

Issue 609

PS

August
2003

THE PREVENTIVE MAINTENANCE MONTHLY

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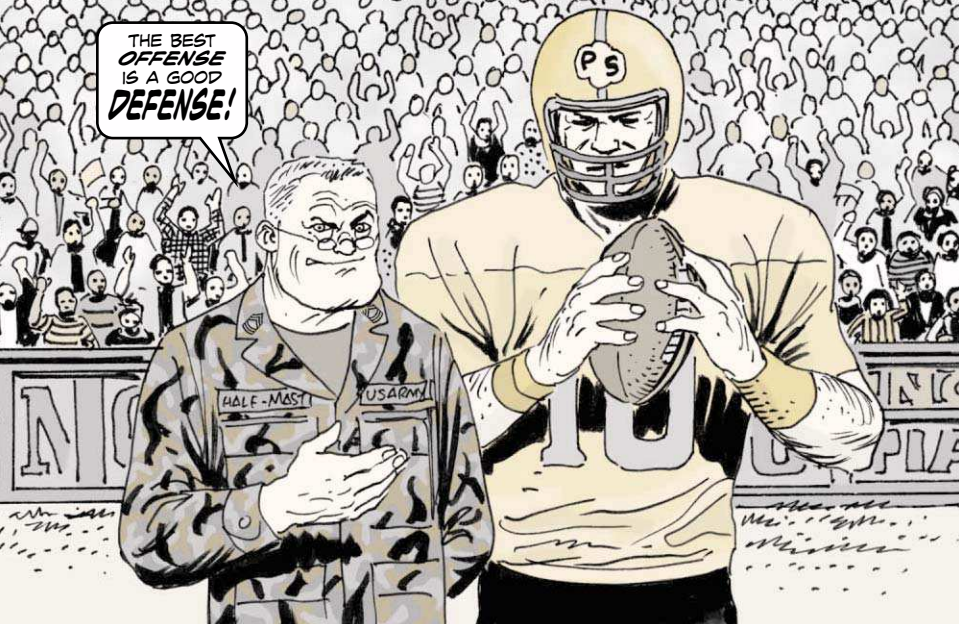
**Y'GOTTA
HELP
ME!!**

**TAKE IT
EASY. JUST
THE FACTS,
SOLDIER.
JUST THE
FACTS.**

**I'VE BEEN ASSIGNED TO
THE ARMS ROOM. I DON'T
KNOW ANYTHING ABOUT
ARMS MAINTENANCE...
I'M A SUPPLY CLERK...
I'VE NEVER DONE THIS-!**

PM Dragnet
See page 27

PREPARATION



Successful sports teams are fond of saying that “the best offense is a good defense”.

That translates to winning on another field—the battlefield: If the enemy can’t beat your defense, he’s not going to win any battles.

How do your toughen up your defense for the battlefield? By preventive maintenance on your equipment.

While military tactics deploy soldiers and equipment as situations demand or where advantage can be gained, it is the condition of equipment that holds the line and helps carry the day.

Would you stake your life right now on the condition of your equipment?

If there’s any doubt, get out the maintenance pubs and get to work. Just as ball players like their chances when the defense is working, our chances improve tremendously when your defense is PM.

WE HAVE THE
WORLD'S BEST
EQUIPMENT...
TAKE CARE OF IT!
D-E-F-E-N-S-E!



THE
PREVENTIVE
MAINTENANCE
MONTHLY

ISSUE 609 AUGUST 2003



WHEELED VEHICLES

M1000 HET Semitrailer Loading Caution
M1070 HET, M1075 PLS Windshield Washer
M1070 HET Tractor 4-Way Control Valve
FMTV Winch Cable Retraction
FMTV Engine Oil Pressure
HMMWV AOAP Sampling
Trailer Brake Air Hose Hookups
HEMTT Fuel-Water Separator Bowl
HEMTT Static Reel
M915A4 Tractor Truck Spare Fuses



COMBAT VEHICLES

Combat Identification Panels CDs
MLRS Carrier Battery Tie-down Bolt
MLRS Carrier Steering Cable
M113A3 FOV Towbar NSNs
Allied Kinetic Energy Recovery Rope
M88A2 Hercules Towing Tips
M109-Series SP Howitzer, M992A2 Ammo Carrier Sprockets



MISSILES

Patriot Missile System Generator PM
MLRS Launcher Carbon Build-up Prevention
Avenger Missile System M3P Gauge NSNs



SMALL ARMS

M16-Series Rifle Magazine Maintenance
M16-Series Rifle, M4/M4A1 Carbine Desert PM
M16A4 Rifle Differences
M249 Machine Gun AN/PVS-4 Mounting
M68 Optical Sight

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

Just write to:

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

Or e-mail to: psmag@logsa.redstone.army.mil

Internet address: <http://www.logsa.army.mil/psmag/pshome.html>

By order of the Secretary of the Army:

JOHN M. KEANE
General, United States Army
Acting Chief of Staff

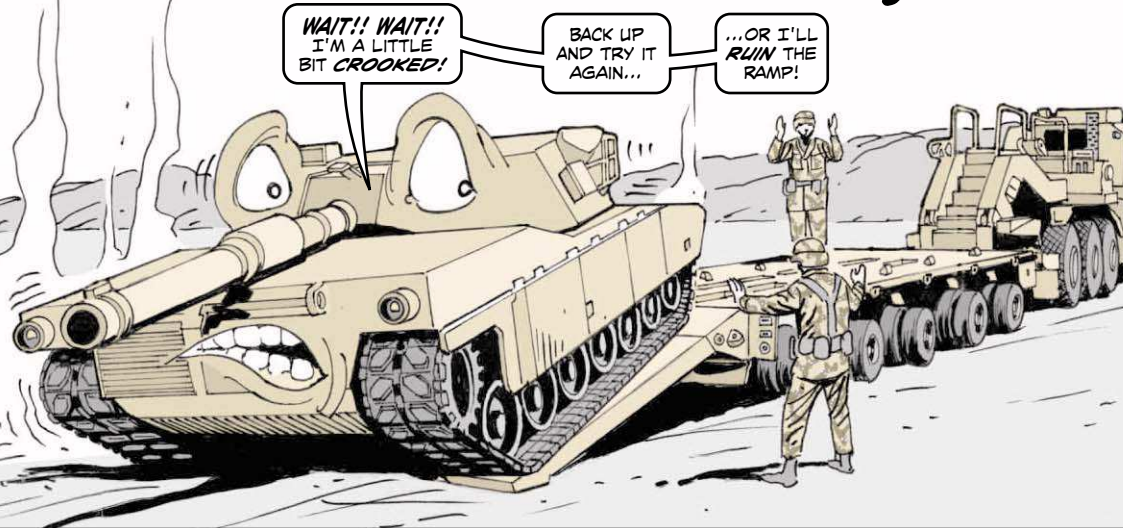
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Avoid Crooked Loading

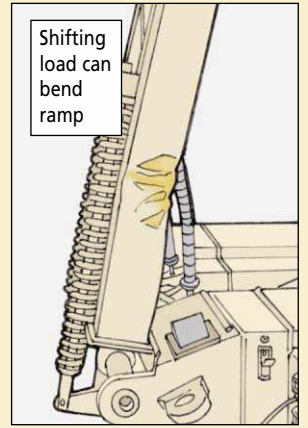


The M1000 heavy equipment transport semitrailer is a rugged beast. But it'll meet its match if you try to load a tracked vehicle improperly.

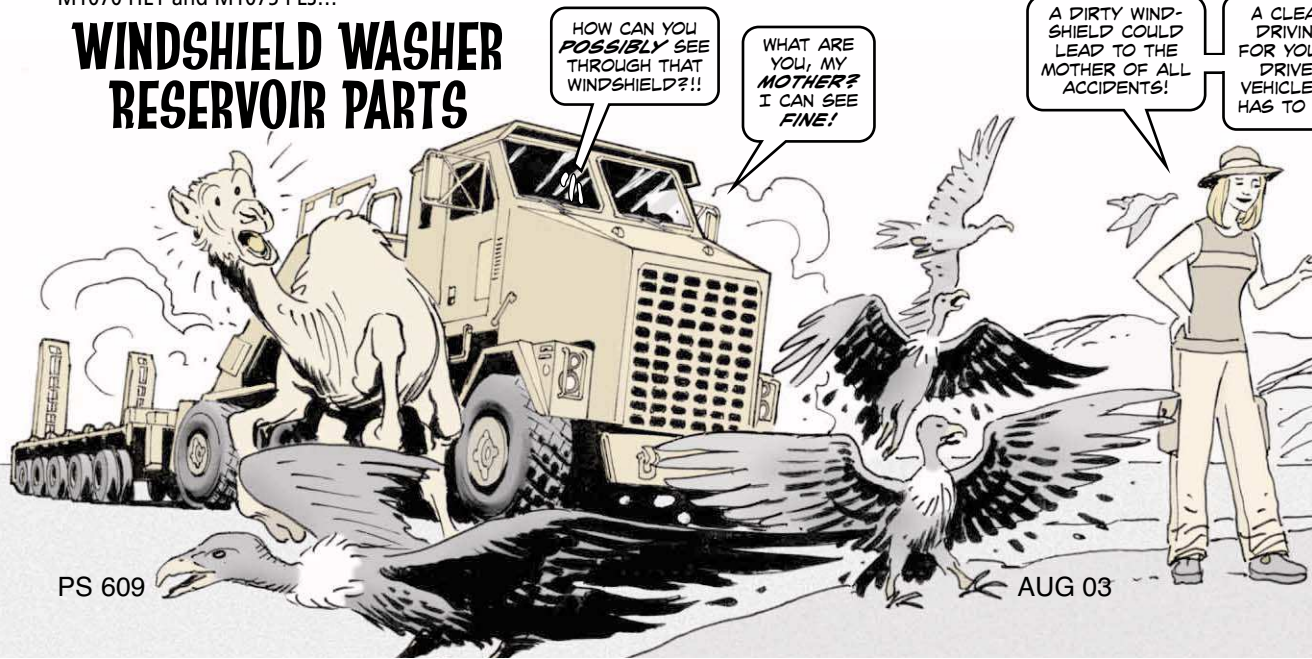
Some drivers try to drive onto the semitrailer without first making sure their vehicles are perfectly straight. Once on the ramp, it becomes obvious that the vehicle is crooked, so they try to straighten out before driving the rest of the way up.

Unfortunately, the torque generated by the tracks and the sudden shift in weight is often enough to bend and weaken the ramp.

So make sure your vehicle is completely straight with the semitrailer before loading. If it goes on slightly crooked, back up and try again.



WINDSHIELD WASHER RESERVOIR PARTS



A CLEAN WINDSHIELD MAKES DRIVING EASIER AND SAFER FOR YOU HET, PLS, AND HEMTT DRIVERS. THAT MEANS THE VEHICLE'S WINDSHIELD WASHER HAS TO BE IN WORKING ORDER.

MAKE A NOTE OF THESE DOWN PARTS FOR THE WASHER RESERVOIR, 'CAUSE THEY'RE MISSING FROM FIG 227 OF TM 9-2320-360-24P AND FIG 437 OF TM 9-2320-364-24P.

Part	NSN
Windshield washer assembly	2540-01-288-5298
Reservoir, windshield washer	2540-01-287-4550
Cover, reservoir/windshield washer	2540-01-210-9638
Grommet, nonmetallic	5325-01-353-9602
Valve, plug	4820-01-355-0380
Tubing, nonmetallic	4720-01-393-4541
Diaphragm chamber assembly	2540-00-114-4180
Pump, windshield washer	2540-01-287-4546

BY THE WAY, THIS WINDSHIELD WASHER IS INTERCHANGEABLE WITH THE ONE THAT'S USED ON THE HEMTT.



RETRACT CABLE S-L-O-W-L-Y

WHAT'S
BUGGIN'
YOU?

THE WINCH CABLE
BROKE MY MHE
CONTROL SENDING
UNITS!

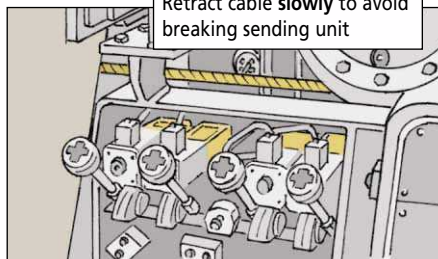
Operators, here's a sure-fire way to stop damage to the material-handling equipment controls on FMTVs.

It's simple. Do not reel in the winch cable at full speed! Left loose, the cable can whip—move sideways—with a lot of force.

The MHE controls are in the way and unprotected. The whipping cable breaks off sending units.

Prevent damage by simply bringing in the cable slowly.

Retract cable slowly to avoid
breaking sending unit



M1070 HET Tractor...

4-WAY CONTROL VALVE

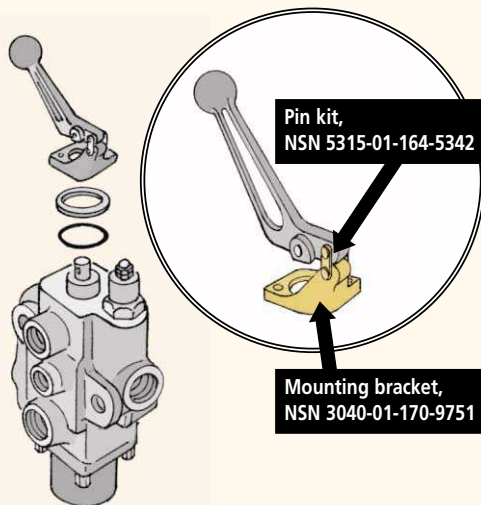
Both NSNs for the handle assembly's mounting bracket and pin kit are missing from the 4-way control valve shown in Fig 222 of TM 9-2320-360-24P.

Make a note of these NSNs until there's a change or revision to the technical manual.

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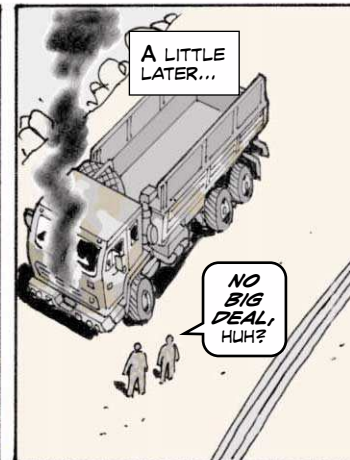
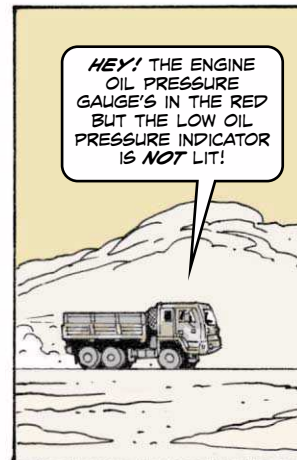
Engine Oil Pressure

HEY! THE ENGINE
OIL PRESSURE
GAUGE'S IN THE RED
BUT THE LOW OIL
PRESSURE INDICATOR
IS NOT LIT!

AH, THAT'S
NO BIG
DEAL. WE
CAN KEEP
GOING!

A LITTLE
LATER...

NO BIG
DEAL!
HUH?



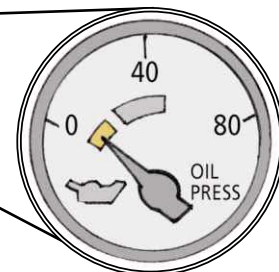
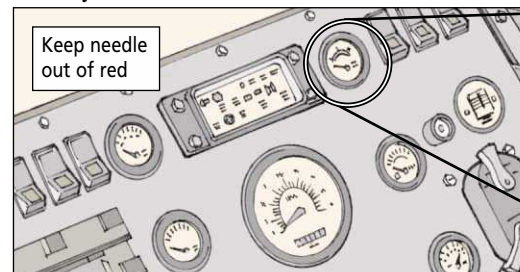
Drivers, the FMTV's normal engine oil pressure is between 15-80 PSI. In addition to an oil pressure gauge, your truck also has an oil pressure warning light.

Do the following if the gauge or the light should indicate problems:

- If the engine low oil pressure indicator is lit and the gauge reads above 15 PSI, continue the mission. When the mission's over, tell your mechanic.
- If the engine oil pressure gauge reads in the red zone and the low oil pressure indicator is lit, shut off the engine and call in your mechanic.
- If the engine oil pressure gauge reads in the red zone and the engine low oil pressure indicator is not lit, shut off the engine and do the following:

- 1) Restart the engine. The light should come on briefly, but then go out. Continue the mission.
- 2) If the light does not come on, or comes on and stays on, turn off the engine and call in your mechanic.

Keep needle
out of red



PS 609

5

AUG 03

TO SAMPLE, OR NOT TO SAMPLE



Dear Half-Mast,

In the last couple of weeks, I've been asked the same question several times: "Why do we do oil analysis on HMMWVs when they're not listed in Table 4-1 of DA Pam 738-750?"

Of course the answer is that the pam hasn't been updated in more than 8 years (1 Aug 94). But is there anything official that tells us to AOAP-test HMMWVs?

CW2 J.R.S.



Dear Chief J.R.S.,

You bet. The Logistics Support Activity's WebLOG web site provides a list of all tracked and wheeled vehicles in the AOAP program along with their sampling intervals. The HMMWV is on the list.

For tactical wheeled vehicles check out:

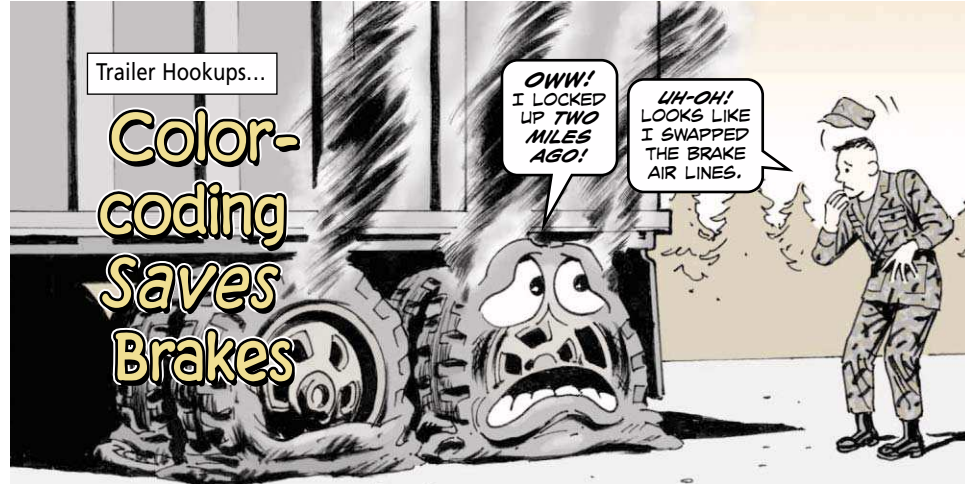
http://weblog.logsa.army.mil/aoap/aoap_tactical_.htm

For combat vehicles, watercraft, MHE equipment, construction equipment and generators, click on the links at the bottom of the page.

Half-Mast

Trailer Hookups...

Color-coding Saves Brakes

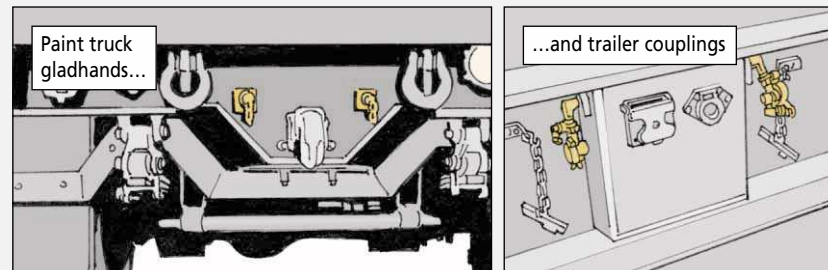


"Careful" is the word to keep in mind when you hook up the brake air hoses from a trailer to your 2½- or 5-ton truck. If you swap the air lines, the trailer brakes will lock up, burn out or ruin the tires.

So-o-o-o, make sure your trailer's hooked up right!

It's not so hard. Just remember the SERVICE air coupling on your truck is always on the road side and the EMERGENCY is on the curb side.

Your best bet is to color-code the trailer air hose connectors and the truck's glad-hand couplings. A dab of blue paint on the SERVICE connectors and red on the EMERGENCY pair will keep things straight.

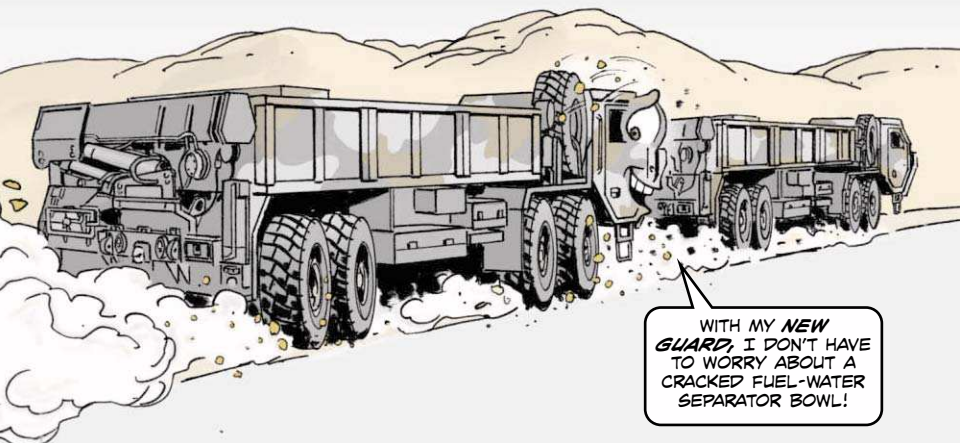


YOU CAN ALSO ADD AN EMERGENCY OR SERVICE I.D. PLATE TO YOUR TRUCK'S GLADHANDS TO HELP.

ID Plate	2 1/2-ton truck NSN 9905-00-	5-ton truck NSN 9905-00-999-
EMERGENCY	774-4284	7369
SERVICE	740-9721	7370

HEMTT...

KEEP BOWL CRACKS AT BAY



The fuel-water separator on your HEMTT won't do its job if its plastic bowl is cracked or broken.

Protect the bowl by installing a fuel bowl shield, NSN 2540-01-383-2252, using three cap screws, NSN 5305-00-269-3211, three nuts, NSN 5310-00-655-9544, and three lock washers, NSN 5310-00-637-9541. The shield will keep rocks, gear, big feet and other items from cracking the bowl.

See Page 4-41 of TM 9-2320-279-20-1 for instructions on installing a replacement shield. If your truck has never had a shield installed, you'll need to drill some mounting holes first.

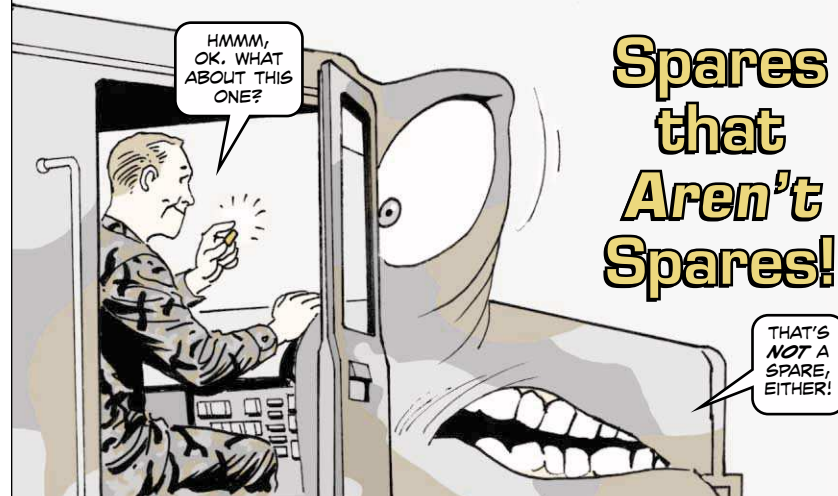
Use the shield as a template to mark the hole locations. Place the front of the shield 2½ inches from the back of the tire carrier and 3 inches in from the edge of the fender.



HEMTT Static Reel

NSN 5340-01-269-4423 gets the static reel for the M978 HEMTT fuel tanker. This NSN replaces the parts info shown as Item 1, Fig 282 of TM 9-2320-279-24P.

M915A4 Tractor Truck...



Dear Editor,

Our unit found out the spare fuse receptacles on the tractor truck's fuse panel aren't slots for spare fuses! For instance, Spare 4 is a fuse for the wiper/washer.

Just thought you could pass this onto other operators and mechanics.

SPC Paul Dickinson
46th Trans Co
Camp Humphreys, Korea

Dear SPC Dickinson,

Thanks for the heads-up.

Matter of fact, here's the other fuses (shown as spares) and what they're for:

Spare 1 Spare

Spare 2 Trailer ABS (along with fuse next to it)

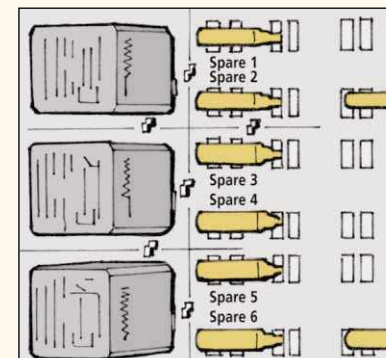
Spare 3 Diagnostics ignition power

Spare 4 Wipers/washer

Spare 5 12-volt dash power receptacle

Spare 6 Mirror heat (along with fuse next to it)

Make a note of these fuses until there's a change or revision to TM 9-2320-303-10.



Half-Mast

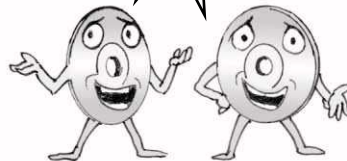
CIPS CDS IMPORTANT, TOO

THOSE TWO CDS REALLY HELPED ME GET MY CIP PANELS INSTALLED!

IF THERE'S ANYTHING IN THERE ABOUT HOW TO CLEAN AND MAINTAIN 'EM, LEMME KNOW!



WE'LL TELL YOU HOW TO TAKE CARE OF YOUR CIPS PANELS!



By now, all active Army units should have received their free-issue combat identification panels (CIPs).

CIPs panels are covered with a special thermal tape and come in different sizes to fit specific vehicle configurations. When mounted on the front, back and sides of a vehicle, they present a unique contrasting "cold spot" when viewed through a thermal-imaging device.

Gunners trained to recognize these unique signatures can tell if the vehicle in their sights is friendly or unknown. Additionally, when not in use, the panels should be placed in the "off position" by reversing them to protect the thermal tape.

Almost as important as the panels themselves is the CD set that accompanies the CIPS. *Combat Identification Panels Kit Installation* is a two-CD set that provides detailed video on how to install, use, maintain and clean the CIPS. It also includes thermal images of specific vehicles and printable versions of the combat vehicle mounting instructions.

If you need additional CD sets, contact Wayne Deutscher at the office of the Program Manager for Target Identification and Meteorological Sensors (PM TIMS). Call DSN 987-5272 or (732) 427-5272 or send an email to:

wayne.deutscher@iews.monmouth.army.mil

You can also request extra copies by writing to:

PM TIMS

SFAE-IEWS-NS-TIMS (Wayne Deutscher)

Bldg 563, Ave of Memories

Ft Monmouth, NJ 07703

You'll find more information about CIPs on Pages 2-5 of PS 594 (May 02). View the article on-line at:

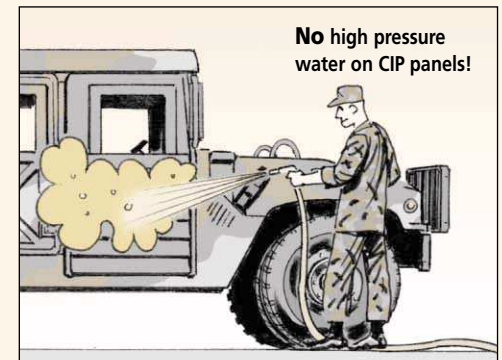
http://www.logsa.army.mil/pub/psissues/ps_594.pdf

High Pressure Cleaning Caution

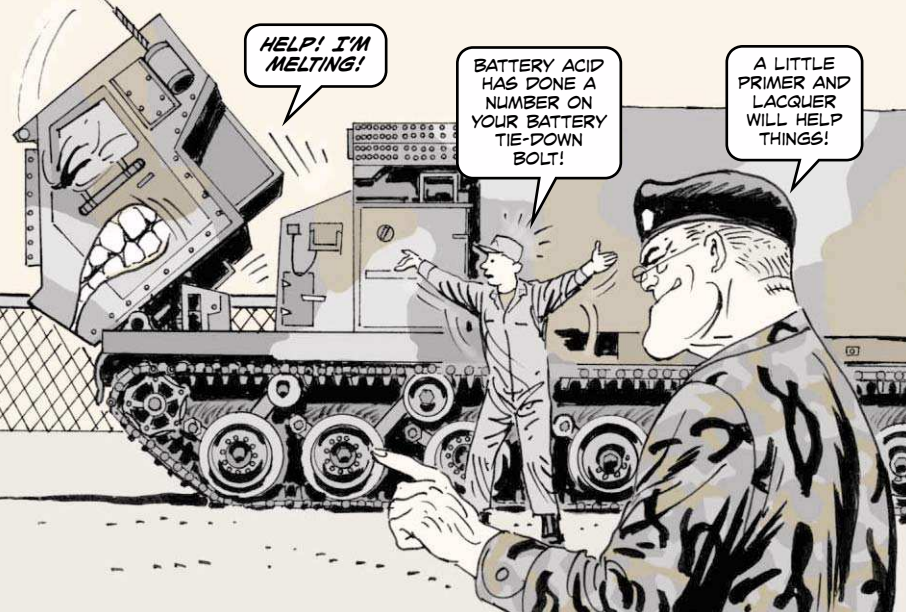
The CDs don't mention this, but you should **never** attempt to clean CIPs with a power washer or any other form of high pressure water. High pressure water will destroy the thermal tape. That ruins or seriously degrades the CIP's thermal signature and your protection from friendly forces.

Use a soft, clean, oil-free cloth to wipe the panels clean.

No high pressure water on CIP panels!



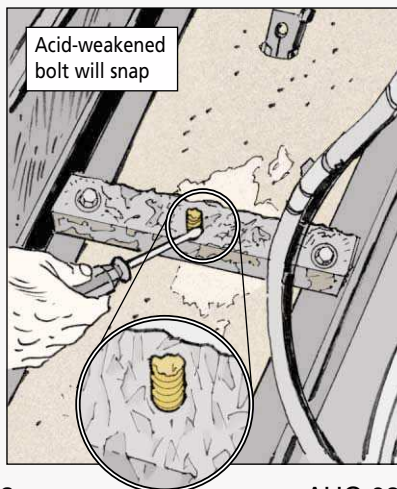
BROKEN BOLT A BUMMER



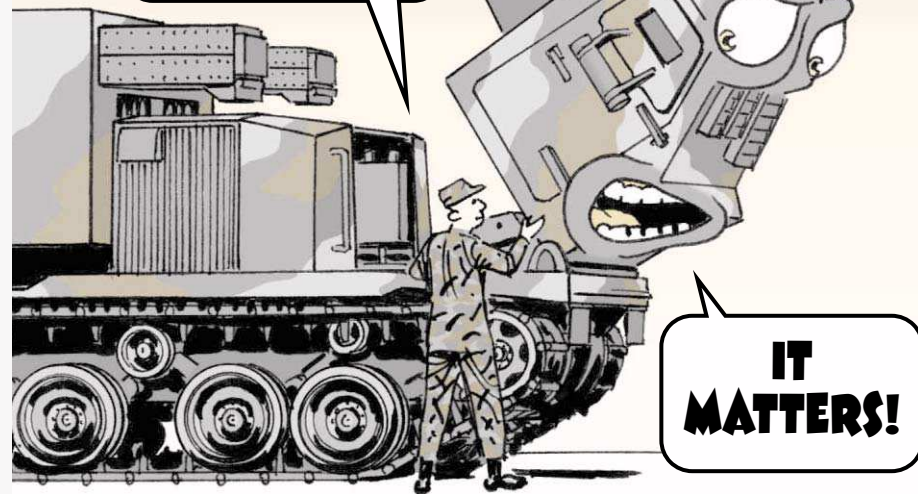
Unless the crew checks MLRS carrier batteries often, there's going to be a little overflow of battery acid from time to time, mechanics.

That acid drips down to the bottom of the battery box, coating the battery tie-down bolt, NSN 5306-00-933-1131. Then the bolt weakens and snaps when you try to remove the batteries.

Before installing a new bolt, try coating the new one with some primer coating, NSN 8010-00-515-2208, and lacquer, NSN 8010-00-166-1667. The primer coating and lacquer provide a protective coating that keeps acid from eating away at the tie-down bolt.

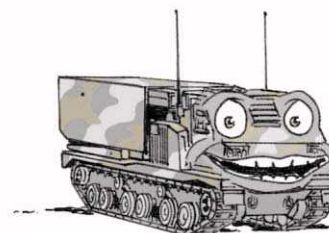
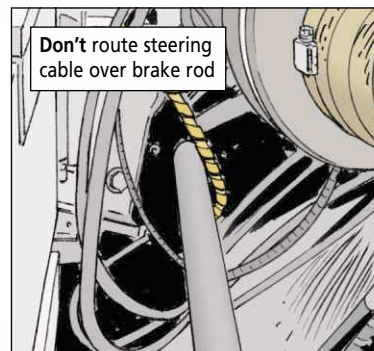


OVER OR UNDER?



Mechanics, when reinstalling the powerpack on an MLRS, you also have to reattach the steering cable. The question is, do you route the cable over or under the brake rod?

If the cable is routed over the brake rod, you've created a serious problem. When the cab is lowered, the steering cable gets pinched between the brake rod and the underside of the cab. That can result in a loss of steering.



SO DO THE MLRS- AND ITS CREW-A FAVOR. MAKE SURE YOU ROUTE THE STEERING CABLE UNDER THE BRAKE ROD WHEN REINSTALLING THE POWERPACK.

TRY THESE TOWBAR PARTS

HEY! I JUST
FOUND THE
PARTS WE NEED
TO REPAIR YOUR
TOWBAR!

AT
LAST!

Dear Half-Mast,

We have several M113A3 towbars, NSN 2540-00-936-7801, that need repair. But I haven't been able to find replacement components. Can you help?

SFC B.G.M.

Dear Sergeant B.G.M.,
You bet. Order from
this list of components
to repair your towbars.

- A** Pin, NSN 5315-01-035-5307
B Clevis, NSN 5340-01-051-3609

Tube assembly,
NSN 4710-01-507-6935

Bolt, NSN 5306-01-037-4886
Washer, NSN 5310-00-209-0698
Nut, NSN 5310-00-834-8755
Cotter pin, NSN 5315-00-843-0138

Tube assembly,
NSN 4710-01-507-6936

- C** Pin,
NSN 5315-01-031-6207
D Clevis,
NSN 5340-01-046-4770

Pin, NSN 5315-01-031-6207
Lock pin, NSN 5315-00-350-4326

Just remember, you'll
need two sets of the
medium duty and light duty
components
for each use. *Half-Mast*

AKERR for Training or Emergency Only

For training purposes or during an emergency situation when a recovery vehicle is not available, you can use the Allied Kinetic Energy Recovery Rope (AKERR) to recover tracked vehicles that weigh under 34 tons.

Unlike standard steel tow cables, the AKERR is an 80-ft long nylon rope with looped ends rather than a clevis.

TM 9-4020-200-10 has use and care information for AKERR. It also lists vehicles authorized to use the AKERR. Pay strict attention to the warnings and cautions in the TM. All recovery operations are dangerous and using AKERR does not change that.

The AKERR kit, NSN 4020-01-211-8382, contains the kinetic energy rope, two shackles and a canvas storage bag. The kit is authorized by CTA 50-970.

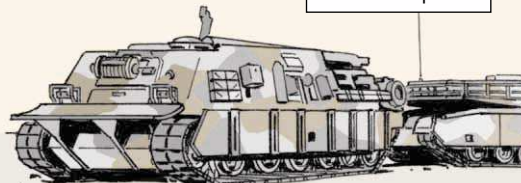
TOWING TIPS FOR TANKS

TRY THESE
TERRIFIC TANK
TOWING TIPS!

THE HERCULES IS A LOT HEAVIER AND STRONGER THAN THE OLD M88A1 RECOVERY VEHICLE, BUT YOU STILL NEED TO USE CAUTION WHEN TOWING A TANK. FOLLOW THESE TIPS...

- Always perform the recovery tow operational risk assessment shown on Page 0040 00-2 of TM 9-2350-292-10 to determine if a hold-back vehicle—either another tank or a second Hercules—is needed.
- Hook up the towbar following the instructions on Page 0043 00-2 of the -10 TM.
- Never allow anyone to ride in or on the tank being towed.
- Adjust your towing speed for the road conditions. Follow the guidance on Page 0040 00-3 of the -10 TM.
- Avoid steep slopes whenever possible. Your track can slip when towing uphill or downhill.
- Avoid making sharp turns or sudden stops. Keep turns slow and gradual and stay in first gear.

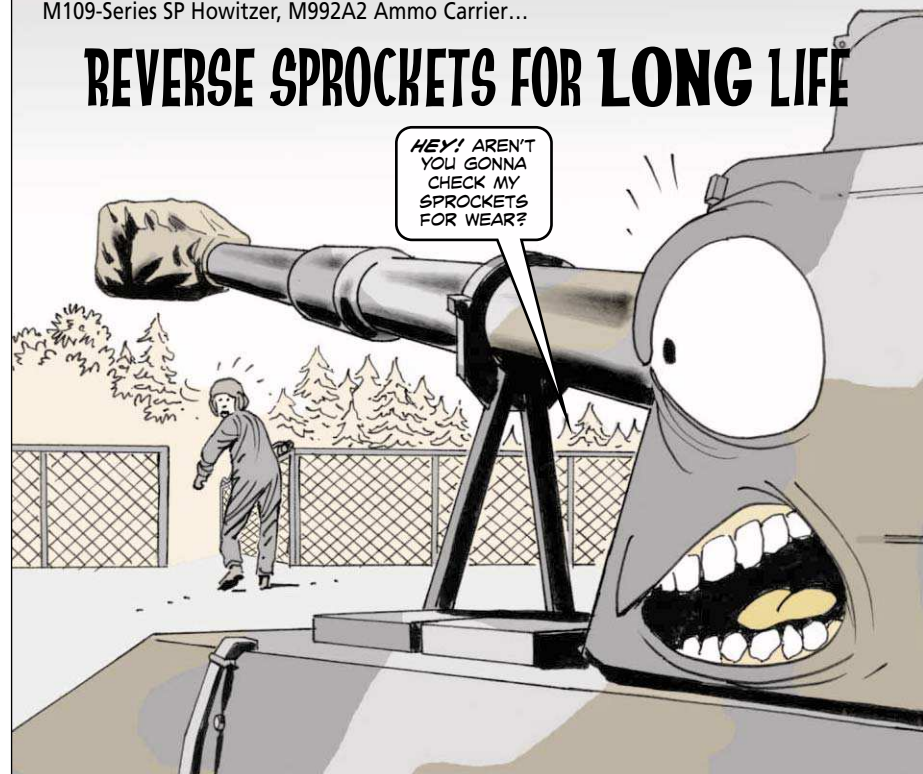
Tow slow and easy
with no sharp turns



If you don't do these things, the tank you're towing can jackknife, push you sideways, run into the back of your vehicle, ruin your transmission or brakes, and maybe even flip you over.

REVERSE SPROCKETS FOR LONG LIFE

HEY! AREN'T
YOU GONNA
CHECK MY
SPROCKETS
FOR WEAR?



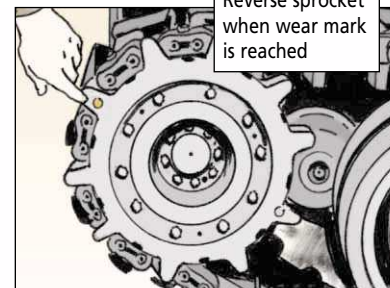
It's easy to tell when it's time to reverse the sprockets on your howitzer or ammo carrier, crewmen. Just eyeball the built-in wear marks on the sprocket teeth.

If you forget to check the sprockets after each operation, like it says in the -10 TMs, the sprockets may wear too far into one side of the teeth.

That causes the sprocket to "hook" track end connectors during operation. The connectors are damaged, track life is reduced and sprockets are broken.

Of course you should still reverse the sprockets annually to extend their life span. If the sprocket wears to the edge of the wear mark before the year is up, though, reverse it immediately. If both marks are reached, replace the sprocket.

Reverse sprocket
when wear mark
is reached



DON'T BE LEFT POWERLESS



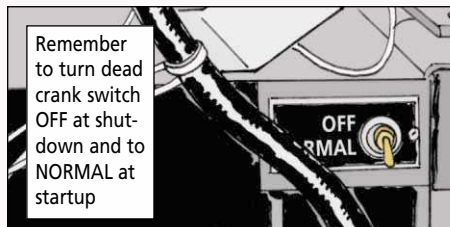
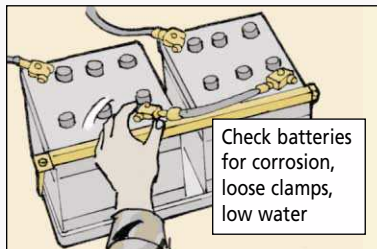
Being unable to launch Patriot missiles because the launcher has no power will not earn you gold stars from your CO. But that's the situation too many Patriot crews run into because they've neglected the 15-KW generators for the launcher. Don't be powerless because of lack of PM.

Regular PMCS is the best way to empower the launcher generators. At least every two weeks, check the generators' batteries for loose clamps, corrosion, and low water in the cells.

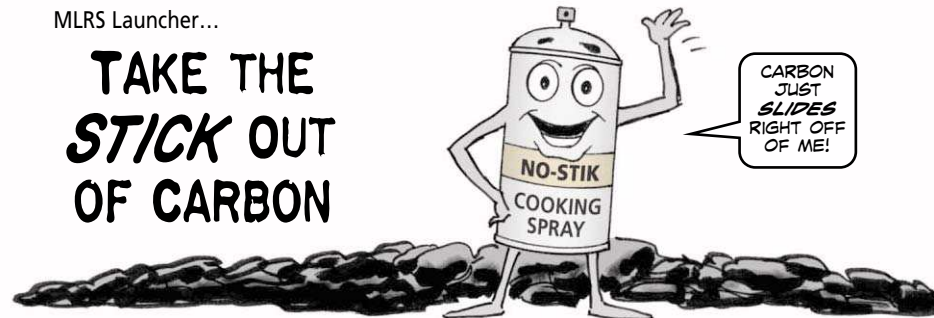
After you've finished, start the generators and let the batteries recharge for an hour. Report missing fan guards. The guards prevent sliced-off fingers. If the generators sit idle for weeks with no attention, count on the batteries going dead.

When you shut down the generator, remember to shut off the panel lights. If the lights are left on, the batteries can be drained by the lights. Also remember to turn the dead crank switch to OFF at shut-down. That prevents accidental cranking of the generator during PMCS, which could electrocute somebody or slice off fingers.

But remember at startup, the dead crank switch must be turned to NORMAL. Otherwise, nothing will happen when you try to crank up the generator. This is not mentioned in the startup procedure in TM 9-6115-643-10, so you might want to make a note.



TAKE THE STICK OUT OF CARBON

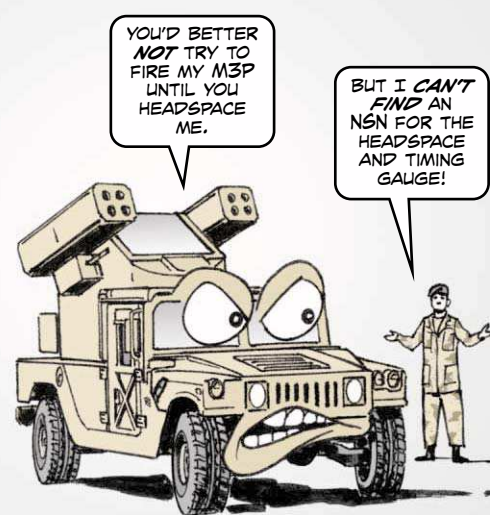


Cleaning off the baked-on carbon that covers the back end of your MLRS after firing is a royal pain. It takes hours of work, lots of CLP and a healthy dose of elbow grease to get the job done right.

You can prevent that cruddy situation by keeping a few cans of non-stick cooking spray handy. Just give all the problem spots a good spray before firing. The spray keeps the carbon from sticking as much and makes cleanup a lot easier.

Get a 22-oz can of non-stick cooking spray with NSN 8945-01-419-5579 or NSN 8945-01-419-4914. Both are local purchase items.

M3P Gauge NSNs



Dear Half-Mast,
We've been trying to order the Avenger's M3P machine gun headspace and timing gauge and sensor gauge, but the part numbers in TM 9-1425-433-10's Appendix B don't have NSNs. Please help us.

SGT J.B.

Dear Sergeant,
Glad to. Order the headspace and timing gauge with NSN 5280-13-116-6359 and the sensor gauge with NSN 5220-13-116-9121.

Half-Mast

SUBSCRIBE TO MAGAZINE PM

HEY!
WHERE ARE
YOU GOING
WITH THAT
LETTER?



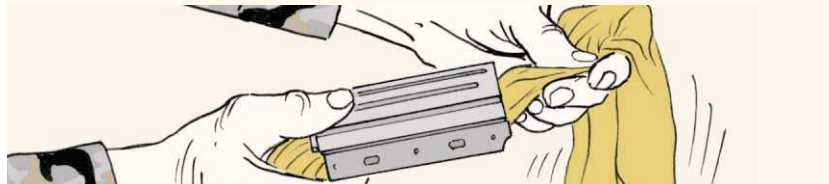
I'M RENEWING
MY MAGAZINE
SUBSCRIPTION!

A perfectly maintained M16-series rifle or M4/M4A1 carbine is of no more use than a stick if you haven't subscribed to magazine PM. A magazine that can't feed bullets leaves your rifle helpless and you a defenseless target.

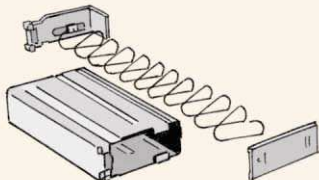
WHEN YOU
TAKE CARE OF
YOUR RIFLE,
REMEMBER
THIS MAGAZINE
PM...



- Take each magazine apart and run a clean cloth through each tube until all dirt is gone.



- Wipe off dirt from the spring and follower. Lightly lube the spring. If the spring and follower come apart, you need a new magazine. **Don't** try to reattach them.



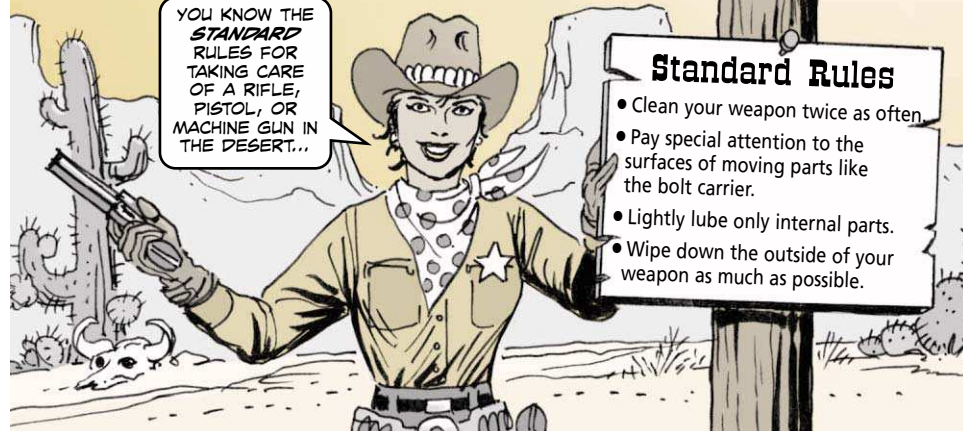
- In the field, protect magazines by keeping them in their bag, NSN 1005-00-193-8306, when they're not plugged in your rifle.



- Eyeball all seven magazines for dents or corrosion that could cause feeding problems. Turn in banged-up or corroded magazines. Do not jam the feed lips of the magazine against a table or anything else hard while loading. That's what bends the lips.

Shootin' in the Desert

YOU KNOW THE
STANDARD
RULES FOR
TAKING CARE
OF A RIFLE,
PISTOL, OR
MACHINE GUN IN
THE DESERT...



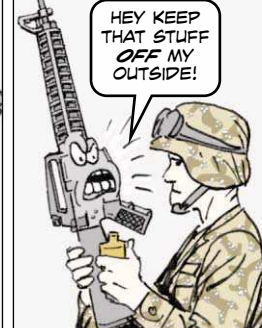
Standard Rules

- Clean your weapon twice as often.
- Pay special attention to the surfaces of moving parts like the bolt carrier.
- Lightly lube only internal parts.
- Wipe down the outside of your weapon as much as possible.

- Clean your weapon **twice** as often.



- Lightly lube only internal parts



- Wipe down the outside of your weapon as much as possible.



BUT THERE
ARE SOME
ADDITIONAL
TIPS FOR
YOUR M16
RIFLE OR
M4/M4A1
CARBINE...



Use the protective dust cap, NSN 5340-00-880-7666, the 30-round magazine bag, NSN 1005-00-193-8306 (that gets 500 abags), and M16 rifle cover, NSN 1005-00-809-2190, as much as possible to keep dirt out of the weapon and magazines.

Keep your ammo clean and clean the magazines before using them. Wipe out the magazines with a dry cloth and check for any damaged parts. But don't lube magazines. Lube attracts dirt and sand.

M16A4 Rifle...

HOW THE M16A4 IS DIFFERENT

THERE ARE DIFFERENCES WITH YOUR M16A4 AND IT'S IMPORTANT TO KNOW WHAT THEY ARE.

The 300-meter mark on the rear sight is 6/3, not 8/3 like it is for the M16A2. And after you reach the mechanical zero when you zero the sights, you move the elevation knob clockwise up two clicks past the 300-meter setting, not one like you did with the M16A2. That's Step 4 on Page 0011 00-7 in TM 9-1005-319-10.

6/3

When you mount the M5 adapter rail onto your M16A4 to replace the standard handguards, use the provided rail covers to protect the bare rails from rough treatment and your hands from the hot barrel. The rail covers can be arranged in any manner to cover exposed metal areas that your optics or other accessories don't cover.

Leave the screw at the top rear part of the adapter rail alone. It's a self-locking screw that keeps the mounting rail in place. Once it's removed, it's no longer self-locking and it must be replaced.

M249 Machine Gun...

Mounting the AN/PVS-4

FINALLY, A WAY TO GET US TOGETHER!

I'VE BEEN WAITING FOR THIS!

I'M GLAD I COULD HELP!

Dear Half-Mast,
How do I get the new AN/PVS-4 night sight mounting bracket for the M249 machine gun?

LT B.M.

Dear Lieutenant,
Order an adapter, NSN 4933-01-447-8991, and a rail grabber assembly, NSN 5340-01-449-8533. You will also need two screws, NSN 5305-01-015-5686, to attach the adapter to the AN/PVS-4, and two screws, NSN 5305-00-928-9540, to attach the rail grabber to the adapter. *Half-Mast*

M68 Optical Sight...

Keeping It Tight

Dear Editor,

We have had trouble keeping the M68 optical sight tight on our M16 rifles and M4 carbines. A loose sight makes accurate sighting difficult.

Armors can keep the mounting screws tight by putting a drop of sealing compound, NSN 8030-01-014-5869, in each screw hole before installing the screws. Sealing compound keeps the screws tight without making it impossible to remove the screws later.

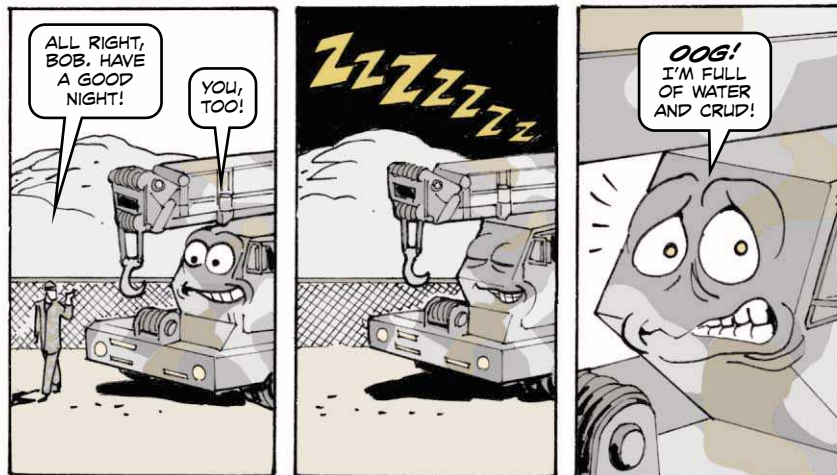
Put one drop of sealing compound in each mounting screw hole

CW2 Benjamin Stecker
HHC, 3/235th Airborne
Ft Bragg, NC



ADIOS TO WATER AND CRUD

QUESTION: WHAT HAPPENS TO YOUR 22-TON CRANE WHEN THE WEATHER CHANGES FROM WARM DAYS TO COOL NIGHTS?



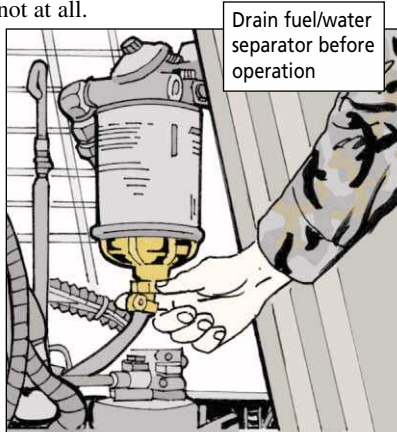
ANSWER: A SWEATBOX FORMS IN THE VEHICLE'S FUEL TANK.

That means you operators have to drain the fuel/water separator before each day's operation. Not draining the separator will leave water and crud in the vehicle's fuel system. Then the engine runs rough... or not at all.

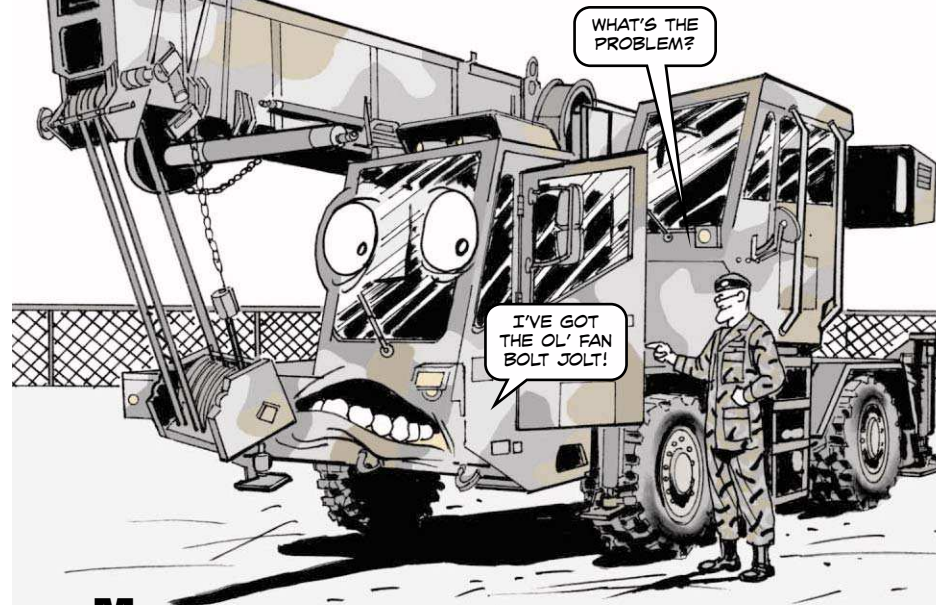
Open the separator—located behind the roadside engine access door—by turning its drain cock counterclockwise. Store drained fuel in an approved waste container. Never dump it down a drain or let it run on the ground from the separator's drain hose.

If the fuel is clear, you're OK. If the fuel doesn't run clear after you've drained half a pint or so, close the valve and report it to your mechanic.

Also, make sure your mechanic replaces the fuel filter at semiannual service time.

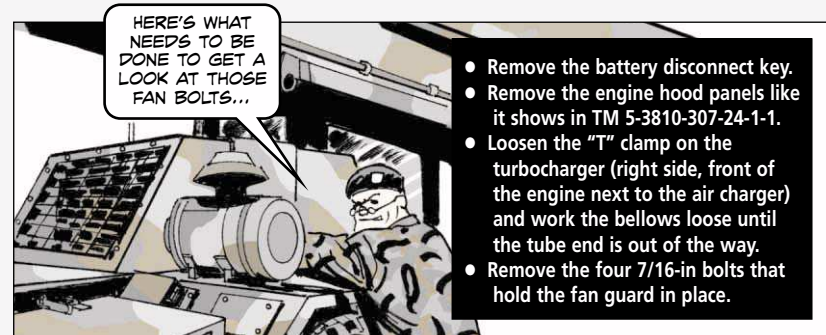


Fan Bolt Jolt



Mechanics, you've got to keep an eye on the 22-ton crane's engine cooling fan bolts. These bolts were not torqued properly at the manufacturer.

One loose bolt causes the other fan bolts to come loose. Eventually, the bolts shear off and the fan is propelled into the radiator, fan shroud and coolant or hydraulic lines. A busted coolant or hydraulic line means a loss of fluid—causing extensive damage to the crane's engine.

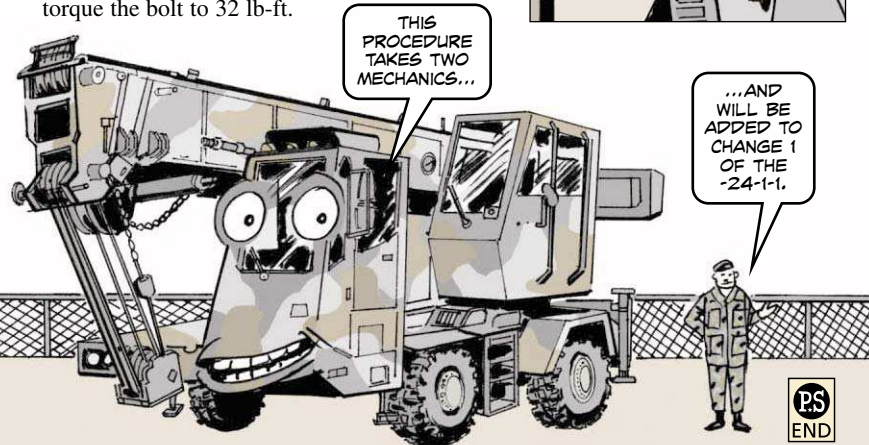
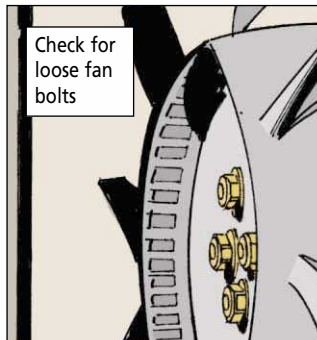


You have to place your hand and arm through the fan blades to get at the fan bolts. Use the mechanics mirror from the No. 1 Common shop set to see the position of the fan bolt heads. The mirror will help you align the torque wrench with the head of each fan bolt.

Because of the tight space, use torque wrench, NSN 5120-01-355-1734, and a 16mm socket from the No. 1 Common shop set.

Check each bolt with the torque wrench to see if it's less than 32 lb-ft of torque. Less than 32 lb-ft means the bolt is loose.

If any bolt is loose, remove it with a wrench—but not the torque wrench. Clean the bolt's threads with a wire brush. Use sealing compound, NSN 8030-01-250-3969, on the bolt threads before you reinstall the bolt. Then torque the bolt to 32 lb-ft.



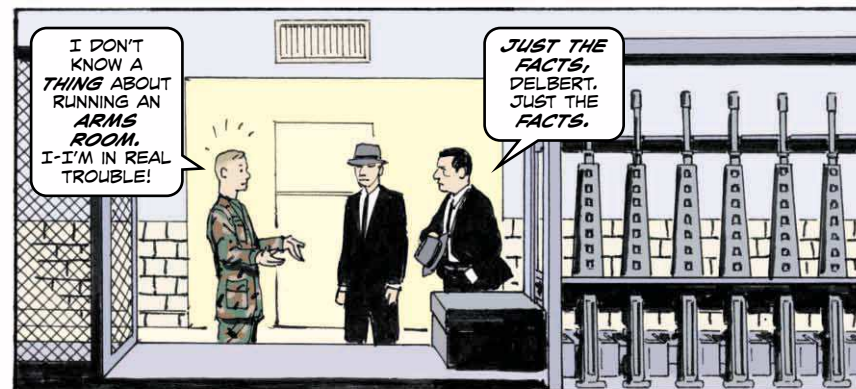
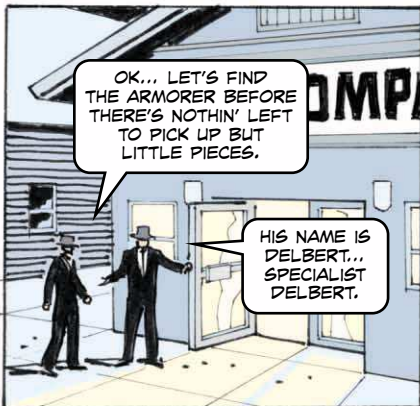
LRT-110 Crane Brake Fluid Reservoir

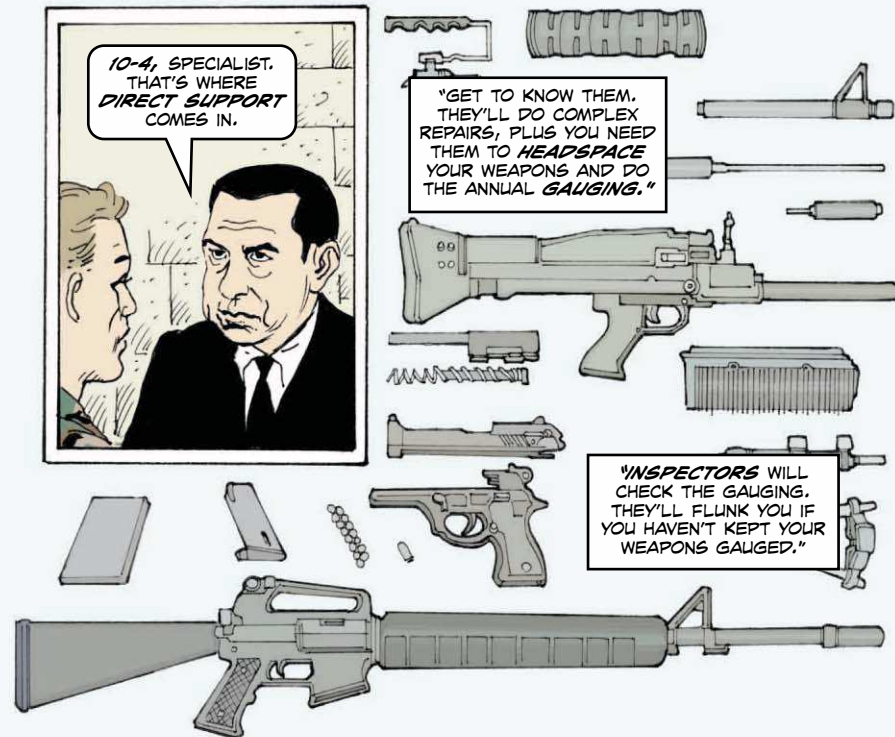
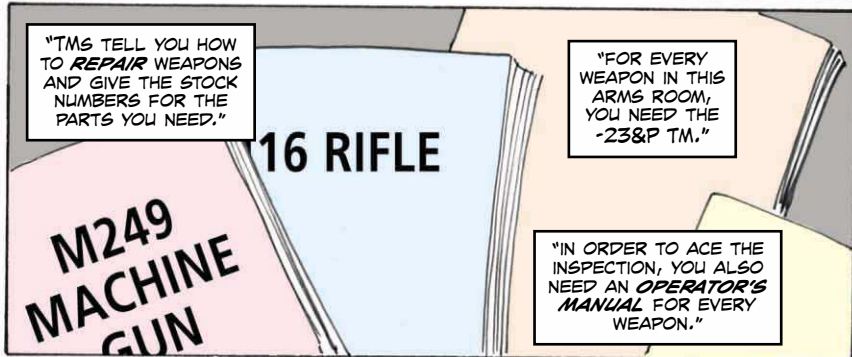
The elements and rough handling can KO the caps on the 7½-ton crane's brake master cylinder. Don't order the whole reservoir like it shows in TM 5-3810-305-24P. Instead, order the cap with NSN 5340-01-173-9156 and the diaphragm with NSN 5340-01-173-9155. Make a note of these NSNs until the TM is updated.

LRT-110 Crane Cable

Use NSN 4010-00-171-6315 to get the winch cable for the 7½-ton crane. The parts info shown for Item 3, Fig 13-1 of TM 5-3810-305-24P is no longer available.





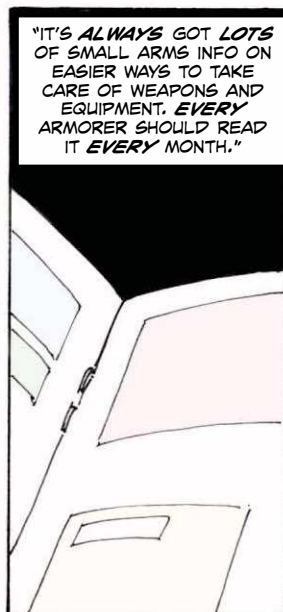




HEY, GUYS... I THINK I CAN DO THIS! IS THERE ANYPLACE ELSE I CAN GO FOR TIPS ON BETTER WAYS TO TAKE CARE OF WEAPONS?



SON... YOU'VE NEVER HEARD OF PS MAGAZINE?



"IT'S *ALWAYS* GOT *LOTS* OF SMALL ARMS INFO ON EASIER WAYS TO TAKE CARE OF WEAPONS AND EQUIPMENT. *EVERY* ARMORER SHOULD READ IT *EVERY* MONTH."



"AND IF YOU NEED BACK ISSUES, YOU CAN FIND 'EM ON THE INTERNET."



GEE... *THANKS*, GUYS. YOU SAVED MY BUTT. I WON'T HAVE TO SPEND THE REST OF MY TOUR PICKING UP *TRASH*.



NO NEED TO THANK US, SOLDIER. THAT'S OUR *JOB*. WE'RE LARS.

THAT'S WHAT WE DO.



D'YOU THINK COS WILL EVER REALIZE THAT THE *ARMORER* HAS AN IMPORTANT JOB AND THEY SHOULDN'T PUT JUST *ANYBODY* IN THE ARMS ROOM, JOE?



I DON'T KNOW, BILL... BUT, THAT'S WHAT KEEPS *US* BUSY.

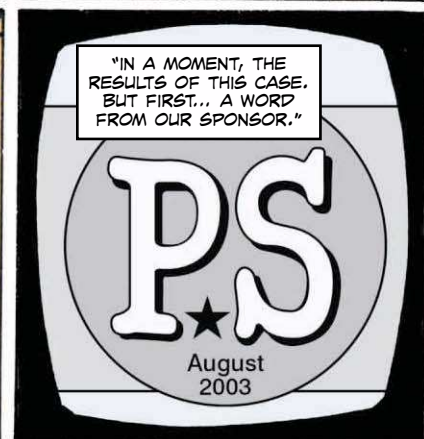
YOU FEEL LIKE A CLIP OF JOE BEFORE WE CALL IT A NIGHT, BILL?



A CLIP OF JOE, JOE?



YEP. I'LL GET THE BILL, BILL.

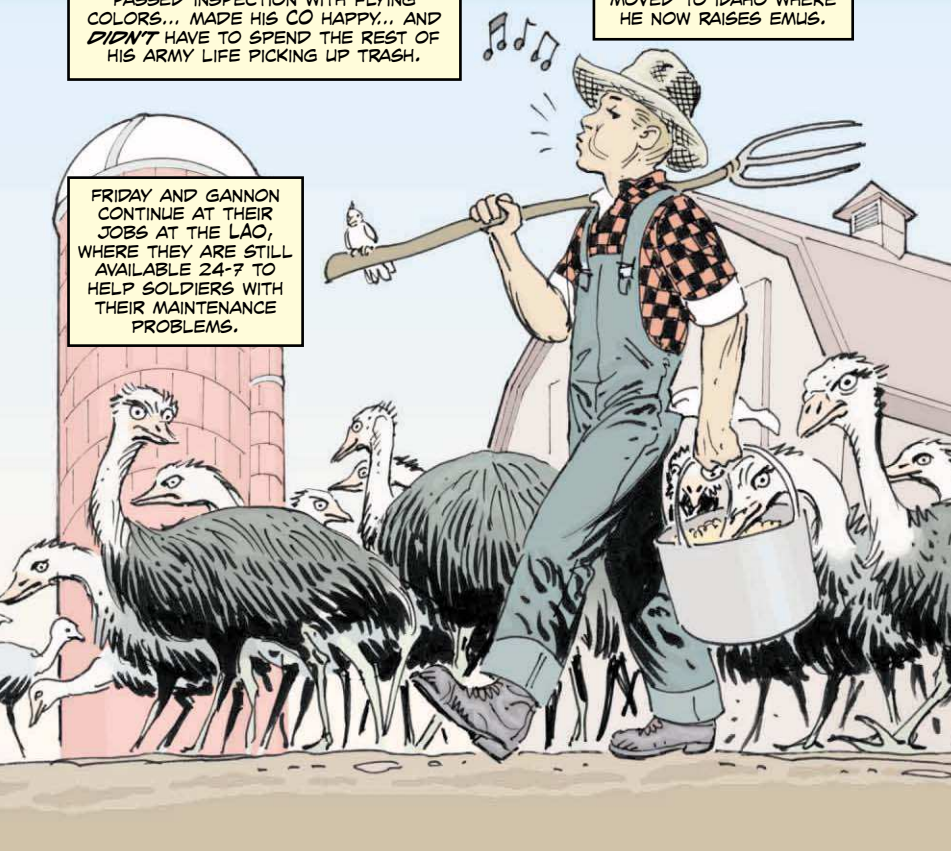


"IN A MOMENT, THE RESULTS OF THIS CASE. BUT FIRST... A WORD FROM OUR SPONSOR."



SPECIALIST DELBERT RECEIVED TRAINING IN RUNNING AN ARMS ROOM... PASSED INSPECTION WITH FLYING COLORS... MADE HIS CO HAPPY... AND DIDN'T HAVE TO SPEND THE REST OF HIS ARMY LIFE PICKING UP TRASH.

AFTER FINISHING HIS ARMY CAREER, DELBERT MOVED TO IDAHO WHERE HE NOW RAISES EMUS.



Clothing...

BOOTS FOR AVIATORS



Aviators and crews, you now have another choice in footwear.

The US Army Aviation Center has waived the requirement in AR 95-1, *Flight Regulations*, calling for wearing only leather boots while performing duties.

Now you're also authorized to wear the black Army combat infantry boot (the Belleville 700) and the sand-colored Air Force desert flyers boot (the Belleville 790).

But, all production of the combat infantry boot is going into initial issue stock. That means you can't order them yet. If they're not available at clothing sales stores or DSCP yet, they will be soon.

The desert flyers boot is back-ordered. This boot is going first to deployed or deploying units. NSNs may be found at the DSCP website:

<http://ct.dscp.dla.mil/ascot/>

Belleville boot 790 (desert)



PS 609

Belleville boot 700 (black)



35

AUG 03

STOP CORROSION DEAD IN ITS TRACKS

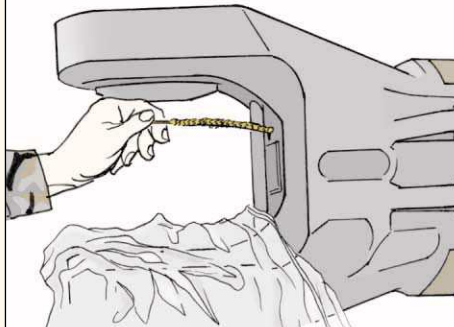


To get a handle on corrosion and to stay ahead of the game, eyeball every nook and cranny of your bird. For example, prior to rotor head or blade installation, check out the drain holes in the opening of each pitch-varying housing where the tie bar pin weights are installed.

The opening on the inside of the weight cavity area of each pitch-housing has a drain hole—that's just above the tie-bar pin—for draining water and moisture.

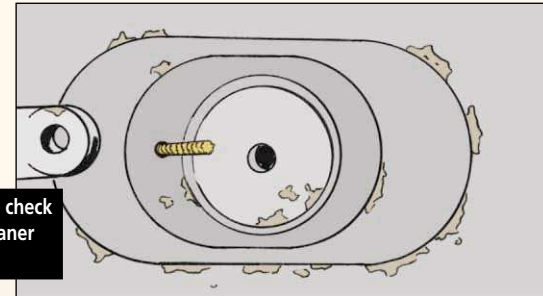
If sediment and dirt clog the hole, water and crud will back up into the cavity and corrosion can cause extensive metal damage. That can lead to depot repairs if the drain holes are not kept clean. Use a pipe cleaner, NSN 9920-00-292-9946, to remove any debris that clogs the hole.

Clean drain holes when blades are removed



Until the TM is changed, make a note to clean the drain holes.

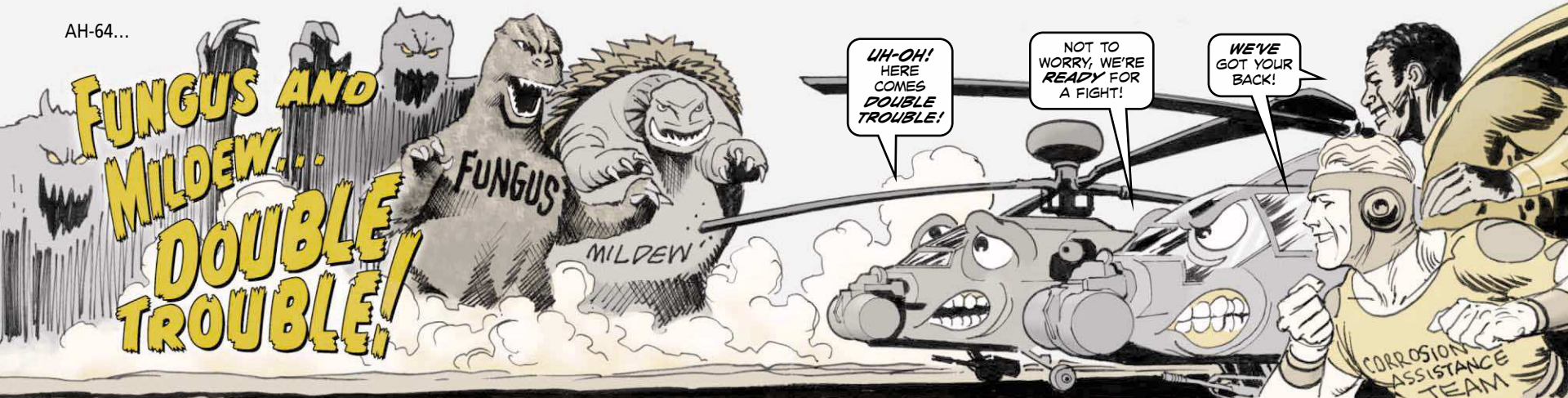
When weights are removed, check drain holes and use pipe cleaner for clogs inside each cavity



LOOKS LIKE WE'VE GOT A BLADE PROBLEM!

OK. REMOVE 'EM AND FIX 'EM...

BUT, BEFORE YOU INSTALL 'EM, CHECK MY PITCH HOUSING DRAIN HOLES FOR CLOGS.



Corrosion is one nemesis of aircraft. But, now the twins, fungus and mildew, have joined the fight. Like a virus, they grow on the inside surfaces of the Apache's avionics bay, ammo bay and tail boom.

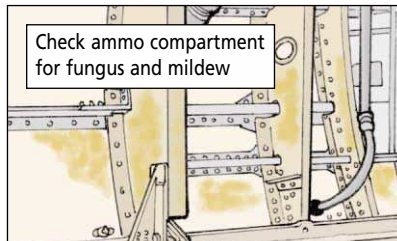
To annihilate these microbiological growths and keep 'em from coming back to dine on your bird, use the procedures below.

(As always, follow your TMs warnings and cautions and use protective measures before cleaning. Wear safety goggles, NSN 4240-00-052-3776 or 4240-01-292-2818, to shield your eyes from chemical splashes. And always wear rubber gloves, NSN 8415-00-266-8677, when handling chemicals.)

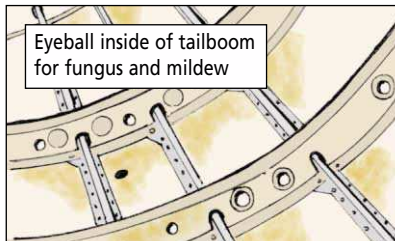
When using fungus remover, P-D-410 and mildew remover, OS-642, never mix them together.)

Removing Fungus Growth

Remove fungus by scrubbing with a solution of 2 ounces of P-D-410, NSN 7930-00-880-4454, per 1 gallon of water. On unpainted surfaces the scrubbing mixture won't remove the fungus. You must remove the fungus like it says in Chapter 5 of TM 1-1500-344-23. After the fungus is removed, rinse the area thoroughly of all residue.



PS 609



38

AUG 03

Removing Mildew

Mildew may be produced by fungus growing on organic matter that adheres to a soft paint film or on the paint itself.

Remove mildew by scrubbing with tri-basic sodium phosphate, OS-642, NSN 6810-00-141-6080. Mix 3 pounds per 10 gallons of water and apply to affected areas. Then, rinse off immediately with clean water and dry with a lint free cloth. Leaving the solution on a painted surface too long will loosen the paint. To prevent reoccurrence of mildew, you should remove the old paint like it says in TM 1-1500-345-23 and TM 1-1500-344-23.

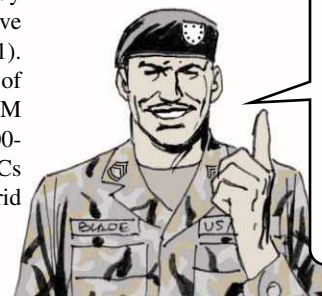
Cleaning Plastics

Plastics are composed of different chemical compositions varying widely in chemical and physical properties.

One plastic may be cleaned by one method, but that method may destroy another type of plastic. Generally, organic solvents, like petroleum solvents and mineral spirits paint thinner, should not be used to clean plastic or come in contact with plastic.

Always clean plastic by wiping with a lint-free cloth or sponge moistened with clean water, or a solution of 2 ounces of P-D-410 per gallon of water.

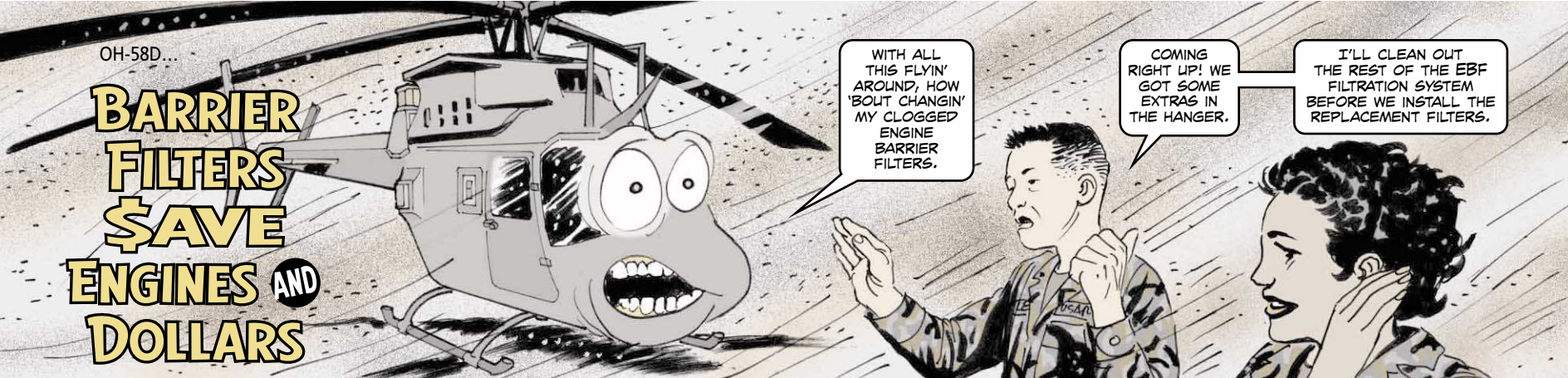
Plastics are polished by rubbing with ground abrasive technical pumice (SS-P-821). For other cleaning methods of certain plastics, check out TM 1-1500-344-23 or TM 1-1500-343-23, which contain CPCs and sealants needed to get rid of fungus and mildew.



BY THE WAY, IF YOU NEED CORROSION PREVENTION SITE VISITS OR HELP, CONTACT THE PEO AVIATION CORROSION ASSISTANCE TEAM HOTLINE AT DSN 897-0209, (256) 313-0209 OR CALL SIDNEY HARRISON AT: (256) 876-9034 OR DSN 746-9034.

OH-58D...

BARRIER FILTERS \$AVE ENGINES AND DOLLARS



Mechanics, your new Kiowa Warrior engine barrier filters will prevent FOD from entering the engine if they're kept clean.

As long as air flows unrestricted through the new EBF filtration system, the filters will prevent compressor erosion and subsequent engine failure and replacement. That's what will happen if unfiltered air and all that it brings with it is sucked into the engine.

Cleaning Tips Not in TM

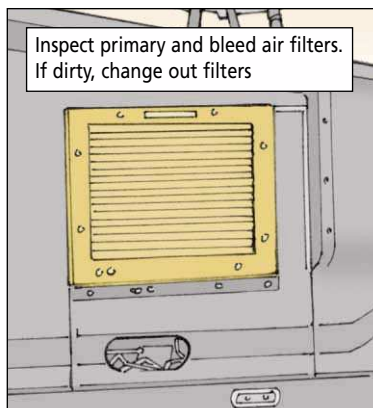
MWO 1-1520-248-50-15, installed the new filters. Here are some lessons learned to keep the filters clean as a whistle.

The maximum service life of the filters is determined by the environmental conditions you're flying in. So take one or more of the spare set of filters with you to the field for each aircraft. Sandy and dusty flying conditions clog the filters much quicker and require more cleaning and changing of the filters.

To get more hours out of the filters before cleaning or changing, "shake out, not hammer out," the heavy accumulation of dust and dirt. Use extreme care, though, and don't shake them too hard or you'll damage the filter and its frame.

Plans for a unit-made device to shake out the filters is available along with EBF maintenance procedures. The info is contained in a new manufacturer's commercial manual. For a copy, contact Ray Hensley (256) 955-7441 or email

Raymond.Hensley@redstone.army.mil



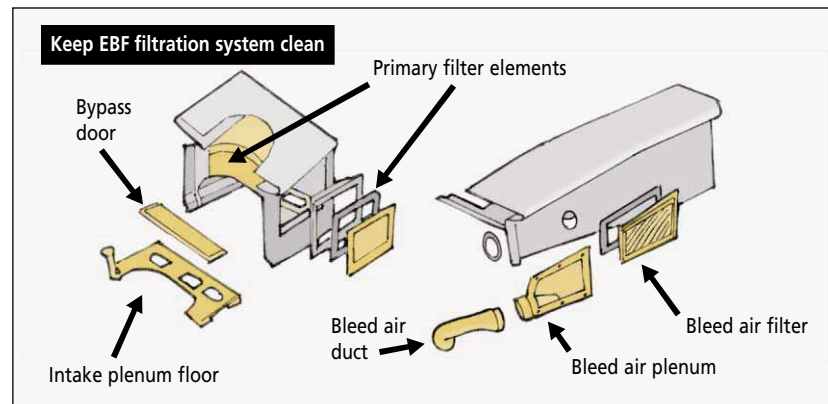
Cleaning dirty filters in the field can be a difficult process. So always have the spares on hand when you need to change out a filter. Clean the dirty filters when you have the time and facilities to do it properly.

Dirty filters require lots of low pressure water to completely flush out contaminants. Too little water won't clean the filters properly.

While washing the filters, do not allow contaminated water with filter oil and cleaning solvent to run onto the ground. To dispose of contaminated water, check with your local environmental folks for guidance.

Along with the water, use only the approved cleaning solvent and the filter oil supplied with the MWO kit. If you need more, NSN 6850-01-486-7201 brings the cleaning solvent and NSN 4330-01-486-7174 brings the filter oil. After washing, allow the filters to thoroughly dry before you re-oil them and place them back on the aircraft.

If you need a new engine filter assembly, order NSN 2945-01-488-6576. NSN 2945-01-488-6577 brings the bleed air filter assembly.



FHMX...

WHOA!
THERE'S A LOT
OF THESE CIRCUIT
CARD ASSEMBLIES
OUT HERE!

YEAH!
SOMEBODY
HASN'T GOTTEN
THE WORD...

**CCAs
Aren't
Throwaways!**

The circuit card assemblies (CCAs) in your frequency hopping multiplexer (FHMX) are depot repairable items. Stop throwing them away!

The CCAs are:

NSN 5998-01-424-2269, PN A3251884;
NSN 5998-01-422-6520, PN A3251869;
NSN 5998-01-422-6522, PN A3251899;
NSN 5998-01-441-2981, PN A3251889;
NSN 5998-01-422-9779, PN A3251874.

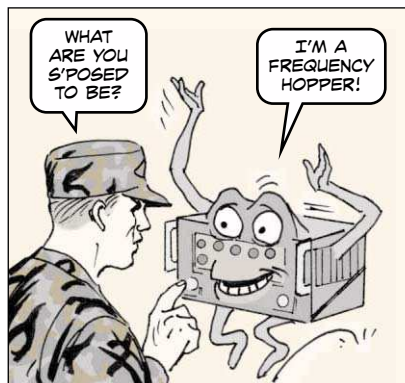
If you're saying "Hold on a second, I know that last one, NSN 5998-01-422-9779, is a throwaway," you need to get updated. It once was, but now it's not!

All these cards are now under a depot repair program run out of Tobyhanna Army Depot. Send cards for replacement to:

Tobyhanna Army Depot
BLDG 2, DLA/DDTP
11 Hap Arnold Blvd
Tobyhanna, PA 18466

Mark the package with, "For DODAAC W25G1W."

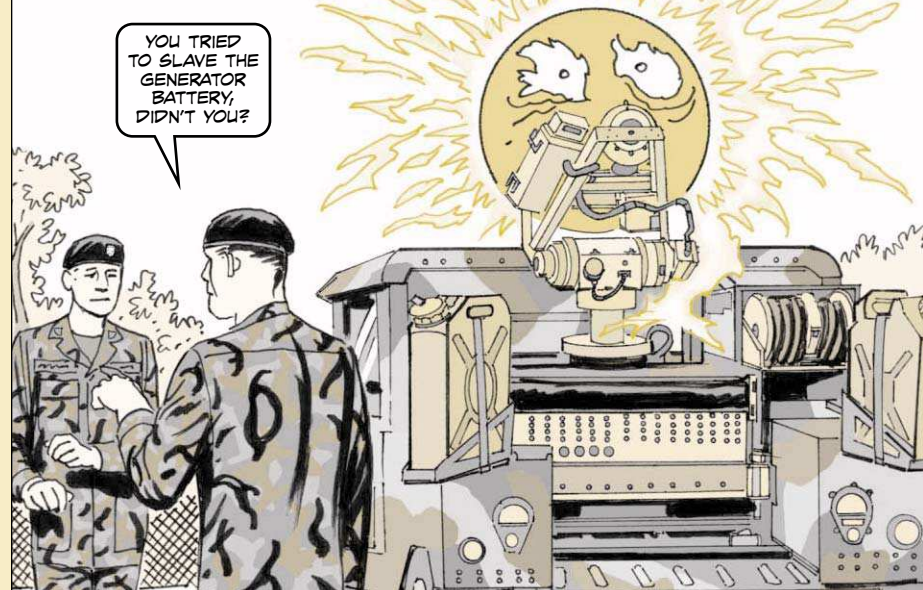
And when you send in the cards, send in all the parts, too! That includes cable assemblies.



AN/TSC-154...

BE A BATTERY SMARTY!

YOU TRIED
TO SLAVE THE
GENERATOR
BATTERY,
DIDN'T YOU?



The batteries on the diesel engine generator set (DEGS) on your AN/TSC-154 secure mobile anti-jam reliable tactical terminal (SMART-T) can get you in trouble if you try to jump start the engine.

Soldiers have been seen using jumper cables in an effort to bring dead DEGS batteries to life.

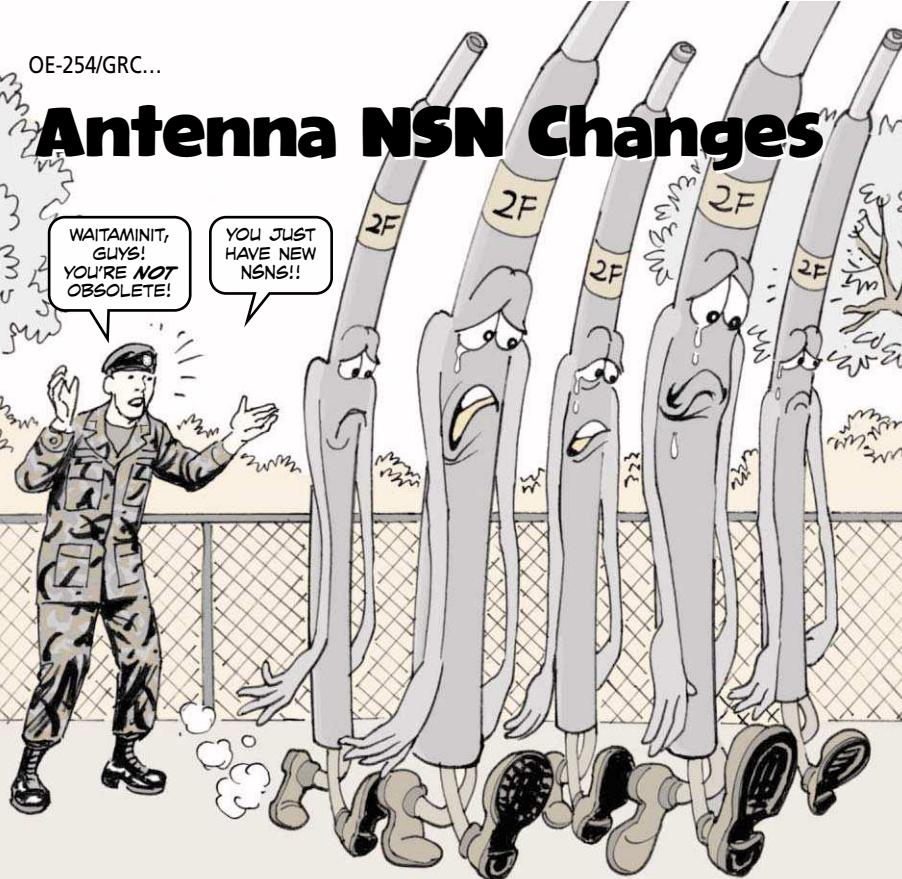
If the batteries are discharged or the battery charger has failed, you must replace the batteries, NSN 6140-01-484-5341. Do not try to slave them or jump them.

If you're in a bind and need your SMART-T up and running, it can take DC power from the HMMWV it's mounted on. You can also get AC power from another generator with the equivalent output of the PU-815 DEGS.

During the scheduled retrofit, warning stencils will be applied on the DEGS that warn the user not to jumpstart or slave the batteries. Future additions to TM 11-6115-481-13 will also have the warning.

A Ground Precautionary Message (CECOM GPM 03-006) was issued that provides additional details. SMART-T DEGS users should obtain copies of the message and keep them with their TMs. Copies of the message can be obtained through your local CECOM LAR or online at <http://aeps.ria.army.mil>

Antenna NSN Changes



There have been three NSNs changed for the OE-254 antenna. They are:

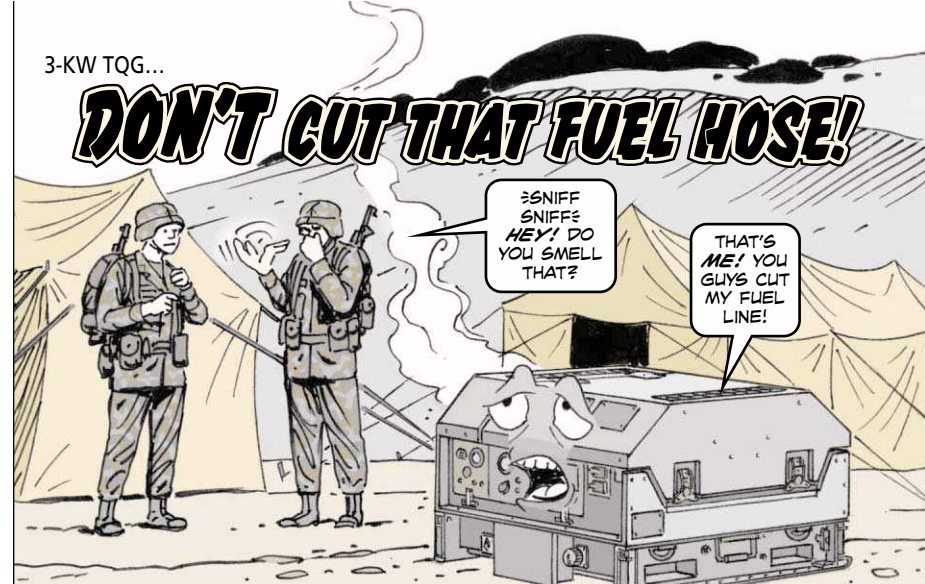
Item	Old NSN 5985-01-	New NSN 5985-01-
Sleeve	072-8015	327-1448
Sleeve	072-8016	326-5533
Mast section	072-8018	324-3464

Although these changes have made it to the AMDF and FED LOG, many units have not picked them up. They are ordering these parts under the old NSNs using a requisition transaction advice code of 2F.

Code 2F means the item is obsolete, but still required. But these items are not obsolete! When you use 2F, the computerized supply system kicks out your requisition and your request must be handled by hand. This increases workload and slows down the shipping (and arrival) of your part.

So update every record you have with these new NSNs and tell your folks to always check the AMDF or the FED LOG before they use the 2F code.

DON'T CUT THAT FUEL HOSE!



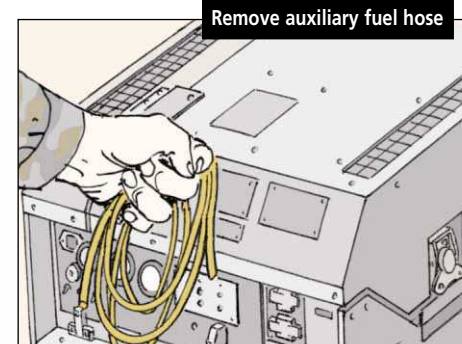
A leaking fuel hose on your 3-KW tactical quiet generator (NSNs 6115-01-285-3012; 6115-01-287-2431; 6115-01-322-8583; 6115-01-322-8582) can make for a real bad day. At the very least, you will have an environmental hazard—at the worst, a fire!

Holes are showing up in the fuel hoses because the pull/start rope of the recoil starter assembly is rubbing against the hose and cutting away some of the covering. This is happening between the primary fuel pump and the fuel filter assembly.

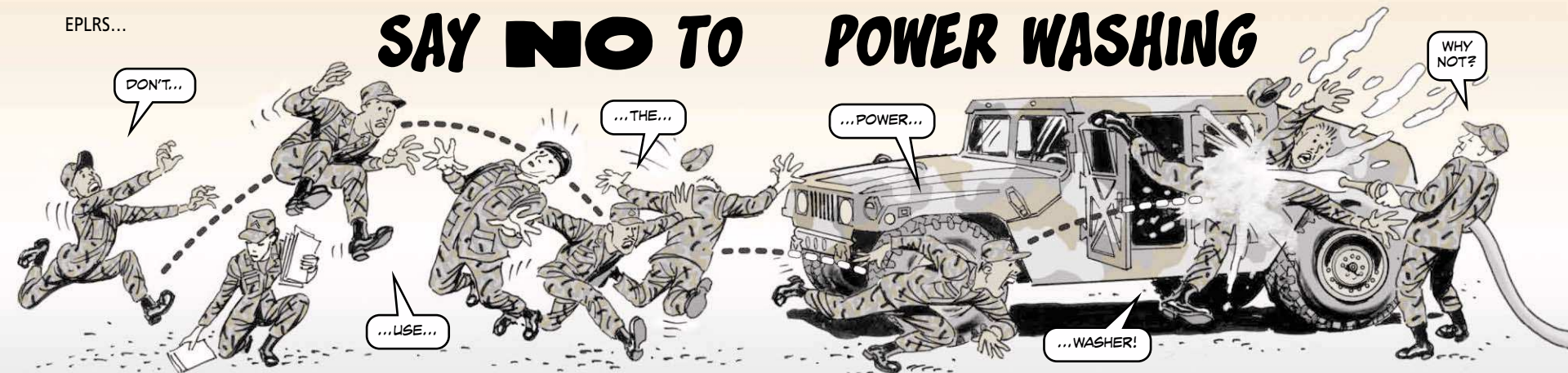
It seems the auxiliary fuel hose forces the primary fuel hose down into the pull/start rope. If you frequently start your generator manually, you will eventually cut a hole in the fuel hose.

Here's the fix:

1. Remove the auxiliary fuel hose before you manually start the generator.
2. After the generator starts, put the auxiliary fuel hose back in the same spot.
3. Check the primary fuel hose to make sure no rubbed spots are showing up. If your fuel hose is already cut or damaged, it must be replaced!



SAY NO TO POWER WASHING



THERE'S A **BIG PROBLEM** WITH WATER DAMAGE TO THE ENHANCED POSITION LOCATION REPORTING SYSTEM RADIO/TRANSMITTERS.

THE PROBLEM IS VEHICLES WITH EPLRS BEING WASHED WITH HIGH-PRESSURE WATER.

EPLRS RTS MUST BE REMOVED BEFORE DOING **ANY** TYPE OF POWER WASHING OF A VEHICLE.

HERE'S THE RIGHT WAY TO **REMOVE** AN EPLRS...

1. On the RT front panel, turn POWER switch fully counterclockwise to OFF.
2. Turn the connector nut of P1 on URO extension cable counterclockwise and unplug it from DATA connector J3 on the RT front panel.
3. Turn the connector nut of P1 on the antenna cable counterclockwise and unplug it from ANT connector J2 on the RT front panel.
4. Turn the connector nut of P1 on the power cable counterclockwise and unplug it from the J1 on the right side of the SPA.
5. Disconnect the RT and SPA ground leads at the quick-disconnect terminals by pulling the terminals apart. Leave the center quick-disconnect terminal of the RT ground lead with the RT half of the ground lead.
6. Turn the two knurled knobs on the front of the resilient mount counterclockwise to free the retaining latches and slide the latches downward to clear the RT.
7. Slide the RT and SPA forward as a unit until the two pins at the rear of resilient mount disengage from holes in the rear of the SPA.
8. Remove the RT and SPA from the resilient mount as a unit and place it on a flat, horizontal surface.
9. Lift the two butterfly handles on the latches and turn counterclockwise to free the latches.
10. Disengage the latches from slots in the SPA and carefully pull the RT and SPA apart.



AND HERE'S THE RIGHT WAY TO PUT THE EPLRS **BACK IN...**

1. Place the RT on a flat, horizontal surface in front of the SPA and slide the RT and SPA together, making sure that the connector on the rear of the RT mates with the connector on the SPA and that the four pins on the rear of the RT enter the four holes in the SPA.
2. Engage the latches with the slots in the SPA and turn the butterfly handles clockwise to secure the RT to SPA.
3. Slide the RT and the SPA into the resilient mount as a unit until the two pins at the rear of resilient mount engage holes in the rear of the SPA.
4. Slide the two retaining latches upward to engage the RT and turn the knurled knobs clockwise to secure the latches.
5. Connect the RT and the SPA ground leads by snapping the two halves of the quick-disconnect terminals together.
6. Plug the connector P1 of the power cable into the J1 on the right side of the SPA and turn the connector nut clockwise to secure it.
7. Plug the connector P1 on the antenna cable into ANT connector J2 on the RT front panel and turn the connector nut clockwise to secure it.
8. Plug the connector P1 on the URO extension cable into the DATA connector J3 on the RT front panel and turn the connector nut clockwise to secure it.
9. Reload the keys according to the procedure in TM 11-5825-283-10.
10. Perform the surface vehicle radio set test according to the procedures in TM 11-5825-283-20&P.

REPLACE EXHAUST VALVE TIP YOURSELF

LOOKS LIKE YOUR EXHAUST VALVE TIP IS CRUNCHED.

GUESS THIS MEANS A LONG TRIP FOR YOU TO SUPPORT.

I DON'T NEED TO GO TO DS. YOU CAN REPLACE MY VALVE TIP!



NBC NCOs, you no longer have to send your ACADAs off to support when the tip of the exhaust valve breaks. You can take care of broken tips yourself.

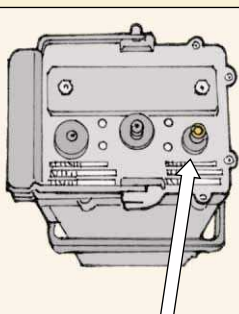
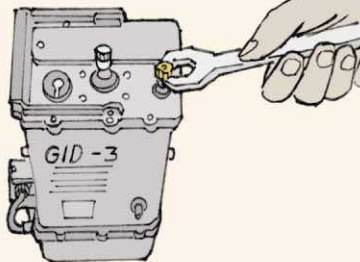
The replacement procedure was added in Change 2 to Page 4-37.0 TM 3-6665-321-12&P. If you don't have Change 2, here's how to replace the exhaust valve tip:

1. Unscrew the exhaust port tip counterclockwise with a 5/16-in open-end wrench if enough of the six-sided flat portion of the tip is undamaged. If there's a lot of damage, put a flat blade screwdriver in the remaining part of the tip and unscrew it counterclockwise.

2. Check the exhaust port cavity for any remaining pieces of the tip. Remove them.

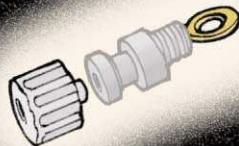
3. Make sure the O-ring is still in place within the cavity. If the O-ring has come out, put it back in the cavity.

Unscrew tip with wrench



Look in cavity for tip pieces

Put O-ring back in cavity

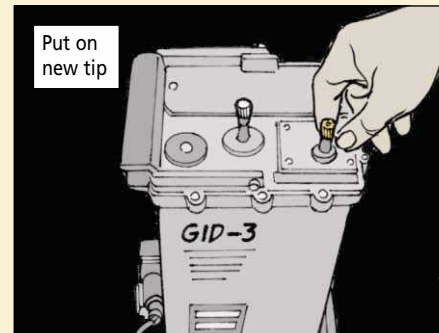


4. Put the new tip, NSN 4730-01-494-7215, on the metal part of the exhaust port and hand-tighten it clockwise. Tighten it carefully so that you don't damage the six-sided flat portion of the tip.

5. Tighten the tip with a 5/16-in open-end wrench.

You cannot replace the tip for the inlet valve. If its tip breaks, you must replace the whole valve using the procedure in Para 3.4.1.

Put on new tip



M40/M42-Series Mask...

How Do I Order Headharness?



Dear Half-Mast,

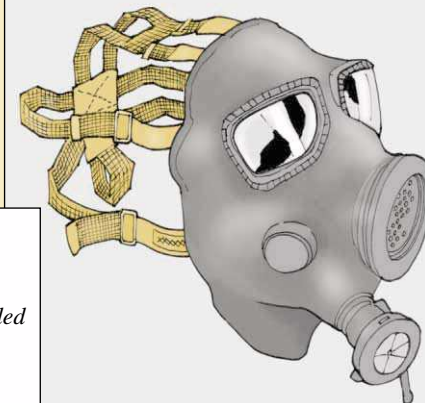
How do we order the headharness for the M40A1 and M42A2 masks? There is no NSN listed for the headharness on Pages 1-2 and 1-3 in TM 3-4240-346-20&P.

SFC R.P.

Dear Sergeant R.P.,

When the TM was printed, the headharness NSN wasn't available. NSN 4240-01-464-7839 will be added in the next revision to the TM.

Half-Mast



M40/M42-Series Masks...

ALL THOSE IN FAVOR OF GETTING THE NEW INSERTS AND OUTSERTS, PLEASE SAY *YAY!*

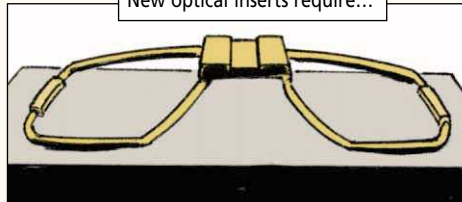
The Eyes Have It!

NBC NCOs, there are two pieces of equipment for the M40/M42 masks that will help your customers see better and safer:

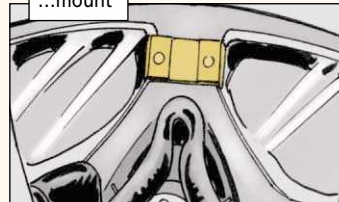
New Optical Inserts

The old one-piece optical insert has been replaced by an M40/M42 vision correction mount and a prescription lens carrier. When you have a soldier who needs a new optical insert, first check with your local NBC supply office to see if they have any vision correction mounts on hand. If they don't, let your optical lab know when you order new lenses. They will usually provide the mount if you don't have any on-hand.

New optical inserts require...



...mount



If your optical lab doesn't have any mounts or you need to replace a broken mount, order one with NSN 4240-01-389-7152. Instructions for installing, removing, and adjusting the new optical insert are on Page 2-68 of the M40A1/M42A2's TM 3-4240-346-20&P.

For more info, see SBCCOM supply advisory message 03-07-002 or contact SBCCOM's Doug Vanatta at DSN 793-3053/(309) 782-3053 or email:

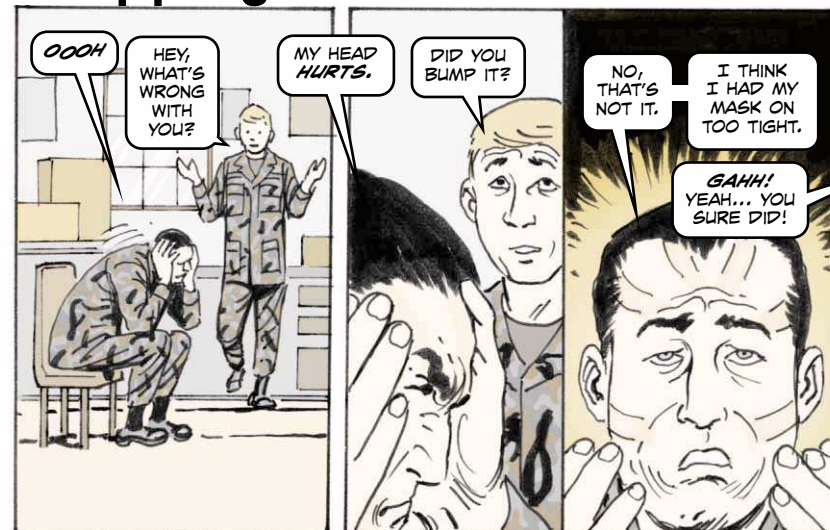
vanattad@ria.army.mil

M1 Laser Ballistic Outserts

The outserts protect soldiers' eyes from lasers and low-speed fragments and can be used with both the M40 and M42 masks. They come with NSN 4240-01-434-1503.

M40-Series Masks...

Stopping Loose Harnesses

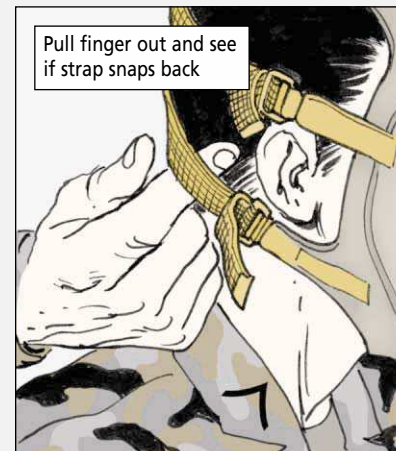


Dear Editor,

A loose M40 headharness could keep the mask from protecting a soldier. A harness too tight can give a soldier a terrible headache. We've found this procedure harnesses headharness problems:

Is the headharness tight enough and does it have enough snap to keep the mask tight? An easy way to tell is to put a finger flat under the cheek strap. If you can't get your finger under the strap, it's too tight and needs to be adjusted. Turn your finger sideways and quickly pull it out from under the strap. If the strap snaps back in place, it's strong enough. If it doesn't, the headharness probably needs to be replaced.

Pull finger out and see if strap snaps back



PFC Jeremiah Peoples
C Co, 407th FSB
Ft Bragg, NC



Canvas Tents...

TENT PINS: A Driving Lesson

DON'T
BLAME ME
FOR THAT
TEAR!

I'M NOT
ANGLED
CORRECTLY!

When it comes to driving tent pins, it pays to know all the angles.

Once a canvas tent gets wet, it shrinks.

And when it shrinks, guy lines tug hard on the pins. A pin with its head angled away from the tent acts like a lever under the tug of the tight line. The pin enlarges its hole in the ground and works loose until it pulls clear out.

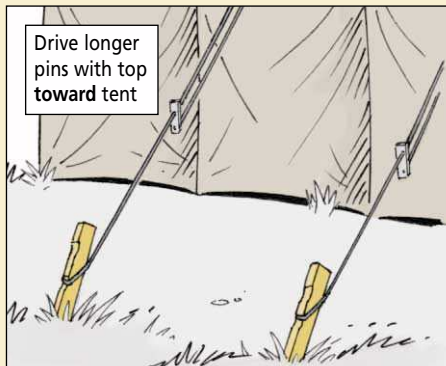
Or something worse happens. The pin doesn't pull free but continues to strain the tent until the canvas tears.

THE SOLUTION LIES IN
TWO SIMPLE RULES
FOR POUNDING PINS
INTO THE GROUND...

• Drive short pins straight up and down. By short, we mean the 12-in steel pin, NSN 8340-00-823-7451, or the 16-in wood pin, NSN 8340-00-261-9750.

• Drive longer pins with the head slightly angled toward the tent—about 15° from vertical. Longer pins are those like the 24-in wood pin, NSN 8340-00-261-9751, or the 36-in wood pin, NSN 8340-00-261-9752.

One other pointer about pitching a tent: Keep an eye on the guy lines. Lines need to be taut enough to hold up the tent, but slack enough to deal with shrinkage when rain and snow fall.



Polyester Tents, Tarps...

TENT TAPE FOR TEARS

THERE. THAT
OUGHTA HOLD
IT--GOOD
AS NEW!

I THINK
THERE'S A HOLE
IN YOUR PLAN,
THERE.



Small holes and tears can turn your coated polyester tent or tarp into a sieve. You need to make repairs while they're still small, before the damage becomes major.

That's where tent repair tape comes in. It's made for permanent small repairs on canvas or coated polyester tents and tarps. NSN 8315-01-423-6231 gets you a roll of tape 3 inches wide and 50 ft long.

HERE'S
HOW TO
USE IT...



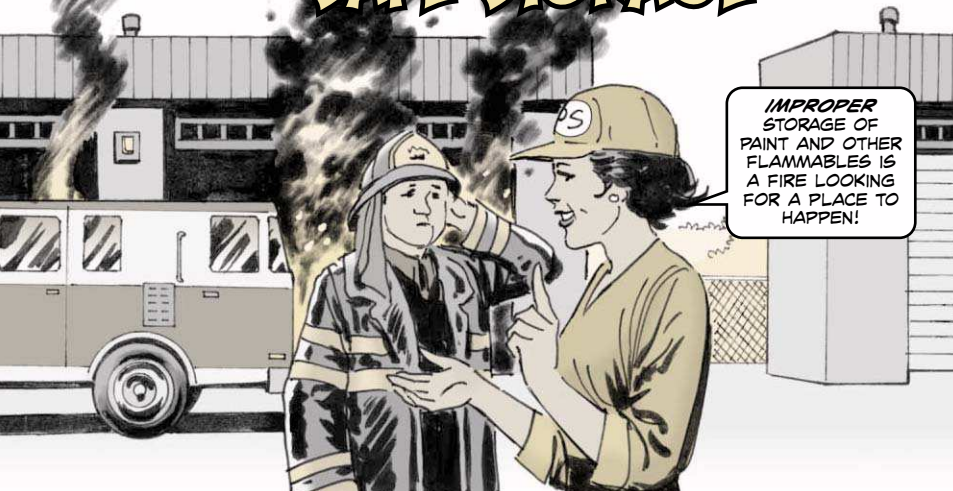
- Spread the tent or tarp on a flat surface.
- Brush off loose soil or dirt from the areas to be patched. Wash these areas with mild detergent and water. Rinse with clean water.
- Let the tent or tarp dry completely.
- Cut a circle from the tape slightly larger than the hole you want to cover. The circle's rounded edges make the tape less likely to peel off.
- Press the tape against the outside of the fabric.
- Allow the tape to set. The longer the better. Overnight is best, but give it at least 20 to 30 minutes.

IF YOU FIND A
HOLE MORE THAN
2 INCHES ACROSS,
TURN THE TENT OR
TARP OVER TO DS.
THEY'LL REPAIR IT
WITH MACHINE-
SEWN PATCHES.



Now that you're thinking PM for tents and tarps, order the updated tentage repair kit, NSN 8430-00-262-5767. It comes with two yards of green coated polyester fabric and two yards of tan coated polyester fabric

BE SERIOUS ABOUT SAFE STORAGE



Safety is a big concern when storing flammables such as petroleum, oil, lubricants and paints. After all, they're called flammables for a reason.

CTA 50-909 authorizes the purchase of storage cabinets for units that store flammables. FED LOG lists many sizes, shapes and colors, so order the cabinet that best suits your needs. Here are a few that might do the trick:

Cabinet Description	NSN 7125-
Yellow, 43 inches wide x 65 inches high x 18 inches deep	01-084-6955
Yellow with red "Flammable—Keep Fire Away", 43 inches wide x 65 inches high x 18 inches deep	01-035-3023*
Yellow with red "Flammable—Keep Fire Away" decal across both doors, 43 inches wide x 44 inches high x 18 inches deep, 30 gallon capacity	01-084-6954
Gray, 36 inches wide x 78 inches high x 24 inches deep	01-159-6943
Red with white "FLAMMABLE LIQUID" lettering on front, 4 shelves, 36 inches wide x 35 inches high x 24 inches deep	00-550-3356*

*Order on a DD Form 1348-6 and put "NSN not on AMDF" in the REMARKS block.



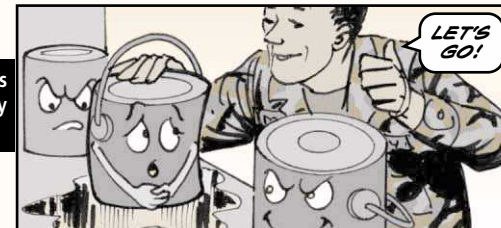
SAFETY'S **NOT** ENSURED JUST BECAUSE YOU HAVE A STORAGE CABINET, THOUGH.

FOLLOW THESE RULES FOR **HANDLING** AND **STORING** FLAMMABLES...

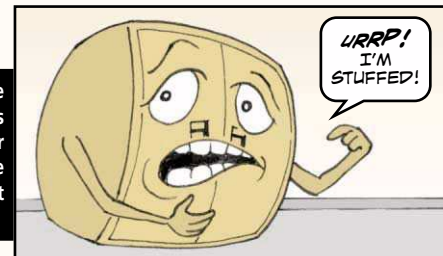
- Tighten all container lids.

- Remove any leaking containers immediately. Clean up all spills by following your unit's HAZMAT SOP.

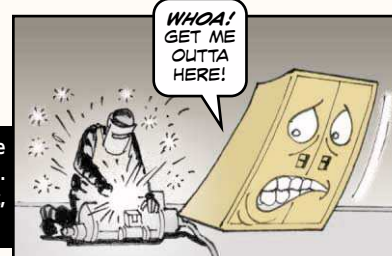
- Ground containers before pouring from one to another. That prevents sparks from static electricity that could start a fire.



- Never exceed the maximum storage capacity of a cabinet. A cabinet's capacity is determined by safety, not by the number of containers it will hold. You'll find the capacity listed in the instruction sheet that comes with each cabinet.



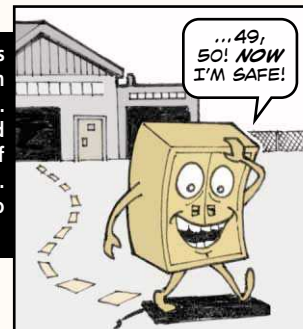
- Give paint its own storage cabinet. Never store it in the same cabinet as petroleum, oil or lubricants. Always check the Hazardous Materials Information System (HMIS) for compatibility before storing materials



- Locate indoor cabinets away from areas where spark-producing tools or equipment are used. Also keep them away from areas where heat, fumes and gases build.

- Check out the information in the National Fire Code 30, *Flammable and Combustible Liquids*, and AR 420-90, *Fire Protection*. If you do not have these pubs on hand, call your safety office. They should have copies and be able to tell you about local regulations.

- Put outdoor cabinets at least 50 feet from combustible structures. Keep the area around the cabinet free of weeds and debris. Place and enforce "No Smoking" signs.



Order the signs with these NSNs:

NSN 7690-01-	Letter Height (inches)
032-3714	1
032-4602	1 1/2
032-4604	2
036-4777	3

HAZMAT...

SPILL KITS ABSORB YOUR LOSSES

IF YOU WORK WITH HAZARDOUS MATERIALS LONG ENOUGH YOU'RE EVENTUALLY GOING TO HAVE A SPILL.

WHETHER IT'S FUEL, OIL, SOLVENTS OR SOME OTHER HAZARDOUS MATERIAL, YOU'RE GONNA NEED A HANDY SPILL KIT THAT HAS WHAT YOU NEED TO CLEAN UP THE MESS QUICKLY AND SAFELY.

THERE ARE SEVERAL SPILL KITS IN THE SYSTEM. PICK THE ONE THAT BEST SUITS YOUR NEEDS.

Tote Bag Spill Response Kit, NSN 4235-01-432-7909

Contents	Qty
Tote bag, water-resistant nylon	1
Pad, 18x18x3-in	4
Sock, 2-in x 5-ft	2
Absorbent, peat moss, 3/4 cubic foot bag	1
Waste disposal bag	2

Spill Response Kit (25-gal drum), NSN 4235-01-432-7912

Contents	Qty
Pads, 18x18x3-in	7
Sock, 4-in x 8-ft	1
Sock, 4-in x 4-ft	2
Absorbent, peat moss, 3/4 cubic foot bag	1
Tyvek protective suit	2 pairs
Nitrile gloves	2
Safety goggles	1
Waste disposal bag	3

Spill Response Kit (55-gal drum), NSN 4235-01-423-7214

Contents	Qty
Pads, 18x18x3-in	15
Sock, 4-in x 8-ft	2
Sock, 4-in x 4-ft	2
Absorbent, peat moss, 3/4 cubic foot bag	3
Tyvek protective suit	3
Nitrile gloves	3 pairs
Safety goggles	3
Waste disposal bag	5

Spill Response Kit (55-gal drum), NSN 4235-01-423-7221

Contents	Qty
Pads, 18x18x3-in	10
Sock, 2-in x 10-ft	5
Absorbent, peat moss, 3/4 cubic foot bag	5
Tyvek protective suit	2
Nitrile gloves	2 pairs
Safety goggles	2
Shovel, non-sparking	1
Bucket, 3 1/2-gal	1
Emulsifier, 2-qt	1
Waste disposal bag	5

Spill Response Kit (55-gal drum), NSN 4235-01-391-3110

Contents	Qty
Sock, 4-in x 4-ft	6
Absorbent, peat moss, 18-lb bag	2
Rubber gloves, chemical resistant	2 pairs
Dust mask, disposable	6
Shovel, non-sparking	2
Pushbroom	1
Waste disposal bag, 55-gal	4
Hazardous label, blank	1

THIS STUFF REALLY SOAKS UP THE SPILL!

YEAH, BUT HOW DO WE GET MORE?

THE KITS AREN'T CHEAP! ONCE YOU'VE GOT ONE, USE THIS LIST TO ORDER THE REPLACEMENT ITEMS THAT ARE AVAILABLE...

Item	NSN	Qty
Pad, 18x18x3-in	4235-01-423-1463	30
Sock, 4-in x 8-ft	4235-01-423-1465	10
Sock, 4-in x 4-ft	4235-01-416-9008	20
Sock, 2-in x 10-ft	4235-01-423-1467	20
Sock, 2-in x 5-ft	4235-01-416-8997	40
Absorbent, peat moss, 2 cubic feet	4235-01-423-0711	3
Shovel, spark-free	5120-01-332-9954*	1
Pushbroom, handle	7920-01-460-8614*	1
Pushbroom, head, 18-in wide	7920-00-292-2367	1
Safety goggles	4240-01-292-2818	1
Nitrile gloves, small	8415-01-492-0176*	100
Nitrile gloves, medium	8415-01-492-0179*	100
Nitrile gloves, large	8415-01-492-0178*	100
Nitrile gloves, x-large	8415-01-492-0180*	100
Dust mask	4240-01-463-5449*	20
Bucket, 3 1/2-gal	7240-00-160-0455	1
Waste disposal bag, 57-gal	8105-01-183-9764	100



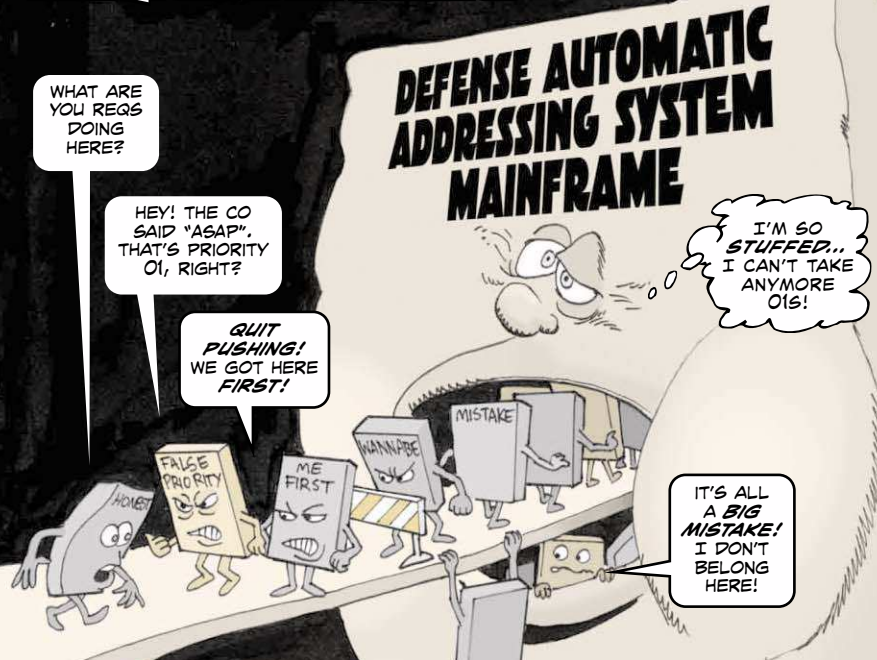
*Order on a DD Form 1348-6 and put "NSN not on AMDF" in the REMARKS block.

Supply...

GETTING PRIORITY



REQUISITIONS



Dear Editor,

The number of unauthorized units submitting Issue Priority Group O1 requisitions is increasing. Because of this, the supply system appears to be ignoring any IPG O1 and simply making a priority abuse file of the units.

Units should use only the IPG they are authorized. When IPG O1 priorities reach unmanageable proportions, the units that truly need, and are authorized, the IPG O1 priority may find their urgent requisitions delayed by everyone else.

You can determine your correct IPG by matching your unit's Force/Activity Designator (FAD) to its Urgency of Need Designator (UND). Table 2-1 of DA Pam 710-2-1 relates IPGs to FADs and UNDs.

Your unit's FAD is found on its unit's permanent activation orders. To determine your UND, refer to the guidelines in Paras 2-2b(1), 2-2b(2), 2-2b(3) and 2-2d of Pam 710-2-1.

I'M OK!
GO ON
WITHOUT
ME!

Just as bad as using unauthorized IPDs is not applying authorized project codes.

Numerous O1 and O2 Not Mission Capable Supply (NMCS) requests continue to be received from units deployed in support of Enduring Freedom, Project Code 9GF. The problem in this case is some of the units are not using the project code assigned to them. This often delays delivery of the part. The priority of release within IPG 1-3 is: Joint Chief of Staff Project Code, then NMCS 999, then "N" NMCS, then "A" NMCS, then 777, then all others by requisition date.

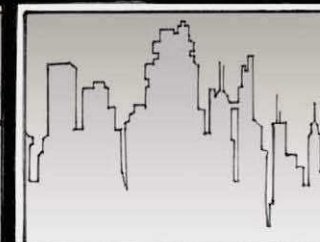
Project codes not only get priority release, they also affect the mode and priority of transportation as well as the ability to track the cost of the operation.

Robert W. Holley
AMC-OSC SUPPLY LAR

From the desk of the Editor

Good info to keep supplies moving quickly to units that really need them.

MAYBE HE
CAN HELP
US WITH
THIS ARMS
ROOM
PROBLEM!



MOUNT T&E PLATE

The traversing and elevation (T&E) plate, NSN 9905-00-514-0669, used with the T&E for the M3, MK64, and MK93 mounts is now being managed by TACOM-Rock Island and should be ordered from B14. The plate's \$16 price is scheduled to drop 1 Oct 2003. The next revision to TM 9-1005-245-13&P, the TM which covers gun mounts, will reflect this change. If you have questions about the plate or mounts in general, contact Barb Painter at (309) 782-4403/DSN 793-4403 or painterb@ria.army.mil

AN/GRA-39 SLING

Item 4, Fig 1 of TM 11-5820-477-23P, NSN 5340-01-157-2100, brings a 1-inch wide, 24-inch long carrying strap with a D-ring on each end for the AN/GRA-39 radio set control group. This is not the sling you want. TM 11-5820-477-12 has the right strap, NSN 8465-00-269-0682. It's 2 inches wide, 48 inches long and has a swivel hook on each end.

CAM Upgrade Needs Your Help

An upgrade is on the way for your chemical agent monitors (CAM), NBC NCOs. A refillable drift tube module and sieve pump assembly will be added to each CAM, which will increase performance and reliability and simplify maintenance. The upgrade will require some performance on your part. Before the CAMs can be shipped to the contractor for the upgrade, you must turn them in to your installation MWO coordinator with all their components of end item (COEI) and basic issue items (BII), except the battery. You also need to keep a record of the CAMs' serial numbers. Your local MWO coordinator can help. For more info about the CAM upgrade, contact SBCCOM's Alonzo White at DSN 584-6565/(410) 436-6565 or e-mail: alonzo.white@sbccom.apgea.army.mil

M190/M191 MORTAR NSNs SWITCHED

Get out your pencils, armorers. Two NSNs in the M190/M191 mortar's TM 9-1015-250-23&P were switched. Item 7 in Fig C-8 should read NSN 5365-01-305-3144 and p/n 12577052 and Item 12 should be NSN 5365-01-301-8242 and p/n 12577048.

BARBED TAPE/WIRE GLOVES

If you're running or retrieving barbed tape or wire, protect your hands with tape/wire handler's gloves. NSN 8415-00-926-1674 gets you a pair of flannel-lined leather gloves with reinforcing patches attached to the thumb and fingers.

M157A2 SMOKE GENERATOR CABLE NSN

A replacement for the M157A2 smoke generator cable that runs from the K106 relay on the back of the M54 generator to the glow plug and band heater is now available with NSN 6150-01-502-5500. It's Item 23 in Fig C-9 in TM 3-1040-283-20&P.

MEAL HEATER

Need to heat your water and MREs? NSN 7310-01-387-1305 gets you a portable water and ration heater. It operates off 24 VDC and connects to your vehicle's auxiliary power supply.

HMMWV Fuel Pump Gasket

NSN 5330-01-393-9101 gets a fuel pump gasket for the HMMWV. This NSN replaces the parts info shown as Item 2, Fig 9 of TM 9-2320-280-24P.

CROP BII Web Strap

NSN 5340-01-504-2426 gets the web strap assembly for the M3/M2A1 container roll-in/out platform (CROP). This NSN replaces the parts info shown as Item 1, Page C-1, Appendix C (BII) of TM 9-3990-260-14&P.

ALSE TRAINING MATERIAL?

ALSE techs, if you want to brush up on maintaining your equipment or if you're looking for general information on aviation life support, go online to the Defense Visual Information website at:

<http://dodimagery.afis.osd.mil>

Scroll down and click on Central DoD Production Databases@DAVIS/DITIS for training and informational videos, CD-ROM's, and other visual information end products. Use the search engine to locate the items you need and they will send you up to ten free videos, or CD-ROM's. If you have questions, contact Bobbie Roberts at DSN 795-7827/(570) 895-7827 or email:

vibuddy@hq.afis.osd.mil

M916/M920 Sight Gauge

NSN 6680-01-436-0588 gets the sight gauge for the M916 and M920 tractor truck's hydraulic reservoir. The part shown as Item 7, Fig 266 of TM 9-2320-273-24P is no longer available.

DATA TRANSFER DEVICE TAG

Order the tag assembly for the AN/CYZ-10(V3) data transfer device with NSN 5810-01-393-2942. It's not shown in the TM for the data transfer device, but should be in the next update.

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

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