

Issue 388

PS

March 1985

# THE PREVENTIVE MAINTENANCE MONTHLY



BUT, CHIEF,  
ASKING FOR HELP  
IS **NOT** A SIGN OF  
WEAKNESS —  
IT'S **SMART**  
MANAGEMENT!

Use **ALL** your resources!  
(See page 29)



# Leaf Spring Faces Down

REMEMBER...  
HOOK TO THE REAR,  
AND DOWN OVER  
THE SEAR PIN!

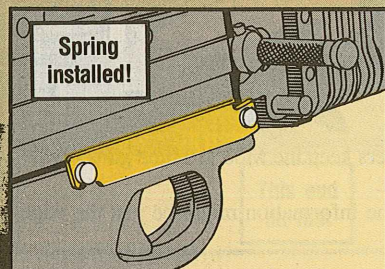
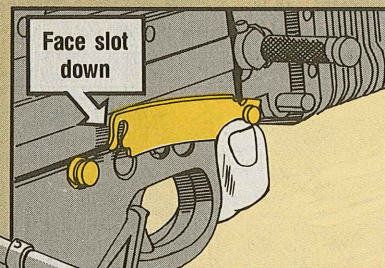
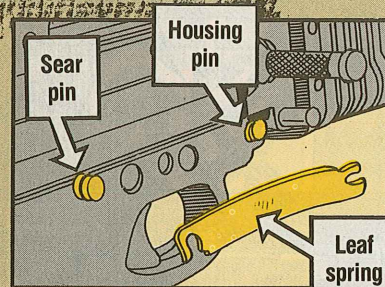
The leaf spring on the trigger grip assembly of your M60 machine gun clips over the grooved trigger mechanism/sear pin from above... with the slot facing down.

If you install it with the slot up, the spring will slip out... and so will the grip assembly.

If you use FM 23-67 (Oct 64) for field stripping or installation, forget Fig 9 on Page 10. The spring's reversed in that figure. It can slip out. FM 23-67 (Feb 84) shows the correct installation on Page 2-10.

The hooked end of the spring goes over the trigger mechanism/sear pin and **not** over the trigger housing pin.

Remember: The hooked groove of the spring goes over the sear pin from the top. Just push the spring toward the grip assembly and slide it down into the pin groove. Item 8, Page 48 of TM 9-1005-224-10, shows you how.



## PS THE PREVENTIVE MAINTENANCE MONTHLY

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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  
40511-5101

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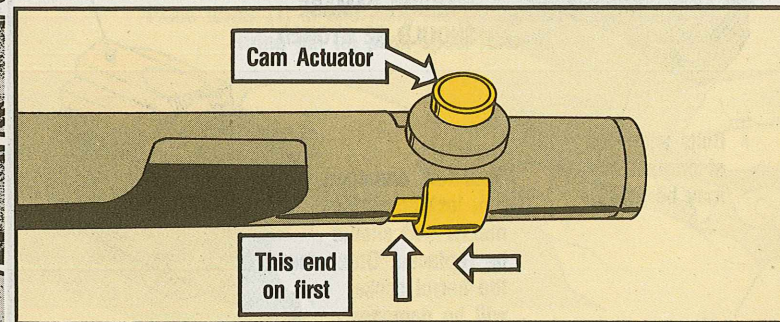


Here're some tips that'll help you armorers keep the M60 machine guns ready.  
TM 9-1005-224-24 is your starting point.

Following are repeat problem areas. The information might be just the edge  
you need to get your job done.

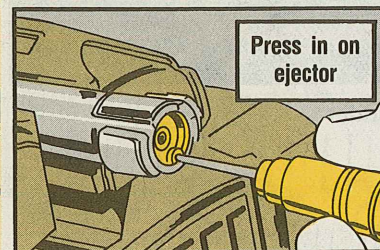
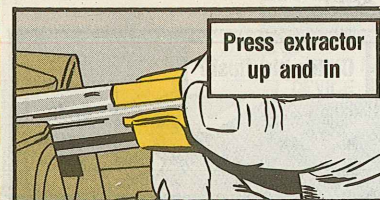
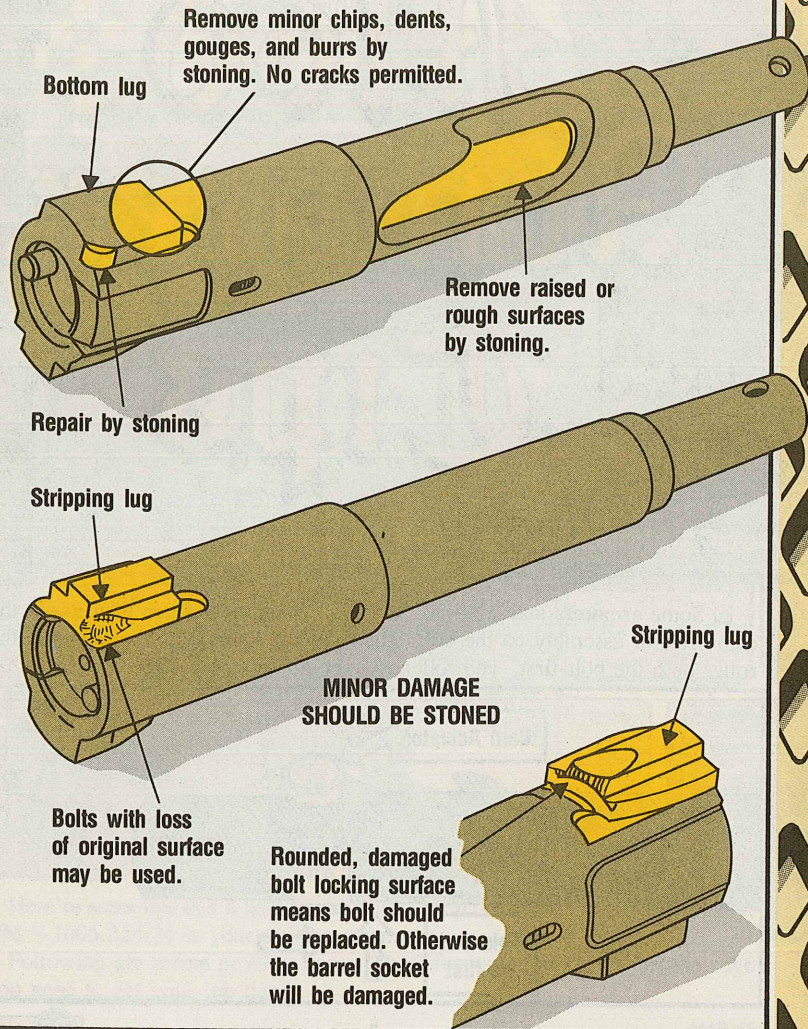
# M60 Armorer Tips

✓ Some armorers take a 50-50 chance on being right when they install the cam actuator assembly on the bolt. The right way is to slide the end with the roller onto the bolt first. The roller end should be toward the bolt face.





☑ Don't panic if the lugs on the bolt face are chipped. Stone minor damage smooth. If damage is severe, turn the weapon in to support for repair. Replace bolts with cracks in locking lugs.



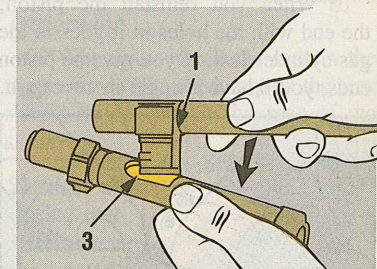
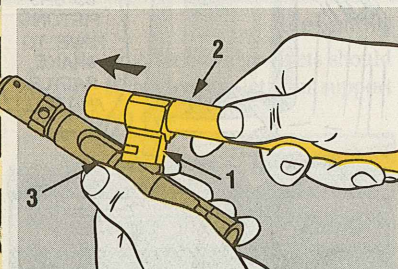
☑ Weak or broken extractor and ejector springs put a lot of weapons down on the range or in the field. You can help head that off with a couple of quick checks.

1. Press up and in with your thumb to check the extractor and plunger. It should take firm pressure. When you ease off, the spring should push the extractor back strong and quick. If it doesn't, replace the spring.

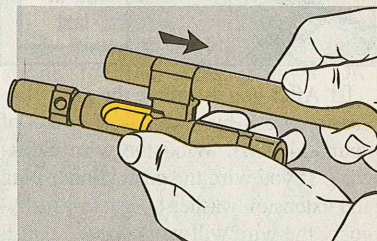
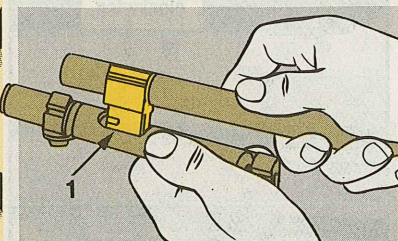
2. Press in on the ejector with a punch from your tool kit. If the spring goes in with a minimum of pressure, or if it sticks, replace it. If the spring doesn't push the ejector back firmly when you release it, replace the spring.

### Operating Rod

Installing the operating rod in the bolt can be a snap or a snag. Do this:



Place tower (1) of operating rod (2) against spool of firing pin (3) push spool forward.



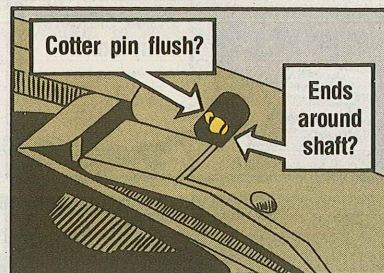
Seat tower (1) between spools. Let tower slide back in bolt assembly.



## Cartridge Guide

Another installation pointer...for guns with cartridge guide shaft cotter pins instead of C-rings:

☑ To keep cotter pins from working loose and fouling the cover assembly, push the pin in until the head is flush against the guide shaft. It can't stick out over the edge of the cover. Wrap the pin ends tightly around the other side of the guide shaft.



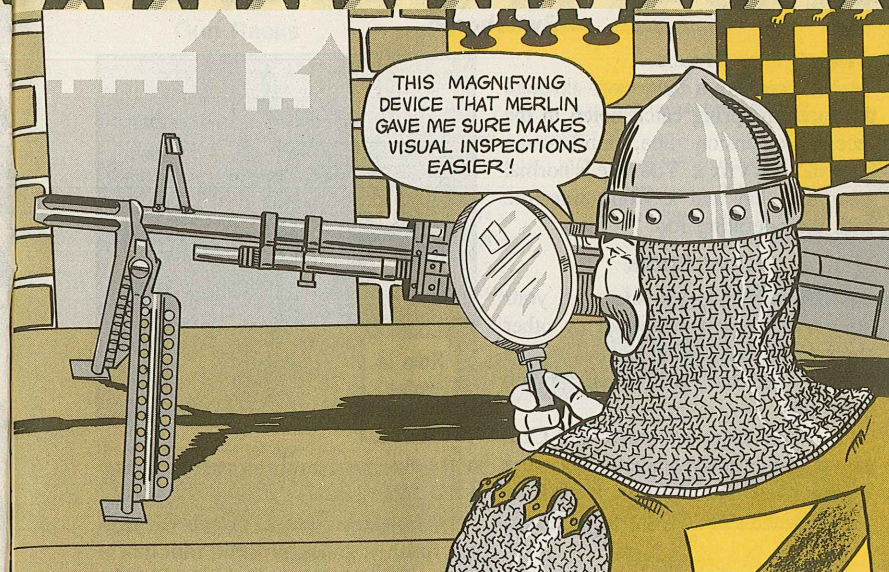
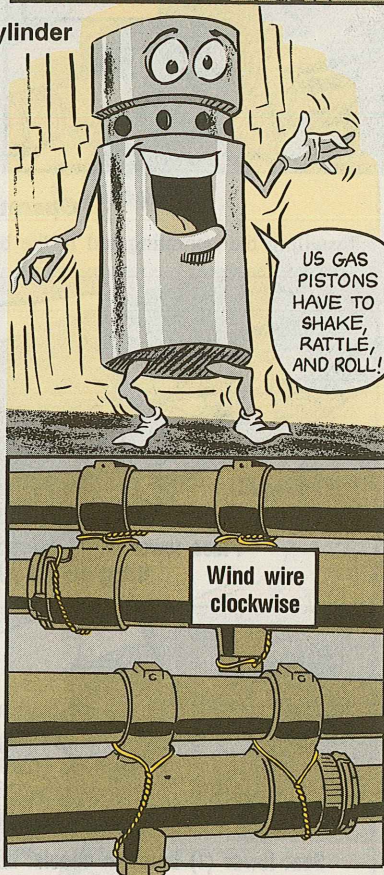
## Gas Cylinder

☑ Do this before you disassemble the gas cylinder for cleaning: Tip the barrel assembly end-to-end and listen. If you hear the gas piston click, you don't have to clean the piston or the cylinder. Take it down only when you don't hear a click.

☑ When you reinstall the piston, the end with the holes in it goes in the gas cylinder **last**. If you reverse piston ends, you'll have a single shot weapon.

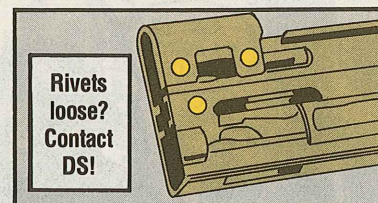


☑ After you assemble the gas cylinder, rewire it by the book (Fig 2-7 of your -24 TM). Wind the wire clockwise. If you wire the gas cylinder plug and extension washer by-guess-and-by-gosh, the wire will work loose. You'll make problems for the gun crew.



## Eyeballing & Otherwise

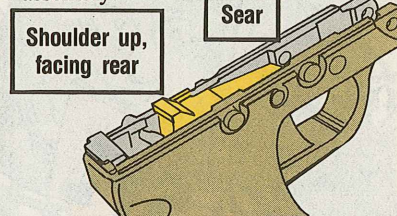
☑ Receiver and bridge rivets should be snug. If they're not, let your support check them out.



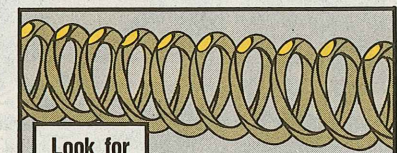
☑ Check your flash suppressor for looseness. It can turn up to 1/16 inch...no more. It cannot be loose up, down or sideways.



☑ When you install the sear in the trigger assembly, the hump on the sear should be up and to the rear of the assembly.



☑ Check the driving rod assembly spring for flat spots. Shiny's OK. Flat's not.





## Switcheroo

Here's a turnaround.

☑ If you spot a hole worn through the forearm spring catch notch in the receiver extension tube, don't sweat it... and don't fix it. The hole is normal wear and tear and it won't interfere with the operating rod.

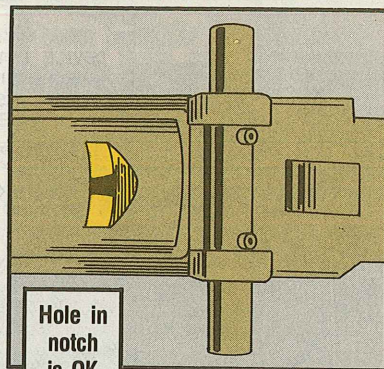
## Rust Spots

☑ If you find rust spots on your M60's, hold the steel wool or other abrasives. Steel wool removes the finish... and no finish means much more rust.

☑ If rust spots are small, put CLP on a cleaning patch and rub the patch on the rust area until the rust is gone. Wipe it clean and put some fresh CLP on the area.

☑ For larger areas, or spots where the finish is gone, use solid film lubricant (SFL), NSN 9150-00-168-2000. You have to apply SFL like kit instructions say, since it can be scuffed during storage, weapon use, and so forth. Use it as necessary.

RUST IS NO MATCH FOR US!



## Gun Racks

There are no machine gun racks in the supply system, but you can get plans for an M60 rack and have your support make it for you.

If you need racks, you can get specs from the headshed. Tell them you want M60 plans since some are available for other machine guns.

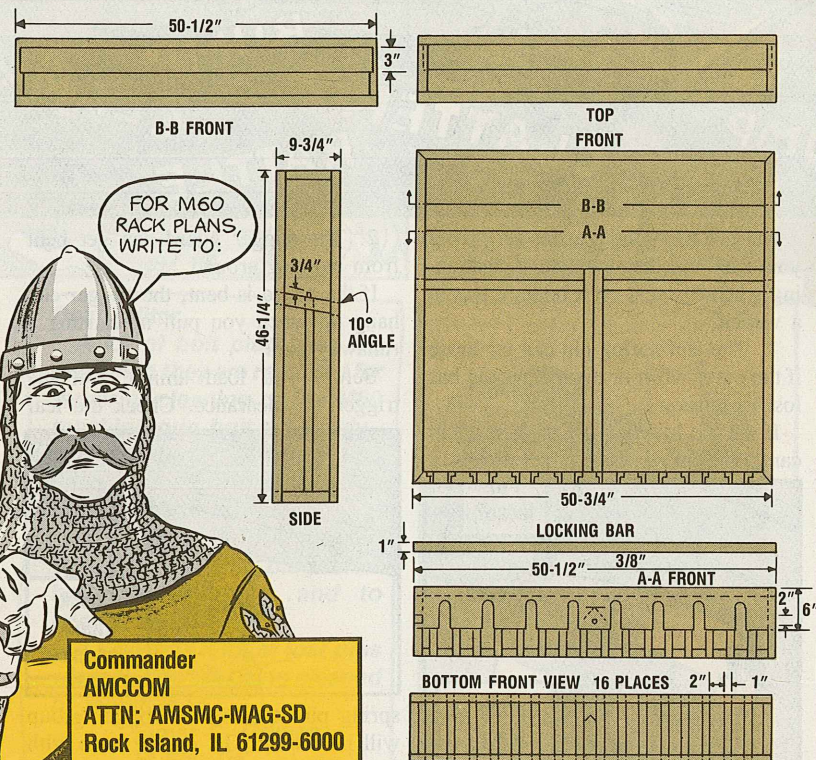
### INSTRUCTIONS FOR FABRICATION OF STORAGE/SECURITY RACK FOR THE M-60 MACHINE GUN

#### A. Material Requirements:

(1) 1/8 x 1-1/4 x 1-1/4	Angle Iron	9520-00-277-5988	540 inches
(2) 1/8 x 1 x 1	Angle Iron	9520-00-277-5986	160 inches
(3) 1/4 x 6	Steel Plate	9510-00-189-1569	50"
(4) 3/8 x 1	Steel Bar	9510-00-189-1586	
(5) 1/8 x 3	Steel Strip	9515-00-516-57	
(6) 1/8 x 1	Steel Strip		

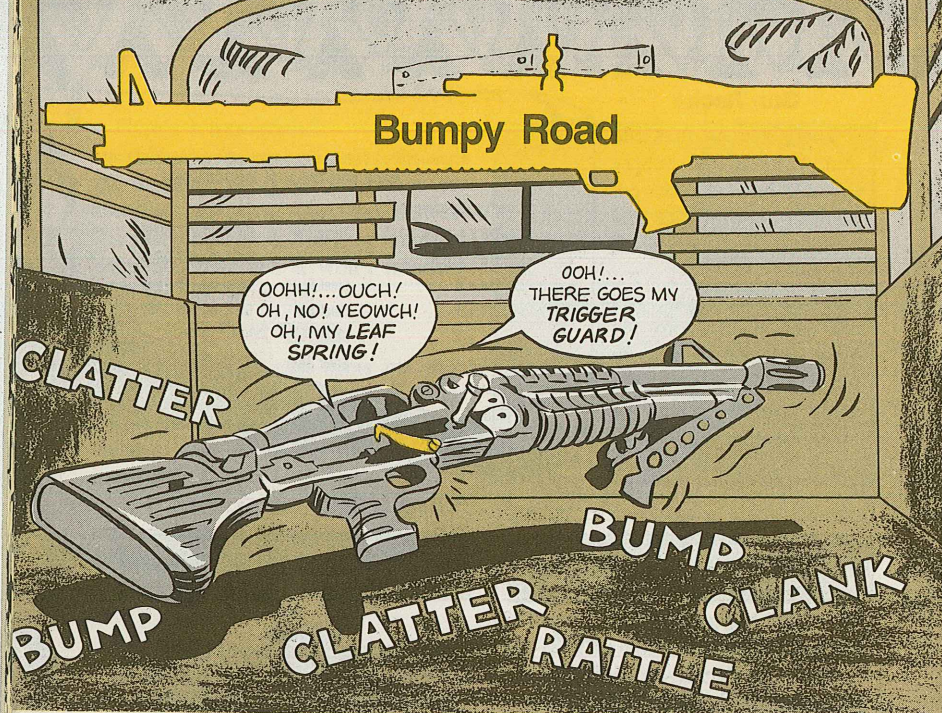
#### B. Procedure:

- (1) Cut 4



Commander  
AMCCOM  
ATTN: AMSMC-MAG-SD  
Rock Island, IL 61299-6000

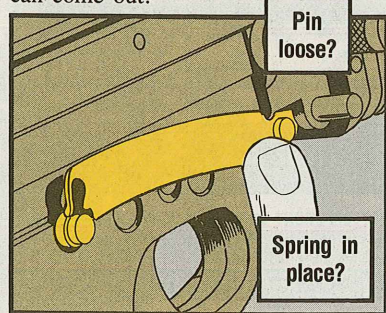




Here're two good reasons for giving your M60 machine gun lots of cushioning when it's sent on a bouncy trip in a vehicle:

1. The leaf spring pin can jar loose if the pin is worn or the leaf spring has lost its tension.

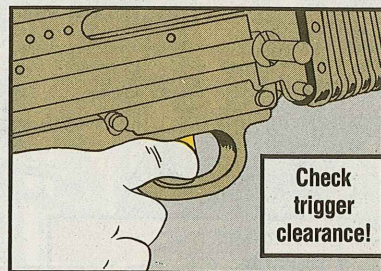
If the pin loosens, the trigger group can come out.



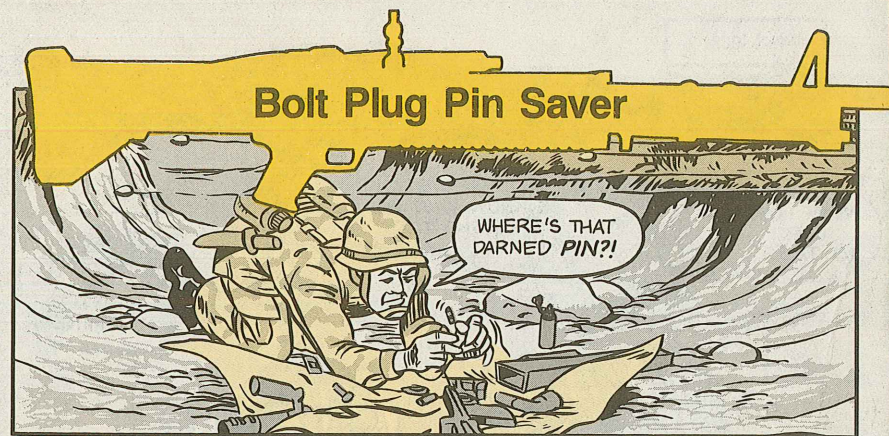
2. The trigger guard can get bent from banging around.

If the guard is bent, the trigger can hang up when you pull it, causing a runaway gun.

Before you load ammo, test the trigger for clearance. Check the leaf



spring pin, too, so the trigger group will be secure. Get on the horn with your armorer if you've got a problem.



**Dear Editor,**

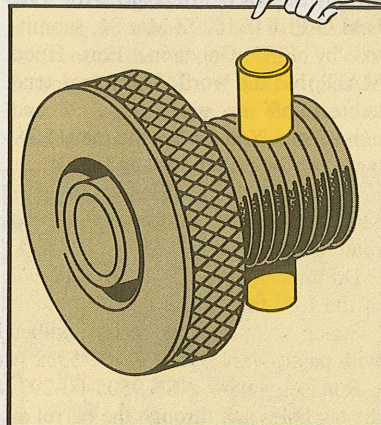
*A lot of bolt plug pins are lost when they are removed for repair or cleaning of the M60 machine gun bolt assembly.*

*We're saving a lot of pins with a simple procedure I've passed on to armorers.*

*I tell them to put the pin through the bolt plug after bolt disassembly...and to keep it there.*

*It prevents a lot of lost pins while the bolt is being cleaned or maintained.*

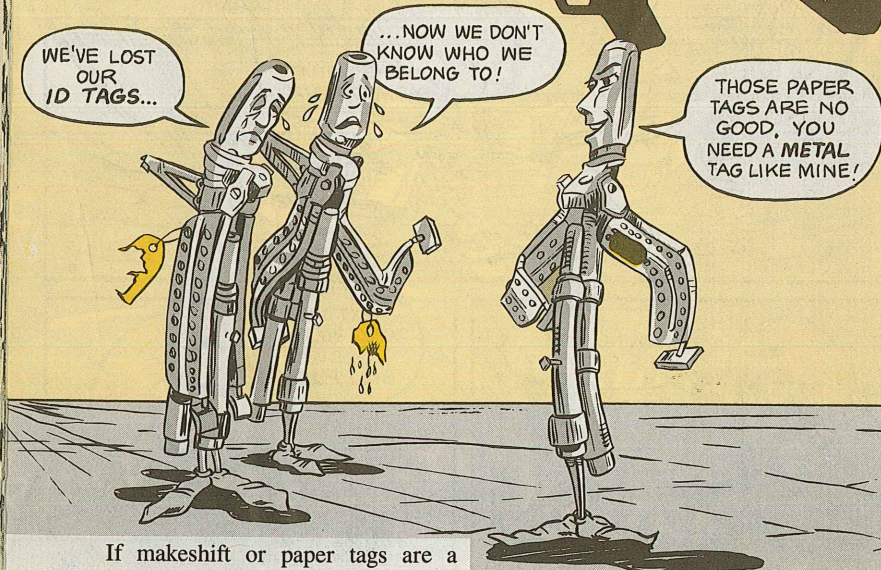
**Elmer C. Grimes  
Ft Sill, OK**



*(Editor's note—Great idea!)*



## ID for Barrels



If makeshift or paper tags are a headache for the barrels of your M60 machine guns, go the metal "dog tag" route. SMART Message No. 37, DALO-PLF 091620Z Mar 84, submitted by SFC Goodwin, Fort Hood MAIT, has the word. Paper tags tend to tear off or get oil-soaked and unreadable. You can get the metal I.D. tags with NSN 8465-00-242-4804.

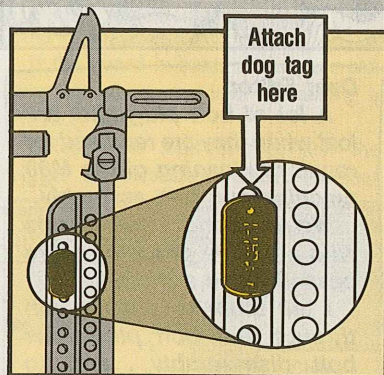
To keep barrels matched on your M60's, armorers can use the dog tag route as an option.

Do this: Punch a hole in each end of the I.D. tag.

Stamp your receiver serial number between the holes. Paint the tag black with paint, NSN 8010-00-582-5382 (same as you use for the gun cover).

Run lacing wire, NSN 9505-00-293-4208, used on gas cylinder plug, through the tag holes and through the barrel assembly's bipod leg holes. Secure the tag tight so it doesn't rattle.

When you replace the bipod, remove the tag and put it on the replacement.



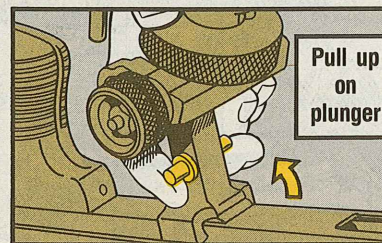
## Push & Pull Patterns



Push and pull routines on your M60 machine gun keep components in place, prevent damage and make for smooth operation.

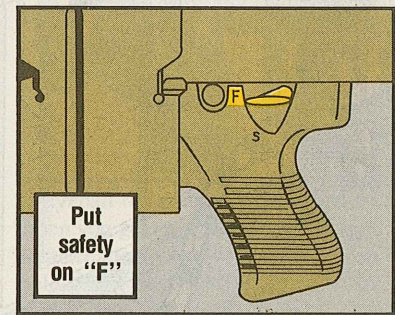
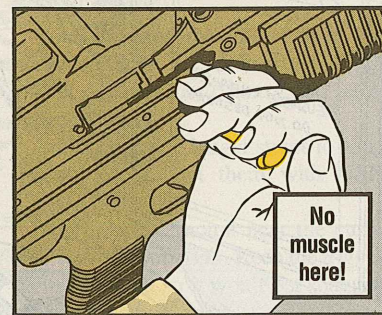
Remember them. For instance, set the receiver on the cover.

To install or remove the traversing and elevating (T&E) adapter assembly, you must first pull up on the plunger (release lever). That allows the T&E to seat or to release from the M122 tripod. If you get resistance, pull the plunger.



Don't put the muscle to it, since that can damage the mount or the plunger.

Another place you don't need muscle work is on the cocking handle. If you get hung up when you try to cock the bolt, check the safety position. Cock the bolt on F (FIRE). If you try to cock it on S (SAFE), you can damage the cocking handle, safety or operating rod.





## Mark Your M175 Containers

Units with unmarked M175 Dragon mount containers should mark them.

The container is reusable, and the mount should be stored in it when the mount's not on the vehicle.

So get a stencil set from your No. 1 or No. 2 Common shop set. Mark both ends of the container with:

### REUSABLE CONTAINER DO NOT DESTROY

Use indelible black ink and one-inch letters. NSN 7510-00-469-7910 gets a pint spray can of ink.

New containers will come marked with the message.

OH, BOY! CAN I STORE THIS CONTAINER WITH THE REST OF THEM?

YOU BET! I JUST MARKED IT!

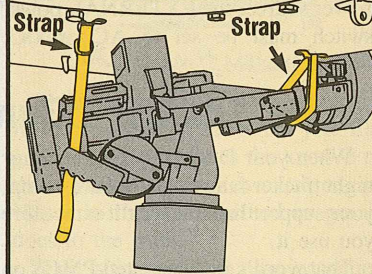
REUSABLE CONTAINER  
DO NOT DESTROY

## Mount Hanger

I'M JUST LOOKING FOR A PLACE TO HANG OUT!

C'MON DOWN, WE'VE GOT A PLACE FOR YOU!

NSN 5340-00-753-3745  
gets you these:



Look no more for a place to store the M175 mount of your APC Dragon missile system. The word's out. Hang it high!

You can hang the mount from the overhead strap loops in your APC, except during cross-country and tactical maneuvers.

You'll need two longer straps to hang the mount, so get them with NSN 5340-00-753-3745.

You hang the mount near the curb-side wall of your APC. Keep the trigger facing the wall so it won't get snagged by people or equipment.

Eyeball the straps for wear and tear when you get ready to hang the mount. Replace them when you feel they won't hold. That beats letting an expensive mount drop and suffer damage.





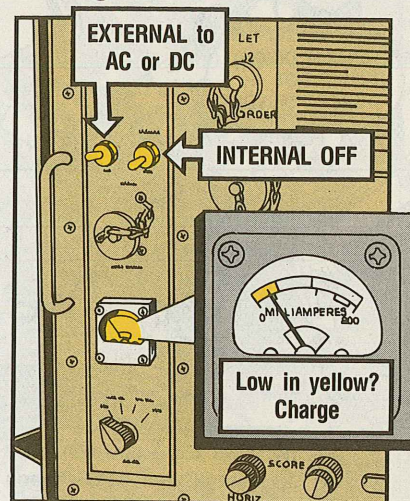
## Charging Your Dragon

Here's a new twist on the old problem of charging the batteries in your Dragon LET monitoring set:

Wait until the set's charge meter reads low in the yellow before you charge, but never run the batteries all the way down before charging.

Charging too soon... or too late... reduces the life and charge capacity of the batteries.

Use the charging procedure in Para 3-6 of TM 9-6920-484-12 and remember this: When you charge, the monitoring set's INTERNAL power switch must be OFF. Depending on your power source, the EXTERNAL power switch must be set to AC or DC. Follow the TM.

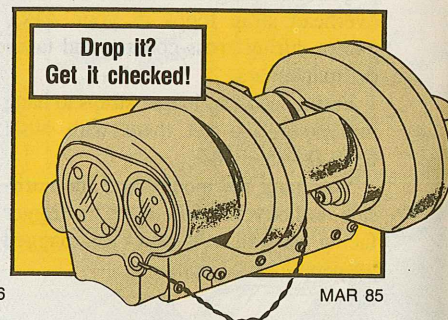


## Tracker "Bump" Test

When your Dragon system's day or night tracker falls or gets a hard bump, your support has to check it out before you use it.

That word's in an updated PMCS on Page 2-12.1, C4 (Mar 84) to TM 9-1425-484-10.

Although you may not be able to see damage, a fall or hard bang can make the tracker fail its operational test.



Tanks...

# How To Eyeball and Clean The 105 MM Gun



Maintenance know-hows get passed from crewman to crewman just like gossip—and sometimes the know-how that's passed on bears as much resemblance to the right method as gossip does to the truth.

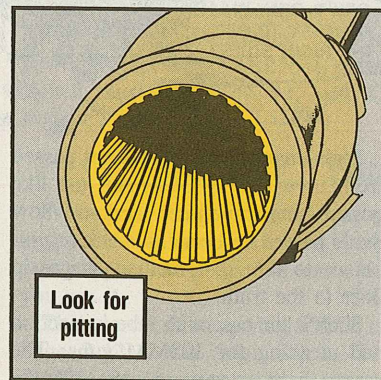
Such is the case with tube inspection and cleaning for 105MM guns. The reason there are varying ways to do the maintenance is simple: The tank -10 TM's are a little skimpy in servicing info.





### Inspection Before Firing

✓ Visually check the gun bore for wear and deformation of lands and grooves. Look for pitting and flaws. If the lands or grooves are deformed or pitted, or if you see cracks inside or



outside the tube, let your organizational maintenance hear about it before you fire the gun.

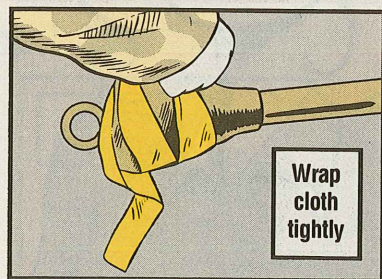
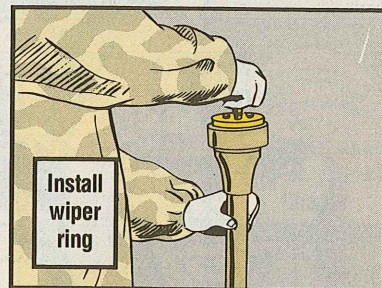
✓ Look for powder fouling and rust. Don't confuse bore coppering with powder fouling and don't look for a shiny, polished tube. Coppering, which is shiny-looking streaks, is OK and should not be removed. A clean bore may often have a dull gray appearance. If it's shiny, the bore may have been cleaned with abrasives, which is not permitted.

If you see powder fouling or rust, clean the tube as described in the after-firing service.

### Service Before Firing

Do this service before you fire the gun:

✓ Install the wiper ring or bore brush on the end of the cleaning staff. Wrap a clean wiping cloth tightly on the



ring or brush so that the cloth makes a good fit in the bore.

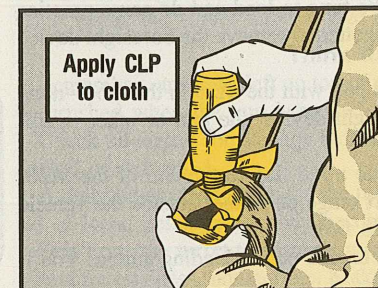
✓ Wipe the bore with a push-pull motion from one end to the other. Add another staff section as needed to do the job. Get all bore surfaces clean and dry.



### Service After Firing

Wait to begin cleaning the bore until the tube is cool enough to touch comfortably. Otherwise, CLP won't clean as well.

✓ Apply CLP to a wiping cloth wrapped tightly around the wiper ring or bore brush.



✓ Scrub the bore from one end to the other with a push-pull motion. Lengthen the staff as needed to reach the full length of the tube.

✓ Use the bore brush to remove any powder fouling not removed by the cloth. Don't wipe the tube dry afterward. Clean bore evacuator holes with a soft wire.



### Next-Day Service

Repeat the after-firing cleaning procedures.

Don't wipe the tube dry.

### Second-Day Service

On the second day after firing, wrap a CLP-soaked cloth around the ring or brush and coat the bore. Make sure to work the CLP into the bore grooves. Don't wipe the tube dry.

### Quarterly/As Required Service

Clean with CLP.





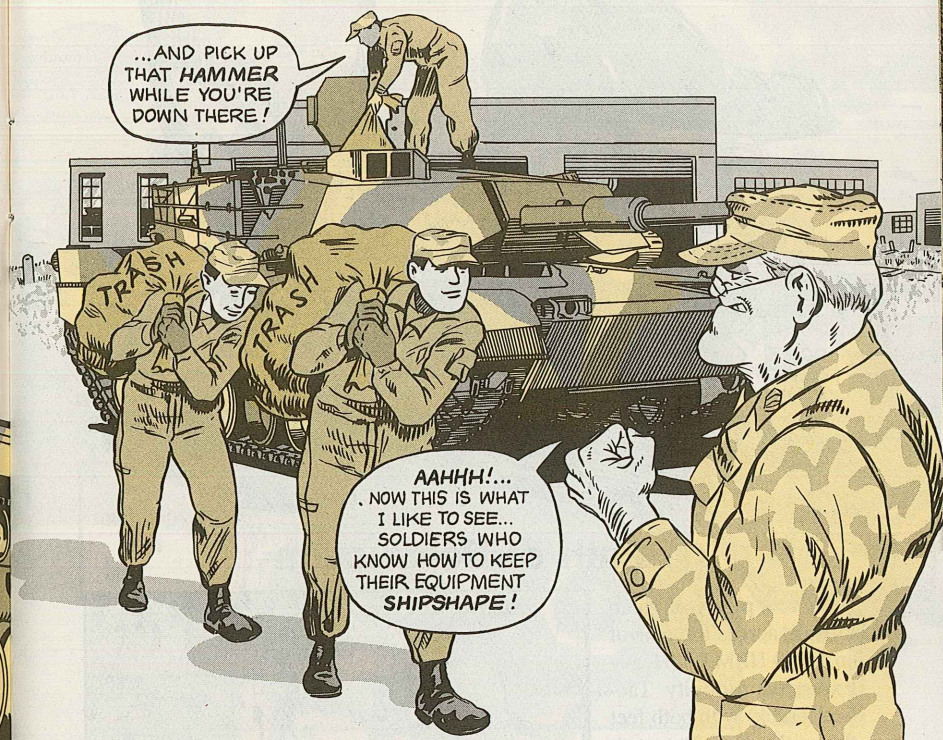
So-o-o-o, you've completed boresighting your tank's 105 MM cannon using the M26 muzzle boresight device. Now it's time to load and do some practice firing. But first, make sure you haven't forgotten to remove the boresight device from the tube.

Lots of things can happen if you fire the gun with the M26 in the tube—none of them good! You can damage the boresight device, the gun or other equipment, or injure a buddy—ugh!

One way to prevent this accident is to tie a red flag to the end of the M26. A red flag swinging in the breeze will alert range personnel outside the vehicle that the gun isn't ready to load, much less fire.

As a second check, always look thru the breech before loading ammo. You'll be glad you did!

## Keep the Turret Neat



The saying, "There's a place for everything and everything in its place," really counts in a tank turret.

Loose items such as tools, parts and trash can put you out of operation fast. If these items get under the floor or between the hull and the turret, they can break parts, cut cables and damage ammo.

### Think turret safety!

Remember, anything left on top of or below the tank's main gun breech could be crushed when the gun is moved. That includes parts of your body.

Check all ammo for damage before chambering. Don't fire any ammo that's dented or deformed.

A daily housecleaning inside the turret and under the floorboard will help get rid of loose items before they become a repair problem.

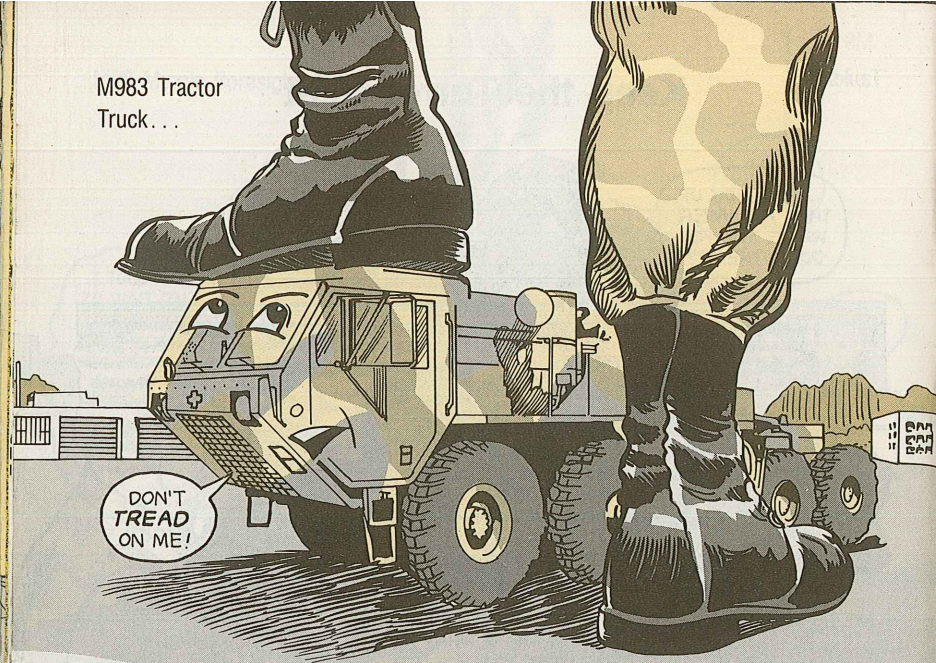
Don't use the turret to store items that belong on outside racks. The turret is meant for business, not storage. Make it your business to keep it clean and neat.

HAZARD

HAZARD



M983 Tractor  
Truck...



## Path of Destruction

There's plenty of room to walk across the rear of an M983 HEMTT (Heavy Expanded Mobility Tactical Truck) with both feet flat on the deck. But some people can't resist planting a foot on the transmission oil lines as they pass by—or as they pause to admire the sunset.

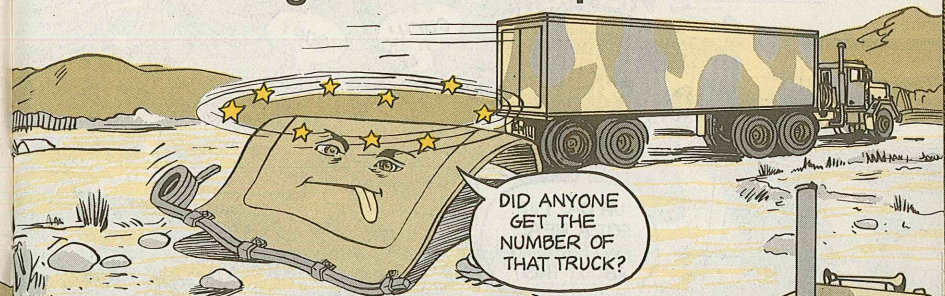
Result: Broken PTO sending unit or broken transmission oil temperature sending unit.

Remember the song of a few years back—"These boots are made for walking"...not for busting up your HEMTT!



M915 & M915A1 Trucks...

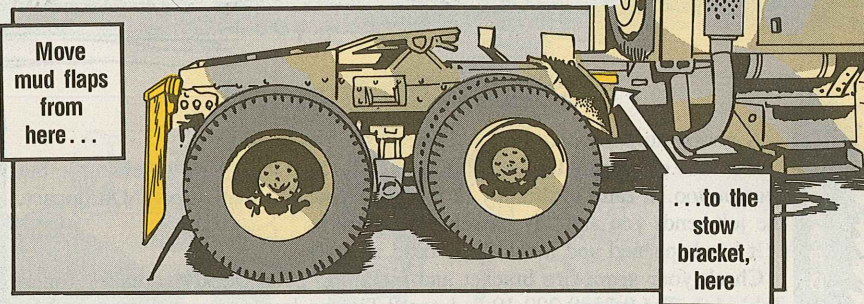
## Forgotten Mud Flaps Flub



Be sure to take out the mud flaps and stow 'em when you're hooked to an M127 12-ton semitrailer. If you don't, the support rods will hit the landing legs and get banged up.

Put the flaps or splash guards in the mud flap stow bracket on the right side of your truck, like it says on Page 2-69 in TM 9-2320-273-10 and Page 2-79 in TM 9-2320-283-10.

Move  
mud flaps  
from  
here...



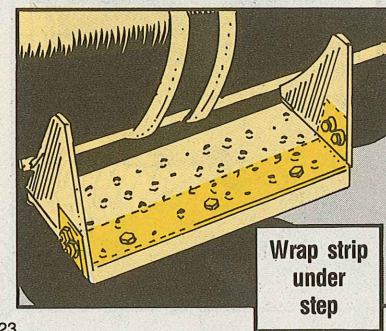
M915-Series Trucks...

## Broken Step Is Hazard!

Get it fixed before someone skins a shin or, worse, busts a leg!

Materials needed:

- ☐ One steel strip, 18½ inches long, 1½ inches wide, ¼ inch thick.
- ☐ Seven 5/16-in bolts, ¾ inch long, NSN 5306-00-225-8497.
- ☐ Seven nuts, NSN 5310-00-880-7744.
- ☐ Seven washers, NSN 5310-00-167-0721.







## Spare Tire Danger!

A poorly stowed spare tire is dangerous!

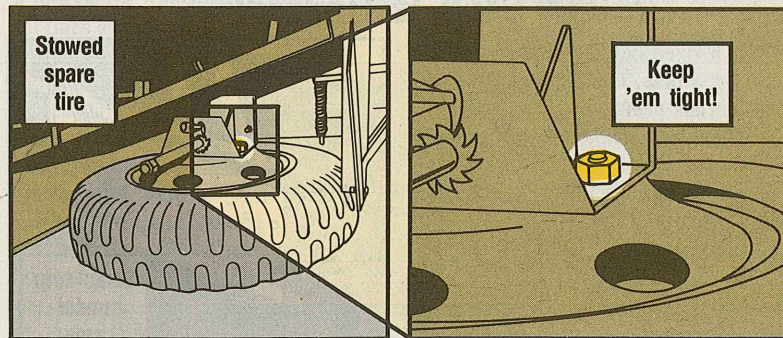
If it falls off during travel, it's a road hazard—not only for other traffic but for you too. It can fall directly in line with your left rear wheels. On impact, the jolt sends you and any passengers flying.

It has happened and a soldier is dead as a result!

Check your spare tire bracket and mounting bolts weekly as called for in Table 1-1, TM 9-2320-209-10-2. Loose? Tighten 'em up as spelled out in Para 2-6 of TM 9-2320-209-10-4.

HAZARD

HAZARD



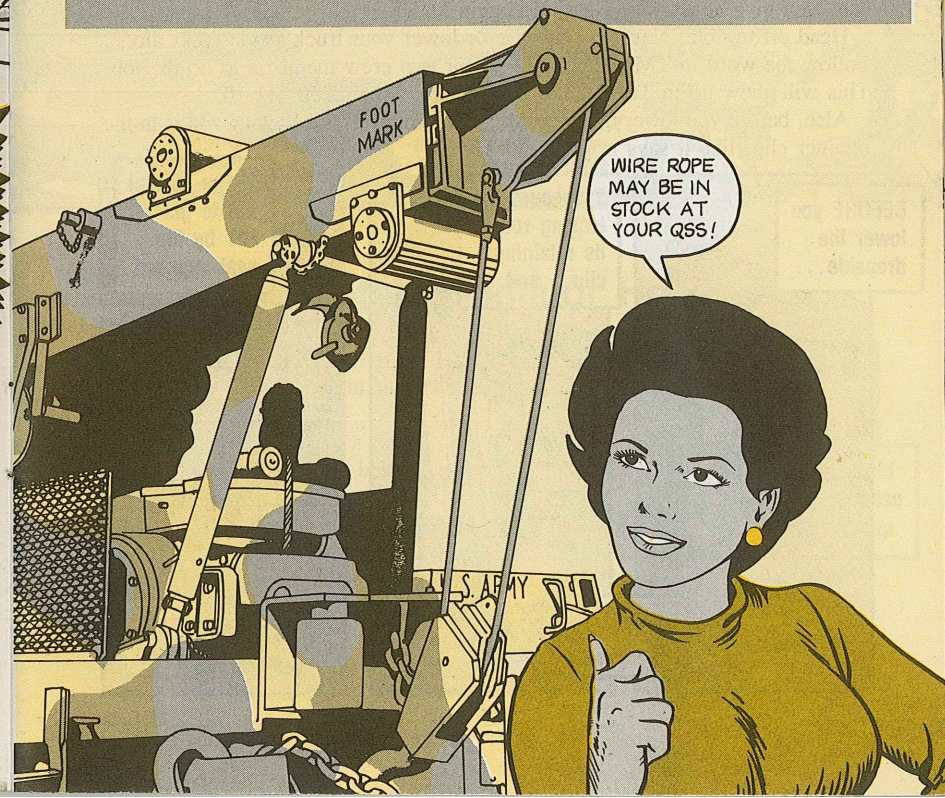
## Reel in Cable NSN's

You may get tied into knots replacing wire rope on your winch or wrecker crane, so loosen up and listen.

Since there's so much waste when you replace the wrecker's rear winch wire rope, the TACOM headshed says you can use 333 feet instead of 350 feet as called for in your -20P TM. Then you get three lengths out of a 1,000-ft reel of ¾-in cable.

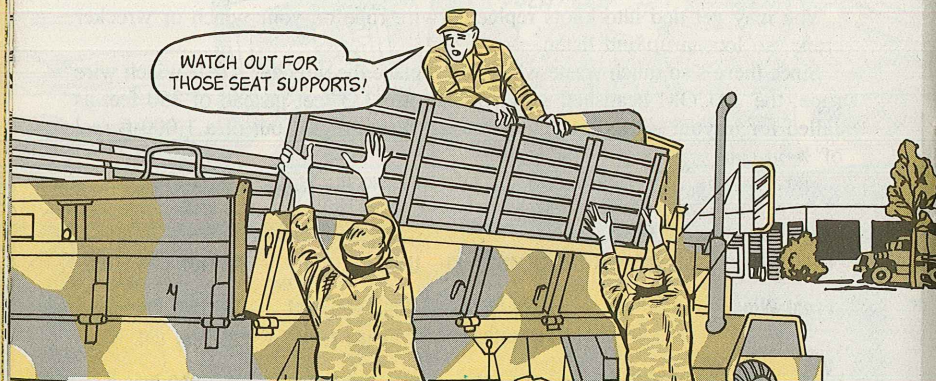
Here are the wire rope sizes:

LOCATION	DIAMETER	NSN 4010-00-	UNIT OF ISSUE	AMOUNT NEEDED
Front Winch	5/8-in	274-6817	Reel, 600 feet	280 feet (wrecker)
		274-6824	By-the-foot	200 feet (all other)
Wrecker Rear Winch	3/4-in	618-7697	Reel, 1,000 feet	333 feet
Crane	1/2-in	961-9780	By-the-foot	96 feet





## Seat Support Caution

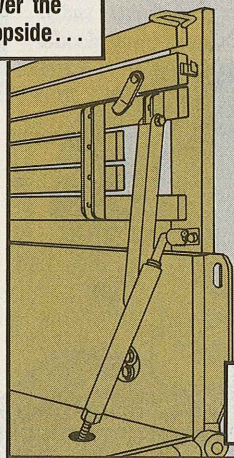


Those free-swinging troop seat supports in your M39-, M809- or M939-series dropside cargo truck can bend or break when the dropside is lowered. And they can even give an unwary Harry a noggin knock.

Head off trouble! Never try to raise or lower your truck's side racks alone. Follow the word in TM 9-2320-272-10 for two crew members to do the job. This will show up in TM 9-2320-260-10 and TM 9-2320-211-10.

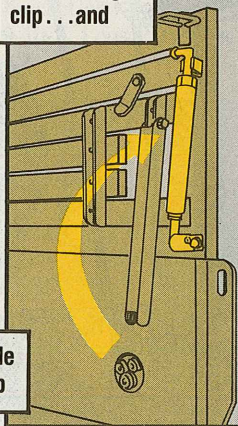
Also, before you lower the dropside, make sure the seat locking rod is in the retainer clip, like it says in your -10 TM.

**BEFORE** you lower the dropside...



Side up

...secure the locking rod in its retaining clip...and



...be careful not to get HIT by the seat support!

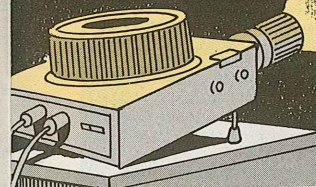


Side down

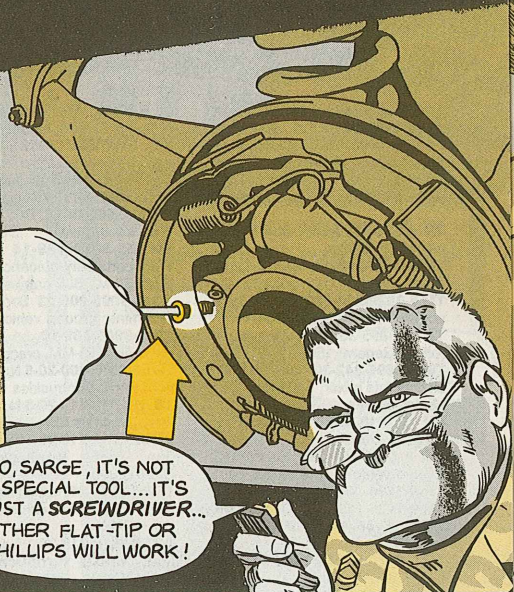
## The Tool Solution

*Dear Half-Mast,*  
Is that a special tool being used to remove and install the brake shoe conical hold-down springs on Pages 8-24 thru 8-27 in TM 9-2320-218-20-1-2? If so, how do we get it?

SGT J.D.M.



NO, SARGE, IT'S NOT A SPECIAL TOOL...IT'S JUST A **SCREWDRIVER**... EITHER FLAT-TIP OR PHILLIPS WILL WORK!



CUCV's...

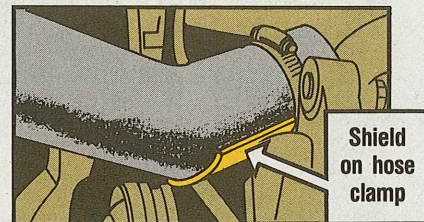
## Protect Radiator Hose!

A flapping alternator belt or air conditioner belt can cut thru an unshielded upper radiator hose.

The belt flaps when it's loose. Get your mechanic to check belt tension and, if needed, tighten the belt.

Even a properly adjusted belt comes close to the hose. So your truck needs a shield to protect the hose. If the hose clamp at the thermostat housing has no shield, replace it with clamp-with-shield, NSN 4730-01-194-2002.

Make sure the shield is on the bottom.



The shield is needed on all CUCV models, not just the M1010's. Make a note that the CAUTION on Pg 7-11 of TM 9-2320-289-20 applies to all CUCV's.





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.

TM 5-2410-233-20P Dec Caterpillar D7F tractor  
 TM 5-2420-206-20P Jan 85 Clark 290M tractor  
 TM 5-3820-236-20P Jan 85 Earth auger, Texoma Model 254-10  
 TM 5-3895-336-20P Nov 3-roll roller, (General 1503)  
 TM 5-3895-342-20P Jan 85 Non-tilt concrete mixer, T.L. Smith Co., Model 499A  
 TM 9-1010-221-10 Dec M203 grenade launcher  
 TM 9-1095-205-20P Sep M128 ground vehicle mine dispenser  
 TM 9-1430-489-24P Dec LANCE  
 TM 9-1430-1535-24P Dec HAWK  
 TM 9-1440-485-20P Jan 85 LANCE  
 TM 9-2320-272-10-HR Jul Truck, 5-ton, M939 series  
 TM 9-2330-297-14&P Dec Chassis, MILVAN, 12-ton w/bogie  
 TM 9-3431-254-14&P Aug Welding machine, Model GCC-300W  
 TM 9-4935-451-24P Jul 83 Improved contact support set, AN/TSM-153  
 TM 9-4935-542-24P Jan 85 HAWK  
 TM 10-3930-606-20P Jan 85 Fork-

lift; 6,000 lb, Allis-Chalmers Model F-60-24PS, Army Model MHE-205  
 TM 11-5820-670-12 Dec AN/ARC-131 radio set  
 TM 11-7440-293-14 Jun 83 MK-1818/GSG-10(V) Installation kit  
 TM 32-5800-001-L Dec LOAP for B-46 equipment  
 TM 55-3810-229-14 Jan 85 Transportability guidance, P & H MT-250, MT-300 cranes  
 TB 9-1095-205-23 Sep Dispenser, mine: ground vehicle, M128  
 TB 9-2350-309-10 Jul Howitzer, projectile, 155-MM, practice, M804  
 TB 55-1510-200-20-5 Nov Inspection, brass turnbuckles on UV-18  
 TB 55-1510-213-20-6 Nov Inspection, propellers, OV-1D and RV-1D  
 TB 55-1510-216-20-1 Nov Inspection, brass turnbuckles on U-3A/U-3B  
 TB 55-1510-217-20-5 Nov Inspection, brass turnbuckles on OV-1/RV-1  
 TB 55-1510-218-20-1 Nov Inspection, brass turnbuckles on C-12/RC-12  
 TB 55-1520-237-20-57 Nov Inspection, tail rotor control, cable brass turnbuckles, Part No. MS21251BSL  
 TB 55-1520-237-20-58 Nov Inspection, tail rotor control cables  
 TB 55-1520-242-20-10 Nov SOF, Pitch change clevis, EH-1/UH-1D/HV  
 STP 55-67Y-JB Dec Attack

### AUDIO VISUAL STUFF

Available at battalion or post Learning Center

#### TEC LESSONS

010-071-6668-F Store mortar ammunition, Part II  
 041-061-5932-J Checking M115 pantel bore sight w/M140  
 041-061-5937-J Prepare M650 rap projectile for firing  
 041-061-5972-A Inspect/Service/Clean M198 howitzer tube  
 041-061-5975-J Inspect/Service M198 howitzer speed shift and travel lock  
 041-061-5976-A Inspect/Service M198 howitzer

041-061-5977-J Inspect/Service M198 howitzer recoil mechanism  
 041-441-5918-F Vulcan radar frequency changing, Part I  
 202-113-5187-A TSEC/KG-27 Installation and cabling in AN/TRC-117  
 202-113-5193-A Operators AN/TRC-110 PM  
 481-091-1082-A Trouble-shoot 4,000-lb GED forklift hydraulic system  
 481-091-1083-A PMCS for 4,000-lb GED forklifts  
 481-091-1180-A Trouble-

shoot M747 semitrailer axle air suspension system  
 481-091-1193-A Trouble-shoot M915-series truck cooling system  
 481-091-1198-A Trouble-shoot M915-series truck electrical charging system with STE/ICE  
 481-091-1199-A Trouble-shoot M915-series truck engine retarder electrical control circuit  
 481-091-1211-A M915-series truck PMCS  
 481-091-2042-A Electrical troubleshooting: 4,000-lb

helicopter repairer job book  
 STP 55-68M12-SM Nov Soldier's manual, Aircraft weapons systems repairer  
 SC 4920-99-CL-A90-HR Nov AVUM Set No. 1, Airmobile Set No. 1  
 SC 5180-91-CL-R52-HR Nov TK-168 Telephone repair  
 SC 5180-92-CL-A54 Oct FAAR Organizational Maintenance  
 SC 5180-95-CL-A31 Nov Pershing, organizational maintenance tool kit  
 SC 6230-90-CL-N02-HR Nov Light set marker, emergency  
 LO 9-2350-304-12 (Rev) Dec Howitzer, M110A2

### MAINTENANCE ADVISORIES

AMCCOM MA 84-26—Tightening of Machine Bolts of the Inner Shell Gaskets of M3A3 Smoke Generator, AMSMC-MAR-C 121605Z Dec 84.

AMC SOU—Advisory, Technical, Safety Problems with M2/M2A Burner Units (retransmission of TROSCOM SOU-MES-14), AMCSF-E 071820Z Dec 84.

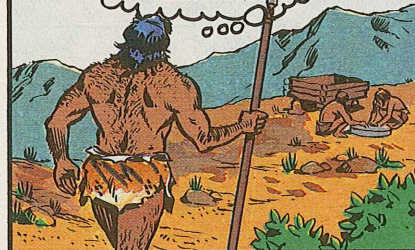
If you need a maintenance advisory, contact your direct support or local Logistic Assistance Office (LAO).

Using Available Experts?...



When last we saw our "Little Chief," he was charging off to put command emphasis on PM (PS 383)

I'LL GIVE 'EM  
 COMMAND EMPHASIS  
 ALL RIGHT!



Many moons have passed as we pick him up again in the continuing story of OPERATIONAL READINESS...

S'CUSE ME, CHIEF  
 CONNIE'S HERE!

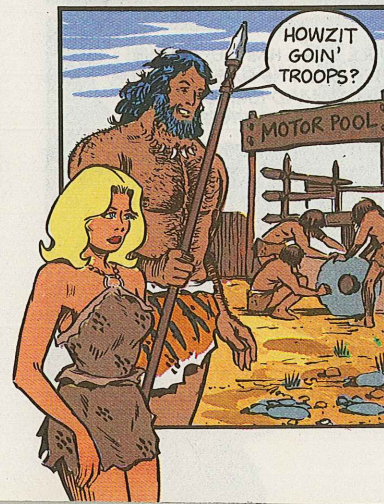
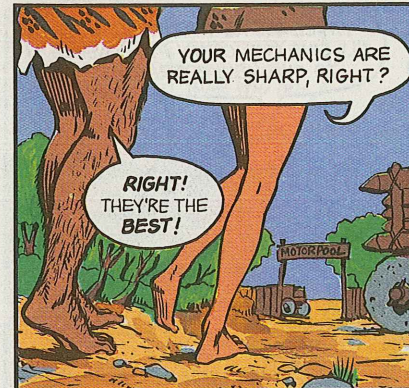
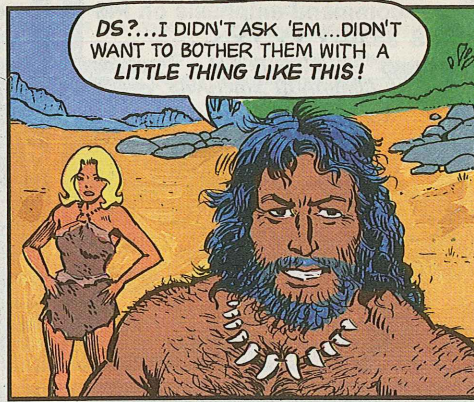
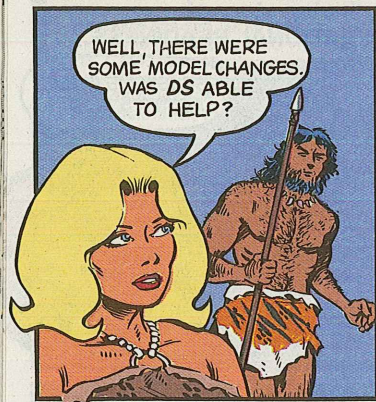


OH! HI, CONNIE. JUST ON MY WAY TO THE MOTOR POOL....WE'VE GOT A LITTLE MAINTENANCE PROBLEM!

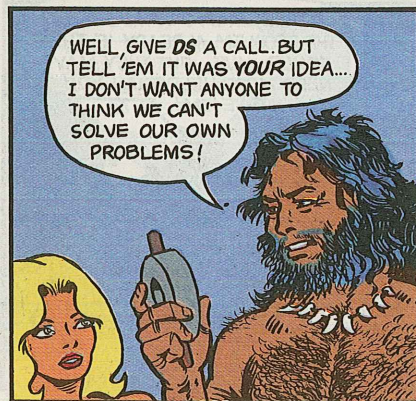
OH  
 REALLY..?

















RIGHT, CHIEF! YOU CAN'T AFFORD TO BE TOO CLANNISH. REMEMBER WHAT HAPPENED TO THE NEANDERTHALS. THEY DIDN'T WANT ANY OUTSIDE HELP EITHER!

YEAH. OK, CONNIE, OK!

SAY, I SEE THE TROOP FROM DS GOT HERE. LET'S SEE WHAT HE HAS TO SAY. I'LL HAVE MAIT TAKE OVER MY TRAINING CLASSES!

DS SAYS THEY GAVE US THE **WRONG PARTS** FOR OUR NEW MODEL. THEY'LL EXCHANGE 'EM RIGHT AWAY!

GREAT!

WELL, LOOKS LIKE **THAT** FIRE'S OUT, CONNIE!... NOW, I'VE GOT TO GET BACK TO HEADQUARTERS!

ANYTHING SPECIAL?

NO... BUT A NEW **FM** ON **TACTICS** JUST CAME IN. WITH A LITTLE LUCK I MAY HAVE TIME TO READ IT!

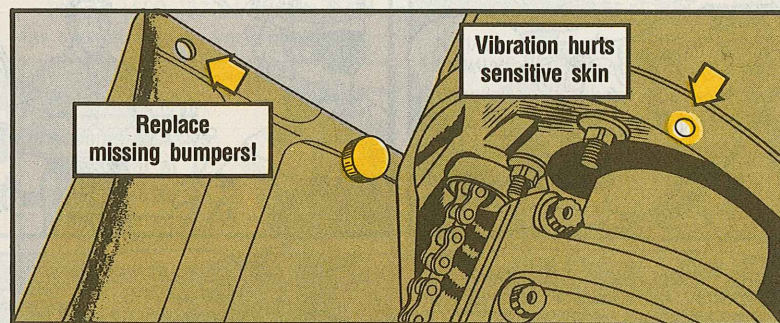
SO LONG... AND THANKS AGAIN!

UH-1.



## Rub Your Bird the Right Way

Keep your bird's tailboom skin off the bumpy road to ruin by replacing missing rubber bumpers on access doors. When bumpers, NSN 5340-01-054-1588, come off, engine vibration does a number on the Huey's soft aluminum skin. The area where the bumper should be can even wear right into the skin it's touching! That'll send the aircraft to support.



## Aviation Messages

Cat 1 EIR Phone  
AUTOVON 693-2066  
(24 hours)

If your unit has not received a message you have an interest in, check with your next higher headquarters.

UH-1-84-11, SOF, Technical message concerning replacement of all the pitch change clevises on all UH-1 aircraft (except C/M models). 131300Z Nov 84.

UH-60A-84-15, SOF, Maintenance Mandatory Message, UH-60A BLACK HAWK aircraft extension of time to replace tail rotor control brass turnbuckles (UH-60A-84-15). 282110Z Nov 84.

SOU-GEN-MEM-84-03, SOU,

Technical, static discharge probe, NSN 1670-00-574-8044, P/N 1670EG06881 (SOU-GEN-MEM-84-03). 021815Z Nov 84.

MIM-CH-47-MEM-84-14, Urgent change to TM 55-1520-227-10-1, CH-47B Operator's Manual, 23 Aug 78. 231600Z Nov 84.

MIM-GEN-84-04, D5-D Hydraulic test stand, NSN 4920-01-119-8795, tachometer adjustment/verification (miscellaneous). 091800Z Nov 84.

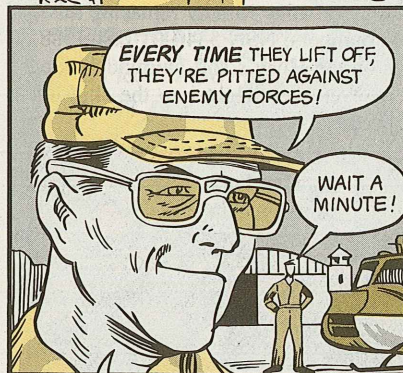


# Fighting the Enemy Within!



HELICOPTERS FLY  
NO PEACEFUL  
MISSIONS!

HEY, JUST A  
MINUTE THERE!



EVERY TIME THEY LIFT OFF,  
THEY'RE PITTED AGAINST  
ENEMY FORCES!

WAIT A  
MINUTE!



THEY'RE SUBJECTED TO  
THE UNFORGIVING LAWS OF  
GRAVITY, PLUS...



...THE TURBULENCE, VIBRATION,  
CORROSION, AND EROSION OF THEIR  
OWN MAKING. THEY OPERATE IN A  
TRULY HOSTILE ENVIRONMENT!

HELP!

GRAB!

SHAKE



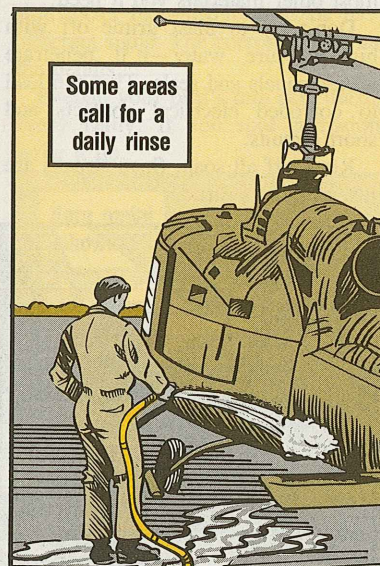
OH, THAT! OK,  
SO WHAT'S  
YOUR POINT?

PLAIN OLD  
SKIN  
CARE!

Your bird's made of lightweight materials—cast iron and stainless steel don't fly too well. Those light materials take a real beating from salty air, dust, rain and stuff. That makes them prime targets for electrochemical corrosion—a fancy way of saying the metal breaks down and can't do its job.

To counterattack the corrosion enemy, keep your aircraft clean.

TM 55-1500-333-24 has the word on cleaning aircraft. Check your -23 TM for special info on your machine.



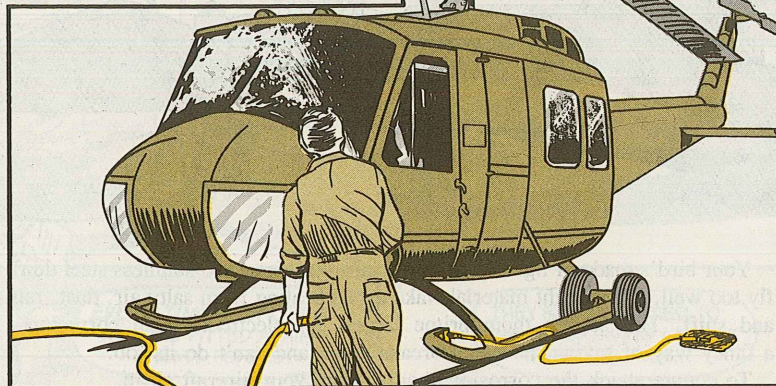
Some areas  
call for a  
daily rinse

How often does your bird get a bath? It depends on where you are. Salty coastal air, polluted air or areas with acid rain call for a weekly wash—at least. Consider a daily rinse, too.

In other areas, monthly cleaning is OK, so says TM 43-0105, the corrosion pub. An ideal time for a wash job is during a Phase or Periodic inspection.



Water flowing over Plexiglas creates static electricity. So remember to ground an aircraft before washing. That way, you'll avoid sparking off an explosion if you use any flammable material for cleaning.



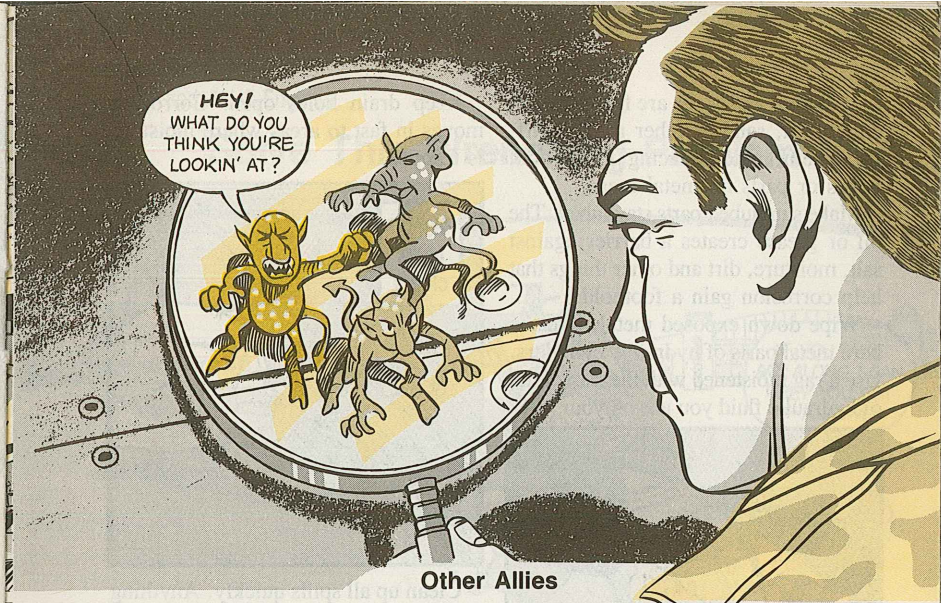
Infrared paint can't stand up to full-strength alkaline waterbase cleaning compound. So mix one part compound to 7-10 parts water. Order a 55-gal drum of compound with NSN 6850-00-935-0995.



Table 2-1 in the cleaning pub lists most other materials you'll need.

Don't try to blast grime off with high-pressure water—it'll penetrate access panels and seals. That can lead to corroded electrical contacts and short circuits.

Rinse off all soap. Soap streaks are just as bad as dirt.

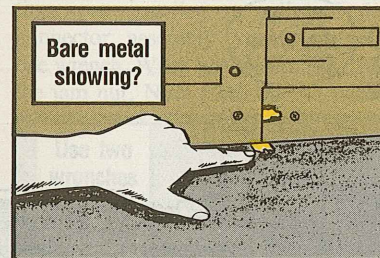


### Other Allies

Cleanliness isn't your only ally in the anti-corrosion war.

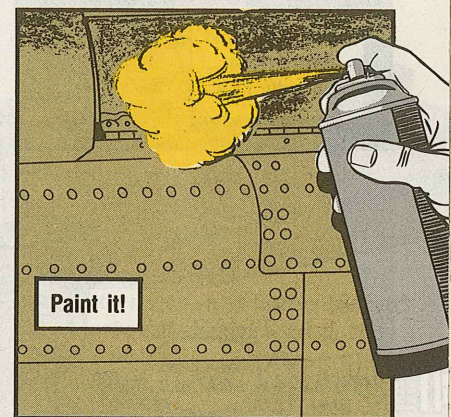
Your eyes, for example, can scout out the enemy. So learn what corrosion looks like—different kinds have different signs. The corrosion TM has the details.

Eyeball your bird's thin skin during every Daily. If you spot corrosion, write it up.



Never use paint to hide corrosion. Paint will just cover the growing damage underneath. Once corrosion starts, a special treatment is needed to stop it.

Do paint bare metal before corrosion begins. See TB 746-93-2 for the right kind of paint to use on your aircraft.



Report or repair nicks, digs or scratches. They're dandy hideouts for the enemy.

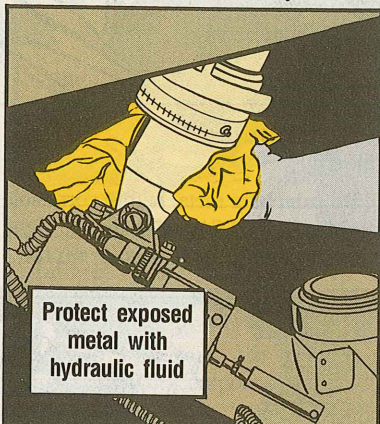
Avoid scratches by wearing approved footwear and clothing when walking or working on metal surfaces. Make



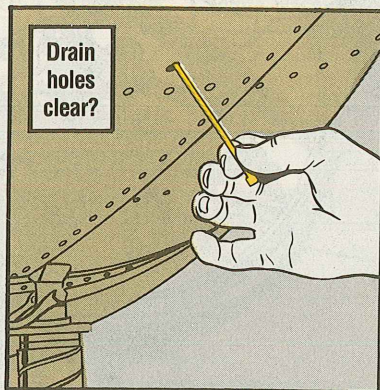
sure clothes and boots are free of metal chips, dirt, sand or other rough stuff. Be careful when placing tools, tool boxes or parts on metal areas.

Make sure lubed parts stay lubed. The oil or grease creates a barrier against salt, moisture, dirt and other things that help corrosion gain a foothold.

Wipe down exposed metal, like the bare metal parts of hydraulic cylinders. Use a rag moistened with the same kind of hydraulic fluid you use on your bird.



Keep drain holes open. Corrosion moves in fast to areas where moisture is trapped.



Clean up all spills quickly. Anything from acid to food particles can hide corrosion-starting chemicals.

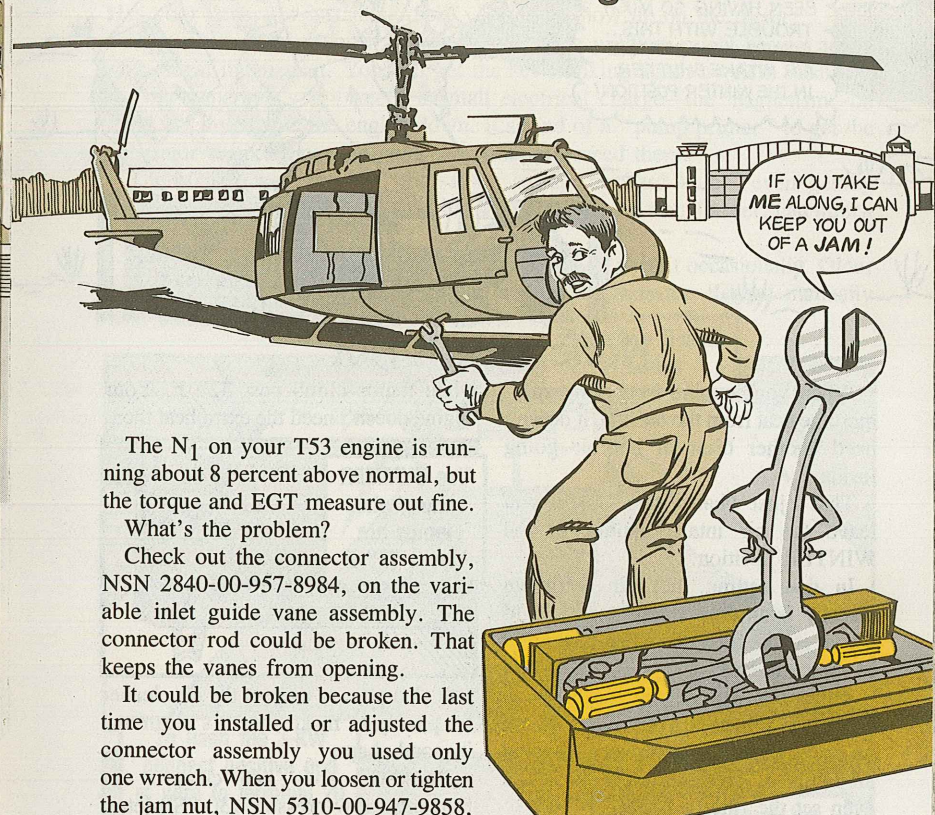
Don't polish an area just so it'll look sharp. Some metals form their own thin, dull-looking protective coating. A shine job removes the coating and opens a route for corrosion.

Use all the weapons in your arsenal, and give corrosion a fight to remember.



UH-1 and AH-1 Engines...

## Solve This Wrenching Problem

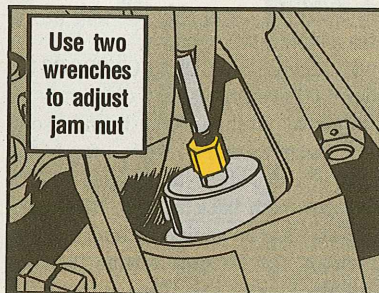


The  $N_1$  on your T53 engine is running about 8 percent above normal, but the torque and EGT measure out fine.

What's the problem?

Check out the connector assembly, NSN 2840-00-957-8984, on the variable inlet guide vane assembly. The connector rod could be broken. That keeps the vanes from opening.

It could be broken because the last time you installed or adjusted the connector assembly you used only one wrench. When you loosen or tighten the jam nut, NSN 5310-00-947-9858,

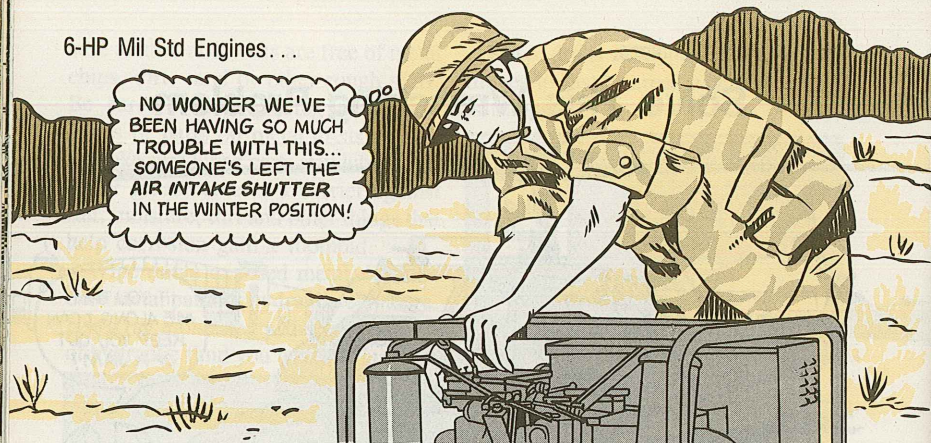


use another wrench to keep a backup force on the self-aligning bearing, NSN 2840-00-904-2475.

Otherwise, the force you put on the jam nut will twist and weaken the connector rod. If it doesn't break right away, it will eventually... maybe during a flight. That can cause the engine to lose power—an emergency for sure!

So grab two wrenches, next time you adjust the connector assembly.





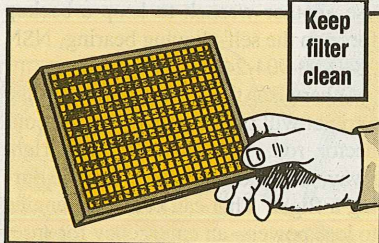
## None Like It Hot

When your engine is battling summertime heat from the outside, it doesn't need another blast of hot air going inside.

That's just what it gets, tho, if you leave the air intake shutter in the WINTER position.

In that setting, hot air is drawn directly from the exhaust manifold to the air intake filter. It's then passed on to the carburetor.

This extra heat in the summer can break down a filter. These pieces can be drawn into the carburetor, causing all kinds of problems. The heat can even set the filter on fire.



You keep things cool, tho, by switching the shutter to SUMMER

when temps climb past 32° F. Your engine doesn't need the extra heat then.



It also pays to inspect the air cleaner frequently to make sure it's clean and in good shape.

Your org shop can clean it by blowing a low-pressure (30 PSI) jet of air from the clean side through to the dirty side.

If filters, NSN 2940-00-876-2212, are in short supply, keep dirty ones on the job by washing them in mild soap and water to extend their life. Make sure you dry them thoroughly before you put them back in, tho.

Never run an engine without a filter. Dust or dirt in your engine is more trouble than a dirty filter.

## Be a Field Flasher

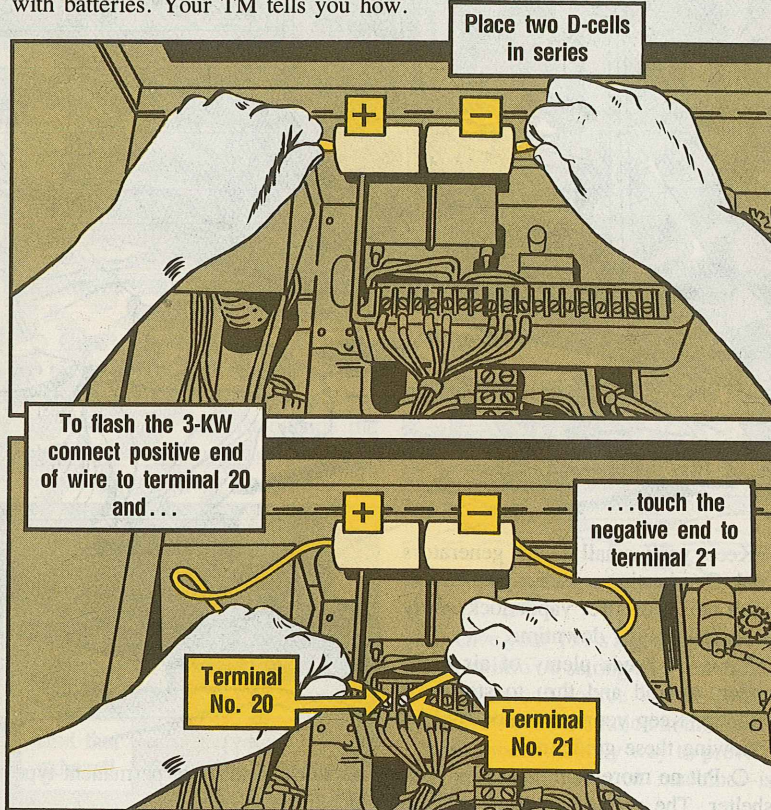
Has your generator lost its oomph? No volts show up on the meter?

Wait one before you turn it in for repair. The problem might be just a loss of residual magnetism. You can get the set cranking again by field flashing.

Your generator's coil keeps a small electrical charge—the magnetism—on hand when you shut the engine down. It's kind of a "pump primer" to get the generator cranking out the volts next time you need them.

The charge is easily lost, tho. Long storage, a hard bump, even getting too close to a large electrical field like that put out by a transformer, can knock it out.

Field flashing brings it back. Most generators will need it occasionally. Older sets have toggle switches or push-buttons. Newer sets are flashed manually with batteries. Your TM tells you how.





# Give 'em

I GUESS WE HAVE TO STOP MEETING LIKE THIS, JED!

YEAH, JENNIE, YOU JUST MAKE ME TOO HOT!

SORRY, KIDS! THIS BREAK-UP IS FOR YOUR OWN GOOD!

Keep your small GED generators cool. Overheating causes engine knock, extra noise, oil use, vapor lock, early parts failure and downtime.

Your set needs plenty of air over, under, around and thru to stop heat buildup. Keep your generator cool by following these guidelines:

- Put no more than one set in your generator's sandbag or permanent-type shelter. The extra engine just adds to heat buildup.

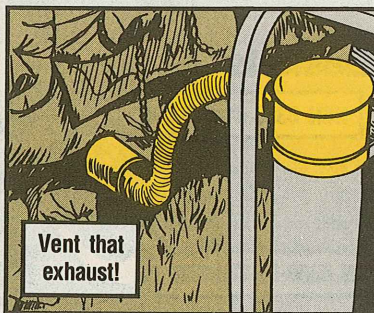
# Cool Aid!

- Place the set lengthwise in the center of the shelter. Point the engine end of 3-KW sets toward the opening. On other sets—0.5 to 10-KW—point the generator end toward the door. This gives you the best cooling action.



- Give generators lots of room. Try to put 4 feet between the set and the shelter wall in all directions.

- Pipe engine exhaust outside the shelter. The hot fumes are deadly to you and the generator's engine.



If you need flexible tubing to pipe the exhaust, here are some common sizes:

NSN 4720-00-	Inside Diameter
174-4668	1 inch
278-8030	1-½ inches
278-8027	1-¾ inches
278-8031	2 inches
174-6818	2-½ inches
174-4664	3 inches
174-4671	4 inches

Be sure you get a snug fit.

- Never put your set into a hole. What damage the extra heat doesn't do will be done by water that might pool up.

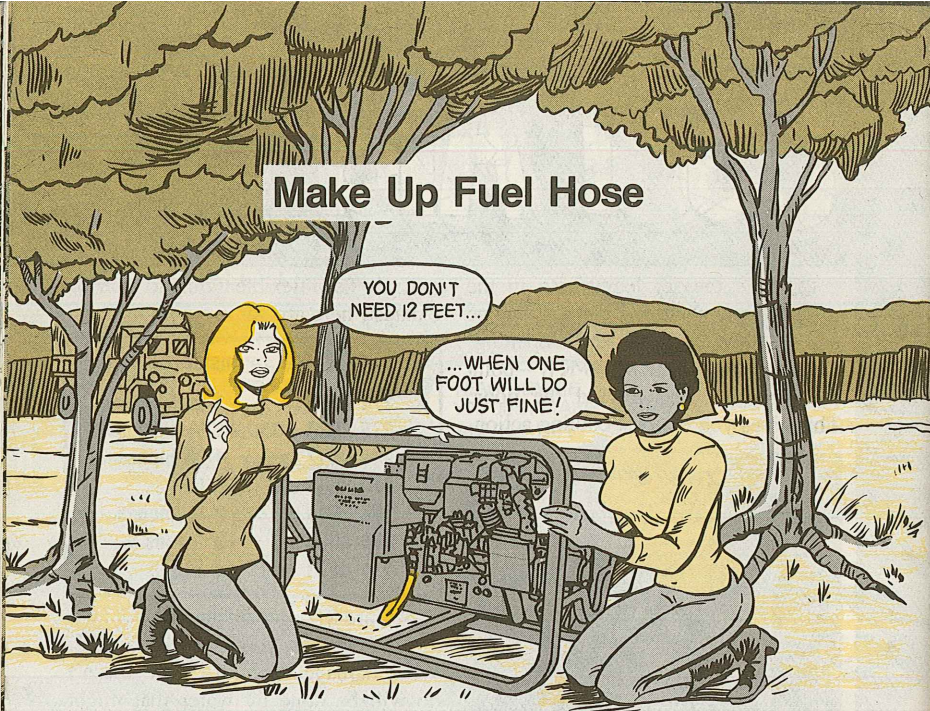


- Give your TM's a good once-over for more info on setting up in the field. A good second source is FM 20-31, Electric Power Generation in the Field.

Remember, the only way to prevent heat stroke—to man or machine—is with cool aid.



## Make Up Fuel Hose



YOU DON'T  
NEED 12 FEET...

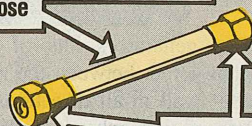
...WHEN ONE  
FOOT WILL DO  
JUST FINE!

A one-foot fuel hose assembly for your 1.5-KW generator set, shown as Item 11 of Fig 3 in TM 5-6115-323-24P, is not available.

You make your own with a one-foot piece of rubber hose, NSN 4720-00-540-1962, and two adapters, NSN 4730-00-497-4281.

NSN 4720-00-814-0321, listed in the TM, brings a 12-ft hose.

NSN 4720-00-540-1962  
Hose



Adapters  
NSN 4730-00-497-4281

## Fuel Can Gaskets

New gaskets are now available for the fuel can adapter used with the M1941 and M1950 space heaters.

Get the large gasket with NSN 5330-01-172-1182. The small one is NSN 5330-01-172-1251.

The new gaskets stay soft in extreme cold weather.

NSN 5330-01-172-1182

NSN 5330-01-172-1251



## Mess-y Problem Solved

Dear Editor,  
I've found a way to save hours of cleaning time on field mess wash lines. Just line the immersion heater can with plastic bag, NSN 8105-00-655-8286. Then put the immersion heater in place and adjust it so it doesn't touch the bag.

The bag won't burn, melt or leak even when the water's boiling. When it's time to change water, there's hardly any cleanup needed.

SSG C.W.M.

WOW! THIS  
BAG WILL MAKE  
CLEANUP A SNAP!

CLEANLINESS  
IS MY BAG!

(Editor's note—Now that's really a neat trick!)

## Blowing Smoke... And Fire?

### Equipment

Four-inch smoke pipe, NSN 4520-00-277-8339, used on immersion heaters and space heaters.

### Problem

Some of the pipes have seams that don't lock the right way. That causes a safety and fire hazard.

### Action

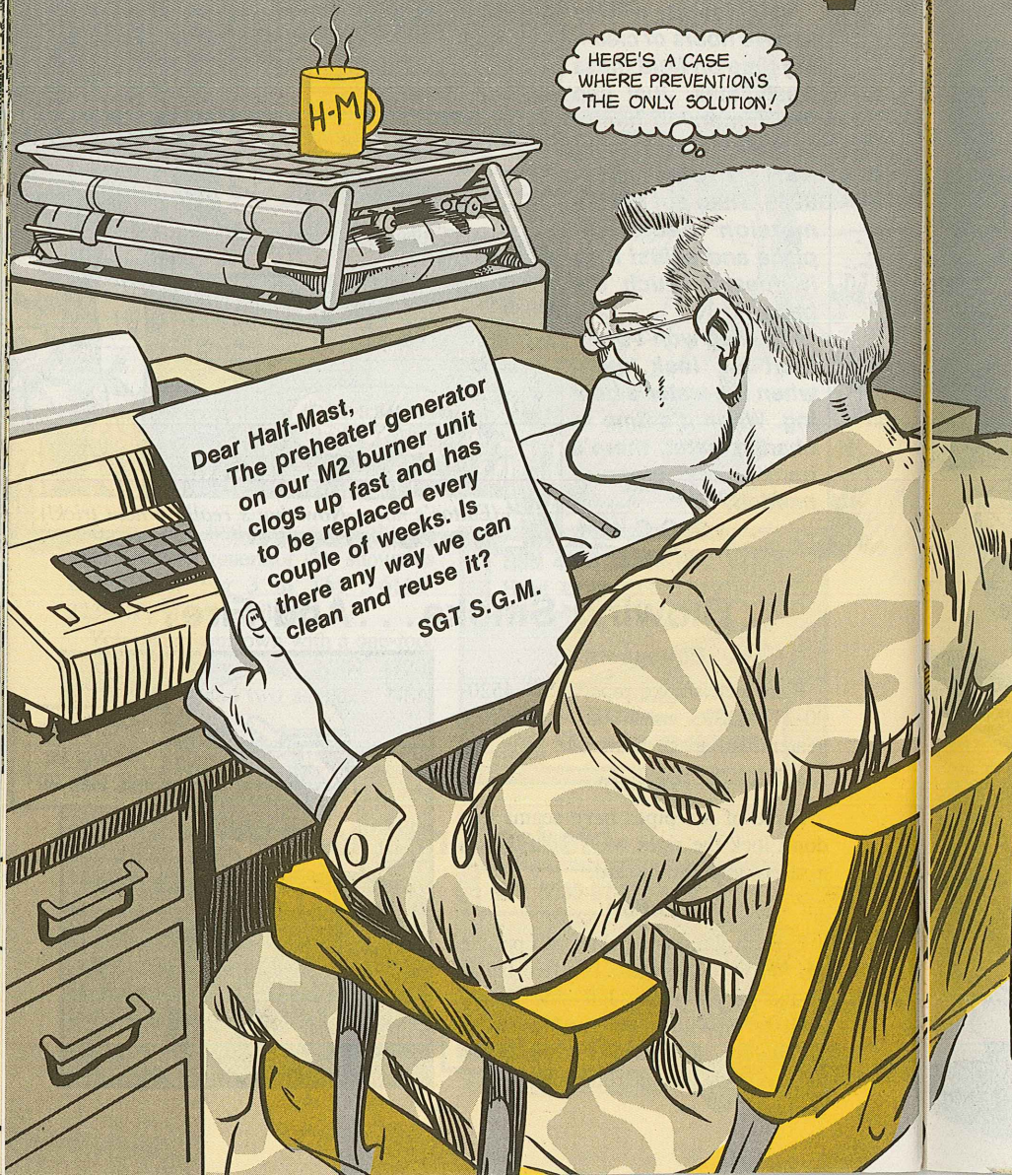
Eyeball the seams when you put the smoke pipes together. The two bends in the metal on the left side should each be less than 90° or the seams won't lock completely. If the bends are too wide, replace the pipe.

Both bends  
should be  
less than 90°





# Clean Up Your Burner!



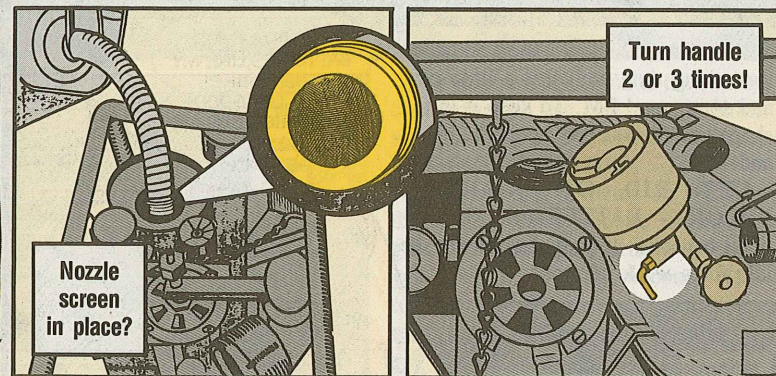
Dear Half-Mast,  
The preheater generator  
on our M2 burner unit  
clogs up fast and has  
to be replaced every  
couple of weeks. Is  
there any way we can  
clean and reuse it?  
SGT S.G.M.

Dear Sergeant S.G.M.,

There's no good way to clean out that lead buildup—and the generator may not work right after cleaning.

Here are some tips to make the generator last longer:

- ✓ Use fresh, clean gasoline. Gasoline that's been in a can for a long time contains gum that clogs the screen and needle. Drain any gas left in the tank before you store the burner unit.
- ✓ Store gasoline in a clean can.
- ✓ Make sure the gas can nozzle screen is in place when you refill the tank. That'll catch trash that could clog the preheater generator.
- ✓ Clean the inside of the U-tank with dry-cleaning solvent.
- ✓ Make sure the air-fuel feed assembly is not clogged or bent. That cuts the flow of fuel and air to the preheater. Replace it if necessary.



✓ Turn the preheater orifice cleaner two or three times before lighting up, like it says on Page 2-19 of TM 10-7360-204-13&P. Leave the handle pointing down. When the handle is in any other position, the screen and pin burn up quick.

✓ Run the preheater only as long as needed to heat the full length of the burner generator. Lead and gum deposits build up whenever the preheater is on.

✓ Keep soap and water away from the preheater when you clean the burner unit. That can clog up the preheater.

*Half-Mast*



# Br-r-r-inggg on the PM!

TA-312 Telephone...

HELLO?

SAY  
AGAIN?

PLEASE DEPOSIT  
\$6.95 FOR THE  
FIRST THREE  
MINUTES!

Your TA-312 should keep hummin' for a long time with just a little care and some good PM. To keep it in top shape you'll need TM 11-5805-201-12 and -20P.

**GET RID OF LEAKING, BULGING BATTERIES.** Remove good batteries, too, if the set will be idle for a week or more.

GET RID OF SICK  
BATTERIES, LIKE MY  
PARTNER HERE...  
AND LET GOOD  
BATTERIES, LIKE ME  
OUT SO I DON'T  
GET SICK!

Keep it  
clean  
and dry!

Eyeball the battery compartment after a rain or when humidity is high. Wipe it dry with a clean, lint-free cloth. Moisture corrodes batteries and contacts.

Make  
sure...  
one up,  
one  
down!

Use cleaning compound, NSN 6850-00-597-9765, to finish the job.

Use a burnisher, NSN 5120-00-255-4458 to clean electrical contacts. Appendix A of CTA 50-970 OK's it. Some tool kits, like the TE-50B, have them already.

Use burnisher  
on contacts

AH SO...  
I THINK YOU  
VELLY MUCH  
WONG  
NUMBA!

For stubborn corrosion in the battery compartment, use sandpaper. Shine spring springs with a dose of cleaner-lubricant, NSN 6850-00-003-5295.

If moisture is showing up often in the battery compartment, check the gasket. Support puts in a new one if you need it. A little silicone, NSN 6850-00-880-7616, on the rubber can restore an old one.

A little  
silicone  
will  
help!





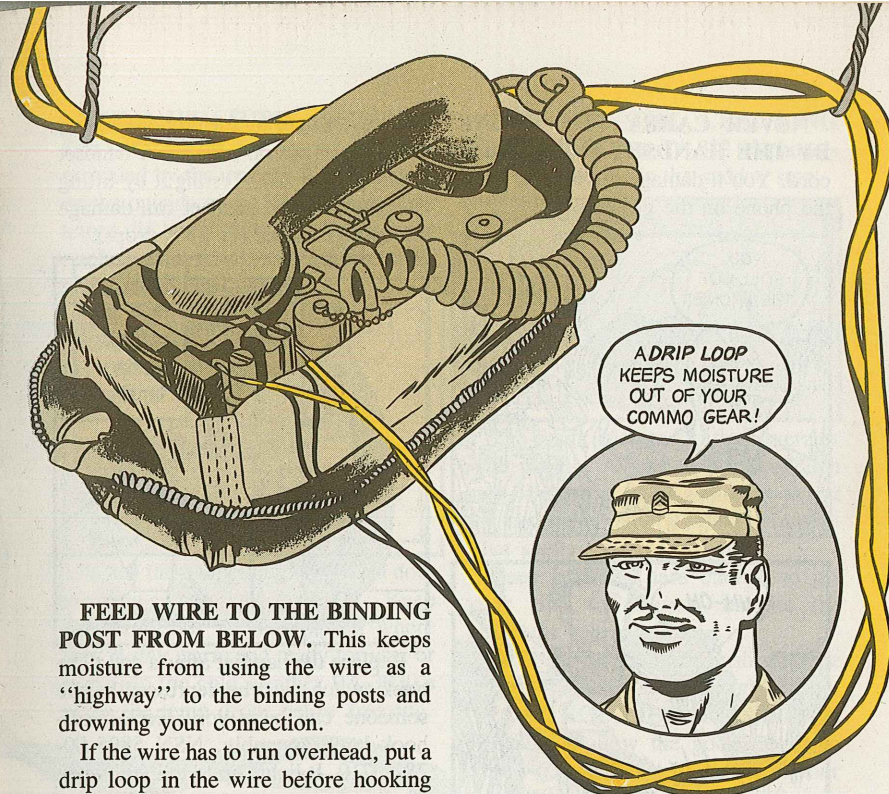
**YOUR PHONE IS WATER-PROOF**, sure, but give it a break. Cover it with a poncho or other protection during rain. Keep it off the ground, especially where puddles form.

Keep case screws snug. If you have screws missing, get new ones with NSN 5305-00-054-6670. You also need packing, NSN 5330-00-448-1018. The longer screw for holding the U-79 receptacle cap chain is NSN 5305-00-054-6671.



The disk inside the U-79 cap will also stop moisture. If it's loose, use a little adhesive, NSN 8040-00-270-8150.

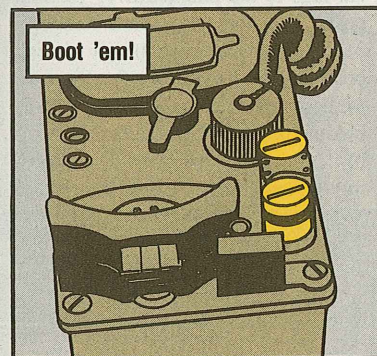
Keep the canvas cover on for extra moisture protection. If the canvas gets wet, remove it to dry it out. Towel or air dry the phone.



**FEED WIRE TO THE BINDING POST FROM BELOW.** This keeps moisture from using the wire as a "highway" to the binding posts and drowning your connection.

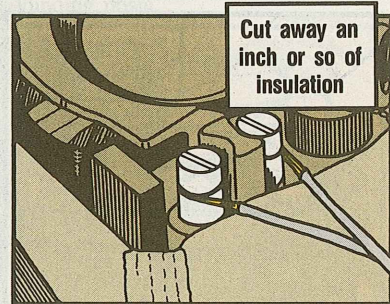
If the wire has to run overhead, put a drip loop in the wire before hooking it up.

NSN 5970-00-869-6263 brings rubber boots that help keep posts dry, too.



**Eyeball the connection** between the wire and the binding posts. Strip away

an inch or so of insulation. That's enough to ensure good contact. Take off more and the wires might touch. Take off less and insulation can get under the posts, keeping the wires from making good contact.

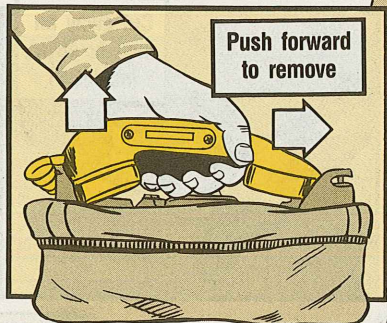




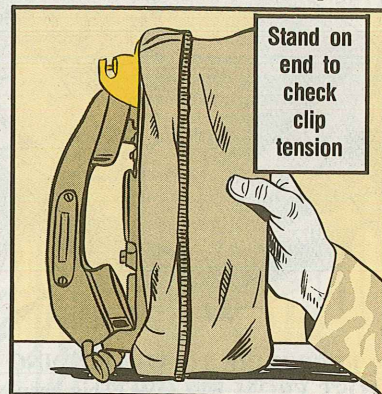
**NEVER CARRY THE PHONE BY THE HANDSET** or the handset cord. You'll damage the cord or bang the phone on the ground.



Remove the handset by pushing forward and lifting the rear end out first. Don't pull it straight out or yank it. You'll weaken the retaining clip.

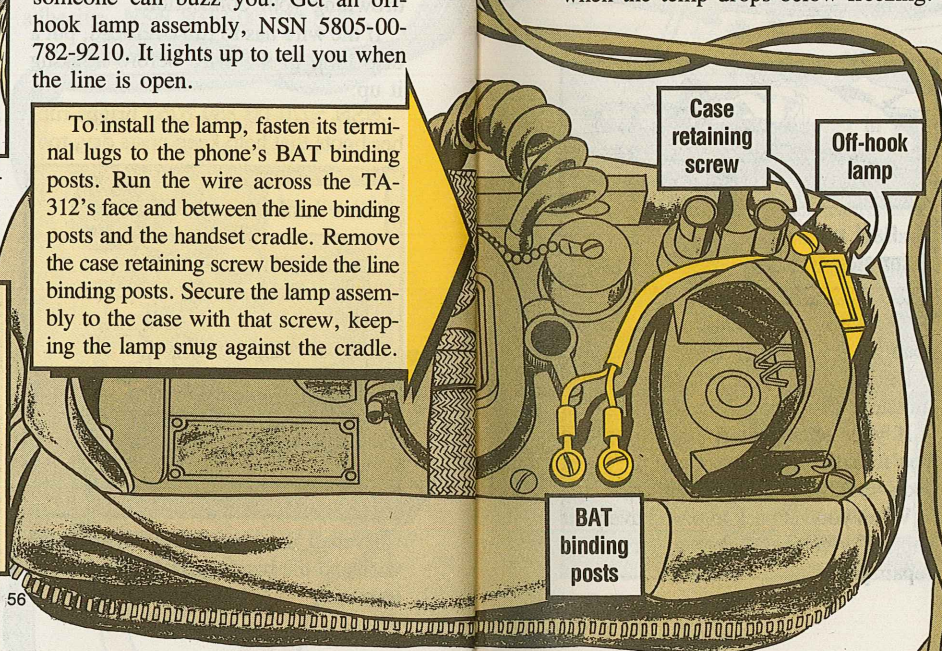


To test the spring for proper tension, stand the phone on end. If the handset holds, you're OK. Testing it by lifting the phone by the handset can damage the springs or the set (if it drops).



Replace the handset after a call. The hook switch must be depressed before someone can buzz you. Get an off-hook lamp assembly, NSN 5805-00-782-9210. It lights up to tell you when the line is open.

To install the lamp, fasten its terminal lugs to the phone's BAT binding posts. Run the wire across the TA-312's face and between the line binding posts and the handset cradle. Remove the case retaining screw beside the line binding posts. Secure the lamp assembly to the case with that screw, keeping the lamp snug against the cradle.

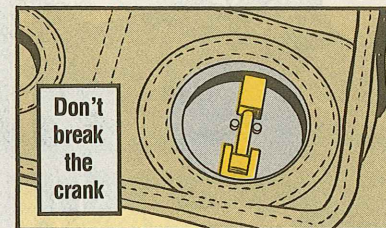


**COLD WEATHER MOISTURE PROTECTION** for your handset is provided by the deicing shield. Snap it on the outside of the mouthpiece when temps dip below freezing. Never put it on the inside. It won't do the job there.



When the temperature drops, so does the power of your batteries. Keep extra batteries in your pocket where they'll stay warm and ready for use, or switch to the cold weather BA-3030's when the temp drops below freezing.

**IT'S NOT THE CRANKING THAT KILLS** your TA-312 telephone's ring generator—it's the sudden stop.



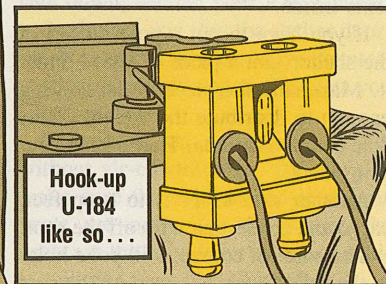
The crank is mated to the generator with plastic. A hard crank, a sudden stop, maybe a reverse motion to cut the ring short and you snap the plastic. That spells a trip to support.

Keep cranking hard enough to get your ring, of course, but let the generator roll to a stop.

Tuck the handle back flush with the generator when you're through ringing.

**LOST YOUR IDENTIFICATION PLATE?** Follow the good words in SB 11-631, which tell you to let your support order them for you with info you provide.

**THE U-184 ADAPTER CONNECTOR** that lets you "see" your TA-312 telephone ring is NSN 5805-00-708-2203. The neon light indicator goes on the field wire leading to your set's binding posts.





## Watch That Pole, Cat!



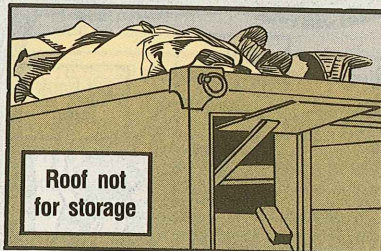
The roof of your commo shelter is no place to prop a camouflage screen support pole.

The weight of the screen and pole will cut a neat round hole in the thin aluminum skin covering your shelter. Enough holes outside—and one can be enough—and you'll have water problems inside.

If you have to put a pole on top of the shelter, put a piece of wood under it. Make sure the piece is flat and big enough to distribute the weight of the pole over a wide area. That'll keep your skin intact.

Another skin saver is to keep feet, cargo and concertina wire off the roof.

The wire, of course, will poke holes in the skin. Stacking cargo on the roof



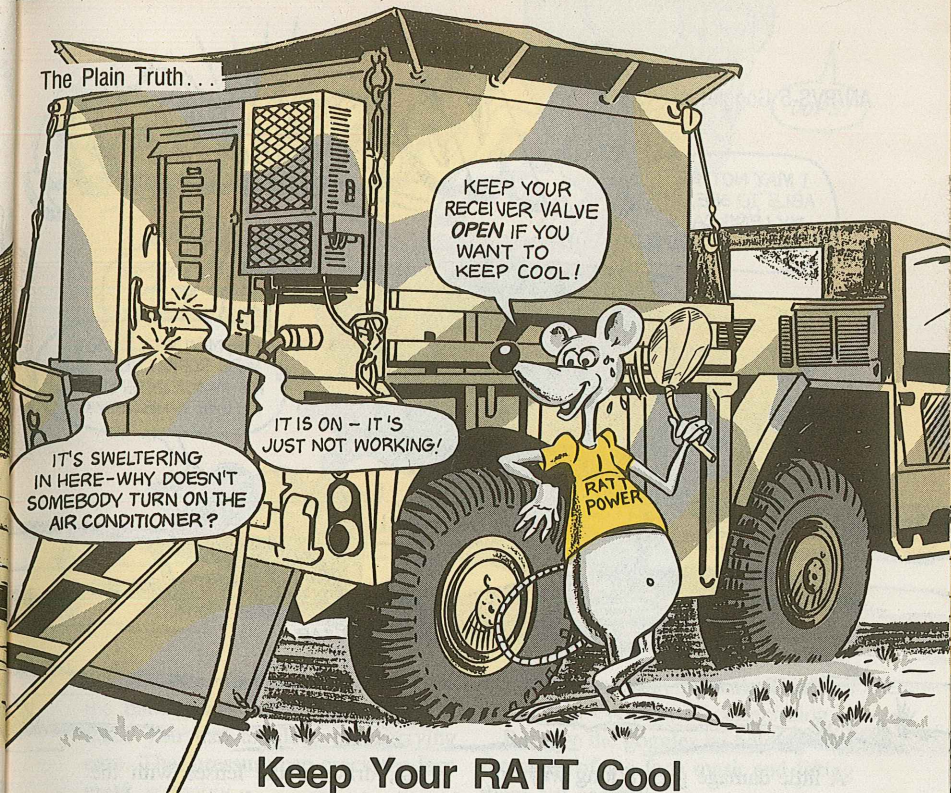
or walking on it can break shelter seams.

Either way you've got another moisture problem.

If your shelter starts leaking while you're in the field, use one of the quick fixes in TB 43-0124 to seal it.

When you get back to post, have your support give the shelter a permanent repair job.

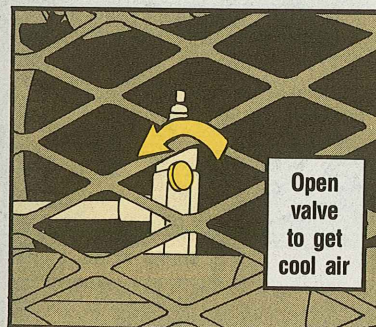
The Plain Truth...



## Keep Your RATT Cool

When is the air-conditioner in your AN/GRC-142, -122 not an air-conditioner?

When you forget to open the receiver valve. The valve controls the coolant.



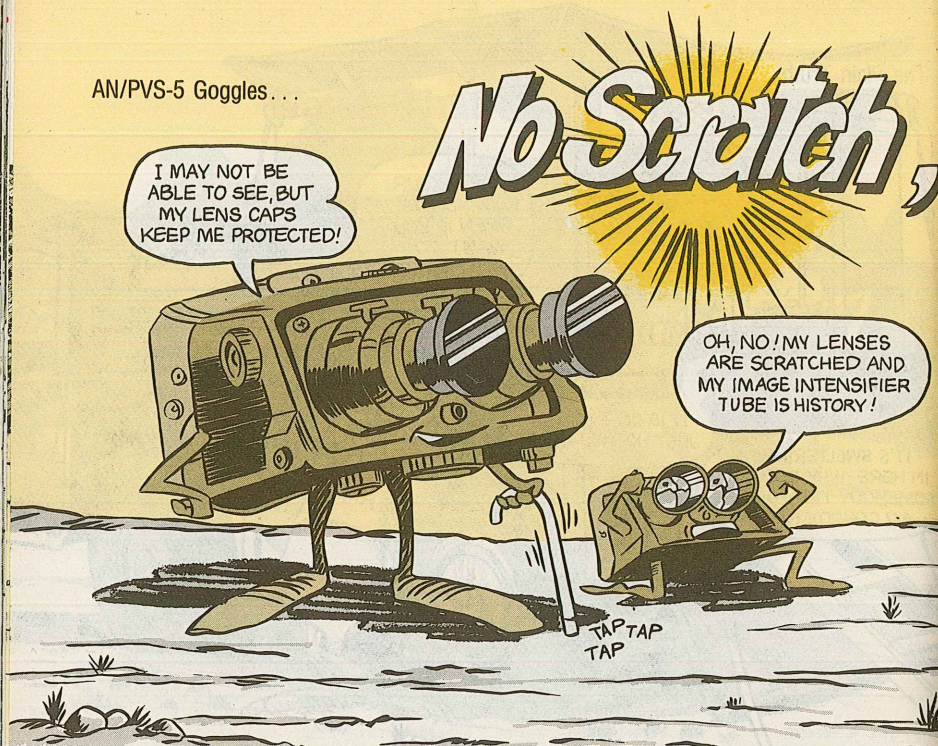
Closed, the valve keeps coolant in the holding tank. That turns the conditioner into an expensive fan, blowing hot air only.

Without the cool air, your AN/GRC-106 radio set will overheat and shut down, leaving your RATT silent.

So, before you shut the shelter door, reach over and turn the valve counter-clockwise until it's open. That lets you keep your cool.

Of course, on any model RATT without air-conditioning, you have to make sure the exhaust and intake air vents are open. On these sets, the vents are the only direct source of cooling air for your big AM radio.





A little damage goes a long way on a fragile piece of gear like your night vision goggles. A little PM can stop it.

### Don't Scratch

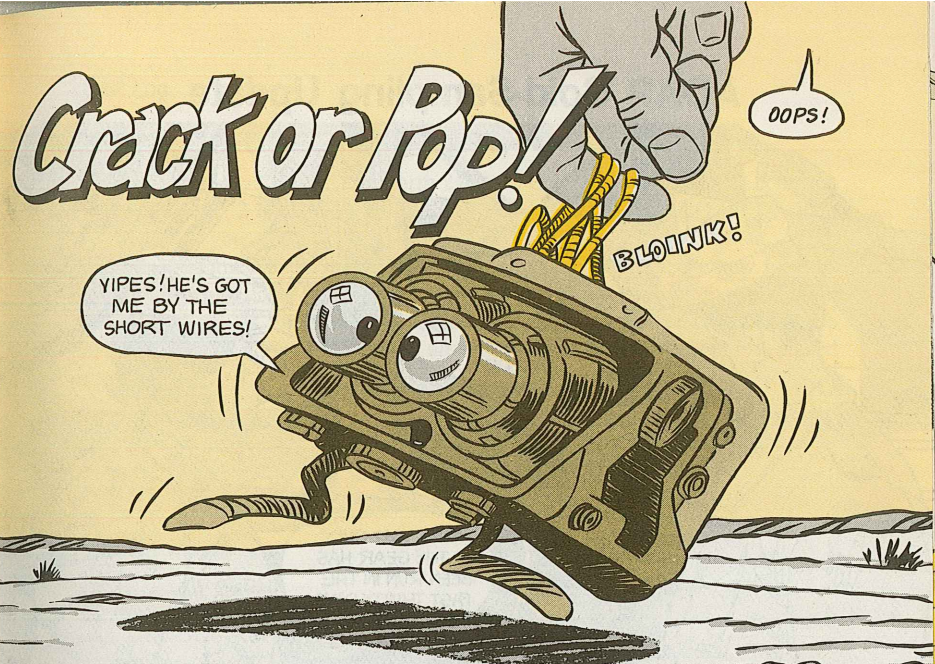
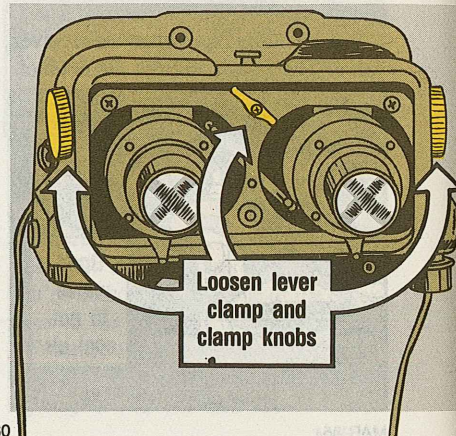
Use all four lens caps when you aren't using the goggles. They protect the lens glass from scratches that can ruin your field of vision. You sure don't need that when your life depends on what you can see.

During the day, the caps also keep a shot of sunlight from knocking out an image intensifier tube. That's a big—as in \$\$\$—problem.

### Cracking Up?

Always store your goggles in their case when you're through with them. Do it right, tho.

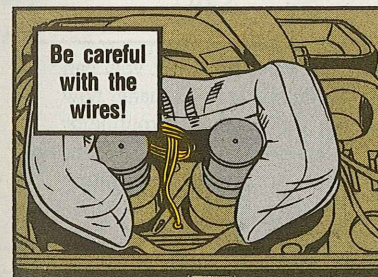
First, draw in the lenses with the focus knobs. Then relieve the tension on the monoculars by loosening the lever clamp and clamp knobs.



Left locked in the viewing position, the monoculars bear the brunt of the force you use to close the carrying case. That pressure can crack the face mask assembly.

### Don't Pop Wires

There are some fragile wires running under the face cushion assembly.



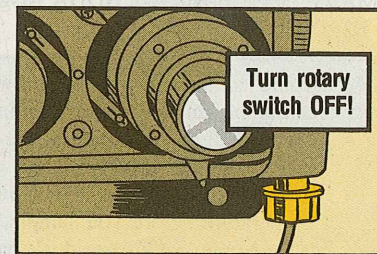
If you hook your fingers around one or two wires when you pull the goggles

out of the case, they'll break. That puts your night eyes out of commission.

Remove the goggles by holding onto the sides of the face mask and lifting them out carefully.

### More Power to You

Save your battery's life by turning the rotary knob OFF when you aren't using



the goggles. Also, use IR (infrared) only when you need it—during map reading, for example. IR puts a big drain on the battery.



## AOAP Cold-Sampling Update



The latest guidelines for AOAP cold-sampling of ground equipment are in SMART message No. 41, HQDA Msg DALO-PLZ-B 191715Z Jul 84. Here's how it goes:

- ☐ If the equipment's been run within the past 30 days, you can take an oil sample without warming up the equipment—no matter how cold it is. It makes no difference whether you're taking a routine or special sample.
- ☐ If the gear hasn't been run within 30 days, bring it up to operating temperature before you sample.
- ☐ If the equipment's so cold it's hard to draw out the oil, warm it up enough to take the sample.

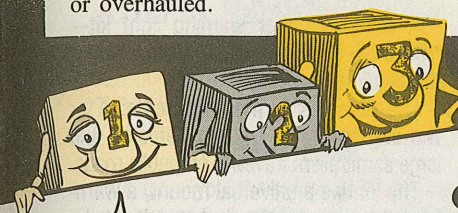
Of course, if the lab tells you to take a hot sample, bring the gear up to operating temperature before you sample.

AOAP Log...

## One Component, One Entry

It's a snap to start a new DA Form 2408-20 Oil Analysis Log. Just copy the info in Blocks 1, 2 and 3 right off the completed form. Para 5-7c(1) of DA Pam 738-750 says you also copy any needed info from the Remarks block.

Block 3c, Time Since New or Overhaul, stays the same on the new form as on the old form. Block 3c tells the number of hours that were on the item when it was installed—as Fig 5-10 of DA Pam 738-750 shows you. The entry stays the same, sample after sample, form after form, until the component is replaced or overhauled.



BONNIE WILL TELL THEM TO LEAVE US ALONE!

For use of this form, see TM 38-750; the proponent agency is DCSLOG.

END ITEM				2. SAMPLE FREQUENCY		3. COMPONENT	
1. NOMENCLATURE				100 Hours		a. NOMENCLATURE AND TYPE	
b. MAKE OR TYPE				60 DAYS		ENGINE LP 465-1	
c. SERIAL NUMBER						b. SERIAL NUMBER	
29595						386 0874	
						c. TIME SINCE NEW OR OVERHAUL	
						0	
				6. REASON FOR SAMPLE		7. RESULTS	
				ROUTINE		NORMAL	
				ROUTINE		RESAMPLE REQD	
				SPECIAL		CHANGE OIL	
						SIGNATURE	
						SP5 J. Hill	
						SP5 J. Hill	
						SP5 J. Hill	

4. DATE 5. END ITEM 6. COMPONENT 7. HOURS 8. LAST OIL CHANGE

DATE	END ITEM	COMPONENT	HOURS	LAST OIL CHANGE
10 DEC 84		400	100	
10 FEB 85		487	187	
14 FEB 85		492	192	

BLOCK 1, 2 AND 3 ARE ALWAYS THE SAME... FORM AFTER FORM!

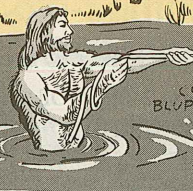
DA FORM MAY 81 2408-20

MAR 85

63

OIL





SIGINT/EW...

For Germany Only...

## STAR Light

In the dark over signal intelligence or electronic warfare equipment problems?

Let the Communications-Electronics Command's (CECOM) STAR team shine on you.

STAR (Signal Intelligence/Electronic Warfare Technical Assistance and Readiness) teams were set up to help you solve maintenance and supply problems on gear such as the AN/GLO-3B and AN/MLQ-34 countermeasure sets and the AN/MSQ-103A receiving set.

Call STAR at these numbers:

CONUS: AUTOVON 992-5327 (After duty: AUTOVON 992-3634)

USAREUR: Mannheim Mil 2131-7521 (After duty: Mil 2121-8888)

Two special CONUS numbers have been set up for the Electronics Materiel Readiness Activity (EMRA):

Maintenance: AUTOVON 249-6292

Supply (B46 items): AUTOVON 249-6495

## HOTLINE Number Change

The depot maintenance hotline for all howitzers, M578, FAAR, FADAC, ground guidance and shop/test equipment for I-HAWK and Nike-Hercules is AUTOVON 238-7693. The commercial number remains (717) 263-7693.

## Warning Light Available

A rotating amber warning light kit—NSN 2590-01-107-9696—is now available for units in Germany.

The kit meets German requirements for warning lights on tracked vehicles and large semitrailers traveling on public roads.

The kit has a universal mount, a warning light, mounting hardware and installation instructions.

The 24-volt light assembly, NSN 6220-00-947-7570, is already widely used. (See "Warning Light NSN's" on Page 46 of PS 378.)

You'll find more on the kit in Para 5-1 of TB 43-0001-39-1, Apr 84.

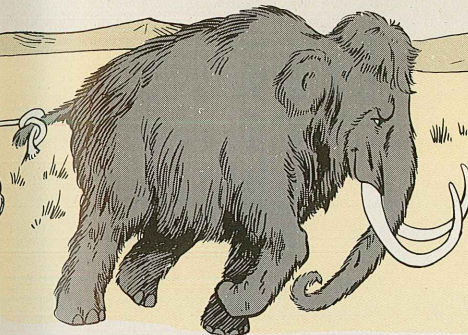
## M332 Light Lens

Side clearance lights on late model M332 ammo trailers may have wrong lenses—blackout instead of red. Make sure yours are red, NSN 6220-00-299-7426, as in TM 9-2330-231-14&P.

## M2/M3 Hub Bolt Torque

When you mechs go to tighten sprocket mounting bolts on M2/M3 Bradley's, lighten up a bit. The headshed says the torque called for on Page 2-11 in TM 9-2350-252-20-1-1 is wrong. Tighten the bolts to 171-189 ft-lb.

*Would You Stake Your Life <sup>right now</sup> on*



FOR SPECIAL PROBLEMS GET SPECIAL ASSISTANCE!



## AT-271A Number Blunder

The NSN for an AT-271A antenna is 5820-00-242-4967, not 5820-00-424-4967 as listed in TM 11-5820-667-12-HR.

## Dry Gas NSN

We gave you the wrong NSN for the 1-gal can of fuel additive on Page 14 of PS 385. The right number is NSN 6810-00-597-3608.

## NSN for Isolation Mount Boot

Get the elastomeric front boot on your OH-58A's pylon isolation mount with NSN 1560-01-134-7273. It's shown as Item 10 in Fig 2-36B of TM 55-1520-228-23-1 but it's not listed in the -23P TM.

## BB-590 NSN

Page D-3 of TM 11-7440-283-12-1 has the wrong number for your Battery Computer System power distribution unit's rechargeable nickel-cadmium battery. It should be NSN 6140-01-063-3918.

## Muffle Engine Noise

Hood insulation for your M911 C-HET tractor truck comes as two separate items. Use PN 104175C for the right side and PN 104176C for the left. The FSCM is 45152.

## Oil Filter NSN Change

The NSN for the M113-series FOV's transmission oil filter parts kit has been changed to NSN 2940-00-678-0641. The kit, which includes two packings and one element, is Fig 106 of TM 9-2300-257-20P.

## 4.2-KW Lifting Bracket

If you've got a problem using the M577A1/A2 vehicle's davit hooks on your 4.2's lifting bracket, get a bracket with a larger diameter hole. Bracket, NSN 6115-00-134-0852, will let the hooks set securely so you can safely lift and move the generator.

## 1/4-Ton Master Cylinder

If mounting bolt holes in your M151 or M151A1 1/4-ton truck's new brake master cylinder are too small, drill 'em bigger with a 3/8-in bit. TB 43-0001-39-3, Oct 82 OK'd this fix.

## 2 1/2-Ton Air Governor

When you're putting a new air governor in a 2 1/2-ton truck, forget the procedures in Para 13-35 of TM 9-2320-209-20-3-2. Instead, go by the instructions in TB 43-0001-39-2, Jul 84.

*the Condition of Your Equipment?*



# PRIDE IN THE JOB



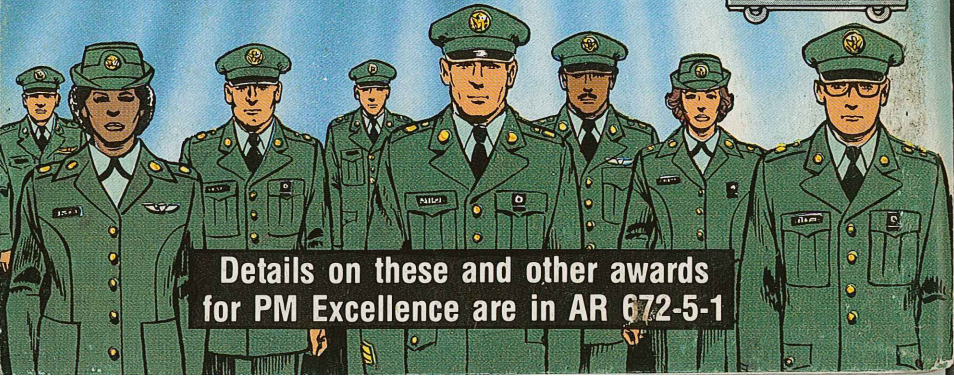
**AIRCRAFT CREWMAN**



**SENIOR AIRCRAFT CREWMAN**



**MASTER AIRCRAFT CREWMAN**



**Details on these and other awards  
for PM Excellence are in AR 672-5-1**