Issue 482

D

January
1993

THE PREVENTIVE MAINTENANCE MONTHLY

TB 43-PS-482

Has your buddy read this issue? Pass it along!



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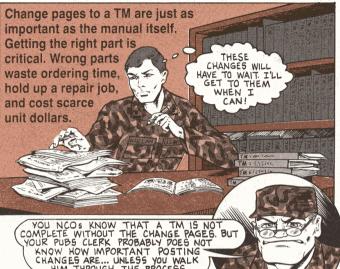




Getting All the Pubs

Approved For Public Release; Distribution is Unlimited

anges are TMS, Too



HIM THROUGH THE PROCESS.

Show him the importance of using binders

BINDERS PROTECT TM COVERS, KEEP PUBS IN ORDER, AND MAKE POSTING CHANGES EASY!

Here are some binder NSNs:

A CONTRACTOR OF STATE OF THE STATE OF THE STATE OF	NO TOP TO THE PARTY OF THE PART
Binders and Posts	NSN 7510-00-
1-in notebook	187-6489
1-in posts	634-0231
2-in binder	149-0604
2-in posts	889-3519
Long binder (11x17 inches)	281-4310
3-ring notebook for Ps	187-6486

Show your pubs clerk the steps for posting a change.

CHECK CHANGE PAGES AGAINST THE TRANSMITTAL PAGE TO BE SURE YOU'VE GOT THEM ALL.





PUT THE TRANSMITTAL SHEET AT THE FRONT OF THE TM SO YOU CAN QUICKLY FIND THE LAST CHANGE POSTED

YOU HAVE TO MAINTAIN YOUR TMS TO MAINTAIN YOUR EQUIPMENT. MAKE SURE YOUR PUBS CLERK POSTS EVERY CHANGE WHEN IT COMES IN SO YOUR MECHANICS WILL HAVE THE LATEST INFO ON THEIR EQUIPMENT!



publication of the Department of the Army, providing information for all soldiers assigned to combat and combat support units and all soldiers with unit maintenance and supply duties. All information published has been reviewed and approved by the agency responsible for the equipment, publication or policy discussed. Application of the information is optional with the user

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

MSG Half-Mast The Preventive Maintenance Monthly Lexington, KY 40511-5101

By Order of the Secretary of the Army:

GORDON R. SULLIVAN General, United States Army Chief of Staff



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Get It Right the First Time



Do something wrong the first time and you may not get a second chance. That's especially true with the M1A1's firing mechanism assembly.

If you assemble the cam and spring in the wrong order, the firing pin will break when you fire the cannon or manually open the breech. So make sure you assemble it right the first time. Broken pins can't be fixed.

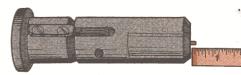
Make sure you do this:

1. Check the assembled mechanism by pushing down on the cam. If the firing pin moves out about ³/16 inch, the cam is installed right. If the pin doesn't move, reassemble the mechanism.



... firing pin should move out 3/16 inch

2. Measure the distance from the face of the firing mechanism to the tip of the firing pin. If the distance is ³/₄ inch or more, the spring is installed wrong.



Less than 3/4 inch? Spring's OK!

3. Disassemble the mechanism and make sure the spring is installed BEFORE the firing pin when you put the mechanism back together. If the spring is installed after the firing pin, the pin will break during firing or when you manually open the breech.



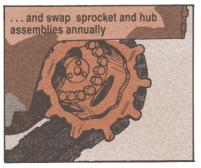
4. Use no oil when you assemble the mechanism, and dry off all parts before assembly.



Unidelines now require that T158 track on M1-series tanks be reversed annually. That evens out shoe wear and makes the track last longer.



The tank's sprocket and hub assemblies must also be swapped side-to-side each year. That helps keep the wear even and extend track life.



Of course, if the wear mark on the sprocket wheel is reached before the year is up, go ahead and reverse the assembly. If both marks are reached, replace the sprocket.

The rule on sprocket and hub assemblies also applies to tanks with T156 track. Rotate 'em side-to-side. But don't try to reverse T156 track. The shoes are angled and should only point in one direction.



Dear MSG Half-Mast.

I'm having trouble finding the right check valve for the fuel/ water separator lines in an M1A1 tank.

I ordered the check valve. NSN 4820-01-241-4611, that's listed as Item 9. Fig 63, in TM 9-2350-264-24P-1, but the part just won't fit. What gives? SSG B.B.K.



Dear Sergeant B.B.K., The NSN you're using is the right one. The problem most likely is that you're replacing an old check valve, NSN 4820-00-781-7459. Since the new check valve, NSN 4820-01-241-4611, is a little longer than the old one, you'll have to change the parts around the valve to get a good fit.

Item	" need:	sel a good
Tube assembly	NSN	
dssemble	110-01-220	Oty
-upier		
Packing	4730-00-897-55	
You'll also need to char	5330-00-020-020	91 2
8 the old of need to char	00-020-020	3

ing the old check valve on an MI/IPMI tank. They're o need to change these parts when replaclisted in Fig 60 of the TM 9-2350-255-24P-1.

Half-Mast

Match Check Valve to Manifold



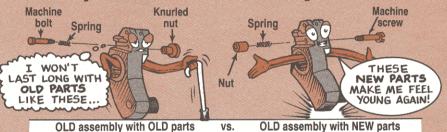
TM 9-2350-255-24P-1 lists two fire extinguisher manifolds for Item 14, Fig 334. Both look exactly alike, but the check valve — Item 13 — is not compatible with both.

Take a close look at the manifold. If it's stamped 12323879, use check valve, NSN 4820-01-317-6412. If it's stamped 12284049, you'll need check valve, NSN 4820-00-903-3756.

Make a note until the TM is updated.

M1A1 Tank . . .

Simple Solution to Cranky Problem



he M1A1 tank's breech mechanism crank assembly, NSN 1015-12-179-0159, has been replaced by a new assembly, NSN 3040-01-336-3655.

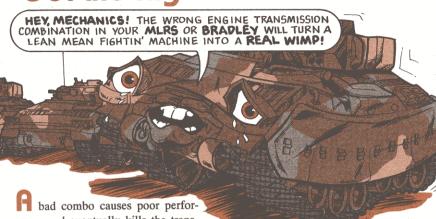
Most of the repair parts listed in Fig 92-1 of TM 9-2350-264-24P-2 remain the same. The exceptions are knurled nut (Item 10), NSN 5310-12-143-2606, and machine bolt (Item 6), NSN 5306-01-164-0857. These parts work only with the old assembly.

The new crank assembly requires nut, NSN 5310-01-336-3521, and machine screw, NSN 5305-01-336-8241.

The new nut and screw can also be used with the old assembly. Simply flip the pin and nut, reversing their position on the crank assembly. Then tighten the nut on the pin, leaving 1/4 inch of the nut protruding out of the operating crank assembly.

JAN 93 5

Get the Right Combination

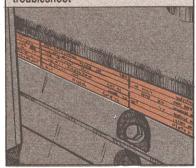


mance and eventually kills the transmission. Its power output gets weaker and weaker until the transmission fails altogether.

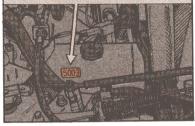
If your drivers complain of these

If your drivers complain of these symptoms—particularly if support has recently replaced the transmission or engine—check the combination. Here's how:

Look at the engine's data plate. If you've got a 500-HP engine, it'll work with any transmission. Continue to troubleshoot



If it's a 600-HP engine, look for a label beside the transmission's oil dipstick. The label should read 500-3.



If there's no label, or the label reads differently, it's a bad combo. You don't need to do anything. The vehicle's deadlined until support gets things fixed up.

One more note, mechanics. The 500-HP engine and 500-3 transmission combination requires 2,425-2,525 RPM for the schedule adjustment procedure, instead of 2,350-2,450 RPM used for all other combinations.

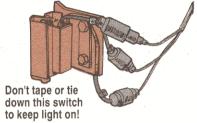
Stay Away from Ramp Switch



he ramp light switch on your M2/M3-series Bradley was put there for a reason!

The switch turns off the interior dome lights whenever the ramp is lowered. That keeps you from being easy to spot on a dark battlefield.

So never use tape or wire ties on the switch to keep the lights on. It not only blows your light security, but the switch



is damaged and the 1W19 cable harness shorts out. A new cable will cost you a bundle.

M2/M3-Series Bradlev . . .

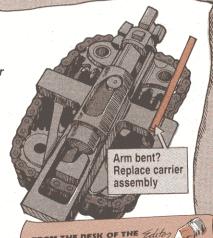
Eve the Arm

Dear Editor.

If your M242 automatic gun's bolt and track assembly just won't go in the breech or if your M242 jams a lot, the carrier assembly arm may be bent.

We've found that if the arm is even slightly bent, it can cause clearance problems in the breech. Get the carrier assembly replaced.

> Gary Williams **Arthur Holt** Ft Benning, GA



FROM THE DESK OF THE Editor

This is good knowledge to be armed with. Thanks.

Blown Over

WHY ARE YOU ALWAYS
HAVING BLOWOUTS?

PON'T

AT ME! MY TIRES
WOULD BE FINE IF
OUT USE THE RIGHT
AIR PRESSURE!

an you think of anything more irritating than a tire blowout on your M198 towed howitzer during maneuvers? Don't blowup at the tires, though. It may not

be their fault.

Improper tire inflation and unsafe towing speeds are the main causes of tire damage on the M198.

Never—even during cross-country towing—lower the tires' air pressure. The lower the pressure, the hotter the tires get. That causes tread separation and fatigue breaks in the body cords.

While cornering, the wheel rims on underinflated tires are forced outward. That puts a lot of pressure on the sidewall and could cause the tire to blow or come off the wheel.

Inflate to proper PSI

a Blowout

Lessen the chance of these problems by keeping your tires properly inflated. Here's the correct pressure to use for cold tires:

Tire	NSN 2610-	Tire Size (inches)	PSI
Radial	01-287-6409	11-20	110
Bias ply (narrow)	00-204-4029	10/9.75-20	105
Bias ply (narrow)	00-060-9960	10/9.75-20	105
Bias ply (wide)	00-763-7333	16.5-19.5	90

The maximum highway towing speed for your howitzer is 45 MPH. Any faster and tire temperature rises dramatically, permanently damaging the tire cord.

Never go faster than 30 MPH on secondary roads or 15 MPH cross-country. Since the howitzer does not have a suspension system, excessive speed causes the tires to bottom out. That damages the rims and results in handling problems.

M101A1 Howitzer . . .

Look Before You Fire

Do not fire any M101A1 howitzer until you check out the scale on the M12A7S panoramic telescope!

Some of the pantels have a 6400-mil scale installed. That's wrong. The M12A7S pantels are supposed to have a 3200-mil scale.

If you fire the howitzer using the wrong scale, you may miss the target. And that could be a real disaster if someone is in the wrong place.



0

M901 Improved TOW Vehicle . . .

Suspect the Switch

Dear Editor,

We had a lot of trouble finding the cause of hydraulic leaks in our M901s until...

... we checked the

hydraulic pressure switches.

Defective switches were letting the

hydraulic pressure go up and down too much, which eventually caused leaks. Once support replaced the bad switches, we had far fewer leaks. If the accumulator gauge shows more than 1,900 PSI, your switch is probably bad. Have support check it out.

SPC Jimmy Carlton Ft Benning, GA

That's a suggestion that's a switch.

TOW 2 Day Sights . . .

Finding Your Center

Dear Editor,

Stops on the azimuth and elevation knobs on many older TOW day sights have worn off. Operators have forced the knobs too far too many times. Now the knobs turn too far and your TOW fails its self-test.

If that happens, you can still operate until the knob stops are repaired. Turn both knobs either all the way in or all the way out. Then turn both knobs back one complete revolution.

That will give you a rough center and a self-test PASS and allow you to fine tune the sight.



Steven Vaughn Ft Benning, GA

Your suggestion shows good insight.
Thanks.

Drain and Dispose Properly



The PMCS for equipment that uses diesel fuel, such as tanks, trucks, self-propelled howitzers and generators, calls for the fuel filter to be drained daily.

ITEM W M S H	ITEM TO BE INSPECTED	PROCEDURES CHECK FOR AND HAVE REPAIRED OR ADJUSTED AS NECESSARY	EQUIPMENT IS NOT READY/ AVAILABLE IF:
3	Fuel Filters and Strainers	Drain water and sediment every 8 hours of operation	
		NOTE In freezing weather drain shortly after operation. Allow to drain until fuel runs clear.	

Usually the operators drain the fuel into something they can't see through—like a soda pop can—and it's hard to tell if all the contamination's been removed.

Then some careless operators even throw the soda pop can with waste fuel in the trash instead of pouring it in an approved contaminated fuel waste container.

Here is a solution to both problems: Use a clear bottle to drain off the contaminated fuel. That way you can see when the fuel runs clear.

Put a 5-gal bucket in the motor pool that the operators can pour contaminated fuel into. That way you have only one container to empty in the hazardous waste container at the end of the day.





OH, NO, THIS NEW BOOSTER LEAKS!

COULD JUST BE TEST FLUID - LET'S CHECK AGAIN.

ne look is not enough when you install a new brake booster and then inspect it for leaks.

A Class II leak makes your vehicle NMC, sure. But, bubbling around the seal may not be a leak.

During production testing, the booster is tested in fluid for air leaks. That fluid can be held in the seam where the seal is seated.

If you see bubbling between the booster halves, check the fluid level, clean off the outside and check again for leaks.

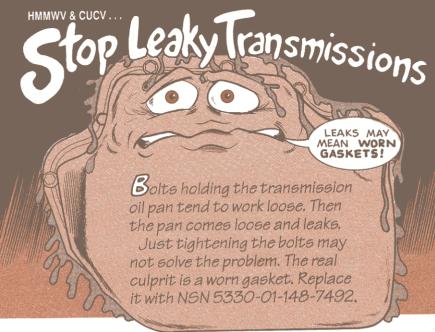


Still bubbling? Replace it.

USMC HMMWV Winch Kit

ou Marines can now get a self-recovery winch for the M998 HMMWV. Get your commander's OK before ordering NSN 2590-01-316-9638. This is the same winch that's used on the M1038 HMMWV.



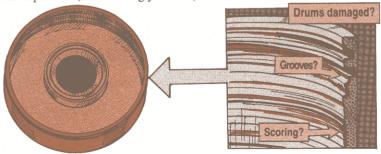


Drums and Rotors . . .

Do 'em a Good Turn

Putting new brake shoes or pads on grooved or scratched drums or rotors is not only wasteful, it's dangerous.

Grooved or scored braking surfaces wear out pad surfaces fast. They won't give you the dependable, safe braking you want, either.



So, next time you change brake pads or shoes, give the drum or rotor a good onceover. If you spot any scoring or grooving, turn them in to support. They'll check for out-of-round or tapering, and turn them if they can, or tell you if you need new ones.

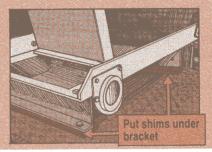
JAN 93 13

Tire Bracket Needs Cushion



hat balloon tire on the new 5-ton has proven to be too much of a load for some brackets. The base cracks where the bracket mounts to the truck or where the bracket bolts to the base.

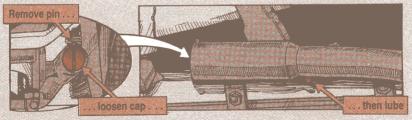
Give the bracket some relief. Put shims, NSN 5365-00-752-9294, between the base and the truck, and where the bracket meets the base.



Trucks . . .

Pull Pin on Drag Link Lube

Before you lube the drag link on a truck that does not have power steering, pull the cotter pins and loosen the end caps two or three turns.



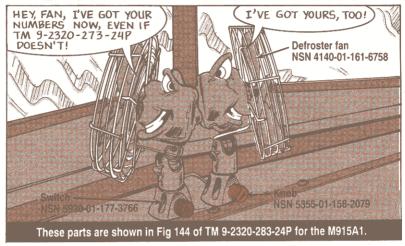
This lets grease get out to the ends where it's needed.

Once the greasing's done, tighten the end caps. Then back them out one-half turn or less to line up the holes for the cotter pin.

Install new cotter pins, NSN 5315-00-059-0184, and you're done. The cotter pin for your M911 is NSN 5315-00-187-9537.

JAN 93

Defroster Fan Found



Inflation? No Sweat!

hink safety first when you're inflating truck tires. For instance, if you don't have a tire inflation cage, get one with NSN Inflate in 4910-00-204-2448. It holds tires cage using up to 14 x 24. a 10-ft hose Then, keep your distance. A 10-ft hose and tire gauge to keep you from harm's way is NSN 4910-00-441-8685. It usually comes with adapters for both large and small valve stems. Some have shown up without the adapter for small stems, though. If yours does, order the small adapter with NSN 2640-00-758-6274. Your authority for the hose and adapter is Appendix A, CTA 50-970.

15

Think legs VERS! SOFT OR IVEN GROUND VEN GROUND VEN

DRIVERS! SOFT OR UNEVEN GROUND DOES NOT MAKE A SOLID PLATFORM FOR US LANDING GEAR LEGS! HERE'S WHAT CAN HAPPEN!

• If you pull out from under the trailer and both of the legs don't make contact with the ground at the same time, the trailer can come crashing down.

 A heavy load – whether cargo or fuel – pushes the legs into mud, sand or snow.

 Cargo can shift and tumble off. Trailer damage may include twisted, bent landing legs. If you must unhook on soft or uneven ground, use ground pads under the landing leg shoes to keep the legs level. Order pads with NSN 2510-00-741-7585.





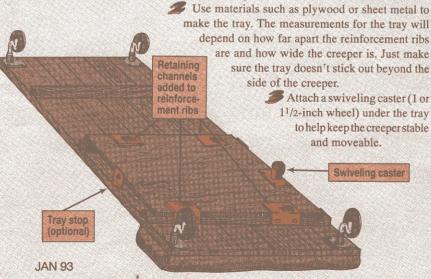
Homemade 'n' Handy



It's hard to keep up with tools while manuevering around on a creeper to work under a vehicle. Since there's no place to lay the tools, they get greasy, scattered and sometimes lost.

To solve the problem, make an add-on tool tray to attach to the bottom of the creeper. The tray slides out to the side to give the mechanic easy access to the tools. Follow these three simple steps to make the tray:

Mount four sheet-metal retaining channels underneath the creeper on two of the width-wise reinforcement ribs (two channels per rib). The channels will allow the tray to slide in and out from under the creeper.





old weather is here and so are those itchy fingers that stay stuck on an engine's starter switch. All it takes is one finger stuck on the switch too long to burn out a good starter motor. When you try to start your truck engine, never keep the starter engaged for more than 10-15 seconds. Stop! Let the starter cool one minute. Try again.

If your truck's engine won't start in three tries, get your mechanic to find out what's wrong.

Battery Terminal Covers

The new battery terminal clamp covers shown on Page 4-87 of the HMMWV's TM 9-2320-280-20-2 has no NSN. Order them with CAGE 34623, PN 5935425, on a DD Form 1348-6 from RIC S9C. That brings you four covers — enough for both batteries.

Alternator Belts

The belts for your HMMWV's 100amp alternator are NSN 3030-01-282-6968. The two-belt set is the same as the one used on the 60-amp alternator. That info was left out of TM 9-2320-280-20P.

Winch Cable

The eye of your HMMWV's winch cable needs a thimble to keepwires from slieating or breaking. Order the thimble you need with NSN 4030-00-266-0085. For use, see Para 2-17, TM 5-725.

Remove 'em, Toss 'em



Once is enough for lock washers and locknuts. When your TM tells you to discard locking hardware, toss it.

In fact, even if your TM doesn't tell you to toss 'em, do it. Trying to get extra life out of them puts you or your equipment at risk. Para 5 of TB 43-0218, Inspection, Use and Tightening of Metal Fasteners Used on Tank-Automotive Command Equipment, has that same word.

Lock washers lose their "spring" and don't hold tight the second time. Locknuts, which formed to the bolt when first put on, will work loose the second time.

Forget Loctite, too. It's not a replacement for new locknuts.

Gasket Stops Spring Seat Leak

Some M939-series 5-tonners left the factory with RTV instead of a gasket in the rear leaf spring seat. Now some of those seats are leaking. To stop a leak, remove the cover. Clean off all the old goop – RTV – from the housing and the cover. Install gasket, NSN 5330-00-740-9600.

JAN 93 19



he MGS is the heart and mind of your TOW. If it can't send its power and info to the rest of the TOW, no missiles will be launched. It does that sending through the 2W1P1 cable and the MGS J1 connection. That's why you need to make a PM connection.

Before you go to the field, make sure the cable adapter is screwed on tight. The adapter is cheap and easy to replace. The cable connector is not.

Eveball the cable connector for bent or pushed-in pins. Support can often fix them. If you use a connector in that condition, the pins will break and the connector adapter must be replaced.



Look for dirt and sand in the connector and MGS jack. They cause a poor connection and bent pins.

Report clogged jack holes to your repairman. Hit the cable connector against your palm to knock out sand.

Connection to PM

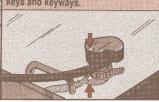
Wrap a rag around a stick to make a swab. Wet the swab with denatured alcohol. Clean out remaining dirt with the swab.



Check the cable for tears in its protective coating. The tears will let in moisture that can cause FAILs. Wrap small tears with electrical or shrink tape.

When you connect the cable, look before you push.

Match the connector's vellow line with the MGS yellow line to align the keys and keyways.



If you feel resistance when you push in the connector, jiggle it to the right or left. If you still feel resistance, STOP. Call vour repairman.

When you're not firing, keep the cable connector wrapped in plastic and the MGS cover latched to shut out sand.





20

Cable Keepers

The slipring and W2J1 MGS cables are two of the most—if not the most—important M901 cables. A damaged slipring cable pulls the plug on power to the turret. No W2J1 means no missiles fired. Keep your cables healthy with these fixes.

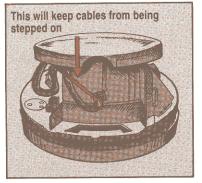
W2J1

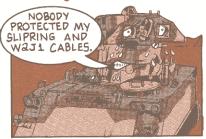
A W2J1 cable unplugged and on the floor is waiting to be stepped on. To keep it off the floor, get a couple of electrical tiedown straps, NSN 5975-00-111-3208, and a 10-in rubber tiedown strap, NSN 5340-00-340-0980.

Remove the hook from each end of the rubber strap.

Thread one electrical tiedown strap through the cable's loop in the MGS housing cover and through the hole in the end of the rubber strap. Pull the tiedown tight.

Wrap the other electrical tiedown strap directly below the connector and push it through the hole in the other end of the rubber strap. Lock it tight.



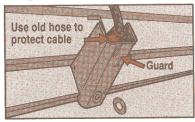


When you unplug the W2J1, the strap pulls the cable up to the housing cover and out of the way.

Slipring

Shifting floorplates can slice the slipring cable. The best cable protection is an old, very thick rubber hose. A heater hose from a 21/2- or 5-ton truck is perfect.

Split six inches of the hose. Glue it around the cable where it passes the floorplate.



For extra protection, eyeball the floor plate mounting bolts for shiny spots before you go to the field. They signal bolts that need tightening.

If you remove the floorplates, take off the cable guard first. Be careful not to pinch the cable when you pull up or put down the floorplate.

Silence Post Amplifier Problem



Dear Editor.

We were having a problem that nobody could help us with. We were getting total distortion in the AN/TAS-4A/4C night sight when it was connected from the post amplifier (PA) to the sight's J5 connector. Our troubleshooting got us nowhere until . . .



...we had support remove the post amplifier and clean out all the dirt and corrosion from the four captive bolts and their holes. Seems crud was preventing a good ground.

You also need to watch this if the sight has been painted. If paint has gotten in the PA holes, it will block the ground, too.

> Steven Vaughn Ft Benning, GA

No Charge Needed

The TOW Vehicle Power Conditioner (TVPC) gets its power directly from the battery of the vehicle your TOW is mounted on. That's all the power help the TVPC needs.

Operators, never charge the TVPC on the TOW battery charger. The TVPC doesn't need recharging. Besides, you'll damage both the TVPC and the battery charger.

If your TVPC isn't up to snuff, turn it in to your mechanic. It's not your job to fix it.

M249 Machine Guns . . .

Right Hole for the Right Pin

HEY, BUPPY!
WHO DO YOU THINK YOU ARE? I'M THE TOP PIN
AROUND HERE!



In M249s that have been modified with the new headed takedown pin, make sure the headed pin is kept in the top hole at the end of the receiver.

The headed pin is much longer than the bottom hole's headless pin. That's

why it must be in the upper receiver hole, where it can provide more strength. If the headless pin is put in the top hole, the M249 comes apart during firing.

Look for the three retaining clips, too. They're often forgotten. Without them, both pins can work loose.



If your M249s won't fit in the rack, something's wrong with the rack, not your M249s. Tell your local AMCCOM LAR.

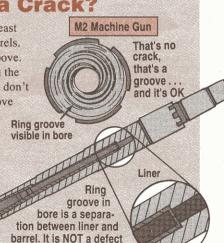
M2, M60, M85 Machine Guns . . .

Is That a Crack?

A crack is not always a crack... at least when it comes to your machine gun barrels. That "crack" you see may be only a groove.

If you spot what looks like a crack on the inside of the barrel near the breech end, don't sweat it. That's no crack, that's the groove where the barrel's tube and liner meet. The groove is very narrow and goes completely around the barrel's inside. It doesn't mean anything's wrong with your barrel.

Of course, if you see other cracks in the barrel, report them before you fire your machine gun again.





artridge indicator flags cause M249s to feed and extract poorly and eventually suffer cookoffs.

The flags aren't needed – like it says on Page 3-28 in TM 9-1005-201-23&P. So

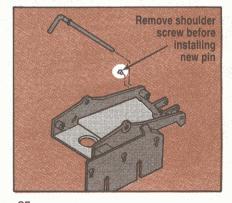


MK19 Machine Gun...

Pull Mount Screw

new quick release pin, NSN 5315-01-292-9631, replaces the retainer pin, NSN 5315-01-151-6260, that locks the MK19 to the MK64 mount.

You will not need to safety-wire the new pin in the mount. But you will need to take out the cradle shoulder screw (Key 5, Fig 3, TM 9-1010-231-13&P) before you put in the pin. Otherwise, the pin won't go in all the way. Put the chain on the new pin and discard the screw.



JAN 93 25

Maintenance Advisory and Safety-of-Use Messages

AMCCOM SOU Msg 92-25—Advisory, MK19 Mod 3 grenade MG weapon system, AMSMC-DSM-MG 051654Z Oct 92.

AMCCOM SOU Msg 92-26—Advisory, Handbook for US/GE Ammunition Interoperability, AMSMC-DSM-MG 151205Z Oct 92

AMCCOM Maintenance Advisory Msg 92-37—M1-series tank, thermal system test set, AMSMC-MA 221847Z Sep 92.

AMCCOM Maintenance Advisory Msg 92-40—M1A1 tank, AMSMC-MA 021218Z Oct 92.

AMCCOM Maintenance Advisory Msg 93-03—M1A1 turret race ring assemblies, AMSMC-MA 0217217 Oct 92

AMCCOM Maintenance Advisory Msg 93-01—Shop equipment, truck mounted, NSN 4940-00-294-9518, AMSMC-MA 051328Z Oct 92.

AMCCOM Maintenance Advisory Msg 93-02—M106, 4.2 inch mortar carrier, AMSMC-MA051515Z

AMCCOM Maintenance Advisory Msg 93-05—M242, 25MM automatic gun system, clutch assembly, AMSMC-MA 081907Z Oct 92.

AMCCOM Maintenance Advisory Msg 93-06—M242, 25MM automatic gun system, breech assembly, AMSMC-MA 091930Z Oct 93.

ATCOM SOU Msg 92-16—One Time Inspection-Limited, PU-753/M power unit, SATBE-S 061855Z Oct 92.

ATCOM SOU Msg 92-17—Advisory, Operational, 3,000 GPH ROWPU, NSN 4610-01-219-8707, SATBE-S 091530Z Oct 92.

ATCOM SOU Msg 92-18—One Time inspection-Limited, Static line snap hook used on personnel parachute systems T10C and MC1-1C, SATBE-S 151915Z Oct 92.

ATCOM SOU Msg 92-19—Advisory, Operational, latch assembly used on extraction force transfer coupling for air delivery cargo parachute operations, SATBE-S 221400Z Oct 92

ATCOM Maintenance Advisory Mag 92-26—Amertek Model 2500L fire fighting vehicle, SATBE-S 061935Z Oct 92.

ATCOM Maintenance Advisory Msg 92-27—MC-3 free-fall personnel parachute system, SATBE-S 061955Z Oct 92.

ATCOM Maintenance Advisory Msg 92-30—Amertek Model 2500L fire fighting vehicle, SATBE-S 2115007 Oct 92 ATCOM Maintenance Advisory Msg 92-25—M2-series gasoline burner units, SATBE-S 211530Z Oct 92

CECOM SOU Msg 92-10-03— Advisory, Operational, AN/ALQ-144A transmitter, AMSEL-SF-SEP 291930Z Oct 92.

MICOM SOU Msg 92-08—Advisory, Dragon missile firing protection during training, AMSMI-MMC-AM 221400Z Oct 92.

TACOM SOU Msg 92-24—Limited One Time Inspection, M911 truck tractor tires, AMSTA-M251948Z Sep

TACOM SOU Msg 92-25—Limited One Time Inspection, M172A1 25-ton semitrailer tires, AMSTA-M 221807Z Oct 92.

TACOM SOU Msg 92-26—Operational, Crossing restrictions for class 60 AVLB, AMSTA-M 271250Z Oct 92.

TACOM SOU Msg 92-27—Advisory, Technical/Maintenance, M915A1 vehicles, AMSTA-M 021955Z Nov 92.

Your Direct Support or Logistics Assistance Office (LAO) can provide you with more information.

AUDIO-VISUAL STUFF

Available at Battalion or Post Learning Center

TV Tapes

706119 The Single-Story Medium Girder Bridge

706800 M48A2 Chaparral (SP) Drill - Emplace and Prepare for Action

709045 Introduction to 120MM Mortar 709146 M939A2 CTIS Trouble-

shooting

709154 M998 PMCS 709357 PMCS/Equipment Certi-

709359 Materiel Condition Status

Report Part 1 of 2 709360 Materiel Condition Status

Report Part 2 of 2 709368 The Army TMDE Pro-

gram - Part 1 of 2 709369 The Army TMDE Pro-

gram - Part 2 of 2

709405 Issue and Turn-in Procedures

709408 Unit Prescribed Load List (PLL) - Part 1 of 2

709409 Unit Prescribed Load List (PLL) - Part 2 of 2

709423 Equipment I-D Capability

and Deploy Part 1 of 2 709424 Equipment I-D Capability

709424 Equipment I-D Capability and Deploy Part 2 of 2 709429 Radio Net Planning - Part

1 of 2 709430 Radio Net Planning - Part

709431 Selection and Organization of Signal Nodes - Part 1 of 2

709432 Selection and Organization of Signal Nodes - Part 2 of 2

709454 Introduction to Automated Planning Systems

709456 Communications-Electronics Management System - Part 1 of 2

709457 Communications-Electronics Management System - Part 2 of 2

709918 NVG Desert Flight Visual Illusions

Interactive Videodiscs

706432 Missile Decanning/Canning and Transfer Procedures - Module 1

706499 Missile Launching Operational Checks, Services and Procedures - Module 2

706620 Introduction, Emplacement, Alignment of Patriot from the ECS/ICC

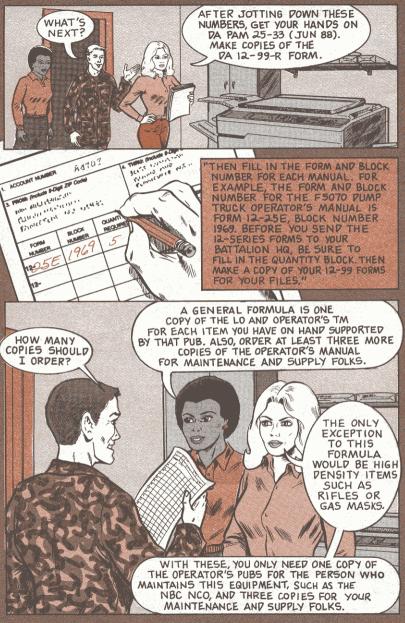
709009 CWAR Weekly Checks and Adjustments, PMCS, Tuning and Alignment - Modules 3 and 4

709014 Platoon Command Post TDECC Corrective Procedures -Module 5









HERE ARE SOME BASIC PUBS MOST UNITS NEED. SOME OF THESE
PUBS YOU'LL USE EVERY
NOW AND THEN, BUT OTHERS
YOU'LL USE ALL THE TIME.
PICK THE ONES THAT MATCH
YOUR UNIT'S NEEDS.



ARMY REGULATIONS

- 95-1 ... Army Aviation Flight Regulations
- 95-3 ... Aviation General Provisions, Training, Standardization and Resource Management
- *190-11 . Physical Security of Arms, Ammunition and Explosives (Security UPDATE)
 - 220-1 ... Unit Status Reporting
 - 385-30 . Safety Color Code Markings and Signs
 - 385-40 . Accident Reporting and Records
 - 385-55 . Motor Vehicle Accident Prevention
 - 385-95 . Army Aviation Accident Prevention
- 600-55 . Motor Vehicle Driver and Equipment Operator Selection, Training, Testing and Licensing
- 700-64 Radioactive Commodities in DOD Supply Systems
- *700-84 . Issue and Sale of Personal Clothing (Unit Supply UPDATE)
- 700-138 Equipment Readiness Standards
- 700-139 Army Warranty Program
- *710-2 . . Supply Policy Below the Wholesale Level (Unit Supply UPDATE)
- 710-3 . . Asset Transaction Reporting System
- 725-50 . Requisitioning, Receipt and Issue System
- *735-5 . . Property Accountability (Unit Supply UPDATE)
- 746-1 ... Packaging of Army Materiel for Shipment and Storage
- *750-1 . . Army Materiel Maintenance Policy and Retail Maintenance Operations (Maintenance Management UPDATE)
 - 750-43 . Test, Measurement and Diagnostic Equipment Program
 - 750-59 . Army Corrosion Prevention and Control Program



TECHNICAL BULLETINS

	TEOTHIOAE = = = = = · · · ·
9-2300-295-series 43-0001-series	Fire Extinguishers, Hand Portable Warranty on Vehicles (See DA Pam 25-30 list for model) EIR Digests (These pubs are not stocked—use DA-12 series forms to get on distribution)
43-0106	Aeronautical Equipment: Army Oil Analysis Program
43-0118	Field Instructions for Painting and Preserving
	Communications-Electronics Equipment
42.0142	Safety Inspection and Testing of Lifting Devices
43-0142	AOAP, Army Oil Analysis Program, Guide for Leaders and
43-0211	Users
40.400	Calibration and Repair Requirements
43-100	Fire Prevention and Protection-Military Gas Cans
383-3	Safe Use of Cranes, Crane-Shovels, Draglines and Similar
385-101	Equipment Near Electric Power Lines
	Procedures for Selection, Training, Testing and Qualifying
600-1	Operators of Equipment Systems (Excluding Selected
	Operators of Equipment Systems (Excidently Colores
	Watercraft and Aircraft)
750-651	Use of Antifreeze Solutions, Antifreeze Extender, Cleaning
	Compounds in Engine Cooling Systems
55-8100-200-24	. Maintenance of Aircraft Reuseable Containers
55-9150-200-24	Engine and Transmission Oils, Fuels and Additives for Army
	Aircraft
SIG 222	, Solder and Soldering

TECHNICAL MANUALS

Provided Equipment Maintenance Management Policies

and Procedures	
5-618 Paints & Protective Coating	
5-725 Rigging	
9-237 Welding	
9-243 Use and Care of Hand Tools, Measuring Tools	
9-1000-202-14 Maintenance Manual for Evaluation of Cannon Tubes	
9-2530-200-24 Solid Rubber Tires and Track Components	
9-2540-205-24&P . Maintenance Manual for Heater, Vehicular Compartment	
9-2610-200-14 Care, Maintenance, Repair and Inspection of Pneumatic Tire	es
and Inner Tubes	
9-8000 Automotive Vehicle Principles	
10-6140-200-14 Lead-Acid Batteries for MHE	
10-7200-200-13 Gasoline and Water Cans	ant
11-5800-213-L Publications List for Communications-Electronics Equipme	SHL
11-6140-203-14-2 . Aircraft Nickel-Cadmium Batteries	
38-600 Administrative Vehicle Management	
43-0139 Painting Instructions for Army Materiel 55-1500-204-25/1 . General Aircraft Maintenance Manual	
55-1500-204-23/1 . General Aircraft Maintenance Manual 55-1500-323-24 Aircraft Electric and Electronic Wiring	
55-1500-323-24 Aircraft Electric and Electronic Willing 55-1500-335-23 . Nondestructive Inspection Methods	
55-1500-343-23 Avionic Cleaning and Corrosion Prevention/Control	
55-1500-344-23 Aircraft Weapons System Cleaning and Corrosion Control	
55-1500-345-23 Painting and Marking Army Aircraft	
750-116 Purging and Charging of Fire Control Instruments	
750-254 Cooling Systems, Tactical Vehicles	
150-254 Transit Gooding Systems, Indiana Tomas	

PAMPHLETS

25-30 Consolidated Index of Army Publications and Blank Forms 25-33 Revision of DA 12-series Forms, Usage and Procedures

310-10 ... Publications Sytem - Users Guide

*710-2-1 .. Unit Supply-Manual Procedures (Unit Supply UPDATE)

710-5 Unit Commander's Supply Handbook

*738-750 . The Army Maintenance Management System, TAMMS (Maintenance Management UPDATE)
738-751 . The Army Maintenance Management System-Aviation (TAMMS-A)

750-1 . . . Leader's Unit Level Maintenance Handbook

750-22 ... Troubleshooting Equipment in Combat Units

*750-35 ... Users Guide for Motor Pool Operations (Maintenance Management UPDATE)

SUPPLY BULLETINS

- 3-30-2 Chemical-Biological Canisters and Filter Elements Serviceability List
- 9-16Personnel Heater and Winterization Kit Policy for Tank-Automotive,
 Construction and MHE

11-6 Dry Batteries, Supply Data

11-30 Dry Batteries, Handling, Storage, Testing

11-131-1 . . . Vehicular Radio Sets and Authorized Installations

700-20 . . . Army Adopted Items

746-1 Publications, Packaging General Supplies

FIELD MANUALS

1-302 Aviation Life Support Equipment (ALSE)

1-400 Aviator's Handbook

- 1-500 Army Aviation Maintenance
- 1-506 Aircraft Power Plant Maintenance

1-508-1 ALSE Maintenance Program

1-509 Aircraft Pneudraulics

1-511 Army Aircraft Quality Control and Technical Inspections

1-514 Rotor and Power Train Maintenance

1-544 Standardized Maintenance Test Flight Procedures

5-36 Route Reconnaissance and Classification (Vehicle Load Marking,

Bridge Classes, etc)

9-207 Cold Weather Operation/Maintenance

10-16 General Fabric Repair

10-20 Unit Maintenance: Military Petroleum Pipelines, Tanks and Related Equipment

10-68 Aircraft Refueling

10-69 Petroleum Supply Point, Equipment and Operations

10-70 Inspecting and Testing Petroleum Products

10-71 Petroleum Tank, Vehicle Operations

20-22 Vehicle Recovery Operations

21-305 Manual for the Wheeled Vehicle Driver

55-30 Army Motor Transport Units and Operations

55-450-2 . . . Army Helicopter Internal Load Operations

55-450-3 Helicopter External Air Transport

MISCELLANEOUS

CTA 50-900 . . Clothing and Individual Equipment

CTA 50-909 . . Field and Garrison Furnishings and Equipment

CTA 50-970 . . Expendable/Durable Items (Except Medical, Class V, Repair Parts

and Heraldic Items)

TC 9-515 ... Shop Mathematics
TC 11-6 ... Grounding Techniques

TC 24-20 ... Tactical Wire and Cable Techniques

THE STARRED (*) PUBLICATIONS
ARE IN **UPPATE** FORMAT. ORDER ON
DA FORM 12-99 USING FORM NUMBER 12-09
AND THE FOLLOWING BLOCK NUMBERS...



2560 Unit Supply 2561 Maintenance Management

2568 Security



SINCE YOU GOT THE RIGHT PUBS FOR OUR EQUIPMENT, THE SHOP RUNS LIKE A WELL-OILED MACHINE!



Lubing Aids

5 moothing grease evenly in the fittings of drive shaft couplings is hard to do. So is removing excess grease. Your finger is not flat enough or shaped right to do the job.

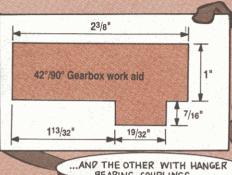
TRY THESE TWO TOOLS. ONE WILL HELP SMOOTH THE JOB WITH THE GEARBOX QUILL COUPLINGS ...

11/4

Hanger bearing

work

31/8"



127/32"

BEARING COUPLINGS.

Make them from a piece of 1/8-in acrylic, NSN 9330-00-993-1610.

Aviation Messages

CAT 1 EIR Phone: DSN 692-2066 (24 HOURS)

7/16"

27/32

AH-64-93-01, SOF, Oper, fuel system, 051600Z Oct 92. CH-47-93-01, SOF, Emer, Immediate Grounding CH-47/MH-47, 232230Z Oct 92 CH-47-93-02, SOF, Tech, Ungrounding of CH-47D, MH-47D/ E. 302100Z Oct 92. AH-1-93-ASAM-01, Maint Mand,

AH-1, inspect pitch horn bushing, 271800Z Oct 92 OH-58-93-ASAM-01, Maint Mand, inspect OH-58D sight cable standpipe, 27190Z Oct 92. UH-50-93-ASAM-01, Maint Mand, transmission/gearbox chip detector system, 072000Z Oct 92. UH-60-93-ASAM-02. Info. UH-

60A/EH-60A, T700 gas generator rotor turbine blade failures. 15830Z Oct 92. AH-64-93-ASAM-01, Maint Mand, inspect mast support base, 051800Z Oct 92.

3/4"

AH-64-93-ASAM-02, Maint Mand. revision to inspect mast support base, 132130Z Oct 92.

Slingloading Safety . . .

The majority of slingloading accidents can be prevented by simply knowing the right procedures and using a static electricity discharge wand.

Read and reread FM 55-450-3 (Feb 91), Army Helicopter External Load Basic Operations, and the companion -4 on single-point rigging and the -5 on dual-point rigging. Too many accidents happen because of shortcuts that become habits. There's only one way to slingload and that's by the book!

Use your static electricity discharge wand to ground the cargo hook and avoid electrical shock. Maintain contact between the wand and the cargo hook until the load is properly hooked up and ready to go.

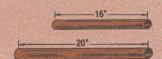
You can order the improved model static electricity wand with NSN 4920-01-192-5535.

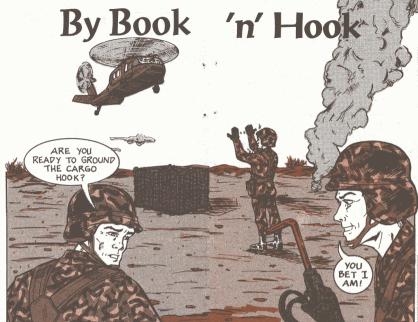
Or, you can make one like this:

1. Strip 1 inch of insulation from both ends of a 20-ft section of grounding cable, NSN 4010-00-286-2681. (This stock number brings 1,000 feet of cable, so you might want to get what you need from your local fuel handling or ground power outfit.)



2. Cut a 20-in and a 16-in section from ground rod, NSN 5975-00-240-3859.





3. Clamp one end of the cable to the 20-in rod section about 11 inches from one end of the rod, using conductor splice, NSN 5975-00-233-9022.



4. Slide a 12-in piece of rubber hose, NSN 4720-00-277-8985, over the cable and ground rod so that the clamp touches the end of the hose.



5. Fill the end of the hose with silicone sealant to provide insulation protection from the bare end of the rod.



6. Bend the last 2 inches of the rod 90 degrees to form a hook to connect to the helicopter cargo hook.



JAN 93

7. Sharpen one end of the 16-in rod into a point to make it easier to drive into the ground.

8. Attach an electrical clip, NSN 5999-00-260-0447, to the other end of the 20-ft cable and connect the clip to the ground rod.



 Use a multimeter to do an electrical continuity check between the hook end of the static discharge wand and the electrical clip on the ground rod.



When you use the static discharge wand on the cargo hook of a hovering helicoper, keep your hands away from the bare metal of the wand. If you touch bare metal, you could get shocked.

Be aware of what is going on around you at all times. No daydreaming! Know where your fellow crewmen are; know where the obstacles are; know where the helicopter is; and most importantly . . . KNOW YOUR JOB!

B-1 Mechanical . . . Platform



he B-1 mechanical maintenance platform is a forgotten soldier in the PM war . . . used to maintain something else with no maintenance to keep it ready for another job.

The B-1 mechanical needs its own maintenance to help with the maintenance of your aircraft.

TM 55-1730-223-13 & -23P covers the B-1 mechanical platform, NSN 1730-00-529-6235, and here are some areas to pay close attention to:

✓ The platform should be complete and the handrails in place. Repair or replace any corroded, cracked, bent or missing parts on the frame, handrails, steps and platform.



Reinforce the platform railing by taping the end rail to the two side rails at the two adjacent top corners.



Check the wheel assembly for worn-out swivel lock pins, bad brakes, failing brake set levers and a poorly working wheel jack rachet.



✓ Make sure the platform wheels and caster are lubed according to TM 55-1730-223-13 & -23P.

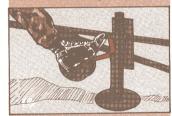
JAN 93

You can replace the bearings and seals for your platform's wheels instead of replacing the entire wheel. Replace the outer wheel bearing with NSN 3110-00-159-1631 and the inner bearing with NSN 3110-00-198-2169. Replace the grease seal with NSN 5330-01-133-0666.

If the whole wheel needs replacing, use NSN 1730-00-657-3214.

Check your tires for good tread

Make sure the two immobilizing jacks are working right. Set the foot pedals on the jacks to raise the two front casters off the ground. The

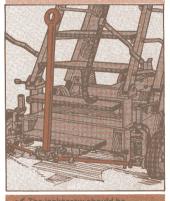


platform shouldn't move when they're in place. If foot pressure doesn't easily set the jack pads, grease the pivot points.

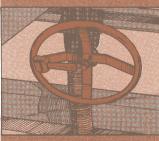
✓ Check the static discharge reel for missing alligator clips and frayed or damaged static wire. Make sure the reel turns freely.



✓ Make sure the lunette assembly isn't badly bent, cracked or missing the steering bar, tie rods, detent pins, tie rod pins, or the tonque.



The lackscrew should be



Look over the handwheel for a

JAN 93

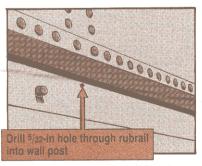
39

Give Condensation the Slip



Condensation builds in the AN/MYQ-4 or -4A trailer walls, collects at the bottom, and then seeps out onto the floor. Footing gets slippery and the equipment gets damaged.

Solve water problems by drilling a 5/32-in diameter hole through the rubrail in-



to each wall post. There's a wall post between each double vertical row of rivets.

Make sure you use a pneumatic drill for this operation, though. Water in the wall can drip into an electric drill when the drill bit cuts through the rubrail. A wet electrical drill can give you the shock of your life.

No pneumatic drill? Get DS to drill the holes for you.

The water will drain outside as long as you keep the holes open. Just run a small screwdriver or pick into the holes once a month or so.





That's because reversing the connectors hot-mikes your set. That means keying the helmet switch will override all

your AN/VIC-1 intercom to cause a bunch of

Avoid this by paving special attention to the color code during hookup. The long cord and the control box both have yellow markings, so they go together.

No marks? Make them yourself by dabbing some yellow paint on the recessed ring found on the long cord's connector and above the control box's left receptacle.

Doublecheck the connection with this quick test. Move the helmet switch forward. If it keys the radio, you're OK, If you don't break squelch, switch the connectors at the control box.

AS-1729 Control Cable

NSN 5995-01-092-0114 gets a 60-ft CX-4722A/G cable assembly to use with your AS-1729 antenna and AB-903 mast. The 30-ft CX-4722A/G cable is too short when the mast is fully raised.

Protect Glassified Info!

If you're not careful, using your AN/UXC-7 facsimile to print classified messages can mean real security problems.

That's because the message is printed on the drum when you accidently put carbon paper directly on the drum

PEEKING ALLOWED! assembly. And that means prying eyes have easy access to classified info.

Keep classified info out of the wrong hands by using two-part carbonless paper instead. NSN 7530-00-145-0174 gets 500 sheets.

AN/UGC-74 Teletypewriter . . .

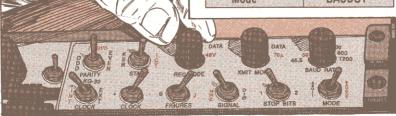
Switch Settings to Fit In

All AN/UGC-74 teletypewriters in your net need to have the same switch settings or they can't talk to one another.

TM 11-5815-616-13 is not clear on what switch settings to use when interfacing with the KG-84 security equip-



Switch	Setting
Parity	INHIB
State	ICT
Rec Mode	48V
Xmit Mode	70 u
Baud Rate	50 or 75
Clock	INT
Clock	- (minus)
Figures	J
Signal	NRZ
Stop Bit	1
Mode	BAUDOT



The Case of the Misplaced Batteries

Dear Editor,

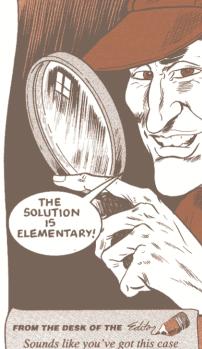
Our unit's mission requires extensive use of night vision goggles (NVGs). But a lot of NVGs are being returned for storage with lost or misplaced lithium batteries.

We've corrected this by storing the batteries head-to-tail in an empty 35mm film container. The container then goes in the NVG case between the goggle tubes.



The NVGs are issued to the soldier with three batteries in the case—two in the film container and one still unwrapped. So far, it's working great. The number of lost batteries is way down.

CW2 Matthew K. Bentson Ft Bragg, NC



sealed up tight. Thanks for the

Bad BA-1568 Battery Date

tip.

efore you send a BA-1568 battery, NSN 6135-00-838-0706, to its grave, check the contract number. If the number is DAAB07-88-D-C025 and the expiration date is 1991, the battery is still good. Actually, 1991 is the manufacture date. Write the new expiration date of 1994 on the label.

JAN 93 43

he Acoustic Suppression Kits (ASK) on your 15- and 30-KW DED generators are great for keeping down noise. But the kits can't do their jobs when they're full of rusty holes.



Drill three 3/8-in drain holes through the bottom of the front upper panel assembly - one hole in the center and the other two 1/2 inch from each end.



JAN 93

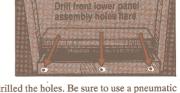
Just ASK for Moisture Solution

Remove both upper side panel skirts and drill four 3/8-in drain holes two inches from the bottom on both sides of the generator. Drill two of the holes one inch from each end and the other two equally spaced between the two end holes.

The skirts on trailer-mounted generators cannot be removed. Instead, loosen the skirts and slide them backward. After drilling the forward holes, slide the skirts forward and drill the rear holes.

Remove the front lower panel assembly and drill three 1/2-in drain holes through the web of the channel that's across the forward bottom of the battery compartment. Drill two holes one inch from each end of the channel with the third hole centered.



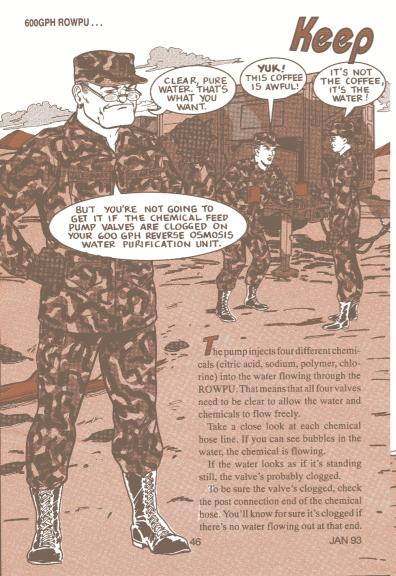


Grind off all the burrs after you've drilled the holes. Be sure to use a pneumatic drill, too. An electric drill will give you quite a shock if you hit water. If you don't have a pneumatic drill, get your support to make the modifications.

Drain holes alone won't be enough to protect your generator, though. Do this too:

- Install and use new ASKs right away. Kits kept in storage rust quicker than those in use, because heat and flow of air from an operating generator keep the the ASK dried out.
- Store the generator in a cool, dry place whenever possible. Never cover the generator with a tarp or canvas. That holds in moisture and gives rust a foothold. Meep the flaps on the discharge and inlet turn assemblies open as much as possible - even when the generator is turned off. That allows any trapped moisture to evaporate.

JAN 93



Chemicals Flowing

Here's how to unclog the valve:

Use a screwdriver to remove the front and back hose lines from the chemical valve.



2 Use a hex head key to take the top knob off.



3 Remove the nut to get to the valve.



4 Remove fittings from the sides of the valve



S Use a screwdriver or suitable object small enough to pass through the valve openings to remove the paste-like mess that caused the clog.

6 Put unclogged valve back on.

CLEAR, PURE WATER!



JAN 93

Toss Old Roadwheel Locknots



NEVER

REUSE OLD

LOCKNUTS. THEY'LL JUST

LOOSEN UP.

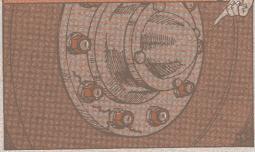
MEY, SOMETHING TELLS ME WE'RE FALLING APART!

Loose roadwheel locknuts cause M9 ACE roadwheels to come apart, and maybe cause a thrown track.

You can spot loose locknuts by:

- Elongations around the studs.
- ✓ A shiny metal surface or rust spot around the locknut.
- ✓ A starburst pattern or warped metal on the roadwheel.

Loose nuts? Replace each locknut with a new one, NSN 5310-01-183-6841, and torque it down to 170-190 lb-ft.



If you find starburst patterns or warped metal on any roadwheel, the roadwheel is ready to fall apart, so report it pronto.

Help Stop Steel Line Abuse

H ydraulic lines under your SEE's boom lift cylinders get cracked, dented or broken. To protect the lines, turn both cylinders over so the lines are on top.

This turn-around will give enough clearance to dump a load into a dump truck without damaging the hoses.



(A Good Move for Tools

When the backhoe on the SEE is in transport, it's hard to reach tools stowed in the small tool box behind the cab.

To make it easier to get at those tools, move 'em to the tool chest used for the chain saw and hydraulic tool accessories.

Keep the jack in place by using the straps in the tool box.



Me-water de Fuel

Mater in a fuel system is the biggest cause of clogged fuel filters and injection system failure.

Nearly all fuel contains some water. Condensation

adds more moisture to closed fuel systems.

But you can help keep water out of ground equipment fuel systems with a water absorbent fuel dry compound. It comes in two parts; a plastic sleeve, or guard, and a cartridge. And it comes in several sizes for various sized tanks.

> HERE'S WHAT'S AVAILABLE

NSN 5430-01-

American	For tanks up	For 200 to 500	For tanks over
Sleeve	to 250 gallons	gallon tanks	500 gallons 349-8730
Cartridge (2)	349-8729	349-8728	350-5465

No cartridges come with the sleeve.



Biodegradable's Best

rycleaning solvent cleans OK, but biodegradable cleaning compound cleans OK, too, and it's better for the environment.

You can use a water-based biodegradable cleaning compound instead of drycleaning solvent for most cleaning chores except for cleaning aircraft aluminum surfaces.

This cleaner will not contribute to hazardous waste. You won't have to wear protective clothing or use protective equipment when cleaning with it, because it's non-toxic.

It's good for those tough cleaning jobs, like removing grease and oil from brake shoes, cleaning individual web gear, tires, canvas, plastic and wood material. Use a mixture of one part cleaning compound with three parts water.

The cleaner may be biodegradable, but the contaminant it removed may not be biodegradable, and will have to be disposed of as hazardous waste.



Mat Adhesive NSN

he NSN for the sleeping mat repair adhesive listed on Page 2-14 of TM 10-8400-203-23, General Repair Procedures for Individual Equipment is no good. Get the adhesive with NSN 8040-00-165-8614.



Dear Editor,

Metal tags used for identifying M17 mask carriers are a problem. First, you have to get the ID numbers stamped on them—that's a hassle. Second, because they're metal, they make noise in the field that can alert the enemy.

We've had better luck with plastic tags, NSN 9905-00-537-8957. We write on the number with a waterproof paint marker (your local SSSC probably has them or you can order markers with NSN 7520-00-043-3408). The paint soaks into the plastic tag and the writing is there to stay.

The tag even has a hole you can use to attach it to the carrier's D-ring.

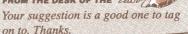
We've also had better luck putting the tag on the D-ring at the



end of the leg strap, rather than the large D-ring, where it's more likely to snag on the Load Bearing Equipment (LBE) harness.

SGT Graham Ray Ft Bliss, TX

FROM THE DESK OF THE Editor



Shrink to Fit

Dear Editor.

When we clean the M17 burner fuel filter sediment bowl in the field, we have trouble with the filter gaskets. Once the filter is taken apart, the gaskets swell and won't fit back in the filter.

The best idea is to take extra filter elements (which include gaskets), NSN 2910-00-057-1421, to the field and just replace the gaskets and element after you clean the filter. The element and gaskets cost only \$2.99.

But if you do get caught short, we've found that leaving the gaskets in the sun for five minutes shrinks them back to normal size.

SPC Anthony Thomas Ft Benning, GA



FROM THE DESK OF THE Edito

Your suggestion certainly shrinks that problem down to size.
Thanks.

M12A1 Decon...

Plug Battery Drain

Dear Editor,

Even if we followed the correct shutdown procedure, our decon's batteries often ended up dead—especially if the M12s were idle very long. Something was draining the batteries.

We plugged the battery drain by disconnecting the batteries' negative terminals at shutdown, especially if we weren't going to run them again for quite a while.



Disconnect negative terminal if decon will be idle two weeks or more

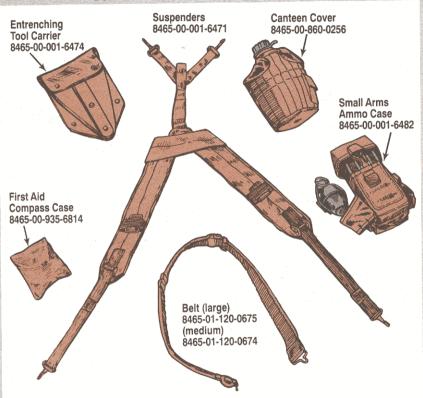
SPC Bernard Hampfling Ft Benning, GA

Your suggestion will keep batteries from going down the drain. Look at the AMP gauge after start-up. If the needle doesn't move to the right, you have a bum regulator.

The battery won't be charged.

A Friend You Can Depend On

Your All-Purpose Lightweight Individual Carrying Equipment (ALICE) will be there with you during the good times — and the bad times — if you replace its worn, broken or missing parts with these NSNs:



Replace the belt keepers with NSN 5340-00-753-5581, female fasteners with NSN 8315-01-287-0604 and male fasteners with NSN 8315-01-287-0603.

Get the loop strap fastener with NSN 5340-01-062-6751.

Replace strap keepers that fit on the small arms ammo case, the first aid/compass case, the canteen cover and the entrenching tool carrier with NSN 5340-00-753-5580.

Eyeball Chapter 14 of TM 10-8400-203-23, General Repair Procedures for Individual Equipment, for maintenance info on ALICE.

Protection for



Here's a good preventive maintenance tip for your PS TBs:

Keep PS in binders.

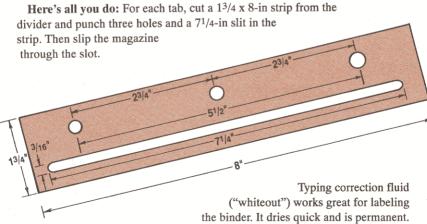
Get a three-ring looseleaf binder with NSN 7510-00-187-6486. Each binder holds about a year's worth of PS Magazines.

Don't punch holes in PS. The holes may take out important info. Instead, make tabs from file dividers, NSN 7530-00-988-6515.



JAN 93





NSN for Pulley

The NSN for the blower motor pulley of the air conditioner on the Deployable Medical Systems (DEPMEDS) is not listed in TM 5-4120-390-14.



Portable Microfiche Reader . . .

Battery Charge

Set the power mode switch to the OFF position when you charge the battery in your Commuter II microfiche reader, NSN 6730-01-080-7933.

If you try to charge while the reader's in the DC mode, you'll end up damaging both the battery and the battery box.



Heavy-duty Lamp NSNs

Dear Half-Mast,

I need your help. Can you give me the NSNs for heavy-duty 110/120v lamps for drop lights, extension lights and light sets?

PVT B.V.



NSN 6240-	Watts
00-927-3841*	60
00-194-7924	75
00-246-5052	100

* NSN is not on the AMDF. Order on a DD Form 1348-6 from RIC S9G, and put "Not on AMDF" in the REMARKS block.

Your authority to order is Appendix A of CTA 50-970.

Energy Efficient Lighting

Save money in your shop area by using energy saving light bulbs, ballast and fixtures.

The Defense General Supply Center (DGSC) has a catalog on Energy Efficient Lighting. It lists the NSNs for the light bulbs and how to order them.

GET THE CATALOG BY CALLING ME!

AMDF...

Price Challenge

hen you find an item on the AMDF that you think is overpriced, call the hotline at the Catalog Data Activity.

The 24-hour MIRAC (Management Information Research Assistance Center) is on DSN 977-7431 or commercial (717) 770-7431.

Overseas folks can challenge a price by calling these numbers:



Europe ETS 370-6760/6796/ 7255 USFK/EUSA DSN 315-723-

You'll get a recording that asks for your name, address and telephone number, the NSN for the item and why you think it's overpriced. The MIRAC folks will get back to you as soon as possible.

Or write to:

USAMC Catalog Data Activity ATTN: AMXCA-PP New Cumberland, PA 17070-5010

Or send your challenge over DDN using:

mirac@ncad-emh12.Army.mil

LMMs Replacing KAMs

Some communications security maintenance manuals (KAMs) can now be ordered through the Army's pinpoint publication system as limited maintenance manuals (LMM).

Headquarters has "scrubbed" these unit-level KAMs and now your pubs clerk can order them on DA Form 4569 using the LMM number. For future changes and revisions, your pubs clerk should add these to your 12-series form using these block numbers:

			DA Form 12-43-E
Equipment	KAM	LMM	Block No.
KG-40/40A	279	1A	0947
KG-84C	504	2A	0948
KG-84/84A	410	5A	0949
KY-99	None	9A	0946

Chack Codes Batore Shipping



SARGE SAYS
WE'RE WASTING
TOO MUCH SHIPPING
MONEY BECAUSE OF
THE WRONG COPES.



HERE'S HOW TO BREAK THOSE COPES

repairable item up the line to be shipped to depot for repair, make sure you've got the right codes!

If you have the wrong condition code or you didn't check the recoverability code on the AMDF, you could wind up spending unnecessary shipping dollars.

Here's how to make sure you save those dollars for more important things:

First, check the recoverability code (RC) column on the AMDF. If the RC is anything but a "D," don't send it to the depot for repair.

If the RC on the AMDF is "D," inspect the item to get the condition code.

Here are the codes to use on the shipping document to describe the condition of the item:

Code	Definition
F	Economically repairable materiel which requires repair, overhaul, or reconditioning, includes repairable items which are radioactively contaminated.
G	Materiel requiring additional parts or components to complete the end item prior to issue.
H	Materiel which has been determined to be unserviceable and does not meet repair criteria, includes condemned items which are radioactively contaminated.







The Army does not stock repair parts for those beasts. You've got to use local purchase requests to get parts. That's not too bad if you're stateside, but if you're in an overseas unit, it's a different story.

Lots of times you can't find a supplier for local purchase parts. Don't give up. Help is near. . . as near as your Logistics Assistance Office (LAO).

LAOs can help your supply people get your request through the correct regional contracting office to the activity that supports you.

USAREUR units use:

Letterkenny Army Depot Director of Contracting ATTN: SDSLE-P Chambersburg, PA 17201-4150 Phone: DSN 570-9007 Comm (717) 267-9007

EUSA units use:

Sacramento Army Depot ATTN: SDSSA-KPD Sacramento, CA 95813-5021 Phone: DSN 839-3705 Comm (916) 388-3705

Quick Disconnect Correction

The correct NSN for the 14 AWG quick disconnect receptacle in the terminal kit we had on Page 57 of PS 478 is NSN 5940-00-926-0085.



M113-Series TM Correction

A leaky engine compartment access cover does not deadline your M113series personnel carrier. The PMCS tables in your -261-10 and -277-10 TMs are wrong where they say a broken or missing panel, latch or seal make the vehicle Not Mission Capable (NMC). Now TACOM says it's okay to operate the vehicle even without the access cover. Look for the upcoming TM changes.

Better DS2 Packing

In PS 476 we told you to use vermiculite insulation, NSN 5640-00-801-4176, for packing DS2 leakers or cleaning up DS2 spills. Forget that. It doesn't absorb DS2. Instead, order vermiculite, NSN 5640-01-324-2664. It will do the job. See your AMCCOM LAR for a copy of their Maintenance Advisory Message 92-25.

Tank Engine Access Covers

Because of a supply snafu, ordering the right engine access cover, NSN 5340-01-144-0889, for your M1-series tank gets you the cover for the left side. Prevent that by ordering the cover by NSN on a DD Form 1348-6. Put an advice code of 2B in card columns 65-66 to prevent substitution.

Sheridan Bll Snafu

If you've lost or broken the 19.5-in flat tip screwdriver, NSN 5120-00-809-1570. for your M551A1 Sheridan, you're caught between a rock and a hard place.

The screwdriver was taken out of the BII when TM 9-2350-230-10 was up-

dated.

But NSN 5120-00-255-1097 will get a replacement screwdriver. Use Appendix A of CTA 50-970 as your authority until the TM is changed.

Clean Brake Shoes

A little grease from your hand while repacking bearings won't ruin a brake shoe—if you clean off the grease real quick. Use drycleaning solvent, NSN 6850-01-158-3928. Order it on a DD Form 1348-6 using RIC S9G. In RE-MARKS, note "NSN not on the AMDF." Of course, you replace oil-soaked shoes.

SUSV Brake Light Switch

The brake light switch on most SUSVs could be a potential safety hazard. Moisture shorts out the switch, keeping the brake light off while the parking brake is on. Friction from driving with the brake on can cause a fire. Order watertight switch, NSN 2540-01-350-5233, as a replacement.

M1-Series Tank Taillight

Got a broken aluminum stoplight/taillight assembly, NSN 6220-01-325-9836? Replace it with a plastic assembly, NSN 6220-01-197-5523. Metal assemblies and repair parts are no longer being made and the supply will run out soon.

Distribution: To be distributed in accordance with DA Form 12-34-E, Block 0312, for TB-43-Series

Would You Stake Your Life night on the Condition of Your Equipment?

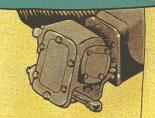
☆ U.S. GOVERNMENT PRINTING OFFICE: 1992 0-750-062

CLASSIC LUBE LEAKS

Leaks have CLASS. Here's a leader's guide on what to do about each class of lube leak.

CLASS I

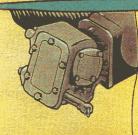
Lube is moist to touch, but doesn't form a drop.



Forget it. It's acceptable.

CLASS II

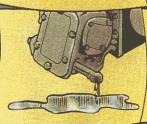
Lube comes out to form a drop, but not enough to drip off during inspection.



Keep an eye on it.
Change the seal
if the case loses
15 - 20% of the
lube between
scheduled
services.

CLASS III

Lube that drips from the item being inspected.



Change the seal.

Figure out what causes Class III leaks.
Could be a clogged vent valve or line.