

Issue 430

# PS

September  
1988

## THE PREVENTIVE MAINTENANCE MONTHLY



WE JUST  
FOUND OUT  
THEY'VE BEEN  
SUPERSEDED!

Approved For  
Public Release;  
Distribution is  
Unlimited

Unit Publications Guide  
See Page 27

# Ask...and You'll Receive



THE  
PREVENTIVE  
MAINTENANCE  
MONTHLY

TB 43-PS-430, The Preventive Maintenance Monthly, is an official publication of the Department of the Army, providing information for all soldiers assigned to combat and combat support units and all soldiers with unit maintenance and supply duties. All information published has been reviewed and approved by the agency responsible for the equipment, publication or policy discussed. Application of the information is optional with the user.

ISSUE 430 SEPTEMBER 1988

## FIREPOWER

M1A1 Tank	2, 3	M2/M3 Bradley	8-9
M1-Series Tanks	4, 5	M85 Machine Gun	10-13
MLRS	6		
Stewart Warner Heater	7		

## GROUND MOBILITY

M939A1/M939-Series Trucks	14-15, 16	M332 Trailer	22
2 1/2-ton Trucks	17	M872A1 Trailer	23
HEMTT's	18, 19	M796 Bolster Trailer	23
M915-Series Trucks	20	Terminal Kit	24
M151-Series Trucks	20	Antifreeze	25
Fuel Tankers	21		

## AIR MOBILITY

AH-1	35	Aircraft Tires	40-41
Aviation Messages	35	Aircraft Windshields	42
UH-60A	36, 38-39	Nickel-Cadmium Batteries	43
Special Inspections	36		
Avionics	37		

## COMMUNICATIONS

SB-22 Switchboard	44	AN/VIC-1 Intercom Set	48, 49
Printed Circuit Board	46	AM-2060 Amplifier-Power Supply	49
Cable Connectors	47		

## TROOP SUPPORT

New Pubs, Audio-Visual Stuff	26	Welding Torch Tips	54-55
Unit Publications Guide	27-34	Welding Jacket	56
Ropes	50-51	NSN's	56
Clark 4,000-lb Forklift	52	Container Handler Filter	56
Erdlater WPU	52	Fire Extinguisher Bracket	56
250-CFM Compressors	53	AOAP Pump	57
		M11 Decon	58, 59

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

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

By Order of the Secretary of the Army:

**CARL E. VUONO**  
General, United States Army  
Chief of Staff

Official:

**R.L. DILWORTH**  
Brigadier General, United States Army  
The Adjutant General

PS, The Preventive Maintenance Monthly (ISSN 0475-2953) is published monthly by the Department of the Army, Washington, D.C. Second Class Postage is paid at the Lexington, KY post office and at additional mailing offices.

Postmaster: Send address changes to Cdr. U.S. Army Pubs Ctr, 2800 Eastern Blvd, Baltimore, MD 21220-2896.



MOST TIMES WE'VE GOT THE ANSWER RIGHT AT OUR FINGERTIPS. YOU'LL GET A REPLY IN A FEW DAYS.

OTHERWISE, WE'LL DIG AND HUNT UNTIL WE FIND THE ANSWER ... AND GET BACK TO YOU AS SOON AS POSSIBLE!

THERE'S PLENTY OF HELP AVAILABLE. USE IT!



There's no excuse for groping and guessing when you need information to maintain your equipment. Learning the hard way—trial and error—is hard on your equipment. And it can be hard on you, too, if your guessing leads to injury... or worse!

You've got several sources of information when your TM's don't make it clear to you. Your first is your own Direct Support. Then there's the MAIT—Maintenance Assistance and Instruction Team. If you're on—or near—a major installation, there's the Logistic Assistance Office. And there are Hot-lines that put you directly in touch with the headsheds for the equipment.

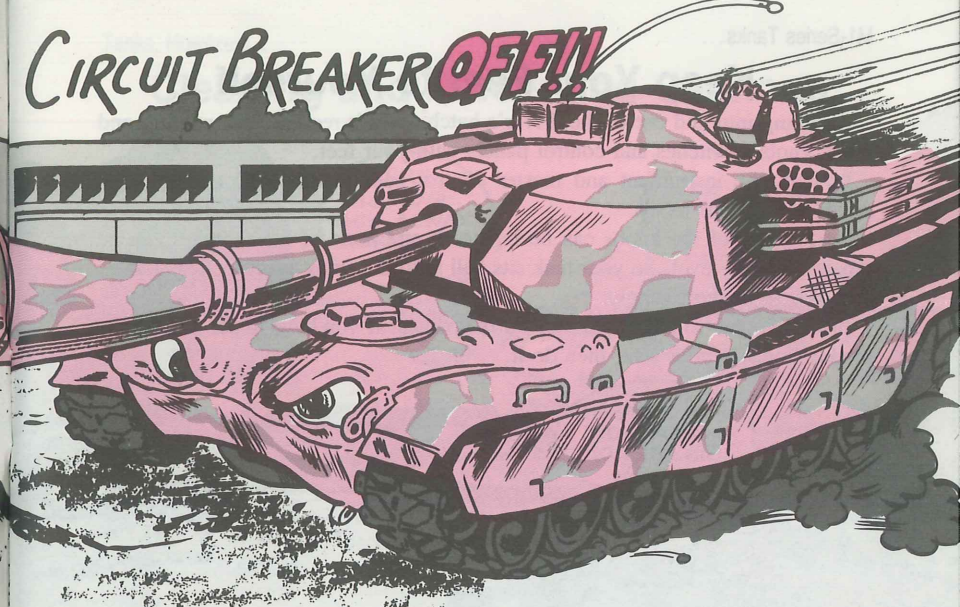
And don't forget PS! We're as close as the nearest mailbox. Got a question about maintenance or supply? Something in your TM's you don't understand?

Just whip out a stubby pencil and any ol' piece of paper and drop a line to:

MSG Half-Mast  
PS, The PM Monthly  
Lexington, KY 40511-5101

# TURN "NBC" CIRCUIT BREAKER OFF!!

IT'S NOT MY FAULT YOUR CREW DIDN'T TURN ME OFF !!



Help save your tank's engine by making sure the NBC system is turned off before you start up or shut down.

Otherwise, the engine recuperator won't last long. Do exactly what Change 5 to TM 9-2350-264-10-2 tells you.

## START-UP PROCEDURES

- Make sure the tank commander turns off circuit breaker 3 in the turret network box. That disables the NBC system.

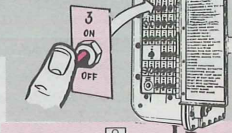
- Start the engine using normal procedures in the -10-2.

- Idle the engine for 2 minutes.

- Have the tank commander turn on circuit breaker 3 and turn off the NBC mode switch.

Continue with the TM procedures as written for afterstarting checks, etc.

### TURN OFF



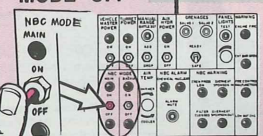
### RPM GAGE AT 950



### TURN ON...



### ... THEN NBC MODE OFF



## SHUTDOWN PROCEDURES

- Have the tank commander turn off circuit breaker 3.

- Idle the engine for 2 minutes.

- Shut down the engine using -10-2 procedures.

With CB3 turned off, the NBC system will not turn on automatically when you're in an NBC environment or firing the coax.

To avoid contamination or toxic ammo fumes, be sure the CB3 is turned on after starting and the NBC mode switch is turned off.

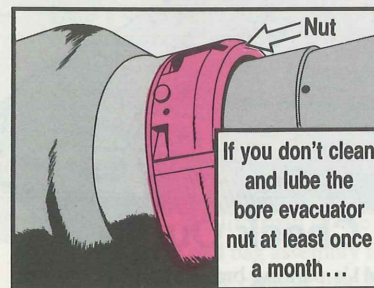
### TURN OFF



## Keep Bore Evacuator Nut Clean

Make sure you clean and lubricate the bore evacuator nut on the 120-MM cannon at least once a month.

If you don't clean and lube the nut it freezes in place. If you can't get it off, the tanks has to go to support.



So do the work after each firing, or at least monthly.

The monthly PMCS called for on Page 2-33 of TM 9-2350-264-10-1 requires that you also pull after-firing PMCS when your tank's not been operated or fired in a month. See pages 3-180 and 3-181 of TM 9-2350-264-10-3 for details.

Manually turn on the NBC system when firing the main gun in the closed-hatch mode.

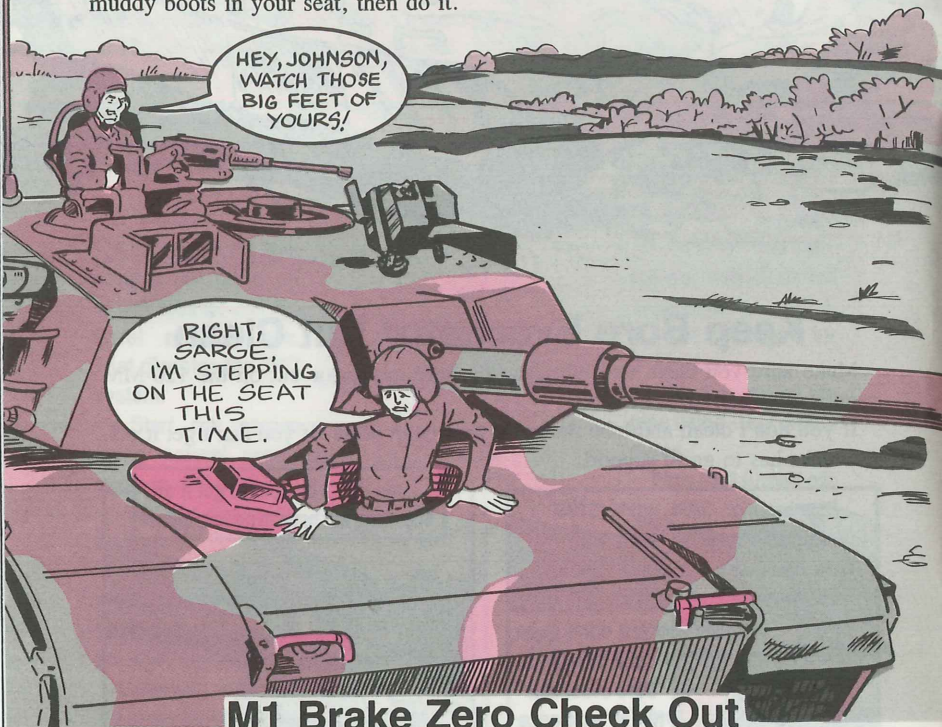
## Keep Your Feet to Yourself

Climbing into and out of the driver's hatch doesn't require you to batter and break knobs, switches and control panels with your feet.

In fact, the instrument and master control panels should be off limits to anything but your hands.

Only a few of the knobs can be replaced, and none of the switches can be repaired at unit level. So your tank sits still until DS finds a replacement panel, and they're in short supply.

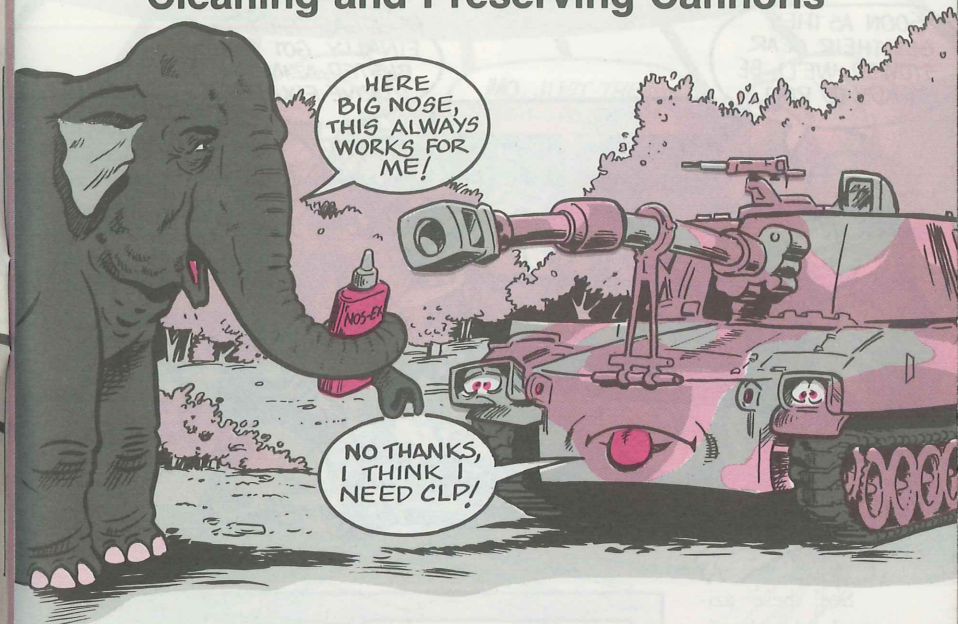
Just remember to keep your feet off the panels. If you have to put your dirty, muddy boots in your seat, then do it.



## M1 Brake Zero Check Out

You no longer need to depressurize the M1's parking brake hydraulic system before making the hydraulic zero pressure check in step f on Page 2-234 of TM 9-2350-255-10-2. Just depressurize the turret hydraulic system. Then check the oil level on the reservoir. M1A1 tank TM 9-2350-264-10-2 already shows step f deleted on Page 2-246. Make a note until the -255-10-2 TM is changed.

## Cleaning and Preserving Cannons



What's easy to use and does a good job of cleaning and preserving your tank or howitzer cannon?

Why, it's CLP, of course! And now it comes in kits containing everything you need to take advantage of its time- and labor-saving characteristics.

Here's what is available:

- For 105MM and 120MM tank cannons, use kit, NSN 1015-01-196-2173. The kit has 30 pre-measured containers of CLP, a liter of CLP in a trigger spray bottle, 30 bore cleaning sleeves and a bore evacuator brush.
- For 105MM, 155MM and 203MM (8-in) artillery weapons, use NSN 1025-01-196-2172. This kit has all of the items in the tank kit, plus a primer vent brush.

You can also get a new nylon bristle bore brush to use when applying CLP. It has 10 times the life span of the old wire brush.

To get a brush and bag assembly for a 105MM cannon, use NSN 1015-01-196-2175; for a 155MM cannon, use NSN 1025-01-196-2176; and for a 203MM cannon, use NSN 1030-01-196-2177.

Remember these important tips, though. The chemicals and equipment of the CLP system cannot be used with rifle bore cleaner (RBC), and CLP will not work well if it's used with the old brush assembly.

## Stow It Somewhere Else

SOON AS THEY GET THEIR GEAR STOWED, WE'LL BE READY TO ROLL.



GLAD THEY FINALLY GOT THAT BUSTED AZIMUTH DRIVE FIXED

HOW DID THAT BREAK?

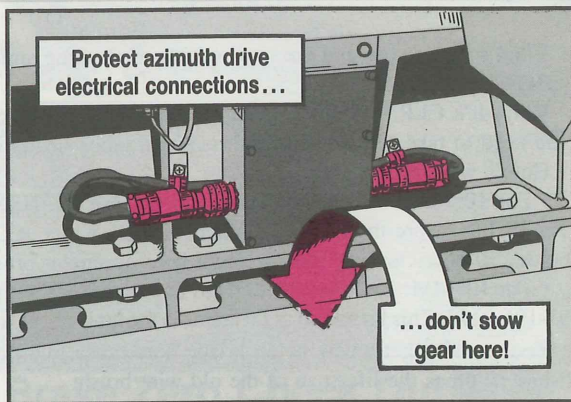
NO ONE KNOWS

See these azimuth drive electrical connectors? Notice that they don't have protection against bumps and knocks?

While their location at the rear of the launcher/loader module may seem like a great place to put extra gear, it's not.

The only "help" you'll get from stowing gear there is a busted azimuth drive when one or both of the connectors is snapped off. Plus, there's no blast protection for any gear left there.

Put your stuff somewhere else.



## Terminal Strip Saves Cover



NO, JUST THE TERMINAL STRIP!

IS IT TERMINAL, DOC?

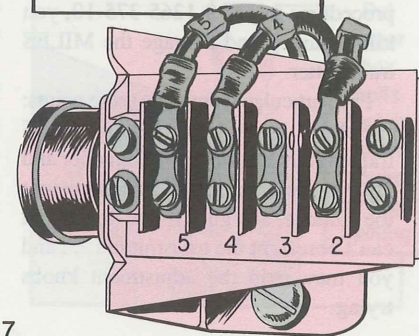
If your troubleshooting turns up a bum electrical cover assembly on a Model 10560C-24, 10560M or 10560M24B1 heater and the only thing wrong is a chipped or cracked terminal strip, replace the strip with NSN 5940-00-983-6082.

Two things to remember, though. A chipped or cracked terminal strip is OK unless:

- The chip causes a loose terminal.
- A crack goes all the way through the body. If one clearance hole on one or both ends is cracked, the strip is still OK to use.

Make a note of the NSN until TM 9-2540-205-24&P is updated.

Replace strip with  
NSN 5940-00-983-6082

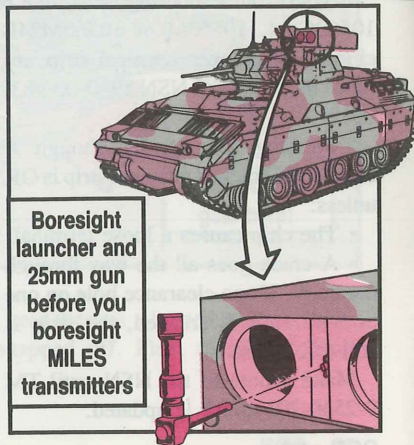


# CARELESSNESS CAUSES MILES OF TROUBLE!



Training with the Multiple Integrated Laser Engagement System (MILES) is not a slap-it-on-and-go situation. If you don't carefully follow the MILES setup procedures in TM 9-1265-375-10, you kill accuracy and damage the MILES transmitter.

Pay particular attention to these points: Before boresighting the MILES transmitters for the TOW launcher and 25-mm gun, you must first boresight the launcher and gun. If you don't, you can't boresight the transmitters . . . and you may strip the adjustment knobs trying.

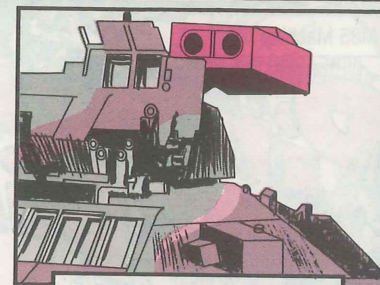


**Boresight launcher and 25mm gun before you boresight MILES transmitters**

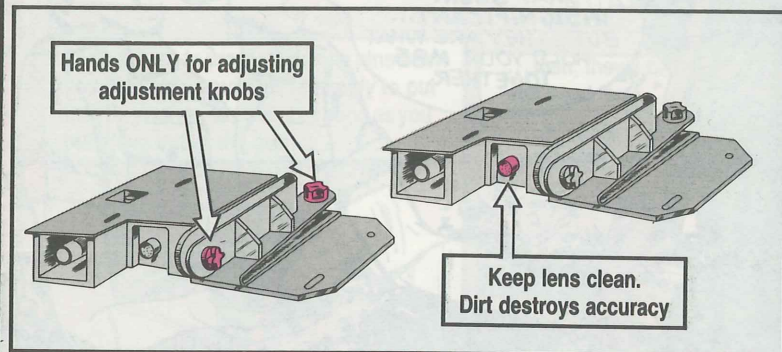
Leave the launcher fully erect and the TOW system activated after you're through boresighting. The launcher must be up and activated to boresight TOW MILES accurately.

Use your adjustable wrench only on the TOW MILES transmitter bolts. If you use it to tighten the adjustment knobs, you break or strip their screws.

For boresighting TOW MILES, select a target at least 2,000 meters away . . . 2,500-3,000 meters will give you the best accuracy.



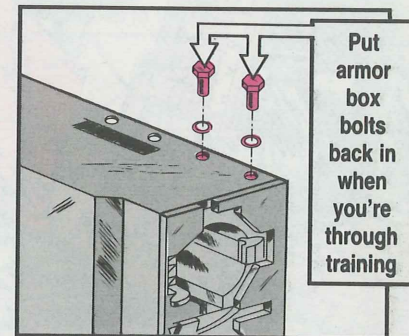
**Launcher must be up and on to boresight TOW MILES!**



If you travel over rough country or go through a temperature change of more than 25-30°F, boresight both transmitters again. Rough movement or temperature changes throw off the transmitters' alignment.

Clean the lenses on both transmitters with lens paper. In the dust of the desert, you'll need to clean the lenses at every halt. If the lenses are dirty, it's like shooting through a fog bank. You have no accuracy or range.

When you're through training, put the launcher armor box bolts back in that you removed to install the transmitter. The MILES bolts are 1/2-inch longer than the armor box bolts. If you tighten the longer MILES bolts without the transmitter mounted, the bolts bottom out and strip the armor box threads.



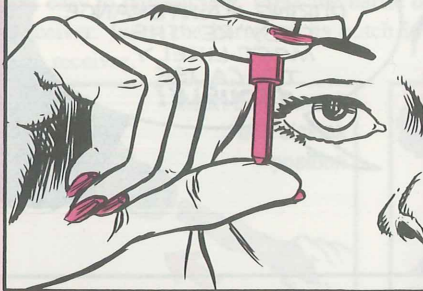
**Put armor box bolts back in when you're through training**

# Pin Your Attention on Pins

THESE LITTLE PINS MAY SEEM INSIGNIFICANT... BUT THEY ARE WHAT HOLD YOUR M85 TOGETHER...

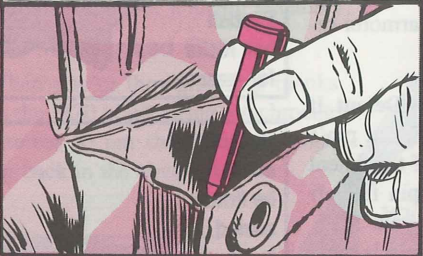
IF EVEN ONE PIN IS FORGOTTEN OR DISAPPEARS, YOUR M85 COMES UNGLUED AND YOU CAN'T SHOOT.

PIN THESE POINTS TO YOUR PM TO KEEP PIN PROBLEMS PENNED UP!



The best way to prevent missing pins when you field strip your M85 is simply to put them in your pants pocket as soon as you pull them out of the gun...

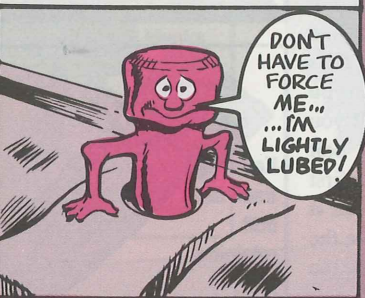
... then, they'll be there when you need 'em!



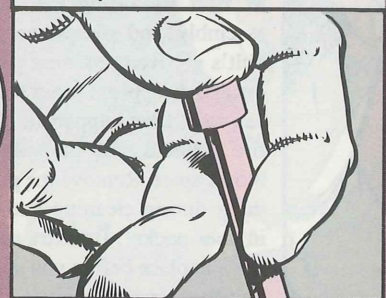
NEED ME YET?

Keep them clean and lightly lubed so they'll slide in and out of their holes without being forced.

If they're detent pins, work their ball locks as you lightly lube them to keep the snap in the detents.



DON'T HAVE TO FORCE ME... I'M LIGHTLY LUBED!



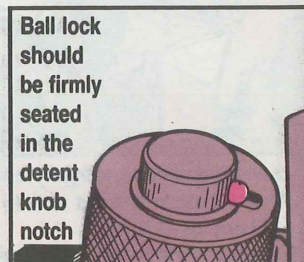
PAY CLOSE ATTENTION TO THESE PINS DURING MAINTENANCE... THEY'RE THE MOST LIKELY TO CAUSE TROUBLE!

■ **Feed and Ejector Quick Release Pins.** The little ball locks that hold the two pins in place wear down. The pins work out and the feed and ejector assembly comes loose. Eyeball the ball locks for wear. Your armorer replaces worn pins.



Eyeball ball locks for wear

■ **Charger Assembly Detent.** If the ball lock on the detent pin's not set in the notch of the detent knob, the knob and pin fall off and you can't charge your M85. Make sure the detent pin is positioned right and tight in the knob before you fire.



Ball lock should be firmly seated in the detent knob notch

■ **Bolt Retaining Pin.** During assembly and disassembly, the bolt's grooved retaining pin falls out and disappears faster than you can say "what happened." If you fire without the pin, the bolt blows apart. Remove the pin first thing during cleaning and put it in your pocket. Be extra sure the pin's in place before you slide the bolt back in the receiver.

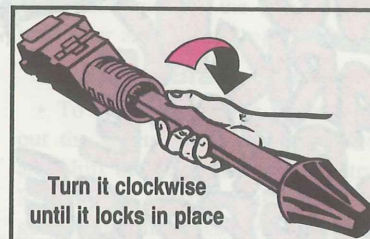
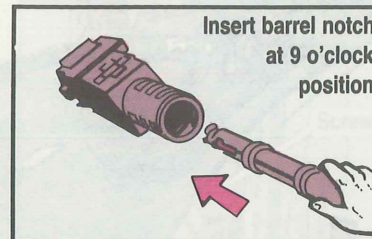


Keep track of bolt retaining pin

## Barrel Business

The barrel can fool you. You think you've locked it in, but as soon as you squeeze the trigger the barrel whizzes downrange. Very embarrassing for you.

It's easy to prevent that. Press the barrel latch and then the barrel lock on top of receiver. Insert the barrel so its notch is at 9 o'clock as you face the front of the receiver.

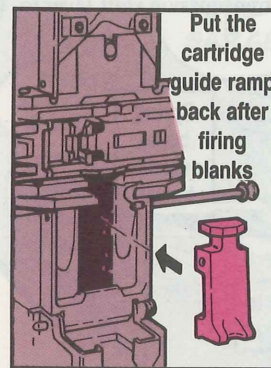


Turn the barrel clockwise until you feel it lock in place. The barrel latch will snap down when the barrel locks.

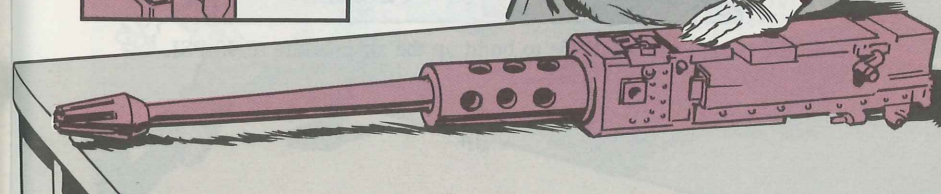
Be sure by twisting the barrel back and forth. It shouldn't move. If the barrel moves and you know it's locked in, your armorer needs to check the barrel locking lugs and accelerator housing assembly.

## Blanked Out

When you're through firing blanks with the M20 blank firing attachment, remember to put the cartridge guide ramp back in the cover.



IF YOU FORGET YOUR M85 WON'T FEED NEXT TIME YOU SHOOT.





DID  
YOU CHECK  
THE PARKING  
BRAKE?

NO, I  
FORGOT!

# NO PARKING BRAKE SURPRISE HERE!

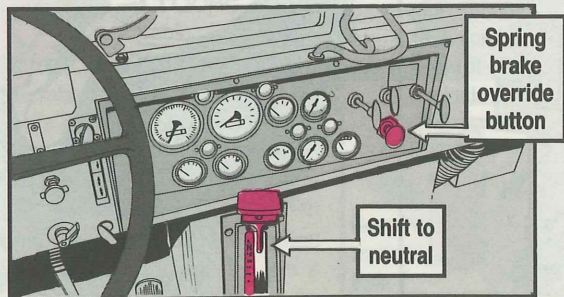
Drivers, it's easy to forget about the parking and spring brakes on your 5-ton truck until you need 'em. But when you need 'em, you need 'em, and that's no time to be without 'em.

That's why it's so important that you check both brakes before you leave the motor pool. Your truck is NMC if either brake is not working right.

## Parking Brake Check

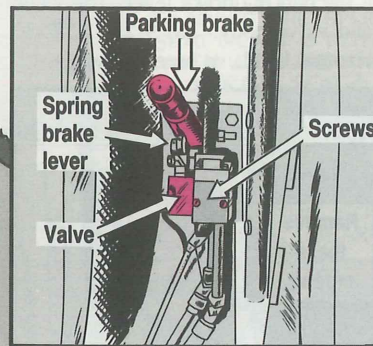
TM 9-2320-272-10 does not tell you how to check it, so here's what you do:

- Make sure no one or anything is in front of the truck.
- Shift the transfer to high range.
- Pull the transmission shift lever to neutral.



Start the engine and let it idle to build up the air pressure to 90 PSI.

- Place your foot on the service brake pedal. Push in on the spring brake override button on the instrument panel, and then set the parking brake lever.



- Place transmission in 1-5 (DRIVE).
- Release the service brake pedal.

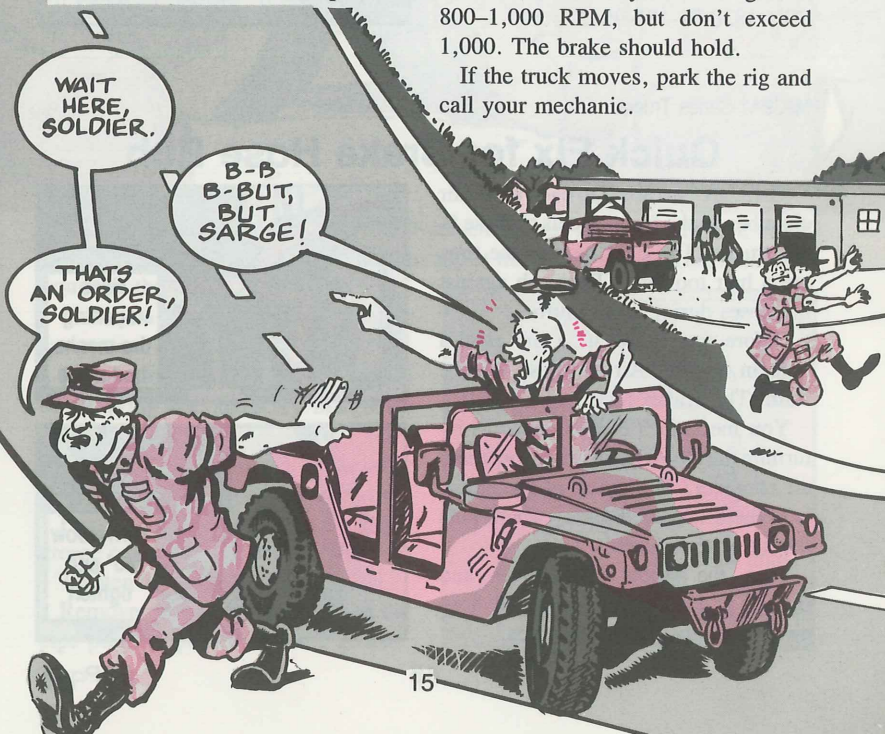
Don't rev the engine. The vehicle shouldn't move. If the truck moves, shift to neutral. Turn the knob on top of the parking brake lever to the right. That increases braking power. Try the brake test again. If the brake doesn't hold after adjustment, report it.

## Spring Brake Check

To check the spring brakes, pull out the spring brake override button and shift the transmission to neutral. Release the parking brake lever and gently raise the valve lever at the base of the parking brake handle for the spring brake. You should hear air hissing out of the air tanks as the spring brakes engage.

- Shift the transmission in 1-5 (DRIVE). Gradually rev the engine to 800-1,000 RPM, but don't exceed 1,000. The brake should hold.

If the truck moves, park the rig and call your mechanic.

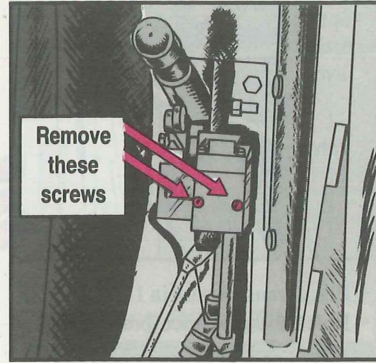


## Valve Lever Adjustment

Mechanics, if you get a report that the spring brakes do not hold, your first step is the spring brake valve at the base of the parking brake lever. The valve lever must be horizontal to the cab floor and valve body. TM 9-2320-272-20 does not say how to adjust the lever to horizontal level, so here's how:

- Remove the screws that hold the valve.
- Turn the valve over and loosen the set screw.
- Adjust the lever arm until it is parallel to the valve body.
- Tighten the screw and put the valve back on.

Pull the hand parking brake on and then let it off a couple of times. If the valve lever doesn't go back to the horizontal position, replace the valve with NSN 4820-01-187-9542.



M939A1-Series Trucks...

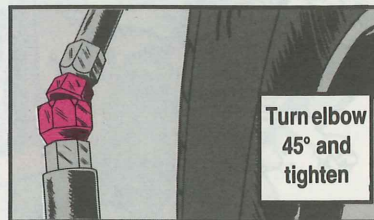
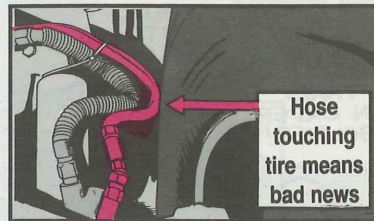
## Quick Fix for Brake Hose Rub

There are two hoses to each brake air chamber on the front wheels of these 5-ton trucks. The ones next to the tires are a hair too long. Tires rub against the hoses during a hard turn.

Before you know it, a tire rubs a hole in a hose. Air escapes. Wham! Bam! The brakes lock.

You mechanics can prevent this by turning the elbow between the hose and air chamber. The crook in the elbow is pointed toward the tire, which puts the air hose in harm's way.

Turn the elbow 45 degrees and tighten it down. This holds the hose away from the tire in the turns.



## Spring Seat Bearing Lube Change



There's been a change to the 3,000-mi/semiannual section of Note 8 of LO 9-2320-209-12. Now there's no need to adjust the spring seat bearing nuts when you lube the spring seat.

Until you get a revised LO, lube the spring seat like so:

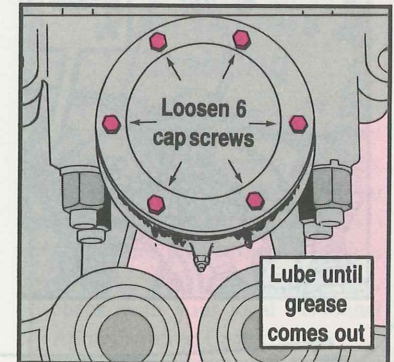
Remove the pipe plug at the bottom of the spring seat, and screw in a grease fitting.

Loosen the screws on the bearing cap. Back them out a full turn or so.

Pump GAA through fitting until grease comes out around the cap.

Tighten the screws to 16 to 20 lb-ft.

Remove the fitting and replace the pipe plug. Wipe off the extra grease.



## Check Breaker for a Charge



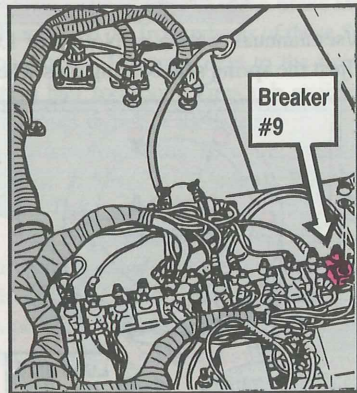
GREAT JOB, GUYS! THIS BREAKER COULD HAVE COST US A BUNDLE !!

SHUCKS, SARGE, IT WAS JUST A LUCKY BREAK...ER

Dear Editor,

Replacing a \$1.07 breaker saved a \$486.45 alternator! Here's what happened.

When troubleshooting a charging problem on a HEMTT, I followed the procedure on Page 2-114 of TM 9-2320-279-20-1. I determined that the alternator wasn't putting out any power. The TM said to replace the regulator or alternator. Checking further, though, I found that circuit breaker No. 9 was bad, so the regulator wasn't getting power.



You can run a quick check on the breaker by turning on the engine brake. If it doesn't work, check wire No. 831 at the regulator for battery voltage. A lack of power means it's time to check the breaker. If you have power, check the regulator and alternator.

SSG James M. Snoke, Jr.  
APO San Francisco

*(Editor's note: A tip for no charge! That's a great way to save money.)*

# LOCK RIM LOCK RINGS RIGHT!



Make sure the split lock ring goes on the rim like so:



Always put the tire in a tire cage before you hook up the air hose.

## HEMTT Machine Gun Mounting Snafu

The TM's for HEMTT trucks are fuzzy about who does what to the machine gun mounting kit, NSN 2590-01-220-6377. Here's the straight scoop: DS installs it the first time and units maintain it. All maintenance instructions are in Para 21-2 of TM-9-2320-2798-20-3.

## Fuel Drivers' Training

If your MOS is 77F and your job requires you to drive a fuel delivery vehicle, there's a 6-week course at Ft Dix, NJ, that gives you the additional skill identifier (H7) to become a petroleum vehicle operator. For more information, check with your local Personnel Administrative Center.

## Warning Kit NSN Change



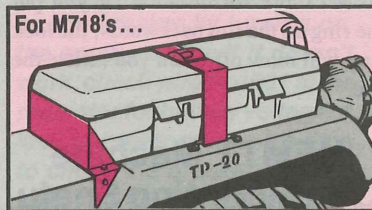
M151-Series Trucks...

## Tie Down Your Warning Kit

You may be required to carry a highway warning kit in your 1/4-tonner, but there's no place in or on the truck to secure it.

Your mechanic—with a little help from support—can add a couple of straps to tie down the kit.

Instructions are in Para 3-3e of the TACOM EIR and Maintenance Digest, TB 43-0001-39-3 (Jul 87). Check with your local LAO or write Bonnie if you need a copy.



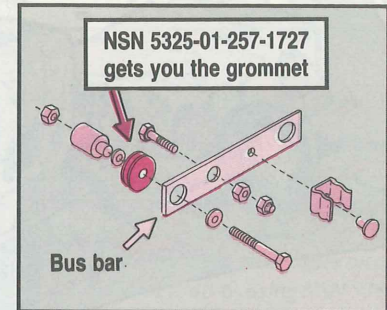
## Grommets Prevent Sparks

The rubber grommets on the bus bar on the 5,000 gallon fuel tankers rot and crack. Bad grommets let the metal bus bar hit the metal mounting spacer.

If metal touches the bus bar, it'll set off a spark... and one spark can be o-n-e spark too many for a tanker load of gasoline!

If the grommets are cracked on your tanker, replace 'em with a more durable grommet, NSN 5325-01-257-1727.

Make sure the protective cover on the bus bar is always in place. The cover shields grommets from the weather and keeps metal objects away from the bus bar.



Fuel Tankers...

## Spill Catcher

Spilled fuel gets everyone upset. It's not only a fire hazard, it sends the environmental folks through the roof!

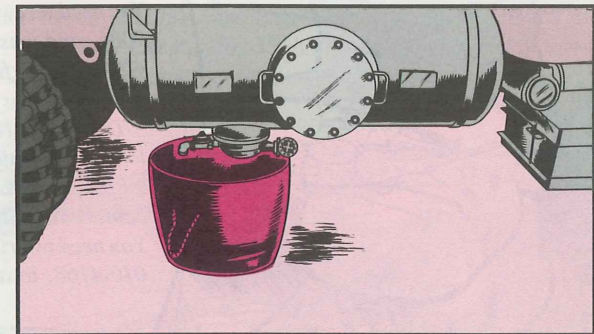
Here's a cheap way to catch that fuel.

Cut an empty plastic 55-gallon anti-freeze drum in half and add a couple of rope handles.

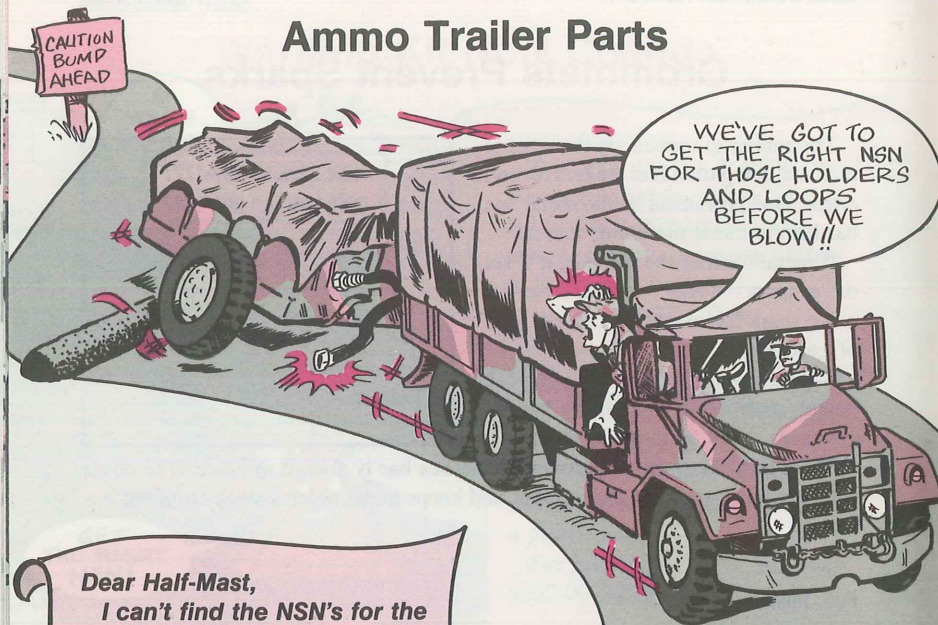
Slide it under a tanker when you:

- Drain water from the piping;
- Disconnect bulk fuel hoses after fueling;
- Drain a filter separator for servicing;
- Have a leak.

Be sure to dispose of fuel properly. Check your SOP or with your Safety Officer or fire department for details.



## Ammo Trailer Parts



Dear Half-Mast,  
I can't find the NSN's for the air hose holders and the cargo strap loops for the M332 ammo trailer. Can you help me?  
SP4 C.B.

Dear Specialist C.B.,  
You bet. Use NSN 5340-01-189-6405 to get the air hose brackets. You need screws, NSN 5306-00-225-9086, and washers, NSN 5310-00-407-9566, to fasten the brackets to the frame.

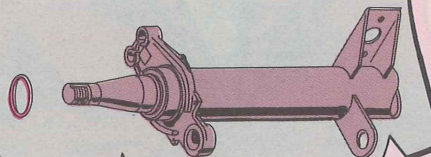
There's no NSN for the tiedown loop on the trailer, but the one used on the M151A2 1/4-ton truck fits. It comes with NSN 5340-00-916-6539. You need two rivets, NSN 5320-00-010-4168, to attach it.

*Half-Mast*

## 3-for-1 Hub Seal Mix-up

Dear Half-Mast,  
TM 9-2330-359-14&P lists NSN 5330-01-049-4093 for the hub seal. The seal we got with that NSN won't fit. The inside diameter is too small. Besides, it's an oil seal, not a grease seal.

How do I get the right seal?  
SFC S.B.



Dear Sergeant S.B.,  
You're using the NSN the truck headshed says to use. But the trouble is, you can get three different seals with that one NSN!  
To get the right seal, order on a DD Form 1348-6, using NSN 5330-01-049-4093. Include the part number, B370036BG0, and FSCM, 01212. Write "2B" in Columns 65 and 66, for no exception.

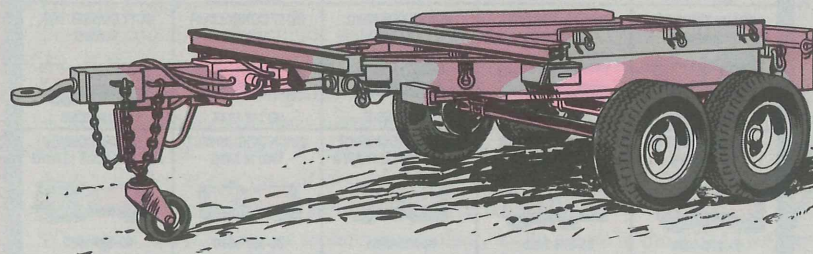
*Half-Mast*

## Trailer Handbrake Spring NSN

Need a spring to hold up the handbrake cable on your M103, M105, M107 or M448 1/2-ton trailer? Get it with NSN 5360-00-205-4655. It's not shown in TM 9-2330-213-14&P.

## M796 Bolster Trailer Coupling

Use NSN 4730-00-278-6319 to get the coupling anchor tubing, Item 1 of Fig 13 in TM 9-2330-287-14&P. It replaces the part number listed.























# Terminal Kit

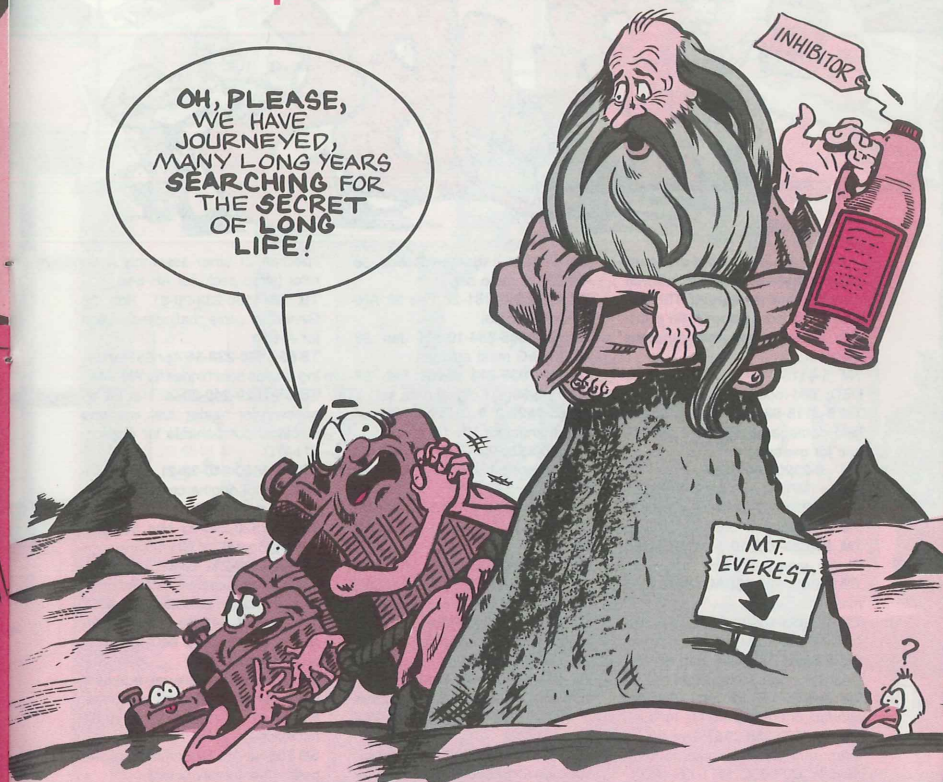
NSN 5940-00  
525-0907 GETS YOU  
AN ELECTRICAL TERMINAL  
KIT WITH 500 TERMINALS  
IN 20 DIFFERENT TYPES  
AND SIZES, A CRIMPING TOOL,  
AND A STORAGE BOX.

ORDER  
REPLACEMENT  
COMPONENTS  
AS YOU NEED THEM,  
USING FSC  
5940.

## Terminal NSN's

RING TERMINAL 18 AWG  00-204-8966	RING TERMINAL 18 AWG  00-143-4771	RING TERMINAL 14 AWG  00-113-8179	RING TERMINAL 14 AWG  00-143-4780	RING TERMINAL 14 AWG  00-230-0515
RING TERMINAL 10 AWG  00-143-4794	RING TERMINAL 10 AWG  00-143-4777	RING TERMINAL 10 AWG  00-113-9826	SPADE TERMINAL 18 AWG  00-833-1705	SPADE TERMINAL 14 AWG  00-539-2193
SPADE TERMINAL 14 AWG  00-552-2019	SPADE TERMINAL 10 AWG  00-727-5351	SPADE TERMINAL 18 AWG  00-938-5515	BUTT CONNECTOR 16 AWG  00-143-5147	BUTT CONNECTOR 14 AWG  00-140-9596
BUTT CONNECTOR 12-10 AWG  01-079-1936	DISCONNECT TAB 14 AWG  00-378-7225	QUICK DISCONNECT RECEPTACLE 14 AWG  00-926-0085	QUICK DISCONNECT TAB 18 AWG  00-867-9573	QUICK DISCONNECT RECEPTACLE 18 AWG  00-436-1632

## Liquid Extender Available



You can now get a liquid corrosion inhibitor to boost corrosion protection in military antifreeze.

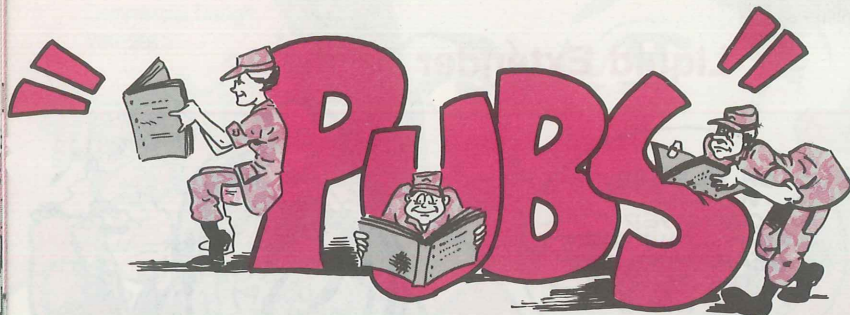
The liquid replaces the powder-type corrosion inhibitor. NSN 6850-01-160-3868 gets a quart.

Test the coolant in the engine with the antifreeze test kit, NSN 6630-01-011-5039. If the test strip comes out yellowish-green, you need to add inhibitor.

You can boost corrosion protection only once. Check the vehicle's DD Form 314. If the inhibitor has been used, there should be an entry saying so in the REMARKS block. If there is, drain and replace the coolant.

Add extender at the rate of one pint to 17 quarts of coolant. Then run the engine until it warms to operating temperature to mix it in.

When you add inhibitor or replace the coolant, make a note in the REMARKS block of the DD Form 314.



TROOP SUPPORT

# Unit Publications Guide



This is a selected list of recent pubs of interest to organizational maintenance personnel. This list was made from a computer print-out provided by the Adjutant General.

**TM 5-6115-615-12** Jul 87 3KW, DED, skid-mounted  
**TM 5-6115-624-BD** Mar 88 Battle-field damage assessment and repair for generators  
**TM 9-2320-354-24&P** Mar 88 Crane (MHC), wrecker (HEMTT)  
**TM 9-2330-377-14&P** Apr 88 Expandable van XM1065  
**TM 9-4020-200-10** Mar 88 Allied kinetic energy recovery rope  
**TM 9-4935-625-20P** Mar 88 Roland missile  
**TM 9-5855-1450-24** Oct 87 AN/TAS-4C night vision sight  
**TM 9-5855-1450-24P** Feb 88 AN/UAS-12C night vision sight  
**TM 9-6920-736-10** May 88 Unit-conduct of fire trainer, M1 tank  
**TM 10-1670-288-23&P** Dec 87 Interim ram air parachute system, models MT1-XX, MT1-XR, MT1-XCCT  
**TM 11-5800-218-10-5** May 88 AN/TRC-110(V) radio repeater set and AN/TRC-117(V) radio terminal sets  
**TM 11-5815-619-12-2** Sep 86 Letterwriter 100 installation guide  
**TM 11-5815-619-12-3** Sep 86 Letterwriter 100 operator guide  
**TM 11-5820-863-23P-3** Feb 88 AN/FRC-170(V)11 radio set  
**TM 11-5820-1018-13** Dec 87 CV-3837/U converter unit  
**TM 11-5820-1019-13** Dec 87 TD-1390/U multiplexer/demultiplexer  
**TM 11-5820-1020-13** Dec 87 TD-1427(V)1/U multiplexer  
**TM 11-5865-255-13** Mar 88 AN/TSC-116 communications terminal  
**TM 11-5895-1180-10-HR** Feb 88 AN/PSC-3 radio set

**TM 11-5895-1181-10-HR** Feb 88 AN/VSC-7 radio set  
**TM 11-5895-1181-20** Feb 88 AN/VSC-7 radio set  
**TM 11-5985-384-10-HR** Jan 88 AB-1339/G mast antenna  
**TM 11-7035-214-10-HR** Feb 88 AN/FYQ-90(V)1 digital data set  
**TM 55-1520-210-10** Feb 88 Operator's manual for UH-1H/V  
**TM 55-1520-237-PMS-2** Apr 88 PMS periodic inspection checklist, UH-60A and EH-60A  
**TM 55-1520-248-23-7** Jan 88 AVUM and AVIM manual for OH-58D  
**TM 55-1520-248-23-8** Jan 88 AVUM and AVIM manual for OH-58D  
**TM 55-1520-248-PPM** Jan 88 Progressive phase maintenance inspection checklist  
**TB 55-1510-200-20-9** Mar 88 Inspection and selective replacement of wingbolt hardware for U-21, VC-6 and RU-21  
**TB 55-1520-214-20-54** Apr 88 Inspection of rigid connecting links for OH-64A  
**TB 55-1520-214-20-55** Apr 88 Inspection of main rotor hub strap pack assembly for OH-64A  
**TB 55-1520-228-20-44** Apr 88 Inspection of OH-58A/C equipped with landing search light  
**TB 55-1520-228-20-45** Apr 88 Inspection of engine accessory drive oil vent hose on OH-58A  
**TB 55-1520-237-20-91** May 88 Inspection of midsection bellcrank assemblies for all H-60  
**TB 55-1520-237-20-95** Mar 88 Inspection of tail rotor blade assemblies for H-60 series  
**TB 55-1520-237-20-96** Apr 88 Inspection of rotor gearbox output shaft, H-60  
**TB 55-1520-238-20-30** Mar 88 In-

spection of strap assembly main rotor (strap pack) for AH-64A  
**TB 55-1520-238-20-31** Apr 88 Generator cable chafing inspection for AH-64  
**TB 55-1520-238-35** Apr 88 Restaking access door hinges for AH-64A  
**TB 55-1520-240-20-20** Mar 88 Inspection of heater fuel line and electrical components for chafing, CH-47D  
**TB 55-1520-240-20-21** Apr 88 Inspection of engine cross shaft assemblies, CH-47D  
**TB 55-1520-240-23** Mar 88 Warranty program for CH-47D  
**TB 55-1520-241-20-47** Apr 88 Inspection of bearings installed in aft swiveling servo actuators, CH-47C  
**TB 55-1520-248-20-1** Apr 88 Inspection of OH-58D equipped with landing search light  
**SB 700-20** Sep 88 Army adopted/other items selected for authorization/list of reportable items (48X microfiche)  
**SB 708-48** Apr 88 Commercial and government entity codes  
**LO 5-3805-254-12** Jan 88 F5070 20-ton dump truck

## AUDIO-VISUAL STUFF Available at battalion or Post Learning Center

### Films, TV Tapes

**TVT 3-64** Operation of the M8A1 automatic chemical alarm  
**TVT 3-65** M8A1 automatic chemical alarm safety  
**TVT 3-28** NBC M20 collective protection equipment  
**TVT 21-196** MILES: Initial training with MILES  
**TVT 21-197** MILES: Initial MILES sustainment training

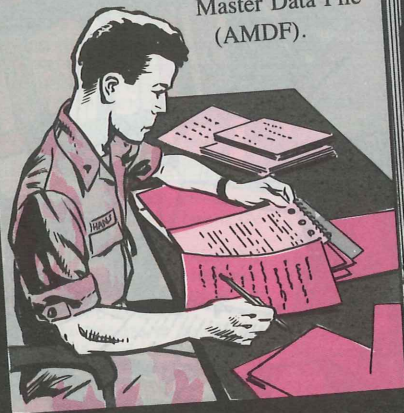
To make sure your library's current, check DA Pam 25-30.



But the gold mine is the list of pubs underneath. It shows the basic pubs for your equipment and the pubs for the components used on the end item.

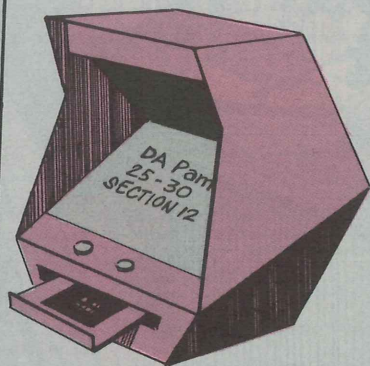
Jot down the Line Item Number (LIN) and National Stock Number (NSN) for each piece of your equipment. Your unit has all kinds of records and files that show the LIN and NSN, such as the property record or the Army

Master Data File (AMDF).



Section 12 of DA Pam 25-30 cross-references the pubs by LIN.

The first part shows you the LIN, the "official" name of your equipment and its NSN.



### Section 12 of DA Pam 25-30

CROSS-REFERENCE INDEX BY SB700-20 LINE ITEM NUMBER

LIN NSN	GENERIC NSN NOMENCLATURE	NOMENCLATURE	DATE	CHS	IN FORCE	DA	LC	COMPONENT NSN	NOMENCLATURE
Q34308	RADIO SET; AN/GRC-160								
5820-00-223-7473	RADIO SET AN/GRC-160								
<b>BASIC Pubs</b>									
TM 11-5820-498-12			MAY 67			1-9	OCT 81		
TM 11-5820-498-12-HR			JAN 79						
TM 11-5820-498-20P			DEC 81						
TM 11-5820-498-34P			SEP 76			1	JUL 81		
TM 11-5820-498-35			DEC 69			1-4	OCT 81		
<b>Pubs ON COMPONENTS</b>									
MWO 11-5985-262-40-1			DEC 82					5985-00-985-9024	ANTENNA AS-1729/VRC
TM 11-5820-667-12			JAN 87 +					5820-00-930-3725	RECE IVR RT-841/PRC-77
TM 11-5820-667-20P			JAN 87					5820-00-930-3725	RECE IVR RT-841/PRC-77
TM 11-5820-667-34LD			SEP 76					5820-00-930-3725	RECE IVR RT-841/PRC-77
TM 11-5820-667-34P			JAN 87					5820-00-930-3725	RECE IVR RT-841/PRC-77
TM 11-5820-667-35			FEB 88 1-3				APR 87	5820-00-930-3725	RECE IVR RT-841/PRC-77
TM 11-5985-262-14			JAN 84				1 OCT 87	5985-00-985-9024	ANTENNA AS-1729/VRC
TM 11-5985-262-24P			MAR 85					5985-00-985-9024	ANTENNA AS-1729/VRC

Here we find that LIN Q34308, NSN 5820-00-223-7473, is an AN/GRC-160 Radio Set.

With the LIN cross-reference, you can find just about any pub relating to your equipment and all its components.



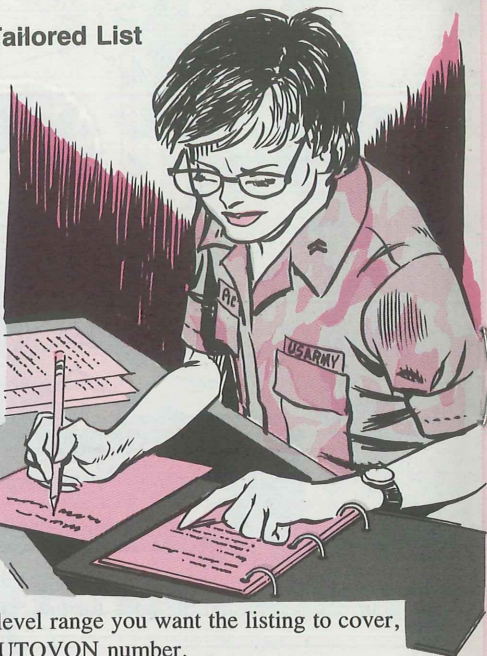
## Getting a Tailored List

Of course, checking each LIN on the DA Pam 25-30 is time-consuming. Save some time by getting an index of equipment publications tailor made for your unit.

Here's how:

- Write down the LIN's and NSN's of all your unit's equipment from the property book.
- Send the list of property book items to:

**USAMC Material Readiness Support  
Activity  
ATTN: AMXMD-MP  
Lexington, KY 40511-5101**



Be sure to include the maintenance level range you want the listing to cover, your name, rank, unit, address and AUTOVON number.

You'll get back a computer printout showing every equipment publication you need in your unit to support the equipment you have assigned.



## Reading the List

The listing will be in two sections.

Section I lists the pubs in the equipment's LIN and NSN sequence. It tells you which supply manuals and bulletins, technical bulletins, lubrication orders, modification work orders and supply catalogs you need.

### Section I of EOPDB Listing

PCN INDEX TITLE	PUBLICATION INDEX BY SO 700-23 LIN	DATE					RIC
LIN NSN	GENERIC Nomenclature Nomenclature/SB700-20		DATE	CHS IN FORCE	LAST CH	PPNT	TACOM
15482	TRUCK CARGO TACTICAL 5/4 TON 4X4 W/E M1008						TACOM
2320-01-123-0827	TRK CGG 5/4 TON M1008						TACOM
	BASIC PUBS						TACOM
	LO 9-2320-289-12		JUN 86				TACOM
	TR 9-2300-295-15/24		SEP 85				TACOM
	TM 9-2320-289-10		JUL 86		1 MAY 87		TACOM
	TM 9-2320-289-10-HR		JUN 86				TACOM
	TM 9-2320-289-20		APR 86				TACOM
	* TM 9-2320-289-20		OCT 86				TACOM
	TM 9-2320-289-20P		JUN 85				TACOM
	* TM 9-2320-289-20P		DEC 87				TACOM
	** TM 9-2320-356-8D		OCT 87				TACOM
	TM 43-0001-31		JUN 85				TACOM
	TM 55-2320-289-14		JUN 87				HMCNTEA
1494	TRUCK UTILITY CARGO/TROOP CARRIER 1-1/4 TON 4X4 W/E (HMMWV)						TACOM
2320-01-107-7155	TRK UTIL 1-1/4 TON						TACOM
	BASIC PUBS						TACOM
	LO 9-2320-280-12		OCT 86				TACOM
	TM 9-2300-422-23CP		FEB 85				TACOM
	TM 9-2320-280-10		APR 85		1 CCT 86		TACOM
	* TM 9-2320-280-10-HR		OCT 86				TACOM
	TM 9-2320-280-10		DEC 87				TACOM
	* TM 9-2320-280-10-HR		JUN 85		1 MAY 87		TACOM
	TM 9-2320-280-20		APR 85				TACOM
	TM 9-2320-280-20P		JUN 87				TACOM
	** TM 9-2320-356-8D		OCT 87				TACOM
	TM 43-0001-31		JUN 85				TACOM
1562	TRUCK UTILITY CARGO/TROOP CARRIER 1-1/4 TON 4X4 W/E W/H (HMMWV)						TACOM
2320-01-117-7156	TRK UTIL 1-1/4 TON						TACOM
	BASIC PUBS						TACOM
	LO 9-2320-280-12		OCT 86				TACOM

\*DATE PROPONENT ESTIMATES PUBLICATION WILL BE SENT TO PRINT  
\*\*DATE PROPONENT SENT PUBLICATION TO PRINT

Section II provides a pub-to-end item cross-reference. This is helpful in ordering the pubs you need. For example, you have different models of the CUVC—M1008, M1009 and M1028—but LO 9-2320-289-12 covers all three models. You'll order the number of copies you need for all models.

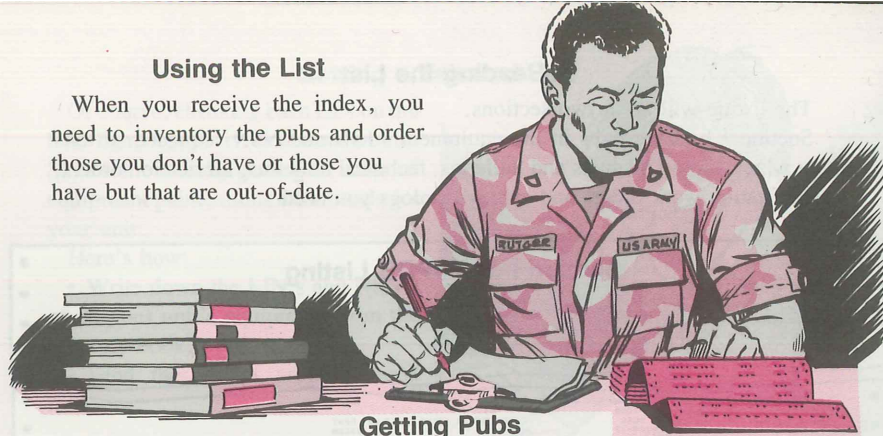
### Section II of EOPDB Listing

PCN	PUB TO END ITEM CROSS REF	DATE	PAGE				
INDEX TITLE							
PUBLICATION NO	DATE	CHS IN FORCE	LAST CH	PPNT	B/C	LIN	END ITEM APPLICATION Nomenclature
LO 9-4930-228-12		99	AUG 88		3	V12141	4930-00-070-1181 TK-PUMP UNIT MDL 1800
LO 9-2320-289-12		JUN 86					
				TACOM	B	T05028	2320-01-123-2665 T UTI 3/4 T M1039
					B	T59346	2320-01-123-2571 T CGD 3/4 TON M1008
					B	T59414	2320-01-127-5077 T CGD 3/4 TON M1028

\* DATE PROPONENT ESTIMATES PUBLICATION WILL BE SENT TO PRINT  
\*\* DATE PROPONENT SENT PUBLICATION TO PRINT

## Using the List

When you receive the index, you need to inventory the pubs and order those you don't have or those you have but that are out-of-date.



## Getting Pubs

Your Battalion HQ gets an account for your unit by sending a DA 12-R Form through your installation Publications Control Officer or through your MACOM Publications Control Officer if you are not supported by an Army installation, to the Baltimore Pubs Center. When that's done, you can request pubs on the 12-series forms that cover your equipment.

Make a list of the pubs you need from Section II of the tailored index. Using Section 8 of DA Pam 25-30, go to the pub number and find the 12-series form and block number at the end of the title block.

Section 8 of DA Pam 25-30					
TM	NO	DATE	TITLE, JOINT SERVICE NUMBERS	UNIT/ISSUE	PROPOSED
TM 9-2320-285-24-2	14	OCT 85	ORGANIZATIONAL DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL FOR TRUCK, TRACTOR, YARD TYPE, 43500 LB GVW, EEO, 432 (OTVANA MODEL 50, ARMY)	EA	TACOM
TM 9-2320-285-24P	10	C	<b>SUBSCRIPTION FORM: 12-38-R BLK 0369</b>		COM
TM 9-2320-289-10P 901 OCT86	04	JUL 85	ARMY MODEL M87A1 (NSN 2320-01-121-3108) SUBSCRIPTION FORM: 12-38-R BLK 0361	EA	TACOM
			OPERATOR'S MANUAL FOR TRUCK, CARGO, TACTICAL, 1 1/4-TON, 4X4, M1009 (NSN 2320-01-121-2487), M1008A1 (2320-01-121-3071), M1028 (2320-01-127-5077); TRUCK, UTILITY, TACTICAL, 3/4-TON, 4X4, M1009 (2320-01-121-2988); TRUCK, AMBULANCE, TACTICAL, 1 1/4-TON, 4X4, M1010 (2320-01-121-2938) AND TRUCK, CHASSIS, TACTICAL, 1 1/4-TON, 4X4, M1031 (2320-01-121-5388) (TO 38A12-1A-2011-4C-1-4-2320-10/1) SUBSCRIPTION FORM: 12-38-R BLK 0368		

After jotting down these numbers, get your hands on DA Cir 310-86-2 (Nov 86). Copy the DA 12-series form—in this case DA Form 12-38-R.



## DA Cir 310-86-2 (Nov 86)

SUBSCRIPTION FOR ARMY AUTOMOTIVE NON-TRACKED VEHICLE, PUBLICATIONS				
1. ACCOUNT NUMBER	2. DATE	3. TYPE OF SUBMISSION a. <input type="checkbox"/> INITIAL b. <input type="checkbox"/> CHANGE		
4. FROM: (Include 9-Digit ZIP Code)	5. THRU: (Include 9-Digit ZIP Code)	6. TO: Commander USA Publications Center 2800 Eastern Blvd Baltimore, MD 21220-2896		
EQUIPMENT		OPERATOR	UNIT	DS/GS
Truck, Cargo, 10-ton, 8x8, Heavy Expanded Mobility Tactical Truck, HEMTT: Controls & Equip For M983 Tractor Only without Crane (TM 9-2320-351-Series)		399)	399)	400)
Truck, Commercial Utility Vehicle, Cargo, Tactical, 4x4, M1008, M1008A1, M1009, M1010, M1028, M1028A1, M1031 (TM 9-2320-289-series)		399)	370)	372)
Truck, Multifuel, 2 1/2-ton, 6x6, M44A1 and M44A2-series (TM 9-2320-209-series)		185)	186)	188)

(Page 2, DA Form 12-38-R, Nov 86)

To avoid getting unneeded pubs, request only those that are aimed at your unit's level of maintenance. Put the quantity needed under either "Operator" or "Unit" when the quantity blocks on the DA 12-series form show maintenance levels. When the blocks show Classes of Distribution, put the quantity needed under:

- Distribution A—pubs for company-level units.
- Distribution B—pubs for battalion, brigade, regiment or group level units.

That brings us to the question—how many copies do you order?

A general formula is that there should be 1 copy of the LO and operator's TM for each item you have on hand supported by that pub. For example, if you have 10 CUCV's, you should order at least 10 copies of the LO and operator's TM for the 289-series.

The only exception would be high density items such as rifles or gas masks.

Also, order at least three more copies of the operator pubs for your maintenance and supply operations.

Most units need three copies each of the unit level maintenance (-20) manual and a parts manual (-20P).

## GENERAL FORMULA

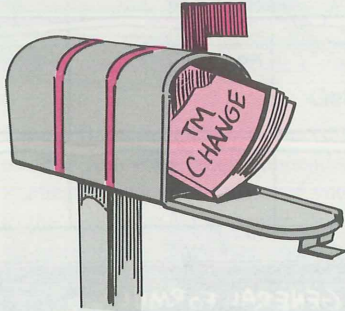
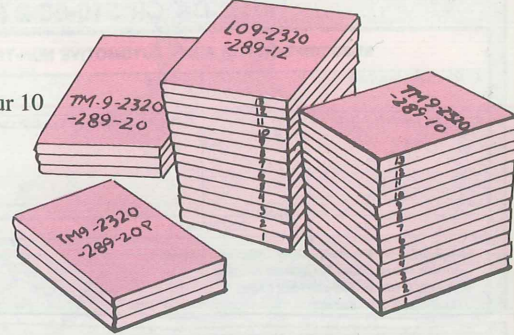
$$(1LO + 1TM) \times \# \text{ ITEMS} =$$

EXCEPTION:  
HIGH DENSITY  
GEAR



Here's what you'd order for your 10 CUCV's:

- LO 9-2320-289-12     13 copies
- TM 9-2320-289-10     13 copies
- TM 9-2320-289-20     3 copies
- TM 9-2320-289-20P    3 copies



Once your unit has established a requirement for a certain pub at Baltimore, you'll automatically receive any change or revision to that pub.

That takes care of future changes or revisions, but what if you don't have the current editions of that pub?

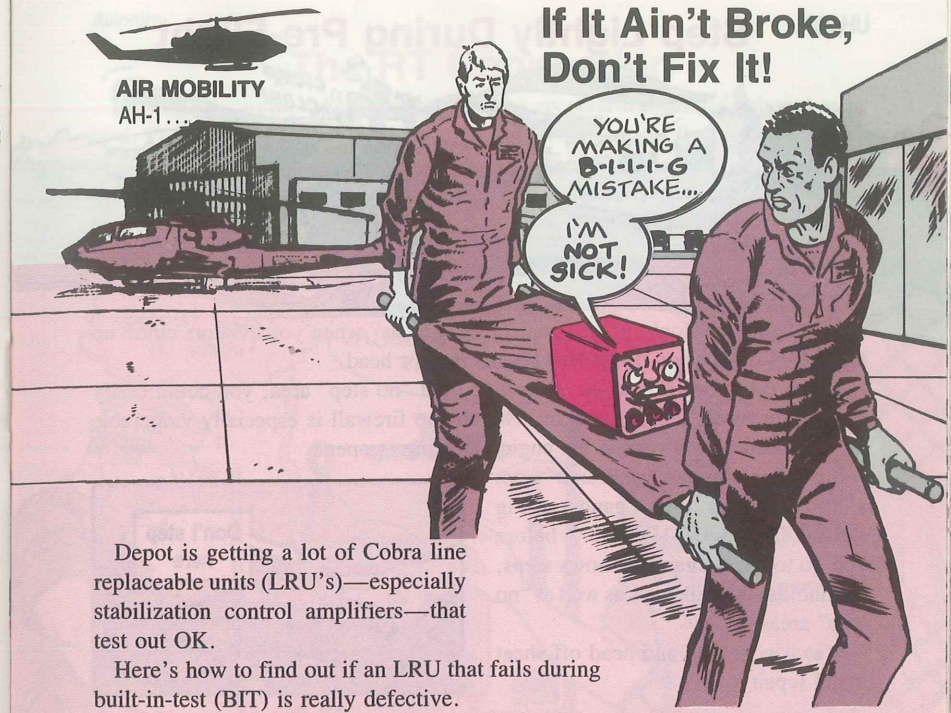
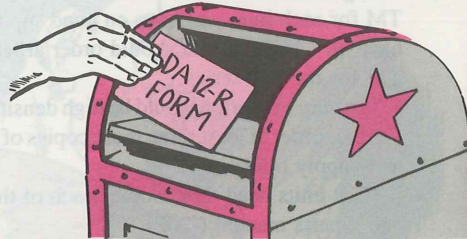
### Resupply

Make a list of the manuals you need. Battalion HQ then fills out a DA Form 4569 and sends it to Baltimore. The request goes either through your Communications Center over AUTODIN or by mail.

USAAGPC REQUISITION CODE SHEET																															SEE CODING SAMPLES ON REVERSE							
ACCOUNT NUMBER	BLANK	DISPATCH	BLANK	BLANK	BLANK	PUBLICATION OR FORM CATEGORY AND NUMBER	BLANK	QUANTITY REQUIRED	BLANK	UNIT OF ISSUE (UI)	BLANK	2IP CODE OR APO NUMBER	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK			
1	M	1	7	3	4																																	
2						A	TM	9	-	2	3	2	0	-	2	8	9	-	1	0																		
3																																						
4																																						
5	N	1	2	3	4																																	
6						A	TM	1	1	-	5	8	2	0	-	3	9	8	-	1	2																	
7																																						
8																																						

After Baltimore feeds your request to the computer, your pubs are mailed directly to the address listed on your DA 12-R form.

Always notify the pubs center when your unit is moving. Give them your account number, new and old address and the approximate date of your move.



## If It Ain't Broke, Don't Fix It!

**AIR MOBILITY**  
AH-1...

Depot is getting a lot of Cobra line replaceable units (LRU's)—especially stabilization control amplifiers—that test out OK.

Here's how to find out if an LRU that fails during built-in-test (BIT) is really defective.

Perform another BIT with a new LRU installed. If the new LRU also fails, you probably have a wiring or connector problem. But if the new LRU passes the BIT, re-install the original LRU and do another BIT.

If the original LRU fails again, you can be sure it's defective.

## Aviation Messages

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

CAT 1 EIR Phone:  
AUTOVON 693-2066  
(24 HOURS)

- UH-60-88-03, SOF, Maint Mandatory, life extension of main module shaft, 112100Z May 88.
- UH-60-88-04, SOF, Maint Mandatory, revision to one-time inspection of tail rotor gear box output shaft, 121720Z May 88.
- AH-1-88-04, SOF, Operational, limited firing of rockets using MK66 motor, 182200Z May 88.
- C-12-88-02, SOF, Technical, 10,000-hour outboard forwarding spar re-

- tirement life, 182230Z May 88.
- OV-1-88-01, SOF, Maint Mandatory, life extension of the MK-J5D ejection seat rocket motor, 252100Z May 88.
- CH-47-88-10, SOF, Maint, flight control and utility hydraulic pump retaining screws replacement, 261900Z May 88.
- UH-60-88-MIM-05, Main transmission overtemp prevention tips, 041700Z May 88.

- AH-64-88-MIM-09, Machining guide pin hole in TADS/PNVS ground support dolly, 052200Z May 88.
- CH-47-MIM-88-02, Synchronizing shaft pins, 132200Z May 88.
- UH-60-MIM-88-06, Replacement of cargo hook cartridge assembly and correction notice, 262000Z May 88.
- CH-47-MIM-88-03, Modification to pilot start solenoid valve, 272000Z May 88.

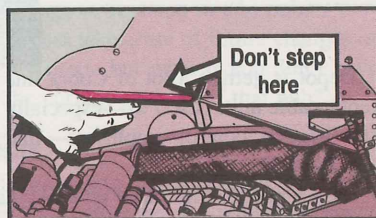


Step lightly and only in designated "walk areas" when you aviators climb up top to pre-flight your Black Hawk's main rotor head.

If you come down hard on an unsupported "no step" area, you could easily crack your bird's thin outer skin. The engine firewall is especially vulnerable to misplaced brogans when the engine cowling is open.

If you don't know a "walk area" from a "no step" area, take a gander at Fig 1-5 of TM 55-1520-237-23-2 before you go top-side again. It shows steps, handholds and walkways as well as "no step" areas.

Watch your step and head off sheet metal repair.



Special Inspections...

## Plus or Minus 10 Percent

All recurring special inspections have a tolerance of plus or minus 10 percent from the scheduled inspection time, whether it's spelled out in your bird's maintenance manual or not.

If your bird is due a special inspection every 150 hours, for instance, the inspection must be performed between 135 and 165 hours. If it's not done during that period, the bird must be grounded with a red "X" until the inspection is completed.

The tolerance on recurring special inspections does not mean you're authorized to overfly the inspection due date. Inspections will not be exceeded except in MISSION ESSENTIAL or EMERGENCY situations.

One-time special inspections, such as torque checks that follow a specific maintenance action, have no tolerance. They must be performed when due or the bird gets grounded.

Para 2-3b of TM 55-1500-328-25, Aeronautical Equipment Maintenance Management Policies and Procedures, has all the info on special inspections.

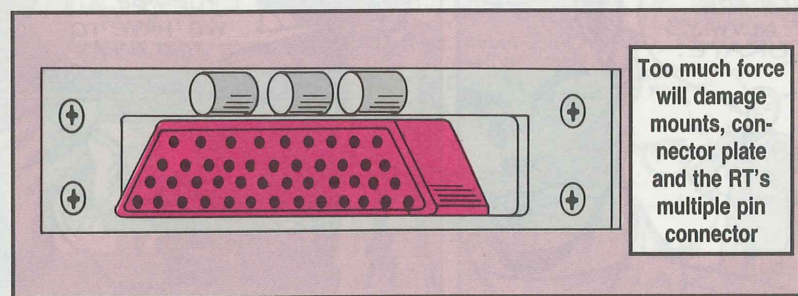
## The RT Connection

Be mighty careful when you replace the receiver-transmitters aboard your bird. Too much force can bend the pins, spacers and plates that connect the RT to the on-board radio control set.

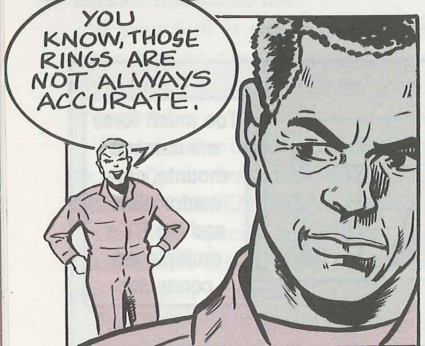
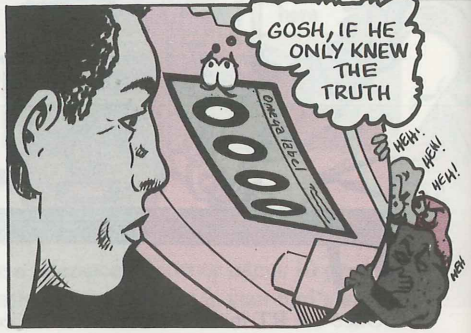
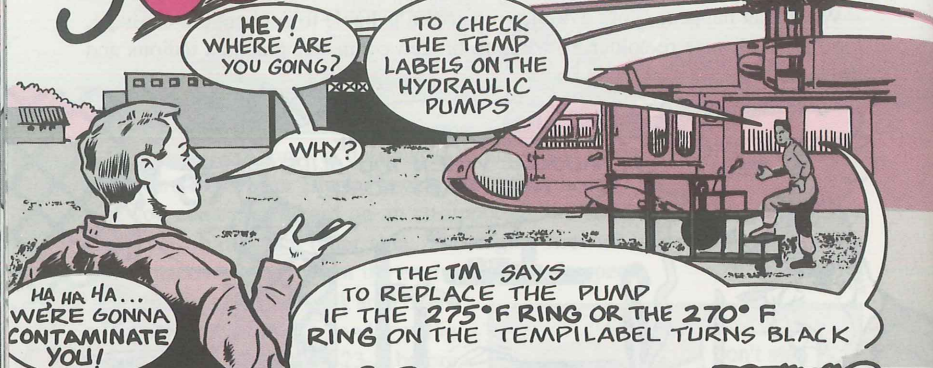
When that happens, your avionics repairman is liable to get bent out of shape, too. That's 'cause re-soldering wires to broken connector pins is a tedious and tiresome task.



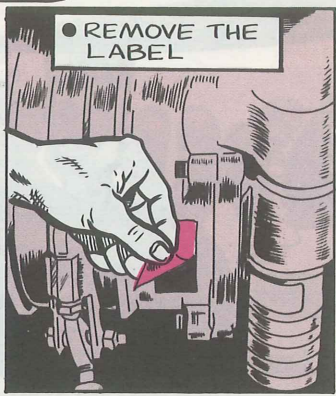
Once the RT makes contact with the connector at the rear of the mount, just give it a small nudge to make a good connection.



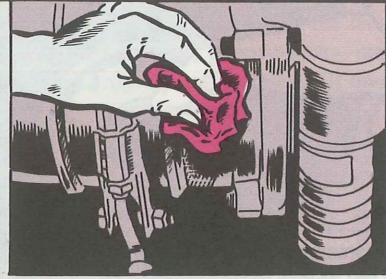
# Seeing's Believing



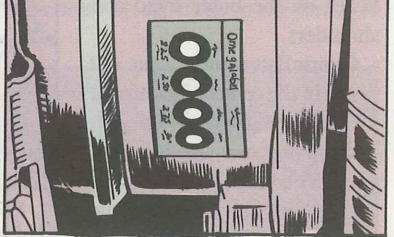
YOU'RE RIGHT TO CHECK THE RINGS, BUT FOR AN ACCURATE CHECK, HERE'S WHAT TO DO:



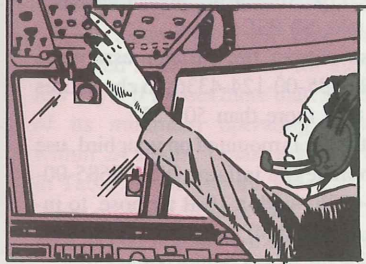
● CLEAN THE AREA USING A CLEAN CLOTH DAMPENED WITH METHYL-ETHYL KEYTONE (MEK)



● ATTACH A NEW LABEL USING NO. 800 CLEAR 1/2 INCH WIDE ACETATE TAPE OR LTV ADHESIVE, NSN 8040-01-009-1562

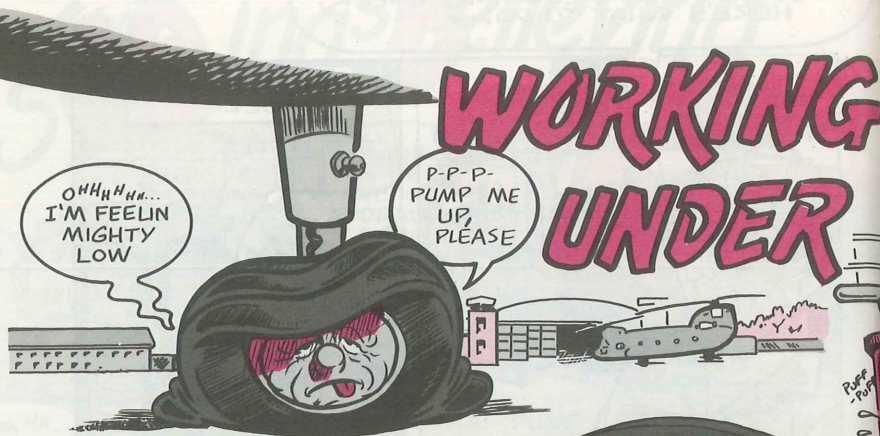


● GROUND RUN THE SYSTEM FOR AT LEAST 15 MINUTES



IF THERE'S A BLACK DOT INSIDE THE 275°F RING OF TEMPILABEL, NSN 6685-01-177-2764, OR INSIDE THE 270°F RING OF TEMPERATURE LABEL, HM-200-300, REPLACE THE PUMP. IF THE DOTS DON'T DARKEN, FORGET IT! THE PUMPS OK!



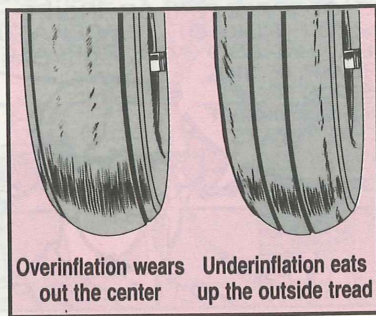
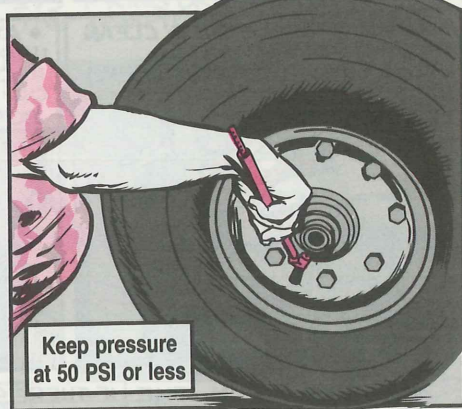


Nobody likes to work under pressure, but aircraft tires can't work well without it.

Underinflated tires wear out faster on the outer tread and shoulders.

Overinflated tires wear out faster in the center of the tread.

Look at your tires often. Adjust tire pressure when they're cool. Your maintenance manual spells out exactly how much pressure to put in your bird's tires.



Use pressure gage, NSN 4910-00-204-3170, to measure pressure in tires that take 50 PSI or less.

Use remote tire inflator assembly, NSN 6685-00-124-4336, to check tires that take more than 50 PSI.

If the tire is mounted on your bird, use the remote tire inflator, NSN 6685-00-124-4336, with a 10-ft air hose to inflate it. Stand off to one side of the tire, outside the wheel failure danger zone.

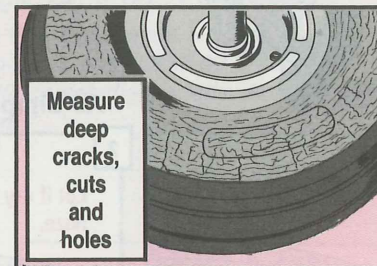


Any time you adjust tire pressure without the remote tire inflator, wear goggles to protect your eyes.

Use compressed air in all Army aircraft tires except those on the Black Hawk and Apache. Use only nitrogen in Black Hawk and Apache tires.

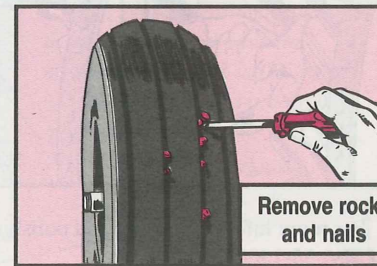
While you're doing your 10-day/14-hour PMS, look for tire damage. Use a tread depth gage, NSN 5210-00-357-5951, to measure the depth of cuts. Fig 3-12 of the TM 55-2620-200-24 shows how to measure cuts, cracks and holes. Table 3-3 tells how to evaluate the damage.

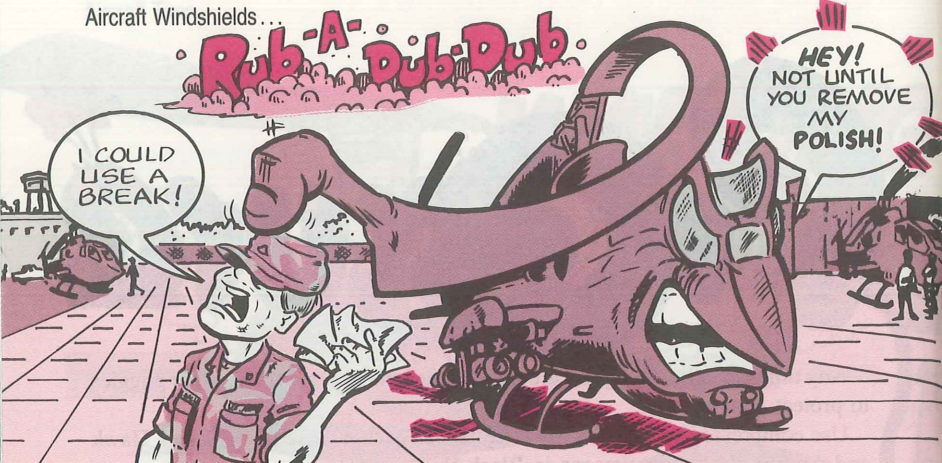
While you're at it, remove rocks, nails or other objects stuck in the tread. A medium, cross-tip screwdriver will do the job.



Keep an eye on a tire after you've reinflated it. Gage it daily for the next few days. If it loses more than 5 percent of its minimum operating pressure within 24 hours, repair it like it says in Table 3-1 of the tire TM.

For example, if your bird's tires take 50 PSI and one of 'em loses 3 PSI or more within 24 hours, get it repaired.





# Rub-A-Dub-Dub

Some mechanics ruin their birds' plastic windshields by leaving bubble polish on too long.

The longer you wait before removing bubble polish residue, the more grit it absorbs. Then when you remove it, the grit scratches the plexiglass.

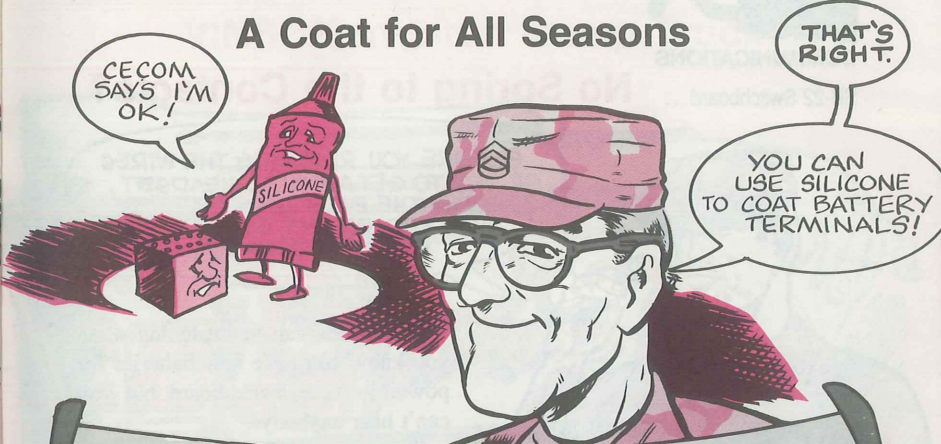
Polish windshields just like you do when you polish or wax your car.

### As Simple As...



For more info on cleaning and polishing your bird's windshield, see Para 2-37 of TM 55-1500-333-24.

## A Coat for All Seasons



THAT'S RIGHT.

Dear Windy,

TM 11-6140-203-14-2 says to use corrosion preventive compound, NSN 8030-00-903-0931, to coat the terminal hardware on our aircraft batteries after it's been torqued.

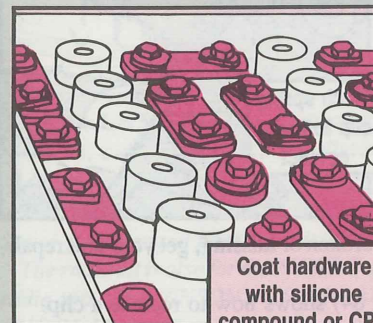
But CPC produces a varnish-like coating that's hard to remove.

The manufacturer of the BB-558/A battery for the OH-58D says to use a neutral (non-acid) petroleum jelly on their batteries. But it turns into a liquid when it gets hot and makes a mess.

We've found that silicone compound, NSN 6850-00-880-7616, prevents corrosion as well as CPC or petroleum jelly. And it's neither messy nor hard to remove.

Is it OK to use this compound?

SSG J.O.R.



Coat hardware with silicone compound or CPC

Dear SSG J.O.R.,

The Communications and Electronics Command says the silicone compound is OK as a substitute for CPC on battery hardware.

Windy



COMMUNICATIONS

SB-22 Switchboard...

## No Spring to the Contacts?

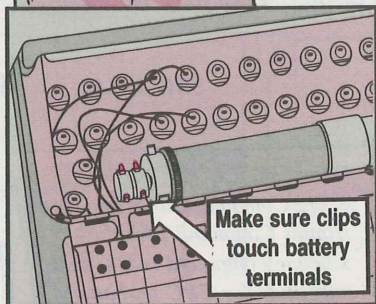


BEFORE YOU RESTRING THE WIRES OR TRY TO GET ANOTHER HEADSET, OPEN THE BACK OF YOUR SWITCHBOARD AND EYE THE SPRING CONTACTS.

The silence can be deafening when you know you have new batteries for power in your switchboard but you can't hear anybody.

Chances are the springs are sprung, keeping the battery case from making good contact. Or, the springs are corroded. That blocks the electrical current from the battery case to your switchboard.

Make sure the spring contacts are snug around the battery case contacts. You might have to pinch them together to make better contact.



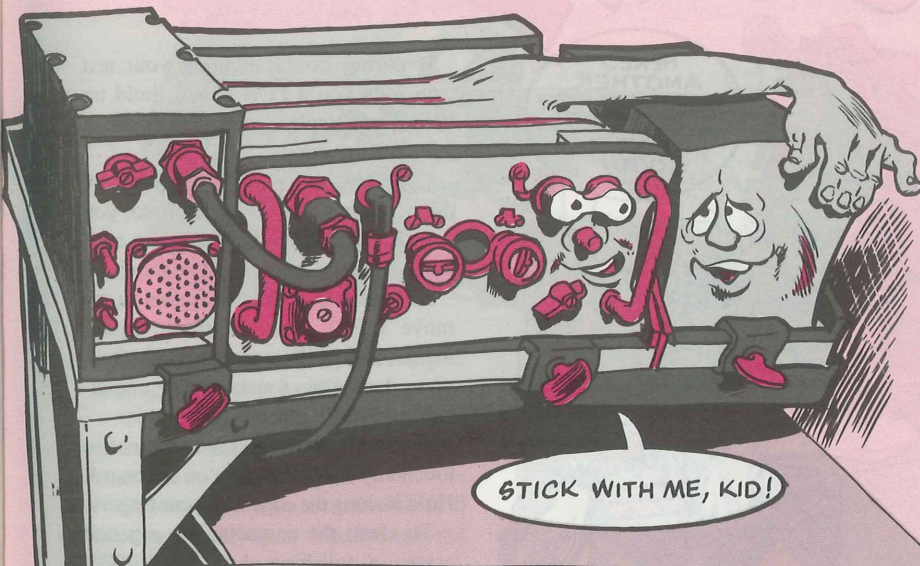
If a spring, NSN 5999-00-643-7687, is broken or missing, get your unit repairman to replace it.

Page 5-3 of TM 11-5805-262-12 (Aug 84) shows how to replace a clip.

If the springs are corroded, shine 'em up with an eraser or a polishing cloth, NSN 7920-00-985-6849, which is authorized by Appendix A of CTA 50-970.

Installation Kit...

## VINSON in 5-ton Dump Truck



Dear Half-Mast,

The VINSON commo system was installed under the seat in my old 5-ton dump truck. Now I have an M929 truck which has its batteries under the seat. I have an AN/GRC-160 radio set with the KY-57. Where is this set installed?

1LT L.A.D.

Dear Lieutenant L.A.D.,

You need an MK-2301 installation kit, NSN 5820-01-220-8027, for your radio set, and an MK-2149 installation kit, NSN 5810-01-125-1031, for adding the VINSON.

This puts VINSON and the radio between the driver and the passenger. Space for a second passenger is eliminated.

The radio kit is also for the AN/GRC-125 and AN/VRC-46, -53, and -64 radio sets. The VINSON kit for the AN/VRC-46 radio is MK-2147, NSN 5810-01-125-4680.

Half-Mast



# GIVE IT A 2<sup>ND</sup> CHANCE

HERE'S ANOTHER ONE OF THESE "BAD" BOARDS THAT'S GOOD!



If during troubleshooting your test gear tells you a PCB is bad, hold up before you replace it. Chances are it may still be good.

Could be the plug-in contacts are dirty, tarnished or corroded. If so, you can take out the PCB, clean the contacts and give it a second chance.

Always use a card extractor to remove a PCB from electronic equipment. This will save the PCB from your damaging touch—body chemicals and static electricity—that is.

And when it's out, take care not to touch any of the circuitry on the board. Hold it along the edge with your fingers.

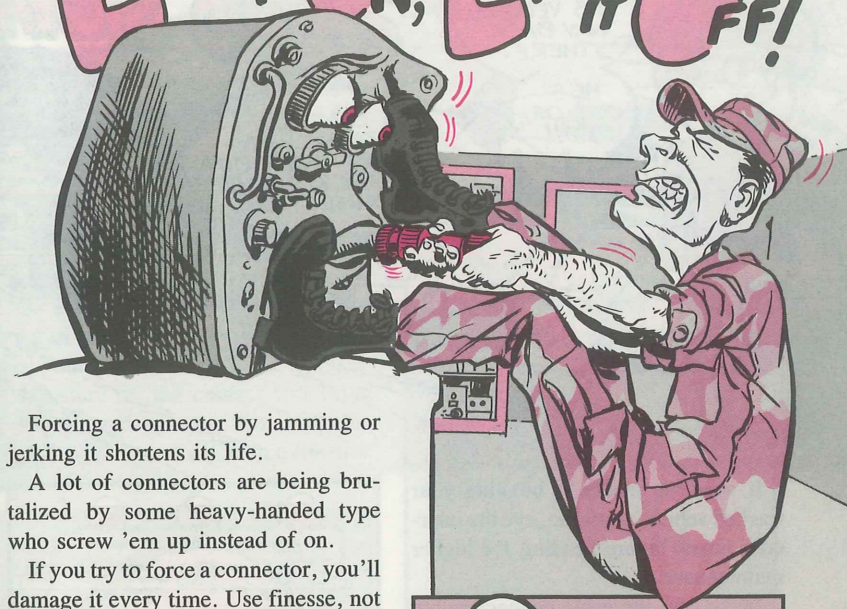
To clean the contacts, use a pencil eraser, a polishing cloth, NSN 7920-00-985-6849, or a burnisher tool, NSN 5120-00-247-1726.

When the contacts are clean, use a cotton swab with rubbing alcohol or cleaning compound, NSN 6850-00-105-3084, to brighten them. If you use either of these for cleaning, keep them off other parts of the PCB which may have a sensitive coating.

Then, plug in the PCB and re-test it to find out if the PCB still has life left in it.

If the PCB fails the second test and has to be turned in, put it in protective packaging. This makes for minimum repair when the PCB gets back to support. Info on packaging is on Pages 46-47 of PS 425.

# EASE IT ON, EASE IT OFF!



Forcing a connector by jamming or jerking it shortens its life.

A lot of connectors are being brutalized by some heavy-handed type who screw 'em up instead of on.

If you try to force a connector, you'll damage it every time. Use finesse, not strength.

Eye the connector for pin damage before you connect it to the radio set's receptacle. Broken or bent pins cause arcing which will damage your radio.

If all's OK, line up the keys with the receptacle keyways.

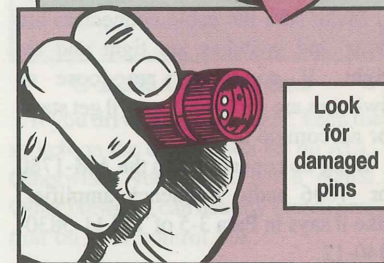
Then turn the connector slightly clockwise until you feel the keys slip into the keyways.

Push and keep turning the connector until it's snug on the receptacle.

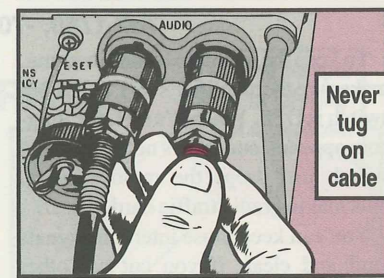
A new connector may need a little help to slip in place. Add a dab of silicone grease, NSN 6850-00-880-7616, to the O-ring inside.

Never tug on the cable when you're connecting or disconnecting the connector. You'll twist wires loose.

When you're taking the connector



Look for damaged pins



Never tug on cable

off the receptacle, push the connector in. Then, turn it counterclockwise.



# GET A SOUND SIGNAL SOUND!

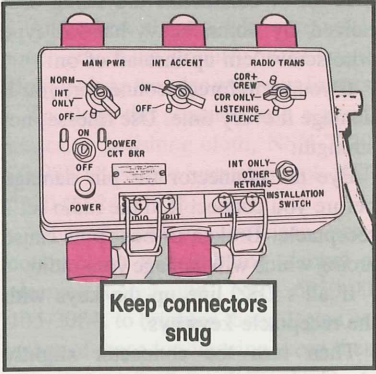
HIS STATIC IS DRIVING HIM CRAZY! I TOLD HIM TO CHECK LOOSE CONNECTIONS



If noise or silence is bugging your tracked vehicle's commo, eye the intercom boxes before heading for higher maintenance.

Make sure the cable connectors are snug and switches are tight and set right. If connectors are loose or switches are set wrong, you'll get static or no commo at all.

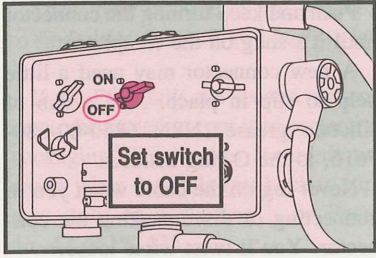
Snug up connectors on the AM-1780 or -7046 audio frequency amplifier, like it says in Para 3-5 of TM 11-5830-340-12.



## AM-1780, -7046 Amplifier

To keep the intercom commo coming, make sure the amplifier's INT ACCENT switch is OFF. When it's ON, the intercom appears louder. It's not really. The switch just drops the radio volume, thus making radio traffic hard to hear.

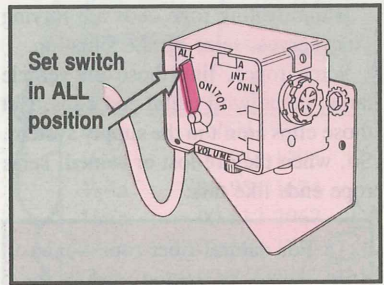
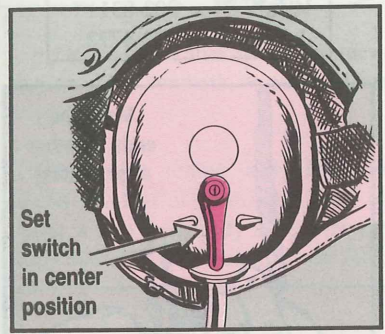
You can keep those intercom signals loud and clear, if you cut out other crackling sounds.



## Helmet Switch Settings

Be sure the helmet switch is in the center position if you want to hear without a lot of background noise. When you need to talk, push the switch forward to key your headset's mike.

Moisture on the contact will bring on static and buzzing. So, keep the contacts clean and dry with a lint-free cloth to keep the signal clear.



## C-2298 Control Box

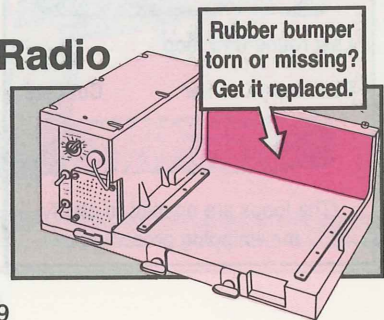
If you drive an SP howitzer, keep the switch on the control box set on ALL. Otherwise, you won't get a signal. Other crewmen can use any switch position on their control box.

## AM-2060 Amplifier-Power Supply...

# Bumper Pad Saves Radio

When the bumper pad is missing, the radio battery box is damaged. The battery box rubs against the back of the mount every time you move out.

If the pad, NSN 5340-01-100-0239, is torn or missing, get your repairman to replace it.



# Seize rope



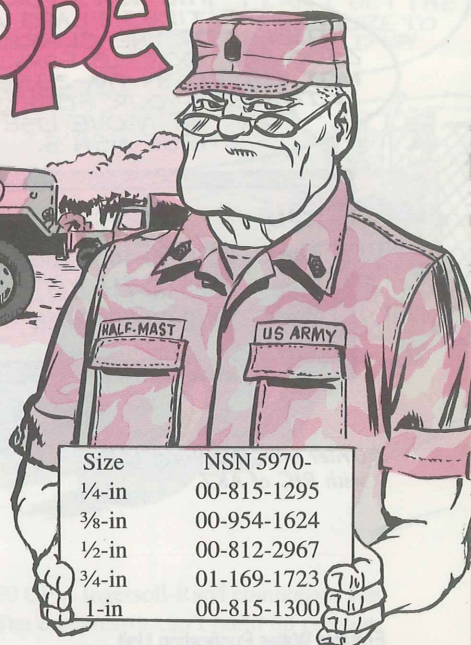
If unravelling rope ends are fraying your nerves, seize up the situation.

Some ropes, like those on vehicle tarps, come with metal end clips. But those clips aren't in the supply system. So, when they're lost or ruined, seize rope ends like this:

Or wrap the ends with reinforced nylon tape:

Size	NSN 7510-00-
1/2-in	582-4771
3/4-in	802-8311
1-in	582-4772

HERE'RE WAYS TO TIE UP THOSE LOOSE ENDS.



Size	NSN 5970-
1/4-in	00-815-1295
3/8-in	00-954-1624
1/2-in	00-812-2967
3/4-in	01-169-1723
1-in	00-815-1300


• Or use shrinkable insulation sleeving on either synthetic or natural fiber rope.

Remember, tubing will shrink to about one-half of its original size, so order a size that easily slips over the rope end. Get this tubing by the foot:


No matter which method you use, be sure the seized rope end will fit through the equipment's hardware.

- For natural fiber rope—manila, hemp or cotton—whip the rope ends with cord like so:


**Lay loop along rope**



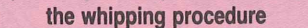
**End Start whipping here**



**Last round thru loop**



**Pull loop to center Cut here**



(The loops are opened to clarify the whipping procedure)

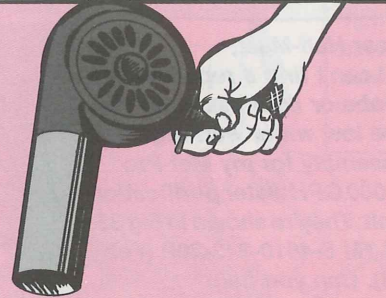

**Mash the ends together after melting**



• For synthetic rope—nylon or polypropylene—melt the ends together with a heat gun, match or torch flame.

To apply shrink tubing—

- Cut a 3/4 to 1-in piece of tubing.
- Slip the tubing over the rope, leaving a little of the end showing.
- Shrink the tubing with a heat gun or match until it's snug on the rope.

## Keep 'em Moving

THE NSN'S FOR THE TIRES, FLAPS AND TUBES FOR THE CLARK MODEL C500Y45, 4000-LB FORKLIFT ARE NOT LISTED IN TM-3930-647-14&P TO KEEP YOUR FORKLIFTS ON THE MOVE, USE THESE NSN'S.

ITEM	DRIVE	STEER
Tire	2610-00-455-7138	2610-00-726-7648
Flap	2530-00-714-8357*	2640-00-472-8645
Tube	2610-00-204-3016	2610-00-528-7783

\*Order on a DD Form 1348-6 with RIC of AKZ.

Erdlator Water Purification Unit...

## Van Light Fixture and Globe NSN

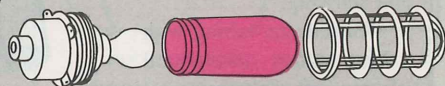
Dear Half-Mast,  
I can't find a replacement globe or light assembly for the low water warning light assembly for my Met-Pro 3,000 GPH water purification unit. They're shown in Fig 35 of TM 5-4610-223-20P (Feb 83). Can you help?

CW4 R.H.K.

Dear CW4 R.H.K.,

The TM doesn't tell the whole story. Item 1 of Fig 35 is the whole fixture, not the globe as shown. The fixture's NSN is 6210-01-260-3588 (PN VDA25GP). NSN 6210-00-244-1965 (PN G57) gets the red globe.

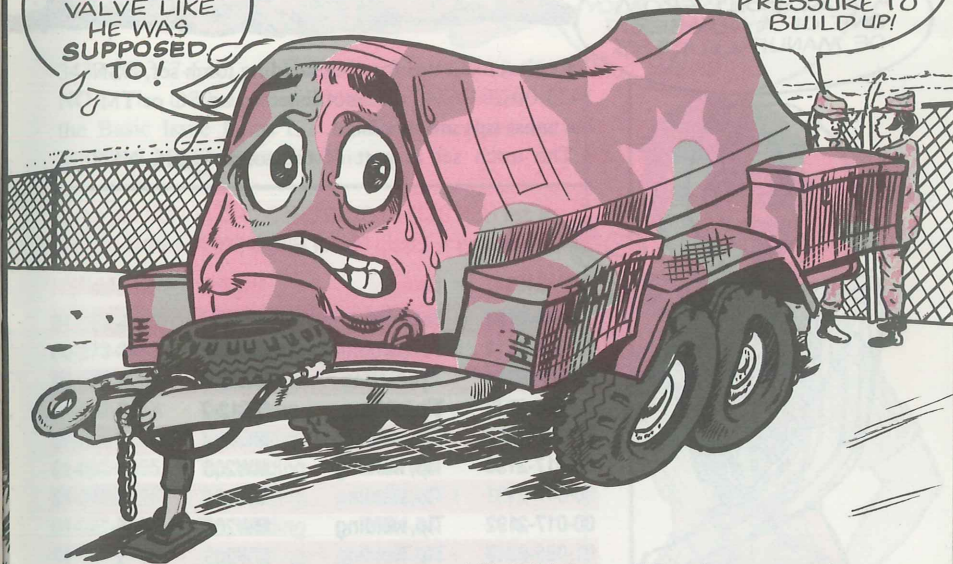
Half-Mast



## PMCS Change

WISH HE'D DRAIN MY UNLOADER VALVE LIKE HE WAS SUPPOSED TO!

IT'S BEEN RUNNING AN HOUR AND STILL I CAN'T GET THE PRESSURE TO BUILD UP!



The air inlet unloader valve on your 250 CFM Ingersoll-Rand compressor has a nasty habit of clogging up with rust. The compressor can't build up pressure so your power tools won't work right.

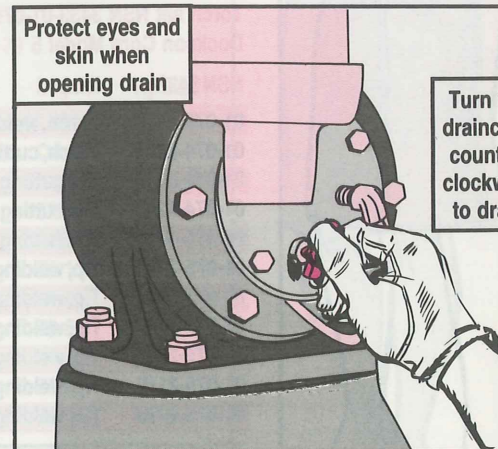
You operators can bust the rust problem by adding this step to your PMCS:

- Once a week, during compressor warm-up and before you push the service air button to start to build up pressure, drain the unloader valve assembly. This gets rid of any water build-up in the system—and prevents rust.

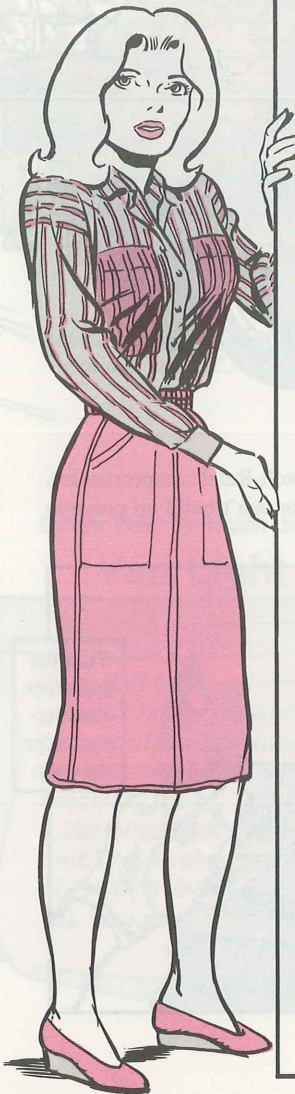
Make a note on Page 2-6 of TM 5-4310-452-14&P.

Protect eyes and skin when opening drain

Turn the draincock counter-clockwise to drain



THE TORCH NSN CAN GET YOU A TORCH SET FROM ONE OF A NUMBER OF MANUFACTURERS



# TORCH TIPS!

Replacement tips for your welding torch set, NSN 3433-00-294-6743, are not listed in an SC or TM, but most tips are available.

The torch set is part of the torch outfit, NSN

**Torch set NSN 3433-01-075-2134  
Smith Welding & Equip Model BIG98-510**

NSN 3433-	Item	Mfg PN	Tip size
00-018-8151	Torch, welding	MW5	—
01-074-8112	Torch, cutting	MC509	—
00-688-9784	Tip, cutting	MC12-1	1
00-484-2772	Tip, cutting	MC12-2	2
00-484-2771	Tip, cutting	MC12-4	4
00-017-2190	Tip, welding	MW203	3
00-017-2191	Tip, welding	MW204	4
00-017-2192	Tip, welding	MW205	5
01-085-9343	Tip, welding	MW209	9
01-074-8242	Tip, welding	MW211	11
01-074-8243	Tip, welding	MW212	12

**Torch set NSN 3433-01-075-2135  
Dockson Corp Model 5**

NSN 3433-	Item	Mfg PN	Tip size
01-075-2135	Torch, welding	Model 5	—
01-074-8238	Torch, cutting	Model C-5	—
01-074-8239	Tip, cutting	C-1	1
01-074-8240	Tip, cutting	C-2	2
00-378-4344	Tip, cutting	C-4	4
01-075-2145	Tip, welding	E-3	3
01-075-2146	Tip, welding	E-4	4
01-075-2147	Tip, welding	E-5	5
01-075-2148	Tip, welding	E-9	9
01-075-2149	Tip, welding	E-11	11
01-075-2150	Tip, welding	E-12	12

# TORCH TIPS!

3433-00-357-6311, covered by SC 3433-90-CL-NO1. The torch is also part of the torch outfit in the Basic Issue Items List of 5-ton wreckers and M88 and M578 recovery vehicles.

**Torch set NSN 3433-01-093-8012  
S.S. Co Model BSM**

NSN 3433-	Item	Mfg PN	Tip size
01-092-9051	Torch, welding	BS	—
00-273-2552	Torch, cutting	BMC	—
01-092-9052	Tip, cutting	10C-2-54	2
01-092-9053	Tip, cutting	MC-3-50	3
01-092-9054	Tip, cutting	MC-1-60	1
01-092-9055	Tip, welding	WT1-68	1
01-092-9056	Tip, welding	WT2-62 2	
01-092-9057	Tip, welding	WT4-54	4
01-092-9058	Tip, welding	WT6-50 6	
01-092-9059	Tip, welding	WT8-44	8
01-092-9060	Tip, welding	WT9-40	9

**Torch set NSN 3433-01-070-9838  
Uniweld Products, Inc Model KL-79**

NSN 3433-01-	Item	Mfg PN	Tip size
070-9833	Handle, welding torch	WH-79	—
070-9834	Cutting attachment	CA-79	—
070-9867	Tip, cutting	6290A-0	0
070-9868	Tip, cutting	6290A-2	2
070-9869	Tip, cutting	6290A-4	4
070-9875	Tip, welding	79-1	1
070-9871	Tip, welding	79-4	4
070-9870	Tip, welding	79-6	6
070-9872	Tip, welding	79-7	7
070-9873	Tip, welding	79-9	9
070-9874	Tip, welding	79-10	10

EACH INDIVIDUAL TORCH HAS IT'S OWN NSN. USE THE NSN OR MODEL NUMBER OF YOUR TORCH TO FIND THE TIP THAT YOU NEED!



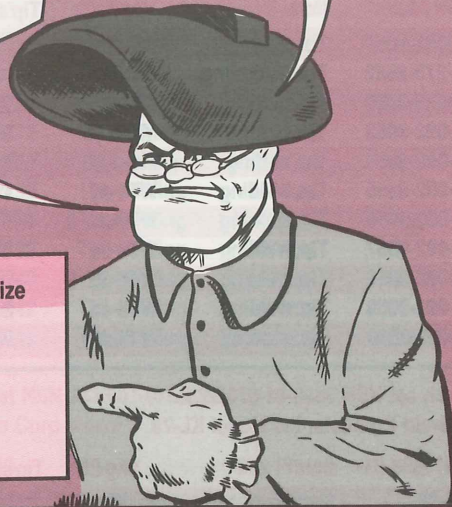
## Welding Jacket NSN's

Dear Half-Mast,  
We've been searching for leather welding jackets. Aprons protect the body fine, but our welders need protection for their arms too. Can you help?  
CPT D.R.

THE NSN'S ARE NOT ON THE AMDF SO ORDER THEM ON DD FORM 1348-6 FROM S9T. WRITE IN THE REMARKS BLOCK THAT THE NSN IS NOT ON THE AMDF. THEY ARE AUTHORIZED IN CTA 50-900. USE LIN 84137N.

THE JACKETS ARE ABOUT \$36 EACH

NSN	Jacket Size
8415-00-268-8262	34
8415-00-268-8263	38
8415-00-268-8264	42
8415-00-268-8265	46
8415-01-088-4933	50



## Container Handler Coolant Filter

Get the coolant filter for the 50,000-lb rough terrain container handler with NSN 2940-01-117-5552. This filter replaces the one shown as Item 11 in Fig 67 of TM 10-3930-641-20P and -34P.

## Fire Extinguisher Bracket

Use NSN 4210-00-383-7127 to get a mounting bracket for your 2½-lb Purple K fire extinguisher, NSN 4210-00-889-2221. Your authority is Appendix A of CTA 50-970. The fire extinguisher is listed in TB 5-4200-200-10.

## You Need a Good Start

BESIDES TACTICAL ADVANTAGES, GOOD PREPARATION MEANS LONG-TIME PROTECTION AND DURABILITY!



loose or blistered paint. Prepare the surface to be touched up like so:

- Remove all loose paint by light sandblasting or with an orbital sander. Wear a respirator!
- Feather the edges of good paint by sanding or with a stainless steel scouring pad.
- Wash with liquid detergent, NSN 7930-00-282-9699, and water, rinse with fresh water, and let the area dry.
- As soon as the area is dry—but no longer than four hours later—clean the area to be painted with thinner, NSN 8010-00-181-8079.

• Immediately coat all bare metal surfaces with coating compound, NSN 8030-00-850-7076. This protects the surface and helps the primer bond to the surface. Avoid getting this on painted surfaces.

• After the coating is dry—at least 30 minutes—paint it with primer, NSN 8010-01-193-0516. Mix each part well, then blend them at the specified 4 to 1 ratio. Let it stand 30 minutes before you use the primer.

• Apply the primer. It will dry hard in 90 minutes and you can add the CARC topcoat.

• Paint with single part CARC. Stir it thoroughly, though, before use. Here are NSN's for quart quantities:

Black	8010-01-229-7540
Brown 383	8010-01-229-7543
Green 383	8010-01-229-7546
Sand	8010-01-234-2934

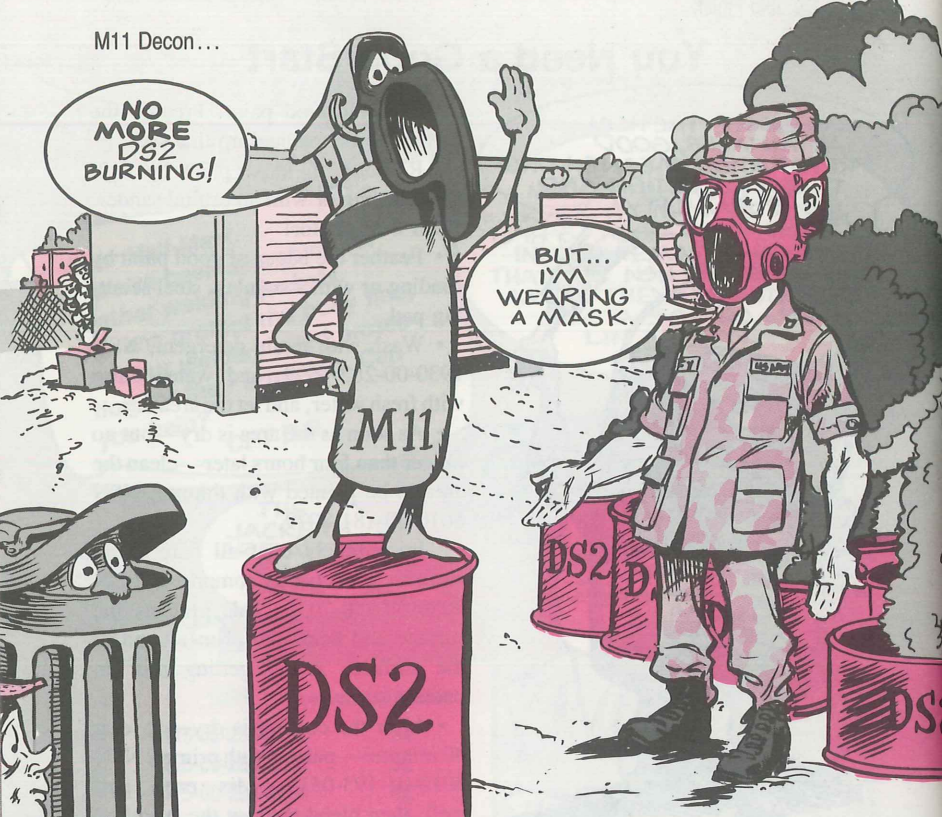
For more info on painting, see TM 43-0139, Painting Instructions for Army Materiel.

Chemical Agent Resistant Coating has significant tactical advantages, but an equally important feature of this basic polyurethane coating is its proven durability. This durable, tough coating will last up to four times longer than alkyd paint. But to get that coating to hold up when you're touching up, you have to prepare the surface right.

You can apply CARC over old CARC as long as it is clean and sound. But whether you're painting over old CARC or bare metal, clean off all rust, corrosion, oil, grease, moisture, dirt,

NO MORE DS2 BURNING!

BUT... I'M WEARING A MASK.



DS2 NEEDS CARE TOO!

AIR IS BAD FOR DS2, AND DS2 FUMES ARE BAD FOR US!



If you've been training with anti-freeze and water, thoroughly wash with detergent, rinse, then wash with dry cleaning fluid and wipe dry. Otherwise, the antifreeze and water will kill DS2's decon power and corrode the M11.

If you have DS2 left over, dispose of it through your local DRM office. No more DS2 burning!

Never store DS2 with STB. That's an explosive combination. There's no need to do anything special for DS2 while it's in storage, like turning its containers over every month. DS2 keeps fine left alone. DS2 has no limit on shelf life. But you need to inspect the container monthly for signs of dents, corrosion and leaking.



Thoroughly wash and rinse container

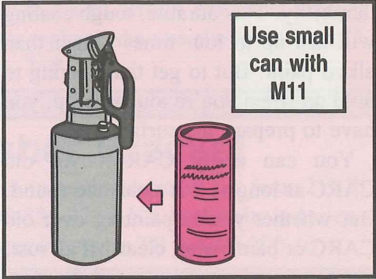
To knock out nerve agent, DS2 has to be strong stuff—strong enough to hurt if you're careless. Make DS2 work for you, not against you, with these reminders.

DS2 fumes are bad news. If you breathe the fumes, they'll make you sick. Never open DS2 containers without your mask on.

Never open a DS2 container until you need it, either. Once air hits DS2, it's only good for 48 hours... even if you just broke the container's seal.

Save yourself storage and disposal problems by figuring out exactly how

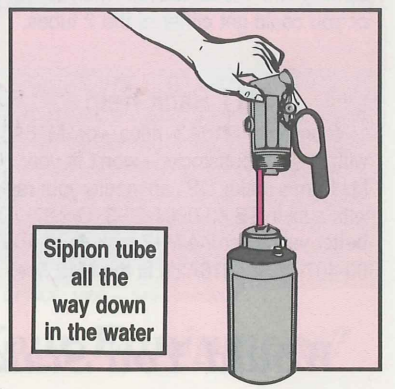
much DS2 you'll need before you start opening containers. That's a cinch with the M11 if you order DS2 in 1 1/3-qt containers, NSN 6850-00-753-4827. Just open one container for every M11.



### Stop Inhibitor Stop-Ups

When corrosion inhibitor clogs the siphon tubes in the M11, do this:

- Fill the container with water and stick the siphon tube all the way down in the water. The corrosion inhibitor will dissolve almost instantly.
- If the siphon tube is still clogged after the water treatment, rust is the problem. Replace the spray head assembly. If the inside of the container is badly rusted or pitted, replace it, too.





### Better Sockets

Need to replace one of the sockets in your tool set? Thin-wall, high-tensile-strength sockets to handle 12-point fasteners are available. You'll find them in the GSA Catalog listed as Aerospace Standard (AS) 954 handtools.

### Dipstick NSN

The filler cap and gage rod used to check the power steering fluid level on M809-series 5-ton trucks comes as one unit. Order it with NSN 6680-01-063-0266. Make a note in your TM 9-2320-260-20P.

### Cobra Control Tubes

Control tubes for the AH-1 series are not alike. Both NSN 3040-00-931-8284 and 3040-00-103-4630 can be used on the AH-1S (MOD), but only 3040-00-103-4630 will work on the AH-1P, -1E, and -1F models. Specify your model aircraft when ordering, or you could get either of the 2 tubes.

### M11 Rack Help

Your new M16A2 rifles—or M16A1's with M16A2 buttstocks—won't fit your old M11 arms racks. DS can modify your racks with a fix in TB 43-0001-36-3 (Oct 87). Or, better yet, order the M12 rack, NSN 1095-00-407-0674. M16A2's fit the M12 fine.

### Light Up Your Lantern

Use NSN 6240-00-299-5546 to get replacement fluorescent bulbs for your AC/DC electric lanterns, NSN 6230-00-901-7301.

### Fiberglass Repair Kit

Use NSN 2090-00-372-6064 to get a fiberglass repair kit, MIL-R-19907, to repair HMMWV and M1009 CUCV tops.

### JP-8 Smoke Correction

This updates the article on Page 3 of PS 426 about JP-8 fuel as used in M1-series tanks. The only concern when using the smoke generator with JP-8 is that JP-8 produces poor quality smoke, and not much of it, in comparison to DF-1 and -2. The chance of fire is no greater with JP-8 than with diesel fuels. No warning will be added to the tanks'-10 TM's.

### SPH-4 Helmet

The part number and description are wrong for Item 9 in Fig E-4 of TM 10-8415-206-12&P. The right PN for the connector, receptacle, is RCGOB304C0040. The NSN is 5935-01-254-7809. You can get the connector, plug, Item 17, with NSN 5935-00-137-6789. It cross references to 2 part numbers, RE54-106S613 or SMD657412.

### High Level Stand

Need a 17-ft extension ladder for some of those high-up aircraft maintenance chores? You can get ladder, NSN 5440-01-048-8638, and platform, NSN 5440-01-092-1812. They are authorized for your AVUM shop sets.

### Bradley NSN Change

Use NSN 4730-00-930-2341 to get the final drive drain plug for M2/M3-series Bradleys. The number shown for Item 1 in Fig 12 of TM 9-2350-252-24P-1 is wrong. When supplies of -2341 run out, you'll get NSN 4730-00-640-0279 as a replacement.

### Ground Strap NSN

NSN 5805-01-163-8867 gets the ground strap that's used on your SB-22 switchboard and MX-148/6 ground rod. The NSN for the ground strap's not in TM 11-5805-262-12.

### M88A1 Brake Info

The parking brake test info on Page 2-18 of TM 9-2350-256-20 (May 86) is wrong! Testing the parking brake with the vehicle on a 60-degree slope will get you a runaway "88." In Item 9, instead of parking your "88" on a 60-degree incline, park it on a 30-degree incline to test the parking brake.

### "Blue Light Specials"

Use NSN 6220-01-211-8419 to get a blue lens for the dome light of your M577-series command post vehicle. If you need the entire dome light with a blue lens, use NSN 6220-01-211-8397.

### Torque for M110/M578

The right torque for the eccentric spindle nuts is  $600 \pm 25$  lb-ft lubricated. That means you put oil on the clamps, nuts, bolts, and washers before you torque. Make a note that the 1,000-1,200 lb-ft mentioned in the -20's is wrong.

### Wrench for PIP M102

You'll need wheel bearing wrench, NSN 5120-01-185-7963, to adjust the wheel bearings on the product-improved M102 towed howitzer. It's the same locknut wrench that's used on the HMMWV. Use Appendix A of CTA 50-970 as your authority to order.

### Clean 'n' Green

If you need sea foam green paint to touch up administrative vehicles, get it with NSN-8010-01-115-2195 (5 gal) or NSN 8010-01-115-7984 (1 gal). Or local purchase the paint using Dupont Number 45802L or GM Number DS-GM283.chip numbers.

☆ U.S. GOVERNMENT PRINTING OFFICE: 1988 — 548-004/80009








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

the Condition of Your Equipment?



**ALWAYS USE THE  
RIGHT BOLT AND THE  
RIGHT  
TORQUE!**



HEAD MARKING	SAE GRADE
	1 & 2
	5
	5.1
	5.2
	7
	8
	8.2