

Issue 605

PS

April
2003

**THE
PREVENTIVE
MAINTENANCE
MONTHLY**

TB 43-PS-605

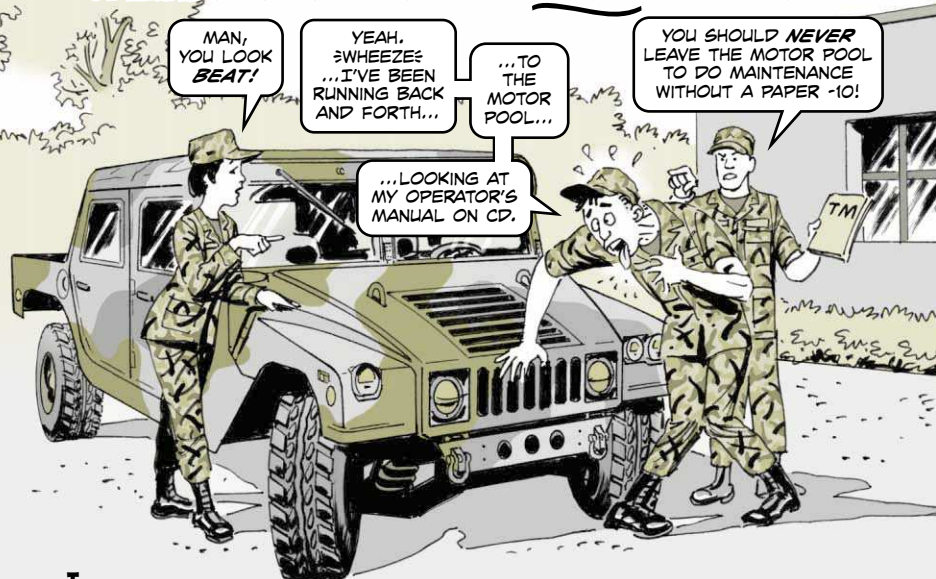
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PM
BLACKSMITH
LIVERY
AND
CORRAL
PAUL MORGAN



Will PM Win the Day? See Page 27!

OPERATOR TMS SHOULD BE *WITH* OPERATORS



The paperless Army is the next big thing. But there's some controversy about how much of the -10 manual operators need to operate a piece of equipment. Will PMCS charts alone suffice or should unit operators have complete -10 paper manuals in their hands?

Some unit pub clerks have already answered that question by not bothering to order -10 operator manuals anymore. Some have decided to only put CD-ROMs on their pubs distribution accounts, citing the "paperless Army" as the reason to not order hard copy operator manuals.

Less paper may sound good, but if you think operators can run back and forth to the motor pool or the pubs office to look at the -10 on a computer to perform operator maintenance, you're dead wrong.

For example, what happens if they're in the field performing maintenance under unusual conditions, like extreme cold or hot weather or wet climates? PMCS charts won't do any good in the middle of nowhere.

Operator's manuals are more than PMCS charts. They contain lubricating, cleaning, inspection and operating instructions. PMCS charts alone won't give you the lowdown on equipment characteristics and data, descriptions and use of operator controls.

The -10 manuals contain information needed to keep equipment mission ready.

So, until the Army decides on a uniform policy on paper or paperless -10s, every operator should always have a hard copy of the manual on hand to maintain or repair equipment.



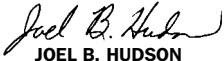
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You are invited to send PS your ideas for improving maintenance procedures, questions on maintenance and supply problems and questions or comments on material published in PS.

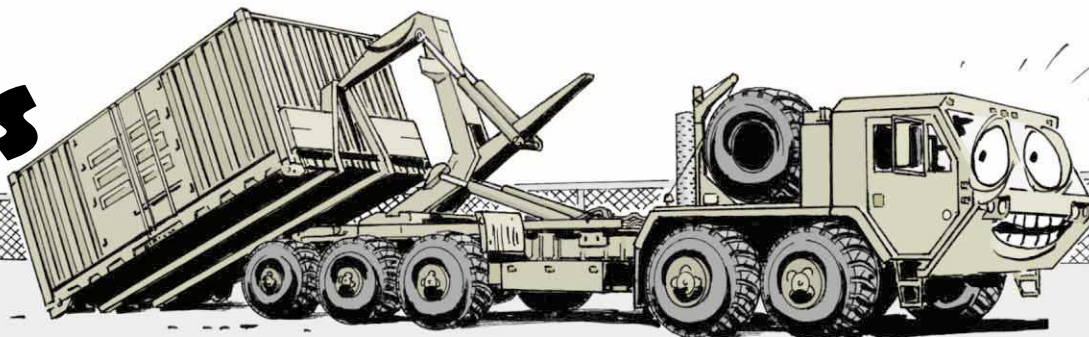
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TREAT PLS WITH TLC

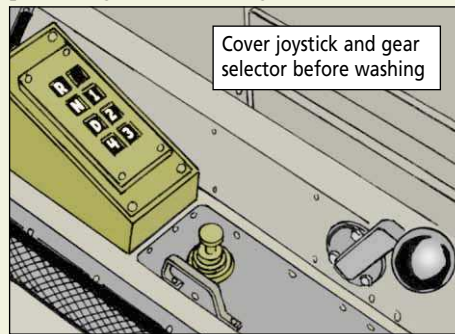


You've gotta be careful when operating the palletized loading system (PLS) truck. Since it works differently from other trucks in the Army inventory, keep these tips in mind:

- Never shift the transmission into first gear while the PLS is moving. That applies too much torque to the drive train and damages components.



- Keep water away from the joystick and gear selector when cleaning the cab. Water can seep inside and short out or corrode the contacts. As extra protection, try covering them with a plastic bag before cleaning.

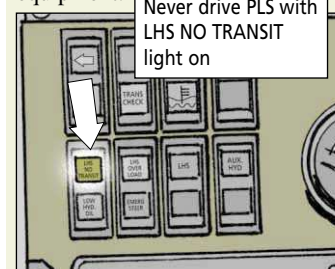


- Keep an eye out for overhead power lines or other obstructions before beginning load handling system (LHS) operations. The LHS hook reaches a height of 18 feet when lifting a standard shipping container.

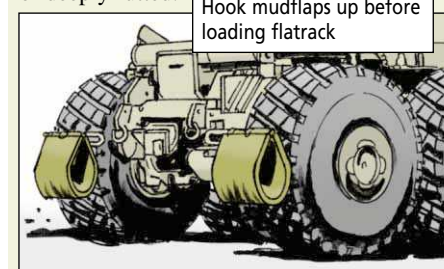
- Do not back up while the LHS hook arm is attached to a flatrack on the ground. A flatrack roller could get caught in a pothole or uneven ground and damage the LHS.

- Do not hold the PLS' steering wheel at full left or full right for more than 10 seconds. Otherwise, oil overheating and pump damage can result.

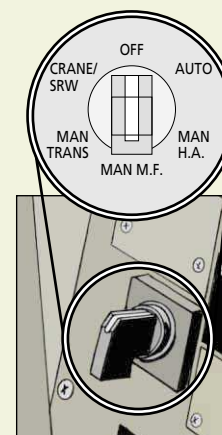
- Never drive the PLS with the LHS NO TRANSIT light on. When the light is on, the LHS load locks are not engaged and the LHS is not fully stowed. You can lose your load and damage your equipment.



- The mudflaps hang real close to the tires—so close that it's a good idea to hook 'em up any time you're traveling in mud, sand, or snow. It's easy for the flaps to "catch" and get pulled over the tires. Be sure to hook 'em up before you load a flatrack if the terrain is soft or deeply rutted.



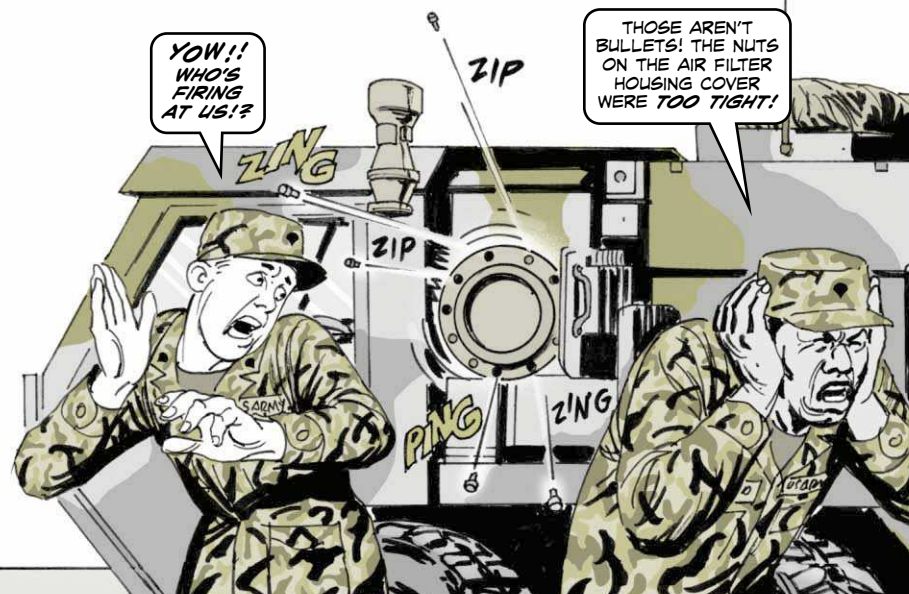
- You must be extra careful when loading and unloading flatracks. In MANUAL mode (MAN H.A., MAN M.F. and MAN TRANS), you control every part of the loading and unloading process. You must follow the steps exactly or risk damage. In AUTO mode, the cycle is controlled by the LHS controller.



Be *extra careful* using MAN H.A., MAN M.F., and MAN TRANS modes

Keep the instructions in front of you any time you use **MANUAL** mode. They'll help you prevent hydraulic seal, hose and cylinder damage, roller damage and hook arm/main frame cylinder damage. The info starts on Page 2-264 in TM 9-2320-364-10.

Too Tight's Not Right



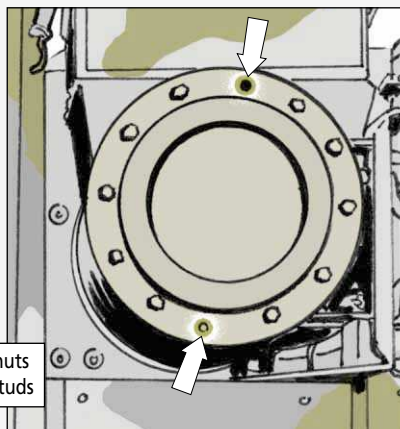
If tight is good, then tighter must be better. Right, mechanics?

Not when it comes to the air filter housing cover on the M1074/M1075 PLS. If you overtighten the nuts that hold the cover in place, you'll either strip the studs, snap them off or rip them loose.

So don't guess. Tighten the nuts to 90-110 lb-in like it says on Page 4-20 of TM 9-2320-364-20-4. No more, no less. Use the proper tightening sequence, too.

If any studs are damaged or missing, replace them using the stud replacement kit, NSN 5307-01-456-6938.

Too tight on nuts can damage studs



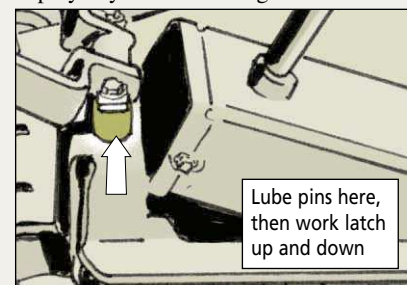
GOT A LEG TO STAND ON?



You can't unhook your M1112 water trailer from the towing truck if the landing leg won't deploy. And the landing leg won't deploy if you don't take good care of the release latch.

The release latch has no lube points, so it's usually ignored when it's time to lube the trailer. But then the latch rusts in place and won't move.

Give your trailer a leg to stand on by putting a few drops of OE/HDO oil on the latch's release pins. Then, raise and lower the latch a few times to work in the oil.

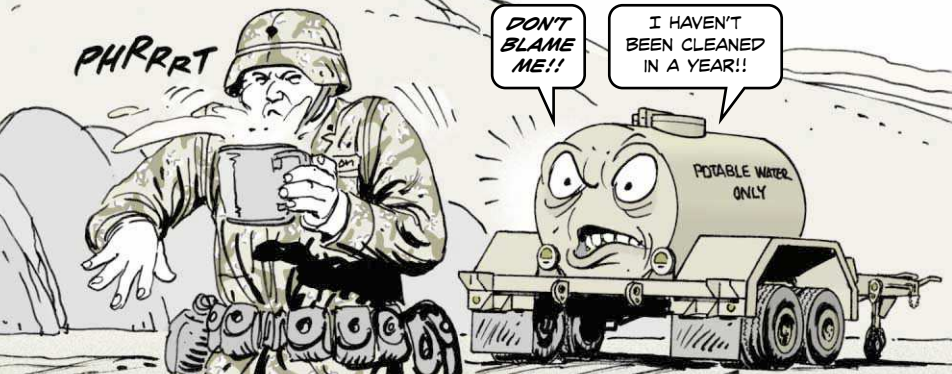


LUBE THE LATCH AT LEAST EVERY 6 MONTHS AND THEN AGAIN FOLLOWING A HEAVY RAIN OR AFTER WASHING THE TRAILER.

AHHH... THAT'S BETTER!



Be Keen On Clean for Water Tank



IF YOU'RE TRYING TO REMEMBER THE LAST TIME YOU CLEANED THE TANK ON YOUR WATER TRAILER, IT'S PROBABLY **TOO LATE...**

...ESPECIALLY IF YOU'VE GOT A FIELD EXERCISE **TOMORROW!**

Cleaning the tank regularly will improve the taste of the water and keep the tank safe to use when it's needed. So follow these tips to keep your drinking water from tasting slimy, rusty, or metallic.

- Make sure you drain the tank completely between uses. Water left in the tank causes rust, mineral deposits and algae buildup.

Put the trailer on an incline with the rear slightly lower than the front so that all water will drain through the drain plug. Then open the faucets to let out any water still in the pipes.

Drain tank on slight incline



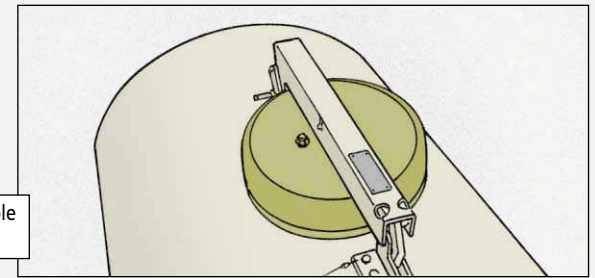
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- Close the manhole cover tightly when the water trailer is in storage. That keeps out dirt, sand and rainwater.

Keep manhole cover closed



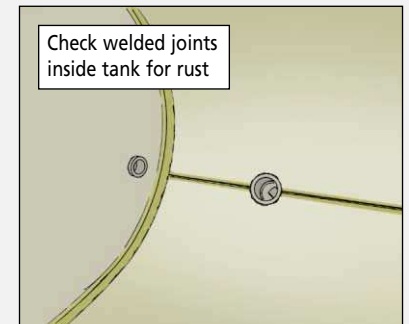
- Every three months, pour 8 gallons of vinegar, NSN 8950-01-079-3978, into the tank and leave it for 5-6 hours. Then empty the tank and flush it out with clean water. The vinegar kills algae and prevents deposit buildup.

Since algae is a bigger problem when it's hot, clean the tank more often during the summer.

- Before filling a tank with drinking water, eyeball the weld joints inside the tank for signs of rust. Scrub away any rust with a solution of water and scouring powder, NSN 7930-01-294-1116. Always use a nonmetallic, nylon brush such as NSN 7920-00-061-0038, to avoid scratching the tank's inner surface.

Flush the tank thoroughly with clean water. Then scrub it again if you see any more rust.

Check welded joints inside tank for rust



FMTV...

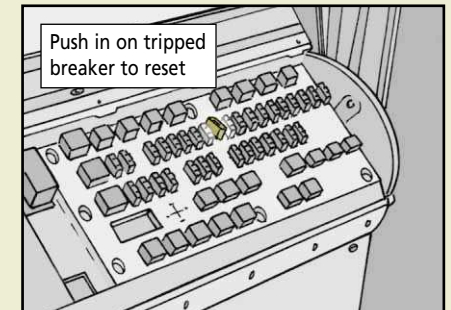
CIRCUIT BREAKER CHECK

Having electrical problems while operating your FMTV? Take a look at the circuit breaker panel.

Check for tripped circuit breakers. If you find one, just push it back in to reset. If the circuit continues to trip, call in your unit mechanic.

And if no circuit breakers are tripped, call in your unit mechanic to find the problem.

Push in on tripped breaker to reset



GIVE YOUR TANK SOME AIR!

WHEEZE
GASP
GASP

BACK UP!
GIVE HIM A
LITTLE AIR,
WILL YA!?

TO OPERATE AT
PEAK PERFORMANCE,
THE ENGINE IN YOUR
M1-SERIES TANK
NEEDS A LOT OF
CLEAN AIR.

KEEPING AIR
CLEAN IS THE JOB
OF THE SEALS
AND FILTERS ON
YOUR TANK'S
AIR INDUCTION
SYSTEM.

THEY
SCREEN OUT
SAND AND
DIRT SO THAT
ONLY CLEAN
AIR CAN GET
THROUGH.

THEY ALSO
KEEP OUT
LARGER DEBRIS
THAT CAN DENT,
CRACK OR BREAK
COMPRESSOR
BLADES.

Precleaner

Trees and bushes make a good hiding place for your tank, but they also result in clogged air precleaners.

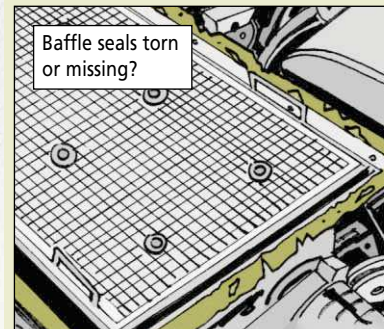
Leaves that fall on or near the air inlets get sucked onto the precleaner. Enough leaves will cut off airflow and lower power output.



Precleaner
surface
clean?

If the AIR CLEANER CLOGGED FILTER light comes on, make the pre-cleaner one of your first checks.

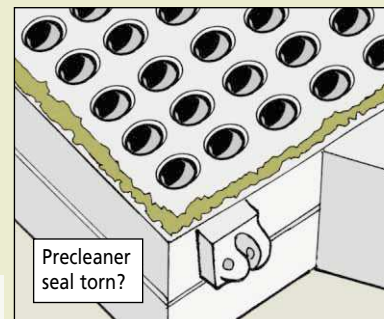
While you're there, take a close look at the baffle seals. Cracked, torn or missing seals allow dirt and oil from the engine to clog the air cleaner assembly element strainers.



Baffle seals torn
or missing?

NSN 5330-01-225-6106 gets a new short seal. The longer seal is NSN 5330-01-320-3696.

Next, eyeball the bottom precleaner seal. If the seal is missing, loose or torn, replace it. There are two different seals available: NSN 5330-01-166-5798 and NSN 5330-01-329-6614. The seal you use depends on the type of precleaner in your tank. Check your -24P-1 TM to match the correct seal with your pre-cleaner.



Precleaner
seal torn?

A NEW SEAL
IS USELESS
UNLESS YOU
PUT IT ON
RIGHT.
HERE'S
HOW...



1. Clean off the old seal and adhesive completely. To do it right you'll need a lot of elbow grease—combined with a rag, dry cleaning solvent and a wire brush.

2. Spread adhesive, NSN 8040-00-664-4318, in the seal groove. Use enough to hold the seal, but not so much that it squeezes out around the seal. The right amount of adhesive keeps the seal from sticking to the airbox frame and ripping loose every time you remove the pre-cleaner.

3. Apply a very light coat of adhesive to the bottom of the new seal and press it into the groove with your finger. Take extra care not to twist the seal as you put the rounded side in the mounting groove. A twisted seal is not airtight.

4. Let the adhesive dry completely before you put the precleaner back in place. Put a dab of adhesive on a piece of paper. When it's dry, the seal should be, too.

Skirt Seals

If you're having problems with clogged air cleaner intake filter elements (V-packs), missing fender skirt seals could be the cause. Those rubber strips are there to seal the area between the skirts and hull.

Missing seals let dirt and dust get sucked inside the fender skirts. The engine pulls the dirt into the intake system where it clogs up the V-packs.

All the seals are important, but pay special attention to the seals at skirts 4, 5 and 6 on the left side of the vehicle. These seals are closest to the air intake grills and can let in the most dirt.

NSNs FOR THE SEALS ARE LISTED HERE...

M1	Figs 261-264 and 266 of TM 9-2350-255-24P-1 (Oct 92)
M1A1	Figs 263-266 and 268 of TM 9-2350-264-24P-1 (Sep 01)
M1A2	Figs 242-245 and 247 of TM 9-2350-288-24P-1 (Jul 01)
M1A2 SEP	Figs 241-244 and 246 of TM 9-2350-388-24P-1 (Feb 01)

V-Packs

The three V-packs on all tanks not equipped with the pulse jet system (PJS) should be removed, cleaned and inspected after every operation. V-packs on PJS-equipped tanks are self-cleaning. **Removing the V-packs on these tanks will ruin the system.**

The preferred cleaning method is the V-pack cleaning wand. You'll find info on the wand in the "unusual conditions" section of your -10-2 TM's operating instructions.

If the cleaning wand isn't available, shake the V-packs, making sure not to hit them against anything harder than your hand. Brush dirt and dust from the elements with your hand. Then, have the elements properly cleaned by your unit maintenance folks as soon as possible.

Use wand to clean V-pack



No wand?

Shake V-pack gently

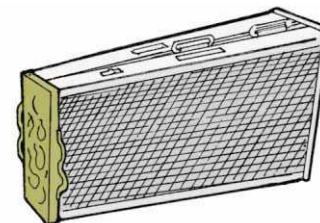


WHILE THE V-PACKS ARE OUT, INSPECT THE PLENUM BOX AND ELEMENTS FOR POTENTIAL PROBLEMS...



- Eyeball the bead on the front face of each V-pack element for dents or sharp edges that could cut the plenum box seal. Then check for buckling on the rear face of the element. Either problem means you need a new V-pack.

Look for dents or buckling



- Look for broken welds and cracks in the plenum air box. Dust trails along the welds and seams of the box are a good sign of a leak, so tell your mechanic.
- Look for torn, cracked or missing plenum box seals. A missing seal makes your tank NMC.

Those three seals also deteriorate over time, so check each one by measuring the depth of the depression made by the V-pack bead in the seal. If the depression measures more than 3/16 inch, get the plenum box seal replaced.

HERE'S ANOTHER WAY TO CHECK THE SEALS:



1. Apply chalk to the raised portion of the V-pack bead.

Chalk placed here...

2. Install the V-pack and secure the holding clamp.
3. Remove the V-pack and eyeball the plenum box seal. There should be a complete chalk line around the seal from contact with the V-pack bead.

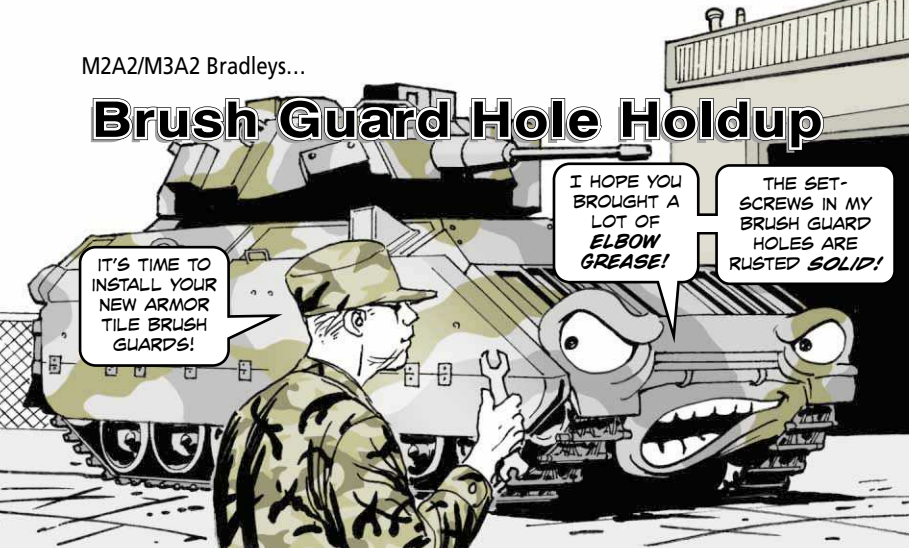


...should show up here

If the chalk line is broken, the V-pack may not be sealing correctly. So, get your mechanic to install a new seal, NSN 5330-01-098-6807. Remember to wipe the chalk off the V-pack bead and seal after testing.

This method works especially well if you are putting new V-packs in **without** replacing the plenum box seals. But, it's a good idea to put in new seals along with the new V-packs whenever possible.

Brush-Guard-Hole Holdup



Installing the armor tile brush guards on an M2A2/M3A2 Bradley doesn't seem like a hard job, mechanics. After all, the threaded holes were pre-drilled in the Bradley's skirts during production.

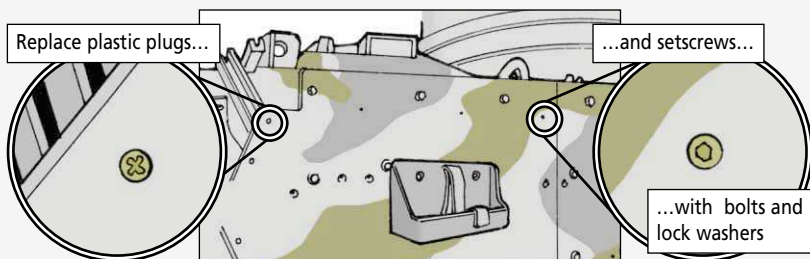
Problem is, those holes weren't protected very well after being drilled. Plastic plugs inserted to keep the threads from corroding didn't work.

Replacing the inserts with setscrews didn't work either. The corrosion problem continued.

Now you face the difficult task of peeling out the plastic inserts or drilling out stuck setscrews.

Don't put it off, though. The longer the inserts and setscrews stay in place, the worse corrosion gets.

Once they're out, replace each insert and setscrew with a bolt, NSN 5305-00-724-7219, and lockwasher, NSN 5310-00-820-6653. Apply some antiseize compound, NSN 8030-00-597-5367, to the threads before installing the bolt. That puts a stop to the corrosion and makes removal a little easier.



FILTER OUT FUEL FILTER PROBLEMS



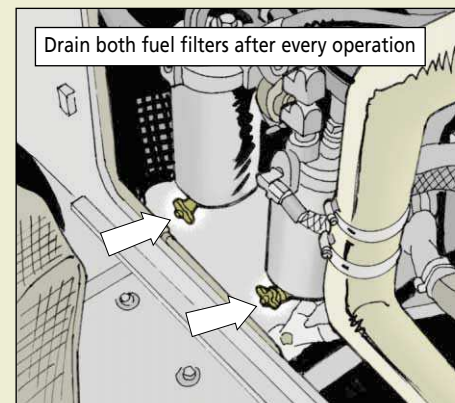
Crewmen, if you're not willing to drain the fuel filters daily on your M113-series carriers, you'll have to suffer the consequences, namely a loss of fuel flow.

If sediment isn't cleaned out, it builds up and creates a plug in the bottom of the fuel filter. Water from condensation leads to rust inside the filter canister. Rust is just another form of sediment that puts a stop to fuel flow.

So stay out of trouble by draining both the primary and secondary fuel filter after every operation. Here's how:

1. Remove the rear engine compartment access panels on M113A2 carriers. For M113A3's, you'll need to remove the driver's engine access panel.

1. Place a container under the primary fuel filter.
2. Slowly turn the draincock to open the valve.
3. Let water and sediment drain into the container until the fuel runs clear. Close the draincock.
4. Repeat steps 1 through 3 for the secondary fuel filter.



You can still run into trouble with M113A2s, even if you drain the filters daily. Since the filters sit at an angle, a draincock that sits on the high side of the canister's bottom will not allow all of the water and sediment to drain.

If that's the case, have your mechanic turn the canister so that the draincock is positioned at the lowest point of the canister. While you're at it, make sure your mechanic changes the fuel filters every 1,500 miles or semiannually, whichever comes first. That keeps the fuel flowing, too.

SAY BYE-BYE TO BENDS

WITH A
DAMAGED
W29
CABLE...

...MY
NIGHT
SIGHT IS
SHOT!

The M981 FISTV's W29 collimator cable will not bend over backwards for you.

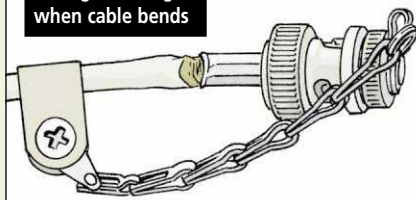
In fact, the crimped end of the connector cuts into the insulation every time the cable bends. Eventually, the wiring is damaged and you can't boresight the FISTV's night sight.

A little adjustment will prevent that damage. Just loosen the loop clamp, NSN 5340-00-543-3931, that attaches the connector cap to the W29 cable. Then, slide it up until the clamp covers the weak spot.

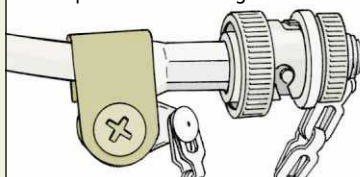
Retighten the loop clamp and you've got a ready-made support that keeps the cable from bending.

If the cable shows chafing, wrap it with electrical tape before moving the loop clamp.

Wiring is damaged
when cable bends



Move loop clamp up to protect cable's
weak point **before** damage occurs



IF THE CABLE'S
INTERNAL WIRING
IS DAMAGED,
REPLACE THE
CABLE.

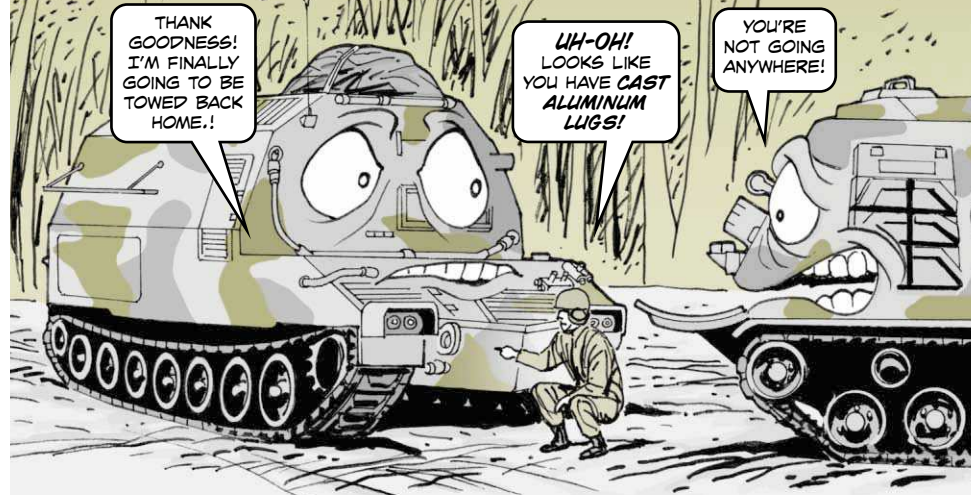


You Can't Tug with Wrong Lug

THANK
GOODNESS!
I'M FINALLY
GOING TO BE
TOWED BACK
HOME..!

UH-OH!
LOOKS LIKE
YOU HAVE **CAST**
ALUMINUM
LUGS!

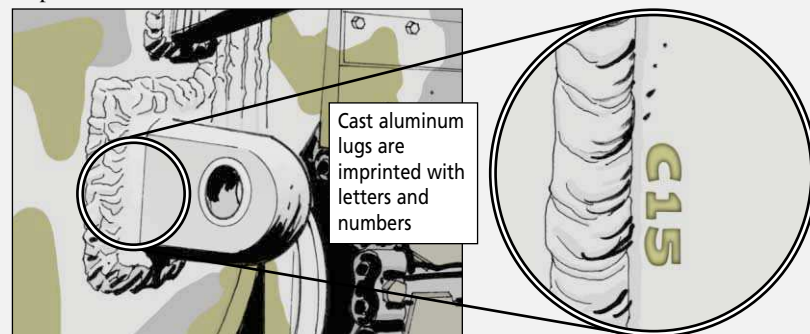
YOU'RE
NOT GOING
ANYWHERE!



You'll have a hard time towing your howitzer or ammo carrier if the towing lugs, NSN 2540-00-031-7707, are broken. But broken lugs are almost unavoidable if your vehicle has the wrong lugs attached.

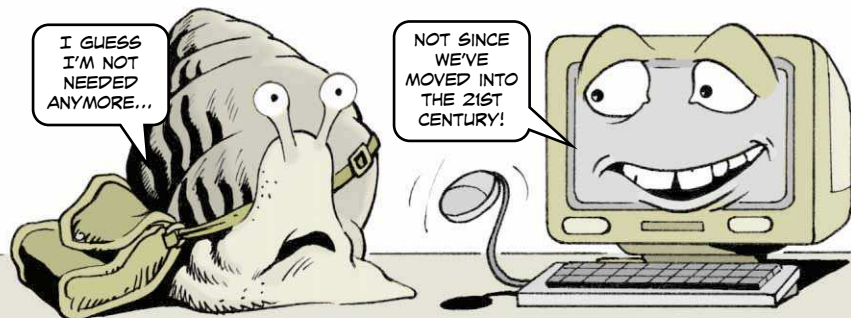
The wrong lugs are made of **cast** aluminum and will break under the stress of towing. They were accidentally mixed in with the **machined** aluminum lugs already in the supply system.

Right now, check the towing lugs on your vehicle. Cast aluminum lugs will be imprinted with letters and numbers.



If you find any cast aluminum lugs, tell your support. They can replace them.

Welcome to the Future



DA FORM 2408-4, WEAPON RECORD DATA CARD, IS AN IMPORTANT FORM.

"IT'S USED TO KEEP TRACK OF THE NUMBER AND TYPES OF ROUNDS FIRED FROM YOUR MORTARS AND CANNONS TO HELP DETERMINE GUN TUBE LIFE."



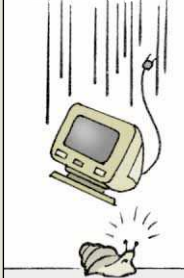
"IT'S ALSO AN OLD, SLOW SYSTEM THAT REQUIRES A STUBBY PENCIL AND SNAIL MAIL TO GET THE DATA TURNED IN."



"NOW, WITH THE HELP OF THE ARMY ELECTRONIC PRODUCT SUPPORT (AEPS) WEBSITE..."



"...THE DA FORM 2408-4 HAS ENTERED THE 21ST CENTURY."



"THE NEW ON-LINE SYSTEM ALLOWS ARMOR, ARTILLERY AND MORTAR UNITS TO INPUT FIRING AND NON-FIRING DATA DIRECTLY INTO AN **ELECTRONIC VERSION** OF THE 2408-4."



"ALL CURRENT TANK, ARTILLERY AND MORTAR WEAPONS FIRING DATA HAS ALREADY BEEN ENTERED INTO THE SYSTEM, SO ALL YOU HAVE TO DO IS PRINT OUT A CURRENT CARD TO TAKE TO THE RANGE WITH YOU. THEN, WHEN YOU RETURN FROM THE FIELD, UPDATE THE SYSTEM ON-LINE JUST LIKE YOU DO WITH THE PAPER CARD."

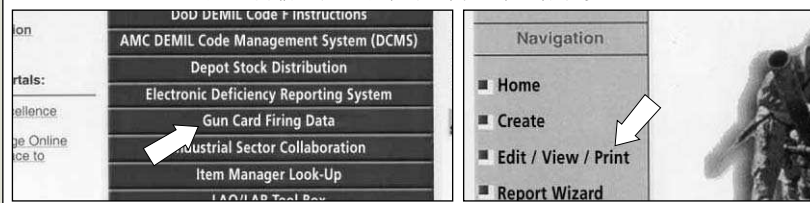


"THE NEW SYSTEM MEANS **NO MORE LOST CARDS!** AND IT'S EASY FOR A UNIT TO RESEARCH THE FIRING HISTORY OF ANY PARTICULAR GUN."

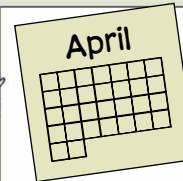


GO TO THE AEPS WEBSITE AT <http://aeps.ria.army.mil/aepspublic.cfm> IF YOU DON'T ALREADY HAVE A USER NAME AND PASSWORD, CLICK ON ACCESS REQUEST FORM AND FOLLOW THE DIRECTIONS.

"AFTER YOU GET A USER NAME AND PASSWORD, CLICK ON ENTER AEPS. SELECT THE GUN CARD FIRING DATA BUTTON UNDER POPULAR APPLICATIONS. NEXT, CLICK ON EDIT/VIEW/PRINT IN THE LEFT-HAND COLUMN AND FOLLOW THE INSTRUCTIONS FOR ACCESSING THE CARD FOR YOUR GUN TUBE."



DEPLOYED UNITS WHO **DO NOT** HAVE WEB ACCESS SHOULD MAIL IN THE DA FORM 2408-4 SO THE DATA CAN BE ENTERED INTO THE SYSTEM FOR YOU.



"MAIL THE CARDS EACH APRIL AND OCTOBER FOR ACTIVE DUTY UNITS AND EACH OCTOBER FOR NATIONAL GUARD/RESERVE UNITS TO..."

US Army TACOM-RI
AMSTA-LC-CIPPA (AEPS Help Desk)
Rock Island, IL 61299-7630

QUESTIONS?
HERE'S WHO TO CONTACT...



ARTILLERY/MORTARS:
Gary Rogers,
DSN 793-0030 or
(309) 782-0030,
rogersg@ria.army.mil

ARMOR:
Gordy Bieri,
DSN 793-2189 or
(309) 782-2189,
bierig@ria.army.mil

TECHNICAL PROBLEMS:
AEPS Help Desk,
DSN 793-0699 or
(888) 564-4357
TACOM-RI-AEPS-Helpdesk@ria.army.mil

Help for Patriot Launchers

THESE PATRIOT MISSILEMEN HAVE GOT SOME EXCELLENT IDEAS FOR KEEPING YOUR LAUNCHER ON ITS FEET!



Dear Editor,

We have some suggestions for Patriot crews that should keep their launchers launching longer.

- The GPS (global positioning system) antenna cable is fragile. If you just jam the GPS in its storage box, you damage the cable and you have no GPS. Avoid that problem by pushing the cable to the side before putting the GPS in the box.



- When you drain the launcher's MB60A1 trailer air tanks, pull the handle straight back. If you twist the handle as you pull it back, you can break the handle's cable. That cable is very difficult to replace.

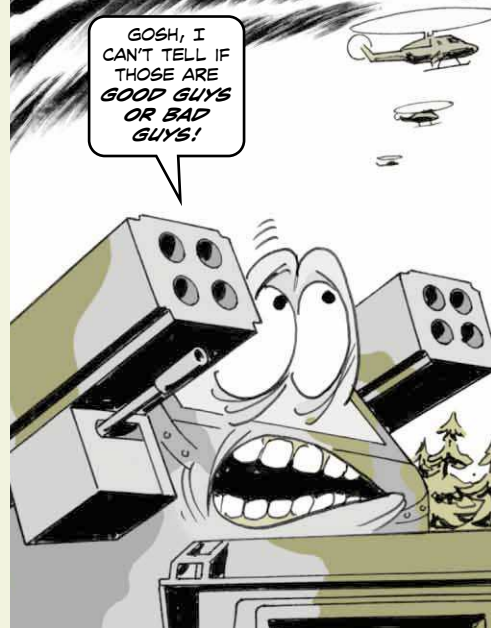


SSG Ramon Cummings
SPC Christian Armstrong
D Co, 5/7th ADA
Babenhausen, Germany



KEEPING IFF ACCURATE

GOSH, I CAN'T TELL IF THOSE ARE GOOD GUYS OR BAD GUYS!



If your Avenger Missile System's identification friend or foe (IFF) is not accurate, the consequences could be tragic.

Many units aren't sure how to test the accuracy of the IFF, so it doesn't get checked. Help is now at hand in the form of a training videotape.

The tape shows you how to check to IFF and contains the codes for running the checks. Your COMSEC custodian will need to order the tape, AKZT-3662, because it's a controlled item.

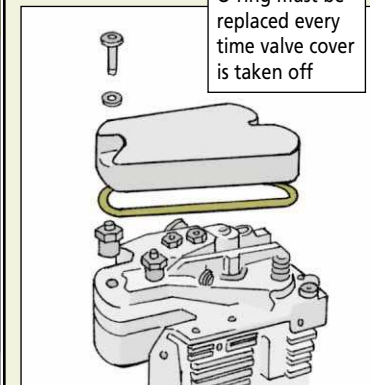
ECU/PPU NEEDS O-RING

Avenger repairmen, every time the valve cover on the environmental control unit/primary power unit (ECU/PPU) is taken off the cover's O-ring must be replaced. The O-ring is not reusable. If the old one is used again, you risk oil leaks and damage to the ECU/PPU.

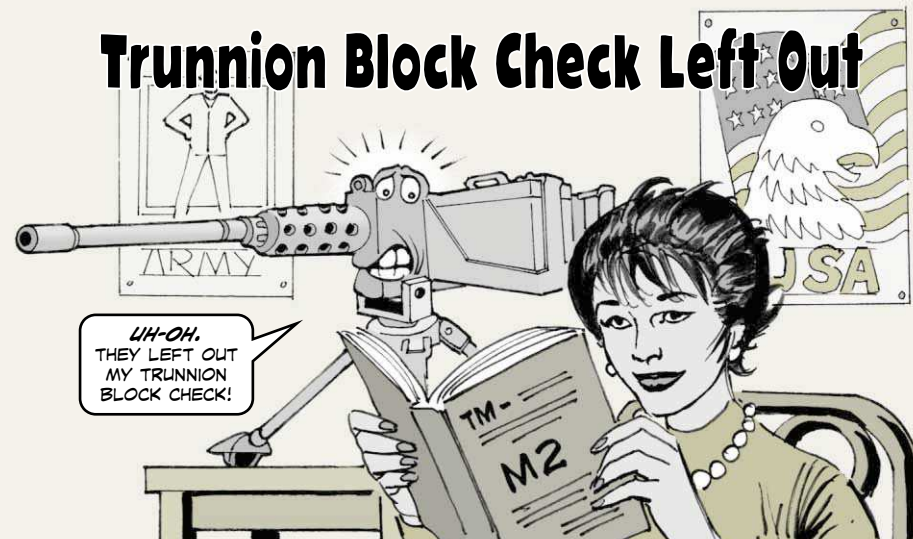
But it looks like the O-ring is not being replaced. Defense Supply Center-Philadelphia (S9I), which manages the O-ring, reports there has been zero demand for the O-ring. Because the ECU/PPU tappets are supposed to be adjusted at least twice a year, the O-rings should also be replaced at least every 6 months.

Order the O-ring with NSN 5331-01-400-5772.

O-ring must be replaced every time valve cover is taken off



Trunnion Block Check Left Out

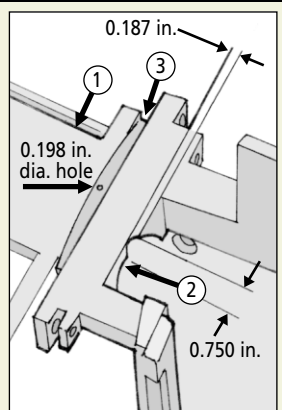


oops! The new edition of the M2 machine gun's TM 9-1005-213-23&P (Mar 02) left out the direct support check and repair for the trunnion block hole. That could cause M2s to be coded out that are still serviceable, which would cost units money.

If you have the old TM, the procedure is on Page 3-68. If you don't, here are the two steps:

3. Receiver assembly with cracked trunnion block (1) or ragged edges on the rear thin portion of the barrel hole (2) may be repaired by grinding a 0.75-in (1.905-cm) radius, not to exceed a maximum depth of 0.187 inch (0.475 centimeter), as shown.

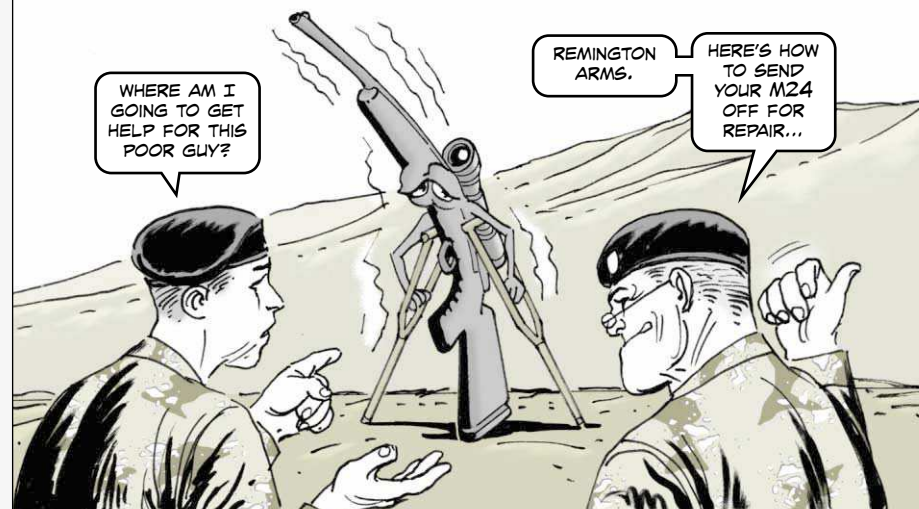
4. Receiver assembly with a hole broken through the feedway of trunnion block stripper slot (3) may be repaired by drilling a .198 to .203-in (.503 to .516-cm) diameter hole, centered in slot (3) to include damaged area.



The check should be on Page 0034 00-3.

Armorer, make sure your support knows this check is missing. It will be added in the next change to the TM.

GETTING THE M24 REPAIRED



Since the M24 sniper weapon system must go to Remington Arms for most repairs, it has to be handled differently than the other weapons in the arms room.

To get an M24 repaired, ask your installation accountable property officer to prepare a DD Form 1348 using a document identifier code (DIC) FTE (report of excess) and AOE (requisition with exception data), which are covered by Chapter 7 of AR 725-50, *Requisition, Receipt, and Issue System*.

The exception data should include the M24's serial number, the FTE document number, and a point of contact, including a commercial or DSN phone number.

TACOM-Rock Island will respond with an FTR (reply to report of excess) that will direct you to ship the M24 to Remington. Remington will return the repaired weapon to you using the document number from the AOE.

If you're OCONUS and don't have access to US registered mail, TACOM-RI will direct you to send the M24 to Anniston Army Depot, which will ship it to Remington.

The FTE and AOE can be phoned into TACOM-RI at (309) 782-2774/DSN 793-2774 or faxed to (309) 782-2640/DSN 793-2640 or e-mailed to

bynumj@ria.army.mil

For more information, contact George Riley, (309) 782-3843/DSN 793-3843, or Doug Carlstrom, (309) 782-2361/DSN 793-2361, or your local TACOM-RI logistics assistance representative.

Mine Clearing Line Charge...

CLEAR MICLIC'S WAY WITH PM



TIPTOEING THROUGH A MINE FIELD CERTAINLY MAKES YOU QUESTION YOUR CAREER CHOICE.

THAT JOURNEY IS MUCH EASIER IF A MICLIC HAS CLEARED A PATH FOR YOU.

BUT FIRST YOU NEED TO CLEAR THE MICLIC'S PATH WITH PM. THE JOURNEY BEGINS LIKE THIS...



Pay attention to the MICLIC's hydraulic system.

If air gets in the hydraulic system, you won't be able to raise the launcher arm high enough to fire. How do you tell if there's air in the system? Put the selector lever in **MANUAL RAISE/LOWER** and pump the hand pump a few times. If the arm doesn't move within the first few strokes, either the hydraulic fluid is low or there's air in the system. If the fluid's OK, bleed the system with the procedure beginning on Page 4-28 in TM 9-1375-215-13&P.

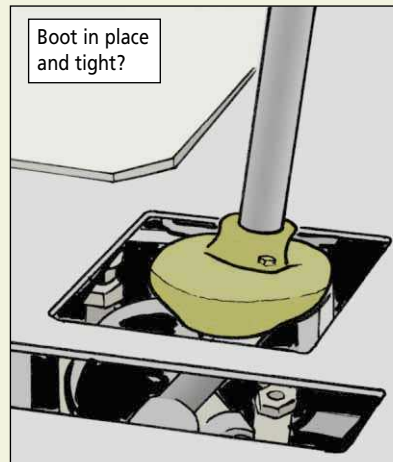
Pump hand pump and see if launcher arm raises



Make sure the boot for the hydraulic reservoir is tightly in place.

It disappears a lot. Without the boot, dirt gets into the pivot point for the hand pump, which makes it hard to pump and wears out the pump. The whole pump must be replaced.

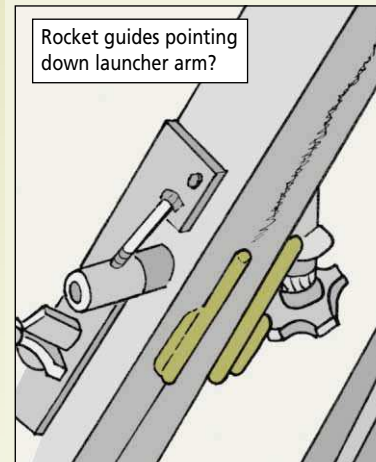
Boot in place and tight?



Check that the rocket guides point down the launcher arm.

The guides are often bent or broken off. If they're pointing out, you'll have trouble loading the rocket. You can usually just bend the guides back in place. Report missing rocket guides.

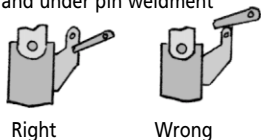
Rocket guides pointing down launcher arm?



Make sure the rocket release actuator cam is forward and under the pin weldment.

If it's to the rear and on top of the weldment stop, the rocket fires but stays on the launcher! One MICLIC crew suffered burns when that happened.

Release actuator cam should be forward and under pin weldment



Check the rope between sausages after firing.

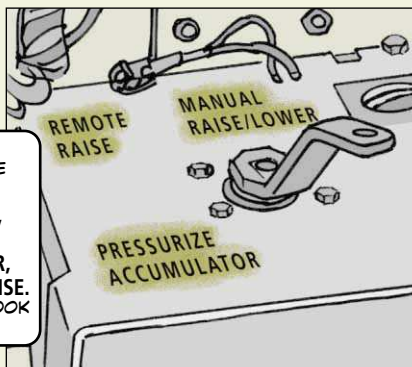
If it has broken, the rocket will fly miles next time you fire. Then you have to spend lots of time hunting it down.

Make sure the three positions for the selector lever are marked.

They are often painted over and then crews have to guess. That sometimes leads to accidentally dumping all the hydraulic pressure.



THE THREE POSITIONS ARE MANUAL RAISE/LOWER, PRESSURIZE ACCUMULATOR, AND REMOTE RAISE. THEY SHOULD LOOK LIKE THIS...

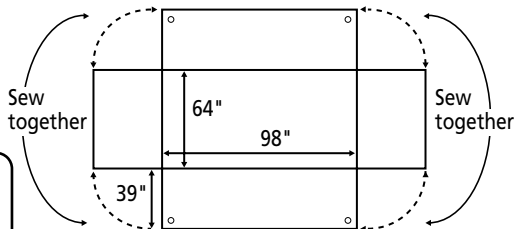


Keep the MICLIC covered in the motor pool.

If it sits uncovered, rain washes out lubricants, starts corrosion, and—worst of all—gets in the hydraulic pump and freezes during cold weather.

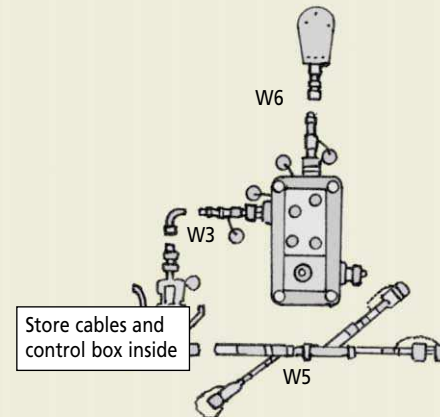


AN OLD 1 1/2-TON TRAILER COVER WORKS WELL OR YOU CAN HAVE YOUR CANVAS SHOP MAKE ONE WITH THIS DIAGRAM...



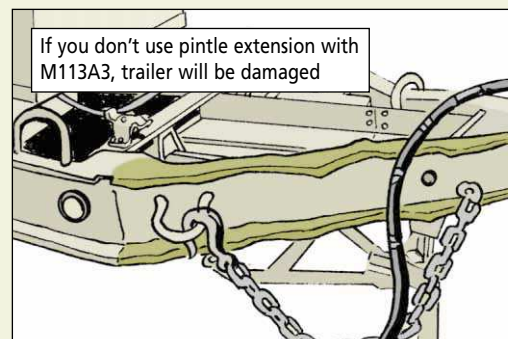
Remove the W3, W5, and W6 cables and control box when the MICLIC is going to sit for weeks.

Store them inside or in the storage box. If you leave the cables and control box exposed to the elements, they will dry rot or corrode. Replacements can be expensive. The W3 cable alone costs more than \$1,000.



Towing with M113A3

In case you haven't heard, you need a tow pin-tle extension, NSN 2540-01-458-4846, if you tow the MICLIC with a M113A3. Without the extension, the M113A3 bangs the trailer and eventually the trailer has to be replaced. You don't need the extension with the other versions of the M113.



Hydraulic Pump

Make sure you have the correct hydraulic pump, NSN 4320-01-226-1226. See the data plate on top of the pump. The other version of the pump does not have a boot to seal out water and dirt, which can ruin the pump. Make sure also the pump handle is tightly screwed in so it doesn't come off and disappear.



Tricks To Keep MICLIC Ticking

LISTEN
UP, COMBAT
ENGINEERS!

THESE THREE
SOLDIERS HAVE
SOME GOOD IDEAS
TO HELP YOU WITH
YOUR MICLICs!

Dear Editor,

We think these suggestions will help other MICLIC crews forge clear paths through mine fields.

- There's never enough room in the MICLIC's storage box for everything you need, so things like TMs or turnbuckles turn up missing when you need them. We eliminated that problem by building a wooden box measuring 4x2x1 feet. We keep the box in the vehicle that tows the MICLIC. You can probably find a box in your motor pool that works just as well.

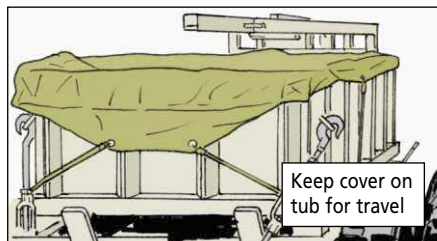
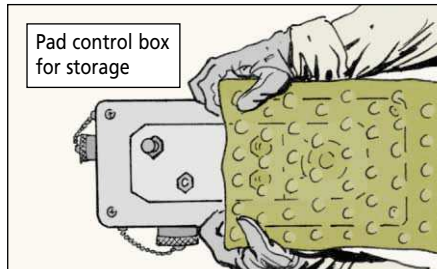
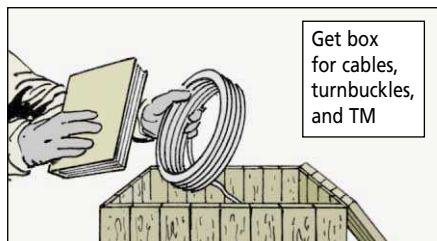
- Wrap some sort of padding like bubble wrap around the control box before you store it. If its plastic case cracks, your MICLIC is out of business. For the same reason, never toss the control box around when you're operating.

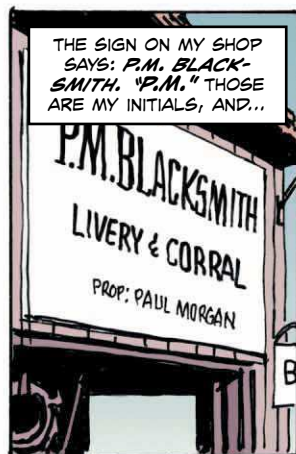
- Keep the cover on the tub during travel. That prevents part of the line charge from bouncing out if the trailer hits a bad bump. Getting the charge back in the tub correctly is hard to do in the field.

SPC Russell Glick
SPC Cesar Correa
PFC Eric Walsh
Co A, 4th Engr Bn
Ft Carson, CO

From the desk of the Editor

Thanks for clearing up those mine-clearing problems.





THE SIGN ON MY SHOP SAYS: **P.M. BLACKSMITH.** "P.M." THOSE ARE MY INITIALS, AND...

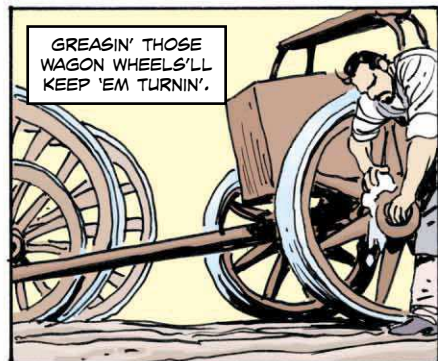


PREVENTIVE MAINTENANCE IS WHAT I DO. I TAKE GOOD CARE OF MY HAMMER AND TONGS...

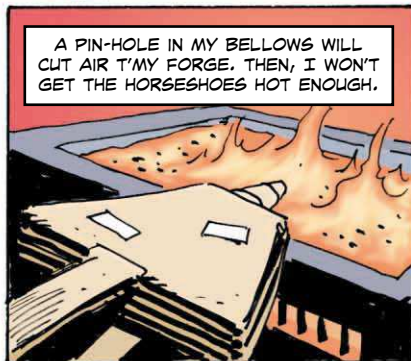
KLANG KLANG



...AND I KEEP MY CORRAL FENCES IN GOOD REPAIR. WON'T DO T'HAVE MY CUSTOMER'S HORSES RUNNIN' LOOSE.



GREASIN' THOSE WAGON WHEELS'LL KEEP 'EM TURNIN'.



A PIN-HOLE IN MY BELLOWS WILL CUT AIR T'MY FORGE. THEN, I WON'T GET THE HORSESHOES HOT ENOUGH.

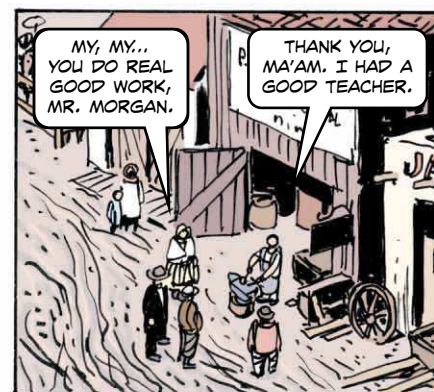


KLANG KLANG

COLD IRON MAKES IT TOUGH T'FORM HORSESHOES PROPER.

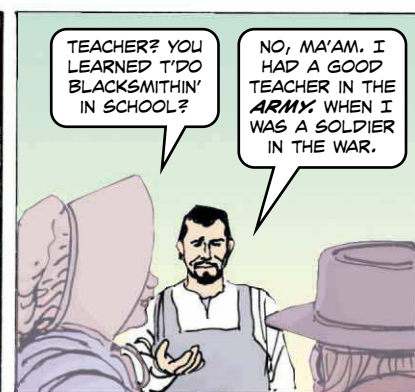


I KEEP MY SIX-SHOOTER CLEAN AN' OILED. I AIN'T NO WYATT EARP, BUT I DO **PM** ON MY GUN.



MY, MY... YOU DO REAL GOOD WORK, MR. MORGAN.

THANK YOU, MA'AM. I HAD A GOOD TEACHER.

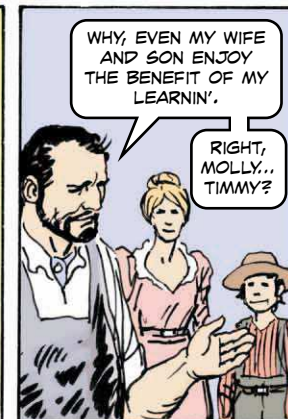


TEACHER? YOU LEARNED T'DO BLACKSMITHIN' IN SCHOOL?

NO, MA'AM. I HAD A GOOD TEACHER IN THE **ARMY**. WHEN I WAS A SOLDIER IN THE WAR.

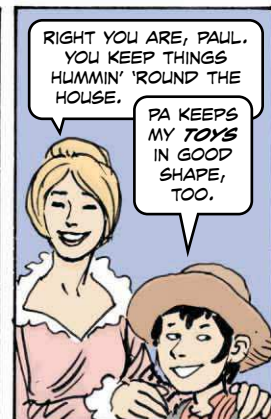


HE WAS MY SERGEANT, NAME O' **HALF-MAST**. NEVER DID FIND OUT **WHY** THEY CALLED HIM THAT, BUT HE SURE KNEW HOW TO TAKE CARE OF EQUIPMENT.



WHY, EVEN MY WIFE AND SON ENJOY THE BENEFIT OF MY LEARNIN'.

RIGHT, MOLLY... TIMMY?



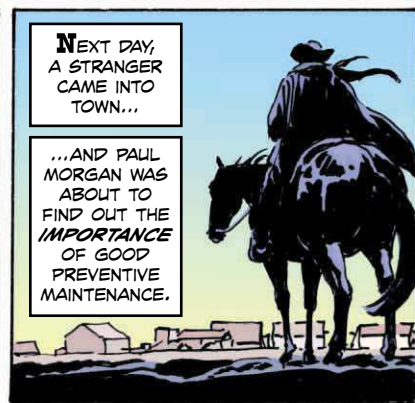
RIGHT YOU ARE, PAUL. YOU KEEP THINGS HUMMIN' 'ROUND THE HOUSE.

PA KEEPS MY **TOYS** IN GOOD SHAPE, TOO.



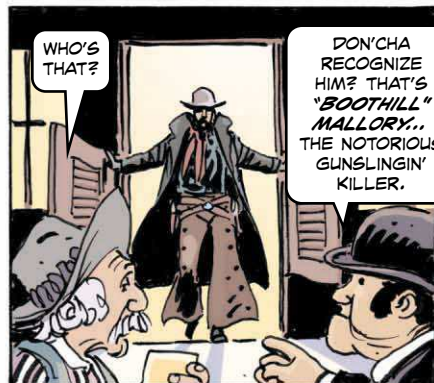
I'VE NEVER HAD TO USE IT, BUT KEEPIN' THIS REVOLVER IN GOOD WORKIN' ORDER IS **ALSO** IMPORTANT.

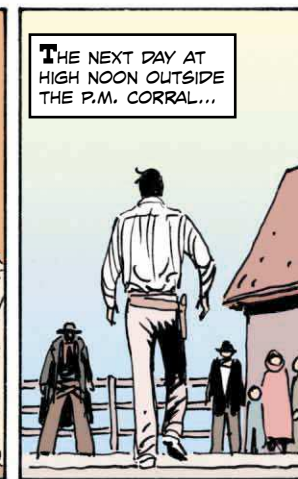
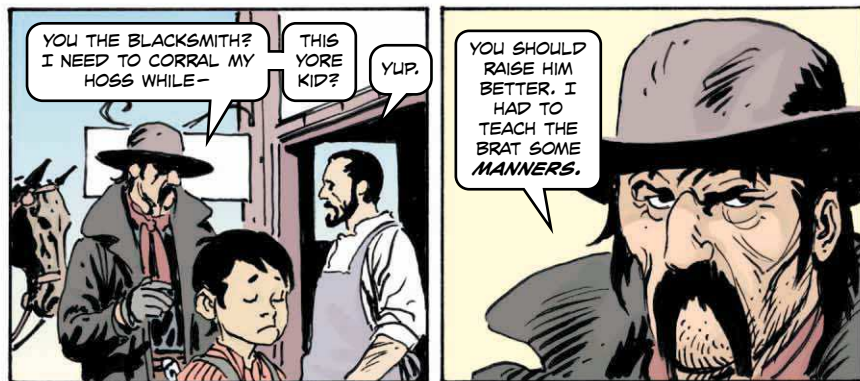
YOU NEVER KNOW WHEN TROUBLE WILL COME CALLIN'.

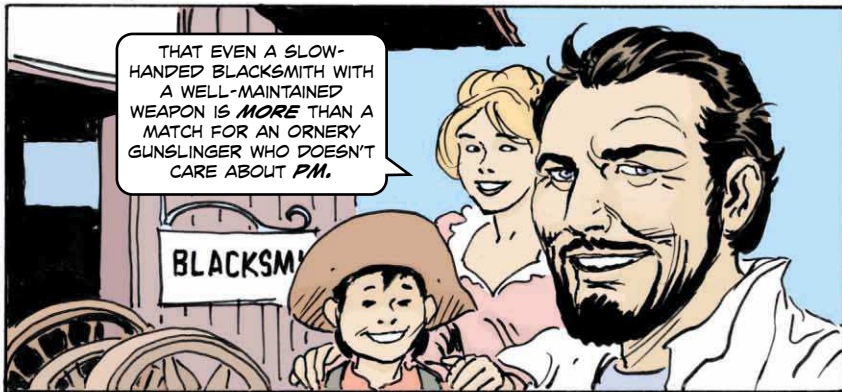
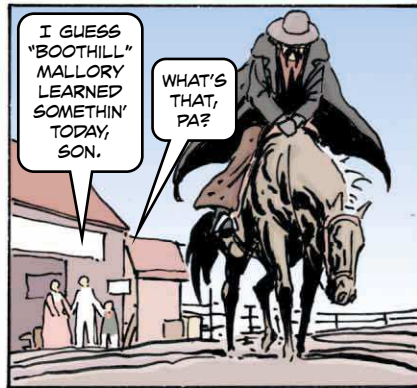
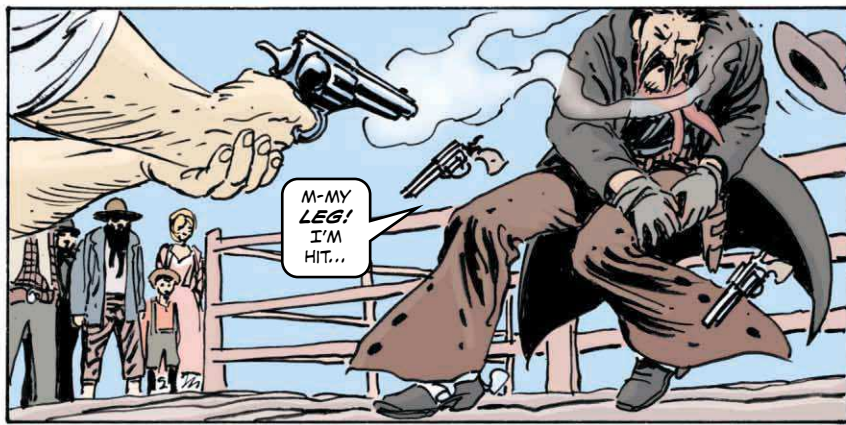


NEXT DAY, A STRANGER CAME INTO TOWN...

...AND PAUL MORGAN WAS ABOUT TO FIND OUT THE **IMPORTANCE** OF GOOD PREVENTIVE MAINTENANCE.







GOT EJECTOR RACK CORROSION?



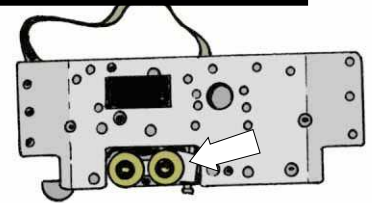
Once more into the breach, mechanics, to fight the corrosion war. No matter where corrosion hides out, it can be wiped out.

When you remove the impulse cartridges from your Kiowa's store ejector rack, eyeball the contact areas and the breech for corrosion. If you find hidden corrosion, clean the breech like it says in paragraph 4-70 of TM 9-1090-214-23&P and apply a light coat of lubricating oil, NSN 9150-00-231-2361.

Trapped water in the breech starts the corrosion process, so don't let it build up. If you do, that could stop the cartridges from firing.

A surefire way to seal out water and keep it at bay so weapons continue to fire, is to apply teflon tape, NSN 8030-00-889-3535, to the threads of the cartridge retainers.

Clean breech and apply lubricating oil



Apply teflon tape to retainer threads to seal out water



PACK IT, SHIP IT, STORE IT RIGHT



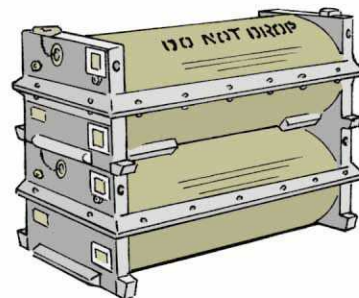
AVIUM MECHANICS, DUCT TAPE, STRING, SPIT, GUM AND A WING AND A PRAYER IS *NOT* THE WAY TO PACK AND SHIP AIRCRAFT COMPONENTS TO YOUR AVIM OR DEPOT SHOP FOR REPAIR.

Shabby, improper packaging, storing, and shipping of components without the correct paperwork leads to long lead time for repairs. If components aren't packaged according to the instructions in FEDLOG or in each aircraft maintenance TM, damage and deterioration during shipment or storage can drive up repair costs.

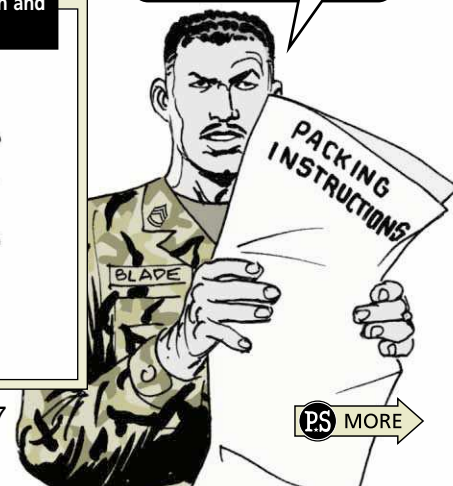


For example, if you ship a rotor head, use the correct container that's clean and free of corrosion and has good seals to keep out condensation and moisture.

Make sure containers are clean and free of corrosion before use

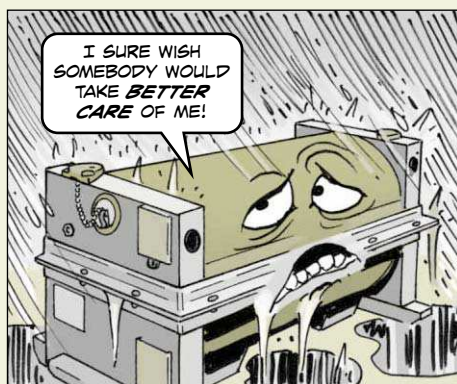


SOME CONTAINERS COME WITH ADDITIONAL PACKAGING INSTRUCTIONS. IF THEY DO, MAKE SURE YOU FOLLOW 'EM.



The best rule of thumb is to ship the component back in the same container or box you received the replacement part in. If there's doubt about how to package an aircraft part, contact Jerry Platzer or Susan Lunsford, AMCOM Packaging Branch, at DSN 788-8614, or DSN 788-9130 and commercial at (256) 842-8614.

When you ship any type of component, consider the type of environment it's heading to and how long it will sit outside, let's say, in a salty, rainy or cold environment. That should determine the type and amount of desiccant, preservative, cushioning material, and the level of protection to use. Check out TM 746-10, *General Packaging Instructions for Field Units*, (Apr 93) for more packaging instructions.



- FM 38-700, *Packaging of Material - Preservation* (01 Dec 99);
- FM 38-701, *Packaging of Material: Packing* (01 Dec 99);
- TM 38-230-1, *Vol 1, Packaging of Material: Preservation*,
- TM 38-230-2, *Vol II, Packaging of Material: Packaging*.

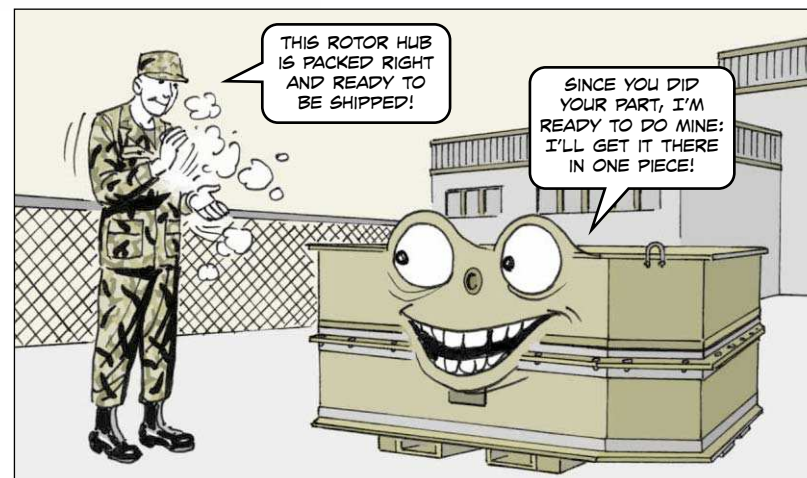
Ship all the historical data with a component. That means use DA Form 2410 and DA Form 2408-5. If the paperwork is left out, you won't get any unit turn-in credit, and the component could be returned. Upon receipt of disposition instructions from the managing ICP, ship material with the completed condition tag, 1348-1A.



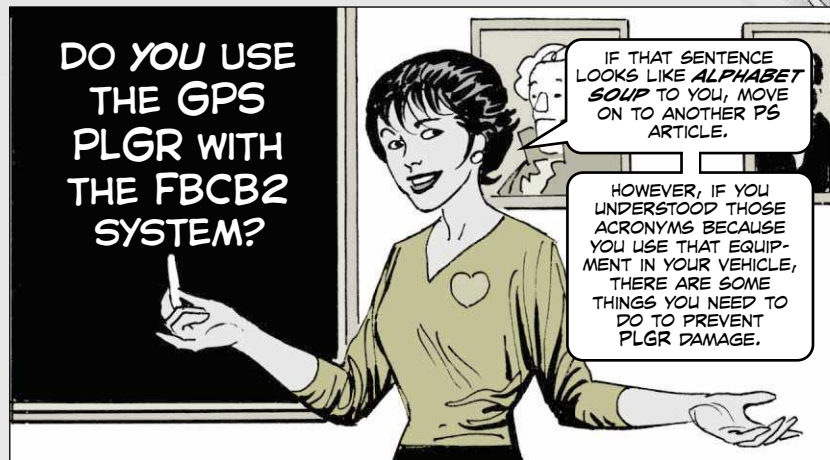
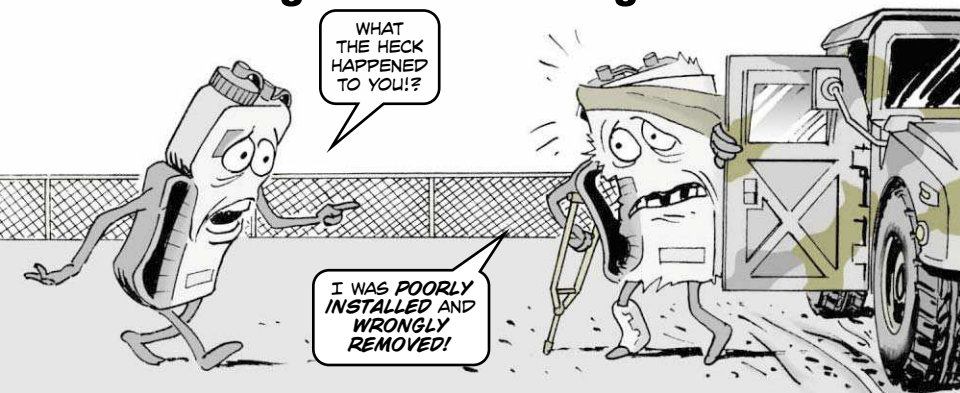
HERE IS A SHORT LIST OF SHIPPING MATERIALS YOU CAN ORDER TO SHIP SMALL PARTS AND COMPONENTS FOR REPAIR.



NSN	Item
8105-00-224-8485	Envelope, packing list
8105-00-290-0342	Sack, shipping, padded envelope
8105-00-756-2710	Envelope, packing list
8115-00-050-5237	Box, shipping, 12x12x18
8115-00-101-7638	Box, shipping, 9x6x3
8115-00-134-3655	Box, shipping, 12x12x14
8115-00-134-3656	Box, shipping, 14x14x14
8115-00-179-0578	Box, shipping, 10x16x8
8115-00-192-1604	Box, shipping, 8x8x12
8115-00-192-1605	Box, shipping, 10x10x12
8115-00-428-4185	Box, shipping, 18x18x18
8115-00-516-0251	Box, shipping, 20x14x9
8115-00-550-3558	Box, shipping, 24x14x14
8115-00-787-2142	Box, shipping, 6x5x2½
8115-00-787-2147	Box, shipping, 6x5x3½
8115-00-787-2148	Box, shipping, 12x8x3½
8115-01-015-1313	Box, shipping, 26x9x9
8115-01-019-4084	Box, shipping, 18x12x3½
8115-01-057-1244	Box, shipping, 10x10x3½
8115-01-057-1245	Box, shipping, 16x16x3½
8135-00-300-4905	Cushioning material, foam
8135-00-664-0057	Cushioning material, packing
8135-00-926-8990	Cushioning material, bubble
8135-00-926-8991	Cushioning material, bubble



Installing and Removing the PLGR



HERE'S HOW TO INSTALL THE PLGR...

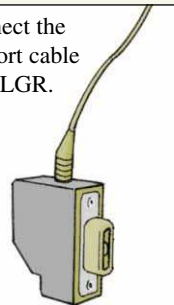


1. Make sure a grounding plate is attached to the PLGR and that the plate has a grounding strap attached to it.



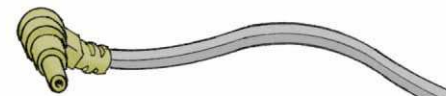
2. Attach the free end of the strap to the chassis ground connector.

3. Connect the serial port cable to the PLGR.



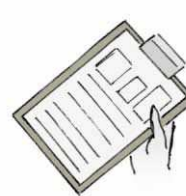
4. Connect the remote antenna cable to the PLGR.

5. Connect the power cable to the PLGR.



6. Put the PLGR in the mount.

"**REVERSE** THE PROCEDURE TO REMOVE THE PLGR, MAKING SURE THE PLGR IS TURNED OFF BY THE **OFF BUTTON** ON THE UNIT BEFORE YOU BEGIN."



IT'S NOT A BAD IDEA TO MAKE THESE INSTRUCTIONS INTO A SMALL CHART AND POST THEM NEAR THE PLGR MOUNT.

PLGR Connect Procedure:

1. Attach ground strap
2. Connect serial port cable
3. Connect remote antenna cable
4. Connect power cable
5. Install PLGR in mount

Disconnect Procedure:

1. Remove PLGR from mount
2. Disconnect power cable
3. Disconnect remote antenna cable
4. Disconnect serial port cable
5. Detach ground strap

Getting Good Connections

THE AN/URM-213 WATT-METER IS NOW WHAT IS KNOWN AS A "NON-SUPPORTED" ITEM.

THAT MEANS IF YOU'RE USING THE METER AND YOU HAVE A BROKEN CABLE, YOU MUST ORDER THE PIECES AND MAKE THE CABLE YOURSELF.

HERE'S A CHART OF THE EIGHT CONNECTORS YOU CAN USE ON THE SPECIALTY CABLES. THE CABLE RUNS FROM THE N-PLUG, NSN 5935-00-660-4296, TO ONE OF THESE CONNECTORS...

Component	NSN
BNC plug	5935-01-043-0629
BNC plug	5935-00-552-7920
TNC plug	5935-00-136-6912
TNC jack	5935-00-430-4108
SMA plug	5935-01-214-9569
SMA jack	5935-01-419-4545
TPS plug	5935-00-995-1665
TPS jack	5935-01-098-0661

FOR BNC CABLES, HERE'S WHAT YOU NEED...

Component	NSN
BNC-male to N-female	5935-00-739-2242
BNC-male to TNC-female	5935-01-274-9106
BNC-male to TPS-female	5935-01-051-0673
HN-female to N-male	5935-00-702-4846
N-female to BNC-male	5935-01-095-6418
TNC-female to TNC-female	5935-01-282-7196
BNC-female to N-male	5935-00-259-0205
BNC-female to TPS-male	5935-00-491-6302
BNC-female to HN-male	5935-00-149-3535
BNC-male to BNC-male	5935-00-894-2451
BNC-female to BNC-female	5935-01-370-3940
N-male to N-male	5935-01-057-7227
N-female to N-female	5935-00-643-9875



PROBLEMS GET FIXED

NEWSFLASH!
...THIS JUST IN...
FREE UPGRADES
BEING GIVEN TO
AN/PRC-112
RADIOS!!

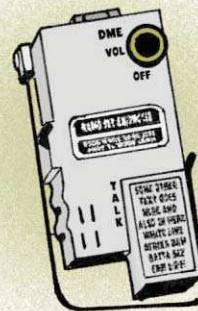
NOW THAT'S
WHAT I NEED
TO HEAR!



THE AN/PRC-112 SURVIVAL RADIO HAS **THREE PROBLEMS**. THEY ARE...

1. The large VOL/OFF knob can accidentally be turned on when the radio is handled. If turned on and left on, it drains the battery.
2. Water seeps into the radio's case.
3. Frequency hopping happens by chance due to the design of the radio's transponder.

HERE'S HOW AN UPGRADE PROGRAM THAT'S UNDERWAY FOR THE AN/PRC-112 SOLVES **ALL THREE PROBLEMS...**



1. Current VOL/OFF knob is replaced with a smaller knob that is more difficult to accidentally turn on.

2. A new, better gasket that stops water intrusion is installed in the lid of the case.

3. A more efficient transponder is added that corrects chance frequency hopping.

It is important to find out if your radio has been upgraded.

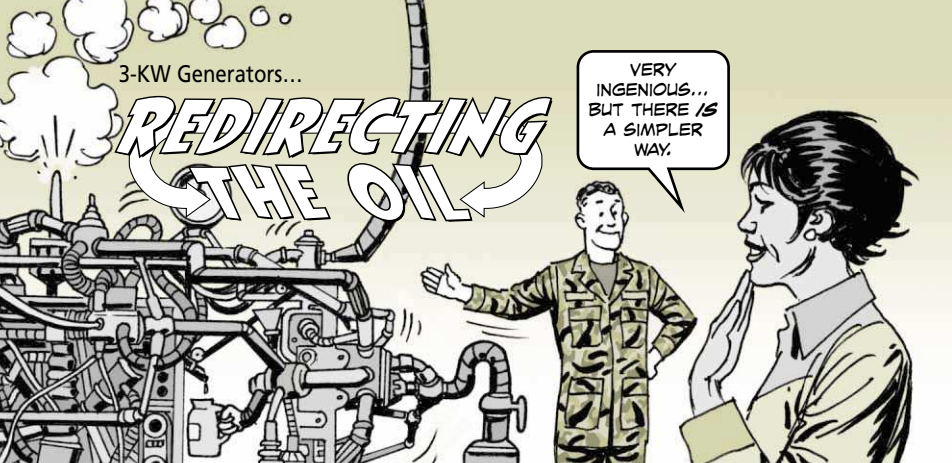
If your radio's NSN is 5820-01-458-6018, then it has been upgraded.

If your radio's NSN is 5820-01-279-5450 and a Tobyhanna Army Depot (TYAD) sticker has been added, then the radio has been upgraded.

If the NSN is 5820-01-279-5450 and there is no TYAD sticker, then the radio needs to be upgraded.

Contact CECOM at DSN 992-1191 or (732) 532-1191 or e-mail at:

bruce.jetter@
mail1.monmouth.army.mil
for instructions on how to get the upgrade.

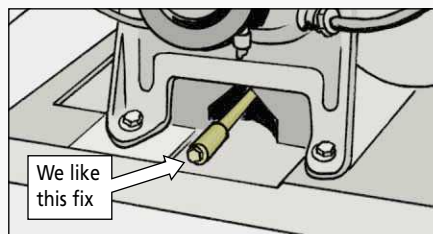


Draining the oil from a 3-KW generator can be a big mess. Before the oil reaches a drain pan, it hits the generator frame, then splashes and spreads.

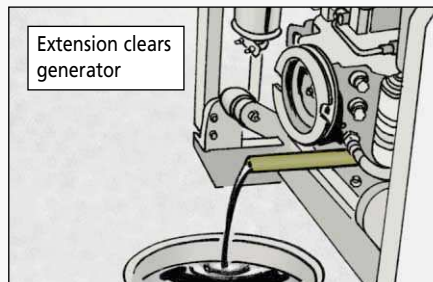


Many homemade fixes have made their appearance over the years, including drip pans of all shapes and sizes, funnels and hoses.

We still recommend how PS solved in the problem in PS 373, Dec 83.

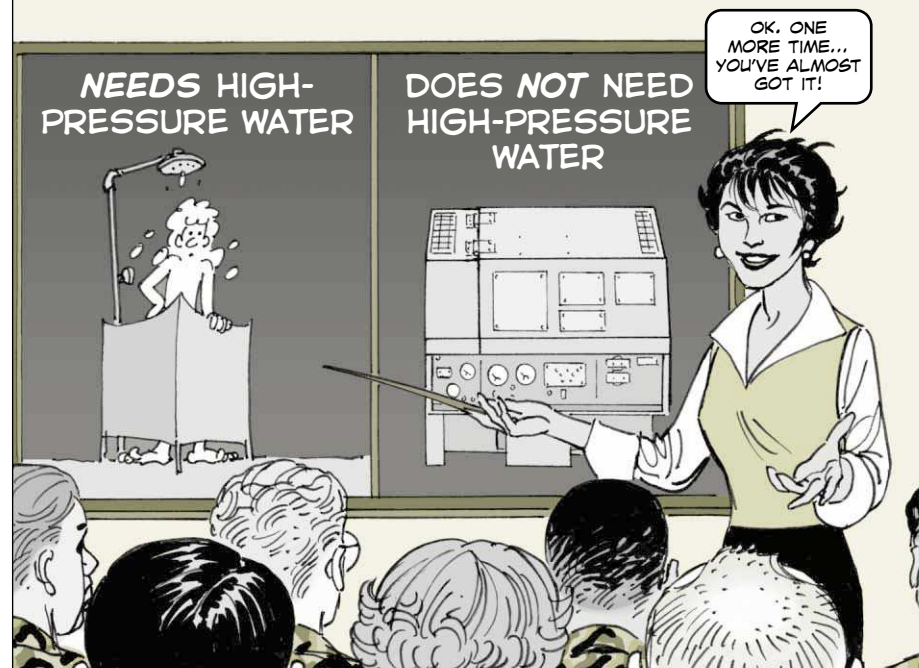


Simply screw in a drain pipe extension, NSN 2805-01-045-9735, into the engine oil drain opening. A magnetic oil drain plug, NSN 4730-00-788-0441, then screws into the end of the extension. This extension clears the generator and allows oil to be drained directly into a drain pan.



3-KW TQG...

QUIT WATERING THE CONVERTER



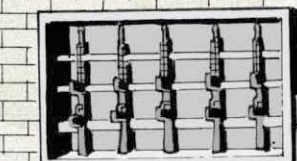
Water is entering 3-KW TQGs, NSN 6115-01-285-3012 (60 HZ) and NSN 6115-01-287-2431 (400 HZ), and collecting in the A8 frequency converter. Soon the converter shorts out and your unit is shelling out three grand to replace the 400 HZ converter, NSN 5895-01-477-0858, or four grand to replace the 60 HZ converter, NSN 5895-01-477-0855.

CECOM says the water problem is coming from high-pressure washing of the generator. The generators are made to shed rain, but pressurized wash water can force its way in and do a great deal of damage. Seems like the A8 frequency converters are suffering the most.



LET ULLS TRACK VERIFICATIONS

THAT WRAPS UP ANOTHER DAY OF ARMS ROOM PM. NICE JOB, BOYS.



(SIGH)
...NOBODY PAYS ATTENTION TO US ANYMORE...

WE'RE NOT GETTING OUR CHECKUPS LIKE WE'RE SUPPOSED TO!

THEY'LL BE **SORRY** WHEN THEY NEED US!"



Dear Editor,

As the V Corps Maintenance Assistance/Instruction Team (MAIT) in Germany, we run into many units who aren't staying on top of required services for their equipment. They miss the deadline for the verifications. Then when they need the equipment it's deadline until the required checks are done by direct support. That doesn't make commanders or direct support happy.

This problem is particularly acute in the area of night vision equipment. Night vision goggles and sights are usually stored in the arms rooms. But often it's the commo people who are responsible for scheduling the equipment's verifications. It's a case of out-of-sight, out-of-mind. The goggles and sights sit in the arms room, but it's not the armorer's job to have them verified. So the commo folks forget about them.

I THOUGHT VERIFYING THE NVGS WAS **YOUR** JOB!

NOPE. IT MIGHT BE **MY** ARMS ROOM, BUT IT'S **YOUR** JOB!



We suggest to units that they enter all their night vision equipment into their Unit Level Logistics System (ULLS). ULLS and DA Form 5988E can then automatically notify the commo shop when it's time for verifications. And nobody ends up in hot water with his commander.

Of course, ULLS is also good for tracking verifications for other equipment like machine guns and chemical alarms.

The information coming out of ULLS is only as good as the info put into it. Don't just dump a load of paperwork on your ULLS clerk. Work with him to make sure the correct nomenclature, ID or serial number, and maintenance schedule are entered for each item. A little care when the info is put in ULLS saves time and trouble later.

Willie F. McCall
Archard C. Mathis
Douglas J. McKay
SFC Aaron Burr
SFC Somsak Tong
SFC Stephen Hattle
SSG Rona M. McLeod
Maintenance Assistance/
Instruction Team (MAIT)
V Corps
Heidelberg, Germany



HEY!! I **NEED** VERIFYING!

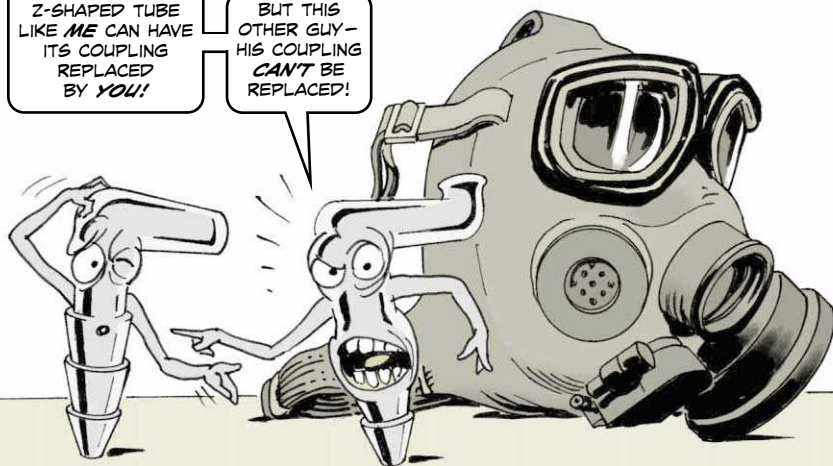
From the desk of the Editor

ULLS is an excellent way to track required equipment verifications and services.

Drink Tubes Not All the Same

NOW A Z-SHAPED TUBE LIKE *ME* CAN HAVE ITS COUPLING REPLACED BY *YOU*!

BUT THIS OTHER GUY—HIS COUPLING *CAN'T* BE REPLACED!



Listen up, NBC NCOs. Internal drink tubes and their couplings for the M40/M42-series masks are not all the same. Some drink tube couplings can be replaced by you, but others can't. So it's important to know which kind you've got.

The new drink tube looks like a stretched Z—it has 2 bends. The old tube has only one bend.

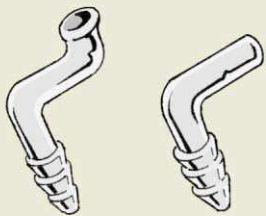
The new drink tube, NSN 4240-01-441-0557, can be used only with the new drink tube coupling, NSN 4240-01-462-0045. If the new tube disappears or its coupling is damaged, you can replace them with the procedures that begin on Page 2-54 of TM 3-4240-346-20&P.

But if the old drink tube coupling is damaged, the whole facepiece must be turned in for replacement.

The old coupling has a squared base and points upward toward the front voicemitter and nosecup ridge. The new coupling is straight and points out of the facepiece.

Don't try to use the new drink tube with the old coupling or vice versa. That puts the drink tube in the wrong position for drinking.

New and old drinking tubes



New

Old

ONE TIP, ONE CORRECTION

NBC NCOs, THESE *TWO POINTS* WILL POINT THE WAY TO EASIER EVALUATION OF YOUR UNIT'S M40/M42 MASKS...



- If the M40/M42 drink tube is too close to the soldier's face when you're testing with PATS, the vacuum created by PATS can cause the drink tube to stick to his skin. Then PATS will give a false reading because no air is being sampled.

The solution is to rotate the drink tube 90° to the right. That keeps the drink tube away from the soldier's skin. Of course, once you're finished testing, remember to rotate the drink tube back to where the soldier can reach it with his mouth.

- If a mask has any tears, cuts, holes or sticky or soft patches in the facepiece, it's non-mission capable. Period. Get a new mask. The PMCS in TM 3-4240-346-10 is being changed to make that clear.

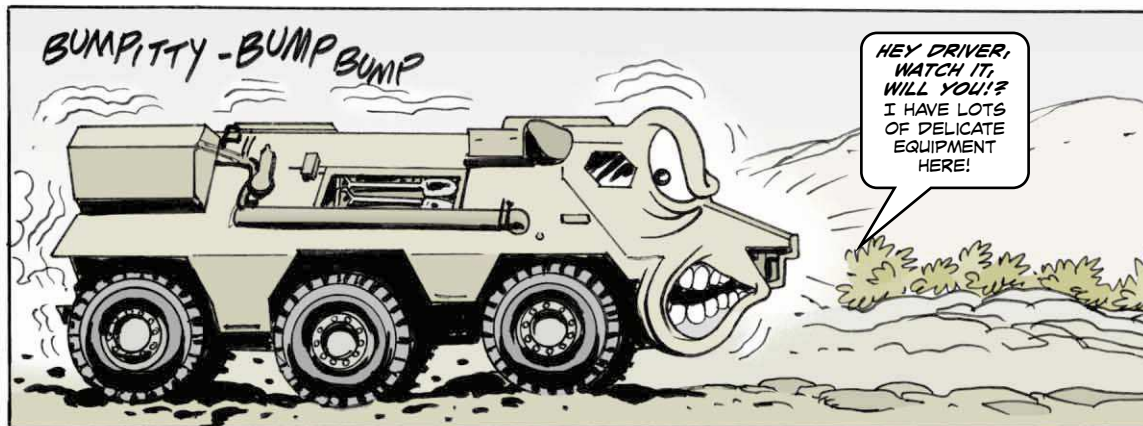
Rotate drink tube 90° to right, away from soldier's mouth



Any tears, cuts, holes, or sticky or soft spots make mask NMC



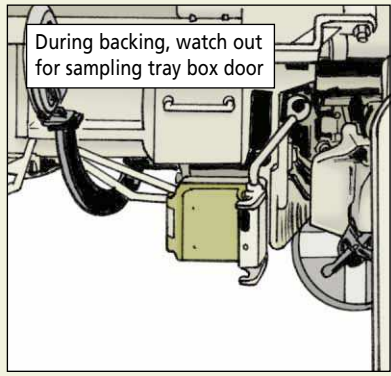
BE CAREFUL OUT THERE



THE FOX HAS LOTS OF EQUIPMENT THAT CAN BE SNAPPED OFF OR BANGED UP IF YOU'RE NOT CAREFUL DURING TRAVEL. FOR INSTANCE...

• Door for the sampling tray box:

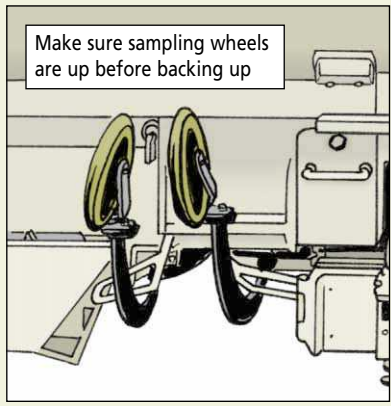
The door can be snapped off when the Fox is backed up over rough ground. Whenever possible, use ground guides to back up in the field and have them watch the door for clearance. Of course, take it slow, too.



During backing, watch out for sampling tray box door

• Sampling wheels:

If the wheels aren't up when you back up the Fox, you quickly have no sampling wheels. Make a point to check that the wheels have raised before you back up.



Make sure sampling wheels are up before backing up

• M21 chemical agent alarm:

If the M21 is left up during travel, its weight will cause it to snap on the first hard bump and its expensive camera will be broken. **Never** travel with the M21 raised.



M21 must be stowed for travel

• Propeller:

Bouncing through rough country can bang the bottom of the propeller assembly hard enough to cause it to leak oil. If your Fox has taken some hard bumps, check the propellers for oil leaks.



Check propellers for oil leaks

BOTTOM LINE, FOX DRIVERS, IS YOU NEED TO TAKE IT EASY IN THE FIELD.

STAY ON SMOOTH, EVEN GROUND AS MUCH AS POSSIBLE AND IF YOU MUST DRIVE THROUGH ROUGH COUNTRY, DO IT SLOWLY.



DISPENSING DISPERSER INFO

THIS M37 IS STARTING TO WEAR OUT! WHERE ARE WE GOING TO GET REPAIR PARTS FOR THIS?

I DON'T KNOW! I DON'T EVEN HAVE A TM FOR IT.



THE ARMY IS FIELDING THE M37 RIOT CONTROL AGENT DISPENSER, NSN 1040-01-463-0157, TO MP UNITS AND THE GUARD AND RESERVES.

IF YOUR UNIT RECEIVES THE M37, HERE ARE A FEW THINGS TO REMEMBER.

- The M37 is covered by TM 3-1040-287-12&P. You should have received a copy with each M37. If you didn't, have your pubs clerk order more.
- You should also have received refill and repair kits for every 2 or 3 M37s. The repair kit has no overall NSN, but you can order its components with the NSNs in the Repair Parts and Special Tools List in the TM.
- All M37s are under warranty through April 2004. See Page 0001 00-2 in the TM for more info.

THE REFILL KIT IS MADE UP OF THESE ITEMS...



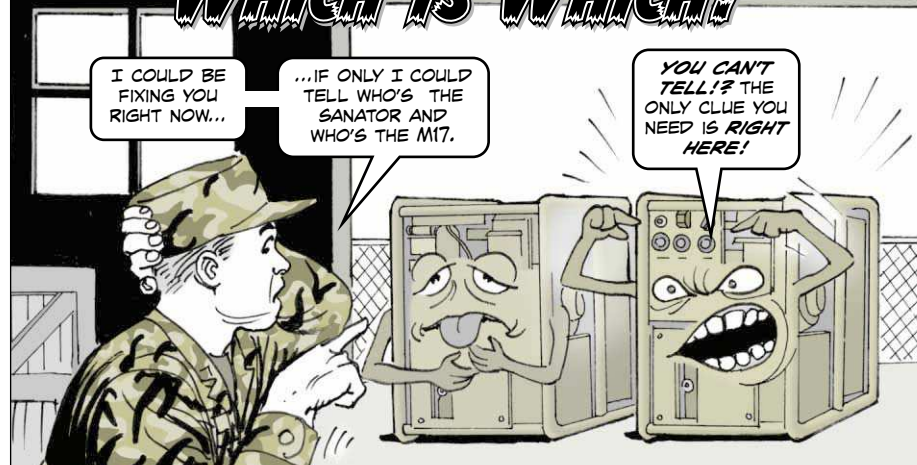
- Screw cap bottle, NSN 6640-00-688-7881
- Funnel, NSN 6640-00-063-7872
- Antiseizing tape, NSN 8030-00-889-3534
- An alternative to the M254 service kit transfer tube for filling the transfer bottle is a pour spout, NSN 7240-00-782-3501, which is being added to the refill kit.

WHICH IS WHICH?

I COULD BE FIXING YOU RIGHT NOW...

...IF ONLY I COULD TELL WHO'S THE SANATOR AND WHO'S THE M17.

YOU CAN'T TELL! THE ONLY CLUE YOU NEED IS RIGHT HERE!



Dear Sergeant N.D.,

You bet. If your decon has the control panel on the end, it's an M17. If the panel is on the lower left side, it's a Sanator.

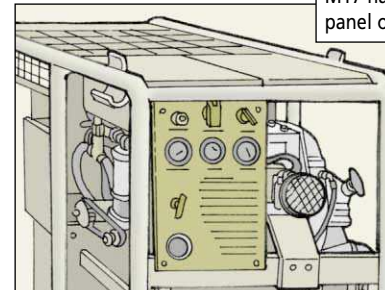
M17 has control panel on end



Dear Half-Mast,

We have several decons at our posts and we have trouble telling whether we have the M17 decon or the AE32U/8 Sanator, plus we have trouble telling what models of M17 we have. That makes it tough when we order parts since we don't know which parts we need. Is there a good way to tell what's what?

SGT N.D.

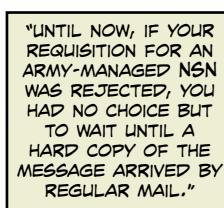
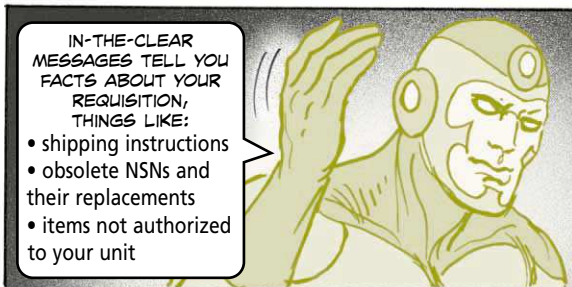
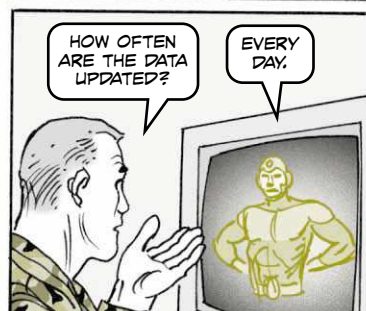
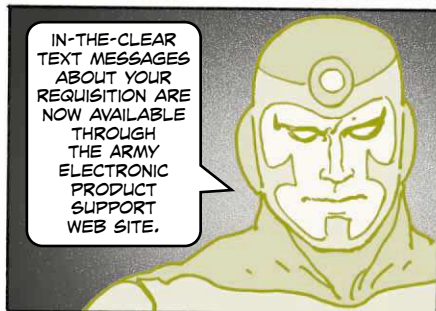


For Sanator parts, see TM 3-4230-218-12&P.

There are only two versions of the M17 in the field now, the M17A2 and M17A3. The only difference between the two is that the -A2 uses the 1,580-gal blivet, while the -A3 uses the 3,000-gal blivet. Go to TM 3-4230-228-23&P for parts.

Half-Mast

REQUISITION IN-THE-CLEAR MESSAGES WEBSITE



THE WAIT
SOMETIMES
TOOK TWO
WEEKS.



NOW YOU CAN GET
WHAT YOU NEED
ON-LINE IN ONE DAY.
HERE'S HOW...

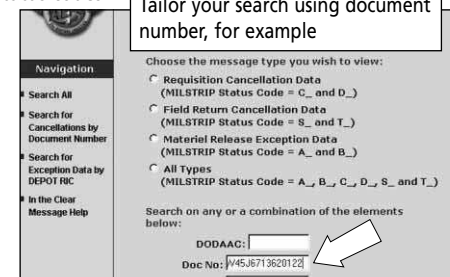
- Go to the AEPS web site at <http://aeps.ria.army.mil>
- Click on AKO Protected Applications. You'll need your AKO user name and password to enter.
- Once you reach the AKO Public Applications page, click on MILSTRIP In The Clear Messages.



You'll get a screen where you can perform a search for the messages.

- You can base your search on the cancellation code on your MILSTRIP document. Or you can search all types of MILSTRIP status codes.
- You can also tailor your search using any or all of the following:

- document number
- DOD Activity Address Code (DODAAC)
- national stock number (NSN)
- Army inventory control point (ICP) routing identifier code (RIC)
- depot RIC
- document identifier code (DIC)



- After tailoring your query, click on the Search button. You'll get a screen showing a list of messages, sorted by message type and DODAAC. Each listed message will also show the Julian date, document number, NSN, ICP RIC, depot RIC, and a View link.



- Click on the View link. You'll get the entire MILSTRIP document, including the text of the in-the-clear message.
- If you need any help contact the AEPS help desk at AEPS-helpdesk@ria.army.mil or call them at (888) 564-4357, DSN 793-0699.

Soldier Support...

PREPARING FOR THE DESERT



HEADED FOR AN NTC ROTATION OR BEING DEPLOYED TO SOME OTHER DESERT LOCATION? THEN TAKE A LIST AT THIS LIST OF ITEMS.

SOME JUST COME IN HANDY; OTHERS CAN MAKE A VERY UNCOMFORTABLE SITUATION A LOT MORE TOLERABLE.



Item	NSN	Qty/Size
Chapstick	6508-01-436-0607	144 sticks
Hydrogen peroxide	6505-00-153-8480	1 pint
Adhesive bandage strips	6510-00-597-7469	100 3/4x3-in strips
Cotton swabs	6515-01-464-0432*	100
Snake bite kit	6545-01-281-1237	1
Insect repellent	6840-01-003-9589*	1 oz
Insect repellent (controlled release over 24-hr period)	6840-01-463-5455*	4 oz
Insect repellent, aerosol	6840-01-278-1336	12 6-oz cans
Insect repellent (for wash treatment of BDUs)	6840-01-345-0237	12 kits
Insect sting kill swabs	6510-01-045-3506*	10
Fly bait insecticide	6840-01-183-7244	5-lb can
Dust mask	4240-01-463-5449*	20
Sunscreen	6505-01-121-2336	4-oz bottle
Sunglasses	8465-00-045-4651	1 pair
Talcum powder	8510-00-817-0295	9-oz can
Foot powder	6505-01-008-3054	45 gram container
Toothbrush, 6-in	8530-01-293-1387	12
Toothpaste, fluoride	8520-01-303-4037	12 3-oz tubes
Disposable wipes, pre-moistened, antibacterial	7930-01-423-1120	60 sheets in pop-up container
Disposable wipes, pre-moistened	8520-01-415-2929	255 individually packaged wipes
Hand cleaner, pumice	8520-00-634-1594	3-lb container
Ear plugs, disposable foam	6515-00-137-6345	200 pairs
Goggles, safety	4240-00-052-3776	1 pair
Sewing kit	8315-01-222-0680	1
Batteries, D-cell	6135-01-446-8310*	4
Batteries, C-cell	6135-01-446-8307*	4
Batteries, AA-cell	6135-01-447-0950*	4
Batteries, AAA-cell	6135-01-446-8308*	4
Batteries, 9-volt	6135-01-447-0949*	2

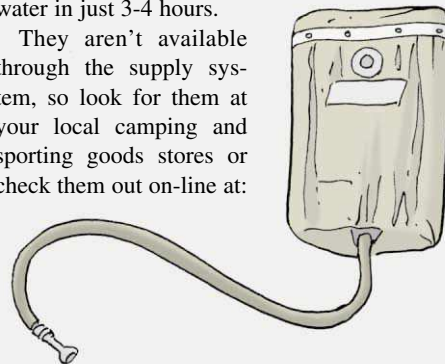
*Order on a DD Form 1348-6 and put "NSN not on AMDF" in the REMARKS block.

A Good, Hot Shower

Staying clean in the desert isn't easy and taking a cold sponge bath is no one's idea of a good time. That's when a solar shower comes in handy.

These gravity-fed showers are made of solar-absorbing materials that can heat 4-5 gallons of water in just 3-4 hours.

They aren't available through the supply system, so look for them at your local camping and sporting goods stores or check them out on-line at:



<http://www.altrec.com/shop/detail/1884>

<http://www.ballystore.com/product/index.jsp?productId=502809>

<http://www.kmart.com/product/index.jsp?productId=502809>

<http://www.gijoes.com/product/index.jsp?productId=502809>

You can find other vendors by doing a web search for "solar shower".

Keep the Sand Out

SINCE SAND HAS A HABIT OF GETTING INTO PRETTY MUCH EVERYTHING, KEEP A GOOD SUPPLY OF ZIP-SEAL BAGS ON HAND FOR SMALL PARTS AND OTHER ITEMS.



Size	NSN 8105-00-837-	Qty
4x4-in	7753	1,000
6x6-in	7754	1,000
8x8-in	7755	1,000
11x10 1/2-in	7756	500
12x12-in	7757	500

3,000 GPH Trailer-Mounted ROWPU...

Hard to Find Repair Parts

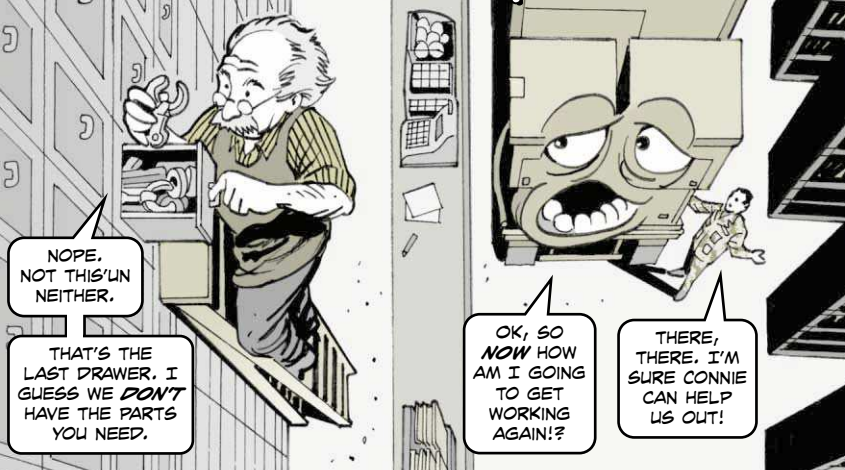


Fig #	Item #	NSN	Name
3	41	5340-01-468-4943	Bracket, raw pump cannon plug
43	2	2540-01-468-5020	Latch, electrical panel door
67	96	5330-01-467-1605	Gasket, retainer in booster pump discharge assembly
69	13	4730-01-467-1526	Clamp, product water out
72	1	5340-01-468-4937	Clamp, basket retainer
80	4	4810-01-467-1589	Valve, solenoid assembly
81	4	4810-01-467-1591	Valve, solenoid assy
83	17	5999-01-467-1685	Level switch, P37
83	18	5999-01-467-1676	Level switch, P36
83	19	5999-01-467-1683	Level switch, P35
84	9	4730-01-467-1501	Clamp, multi-media tank
116	4	4730-01-468-5339	Elbow, waste out
BULK	33	5330-01-468-5373	(Aqua Chem models only) Material, electrical panel seal

MAKE A NOTE OF THESE CHANGES IN TM 10-4610-232-24P UNTIL THERE'S A CHANGE OR REVISION TO THE TECHNICAL MANUAL.



Water Tanks...

FILL-LINE REMINDER



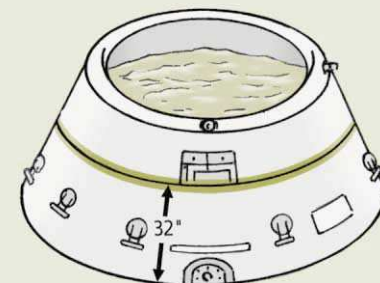
You'll end up with wet boots and a burst 3,000-gal onion tank, GTA-Z60 TPW, NSN 5430-01-469-8744, if you follow the info on Page 0002 00-2 of TM 10-5430-237-12&P.

That's because the water fill level says 45 inches. That's wrong—it should be 32 inches!

Filling the onion tank to 45 inches is almost the equivalent of 5,000 gallons of water. The tank will rupture and break at that level. It's only designed to hold 3,000 gallons of water.

Play it safe with no more guesswork. Use a yardstick to mark a line at 32 inches around the tank with a permanent marker. In the meantime, make a note of the error until there's a change or revision to the technical manual.

Mark a 32" fill line around onion tank





Dear Editor,

Safety glasses are vital for mechanics and operators who need protection from small debris and sand when working at NTC or other desert environments.

Unfortunately, most safety glasses don't provide any sun protection and are so ugly that most guys *won't* wear them.

I found the perfect solution when I came across some safety glasses that were recently added to the supply system. These glasses filter out 99% of all harmful UV light, have curved lenses to provide 180° of protection, and have adjustable temple pieces with four different size settings.

An additional plus is the cool frame and lens style.

SPC George B. Walsh
TNARNG
Athens, TN

From the desk of the *Editor*

The better they look, the more likely they are to be worn. Thanks for the info!

Frame Color	Lens Color	NSN 4240-01-500-
Camouflage	Mirror	6116
Camouflage	Amber	6161
Camouflage	Grey	6164
Camouflage	Clear	6167
Black	Mirror	6169
Black	Amber	6171
Black	Grey	6173
Black	Clear	6174
Metallic blue	Mirror	6178



DON'T WAIT
TIL HIGH
NOON TO
START YOUR
PM!

YOU SHOULD
BE DOING IT
ALL THE
TIME!



EOD MWO WRONG

MWO 9-2320-288-20-6 listed in the explosives ordnance disposal's TM 9-4940-566-23&P and the contact maintenance shop equipment's TM 9-4940-563-13&P is wrong. The correct number is MWO 9-2320-280-20-6. The MWO is listed on the Warning Summary page and in Para b on Page 0002 00-1 in TM 9-4940-566-23&P and on the Warning Summary Page C and in Para 1-7 b on Page 1-7 in TM 9-4940-563-13&P.

MKT Food Containers

Are you having trouble getting the latest insulated food containers (IFC) used on all MKTs? Order NSN 7360-01-419-8500.

INSULATED FOOD CONTAINER GASKETS

If you've got worn-out gaskets on your insulated food containers, NSN 7360-01-419-8500, order NSN 7360-01-456-9114 for the pan gasket, and NSN 7360-01-456-9113 for the lid gasket.

Defective GPFU Fans

Fans made for the M93 gas-particulate filter unit (GPFU) may be defective. It is critical that defective fans be identified and replaced because no fan means the GPFU provides no NBC protection. How to tell? Check the GPFU's identification plate. If your GPFU was made by Hunter Manufacturing, Keco Enterprises, or Donaldson Company, check the contract number. It will say DAAE20-XX, with the XX being the year of the contract, such as 98 for 1998. If your GPFU was contracted for in 1996 or later, contact SBCCOM's Guy Cabell at (309) 782-7126/DSN 793-7126 or cabellg@ria.army.mil. He will tell you if you have a defective fan and how to get a replacement. If your fan's contract year is before 1996, your fan is OK.

Use PATS, Not BANANA OIL

The M41 PATS is the most accurate way for an NBC NCO to test the fit and condition of an M40/M42-series mask. The old banana oil smell method does not even come close. Unfortunately, some NBC NCOs are still using banana oil to test masks for soldiers deploying overseas. Then when the soldier arrives overseas he's tested with PATS and his mask flunks the fit test. Not good! Use PATS, not banana oil, for testing masks.

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?

