

Issue 398

PS

January  
1986

THE  
PREVENTIVE  
MAINTENANCE  
MONTHLY

THIS IS A  
REAL FOWL-UP.  
BETTER GET  
SOME **HOTLINE**  
HELP!

COO...  
COO!

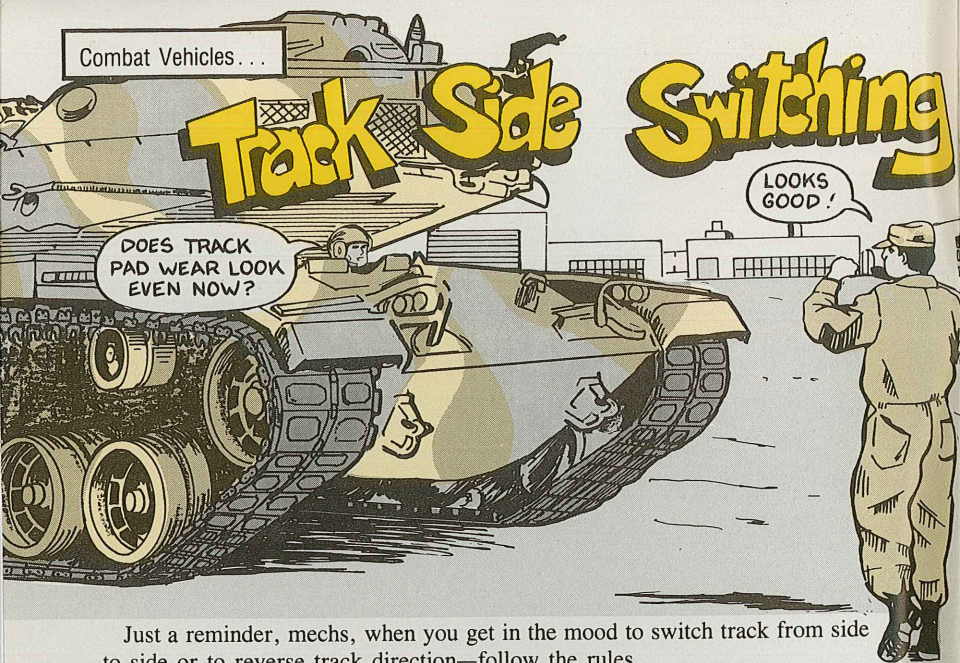
BRAYMAN

US ARMY

AN/DBC-1  
Pilotless Carrier,  
Pigeon,  
Communications

See **HOTLINE** Insert  
Pages 31-34

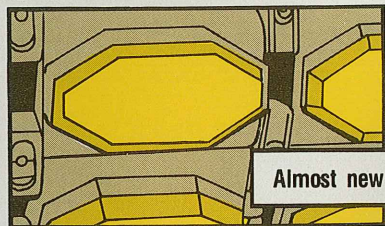
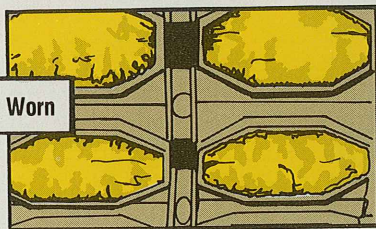
# Track Side Switching and Reversal



Just a reminder, mechs, when you get in the mood to switch track from side to side or to reverse track direction—follow the rules.

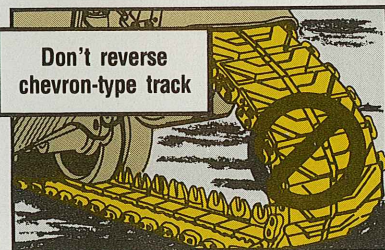
The rules are simple:

1. To even out track wear, you can switch left and right side track on your vehicle, or you can use either side track of another vehicle, as long as it's worn about the same as the track you'll be keeping on your vehicle.



2. To even out shoe wear on a side of track, you can sometimes reverse the direction of rotation by turning the entire track around. You can also move that track to the other side of the vehicle.

3. The exception to Rule 2 is that you cannot reverse the rotation of track with chevron grousers (track with rubber that is shaped sort of like a V).



By design, the chevron grouser track must be mounted so that the bottom of the V-shape hits the ground first when the vehicle moves forward. That way the track cleans itself and gets the most grip on the ground.

More info on track wear can be found in TM 9-2530-200-24, Standards for Inspection and Classification of Tracks, Track Components and Solid Rubber Tires.

JAN 86

## PS THE PREVENTIVE MAINTENANCE MONTHLY

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Within limits of availability, older issues may be obtained direct from Editor, PS Magazine, c/o US Army Materiel Readiness Support Activity, Lexington, KY 40511-5101.

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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

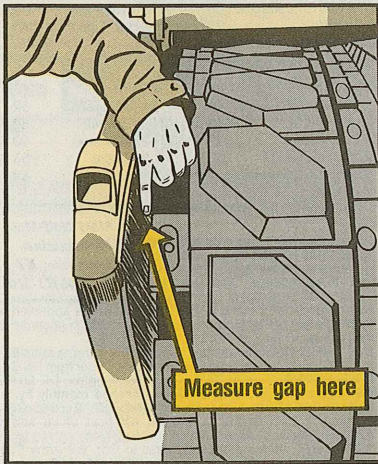
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# Idler Hub Arm



Well, it turns out that the upper spindle bearings on the M1's compensating idler hub and arm may be causing dangerous wear.

The bearings are harder than the metal of the upper spindle, which means they're wearing at the softer metal. Plus, the lube currently used isn't doing the job. Until a solution to the metal problem is found, here's what you need to do:



—Crews, as part of your after-operations checks open both front fenders and measure the gap between the track end connectors and the #1 skirt. If the gap is less than 1/8-inch—or if the end connectors are touching the skirt—sing out to your mechanic.

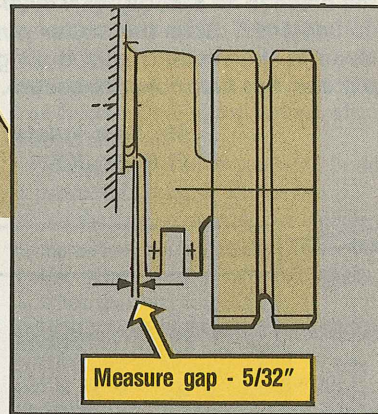
Also open both #1 skirts and look for loose or missing idler hub nuts. If nuts are loose or missing, don't operate again until your mechanic has checked out the hub and arm.

—Mechs, here's what you do at each semiannual service—or whenever the crews report loose or missing nuts or too little room between end connectors and skirts.

# Inspection



the No. 1 Common tool set) into the gap between the retainer and the idler arm at the front, the upper spindle and bearings are worn. Replace the idler arm.



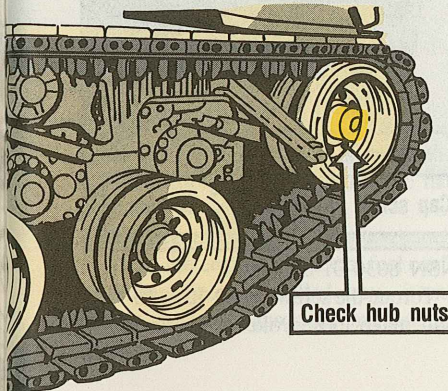
1. With the track on the tank and with the correct track tension applied, eyeball the retainer and idler arm where they join. If there's metal-to-metal contact at the top and a gap at the bottom, the upper spindle is bent. Replace the idler arm.

2. If you can insert a 5/32-in Allen wrench (NSN 5120-00-198-5392 from

—Change the grease you use when lubing the M1. From now on, use General Purpose Aircraft Grease, MIL-G-81322, for all applications calling for GAA. NSN 9150-00-145-0268 gets a 5-lb can and 9150-00-935-5851 gets a 35-lb can.

Just pump in enough of the new stuff to push out all of the old. If you can't get the new grease for a while, use the old stuff more often—like weekly for the idler upper spindle bearings.

More details are in Para 2-5b of TB 43-0001-39-7 (Oct 85).



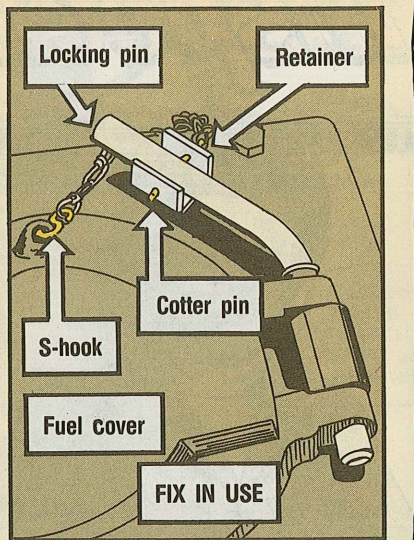
## Fuel Cover Fix

Dear Half-Mast,

I've found a solution to the problem of broken metal clips that plagues the fuel cover retainers on M1 tanks. The metal clip is not in the supply system.

Drill a hole through the fuel cover retainer and locking pin using a 1/32-in drill bit. Attach a cotter pin, NSN 5315-00-013-7258, to a piece of small chain and fasten the chain to an S-hook, NSN 4030-00-946-8497. Slip the cotter pin through the retainer and locking pin and the fuel cover is secure.

Mr. Sam Vuleta  
Ft Knox, KY



(Editor's note—Thanks for the quick fix!)

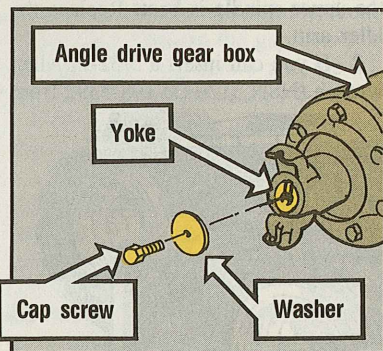
## Use Hardened Yoke Washers

A loose yoke is no joke. If the yokes for the M1's oil cooler drive gearbox work their way loose, they cause lots of damage to the shaft components.

To stop the yokes from working loose from the angle drive gearbox, the headshed has come up with washers and cap screws that let you torque the yoke screws tight.

Replace the washers and cap screws on both the right- and left-side yokes with improved washers, NSN 5310-00-987-1294, and cap screws, NSN 5305-01-010-2362.

Before installing the cap screws, coat their threads with sealing compound,



NSN 8030-01-025-1692.

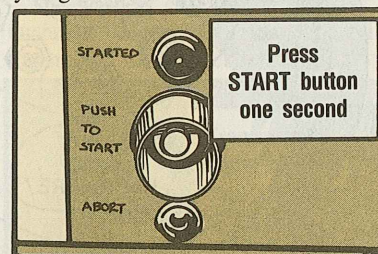
Torque the screws to 30-40 lb-ft. That will make loose yokes a memory.

## Start Right—Stop Right!

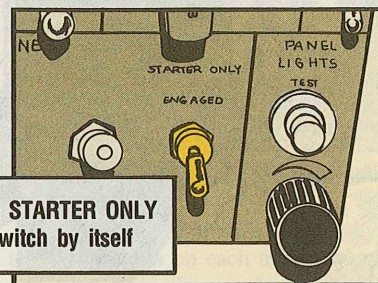
Some bad things are happening to those \$353,000 turbine engines—and right now the finger is pointing to you drivers. Incorrect starting and shutdown procedures are causing excessive wear and tear, along with outright failure!

Here are four cautions to prevent engine damage during starting:

**\$** Never press the START button longer than one second. Don't push the button more than once, or hold it down until you get a start or an abort.

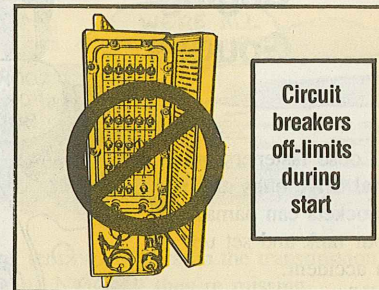


**\$** Never use the STARTER ONLY switch before or while pressing the START button.



**\$** Never move any circuit breaker to the OFF position once the start cycle has begun.

All these actions could put too much fuel into the engine. The extra fuel can't be burned in a controlled way—it explodes. And that causes internal damage

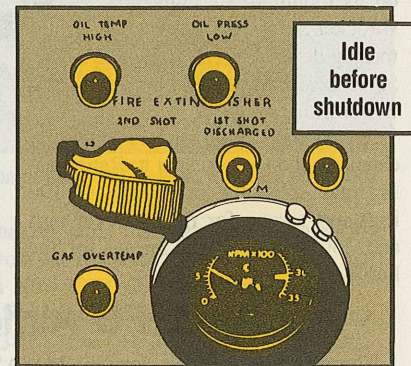


that will eventually ruin the engine.

**\$** Don't play tricks or combat start games with the engine. The info in TM 9-2350-255-BD, Battlefield Damage Assessment and Repair, is only for use in an emergency or in real combat when directed by your CO.

Finally, here's what you need to do to prevent damage at shutdown:

**\$** Give the engine at least two minutes at idle to cool off before shutdown. Let it idle while you check out gages, switches and warning lights.



That will prevent heat soak-back, which cracks the engine recuperator. The cracks will ruin the rear module, and that costs \$139,000.

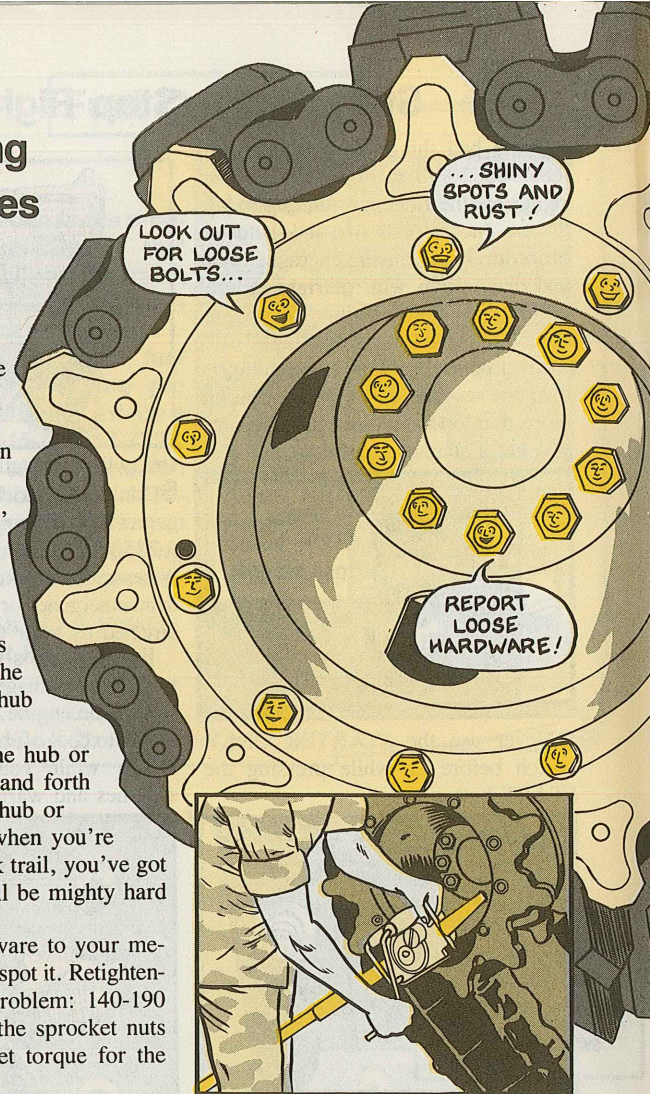
## Gaging Gouges

Loose fasteners on final drive hubs and sprockets can damage your tank and set up an accident.

When you crewmen make your before-operation PM checks, eyeball the hubs and sprockets. Look for signs of loose nuts—shiny spots or rust. Loose mounting bolts or studs will gouge the metal and make the hub or sprocket useless.

Gouging will let the hub or sprocket move back and forth on its mount. If the hub or sprocket shears off when you're tooling down the tank trail, you've got 55 tons of tank that'll be mighty hard to control.

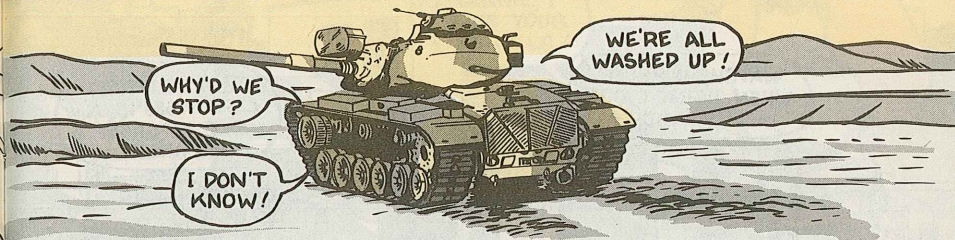
Report loose hardware to your mechanic as soon as you spot it. Retightening may solve the problem: 140-190 lb-ft wet torque for the sprocket nuts and 450-470 lb-ft wet torque for the hub nuts.



## GPFU Airflow Tests

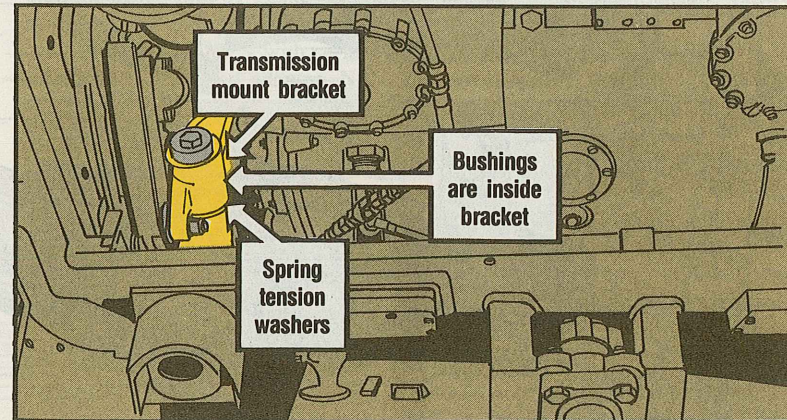
There's help available for you M48A5/M60-series tank, AVLB and M728 mechanics in operating the M39 airflow tester. The tester measures the airflow from the M8A3 and M13A1 gas particulate filter units to each crewmember's protective mask. The instructions aren't found in any of your -20 TM's, tho. They're in Para 2-5e of TB 43-0001-39-4 (Jan 85).

## From Missing Washers to Lost Tank



Something as simple as the three spring tension washers on the transmission mount brackets can lead to your tank being NMC—if they're missing.

The washers cushion the brackets' rubber bushings. Without washers, the bushings wear out quick-like. Then all the shocks absorbed by the bushings are transmitted to the pack.



Eventually, the shocks and bumps damage final drive seals, and that puts your tank out of action.

You mechs can prevent damage by making sure you install all three spring tension washers on each mount when you put the pack in.

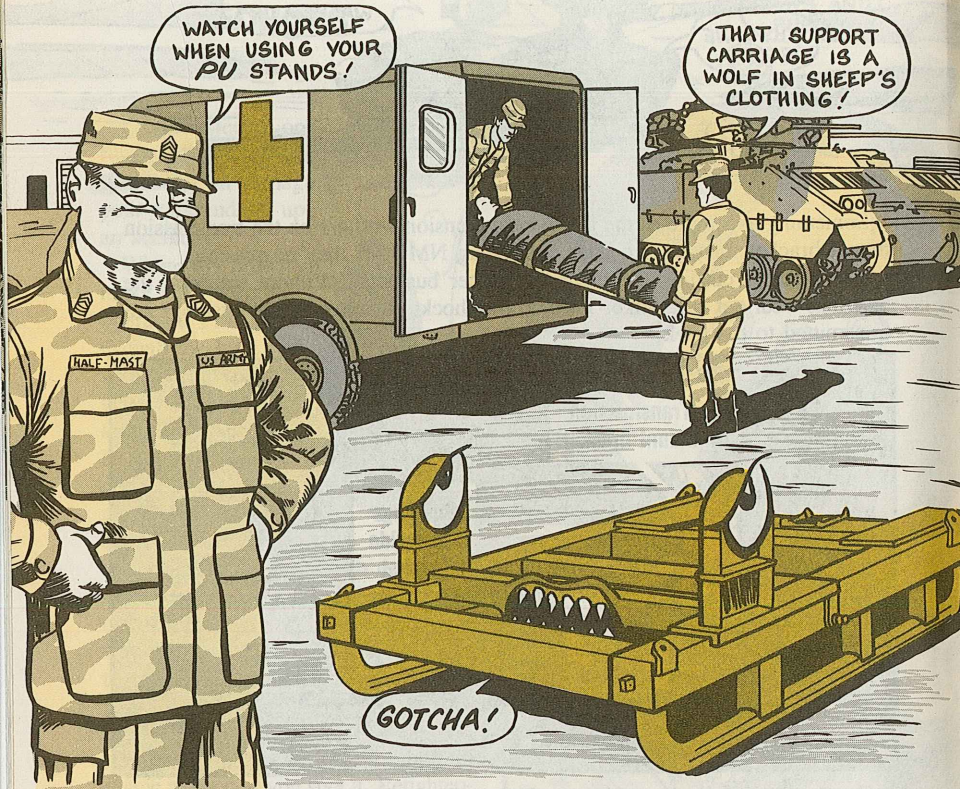
If they're missing, replace them with NSN 5310-00-790-0186.

Eyeball the rubber bushings inside the brackets, too. If they're torn or ragged, replace them with NSN 5340-00-678-5389.

## PS Back Issues

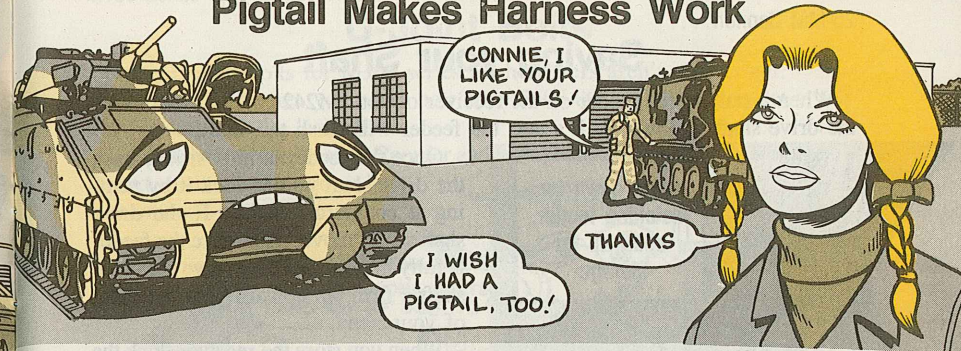
You don't need to go around in the dark trying to find back issues of PS Magazine. Just drop a line to Bonnie, PS Magazine, Lexington, Ky 40511-5101.

# Power Unit Stand Dangers



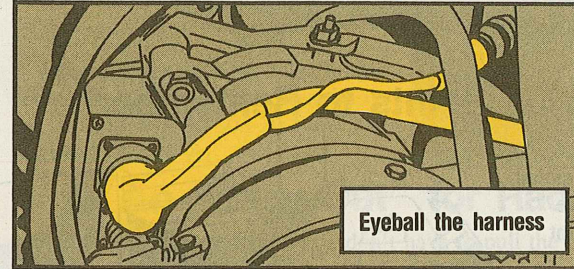
Seems like for every break you get, there's a catch or two. As useful as the power unit stand is, you've got to watch how you use it or you can get hurt or killed. In the first place, you move the stand only by lifting sling or tow bar. You and your buddies can mash a lot of fingers trying to lift the heavy stand. The transmission support carriage slides back and forth on the stand's outside rails. If you get a hand in the way when the carriage slides against the end of the stand, you can just about say goodbye to it. You also don't try lifting or towing the stand with the power unit mounted. The stand's lifting and towing brackets aren't made for that weight. Someone—maybe you—can get hurt real bad if the brackets give out under load.

# Pigtail Makes Harness Work



Mechs, you'll need a generator pigtail adapter to make a new generator wiring harness (3W4) work on some Bradley vehicles. The original equipment generator wiring harness has been replaced on new production vehicles by NSN 2590-01-187-9536. This is the only one available in the supply system.

Older vehicles (M2's with serial numbers up to 2AA00633 and M3's up to 3AA00467) will need adapter, NSN 2920-01-187-3661, to hook up the new harness to the generator.



Of course, if you've got a late Bradley, you've got no problem. Just keep in mind that the adapter is needed if you need to replace the harness on an older vehicle.

Bradley...

# Crowfoot Eliminates Pack Pulling

There's good news for you Bradley and MLRS mechs who've cussed and discussed the transmission oil cooler outlet hose.

You won't have to pull the power pack to remove, replace or tighten that hose if you get a 2 1/4-in crowfoot socket for the 1/2-in square drive wrench in your tool set. NSN 5120-00-184-8385 gets the crowfoot socket. It's authorized by Appendix A of CTA 50-970.

25-MM Cannon...

## Saving your Shaft

When installing the feeder on the receiver of your M242 cannon, make sure the drive shaft is down. If it's not, the feeder will mash the shaft.

Shaft down for installing feeder, shaft up for storage

Once the feeder is in position, push the drive shaft up and lock it by turning it counterclockwise. If the drive shaft won't move, make sure the feeder is fully in position. Then give the drive shaft a firm tap upward with the palm of your hand.

When you store the receiver, lock the drive shaft. That keeps it from bending when the receiver is slid on a workbench or other surface.

Never move the receiver or load the feeder unless you know the drive shaft is in place. Knowing whether it's up or down can save your cannon a trip to the shop.

MLRS...

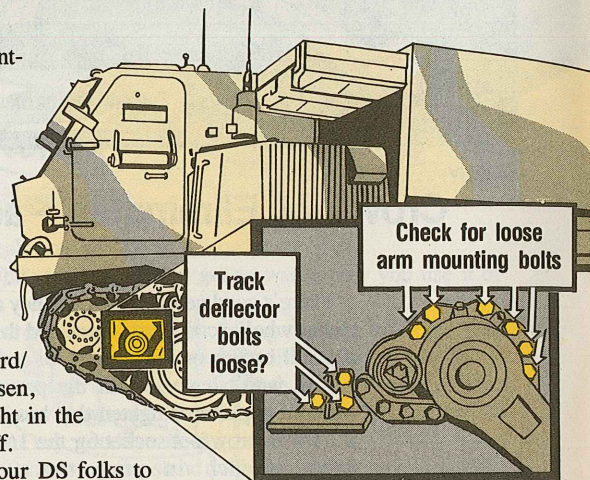
## Hull Points to Remember

Keep an eye peeled for loose roadwheel arm mounting bolts. The bolts are steel and the hull mount is aluminum.

If the bolts loosen, they strip the aluminum threads. Repairing the hull is a DS job. Report loose bolts to your mech soonest.

Watch for loose mounting bolts on the track guard/deflector, too. If they loosen, the deflector can get caught in the track and maybe break off.

That means a job for your DS folks to drill out the broken bolts and re-thread the holes. If you see loose bolts, get your mech on the job.



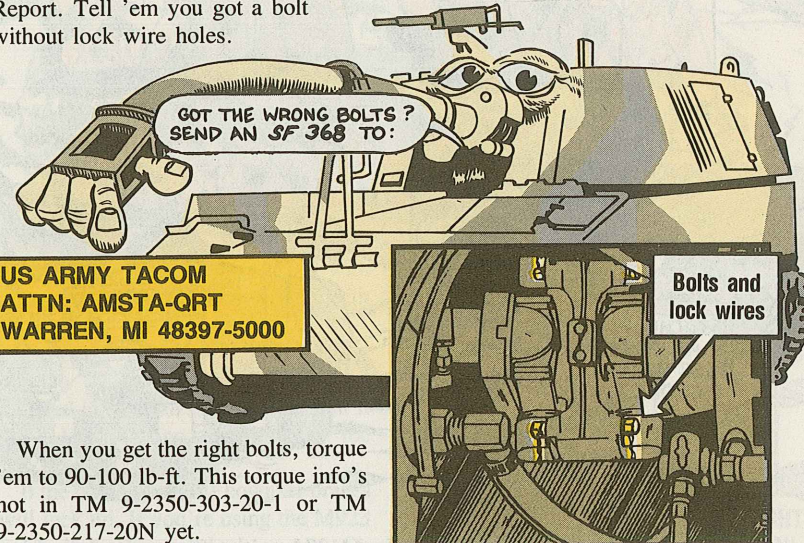
M109-Series SP Howitzers...

## U-Joint Bolts

Some U-joint bolts for M109-series SP howitzers aren't made right.

You may find when you order bolt NSN 5306-00-174-4216, you get a bolt with no hole for the lock wire.

If that happens, don't use it. Reorder and send in an SF 368, Quality Deficiency Report. Tell 'em you got a bolt without lock wire holes.



When you get the right bolts, torque 'em to 90-100 lb-ft. This torque info's not in TM 9-2350-303-20-1 or TM 9-2350-217-20N yet.

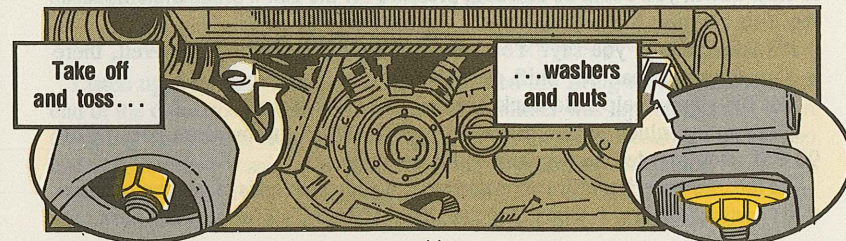
## An "Easy Out" for Radiators

A little work will fix it so you don't have to pull the powerpack to remove the radiator on your M109.

Next time the pack's out, don't replace the flat washer, lockwasher and nut holding the mounting screws to the front and rear radiator mounts.

The screws—held in place with brackets—will act as mounting studs.

Then, to pull the radiator, just disconnect the upper mounts and all the hoses and lift the radiator out.



# Prime Mover Makes Brakes

HEY, CHECK THE AIR PRESSURE GAGE BEFORE I CHOK!

The 5-ton truck does more than pull the M198 howitzer from point A to point B. It also provides the air pressure to operate the gun's brakes.

In hilly country, your truck could use so much air to slow or stop that the gun's brakes will start to apply.

What happens is this: It takes between 65-90 PSI air pressure to release the brakes on an M198. Any time the pressure goes lower than 90 PSI, the brakes can start to apply.

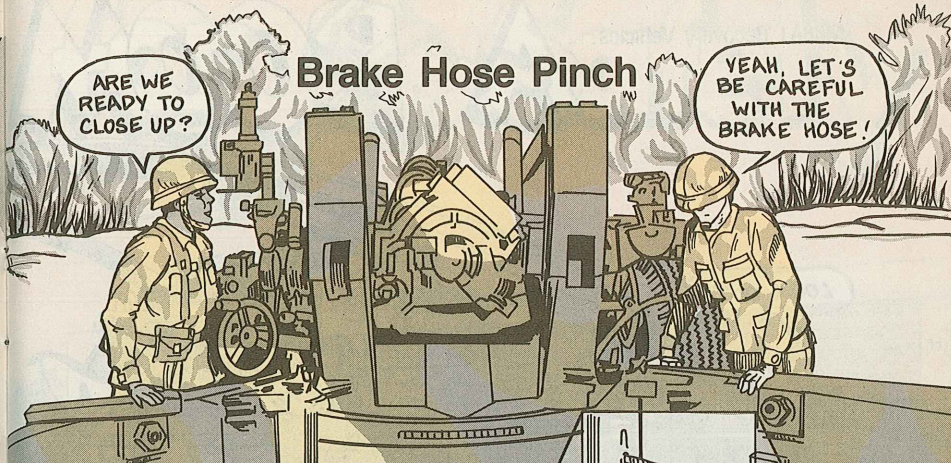
Your truck's air compressor has a cut-in pressure of 105 PSI and a cut-out pressure of 125 PSI. So, when you're hauling down that hill using air pressure to slow down, you could be bleeding pressure off the gun's brake system, causing it to begin to lock up.

It's unavoidable, you say? You have to use your brakes, right? Well, there is something you can do. Shift down before you start down.

Let the engine help hold back against your rig's weight.

Keep an eye glued to the air pressure gage. When the pressure goes below 90 PSI, stop and let the pressure build up again.

All this maneuvering is time-consuming, but your mission is to get that howitzer to its destination. It won't be going anywhere if the brakes lock up and burn out.

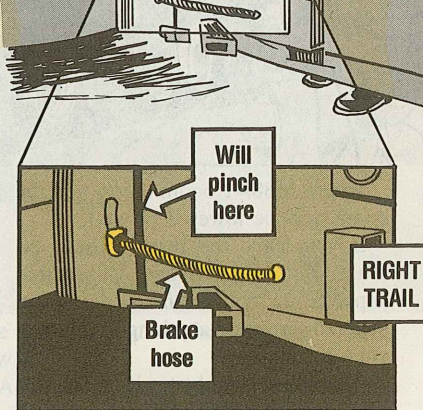


## Brake Hose Pinch

Close the trails on your M198 with care, crewmen, or you can end up with no brakes.

The brake hose running from the right trail to the bottom carriage can be pinched in the trail hinge. Then you'll have little or no braking for the howitzer.

If the hose bursts, the howitzer brakes will lock up. If you're using the M923 truck, its brakes will lock up, too. On the M54A2 and M813, you won't have any brakes at all. Remember to watch the hose carefully when closing the trails. Keep the hose clear of the hinge.



## Thumbscrews for Stowage Boxes

Get the thumbscrews used on the cab vehicular boxes on M109-series SP howitzers with NSN 5325-00-290-3820. The screws work on both the right- and left-side boxes.

## M114A2 Howitzer Headspacing

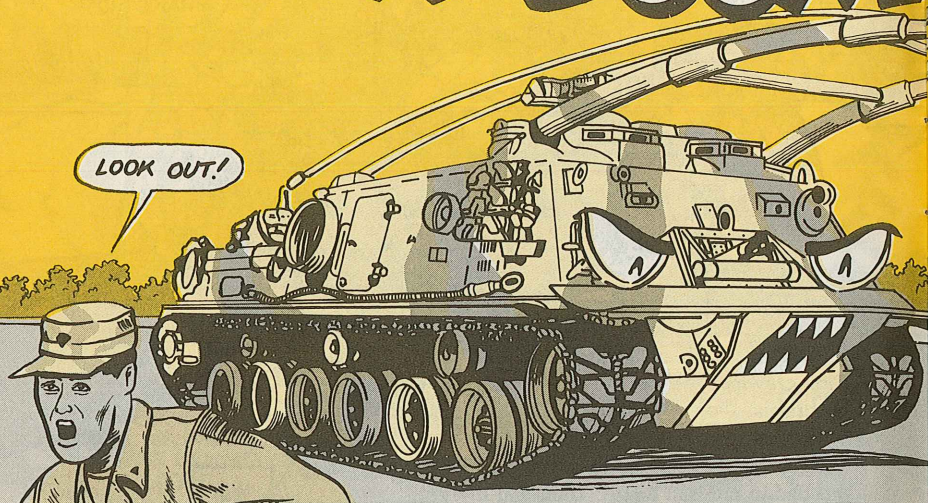
Listen up, Redlegs! Bad headspacing between the firing mechanism and the end of the obturator spindle can hurt you. One soldier was injured recently when the firing mechanism blew out of the breech assembly. Bad headspacing can also cause split primer casings and burred firing mechanism lock stops.

Check headspace now using gage, NSN 4933-00-722-5952, which is in your BII. Details on how-to are on Page 114.1 of C5, TM 9-1025-200-12.



# A BOOM for Safety

LOOK OUT!



Ignore M88A1 boom safety and the boom may be lowered on you.

If you leave the boom raised, oil drains from the cylinders. When that happens, the boom can free fall when lowered, crushing anything—including you—below it.

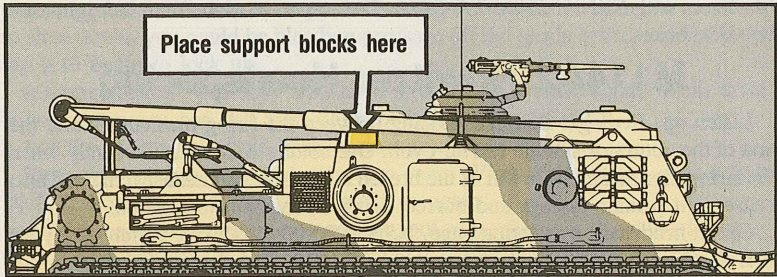
Always stow the boom in travel lock when you're not using it.

When you remove the powerpack for service, lower the boom with the Auxiliary Power Unit (APU). Support it with

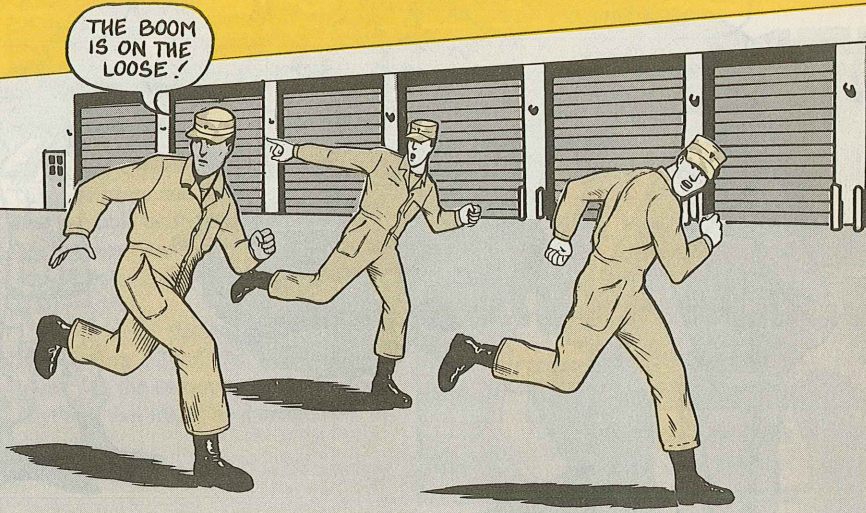
2 x 4-in wood blocks placed on the air cleaner inlet covers on top of the hull.

If the APU is out of action, use one from another M88A1 to lower the boom. Para 2-23.1 of C4 to TM 9-2350-256-20 gives the procedure.

If no other APU is available—then and only then—leave the boom raised. Never try to lower the boom with any other equipment. You'll damage the boom, cylinder and hydraulic system components.



THE BOOM IS ON THE LOOSE!



If you leave the boom raised, you've got to pressurize the hydraulic system before lowering the boom. Here's how:

Place the boom lever in the FORWARD position and keep it there for five minutes. This allows the hydraulic system to fill with oil and eliminates air pockets. Move the boom backward and forward within the 4-ft live boom area described on Page 2-93 of TM 9-2350-256-10. Make sure the boom is operating smoothly. Stow the boom and you're back in business.

When you're using the boom, keep everyone off the vehicle. Page 2-94 of the -10 TM is wrong when it tells you to lay the hoist cable over the J-hook as the boom is lowered. That's dangerous.

For more info, see TACOM SOU Message AMSTA-MCB 171400Z May 85.

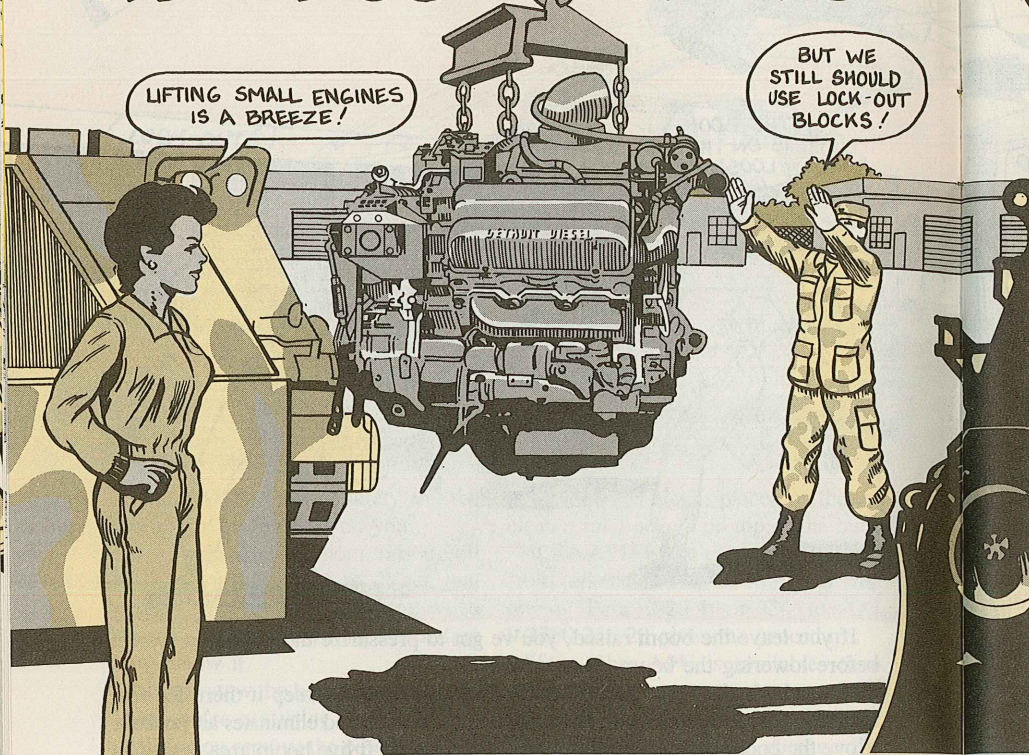


# Use Lock-Out for

# Heavy Loads

LIFTING SMALL ENGINES IS A BREEZE!

BUT WE STILL SHOULD USE LOCK-OUT BLOCKS!



Setting up your M88A1 to lift less than six tons (like a tank powerpack, for example) is a breeze compared to what you have to do to safely lift heavier loads.

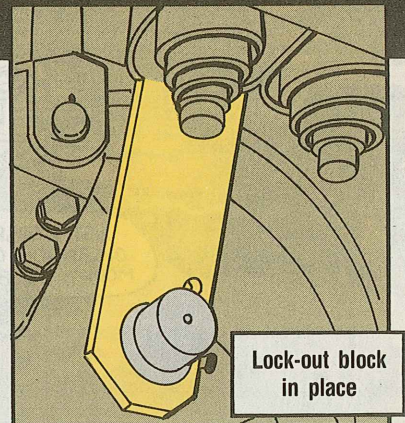
It's not enough of a breeze, tho, that you can overlook the possibility of equipment damage.

For loads of more than six tons, you have to use the lock-out blocks so the front suspension's not damaged. All that extra weight can play havoc with torsion bars, shock absorbers and road arms.

At less than six tons, what you have to look out for is damage to anything that might be under the M88A1's hull.

Some tank outfits remove the engine deck and put it on the ground between the tank and the "88". Then the 88 straddles the deck as it gets ready to lift the pack.

When the pack is lifted, the weight can compress the suspension enough that the hull bottoms out on the deck. Most times, you end up with a broken travel lock. You could end up with a warped deck.  
To prevent damage, use lock-out blocks. Para 2-24 of TM 9-2350-256-10 gives you the instructions. And, move anything that might be damaged out of the way.



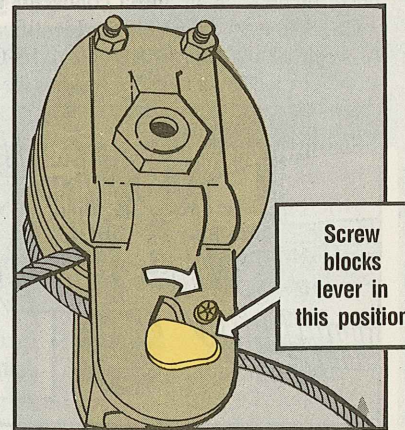
## Don't Wait for the Fall!

Crews, make sure the capscrew is in place on your 88's 25-ton snatch block.

If it's missing, the hinge can open when there's no load on the block and let the block fall.

You can get the right screw with NSN 5305-00-269-3231. No hole for the screw? Call your mech. He can drill and tap a 3/8-24UNF-2A hole.

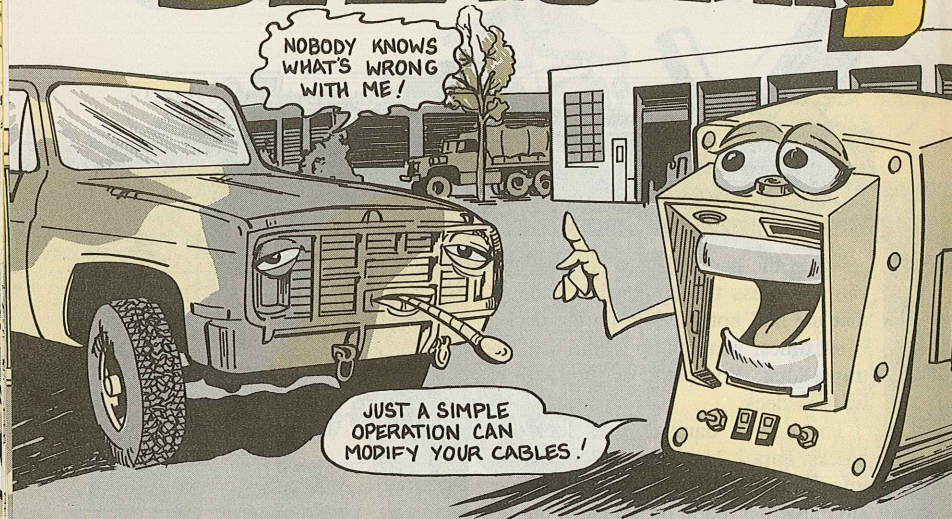
Once you've got the screw and the hole, use the screw to block the hinge lever so it can't open unless you want it open.



# STE//ICEing

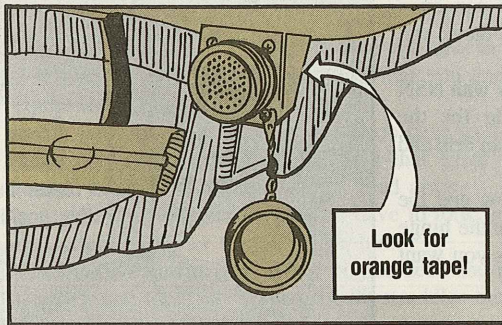
NOBODY KNOWS WHAT'S WRONG WITH ME!

JUST A SIMPLE OPERATION CAN MODIFY YOUR CABLES!



Mechs, you can use STE/ICE to troubleshoot the CUCV, but you may have to modify the Diagnostic Connector Assembly (DCA) cable on some of them. Early models came with a connector that was not wired correctly.

Check the truck's Vehicle Identification Number (VIN). If the number's between 100000 and 172483 on an M1009, or between 300000 and 357978 for all other models, it may be missing the clip. Trucks with other VIN's are OK.



Look for orange tape!

Find the wiring harness under the center of the dashboard behind the DCA. If it has orange tape around it, the fix has been done and you can use the DCA.

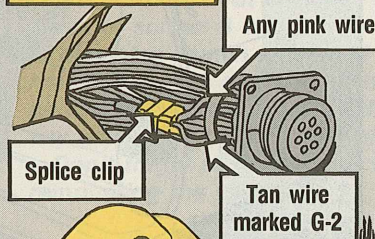
No orange tape? Then you'll need to order a clip, NSN 5940-00-264-9099, and orange tape, NSN 7510-00-836-9902.

# the CUCV

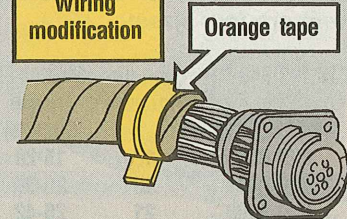
When the clip and tape come in, do this:

- Peel back the connector plug harness tape until you can see the tan and pink wires.
- Retape the connector plug harness.
- Insert the clip between any pink wire and the tan wire marked G-2.
- Wrap orange tape around the harness to identify that the clip has been installed.

Location of wiring



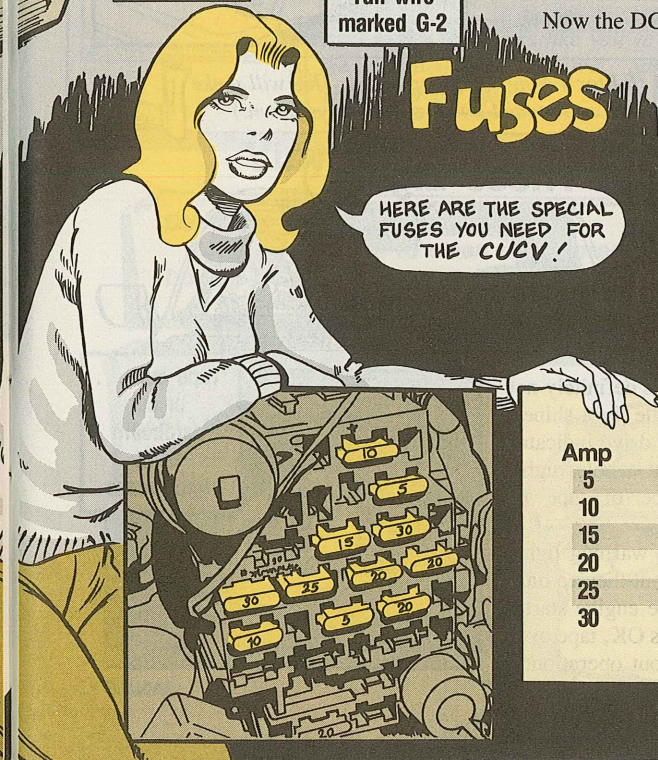
Wiring modification



Now the DCA's ready for STE/ICE.

## Fuses

HERE ARE THE SPECIAL FUSES YOU NEED FOR THE CUCV!



Amp	NSN 5920-01-
5	123-5212
10	123-5211
15	149-6952
20	085-0825
25	149-6953
30	188-6294

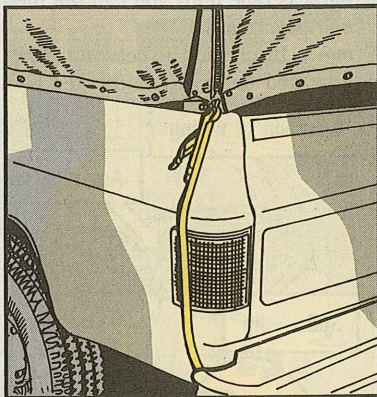
## Hold That Zipper Down

Dear Editor,

Cargo covers on M880's and CUCV's come unzipped during travel. By the time you notice it, chances are the wind has damaged the cover. Here's our simple, cheap way to hold those zippers down. Hook one end of a rubber tiedown strap to the zipper pull and the other end to the body of the truck far enough away to keep a constant pull on the zipper.

Rubber tiedowns are authorized by Appendix A of CTA 50-970. Here are four sizes:

NSN 5340-01-	Length (inches)	Stretched length (inches)
029-9083	10	15-20
029-9084	15	20-30
030-3098	21	26-42
029-9085	31	36-42

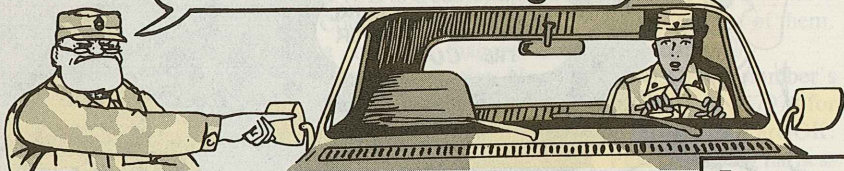


2Lt Marc L. Yergin  
Weirton, WV

(Editor's Note—A snappy idea. This will make sure a buttoned-down zipper stays down.)

CUCV...

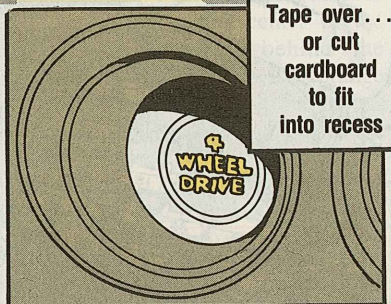
## Blackout Those Lights



A blackout situation is definitely not the time to let your little light shine.

To keep the 4-wheel drive indicator light from ruining your whole night, cover it with a piece of tape or cardboard.

Several other engine warning lights can also be annoying, but they're only on temporarily until the engine starts. If your commander says OK, tape over them too during blackout operation.



Tape over...  
or cut  
cardboard  
to fit  
into recess

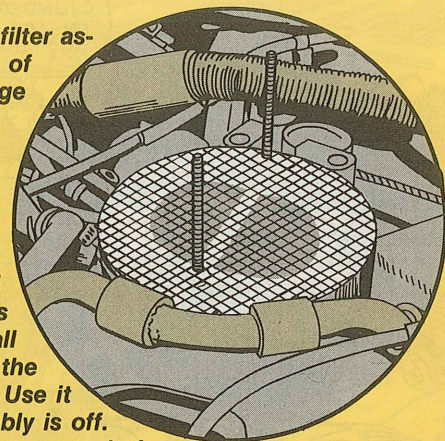
## CUCV Air Intake Screen

Dear Editor,

When you remove the air filter assembly to get to the engine of the CUCV, you expose a large air intake opening. It's easy for things like pens, small tools or parts, to fall into the air intake.

I've solved the problem by making a cover from an old screen. Cut out a round piece of screen 6 1/2 inches in diameter. Punch two small holes so it slips easily over the air cleaner mounting studs. Use it any time the air filter assembly is off.

Don't forget to remove the screen before remounting the assembly.



SFC Robert Boyd  
Ft Knox, KY

(Editor's Note—Looks like you've got the situation well covered, Sarge. Thanks for the tip.)

## Vinyl Cleaner and Protector

Dear Half-Mast,

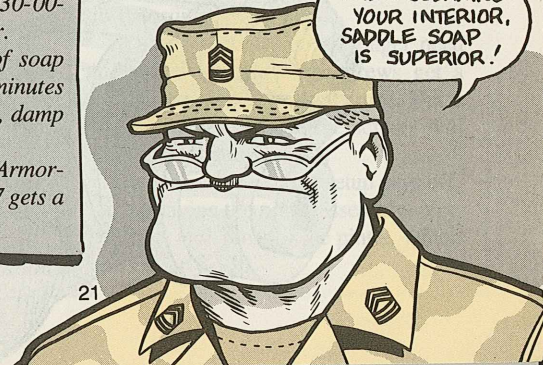
What can we use to clean and protect the seats and dashboard? We've tried soap and water, but that leaves a soapy film. SGT G.D.W.

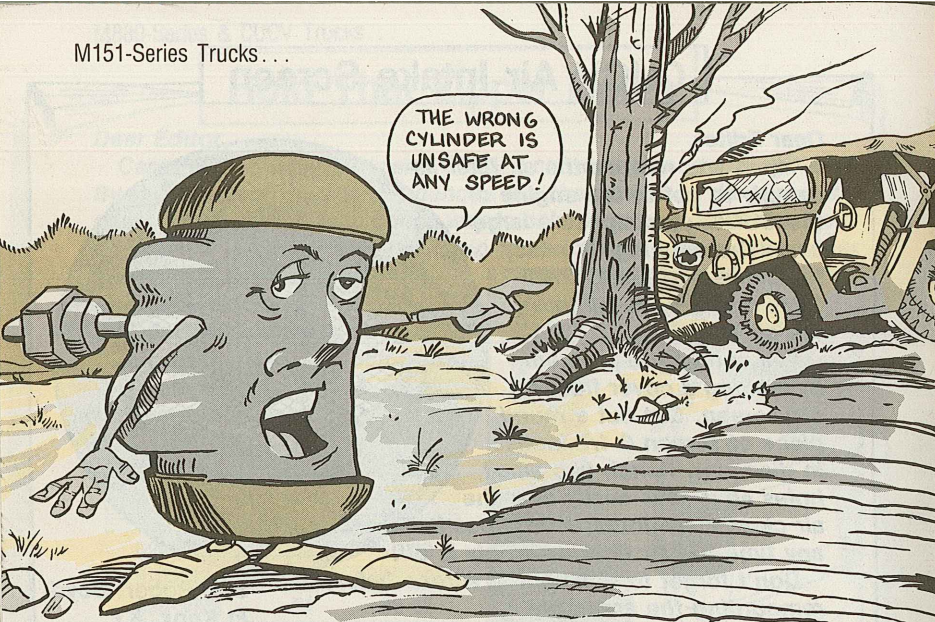
Dear Sergeant G.D.W.,

Use saddle soap, NSN 7930-00-170-5467, and warm water. Work in a small amount of soap solution. Let it soak a few minutes and wipe it off with a clean, damp cloth.

To protect the vinyl, use Armor-All. NSN 7930-01-130-6287 gets a 32-oz. bottle.

WHEN CLEANING  
YOUR INTERIOR,  
SADDLE SOAP  
IS SUPERIOR!



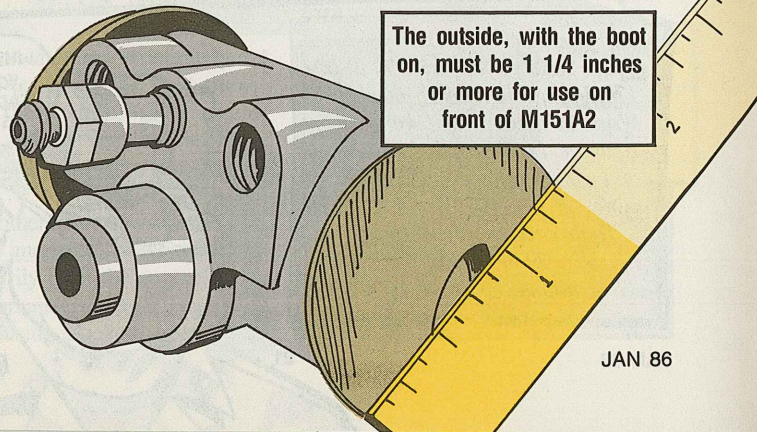


## Brake Cylinder Matchup

There are two sizes of wheel brake cylinders used on M151-series 1/4-ton trucks. If you mechs mix them up, you'll end up with a truck that's unsafe at any speed! M151's and M151A1's use 3/4-in brake cylinders, NSN 2530-01-071-9851, for both front and rear brakes.

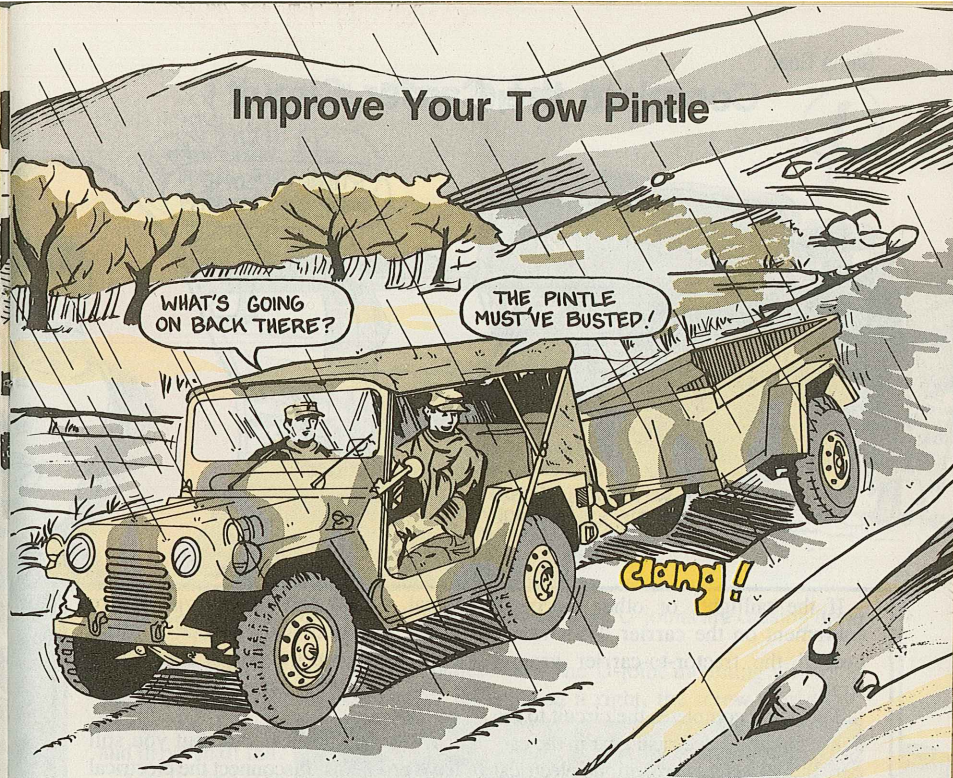
M151A2's use 1-in brake cylinders, NSN 2530-01-071-9850, on the front, and 3/4-in brake cylinders, NSN 2530-01-071-9851, on the rear.

If you're not sure which cylinder you have, measure it. Make a note of the NSN's. The 3/4-in cylinder is Item 14 in Fig 67 and Item 14 in Fig 68 of TM 9-2320-218-20P. The 1-in cylinder is Item 27 of Fig 68.



The outside, with the boot on, must be 1 1/4 inches or more for use on front of M151A2

## Improve Your Tow Pintle



Losing your towed load can give you the kind of excitement you don't need!

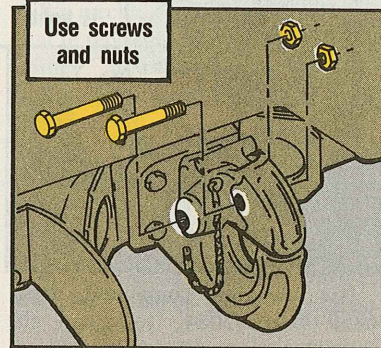
It can happen if the tow pintle comes apart. This's a bad time to find out that the retaining rings and pins used to

secure the latch and lock are missing.

But just a couple o' bucks and a few minutes time can head off this trouble. Check those rings and pins right now. If they're loose or defective—or missing—replace 'em with the 2 screws and 2 nuts that come in a kit, NSN 2540-01-119-5674. The nuts get 5 to 15 lb-ft torque.

With this setup, you no longer need to lube the pintle. The screws get a special coating in manufacture. But a light coat of GAA on the screws will make installation easier.

The new screw 'n' nut setup pays off, too, in saving the pintle assembly. You can't get new pins for the pintle, which costs nearly \$30.



# Complete the Carrier Circuit

# Lock The Drive Shafts

STRAP ON SOME GOOD CIRCUIT PM!

MAKE SURE YOUR U-JOINT RETAINERS ARE LOCKED!



WHY THE HECK DON'T THE LIGHTS WORK?

CLANK!

WATCH FOR FALLING SHAFTS

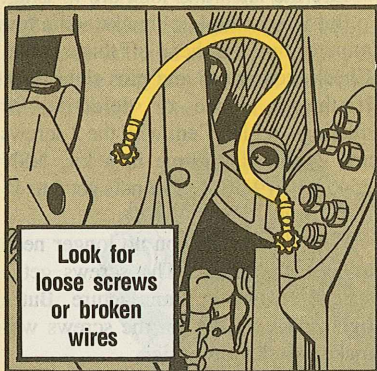
If the taillights or other electrical equipment on the carrier don't work, eyeball the tractor-to-carrier ground strap.

That strap completes the circuit to the lights and other electrical gear in the carrier. If the circuit is broken, no electrical component will work.

minimal, screws and chassis with a wire brush. You need a good metal-to-metal contact to keep the power flowing.

Put the strap on and tighten the screws.

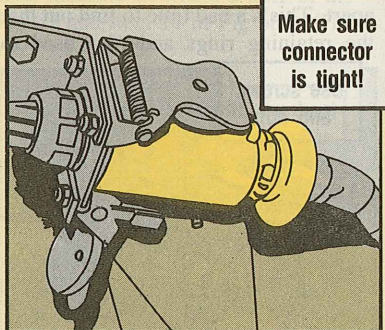
If the strap checks out, but you still have problems, disconnect the electrical connector between the tractor and carrier. Look for corrosion or dirt in the connector.



Look for loose screws or broken wires

Look for a broken or missing strap and loose screws. Replace the strap if it's bad.

Take the screws out. Clean the ter-



Make sure connector is tight!

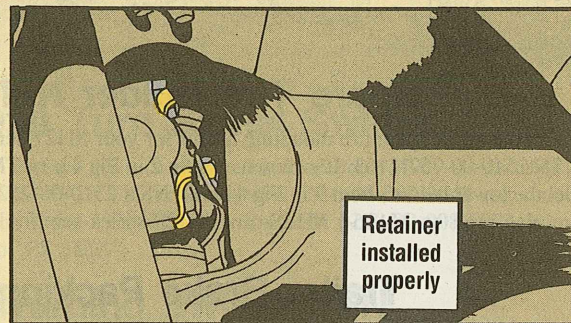
Use cleaning compound, NSN 6850-00-105-3084, to clean the connector.

Missing or worn-out screw retainers on Gama Goat U-joints are causing drive shafts to fall out.

The retainers—also called lock plates—hold the U-joint mounting screws in place. If you forget the retainer, or fail to bend it right, the screw works out, letting the U-joint and drive shaft fall.

You'll find the retainers, NSN 5340-00-886-6662 and -6663, used on U-joints throughout the drive train.

So, mechs, when you're replacing U-joint mounting bolts, always install new retainers and always bend them right. This means two of the tabs bent snugly around the head of the screw and the other tab bent over the mount.



Retainer installed properly

## Windshield Wiper Motor NSN

If you need the windshield wiper motor kit for a Gama Goat, get it with NSN 2540-00-122-8956. The NSN listed on Page 347 of TM 9-2320-242-20P is wrong.

## M916-M920 Jack Board

Hold one before you order a replacement jack support board, NSN 2510-00-741-7585. It's Item 11 of the basic issue items on Page B5 of TM 9-2320-273-10.

That board has been replaced by wood block, NSN 5510-00-491-0307. The block is also shown in the Additional Authorization List on Page C2.

Or make your own block from hardwood. Cut it 4 inches thick, 8 inches long and 9 inches wide.

## M911 Cable NSN

Use NSN 2590-01-053-6449 to get the intervehicular cable for your M911 truck. It's part of your **BII**, but it's not called out in TM 9-2320-270-10.

## Spare Tire Holder NSN

Get the upper spare tire mounting holder for your M127-series semitrailer with NSN 2510-00-752-1163. It's shown as Item 2 in Fig 41 of TM 9-2330-207-24P. Get the lower holder, Item 9 in Fig 41, with NSN 2510-00-752-1161. The holders are also used on M126-, M128- and M129-series semitrailers.

## Trailer Brake Packing

The 2 1/2-ton truck's -20P manual doesn't list the preformed packing that goes with the trailer brake coupling assembly. Use NSN 5330-00-090-2128. It's listed on Page 2-120 of the M39-series 5-ton truck's parts manual, TM 9-2320-211-20P.

## New Taillight NSN

Use NSN 6220-01-093-4439 to get the composite stoplight/taillight for your M44-series 2 1/2-ton truck. This replaces the NSN for Item 1 in Fig 78 of TM 9-2320-209-20P.

## M871/M872 Semitrailer Bows

Get a bow for your M871/M872-series semitrailer with NSN 2540-01-138-3995. The tarp only comes as part of tarpaulin kit, NSN 2540-01-080-8025, listed in Appendix C of TM 9-2330-359-14&P with C5. The bows are not listed in TM 9-2330-358-14&P.

## M939 Turn Signal Switch

When you need to replace the turn signal switch on your M939-series truck, order NSN 6220-00-431-3771. This replaces NSN 6220-01-089-3049 called out as Item 1 in Fig 48 of TM 9-2320-272-20P and NSN 6220-00-808-6072 mentioned on Page 24 of PS 386.

## Warning Switch NSN

Get the air pressure warning switch for your M939-series 5-ton trucks with NSN 5930-01-189-0494. This switch replaces NSN 5930-01-090-7634 shown as Item 1 of Fig 57 in TM 9-2320-272-20P.

## M916-M920 Exhaust Pipe NSN

Use NSN 2990-01-074-8140 to get an inlet muffler pipe for M916 through M920 vehicles. It's called out by PN only (Item 21, Fig 15) in TM 9-2320-273-20P.

# ★★★ P U B S ★★★

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 3-1040-276-23P Sep Smoke generator, M3A4  
 TM 3-4230-216-10 Jun M258A1 decontaminating kit  
 TM 3-6910-226-10 Sep M72A1, chemical agent training kit  
 TM 3-6665-320-10 Sep M256 training chemical agent detector tickets simulator  
 TM 5-1940-271-10 Sep 3-man pneumatic recon boat  
 TM 5-5420-202-10 Aug M60A1 AVLB  
 TM 5-5420-202-20-4 Oct AVLB, M60A1 chassis  
 TM 5-6675-323-14-1 Sep Topographic support system, Model ADC-TSS-12  
 TM 9-1040-266-20&P Sep M239 smoke grenade launcher  
 TM 9-1270-221-23 Sep M142

helmet used w/M139 armament subsystem  
 TM 9-1440-531-24P Sep HAWK  
 TM 9-2320-233-20P Aug GOER  
 TM 9-2320-272-20-1 Oct M939-series 5-ton trucks  
 TM 9-2320-272-20-2 Oct M939-series 5-ton trucks  
 TM 9-2330-213-14&P Sep M103, M105, M107 trailers  
 TM 9-2350-264-20-1-1 Sep Tank, M1A1 120-MM gun  
 TM 9-2350-267-20 Oct M992 ammo carrier  
 TM 9-2350-303-10-HR Aug M109A2 howitzer  
 TM 9-4935-471-24P Jul TOW field test set, AN/TSM-140  
 TM 9-4935-485-24P Jun LANCE  
 TM 9-5855-247-24P-1 Nov AN/UAS-12 night vision sight  
 TM 9-6920-646-24P Jul MLRS trainer  
 TM 9-6920-600-14 Sep Patriot  
 TM 9-6920-646-24P Sep MLRS  
 TM 9-8000 Oct Principles of automotive vehicles

TM 10-3950-263-14&P-1 Jul 140-ton container handling crane MHE-248  
 TM 10-3950-263-14&P-2 Jul 140-ton container handling crane MHE-248  
 TM 11-5805-681-12-HR Aug AN/TTC-39 central office  
 TM 11-5805-702-12 Mar TD-1219 pulse form restorer  
 TM 11-5815-334-20P-1 Aug AN/GRC-142B radio teletypewriter set  
 TM 11-5820-862-13&P May 84 J-3714 interconnecting box  
 TM 11-5840-217-10 Oct AN/TPS-25 radar sets  
 TM 11-5855-213-10 Sep AN/PVS-4 night vision sight  
 TM 11-5895-1048-23P Sep AN/MGC-19 operations central  
 TM 11-7025-232-23 May RO-309 line printer  
 TM 11-7440-293-24P Sep MK-1818/GSG-10 installation kit  
 TM 43-0003-22 Oct Demilitarization procedures for Dragon weapon system

## AUDIO-VISUAL STUFF

Available at battalion or post Learning Center

### TEC LESSONS

041-441-5945-F Towed Vulcan Loading/Unloading Procedure  
 043-441-7880-F Chaparral M730 Self-Propelled Guided Missile Carrier: Operating Controls/Indicators  
 043-441-7883-F PMCS on the Chaparral Carrier, M730  
 102-113-7467-A Test Operate Advanced Flight Control System, CH-47D, Part I  
 102-113-7468-A Test Operate Advanced Flight Control System, CH-47D, Part II  
 221-441-5720-F FAAR: Daily Electrical Checks  
 221-441-5724-F FAAR: PMCS  
 481-091-1225-F Basic Principles of Hydraulics and Hydraulic Schematic Reading, Part I

484-091-1966-A Install Power Plant, M113A1/A2 Carrier  
 484-091-2186-A Adjust 4.2-KW Generator Set M577A1  
 499-091-1290-A Replace Track Assembly, M578 Recovery Vehicle  
 902-011-5848-F AN/AVS-6 Aviator's Night Vision Imaging System, Part II  
 944-071-0105-F Operator Maintenance, M151 Vehicle  
 945-171-0002-F Track Vehicle Recovery - Platoon Level (Using Cables and Logs)

### Films, TV Tapes

TVT 9-77 M110A2 Howitzer Turret Electrical System  
 TVT 6-142 AN/TPQ-37 Radar

Trailer PMCS Cautions  
 TVT 44-161 Man-Portable Air Defense Systems Crew Drills  
 TVT 6-146 Introduction to Multiple Launch Rocket System  
 TVT 3-61 Planning/Conducting Smoke Operations  
 TVT 3-63 Chemical Downwind Hazard Prediction  
 TVT 21-75 MILES Boresighting/Alignment, AH-1 Attack Helicopter  
 TVT 3-64 Operation, M8A1 Automatic Chemical Agent  
 TVT 3-65 M8A1 Automatic Chemical Agent Alarm System Safety Requirements

## Maintenance & Safety-of-Use Messages

TACOM SOU—M578, M110A2 brake support system, AMSTA-MCC 102230Z Oct 85.  
 TACOM SOU—M1 tank engine compartment (fire hazard), AMSTA—MCD 181300Z Oct 85.  
 TACOM SOU—Tester, density and moisture, NSN 6635-01-

030-6896, AMSTA-MVC 301900Z Oct 85.  
 TACOM SOU—M1008-series Commercial Utility Cargo Vehicle (CUCV) trucks and M101A2 3/4-ton trailers, AMSTA-MTA 011400Z Nov 85.

TACOM SOU—Heavy Expanded Mobility Tactical Truck (HEMTT) NATO slave cable, AMSTA-MTC 012100Z Nov 85.  
 Your Direct Support or Logistic Assistance Office (LAO) can provide you with more information.

## Supply and Maintenance Assessment and Review Team





**EXTRA**

# Smart Army Times

**EXTRA**

☆ January 1986

US Army Logistics Center, Ft. Lee, VA

FREE ☆

## SOLDIER GETS \$10,000 SMART AWARD Saves Army \$1.67 Million Annually

CW4 John R. Stoffa of the New Jersey Army National Guard just won \$10,000 through SMART (Supply and Maintenance Assessment and Review Team).

Mr. Stoffa's idea to double the time between run-up's on the Army aircraft in flyable storage means saving \$1.67 million in jet fuel alone each year.

He received his check at a SMART Council meeting at Ft Hood, TX, from Army DCSLOG LTG Benjamin F. Register.

## Army Allows Senior NCO's and Warrants to be Survey Officers Any Time

WASHINGTON — As a result of a SMART idea, it's now OK for senior NCO's, E7, E8, and E9, and Warrants to do report of survey investigation right along with the commissioned officers.

Prior to this change to AR 735-11, it was required that there be a shortage of commissioned officers in the command for NCO's and Warrants to draw this duty.

This winning SMART initiative came from MAJ Horace Newton of Ft Hood.

## Dump Trucks Improved

SMART Message 61 announced that units with M929 5-ton dump trucks can add the OVM storage box from the M51A2 truck to increase storage.

2Lt Kenneth A. Young, Ft Benning, submitted this idea.

## Army Buys SMART Idea

The Army is now allowing units to make the power steering pumps on M809-series 5-ton trucks a unit DX item instead of a Direct Support job.

This SMART idea from Mr. Thomas Labine, Ft Ord, will make repairs easier for all concerned and will increase readiness.

## SMART Idea Pays

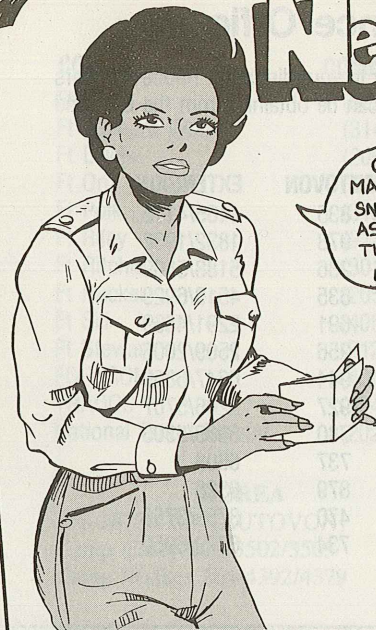
An Oklahoma Army National Guardsman, SSG Larry C. Nickell of Ada, OK, is richer because his SMART idea for adding a safety bar to the 5-ton truck hood was recently adopted.

## Mod Worth \$500

A USAREUR soldier, SGT Mergler, suggested that the air inlet door on 60-KW generators be modified to improve performance. He won \$500.

Send SMART ideas to:  
**SMART**  
U.S. Army Logistics Center  
ATTN: ATCL-C-SMART  
Ft Lee, VA 23801-6000

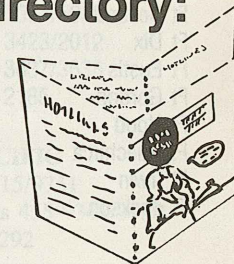
# Need a Hand?



GET A TOUGH PROBLEM IN MAINTENANCE OR SUPPLY? WARRANTY SNAG? A SOLUTION MAY BE AS NEAR AS YOUR TELEPHONE -- MAY BE AT THE OTHER END OF A "HOTLINE" IN THIS POCKET DIRECTORY!

## Pocket Directory:

- Open Staples
- Lift out this section
- Cut on broken lines
- Fold on dotted lines



## HOTLINES

- Substitute NSN's, part number cross reference to NSN, Item ID, price questions and AMDF code problems (MIRAC)  
AUTOVON 977-7431  
COMM 717-782-7431
- AMDF Code Guide (USAMC Catalog Data Activity) (mailing info)  
AUTOVON 977-6608/6741  
COMM 717-782-6608/6741
- Packaging Problem, SF 364 ROD (AMCPSCC)  
AUTOVON 795-7150  
COMM 717-894-7150  
FTS 590-7150
- Equipment Historical Records—DA Form 2408-9, etc.—Missing Information (USAMRSA)  
AUTOVON 745-3957/4265  
COMM 606-293-3957/4265

## TECH ASSIST Telephone Directory



BEFORE YOU CALL A HOTLINE, TOUCH BASE WITH YOUR DSU, MAIT, AND LAO!

# LAO's (Logistic Assistance Offices)

Locate your LAO and insert the phone number in your directory. Phone numbers of LAR's (Logistic Assistance Representatives) can be obtained from the LAO and added to your directory.

CONUS	COMMERCIAL	AUTOVON	EXTENSION
Ft Benning	(404) 545	835	4185/4115
Ft Bliss	(915) 568	978	1832/1932
Ft Bragg	(919) 396	236	5188/5509
Ft Campbell	(502) 798	635	4510/6929
Ft Carson	(303) 579	691	2291/4669
Ft Devens	(617) 796	256	2509/2005
Ft Dix	(609) 562	944	6647/6859
Ft Eustis	(804) 878	927	2206/5707
Ft Gordon	(404) 791	780	5360/5305
Ft Hood	(817) 287	737	6608
Ft Huachuca	(602) 538	879	6328
Ft Irwin	(619) 386	470	3755/3759
Ft Jackson	(803) 751	734	6772/6950

CONUS	COMMERCIAL	AUTOVON	EXTENSION
Ft Knox	(502) 624	464	2222/4955
Ft Leonard Wood	(314) 368	581	7312/7314
Ft Lewis	(206) 967	357	5593/3308
Ft Ord	(408) 242	929	2304/3193
Ft Polk	(318) 535	863	2975
Ft Riley	(913) 239	856	4241
Ft Ritchie	(301) 878	277	5133
Ft Rucker	(205) 255	558	4694/3971
Ft Sill	(405) 351	639	5653/1419
Ft Stewart	(912) 767	870	5037/5038
FORSCOM	(404) 752	588	3423/2012
TRADOC	(804) 727	680	3637/3638
National Guard Bureau	(202) 694	224	2185

## KOREA

293-3873/6237 (AUTOVON)  
Camp Casey 299-3502/3503  
Camp Walker 264-4392/4379

## PACIFIC

Ft Shafter 438-2715/9751  
Schofield Barracks 455-9348/9458  
Japan 635-2747/3292

WRITE IN YOUR LOCAL  
PHONE NUMBERS

## DSU

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## MAIT

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## LAO

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## HOTLINES

- Tanks, small arms, missile guidance/control systems for LCSS, ground and air TOW, Dragon, LANCE, Shillelagh (Anniston)  
AUTOVON 694-6582  
COMM 205-235-6582
- Aircraft engines (Corpus Christi)  
AUTOVON 861-2651  
COMM 512-939-2651
- Cat 1 EIR (Aircraft) (duty hours 693-1624) (AVSCOM)  
AUTOVON 693-2066  
COMM 314-263-2066
- M113 FOV (incl Vulcan, Chaparral), M2/M3 Bradley (Red River)  
AUTOVON 829-3100  
COMM 214-838-3147

## HOTLINES

- Power generation eqpt, wheeled vehicles, brake problems, Redeye, topo eqpt (Tooele)  
AUTOVON 790-2129  
COMM 801-833-2129
- All howitzers, M578, FAAR, FADAC, ground guidance and shop/test eqpt for I-HAWK, and Nike-Hercules (Letterkenny)  
AUTOVON 238-7693  
COMM 717-263-7693
- Commo/Electronics (Sacramento)  
AUTOVON 839-2839  
COMM 916-388-2839
- Commo/Electronics (Tobyhanna)  
AUTOVON 795-7900  
COMM 717-894-7900

## HOTLINES

- Commo/Electronics (Ft Monmouth-CECOM)  
AUTOVON 992-3266  
COMM 201-532-3266
- Camouflage (Ft Belvoir)  
AUTOVON 354-6771  
COMM 703-664-6771
- Supply, Maintenance policy guidance for AR's 750-1, 710-2, 735-5, 735-11, 700-131 and 710-28 (New Cumberland)  
AUTOVON 977-6842  
COMM 717-782-6842
- Fuels/lubes (Ft Belvoir)  
AUTOVON 354-3576/4594  
COMM 703-664-3576/4594

## LAO's (cont'd)

### ALASKA

Ft Richardson 863-7281

### PANAMA

313-285-4153/4154

### USAREUR

Chief  
Heidelberg Mil (2121) 8888/8145  
V Corps  
Frankfurt Mil (2311) 6306/8346  
VII Corps  
Nellingen Mil (2724) 6198/7152  
32d AADCOM  
Darmstadt Mil (2371) 8357/6550  
1st Armored Div  
Nuernberg Mil (2624) 633/805  
2d Armored Div (FWD)  
Garlstadt Mil (2445) 6218/6572  
3d Armored Div  
Drake Kaserne Mil (2314) 8204/7302

7th CATC  
Vilseck Mil (2641) 867/865  
3d Inf Div  
Kitzingen Mil (2325) 715/785  
8th Inf Div  
Bad Kreuznach Mil (2255) 7226/6161  
5th Signal CMD  
Worms Mil (2421) 7800/7847  
21st SUPCOM  
Kaiserlautern Mil (2221) 8211/8123  
200th TAMMC  
Zweibruecken Mil (2281) 6016/6246  
2d ACR  
Nuernberg Mil (2625) 635/804

11th ACR

Fulda Mil (2364) 725/625

## HOTLINES

- SMART  
(Supply and Maintenance Assessment and Review Team)  
AUTOVON 687-4347/5512  
COMM 804-734-4347/5512
- Personnel heaters (TACOM)  
AUTOVON 786-7369/6993  
COMM 313-574-7369/6993
- Aircraft Vibrex balancing kit (AVSCOM)  
AUTOVON 693-1107  
COMM 314-263-1107
- Defense Construction Supply Center (For ROD's)  
AUTOVON 850-3413/2089  
COMM 614-238-3413/2089  
(For non-NSN requisitions)  
AUTOVON 850-2841  
COMM 614-238-2841

## HOTLINES

- STE/ICE (TACOM)  
AUTOVON 786-8853  
COMM 313-574-8853  
FTS 973-8853
- Warranty (TACOM)  
AUTOVON 786-7889  
COMM 313-574-7889  
FTS 973-7889
- Food service equipment, individual equipment (clothing), aerial delivery, tentage and shelter (NATICK)  
AUTOVON 256-5341  
COMM 617-651-5341
- CARC (Chemical Agent Resistant Coating) General (TROSCOM)  
AUTOVON 693-2361  
COMM 314-263-2361  
Supply Source (GSA)  
COMM 206-931-7109  
FTS 396-7109

## SMART tests . . .

. . . Simpler Procedures . . . Different Tools . . .

. . . Better Support Equipment . . .

. . . YOUR IDEAS . . . IN REAL UNITS!

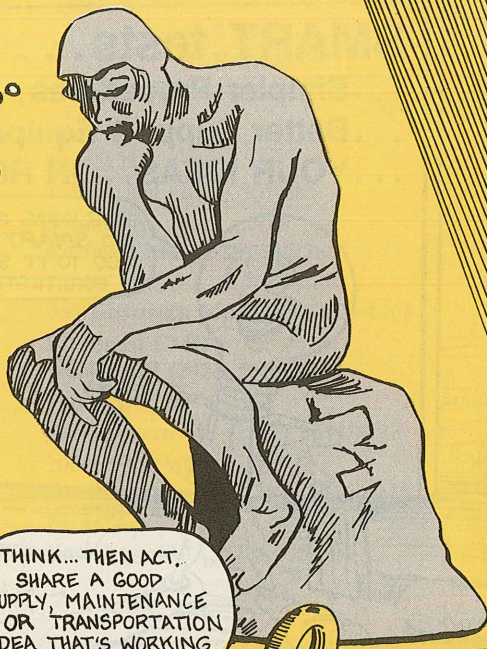


### SMART TESTS

Hq. 24th Infantry Div  
ATTN: AFZP-GD-SMART  
Ft Stewart, GA 31314  
AUTOVON 870-4700/4707

★ SMART ★ SMART ★ SMART ★ SMART ★

SMART IDEAS ARE COMMON SENSE IMPROVEMENTS THAT SAVE MONEY... SAVE TIME... FIX A SYSTEM GLITCH!



THINK... THEN ACT. SHARE A GOOD SUPPLY, MAINTENANCE OR TRANSPORTATION IDEA THAT'S WORKING IN YOUR UNIT! SEND IT TO:

WASTE OF  
- TIME -  
- ENERGY -  
- MONEY -

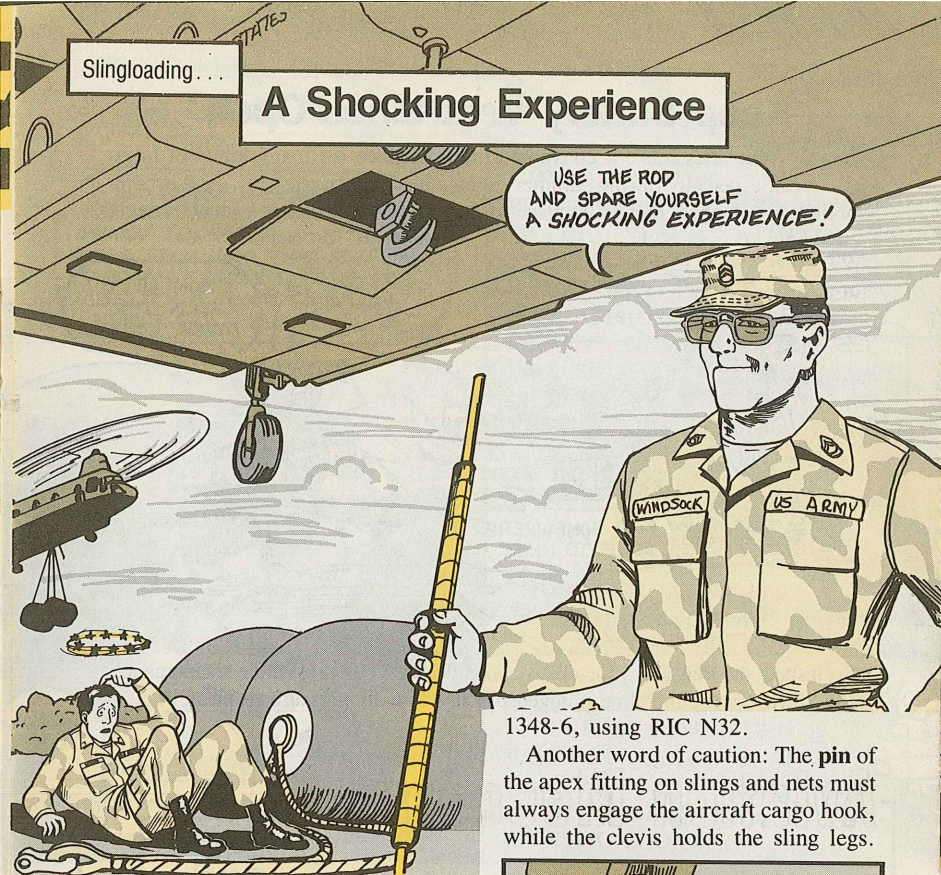
SMART  
US Army Logistics Center  
ATTN: ATCL-C-SMART  
Ft Lee, Va 23801-6000

Your ideas carry a lot of weight with SMART!

Slingloading...

## A Shocking Experience

USE THE ROD AND SPARE YOURSELF A SHOCKING EXPERIENCE!



1348-6, using RIC N32.

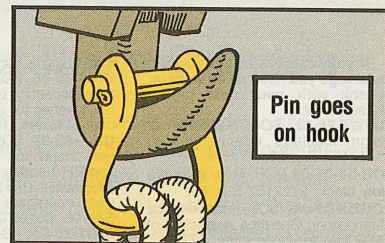
Another word of caution: The pin of the apex fitting on slings and nets must always engage the aircraft cargo hook, while the clevis holds the sling legs.

Slingloading equipment from a hovering helicopter can be a shocking experience, ground crews.

Static electricity in the cargo hook can deliver a bone-jarring charge. The shock could lead to a fall or much worse.

You've got to ground the cargo hook before handling it.

Use a static discharge probe like it says on Page 6-3 of FM 55-450-1. And keep contact between the probe and hook until you put the clevis on the hook. Get a discharge probe with NSN 4920-01-192-5535. It's not on the AMDF, so order on a DD Form JAN 86

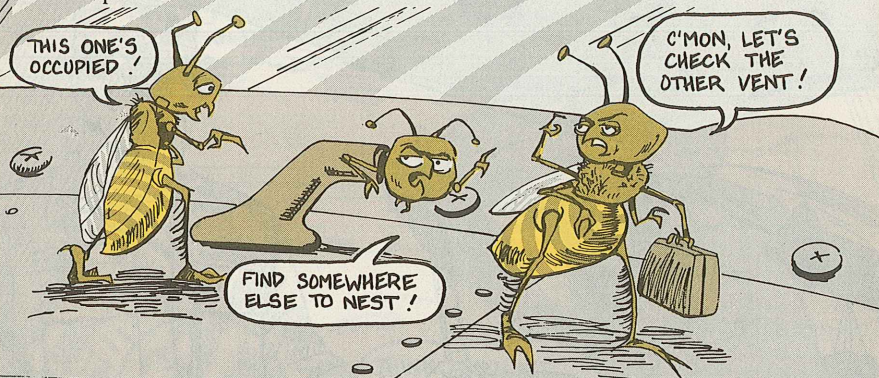


Reversing the fittings will increase the chance of the pin breaking under stress.

On the UH-1, you can't slip the fitting directly onto the cargo hook. It won't fit. You have to use a nylon donut, NSN 3940-00-675-5001, between the sling and the aircraft hook.

## Keep Battery Vent Lines Open

Battery vent lines make a convenient nesting place for many kinds of bugs and insects, especially during summer months in southern climates. And if both vent lines get clogged, there's no place for battery fumes to escape except through the cockpit.



So inspect the vent lines for obstructions during your preventive maintenance daily. If you find either line plugged up, use low-air pressure to clear it.

## 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.

**UV-18-85-01**, SOF, Inspection of wing fuselage attach fittings, 181845Z Sep 85.

**OH-58-85-03**, SOF, Main rotor pillow block, 272215Z Sep 85.

**OH-58-85-04**, SOF, Maintenance Mandatory, One-time inspection of M/R hub for loose bolts, 272230Z Sep 85.

**AH-64-85-05**, SOF, Maintenance Mandatory, One-time inspection of aircraft records for compliance with contractor initiated information service notes, 202235Z Sep 85.

**OH-6-85-01**, SOF, Technical, One-time and recurring inspection of tail

rotor blade tip cap, 181900Z Sep 85.

**UH-1-85-06**, SOF, Technical, One-time inspection of all UH-1H/V and EH-1 series for defective universal control levers, 192330Z Sep 85.

**UH-1-85-07**, SOF, Technical, One-time inspection of all UH-1D/H/V and EH-1 series for collective lever assemblies, P/N 212-010-403-5 with serial numbers EA-001 through EA-196, 031800Z Sep 85.

**AH-1-85-05**, SOF, Emergency, Immediate grounding, K747 blades, 110500Z Sep 85.

**MIM-GEN-85-MEM-06**, Turbine engine washing, 192230Z Sep 85.

**MIM-UH-1-85-MEM-04**, Installation of wire cutter blades in WSPS, 071700Z Sep 85.

**MIM-UH-1-85-MEM-08**, Oil change

interval, 181930Z Sep 85.

**MIM-UH-1-85-MEM-09**, Change of retirement life for elevator horn assembly, 271430Z Sep 85.

**MIM-AH-1-85-MEM-03**, Hot metal plus plume suppressor, 192130Z Sep 85.

**MIM-AH-1-85-MEM-04**, Oil change interval, 181930Z Sep 85.

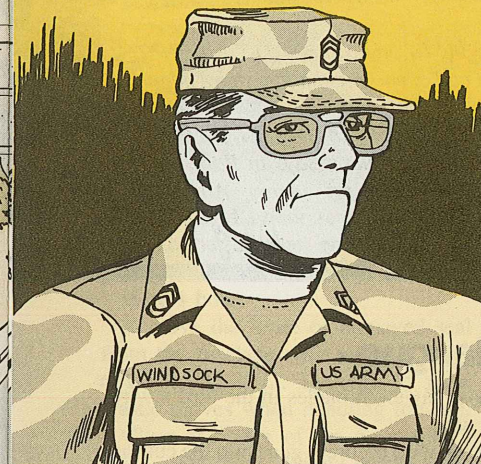
**MIM-UH-60A-85-MEM-03**, Inspection of oil cooler accessor door, APU access door and center beam for loose or missing fasteners, 181915Z Sep 85.

**MIM-OH-6A-85-MEM-01**, Installation of wire cutter blades in WSPS, 071701Z Sep 85.

**MIM-OH-58-85-MEM-02**, Installation of wire cutter blades in WSPS, 071702Z Sep 85.

## Be Safe, Not Sorry

THIS MISHAP SUMMARY IS NOT AN ISOLATED CASE. YOU SHOULD ALWAYS REMOVE TIEDOWN ROPES FROM YOUR BIRD BEFORE DOING AN ENGINE RUN-UP. THE GUST LOCK ON YOUR BIRD MAY NEVER FAIL, BUT IT COULD!



CREW WAS PERFORMING ENGINE(S) FLUSH AND HAD PROGRESSED TO THE ENGINE DRYING STAGE. WITH GUST LOCK ENGAGED NUMBER TWO ENGINE WAS OPERATED AT IDLE FOR APPROXIMATELY THREE MINUTES. NUMBER TWO ENGINE WAS SHUT DOWN AND SAME PROCEDURE INITIATED FOR NUMBER ONE ENGINE. AFTER APPROXIMATELY ONE MINUTE AT IDLE, AN APPARENT GUST LOCK FAILURE RESULTED IN UNCONTROLLED ROTOR SYSTEM ROTATION OF THREE TO FOUR REVOLUTIONS. MAIN ROTOR TIEDOWN ROPES, WHICH HAD BEEN RELEASED FROM FUSELAGE BUT PERMITTED TO REMAIN ATTACHED TO BLADES, STRUCK AND DAMAGED TAIL ROTOR BLADES, ANTI-COLLISION LIGHT, AND ANTENNA. MISHAP IS UNDER INVESTIGATION.

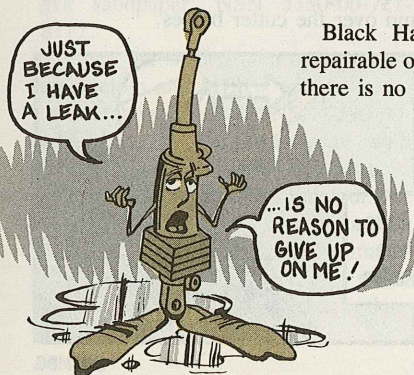
## Don't Chuck Faulty Brake Cylinders

Black Hawk brake master cylinders are coded repairable on the AMDF and in the parts manual. But there is no repair procedure in the task manual.

So, what do you do with that leaking cylinder that's been replaced? Condemn and dispose of it?

No way, not at \$902 a clip! A repair procedure and test kit will be added to TM 55-1520-237-23-5.

So, don't chuck those leaking cylinders. Send 'em to depot until you get the repair kit.



## Brasso for Windows???

Dear Windy,

Recently I was asked to order new greenhouse windows for my aircraft because they were foggy and hard to see through. But instead of replacing them, I polished them with ordinary Brasso! In about 30 minutes I had them looking like new.

I feel if more crew chiefs used Brasso, they could save a lot of money on all plastic helicopter windows.

SP4 W.J.L.  
Fort Hood, TX

Dear Specialist W.J.L.,

You're right on with the Brasso—but be careful! Para 2-127d of TM 55-1520-228-23-1 says to use it and a small pad of cheesecloth to remove minor scratches and mild distortion in your bird's cabin roof windows.

But never use it to clean any of the other windows. Instead, use the transparent plastic surface polish kit, NSN 1560-00-450-3622, like it says in Para 2-37 of TM 55-1500-333-24, *Cleaning Procedures for Army Aircraft*.

Windy

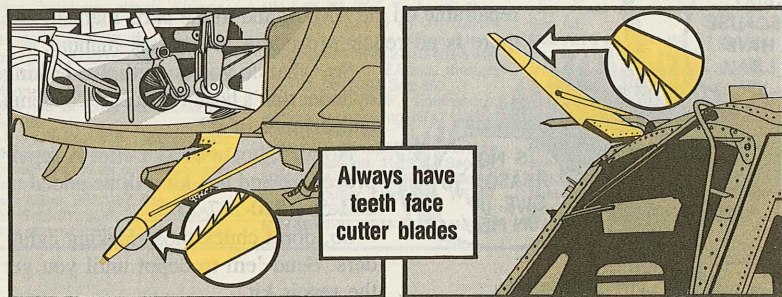
OH-6A, OH-58A&C, UH-1, Series...

## Tooth Hangup

There's a good reason for installing those sawtooth blades in the bird's wire strike protection system like your TM's say.

Sawtooth blades are supposed to abrade the wire before it goes into the cutting blades so the wire cuts easier. Always put the sawtooth blades in with the teeth facing the cutter throat.

If you put the blades in with the teeth facing away from the cutter, loose wires or cables can hang up on a tooth and jump over the cutter blades.



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JAN 86

## Switch Door Seal



If your bird's door seals won't stay glued to the fuselage, crew chiefs, try gluing them to the doors instead.

Here's how:

Remove the loose or damaged seal from the fuselage with toluene, NSN 6810-00-281-2002. Be sure to wear plastic gloves when handling toluene.

Clean the edge of the door with a clean cloth and methyl-ethyl-ketone (MEK), NSN 6810-00-281-2785.

Sand the edge of the door with 180-grit sandpaper, NSN 5350-00-721-8117.

Clean the sanded area again with a clean cloth and MEK.

Glue the rubber seal, NSN 9390-00-133-6472, to the door edge with adhesive, NSN 8040-01-136-5464.

When you're removing the doors for hot-weather missions, take extra care not to grab hold of the seals. No matter how well they're glued on, they won't stay on long if they're used as a door handle or lifting device.

JAN 86



41



## Protect Uniball from Grease

When you Cobra mechs lube your bird's scissors and sleeve assembly, purged grease falls down inside the sleeve assembly onto the uniball. Grease ruins the uniball's Teflon-lined bearings.

So before you start pumping lube, lift up on the swashplate lower boot, Item 46 in Fig 5-51 of TM 55-1520-236-23-1. Put some paper towels under the boot to catch purged grease.

After you're through lubing, use a clean cloth to remove any grease that gets past the towels onto the uniball.

CH-47C...

## Inspect for Chafing Damage

Chafing can damage your T55-L-11D engine's anti-icing air gallery upper covers and cause big problems. Those covers are soft and won't take much abuse.

When you pull your PM daily, eyeball the upper cover. Make sure the P3 and hydraulic starter lines are not touching the cover.

If they touch, move them away from the cover. Look for chafing. If you find any, use dial indicating gage, NSN 5210-00-076-1517, to measure the damage. If it exceeds 0.030 inch, replace the cover with NSN 2840-00-045-6688.

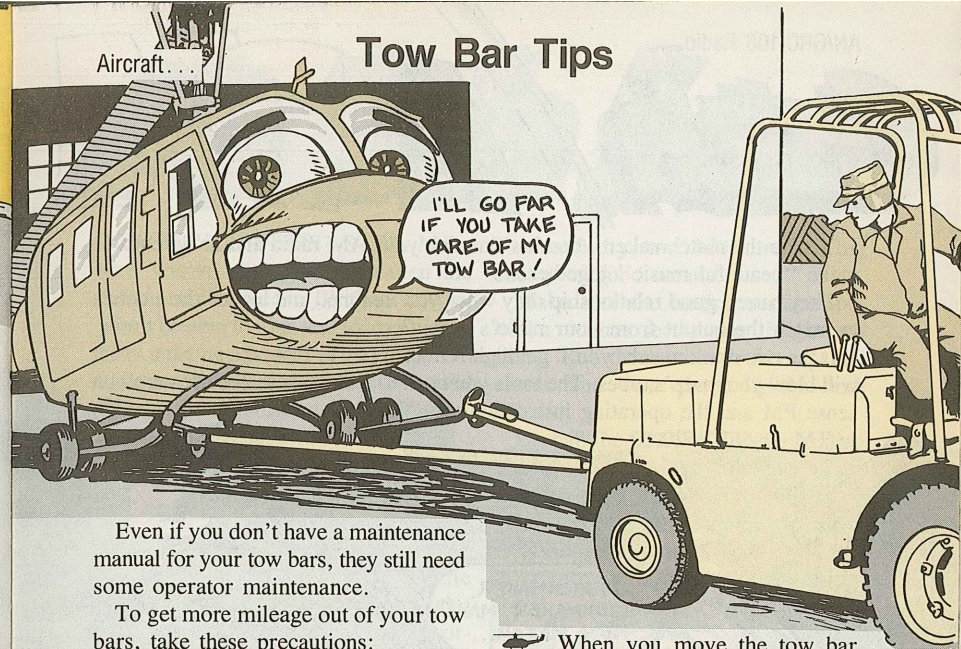
## Antichafing Tape Change

No chemical activator is required for the new antichafing tape, NSN 7510-01-009-8023, used on CH-47 series rivet heads and seams. Para 2-586 of TM 55-1520-227-23-1 is being revised to delete reference to use of the activator.

The old NSN for antichafing tape has been deleted from the AMDF.

## Crash Kit Tape NSN

If you need to replace the 60-minute recording cassette in the crash investigation tool kit, use NSN 7450-00-879-0163. The number will be added to SC 5180-97-CL-A11 when it's updated.



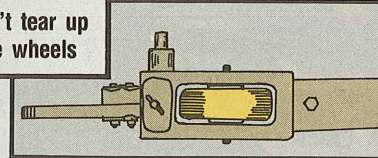
Even if you don't have a maintenance manual for your tow bars, they still need some operator maintenance.

To get more mileage out of your tow bars, take these precautions:

- ✎ Keep POL off the solid rubber wheels.
- ✎ Steer clear of rough surfaces that can tear up the wheels.

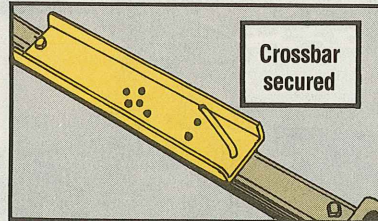
✎ When you move the tow bar, make sure the crossbar is locked in place to both legs and both wheels are firmly on the ground.

Don't tear up the wheels



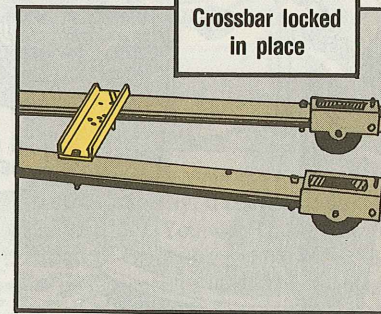
✎ Store the tow bar with the crossbar secured.

Crossbar secured



✎ Keep your tow bars painted and free from corrosion.

Crossbar locked in place



New wheels won't fit an old housing with its non-swiveling wheel assembly. So the way to go when you need a wheel replacement is with a new housing, NSN 1730-01-087-4231, which includes a new swivel wheel. It slips right into the tube assembly (Items 36 and 39 in Fig 1 of TM 55-1730-225-23P).

# Catch A PM

You're the matchmaker when it's time for your AM radio and its antenna to make "beautiful music" together.

They have a good relationship only when you've tuned and loaded the antenna to match the output from your radio's amplifier.

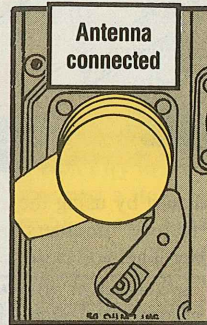
If the two don't match, you'll get high reflected power from the antenna. That will blow your amp's tubes. The tools you need to make this match are common sense PM and the operating instructions in TM 11-5820-520-10.



# Match!

PM IS YOUR FIRST STEP. Make sure you've got contact between the radio and its antenna. Without it, you won't be able to tune and load. That invites reflected power.

Be sure the antenna cable is connected to both the amplifier and the antenna, usually the AB-652 mast base.



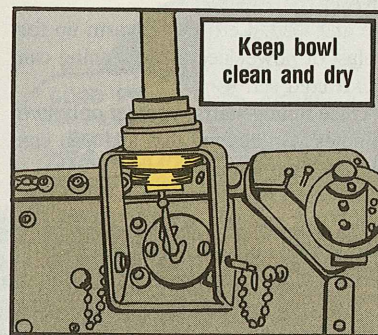
At the AB-652, you've got a couple of other checks to make.

Eyeball the contact. Make sure rust or corrosion isn't keeping your CX-10171 cable from making good contact.

If it is, shine the contact with a stiff brush. The one from your weapon's cleaning kit will do.

Once it's shiny, lube it **lightly** with silicone, NSN 6850-00-880-7616.

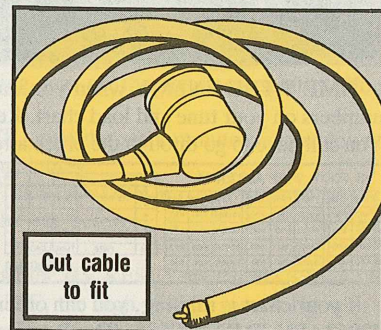
Keep the mast base ceramic bowl



clean and dry, too. Moisture is a big enemy of good commo.

Make sure the mating surfaces between antenna sections are bright and shiny. Rub them with a rubber pencil eraser and coat them lightly with silicone.

Eyeball the CX-10171 cable feeding your mast base. Make sure it has all the conductors. If any have broken off, cut the cable back far enough to expose them all. That insures good contact.

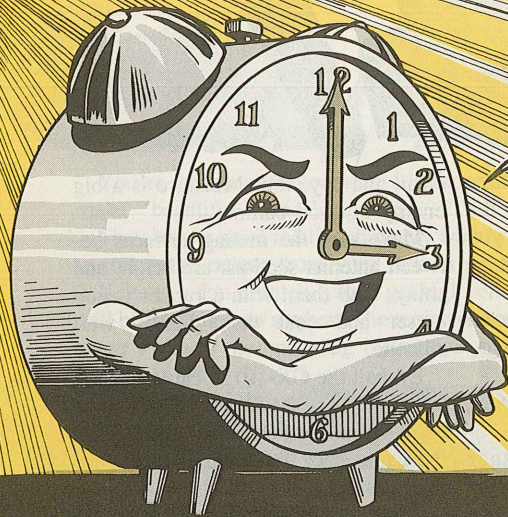


You should cut your cable to fit your installation anyway. It comes in a standard 6-ft length. You won't always need that much. Since extra cable becomes part of the antenna—and can foul up your tuning and loading—cut it to fit.

You can head off another tuning problem by keeping your receiver-transmitter and amplifier together. They're aligned together at support. Pairing either with another component can throw off your operation.

So, if one goes bad, send both back to support.





GET YOUR TIMING DOWN RIGHT SO YOU DON'T MISS THE SUNRISE OR SUNSET!

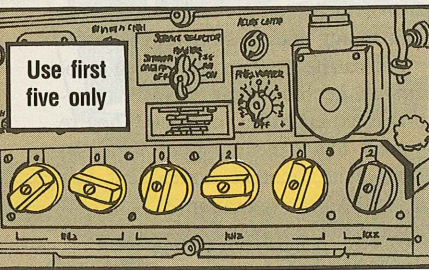
TIME'S THE ENEMY when you start tuning. Get a head start by using the numbers on your tune and load chart. Remember, these are "factory" numbers. You still have to go through the procedures in your pub. But, they'll get you close.

15 FOOT WHIP ANTENNA						50 OHM DOUBLET ANTENNA					
FREQ	TUNE	LOAD	FREQ	TUNE	LOAD	FREQ	TUNE	LOAD	FREQ	TUNE	LOAD
2.000	500	200	8.000	450	700	15.000	500	850	2.000	600	500
2.500	500	300	8.000	450	800	18.000	400	900	2.500	600	600
2.750	500	400	10.000	300	850	20.000	400	950	2.800	600	850
3.000	450	400	13.000	600	850	28.999	400	950	3.000	600	700

If your chart is missing, you can order a new one by part number. Use FSCM 80063, PN SMD 508586. The Routing Identifier Code (RIC) is B16.

Set the frequency on your RT's first five dials only. The last dial—100 Hz—is used for fine tuning once you're in OPERATE.

Clock watching is a must when you tune and load. Let the set warm up for 10 minutes before you start. That sudden blast of power needed for tuning can KO a cold set.



Once tuning starts, you get only two minutes. Go beyond that and you can blow a final amplifier tube.

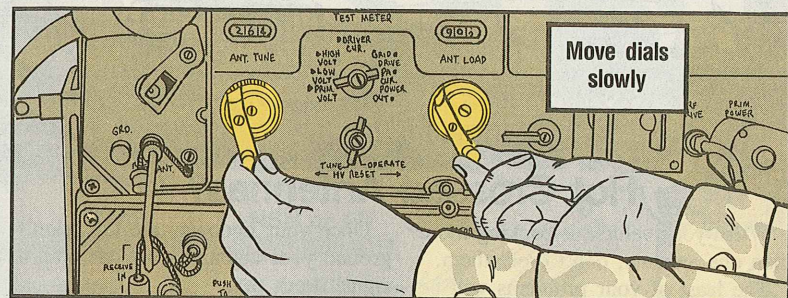
If you hit two minutes but still aren't done, put the HV RESET switch in OPERATE and your RT's SERVICE SELECTOR switch in STANDBY.

Wait five minutes for cooling. Then repeat the two-minute drill.

Keep in mind that you have to tune and load not only when you change frequencies, but daily. Atmospheric conditions affect the process.

'Course, even if you use the same frequency for a long time, you should turn the dials. That keeps contacts shiny.

If your tune and load meter needles aren't centering, try turning the knobs slowly at the same time and in the same direction you want them to go. They should center.

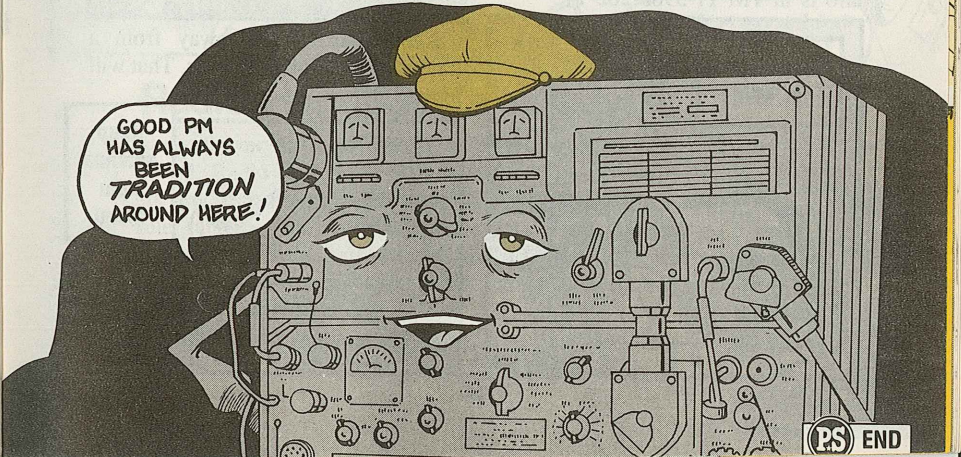


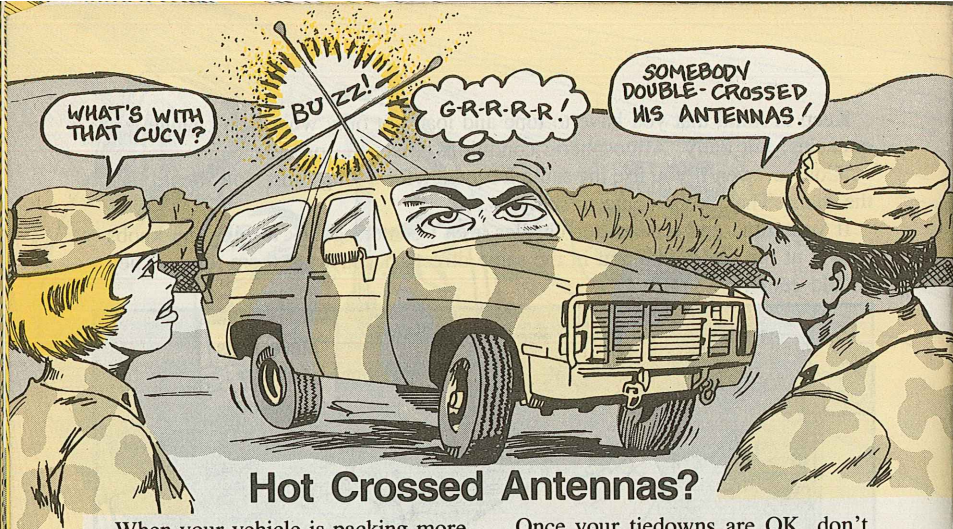
Don't try to set any speed records when you're handling the controls. If you roar past a stop, you can throw the tuning gear off the coupler assembly. You won't be able to tune.

Once you move the dial to OPERATE, give the set a minute to cool down. That gets rid of the heat built up during tuning.

Your final time trial is to put the RT in STANDBY for two minutes before shutting the radio down. That cools the set before you shut down the heat exchanger.

To make sure the set will start again, put the HV RESET switch in OPERATE before you switch the set off. Left in TUNE, the high voltage reset relay won't energize, leaving you with a dead set when you try to start again.





## Hot Crossed Antennas?

When your vehicle is packing more than one antenna, don't cross them.

The least of your problems will be crossed signals when someone is trying to reach you.

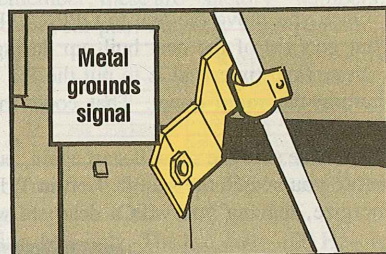
Major problems start when you transmit with those crossed whips.

The transmitting antenna will send its signals to the antenna it touches. Even if the receiver-transmitter or receiver circuits stand that blast, your transmission goes nowhere.

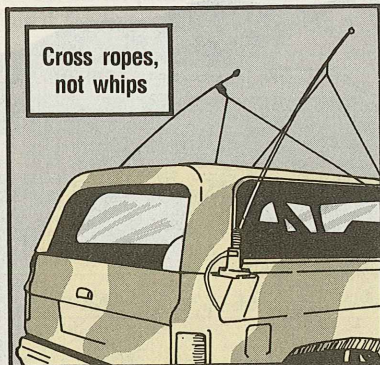
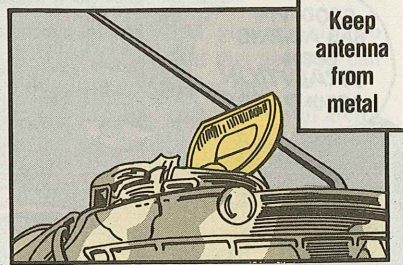
So, instead of crossing antennas, cross tiedown ropes. Other tiedown info is in TM 11-5985-262-14.

Once your tiedowns are OK, don't ground your antenna—that can stop a signal dead, too.

Never bolt your receive antenna's tiedown clip directly to the vehicle. That will ground it.



Keep your antenna away from a tracked vehicle's hatch cover. That will ground it, too.



## Kit Keeps Antenna Fit

Dear Macon,

I have an MK-1069 mast accessory kit for my AN/GRC-103 radio set's antenna, but I'm missing some items in the kit. Can you give me a hand?

SP4 J.A.S.

Dear Specialist J.A.S.,

The kit's on Page 2-31 of TM 11-5820-540-20P, minus many NSN's.

*Macon*

SO, ORDER COMPONENTS WITH THESE NUMBERS:

Item	NSN or PN
Guy anchor	4030-01-069-9917
Strap wrench	PN SMC697081
Spike, common	5315-01-070-5420
Hammer, hand (universal tool)	5120-01-069-9939
Bag, mast accessories	5820-01-070-6022
Guy, red	5975-01-051-9436
Guy, white	5985-00-104-2526
Adapter, antenna to antenna, mast	5985-01-069-4891
Guy attachment ring	4030-00-155-8507



USE FSCM 80063 AND RIC B16 FOR PART NUMBER REQUESTS!

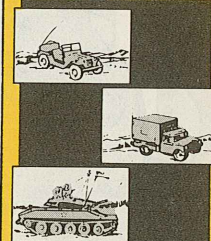
## Radio Handbook's Handy!

Just about everything a radio operator needs to know is in TC 24-19, Radio Operator's Handbook.

This new pocket-sized commo pub shows an operator how to cable, tune, operate and troubleshoot most common radio and radio teletypewriter sets. The TC also covers COMSEC gear, antennas, generator sets, CEOI and radio telephone procedures.

If your unit hasn't received copies yet, have your pubs clerk order them from the Baltimore Pubs Center.

### RADIO OPERATOR'S HANDBOOK



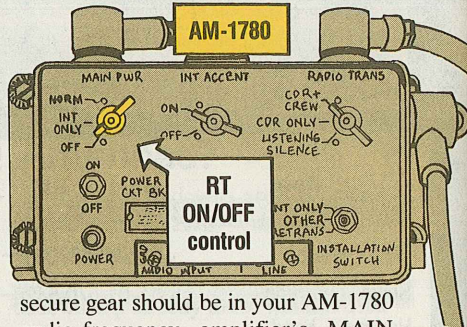
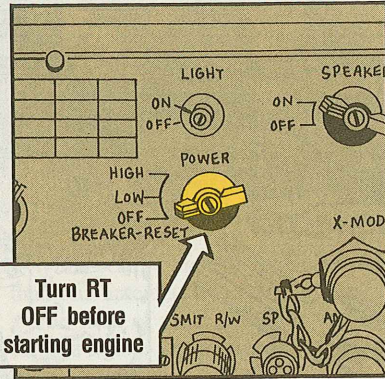
## Turn It All Off

Before you start or stop your wheeled vehicle's engine, turn off the AN/VRC-12-series receiver-transmitter (RT), the aux receiver **and** all secure gear.

The surge can also blow the wiring inside the secure gear.

Be on the safe side. Set the switches on all equipment to OFF.

In your tracked vehicles, ON/OFF control for RT's, aux receivers and

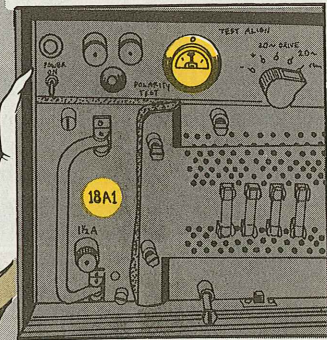


secure gear should be in your AM-1780 audio-frequency amplifier's MAIN PWR switch. Your org shop can verify that control per Para 2-14 of TM 11-5820-401-20-2.

You've heard often enough what the surge of power from your vehicle's electrical system will do to radio circuits.

## CV-1548 Meter Dead?

If the ammeter on your CV-1548 telephone signal converter isn't working, you may have one of the newer model power supplies. Supplies are interchangeable, but the PP-18A1 is the only one with circuits that power the ammeter. Newer power supplies—PP-18A1A and PP-18A1B—don't have those circuits, because newer CV-1548's have no panel meter.

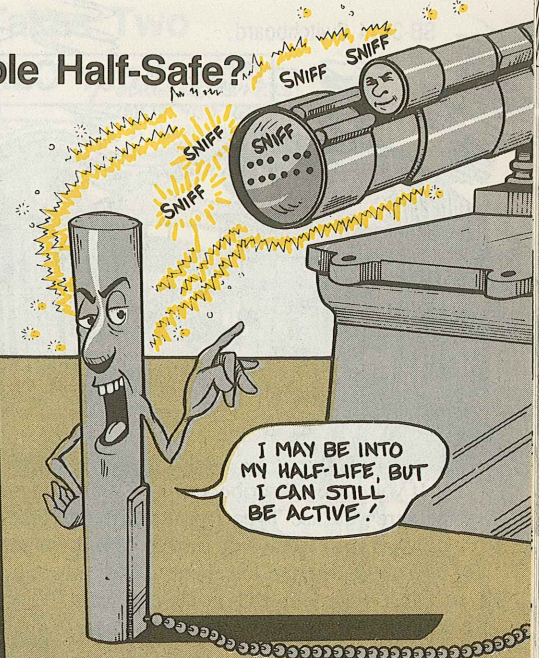


ONLY THE 18A1 POWERS THE AMMETER



## Sample Half-Safe?

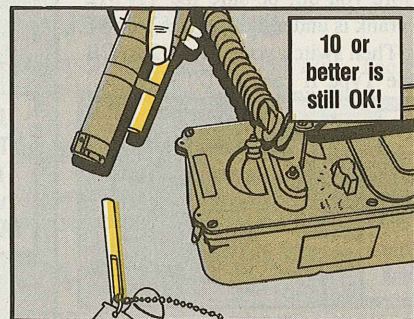
Dear Macon,  
Our MX-7338 radioactive test sample is 10 years old. According to TM 3-6665-264-10, that's its half-life. How can we be sure the sample is still strong enough to test our AN/PDR-27R radiacmeter? Or should we just turn the old sample in and order a new one?  
SGT B.J.K.



Dear Sergeant B.J.K.,  
Test it first. No sense turning in a good sample. The test is simple. Turn your AN/PDR-27R's function switch to 50. Place the purple—active—end of the sample against the set's small probe.

If the pointer hits 10 or more on the scale, your test sample is still OK. If it registers less, turn it in to your support.

When your new test sample comes in, be sure you chain it to the case as shown on Page 1-8 of TM 11-6665-230-12.



Macon

## Play Your Cards Right



SOMEONE USED THE WRONG CARD AND I'M KINDA BURNED UP ABOUT IT!

If you have subscribers using TA-312 telephones to signal your switchboard, be sure you use Type I printed circuit cards to handle their calls.

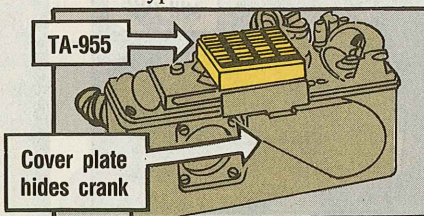
The Type I is the only card in your spare parts case that can handle the 20-Hz, 90-volt charge the telephone ringer puts out.

That ring will KO a Type II card. Another ring from the TA-312 will knock out the switchboard's ringer generator.

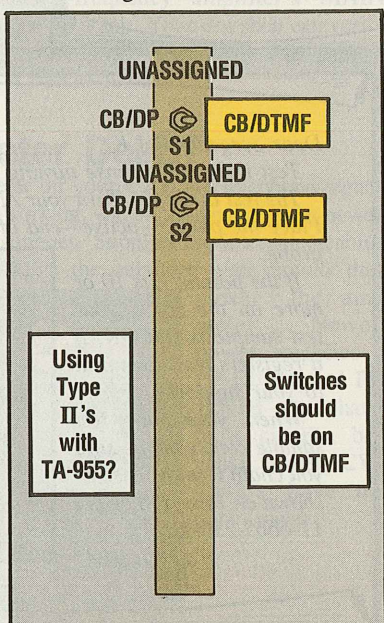
There's also a good chance you'll burn out the switchboard's power supply.

If your TA-312's are equipped with the new TA-955 tone-signalling adapter, of course, you can use the Type II cards.

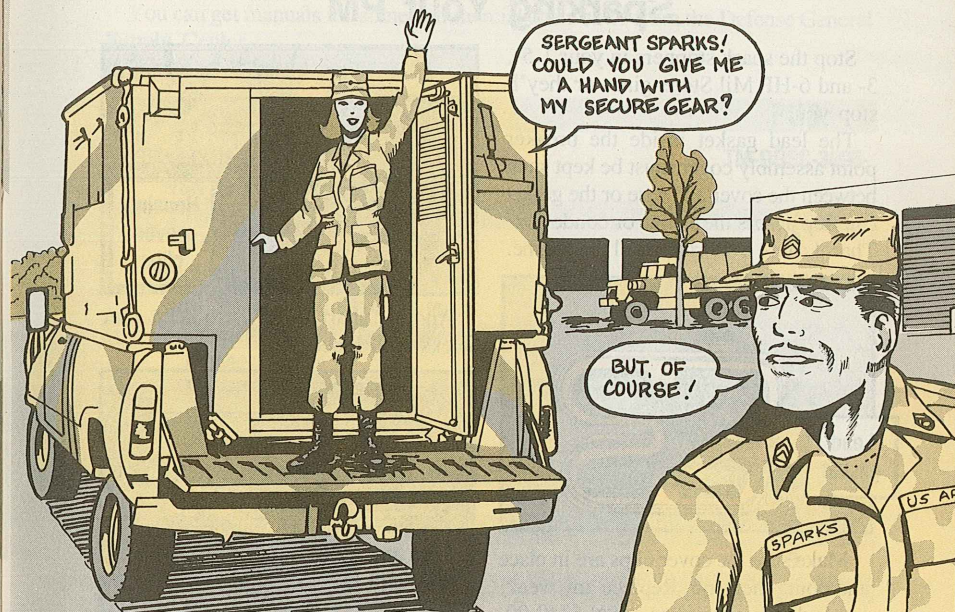
Before you do, be sure the TA-312 hand crank is under the TA-955's cover plate. Then switch your TA-312 to CB and the Type II card to DTMF.



If you need the TA-955, order it with NSN 5805-01-153-9158. Details on its use are on Page 53 of PS 394.



## It Takes Two



SERGEANT SPARKS! COULD YOU GIVE ME A HAND WITH MY SECURE GEAR?

BUT, OF COURSE!

Wrestling that heavy secure gear onto its mount inside your AN/GRC-142 or -122D and E model radio teletypewriter set is a sure way to break something.

If you don't bang up the big box itself, you'll knock a few circuit breaker switches from your power distribution box.

Get a buddy to help you lift the secure equipment onto its mount. It's close quarters for two people to work in, but it'll save equipment downtime.

## PP-2953 Fuse Change

A 10-amp fuse for your power supply is NSN 5920-00-758-7785. The NSN in your TM 11-6130-233-12 and -24P brings a too big 12-amp fuse.

## AB-22 Mast Section

The stock number for your RC-292 antenna equipment's AB-22 mast section is NSN 5985-00-372-0970. The number in TM 11-5820-348-24P is wrong.

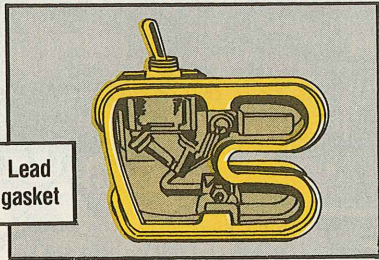
## IM-174 Sling

TM 11-6665-232-12 has the wrong NSN for your radiacmeter's sling assembly. NSN 6665-00-087-7931 on Page C-2 should be NSN 6665-00-877-7931.

## Sparking Your PM

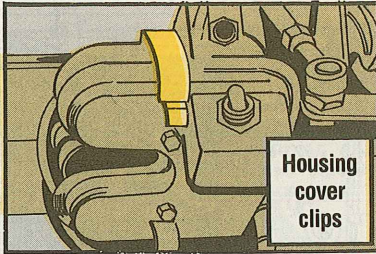
Stop the spark stoppers in your 1.5-, 3- and 6-HP Mil Std engines or they'll stop you.

The lead gasket inside the breaker point assembly cover must be kept snug between the cover and case or the gasket can flop across the points or condenser. That'll cause a short and kill the engine.



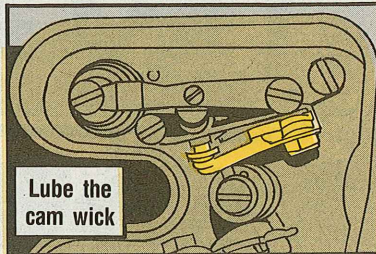
Lead gasket

Make sure the cover clips are in place and doing their job. Replace any weak, cracked or broken clips, NSN 5340-00-797-5966.



Housing cover clips

Another spark saver is to keep cam wicks well lubed.

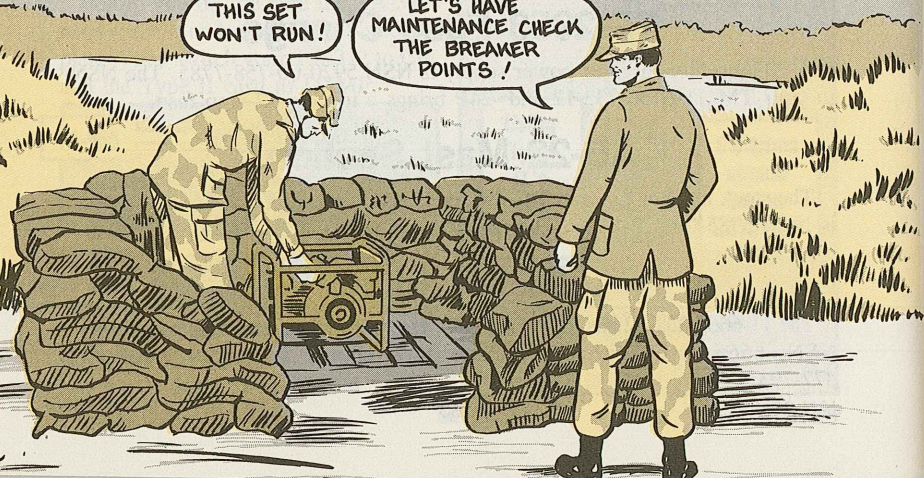


Lube the cam wick

A drop—don't overlube!—of clean oil on the cam wick when adjusting or replacing the points will do the job. That lubing keeps the point gap from closing prematurely.

THIS SET WON'T RUN!

LET'S HAVE MAINTENANCE CHECK THE BREAKER POINTS!



## Get Pubs for Your Chain Saw

You can get manuals for some commercial chain saws from the Defense General Supply Center.

Here are the pubs available:

SAW	PUB
<b>PNEUMATIC SAWS:</b>	
NSN 3695-00-247-9684	TM-DGSC-3695-
Boston Pneumatics SC-1-24	2
Remington 6P	3
<b>GASOLINE SAWS:</b>	
NSN 3695-00-679-6914, 18-in cut	TM-DGSC-3695-
Homelite EZ, XL, & XL Mini	7
Pioneer 1200A	11
Poulan 306A, 306SA, & 245A	4
Poulan 3400	14
NSN 3695-00-452-2244, 20-in cut	
Homelite 450, 450W, 450HG, 450SL	15
NSN 3695-00-554-4438, 24-in cut	
Homelite XL-12, Super XL-12, & XL-15	13
McCulloch Mac 10-10-A	9
Partner S55,S65	17
Poulan 361	1
Stihl 032 AV	16
NSN 3695-00-141-8291, 36-in cut	
Homelite 1130G	10
McCulloch 895	5
Poulan 72	6

YOU CAN GET ONE COPY OF EACH MANUAL BY WRITING TO:

Commander  
Defense General Supply Center  
ATTN: DGSC-SDA  
Richmond, VA 23297-5000



### PU Lamps

All of the power units in TM 5-6115-365-15 use the same lamps. If yours needs replacing, get it with NSN 6240-00-892-4420.

### Gasket NSN

Use NSN 5330-00-663-4773 to get a secondary fuel filter gasket for your 30-KW generator set. The NSN for Item 9, Fig 47, on Page 185 of TM 5-6115-465-24P is wrong.

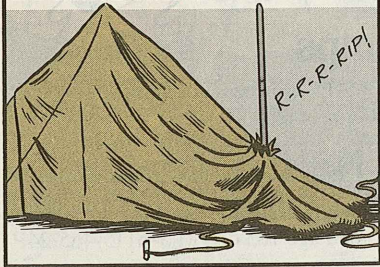
# Tent



Your tent is the first line of defense against the elements. Take care of it and you'll save wear and tear on yourself and your gear when you're in the field.

Most damage to canvas is caused by abuse and neglect. You can put a damper on both. Here's how:

Be careful with the tent poles when erecting and dismantling the tent. They can tear or poke holes in canvas and window screens.

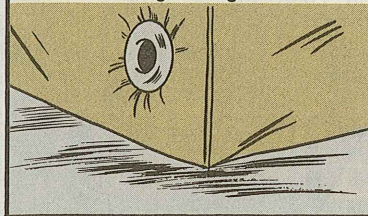


Loosen the lines when it rains so the canvas won't tear.



# Sense

Never poke a hole in the canvas or window screen to route a wire or cable into the tent. Instead, put in a grommet from the repair kit and route the wire through the grommet.



Before you put the tent away, clean the canvas and dry it thoroughly. This will head off rot. Look it over for torn or worn spots.



If you find a torn or worn spot, repair it—pronto! Fix little tears and holes right away. Don't wait until they're so big you have to send the tent to DS for repair.

NSN 8340-00-262-5767 gets the tent repair kit covered by SC 8340-90-CL-P01. Chap 6 of FM 10-16 tells how to use it.

Get patch glue with NSN 8040-00-264-3848 (6 ounces) or 8040-00-266-0850 (8 ounces).

If the tent's leaking but you can't find any holes, apply waterproofing preservative. Para 4-29 of TM 10-8340-211-13 has instructions.

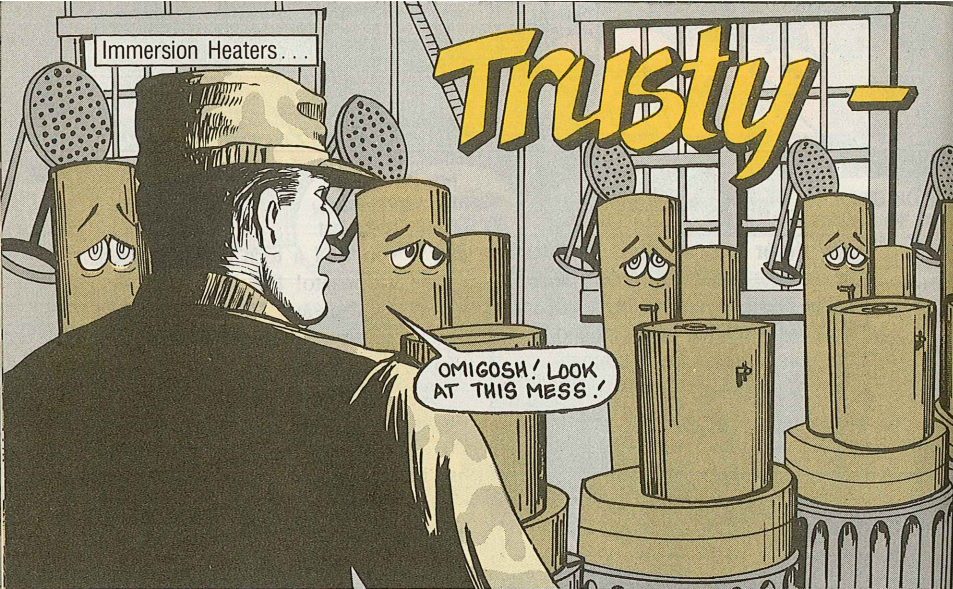


Use a 50-50 mix of preservative, NSN 8030-00-281-2346 (5 gallons) and solvent, NSN 6850-00-264-9038 (5 gallons). Spray, brush or roll on the mix. A gallon of the mix covers about 90 square feet of canvas. Dry the canvas outside or in a well-ventilated area.

Store the tent, tent pins and guy lines where it's clean and dry.

# Trusty -

# Not Rusty



Field exercise over? Before you put away those immersion heaters, take time for rustproofing. It'll head off major problems when you have to use them again!

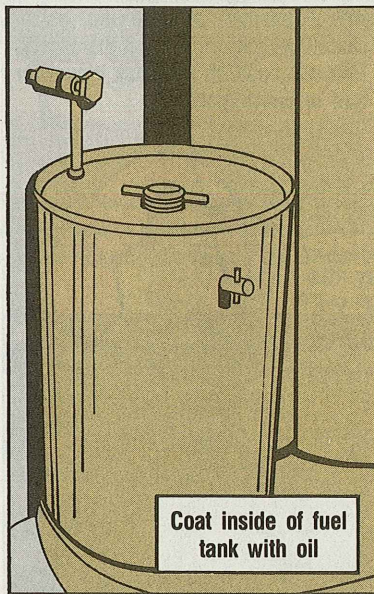
Use touch-up paint wherever it's needed. Paint only the parts called out by your TM—either 10-4500-200-13 or 5-4540-202-12&P, depending upon the NSN of your heater.

Before you paint, use a wire brush or flint paper, NSN 5350-00-664-9692 (100 sheets), to take off rust and loose paint. Clean off grease and moisture, too.

Clean unpainted parts, like the heater body, the hanger, the hanger screws, and the outside of the fuel tank with solvent. Dry them thoroughly. Then coat them with corrosion preventive compound, NSN 8030-00-251-5048 (1 gallon).

Coat the inside of the fuel tank with lubricating oil. Put about 8 ounces of the oil into the empty tank, cap it and gently swirl it around. Pour off the extra oil.

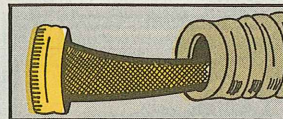
Before you use the tank again, though, flush out the lube oil with a little clean



fuel. The oil will smoke if you leave it to burn off with the first tank of fuel. To protect the smoke pipe in storage, use lube oil. Wrap the burner in grease-proof barrier paper, NSN 8135-00-224-8885, and it's ready for a few weeks in storage.

## Gas Can Parts

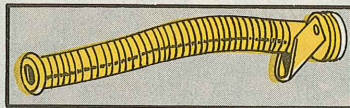
These NSN's get repair parts for your 5-gal military gas can, NSN 7240-00-222-3088: Chap 2 of TM 10-7200-200-13 has the Maintenance Checks and Services.



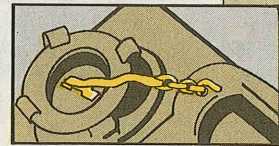
**Cap & screen assembly**  
NSN 7240-00-132-6433



**Gasket**  
NSN 5330-00-298-7165



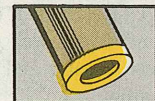
**Spout assembly**  
NSN 7240-00-177-6154



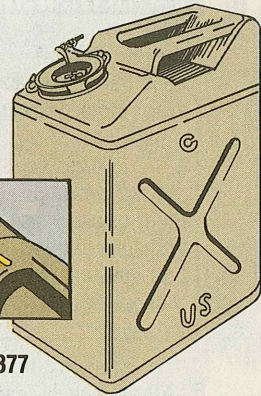
**Closure assembly**  
NSN 7240-00-025-3377



**Bottom bushing**  
NSN 7240-00-132-6431



**Bottom washer**  
NSN 5310-00-228-6638



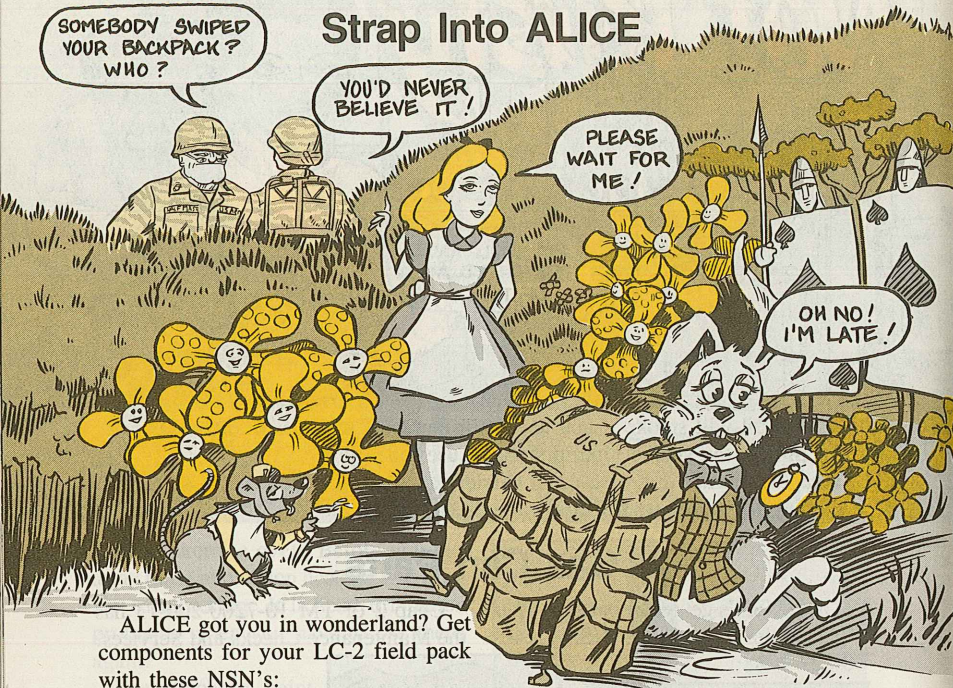
SOMEBODY SWIPED YOUR BACKPACK? WHO?

## Strap Into ALICE

YOU'D NEVER BELIEVE IT!

PLEASE WAIT FOR ME!

OH NO! I'M LATE!



ALICE got you in wonderland? Get components for your LC-2 field pack with these NSN's:

ITEM	NSN 8465-
Pack frame w/straps	01-073-8326
Waist strap w/lower back pad	01-075-8164
1 1/2-ft lower back strap w/clamp	01-151-2891
Right quick-release shoulder strap	01-078-9282
Left quick-release shoulder strap	00-269-0482



The parts are interchangeable with LC-1 gear.

All your web gear will last longer if you take care of it. Never, never toss it into the washing machine or dryer. Clean web gear like it says on Page 1-6 of FM 21-15—by swishing it in warm water and mild soap or detergent. Dry the straps indoors or out of the sunlight.

Chap 26 of TM 10-8400-201-23 has repair info for the ALICE pack. The LC-2 NSN's will be added when the TM is revised.

## Food Container Tip

Dear Editor,

Spray painting an insulated food container, NSN 7330-00-238-2411, is a breeze if you have an old outer cover gasket handy. Just put the unserviceable gasket in place and close the lid before you spray. It keeps paint out of the container, and saves time hassling with masking tape.

Don't toss the gasket when you're done—use it for the next paint job.

Mr. Robert E. Jones  
Ft Campbell, KY

(Editor's Note: Good idea, and here're some container parts.)

THAT GASKET MAKES SPRAY PAINTING A CINCH!

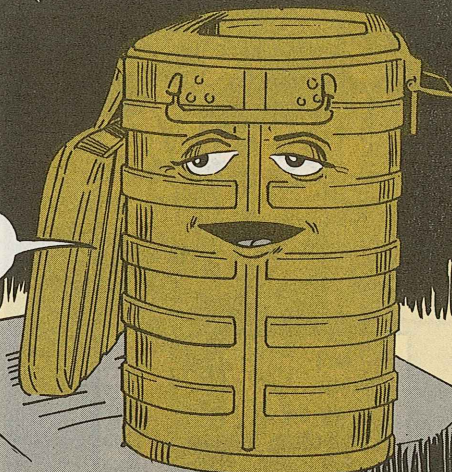


EVEN IF I'M PAINTED, I CAN'T DO MY JOB IF I HAVE DAMAGED OR MISSING PARTS. USE THESE NSN'S TO GET REPLACEMENTS!

ITEM	NSN
Outer cover gasket	5330-00-032-2722
Insert cover	7330-00-243-3254
Insert cover gasket	5330-00-032-2721
Insert	7330-00-243-3253

FOR DECALS, ORDER ON A DD FORM 1348-6 USING FSCM 66745, RIC S9G AND THESE PART NUMBERS:

DECAL	PN
Insulated Food Container with Inserts	8450
Instructions for Use	8449
Nomenclature of Parts	8448





## Keeping It Fit for Duty

You can't just shove your M11 Decon Unit on the shelf after use and expect it to work next time you need it.

Without proper PM, rust and dirt will make your M11 about as effective as a screen door in a submarine.

If the M11 has been filled with DS2, water, or water/antifreeze, turn it in to unit maintenance for cleaning.

Unit NBC NCO's, remove the nitrogen cylinder before cleaning the unit. Flush the container and head assembly with a mixture of water and detergent. NSN 7930-00-282-9699 will get you a good detergent. Rinse with clean, hot water,

if possible. Dry the container and head assembly with compressed air. Shoot air thru the siphon tube to drive out any water in the valve mechanism.

To keep the M11 from rusting shut while in storage, apply a light coat of anti-seize compound, NSN 8030-00-087-8630, to the first two threads of the container and drain plug. You need just a dab.

Before screwing everything shut, put 1/4-teaspoon of rust inhibitor, NSN 6850-00-368-5233, or the 2-oz size, NSN 6850-00-865-2916, in the container. Screw in the head assembly and drain plug bolt. You've just said good-bye to most rust.

**Never put oil or grease in the container.** That stuff neutralizes DS2.

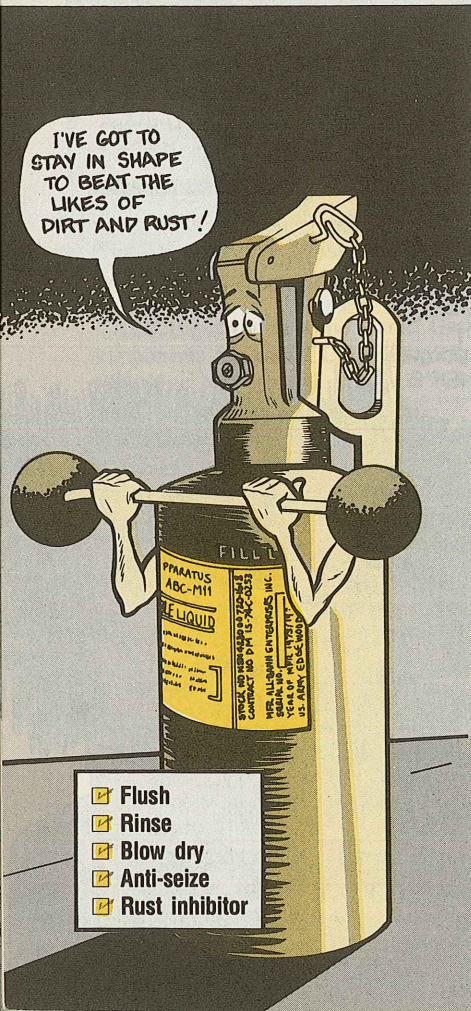
Wipe off any anti-seize compound from around the outside of the container opening and drain plug.

Put a couple of drops of CLP on the thumb lever and handle locking pins.

Put in a serviceable nitrogen cylinder and your M11's now ready for storage. And you can be sure it will be ready when you need it.



Shoot air thru siphon tube

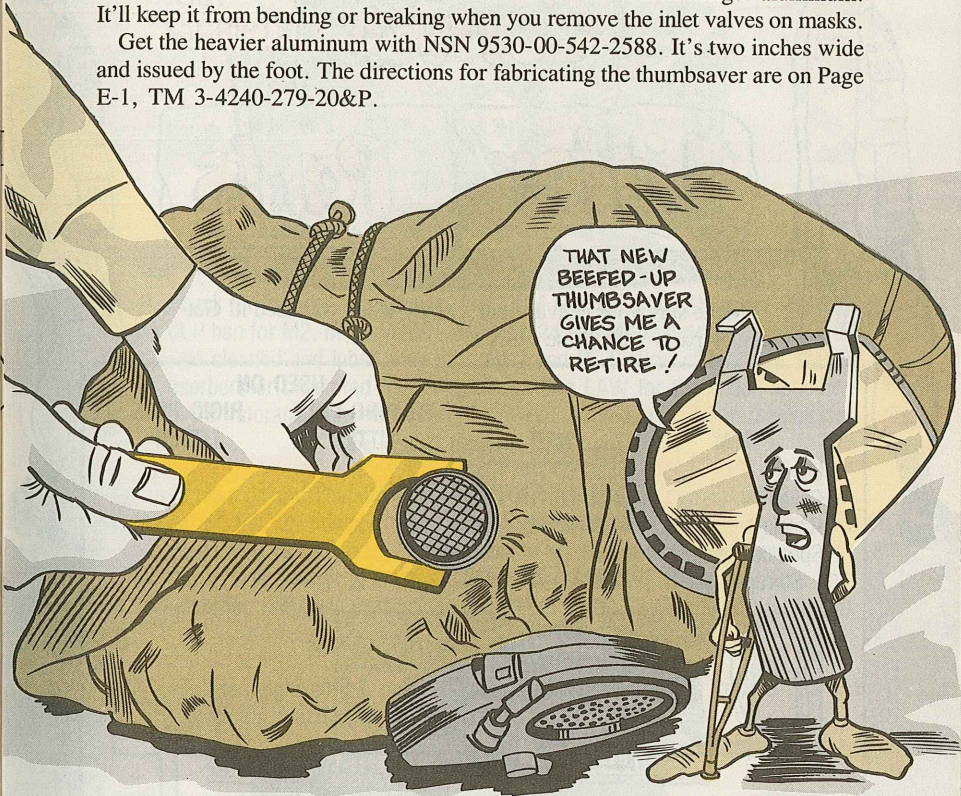


- Flush
- Rinse
- Blow dry
- Anti-seize
- Rust inhibitor

## Rule of Thumbsaver

Beef up the thumbsaver tool for M17-series masks with stronger aluminum. It'll keep it from bending or breaking when you remove the inlet valves on masks.

Get the heavier aluminum with NSN 9530-00-542-2588. It's two inches wide and issued by the foot. The directions for fabricating the thumbsaver are on Page E-1, TM 3-4240-279-20&P.



## M24 Mask Hood Storage

When you store your M24 protective mask facepiece in the carrier, the M7 hood should be neatly wrapped around the hose... **not** attached to the facepiece. Storing it on the facepiece can distort the lens.

The M5 hood for the M25/25A1 mask should be attached to the facepiece for storage in the carrier.

This updates the info on Pages 54-56 of PS 386.



Wrap hood around hose

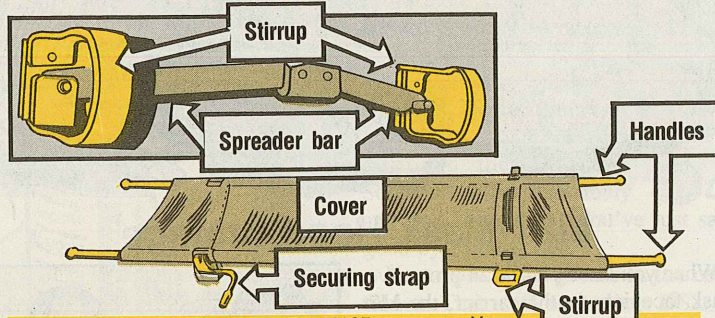
# Canvas

# Litter

# Parts

Make sure your canvas litter's ready when you need it! Get repair parts with these NSN's:

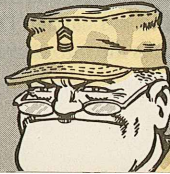
ITEM	NSN	USED ON	
		FOLDING POLE LITTER	RIGID POLE LITTER
Cover	6530-00-784-1035	X	
Cover	6530-00-784-1250		X
Handle	6530-00-784-2010	X	X
Spreader bar/ Stirrup	6530-00-784-3450	X	X



Securing strap	6530-00-784-4105	X	
Securing strap	6530-00-784-4335		X
Securing strap w/quick-release	6530-00-784-4205	X	X
Headless nail	5315-00-784-2170	X	X

APPENDIX A OF CTA 50-970 AUTHORIZES REPAIR PARTS FOR THE LITTERS.

64



JAN 86

Connie's  
★ POST ★  
SCRIPTS



## CLP Is Back

CLP is back for mortars... part way. AMCCOM AMSMC-MAL-SS Letter 16 Jul 85 lifts the CLP ban for M2, M19, M29A1, M30, M224 and M252 mortars. The mortars can now be cleaned and lubed with CLP, RBC and PL-S. You cannot use CLP on shock absorbers or on stored mortar systems. Use LAW for the shock absorbers and PL-S for storage. Use LAW on the M224 handle and firing mechanism.

## M1 Fan Drive Update

Loose screws galore! That story on Page 5 of PS 394 doesn't cover all the screws that loosen on the fan drive. It turns out that the two radial bolts on each end of the driveshaft also vibrate loose. Torque 'em to 90-135 lb-in and then stake 'em. You'll need a 3/16 socket wrench, NSN 5120-00-683-8597. CTA 50-970 is your authority to order. Complete instructions are in Para 2-5 of TB 43-0001-39-6 (Jul 85).

## M224 Mortar BILL Change

You only need eight aiming posts, NSN 1290-01-046-8320, on Page B-7 of TM 9-1010-223-10 for your M224 mortar, not 16 as listed.

## Upward to Supply Excellence!

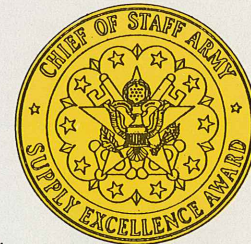
There's still time—but you need to hustle!

Competition for the Chief of Staff, Army, Supply Excellence Award is underway according to guidelines in DA Msg DALO-SMP-U 042337Z Oct 85.

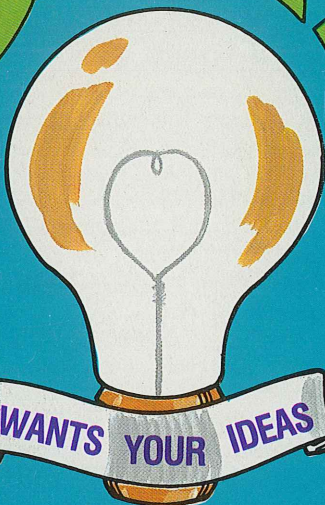
The winner in each of two categories will receive a plaque specially designed by the Army Institute of Heraldry. The winners and runners-up will be honored in award ceremonies to be sponsored jointly by the Dept. of the Army and the American Defense Preparedness Association.

Entrants are not restricted to units with a supply mission. Competition is open to all active Army, Army Reserve and National Guard units, at the company and battalion levels, functioning under either manual or automated accounting procedures.

Units nominated by their major commands will be evaluated by a committee organized by the US Army Quartermaster School. Nominations must reach the committee no later than 3 Mar 86.



# SMART



WANTS YOUR IDEAS

... Just Jot  
Them Down  
and  
Send To:

**SMART**

US ARMY LOGISTICS CENTER  
ATTN: ATCL-C-SMART  
FT LEE, VA 23801-6000  
AUTOVON 687-4347/5512