Issue 314

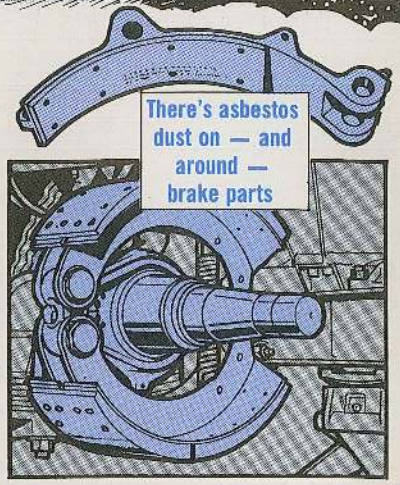
P.S

January 1979

THE PREVENTIVE MAINTENANCE MONTHLY

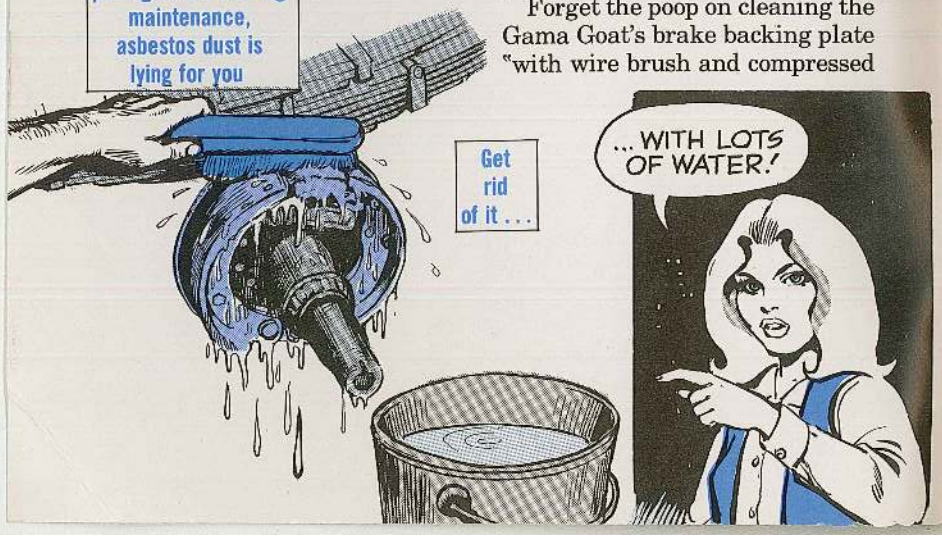
DANGER-ASBESTOS

Cleaning brake shoes and clutch plates can be dangerous to your health. If you breathe in asbestos dust from the brake shoe and clutch plate linings, you may wind up with "asbestosis" or lung cancer.



So, never use compressed air or a wire brush to clean brake shoes, brake drums, clutch plates or linings — no matter what it says in your TM's or anywhere else.

Forget the poop on cleaning the Gama Goat's brake backing plate "with wire brush and compressed air" — para 154c(1), page 2-223, TM 9-2320-242-20 (Sep 76). And pay no mind to that "compressed air" in PS 302, page 25 — just stick to the "water and a brush" for cleaning brake shoes and clutch parts.



Here's the ticket on cleaning parts that may have asbestos dust on 'em:

Clean dirt or mud from brake shoes and clutch parts with a vacuum cleaner, if possible. Then follow up with a bristle brush and water. If there's grease or oil on the lining, you need new lining.

Clean other parts — brake drum, backing plate, etc. — with a brush 'n' water to take off mud. Then use solvent to clean off oil or grease. Wear rubber gloves when you're working with solvent.

Anybody doing brake or clutch maintenance should get a medical checkup annually.

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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
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40511

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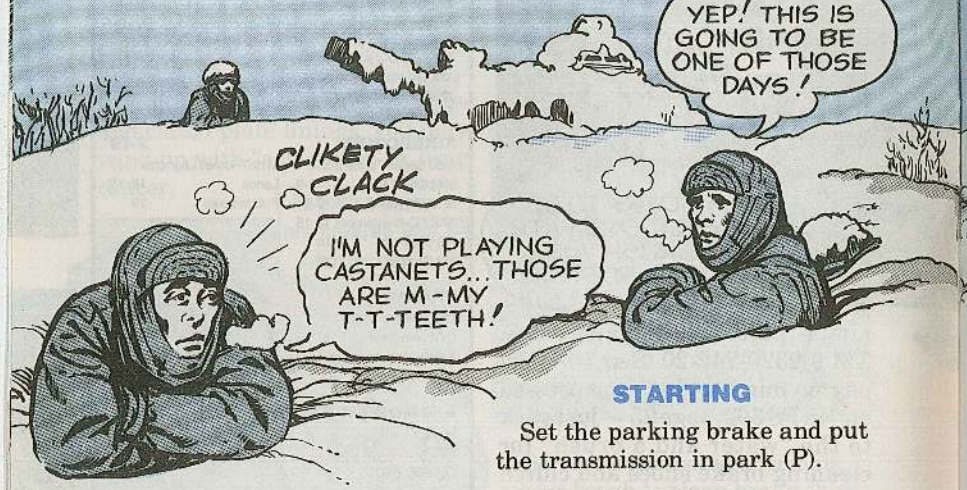
FIREPOWER

M60-Series Tanks...

COLD WEATHER



STARTING

Set the parking brake and put the transmission in park (P).

Check for Hydrostatic Lock

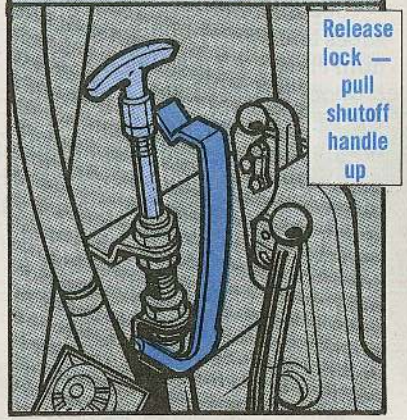
When the temperature gets down around 32°F or below and stays there, your AVDS 1790-series engine gets contrary and hard to start.

It idles rough — or barely runs — when operated at normal idle speed with no load. One or more cylinders may not fire. That's because it's not hot enough to get complete combustion in all cylinders.

An over-cooled engine will idle rough. It'll blow a lot of blue or white smoke. And you can see raw fuel on the access grille doors.

Here're a few cold weather tips.

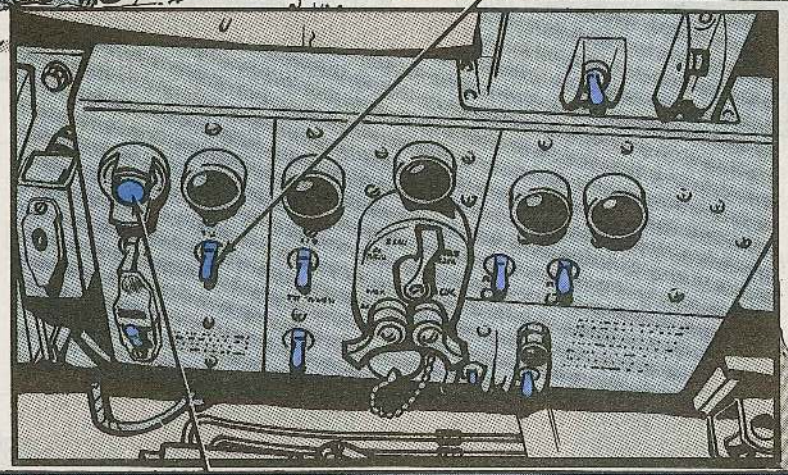
(1) Pull the manual fuel shutoff handle to OFF.



STARTING

(2) Turn off all electrical switches and fuel pumps.

(3) Turn the master battery switch ON.



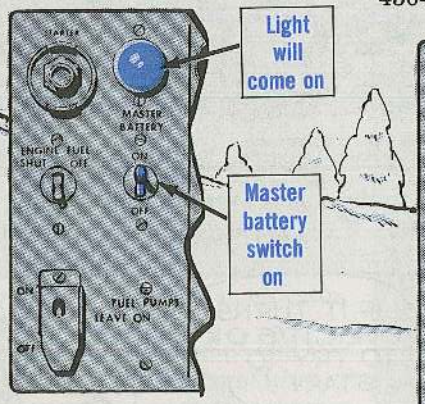
(4) Push the starter button. Turn the engine over a couple of times. If it turns over, it's OK to try to start. If you get any resistance, stop and get your mech on it.

PS MORE

All clear? Then start —

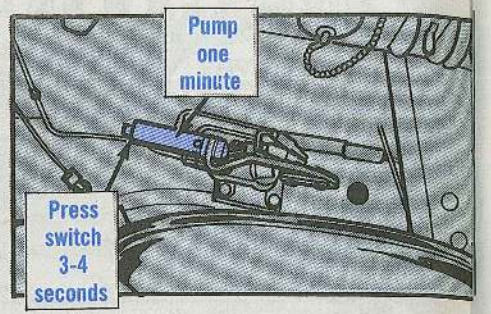
1. Push the manual fuel shutoff handle down and lock it.

2. Turn the master battery switch ON.



3. Turn the fuel pump switch ON.

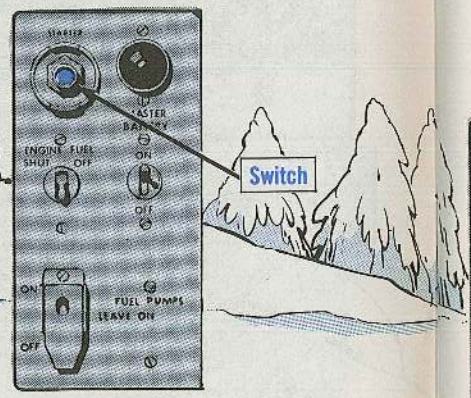
4. Pump the purge pump until you feel a firm back pressure. Use slow steady strokes. Pump for about one minute.



5. Continue pumping and press the manifold heater switch 3 to 4 seconds.

6. Push the accelerator pedal down to full throttle.

7. Press and hold the starter switch. Continue to operate the purge pump and the manifold heater until the engine reaches 450-500 RPM.



8. Release the starter switch.

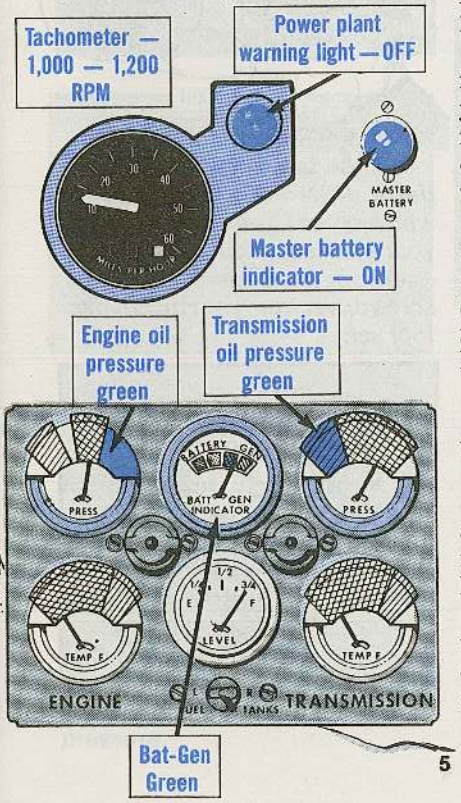
9. Use the accelerator pedal to keep the engine at 1,000-1,200 RPM.

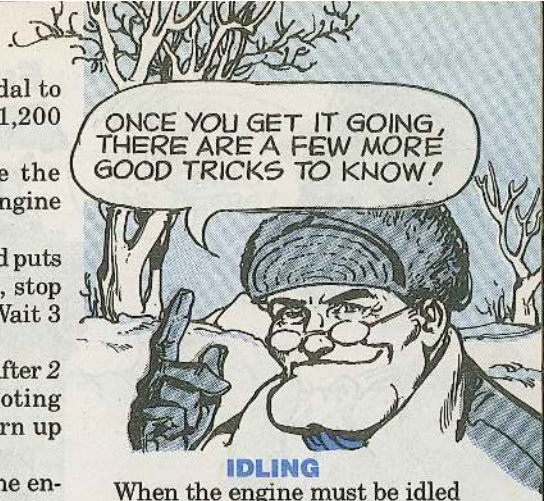
10. Continue to operate the manifold heater until the engine runs smoothly.

If the engine won't fire and puts out a white or gray smoke, stop cranking after 15 seconds. Wait 3 to 5 minutes and try again.

If the engine won't start after 2 tries, go to the troubleshooting table in your TM. Don't burn up your starter.

Check your gages when the engine is running smoothly:





IDLING

When the engine must be idled for a long time, use high idle — 1,500-1,600 RPM.

If you have to use a lower engine idle speed, watch your exhaust. If you see white smoke, use the manifold heater. When the exhaust color goes back to normal, quit using the manifold heater.

Too much idling and the engine might get over-cooled. It'll misfire and blow heavy blue-white smoke. You'll have to blow out the induction and exhaust systems. Here's how:

Set the parking brake.

Clear the area in front of the tank.

Shift to HIGH range.

Rev up the engine to 1,800 RPM and hold it for 30 seconds. Not any more than that or you could overheat the transmission oil.

Stop the engine immediately if the power plant warning lights come on or if the warning horn sounds.

Reduce the engine speed to 1,000-1,200 RPM.

Shift back to Neutral. (PS) END

Fuel Pump MAGIC

Dear Editor,

We've had several cases lately where our M60-series tanks had the blahs.

The engines ran slow – stalled at low RPM – and they wouldn't develop full horsepower.

We checked everything just like the troubleshooting tables in our TM-20 said.

The air cleaner screens and filter elements were clean.

There were no restrictions or obstructions in the exhaust pipes.

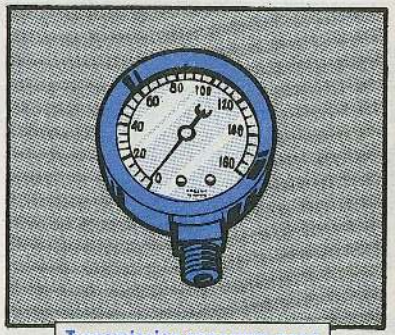
The accelerator linkage was free and clear and adjusted right.

Both fuel tanks had about the same amount of fuel, and the electric fuel pumps were working.

We'd just changed the primary fuel filter and were about ready to change the engine fuel pump.

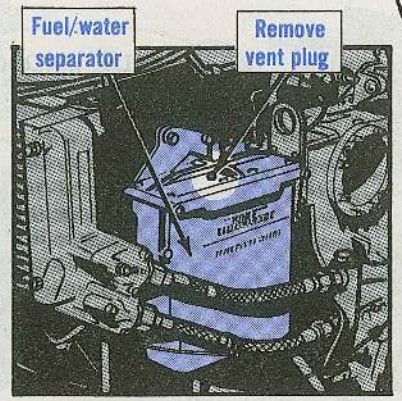
Then we decided to check the pump's pressure. The pressure was low. A little adjustment on the pump's pressure relief valve put the tank back on the road.

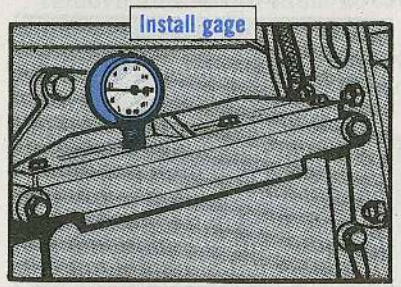
Get the transmission pressure gage, NSN 6620-00-795-0330, which comes as a special tool for your M60 tank. You'll also need a 3/8-in open end wrench and a screwdriver from your mechanics tool set.



Transmission pressure gage

Remove the vent plug from the fuel/ water separator and install the transmission pressure gage.





Start the engine

The fuel pump pressure should be 40-50 PSI at 1,800 to 2,650 RPM in the AVDS 1790-2A engine and 55-60 PSI at the same RPM in the 2C and 2D engines.

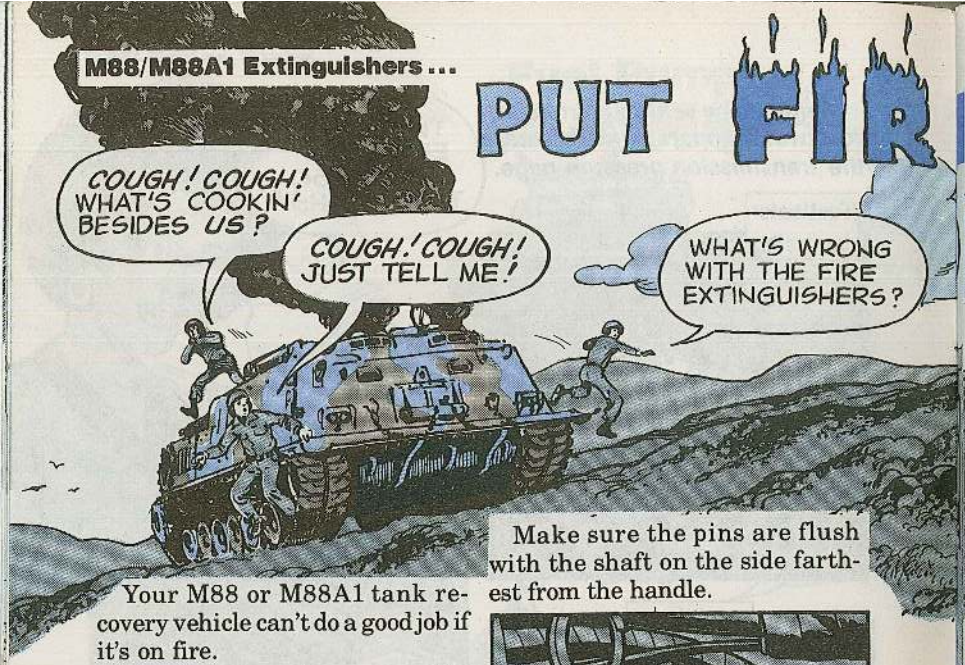
If the gage doesn't show these pressures, loosen the locking nut on the pressure adjusting screw. Turn the adjusting screw until you get the right pressure. Turning the screw clockwise will increase the pressure.

If you can't adjust the pump, replace it with a new one. Use NSN 2910-00-678-4675 for the AVDS 1790-2C and -2D engines. NSN 2910-00-678-4673 is for the -2A engine.

SFC Richard J. Felt
1/66 2AD Ft. Hood, TX

(Ed Note: This holds true for the M48A5 , too.)

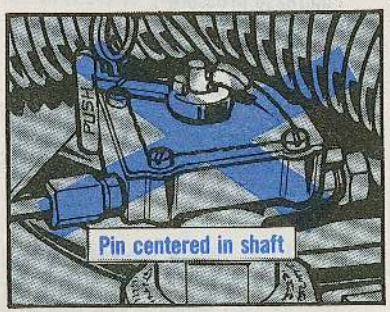
PUT FIRES OUT



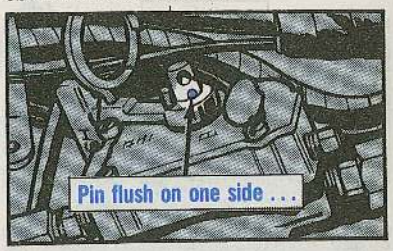
Your M88 or M88A1 tank recovery vehicle can't do a good job if it's on fire.

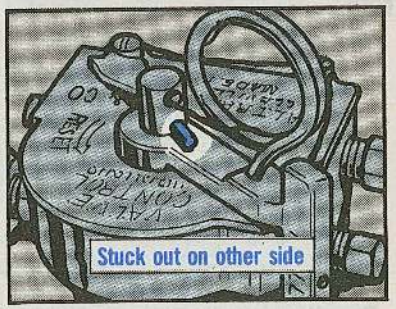
The time to make sure on the fire extinguisher system is right now.

Check the position of the pins in the control valve shafts of the 2 master cylinders. If they're centered in the shafts, they might not be sticking out far enough to work right when the fire extinguisher handle is pulled.



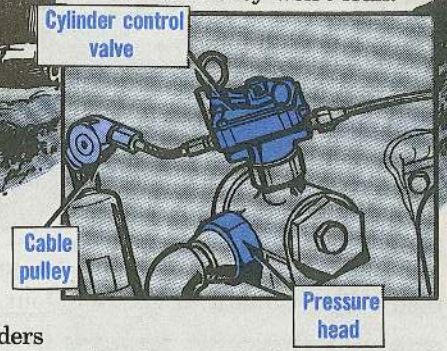
Make sure the pins are flush with the shaft on the side farthest from the handle.





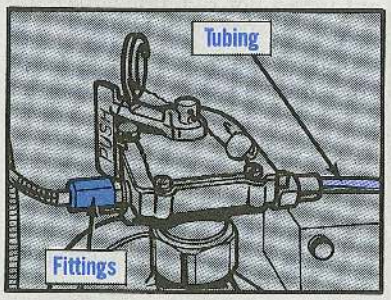
If the pins don't look right, get your mechanic to check the extinguisher system.

He'll also make sure all control valves and pressure heads are screwed down tight on the cylinder valves so they won't leak.

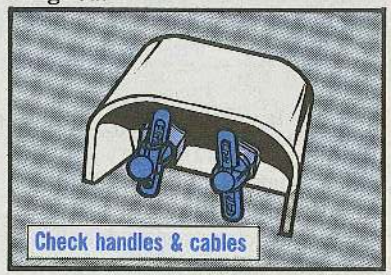


The fire extinguisher cylinders must be charged. To make sure, remove and weigh them at the quarterly service.

Your mechanic will inspect and tighten all connecting tubing and fittings between the cylinders.



Also, your mechanic will inspect and operate all remote handles, cables and pulleys both inside and outside the vehicle. He'll do this quarterly when the cylinders are removed from the vehicle and weighed.



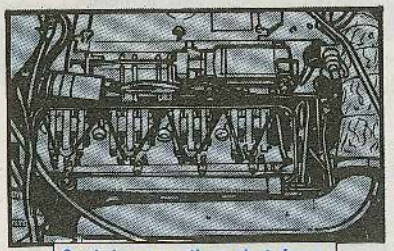
Here's some good stuff for you, the M88 or M88A1 crewman ...

Although it does not say so on page 2-116 of your TM 9-2350-256-10 (Mar 77) for the M88A1, or page 69 of your TM 9-2320-222-10 (Apr 66) for the M88, try to shut down the engine and turn off the master switch *before* you pull the handle.

If you do these two things and if your fire extinguisher system is in good shape, you should be able to put out any fire in your vehicle.

Howitzer HOT Flash

The hot news on M109/M109A1 howitzers is that too many of them are overheating and cracking their engine cylinder heads.



Cool down — then shut down

The cylinder head, NSN 2815-00-970-1204, is in short supply, which means if your howitzer gets deadlined for cracked cylinder heads it is going to stay deadlined for a long time.

TM 9-2350-217-10N (Sep 74) on page 2-41 tells how to stop your vehicle in 8 easy steps. It even warns you:

"Failure to observe shutdown procedures will result in high engine failure rate."

Shutting off a hot engine without letting it cool down is the biggest cause of cracked cylinder heads. Let your hot engine run 5 minutes at high idle (1,000 to 1,200 RPM) to cool it to 185°F or below before you shut it off.

The second biggest cylinder head cracker is pouring cold coolant into a hot radiator with your engine turned off.

Some crews never read page 2-16 in the -10 TM, which shows that the cooling system is supposed to be checked *before* vehicle operation.

They pour coolant into the radiator *after* operation while the thermostat is hanging wide open, and the engine off.

If they had the engine running, it would circulate the new coolant and mix it with the warmed up coolant already in the radiator. With the engine off and the thermostat open, the newly-added cold coolant tends to get right to the engine and crack the cylinder heads.

Here's what you can do about other things that make your engine run hot and set the stage for cracked cylinder heads:

THINGS THAT GO WRONG	WHAT TO DO ABOUT THEM
① Radiator, clogged with leaves, mud, gunk.	Get it steam cleaned or use radiator cleaning tool NSN 2815-00-494-8257
② Cooling fans not working right.	Have mechanic check them out
③ Panels, plates or shrouds not in place.	Put 'em back. Air flow through radiator was figured for everything in place
④ Engine lugging.	Downshift.
⑤ Low engine oil level.	Add oil.
⑥ A bad coolant pump, bad or missing thermostat or transmission trouble can also give your engine the hots.	Have your mechanic check it out.

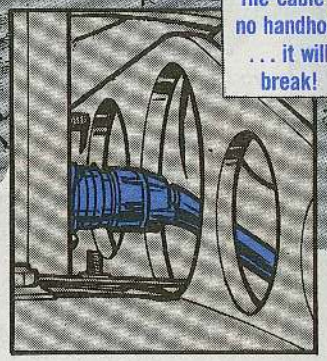
PM Keeps You On The Air

PM learned is commo saved, and with a system as big as your tracked vehicle's intercom, that's a lot of learning to do.

If you want to keep that network of cables, control boxes and helmets from becoming more than dead weight, start learning now.

Ready? Then, here's some pointers to get you on the right track.

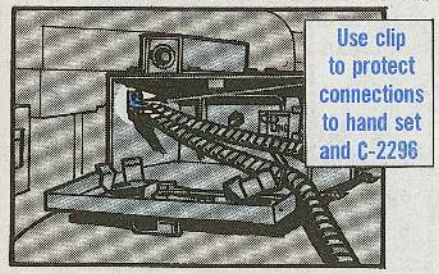
DON'T TREAD ON ME — That C-2296 intercommunication set control box on the outside of your vehicle is no step. Planting your size 10 there can mash it and its insides, too. If you need a place to walk that bad, get the protective bracket, NSN 5830-00-973-4888.

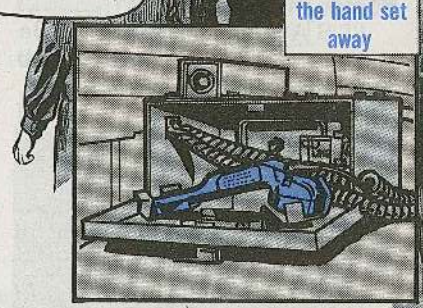


HANDS OFF — Likewise, the cable which feeds the control box is not a handhold. You might not find this out until the cable or its connector breaks. No need to let it go that far. Find another way up.

IN A PINCH — That same cable is fair game when an M60A1 tank's power pack is removed or installed. If it's not out of the way along the engine compartment wall, the pack can tear it up. Warn the repairman who removes the pack.

GET CLIPPED — Take some strain off the H-207 handset cord's connection to the control set. Use the clip on the box's inside wall.

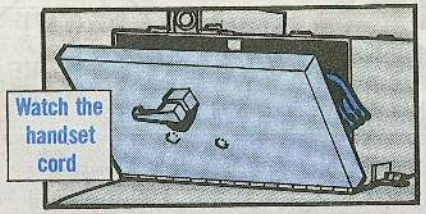




STOW IT — Remember to put away the handset when you're through. It won't work so well after tons of track roll over it. Ease up on the volume knob, too. Stop twisting when it stops turning. Muscle will just break it.

PS MORE

AN OLD SHARPIE — The box lid is sharp enough to do a job on



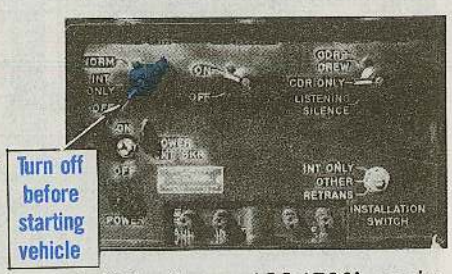
the handset cord. Keep the two from coming together by making sure the cord is safely inside before slamming the door.

Now, let's take a look inside.

There are no big secrets here. Just follow the trouble-shooting and PM checks in TM 11-5820-401-10-2 (Dec 77). Organizational-types should scope out TM 11-5820-401-12 (Aug 72).

As always, tho, there are some things worth repeating.

IT'S A BIG TURNOFF — Be sure to shut down your commo gear before you start your vehicle.



A flick of your AM-1780's main power switch does the job. To double your protection, be sure your vehicle has a transient suppressor installed. Save the batteries by running your vehicle while the radio's in use.

TIGHT'S RIGHT — Make sure all cable connections are made properly. Eyeball the retaining rings on audio receptacles and cables — like the CX-4723. If they're loose, tighten 'em.

Disconnect the cable before tightening receptacle rings, tho. If you don't, you risk bending pins.

Make sure cable insulation is in good shape. Are all cable clamps attached to the vehicle wall and usable?

DON'T JUST PLUG AWAY — Your intercom has a lot of CX-4723 cable assemblies. Be sure they're hooked up right to the AM-1780 audio frequency amplifier. Leave plug J504 for the vehicle commander. He must be able to talk to anyone, at anytime.

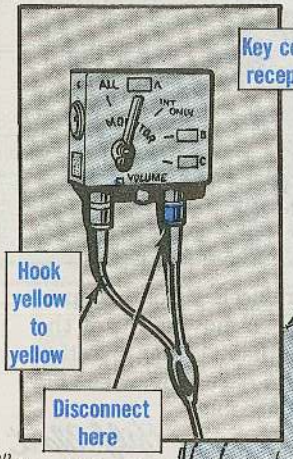
Also watch plug J501. That's for your "A" receiver-transmitter only. The plug is built for the vehicle battery's 24 volts. The other plugs aren't. Wrong connections can mean a burned-up amplifier.

A MOLDY OLDIE — Remember this one? Keep high pressure hoses away from commo gear. It's still good advice.

USE YOUR HEAD — You can't forget the combat vehicle crewmen's (CVC) helmet at PM time, either.

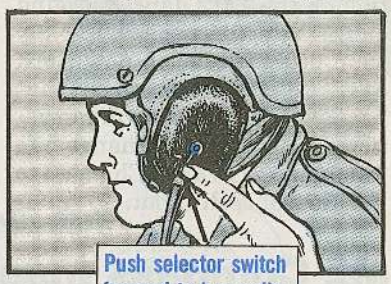
First, be kind to that cord. Hook the clothes clip to clothes. This lets the cord move with you. Once outside, watch the helmet. Leaving it outside makes the cord an easy mark for a falling hatch.

USE YOUR CONNECTIONS — Watch how you hook up the helmet to your control set. The yellow-marked cord goes on the yellow-marked receptacle. Not marked? Should be. The short cord goes to the receptacle on the right.



When you disconnect, do it at the control box. Keep the cord assemblies with the CVC. The next box you hook up to might not have the cord you need.

KEEP IT COOL — If you have reversed your CVC's connections, you'll end up with a "hot mike". This means that when you key the switch on your helmet, you're overriding other commo, even



that in other tracks.

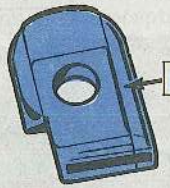
A quick test will tell you just how hot you are. Move the helmet's selector switch forward. If it keys the radio, you're OK. If it doesn't break squelch, switch your connections.

Need a Firing Pin Stop?

Dear Half-Mast,

I've seen different stories on replacement of the M1911A1 .45-cal. pistol firing pin stop. Also, TM 9-1005-211-12 and -35 seem to contradict each other. Who replaces the stop, the armorer or support?

LTC I. R. V.



Dear LTC I. R. V.,

The unit armorer does. Although the TM's danced around on this one, firing pin stop NSN 1005-00-501-3205 is now SMR coded PAOZZ, which means that the stop is replaced by organizational maintenance. Change 5 to TM 9-1005-211-12 and Change 4 to the -35 TM spell it out.

Half-Mast

M2 Compass Inspection

Dear Half-Mast,

During inspection, our M2 magnetic compasses fail Table I, page 7 of TM 9-1290-333-15, which calls out "stops" in checking the azimuth scale adjuster assembly. I believe our compasses were made without the stops. They get declared unserviceable ... and we have to replace them. Can you help?

WO1 K. P. N.

Dear Mister K. P. N.,

You're not alone with the problem, Sir. Others have reported it, too.

Any reference to "stops," real or otherwise, will be removed from Table I, TM 9-1290-333-15, when the TM is revised. If your compasses have free movement of the scale 800 mills in either direction from zero and are otherwise OK, they're serviceable.

Half-Mast

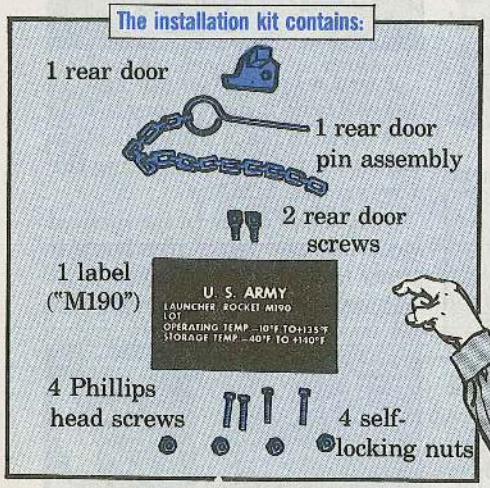
Dear Half-Mast,

Are repair parts available for the old and new conversion kits for the M190 (practice) rocket launcher? Or, do we have to order new kits for parts?

SGT J. J.

Dear Sergeant J. J.,

You can get repair parts for the old conversion kit (NSN 1055-00-179-7280) or new (NSN 1340-00-420-7999) out of installation kit NSN 1055-01-011-8328. Use it for both.



You can use the installation kit for repair parts once the conversion kits are in use.

Half-Mast

CAREFUL WITH THE COVER

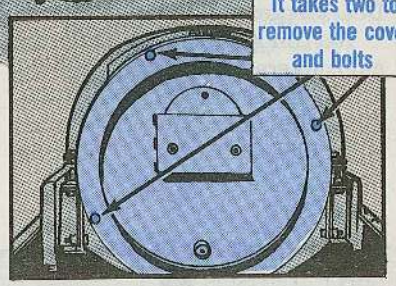
Hold that cover!

Otherwise, it may slip and KO the accelerometer in the Lance guided missile system's main missile assembly (MMA).

Without the accelerometer, you can forget about getting the missile to the target. The accelerometer puts out the electrical signals that help boost and guide the missile.

Fact is, the cover's there to protect the accelerometer — and a lot of the missile's delicate guidance parts during shipment and storage. You take the cover off *only* when mating the MMA to the warhead section.

Here's how to take it off and still keep the missile on target:



• Get a buddy to help you. It takes 2 to do it right — one to hold the cover in place while the other takes out the 4 bolts holding the cover to the MMA.

• Hold the cover in its vertical position and carefully back it away from the MMA. If you tilt it you risk banging the accelerometer.

Cable Cutoff

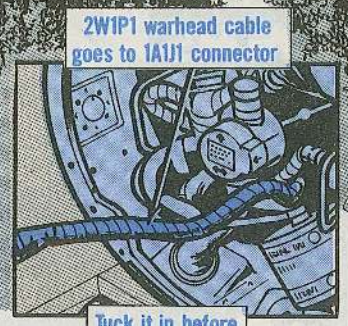
The warhead cable must be tucked in safe to keep from getting caught between the 2 sections of your Lance missile.

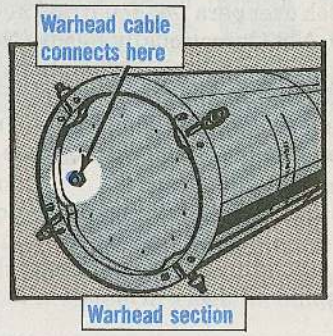
Otherwise, you can pinch or cut the cable and shut off the flow of guidance info that keeps the missile on target.

Here's how to save the cable when mating the 2 sections:

• Hook the 2W1P1 warhead cable from the main missile assembly (MMA) to the 1A1J1 connector on the warhead section — just like it says in para 2-37r of Change 4 to TM 9-1425-485-10-2 (Jan 74).

• Tuck as much of the cable as you can inside the main missile assembly *before* bolting the MMA to the warhead section.





Tired of Pub Hopping?

Are you firepower types tired of digging through piles of pubs looking for the one you need? Then get the LOAP — List of Applicable Publications — which indexes all the pubs you need to operate your system. Here are the ones available:

TM 9-1005-286-L (Aug 77) M167 Vulcan	TM 9-1425-525-L (Dec 77) Improved HAWK
TM 9-1425-250-L (Feb 75) Nike-Hercules	TM 9-1425-550-L (Aug 77) Land Combat Support System
TM 9-1425-380-L (Apr 78) Pershing	TM 9-1425-560-L (Feb 75) AN/TSQ-51
TM 9-1425-470-L (Mar 77) TOW	TM 9-1425-585-L (Sep 76) Chaparral
TM 9-1425-480-L (Apr 77) Dragon	TM 9-2350-300-L (Aug 77) M163 Vulcan
TM 9-1425-485-L (May 78) Lance	

TAMMS

Change 2 to TM 38-750 ...

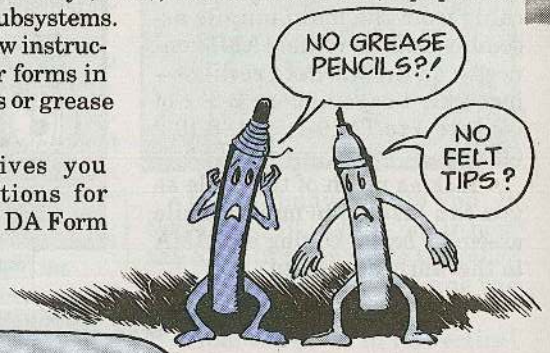
WHAT'S NEW?

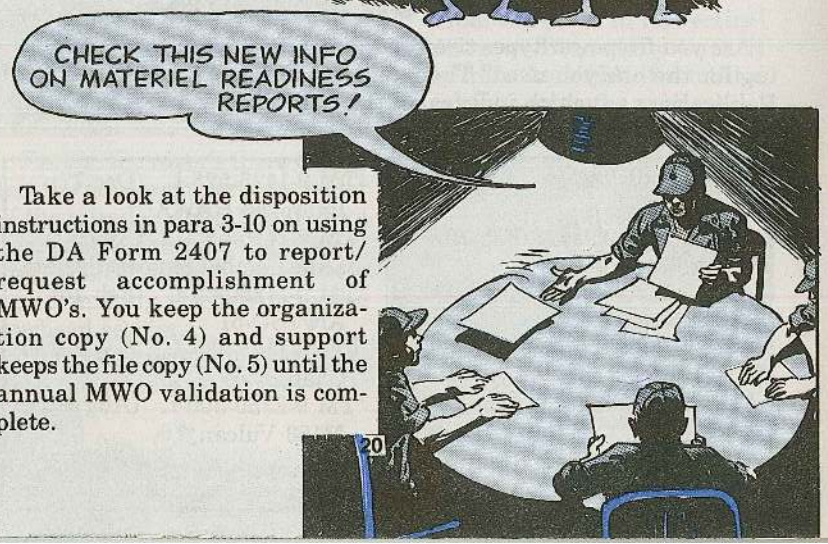
Got your copy of Change 2 to TM 38-750 (15 May 78) yet? There's a lot to read in that change.

Look over para 1-4. You'll find new definitions for Operationally Ready (OR), Not Operationally Ready (NOR), NORS and NORM, equipment/weapons systems and subsystems.

Change 2 has some new instructions for filling out your forms in general—like no felt tips or grease pencils on any forms.

A new para 3-6 gives you easier-to-follow directions for using and filling out the DA Form 2406.





Take a look at the disposition instructions in para 3-10 on using the DA Form 2407 to report/request accomplishment of MWO's. You keep the organization copy (No. 4) and support keeps the file copy (No. 5) until the annual MWO validation is complete.

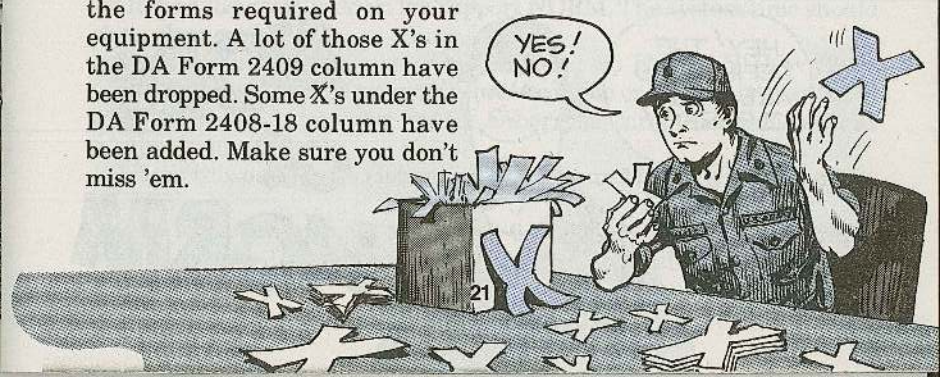
That means instead of a straight 90 days, you may have that form on file for anywhere from 2 to 363 days — depending on when the MWO was applied and the next validation is due.

'Course, the big change is in Chapter 4. Aircraft forms and records pretty much stay the same. But for everything else, some old forms have been dropped. Other forms you just keep for 90 days. And, the logbook — as a collection of forms for 1 item or system in a logbook binder — is no more.

Appendix C has no major changes — unless you missed the earlier message dropping the asterisks for US Army Intelligence and Security Command (SIGINT/EW) units and some vehicles from Appendix C.

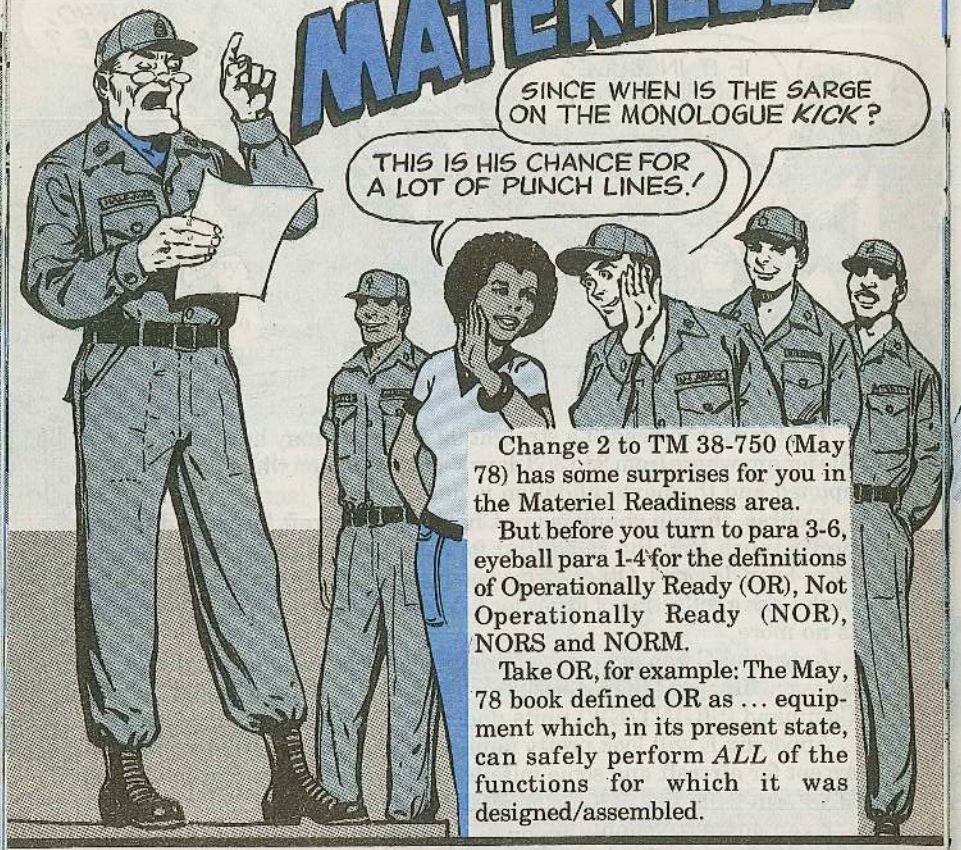
Appendix E will look pretty familiar. But you'll see mostly blanks — except for aircraft and some missile items — under the logbook binder, DA Form 2408 and DA Form 2408-5 columns.

Even so, better double-check the forms required on your equipment. A lot of those X's in the DA Form 2409 column have been dropped. Some X's under the DA Form 2408-18 column have been added. Make sure you don't miss 'em.



Change 2 and DA Form 2406 ...

MATERIELLY



Change 2 to TM 38-750 (May 78) has some surprises for you in the Materiel Readiness area.

But before you turn to para 3-6, eyeball para 1-4 for the definitions of Operationally Ready (OR), Not Operationally Ready (NOR), NORS and NORM.

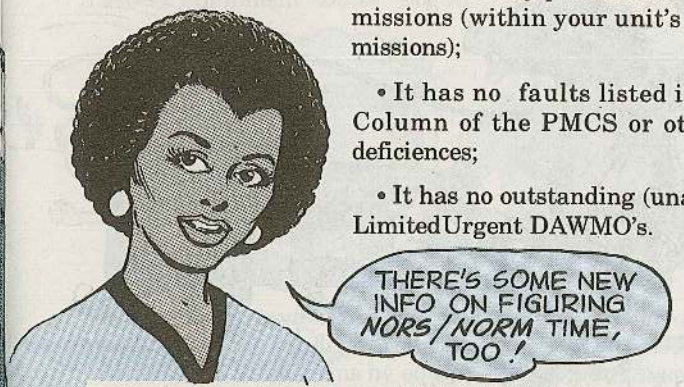
Take OR, for example: The May, 78 book defined OR as ... equipment which, in its present state, can safely perform *ALL* of the functions for which it was designed/assembled.

NORS OR NORM

SPEAKING!!

But, now your equipment is ready IF:

- It can safely perform its assigned combat missions (within your unit's assigned combat missions);
- It has no faults listed in the Not Ready Column of the PMCS or other uncorrected deficiences;
- It has no outstanding (unapplied) Urgent or Limited Urgent DAWMO's.



Hold off on that 8-hours NORS/NORM time you've been counting. You've got a couple of extra hours now.

Forget about counting NORS/NORM time UNLESS it takes more than 12 hours to fix — organizational or support!

Got the definitions straight? Go to para 3-6.

Here's a run-down of the biggest changes:

The May TM 38-750 gave you administrative storage situations that counted as OR and NOR for your Materiel Readiness Report. No more! Your equipment can now be put in admin storage *only* in an OR status.

Before you try to rate a system with different subsystem reasons for NOR, check out the new precedent ratings for NORS and NORM: Charge your system NOR time to Support NORS first, Support NORM second, then, Organizational NORS and Organizational NORM.

In other words, you have a truck down for Organizational NORS while its radio subsystem is down for Support NORM. The system time should show Support NORM.

The communications para 3-6b(6)(o) in the old TM 38-750 (Nov 72) is back. If your reportable system includes commo or electronic gear listed in Appendix C, it's a commo system. Otherwise, carry the commo gear as a subsystem.

Watch this one! You no longer fill out column 11p for your equipment on TDY.

That's the low-down on the para 3-6 changes. Read that paragraph, heed it and speed it on its way — to your next Materiel Readiness Report.

EQUIPMENT RECORDS

New shape, new style, new color! Not bigger and better but *smaller* and better!

Sound like a TV ad? Nope — it's the new records folder in Change 2 to TM 38-750.

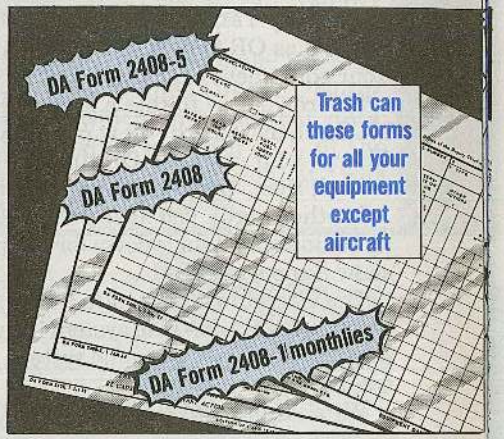
The old logbook binder assigned to one item or equipment system exists now only for aircraft. You aircraft types just keep on with the same forms — only with simpler instructions.

But for you non-aircraft types, it means fewer forms, a new dispatch folder and a whole lot less paperwork.

Fewer Forms and Binders

Trashcan all your old DA Forms 2408 Equipment Log Assembly (except for aircraft), DA Form 2408-1 monthlies and DA Forms 2408-5 Equipment Modification Record (except for aircraft and a few missile systems).

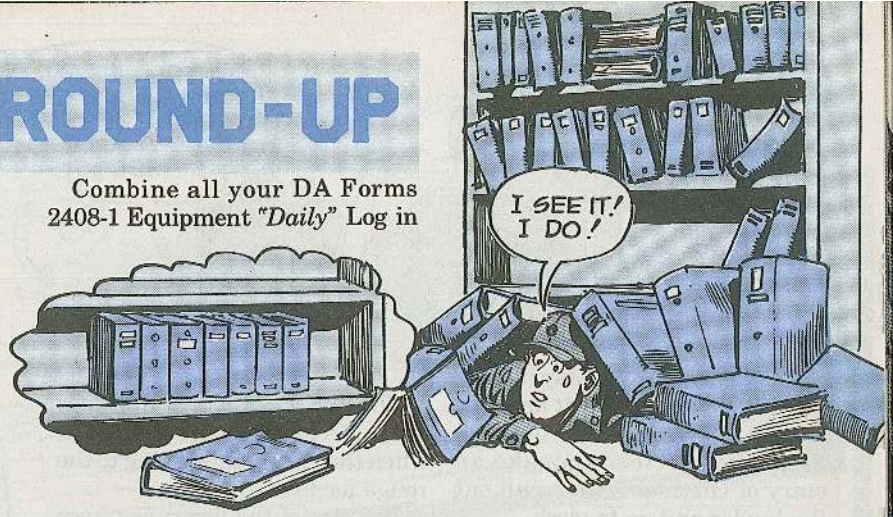
Now take a look at all those logbooks you've been keeping. Imagine clean shelves — OK ... maybe a little dusty! — with only



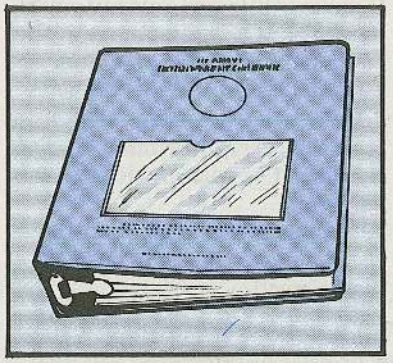
7 or 10 logbook binders. Sound good? Go to it!

ROUND-UP

Combine all your DA Forms 2408-1 Equipment *"Daily"* Log in



1 or 2 (if you have a lot of equipment) logbook binders. You can file and tab those forms by equipment type — if you have a lot of equipment — or by unit — if you keep forms on more than 1 unit. Use the system that's easiest for you.



Put all your DA Forms 2408-10 Equipment Component Record in 1 or 2 binders. Ditto on your DA Forms 2408-14 Uncorrected Fault Record, DA Forms 2408-4 Weapon Record Data, DA Forms 2408-18 Equipment Inspection List and DA Forms 2409 Equipment Maintenance Log.

What about your DA Forms 2408-9? Put all your logbook copy Acceptance and Registration or Gain Reports in 1 or 2 binders.

Put all your logbook copy Usage Reports and Transfer Reports in 2 binders. Take a look at the disposition instructions for Usage and Transfer Reports, though. You keep those reports for just 90 days and trashcan 'em.

PS MORE

The forms you keep stay in their separate binders close at hand for the TAMMS clerk and maintenance types. Need to make an entry or check one? Just pull out the binder and go to work.

Dispatching Equipment

Your crews and operators will see few forms now.

Sure, you've gotta use something for dispatch — but no longer the logbook binder.

Now you use a new camouflage-colored Equipment Record Folder with inside cover pockets and clear plastic inserts to hold any forms the operator needs.

What goes in the folder? The DA Form 2408-1 Equipment Daily Log for that item, a DA Form 2404 and the 2 accident report forms: DD Form 518 and SF 91.

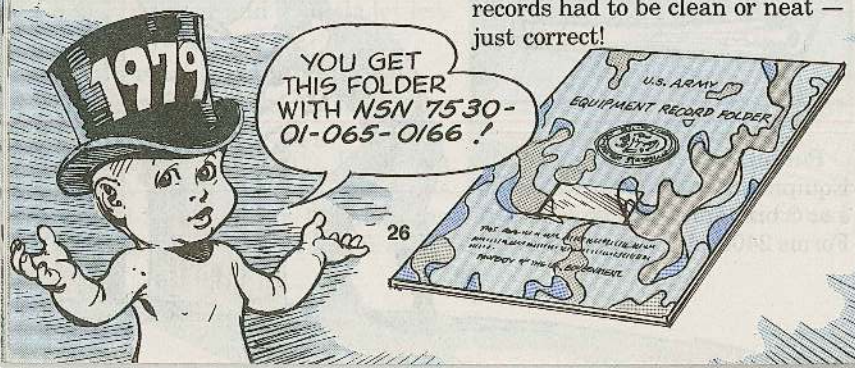
That's all. The only time you give a DA Form 2408-4 to a crew is when they're actually going to the range for firing.

The rest of the forms you keep in separate binders unless support needs them for scheduled services or maintenance work. For those situations, pull the needed forms, add them to the folder and send them to support with the equipment.

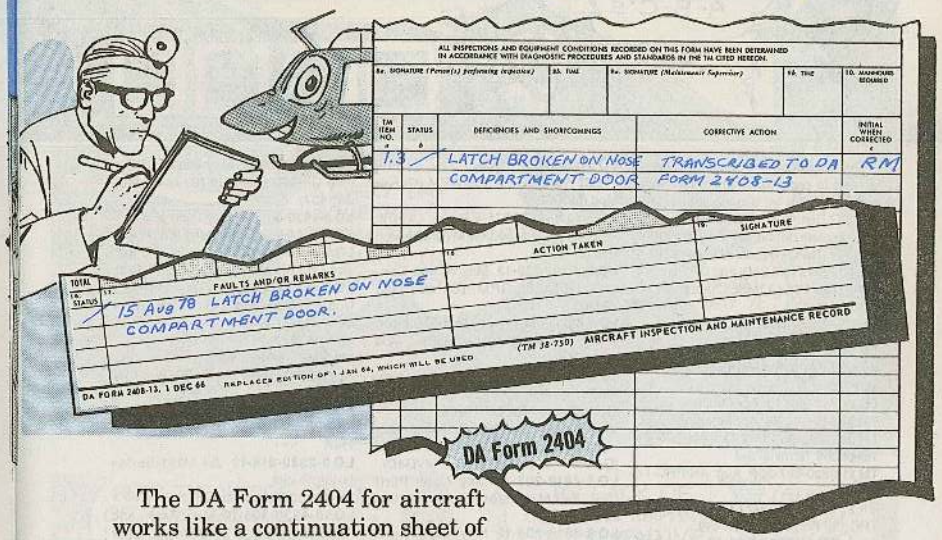
'Course, all the records go in the Equipment Record Folder if you're permanently transferring the equipment or sending it out on extended TDY.

Otherwise, though, the forms stay in the right binder, on the right shelf — with entries you can be sure of.

Remember, nobody said those records had to be clean or neat — just correct!



Aircraft DA Form 2404... Transcription Prescription



The DA Form 2404 for aircraft works like a continuation sheet of the DA Form 2408-13. So when you transcribe an entry from a DA 2404 to a DA 2408-13, you handle it the way you transcribe an entry from one DA 2408-13 to another DA 2408-13.

Write "Transcribed to DA Form 2408-13" in Column d and initial Column e of the DA Form 2404.

Then go by the info in para 4-12c (6)(a)1 of TM 38-750. Write the date of the DA Form 2404 in Block 17 of the DA Form 2408-13, followed by the fault exactly as you worded it on the DA 2404.

Para 3-4e of TM 38-750 tells you how to handle the DA Form 2404 when you're through.

Aircraft Report Dates

You aircraft types going bananas over the difference in reporting dates for the DA Form 1352, DA Form 2406 and DA Form 2715 Unit Readiness Report? Well, they're all back in tune.

Interim Change 1-1 (Jun 78) to AR 95-33 Army Aircraft Inventory, Status and Flying Time changed the DA Form 1352 reporting date to the 15th of the month. Change the date preprinted on the DA Form 1352-1 to show the new reporting period (16th through 15th).

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 (Oct 77), TM's, TB's, etc.; DA Pam 310-6 (Jul 78), SC's and SM's and DA Pam (C) 310-9 (Nov 76), COMSEC pubs.

TECHNICAL MANUALS

TM 5-3810-295-20P Nov Crane, Wheel Mtd 20-Ton Harnischfeger Mod M320RT
TM 9-1440-380-10 Apr Pershing 1A
TM 9-1440-380-20 Apr Pershing 1A
TM 11-5805-357-14-2 Oct AN/TCC-61 Telephone Terminal Set
TM 11-5820-667-20P Aug AN/PRC-77 Radio
Ch 2, TM 11-5820-773-15 Sep AN/TRC-138 Radio Repeater Set
Ch 5, TM 11-5835-224-12 Sep AN/GRA-71 Coder-Burst Transmission Gp
Ch 7, TM 11-5985-262-15 Sep AS-1729/VRC Antenna
Ch 1, TM 11-6140-208-24P Aug BB-451/U Storage Battery

LUBRICATION ORDERS

LO 5-4320-252-12 May Pump, Recip 100-GPM
LO 5-4320-215-12 May Pump, Centrif: Fresh Water; GED 500-GPM (Carver Mod K400S)
LO 5-4320-217-12 May Pump, Centrif: Petroleum, GED 500-GPM (Brielle Mod PP113)
LO 5-4320-220-12 May Pump, Centrif; GED 166-GPM, (Barnes Mod 10-MG)
LO 5-4320-234-12 May Pump, Centrif, 6-In 1500-GPM (Peabody-Barnes Mod US90CCG-1)
LO 5-4320-243-12 May Pump, Centrif, Petrol Pipeline, 500-GPM to 1400-GPM (John Reiner Mod GP 110-5)
LO 5-4320-273-12 May Pumping Assy, Flamm Liquid, GED, 350-GPM (Gorman-Rupp Mod 04A12C-MVG4D)
LO 5-4610-203-12 May Water Purif Unit, Van Mtd. (Met-Pro Mod 3000-2700)
LO 5-4610-205-12 May Water Purif Unit: Base Mtd (Met-Pro Mod 3000-2700A)
LO 5-4610-208-12 May Water Purif Unit; (Litton Sys Mod LPU-420-1) and (Met-Pro Mod 420-1974)
LO 5-4610-222-12 May Water Purif Unit, Trailer Mtd (Met-Pro Mod 600C)
LO 5-4610-223-12 May Water Purif Unit: Base Mtd (Met-Pro Mod 3000V)
LO 5-4930-206-12 May Lube and Service Unit: Trailer Mtd (Gray Co Mod 251-437)
LO 5-4930-207-12 May Lube and Service Unit (Henry Spen Mod 901765-1)
LO 5-4930-217-12 May Lube and Service Unit (Elliott Machine Mod ENG-3)
LO 5-4930-227-12 May Tank and Pump Unit, (Highland Indus Mod 2000)
LO 5-6115-458-12 May Gen Set DOD Mod MEP009A MEP108A
LO 5-6615-464-12 May Gen Set, DED, 15-KW DOD Mods MEP 004A, 103A, 113A
LO 5-6115-465-12 May Gen Set, DED, 30-KW DOD Mods MEP 005A, 104A, 114A
LO 9-2320-218-12 Jul M151-Series ¼-ton Trucks
LO 9-1430-529-12 May AN/MPQ-51
LO 10-4930-204-12 May Tank and Pump Unit, Liquid Dispensing, Truck Mtd
LO 2805-203-12 Jul Engine, Gasoline: 6-HP; Mil Std Mod 4A032-1; 4A032-2

MISCELLANEOUS

DA Pamphlet 310-6 Jul Index of Sup Catalogs & Sup Manuals (Excluding Types 7, 8 & 9)
FM 6-161 Jul Field Arty Radar
FM 9-24H1/2 Oct HAWK

AUDIO-VISUAL STUFF

Available at battalion or post Learning Center.

FILM, VIDEO TAPE

TF 17-6095 NBC (CBR) Protection for Tracked Combat Vehicles (Gas-Particulate Filter Units with M25A1 Mask)
TF 17-6097 M13A1 Gas Particulate Filter Units
905-551-0749-B SQT Scorer Training for CMF 64

TEC LESSONS

020-171-5226-F M85 Machinegun: Clearing, Disassembly, Assembly
030-051-6403-F Crew Maint MAB Part II
030-051-6407-F Emergency OPS MAB
043-441-5411-F Alinement Improved HAWK Launcher, Part 2
043-061-6601-F Lance: M234 Warhead Section, PAL Procedures
043-061-6602-F Lance: M234 Warhead Section, Prefire and Command Disable
121-093-6630-F How to Purge TOW Optical Sight using CSS Nitrogen Purging Kit
121-093-6631-F Repair of TOW Launch Tube
121-093-6633-F Repair of TOW Tripod
121-093-6634-F How to Replace Spring Assy in M233 Telescoping Pedestal
121-093-6637-F How to Replace Dragon Monitoring Set Relay Diode Assy
121-093-6638-F Adjust TOW Missile Guidance Set Power Supply
201-113-4630-F Operator PM Checks, Services, Troubleshooting for Radio TT AN/GRC-142/122
202-113-5203-A Install AN/TSC-76 (Part III)
202-113-5204-A Operation of AN/TSC-76 Part I
202-113-5209-A Install SB-675/MSC (Part I) Power
202-113-5210-A Install SB-675/MSC (Part 2) Telephone
202-113-5211-A Install SB-675/MSC (Part 3) Teletype
202-113-5212-A SB-675/MSC Part I Intershelter Commo
221-301-7201-F Intro to AN/PPS-4A, AN/PPS-5, 5A Radars
551-101-7928-F Setting Up a DX Activity
551-101-7930-F Procedures for Exchange of DX Items
551-101-7943-F Status Cards and Follow-ups
610-091-6056-F Troubleshooting Starting Sys Part I
612-051-9667-F Welded Hull MAB Prop


PEACE FOLLOWED TRIUMPH. COMMAND EMPHASIS ON MAINT-ENANCE FADED.
IT'S GOOD ENOUGH, CENTURION!


IN THE LAZY DAYS OF PEACE, COMMANDERS GOOFED OFF!
AND SO DID THE TROOPS!
KIND OF BAD CRACKS IN THESE SPEARS!
HAH! SO WHAT? WE WON'T BE USING 'EM!


NOBODY GOT ON THEM TO DO THINGS, SO MINOR JOBS BECAME MAJOR REPAIRS.
LET 'EM HAVE FUN. THEY EARNED IT.
ATTILA THE HUN WATCHED!
...AND HIS HORDES STRUCK!
IT'S ATTILA!
REPEATEDLY, ROMANS FELL BACK AS POORLY MAINTAINED EQUIPMENT FAILED...


COMMAND EMPHASIS ON PM COULD HAVE WON THE BATTLE...
BUT NOW... TOO LATE!
WHOLE ARMIES WERE OVERUN BY ATTILA AND HIS HORDES!
THE GODS WERE DISTRESSED!
THEY IGNORED MARS' ADVICE... THE EMPIRE IS DOOMED!


GO, MINERVA, WARN THEM 'TIS THEIR ACHILLES' HEEL!
...ER... THAT'S FROM THE GREEK, OF COURSE!
AH, MINERVA!
(GASP) SHE LOOKS LIKE CONNIE RODD!


I BRING WORDS OF WISDOM FOR THE ARMIES OF ROME!
?
'TIS TOO LATE FOR THEM, MINERVA!
BUT, RETURN WITH ME AND MY COMPANION!
YEH... OUR GUYS COULD USE THIS POSTER!


JOE'S Dope Sheet
FOR AN OUTFIT THAT'S LEAN, KEEN AND MEAN
THE SECRET'S UNSUNG AND UNSEEN:
PM BY THE BOOK
FROM COMMANDER TO COOK
KEEPS YOUR TROUBLE SLATE WIPED NEAT AND CLEAN.
ATTILA TRIUMPHS!
DON'T GOOF-OFF LIKE WE DID!
COMMAND EMPHASIS MEANS —
• Trained men, their skills used
• Equipment maintained, repaired
• Time and tools provided
• Adequate facilities
• Up-to-date publications
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.


I COUNSELED YOUR FIRST ARMY ON COMMAND EMPHASIS... THE LEADERS LEARNED WELL!


WE LISTENED, TOO. EVERY MAN WAS HELD RESPONSIBLE FOR HIS EQUIPMENT!


YOUR COMMANDERS THRU THE YEARS HAVE NEEDED MARS' ADVICE!
IT IS THE ONLY WAY!


THESE ARE THE REASONS YOUR ARMY HAS STOOD FOR MORE THAN 200 YEARS.


COMMANDERS AT ALL LEVELS... CO'S, SHOP CHIEFS, SUPERVISORS, NCO'S, EVEN OPERATORS, ARE RESPONSIBLE FOR THEIR EQUIPMENT.
THERE'S ENOUGH TIME FOR PREVENTIVE AND CORRECTIVE MAINTENANCE.
ALL AUTHORIZED TOOLS AND TEST GEAR ARE KEPT ON HAND...
FACILITIES FOR REPAIR AND TESTING ARE ADEQUATE.


PERSONNEL ARE TRAINED AND, UNDER EXPERIENCED SUPERVISORS, THEIR SKILLS ARE USED.
COMPETENT PLL CLERKS KEEP REPAIR PARTS ON HAND!


UP-TO-DATE TM'S, BULLETINS, LO'S AND PARTS MANUALS ARE AVAILABLE WHEN NEEDED!


WISE LEADERS SUPPORT REGULATIONS SUCH AS AR 570-2, 750-1, DA PAM 750-18... PROVIDING AMPLE TIME ALLOWANCES FOR MAINTENANCE AND SPELLING OUT COMMANDER'S RESPONSIBILITIES...


PM WE DO IT BEST
US ARMY
NOW YOU'VE GOT IT, CAL... THAT'S PUTTING IT RIGHT ON THE LINE!


HUH? DID YOU SAY MARS IS HERE?
THE PLANET?
NO... THE GOD OF WAR!
AND HERE WE ARE IN YOUR TIME, SOLDIER!


TUCKER! MARS IS IN THERE PITCHING COMMAND EMPHASIS ON REGULAR PM!
YEH... I KNOW!


HE'S A FRIEND OF MINE!
?


AFTER A VISIT FROM MARS, EVEN BN. CO'S ARE NEVER THE SAME!
MAJOR! AT ALL LEVELS, I WANT COMMAND EMPHASIS ON PM... WHILE I'M IN THE HOSPITAL!
HOSPITAL, SIR?

AIR MOBILITY

No Safety Needed!

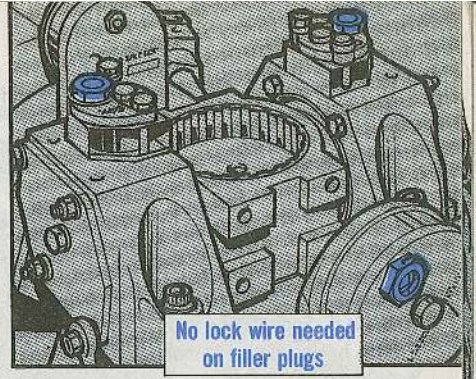
Servicing the Huey main rotor hub pillow block and blade grip oil reservoirs could create a problem.

The reinstalled filler plug had to be secured with lock wire, calling for the services of an eagle-eyed tech inspector.

If a TI wasn't handy, troops often left the safetied filler plug in place and added oil to the grip reservoir thru the vent plug — no safety required!

'Course, the vent plug was never intended to be used to fill the reservoir. With regular use, the steel vent plug stripped out the threads in the grip reservoir. That meant changing the reservoir.

But all this extra sweat and elbow grease is now behind you, knucklebusters. The pubs have been changed to remove any requirement to safety the filler plugs.



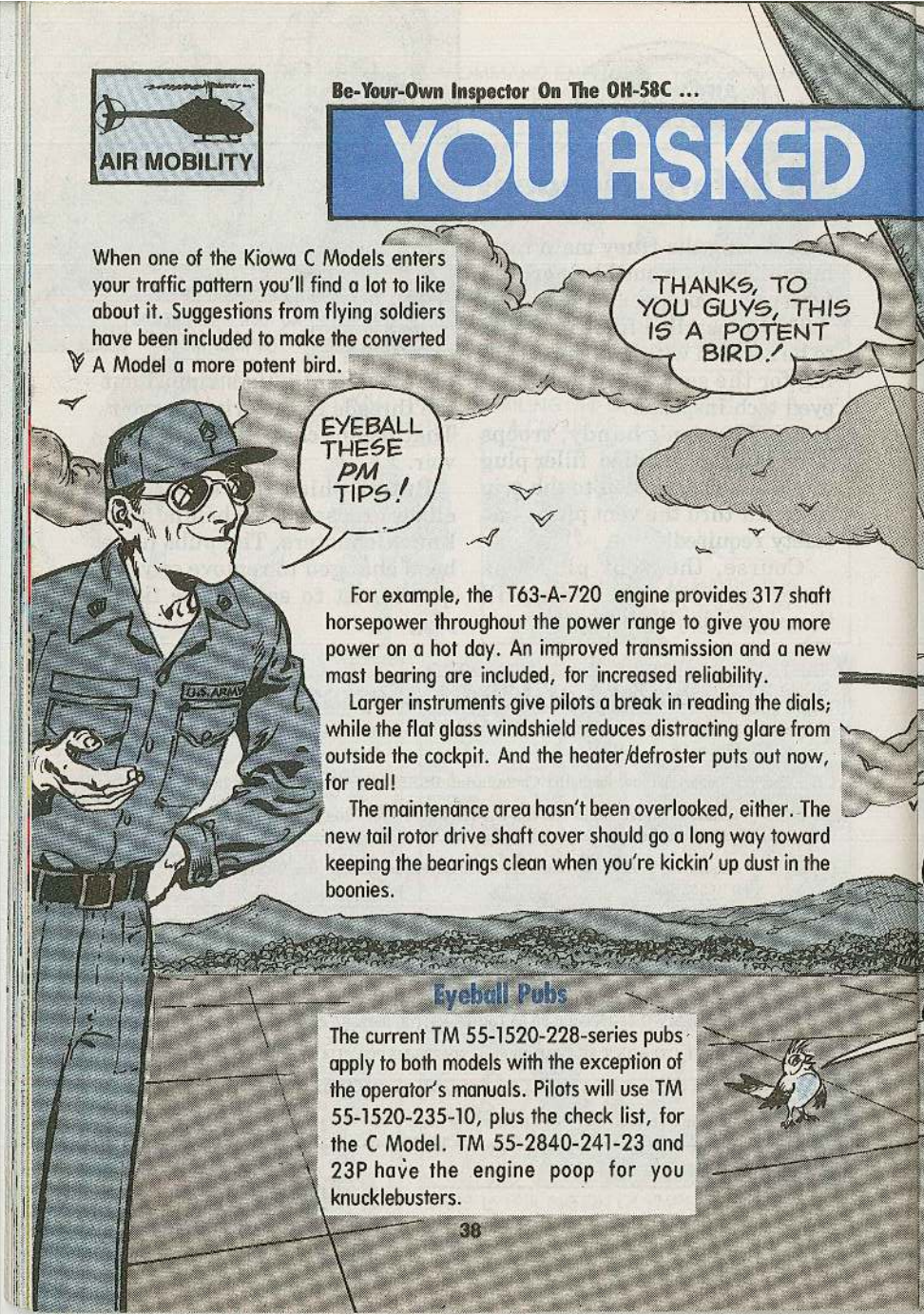
Safety-of-Flight Messages

UH-1-78-12	Revision to TM 55-1520-210-PM, UH-1D/H Phased Maint Checklist DRSTS-MEN(2) 12200 5Z Sep 78
UH-1-78-(No Number)	Washer for Roller Chain Install DRSTS-MEU(2) 122042Z Sep 78
OH-6-78-9 (OH-58-78-18)	Inspect Replacement of T63-A-5A/A-700 Fuel Pump Filter Element DRSTS-MEP(2) 071530Z Sep 78
OH-58-78-19	Request for TT Straps Rejected at the 600 and 900 Hour Inspection DRSTS-MEL(2) 071535Z Sep 78
OH-58-78-20	OH-58A/B/C Tail Rotor Driveshaft Install DRSTS-MEL(2) 142038Z Sep 78
OH-58-78-21	Inspect Tail Rotor Blades, OH-58A/B.C Limited Urgent TB 55-1520-228-20-25 DRSTS-MEL (2) 202225Z
CH-47-78-4	Incorporate Inspection Holes in Latches on CH-47A, B, C, Pilot and Copilot Jettisonable Doors — Urgent MWO 55-1500-210-30-55 DRSTS-MET(2) 081230Z Aug 78
CH-47-78-5	All CH-47C with T 55-L-11D Engines DRSTS-MEP(2) 311415Z Aug 78
CH-47-78-6	Single Engine Op of T 55-L-11 Series Engines in CH-47C DRSTS-MET(2) 261855Z Sep 78
U-21-78-3 (C-12-78-2 UV18-78-1)	One-Time Inspect U-21, RU-21 Series Aircraft, UV-18 (Msg UV18-78-1) and C-12 (Msg C12-78-2, Aircraft Prop Mounting Bolts, TB 55-1500-240-20-1 DRSTS-MEW(2) 161355Z Sep 78

Be-Your-Own Inspector On The OH-58C ...

YOU ASKED FOR IT

When one of the Kiowa C Models enters your traffic pattern you'll find a lot to like about it. Suggestions from flying soldiers have been included to make the converted A Model a more potent bird.



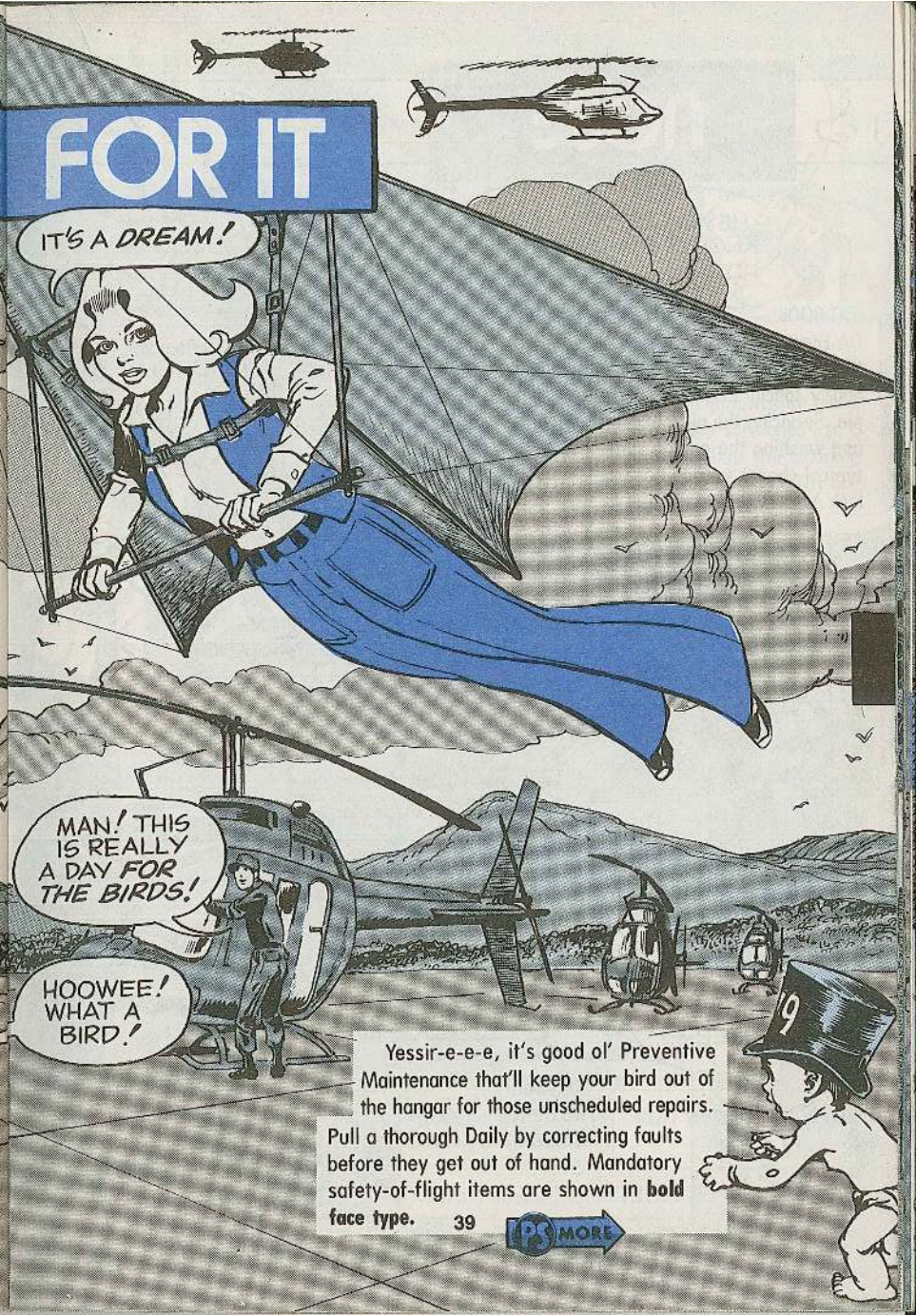
For example, the T63-A-720 engine provides 317 shaft horsepower throughout the power range to give you more power on a hot day. An improved transmission and a new mast bearing are included, for increased reliability.

Larger instruments give pilots a break in reading the dials; while the flat glass windshield reduces distracting glare from outside the cockpit. And the heater/defroster puts out now, for real!

The maintenance area hasn't been overlooked, either. The new tail rotor drive shaft cover should go a long way toward keeping the bearings clean when you're kickin' up dust in the boonies.

Eyeball Pubs

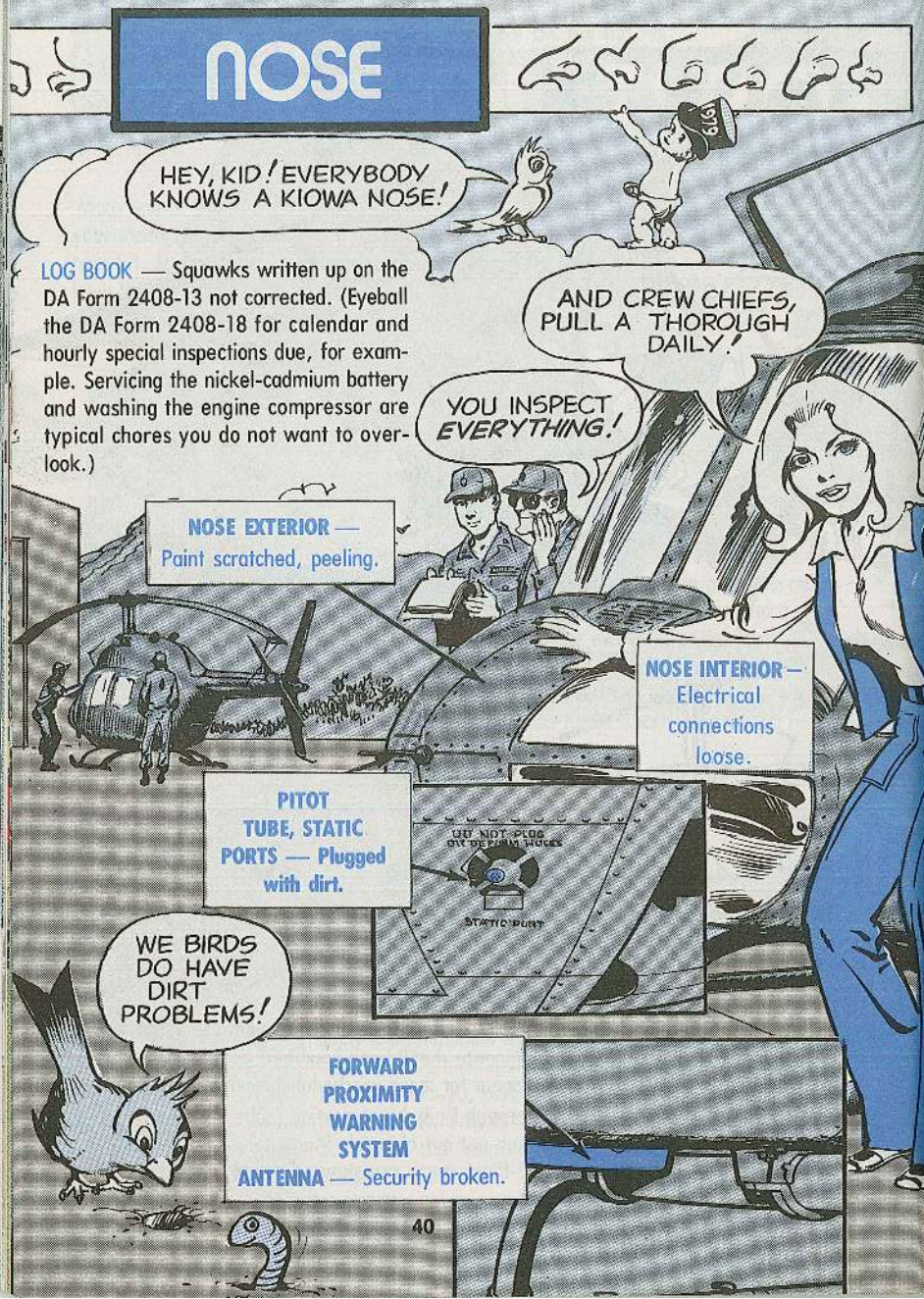
The current TM 55-1520-228-series pubs apply to both models with the exception of the operator's manuals. Pilots will use TM 55-1520-235-10, plus the check list, for the C Model. TM 55-2840-241-23 and 23P have the engine poop for you knucklebusters.



Yessir-e-e-e, it's good ol' Preventive Maintenance that'll keep your bird out of the hangar for those unscheduled repairs. Pull a thorough Daily by correcting faults before they get out of hand. Mandatory safety-of-flight items are shown in **bold face type.**

PS MORE

NOSE



LOG BOOK — Squawks written up on the DA Form 2408-13 not corrected. (Eyeball the DA Form 2408-18 for calendar and hourly special inspections due, for example. Servicing the nickel-cadmium battery and washing the engine compressor are typical chores you do not want to overlook.)

NOSE EXTERIOR — Paint scratched, peeling.

NOSE INTERIOR — Electrical connections loose.

PITOT TUBE, STATIC PORTS — Plugged with dirt.

FORWARD PROXIMITY WARNING SYSTEM ANTENNA — Security broken.

WINDSHIELD, WINDOWS — Dirty. (Never use hard, dirty cloths when cleaning and polishing transparent plastics or glass windshields. To prevent scratches use a soft, clean cloth and follow the cleaning poop in Paras 2-37 and 2-38 of TM 55-1500-333-24 (Oct 74), every time.)

ANTI-TORQUE PEDALS — Binding

UHF ANTENNA — Not secure in mount.

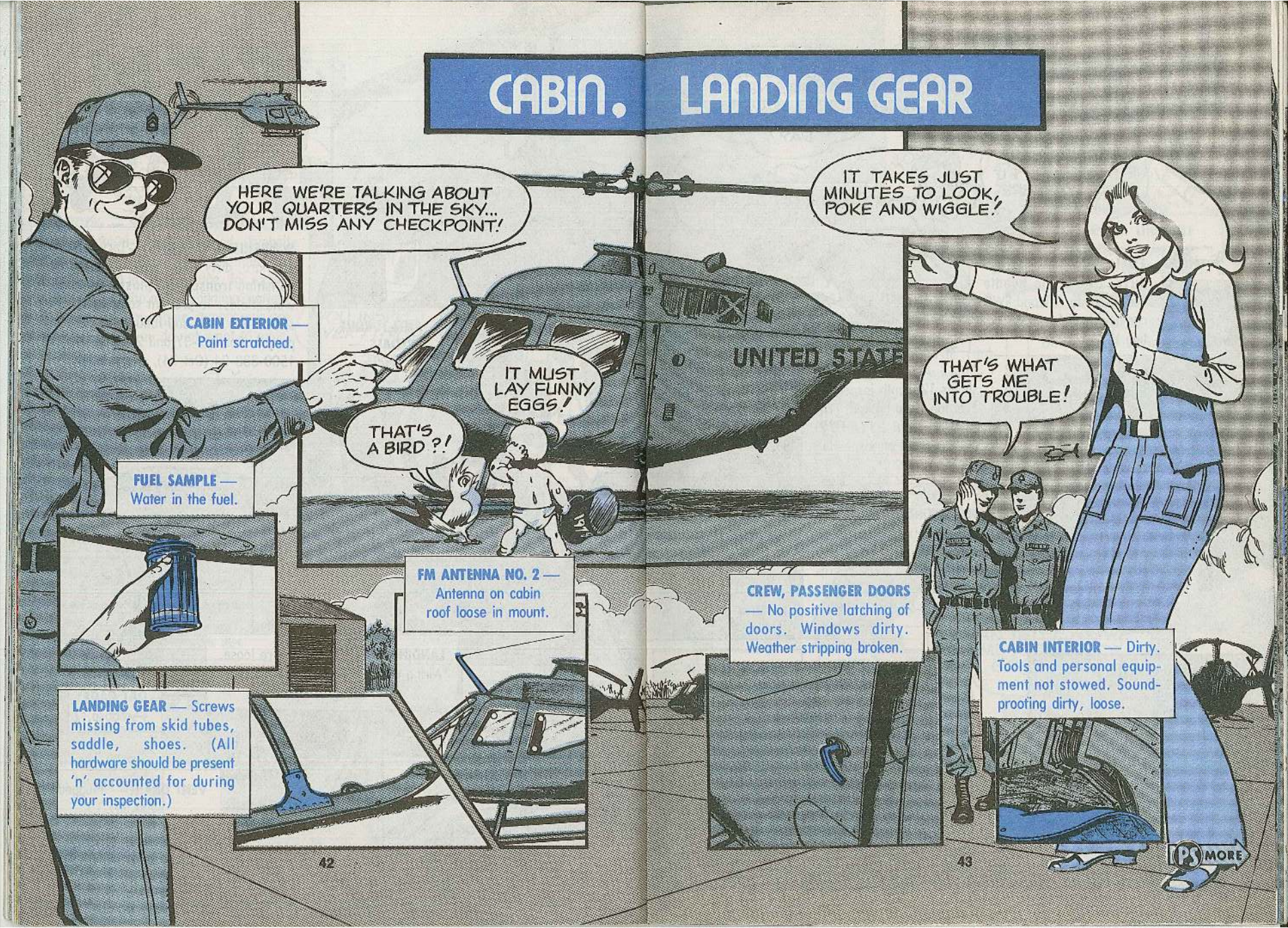
LANDING LIGHTS — Enclosure loose. Wiring chafing. Brown wire indicates overheating conditions.

OAT GAGE — Loose.

VENT DRAIN — Plugged with dirt.

PS MORE

CABIN. LANDING GEAR



CABIN EXTERIOR — Paint scratched.

FUEL SAMPLE — Water in the fuel.

FM ANTENNA NO. 2 — Antenna on cabin roof loose in mount.

LANDING GEAR — Screws missing from skid tubes, saddle, shoes. (All hardware should be present 'n' accounted for during your inspection.)

CREW, PASSENGER DOORS — No positive latching of doors. Windows dirty. Weather stripping broken.

CABIN INTERIOR — Dirty. Tools and personal equipment not stowed. Soundproofing dirty, loose.

PS MORE

CABIN CONT'D

I'LL CHECK MY FUEL VALVE IF SOMEBODY'LL TELL ME WHERE IT IS!

I MUST SAY... A FLYING NEST NEEDS LOOKING AFTER EVERY DAY!

FUEL VALVE — Handle dirty. (Move the handle from FWD to AFT and FWD again to check for proper action.)

HEATER CONTROL — Loose in mount.

FUEL SHUTOFF CONTROL, LINKAGE — Loose, binding.

FIRST AID KITS — Tag shows 12-month inspection overdue. Seal broken. (TM 55-1500-328-25 (Jul 72) has the word on inspecting the kit.)

OVERHEAD CONSOLE — Panel loose.

FIRE EXTINGUISHER — Seal broken. Six-month weight test not done, according to inspection tag. (The charging poop is in TM 55-1500-204-25/1 (Apr 70).

UTILITY LIGHT — Loose in mount, wire frayed.

SEATS — Cushions dirty, webbing loose. Passengers seats secure?

ARMOR PLATING — (when installed) — Not secure.

EAT ALL YOUR BIRDSEED, IF YOU WANT TO BE AN OH-58C SOMEDAY!

COLLECTIVE, THROTTLE CONTROL — Does not move freely. Throttle sticks.

SAFETY BELTS, SHOULDER HARNESS — Cut, fraying. Mounting hinges and brackets cracked. Inertia reel does not retract smoothly.

AFT ELECTRICAL SHELF — Dirty. (Never store tools or clothing in this area or you'll short out the works, for sure!)

COMPASS CORRECTION CARD — Out of date.

WITH THIS KIND OF BIRD-CARE, KID... I CAN TELL... YOU'RE GOING TO BE A GOOD YEAR!

1979

CYCLIC CONTROL — Does not move freely.

PS MORE

TRANSMISSION. PYLON

NOW LET'S MAKE SURE YOUR POWER IS ALWAYS GOING TO GET WHERE IT COUNTS, SERGEANT!

RIGHT, CONNIE, YEAH, SURE!

MAIN ROTOR HUB — Reservoirs leaking, need servicing.

MAIN ROTOR BLADES — Nicks? Dents? Cracks? Erosion of the leading edge and evidence of bond failures? Corrosion on weight retention screw holes? (Eyeball TM 55-1520-228-23 for other inspection info.)

MAIN ROTOR MAST — Visible area nicked, scratched, corroded.

TRANSMISSION FAIRING — Fastener broken.

MAST BOOT — Loose, dirty.

ENGINE AIR INLET BELLMOUTH, PLENUM AREA — Damage, caused by foreign objects?

SWASHPLATE, LEVER, SLEEVE, LINKAGE — Loose. Swashplate support base drain holes plugged with dirt.

SAND AND DUST SEPARATOR — Particle ejection opening plugged with dirt.

TRANSMISSION SIGHT GLASS — Stained, difficult to read oil level.

TRANSMISSION — Loose connections. Oil level low.

WHAT'S YOUR FAVORITE BIRD... ME OR AN ORIOLE?

1979

UH... ROAST CHICKEN OR TURKEY!

PYLON ISOLATION MOUNT — Cover cracked. (Eyeball the drag pin to static stop, or cabin roof, for foreign objects.)

PYLON SUPPORT LINKS — Visible crack.

PS MORE

TRANSMISSION, PYLON CON'T

ROTOR TACHOMETER GENERATOR, HYDRAULIC PUMP, TRANSMISSION OIL PUMP — Loose.

TRANSMISSION OIL COOLER — Duct plugged with dirt. Cooler loose.

TRANSMISSION OIL FILTER — Leaking oil.

MAMA, WHERE'S MY TRANS-MISSION ?

OPEN 'ER UP FOR A GOOD LOOK !

MAIN DRIVE SHAFT COVER — Dirty. (Eyeball the edges of the cover for grease leakage; it'll attract dirt.)

YOUR DAILY CHECK IS THE *ONLY* WAY TO THE PERFORMANCE YOU WANT !

POWER TURBINE GOVERNOR (N2) — Linkage loose, does not operate freely.

CYCLIC, COLLECTIVE CONTROL LINKAGE — Loose. (Check for security of the attachment bolts by attempting to move the nuts with finger pressure. It's not necessary to remove the cotter pin.)

HYDRAULIC COMPONENTS — Lines loose, chafing, leaking. (Be sure you check the collective actuator bellcrank cover for a missing rubber flipper, or for flipper bond failure.)

HYDRAULIC FILTER ELEMENT — Indicator buttons popped, filter clogged!

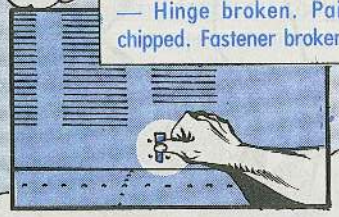
HYDRAULIC SERVO ACTUATOR SUPPORT — Corroded, cracked, loose.

PS MORE

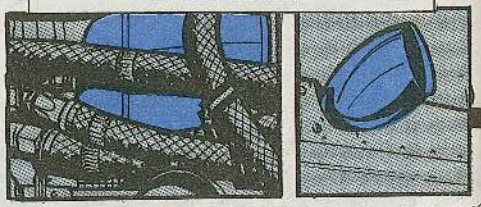
ENGINE

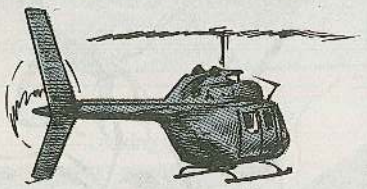
NOW WE'RE TALKING *BIRD POWER!*

ENGINE COWLING, FAIRING — Hinge broken. Paint chipped. Fastener broken.

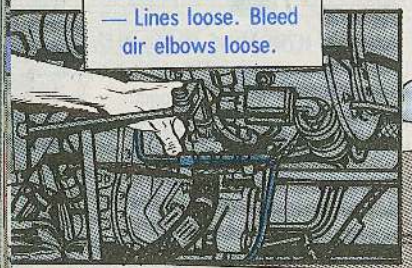


COMBUSTION CHAMBER, HOUSING, TURBINE SUPPORT, EXHAUST DUCTS — Cracked, dented, burned, buckled.



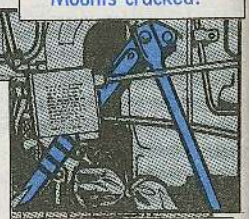


ENGINE ACCESSORIES — Lines loose. Bleed air elbows loose.



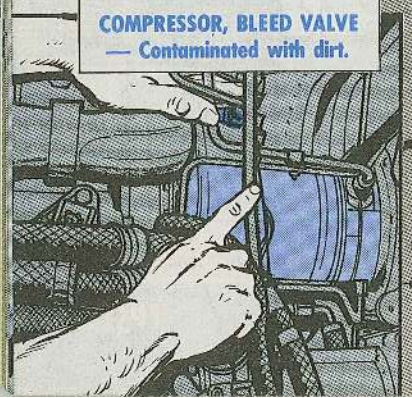
COMPRESSOR ARMOR (when installed) — Loose.

ENGINE MOUNTS — Loose bolts, nuts. Mounts cracked.

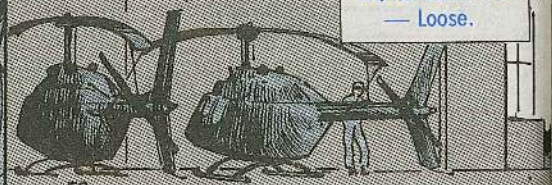


LINEAR ACTUATOR — Loose electrical leads.

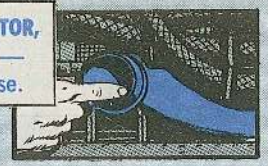
COMPRESSOR, BLEED VALVE — Contaminated with dirt.



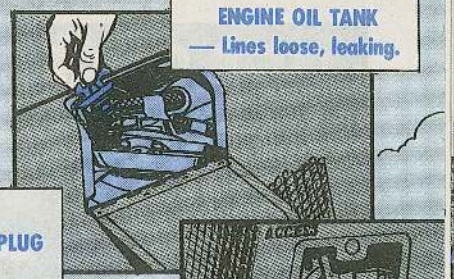
N1, N2 LINKAGE — Loose.



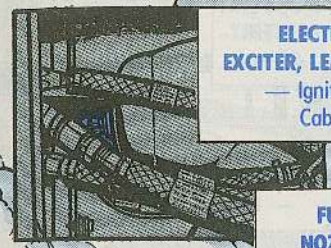
STARTER GENERATOR, EXHAUST DUCT — Exhaust duct loose.



ENGINE OIL TANK — Lines loose, leaking.



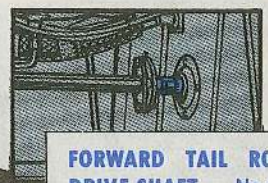
ELECTRICAL CABLE, EXCITER, LEADS, IGNITER PLUG — Igniter plug loose. Cable chafing.



OIL COOLER BLOWER, DRIVE SHAFT — Blower cracked, loose. Dirt and debris in blower.

FUEL NOZZLE, LINES — Lines loose, leaking.

AFT FAIRING — Fasteners broken. Paint chipped.



TO GUARD AGAINST *FOD* ...KNOW WHERE ALL YOUR TOOLS ARE, *SARGE!*

I'M WITH YOU, CONNIE!

FORWARD TAIL ROTOR DRIVE SHAFT — No freedom of movement on the splined adapter.

PS MORE

AFT FUSELAGE

BATTERY, FUEL VENTS — Plugged. (If the avionics compartment is loaded with tools, hardware, paper, rags and what not, clean it out. Otherwise, you could short out the works — for real!)

BATTERY — Loose.

BATTERY PAD (if installed) — Dirty.

ANTI-COLLISION LIGHT — Cracked.

NAVIGATION LIGHTS — Cracked

FUEL FILLER CAP — Seal worn out.

AIR DUCTS —Wire broken.

EXTERNAL POWER RECEPTACLE DOOR — Hinge broken.

AVIONICS COMPARTMENT — Foam Dirty

AVIONICS COMPARTMENT DOOR — Hinge broken.

5 A

TAIL BOOM

TAIL BOOM EXTERIOR — Buckled? Wrinkles in the skin?

MY TAIL NEVER BOOMS!?

EYEBALL THE ENTIRE TAIL BOOM!

DON'T WORRY, CONNIE, THIS BIRD CAN'T HIDE ANY-THING FROM ME!

HORIZONTAL STABILIZER — Working rivets.

TAIL LIGHT, SUPPORT — Light cracked. Support loose.

BALLAST (if installed) — Not secure.

YOU CARRYING ANY BALLAST, KID ?

1979

VERTICAL STABILIZER —Tail skid, loose

ANTENNA LEADS — Antenna wires frayed.

PS MORE

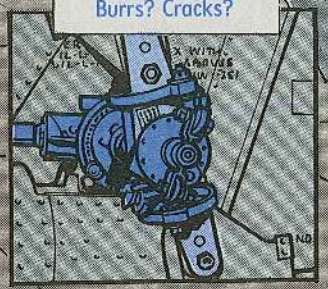
TAIL BOOM CON'T

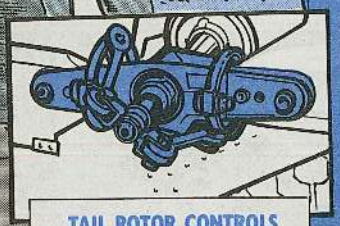
TAIL ROTOR BLADE — Cracked. (Eyeball the blade 7 inches outboard from the butt end of the blade and about 1.5 inch aft of the leading edge. Any crack means the blade has to be replaced.)

THAT 'BOUT WRAPS IT UP, TROOPS... KEEP 'EM FLYING!

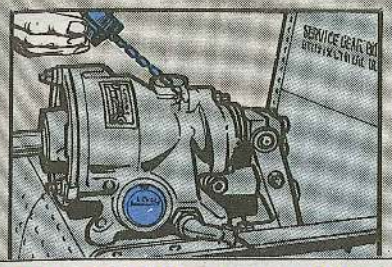
MINE'S A-OK!

TAIL ROTOR HUB, BLADE ASSEMBLY — Secure? Scratches? Nicks? Dents? Burrs? Cracks?

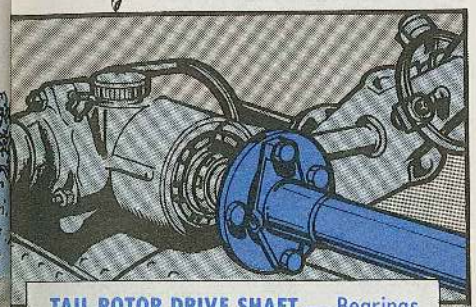




TAIL ROTOR CONTROLS —Attachment bolts loose



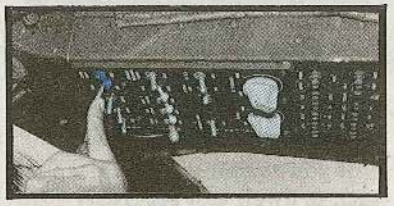
TAIL ROTOR GEAR BOX — Loose. Oil level low. Vent plugged. Sight glass cracked, stained.

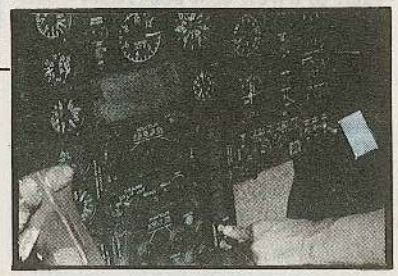


TAIL ROTOR DRIVE SHAFT — Bearings overheating, leaking grease. Bonded fittings loose. Splined adapters do not move freely. (You don't have to wipe grease from the seal because it's probably contaminated, and you wouldn't want to force dirty grease into the bearings.)

POWER ON CHECKS

Turn on the battery, Kiowa mechs. Test the warning and caution panel lights, the interior and instrument panel lights, and the exterior lights, to see that they work.



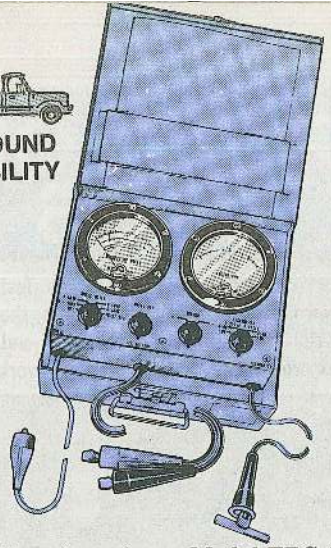


Once you complete your inspection and take the corrective actions necessary, service the bird with oil and fuel and your bird is ready for the wild blue. Go ahead and sign off the Daily on the DA Form 2408-13.

YOU'RE READY, BABY!

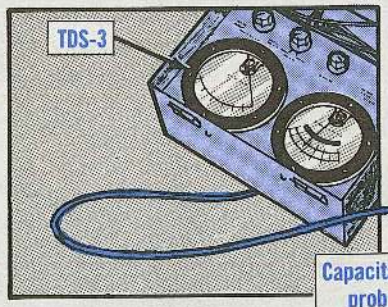
PS END

M880 TACH & DWELL ARC



If you're using a Model TDS-3 tach & dwell test set (NSN 4910-00-788-8549) on your M880-series trucks' solid state ignition system, watch your arc.

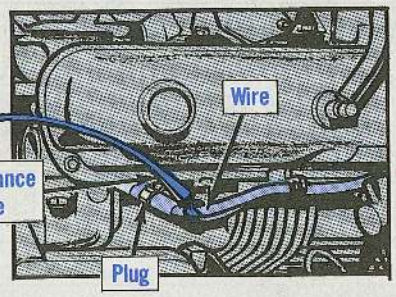
The caution on the TDS-3 and solid state ignition is that you can't get the capacitance pick-up probe closer than 2 inches to the sparkplug when you're measuring engine speed (the



probe's the one that clips to the plug wire). You'll get an arc that'll damage the TDS-3.

Reason: Solid state systems put out more than 35,000 volts, more than 3 times that of other systems. If you clip the probe to the wire near the plug, you'll get an arc from plug to probe that'll put your test set down.

Fact is, if sparkplug wires are deteriorated or damaged, you can put the set down even if you're at least 2 inches from probe to plug.

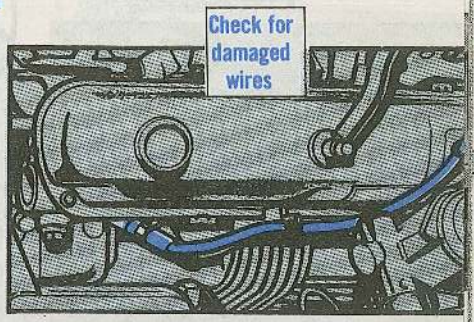


So, if you see bad wires, replace them. Then, make your tests.

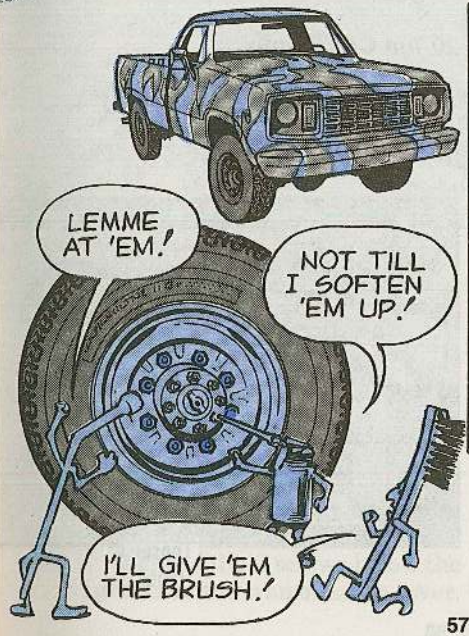
You can get new plug wires for them with Part Nos. 3895940, 3895941, 3895942 and 3895943. They're all coded FSCM 86403. Eyeball *TM 9-2320-266-20P (Feb 78)* for the wires you need if you don't need a whole set.

If the TDS-3 is damaged, your support can beef it up by replacing the R11 and R13 carbon film resistors with R11 and R13 carbon composition resistors (NSN 5905-00-279-2673 (R11) and NSN 5905-00-279-3504).

The carbon composition resistors can withstand more current.



M880-Series 1 ¼-Ton Trucks ...



Wheel Stud Saver

Dear Editor,

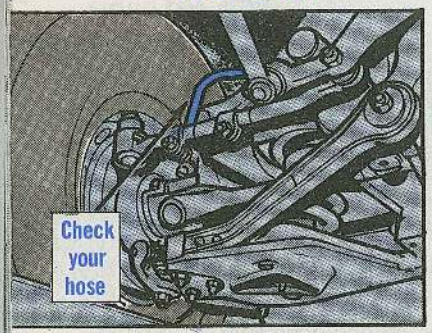
We had a lot of trouble with our M880 wheel studs breaking when the wheels were taken off during scheduled services. Because of rust and paint on those fine threads, the stud twisted off when the lug nut was turned.

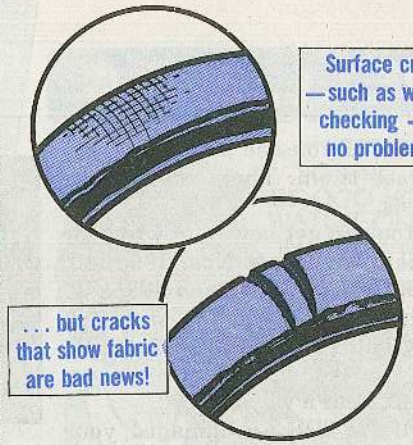
Then the motor pool saved the day by cleaning each stud with a wire brush and applying penetrating oil while working the nut back and forth.

CPT L. T. Kukoski
APO New York

(Ed Note: Forewarned is forearmed. Use penetrating oil *before* trying to turn the lug nut. Those fine threads won't hold up if muscle alone is used to bust the rust.).

Cracked Brake Hoses?

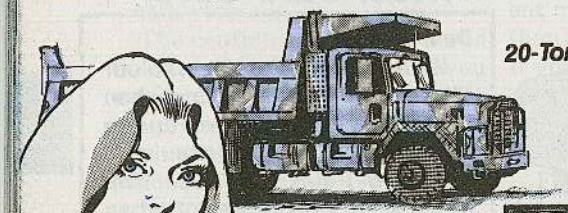




Surface cracking is no longer a good reason for replacing a brake hose. But if a crack goes to the fabric, you do put on a new brake hose.

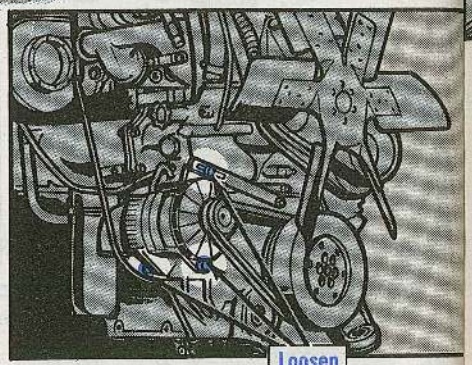
That's the word in the July 1978 edition of TB 9-2300-405-14, Mandatory Brake Hose Inspection and Replacement — Tactical Vehicles.

This point is made, too, in TB 43-0001-39-1 (Apr 78), page 2-94.2.



20-Ton CCE Dump ...

New Alternator Belt Set

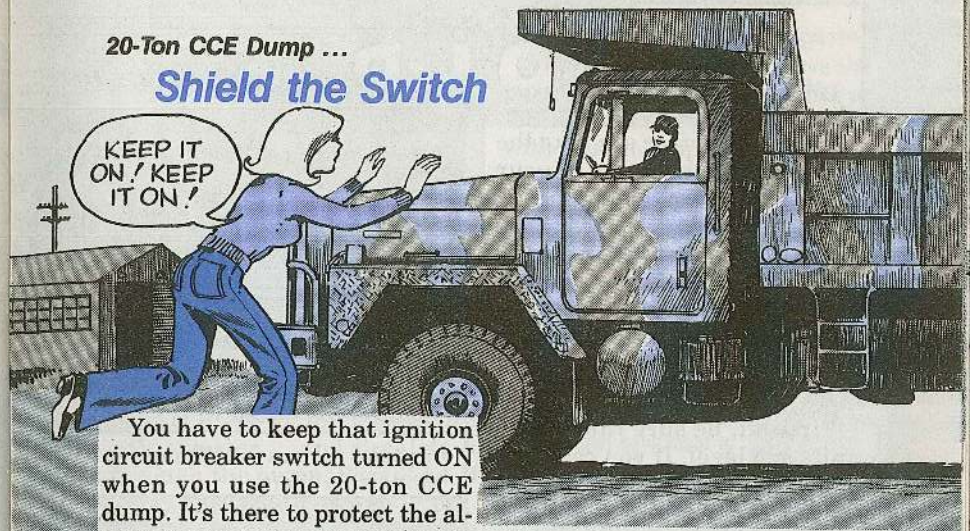


The next time you replace the 20-ton CCE dump truck's alternator belt set, use NSN 3030-00-832-4312. This gets you a longer set that you put on without having to remove the alternator. The set that comes with the truck is too short to let you do that.

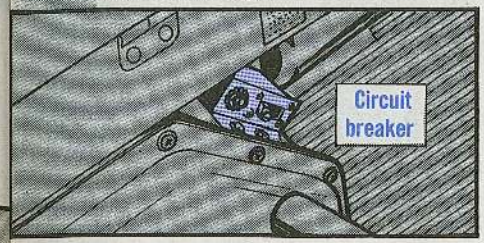
Jot down the belt set NSN on page 73 of your MSP5-3805-254 (Aug 75).

20-Ton CCE Dump ...

Shield the Switch



You have to keep that ignition circuit breaker switch turned ON when you use the 20-ton CCE dump. It's there to protect the alternator against reverse polarity. If it's turned OFF, the alternator will not charge.

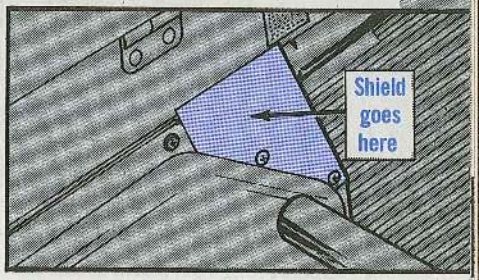


The little rascal is mounted on the dash in just the right place to get bumped and turned OFF. If the switch is turned OFF or ON while the engine is running, the current surge will blow the diodes in the alternator.

Get your mech to make a cover to shield the switch. The cover can be made from scrap steel, aluminum, plastic, etc.

Remove the 2 screws below the switch on the transmission cover. Mount the shield and replace the screws.

If the switch is turned OFF because of reverse polarity, you can



reach up behind the cover and reset it.

Remember, tho. Don't turn it ON or OFF while the engine is running.

NSN 5925-01-023-9114 will get a new ignition circuit breaker switch. Jot it down by PN 513068C1 on page 75 of your MSP 5-3805-254 (Aug 75).

COMBAT SUPPORT

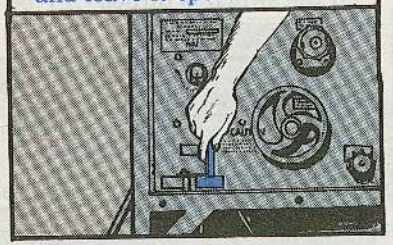
Care for a C-O-L-D M12A1 Decon

Freezing weather can take the punch out of the pump of your ABC M12A1 decontaminating apparatus as quickly as a heat wave can take the ice out of cream.

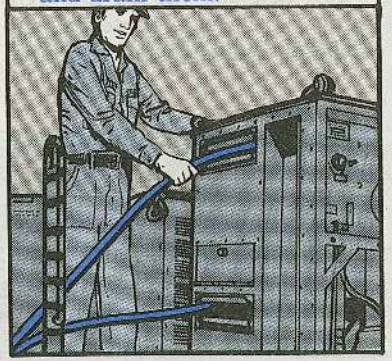
Without a heat wave, you can prevent freeze-up pump failure in a couple of minutes after you finish using your decon. Just drain it.

First off, be sure the M12A1 units are level. If you can't get level, keep the pump unit drain on the low end. Now:

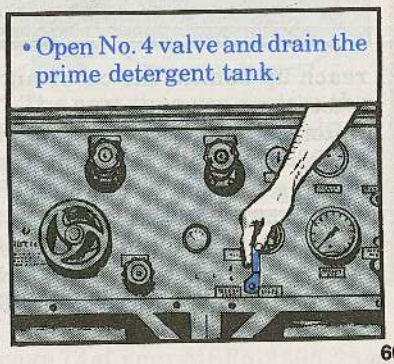
• Open the pump drain valve ... and leave it open.



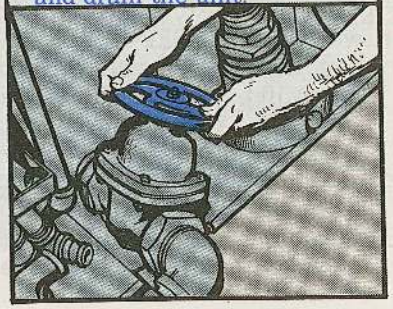
• Extend all hoses all the way and drain them.

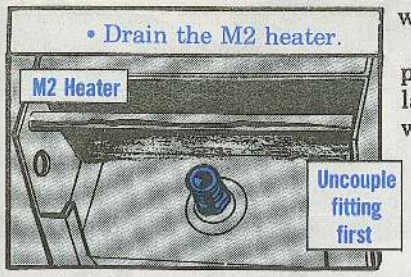


• Open No. 4 valve and drain the prime detergent tank.



• Open the tank unit drain valve and drain the unit.

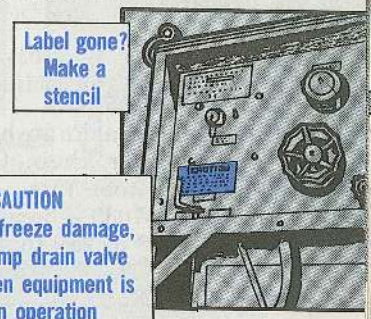




• Go inside where it's warm. Have a cup of coffee.

If you're shut down for more than 24 hours, don't forget to add 3 pints of PL-S (winter) lube oil to 3 gals of water ... and circulate it through the pump. Para 3-5d of TM 3-4230-209-12 spells it out. The lube/water mix is good for the pump drain and No. 4 valves as well as the pump working parts.

Finally, if the caution above the pump drain valve, either stencil or label, is missing get a stencil cut with this caution:



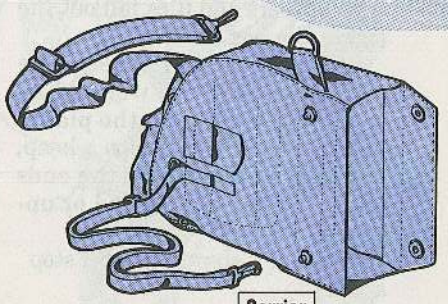
The "caution" can be in ½-in letters, with the remainder ¼-in.

M15A1 Carriers . . .

Hold The Suds!

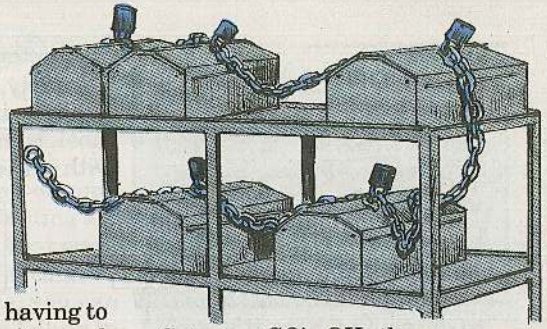
You can clean and sanitize your M17/M17A1 CB mask like it says in Sect III, Table 3-1 of TM 3-4240-279-10, but hold the suds when it comes to your M15A1 mask carrier

Clean the carrier with a damp cloth, but don't give it a bath. It'll shrink and won't hold your mask.

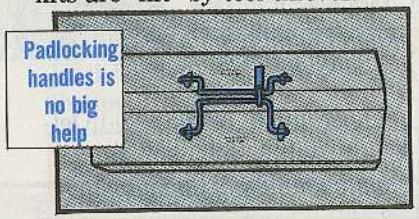


General Mechanics, Automotive ...

Tool Box Hit Fix



A lot of mechanics are having to buy tools for their General Mechanics tool kits — NSN 5180-00-177-7033 — because their kits are "hit" by tool thieves.



Seems the portable tool box — NSN 5140-00-498-8772 — is a poor security risk as a tool keeper. Padlocking and chaining the handles together is no help; the thieves simply spring the handles out of their hinges!

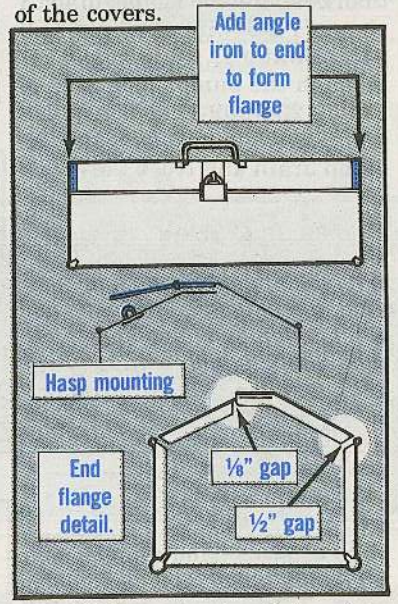
Or, when the thief turns the box upside down — still padlocked and hinges intact — smaller tools like screwdrivers and files fall out the end of the box.

Some newer tool boxes come with a padlock hasp welded between the handles on the piano-hinged covers. This helps a heap, but tools still spill out the ends when the box is upended or upturned.

Here's a 2-step fix that'll stop a thief.

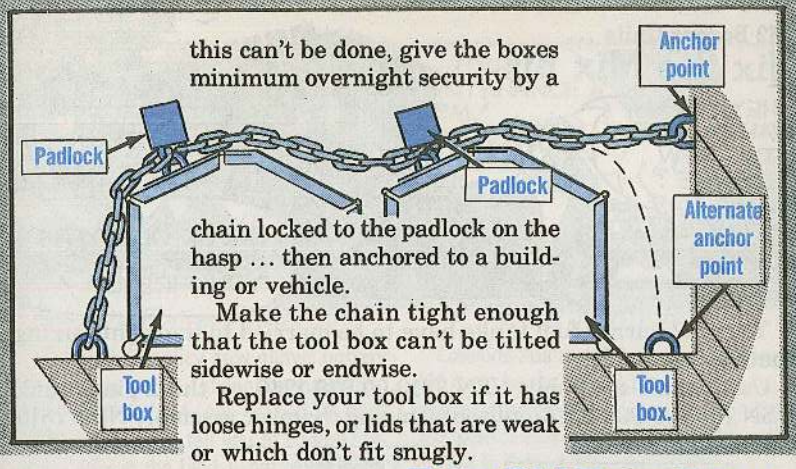
Get your CO's OK, then ...

1. Weld or rivet a steel hasp — 5340-00-664-1707 — to the center of the covers.



2. Weld or rivet a ½-in wide piece of 20 gage angle iron to the ends of the lids to form a cover flange. Add this flange only if this kind of protection is needed.

Take this tool box security business a step further. Keep the padlocked boxes in a secure area. If this can't be done, give the boxes minimum overnight security by a chain locked to the padlock on the hasp ... then anchored to a building or vehicle.



Make the chain tight enough that the tool box can't be tilted sidewise or endwise.

Replace your tool box if it has loose hinges, or lids that are weak or which don't fit snugly.

Toss Old Face Paint

You may become a peel-face instead of a paleface if you use the wrong war paint — camouflage face paint that's too old. If you have tubes of any such paint with old-style stock numbers, FSN 8510-161-6202, -6203, or -6204, chuck it. The good stuff has these numbers:

NSN 6850-00-161-6202, -6203, or -6204. Depots know this — but you might have some old paint on post.

Hot Filter Element NSN

Use NSN 4330-00-903-5389 when you order the fuel filter element for your 250,000-BTU portable heater's fuel filter. This NSN replaces 2910-00-153-8064 that's shown for Item 7, Fig. 13, TM 10-4520-201-24P (Mar 72). Getting this 97-cent item could keep you from buying the $15 fuel filter.

M2 Burner Units ...

Nix the Mix Biz

Your M2 burner fuel tanks have to be married to the right mixing chamber assembly.

Use U-tank assembly NSN 7310-00-879-1740 or the 2-piece tank NSN 7310-00-999-2546 only with mixing chamber assembly NSN 7310-00-999-2497.

A new U-tank — NSN 7310-01-016-2242 — has been shipped to some units ... and they tried to make it fit their mixing chamber. No deal!

If you get this U-tank, use it only with its matched mixing chamber assembly NSN 7310-01-016-2241.

A universal mixing chamber assembly, NSN 7310-01-062-7074 will make the supply scene one of these days. It will work with either the old or new burner tanks. Until you get it, never mix fuel tanks with the wrong mixing chamber.

Back to Battery Charging

A switch in policy now allows battery charging by organizational maintenance. TM 9-6140-200-14 (Apr 78) and DA PAM 750-34 (May 78) tell you to charge batteries only in the field—not in garrison. But this has been changed as a result of a DA study. You can now charge any battery that's in service or in equipment. DS keeps the battery shop, though. They take care of activation of new batteries, testing and recharging of used batteries, and battery issue. TARCOM Msg DRSTA-MCC 091122Z Nov 78 has the word.

OEA NSN's

The OEA oil (Mil Spec MIL-L-46167) called for by some recent LO's is the same as APG PD #1. You can get it in 3 sizes:

1-qt can, NSN 9150-00-402-4478
5-gal can, NSN 9150-00-402-2372
55-gal drum, NSN 9150-00-491-7197.

Turn 'Em In!

Check your storage bins and shelves. If you have any of these excess repairables, turn 'em in.

	NSN
Turbine Engine, T55-L11-ASA.	2840-00-398-9671
Pump, Axial Piston	4320-00-134-1024
Pump, Sub, Acft	2915-00-017-9021
Generator, Engine	2920-00-617-7593
Engine, Diesel	2815-00-462-7484
Engine, Diesel	2815-00-961-1686

2407 Formula

Columns 20b and 20h of your DA Form 2407 can be real headaches—unless you have the formula! Put a failure code in Column 20b for every A, C, H or R action code you put in Column 20a. Put an NSN in Column 20h for each component, assembly or part you write in Columns 20c, 20d or 20e with an action code of A, L, R, S or U. If you can identify an individual NSN to the adjustment application, you also need an NSN in Column 20h for action code B.

Cap and Plug Set

Need some plastic caps and plugs to protect your repair parts and components? NSN 5340-00-450-5718 will get you a package of 156 in various sizes.

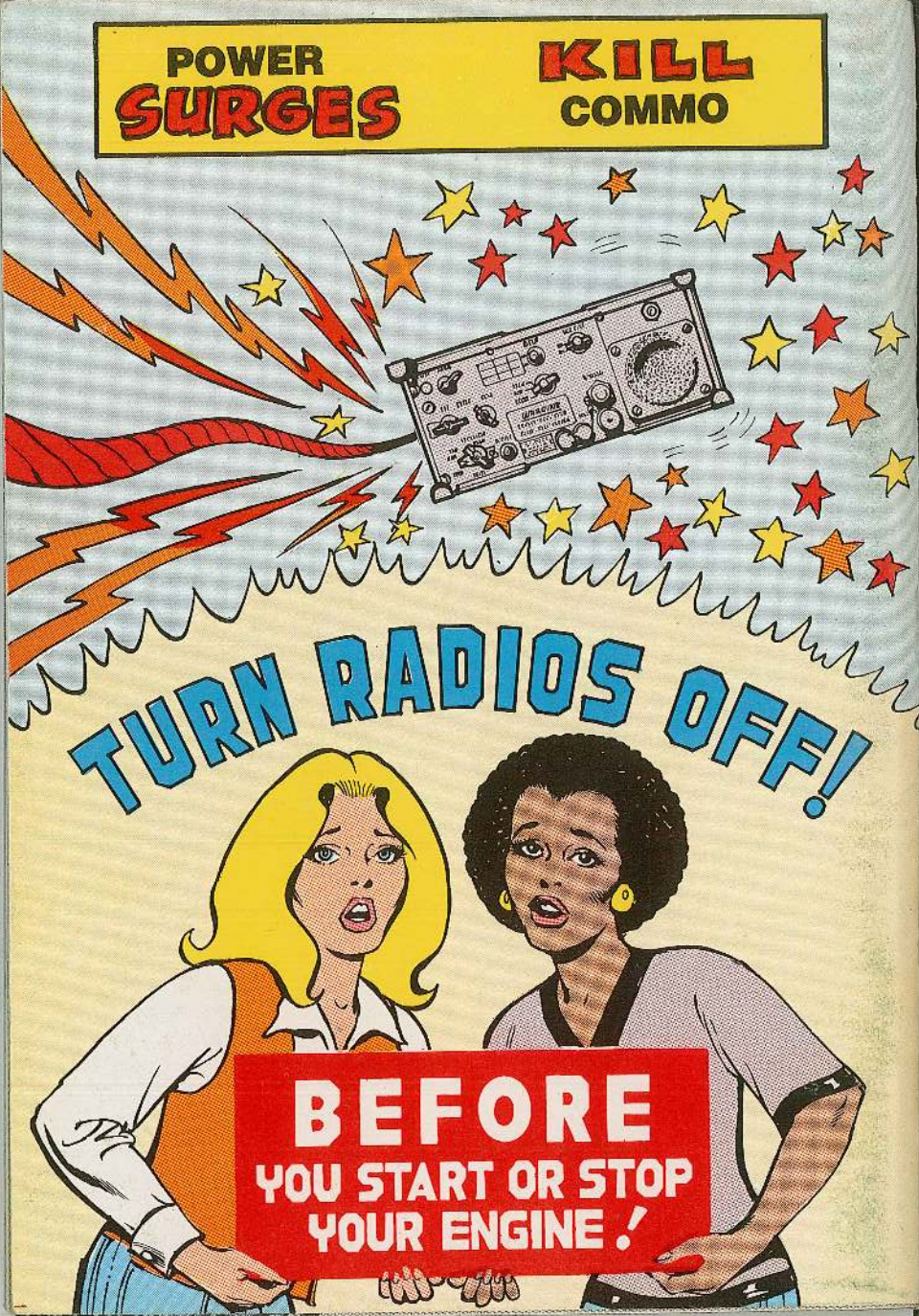
No Can Flip on M151

Pay no mind to the picture of the M151 on page 46 of PS 310. That 2-faced paint scheme is meant for everything except ¼-tonners. The M151-series carries the gas can only one way—spout faced away from the tailpipe.

No Flying Dittos

Stop! Keep Off! Forget 'em! Never use ditto marks on any aircraft records TM 38-750 tells you to keep. Ditto marks on aircraft forms are O-U-T.

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


POWER
SURGES
KILL
COMMO
TURN RADIOS OFF!
BEFORE
YOU START OR STOP
YOUR ENGINE!