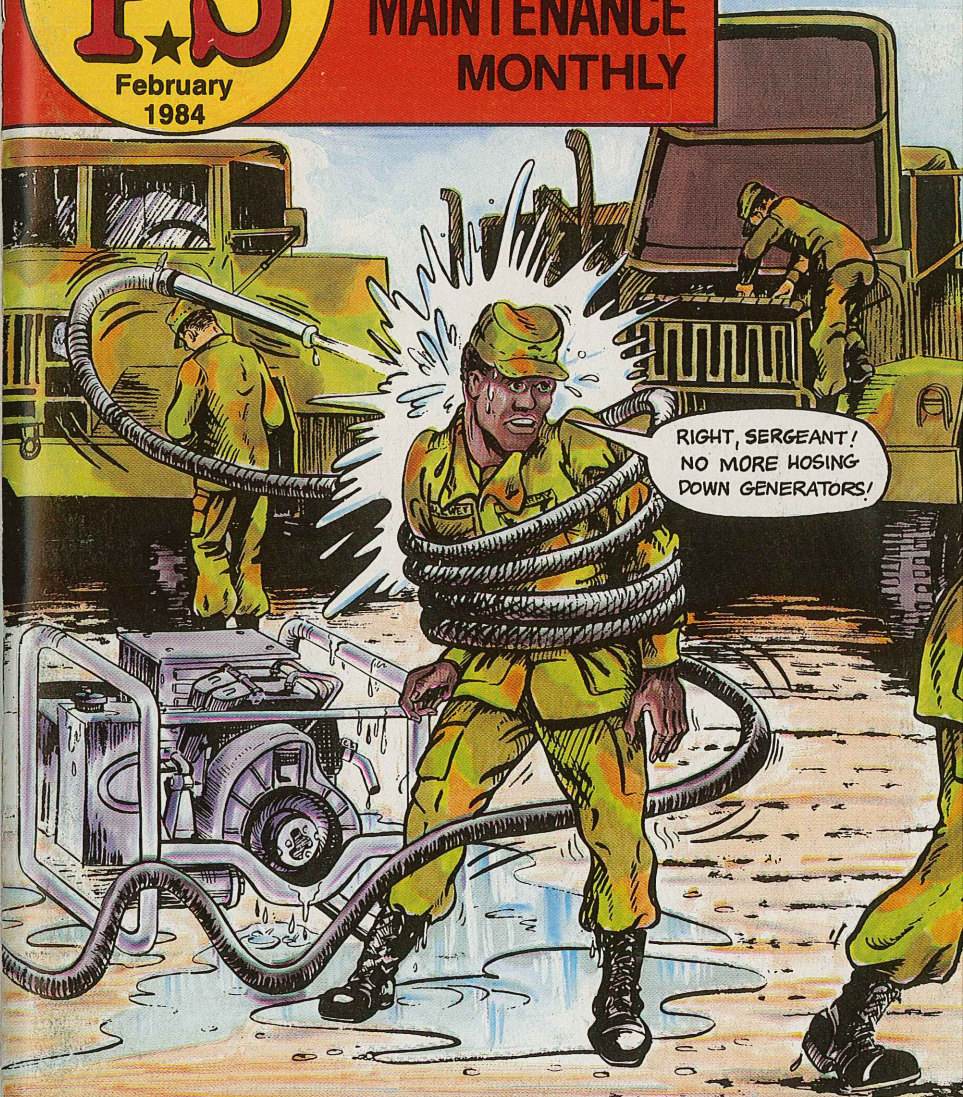


Issue 375

PS

February
1984

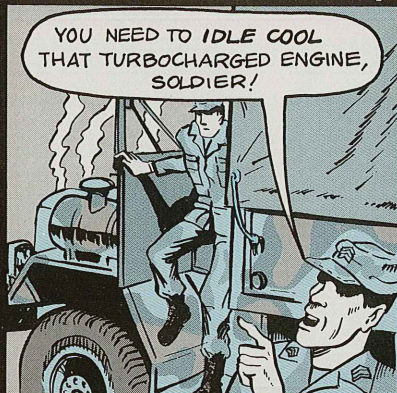
**THE
PREVENTIVE
MAINTENANCE
MONTHLY**



RIGHT, SERGEANT!
NO MORE HOSING
DOWN GENERATORS!



**An Army of excellence's the theme —
It's not an impossible dream!**

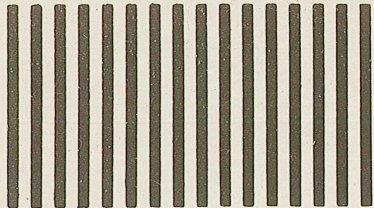


**Teach those who don't know
To work like a pro —**



There's no room for duds on this team!

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES



BUSINESS REPLY CARD

FIRST CLASS PERMIT NO. 12062 WASHINGTON, D.C.

POSTAGE WILL BE PAID BY DEPARTMENT OF THE ARMY

Return Address

OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE, \$300

SMART
U.S. ARMY LOGISTICS CENTER
ATTN: ATCL-CST
FORT LEE, VIRGINIA 23801

TO: PROJECT SMART,
CURRENT PROCEDURE/PROBLEM AREA:

DATE _____

SUGGESTION FOR IMPROVEMENT:

AUTOVON/
TELEPHONE NUMBER

NAME (PRINT)

Work "SMARTer", not harder!

Get SMART!

Got an idea that would improve the Army's logistics system? Or a technique that would help you do your job more efficiently and effectively while improving combat readiness? Then think SMART (Supply and Maintenance Assessment Review Team).

LTG Thompson, the Deputy Chief of Staff for Logistics, and SMART are looking for ways to improve the current logistics system. If you have a suggestion, write it down on the attached post cards or a piece of paper and send it in.

Describe the current procedure and your idea or technique for improving it. Be sure to include your name, unit address and telephone number.

You will receive written notification that your suggestion has been received and is being evaluated. If your suggestion is adopted, you may qualify for a monetary and/or impact award.

HELP IMPROVE THE WAY
WE DO BUSINESS!
WORK **SMARTER**, NOT
HARDER!



PS THE PREVENTIVE MAINTENANCE MONTHLY

Published by the Department of the Army for the information of all soldiers assigned to combat and combat support units, and all soldiers with organizational maintenance and supply duties. Within limits of availability, older issues may be obtained direct from Editor, PS Magazine, c/o US Army Materiel Readiness Support Activity, Lexington, KY 40511.

ISSUE NO. 375 FEBRUARY 1984

FIREPOWER

Dragon LET	2-4	M60-Series Tanks	10-14
M163A1 Vulcan	5	6V53, 8V71 Engines	13
M220A1 TOW	6	M88-Series RV's	14
M901 TOW	8	M1 Tanks	15

GROUND MOBILITY

Engine Overspeeding	16	¼-Ton Trucks	26-27
Brake Inspection	18	Safety Markings	27
2½-, 5-Ton Trucks	18-23	¾-Ton Trailer	27
Water Trailers	24-25		

AIR MOBILITY

UH-60A	37	Cargo Tiedowns	39
Huey CCR Tool	38	OAT Gage	40
CH-47	39	Mohawk Note	41

COMMUNICATIONS

Cable Tips	42	AN/GRC-50	49
CX-4655 Cable	45	AN/PRC-77	49
AB-15 Mast	45	AS-1729 Antenna	50-52
Ground Wire NSN	45	MK-1069 Guy Wire	52
SB-22 Switchboards	46	AN/TAM-4 Glasses	53
AN/VRC-12 RT	49	AN/GRC-103 RT	53

TROOP SUPPORT

New Pubs	28	Bridge Boat	58-59
Maint Management	29-36	Generators	59-61
D7E, D7F Tractors	54	Chemical Alarms	62-63
CCE Briefs	56	NBC Marking Set	64
Ribbon Bridges	57	Water Bag Tips	64
AVLB's	57		

PS wants your ideas and contributions, and is glad to answer your questions. Name and address are kept in confidence. Just write to:

MSG Half-Mast
PS Magazine
Lexington, KY
40511

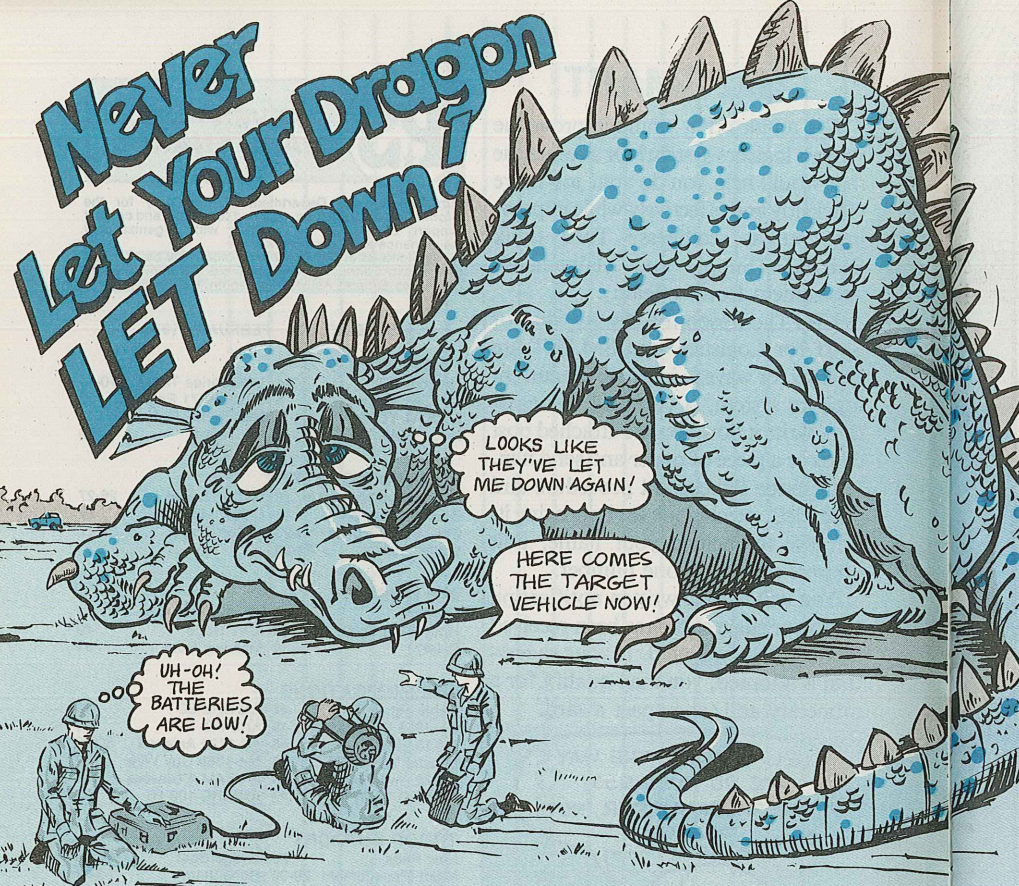
Use of funds for printing of this publication has been approved by Headquarters, Department of the Army, 10 September 1982 in accordance with AR 310-1.

DISTRIBUTION: In accordance with requirements submitted on DA Form 12-5. **Private subscriptions:** Order from US Govt Printing Office, Supt of Documents, Washington, DC 20402. \$24 per year to US and APO; \$30. to foreign address.

PS Magazine ISSN 0475-2953 is published monthly by the Department of the Army, Washington, DC. Second Class Postage is paid at the Lexington, KY post office and at additional mailing offices.

Postmaster: Send address changes to Cdr. US Army Pubs Ctr. 2800 Eastern Blvd, Baltimore, MD 21220.

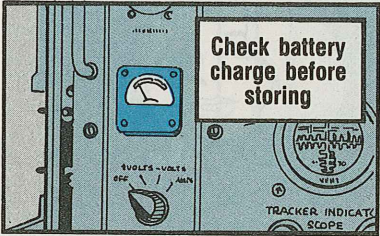
Never Let Your Dragon LET Down!



Never let up on PM, and your Dragon LET (Launch Effects Trainer) won't let you down.

Here're some ways to keep scoring: When you're through using your LET's monitoring set, be sure the batteries are in the lower third of the yellow or higher. In short, store them with some kind of charge on them.

If you have to charge the batteries during use, discharge them deep into the yellow...and then bring them up to full charge.



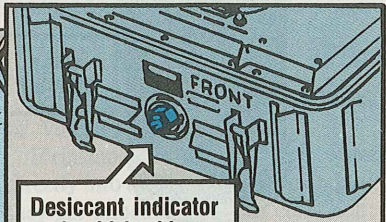
That prevents the batteries from building a memory factor...taking a surface charge only. These batteries won't operate as long as they should.

Efficiency drops, and the battery's life is shortened.

After storage, check the meter to see if the batteries are discharged. Charge them up for the mission.

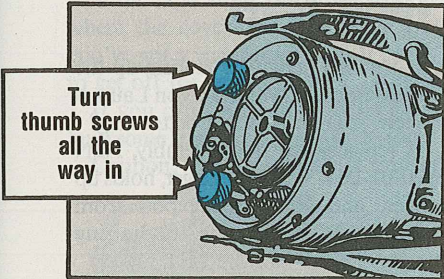
Desiccant Blues

Blue is the color you want to see on the monitor's desiccant indicator when you pull your before-operation PMCS. It means your desiccant's working to prevent moisture damage inside the case.



If the indicator is white or pink, replace the desiccant with NSN 6850-00-935-9795. White or pink means the desiccant's sopped up all the moisture it can, and new moisture is going to corrode internal parts.

Before you store the LET, be sure the thumbscrews on the forward end are turned all the way in. That protects them from being mashed and bent.



Corrosion Explosion

Dry-cell battery leaks and caked carbon can make more problems for you and your LET than you'll want to handle.

Two things you can do to head off problems:



Caked carbon in the breech assembly and on the dummy load will jam the breech assembly and make extra work. Carbon's a lot easier to get off when it's fresh.

Corroding dry-cell batteries can not only destroy the battery compartment, they can destroy the LET. It has happened over and over again. It'll happen to you...if you don't remove the batteries.

MAKE CERTAIN YOU USE ONLY THE RIGHT LENS PAPER!



Dummy Weight

Next time you're cleaning your LET, eyeball the compression rings on the dummy weight.

The rings should be smooth...no burrs, nicks or gouges. If they aren't smooth, get your mech to contact DS for repair or replacement.



Rings smooth?

Lens Cleaning

Tracker lenses have expensive coatings which both protect them and let them perform better.

That's why you use special cleaning material.

If you use rags, eyeglass tissues, paper or whatever to wipe the lenses, you'll scratch and damage them.

Hold this thought: Wipe lenses only with lens paper, NSN 6640-00-597-6745. For other lens cleaning, go with authorized materials only.

You'll find what you need listed in Appendix B, TM 9-1425-484-10.

Dragon LET Ring NSN

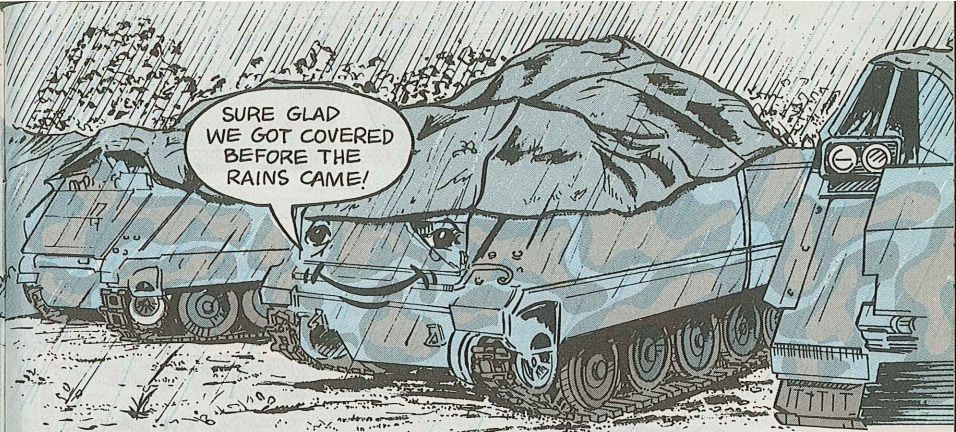


If training activity is tearing up the ring assembly on your Dragon Launch Effects Trainer, go for a better ring!

A replacement ring assembly, NSN 6920-01-064-3111, is stronger, holds up longer, and keeps the bipod from breaking out of the ring. If the ring breaks, it deadlines the LET.

Replace ring with NSN 6920-01-064-3111

FEB 84



M163A1 Damage Dampers

Soft water and hard trees can knock ol' Vulcan to his knees.

F'rinstance, when you feed water directly into all those little black boxes, they get knocked out with corrosion.

To prevent it, keep water off the radar system units when you wash the track. This's especially important when you use high-pressure water on the track.

Also, keep canvas covers in place when the vehicle's idle. Driving rain damages the black boxes, too.

The Unit 5 power supply gets most of the moisture damage. Water gets in it and blows it out.

You can help by latching onto some green tape, NSN 8315-00-253-6293. Run the tape along the power supply where the cover and case meet and you've got a waterproof seal. It's easy to get off for maintenance.

If you can't find any in your unit, bum some from your post canvas shop.

Caution: The tape does not protect

your radar units from high pressure water. Keep it away!

About Those Trees...

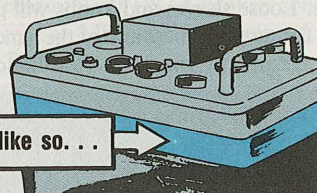
The antenna unit dish on your Vulcan has sturdy brush guards which protect the antenna.



Note, tho, that they are **brush** guards. They ward off the branches of small trees, bushes and such.

They do not knock down trees, thick tree limbs and other barriers that your track can plow into. And, the Vulcan's not supposed to go where tanks go!

The message is: Stay out of the trees! Find a clearer route.



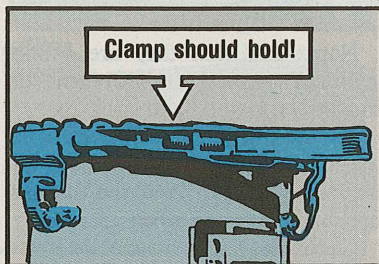
Tape like so...

Go TOW PM!



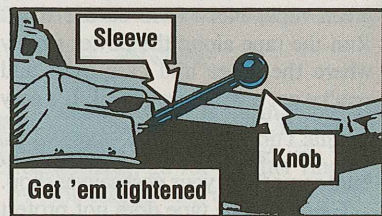
Keep the "go" in your M220A1 TOW system with some eyeball activity on small items that can make big problems.

If the coupling clamp pops off the mount or pedestal, get your Direct Support to replace it. The traversing unit (TU) or optical sight can go tumbling onto a steel deck or a rock and cause some mighty expensive damage.



Locking Handle

When the rubber sleeve or the knob on the locking handle of the TU works loose, get your DS to cement it tight for

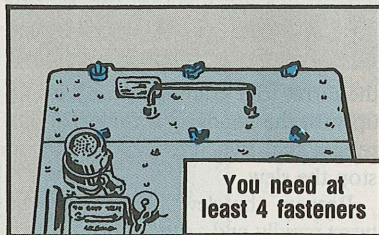


you. Loose sleeves and knobs will get lost for sure. The bare arm of the handle can get mighty rough on your hands.

Battery Studs

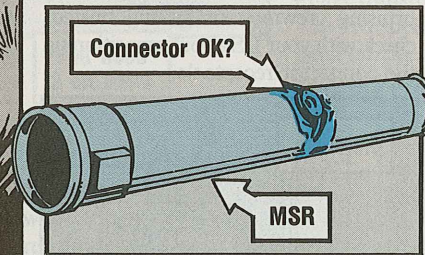
If you don't know it by now, TM 9-1425-470-24P moves the installation of battery stud fasteners back up to DS.

That still leaves organizational with a problem, tho. As your PMCS says, if you have 3 or less fasteners on the battery assembly, it's not mission capable. The fasteners must hold firm. Get DS to install any missing fasteners.



MSR Repair

If your MSR's are damaged, the fiberglass case and the end housings are



repairable at DS. A broken connector on the MSR makes it unserviceable. Turn it in.

Verification

Table 2-1 of C3 to TM 9-1425-472-12 spells out due dates for semiannual and annual verification of system components. It also shows where the verification labels should be placed, so you'll know where to look...and when the DS check is due.

If you're wondering how to get the label, go for it with Plate, Instruction, NSN 9905-01-143-9414. It gets you one label. Since you're going to need about 10 labels a year, keep enough on hand. That's 10 labels for **each** system.

Lens Cleaning

Here's a reminder on an oft-told tale: Do not use substitute cleaning material on those expensive lenses! No rags, no eyeglass tissues, no paper towels, no etc. Go by your -12 TM. You do not clean the night sight lenses with the same stuff

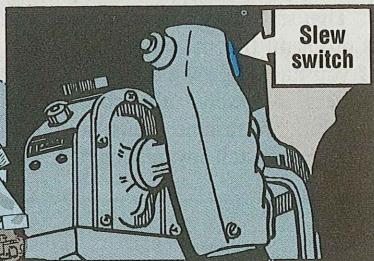


you use on the day sight. All you use is a cotton pad and lens cleaning solution. Otherwise you can damage the sight.

PM Savvy for Your ITV

'Round You Go

Slewing around? Remember this: When you traverse the turret with the slew switch (on hand control) bring

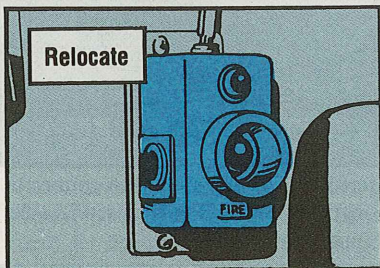


the turret to a gradual stop by easing up with the handgrip actuator. Then, release that switch as you prepare to stop the slew.

Reason: the slew switch turns the turret rapidly, and a sudden stop can tear up the azimuth drive.

Cable Snags

If smoke grenade launcher cables are bruising crewmen or getting busted, check with your DS about repositioning the connector receptacle.



Bolt Checks

Hull mechanics who find loose bolts on the bell housing transfer case and engine-to-transmission should have the bolts reinstalled by DS. DS'll need to use new compression washers, NSN 5310-00-877-5972, when they make the fix. Old washers or substitutes won't do the job.

Cooperation Operation

The turret and missile system require 180-day verification...and togetherness is called for.

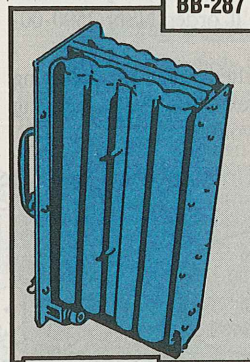
Turret and system mechanics (MOS 45K and 27E) should check the turret and missile system components at the same time.

Reading Material

If you don't have a copy of AR 750-40, get with your pubs clerk. It's the final word on missile system materiel readiness reporting.

Check Page L-6 of the AR. It says you must have 2 BB-287 batteries on hand or your ITV is not mission capable. For other interesting reading, Para 4-6b of AR 190-11 gives you a number of places to store your optical sight and traversing unit (TU). Your missile guidance set (MGS) doesn't have an option. The MGS is stored and locked in your arms room.

BB-287



You need 2 on hand

Boresight NSN

Need the SU-93 boresight collimator for your night sight?

Go for it with NSN 5855-01-109-6433. It's listed in TM 9-5855-450-24P (Jun 83).

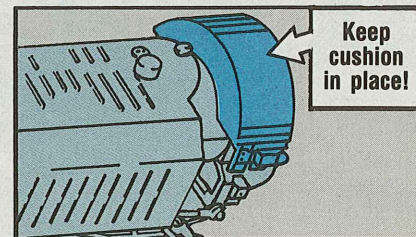
Purge Requirement

Note to turret mechanics: Purging optics in the image transfer assembly (ITA) is your job and your -20 TM spells out the procedure. To do the job you need nitrogen purging kit, NSN 4931-00-065-1110.

TAS-4 Cover-Up

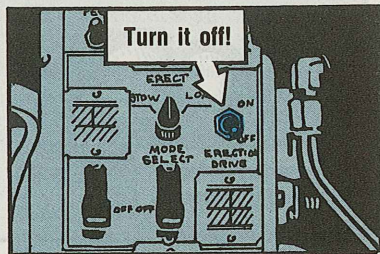
The guard cushion for the Afocal cover on your TOW's AN/TAS-4 thermal night sight must be in place when the sight or cover goes for repair.

The guard prevents damage to the expensive optical lens. Components shipped without the guard have arrived with damaged lenses.



To bring your M901 turret down for a soft landing, be sure your AZ and EL STOW lights are on.

As the turret settles on the deck (you can hear and feel it), turn off the ERECTION Drive switch.

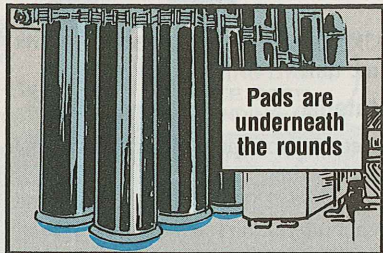


If the turret slams or comes down hard, let your Direct Support know. It may need an elevation stow switch or deceleration adjustment.

Put Pads in Their Places

There's a time and a place for everything, including the cushioning pads in your tank's ammo ready racks.

The time is now and the place is where the pads belong—in the ready rack, not just somewhere in the tank.



Some of you tankers figure as long as the pads are somewhere in the tank, you're all set and your tank is mission capable.

Wrong! The PMCS says a damaged or missing ready rack cushioning pad

makes your tank not mission capable (NMC). Missing means not in its proper place and glued down.

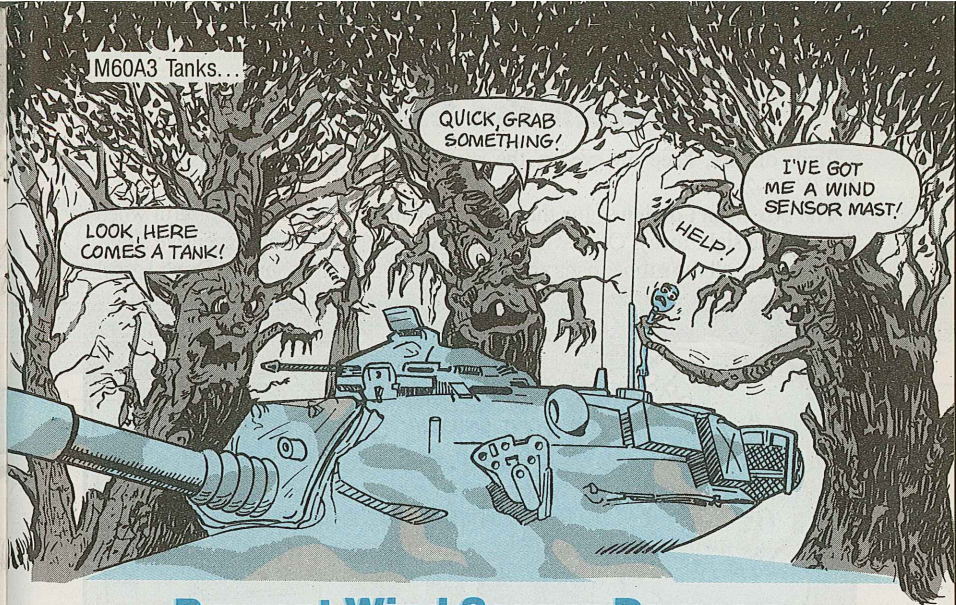
Why all the fuss? That pad shields the 105MM round from shocks and from a possible electrical short circuit—a short that could set off the round and make things really hot for the crew.

If your ready rack pads are just somewhere in the tank, find 'em and have your mech glue 'em down where they belong.

He'll clean the pad and the rack first and then apply adhesive, NSN 8040-00-262-9025, to both surfaces.

If you need new ones, let your mech know and he'll order NSN 2590-00-405-1932.

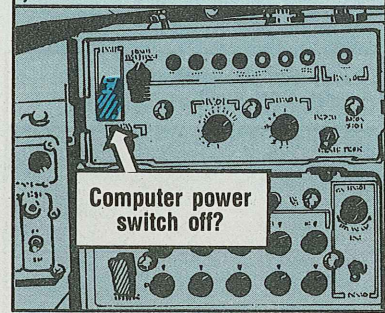
Otherwise, there might be something else missing next time you're carrying live ammo—you!



Prevent Wind Sensor Damage

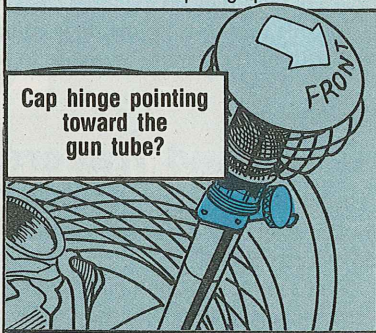
There's not a whole lot you can do about cross-wind sensor damage from tree limbs and brush—it's just a fact of tank life. But you can cut out some damage with a couple of smooth moves.

- Be sure your ballistics computer power is off when you install or remove the probe. Otherwise, scratch one probe and the A9 circuit card in the computer. That makes for a very expensive repair job.



- Rotate the wind sensor mast cap 180°. It'll help prevent damage to the cap that occurs when a limb or branch hits the mast, pops the cap open and then mangles it.

Make sure the cap hinge points toward



the gun tube. Then, those limbs and branches will just slip over the cap, not rip it off. You'll need 4 new lockwashers, NSN 5310-00-933-8118, to finish the job.

Eyeball the Sight Box

Tank drivers, keep an eye on the storage box for the night vision sight, AN/VVS-2.

The box wasn't designed for that sight, so you need to be extra careful when you put the sight away. Otherwise, you may make junk of an expensive sight. Make sure all the rubber pads are in place and fit the sight snugly. Don't forget



the snubbing pad on the inside of the door. If any of the pads are missing, let your mechanic know about it. If they don't fit snugly, adjust their mounting brackets until they do.

Also be sure to close the door completely. There are 2 catches on the door and both of them must be secure to protect the sight.

Hand Traverse Drive Repair

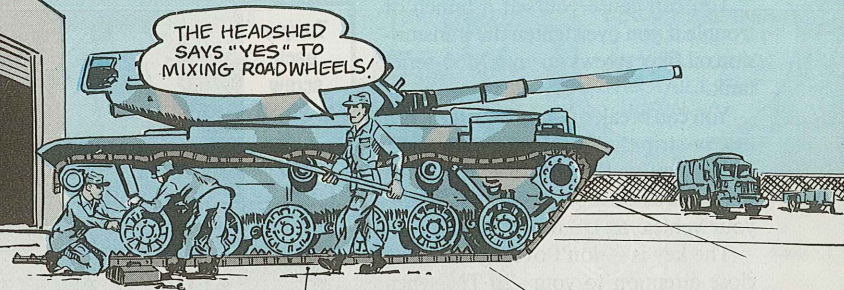
Turret mechs, you can now repair a broken shaft rivet on the hand traverse drive assembly.

That's right, you don't have to send the whole assembly to DS anymore. The headshed is changing the maintenance level to organizational so you can do the work.

Instructions on the installation are in TB 43-0001-36-1 (Apr 83).



Roadwheel Mixing

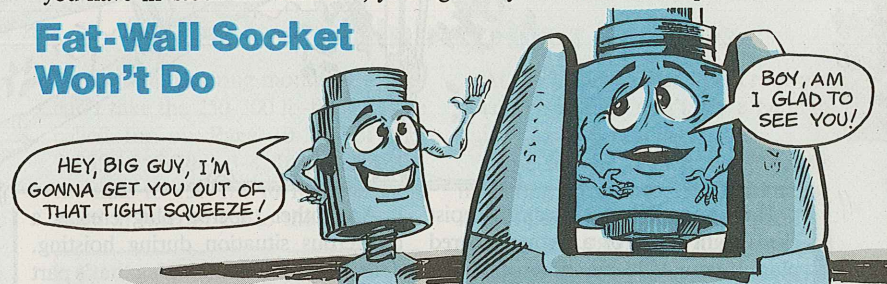


Yes, tankers, you can mix aluminum and steel roadwheels on your vehicles. You can put the wheels on any aluminum hub in any combination—all steel, all aluminum or one steel and one aluminum.

However, when you mix 'em on the same hub, put the aluminum wheel inboard and the steel one outboard. If you have steel hubs, only steel road wheels can be used.

There're no more aluminum roadwheels in the supply system. When the ones you have in stock are worn out, you'll get only steel wheels as replacements.

Fat-Wall Socket Won't Do



You M60A1 (RISE) and M60A3 tank crews having a hard time finding a socket to work on the center guide nut?

The one from your Basic Issue Items is too thick-walled to do the job.

You need a 12-pt thin-wall 1 5/16-in socket, 3/4-in sq dr. NSN 5120-00-232-5681 gets it for you.

New Troubleshooting Guide

A new troubleshooting guide is available for the 6V53 and 8V71 engines. You can get a copy by calling AUTOVON 786-8303 or writing to:

US Army Tank-Automotive Command
ATTN: DRSTA-MCB
Warren, MI 48090

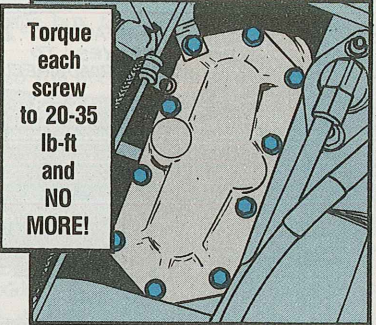
Guessing Won't Hack It...

Use a Torque Wrench

You can cause yourself a bunch of trouble if you overtighten the transmission oil filter screws on your M60-series tank.

You can break off a screw, ruin a gasket, or strip the filter housing threads. Either way, you'll create a leak—and a fire hazard. Possibly, too, you'll doom your vehicle to DS downtime.

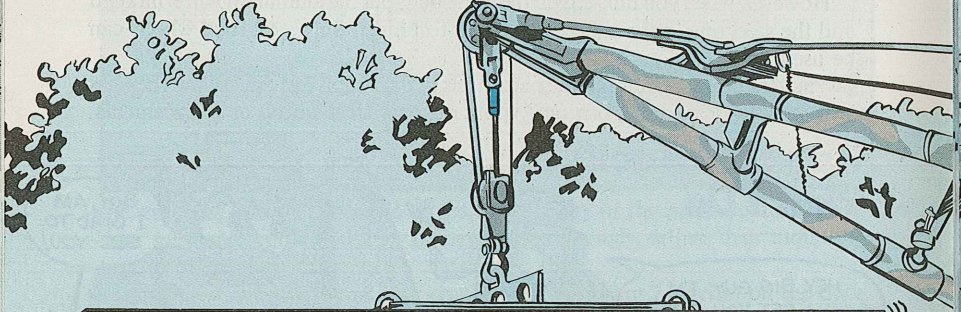
The key is—don't overtighten. Pay close attention to your -20 TM when installing the screws.



Torque each screw to 20-35 lb-ft and NO MORE!

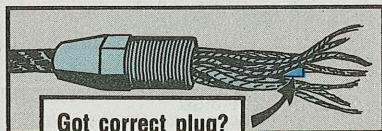
M88-Series Recovery Vehicles...

Hoist Clevis Danger



Have your DS unit check the hoist clevis right now for a wrong tapered plug. If your M88 has the wrong plug, the cable can slip out of the clevis and you'll drop your load!

The correct plug has a hollow center and 6 straight grooves on the outside. One cable strand must go in each of the grooves and one thru the center hole.



Got correct plug?

Any other tapered plug creates a dangerous situation during hoisting. This includes a smooth plug that's part of the replacement clevis assembly, NSN 4030-00-262-3154. Its 20,000-lb load capacity doesn't meet the lifting requirements of your vehicle.

The **only** clevis assembly to be used on your M88-series vehicle is NSN 4030-00-444-3879, which has a 35,800-lb load capacity.

Don't do the work yourself. An upcoming change in the works for TM 9-2350-256-20 makes it a DS job.

M1 Tanks...

Tripping the Light Not Fantastic



Frayed wiring inside the taillight assembly may be the reason circuit breaker #22 tends to trip repeatedly.

Sharp-edged brackets inside the light are causing the frayed wires.

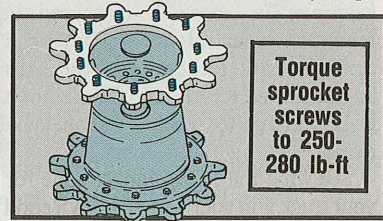
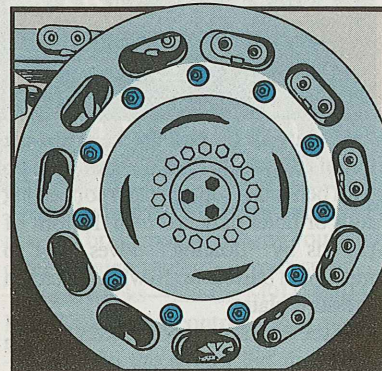
If you're having trouble with short circuits and circuit breaker #22 tripping, check out the tail lights. Inspection and removal procedures are in Chap 11 of TM 9-2350-255-20-1-3-4.

Track Retaining Ring Torque

The retaining ring mounting screws can't take the 250-300 lb-ft of torque called for on Page 10-362 of TM 9-2350-255-20-1-3-4. Instead, torque the nuts to 150-180 lb-ft. That's the word in Interim C1 to the TM.

At the higher torque, the screws are overstressed and don't have enough "give" to keep holding.

Same for the final drive sprockets mounting hardware. The TM change lowers the torque values from 320-350 lb-ft to 250-280 lb-ft. Also, you put



GAA on these screws before you install 'em. And, you clean the inside mating surfaces of the hub and sprockets with a wire brush and dry-cleaning solvent so they fit together real close.

Overspeeding Kills 'em



Anything with moving parts has a speed limit. If the parts are pushed beyond the limit, things start falling apart.

Take a diesel or multifuel engine, for example. Its speed is measured in revolutions per minute (RPM) on a tachometer or tachograph. And each engine has an RPM limit. That's not a level you try to reach—it's one you avoid.

See what the RPM danger zone for your truck is in your -10 TM. It's a good idea to mark it along the tachometer or tachograph with red paint or a DANGER decal, NSN 7690-00-924-4318. Appendix A, CTA 50-970 is your authority for the decal.



If you slip up and let the RPM get out of control, your engine can wind up with bent push rods, broken connecting rods or holes punched thru the tops of pistons by "floating" valves...not to mention a busted-up flywheel or clutch pressure plate.

If the engine's not completely ruined, the repair bill will be out of sight.

What's the Cause?

Engine overspeeding usually happens in downhill travel, when your truck's hauling a heavy load in low gear. You think the engine will work like a brake and hold your speed down. But that's not the case.

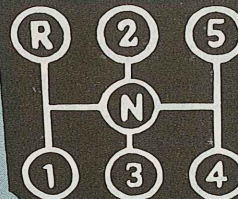
Instead, the speed builds up until it's too late—the brakes can't hold your truck back. Engine speed reaches the DANGER zone, and things start happening—all bad.

Maybe you're lucky and a good enough driver to avoid an accident. But you tear up a mighty expensive engine.

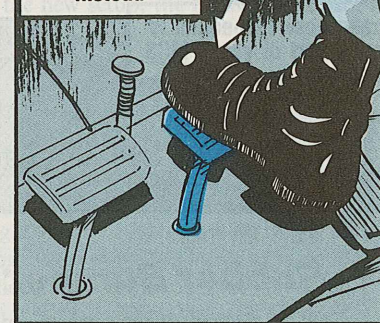
And the Cure?

Be a smart driver. Always travel downhill in the same gear you used to go uphill. And keep an eye on the tachometer.

Don't downshift to slow vehicle after you start downhill...



... use brakes instead



Use the brakes to hold the engine RPM well below the DANGER area. Don't ride the brake pedal, tho, or you'll burn up the brakes. Just apply the brakes often enough to control your speed.

Some trucks—like the M911, M915-series and M746—have a retarder to help keep RPM under control. Use it along with the brakes. Your operator's TM tell you how.

Include Hoses, Too, Mechs



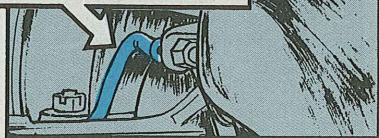
DID YOU CHECK OUT MY TRUCK'S FLEXIBLE HYDRAULIC BRAKE HOSES?

UH...ER... THAT INSPECTION IS NOT IN MY REGULAR PMCS!

IT IS NOW -- IF YOU GOT MY MESSAGE!

Hold it! You're not done inspecting the brake system until you've checked out the flexible hydraulic brake hoses. TACOM Msg DRSTA-AR 221330Z Sep 83 and DRSTA-MTC 071300Z Oct 83 updates your -20 TM to add brake

Brake hose inspection is now a part of your PMCS



2½- and 5-Ton Trucks...

Rubber Bumper Seals Floorboard

Cold air, mud and water can blast up at you thru the floor holes around the brake and clutch pedals. The 2-in rubber bumpers on the pedal shafts aren't big enough to cover the holes.

NSN 5340-01-143-1274 gets a 4-in bumper that lets you ride in comfort.



Get 4-in bumpers



DID THEY EVER INSTALL THOSE NEW BRAKE HOSES?

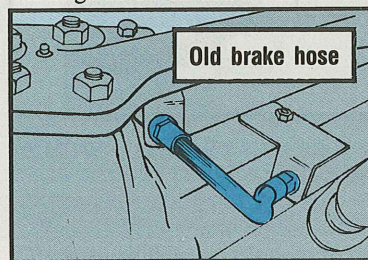
NOPE... SAID THE TM DIDN'T SHOW HOW TO DO IT!

NOW MAYBE THEY'LL FIND OUT HOW TO FIND OUT!

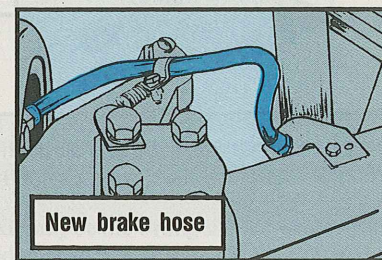
2½-Ton Trucks...

Safer Front Brake Hose

So you've got a new front hydraulic brake hose for your deuce-and-a-half... it's not like the old one... it's longer... and it doesn't fit in with the setup shown on Page 13-91 of TM 9-2320-209-20-3-2.



Old brake hose



New brake hose

So how do you install it?

Fact is, this hose—NSN 4720-00-203-9515—is one of several parts that go into improving your brake system. In the new setup, the brake hose is not so likely to stretch, bend, crack—and fail!



THE OTHER PARTS, LISTED ON PAGE 248 OF YOUR -20P ALONG WITH THE HOSE, ARE ...

Bracket, left	NSN 5340-00-487-5458
Bracket, right	NSN 2530-00-179-7118
Clamp, loop	NSN 5340-00-984-8540
Spring, helical	NSN 5360-00-516-7466
Plate	NSN 2530-00-908-8162
Screw	NSN 5305-00-267-8973
Nut	NSN 5310-00-061-7325

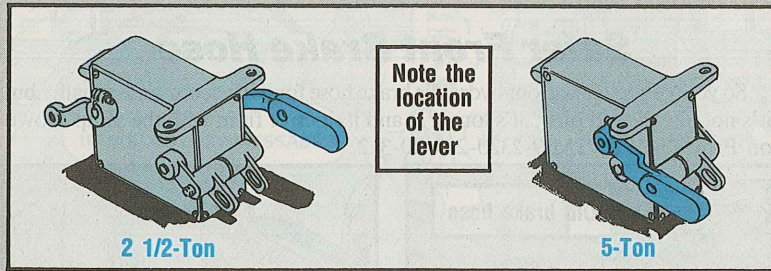
INSTRUCTIONS FOR CONVERTING FROM THE SHORT HOSE TO THE LONG HOSE ARE IN PARA 4-10a OF TM 43-0143!



Give Your Dump a Lift!

If the bed on your 5-ton dump truck won't budge, check the hydraulic hoist control box assembly. Maybe you've got the wrong box!

Control boxes on 2½- and 5-ton dump trucks look a lot alike but they're not interchangeable.



NSN 2520-00-740-9090 gets the control box for a 2½-ton dump. NSN 2520-00-740-9245 is for the 5-tonner's control box.

Wrecker Throttle Cable NSN's

The remote throttle control cables for your 5-ton wreckers are not listed in your TM-211-series or TM-260-series parts manuals.

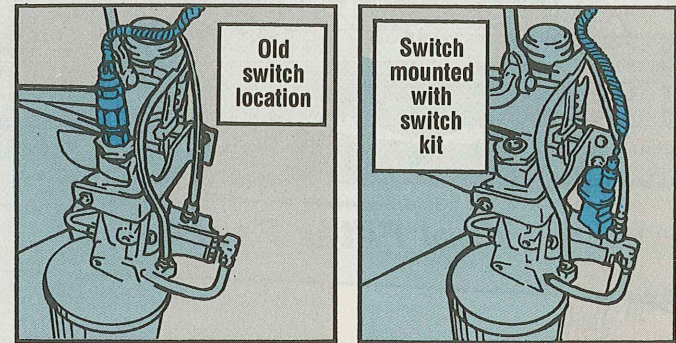
HERE'S A COMPLETE NSN RUNDOWN...

Wrecker	Cable NSN
M246	2590-00-405-9763*
M246A1	2990-00-411-9536
M246A2	2590-00-318-0485
M62	2590-00-159-8935*
M543	3830-00-546-4762
M543A1	2590-00-159-8935
M543A2	2590-00-912-3110
M816	2590-01-036-6735
M819	2590-00-405-9763

*Cable must be shortened. Use your old cable to figure the exact length.

Turn-On with Switch Kit!

Before you order the new type stoplight switch for your deuce-and-a-half, see whether you need only the switch, NSN 5930-00-789-6192, or the kit-with-switch, NSN 2530-01-105-5025.



You can't get the old type switch anymore...and you can't install the new type switch unless the kit's been installed first. The switch is in your TM 9-2320-209-20P, but the kit is not.

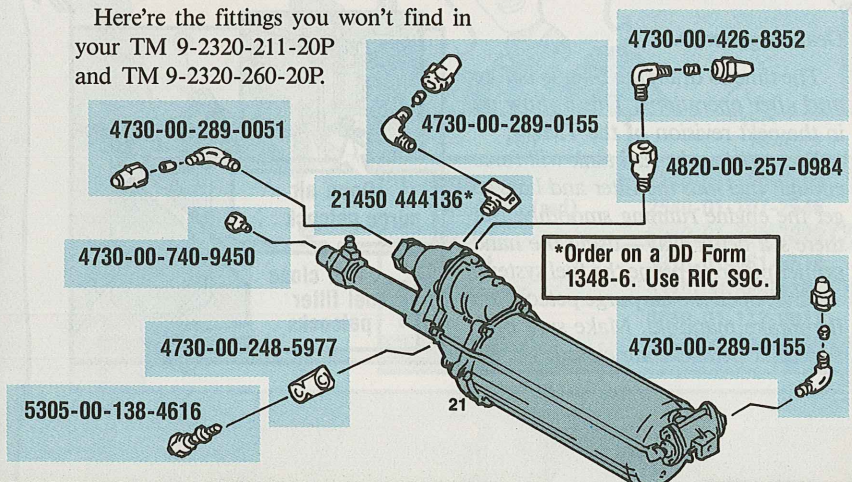
Watch it! The 1/2-in elbow with the kit may be the wrong size for your truck. Check the air line that connects to the adapter shown as Item 48, Fig 122, in the -20P TM. If it has a 3/8-in connector, you'll have to order the same size elbow using NSN 4730-00-228-3302.

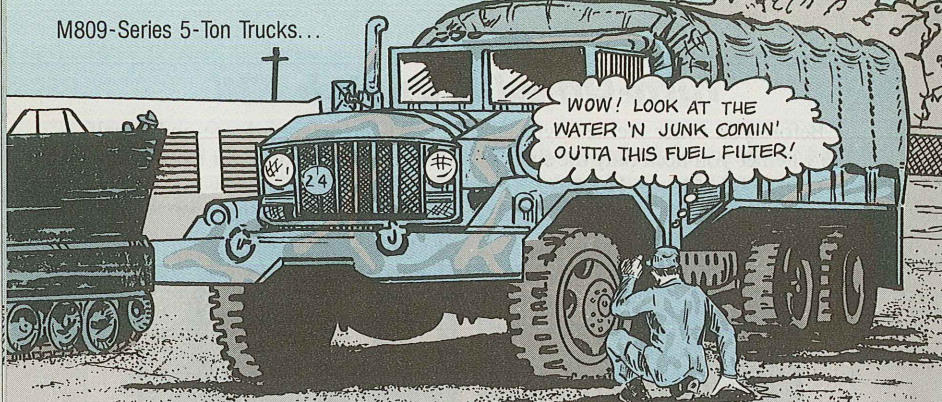
Info on mounting the kit is in Para 2-13d of TB 43-0001-39-4 (Jan 83).

5-Ton Trucks...

Air/Hydraulic Cylinder Fittings

Here're the fittings you won't find in your TM 9-2320-211-20P and TM 9-2320-260-20P.





Fuel Filter Facts

Dear Half-Mast,

The PMCS in the TM 9-2320-260-10-2 says to check for fuel contamination after operations. I think it should be a before-operations check.

Also, sometimes my drivers have to drain the fuel filter almost dry to get out the dirt, water, rust, etc. Then the truck either won't start or runs rough and lacks power. Neither the -10 nor -20 TM's say what to do if this happens. I get a mech to use an air hose to pressurize the fuel tank. That solves the problem. What do you think?

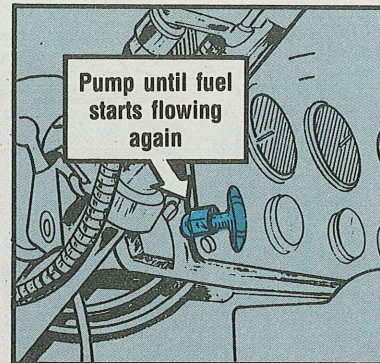
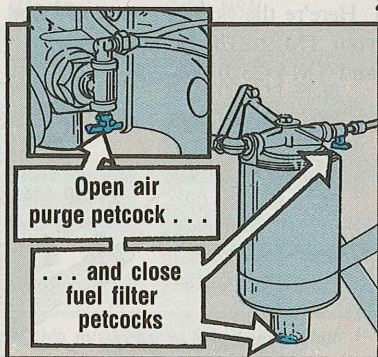
SGT D. C.

Dear Sergeant D. C.,

The time to drain the filter is before and after operations. This'll show up in the next revision of the TM.

Pressurizing the fuel tank will force enough fuel into the filter and lines to get the engine running smoothly. But there's a better way—using the hand primer pump to prime the fuel system.

First, open the air purge petcock on the intake manifold. Make sure both fuel filter petcocks are closed.



Put a container under the air purge petcock. Operate the hand primer pump on the instrument panel to discharge fuel from the fuel injection pump reservoir. Pump until fuel stops flowing, all air is expelled and fuel starts flowing again.

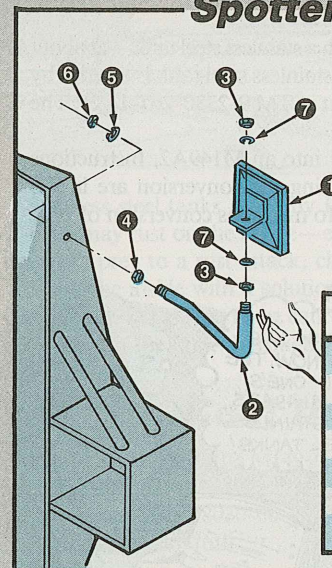
Close the air purge petcock. Properly dispose of the waste fuel.

Start the engine and check for fuel system leaks.

Half-Mast

M911 Tractor Truck...

Spotter Mirror Parts



PARTS FOR THE SPOTTER MIRROR AREN'T LISTED IN TM 9-2320-270-20P. HERE'S THE RUN DOWN!

Part	NSN
1. mirror head	2540-01-106-9080
2. mirror arm (rod)	2540-01-107-2546
3. hex nut	5310-01-105-7229 (2)
4. locknut	5310-01-061-5678
5. lockwasher	5310-00-543-4385
6. nut	5310-01-113-9811
7. lockwasher	5310-00-178-8631 (2)

Steel Tanks Available



I GUESS IT'S TIME TO TURN IN THIS OLD FIBERGLASS WATER TRAILER!

NOT YET, SOLDIER! YOU CAN GET A NEW STAINLESS STEEL TANK— LIKE THIS ONE— FOR ONE-THIRD THE COST!

No need to turn in your M149 or M149A1 water trailer just because the fiberglass tank is beyond repair.

Support can now replace the fiberglass tank with a stainless steel tank—at about one-third of the cost of a whole new trailer. The stainless steel tank is listed—by NSN 2510-01-091-5167—as a separate repair part in TM 9-2330-267-14&P. The fiberglass tank is no longer available.

This conversion turns your M149 or M149A1 into an M149A2. Instructions for changing the identification plate and reporting the conversion are in TB 43-0001-39-5 (Apr 83), Page 2-74. Altho this info mentions conversion of only the M149A1, it applies also to the M149.

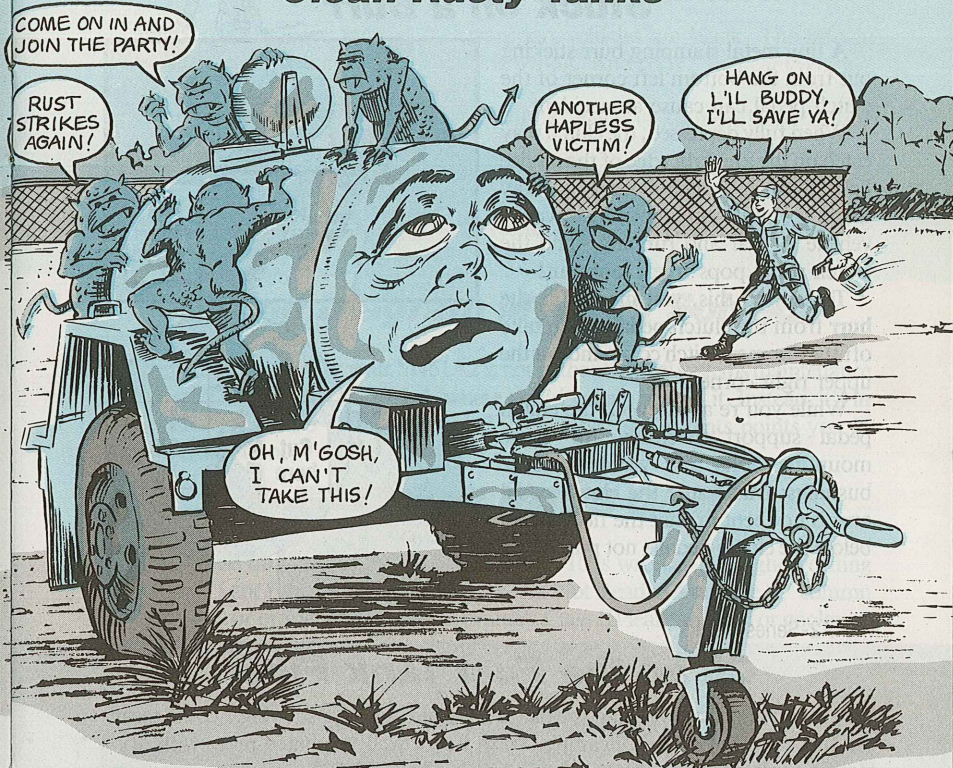
Confusion in TM

A coming change to TM 9-2330-267-14&P will clear up confusion over identifying trailer models by the type of tank. The facts are: M149 and M149A1 trailers have the fiberglass tank, and the M149A2 (NSN 2330-01-108-7367) has the stainless steel tank. Trailers pictured in the TM with a round tank are M149A2's.



I THINK I'VE GOT IT NOW. THE ROUND ONE'S ARE M149A2'S WITH STAINLESS STEEL TANKS!

Clean Rusty Tanks



COME ON IN AND JOIN THE PARTY!

RUST STRIKES AGAIN!

ANOTHER HAPLESS VICTIM!

HANG ON L'I'L BUDDY, I'LL SAVE YA!

OH, M'GOSH, I CAN'T TAKE THIS!

Stainless steel tanks made by Isometrics under Contract No. DAAE07-81-C-6183 may rust on the inside—especially along weld joints. If you've got one that falls prey to a rust attack, clean it out.

Scrub the inside with a solution of water and scouring powder. NSN 7930-00-205-0442 gets you a 14-oz can. Make sure you use a nonmetallic, nylon-type brush. Flush the tank thoroughly with clean water. Repeat if necessary.

Coat the Drain Plug

The plastic plug in the M149-series water trailer has a nasty habit of seizing. The threads then strip when you try to take it out. So, wrap the threads with Teflon tape, NSN 8030-00-889-3534, or lightly coat with silicone grease, NSN 6850-00-880-7616.

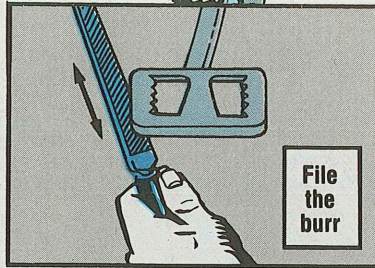
Stuck on a Burr

A tiny metal stamping burr sticking out from the bottom left corner of the clutch pedal can cause an accident.

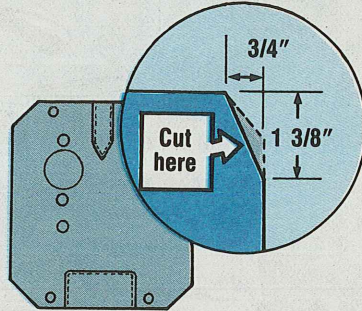
When fully depressed, the clutch may catch on the top right edge of the service light dimmer switch cover and stay there. If you absent-mindedly leave the vehicle in gear and running...and the clutch pedal pops free...look out!

To prevent this, you mechs file the burr from the clutch pedal. Then take off the dimmer switch cover and cut the upper right corner.

While you're at it, check the clutch pedal support assembly for loose mounting bolts and worn or loose bushings: Make sure the clutch pedal arm is not bent or that the floor panel below the clutch pedal's not pushed in.



File the burr



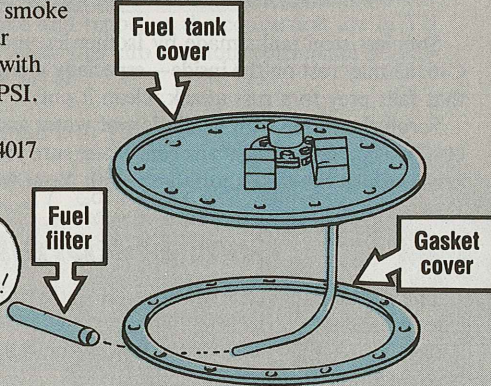
Cut here

Clean the Fuel Tank Filter

A rough start from your 1/4-ton truck...engine coughing, starving...could mean the fuel tank filter needs cleaning. Wash it in a well-ventilated place with dry-cleaning solvent P-D-680. Don't smoke or clean near an open flame. Wear eyeshields for protection and dry with compressed air...no more'n 30 PSI.

Replace the filter if it's torn or corroded. NSN 4330-00-165-4017 gets you a new one.

REPLACE THE FUEL FILTER IF IT'S DAMAGED OR WON'T COME CLEAN!



Fuel Tanker Signs—Updated

Safety markings for tactical fuel transport vehicles are black. The info in Para 11, Safety Markings, TB 43-0209 is wrong. And so is "Tactical (White)" on Page 20 of PS 365.

The right word is in Para 26b of AR 750-58, Painting, Camouflage Painting and Marking of Army Materiel.

Stick-on signs meeting the requirement of AR 750-58 are not available in the supply system.

Instead, put the markings on your fuel tanker with a stencil and lusterless black paint.

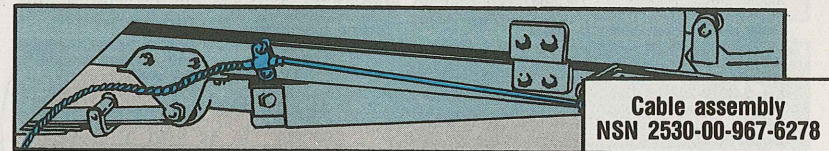
Wiring Diagram Mystery Solved

The wiring diagram for your M151A2 is not in the electrical systems maintenance section of TM 9-2320-218-20-1-1, where you'd expect to find it. Instead, it's in Appendix G of TM 9-2320-218-20-1-2. The Table of Contents points you in the right direction.

1/4-Ton Truck PMCS Goof

The PMCS on Page 2-9 of TM 9-2320-218-10 is wrong! The right wording under Item 1 for fluid leaks in the "Equipment Not Ready/Available If" column is: "Any fuel or brake fluid leakage is evident. Class III leakage of oil or coolant." This'll be showing up in a TM change or revision.

NSN's 'n' Things



The brake cable for the newer, over-the-center locking brake lever is not shown in TM 9-2330-202-14&P.

You can get the cable assembly with NSN 2530-00-967-6278.

The lifting hook and pin assembly—or shackle assembly—comes under NSN 4030-00-542-3181. It's not in the TM either.



PUBS

This is a selected list of recent pubs of interest to organizational maintenance personnel. This list was made from a computer printout provided by The Adjutant General.

Miscellaneous

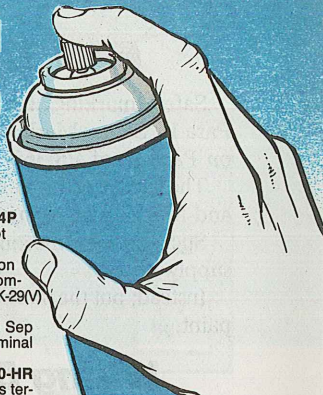
Cir 750-83-3 Nov Maint Mgmt Impr Prog (exp Nov 85)
LO 5-2410-233-12 Dec Tractor, Caterpillar Mod D7F
LO 5-3805-231-12 Dec Scraper, 18 cu yd, Euclid Mod 585H-G
LO 5-3805-235-12 Dec Towed scrapers earth-moving Model MS-100, MRS-100
LO 5-3805-274-12 Dec M917 dump truck body
LO 5-3820-236-12 Dec Earth auger Texoma Model 254-10
LO 5-3820-239-12 Dec Pneumatic drill I-R models CM150A/D475A and CM-225M/D475A
LO 5-3895-264-12 Dec Hot oil heater Hopkins Mod 200S
LO 5-3895-265-12 Dec Pile driver Link-Belt Speeder Mod 180M
LO 5-3895-271-12 Dec Roller Buffalo-Springfield Model KX-25E-A66
LO 5-3895-272-12 Dec Roller Huber Model T56M
LO 5-3895-371-12 Dec M918 bituminous distributor body
LO 5-3910-202-12 Dec Belt conveyor 300-tons per hr Barber-Greene Model PG-70
LO 5-4310-345-12 Dec Air compressor 250 CFM 100 PSI Davey Model 14M250RPV
LO 5-6115-603-12 Oct Generator set 60 KW DOD Model MEP404B
LO 10-3930-623-12 Dec Forklift 4,000 lb Baker Model FJF-040
LO 10-3930-634-12 Dec Forklift 6,000 lb Anthony Model MLT 6-2
MCRL-1 Jan
SC 5180-90-CL-N07-HR Sep Tool kit, canvas worker's

TB 9-2300-295-15/20 Oct Truck tractor M915A1

Technical Manuals

TM 3-1040-267-20&P Nov Launcher grenade smoke screening RP M243, M257 and M259
TM 3-6665-319-10 Nov Water testing kit, chemical agents M272
TM 5-848-2 Jan 84 Handling of aircraft and automotive fuels
TM 5-4120-369-24P Aug Air conditioner horizontal 18,000 BTU/HR
TM 5-4120-371-14-HR Dec Air conditioner, vertical 18,000 BTU/HR
TM 5-4120-375-14 Oct Air conditioner 36,000 BTU/HR Unifab Model UAC 40-5/6-06
TM 5-4310-346-20P Jan 84 compressor air 15 CFM 3500 PSI Stewart-Warner Mod 12021A
TM 5-4310-375-14 Dec Compressor 15CFM 175 PSI Model R122RAAB
TM 5-5420-210-20P Dec Transporter, mobile floating assault bridge/ferry Condec Mod 2270
TM 5-5420-226-20P Aug M48A5 AVLB
TM 5-6115-545-24P Dec Generator set DED 60-KW
TM 5-6675-329-13&P-HR Nov Self leveling surveying level
TM 9-243 Dec Use and care of hand tools and measuring tools
TM 9-1410-600-24P Oct Patriot
TM 9-1430-601-10-1 Oct AN/MPQ-53 Patriot
TM 9-1430-602-24P Oct Patriot ICC
TM 9-1430-604-10 Oct AN/MRC-137 Patriot
TM 9-2300-257-10 Jan M113A1, M577A1, M106A1, M125A1 and M132A1
TM 9-2320-270-10 HR Dec Truck tractor M911
TM 9-2350-247-20P Nov Carrier, cargo M548 and M548A1
TM 9-2350-255-MAC Nov Maintenance Allocation Chart M1 General Abrams
TM 9-4935-600-14 Oct Patriot

TM 9-4935-600-24P-2 Oct Patriot
TM 9-4935-600-24P-4 Oct M976 Patriot
TM 11-2300-487-14-2 Sep Installation for gun direction computer system AN/GYK-29(V) in M561 truck
TM 11-5815-602-10 Sep Communications terminal AN/UGC-74A(V)3
TM 11-5815-602-10-HR Sep Communications terminal AN/UGC-74A(V)3
TM 11-5815-602-24 Jan 84 Communications terminal AN/UGC-74A(V)3
TM 11-5820-401-20P Jan AN/VRC-12 series radio sets
TM 11-5820-401-20-1 Jan 84 AN/VRC-12 series radio sets
TM 11-5820-401-20-2 Jan 84 AN/VRC-12 series radio sets
TM 11-5825-225-12-HR Oct AN/TRN-30 beacon sets
TM 11-5855-247-24P-2 Sep Infrared night vision sight AN/TAS-6
TM 11-6130-233-12 Jan PP-2953 power supplies
TM 11-6625-3015-14 Oct AN/PRM-34 radio test set
TM 11-6625-3016-14-HR Sep AN/PRM-34 radio test set
TM 11-7440-244-10 Jan OA-8389 and 8390 processing and display
TM 55-1510-209-23P-2 Jan U-/RU-21 series
TM 55-1520-239-23P Jan AH-1S (mod)
TM 55-1905-219-14-2 Jan LCU



TM 55-1905-219-14-5 Nov LCU

AUDIO-VISUAL STUFF

Available at battalion or post Learning Center

TV Tapes

TVT 6-115 AN/TPQ-37 radar PMCS
TVT 6-118 AN/TPS-25 radar target location and identification

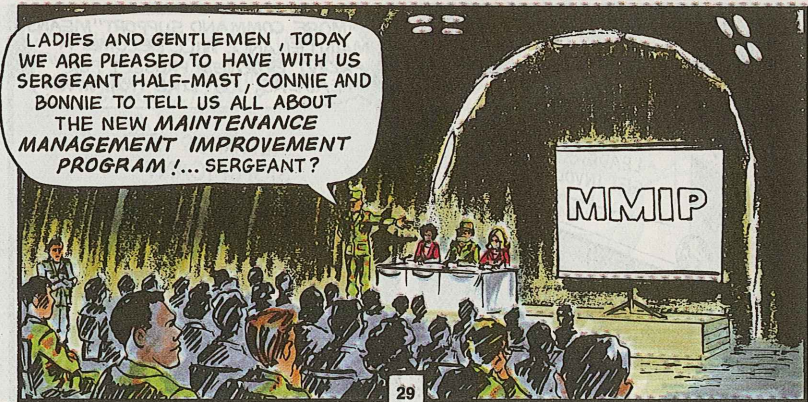
TEC Lessons

2C-011-5003-F UH-60A, Part III
2C-011-5007-F UH-60A elect systems, Part III
020-171-5716-A M60A3 prepare-to-fire checks in the degraded mode
600-551-8858-F UH-ID/H
612-051-9677-E Lubricating and servicing unit
730-051-8407-F Op crawler tractor winch controls
730-051-8413-F Ripping earth, asphalt, stratified rock and concrete
916-013-0035-F Handling, preserving and firing small arms ammo

M137 Pantel Check

Check the correction counter on your M198 towed howitzer's M137 panoramic telescope for a "letter" problem. If the letter "L" is not on the left side and the letter "R" is not on the right side, turn the pantel in to your support for repair.

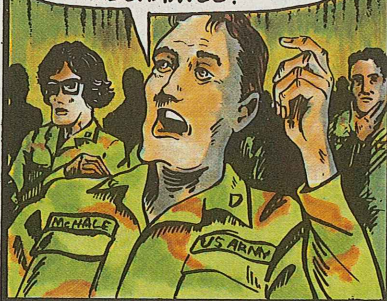
The Maintenance Management Improvement Program



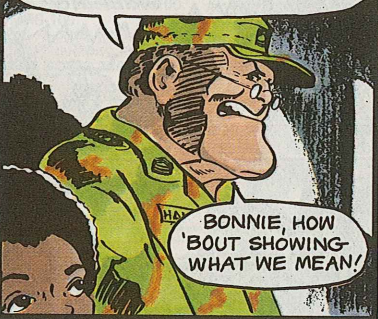
THIS PROGRAM REALLY ISN'T ALL THAT NEW... IT'S MORE OF A STREAM-LINING EFFORT TO IMPROVE THE EXISTING SYSTEM!



EXCUSE ME, SERGEANT... BUT WHY TELL US ABOUT MANAGEMENT?... WE'RE JUST MECHANICS!



BECAUSE YOU ARE THE ONES WHO STAND TO BENEFIT MOST FROM THESE IMPROVEMENTS...



BONNIE, HOW 'BOUT SHOWING WHAT WE MEAN!

CERTAINLY, SERGEANT!



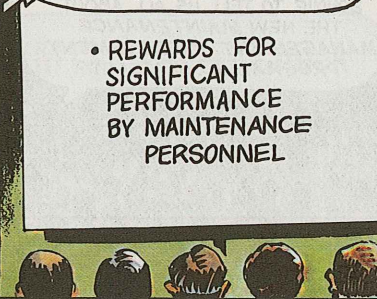
AS A MECHANIC, YOUR INVOLVEMENT WILL BE ON THE RECEIVING END OF THESE BENEFITS!



NOW, LET'S LOOK AT SOME!

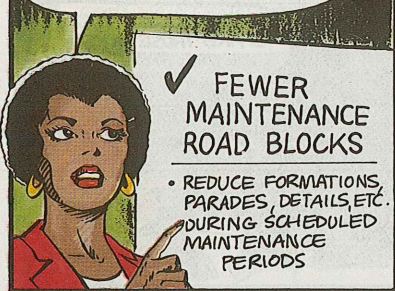
✓ MORE COMMAND SUPPORT FOR MAINTENANCE
• LEADERS TO GET INVOLVED

"MORE COMMAND SUPPORT" MEANS MAINTENANCE WILL BECOME A FRONT BURNER PROJECT FOR LEADERS, JUST LIKE TRAINING!



• REWARDS FOR SIGNIFICANT PERFORMANCE BY MAINTENANCE PERSONNEL

SECONDLY, YOU'LL BE SEEING SIMPLER FORMS AND PROCEDURES— FEWER OBSTACLES AND A HIGHER PRIORITY ON MAINTENANCE!



✓ FEWER MAINTENANCE ROAD BLOCKS

• REDUCE FORMATIONS, PARADES, DETAILS, ETC. DURING SCHEDULED MAINTENANCE PERIODS

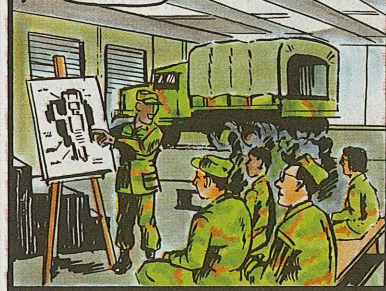
YOU'LL GET THE FACILITIES, THE TOOLS AND MATERIALS, AND THE SUPERVISION YOU NEED TO KEEP YOUR UNIT READY!



NEXT, YOU'LL BE GETTING AN OPPORTUNITY TO SHARPEN YOUR SKILLS...

✓ ACCESS TO MORE TRAINING

...WITH SERVICE SCHOOLING, OJT, CORRESPONDENCE COURSES, ON-SITE MINI COURSES, ARTEPS, AND MORE...



BUT WHAT GOOD IS ALL THIS TRAINING WHEN WE NEVER HAVE A CHANCE TO WORK IN OUR SPECIALTIES?



GOOD POINT, SOLDIER! BUT MMIP IS WORKING ON ALL THAT!



TELL HIM, CONNIE!

RIGHT! ANOTHER BENEFIT OF MMIP IS THAT YOU'LL WORK IN THE MOS FOR WHICH YOU'RE TRAINED! AND YOU'LL GET CROSS-TRAINED WHEN NEEDED...

✓ BETTER USE OF MAINTENANCE PERSONNEL



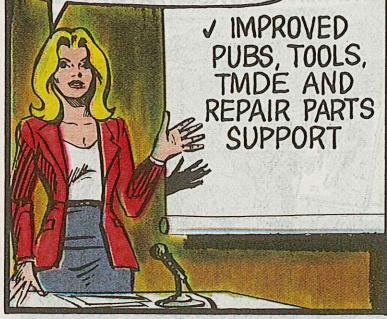
..YOU'LL BE REWARDED FOR GOOD PERFORMANCE. MOST OF ALL, MMIP WILL KEEP YOU ON THE JOB FOR WHICH YOU WERE TRAINED!

SORRY, SARGE... I CAN'T SPARE THOSE GUYS — THEY'RE SPECIALISTS!



FINALLY, MMIP WILL BENEFIT YOU BY PROVIDING WHAT YOU NEED WHEN YOU NEED IT!

✓ IMPROVED PUBS, TOOLS, TMDE AND REPAIR PARTS SUPPORT



DA CIRCULAR 750-83-3 (NOV 83) HAS THE BIG PICTURE. MORE INFO WILL FOLLOW!

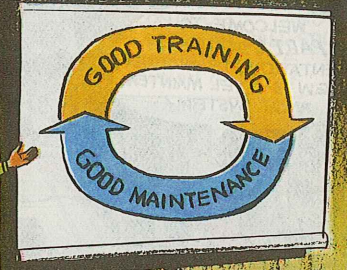


MMIP FITS RIGHT IN WITH OTHER CURRENT PROGRAMS AND INITIATIVES!

- CHIEF OF STAFF, ARMY AWARDS FOR MAINTENANCE EXCELLENCE
- SUPPLY AND MAINTENANCE ASSESSMENT AND REVIEW TEAM (SMART)
- STATE OF TOTAL ARMY REPORT TEAM (START)
- TOTAL ARMY MAINTENANCE MASTER PLAN



THE MAIN POINT HERE ABOUT THIS NEW PROGRAM IS THAT GOOD TRAINING REQUIRES GOOD MAINTENANCE AND GOOD MAINTENANCE REQUIRES GOOD TRAINING!



EQUIPMENT CAN PROVIDE FIRE-POWER, MOBILITY AND COMMUNICATION— BUT ONLY PEOPLE CAN PULL MAINTENANCE!



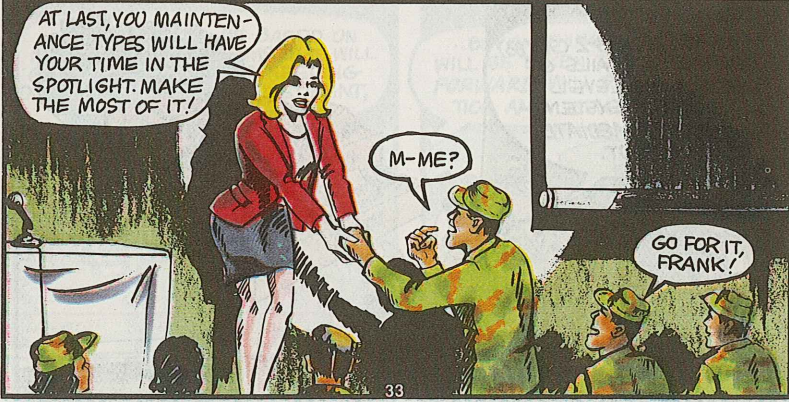
THE EMPHASIS HERE IS ON YOU! AND GOOD MAINTENANCE IS TOP PRIORITY UNDER MMIP!

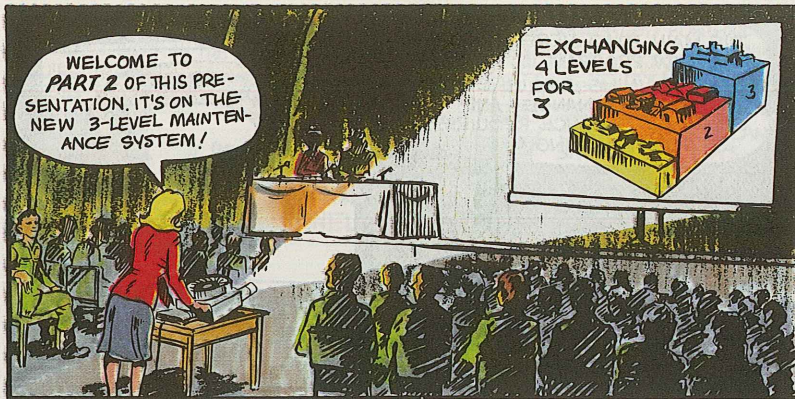


AT LAST, YOU MAINTENANCE TYPES WILL HAVE YOUR TIME IN THE SPOTLIGHT. MAKE THE MOST OF IT!

M-ME?

GO FOR IT, FRANK!





WELCOME TO PART 2 OF THIS PRESENTATION. IT'S ON THE NEW 3-LEVEL MAINTENANCE SYSTEM!

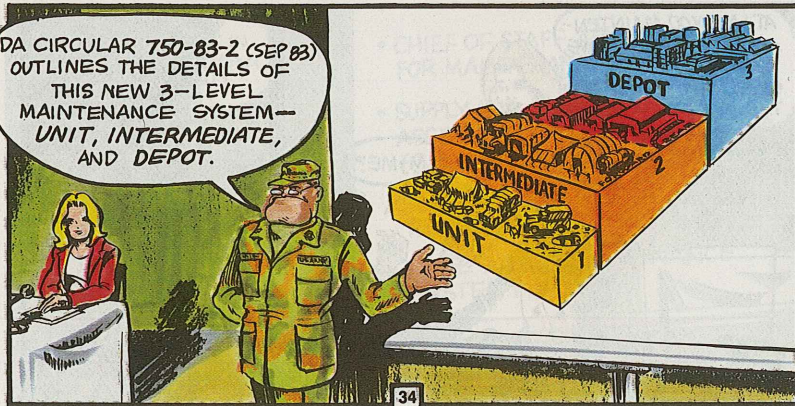
EXCHANGING 4 LEVELS FOR 3



HOW'S THIS 3-LEVEL BUSINESS GOING TO AFFECT US, CONNIE?



TAKE ONE OF THESE AND PASS THE REST ON—AND LISTEN TO THE SERGEANT!

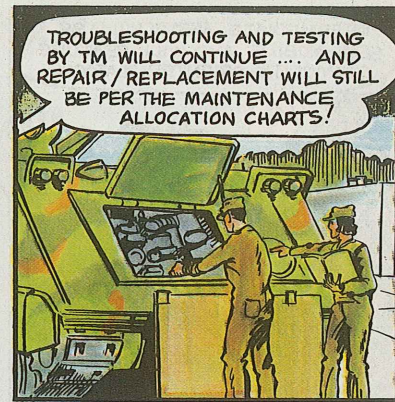


DA CIRCULAR 750-83-2 (SEP 83) OUTLINES THE DETAILS OF THIS NEW 3-LEVEL MAINTENANCE SYSTEM—UNIT, INTERMEDIATE, AND DEPOT.

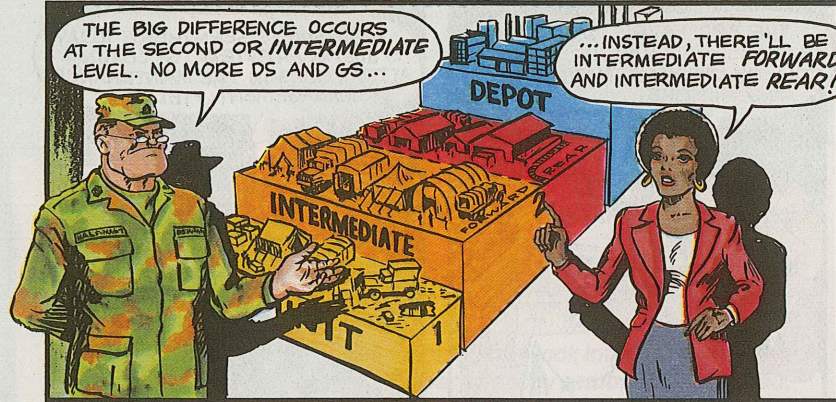
DEPOT
INTERMEDIATE
UNIT



AT THE CREW AND UNIT LEVEL, YOU WON'T NOTICE MUCH DIFFERENCE. YOU WILL CONTINUE TO PULL PMCS'S AS USUAL...



TROUBLESHOOTING AND TESTING BY TM WILL CONTINUE AND REPAIR / REPLACEMENT WILL STILL BE PER THE MAINTENANCE ALLOCATION CHARTS!



THE BIG DIFFERENCE OCCURS AT THE SECOND OR INTERMEDIATE LEVEL. NO MORE DS AND GS...

...INSTEAD, THERE'LL BE INTERMEDIATE FORWARD AND INTERMEDIATE REAR!



FORWARD WILL BE BASED ON MOBILE CONTACT TEAMS THAT WILL GO TO THE EQUIPMENT NEEDING DIAGNOSIS, REPAIR, ADJUSTMENT, OR WHATEVER...

THE DOWN GEAR IS HERE!



...BUT ANYTHING THEY CAN'T FIX WILL BE TAKEN TO THE REAR. ALSO, FORWARD WILL RUN A DX OPERATION AND VEHICLE RECOVERY!

I NEED A NEW DC GENERATOR

OK-GIVE ME A 60-AMP GENERATOR TO GO!

INTERMEDIATE REAR WILL BE SEMI-MOBILE AND WILL FEATURE COMMODITY-ORIENTED PLATOONS



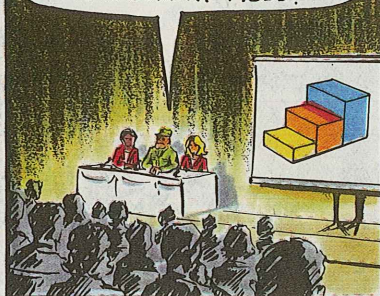
ITS MAINTENANCE INCLUDES REPAIR OF COMPONENTS, DX ITEMS, PRINTED CIRCUIT BOARDS AND MAJOR ASSEMBLIES. IT'LL ALSO MAINTAIN MOST STOCKS FOR THE THEATER.



THE 3RD LEVEL, DEPOT IS BASICALLY UNCHANGED. IT WILL STILL DO OVERHAUL, MODIFICATIONS, AND THE LIKE...



WHAT YOU'VE SEEN HERE TODAY IS JUST A PREVIEW OF COMING ATTRACTIONS IN THE MAINTENANCE MANAGEMENT FIELD!



SOME DAY SOON, SOMEBODY WILL PROBABLY BE ASKING YOU IN PERSON FOR YOUR IDEAS ON IMPROVING MAINTENANCE OPERATIONS...



BE READY TO LAY IT ON THEM!

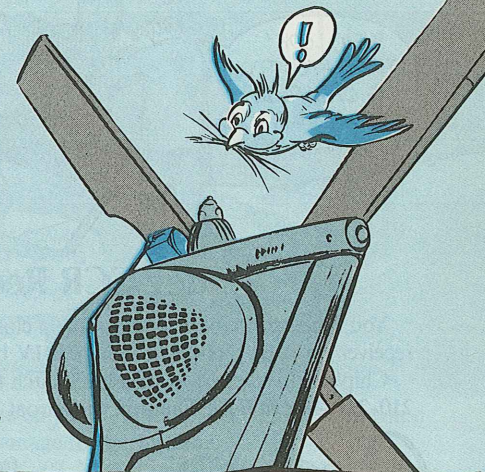
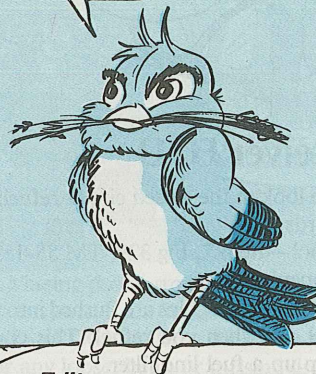
FOR MORE INFO, YOU CAN DIAL 22 START OR COMMERCIAL 1-800-DASTART!



UH-60A...

Nest Building Stopper

C'MON AVA, WE'LL JUST HAVE TO BUILD OUR NEST SOMEWHERE ELSE THIS TIME!



Dear Editor,

We've spent a heap o' hours cleaning bird nests out of the Black Hawk's horizontal stabilator openings.

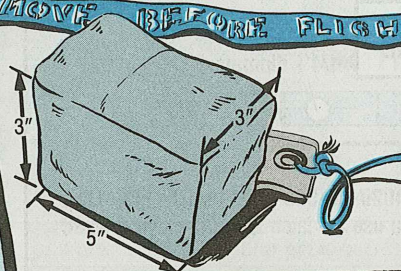
Here's how we solved the problem: Our canvas shop covered a 3 x 3 x 5-inch piece of foam rubber with canvas. Then we attached a REMOVE BEFORE FLIGHT streamer to it.

Our mechanics squeeze the foam rubber block into the holes. No more messy bird nests. The nest stopper is easily removed and stored.

This stopper also works great for the handholds in the tail rotor gear box cowling.

**Black Hawk Mechanics
DPT AVN
Ft Benning, GA**

REMOVE BEFORE FLIGHT



(Ed Note—Looks like you have an inexpensive PM fix for nest builders. Different sizes of canvas-covered foam rubber blocks can eliminate this problem in other aircraft.)



Huey CCR Receiver FOD

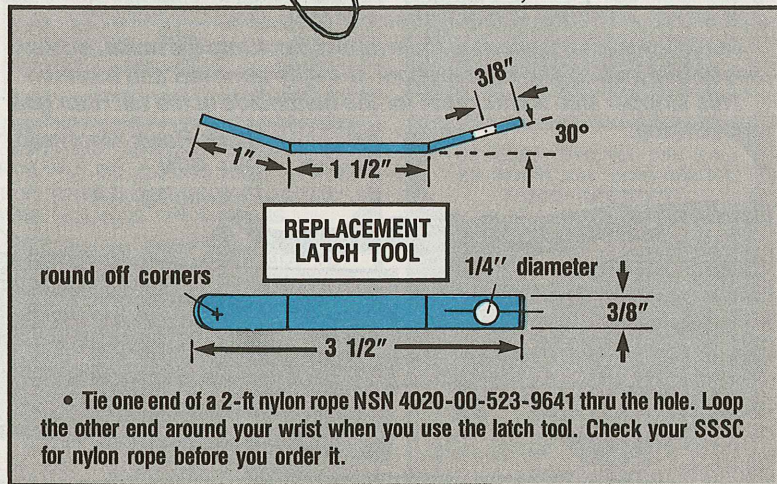
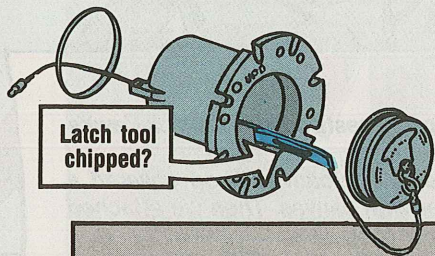
You Huey crewchiefs need to take a close look at the closed circuit refueling receiver on your UH-1E, -1H and -1V birds.

Chips and flakes from the plastic latch tool—Item 7, Fig 329, TM 55-1520-210-23P—have been found in the throat opening.

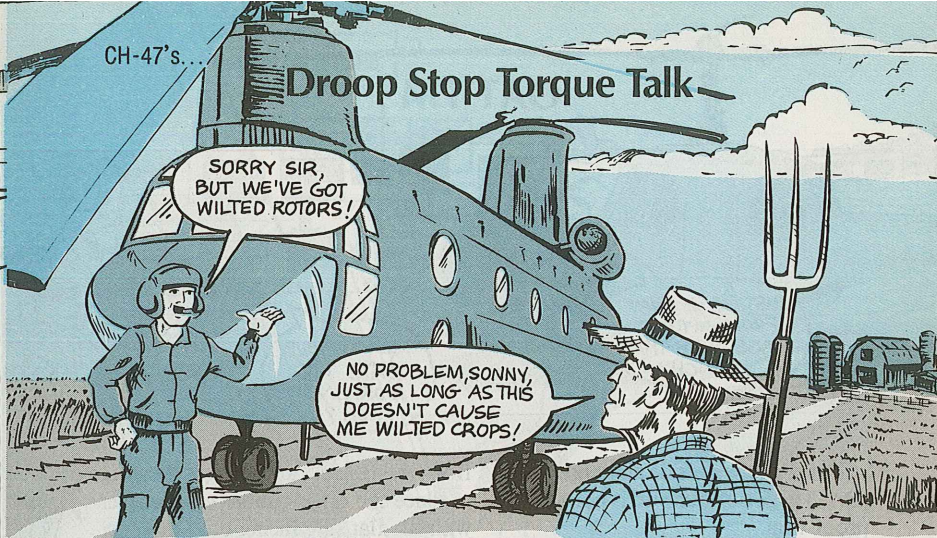
Course the chips are flushed into the fuel cell when you refuel. This could stop up a fuel line filter.

Check the latch tool, too. Toss it if it's chipped or nicked.

Fabricate a replacement latch tool from aluminum alloy plate, NSN 9535-00-084-4519, like so:



- Tie one end of a 2-ft nylon rope NSN 4020-00-523-9641 thru the hole. Loop the other end around your wrist when you use the latch tool. Check your SSSC for nylon rope before you order it.

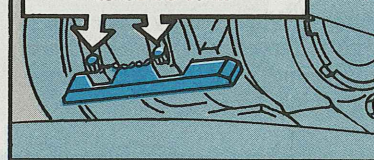


Missing droop stop retention bolts on your Chinook's forward and aft rotor drive systems can result in blade damage to the fuselage.

TSARCOM MIM-CH-47-83-MEC-07 Aug 83 says to check your Chinook for any loose, bent, or missing droop stop retention bolts as soon as practical.

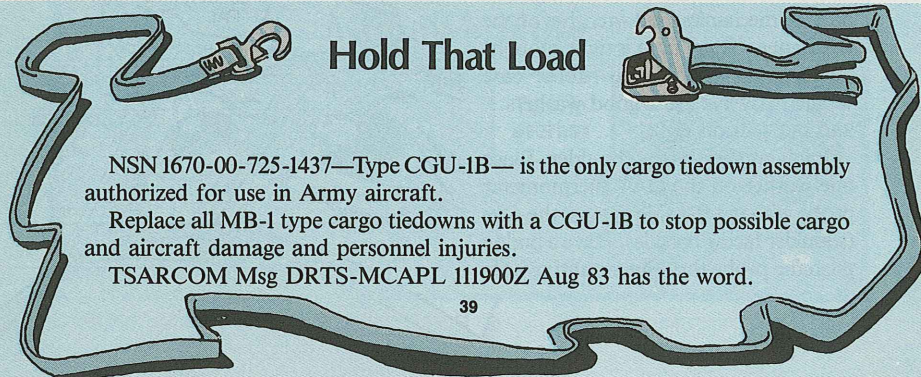
Remove the lockwire...check torque by applying 65-75 lb-in...add new lockwire.

Forward head droop stop retention bolts; torque to 65-75 lb-in



After this check, schedule another torque check every 100 flight hours on your A,B,C model birds. On D models, pull this torque check at every maintenance phase inspection.

Note the torque change for the forward droop stop retention bolts. Use the message as your authority for this torque value change and for the 100-hour torque check in TM 55-1520-209-PMS, -227-23, and -240-PM.



NSN 1670-00-725-1437—Type CGU-1B— is the only cargo tiedown assembly authorized for use in Army aircraft.

Replace all MB-1 type cargo tiedowns with a CGU-1B to stop possible cargo and aircraft damage and personnel injuries.

TSARCOM Msg DRTS-MCAPL 111900Z Aug 83 has the word.

OAT PM

JUST KEEP AWAY FROM MY OAT GAGE WITH THAT WRENCH!

FEELIN' YOUR OATS THIS MORNING, HUH?

Installing the outside air temperature (OAT) gage on your bird is not a goof-proof deal.

Some mechanics, for example, use a wrench to seal the gage. This pulls the OAT dial face against the pointer, pinching it against the back of the case. The pilot gets an erratic temperature reading—or none at all.



Windshields have been cracked because mechanics used wrenches on the OAT gage. Hand-tight is tight enough!

Never use a damaged rubber case washer. Always use 2 good washers... and put 'em on right.

Each washer has a shoulder. Place one washer on the OAT thermometer probe with the flat side against the case (shoulder facing outside). Have a buddy push the probe thru the mounting hole

from the inside...and hold it there.

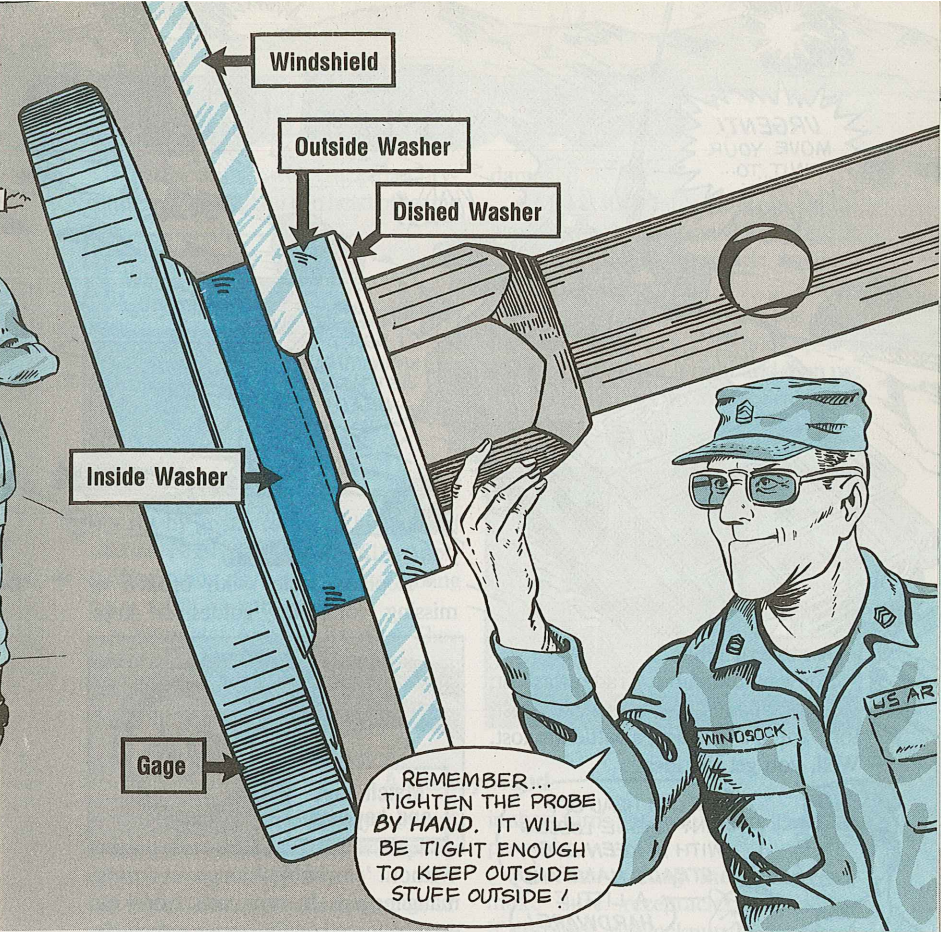
Place the other rubber case washer with the flat side facing out (shoulder facing inside) on the thermometer probe outside the windshield.

Seat the washer shoulders in the windshield mounting hole.

Add the dished washer with the outside edge curving toward the windshield. Hand-tighten.

It's not necessary to seal the OAT gage. Globbs of sealant mess up the windshield (OH-58) or window frame (UH-1). When you try to clean it off with a scraper or harsh abrasive cleaning compound, you'll likely damage something.

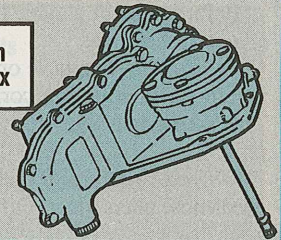
SORRY, PAL!



Mohawk Note

Be sure to turn in the gearbox, Item 88, Fig 113, TM 55-1510-204-23P-1, when you send in an OV/RV-1 engine for analytical teardown because of metal contamination. The gearbox is usually the cause of metal contamination... not the engine.

Turn in gearbox



PM Cuts Cable Losses

URGENT!
MOVE YOUR
UNIT TO...
[static]

WHAT
HAPPENED?

I DON'T
KNOW...TH' RADIO
JUST WENT
DEAD!

- Replace cables with broken or missing connector guides or keys.

A modern fable:

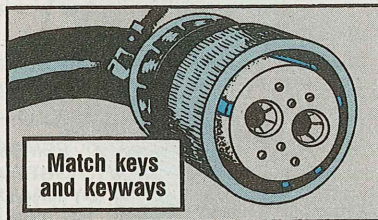
For want of a cable, a radio was lost;
for want of a radio, a message was lost;
for want of a message, a battle was lost.
Well, you get the idea.

YOU CAN HEAD OFF
MANY CABLE LOSSES
WITH A KEEN EYE,
A STEADY HAND AND
A LITTLE
HARDWARE!

A Keen Eye

Before you put a cable into action, give it a once-over.

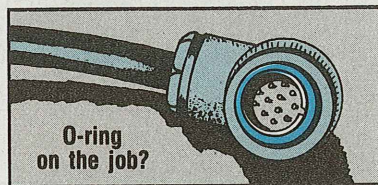
- Clean the receptacle or connector mating surfaces and any corroded pins. That's especially important on audio pins.
- If you can straighten bent pins with needlenose pliers, do it. Otherwise, get a new cable.



Match keys
and keyways

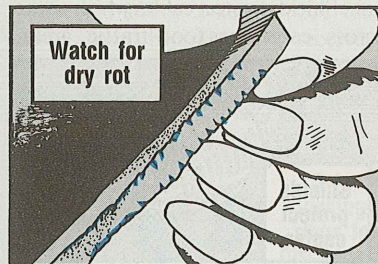
Without 'em, cables can go on wrong, mangling pins. In some cases, cables can even be forced on the wrong receptacle. Shorted equipment is the result.

- Replace missing O-rings. This bit of rubber not only makes cable connections smoother, it also insures a tight, weatherproof mating.



O-ring
on the job?

- Replace cables with cracked or dry-rotted insulation. You can head off some

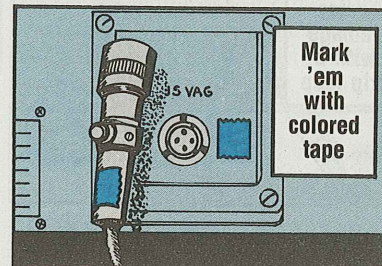


dry rot by giving cables a thin coat of silicone, NSN 6850-00-880-7616. Apply it often in hot, dry weather. That baking takes a toll on rubber.

- Straighten kinks and twists. They can break cable wires. A healthy looking cable can be the cause of radio downtime when inside wiring is

damaged.

- Make sure cables are out of the way. Never lay 'em on the ground in areas where foot or vehicle traffic is heavy.
- See that cables are on the right receptacles. If each new hookup is a guessing game, get it right and then use a little colored tape to code the cable and connector combo.



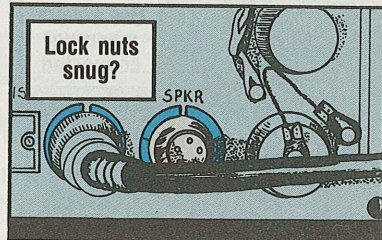
A Steady Hand

You can go a long way toward keeping pins and connectors in shape by using care at hookup time.

- Match the key on the connector or receptacle to its mating keyway. Slide the 2 carefully together, twist and seat 'em.
 - Never check your connection by yanking on the cable. Something'll give. Remember the lost message?
 - Some bigger and longer cables are too bulky or heavy to be handled by one person. Don't be shy. Get a buddy to help you, or use a strain relief to take the weight off the connection.
- Either way is better than getting the connection crooked or stripping threads.
- If you can't get help, twist the cable

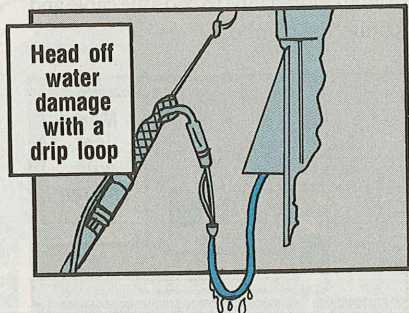
in short turns until you're sure it's mated properly.

- Before making the connection, make sure receptacles are tight. For instance, the locknuts on the front panel of your AN/VRC-12-series radio sets can come loose. Twisting on your cable can tear up wiring inside the radio.



- Go easy with hard-to-get-at connections, too. Like the cables on your MX-6707 matching unit. Hook the larger cable first, so you won't be jamming the smaller one into the pins of the bigger receptacle.

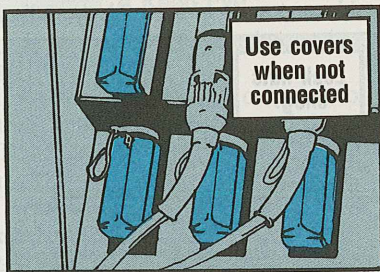
- Put drip loops in cables that feed into receptacles from above. Without loops, rain drops roll right down the rubber "highway" into your connections.



A Little Hardware

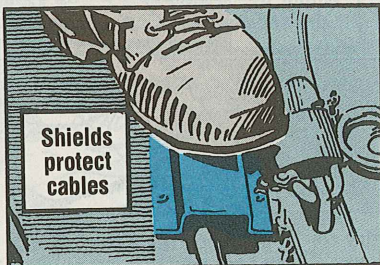
Your hand and eye can protect cables only so much. Here are a few other little protectors you should have on hand:

- If your connectors and receptacles are supposed to have covers, use 'em when the cables are not hooked up. The covers keep dirt, grit and moisture from silencing your traffic.



Cover missing? Use a plastic bag. Tie it, tape it or use a rubber band to secure it.

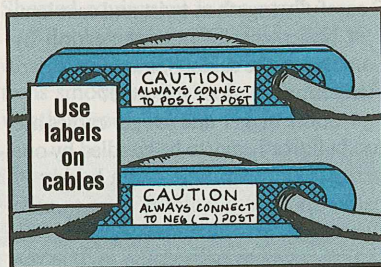
- Installation kits have cable shields, grommets and strapping to keep cables safe. Shields protect cables which snake across cargo or foot traffic areas.



Grommets protect cables from sharp metal edges where cables have been routed through floors or vehicle walls. Finally, strapping keeps cables off the floor and out of the way of feet and other heavy objects that can mash 'em.

- Another cable saver is a strain relief. You can rig your own out of field wire or check your pubs for a "store-bought" model.

- Use cable labels to identify positive and negative leads to your vehicle's battery. A positive label is NSN 7690-00-477-3714. Negative is -3715.



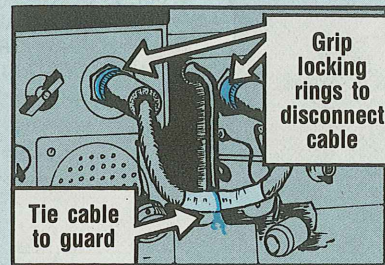
- Need the terminal lug, too? Use NSN 5940-00-838-2984.

CX-4655 Cable...

Tie It Down

A little string might save a lot of downtime for your OA-3633 amplifier-power supply group.

Use the string to tie the CX-4655 cable assembly to the receiver-transmitter's panel guard. Otherwise, the 11-inch cable is an accident waiting to happen.



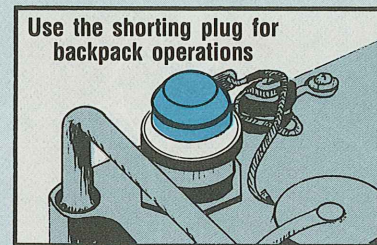
In some installations—like in an M151-series ¼-ton truck with a TOW, the cable sticks out like a sore thumb. The gunner's chair, a foot or a stray piece of cargo hits it, and Snap!—there goes one or both connectors.

'Course, be sure you remove the string and disconnect the cable before removing the RT.

Another cable saver is to use the cable locking ring, not the rubber insulation, as a grip when you disconnect the CX-4655. You'll just twist the inside wiring if you turn the cable.

Store the cable in the clips provided on the back of the OA-3633. That'll keep it handy and safe.

Pulling out the RT for backpack operation? Be sure to use the shorting plug. Otherwise you won't get portable commo.



AB-15 Cap

A rubber cap to protect your R-442 receiver's AB-15 mast base from moisture damage is NSN 5999-00-264-9213. It's listed in the base's pub, TM 11-5985-230-14P.

Ground Wire NSN

Forget the NSN in the Note in Para 1-3d of TB 43-0125. Order your green 6 AWG ground wire by the foot with NSN 6145-00-652-9058.

Readiness Recipe

HEY, SHERRIE, WHAT'S A GOOD RECIPE FOR SWITCHBOARD OPERATION?

I GUESS SERGEANT SPARKS WOULD HAVE THE BEST ANSWER TO THAT QUESTION!

YOU NEED TO USE TLC AND PLENTY OF PM TO STAY ON LINE!

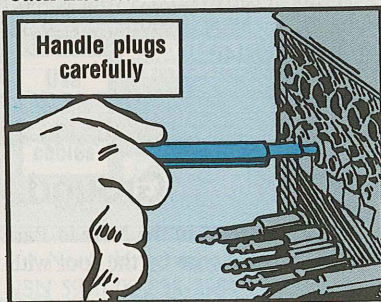
Wondering how you're going to cook up successful wire commo during your next field problem?

Simple. Just add plenty of PM to the mix. Like so...

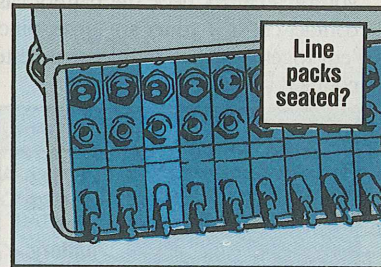
PLUGS 'N' PACKS—Even a clean-looking plug can be dirty. Use no solvents, abrasives (steel wool, f'rinstance) or metal polish to clean them, tho. Use treated cotton polishing cloth, NSN 7920-00-985-6849, for the job.

Hold the plug when connecting or disconnecting a line. Pulling on the cord

can damage wiring inside. Seat the plug carefully, too, instead of letting it fly back into its hole.



Install line packs carefully to avoid contact damage. Be sure everything's lined up, then push the pack straight in until it mates with the case.

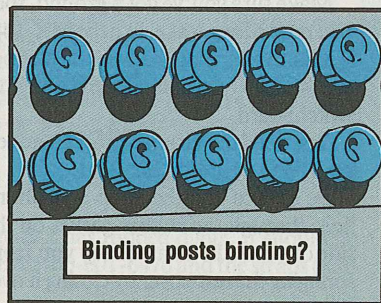


CASE CARE—Those new plastic cases won't stand up to the "use and abuse" the metal ones did.

Watch the area around the battery clips. The rivets can pull out of the plastic if the battery case is slammed in and pulled out roughly. You can even crack the case.

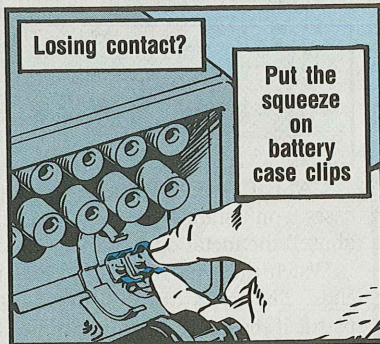
Once you've latched the board's rear cover, push the latches into their recess. They can be torn off if left out.

IT'S ELECTRIC—Your board has to make good connections to do its job. Binding posts must hold field wire tightly for good traffic. If your posts aren't moving freely, use a little silicone, NSN 9150-00-257-5358.



Once you've got the wire in the post, give it a light tug. If the wire comes loose, you've got a bad post.

Lost the light or buzzer that warns you of a call? Check the battery case contact clips. If yours are loose, pinch 'em together. That should give better contact.



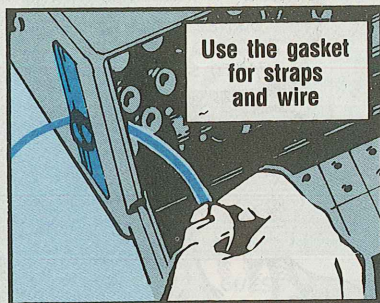
When the audio or red light gets weak, try flipping your battery case before swapping out all 4 dry cells. Half of those BA-30 batteries power the headset. They may still be fresh enough to do the job.

Keep batteries strong by switching the headset OFF when you don't need it. That can also save the transmitter's carbon element.

Make sure you've got a ground, too. You need a long stake, like the MX-148. If you doubt that, just ask a trooper who's seen lightning blow up his switchboard.

You need the ground strap kit added by MWO 11-5805-262-20-1.

Be sure to run the strap and phone lines through the rubber gasket on the side of your SB. That'll keep you from springing the rear cover by closing it over the ground.



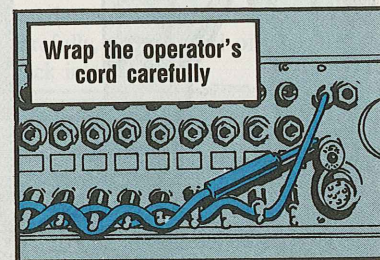
If you're stacking 2 metal boards, use a short length of the MWO strap between both boards' GRD post. Then ground the bottom board to the rod.

Lost your audible alarm when stacking SB-22's? Try a length of WD-1 between the NA (night alarm) binding posts.

A LITTLE EXTRA—Use a small magnet to unstick cateyes. Banging on a lens can break it. If the eye stays stuck, substitute a good pack.

Protect your front panel by carefully stowing the headset in the switchboard cover. A sloppy packing job lets the plugs take a beating.

A neat job of stowing the operator's cord can save banged-up plugs, too.



Finally, remember to remove your SB's batteries when you're packing the gear away or when you won't be operating for awhile.

AN/VRC-12 Dead Lift

Nope, it's not a new Olympic event. It's what you get when the RT you're carrying by the guards breaks loose and hits the dirt. What you reach down and latch onto is now likely to be stone-cold dead, commo-wise.

You avoid this pain by grabbing elsewhere or getting a buddy to help when it's time to tote the 50-lb RT.

Those guards are not sturdy enough to double as handles. And, even a short drop to the ground is enough to KO the set.

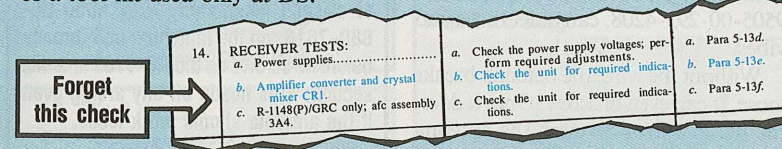
Course, all plain model RT's should have handle assemblies. If your A model RT's have broken guards, your support can add the MWO to them, too.



Chuck Angry-50 Check

You can drop Item 14b from TM 11-5820-461-12's quarterly org maintenance chart.

That check asks you to use an MX-6988 module extender. The extender is part of a tool kit used only at DS.

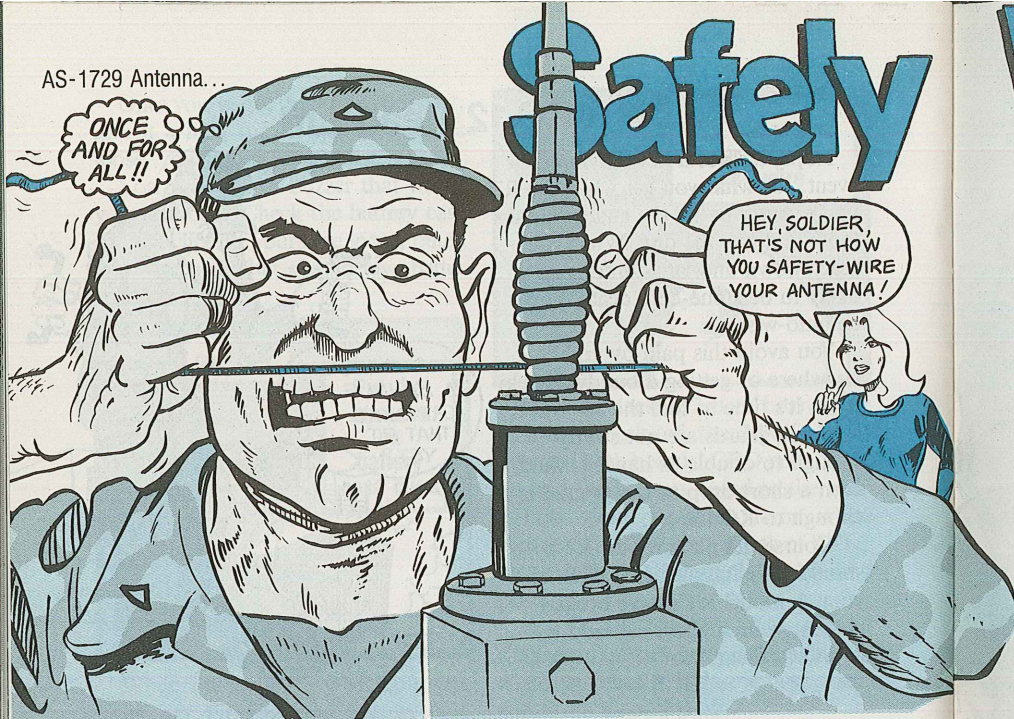


AN/PRC-77 Pack

All the info you need on the new LC-2 pack frame is in C8 to TM 11-5820-667-12.

Well, almost all. The LC-2 NSN on Page E-2 has flipped digits. It should be 8465-01-073-8326. The cargo shelf is NSN 8465-00-001-6476 and the straps (you need 2) are NSN 8465-00-001-6477.

Assembly info is on Pages 6-24 and 6-25.



Safely

Wired?

The shake, rattle and roll from your vehicle can break the electrical contact between your AS-1729 antenna and MX-6707 matching unit, knocking your radio off the air.

A short piece of safety wire, NSN 9505-00-293-4208, can quiet those bad vibes.

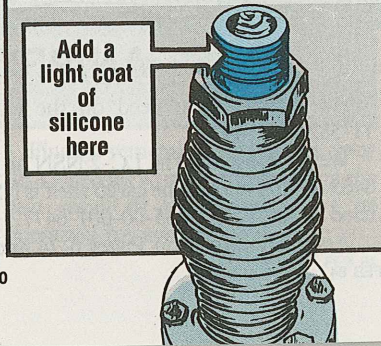
Without the wire, the antenna breaks loose. It can even unscrew. Once it does, the tight contact between the antenna and matching unit is gone. Arcing results.

The least of your troubles then is intermittent or broken traffic. The worst? Reflected RF power that can knock out your receiver-transmitter.

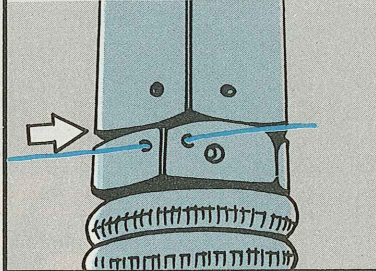
A tip-off to arcing problems is carbon on and around the top contact of the MX-6707.

A secure job of safety wiring can head off these woes. One of the best methods we've heard of was offered to us by SSG Raemonn E. Robe, Ft Irwin, CA.

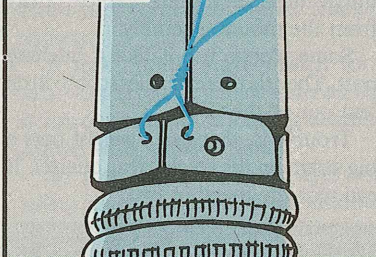
1. His first step is to put a light coat of silicone compound, NSN 6850-00-880-7616, on the matching unit threads before he screws on the AS-1730 antenna section. This heads off any arcing even if the antenna should work loose.



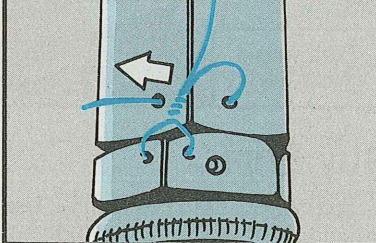
2. Then, run an 8-in length of safety wire through the provided hole in the matching unit. Use the one below and to the left of the antenna hole.



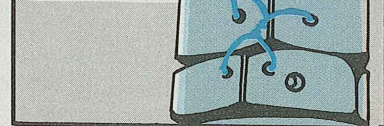
3. Twist the wire—tightly—up to the antenna hole.



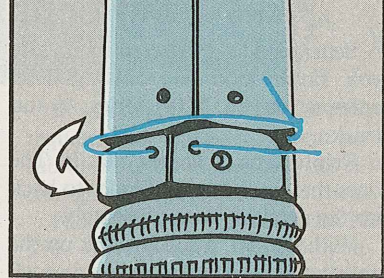
4. Slip it through.



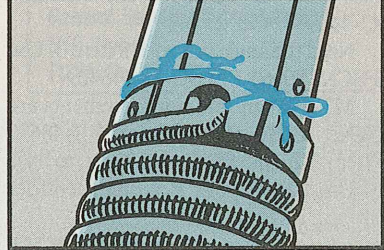
5. Keeping your twist tight, run the wire back past the matching unit hole you used...



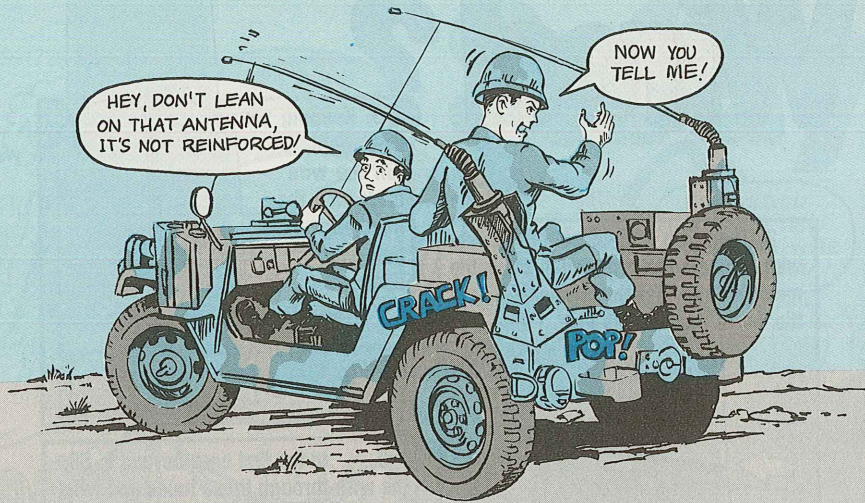
6. ...to the first ones beyond it. Slip the wire through these holes and twist again.



7. Test your work. If you can still jiggle the wire up and down, it's too loose. Twist it until it's snug.



You should now have a tiedown that'll keep your whip in place and in contact, even during the roughest ride.



Antenna Braced?

Better send for reinforcements before you finish mounting the AS-1729 antenna on an M151-series ¼-ton truck.

Reinforcement braces, that is. The ones that go inside the fender to back up the antenna mount assembly.

Without 'em, a solid whack on the antenna can pull the bolts right through the vehicle skin.

The brace's are Item 2 in Fig B-1 of TM 11-2300-351-14&P-22. There's no NSN, so use FSCM 80063 PN SC-C-446060. Get 2.

Need the angle brace? It's Item 3. Use FSCM 80063 PN SC-C-446429.

MT-1029 mount reinforcements are SC-B-48681 (Item 9), SC-B-48680 (Item 10) and SC-B-48679 (Item 11).

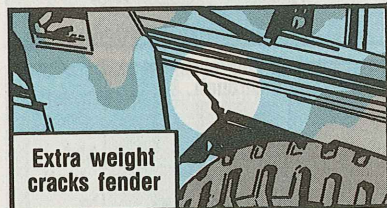
Use B16 as your Routing Identifier

Code (RIC) for all part number requests.

Another skin saver for your ¼-tonner is to keep weighty objects—duffle bags and other cargo—away from the mount assembly.

Some troops use it like a hitching post. They tie those heavies to it to keep 'em out of the way.

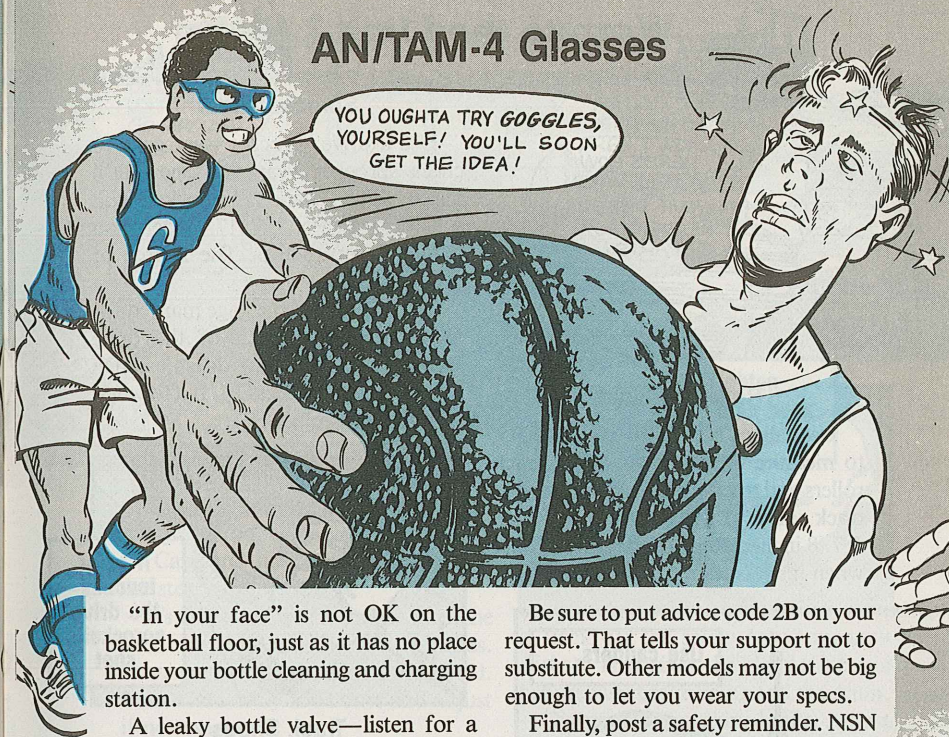
Trouble is, that extra weight puts a big strain on the truck's rear quarter. It can tear the metal in two.



MK-1069 Guy Wire

The white-coded guy wire for your mast accessory kit has a new number. Use NSN 5985-00-104-2526 in place of FSCM and PN 80063 SM-D-697075.

AN/TAM-4 Glasses



"In your face" is not OK on the basketball floor, just as it has no place inside your bottle cleaning and charging station.

A leaky bottle valve—listen for a hiss—could release gasket material, tho, if you open the bottle loading assembly drawer after a valve failure.

Be sure to protect your eyes with safety goggles while you work inside the shelter. You get a pair with NSN 4240-00-052-3776. These'll fit over eyeglasses, too. Appendix A, CTA 50-970 is your OK to order the goggles.

Be sure to put advice code 2B on your request. That tells your support not to substitute. Other models may not be big enough to let you wear your specs.

Finally, post a safety reminder. NSN 9905-01-100-8203 brings you a CAUTION EYE PROTECTION REQUIRED sign. That number's not on the Army Master Data File, so tell your support to order it from:

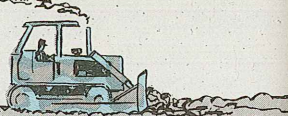
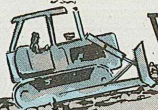
General Services Administration
819 Taylor St.
Ft Worth, TX 76102

AN/GRC-103 Mix or Match?

Match—don't mix—plain and A model radio receivers and transmitters. Use both plain, or both A, when you put together a set.

Wondering about other component combos? Check in with your maintenance support, or call your local commo rep in the Logistic Assistance Office.

Worn to the Limit?

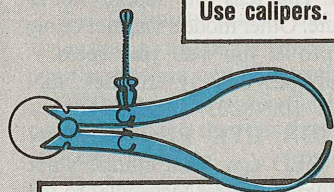


HERE'S HOW TO TELL WHEN YOUR DOZER NEEDS TRACK PARTS!

Rollers & Links

Use caliper, NSN 5210-00-229-3035, to measure the diameter of the track rollers and track carrier rollers. Replace track rollers if they measure less than 7 7/8 inches. Replace the carrier roller when it's less than 6 3/4 inches.

Use calipers...



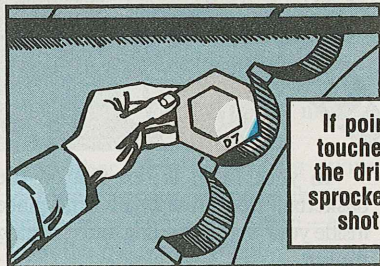
... to measure the diameter of the track carrier rollers...

... and track rollers

Sprocket Wear

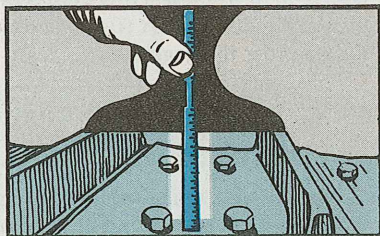
Use a drive sprocket wear gage to check sprocket wear. Get one that'll measure D7, D8 and D9 sprockets with FSCM 11083 PN 5P8617. Order it on a DD Form 1348-6. The source of supply is S9C.

Set the point of the gage marked for D7 between the teeth of the drive sprocket. If the point doesn't touch bottom, the sprocket's OK. If it touches, get DSU to replace it.



Track Shoes

Use the broad-based depth gage, NSN 5210-00-221-1902, to measure the height of the grouser. Set the base across 2 adjacent grousers and measure down to the plate. If it's less than 1 1/2 inches, replace the shoe.



Your authority for the caliper and gage is Appendix A of CTA 50-970.

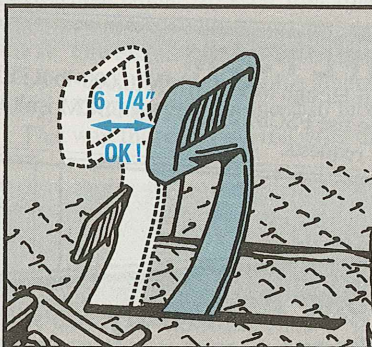
Steering Brake Adjustment



Tighten... then back off

"Pedal to the metal" may be great when you're pushing an 18-wheeler. It's not great, tho, when you're pushing a D7 Cat...and the brakes are used to help the steering clutches.

It's time to adjust the brakes when the pedal travel is more than 6 1/4 inches. Measure it at the center of the pedal. Check 'em every 250 hours and adjust if necessary.



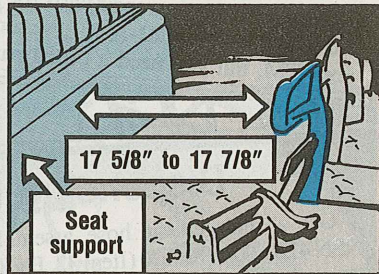
Remove the guard and the brake adjusting screw cover.

Turn the adjusting screw socket assembly in until the brake band is just tight on the drum.



Back off the screw 1 1/2 turns (9 clicks). This gives the right clearance between the brake lining and the drum.

Disengage the parking brake. Adjust the pedal linkage so that there's between 17 5/8 and 17 7/8 inches between the brake pedal face and the front of the seat support.



Repeat the procedure for the other pedal.

Replace the cover and guard. Replace the cover gasket if it's damaged.

Tach Cable Correction

Order NSN 6680-00-507-9980 when you need the flexible shaft assembly-tachometer cable—for your M320T2 20-ton crane. The number shown for Item 2 in Fig 93 of TM 5-3810-294-20P is wrong.

4½- and 5 Cu-yd Loader Tires

The only tires you can use for your Clark Model 175B and IHC Model H100C scoop loaders are 20-ply, 26.5 × 25, L-4 Rock Service type. Use NSN 2610-01-076-9414 to get 'em.

Grove Crane Tire NSN

Use NSN 2610-01-156-9461 to get tires for your Grove Model TMS-300-5 25-ton crane. NSN 2610-00-913-1983, listed on Page 52 of PS 368, has been discontinued.

20-Ton Dump Batteries

Get the 6-volt batteries for your IHC F5070 20-ton CCE dump trucks with NSN 6140-01-072-5608.

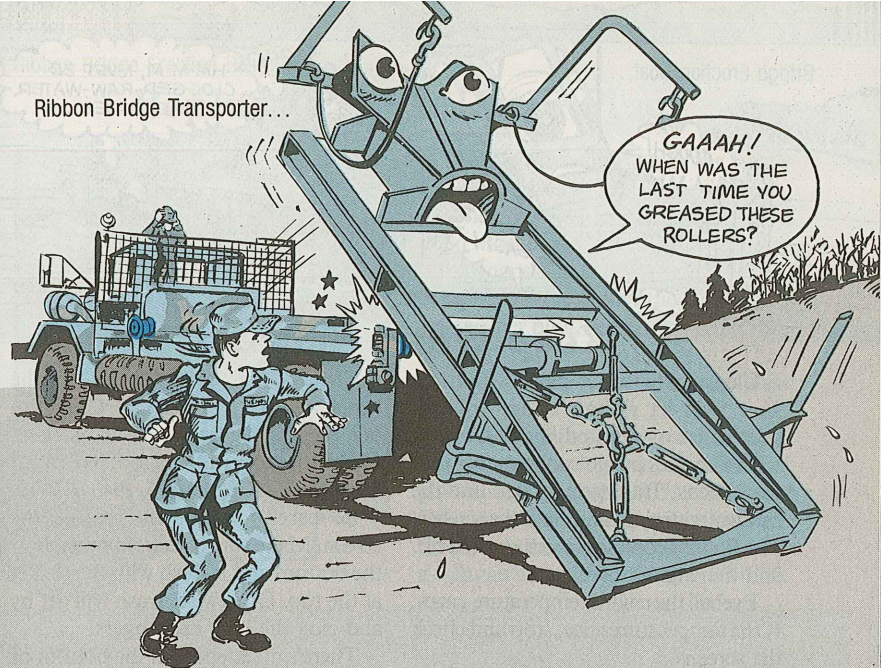
M10A RTFL FSCM

When you request repair parts for your Hough Model M10A 10,000-lb RTFL from TM 10-3930-643-14 & P, be sure to use FSCM 29510. This FSCM isn't in your TM, but you need it on all parts requests.

Dispensing Hose Assembly

Get a replacement hose assembly for your tank and pump unit with NSN 4720-00-718-6020 (Item 32, Fig 3 of TM 5-4930-228-24P). It fits all models.

Ribbon Bridge Transporter...



'Round and 'Round They Go

Rollers that don't roll on your floating bridge transporter can tear up a bridge bay or boat cradle. To keep your rollers rolling, make with the grease gun.

When you launch or recover, water can get inside the rollers and muck up the works. Greasing the rollers pushes out the old lube and any water.

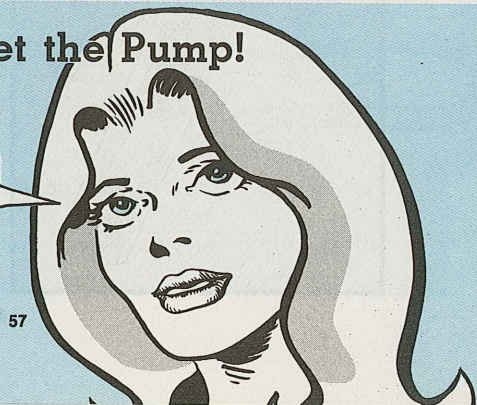
LO 5-5420-209-12-1 calls for lubing the rollers after washing or fording and every 250 hours. But you need to lube after launching and recovery, too.

That way, the rollers will roll when they need to, and won't damage your gear.

AVLB's...

Don't Forget the Pump!

NEVER LEAVE THE HYDRAULIC PUMP ENGAGED ON YOUR M48/MGO AVLB WHEN YOU'RE NOT LAUNCHING OR RECOVERING A BRIDGE. IT'LL BLOW SEALS OR HOSES... OR DAMAGE THE PUMP!





Keep Water Flowing

Clogged raw-water-intake screens on your twin-jet ribbon bridge erection boat cause overheated engines.

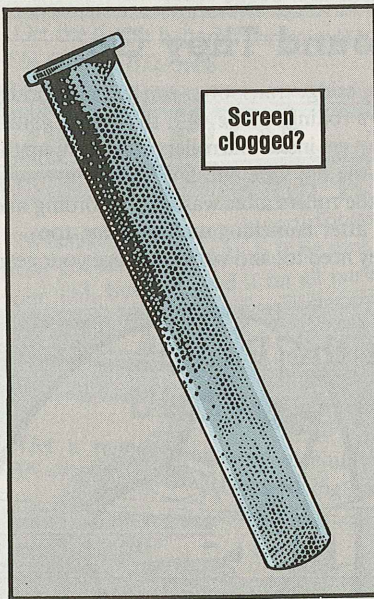
The engines pull in cooling water thru the screens. Trash gets sucked into the raw water strainer and clogs the screens. The flow of cooling water's choked off, and the engines overheat.

Eyeball the engine temperature gages. If the temperatures rise, stop and check the screens.

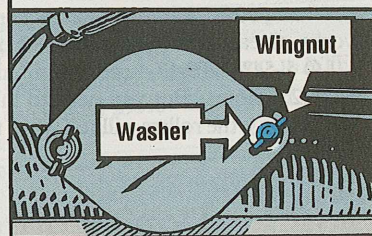
Check 'em often, even if the temperatures aren't going up. Clean 'em out before the water flow's blocked. Check after operations, too, like called for in the PMCS of TM 5-1940-277-10.

Be careful when you replace the screen. Make sure it seats completely at the bottom and is flush with the gasket at the top. Otherwise, trash will get by and clog the heat exchangers.

There's an adaptor at the bottom of the strainer housing. If it's missing, the screen won't fit, and trash gets by.



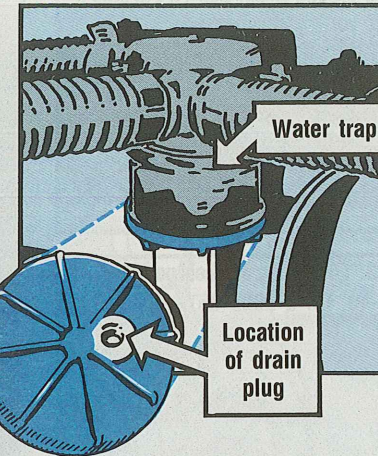
Make sure the washer under the wing nut is between the nut and the cover



Tighten the nuts to make an airtight seal. Air leaks will cause the engines to overheat at high speeds.

Look at your exhaust pipes when running at full throttle. If you don't see water coming out on both sides, shut down and check for air leaks or clogged screens.

Replace Plastic Drain Plug



The plastic drain plug in the boat's engine breather water trap will seize.

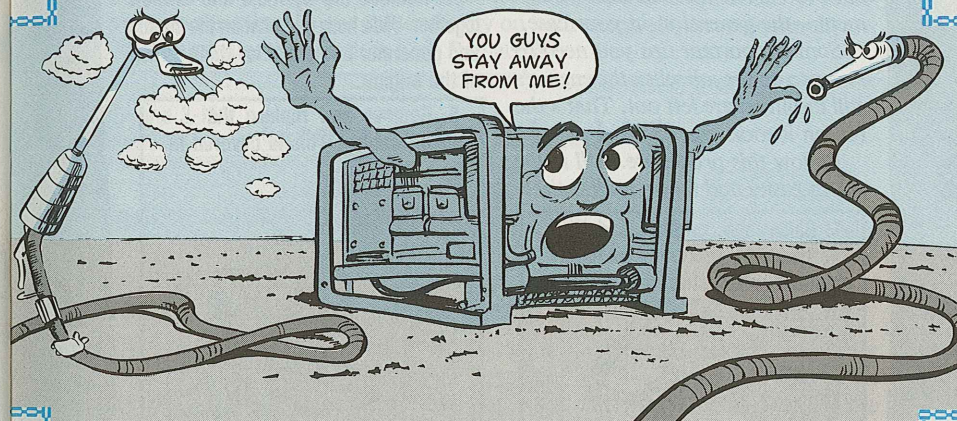
When you try to break it loose to drain water during your PMCS, the plug often snaps.

Until you can remove the threads and get another plug, the only way to drain the water is to take the trap apart. Then you run the risk of breaking the glass bowl.

Save yourself a lot of hassle by replacing the plastic plug with a cadmium-plated steel plug, NSN 5305-00-078-7039. And before you put it in, coat the threads with antiseize compound. Get a 1-lb can with NSN 8030-00-180-6187.

Steam or Water Equals...

A Sure-Shot Short!



Never use a steam cleaner or water hose on your generators. That wet stuff will short 'em out for sure!

Instead, let any mud dry, then brush it off. Use a damp cloth to wipe the generator clean.

1.5-KW Generator...

Replacing Ignition Cables

Dear Half-Mast,

Last time I replaced the ignition cables for the 3-HP Mil Std engine on my generator, it took between 3 and 4 hours. And that's going strictly by the word in TM 5-2805-257-14! No way a simple job like that should take so long. Where did I go wrong?

SGT L. D. L.

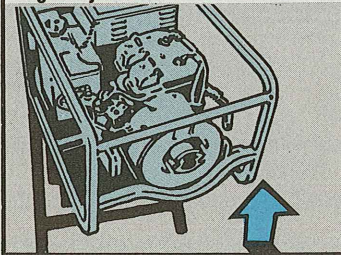
Dear Sergeant L. D. L.,

You didn't, Sarge. The instructions in the TM tell you how to replace the ignition cables when the engine's removed from the end item equipment—the generator, in your case.

Some important tips you need to know to do the job when the engine's still mounted are left out. That's the reason it took you so long.

Follow this procedure. It'll make things easier and take a lot less time:

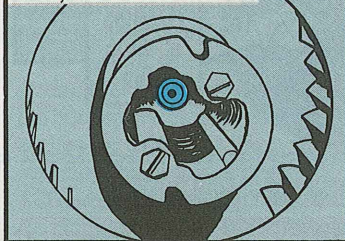
1. Raise the engine end of the generator enough to get to the engine flywheel shroud screws.



2. Loosen the screws and pull the shroud loose. Don't try to take it off, yet.

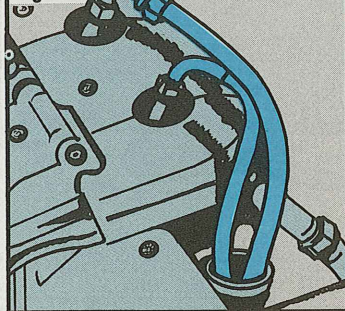


3. Loosen the flywheel per Para 4-40, TM 5-2805-257-14.



4. Remove the flywheel and shroud together. Slide both up between the engine and generator frame and lay them on top of the engine.

5. Remove and replace the ignition cables. This is covered in Fig. 4-6.



6. Replace the flywheel and shroud, together. Tighten everything back up.

60

Half-Mast

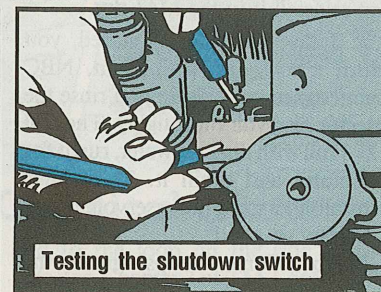
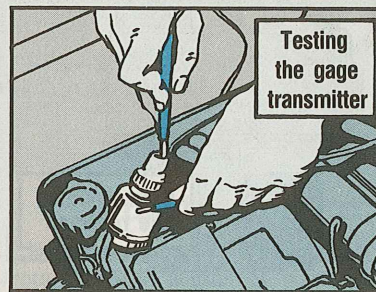
Military Standard Engines...

Oil Pressure Sender Checkouts

Instructions in TM 5-2805-258-14 and -259-14 for testing the oil pressure gage transmitter and the low oil pressure shutdown switch can be a little confusing. Here's the action:

Use a multimeter to check for continuity. Check between the terminal on the gage transmitter and a clean spot on the case.

For the gage transmitter, you should get continuity—a reading of less than 1 ohm when the engine's stopped. The TM's are wrong here.



For the low oil pressure shutdown switch, check between each terminal and a clean spot on the case. You should get continuity on one terminal and no continuity on the other. If you get continuity on both terminals, or no continuity on both terminals, the switch is bad. Replace it.

1.5- and 3-KW Generators...

Ground Terminal Wire

Dear Half-Mast,

The chart on Page 61 of PS 364 says to use 10 AWG size wire for 1.5- and 3-KW ground terminal studs.

Tech manuals for these generators call for 6 AWG wire. Which size do we use?

SGT W. A. Y.

Dear Sergeant W. A. Y.,

Follow the poop in your TM's—use 6 AWG wire. It's a mite larger than the hole in the ground stud, but unravel some of the strands—or crimp the wire—to make it fit.

Half-Mast

FEB 84

61

M8 Alarm Cleanup

TM 3-6665-225-12 gives you 2 procedures on what to do with the solution in the M43 detector unit of your M8 chemical agent alarm when you shut down the alarm.

1. If the alarm's going to be used within 72 hours, you drain the reservoir and reinstall it in the M43 **dry**.

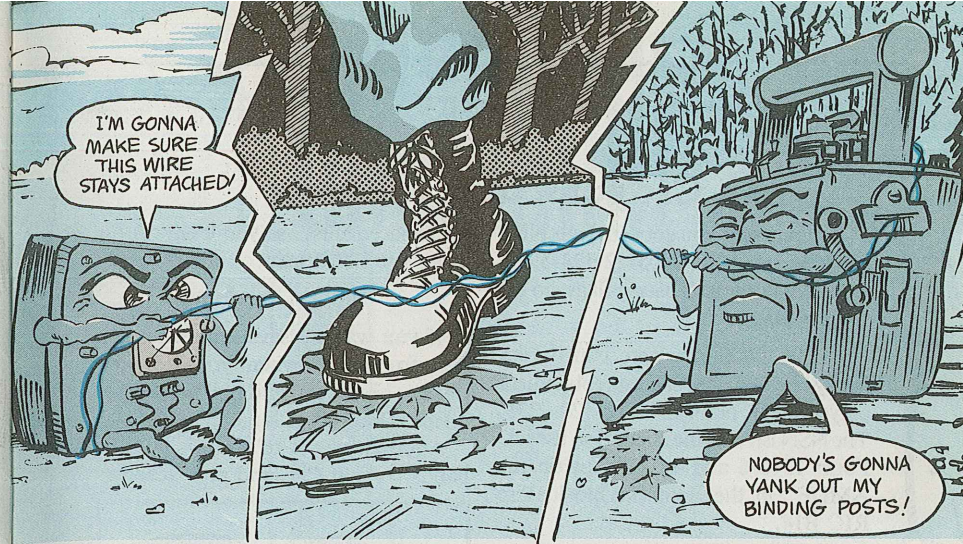
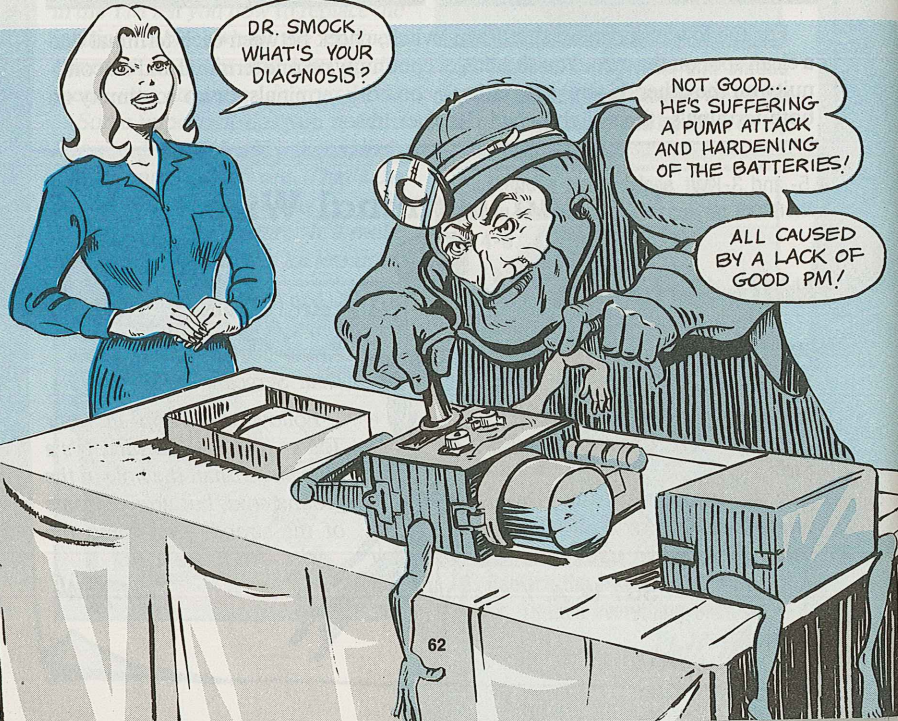
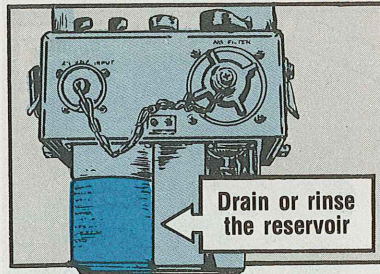
2. If the alarm's to be stored, you return it to your NBC room. NBC maintenance types drain and rinse the detector reservoir thoroughly. They fill it 2/3 full with distilled water, run it for 4 minutes and drain it. Then, they reinstall and store the reservoir.

So far, so good?

Maybe. Some troops ignore the

reservoir chore, the solution hardens or crystallizes, and the detector is damaged. Most common victim is the pump assembly.

Keep your alarm operating. Drain or rinse the reservoir, depending on how long it's going to be shut down.



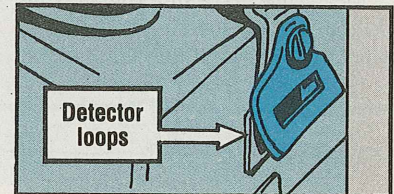
Remoting Your Chemical Alarm

When you remote the M43 detector from the M42 alarms of your M8 chemical agent alarm, tie off the telephone wires.

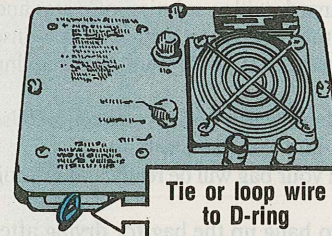
If someone or something snags the wires, slack alone won't be enough to prevent the wires from pulling from the binding posts...or from breaking binding posts. Either way you won't have an alarm system.

So, tie the slack end of the wires to the D-ring on the side of each alarm...about 9 inches from the binding posts.

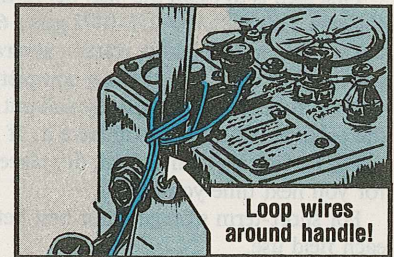
end to the loop on the side of the detector. Chapter 3 of TM 3-6665-225-12 tells you how.



If a D-ring or loop is missing, loop the wires thru the D-ring bracket of the alarm or around the handle of the detector. Cross the wires over, under and back to the posts.



Tie the slack end of wires on the other



NBC Tips...

Crayons and Ribbons

If the crayons you got with your NBC marking set, NSN 9905-12-124-5955, won't mark the set's plastic flags, go for some replacements.

About 4,000 sets were issued with faulty crayons. You can get replacement crayons with NSN 7510-12-120-9355. The NSN isn't on the AMDF so use DD Form 1348-6 and write "Not on the AMDF" in the Remarks block. Use RIC B14.

No other components of the marking set are available at this time. If you need replacement flags, stakes, etc., request a new set.

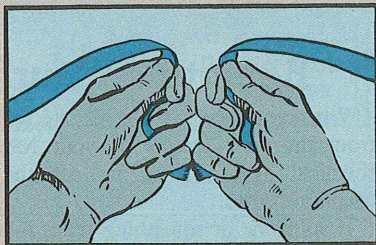
Meanwhile, to be sure your crayons do the job, try marking the exposed point of the flags. If they don't mark,

get replacements...so you'll have them when you need them.

Ribbon Tearing

If you want to save grunts, groans and frustration when you tear the ribbon, keep it flat and pull steadily till it rips. Don't let it bunch.

Another way is to wrap it in both hands, keep it flat, and pull steadily.



DANGER

Water Bag Storage Tips

FM 21-10, Field Hygiene and Sanitation, tells you how to care for your 36-gal water bag. But it doesn't say word one about storage.

First step is to clean the bag. Scrub the innards with a solution of water and chlorine. NSN 6810-00-255-0471 gets a 6-oz tube of calcium hypochlorite. Rinse out the bag with potable water—several times. You don't want any cleaning solution left over. Dry the bag completely.

Now, fold the bag compactly and put the bundle in a box for protection. Use the original box, if you still have it. If not, any clean box will do.

Put the box away in a clean, dry place and your bag will be ready and waiting for you next time you need it.

For short-term storage, your best bet is to hang up the bag for drying after each field use.

NO POSTAGE
NECESSARY
IF MAILED
IN THE
UNITED STATES

BUSINESS REPLY CARD

FIRST CLASS PERMIT NO. 12062 WASHINGTON, D.C.

POSTAGE WILL BE PAID BY DEPARTMENT OF THE ARMY

SMART
U.S. ARMY LOGISTICS CENTER
ATTN: ATCL-CST
FORT LEE, VIRGINIA 23801

Return Address

OFFICIAL BUSINESS

PENALTY FOR PRIVATE USE, \$300

A Part Number "Reels In" A Stock Number

on the MASTER CROSS REFERENCE LIST (MCRL-PART 1)

THERE'S
NOTHING
"FICHEE"
ABOUT IT!



PART No. + FSCM = NSN

K 17	REF. NO.	FSCM	NSN				
				I S C	R N V C	R A D C	S A D C
	2037078		66640 5315-00-298-3567		6	2	3
	037093		2810-00-440-4999				
	037GRADEP60		66640 5315-00-298-1843		6	2	3
	3761		2810-00-048-9180				
		K0640	5330-00-467-6791		6	2	3
		56365	5999-00-030-1927		6	2	3
			5945-00-030-1927		6	2	1
			5945-00-035-8862				
			5999-00-030-030				

To Get the MCRL:

**SEND A DA FORM 12-21
TO BALTIMORE, MD**