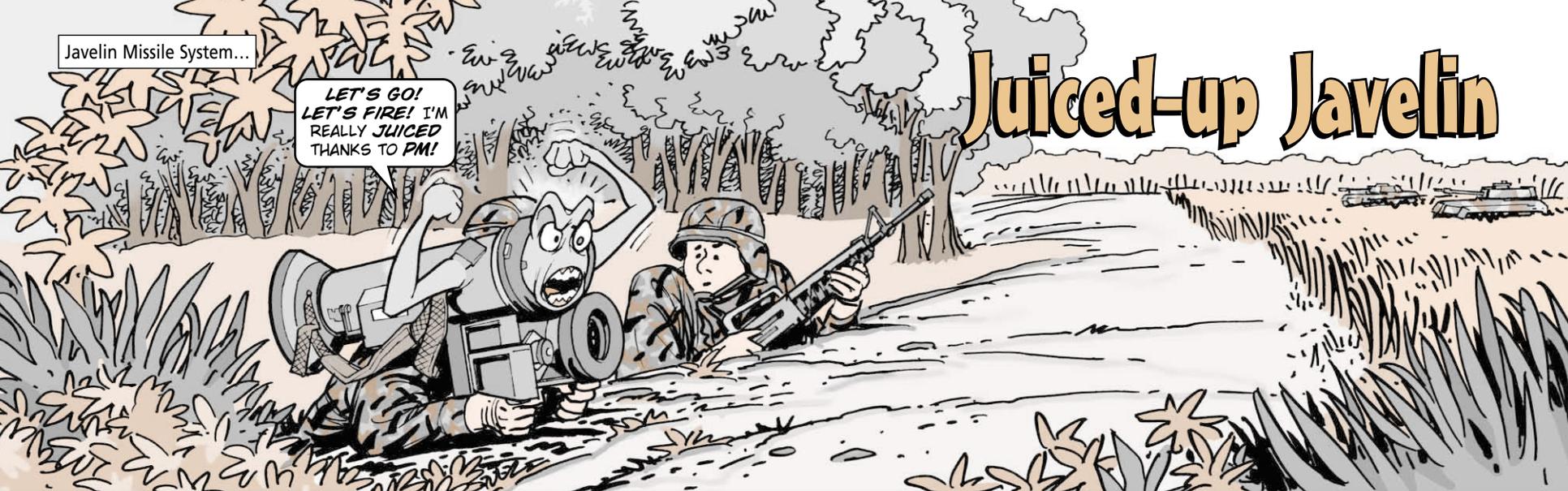
"CLEANING PADS WORK GREAT FOR SHINING UP YOUR WEAPONS. BUT THE PADS DO THAT BY TAKING OFF THE PROTECTIVE FINISH. SOON CORROSION HAS KILLED THE WEAPON."

"LIGHTWEIGHT OILS LIKE THOSE YOU USE TO LUBE DOOR HINGES MAY SEEM LIKE A GOOD SUBSTITUTE FOR CLP, LAW, OR LSA, BUT THEY'RE NOT. LIGHTWEIGHT OILS EVAPORATE QUICKLY AND DON'T STOP CORROSION. THEY ALSO HAVE A HIGH FLASH POINT."

"ANY SOLDIER WHO'S IN THE ARMY LONG ENOUGH WILL HEAR ABOUT SOME **MIRACLE HOMEMADE CLEANING TOOL**. DON'T BELIEVE IT. THOSE TOOLS USUALLY SCRATCH OFF THE PROTECTIVE COATING, WHICH LEADS TO CORROSION."

LET'S GO!
LET'S FIRE! I'M
REALLY JUICED
THANKS TO PM!

Juiced-up Javelin



Before you go to the field for firing, check your Javelin command launch unit's **battery compartment** for dirt and bent connector prongs. Either can prevent the launcher from getting enough power.

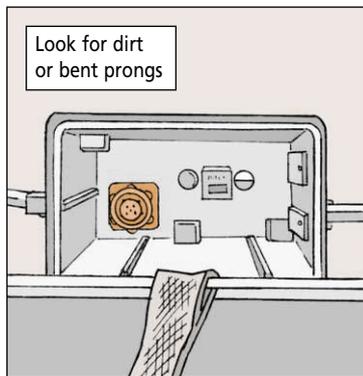
Wipe away dirt with a clean dry cloth. If the pins are bent, the CLU must be replaced.

Be sure to clean the **day and night vision sight lenses**, too. Use the procedure in Para 3-4 in TM 9-1425-688-12 and cleaning kit, NSN 6850-01-448-9653. The kit is made especially for the Javelin's lenses and won't scratch them. Rinse off the lenses with water before cleaning. That washes away sand and dirt that can get under your cleaning pad and scratch the lenses.

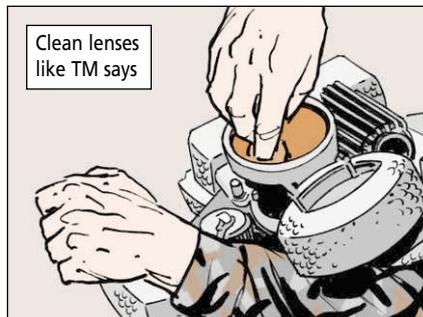
Always check the **CLU round interface connector** for dirt and corrosion that can prevent a good connection to the missile. Wipe away dirt with a clean dry cloth. If necessary, rinse off the connector with water and then clean it out with a cloth. Dry it thoroughly, then wipe away corrosion with isopropyl alcohol and pads from the lens cleaning kit.

Push down the round interface connector's outer sleeve to check for corrosion and dirt. Clean if necessary with pads and alcohol.

Take it easy when you mount the CLU to the round. If you bang it on, you damage both the CLU and missile connections. Put the CLU interface bracket in the round's hooks, then slide the CLU forward until it seats. Push the CLU down until the latch release snaps into place.



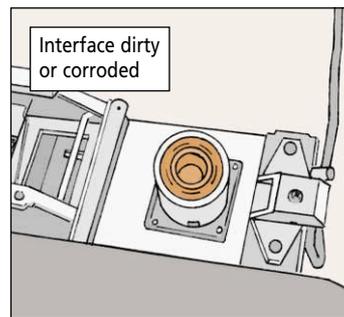
PS 590



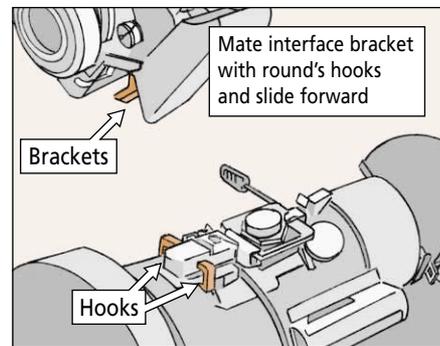
If the lenses are fogged up, the dessicant needs replacing. Tell your squad leader.

42

JAN 02



PS 590



43

JAN 02

Testing True with PATS

ARE YOU TWO READY FOR SOME SERIOUS TESTING?



YOU BET!

OH YEAH!

THE M41 PROTECTION ASSESSMENT TEST SYSTEM (PATS) WILL GIVE YOUR UNIT'S MASKS A TRUE TEST, NBC NCOS...

IF YOU REMEMBER

5

POINTS...

1 Zero check PATS. Attach the HEPA filter to the clear sample tube, making sure the arrow on the filter points towards PATS. Watch the display. The reading should be 0.6 or less within 30 seconds. If the reading is higher, there's a leak. Do the troubleshooting on Page 0011 00-4 in TM 3-4240-349-12&P.

Reading over 0.6?
Troubleshoot for a leak

3 Try to get a particle count of 3 or less after removing the HEPA filter and connecting tube assembly to the mask's drink tube. If you can't, there's no use doing any further testing—something's wrong. The mask is either the wrong size or not working. Have the soldier do PMCS on the mask and try again.

Particle count over 3.0? Do PMCS on mask

2 Prepare the mask for a fit test. Release the drink valve retaining lever. Have the soldier put on the mask. Adjust the face piece and tighten the head harness. Make sure no hair is underneath the sealing surface of the face piece.

Soldier should not be able to breathe in with drink tube and cannister blocked

Check the seal by blocking the open end of the drink tube and the canister and having the soldier breathe in. The soldier shouldn't be able to draw a breath and the mask should tighten against the face. If not, the mask is leaking.

4 Make sure the soldier doesn't eat, drink, use mouthwash or smoke at least 30 minutes before testing. He or she should also wash off all colognes and lotions. There should be no gum chewing or talking during testing. All of these can throw off the tests.



5 Don't let moisture in the tube assembly get in the PATS. That can damage the PATS. When you take off the tubes, pull the tubes off without lifting them. Otherwise, moisture drains down the tubes into the PATS. To dry the tubes, hang them up in the middle so both ends point down until the assembly is completely dry. Never use a tube assembly that's damp.

Hang tubes up to dry

If you have questions about PATS, call the PATS helpline at (800) 926-8378. Outside of CONUS, call (651) 490-3849 or e-mail nbc@tsi.com or go to <http://nbc.tsi.com/>

REMOVE MOISTURE,

REPLACE NITROGEN

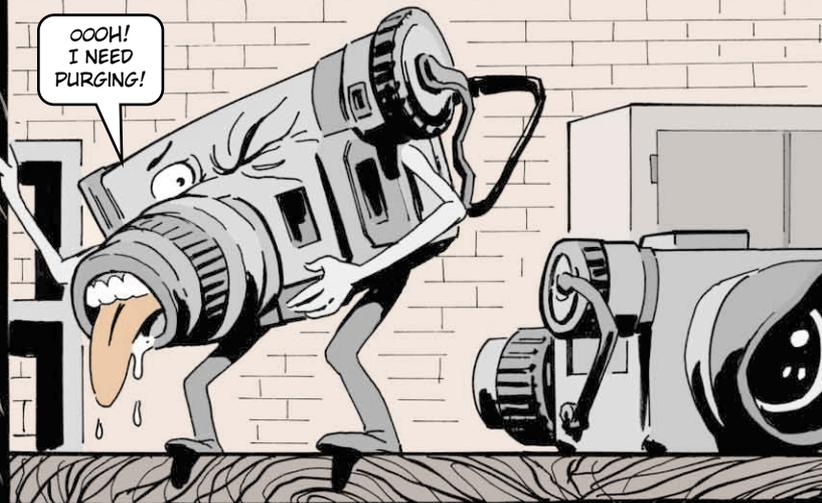
WHAT WORD DOES NOT APPEAR IN TM 11-5855-262-10-2, THE OPERATOR AND UNIT MAINTENANCE MANUAL FOR THE AN/PVS-7B AND -7D NIGHT VISION GOGGLES (NVGS)...

THE WORD IS PURGE!

...BUT SHOWS UP 50 TIMES IN TM 11-5855-262-238P-2, THE DIRECT SUPPORT MANUAL?



OOOH!
I NEED
PURGING!



The housing of your NVG is filled with dry nitrogen. Purging is the process of removing moisture that might have gotten into your NVG housing and of replacing the nitrogen that has leaked out.

There is one mandatory time when every NVG must be purged. That is at the 180-day resolution test performed by direct support (DS) maintenance. Unfortunately, it seems that many of you unit-level armorers are ignoring that 180-day test!

The number one complaint of DS NVG repairmen is that NVGs are not being turned in for the 180-day test.

And guess what? If the test is not done, your NVGs are NMC!

Some DS guys have taken it upon themselves to track your unit's NVGs and alert you when the 180-day test is needed. But that's not their job! It's your job to keep track of when the test is needed.

HEY! IT'S BEEN MORE THAN 180 DAYS! YOU GONNA SEND US TO DS TO TEST US OR WHAT?

AHH, NOT NOW. I'VE GOT NO TIME TODAY.

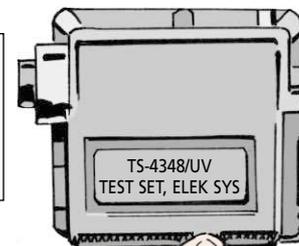


So put this book down, unit armorers, and check every single pair of NVGs in your arms room. There will be a sticker on each one that tells you when the 180-day check was last done. Turn in to DS those that need the check. Start a tracking system that will alert you a week before each NVG needs to be tested.

The second complaint that DS repairmen have is that you users and armorers are forgetting the resolution test with the TS-4348/UV test set, NSN 6625-01-323-9584. You cannot measure resolution accurately without using this test set!

Without accurate resolution, your goggles put you in danger every time you use them, by not allowing you to see what you need to see. So get the TS-4348/UV and do the test often—at least every 45 days.

Use TS-4348/UV test set to do the resolution test



Finally, DS repairmen make this request: When a moveable part on your NVG reaches its stopping point, **stop moving it!** The number one reason parts on your NVG break is because they are turned past their stopping point. This usually stems from a resolution problem that proper testing would have solved. Because you cannot get the clear image you want, you keep trying to adjust the goggles even when there is no more room for adjustment.



So, turn in your NVGs to DS maintenance in a timely way for their 180-day test; do your own resolution tests with the TS-4348/UV as often as needed.



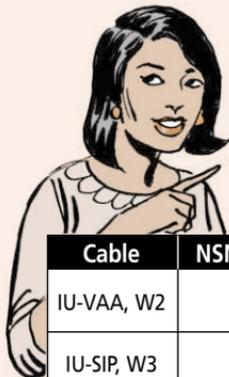
DON'T BREATHE!



In cold weather, resist the temptation to breathe on the optical lens of any night vision goggles and then wipe off the moisture with a cloth. If it is below freezing, your breath will frost the lens. When you wipe away the frost, you're bound to leave behind nasty scratches.

Wipe dirt and smudges off with only lens cleaning tissue, NSN 6640-00-240-5851. Don't breathe on the lens first and don't use just any old available cloth.

Cable Corrosion Fix



THE AN/PSC-11 SINGLE CHANNEL, ANTI-JAM, MAN-PORTABLE (SCAMP) RADIO SET HAS A CABLE CORROSION PROBLEM.

FIVE CABLES ARE BEING REPLACED. THEY ARE...

Cable	NSN 5995-01-446-	
IU-VAA, W2	1469	
IU-SIP, W3	8583	
PLGR, W11	2573	
IU-LCU, W12	8586	
IU-TTA, W14	8576	

"IF YOUR SCAMP CABLES HAVE A **YELLOW BAND** ON THEM, THEY HAVE ALREADY BEEN REPLACED AND ARE GOOD TO GO."

"IF THEY **DON'T** HAVE THE YELLOW BAND, REPLACE THEM BY CALLING ROCKWELL COLLINS AT THEIR TOLL-FREE WARRANTY HOTLINE, (800) 797-8429, AND REQUESTING A DIRECT EXCHANGE. THEN FOLLOW ROCKWELL'S INSTRUCTIONS."

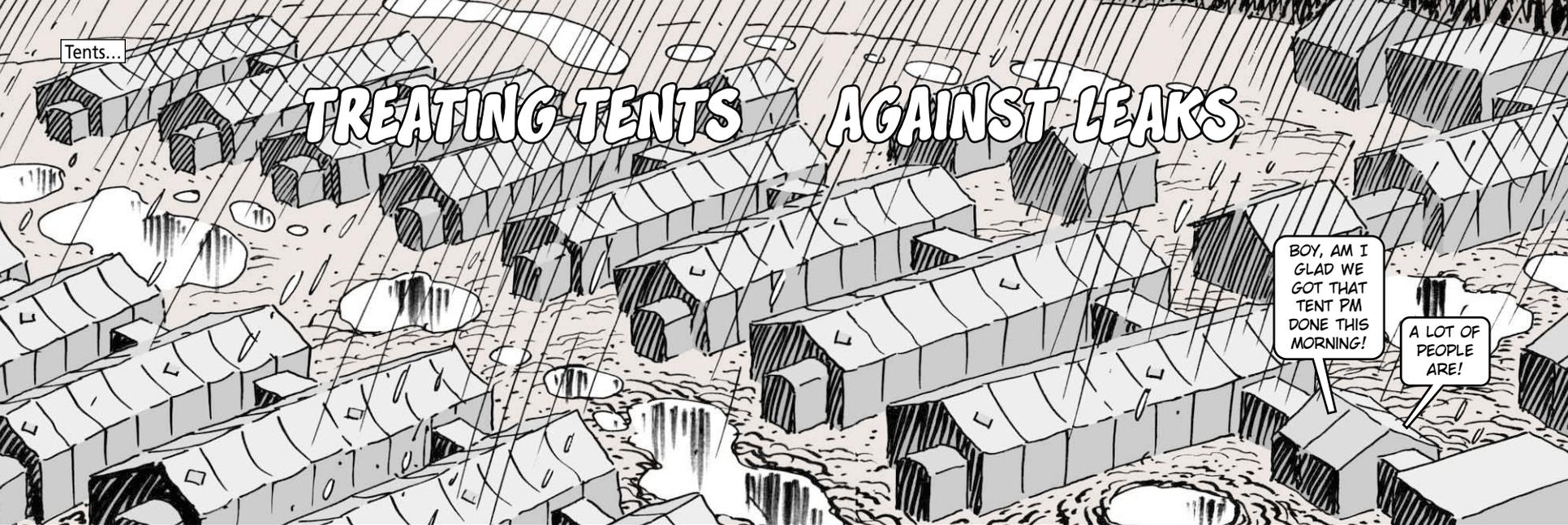
FOR **MORE** INFORMATION ON THE CABLES, THE CORROSION PROBLEM AND HOW TO REPLACE THEM, CONTACT CECOM, DSN 992-9175 OR (732) 532- 9175.

OR E-MAIL THEM AT:
naim.rizk@mail1.monmouth.army.mil



Tents...

TREATING TENTS AGAINST LEAKS



BOY, AM I GLAD WE GOT THAT TENT PM DONE THIS MORNING!

A LOT OF PEOPLE ARE!

No matter whether your tent is made of cotton duck (usually called canvas) or coated polyester (usually called vinyl), leaks are a problem.

Since you don't want to get wet inside your tent, pull a little PM before the rains come. But first, you must know what your tent is made of—canvas or polyester.

Cotton duck is olive drab and has a coarse, rough feel. It develops a musty smell over time.

Coated polyester is bright green or tan and feels slick. It smells like vinyl.

Treating Canvas

All tents start out repelling water, but after awhile, water repellency wears off. Field use wears it off pretty fast, so you need to renew water protection often.

Canvas will change color as the treatment wears off, becoming lighter and looking faded. This happens after about 12 months of field use.

Procedures for fixing leaky canvas are found in FM 10-16, *General Fabric Repair*.

• First, make sure the canvas is dry. Then brush off any loose soil.



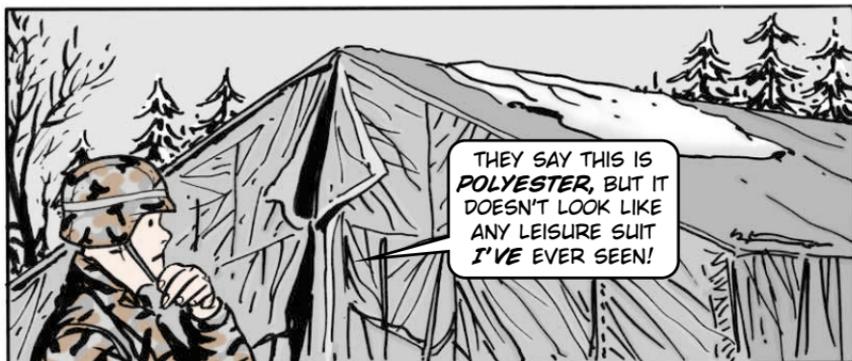
- To re-treat canvas, you'll need a preservative. As long as it's available, NSN 8030-00-281-2346, canvas preservative paste, will do the job. (It's a terminal item, though, and once it's gone, you'll have to find a substitute. Ask a local outdoor recreation supply store for suggestions.)
- Stir the paste thoroughly. Then dilute it with an equal amount of Stoddard solvent, NSN 6850-00-281-1985, adding the solvent a little at a time. Stir the mixture continuously until all the solvent is blended into the preservative paste. Stir it again before you start.



It takes about a gallon of mixture to coat a GP small, 1 ½ gallons for a GP medium and 2 gallons for a GP large.

- Apply the coating mixture with a brush or spray gun. Be sure you have lots of ventilation. If you use a spray gun, wear protective clothing and a respirator.
- Put the coating on thicker over patched areas and places that have previously been repaired.
- Let the canvas dry until it loses its tacky feel.





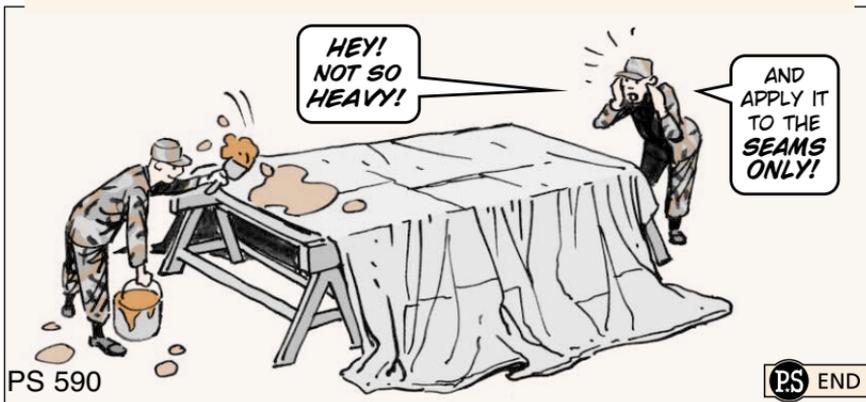
Polyester Tents

If your tent is made of coated polyester, it doesn't need re-treatment. Just the seams need to be re-sealed.

Use seam sealant, NSN 8030-01-350-4984. You'll also need a 1-in wide paint brush to apply the sealant, rags and some disposable containers with lids.

Seal the seams like so:

- Spread the clean, dry tent on a flat surface in a well-ventilated area, preferably outdoors.
 - Put the seam sealant into the small containers and keep the lids on the ones not in use. This keeps the sealant from thickening as you work.
 - Brush a light coat of sealant onto the stitched areas of the seams, flaps and webbing.
 - Use a 1-in brush turned sideways. The sealant should only go on the
- thread and holes left by the stitching needles. Try not to let it slop over beyond the width of the seam.
- The sealant isn't flame retardant, so apply it only to the tent seams. It increases the fabric gloss and makes it more likely to crack. If it cracks, your leaks are worse than ever.
- Let the tent dry about 30 minutes.
 - Apply a second light coat. Dry thoroughly. Two light coats work better than one thick one.



CAMOUFLAGE COVERALLS

MECHANIC'S COVERALLS ARE NOW AVAILABLE IN **WOODLAND** AND **DESERT** CAMOUFLAGE PATTERNS.

SIZES AND NSNs ARE...



Woodland

Size	NSN 8415-01-414-
Small	1856
Medium	1859
Large	1862

Desert

Size	NSN 8415-01-430-
Small	2313
Medium	2314
Large	2315



Y'BETTER PUT THOSE BACK, CHARLIE. I JUST GOT THE WORD...

No Local Purchase of Ear Plugs

Local purchase of disposable ear plugs is not allowed, according to DA memo, SAAL-PS (13 Jun 01). Army users **must** order foam ear plugs, NSN 6515-00-137- 6345, through the supply system using the FED LOG-AMDF data. The depot has a 2-yr supply inventory.

Questions? Call Perry Hicks, SAAL-PS, at DSN 761-5551, (703) 681-5551 or e-mail perry.hicks@saalt.army.mil.

FULL PULL-POWER

Whether you're thinking, doing, wondering or just messing around, there are usually two ways to do a job. One's right, the other's wrong.

The same goes for adjustable wrenches, because there's a right and wrong way to use them. The right, fitting and proper way means:

- Less wear on the wrench
- Less danger of slippage
- More and safer leverage
- Less chance of damaging the nut
- Tighter fit, if needed
- Less huffing, puffing and knuckle-busting for you



In other words, adjustable wrenches **shouldn't** be used so the "pull" or force is directed on the adjustable jaw. It's the stationary jaw that's rigged to take the heavy stuff.

Tools...

Shop Sets Add Degreaser



Units authorized the Common No. 1 and No. 2 shop sets are now also authorized a fully deployable parts and weapons washer.

Called a degreaser, the cleaning system measures 23 x 17 x 6 3/4 inches and can be powered by a generator. The degreaser uses a solvent that's environmentally compliant and a filter that captures particles as small as 1/10 micron in diameter.

Order the degreaser with NSN 4940-01-482-0479 for \$799. It uses cleaning solvent, NSN 6850-01-378-0679, and a filter, NSN 4250-01-381-8024, both of which are expendable items and must be ordered separately.

BOLT CUTTER JAWS



IF THE JAWS FOR YOUR BOLT CUTTER HAVE **WORN OUT**, HERE ARE THE NSNS YOU NEED TO **REPLACE THEM...**

I THINK IT'S TIME I GOT SOME **NEW JAWS!**



For Cutter NSN 5110-00-	Use Jaw NSN 5110-01-
596-9162	378-4608
224-7057	380-5088
224-7055	PN 1413AF* cutter head w/ jaws
596-9156	380-5091
596-9155	380-5095
224-7056	381-0790
188-2524	381-0808
595-8267	PN 8913CN*

Your STAMIS Experts Can Help!



ACT NOW!
OPERATORS ARE
STANDING BY!



ARRGH!
THIS THING
NEVER
WORKS
RIGHT!

HEY!
HOW 'BOUT
CALLING YOUR
SUPPORT
HOTLINE?

WHEN YOU HAVE PROBLEMS WITH ANY ILLS, SAMS, SARSS OR OTHER STANDARD ARMY MANAGEMENT INFORMATION SYSTEM (STAMIS) PACKAGE AND YOUR LOCAL SUPPORT FOLKS CAN'T HELP, WHAT SHOULD YOU DO?



CALL OR
E-MAIL A
STAMIS
SUPPORT
HOTLINE,
THAT'S
WHAT!



ALL ACTIVE ARMY
USERS AND ARMY
RESERVE SARSS USERS
CAN CALL **CUSTOMER
SERVICE** 24 HOURS
A DAY, 7 DAYS A WEEK,
AT DSN 887-1051, (804)
734-1051 OR E-MAIL
cao@sdcl.lee.army.mil

ARMY RESERVE USERS,
EXCEPT SARSS, CALL
**LOGISTICS MANAGEMENT
RESOURCES (LMR)** TOLL-
FREE AT (888) 808-0901,
MONDAY - FRIDAY,
FROM 0700-1700 HOURS
EASTERN TIME, OR E-MAIL
cao@lmr-inc.com

ALL ARMY NATIONAL GUARD USERS CALL THE
PROFESSIONAL EDUCATION CENTER-ARNG
AT (800) 863-3637, DSN 962-4871, (501) 212-4871,
MONDAY-FRIDAY, 0730-1630 HOURS
CENTRAL TIME, OR E-MAIL
logstamishelpdesk@pec.ngb.army.mil

Publications...

GET PUBS LIST FROM LOGSA

Dear Half-Mast,

I'm trying to put together a list of all the equipment pubs that my unit needs. Is there a CD or web site that will let me search for an end item's pubs by using the item's NSN?

M. M.

Ft Huachuca, AZ



Dear Mr. M. M.,

The bad news is that nothing allows you to do an NSN search for a complete listing of pubs for your unit's equipment—not even DA Pam 25-30, Consolidated Index of Army Publications and Blank Forms.

The good news is that the USAMC Logistics Support Activity (LOGSA) Equipment Oriented Publications Data Base (EOPDB) will put together a complete pubs listing for you.

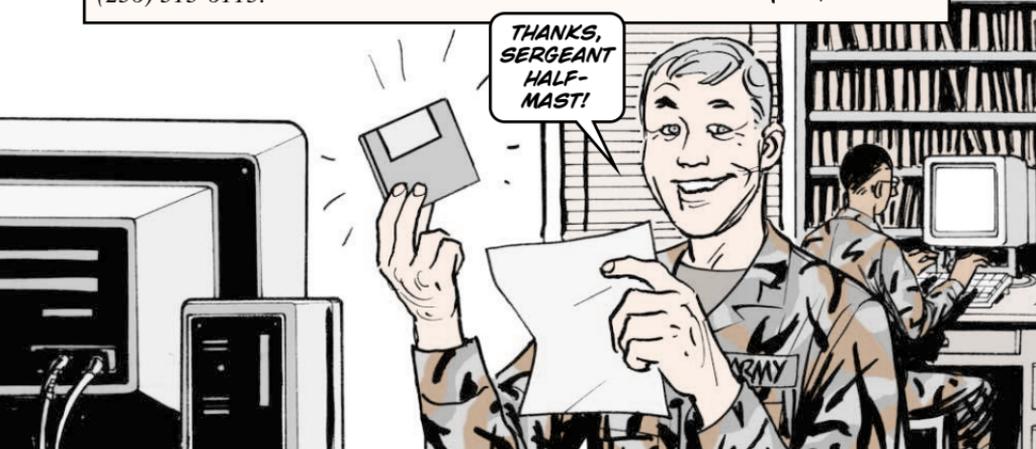
If you use the Standard Property Book System-Revised (SPBS-R), download your property book info to an MS-DOS 3 1/2-in disk. If you don't use SPBS-R, contact LOGSA and ask for the LOGSA Equip Disk. It contains a simple IBM PC (DOS) compatible software program that prompts you for the required data.

Once you complete downloading the data to a disk, you can either mail or e-mail it to LOGSA.

Mail completed disks to USAMC LOGSA, AMXLS-AP, Redstone Arsenal, AL 35898-5000, or attach the file data to a message and e-mail it to eopdb@logsa.army.mil. For more info, call EOPDB toll-free at 800-270-1409, DSN 897-6115 or (256) 313-6115.

Half-Mast

THANKS,
SERGEANT
HALF-
MAST!



POST SCRIPTS

PS 590
JAN 02

Winter Driving Correction
Make this correction on Page 33 of PS588 (Nov 01): When driving on ice, you tap hydraulic brakes, not anti-lock brakes. Anti-lock brakes get firm, even pressure.

Don't Wash Your EPLARS
You must remove the enhanced position location reporting system (EPLRS) radio set from your vehicle before power washing the vehicle. Radios have been destroyed by water because the set wasn't removed before power washing.

PLS Heater Fan Switch
Use NSN 5930-01-207-6337 to request the control switch for the M1074/M1075 tractor truck's heater fan. The info shown for Item 3 in Fig 440-1 of TM 9-2320-364-24P is wrong.

M1068 BOOT WALL
Need a new boot wall for the extension cover on your M1068-series command post carrier? The NSN listed as Item 1 in Fig 327 of TM 9-2350-261-24P and Item 1 in Fig 329 of TM 9-2350-277-24P is wrong. Order a green boot wall with NSN 8340-01-378-8301 or a tan boot wall with NSN 8340-01-380-2241. Make a note until the TMs are updated.

PLS Hub Seal Kit
Fig 271 of TM 9-2320-364-24P-1 has the hub seal kit info in the wrong place for the M1074/M1075 PLstractor. Item 5 on Page 271-1 is the kit, NSN 5330-01-342-7860, not the hub. Item 5 in the figure should be Item 2, the hub assembly.

M548A3 U-JOINT YOKE
Get the universal-joint yoke for your M548A3 cargo carrier with NSN 2520-00-001-3531. The yoke is shown ghosted in Fig 169 of TM 9-2350-247-24P, but the NSN is not listed. Make a note until the TM is updated.

Avionics TM Binders
Use NSN 7510-00-275-2660 for oversized, 11 X 17-in avionics TM binders.

FMTV Troop-Carrying Capacity
TB 9-639, *Passenger-Carrying Capacity of Tactical and Administrative Vehicles Commonly Used to Transport Personnel*, lists changes to the maximum number of troops that can be carried in FMTVs:
2½-ton cargo—12 soldiers
5-ton cargo—14 soldiers
5-ton long wheelbase cargo—20 soldiers
5-ton dump truck—12 soldiers

FREE EXCHANGE RATCHET PULLER
If you have a cable-type "come along" ratchet puller, NSN 5120-01-275-2286, look at the serial number on the rivet-tag attached to the puller's frame. Pullers with serial numbers in the range "C00" through "L00" should be turned in for a free replacement at your local Caterpillar dealer. The puller is an AAL item on CS433C or CS563D vibratory rollers fielded after January 2000. They have a poorly crimped swage on the cable loop that attaches the cable end hook. If you have further questions, see your TACOM LAR for a copy of TACOM GPM 01-021.

MHE 237 FORKLIFT FUEL PUMP
NSN 2910-01-210-5733 gets the electric fuel pump for the 4K forklift. The NSN shown as Item 9 in Fig 20 of C1 of TM 10-3930-638-24P is no longer available.

MAKE THOUSANDS OF DOLLARS IN YOUR SPARE TIME!



IT'S THE EASIEST MONEY I EVER MADE!



LOST DOG 3-LEGS, DEAF, BLIND IN ONE EYE, ANSWERS TO THE NAME "LUCKY"

FOR MORE INFO, CALL 1-800-...

M939A2 FRONT INNER AXLE SEAL
Fig 236 of TM 9-2320-272-24P-1 does not have the right NSNs for the inner axle seal, Item 30, and the shaft seal assembly, Item 28, for M939A2-series trucks with the original Carden CV joints. Use NSN 5330-01-271-9362 to get the plain seal and NSN 5330-01-271-9490 to get the assembly. NSNs shown in the TM are good for all other M939-series trucks.

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?



IF YOU SNOOZE,

YOU LOSE!

EXHAUST FUMES KILL

Carbon monoxide is a silent killer. *Never* idle a truck with the cab windows closed or run the engine in an enclosed area.