Issue 324

PS

November 1979

THE PREVENTIVE MAINTENANCE MONTHLY

Antennas tied down? With tip?

Keep filters clean?

Done for the day? Remove dry-cell batteries!

?... SAY AGAIN!*

Contacts pitting?

WATCH high-pressure hoses!

Turn gear off before starting vehicle!

Guards aren't HANDLES!

Slide components into mounts with care!

Connectors have O-rings?

EASY on switches & knobs!

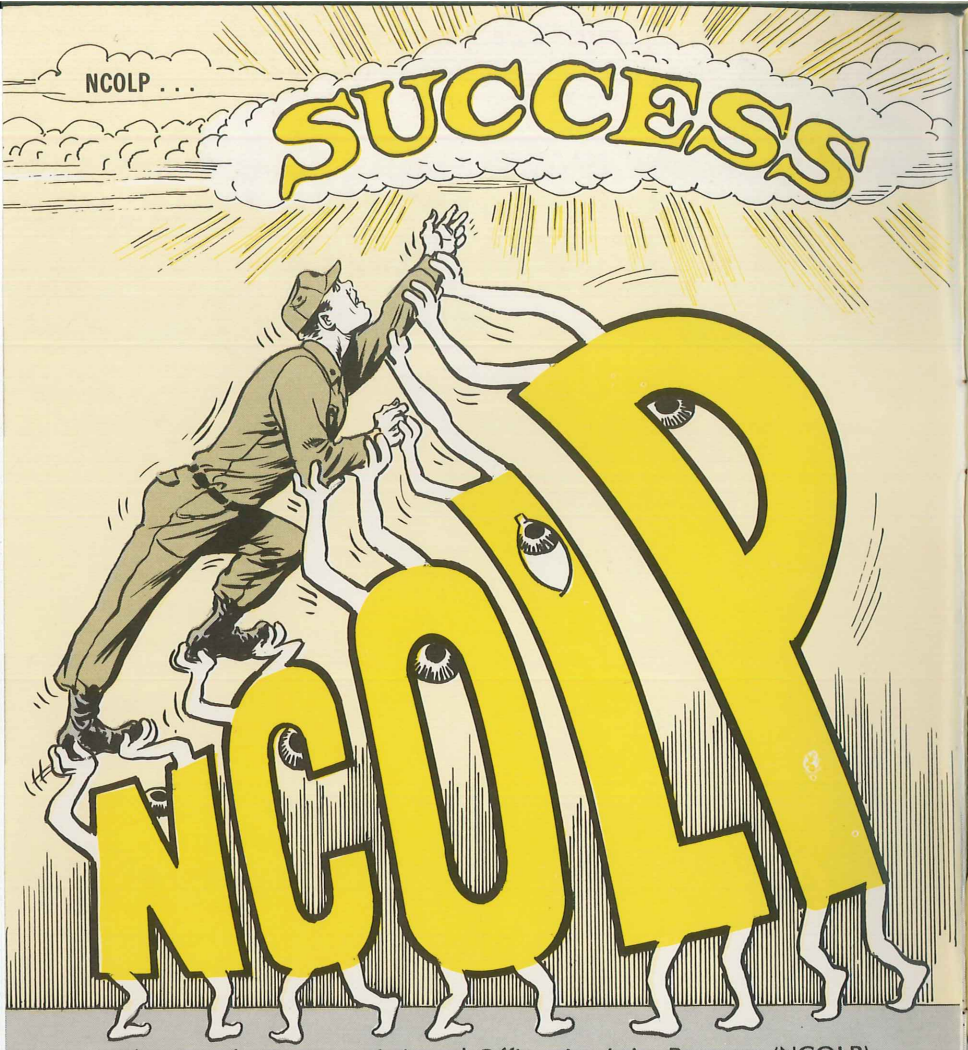
Turn equipment OFF when replacing pluck-out panels!

MURPHY ANDERSON

*See page 29.

NCOLP . . .

SUCCESS



The Army's Noncommissioned Officer Logistics Program (NCOLP) could be the boost you need in your climb to success if you're a maintenance or supply type in the logistics field.

There're hundreds of NCOLP positions in 25 MOS just waiting to be filled.

The positions are located at organizations with major logistics duties, such as HQDA, command headquarters, depots, arsenals and proving grounds.

BOOSTER

You can get one if you're an E-6 or higher with the right qualifications. To find out if you qualify, read Procedure 3-35 of DA Pam 600-8 and Chap 13 of AR 614-200.

Call the NCOLP hotline—Autovon 221-8026—if you have any questions.

So, if you're interested in a mid-level managerial position, your CO can nominate you for the program. The jobs are demanding, but the benefits are great.

P.S.—If you're not yet an E-6 and want to aim for NCOLP, have a session with your unit's career counselor.

PS THE PREVENTIVE MAINTENANCE MONTHLY

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

MSG Half-Mast
PS Magazine
Lexington, KY
40511

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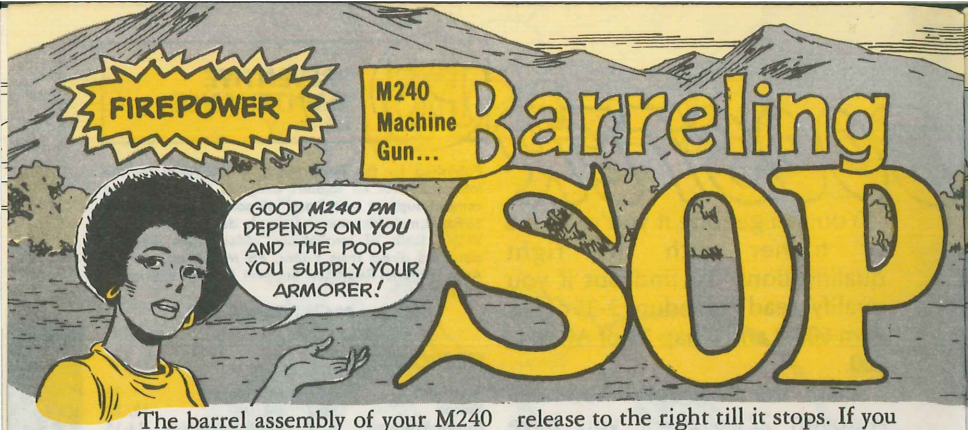
FIREPOWER

M240 Machine Gun...

Barreling SOP



The barrel assembly of your M240 coax machine gun is rugged and efficient. Keep it that way by taking a few precautions.

Nicks, burrs and carbon can foul it up no matter how rugged it is.

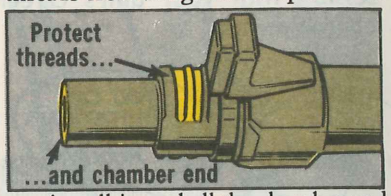
You already know you've got to lock the barrel securely if you want it to stay in the gun.

You also should know the following:

With the barrel release at 12 o'clock, slide the barrel all the way into the receiver. Once it's in, turn the barrel release to the right till it stops. If you hear 2 to 7 clicks before the barrel release stops, you're OK. If you get more or less than that number of clicks, tell your armorer.

If you force the barrel or barrel release you can damage the receiver threads.

When the barrel's out, protect the threads from bangs and drops. When



you install it, eyeball the chamber end for damage. Turn damaged barrels back to your armorer, and armorers

should turn 'em in to support for repair. Nicked, burred and gouged barrels are repaired at support level.

Gas Plug

The gas regulator plug on the barrel needs a good cleaning by the armorer after each day's firing. If that carbon buildup is not removed, the rate of fire can go down and the gun can be sluggish.

After Firing

When firing's over, armorers should remove the gas plug from the barrel and clean it with the combination scraper. The scraper usually does the job with no help from carbon removing compound. Cleaning the plug is the armorer's job. The crew doesn't have the tools.

Pages 3-12 thru 3-15 of TM 9-1005-313-20 (Apr 78) show how to use the scraper. Get to know it. It works. You may even get to like it.

There's one thing you definately don't use on the regulator plug...and that's any kind of lube. If you do, you could get the same sluggish fire that carbon coating on the plug gives you. Keep the plug clean and dry.

Choosing Sides

Another thing about the barrel: If it's installed and you've got to lay the gun on its side, be sure to prop it so the barrel locking latch doesn't touch anything. Or, lay the gun on the side opposite the latch.

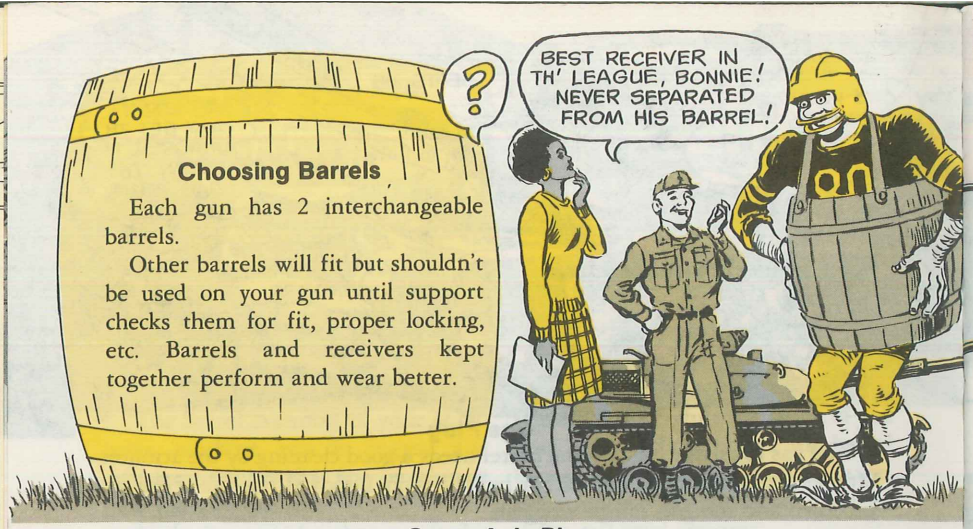
Light pressure releases the latch, so if you accidentally press it, the barrel just might come loose...fall to the ground or whatever...and you'll end up with barrel damage.

PS MORE

Choosing Barrels

Each gun has 2 interchangeable barrels.

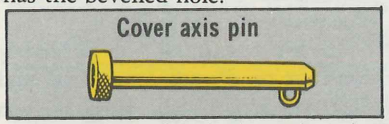
Other barrels will fit but shouldn't be used on your gun until support checks them for fit, proper locking, etc. Barrels and receivers kept together perform and wear better.



Cover Axis Pin

Before you insert the axis pin into the feed tray and cover assembly, read on:

The pin goes into the receiver assembly from the right side...which has the bevelled hole.

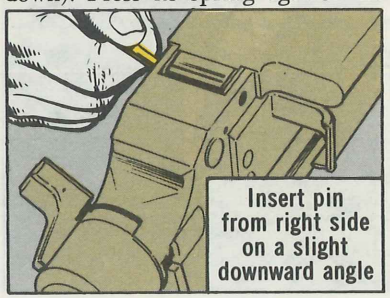


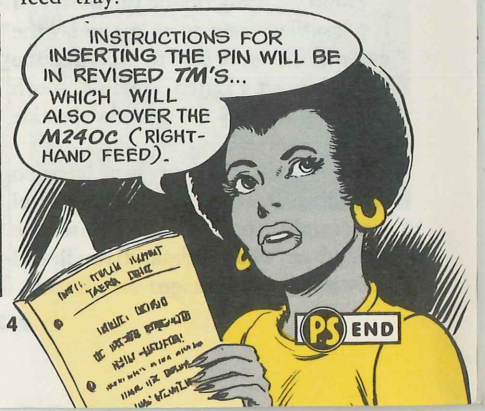
If you force the pin from the other side, you can damage the spring.

Best way is to hold the axis pin on a slight downward angle (pinhead down). Press its spring against the bevel until the spring retracts. Start the pin in the hole and give it a twist as you push it through.

The twist pops it through the hole with the least strain on the spring.

If you shove the pin straight in, you jam the spring into the pin. Sooner or later, it'll break. That could be bad news for the cover assembly and the feed tray.



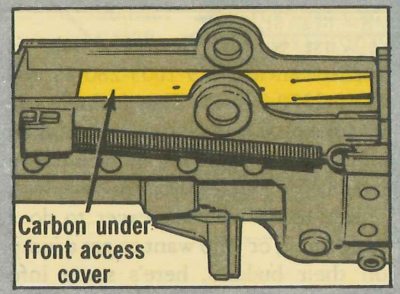


M240 Carbon Hideout

Dear Editor,

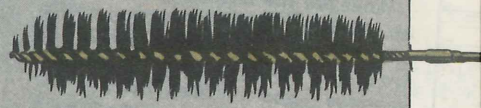
Armorers who work with the M240 coax machine gun may not be aware of a high-carbon area in the receiver assembly.

We found it by accident...under the front access cover. It's not called out in the TM.



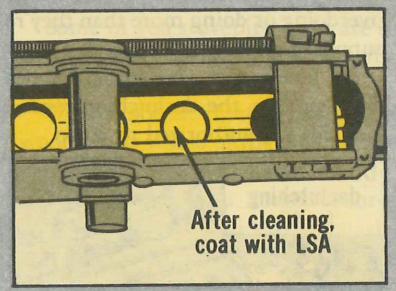
The area under the cover should be cleaned thoroughly with carbon removing compound (P-C-111), NSN 6850-00-965-2332, after each day's firing. The small arms chamber brush, NSN 1005-00-690-3115, works best in getting it out.

Use chamber brush



If the carbon's not removed, weapon operation could be affected. Cleaning after firing also adds to the life of the weapon.

We've found that a light coating of LSA or PL-S on the area under the cover, and especially in the round recesses, traps the carbon and makes it easier to remove.



PFC John W. O'Connell Jr.
Fort Knox, KY

(Ed Note—Thanks. The M240 is a new weapon for many of us, and your tip can head off problems. The next revision to the -20 TM will include a note to clean carbon from under the cover.)

Vulcan Cannon Versus Solvent

Dear Half-Mast,

What are the chances of PS cluing MOS 16R's (Vulcan crewmen) on use of solvent on cannon parts? We 24M's are tired of drying declutching feeders, bearings and other parts that shouldn't have been soaked with solvent

Dear Specialist R. E.,

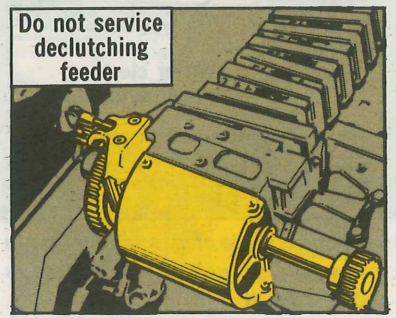
I get your message. Not only M163A1 and M167A1 crews, but lots of others add to their workloads by overdoing or doing more than they're supposed to.

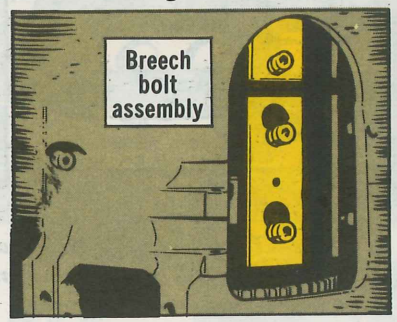
So, listen hard, you 16R's: Do not clean or lube the declutching feeder. You are not authorized to do so.

What you do clean and lube is spelled out in LO 9-1005-286-13 and LO 9-2350-300-13. That includes use of solvent. Do no more or less than what your LO calls for and you'll save trouble for your 24M's and yourselves.

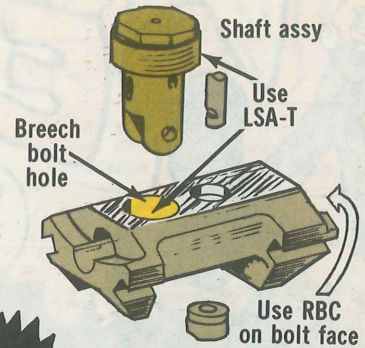
For 16R's who are eager to do a little more, or who want to get a jump on their buddies, here's some info that's slated for changes to both LO's:

When you clean the breech bolt assembly, don't dunk it in the RBC. The solvent gets in the contact stop assembly and deteriorates the plastic insulator. Use RBC on the bolt face, but hold the big bath.

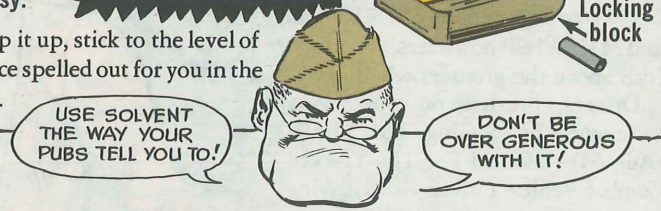




Wipe the breech bolt dry when you finish cleaning it. Let it stand till it dries completely. Then, put a coat of LSA-T on the lobe of the locking block, the shaft assembly and the shaft assembly hole in the breech body.



To wrap it up, stick to the level of maintenance spelled out for you in the TM or LO.



Mortar Muzzle No-No

Some of you stovepipe jocks are so tough you use steel wool to shave with. That's all right.

What's not all right is using steel wool on the inside of the mortar tube to make it shine.

This is strictly a forget-about-it idea. Steel wool will widen the muzzle, and a wider muzzle is absolutely the last thing your mortar needs.

A little cotton waste and your M8 cleaning staff will get the inside of your mortar as shiny as it needs to be, regardless if it's an 81 or a 4-deuce.

M578/M110A1 Vehicles...

KEEP ON TRACKIN'

T132E1 track wears out very fast. The pads for this track, used on M578 recovery vehicles and M107 gun and M110A1 SP howitzers, are only ⅜ inch above the grousers when new.

Drivers, brush up on your driving techniques by reading TM 21-306 (Aug 64)—Manual For The Tracked Combat Vehicle Driver. Good driving is as important as good preventive maintenance and good inspection.

Driving Tips

Keep speed slow and steady. High speeds build up heat that causes tearing and chunking.

Start and stop smoothly. Fast starts and panic stops eat up your pads in a hurry.

Turn in long smooth curves. Pivot steering at any speed wears out more track pad rubber in a few seconds than a whole day's road march. So go easy, Huh?

Remove crud from the track after each operation...this includes mud—which can freeze—rocks, wire, brush and tin cans.

Track Inspection

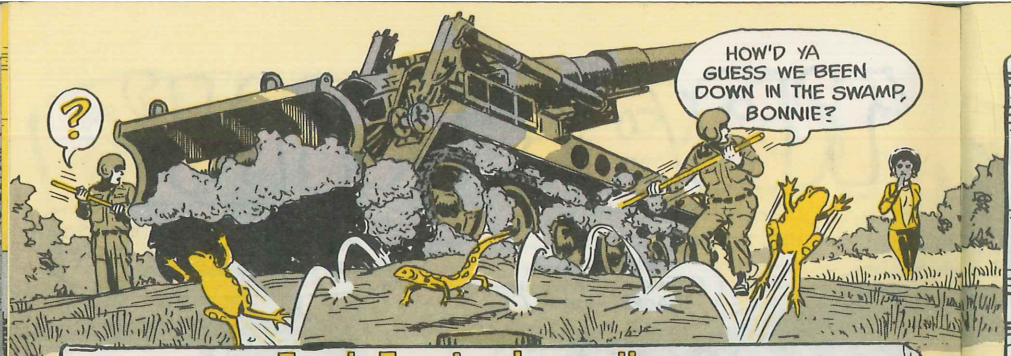
Check track and track components after operations and during halts. Take your time...give 'em a careful eyeballing.

Look for broken or damaged shoes and loose track shoe nuts. When you find a loose one, tighten it.

Replace worn track pads when the grouser begins to mark a paved road.

You never run on a paved road without a pad.

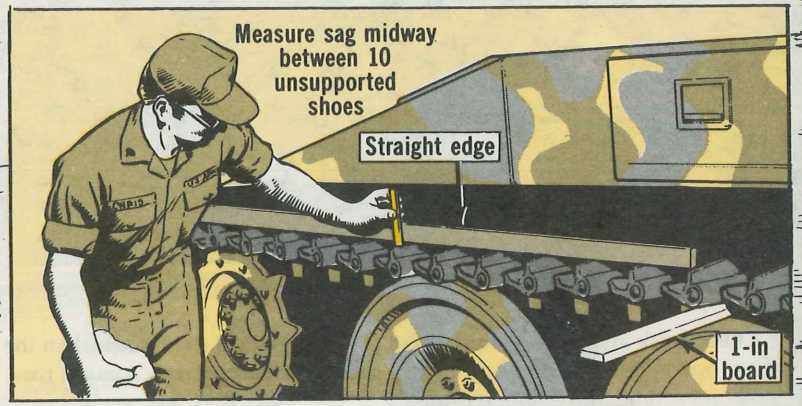
P.S. MORE



Track Tension Inspection

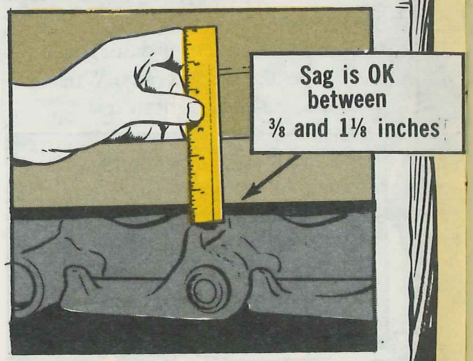
Move the vehicle forward on a hard surface and coast to a stop without applying the brakes. Clean out the mud and crud from the track shoes on the outboard side. Clean out the track shoe pin holes, too.

Move the shift lever to neutral—N.



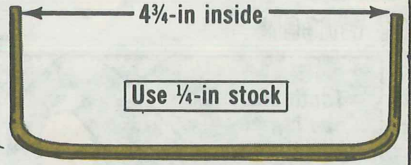
Put a 1-in thick board...or a jack handle...between the track and the second road wheel.

You'll need a piece of wood or steel at least 4-ft long to use as a straight edge. Measure sag midway between 10 unsupported track shoes. Sag should be between ⅜ and 1⅛ inches. If inspection shows adjustment is needed, go by your -10 TM. Page 3-38 in TM 9-2350-238-10 (Mar 78) has good instructions.



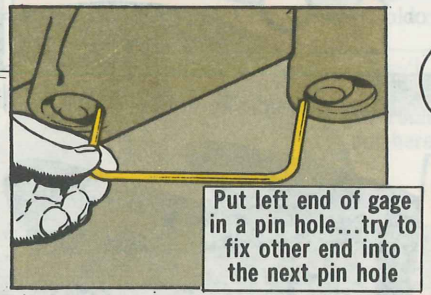
Track Shoe Bushing Wear

Get your mech to make a shoe bushing wear gage. TM 9-2530-200-24 (Jul 76) tells how. Watch it, tho! Don't use 1/16-in stock like it says in that book. The gage won't hold up.



Make one from ¼-in welding rod. It has to be 4¾ inches between the points—inside.

Start measuring the top strand of shoes from the front of the vehicle to the rear. Measure on the straight line of the track.



Don't measure shoes on the ground or shoes going around the sprockets. Mark a pad on top so you'll know where you started.

Put the end of the gage in a bore toward the rear of the vehicle. Try to fit the other end into the next bore. If the gage goes into both bores, the bushings are OK. If not, the bushings in one shoe . . . maybe both . . . are bad. Mark the pin toward the front of the vehicle with chalk. Check the entire track on both sides of the vehicle before making any repairs.

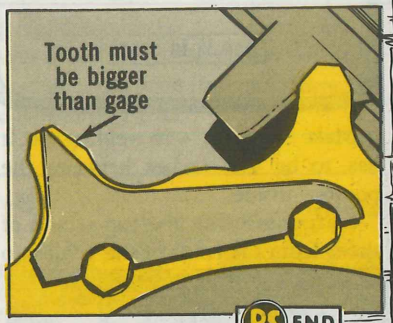
Now disconnect the track shoe at the marked pins. Check both shoes for

gouged-out or loose rubber...crushed or deformed shape...rotating bushings. If you find any of this in either shoe, replace the bad shoe.

Sprocket Wheels

Use the sprocket wheel tooth wear gage, NSN 4910-00-842-3051, that comes as a special tool for your vehicle. It's listed in your vehicle TM-20P.

Measure sprocket wheel tooth wear by resting the gage on 2 screws with the point alined with the tooth. The width of the tooth must exceed the width of the gage. If not, reverse or replace the sprocket wheel.



PS END

M3 Heater Parts for M60's

Here're parts you can replace on the M3 heater used with the gas particulate filter units in your M60-Series tanks:

Knob	NSN 5355-00-723-6829
Lens	NSN 6210-00-954-4205
Lamp	NSN 6240-00-019-0878

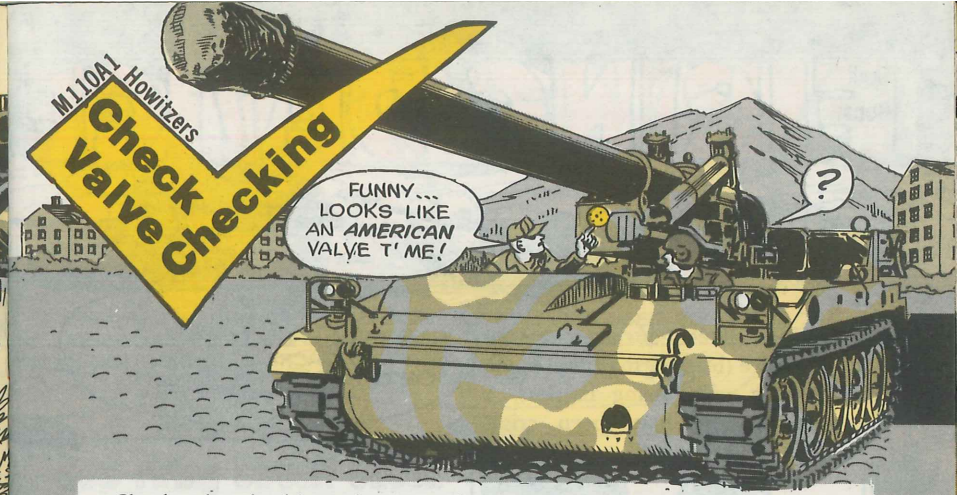
Jot 'em down in the parts manual for your tank.

M110A1 Torque Topic

The wrong torque for the self-locking nuts that hold the roadwheels on the hubs of the M107/M110 SP artillery got printed in your TM 9-2300-216-20 (Nov 73). The correct torque value for these nuts is 250-270 lb-ft wet or 300-350 lb-ft dry.

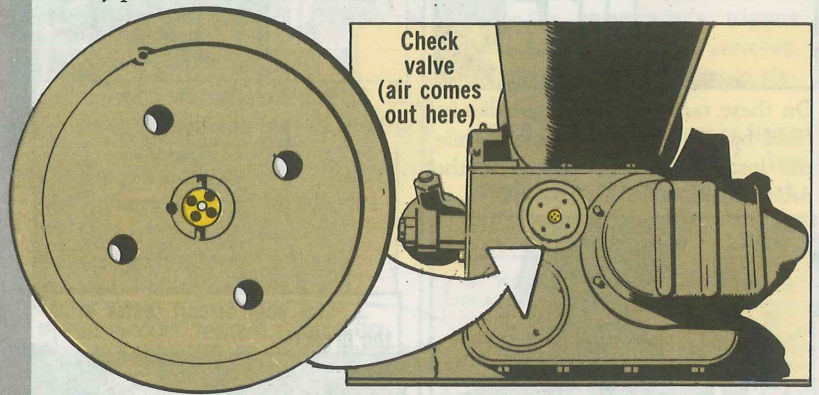
M110A1 Howitzers

Check Valve Checking



Check-valve checking takes just a few seconds and it keeps you from having problems with your counter-recoil cylinder.

Put your hand in front of the check valve (the 4 little holes in the center) while another crewman retracts the gun tube and then returns it to the in-battery position. A stream of air should come out of the 4 holes.



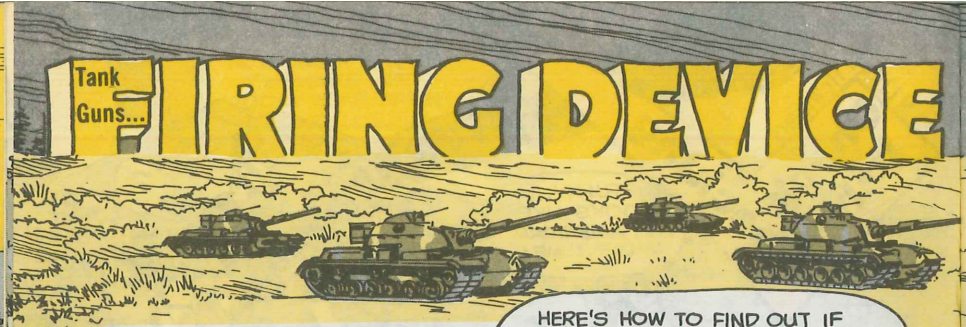
If no air is pushed out of the holes, tell your artillery mechanic He will get the valve working right.

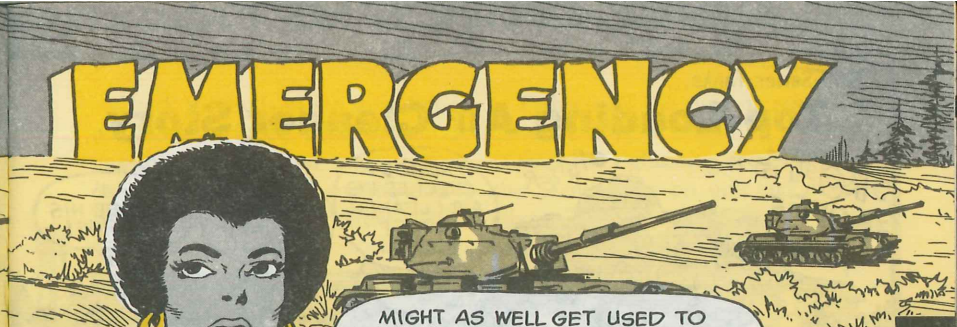
When the valve is blocked, a vacuum is created that sucks oil past the counter recoil rod piston.

During the counter recoil cycle, some oil or moisture or both will be forced out the 4 holes. This is only natural. During normal operation, some oil is forced past the seals for lubrication.

If oil flows out at the holes repeatedly, tell your unit's maintenance crew.

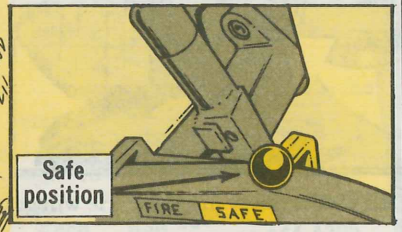
Tank Guns... FIRING DEVICE EMERGENCY





During assembly of the emergency firing device (blasting machine) to the main tank gun wiring harness, 3 connectors may have been criss-crossed.

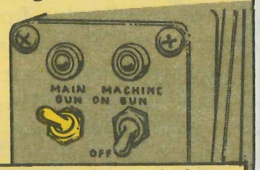
On these tanks the main gun can be fired by the blasting machine while the loader's saftey switch is in the SAFE position.



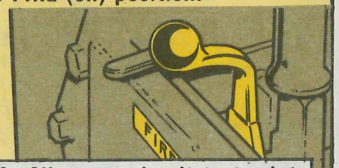
Tanks that must be checked on an emergency basis for this condition include all M60, M60A1, M60A3, M728 CEV and M48A5 (M60A2 tanks do not have this problem).

ARRCOM Msg DRSAR-MAL-ST 011450Z Feb 79 has the word.

1. Set main gun selector switch to ON.



2. Put loader's safety switch to the FIRE (on) position.

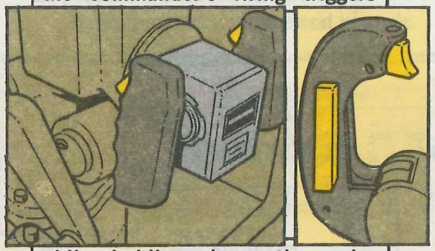


3. Slip your circuit tester into the breech.

4. Crank your emergency firing device (blasting machine) while you watch the circuit tester. The globe of the tester should glow for a second.

New Firing Circuit Check

5. Press the gunner's and then the commander's firing triggers

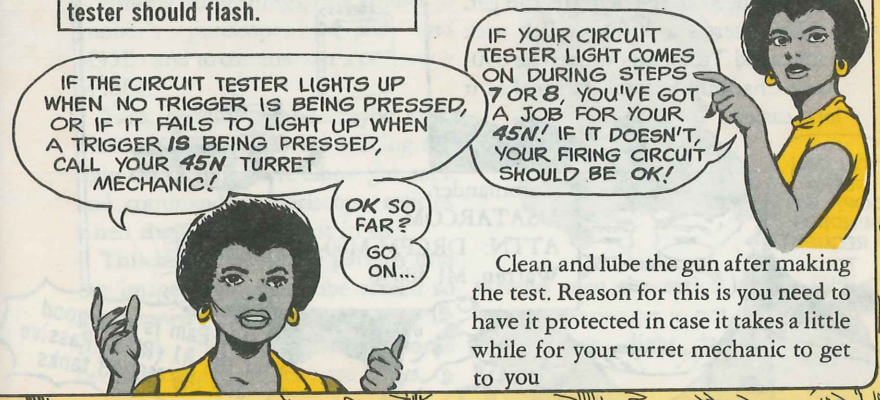


while holding down the palm switches. The globe of the circuit tester should flash.

6. Leave the circuit tester in place and flip the loader's safety switch to the SAFE (off) position.

7. Now press the gunner's and then the commander's triggers while holding in on palm switches. The circuit tester light should stay out.

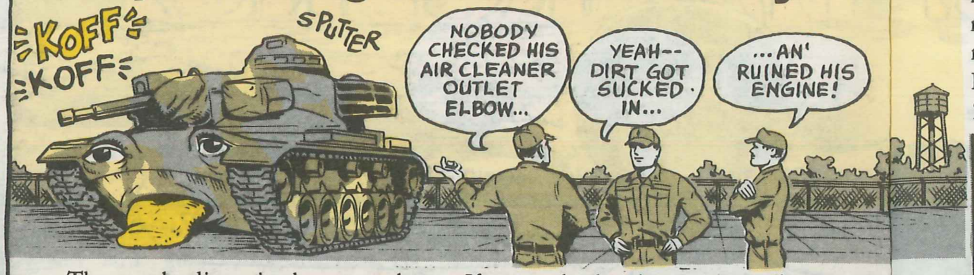
8. Crank your emergency firing device (blasting machine). The circuit tester light should stay out.



Clean and lube the gun after making the test. Reason for this is you need to have it protected in case it takes a little while for your turret mechanic to get to you

M60-Series Tanks...

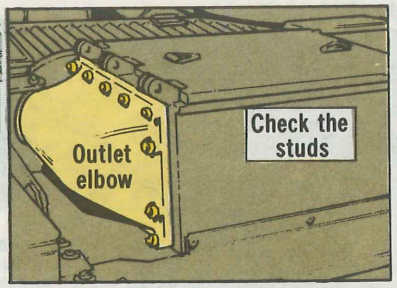
Top-Loading Air Cleaner Story



The top-loading air cleaner outlet elbow has a tendency to loosen. Then dirt, dust and other crud can get sucked into the engine. The engine'll wear out in a hurry because dirt on moving parts acts like a grinder.

If so, check the outlet elbow mounting nuts right away. They must be self-locking nuts. Use NSN 5310-00-950-0039. Torque 'em to 20-25 lb-ft. (Don't bother with the nut under the outlet end of the elbow unless you already have the air cleaner off.)

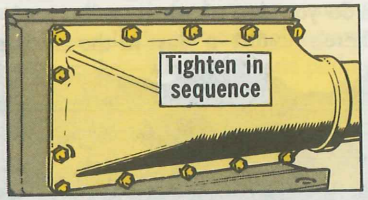
Check the studs to see that they're not loose, stripped, bent, broken or missing. If you find any of that, remove the air cleaner and the elbow. Replace the stud with a screw, NSN 5305-00-725-2317.



Put the outlet elbow back like so:

Tighten all the nuts or screws to about 10 lb-ft.

Start the tightening sequence with the corner nuts on one end of the elbow. Torque to 20-25 lb-ft.



Then tighten the 2 center nuts, top and bottom.

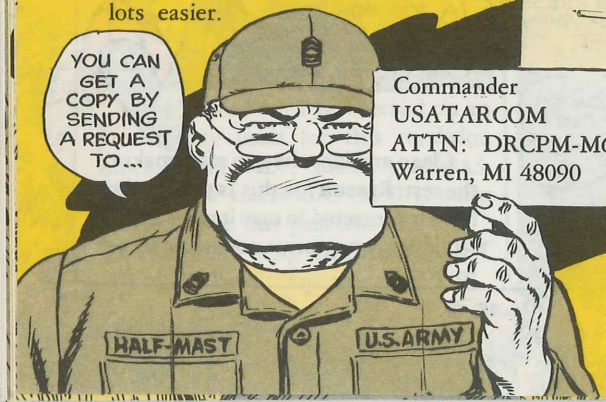
Now tighten the corner nuts on the other end. Torque the remaining nuts starting at one end and tightening alternately from top to bottom.

M60A1 (RISE) Tank...

Checking 650 System

Like some of you 63 Charlie track vehicle mechanics already know, when you're troubleshooting the 650-amp charging system in the M60A1 (RISE) tank you need all the help you can get.

Now there's a 30-page slick trick pam called Troubleshooting The 650-Amp Charging System that makes it lots easier.



M60A1 (RISE) PASSIVE/ M60A3 TANKS...

Proper Periscope Operation

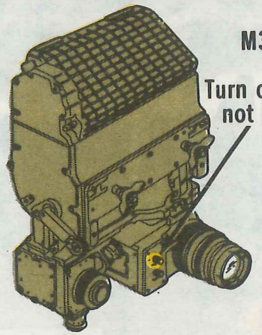
When not in use, turn off the juice!

Among other things, this applies to gunner's periscopes M32E1 and M35E1 and to commander's periscope M36E1.

Tank crewmen (and maybe even maintenance people) are leaving the light on in the passive elbow gunner's and commander's periscope reticles when the periscope's not in use.

This burns the reticle pattern into the image intensifier tube screen so the passive image tube has to be replaced. This is a very bad scene because the tube costs lotsa bucks.

Use the lowest possible light intensity for reticle illumination.



Always turn the reticle power OFF when a periscope is not in use. This will prevent light damage to the screen.

GROUND MOBILITY

Engine Air Cleaner... No Winter Vacation

Your engine air cleaner stops dirt 'n' dust from getting into your engine. Right? Right!

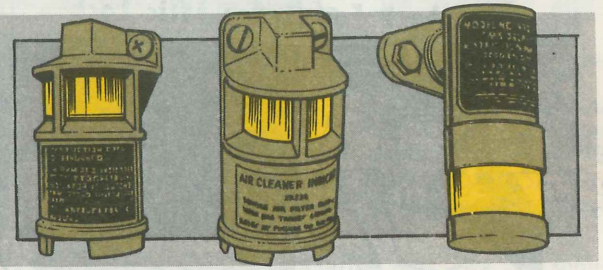
So you don't have to pull any air cleaner PM in the wintertime—'cause there's no dirt 'n' dust in the air. Right? WRONG!

Snow covering up your air cleaner intake is bad enough. If the snow's frozen over solid, your engine can't get air. If the snow's loose, it gets sucked into the air cleaner—and wraps a wet blanket around your filter element. You'll know it when your engine starts losing power and putting out black exhaust smoke.

So keep snow cleared away from your air cleaner intake.

But winter's not all snow. Sometimes, it's fog, rain or sleet. This gets sucked into your air cleaner. It can freeze on the filter element. Then it's the same story—engine air starvation. Your engine gets a bum air-fuel mix—not enough air for the amount of fuel being delivered to the cylinders. Poor engine power! Unburned fuel dumped out as black exhaust smoke—wasted fuel and polluted air!

You've got a helper—USE IT! You know your air cleaner's plugged when the colored band shows in the gage



Know those signals—low power, black exhaust.

You'll have to take out the air cleaner filter element and dry it in a warm place.

Liquid Rock

You know your engine won't run very well on water—like snow or rain pulled in around a bum-fitting filter element. Or sucked through loose connections anywhere in your air intake system.

So you make sure your filter element's in good shape—no holes in the side, no torn or twisted gaskets. And you check the hose or tube between the air cleaner and engine—no holes, no loose clamps. Everything snug.

PS MORE

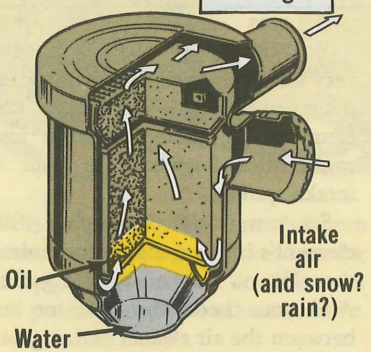
But water in your engine can give you other fits—hydrostatic lock. Water won't compress with pressure—like air does—so water in a cylinder is like rock when the piston comes up against it. Something's gotta give—and it'll probably be the connecting rod. It'll break!

You should already know about hydrostatic lock. It's explained in FM 21-305 (Apr 75), Manual For The Wheeled Vehicle Driver, para 3-2g. This tells you what hydrostatic lock is and how to check for it—so you won't damage your engine.

Oil-Bath Cleaners, Too

Snow or rain, it's still water when it winds up in your oil-bath engine air cleaner. Water sinks to the bottom of the oil reservoir, so the oil level is raised. It's like too much oil. This oil can be pulled into your engine.

Get the message? Check your air cleaner oil level more often during winter's snowy or rainy weather. If it's too high, you can bet there's water on the bottom of the reservoir. Dump it out and refill with clean oil—to the right level.



PS END

TM-218-Series ¼-Ton Trucks...

Graphite for Exhaust Leak

Let's start from the top on the exhaust manifold sealant for your ¼-tonners. There're several NSN's floating around—including those in PS 317, page 41; TM 9-2320-218-20 (Sep 71), Ch 5, para 2-40; TM 43-0143 (Jun 77), Article 4-4.

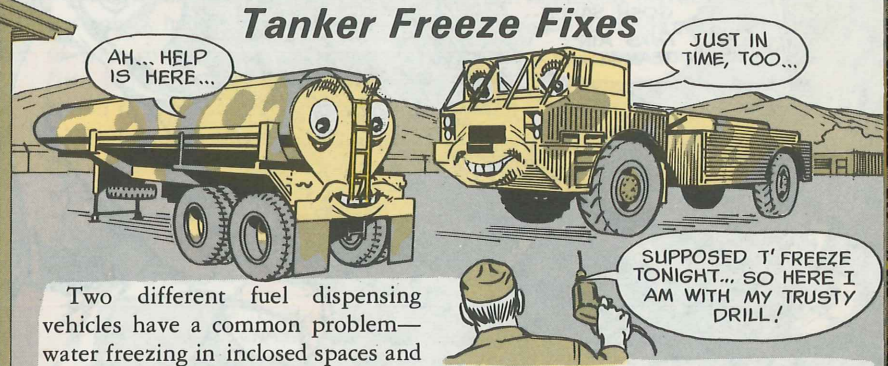
They're all wrong! They won't bring you the right sealant.

You need graphite-type grease. It comes under NSN 9150-00-257-5370 (1-lb can) and NSN 9150-00-235-5568 (5-lb can).

TM 43-0143 does give you some good poop, tho, on straightening your exhaust manifold to help it fit snug against the cylinder head ports.

M131A5 & M559...

Tanker Freeze Fixes



Two different fuel dispensing vehicles have a common problem—water freezing in inclosed spaces and causing damage:

M131A5 5,000-gal semitrailer tanker—rear access ladder tubing splits. So you get your support to drill drain holes in the ladder, like it says in TB 43-0001-39-1 (Apr 79).

M559 (Goer) 2,500-gal tanker truck—failure of rear door, door seal and weldment because of ice in the door support bottom weldment. The same TB gives instructions for drilling drain holes.

YOU AND A

It's hard to beat tire chains for traction—grabbing ahold of ice or hard-packed snow.

But tire chains don't make your winter driving all safe 'n' cozy. A lot still depends on how you drive—and on how you adjust your driving for different conditions.

For either traction or stopping, the value of tire chains depends on size, fit and location.

See PS 323 for more tire chain info.

YOUR TIRE CHAINS-TEAM

FIT

Right fit calls for right size tire chains to begin with—and then right installation. You install chains on your tires so they're not too tight or too loose.

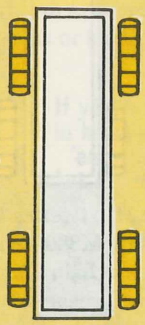
Chains are supposed to creep—or move—a little on your tires. This helps shake out the snow that might pack in around the cross chains. But, most important, it's easier on your tires

Get the chains as tight as you can—but only by hand. Never let the air out of your tires, install the chains and then blow the tires back up. You're bound to get the chains too tight.

Too loose is bad because it's hard on the chains—you beat 'em to death while you're traveling.

LOCATION

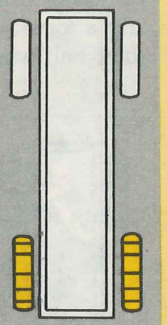
Best for traction, stopping and steering is chains on all wheels—even on non-driving front wheels. This's for real nightmare driving conditions! But chains all around are a big expense and a lot o' hassle—so you go that route only when you really need to.



Best for the worst driving conditions... even tho chains may be on a non-driving axle, like M880-SERIES 4x2 truck

PS MORE

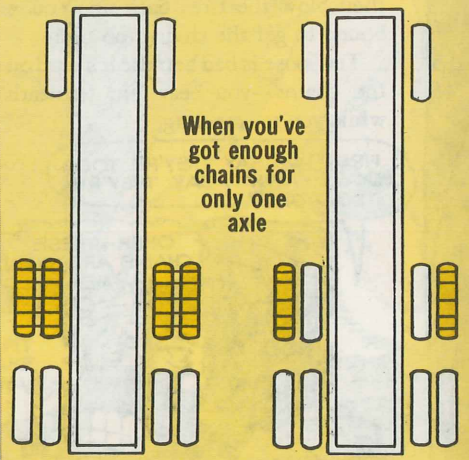
For vehicles with a non-drive axle, you put tire chains on the drive axle—or axles, if there's more than one drive axle. This includes some of the M880-series 1¼-ton trucks and bigger jobs like the IHC F-5070 20-ton dump truck and the M915 14-ton tractor truck.



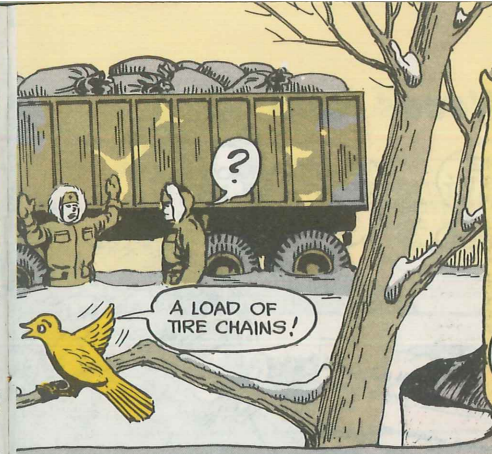
Usually good enough—even on all-wheel-drive vehicle

Rear wheels of the M151-series ¼-ton trucks and the 4x4 M880-series trucks are first choice for chains. Since they've also got front wheel drive, chains also on the front wheels give even better traction.

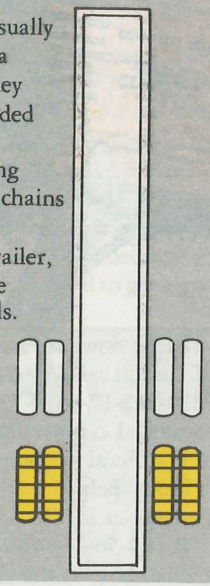
When you've got only enough chains for one axle in a tandem drive setup, you put the chains on the front tandem axle (also called intermediate axle). These should be dual wheel chains, but you can use single chains by putting 'em on the outside wheels.



When you've got enough chains for only one axle



You don't usually put chains on a trailer, but they might be needed under real slippery driving conditions. If chains are put on a tandem-axle trailer, they go on the rear axle wheels.



Not often needed, but this's the way

No matter what vehicle you're putting tire chains on, never—but never—put chains on only one side. Chains on only one side can lead to damage of your axle, differential and other parts of your drive train. And they can cause you to lose control. So, chains on both sides—or none at all.

MAINTENANCE

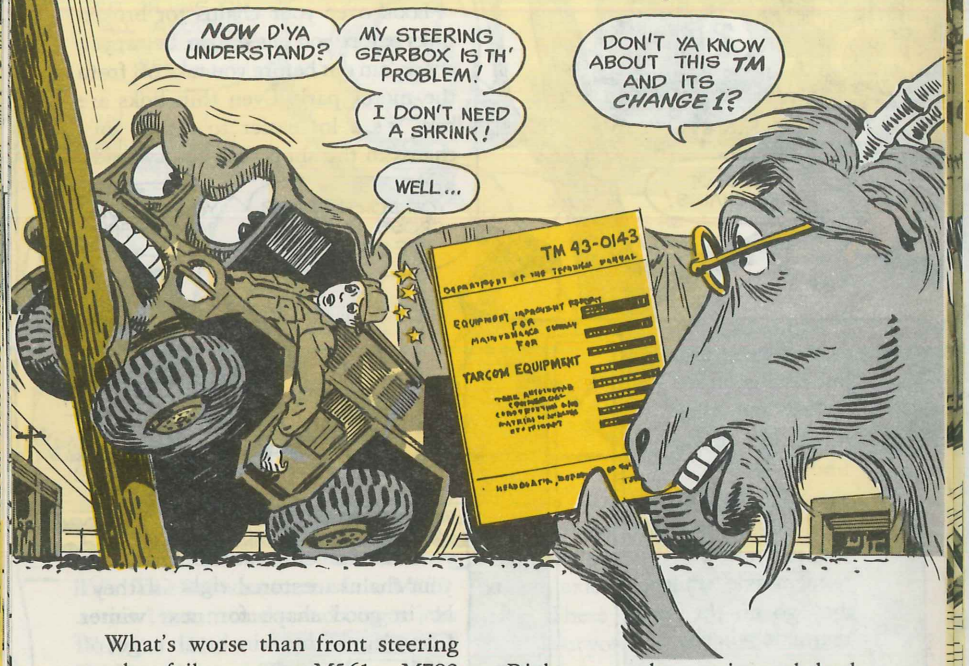
Look over your chains for broken links before you put 'em on. Better yet, check 'em out before you take off from the motor park. Even thin links are bad. It's a lot easier to repair your chains in the shop than on icy roads.

At the end of the season, make sure your chains are stored right—so they'll be in good shape for next winter. Clean 'em with a wire brush to get off all dirt and rust. (This may be easier if you soak the chains first in cleaning solvent.) After cleaning, dunk 'em in used crankcase oil and then let 'em drip dry. Store your tire chains in canvas or burlap bags—in a dry place.

If your new chains come in heavy-duty bags, keep 'em—they're just the ticket for storing your chains

Gama Goat...

Steer Box Needs Help



What's worse than front steering gearbox failure on your M561 or M792 1¼-ton truck? No replacements!

And both are happening. Those steer boxes don't hold up too good, and the headshed is hard pressed to keep a supply of new ones on the shelf.

But several things can be done to cut down on steer box failure—and this'll cut down on the demand for new steer boxes.

Water getting into the box is the biggest cause of failure. You can head off this problem by draining and refilling the box at quarterly intervals—every 3,000 miles or 3 months. Pull this service, too, after any swimming or fording operations.

Right now, only a semiannual check of the oil level is required by LO 9-2320-242-12 (Apr 72). But your own command can put the extra servicing in your local maintenance SOP.

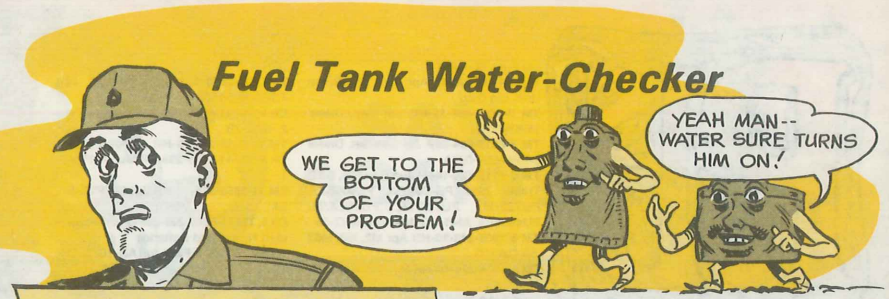
More help for the steer box is spelled out in TM 43-0143 (Jun 77):

Para 4-5o—Instructions for drilling a small hole in the cab floor to drain off water before it can get into the steer box.

Para 4-5p—Sealing compound between the box and housing to keep water out.

Para 4-5t—Pressure-checking the box (by your support) to see if water can get in.

Fuel Tank Water-Checker

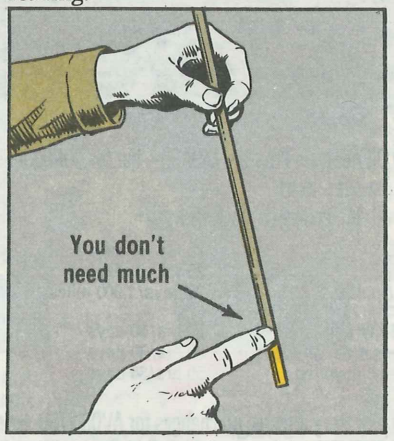


Dear Half-Mast,
Is there some way to check for water sitting on the bottom of a fuel tank?
SFC K. L. M.

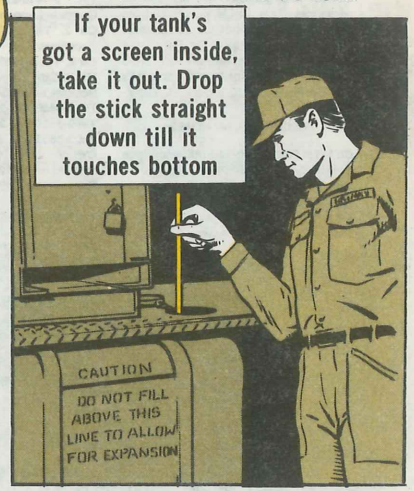
Dear Sergeant K.L.M.,

Use "water indicating paste," NSN 6850-00-090-1361 or NSN 6850-00-001-4194 for a 3-oz tube or NSN 6850-00-001-4193 for a 2½-oz jar. Use CTA 50-970 as your authorization.

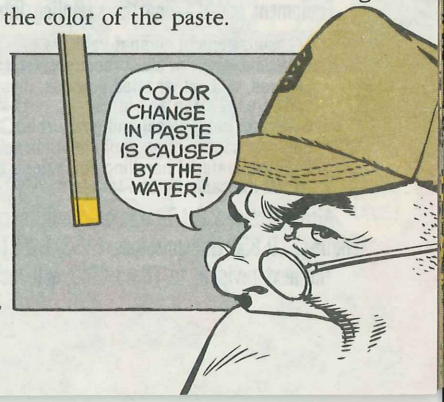
This works only if there's a straight, clear drop from the filler opening to the bottom of the tank, because you have to use a stick or rod to get a good reading.



You smear a thin streak of this paste up from the end of a clean stick or rod. Then drop that end into the fuel tank until it touches bottom.



Pull it out and check the color of the paste. Water changes the color—from green/yellow to red, f'rinstance. Fuel above the water line does not change the color of the paste.



Pubs

This is a selected list of recent pubs of interest to organizational maintenance personnel. This list is compiled from recent AG Distribution Centers Bulletins. For complete details see DA Pam 310-4 (Apr 79), TM's, TB's, etc; DA Pam 310-6 (Jul 78) and Ch 3 (Apr 79), SC's and SM's and DA Pam (C) 310-9 (Jan 79), COMSEC pubs.

TECHNICAL MANUALS

Ch 1, TM 5-1080-200-10 Jun Camouflage Screen Systems
TM 5-4310-360-14 May Compressor, Recip GED, 5-CFM
TM 5-4310-360-14-HR May Compressor
TM 5-4330-232-12-HR Jun Filter/Sep, Liq Fuel, 50-GPM
TM 5-4930-230-13 Apr Tank and Pump Unit, Liq Disp
TM 5-6115-464-12-HR Jul Gen, Diesel 15-KW
TM 5-6115-584-24P Jul Gen Set, Diesel 5-KW MEP-002A
TM 5-6115-594-14&P Jun Gen Set, DED Trailer Mtd PU405A/M, PU406B/M, PU732/M, PU760/M, PU707A/M, PU495A/G, AN/MJQ-10A, AN/MJQ-15
TM 9-1005-213-10-HR Apr M2, M3, M63 .50-Cal MG
TM 9-1005-224-10-HR May M60 Machine Gun
Ch 1, TM 9-1005-249-10 Mar M16A1 Rifle
Ch 1, TM 9-1010-221-10 May M203 Grenade Launcher
TM 9-1010-221-10-HR May M203 Grenade Launcher
Ch 2, TM 9-1015-223-24P May M67 Recoilless Rifle
Ch 2, TM 9-1340-222-20 Jun FFAR, 66-MM Light Antitank Weapon, 3.5-In Rockets and M3A2E1 Rocket Motor
TM 9-1400-425-24P Jun Redeye
TM 9-1425-470-24P Jun TOW
TM 9-1430-588-10-HR Apr FAAR
Ch 7, TM 9-2300-257-20 Jun M113A1/M113A2 Series
TM 9-6920-357-24&P Jun Trainer, Laser Gunnery: M55
TM 9-6920-427-20P May Redeye
Ch 4, TM 10-8415-206-13 Jun Helmet, SPH-4
TM 11-5810-251-24P (OUO) Jun TSEC/KW-26C
Ch 1, TM 11-5855-202-23P Jun AN/TVS-2, -2A, -2B
TM 11-5855-214-10-HR Jul AN/TVS-5
Ch 1, TM 11-5855-236-24P Jun AN/PVS-1
TM 11-5855-238-10-HR Jul AN/PVS-5, -5A
Ch 1, TM 11-6140-203-20P-3 Jun Nonaircraft Nickel-Cad Batteries
TM 55-1500-220-PMD Jun AH-1G/S, TH-1G
TM 55-1510-200-PM Jul U-21/RU-21-Series
TM 55-1510-201-L Jun List of Pubs U-8D, RU-8D, U-8F, U-8G
TM 55-1510-208-CL Feb T-42A
TM 55-1510-217-L May List of Pubs OV-1B, OV-1C, OV-1D, RV-1D
TM 55-1510-217-PM Jul OV-1/RV-1 Aircraft
Ch 5, TM 55-1520-209-PMS May CH47A
Ch 4, TM 55-1520-228-23-1 Jun OH-58A, OH-58C
Ch 5, TM 55-1520-228-23-1 Jun OH-58A, OH-58C
TM 55-1520-237-PMS-2 Jun UH-60A
TM 55-1520-237-23-1 Jun Wiring Data UH-60A
TM 55-1900-200-L Jun Watercraft Pubs
Ch 14, TM 55-2840-233-24 May T53-L-7, T53-L-7A, T53-L-15, T53-L-701

AUDIO-VISUAL STUFF

Available at battalion or post Learning Center

GTA, TV Tape

GTA SLC 3-8-8 M32 Disperser
GTA SLC 5-10-21 US Landmines
GTA SLC 9-1-179 Automotive Principles
GTA SLC 9-8-6 Minigun, 7.62-MM GAU-2B, M134
GTA SLC 38-1-22 Packaging and Packing: General Requirement of Unit Protection
GTA SLC 38-1-23 Packaging and Packing: Method IB Preservation
TVT 46-116 SPH-4 Helmet: Individual Fitting, Wear, Maintenance

TEC LESSONS

020-171-5319-F M51 Periscope, M60A2
030-05106422-F Ribbon Bridge/Raft: Retrieval
041-061-6000-J Crew Maint 105-MM How M102
041-061-6021-J Crew Maint 155-MM How M109
104-301-7502-A Troubleshoot AN/PPS-4A to System Level
104-301-7503-A AN/PPS-4A Troubleshooting, Part I
104-301-7504-A AN/PPS-4A, Part 2
104-301-7505-A AN/PPS-4A, Part 3
104-301-7506-A AN/PPS-4A, Part 4
104-301-7507-A Testing AN/PPS-4A
104-301-7508-A Adjust, Aline AN/PPS-4A
121-093-6901-A Replace Loader-Transport Elev, Roll Control Valves
121-093-6902-A Replace Loader-Transport Roll, Azi Lockout Solenoid Valve, Azi Control Valve

More Oil Sampling

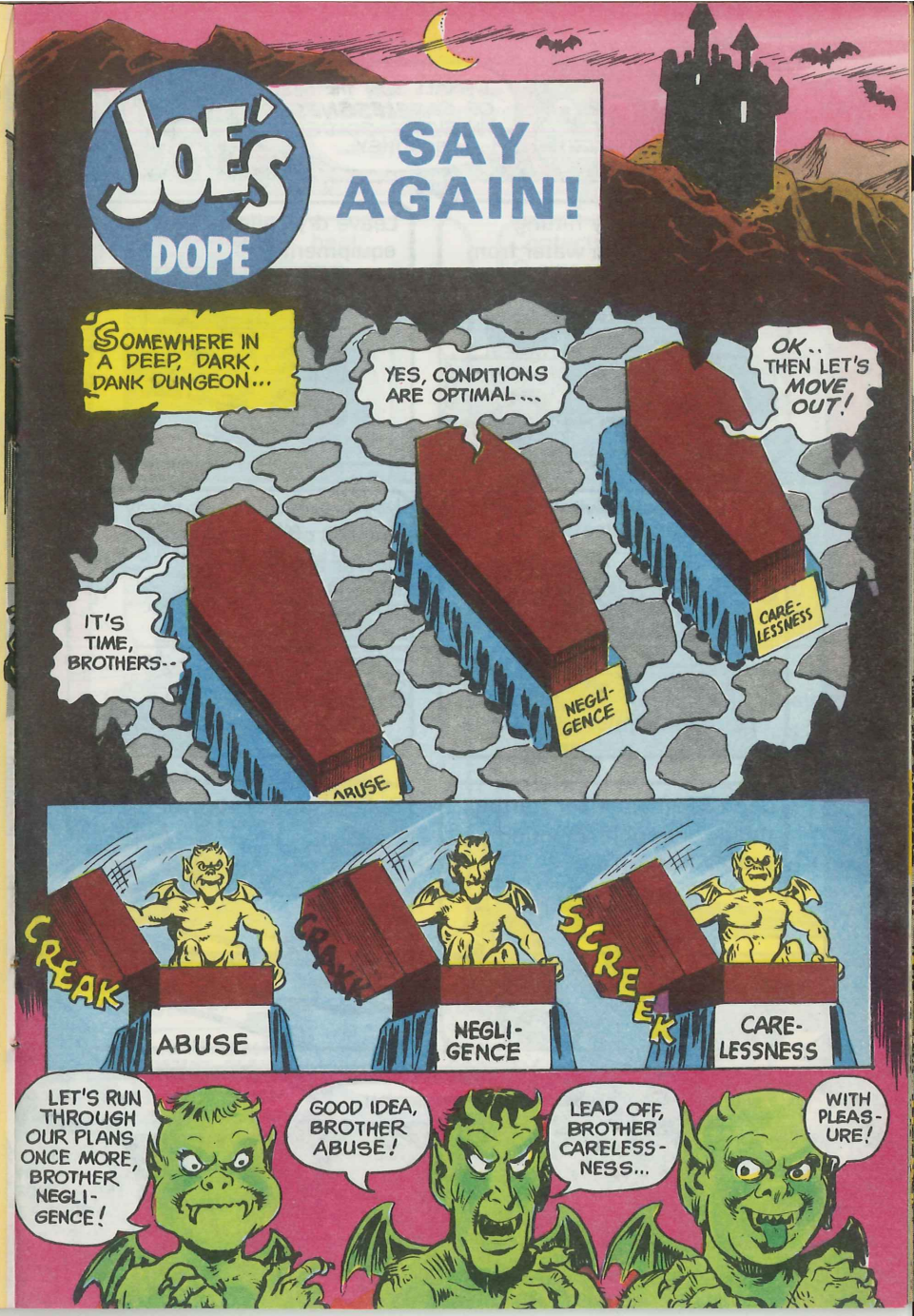
More equipment has been added to the Army Oil Analysis Program (AOAP)—but for CONUS units only. MRSA Msg DRXMD-MS 041735Z Sep 79 has the word.

Equipment added—and the sampling interval for each—is as follows:

Transmissions in combat vehicles	25 hrs/30 days
Hydraulic system, M578 recovery vehicle	25 hrs/30 days
Engines, tactical wheeled vehicles, diesel/multifuel powered, 2½-ton and larger	30 days/1,000 miles
Generator sets, diesel and gas turbine, 15-KW and larger	50 hrs/30 days
Engines, construction equipment, diesel powered, all types	50 hrs/30 days
Engines, materiel handling equipment, diesel powered, 4,000-lbs capacity and larger	50 hrs/30 days

Also effective 1 Oct 79 was on-condition or laboratory directed oil changes for AVDS 1790-series engines, CD 850 transmissions, 6V53, 6V53T and 8V71T engines and Army locomotives.

The next revision to TB 43-0210 will include all of these changes.

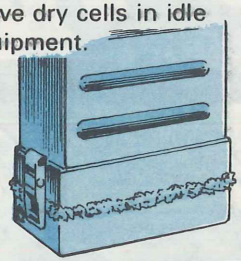


HEEHEEHEE...

I SHALL SOW THE SEEDS OF *CARELESSNESS* IN EVERY SOLDIER SO THEY...

Allow damage by hitting commo gear with water from high-pressure hoses.

Leave dry cells in idle equipment.



Try to muscle switches past stops.

Leave antennas up, ready to bounce off tree limbs or power lines.

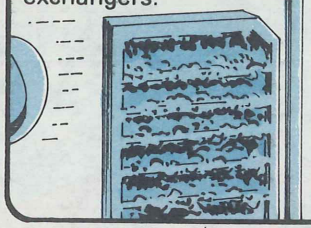
Don't use manual for starting, tuning or trouble-shooting procedures.

Step on and drive over cables.

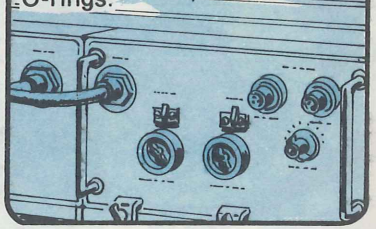
I SHALL WATER THE SEEDS OF *NEGLIGENCE* PRESENT IN EVERY G.I. WHICH WILL RESULT IN...

HAR HAR HAR...

Dirty air filters, heat exchangers.

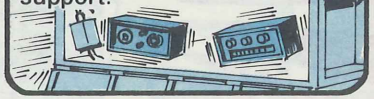


Contacts pitting, missing O-rings.

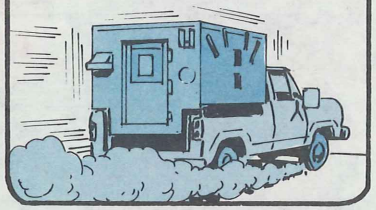


Painting plastic — like MX-6707 matching unit.

Unprotected parts shipped to support.



Sloppy packing for move.



Unused grommets and shields in installation kits.


JOE'S Dope Sheet
Carelessness, Negligence and Abuse
Hex commo if allowed to run loose!
But faithful PM
Will exorcise them --
And make sure your gear's fit for use!
PM
EXORCIST
PM
UNDERMAINTENANCE
NEGLI-GENCE
ABUSE
WE HAVE THE WORLD'S BEST EQUIPMENT
...Take care of it
IF YOU WANT TO DISPLAY THIS CENTERPIECE ON YOUR BULLETIN BOARD, OPEN STAPLES, LIFT IT OUT AND PIN IT UP.

HAW HAW HAW

I SHALL NURTURE THE SPROUTS FROM YOUR EFFORTS INTO FULL GROWN *ABUSE* SUCH AS...

HOHOHOHO

Starting vehicle while radio is on.

ZAP!

Replacing pluck-out panels while equipment is on.

Slamming components into mounts.

Trying to make unauthorized repairs.

Breaking switches and knobs.

GRUNK

Carrying RT's by panel guards.

AHA! THERE IT IS... THE 1ST BATTALION!

YUM!

HURRY! I THIRST FOR COMMO JUICE!

IN NO TIME, THE TRICKY TRIO DO THEIR *WORST*...

HEY! MIKE BUTTON'S STICKING...

SIERRA 2 TO OSCAR 6... OVER...

*?!!

DRAT! SIGNAL FROM SIERRA 2 KEEPS FADIN'...

COMMO FAILED!

ALPHA 2... COME IN...

NO RESPONSE, SIR!

!

ALPHA 2 TO CHARLIE 1! OVER...

WHY DON'T THEY ANSWER?

I SAY AGAIN... SIERRA 2 TO OSCAR 6... OVER!

CACKLE... HAR HAR HEH HEH HO HO!

WHAT'S WRONG WITH THIS SET?

DEMONIC LAUGHTER?

IT- IT'S SPOOKY...

HAR HAR SKIDDLE DOOO

SIR-- NO RESPONSE FROM OSCAR 6...

JUST A LOT O' STRANGE GIBBERISH!

?

GET US TO BATTALION, DRIVER... *QUICK!*

WE KNOW, CAPTAIN! WE CAN'T FIGURE IT, EITHER... *ALL* BATTALION COMMO'S GONE HAYWIRE!

IT'S AS THOUGH IT'S POSSESSED, SIR!

?

EH?

NO, GENTLEMEN... YOUR COMMUNICATIO EQUIPMENT IS NOT WHAT'S *POSSESSED* AROUND HERE...

AIR MOBILITY

AVOID Sudden LETDOWN

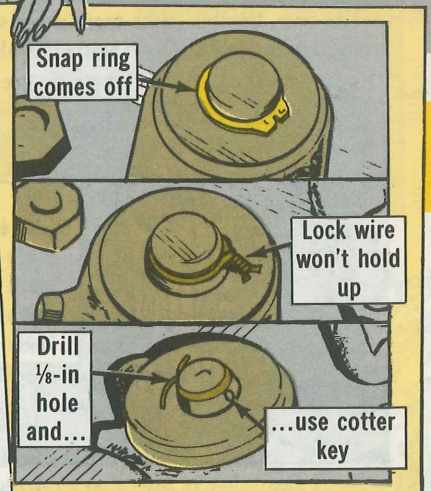
Dear Editor,

The ground-handling wheels for our OH-58A, C aircraft take a lot of beating during towing operations. As a result, the washer retaining ring comes off the axle, followed by the washer and wheel. That makes for sudden stops that can lead to some bent-up bird parts.

I've seen lock wire used to hold the washer in place. But the safety wire doesn't hold up either!

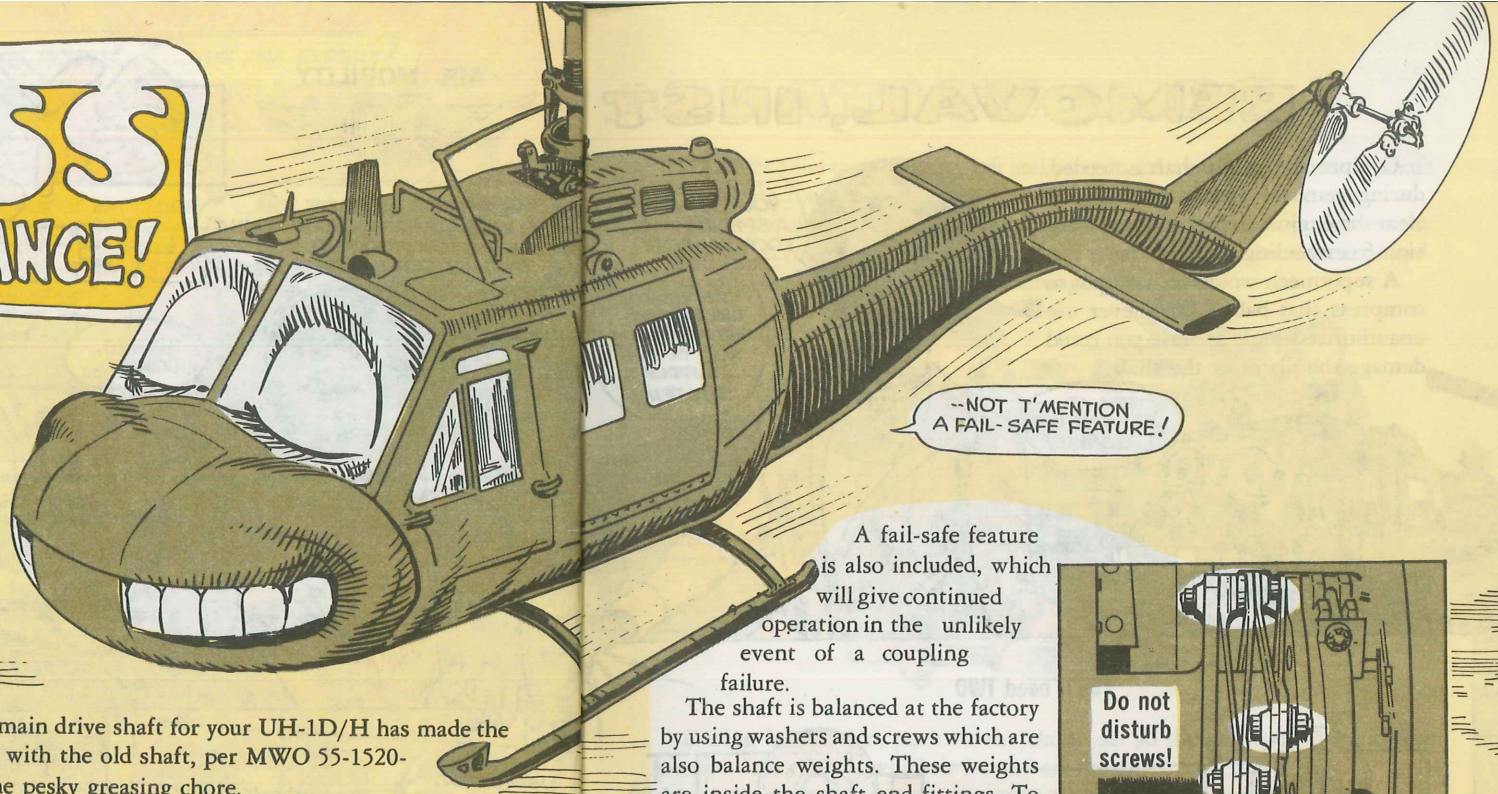
So, we drilled a ⅛-in hole in the retaining ring groove on the axle and inserted a suitable cotter key. No more lost wheels for us!

Mr. Walter Kapica
Patuxent River NAS, Md

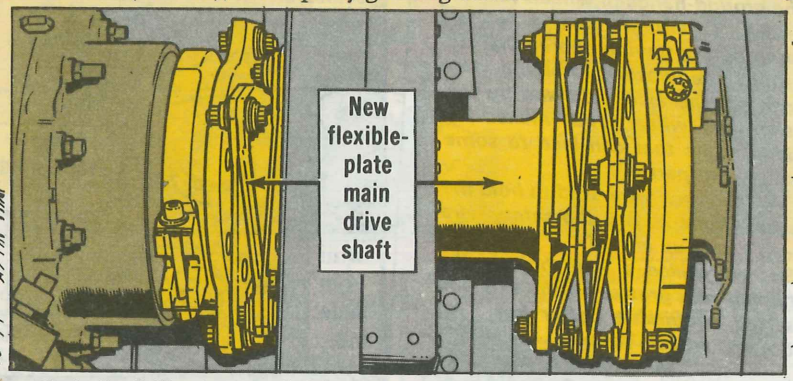


New Short Shaft Means...

LESS MAINTENANCE!



The new, flexible-plate main drive shaft for your UH-1D/H has made the scene, Huey mechs. Gone with the old shaft, per MWO 55-1520-210-30-54 (Nov 78), is the pesky greasing chore.



Shaft flexibility is provided by 4 rectangular plates in each coupling. Each plate flexes to accommodate angular alinement and length changes, caused by transmission movement on the pylon mounts.

A fail-safe feature is also included, which will give continued operation in the unlikely event of a coupling failure.

The shaft is balanced at the factory by using washers and screws which are also balance weights. These weights are inside the shaft end-fittings. To make sure the screws are not disturbed, a high-grade adhesive is used on the threads. Never attempt to turn the screws because, with the high torque required, you could break 'em.

HELPFUL MAINTENANCE TIPS

The maintenance allocation chart indicates that you inspect, aline, replace and repair the shaft. The repair is limited to nicks and scratches that can be blended into the surrounding area so no sharp edges remain. A change to TM 55-1520-210-23 (Feb 79) will have the damage limits, plus the removal and installation info.

The only inspection of the shaft is a visual one, made during the Phase inspection on your Huey. Eyeball the plates for cracks, damage, and security. The shaft, NSN 1615-01-030-9968, is a selected condition item so you maintain the same type of records used for the old shaft.

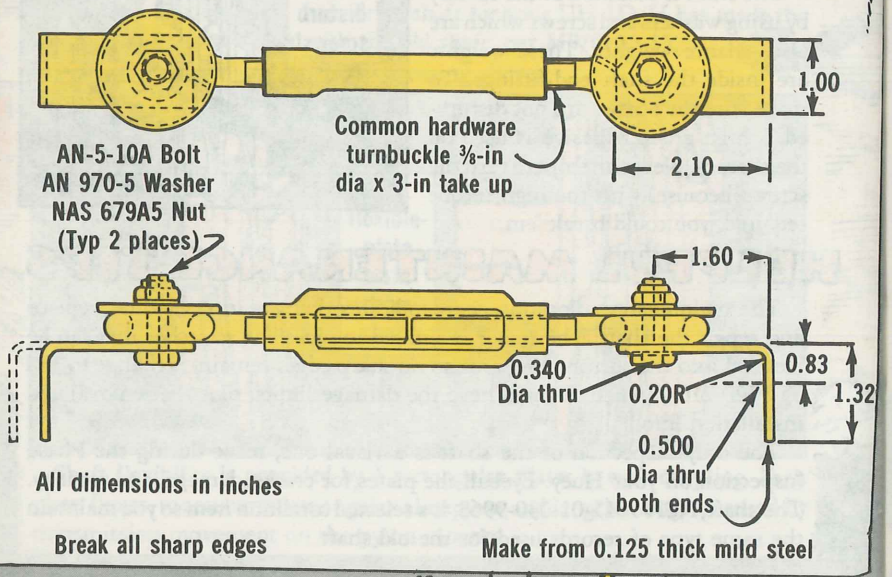
PS MORE

REMOVAL, INST ALLATION TIPS

Compression of the shaft is needed, during removal and installation, to clear the engine adapter and transmission freewheeling unit.

A supermech would be hard put to compress that baby!! But, never use unauthorized tools because you could damage the plates or the shaft.

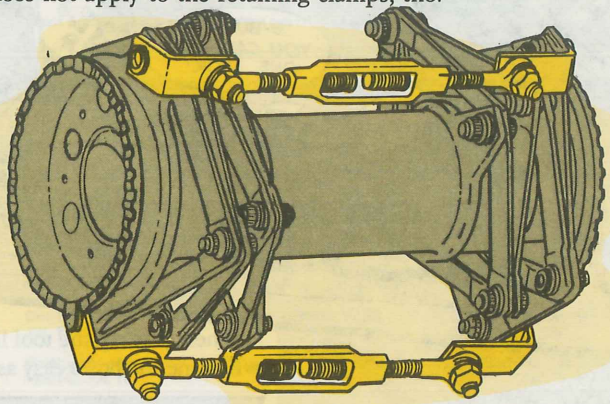
You'll need TWO



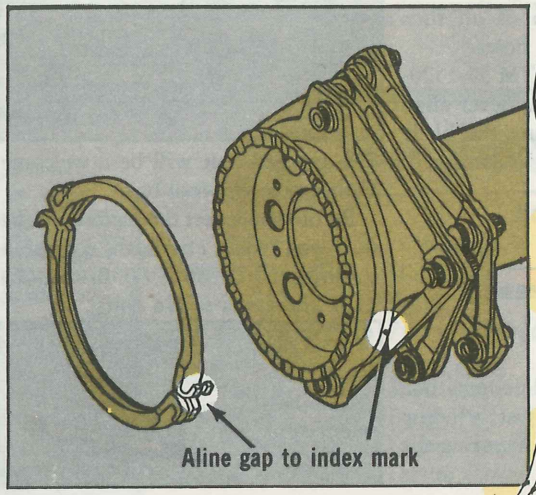
Locate 2 of the tools on the shaft and you can then easily compress the shaft by adjusting the turnbuckles.

When the shaft has been removed, never attempt to loosen or tighten any hardware. A requirement for a part change means the shaft has to be replaced. That info does not apply to the retaining clamps, tho.

Shaft can be compressed by adjusting tool turnbuckles



During installation, position the clamp set so the gap is in line with the circular index mark, which is located on the shaft end-fitting.



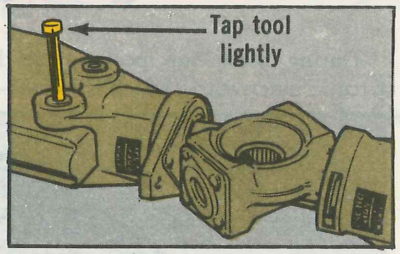
There IS a Better Way!

Installing a Huey tail rotor blade in the grip can be a mighty frustrating job. The fit is so tight you can't move the blade that fraction of an inch needed to aline the bolt holes.

'Course, Para 5-95 in TM 55-1520-210-23 (Feb 79) says you never aline the bolt holes by striking the blade with any tool or you might damage it.

What you need is an alinement tool. You can make one by just grinding down a spare blade bolt, tapering the last inch or so.

Then, just tap the tool lightly and it will aline the holes easy as you please!



The tapered bolt will be a welcome addition to your tool box.

Before you insert the blade bolts, be sure you coat 'em with corrosion inhibitor, NSN 8050-00-066-2333...prevents seized bolts!

Safety-of-Flight Messages

UH-1-79-10	Maint advis msg UH-1-series Roller type tail rotor control chain DRDAV-EOH 181400Z JUL 79
UH-1-79-11 AH-1-79-13	Tech advis msg UH-1/H/M, EH-1H, AH-1G, TH-1g Clarify para 3 of UH-1-79-6 and AH-1-79-5 Msg DRSTS-MEA 231355Z JUL 79
UH-1-79-12	Operational msg UH-1B/C/M/D/H Equipped w/internal rescue hoist DRSTS-MEA 242143Z JUL 79
AH-1-79-10	Maint Advis msg AH-1 Air induction sys DRSTS-MEA 031535Z JUL 79
AH-1-79-11	Maint advis msg AH-1 canopy removal sys DRCPM-CO 051405Z JUL 79
AH-1-79-12	Maint advis msg Safetying pin quick release P/N 11830424, 20-MM auto gun XM97E1 univ turret DRDAV-EOK 052035Z JUL 79
AH-1-79-14	Maint advis msg Inadequate environ seal at connector housing/tank unit flange of fuel quantity transmitters DRDAV-EOK 271800Z JUL 79
OH-6A-79-01	One-time inspect OH-6A fuel cells TB 55-5120-214-20-41 DRSTS-MEA 192145Z JUL 79
OH-58-79-12	One-time inspect to locate specific serial nos. of OH-58A/B/C main rotor heads to determine if the P/N of the TT straps installed are the same as on historical record, DA Form 2408-16. TB 55-1520-228-20-28 DRSTS-MEA 192144Z JUL 79
CH-47-79-7	One-time inspect CH-47 A/B/C rotor system phasing. TB 55-1520-241-20-3 DRDAV-EOT 052116Z JUL 79
CH-47-79-8	One-time inspect CH-47C combining transmission. TB 55-1520-227-20-19 DRDAV-EOT 132045Z JUL 79
CH-47-79-9	Maint advis msg CH-47C with combining transmissions P/N 114D5200-2 installed DRSTS-WC 162014Z JUL 79
CH-47-79-10	One-time inspect all CH-47C to locate suspect combining transmission. TB 55-1520-227-20-20 DRSTS-M 202157Z JUL 79
GEN 79-7	Tech advis msg Internal cockpit painting for use of night vision goggles in night training DRSTS-MEA 161820Z JUL 79
GEN 79-8	Maint advis msg Test set, indicator, fuel qty gage mfg by Simonds Precision on Contract DAAJ01-76-C-0547 DRSTS-MEG 181502Z JUL 79

Turn 'Em In!

NSN	Nomen	Used on
1560-00-533-4074	Wing assy	AH-1S
1680-00-183-5994	Hoist	UH-1 Series
2915-00-017-9021	Pump, submrgd	UH-1H, M; AH-1G
1615-00-072-5799	Blade, RW	UH-1 Series
1615-01-008-2798	Shaft assy	AH-1; UH-1 Series
2910-00-228-2799	Pump, fuel	60-KW gen
2815-00-430-3480	Engine, diesel	60-KW gen
6115-00-185-8021	Exciter assy	100-200-KW gen

COMBAT SUPPORT

Small GED Generators...

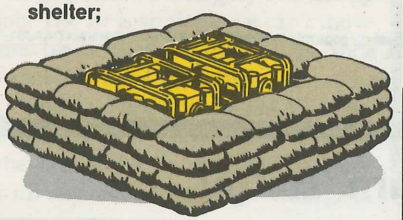
OVERHEATING KILLS 'EM!

SOME OPERATORS ARE CHOKING THEIR GED SETS TO DEATH BY...

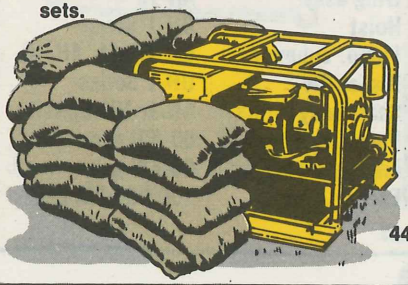
THESE INSTALLATIONS ARE ALL STRICT NO-NO's!

-Placing 'em in small shallow holes in the ground;

-Putting 2 or more sets in the same shelter;



-Jamming sandbags or other protective material too close to the sets.



Overheating causes engine knocks, excessive noise, vapor locks, overuse of oil, extra parts replacement and downtime.

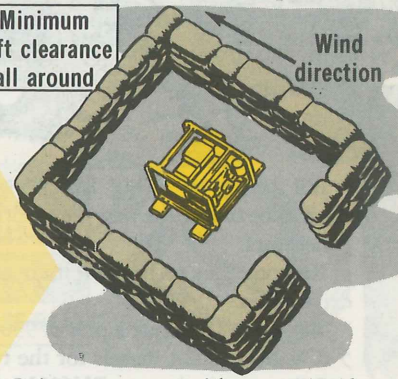
Your set needs plenty of air flowing around and over it to stop overheating.

Put only 1 set in each shelter. A second set in the shelter creates too much heat. Both sets will suffer from overheating. Double trouble you can do without.

Place the generator—lengthwise—in the center of the shelter. If you have a 3-KW set, be sure the engine end faces toward the door. On all others—0.5 to 10-KW— point the generator end toward the door. This position gives 'em the best cooling action.

Pipe exhaust gases outside the shelter. They're hot, poisonous and deadly.

See TM 5-6115-271-14 (Aug 76), TM 5-6115-275-14 (Jun 77), and FM 20-31 (Oct 77) for other info about setting up your generator sets.



Being generous with space inside the shelter gives you plenty of room to operate, adjust and service the set. But most importantly, it gives the set a maximum supply of life-giving air ...whether in a shelter, revetment, dug-out space in the ground or make-do protection in the field.

I FEEL SAFE WITH CONNIE AROUND!

RIGHT! SURE LETS US BREATHE EASIER!

On DED Generators...

'Way Weigh Off Is BAD

It'll bring on a big hurt if you mishandle one of the new diesel-drive generators.

Reason: they're heavier than gas-drive types.

You can't substitute a pair of 930-lb 5-KW MEP 002A diesels for the two 488-lb gas units in your PU620M, for instance. You'd break the back of your M101 ¾-ton trailer.

You can't assume the diesel sets are one-for-one matches with the gasoline jobs, in a PU or elsewhere—not for 5-KW or 10-KW or whatever.

You can't figure to use identical hookups from different sets unless the TM says so—whether they're both gas, or both diesel, or whatever.

Otherwise, you could short out or burn up the generator end of the set...or get yourself a one-way trip to the Pearly Gates.

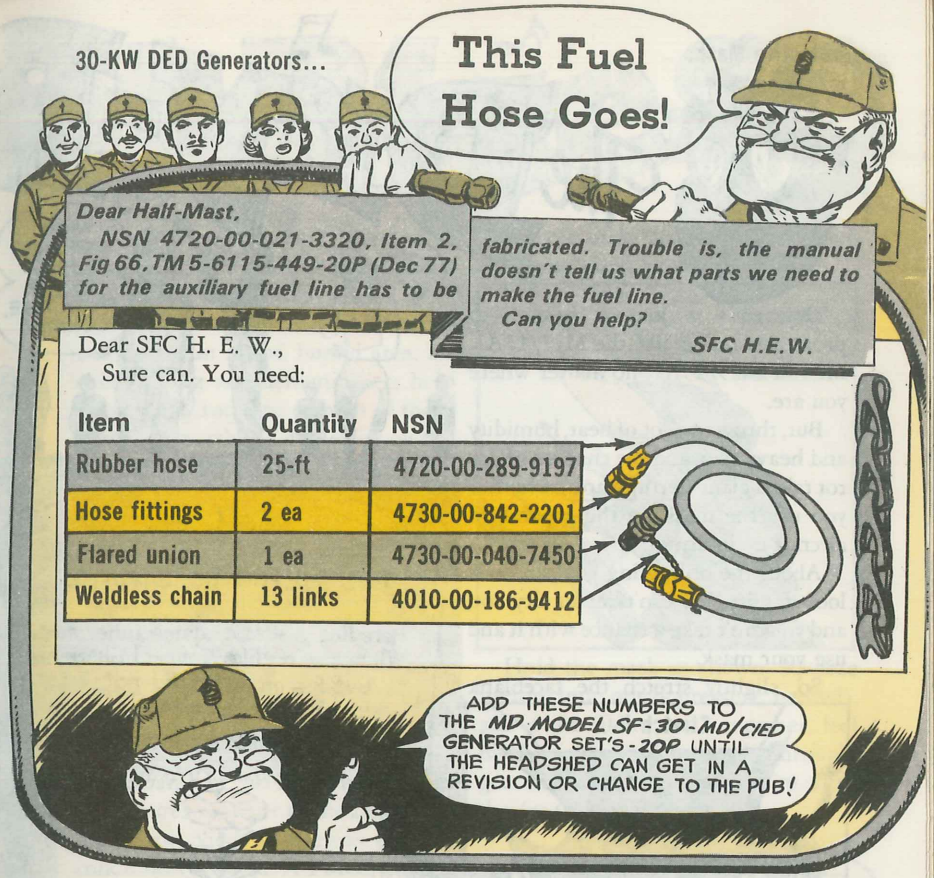
There's an easy way out:

Take a careful look at the TM for each particular generator before you go making any wiring hookups.

Could keep your finance officer from having to terminate your pay record.

30-KW DED Generators...

This Fuel Hose Goes!



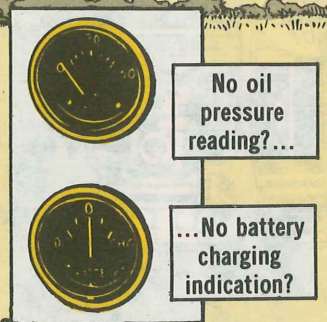
5-10-KW GED Generators...

Don't Forget the Fuse

Troubleshooting your generators and you don't get an oil pressure gage reading?...or a battery charging indication?...or a starter lockout?...

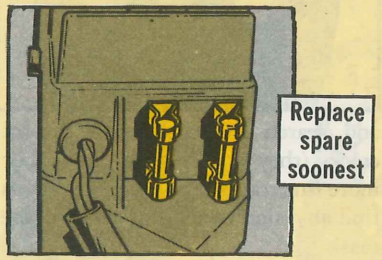
Hold 10...before you start the paper work for replacement items...and check 1 more item.

That's the 4-cent, 14-amp fuse NSN 5920-00-280-4007 on the battery charging regulator. (On older engines you'll find the fuse under a cover on the regulator-rectifier.)



Check it with a multimeter to be sure it's OK. Replace the fuse if there's any doubt it's good.

Use the spare fuse that's in the holder alongside the active fuse. Replace the spare, pronto.



The Dry-Rot Blues

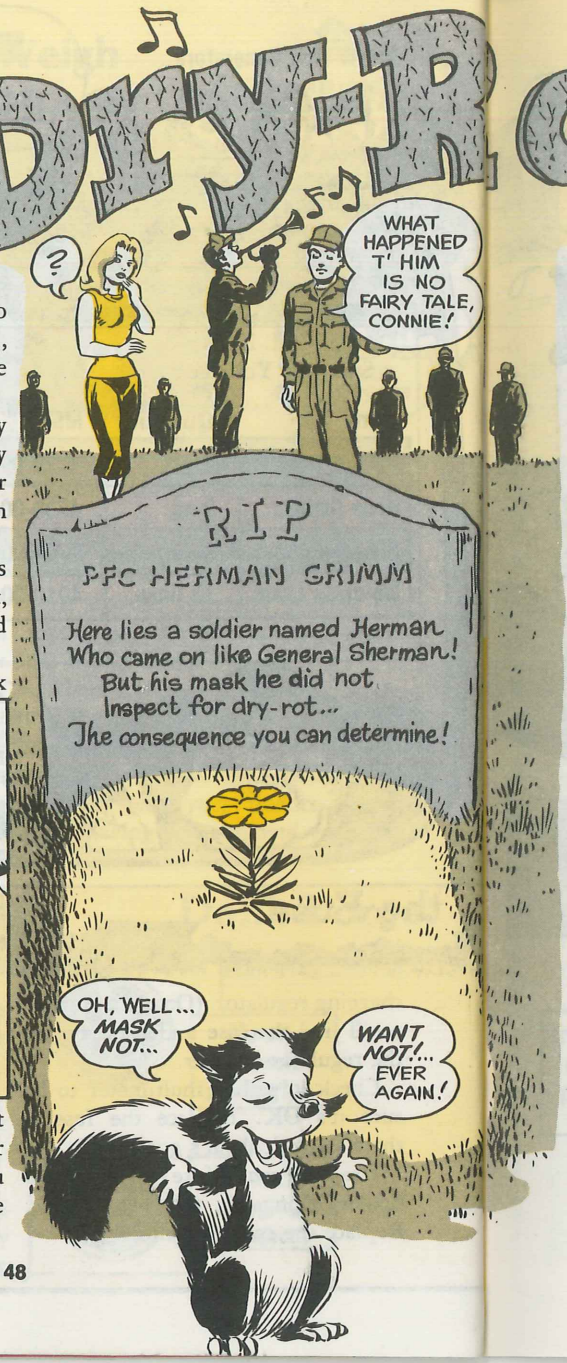
Dry rot's a known hazard to protective masks like the M17/17A1, M24 or M25/25A1, no matter where you are.

But, throw in a lot of heat, humidity and heavy rain, and the chances of dry rot take a giant step upward...whether you use the mask on the ground, in aircraft or in armor.

About the only thing you can do is look for it. You can't repair dry rot, and you can't take a chance with it and use your mask.

So, slightly stretch the faceblank

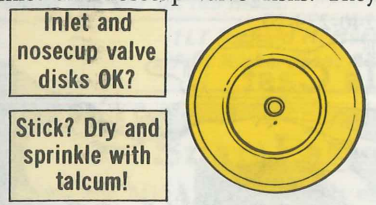
and search the rubber for dry-rot cracks (they usually show up as 2 or more fine cracks close together). If you find any sign of dry rot, turn in the mask.



Just remember, don't attempt to repair a dry-rot crack. It could be the last repair you'd make.

If you're in charge of the NBC room and you're in a hot, humid area, air conditioning and dehumidifiers help prevent dry rot. One or both of those items are worth the money if you can get 'em authorized.

Other mask parts you should check more often in humid areas are the inlet and nosecup valve disks. They



deteriorate fast. An improved disk for all climates may get to the field soon. Meantime, check as often as weather conditions demand. A PMCS every 6 months might not hack it. The disks could be unserviceable. Like the man says, you check to see if the disks are curled, brittle or discolored.

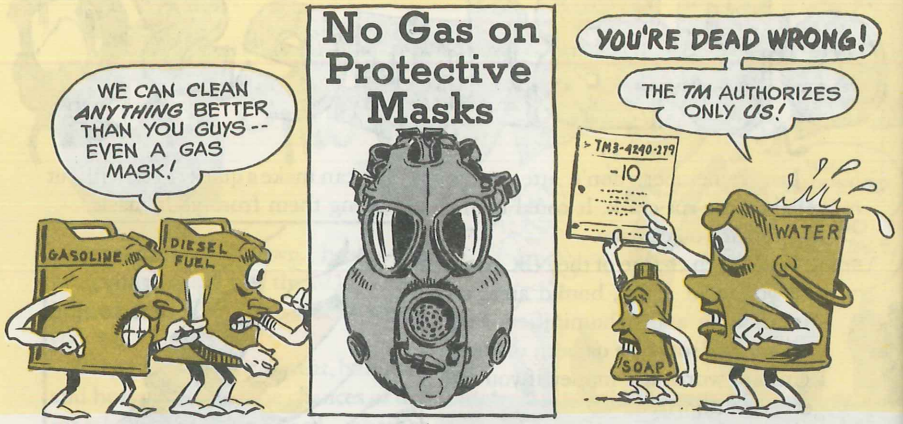
Filter elements need extra checking

in humid weather, too. They get mushy, and when they do, they should be replaced. New ones may get unserviceable in 6 months or less.

You can make a quick check without removing them from your mask.

Hold the mask as shown. Squeeze lightly (not much pressure needed), and if the filters mash together, feel mushy or are hard to breathe through, get them replaced. If they're firm they're OK.

No Gas on Protective Masks



Cleaning CB protective masks like your M17/M17A1 with gas or diesel fuel is a big NO, NO. They rot the mask. If you spill any of these fluids on the masks, wipe and wash them off immediately with lots of water and the soap called for in the cleaning instructions in TM 3-4240-279-10.

The Dye Is Cast

Any time you're working with or hauling around your M13 decon kit, NSN 4230-00-907-4828, keep one thought in mind: Unless you have an emergency on your hands, never crush the dye capsules in the 2 large cloth bags inside the polyethylene bag in the kit. Those plastic capsules of chemical agent detector dye are not healthy to your skin! If a capsule accidentally breaks, turn in the kit.

M17/M17A1 Mask...

M4 Winterization Kit

Dear Editor,

Here's a better way to store your M17/M17A1 protective mask if it has the M4 winterization kit installed:

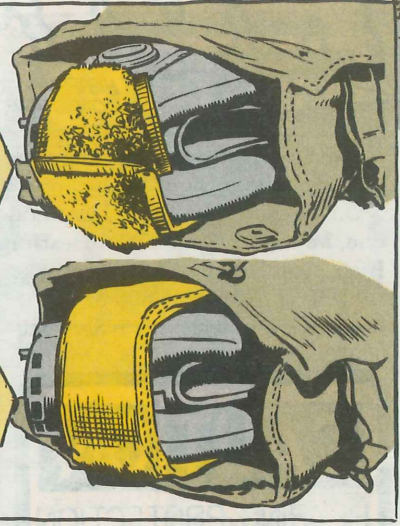
Store it with the flaps open, pulled down and hooked together, with one flap edge over the other.

This saves time when you put on the mask because you don't have to follow Procedure 7, page 2-24, in TM 3-4240-279-10.

The TM way is to close the ice particle prefilter cheek flaps.

When the flaps are closed, you have to follow procedures 7 and 8 in the TM when you put on the mask.

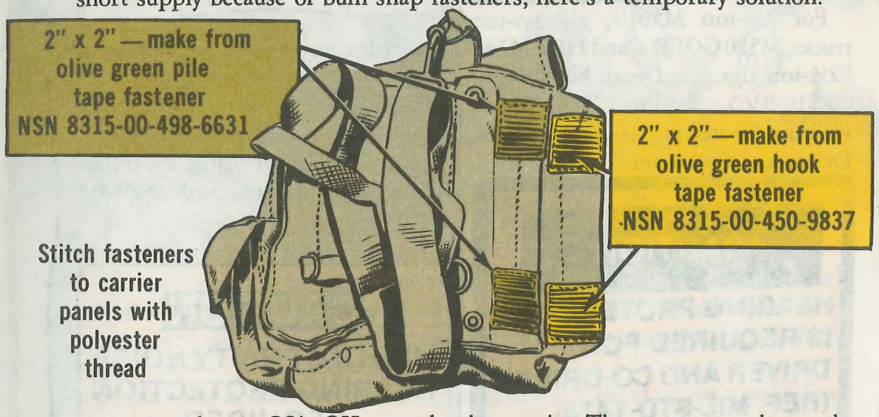
1LT Richard R. Hass
Fort Richardson, AK



M15A1 Mask Carrier...

Snap-Fastener Repairs

Since the M15A1 mask carriers used with the M17/M17A1 masks are in short supply because of bum snap fasteners, here's a temporary solution.



You need your CO's OK to make the repairs. Then you can only use the repaired carrier until new ones are back in the supply system.

NOISE

Need to replace noise warning signs that got scraped off or painted over?

On aircraft, use Tape, Identification, imprinted "CAUTION Hearing Protection Required." A 2-in wide version is NSN 7510-00-629-6637. For one 2½-in wide, it's NSN 7510-00-629-6638.

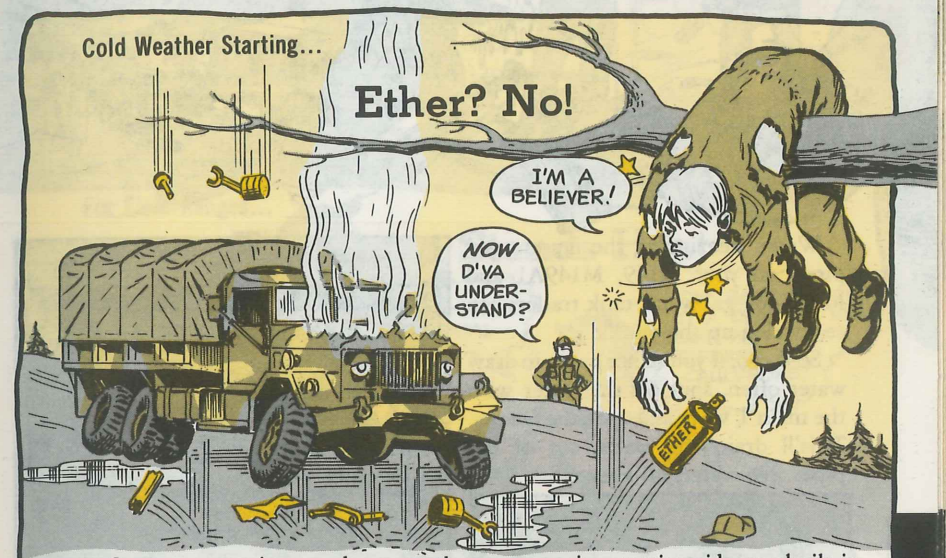
For 1¼-ton M561's, all 2½-ton trucks, M520 GOER's, and HET M746 22½-ton rigs, use Decal, NSN 7690-00-510-0365, reading "CAUTION Hearing Protection is Required for Driver and Co-Driver."

Construction items, stationary large rigs, tanks and some gang-bustin' artillery use a 2⅛ by 4⅜-inch plastic plate stamped "CAUTION High Intensity Noise Hearing Protection Required." It's Decal, NSN 9905-00-198-2728.

WARNING NOTICES

The M113 group has its own private warning: Decal, NSN 7690-01-022-9297, legend "Hearing Protection Required See TB Med 251."

And TB Med 251 (Mar 72) is the good book on the subject for most items. For aircraft, see TB 746-93-2 (Aug 78).



Sure, some equipment does use ether as an engine starting aid—as a built-in system. That's OK.

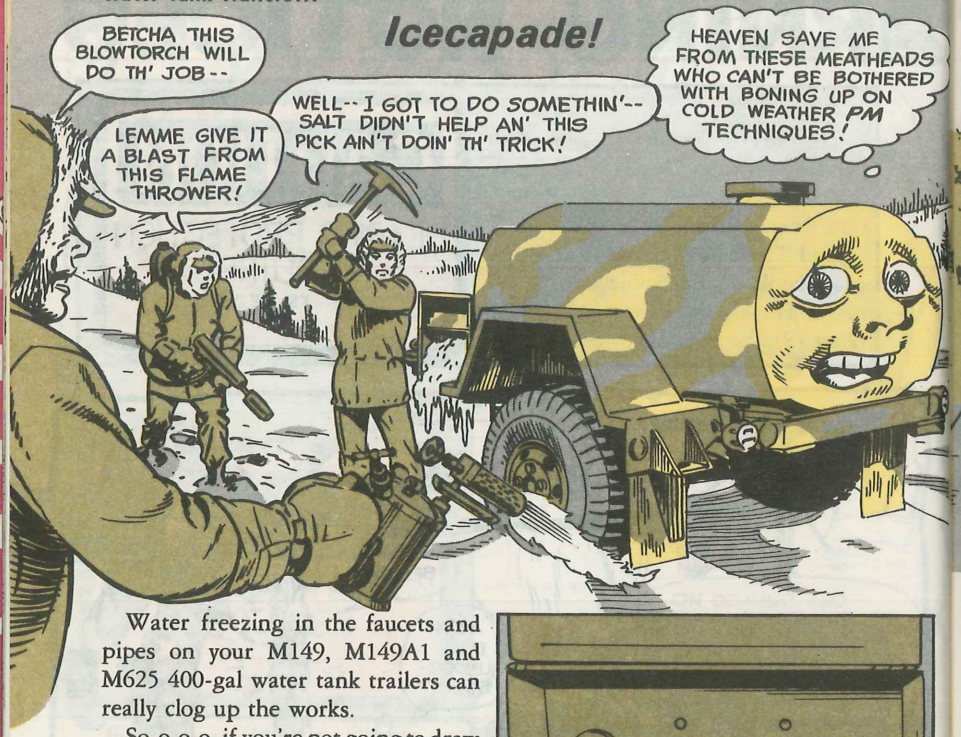
But using ether in an aersol can is out! Too many people are busting up their engines—especially diesel engines that have an intake manifold flame heater system for cold starting. They spray ether into the air intake, hit the flame heater and—BOOM—one busted engine!

Just a little too much ether—in any engine—sets the stage for a real dilly of an explosion.

Ether, in an aersol can, is prohibited as an engine starting aid.

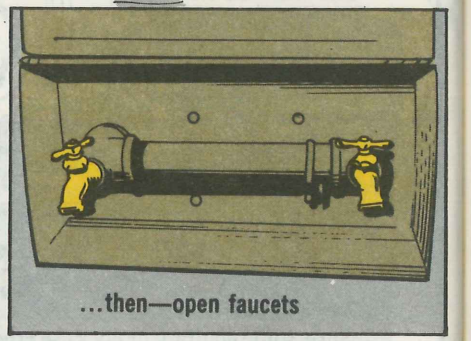
Water Tank Trailers...

Icecapade!

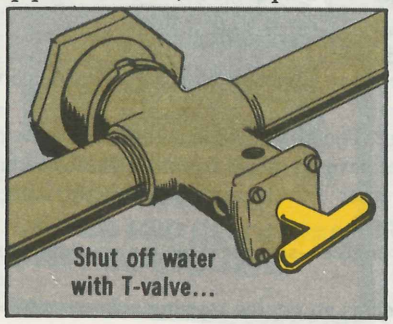


Water freezing in the faucets and pipes on your M149, M149A1 and M625 400-gal water tank trailers can really clog up the works.

So-o-o-o, if you're not going to draw water often, shut off the water with the main T valve and open the faucets. This'll drain the water out of the pipes. No water, no icecapade!



...then—open faucets

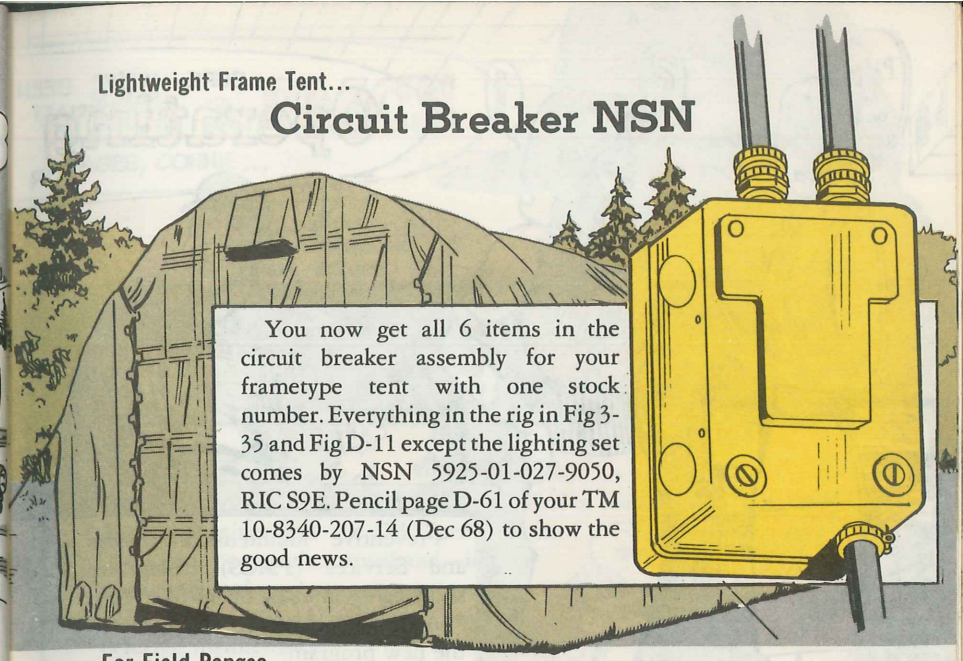


Shut off water with T-valve...

Keep the manhole and filler covers tightened. This will keep water heat in—freezing cold air out. If you expect below 0°F temps, park the water trailer in a shelter if possible, or cover it with canvas and use a duct from a Herman-Nelson heater to keep warm air circulating around the trailer.

Lightweight Frame Tent...

Circuit Breaker NSN



You now get all 6 items in the circuit breaker assembly for your frametype tent with one stock number. Everything in the rig in Fig 3-35 and Fig D-11 except the lighting set comes by NSN 5925-01-027-9050, RIC S9E. Pencil page D-61 of your TM 10-8340-207-14 (Dec 68) to show the good news.

For Field Ranges...

This Paint Stands Heat

Dear Half-Mast,
How can we get heat resistant paint for the exposed steel parts of our field ranges?
D.L.S.

Dear D.L.S.,

Gallon cans come from GSA under NSN 8010-00-815-2692. It's rated to 1200°F, under Mil Spec TT-P-28E. You can also use aluminum paint, NSN 8010-00-598-5054 (1 gal can).

Half-Mast

Preventive Maintenance Checks and Services (PMCS) tables are showing up in many operator's TM's.

Are you going with—or against—the new program?

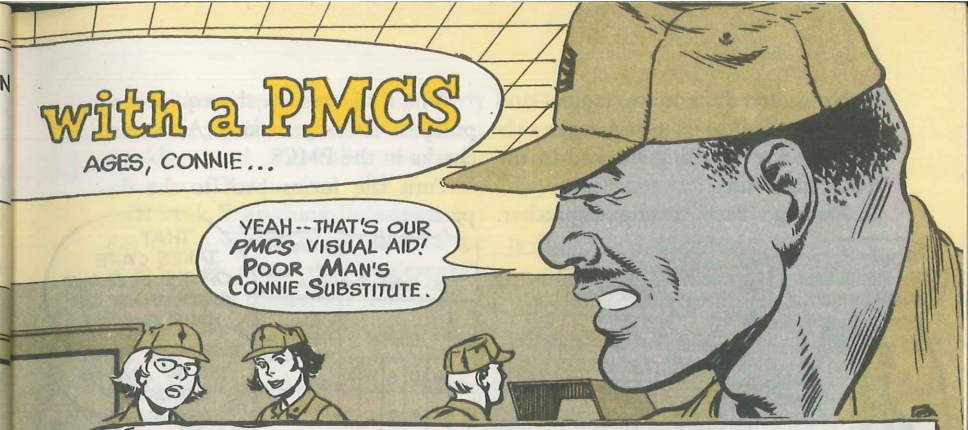
Take a good look at the PMCS in your manuals. Many of the pubs show a B-Before, D-During, A-After, W-Weekly and M-Monthly column. If your equipment is DA Form 2406 reportable—by itself or when operating as a subsystem of a DA Form 2406 reportable item—it will also have an "equipment is Not Ready/Available if" column.

You look for the not-ready column checks each time you operate that equipment.

Table 3-1. Preventive Maintenance Checks and Services (PMCS) 10 Ton Trucks

B - Before Operation D - During Operation A - After Operation W - Weekly M - Monthly

Item No.	Interval B	D	A	W	M	Item to be Inspected	Procedures Check for and have repaired, filled, or adjusted as needed	Equipment is not ready/available if:
1	•	•	•			Tires	Remove stones from between dual wheels. Check for apparent air loss and unusual tire wear. Remove penetrating objects such as nails, glass, etc.	Three or more tires flat, missing or unserviceable (such as cuts showing fabric or tire plys).
				•			Gage tires for correct pressure. Replace missing valve caps.	



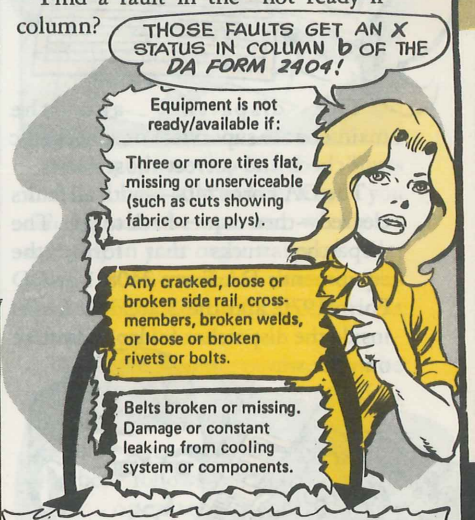
Dispatching

When you go in for an item, the dispatcher gives you the DA Form 2404, your operator's manual and—if one is required on that equipment—a DA Form 2408-14 showing any deferred maintenance.

Look at the DA Form 2408-14. Make a mental note of those faults. Now turn to your PMCS in the operator's manual. Start pulling your before-operations check.

Write up any faults you find on the equipment you cannot fix yourself. Watch it! Faults you fix yourself—by replacing a part—still go on the DA Form 2404.

Find a fault in the "not ready if" column?



TM ITEM NO. a	STATUS b	DEFICIENCIES AND SHORTCOMINGS c
2	X	Crossmember broken

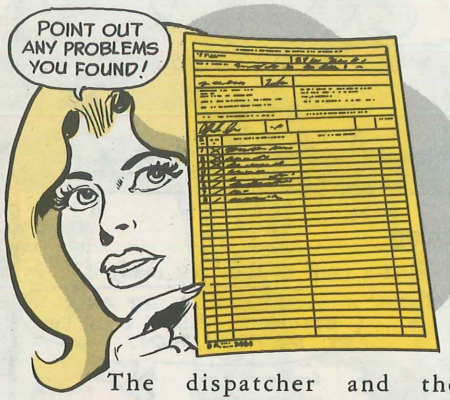
DA FORM 1 JAN 64 2404

Other faults get the status symbol you think describes the seriousness of the fault.

PS MORE

No matter how many faults—and not-ready faults—you find, make sure you check everything marked in the before column.

Now go back to the dispatcher.



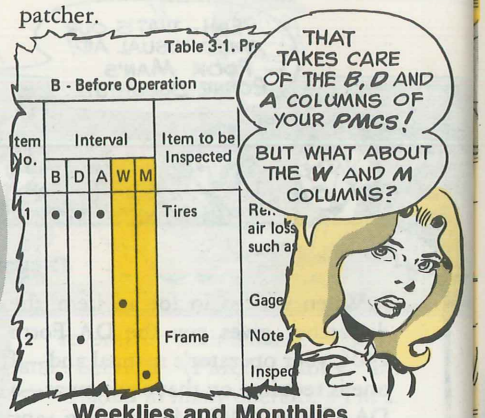
The dispatcher and the maintenance supervisor or a mechanic will check and correct those faults.

The DA Form 2404—with all faults cleared—then comes back to you. The dispatcher tucks that form, the equipment's DA Form 2408-1 or DD Form 1970, and the 2 accident forms inside the dispatcher folder and you're on your way.

'Course, any faults you find while you're operating the equipment go on the DA Form 2404, too.

When you return the equipment, pull your after-operations (A column) checks in the PMCS.

Turn the forms back to the dispatcher.



Weeklies and Monthlies

Organizational-level periodic services are scheduled on the DD Form 314—so the maintenance supervisor knows when to pull those services. But operator services—like those in your PMCS—are not normally scheduled on a DD Form 314.

So how do you know when to pull a weekly (W) or monthly (M) operator PMCS check? Ask your dispatcher or maintenance supervisor.

While a string around the finger may work for some things, a loop for each piece of gear you have adds up to a lot of string.

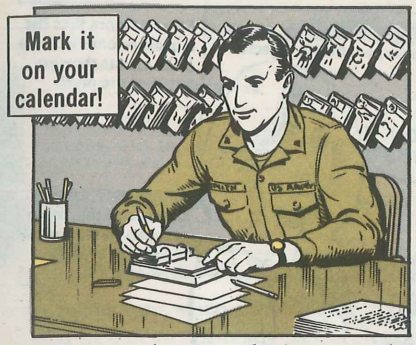
OK, dispatcher or maintenance supervisor, what do you do?

First off, there's no set method. You work out a method that best suits your operation.

Take a look at how often your equipment is operated.

For those items that go out nearly ever day, you can "schedule" operator weeklies and monthlies on your calendar. That is, just pick one day each week. Everything dispatched that day gets a weekly—regardless of the number of times that equipment's actually been dispatched that week.

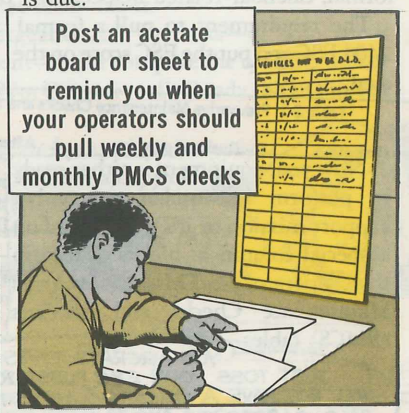
One day a month, everything dispatched that day gets a monthly. A ring around that day on your calendar reminds you to tell your operators to add the weekly or monthly PMCS checks on those days.



But maybe you don't trust the calendar or your equipment's not dispatched that regularly. Even though TM 38-750 doesn't require scheduling of operator services, try scheduling 'em. Put an Ow (for operator weeklies) and/or an Om (for operator monthlies) on the DD Form 314 to remind you when those are due.

Allow a little leeway for a low-use equipment—like maybe only make a note in the Remarks Block. Make sure your SOP or the Remark Block of the DD Form 314 explains those symbols, too.

Or you can post an acetate board. Use a grease pencil to show how often each item is dispatched—so the dispatcher can just glance up to see when an operator weekly or monthly is due.



For equipment operated by hours and thus hard to schedule, maybe you can include the operator weekly or monthly in your organizational services. If so, make a note in the Remarks Block of the DD Form 314 as a reminder.

Whatever system you choose, write it up, get your CO's approval and add it to your SOP.

Make sure—make double-sure—everybody follows through on getting those operator weeklies and monthlies pulled.

For PMCS tables with the "not ready if" columns, your operational readiness—your DA Form 2406 reports and the equipment readiness that report shows—is only as good as your operator services and maintenance back-up.

PS END

Readiness Checks...

R-I-P, ESC

On 15 Aug 78 the Equipment Serviceability Check (ESC)—as a formal, calendar-related inspection—passed away. R-I-P, ESC!

The requirement to pull a formal ESC inspection, fill out a DA Form 2404 ESC and put the ESC score on the DA Form 2406 and DA Form 2715 died.

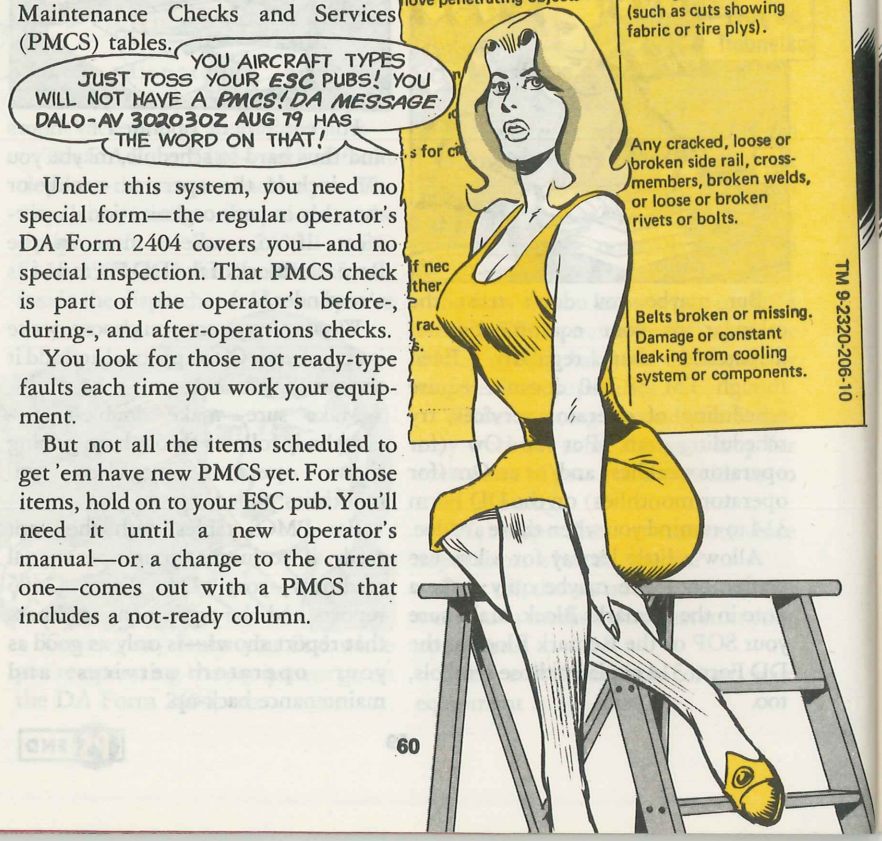
Table 3-1. Preventive Maintenance Checks and Services (PMCS) 10 Ton Trucks

B - Before Operation D - During Operation A - After Operation W - Weekly M - Monthly

	epaired, filled, needed	Equipment is not ready/available if:
	wheels. Check for apparent nove penetrating objects	Three or more tires flat, missing or unserviceable (such as cuts showing fabric or tire plys).
		Any cracked, loose or broken side rail, cross-members, broken welds, or loose or broken rivets or bolts.
		Belts broken or missing. Damage or constant leaking from cooling system or components.

TM 9-2320-206-10

Now your equipment is either ready to perform its combat or combat support mission or it's not—based on a special column or blocks of info in the operator's TM Preventive Maintenance Checks and Services (PMCS) tables.



Under this system, you need no special form—the regular operator's DA Form 2404 covers you—and no special inspection. That PMCS check is part of the operator's before-, during-, and after-operations checks.

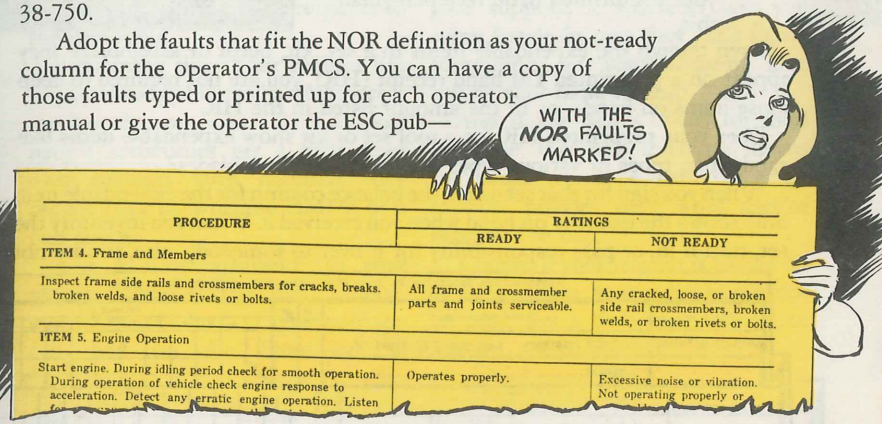
You look for those not ready-type faults each time you work your equipment.

But not all the items scheduled to get 'em have new PMCS yet. For those items, hold on to your ESC pub. You'll need it until a new operator's manual—or a change to the current one—comes out with a PMCS that includes a not-ready column.

Even so—you do not pull a formal ESC inspection with that pub. You just use the old ESC pub as a guide for your not-ready faults.

Maintenance supervisors, motor sergeants and warrants—or whoever is most knowledgeable about the equipment—must compare the old ESC red or not-ready faults with the definition for Not Operationally Ready (NOR) in TM 38-750.

Adopt the faults that fit the NOR definition as your not-ready column for the operator's PMCS. You can have a copy of those faults typed or printed up for each operator manual or give the operator the ESC pub—



PROCEDURE	RATINGS	
	READY	NOT READY
ITEM 4. Frame and Members		
Inspect frame side rails and crossmembers for cracks, breaks, broken welds, and loose rivets or bolts.	All frame and crossmember parts and joints serviceable.	Any cracked, loose, or broken side rail crossmembers, broken welds, or broken rivets or bolts.
ITEM 5. Engine Operation		
Start engine. During idling period check for smooth operation. During operation of vehicle check engine response to acceleration. Detect any erratic engine operation. Listen	Operates properly.	Excessive noise or vibration. Not operating properly or

Either way, when a new operator's manual or change comes out with a PMCS that includes a not-ready faults column, toss the ESC pub right then. Have your dispatcher point out the new checklist to your operators, though, so they stay with the system.

Since the PMCS changes are coming out fast and furious, make it a point to check with your pubs people regularly on your equipment. (See page 64 of PS 320 for a partial list of equipment with the new PMCS.)

Your readiness—and maybe your survival!—depends on how well operators keep up with the PMCS checks.

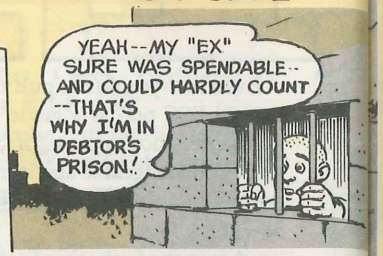
Operator Services

When you're filling out a DA Form 2404, put the type of service you're pulling in Block 6. For operator services under a Preventive Maintenance Checks and Services (PMCS) table, that means you write Daily, Weekly, Monthly or whichever specific operator service you're pulling. Never just put PMCS in Block 6.

Preprinted Hand Receipts...

EXPENDABLES HARDLY COUNT

SC 5180-91-CL-S21-HR

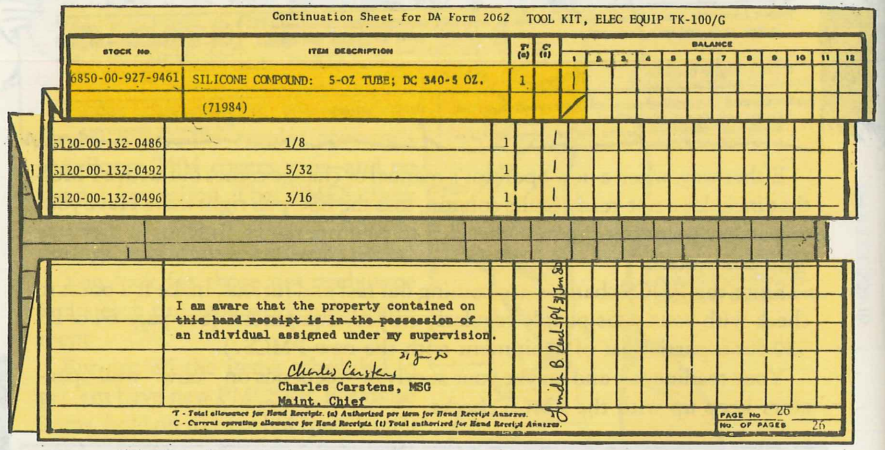


Before you start screaming—when you find expendables as well as durable and nonexpendable items on your pre-printed hand receipts—read this.

Even though the expendable items in a set, kit, outfit or assemblage may appear on a preprinted TM hand receipt (HR), you are not required to keep those items on hand—or in the amount listed in the HR.

Does your preprinted HR for a tool set or kit show expendable items like sandpaper, tubes of various types of goo, or hacksaw blades?

When you sign for that set or kit, the balance column for the expendable item only shows the quantity on hand when you received it. When you inventory the set, turn it in, or pass responsibility for it over to somebody else, you are not



Continuation Sheet for DA Form 2062 TOOL KIT, ELEC EQUIP TK-100/G

STOCK NO.	ITEM DESCRIPTION	(C)	(D)	BALANCE
6850-00-927-9461	SILICONE COMPOUND: 5-OZ TUBE; DC 340-5 OZ. (71984)	1		1
5120-00-132-0486	1/8	1		1
5120-00-132-0492	5/32	1		1
5120-00-132-0496	3/16	1		1

I am aware that the property contained on ~~this hand receipt is in the possession of~~ an individual assigned under my supervision.

Charles Carstens
Charles Carstens, MSG
Maint. Chief

T - Total allowance for Hand Receipt. (a) Authorized per item for Hand Receipt Annex.
C - Current operating allowance for Hand Receipts. (t) Total authorized for Hand Receipt Annex.

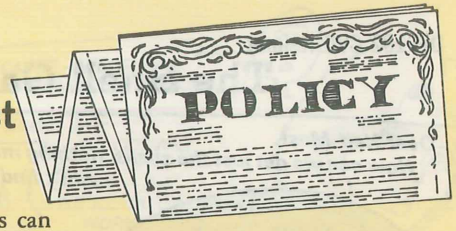
PAGE No. 26
No. OF PAGES 26

responsible for the missing or used-up expendable items.

That's not a license to ignore those items, though. You must still try to keep the set or kit complete at all times because you need those expendable items, too. Tell your supply people as soon as you use up an expendable item. That way, they'll have more for you by the time you need it again.

Durable and nonexpendable components, though, must be on hand in the number you signed for on the component list (CL) or HR.

Take Out a Little Request Insurance



Even though most computers can handle your Federal Supply Code for Manufacturer's (FSCM) plus part number requests, some people run into trouble getting their requests to the computer.

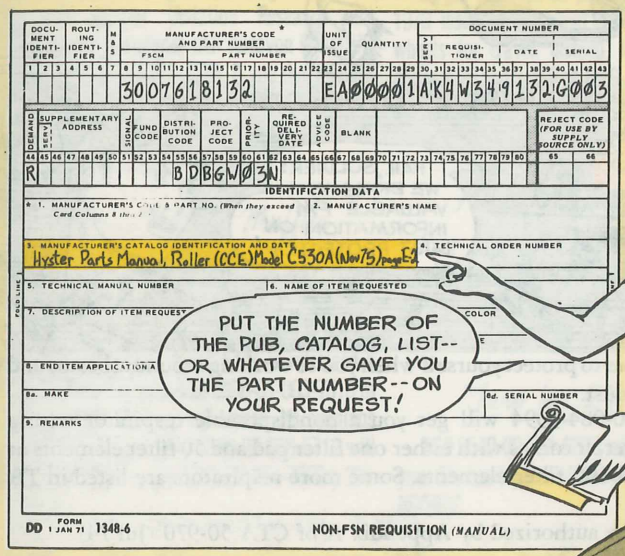
Remember this: Your request has to pass through human hands before it reaches the computers. And support people sometimes get a little edgy over requests with numbers they cannot back up with the AMDF or a pub check.

Add a little insurance to your request. Identify the pub, catalog, manufacturer's list—or whatever you can find on the item—in the publications block of your request form.

That note will not only reassure your support, it will also save you some hassle in case they can't figure something on your request. Like maybe your handwriting?

And if the item's OKed for local purchase, that pub reference means the order won't be held up while support puzzles over what they're supposed to buy.

'Course, if your request is passed on as a requisition, your pub info may not be used. But a little insurance never hurts!



DOCUMENT IDENTIFIER | ROUTING IDENTIFIER | M&S | MANUFACTURER'S CODE AND PART NUMBER (FSCM / PART NUMBER) | UNIT OF ISSUE | QUANTITY | DOCUMENT NUMBER (SUFFIX / REQUISITIONER / DATE / SERIAL)

30076181132 EA ØØØØ1 AK4 W34 913 2 GØØ3

DEMAND CODE | SUPPLEMENTARY ADDRESS | SIGNAL | FUND CODE | DISTRIBUTION CODE | PROJECT CODE | PRIORITY | REQUIRED DELIVERY DATE | ADVICE CODE | BLANK | REJECT CODE (FOR USE BY SUPPLY SOURCE ONLY)

R BDBGWØ3N

IDENTIFICATION DATA

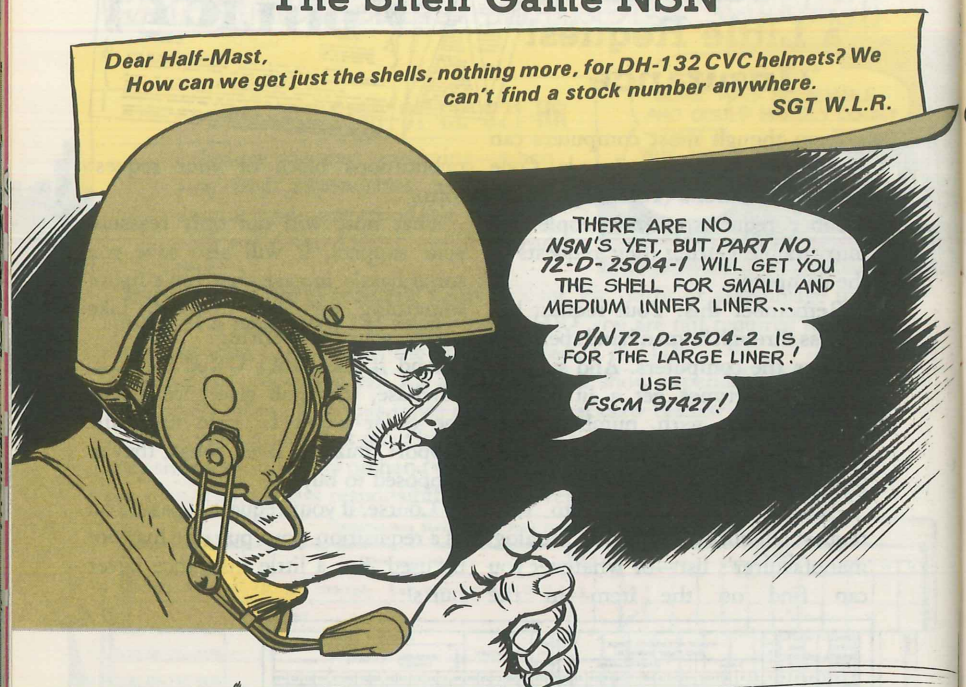
1. MANUFACTURER'S CODE & PART NO. (When they exceed Card Columns 8 thru 2)
2. MANUFACTURER'S NAME
3. MANUFACTURER'S CATALOG IDENTIFICATION AND DATE: Hyster Parts Manual, Roller (CCE) Model C530A (Nov 75) page E-2
4. TECHNICAL ORDER NUMBER
5. TECHNICAL MANUAL NUMBER
6. NAME OF ITEM REQUESTED
7. DESCRIPTION OF ITEM REQUEST — COLOR
8. END ITEM APPLICATION
8a. MAKE
8d. SERIAL NUMBER
9. REMARKS

PUT THE NUMBER OF THE PUB, CATALOG, LIST-- OR WHATEVER GAVE YOU THE PART NUMBER--ON YOUR REQUEST!

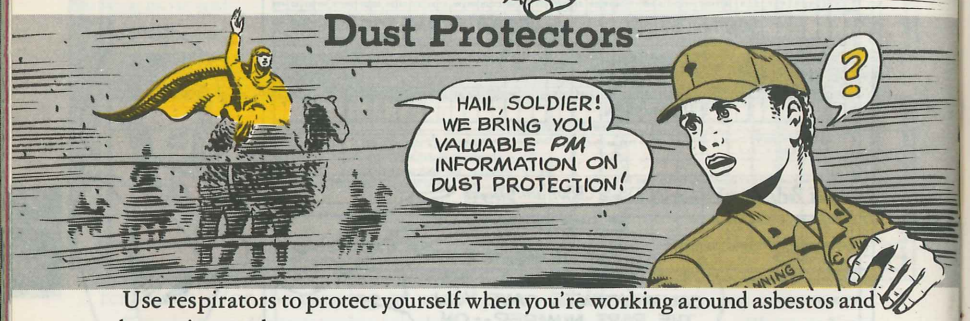
DD FORM 1 JAN 71 1348-6 NON-FSN REQUISITION (MANUAL)

DH-132 CVC Helmet...

The Shell Game NSN



Dust Protectors



Use respirators to protect yourself when you're working around asbestos and other nuisance dust.

NSN 4240-00-084-9394 will get you a nondisposable respirator with a replacement filter. It comes with either one filter pad and 50 filter elements or 2 filter pads and 100 filter elements. Some more respirators are listed in TB MED 223.

Respirators are authorized by Appendix A of CTA 50-970 (Jul 74).

Ute on Phase

TSARCOM Msg DRSTS-MEN 051730Z Sep 79 (Maint advisory message Number U-21-79-7) gives you the green light to put your U-21 bird on Phase Maintenance. TM 55-1510-200-PM (Jul 79) has hit the field and you'll find the changeover poop in TB 55-1500-337-24, with Change 2 (Oct 78).

Warranty Service

Warranty claim procedures on aircraft and related parts differ from one contract to another and can be hard to figure out. To get help from the head hangar (Aviation Research and Development Command) call Autovon 693-1576 or Commercial 314-263-1576. If you don't get an answer within 24 hours, call Autovon 693-1575 or Commercial 314-263-1575 for the status on your question.

Muffed M880 Muffler

That muffler, NSN 2990-01-034-5227, listed in TM 9-2320-266-20P (Feb 78) for the M880-series 1¼-ton truck won't fit all models. It's for the 4x4 trucks only. It has a 2½-in inlet and a 2¼-in outlet. You need NSN 2990-01-003-7510 to get a muffler for your 4x2 trucks. Its openings are both 2¼ inches. NSN 5340-00-358-5711 will get a 2½-in clamp and 5340-00-304-7393 a 2¼-in one.

☆ U.S. GOVERNMENT PRINTING OFFICE: 1979—657-003/13

No Reprints

A lot of troops filled out and mailed the survey card from the March 1979 PS Magazine. The survey asked who needed reprints of PS Magazine articles on specific kinds of equipment and a 5-year PS index. The decision has been made: The Army will not have the reprints done...and no 5-year index.

Thanks for sending in the cards.

LZL Lance Correction

Forget the dope on page 3 of the September 1979 issue of PS about jacking up the caster wheels for travel. Instead, follow the info on pages 2-20 and 2-110 of TM 9-1425-485-10-2 dtd Jan 74. Each caster wheel folds up beside the tow bar.

AN/PRT-4 Cover

Your pubs don't list it, but a transducer housing cover is available for your AN/PRT-4 radio transmitter set. Order it with NSN 5820-00-995-2339. It's cheaper than replacing the set.

Tarp for 2½-Tons

NSN 2540-00-741-6338 will get you a tarp for your 2½-ton truck. It fits the M35A1, M35A2 and M35A2C.

Would You Stake Your Life right now on the Condition of Your Equipment?


NEVER DUMP
● Used anti-freeze
● Battery electrolyte
● Used engine oil
down the drain
...or on the ground!
AR 200-1 and PUBLIC LAW
FORBID IT!