

Issue 326

PS

January
1980

THE PREVENTIVE MAINTENANCE MONTHLY

WHEWEEE--
YOU'LL NEED
PLENTY GOOD
PM,
SONNY!

?

80's

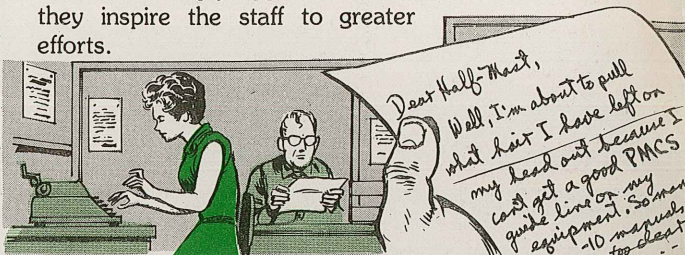
70's

See
Every Page
of PS

MURPHY
ANDERSON

REFLECTIONS

A lot of people say a lot of kind things about PS Magazine and its letter-answering service. The comments are deeply appreciated and they inspire the staff to greater efforts.

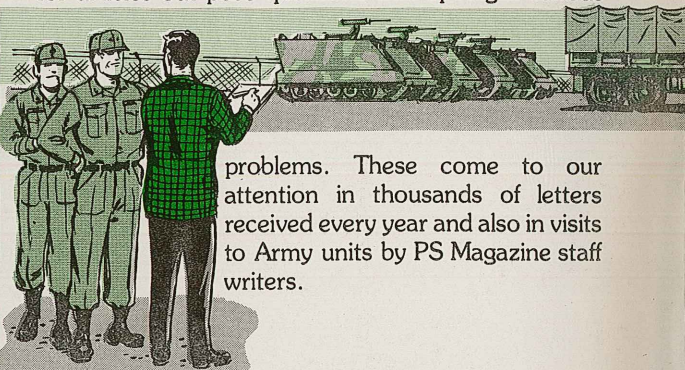


But what these readers are really commending is the combined effort of many people outside of the magazine staff—people who contribute ideas, knowledge, experience and, above all, interest in preventive maintenance of Army equipment.



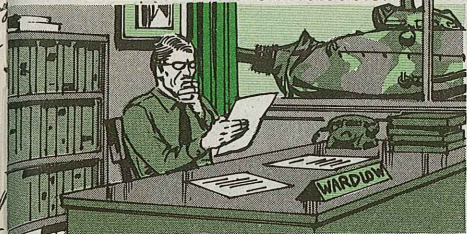
Information in PS Magazine and its letter service is the product of an Army-wide team effort.

Soldiers—privates to generals—not only offer ideas for articles but pose questions that spotlight serious



problems. These come to our attention in thousands of letters received every year and also in visits to Army units by PS Magazine staff writers.

With the wide range and growing complexity of Army equipment, we rely heavily on the experts in the Army's National Maintenance Points and other maintenance agencies to resolve problems and insure that our information is as accurate and as complete as possible. Their contributions are invaluable.



The real value of a product can be measured, however, only by the effectiveness of its application. So



final credit goes to the soldiers who make use of the information in PS Magazine.

OUR THANKS TO THE TEAM!



PS THE PREVENTIVE MAINTENANCE MONTHLY

Published by the Department of the Army for the information of all soldiers assigned to combat and combat support units, and all soldiers with organizational maintenance and supply duties.

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

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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

M48/M60 Tank Families...

TANK TRIGGER

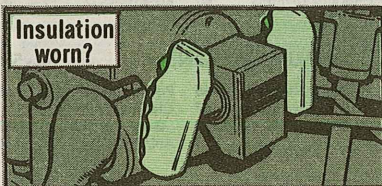
Troubles

HMMMPH!

HE REFUSES T' MOVE UNTIL WE CHECK OUT TH' TRIGGER!

On some tanks the insulation between trigger switch contacts is almost worn out. It has become so thin that the main or coax gun could fire even if you take your finger off the trigger.

Insulation worn?



To stop any firing, you have to stop the electrical current. You do this by turning the main (or coax) selector switch OFF. After that the firing relay



will drop back to the "open" position and you are ready to fire again after



flipping the selector switch ON and pressing the trigger.



THIS IS A LOT OF FELTER CARB THAT YOU CAN DO WITHOUT!

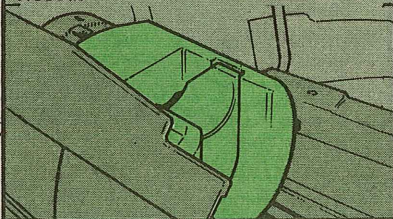
To find out if your main gun and coax machine gun firing circuits need to be repaired before they will work properly, get your friendly turret mechanic to help you run through these 5 Hands-Off and 3 Hands-On tests.

2

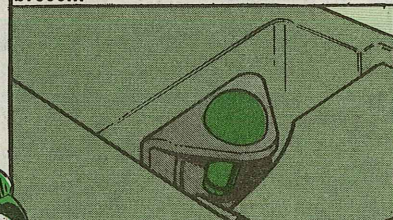
BEFORE STARTING THE TESTS, DO THESE THINGS...

GETTING SET UP

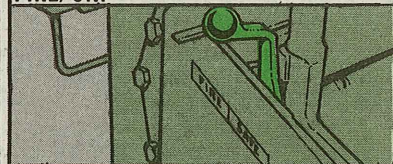
A Make sure the main gun and coax machine gun are cleared of ammunition and the breech-block of the main gun is closed.



B Insert the firing tester in the breech.



C Set the loader's safety switch to FIRE/ON.



D Turn the machine gun switch OFF.



E Turn the master battery and the main gun switches to ON.



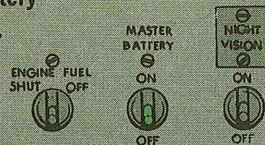
NOTE: After going through **A** to **E**, wait 5 minutes before starting the first of the 5 hands-off tests. (They are called hands-off tests because you keep your hands off the triggers during these tests.) Watch your circuit tester in the breech. If it flashes during any of the tests, there's a short in some trigger circuit. Your turret mechanic will tell support maintenance and they'll fix it.

3

PS MORE

5 HANDS-OFF TESTS

1. Flip the master battery switch OFF, then ON again.



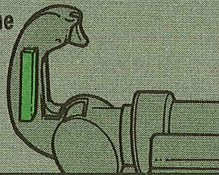
2. Turn the main gun switch to OFF, then to ON again.



3. Set the loader's safety switch to SAFE/OFF, then to FIRE/ON.

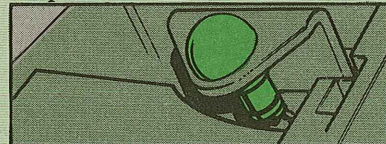
4. Squeeze and hold the override palm switch on the commander's control handle.

5. Release the override palm switch.



3 HANDS-ON TESTS

Keep on watching your tester lamp but now the rules are different. The lamp should flick on for an instant



every time you put hands on these triggers while holding down on the palm switch.

1. Left gunner's trigger.

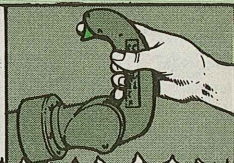


2. Right gunner's trigger.

3. Commander's control handle.

Press the commander's switch a second time while squeezing the override switch when you are squeezing the TC trigger. If the test light does not flick on for a second when you press the commander's switch the second time, support should replace the commander's trigger switch.

Squeeze override while squeezing trigger



NOTE: No need to check the emergency firing switch in the manual elevation handle or the blasting

Emergency firing switch

Blasting machine

machine handle because there is no insulation problem with their circuits.

Support will repeat these tests after replacing defective switches.



M578 Vehicles...

Leaky Air Cleaner Doors?

WHAT AILS YOU, OLD FRIEND?

NOT ENOUGH CLEAN AIR!



The PMCS in TM 9-2350-238-10 (Mar 78) tells you to make sure the doors seal properly.

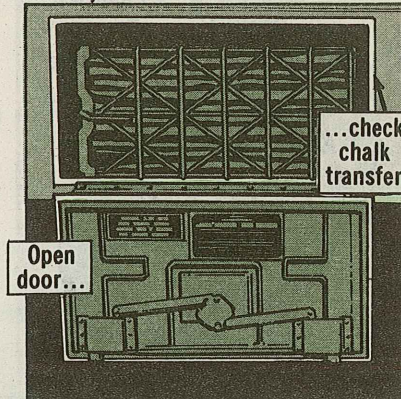
Here's a sure-fire way to check:

Rub chalk all the way around the air cleaner door seal. Button-up the door. Open the door and look for chalk marks on the air cleaner box. If the chalk transfers to the air cleaner box solidly—no gaps—it's a good bet the door seal is tight.

Gaps? Replace the seal with NSN 5330-00-745-7781.

Need adhesive for the seals? NSN 8040-00-152-0063 gets a 2.5-oz can and NSN 8040-00-152-0067 gets a 6-

oz can. This check goes for the M110 vehicle, too.



Pre-Fire Decal Ready

HEY, LOOK WHO MADE THE SCENE!

IT'S OUR NEW DECAL!

HI, TROOPS!

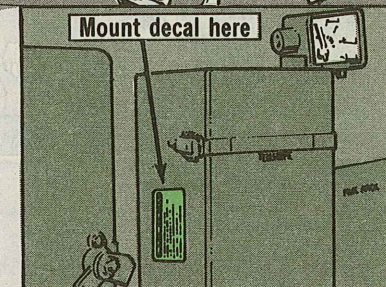


A pre-fire checks and services decal is now ready for issue for M109, M109A1 and M109A2 SP howitzers.

It goes on the M117 telescope storage box mounted on the left wall of the crew compartment.

Ask for Plate, Instruction, NSN 9905-01-037-0245 (PN 8449272). It's a B14 managed item.

Mount decal here



M113A1 Cold Start



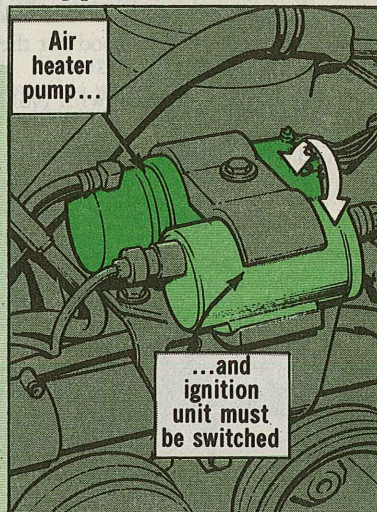
GATHER 'ROUND, YOU MOS 63 CHARLIES...

HERE'S ONE FOR YOU!

COMIN'! THAT'S MY MOS!

The new type cold-start system that may be on some of your vehicles needs a little work from you.

The ignition unit and the air heater pump must have their positions changed to protect the ignition unit. In the positions they are now, the high tension connectors on the ignition unit are exposed and easily broken during pack installation or service.



MINE, TOO!

HOW'S ABOUT AN MOS 36?

Start FIX

It's just a simple trade. You put the ignition unit where the air heater pump is now (to the rear) and put the air heater pump where the ignition unit was (to the front).

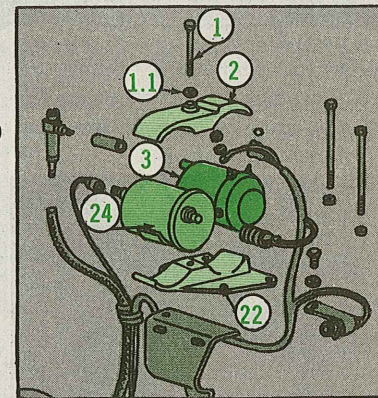
Everything you need to know is in Fig 22 on page 230 of Change 2 to TM 9-2300-257-20P (Aug 75).

First, loosen the cap screw (1), being careful not to let the flat washer (1.1) get lost.

Now move the ignition unit (24) from the front position to the rear position on the mounting bracket (22). Move the air pump (3) to the front position where the ignition unit was before. Make sure fuel lines and wires don't get crimped or stretched.

Now reverse and reinstall the hold-down clamp (2).

That's all there is to it.



Pivot Steer Bleeders

YER NUTZ, PC!

TH' NSN IS RIGHT HERE IN YER TM!

I TELL YA IT'S NO GOOD!

The NSN for the bleeders for pivot steer brakes on M113A1-series vehicles is no good. The bleeders are shown as Item 6 in Fig 130 (page 333) of Change 1 (Mar 77) to TM 9-2300-257-20P. You can get them using PN 10861507 and FSCM Code 19207. The routing identifier code (RIC) is AKZ.



M113/M113A1 Starter

LOOK, NATE--
AIN'T THAT BONNIE?

YEAH, MAN-- AN' JUST
LOOKIN' AT HER IS ENOUGH
T'GET ME STARTED!

If the starter in your carrier can't get started, your vehicle won't get started.

Unless your starter is waterproof—and most are not—it might freeze up in cold weather.

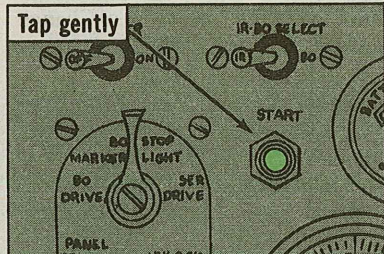


Frozen starter
needs special
attention

First find out if it really is frozen.

Do this by gently tapping on the starter button. If the starter turns over,

Tap gently



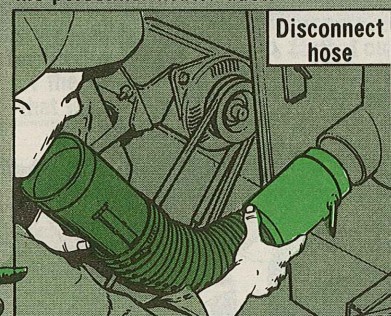
it's not frozen, so use normal cold-weather starting procedure.



Tip

IF THE STARTER
WON'T TURN, THAW IT
OUT LIKE SO--

1. Disconnect the flexible hose from the personnel heater duct.



Disconnect
hose

2. Open the engine access panel (lower panel only if you have the split panels) and pass the open end of the heater flexible hose through the



Direct
hot air
on starter

generator belt opening so hot air from the hose will hit the starter and thaw it out.

3. Start the heater and run it for 15-30 minutes. If the batteries are in good condition, this will do them no harm and you'll have plenty of power. However, you should check the batteries first to make sure they're OK.

4. Now pull the flexible hose clear of the engine and tap on the start button to see if the starter is back in shape.

5. If it is, hook the hose back to the vehicle duct, close and lock the engine access panel and start your vehicle.

This'll work for the M113/M113A1 and M577/M577A1 branches of the M113/M113A1 family of vehicles and the M106A1/M125A1 mortars and M741 Vulcan chassis. It can't be used on any of the M548-type members of the family.

IF THE
HEATER WON'T
THAW OUT YOUR
STARTER, YOUR
MECHANIC CAN
HELP GET YOUR
STARTER
STARTED!



HEY, BONNIE--
COME OVER HERE AN'
LET'S GET SOMETHIN'
STARTED!

?

M60 BFA... All The Way!

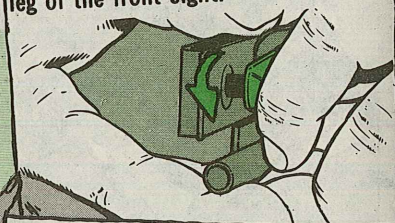


*★☆☆!! BFA IS LOOSE AG'IN!

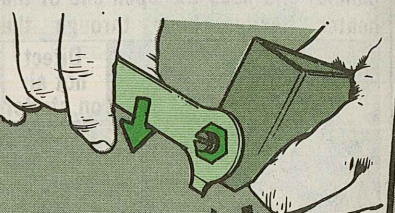
M13A1 BFA's for the M60 machine gun can cause problems from botched installations. Mostly, they come loose.

HERE'S HOW TO INSTALL IT FROM START TO FINISH!

1. Back off the wing nut enough so the BFA can spread over the muzzle end leg of the front sight.

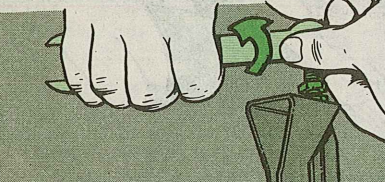


2. With your combo tool, loosen the hex nut enough to let the restrictor tube turn.



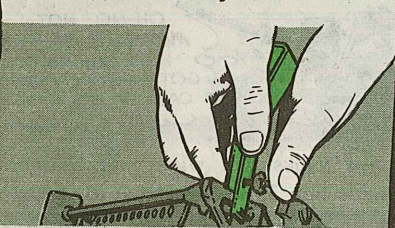
(Note: Some BFA's came with $\frac{9}{16}$ -in instead of $\frac{1}{2}$ -in hex nuts. If yours is one, the combo tool won't fit. Borrow your armorer's 8-in adjustable and have him request a $\frac{1}{2}$ -in replacement nut, NSN 5310-00-058-1626.

3. Using your combo screwdriver, turn the restrictor tube counter-



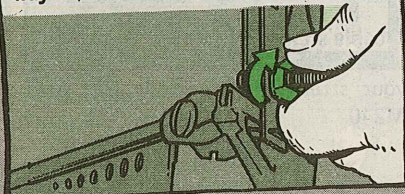
clockwise till the thread is almost out of the BFA (back it out about an inch, that is).

4. Ease the tube through the M60's flash suppressor. As you ease the tube

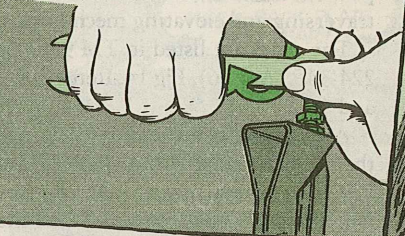


toward the gun muzzle, spread the BFA near the wing nut and side the BFA over the front leg of the sight. The tube face should be squarely against the barrel face to prevent gas leakage.

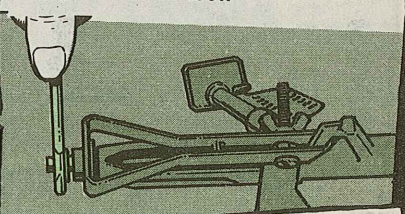
5. Finger tighten the wing nut all the way in, and back it off $\frac{1}{4}$ turn.



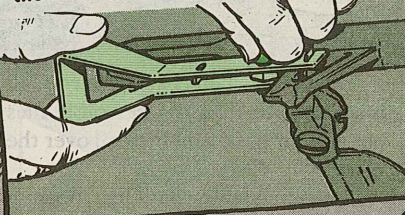
6. Insert the screwdriver in the restrictor tube slot and turn the tube clockwise till it's snug against the barrel muzzle.



7. Lock the tube in place by snugging the hex nut clockwise against the BFA. Use your combo tool.



8. Finger tighten the wing nut to snug the BFA against the sight post.



Blank cartridges and BFA's are tough on weapons. High carbon buildup makes extra cleaning a must. Clean the BFA and weapon after each 1,000 rounds or after each firing.

IF YOU GET A LOT OF CARBON BUILD-UP DO IT MORE OFTEN!



M60 T&E Parts

Armors can now request 4 more parts for their M60 machine gun traversing and elevating mechanisms.

The parts are listed in TM 9-1005-224-34P (Apr 76), Fig 14, Items 7, 8, 9 and 10.

Action has been taken to change their SMR code from PAFZZ to PAOZZ, which means TM changes will follow. They're listed in the AMDF. Armors can get them.

HERE'S
WHAT
YOU
NEED...

Part	NSN
7 Machine screw	5305-00-513-9989
8 Lock washer	5310-00-949-1971
9 Lever, Traversing	1005-00-722-3850
10 Torsion Spring	5360-00-473-5447

M240 Charger Cable

HIYA,
BUDDY!
LET'S
EXERCISE YER
M240!

OH, NO! NOT
MUSCLE'S MCGURK!
HOPE SUPPORT'S
GOT PLENTY O'CHARGER
CABLES ON HAND!

It happens. You charge your M240 machine gun. The charger cable flies out of your hand and flips all over the place.

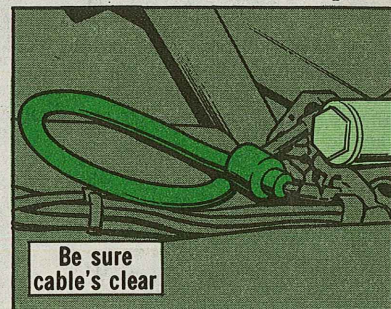
Understandable. But, just because you can't see the cable, that doesn't mean it's clear.

It may have flipped onto the breech handle of the main gun.

If so, recoil will rip the cable out of your M240 when the main gun fires. 'Nough said?

Another point. The cable's rugged. So are you. A steady pull to the rear will charge your M240. King Kong-

type yanks will wipe your charger cable out. You don't have to prove



Be sure
cable's clear

your strength to a buddy like your M240.

M85 Back Plate Cracks

HAPPY
NEW
YEAR

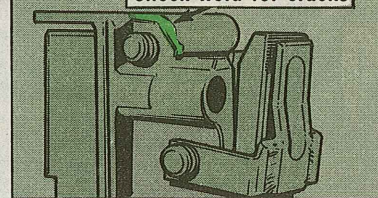
SHOULD AULD
ACQUAINTANCES

HOPE THEY
RESOLVE TO CHECK
THE WELD ON MY
M85'S BACK PLATE
THIS YEAR!

Vibration or other pressure can crack the welded cap on the back plate assembly of your M85 machine gun.

Armors should eyeball the welded area of the cap during weekly or monthly PMCS. If the cap is cracked, the back plate has to go to depot for repair.

Check weld for cracks



M2 Solenoid Saver

I BRING YOU A SPECIAL
TIP FOR THIS NEW YEAR, TROOPS...

SPARE THE
WIRE AND SAVE
THE ELECTRICAL
SOLENOID
ON YOUR M2
MACHINE
GUN!

The firing wire, attached to the solenoid, flops around. If you snag it or yank it too hard, the wire breaks where it enters the solenoid.

Spare
this
wire!



The wire can't be repaired or replaced...so you must replace the solenoid. Tough, when you consider that if you'd looked before the wire leaped you could've saved the cost of a solenoid.



M16A1 Rifle...

Close That Cover!



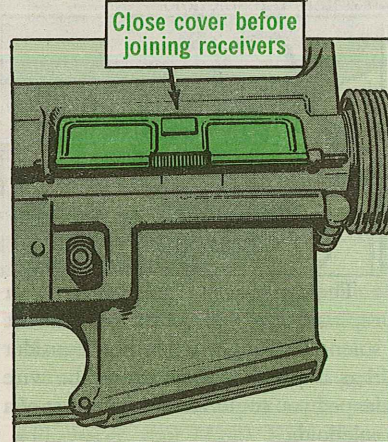
receiver assemblies poised, ready to install the receiver pivot pin.

Drop everything. Mmmm, hold one, that is.

Before you join the receivers, eyeball the ejection port cover (EPC). Be sure it's closed. You should close it when you re-install the bolt assembly.

Otherwise (especially if you've got an old cover), when you install the pivot pin and join the receivers together, you'll snag the cover. That means damage to the cover and its pin, spring, etc. It also means some unwanted crud is gonna get in the ejection port.

The newer cover has an offset that helps prevent snagging. But your best bet, new or old, is to close the EPC when joining the receivers with the pivot pin. If you're wondering, the new cover has the same NSN as the old one.



Bayonet Serviceability

I SAY THERE'S TOO MUCH DAMAGE!

I SAY IT CAN BE REPAIRED!

I SAY SUPPORT'S GOTTA SEE IT!

Dear Half-Mast,
How much of the bayonet blade tip must be broken before the bayonet's unserviceable? How much of a nick is allowed?

SSG S.H.M.

Dear Sergeant S.H.M.,

If any portion of the blade tip is broken, the bayonet is unserviceable and must go to Direct Support.

Breaks or nicks?...



...off to support

Any nicks in the edges of the blade make the blade unserviceable.

TB 43-0001-36-1 (Jan 79) spells it out.

The point is, if any bayonet is damaged (blade or tip), turn it in to your support. Support decides whether it's repairable.

Half-Mast

The Spot on Your M18

I SAW LIGHT AND DARK SPOTS!

ANYTHING WRONG WITH ME?

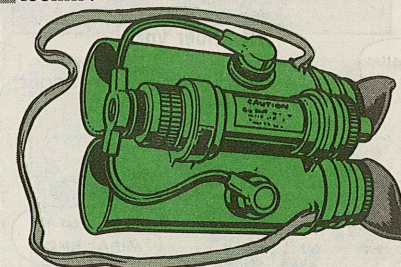
DUNNO... BUT YOUR M18 IS OK!

If you see the light when looking through your M18 night vision binoculars, forget any spots that may appear in the image converter tube.

In other words, don't turn "spotted" binocs in as unserviceable. Dark or light spots (fluorescent screen irregularities) are built into the tubes. You may think the spots are dirt...but even if they were dirt, you wouldn't be able to see them during operation.

So, dark and light spots are OK. If you get a bright, clear image during

normal operation, just keep on lookin'.



If that doesn't convince you, eyeball Table I, page 10, of TM 9-6650-215-12. It says, more or less, don't confuse the light spots with dirt.

TOW TOTING

When your TOW missile system is ground-mounted (tripod) you carry the traversing unit (TU) with the strap assembly.

Use strap assembly

When the system's vehicle-mounted, you hold the TU under the yoke and lift it off the pedestal. Carry the unit by the 2 control knobs.

Carry by knobs

Lift under yoke

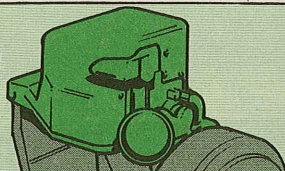


BREAK HIS TOE?

DUNNO! BUT IF HE BROKE THE TOW... HE'S IN FOR REAL TROUBLE!

New one: Some troops lift and carry that 53-lb TU with the bridge clamp. Not so smart. First, it can slip out of your hands and fall...on your foot, maybe. Something's going to get damaged.

No handle!



Second, with all that weight on the bridge clamp, you misalign the clamp/launch tube guidepin as well as the connector in the clamp. Result: Nothing happens when you try to fire the missile round or score with the MSR (Missile Simulation Round).

Connector, hinge pins get damaged



Third, you'll bend or break the shear pins in the bridge clamp. That, of course, can result in the TR falling or the connector misaligning.

CONVINCED? CARRY ON...

THE RIGHT WAY... THAT IS!



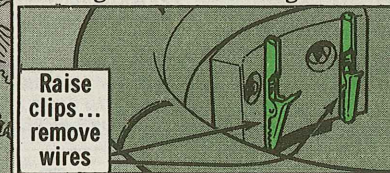
EEEE-EEE YOW!



MSR Damage

The MSR is a reasonably rugged training aid, designed for quick handling and lots of training missions.

Raise clips... remove wires



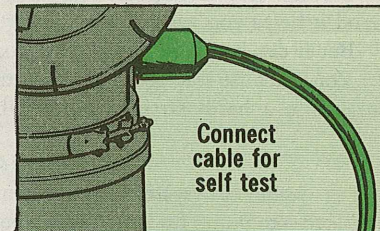
But, it can't live the good life if you toss it in back of a truck, yank wire out of the clips which hold the M80 blast simulators, kick, throw or drop it.

Best PM: Treat it like a missile round. The resultant care is too obvious to discuss.

Self Tests

Reminder: Be sure the W2 cable is hooked to the pedestal and MGS (Missile Guidance Set) or the coil cord from the TU is hooked to the MGS (depending on what you've got) before you make system self-tests. Otherwise, you can burn out the self-test circuit cards.

Connect cable for self test



Dragon LET Batteries

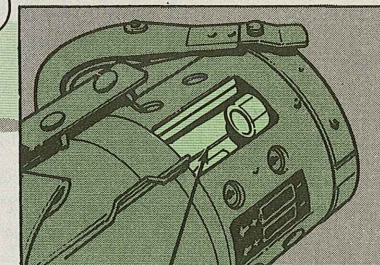


Getting ready to turn in your Dragon system launch effects trainer (LET) for repair?

Remove the batteries.

If you leave 'em in, they'll corrode the LET's battery retainers and make an even bigger repair job.

Remove batteries before turn-in



COLD-WEATHER

GROUND
MOBILITY



YOU MEAN HE'S
BEEN USING YOUR
PREHEATER — TRYING
TO GET QUICK STARTS —
WHEN THE
TEMPERATURE'S
ABOVE FREEZING!

CHEEEEE!

HE
HAS,
CONNIE...
URRRGH!

The manifold air preheater used on some diesel and multifuel engines can be a help or a headache. It's all in how you use it.

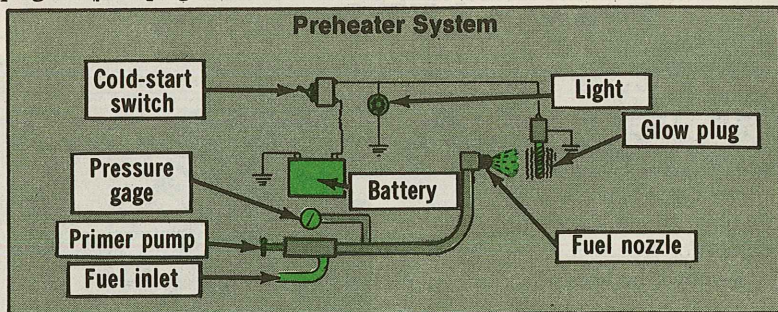
It's supposed to help you start your engine in cold weather: 32°F or below. And it helps you get a cold engine running smoothly.

But it can be bad if you go overboard.

You don't use it to get quicker starts when the temperature's above 32°F. Or to prime a hard-starting engine when something else is wrong.

HOW PREHEATERS WORK

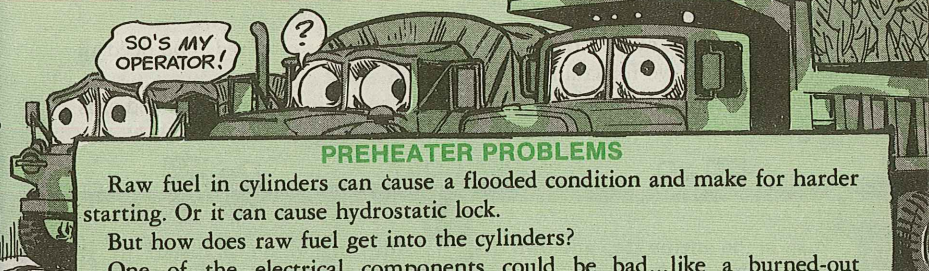
The preheater system has a fuel pump—either electrically or hand operated—to pump fuel into the intake manifold. It's also got an electrical glow plug or spark plug. And there's a switch to turn on the glow/spark plug.



Atomized fuel sprayed into the manifold is ignited by the plug and burns to heat the intake air.

STARTING

I DON'T
FEEL SO
GOOD, EITHER...



SO'S MY
OPERATOR!

PREHEATER PROBLEMS

Raw fuel in cylinders can cause a flooded condition and make for harder starting. Or it can cause hydrostatic lock.

But how does raw fuel get into the cylinders?

One of the electrical components could be bad...like a burned-out preheater...or an open wire...or a defective switch. This'll prevent fuel ignition. And it'll let raw fuel be pulled into the cylinders.

If you pump fuel into the manifold before turning on the preheater, the glow plug will get wet. This'll keep it from getting hot enough to ignite the fuel. (This can happen on vehicles like the M809-series 5-ton truck, the 10-ton truck or the CCE 20-ton dump).

GLOW PLUGS

Heating coil burns out

On systems with the hand primer pump—again the M809-series 5-ton, the 10-ton or the CCE 20-ton dump—some drivers turn on the preheater switch but forget to use the primer pump. Or, after starting, they may forget to turn the cold-start switch to OFF.



If the glow plug is left on long enough, it will discharge the batteries. But most likely the glow plug coil will burn out.

PREHEATER SYSTEM CHECK

Turn the cold-start switch to ON. Preheat about 30 seconds. (For systems with the hand primer pump, give the pump only 1 or 2 strokes.)

Touch the manifold—carefully—to see if it gets warm. On Gama Goats, touch the engine block at the spark plug. Not warm? Report it to your mech.



Turn to
ON...
preheat
30 seconds

Pump
1 or 2
strokes

HE'LL TROUBLE-
SHOOT THE
COLD-START
SYSTEM...

...BY
HIS TM!

PS MORE

STARTING

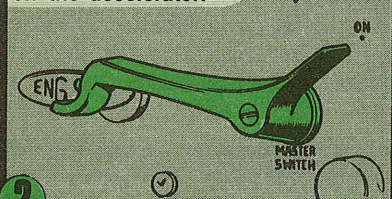
Use the cold-start system to help start the engine when the temperature is below 32° F.

Do not turn on any electrical component that is not required. You need all the batteries' reserve for cranking the engine.

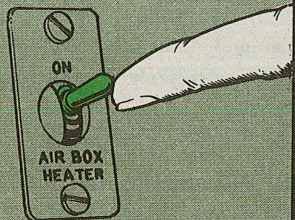
Never operate the manifold heater unless the engine is being cranked or is idling.

GAMA GOAT

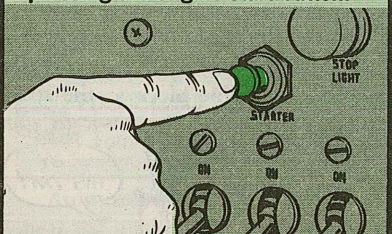
1 Push in the engine stop and turn the master switch to ON. Keep your foot off the accelerator.



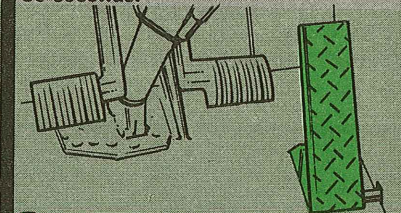
2 Hold the cold-start switch in the ON position while...



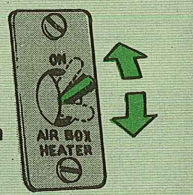
...pressing the engine start button.



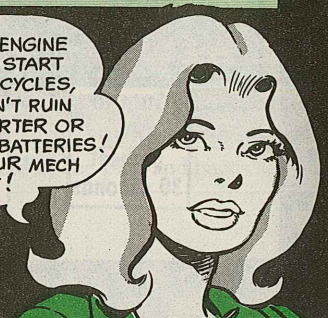
3 If the engine doesn't start in 15 seconds, release the cold-start switch, push the accelerator pedal half-way down and keep on cranking for another 30 seconds.



4 If the engine doesn't start, stop cranking. Wait 30 seconds. Begin cranking again and start cycling the cold-start switch. You cycle the cold-start switch by holding it in the ON position for 4 to 6 seconds, then in the OFF position for 2 to 3 seconds.

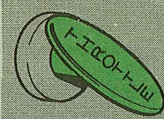


IF THE ENGINE DOESN'T START AFTER 5 CYCLES, QUIT! DON'T RUIN YOUR STARTER OR RUN DOWN BATTERIES! GET YOUR MECH ON IT!

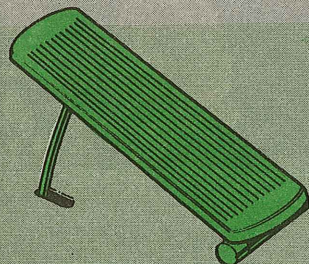


2½- AND 5-TON MULTIFUELS

1 Pull the hand throttle control out about ½ to ⅔ way.



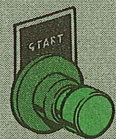
2 Push accelerator pedal down ⅔-¾ way.



3 Turn battery switch ON.



4 While cranking the engine, hold the cold-start switch in the ON position.



5 Continue to use the cold-start switch while the engine is idling until all cylinders are firing.

6 Before moving out, adjust hand throttle to run at high idle until temperature gage starts to register. If the engine doesn't start within 30 seconds, stop cranking. Release the cold-start switch.

Wait 2 minutes before trying again. If the engine doesn't start after 3 tries, get your mech to help.

5-, 10-TON DIESELS AND CCE 20-TON DUMP

1 Turn the battery switch to ON.

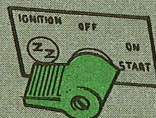
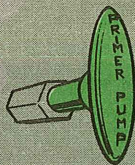


2 Turn the cold-start switch to ON. Pre-heat about 20 or 30 seconds.



3

Operate the primer pump to get the pressure up to 80 to 120 PSI. At the same time, start cranking the engine. Make sure you keep the fuel pressure between 80 and 120 PSI while the engine is cranking.



4

After the engine starts, leave the cold-start switch turned ON. Pump the primer slowly to keep the engine idling smoothly...about 4 to 5 minutes.

If the engine won't start within 20 seconds, stop.

Wait 30 seconds and try again.

IF YOUR ENGINE DOESN'T START AFTER 2 TRIES...

...GET YOUR MECH ON IT!



PS END

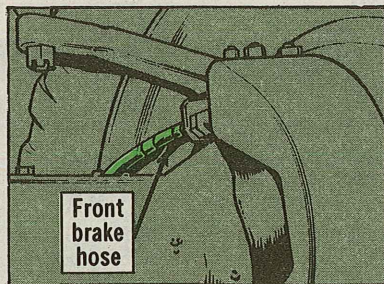
TM-209-Series 2½-Ton Truck...

"RIGHT" Brake Hose Is WRONG



No, you don't use the front brake hose—NSN 4720-00-737-3250—specified in TM 9-2320-209-20P (Oct 76) for your 2½-ton truck.

Instead, you use the same hose



'Neath this sod lies Pvt McGurk--
The brakes on his truck didn't work!
He was warned, goodness knows,
T'use a safer brake hose--
But he didn't listen--th' JERK!

that's on the M39-series and M809-series 5-ton trucks. This hose comes under NSN 4720-00-203-9515, listed in TM 9-2320-211-20P (May 73) and in TM 9-2320-260-20P (Nov 72).

This switch was made because the 5-ton truck hose is safer, as explained—with installation instructions—in TM 43-0143 (Jun 77), Ch 1, para 4-10a. But you switch to the 5-ton hose only when inspection of the old hose shows you need a new hose—also explained in that TM.

The hose clamp in TM 43-0143 should be NSN 5340-00-984-8540.

M880-Series Trucks...

LOOK!

24-Volt Battery Tray Fix

WE ONLY GOT ONE HEADLIGHT BURNING!

BAM! CLANK! KLUNK!

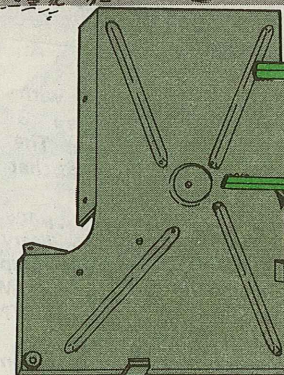
COULD THAT CLANKING UNDER THE HOOD HAVE ANYTHING T'DO WITH IT?



The battery tray for the 24-volt side won't stand up to rough treatment—like cross-country travel and such.

The batteries are too heavy. The tray breaks. This'll let the batteries shift. You could end up with a broken right headlight wire...or connection...or worse.

DS can reinforce the battery tray. TB 43-0001-39-1 (Apr 79), page 2-80 tells how. You'll especially need this fix if you're using the military 6TN batteries.



Tray reinforced on under side

Old Tire Stretches Bucks

HEY! YER TAILPIPE IS DRAGGIN'!!

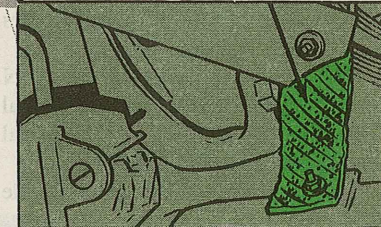
WHEW! GOOD! I THOUGHT IT WAS TH' CRANKSHAFT!



Your truck's tail pipe hanger's rubber insulator can wear out or break. Your mech can replace it with a new hanger, NSN 5340-01-056-2933 or 2990-01-032-9850.

Or he can replace the insulator with PN 3822558 FSCM 86403. Or, he can replace the insulator with a piece of sidewall from an old PDO'd tire cut to size.

Cut old tire side wall to size



Either way, you'll have an insulator as good as new...and a lot cheaper.

BATTERY SUBSTITUTES

Dear Half-Mast,
We have several M883 trucks with signal shelters. They use 3 "maintenance free" batteries. The problem is, we can't always get that battery when we need it.
TM 9-2320-266-20 (Jan 76), page 2-35, tells us to use the 6TN military battery as a substitute. But the setup in the TM looks odd. And the TM doesn't tell us we can use the 6TN batteries on the 24-volt side.
Can you tell us what we need and how to set it up?
WO1 G.G.

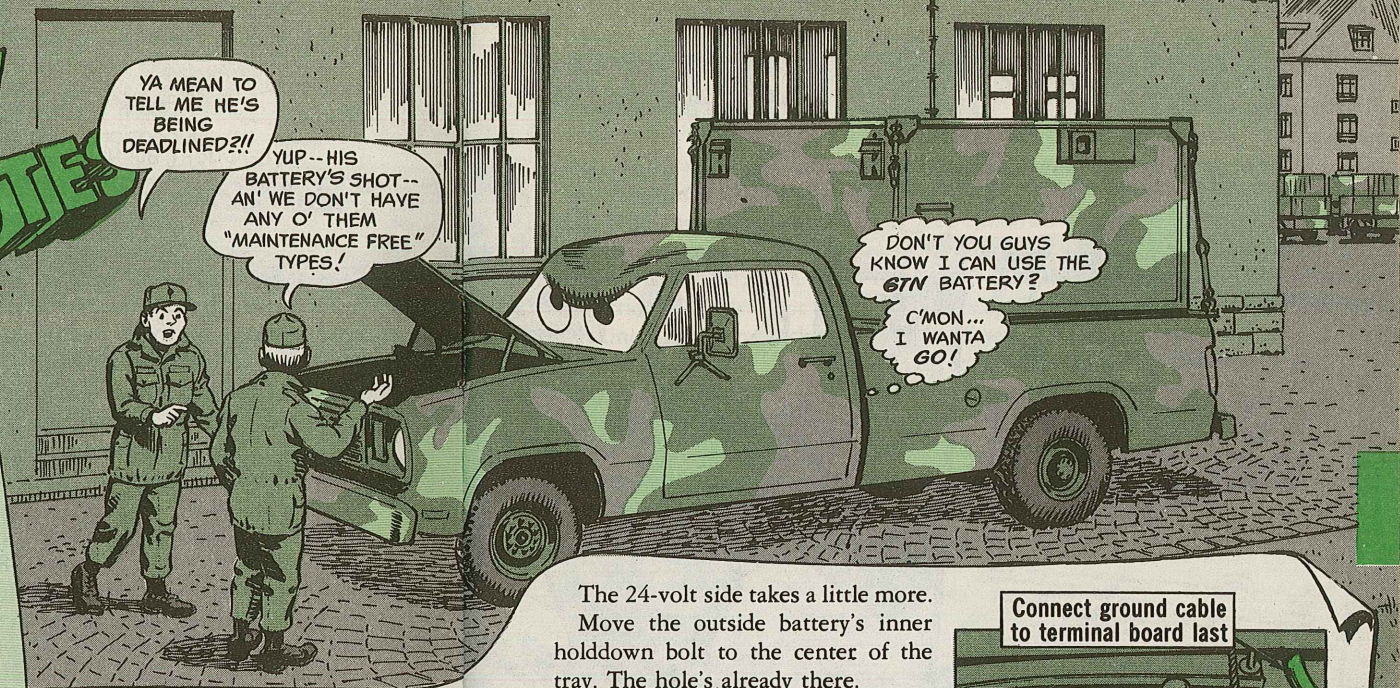
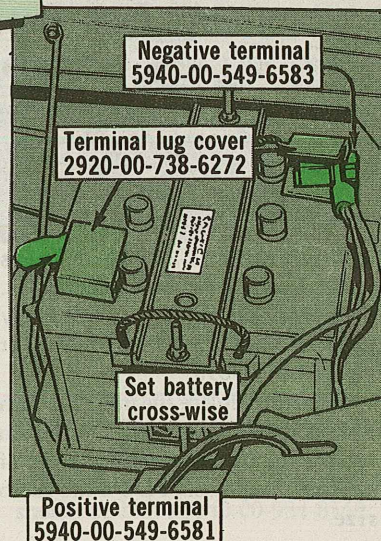
Dear Mr. G.G.

For the trucks with the 1 battery setup, it's easy.

Set the 6TN battery, NSN 6140-00-057-2554, in the tray cross-wise. Put the holddown clamp thru the handles and tighten it down.

Get a positive terminal lug, NSN 5940-00-549-6581, a negative terminal lug, 5940-00-549-6583, and 2 terminal lug covers, 2920-00-738-6272.

Hook up the cables...ground cable last...and the job's done.



The 24-volt side takes a little more. Move the outside battery's inner holddown bolt to the center of the tray. The hole's already there.

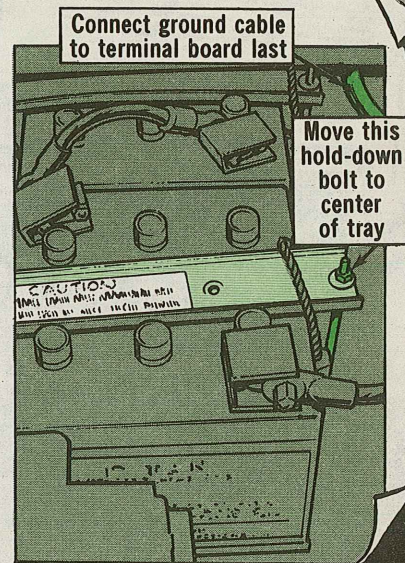
Disconnect the ground cable at the terminal board and tape the end.

You'll need both positive and negative terminal lugs and the terminal lug covers.

Put in one battery and connect the ground cable. Slide the battery under the fender.

Put the other battery in the tray. Clamp down both batteries.

Connect the rest of the cables—the ground cable at the terminal board is last.



AT LEAST
ONCE A MONTH
HAVE YOUR MECH
TAKE OUT THE
BATTERIES...

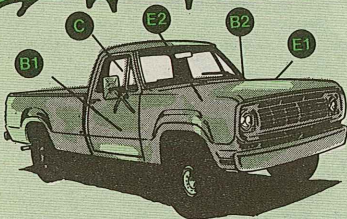
...SO YOU CAN CHECK THE
FLUID LEVEL IN THOSE 3
CELLS UNDER THE FENDER!

2½-Ton &
1¼-Ton
Trucks..

DRIVER CHECK

GTA 9-1-186

SYSTEMATIC INSPECTION PROCEDURE FOR THE TRUCK, 1¼ TON, M880 SERIES



This checklist provides a systematic procedure for inspecting the 1¼ ton truck. It should be used with DA Form 2404—The Maintenance & Inspection Worksheet. Defects which cannot be corrected by the vehicle operator should be noted on DA Form 2404 which, when completed, should be turned over to the Maintenance Supervisor or his representative. This systematic inspection procedure will benefit you when inspecting other similar vehicles.

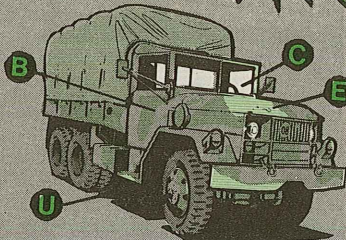
NOTE: This systematic inspection procedure is to be used in conjunction with TEC Lesson 944-091-0007. No inspection should begin until parking brake is engaged. Transmission placed in neutral and truck should be placed in the front and rear of at least one wheel.

DISTRIBUTION: US Army Training Aide Centers.

HEADQUARTERS, DEPARTMENT OF THE ARMY

OCTOBER 1978

SYSTEMATIC INSPECTION PROCEDURE FOR THE 2½ TON TRUCK



This checklist provides a systematic procedure for inspecting the 2½ ton truck. It should be used with DA Form 2404—The Maintenance & Inspection Worksheet. Defects which cannot be corrected by the vehicle operator should be noted on DA Form 2404 which, when completed, should be turned over to the Maintenance Supervisor or his representative. This systematic inspection procedure will benefit you when inspecting other similar vehicles.

NOTE: This systematic inspection procedure is to be used in conjunction with TEC Lesson 944-091-0007. No inspection should begin until parking brake is engaged. Transmission placed in neutral and truck should be placed in the front and rear of at least one wheel.

OCTOBER 1977

GTA 9-1-185 (1-B)

YOU'RE MISSING A GOOD BET IF YOU
DON'T HAVE YOUR OWN COPIES OF
THESE PUBS...

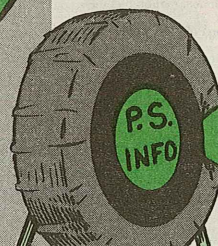
LIST FOR YOU!

They're available thru your TASC (Training and Audiovisual Support Center). These GTA's (Graphic Training Aids) are supposed to be used with certain related TEC Lessons—also at your TASC—but they're great even for all you "old hands" who like a step-by-step rundown to remind you of all of the checkpoints on your deuce-and-a-half or M880 1¼-tonner.

Hold it! These GTA's are not meant for your daily before-operation-inspection. They've got too many checkpoints—things that don't need checking that often. Stick to the PMCS (Preventive Maintenance Checks and Services) in your -10 operator's TM for specific before-during-after inspection checkpoints.

These GTA's are mighty handy for "motor stables"—mentioned in FM 29-2 (Aug 71), Organizational Maintenance Management, para 7-7, and discussed in detail in Appendix P to that FM.

Fact is, with just a little juggling, the GTA for the 2½-ton truck can be used to check out those 5-ton trucks covered by TM 9-2320-211-10 (Nov 77) and TM 9-2320-260-10 (Nov 77).

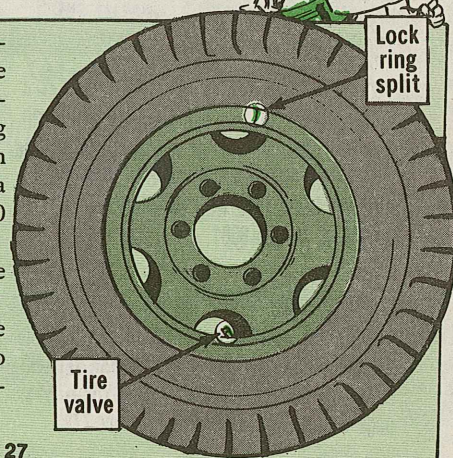


Correction & Update

Miss! PS 319 hit outside the bull's-eye with Tired Tale Retired on page 23. There is a requirement in TM 9-2610-200-20 (Feb 77) for positioning the wheel rim lock ring split in relation to the tire valve. Para 2-19a (2)(a) says..."at 90 degrees or 270 degrees away from the valve stem."

This'll be changed, tho—the headshed says—to:

"Split in lock ring should be positioned away from valve stem to minimize chance of tire irons damaging valve."



Lock
ring
split

Tire
valve

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, TM's, TB's, etc.; DA Pam 310-6, SC's and SM's and DA Pam (C) 310-9, COMSEC pubs.

TECHNICAL MANUALS

TM 5-9905-200-10 Aug Mine field mark set M133
Ch 2, TM 9-1005-224-10 May M60 machine gun
TM 9-1015-234-10 Aug M102 howitzer
TM 9-1025-211-10 Oct M198 howitzer
TM 9-1425-1525-12-5 Jun Improved HAWK
TM 9-1430-381-20P Aug Pershing 1A
TM 9-1430-1526-12-1 Jun Improved HAWK
TM 9-1430-1535-12-1 Jul Improved HAWK
TM 9-1430-1535-12-3 Jun Improved HAWK
TM 9-4935-1540-14-1 Jun Improved HAWK
TM 9-4935-1540-14-2 Jul Improved HAWK
TM 11-1290-387-10-HR Aug AN/TNS-10 sound ranging set
TM 11-5805-471-12-HR Oct SB-3082(v1) and (v2) switchboard
Ch 9, TM 11-5820-540-12 Sep AN/GRC-103 Radios

Ch 2, TM 11-5855-214-10 Jul Night vision sight AN/TVS-5
Ch 2, TM 11-5855-246-10 Aug Viewer, Infrared AN/PAS-7
TM 11-5855-246-10-HR Aug AN/PAS-7 Infrared viewer
TM 11-5860-201-20P Sep AN/GVS-5 laser IR observ set
Ch 4, TM 11-6625-823-15 Aug AN/PSM-13 battery test set
TM 11-7440-242-23-1 Aug AN/GSG-10(V) artillery (TACFIRE)
TM 11-7440-242-23-2 Aug AN/GSG-10(V) artillery (TACFIRE)
TM 11-7440-242-23-3 Aug AN/GSG-10(V) artillery (TACFIRE)
TM 11-7440-243-13 Aug Fault catalog for OA-8389/GSG-10(V) (Bn) and OA-8390/GSG-10(V) (Div) fire direction center (TACFIRE)
TM 11-7440-253-10-2 Aug AN/GSC-21 variable format message entry device (TACFIRE)
Ch 5, TM 43-0001-28 Aug Ammo
Ch 1, TM 55-1520-210-23-2 Aug UH-1D/H/EH-1H
Ch 20, TM 55-1520-219-20 Aug UH-1B
Ch 25, TM 55-1520-220-20 Aug UH-1C/M
TM 55-1520-210-PMD Jul UH-1D/H, EH-1H
Ch 12, TM 55-1520-220-PMS Aug UH-1C/M
Ch 5, TM 55-1520-236-23-1 Aug AH-1S (Prod)
Ch 1, TM 55-2840-248-23P Jul Engine Mech

T700-GE-700

MISCELLANEOUS

Ch 6, AR 725-50 Sep Supply
CIR 310-16 Jul Rescinded pubs
CIR 310-18 Sep Rescinded pubs
C-RL-2 (FICHE) Oct Consol master cross ref list (RL) Part 2
Interim Ch 3, CTA 50-900 Oct Common tables of allowances
DA Form 3912 Jun Parachute log record book (Replaces DA Form 3912)
DA Poster 750-64 Jun Be A Terror on Pubs Error
FM 5-62E Apr Heavy Constr Eqt Op
FM 5-62F Apr Lift & Load Eqt Op
FM 11-05C3 Jul Radio Teletype Op
FM 11-31M3 Jul Multichannel Commo Op
LO 3-4230-209-12 Jun Decon 500-gal ABC-M12A1
LO 9-1430-1534-12 Jul Improved HAWK
LO 9-1430-1535-12 Jul AN/MSQ-110 and -111
Pam 310-23 Jul Index Fed Cat Sup Pubs
PAM 108-1 Jan Index: motion pictures, audio visual aids
Pam 310-10-2 Sep Publications Resupply Guide
SB 740-95-20 Aug Serviceability stds ARRCOM items
TB 43-180 Aug Calibration
TB 43-180-1 Aug Calibration, repair
TC 11-31 V1/2 (JB) Sep Tact Commo Op Mech

AUDIO-VISUAL STUFF

Available at battalion or post Learning Center

Film, GTA
TF 38-6103 "Fast Pack"
packaging
GTA SLC 9-4-5 Mine anti-tank
M21 (tank killer)

GTA SLC 38-1-24 Packaging
and packing
TEC LESSONS
041-061-6061-F Intro to
M114A1 howitzer

043-441-7880-F Chaparral
M730 missile carrier
102-906-1041-A Operating ME-
26/U multimeter
612-051-9657-F Battery charging system Part II
953-071-0055-A Infrared viewer
AN/PAS-7
953-071-0058-A Night vision
goggles AN/PVS-5

Hand Lantern Lamp NSN's

Need bulbs for that hand lantern NSN 6230-00-498-9408 in your 5-ton wrecker OVM? For the spot beam, use NSN 6240-00-844-1758. For the diffused beam, use NSN 6240-00-155-8671 or NSN 6240-00-155-8681.

M816 Wrecker Saw

To get a genuine 5-ft crosscut saw for your OVM on the M816 wrecker, ask for NSN 5110-00-223-5349. Scratch out NSN 4933-00-754-0704 on page C-5 of TM 9-2320-211-10 (Nov 77).

Easy on Trailer Plug!

Easy does it. That vented master cylinder plug on your M416A1 ¼-ton trailer is cast aluminum and won't take much torque. Finger tight is enough.

Mask Faceform NSN

Page 31 of PS 322 says that the faceform for the M24 and M25/M25A1 mask is not replaceable. It is. Get it with NSN 4240-01-032-6050. It's listed on page B-4, Ch 1 to TM 3-4240-280-23&P. Replacement procedures are in para 2-11.1.

PS 1980 PM Dates

ONLY A BOOB
WILL OVER-LUBE

KEEP
REAR
SIGHT
Lubed
ON YOUR
M16A1

GASOLINE
IS NOT FOR
CLEANING



- YES Maintenance facilities
- NO best you can provide?

JANUARY 1980

S	M	T	W	T	F	S
		1	2	3	4	5
		1	2	3	4	5
6	7	8	9	10	11	12
6	7	8	9	10	11	12
13	14	15	16	17	18	19
13	14	15	16	17	18	19
20	21	22	23	24	25	26
20	21	22	23	24	25	26
27	28	29	30	31		
27	28	29	30	31		

- YES Tool Abusers? Train
- NO and restrain them!

CAN YOU GO WITH EVERYTHING YOU'VE GOT?

- YES Safety SOP posted
- NO and followed

FEBRUARY 1980

S	M	T	W	T	F	S
					1	2
					32	33
3	4	5	6	7	8	9
34	35	36	37	38	39	40
10	11	12	13	14	15	16
41	42	43	44	45	46	47
17	18	19	20	21	22	23
48	49	50	51	52	53	54
24	25	26	27	28	29	
55	56	57	58	59	60	

- YES Safety clothing, equipment
- NO being used?

TIRE CHAINS READY FOR WINTER DRIVING?

- ☐ YES ☐ NO | Getting help from Direct Support and MAIT when needed? ASK!!

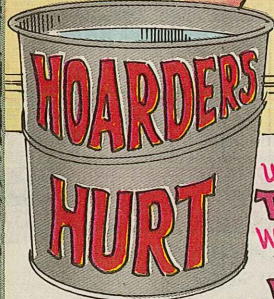
MARCH 1980

S	M	T	W	T	F	S
						1 61
2 62	3 63	4 64	5 65	6 66	7 67	8 68
9 69	10 70	11 71	12 72	13 73	14 74	15 75
16 76	17 77	18 78	19 79	20 80	21 81	22 82
23 83	24 84	25 85	26 86	27 87	28 88	29 89
30 90	31 91					

- ☐ YES ☐ NO | Outstanding performers? Recognize and commend 'em!

TORQUE WRENCH
POWER
BEATS
MUSCLE
POWER!

Clean your
WEAPON
After Firing
Blank AMMO!



USE
TM
WHEN YOU
PULL
PM

BREATHERS
NEED
CLEANING, TOO!

KEEP
AIR
CLEANERS
CLEAN

CHECK TOOL BOX **DAILY!**

- ☐ YES ☐ NO | Tool sets: complete and secure?

APRIL 1980

S	M	T	W	T	F	S
		1 92	2 93	3 94	4 95	5 96
6 97	7 98	8 99	9 100	10 101	11 102	12 103
13 104	14 105	15 106	16 107	17 108	18 109	19 110
20 111	21 112	22 113	23 114	24 115	25 116	26 117
27 118	28 119	29 120	30 121			

- ☐ YES ☐ NO | Tool check-out; check-in procedure working?

30

- ☐ YES ☐ NO | Current list of DX items easily available?

MAY 1980

S	M	T	W	T	F	S
				1 122	2 123	3 124
4 125	5 126	6 127	7 128	8 129	9 130	10 131
11 132	12 133	13 134	14 135	15 136	16 137	17 138
18 139	19 140	20 141	21 142	22 143	23 144	24 145
25 146	26 147	27 148	28 149	29 150	30 151	31 152

- ☐ YES ☐ NO | Latest QSS and SSSC lists on hand?

Storing **DRY-CELL**
BATTERIES?
KEEP 'EM
COOL!!

- ☐ YES ☐ NO | Excess parts turned in?

JUNE 1980

S	M	T	W	T	F	S
1 153	2 154	3 155	4 156	5 157	6 158	7 159
8 160	9 161	10 162	11 163	12 164	13 165	14 166
15 167	16 168	17 169	18 170	19 171	20 172	21 173
22 174	23 175	24 176	25 177	26 178	27 179	28 180
29 181	30 182					

- ☐ YES ☐ NO | Parts stored in secure area?

31

RT
GUARDS
AREN'T
HANDLES

DO
IT
by the
BOOK



GRIPE
with
SF
368
(EIR)

TM'S
ARE
EXPENDABLE
WEAR 'EM
OUT!

A pair of purple high-heeled sandals with straps, shown from a top-down perspective. The sandals are positioned on a light brown, textured surface. The left sandal is slightly behind the right one. The straps are thin and wrap around the midfoot and heel. The heels are thin and high. The overall style is simple and illustrative.

PUB GOT A GOOF? SEND OFF A DA FORM 2028!

SMALL AREA and GLEA PUB!

SMALL ARMS
CLEAN
and
LUBED?

TM 750-651
CURES
OVERHEAT

USE YOUR
TEST
EQUIPMENT
RIGHT

MR

A cartoon illustration featuring a large, red, jagged banner that reads "THIRST KILLS LEAD-ACID BATTERIES" in white and yellow capital letters. The banner is draped over a blue battery. The battery has the text "DO SOME P.M." written on it in black and red. A blue, muscular arm is visible in the upper right corner, holding the banner. The background is a light brown, textured surface.

PORTABLE
RADIO
PMCS

DO SOME
PM
NOW



GENTLY...
WHEN USING
COMMO
SWITCHES

DOWN-SHIFT
BEFORE
YOU
START
DOWN.
HILL

TOOL
SETS,
KITS
ON
HAND
RECEIPTS
?

DIRTY
AIR
CLEANERS
CHOK
ENGINE

PM

- ☐ YES | System NORS/NORM time
- ☐ NO | current on system's
- DD 314's?

JULY 1980

S	M	T	W	T	F	S
		1	2	3	4	5
		183	184	185	186	187
6	7	8	9	10	11	12
188	189	190	191	192	193	194
13	14	15	16	17	18	19
195	196	197	198	199	200	201
20	21	22	23	24	25	26
202	203	204	205	206	207	208
27	28	29	30	31		
209	210	211	212	213		

- ☐ YES | Test equipment being
- ☐ NO | used to identify faults?

KEEP KINKS OUT OF CABLES

- ☐ YES | Prescribed Load List
- ☐ NO | (PLL) current?

AUGUST 1980

S	M	T	W	T	F	S
					1	2
					214	215
3	4	5	6	7	8	9
216	217	218	219	220	221	222
10	11	12	13	14	15	16
223	224	225	226	227	228	229
17	18	19	20	21	22	23
230	231	232	233	234	235	236
24	25	26	27	28	29	30
237	238	239	240	241	242	243
31						
244						

- ☐ YES | All authorized items
- ☐ NO | on hand or on order?

- ☐ YES | PM services scheduled
- ☐ NO | and supervised?

SEPTEMBER 1980

S	M	T	W	T	F	S
	1	2	3	4	5	6
	245	246	247	248	249	250
7	8	9	10	11	12	13
251	252	253	254	255	256	257
14	15	16	17	18	19	20
258	259	260	261	262	263	264
21	22	23	24	25	26	27
265	266	267	268	269	270	271
28	29	30				
272	273	274				

- ☐ YES | Driver's training program
- ☐ NO | set up? Driver's records
- up to date?

Supply
FOUL
UP?
ROID
EM!

- ☐ YES | DA Pam 310-1,2,3,4,6 and
- ☐ NO | 7 readily available?

OCTOBER 1980

S	M	T	W	T	F	S
			1	2	3	4
			275	276	277	278
5	6	7	8	9	10	11
279	280	281	282	283	284	285
12	13	14	15	16	17	18
286	287	288	289	290	291	292
19	20	21	22	23	24	25
293	294	295	296	297	298	299
26	27	28	29	30	31	
300	301	302	303	304	305	

- ☐ YES | Enough time allowed for
- ☐ NO | PM? Be sure!!

SMELL
DIPSTICKS
FOR
FUEL

READ
EIR
DIGESTS

TIGHTEN
THOSE
LUG
NUTS!

DO
THE JOB
RIGHT
THE
FIRST
TIME!

TIRES
INFLATED
RIGHT!

TREAT
ALICE

WITH
TLC!

- ☐ YES | DA 12-series forms
☐ NO | for pubs updated?

NOVEMBER 1980

S	M	T	W	T	F	S
						1 306
2 307	3 308	4 309	5 310	6 311	7 312	8 313
9 314	10 315	11 316	12 317	13 318	14 319	15 320
16 321	17 322	18 323	19 324	20 325	21 326	22 327
23 328	24 329	25 330	26 331	27 332	28 333	29 334
30 335						

- ☐ YES | Command Maintenance
☐ NO | SOP updated and distributed?

DRIVE SLOW IN SNOW!

- ☐ YES | Are you really managing
☐ NO | YOUR maintenance?

DECEMBER 1980

S	M	T	W	T	F	S
	1 336	2 337	3 338	4 339	5 340	6 341
7 342	8 343	9 344	10 345	11 346	12 347	13 348
14 349	15 350	16 351	17 352	18 353	19 354	20 355
21 356	22 357	23 358	24 359	25 360	26 361	27 362
28 363	29 364	30 365	31 366			

- ☐ YES | OJT and cross-training
☐ NO | plan being followed?

DON'T SKID
AROUND

SHOOT
EXCESS
ITEMS
BACK INTO
SUPPLY
NOW

Changes
CURRENT
and
POSTED
IN
PUBS
?

TAP.TAP.TAP
when BRAKING
ON ICE!

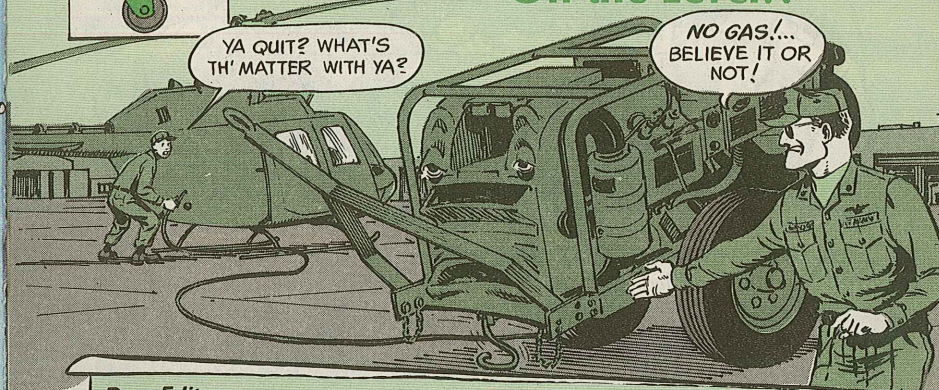
DISCHARGED
BATTERIES
CAN
FREEZE

AIR
MOBILITY



For Army Aircraft...

On the Level??



Dear Editor,

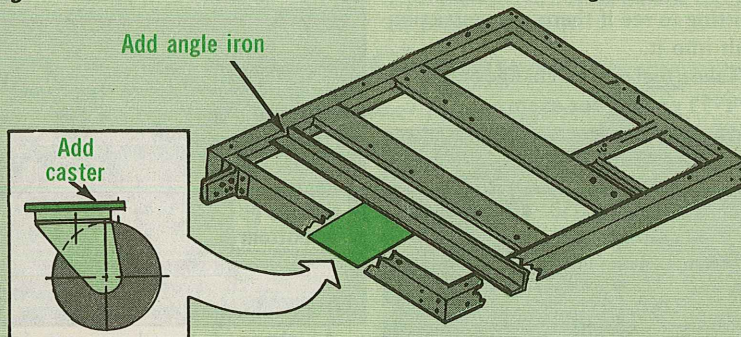
The trouble with the kick stand on the 7.5-KW Hollingsworth generator set, NSN 6115-00-074-6396, is that it can become bent and won't hold the generator on an even keel.

As a result, the generator tilts forward, stopping the flow of gas—and the generator.

So, we came up with the simple solution of removing the kick stand and adding a 10-in swivel caster, NSN 5340-00-810-4193, costing \$22.48.

Add angle iron

Add
caster

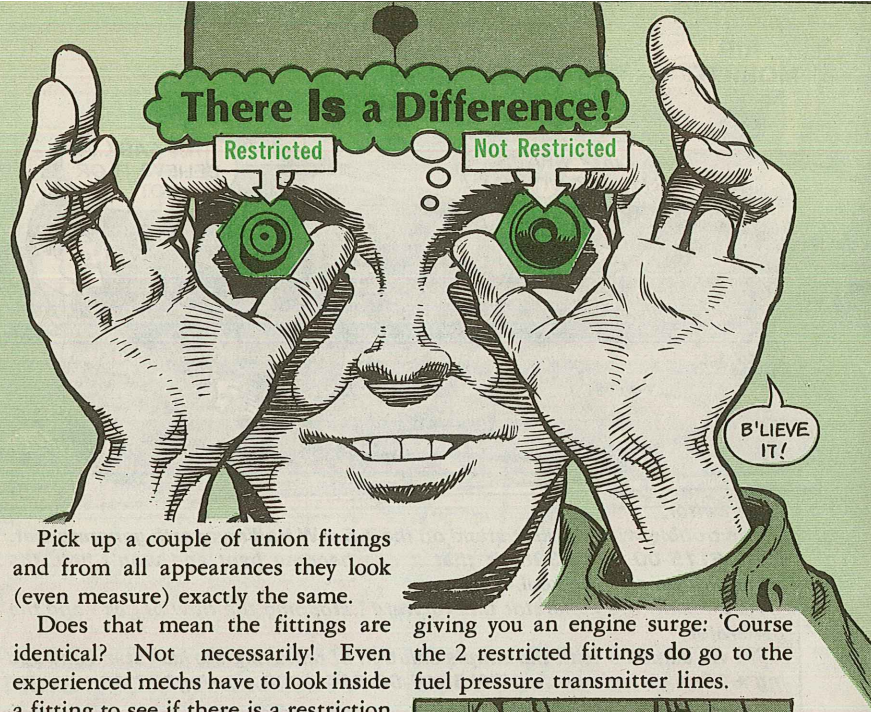


To secure the caster, we welded a 28 1/4-in long piece of angle iron, 1 3/4-in x 1 1/4-in, to the frame. We used the base of the caster to locate the angle iron.

We drilled 2 holes in the angle iron and 2 more holes in the forward part of the frame, again using the caster as a template. To secure the swivel, we added four 1/2-in diameter bolts, 1 1/2 inches long, with lockwashers and nuts.

No more "tilting" generators!
Mr. L.E. Zongker
Aberdeen Proving Ground, MD

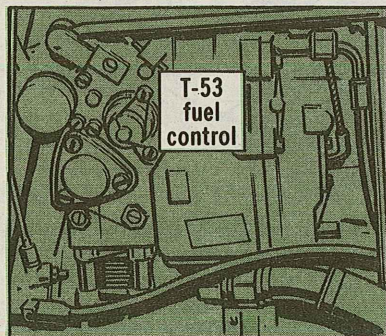
THAT'S
THE WAY TO
KEEP 'EM
RUNNING!



Pick up a couple of union fittings and from all appearances they look (even measure) exactly the same.

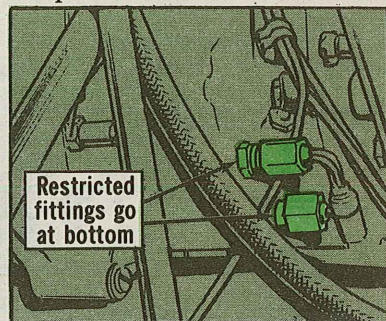
Does that mean the fittings are identical? Not necessarily! Even experienced mechs have to look inside a fitting to see if there is a restriction built into it.

Take a fuel control change on a T-53 or T-55 engine, for example.



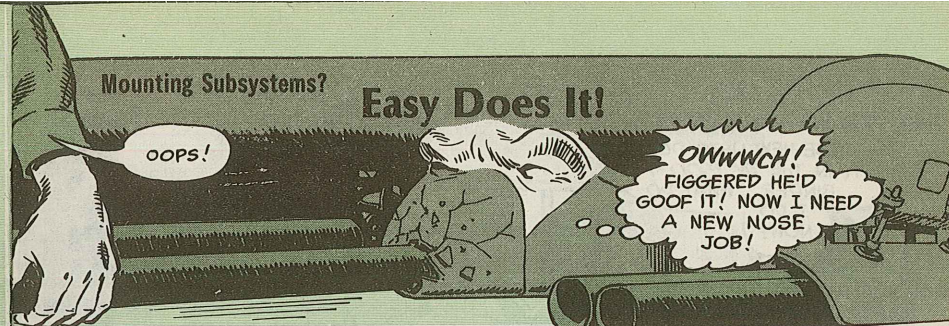
Install a restricted fitting in the P3 port and you'll get premature closure of the bleed band at about 25 percent N1. The bleed band may stay closed,

giving you an engine surge. Course the 2 restricted fittings do go to the fuel pressure transmitter lines.

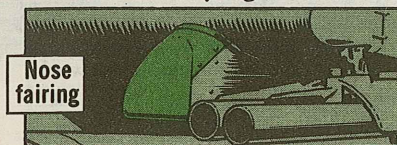


Another place where restricted fittings will really louse up the works is the 3rd and 4th oil scavenge ports on the gear box of a T-53 engine. A restricted fitting will give you a bearing failure in a matter of minutes.

To be absolutely sure you're using all those little dudes in the right place, eyeball 'em—for real!

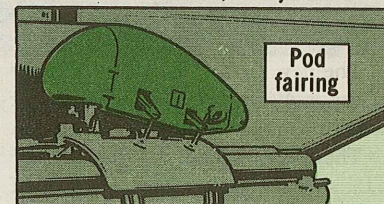


The advantage of fiberglass panels on your Cobra is that they're lightweight and fairly strong. When they do get busted, tho, the replacement costs are sky-high.



Take the wing pod fairings, for example. You mount a lot of weapons subsystems on your Snake so the pods take a real beating.

The nose fairing alone goes for over \$300. Your support has been replacing a lot of those babies, lately.



How 'bout it, bird types? Never slam weapons subsystems into those fiberglass panels! And, handle removed panels carefully.

AT LAST!

Cobra Hardware Change

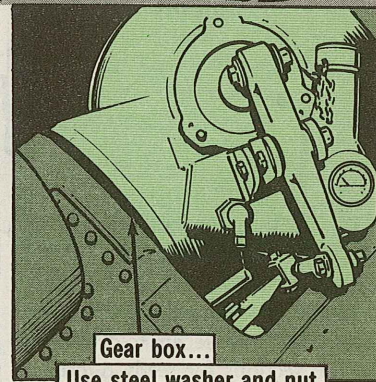
OUR CHOPPER!

THANKS GOODNESS!

Before you Cobra mechs mount a 90-degree gear box on your AH-1S, eyeball the tech manual.

Ch 2 (Aug 78) to TM 55-1520-236-13 says you now use 1 thin steel washer, NSN 5310-00-167-0837, on the mounting studs. It replaces the aluminum and steel washers formerly used.

Then, to hold that baby nice and snug, reach for a torque wrench and tighten the retaining nuts to 160-190 lbs-in.



Ask for Dividers!

THESE NEW LISTS DON'T FIT IN THE TM 1500-1 BINDER... WHAT DO I DO NOW?

ORDER TM 1500-2.

The new aircraft checklist (CL) for pilots is 4½ inches x 8 inches and it won't fit in the old TM 1500-1 binder.

There is no binder for the new size CL...so what do you do? Order TM 1500-2 from your pub source and you'll get a package of tabbed dividers.

How do you hold the works together? With electrical component tie-down straps. Never use key rings because they could cause FOD problems.

The checklists and tabbed dividers have 7 holes on the left side for the straps. Use at least 3 straps so you won't tear the pages. Those plastic babies can also be used on the maintenance test flight pubs.

Just insert the strap thru the holes, adjust to length you need and cut off the remainder.

THE STRAPS STACK UP LIKE THIS...

NSN

LENGTH

5975-00-074-2072

6.5 inches

5975-00-156-3253

13.25 inches

5975-00-570-9598

10.20 inches

The dividers match up with the new size CL and you use 'em to divide your CL into sections for ready reference.

Safety-of-Flight Messages

UH-1-79-20
AH-1-79-17

Driveshaft (Short Shaft) Assemblies. TB 55-1520-243-20-2. Change to UH-1-79-18 and AH-1-79-16. DRSTS-MEA 051215Z Sep 79

UH-1-79-21
AH-1-79-18

Driveshaft (Short Shaft) Assemblies. TB 55-1520-243-20-2. Change UH-1-79-18 and AH-1-79-16. DRSTS-MEA 071905Z Sep 79

UH-1-79-22
AH-1-79-20

Tech Advisory PL Bellows Problems with T-53 Engines DRSTS-MEA 211500Z Sep 79

UH-1-79-23
AH-1-79-21

Driveshaft (Short Shaft) Assemblies. TB 55-1520-243-20-2. Change UH-1-79-18 and AH-1-79-16. DRSTS-MEA 212112Z Sep 79

AH-1-79-19

Safety-of-Flight Hose Assembly. DRSTS-MEA 112100Z Sep 79

CH-47-79-12

CH-47A/B/C electrical wiring. Change CH-47-49-11. TB 55-1520-241-20-4 DRSTS-MEA 211335Z Aug 79

CH-47-79-13

Safety-of-Flt CH-47A/B/C cargo hook beam tracks. TB 55-1520-241-20-5 DRSTS-MEA 301715Z Aug 79

CH-47-79-14

Maint Info: Painting of Latch Plates. DRSTS-MEA 271230Z Sep 79

CH-47-79-15

Maint Adv Transmission Lube Filters. DRSTS-MEA 271600Z Sep 79

OV-1-79-9

Maint Info OV-1/RV-1-Series. Change to drogue gun firing pin spring force test DRSTS-MEA 081505Z Aug 79

OV-1-79-10

Maint Info OV-1D/ OV-1D(C). RV-1D-Series to avoid damage to round-dial torque indicator DRSTS-MEA 101702Z Aug 79

OV-1-79-11

Maint Adv Phased Maint on OV-1/RV-1-Series DRSTS-MEN 051715Z Sep 79

U-8-79-5

Safety-of-Flt 0-480-Series engine defective engine bolts. TB 55-1510-201-30-5 DRSTS-MEA 132028Z Aug 79

U-21-79-7

Maint Adv Phased Maint on U-21/RU-21-Series DRSTS-MEN 051730Z Sep 79

C-12-79-01

Maint Adv Brake Freezing DRSTS-MEA 191300Z Sep 79

C-12-79-02

Maint Adv Oil Analysis Program (AOAP) for C-12 Engines DRSTS-MEA 211300Z Sep 79

Keep Tabs on 'em!

Until the T53-L-13B engine fuel control—Model TA-25—is modified with a stainless steel bellows, you must follow the operational restrictions and maintenance inspections put out for your Huey and Cobra. Keep these messages real handy:

UH-1-79-5

AH-1-79-4

UH-1-79-6

AH-1-79-5

UH-1-79-11

AH-1-79-13

A Little Tighter, Please!

The new roller chain in the tail rotor control system of your Huey tends to lose tension after a few hours of operation. So, the head hangar has changed the tension limits from 35-40 pounds to 40-60 pounds. Try it—you'll like it!

Get the Plug!

You Huey types can have the advantage of a tougher main rotor mast—to protect against mast bumping damage—with the incorporation of MWO 55-1500-219-30-9 (Aug 78) on your UH-1B, D/H birds. The mod adds a reinforcing plug. Some time in the distant future a sturdier mast will make the scene.

Back to Basics

If the T-53, T-55 or T-63 engine in your bird is acting up, eyeball the troubleshooting info in Para 30-1 of TM 55-406 (Feb 69) on powerplant maintenance. The troubleshooting charts, which supplement the word in individual aircraft manuals, will help you analyze, isolate and correct engine problems.

Gage Not Needed!

WHADDAYAMEAN?
YA DON'T NEED A
FEELER
GAGE?

THIS
IS ALL I
NEED!

Dear Windy,

According to Para 6-13f in TM 55-1520-228-23 (Aug 78), we have to inspect the outer adapter spline teeth on the main drive shaft.

To check for wear in excess of .005

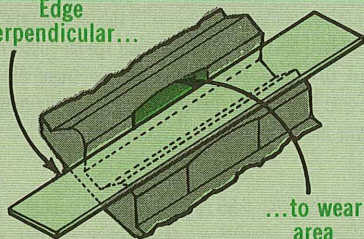
inch, tho, we need a wire feeler gage and there is no such animal in the general mechanic's tool set.

Where can we get the gage, Windy?
SSG L.M.C.

Dear, Sergeant L.M.C.,

You don't need one! The manual is being changed, calling for you to make the inspection with a straight edge.

Edge
perpendicular...



...to wear
area

Just position the metal straight edge against the face of the tooth being inspected. Place a light so it will shine under the straight edge and look for wear, indicated by light showing.

...CONDITIONS
WHICH WOULD
MEAN
REPLACEMENT!



BOY, HERE'S
JUST THE
KIT FOR ME!

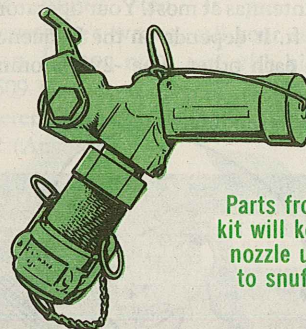
THAT'LL SAVE
UNCLE LOTSA
BUCKS!

Organizational mechanics are overlooking a good PM bet...the repair parts kit NSN 4930-01-021-4737 listed on page E-9, TM 5-4930-226-12&P (Oct 77).

Using the parts from the kit to keep the CCRN—closed circuit refueling nozzle—up to snuff can save you much downtime. Stops unnecessary clogging of the supply lines with nozzles you send back to depot for overhaul, too.

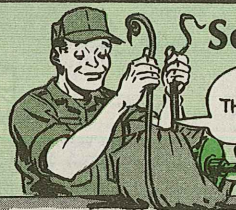
Every item in the kit is illustrated in Figs E-1, -2, -3; 4, or -5. The whole kit costs 130 bucks, but only buy the parts you need.

Add these new numbers to the TM: NSN 4940-01-031-9427 gets a dog wrench; 4730-00-951-3298 gets a 1½-in female-to-male adapter; and 4930-00-951-3295 gets a 2-in female-to-1½-in male adapter.

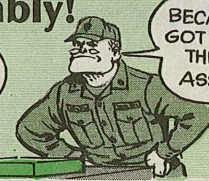


Parts from
kit will keep
nozzle up
to snuff

Send the Assembly!



YUP--I'M SENDING OUT
THIS STARTER-GENERATOR
FER OVERHAUL ... WHY
D'YA ASK?



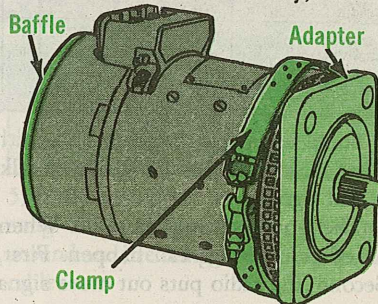
BECAUSE YOU
GOT TO SEND
THE WHOLE
ASSEMBLY.

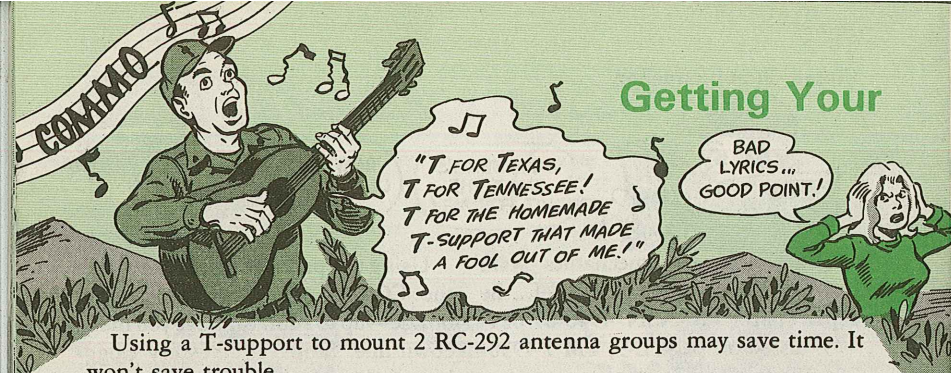
When you turn in an aircraft part for overhaul, it's mighty important that you eyeball the parts pub to be sure it's complete.

Take the starter-generator on the RU-21B/C/D Models, for example. A lot of those babies have been showing up without the adapter, clamp, and baffle.

Buying extra parts runs up the tab somethin' fierce!

Turn in the whole assembly, OK?





Getting Your

Using a T-support to mount 2 RC-292 antenna groups may save time. It won't save trouble.

That setup gives you a 3-ft space between antennas at most. Your operator's TM says you need at least 5, and up to 800, ft. It depends on the frequency.

Too close, and those antennas mess with each other. The -292 is omnidirectional. That is, it radiates in all directions.

When they're too close, they can't. When one is sending, for instance, it hurts the other's reception.

Some operators add to their problems.

They ignore the chart on page 2-4 of TM 11-5820-348-15 (May 66).

THIS CHART TELLS HOW TO "TRIM" THE GEAR FOR EACH OF ITS 3 FREQ RANGES...

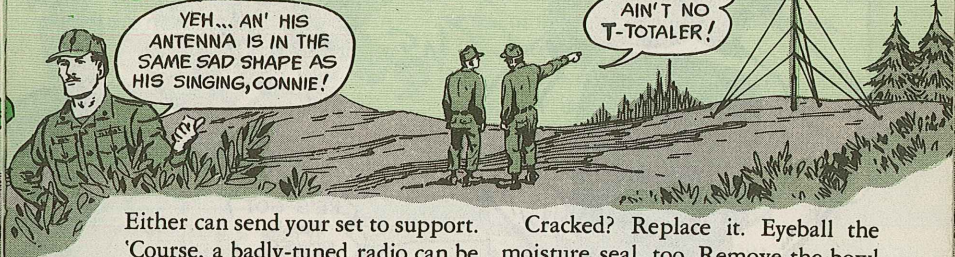
TM 11-5820-348-15

Radio Set or Receiver-Transmitter	Operating frequency (mc)	Vertical antenna					Ground plane				
		Number of sections required	Quantity and type of sections				Number of sections required	Quantity and			
			AB-21GR	AB-22GR	AB-23GR	AB-24GR		AB-21GR	AB-22GR	AB-23GR	AB-24GR
RT-66/GRC, AN/PRC-8	20 to 27.9	6	3	1	1	1	18	3	1	1	1
RT-67/GRC, AN/PRC-9	27 to 38.9	4	1	1	1	1	15	2	1	1	1
RT-68/GRC, AN/PRC-10	38 to 54.4	3	0	1	1	1	12	1	1	1	1
RT-246/VRC,*	30 to 36.5	4	1	1	1	1	15	2	1	1	1
RT-524/VRC,*	36.5 to 50.5	3	0	1	1	1	12	1	1	1	1
RT-505/PRC-25,*	50.5 to 75.95	2	0	1	1	1	9	0	1	1	1
RT-841/PRC-77*											

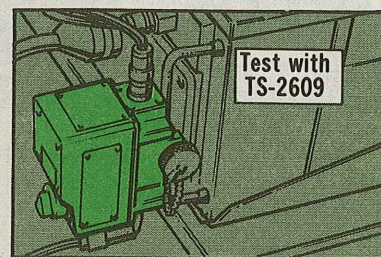
Some learn one way and stick with it. Usually, they pick the mid-range. That's fine if that's the one they're talking on. If not, the best they can hope for is bad signals.

The worst is a zapped radio. When the antenna and radio aren't working together, 2 things can happen. First, power is reflected back to the radio. Second, the radio puts out more signal than necessary.

Signals Crossed

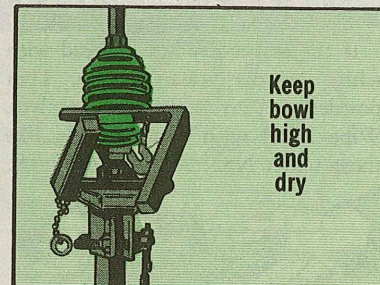


Either can send your set to support. 'Course, a badly-tuned radio can be the culprit, too. If you think something's wrong, call your repairman. He can run a test with his TS-2609 test set or AN/URM-182 watt meter, like it says in TM 11-5820-401-12 (Aug 72).



Here are more tips to keep your antenna perking:

That MP-68 insulator bowl should be high and dry. A little condensation can short it out.

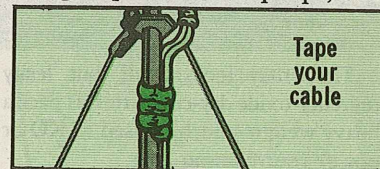


Cracked? Replace it. Eyeball the moisture seal, too. Remove the bowl once in a while and wipe it dry. Then put a light coat of silicone on both sides of both gaskets. An 8-oz tube is NSN 6850-00-880-7616.

Grease the mating ends of the antenna sections, too. That'll keep 'em from "freezing" together. Makes disassembly a breeze.



If you have trouble with the tape that holds your coax cable to the mast, change tape. A low-temp tape, NSN



5970-00-419-4291, keeps the cable snug. That prevents it from blowing around and breaking connectors or the cable.

For Mercury
Dry Cells...

The **WET
LO**

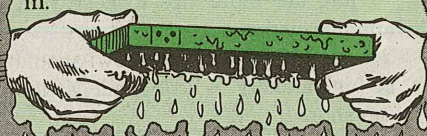
HE'S GOT
REAL
POWER,
MACON!

...I GOTTA
BE RECKONED
WITH!

I'M A
CHAMP...
BOTH
DRY OR
WET...



Electrolyte oozing from one of these batteries is a big-time corrosion problem for your equipment. So, give cells the once-over at inspection time. If you find moisture, turn the batteries in.



If the cell is dry but covered with white powder, clean it up. That powder is crystallized electrolyte. Wipe it off with paper towels, like those under NSN 7920-00-965-1709.



They may look small, but leaky mercury-oxide dry-cell batteries pack a heavy weight punch, poised to KO or power your commo gear.

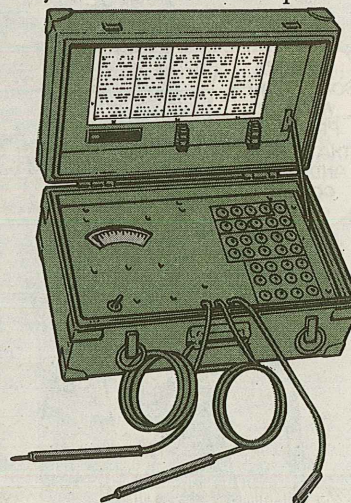
If you're not sure your cells are mercury, eyeball the BA number. Mercury cells are only in the BA-1000 thru 1999 range.

46

**LOOK,
OK**

YEAH -- BUT WATCH
OUT FOR A WET ONE.
HE CAN KO YOUR
COMMO GEAR!

Then, test it under load with your TS-183/U test set. See TB 11-6625-450-10/1 (Jul 68) for details. If the test probe you need is not listed in the TB, check the battery. Newer batteries carry that info on the unit pack.

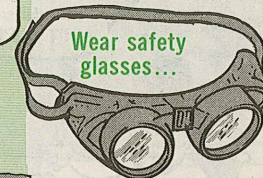


Test with TS-183/U

If your dry-cell passes this test, put it back to work. If not, turn it in.

'Course, any time you handle leaky or powder-covered batteries, be careful.

Electrolyte burns. Keep it off skin and out of eyes. If possible, wear rubber gloves and safety glasses.



...and
gloves



Wash it off quickly if it gets on your skin. If it gets in your eyes, flush with lots of water for at least 15 minutes. Then see a doctor ASAP.

Mercury batteries can explode. That's why bad ones get turned in ASAP. If they don't, somebody might get rid of 'em some other way—like in a fire. That's a sure way to get a big bang.

YOU CAN
STAY OUT
OF TROUBLE
BY...

- Keeping the power switch off when equipment is not in use.
- Disposing of batteries when your test set shows they have 70 percent or less of their rated voltage.

47

Fit to be Tied

HE FIXED
THE CABLE!

YEH -- BUT HE
WON'T INTRODUCE
US TO CONNIE!...

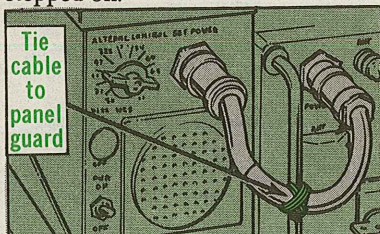
SEZ HE
AIN'T CUPID!

BOY! THIS IS
GONNA BE A
ROUGH YEAR
IF ALL ARMY
TROOPS ARE IN
THEIR SHAPE!

CONNIE--
I HOPE TH'
SOLDIERS YOU
ARE TALKING TO
GOT GOOD
EYESIGHT!

When the CX-4655 cable on your OA-3633 amplifier-power supply group gets in the way, tie it up.

For instance, when it's mounted in a TOW jeep, it's in the way of the gunner's chair. Or, when it's mounted under vehicle seats, it gets stepped on.



So, take a piece of string to that 11-in cable. Tie it flat against the receiver-transmitter's panel guard. That'll keep it, and you, in business.

Course, when you put an MT-1029 mount under a seat, install it as far to the rear as possible.

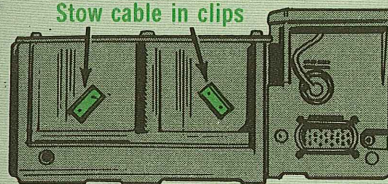
HERE'RE
SOME OTHER
WAYS TO
PROTECT
THAT CABLE
AND YOUR
COMMO
GEAR...

Tied

● When you remove the RT from the set, be sure the cable is disconnected. Otherwise, something's gonna give, and it'll cost somebody a few bucks to fix it.

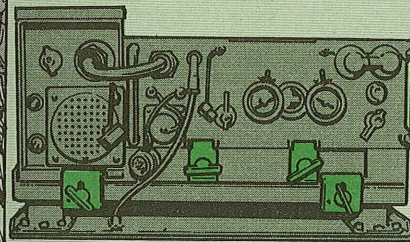
● Next, when you don't need the cable, put it where it belongs. The back of the OA-3633 has clips for carrying the idle cable.

Stow cable in clips



● When unhooking the connector, be sure to use the locking ring. Turning the cable behind the ring just twists fragile wires.

● Be sure you fasten everything down, too. Naturally you lock the OA-3633 into the MT-1029. You'd also better lock the RT into the OA-3633.



● Finally, be sure the power is off when you slide the gear into the MT-1029. If it's not, you can fry up a mess of components.

Boxed In?

Dear Half-Mast,

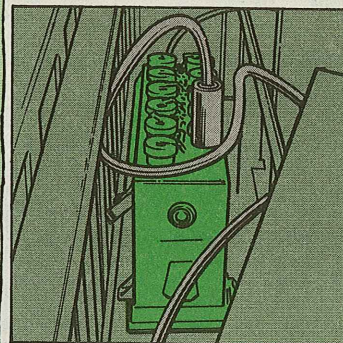
Our M882 truck came with a power junction box mounted in the cargo area. It lets us run our commo gear off the truck's power.

Our box went bad and needs fixing. What is the NSN and TM for the box?

SSG T.L.C.

Dear Sergeant T.L.C.,

The box goes by NSN 5820-01-034-6406.



The pub's still in the draft stage, tho. You can get a copy by asking for PDEP 11-5820-862-13 from:

Commander

US Army Communications and Electronics Material Readiness Command

ATTN: DRSEL-ME-P

Ft. Monmouth, NJ 07703

The official TM will be ready in 1980.

Half-Mast

OK,
Commo
Types...

CLEAN

Keeping your commo gear at the top of its form means keeping it clean. As easy said as done —if you've got the goods.

TO MAKE SURE YOU DO, HERE ARE THE CLEANERS, GREASES AND ASSORTED PROTECTORS YOUR PUBS MOST FREQUENTLY CALL FOR...

HEY--
IT'S MACON,
TROOPS!

WOW!
HAVE I GOT
QUESTIONS
FOR HIM!

C'MON,
DORENE!

I'M
COMIN'...
I'M
COMIN'...

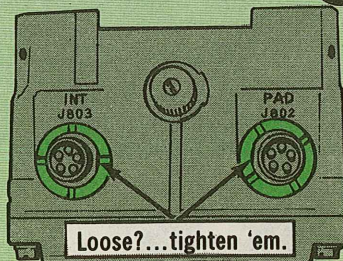
WAIT
FOR ME!

AN/VRC-12 Locknuts

Locknuts loose on your AN/VRC-12-series radio audio accessory connectors?

Tighten 'em if you got 'em. Otherwise, connecting a cable becomes a twisting affair for inside wires.

Locknuts missing? Order replacements with NSN 5310-01-062-6473.



IT UP!

Item	Quantity	Use
Silicone grease (6850-00-880-7616)	8-oz tube	Rubber O-rings, grommets, gaskets, pre-formed packing, between antenna sections
Cleaning/Lubing Oil (6850-00-003-5295)	16-oz spray can	Cleaning switches, contacts
Trichloroethane (6810-00-930-6311)	12-oz can	Contact cleaner
Trichlorotrifluoroethane (6850-00-984-5853)	5-gal can	Contact Cleaner
(6850-00-105-3084)	16-oz can	
Cleaning Compound (6850-00-597-9765)	1-gal can	Grease, fungus, dirt remover. (external surfaces)
Isopropyl alcohol (6810-00-753-4993)	8-oz can	Cleaning boards, electronic components
Freon (type TF) (6850-00-105-3084)	16-oz can	Cleaning recorder heads and electronic components
Varnish (8010-00-515-2487)	1-pt spray can	Moisture, fungus protection
Silicone grease (9150-00-257-5358)	8-oz tube	Antenna contacts (non-insulating)
Talcum powder (8510-00-817-0295)	10-oz can	Switchboard plugs and moisture shields
Denatured alcohol (6810-00-201-0906)	1-pt bottle	Cleaning plugs, springs (in humid areas), searchlight reflectors
Polishing cloth (7920-00-985-6849)	13½x11-in	Switchboard plugs and packs
Silicone compound (6850-00-927-9461)	5-oz tube	Heatsink compound, heat protection
Lens tissue (6640-00-393-2090), (6640-00-285-4694)	5x3-in (100 sheets) 24x36-in (100 sheets)	Night vision equipment, projection equipment
Lens tissue (6640-00-597-6745), (6640-00-240-5851)	6-inx4-in (50 sheets) 24x36-in (100 sheets)	Night vision equipment, Optics
Lens Cleaner (6850-00-392-9751), (7930-00-466-2129)	2-oz bottle	Night vision equipment, projection equipment
Anti-static compound (6850-00-882-6690)	3½-oz bottle	Plastic gage windows
Insulation compound (5970-00-181-0190)	Kit	Waterproofing

YOU SUPPLY THE
ELBOW GREASE!

Camouflage Screen
Systems Protect...

Return

the Favor



Your camouflage screens and support systems need some real spy-close PM treatment.

You can save a bundle of bucks and downtime every time you put 'em up and take 'em down.

Never drape a screen directly on equipment. Sharp corners, armament, bumpers, antennas, exhaust stacks and mirrors on equipment snag and chew up screens quicker'n you think. Always leave a couple of feet of space between the equipment and the screen.

When you're tightening the screen with the aluminum stakes, be sure they catch only the edge cord, not part of the synthetic screen material.



Heat is a camouflage screen killer. You have to keep screens away from any hot surface, like a heater or exhaust.



This poop goes double for field artillery units. Keep the screens away from back blasts. Be sure you move the screen from the blast area before you fire. Saves a heap of screen repair and downtime.

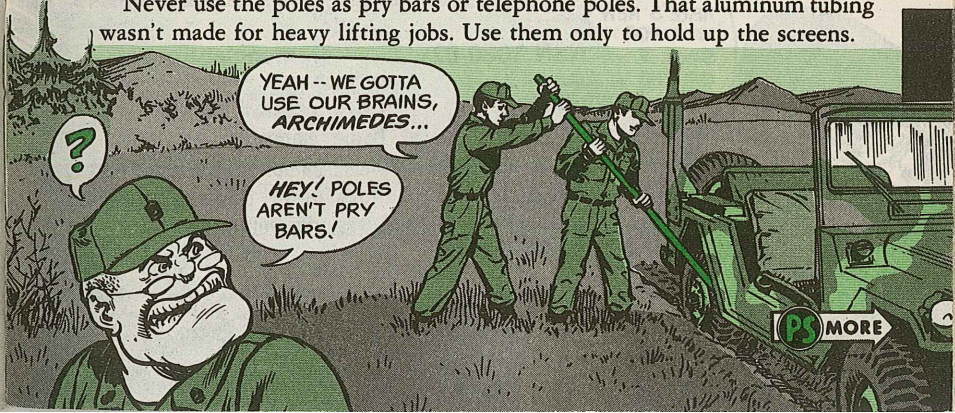
File off nicks and burrs on the aluminum poles. They'll fit easier and won't snag the screens during put-up/take-down operations.



Keep mud, sand, dirt, other gunk off the ends of the poles. Makes mating 'em a lot easier.

Spot paint any bare spots on the poles. TM 5-1080-200-10 (Sep 78) has the clean-before-painting poop if you have to repaint the poles. NSN 8010-00-111-7937 gets a gallon of forest green enamel for this job.

Never use the poles as pry bars or telephone poles. That aluminum tubing wasn't made for heavy lifting jobs. Use them only to hold up the screens.



Before you strike a screen, clean off an area on the ground big enough to spread the screen out. No stones, stubble or sharp sticks allowed under the screen. They'll tear it for sure when you fold it for storage.

Keep the screen clean. Wash it in mild detergent in a barrel of water.



GEE--SMITTY SURE GETS INTO HIS CAMOUFLAGE SCREEN CLEANING!

HMMMPH! ... MAYBE--BUT DID YOU EVER NOTICE HIS SHIRTS??...

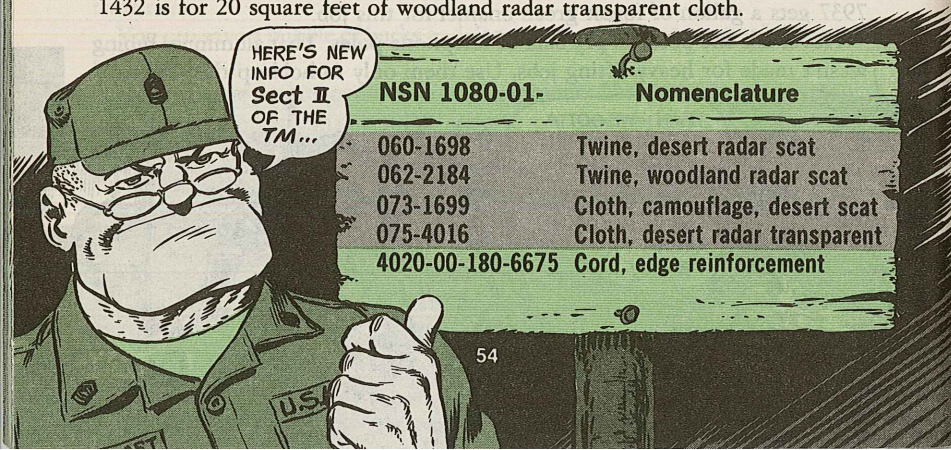
RING-AROUND-THE COLLAR!

A must for your camouflage screen system is TM 5-1080-200-10 (Sep 78). It gives plenty scoop on how to use and care for the screens, including how to repair.

This manual has the parts you may need to keep the screen in top shape, including repair kits, pins, garnish, cord, poles and spreaders.

The TM is small enough to fit in your shirt pocket. Order copies today.

If you use up the camouflage cloth, woodland radar scattering in your camouflage repair kits, you can get it separately now. NSN 1080-01-051-1433 gets you 20 square feet of woodland radar scattering cloth. NSN 1080-01-051-1432 is for 20 square feet of woodland radar transparent cloth.



HERE'S NEW INFO FOR Sect II OF THE TM...

NSN 1080-01-

Nomenclature

060-1698

Twine, desert radar scat

062-2184

Twine, woodland radar scat

073-1699

Cloth, camouflage, desert scat

075-4016

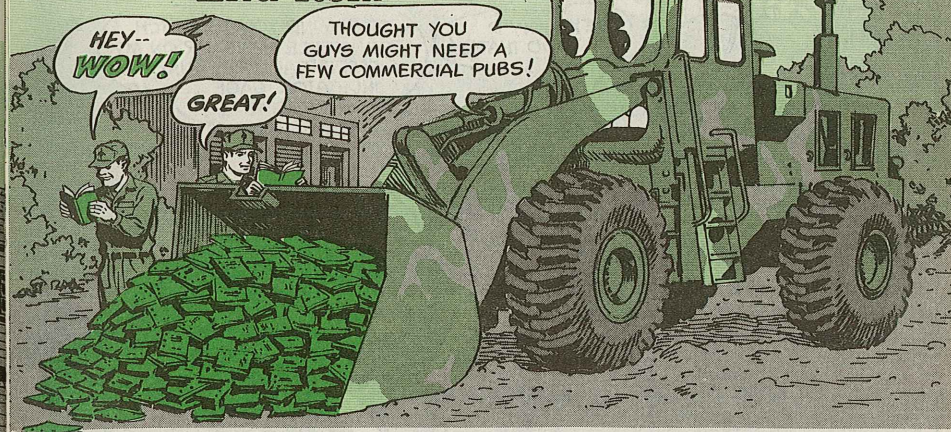
Cloth, desert radar transparent

4020-00-180-6675

Cord, edge reinforcement

Missing Commercial Pubs...?

It's an Incomplete End Item



HEY--WOW!

GREAT!

THOUGHT YOU GUYS MIGHT NEED A FEW COMMERCIAL PUBS!

When you get a new piece of commercial equipment—

And the commercial manuals are not in the overpack—

Friend, that end item's not complete.

You don't have to accept it without manuals.

The headshed puts two sets of manuals in the overpack for you, the user.

Not for DSU. Not for GSU. For the user—you.

You wouldn't accept a JD-410 without wheels, or a D8K with a track missing.

You don't have to take anything without pubs.

One outfit did...an Entyre D-60 bituminous distributor.

Took it on a job. It blew up. The missing manual had the word that would have prevented that.

Insist on your commercial pubs. DSU and GSU can buy books from S9C if needed.

Get what's meant for you. No less.

MHE Carb NSN/PN

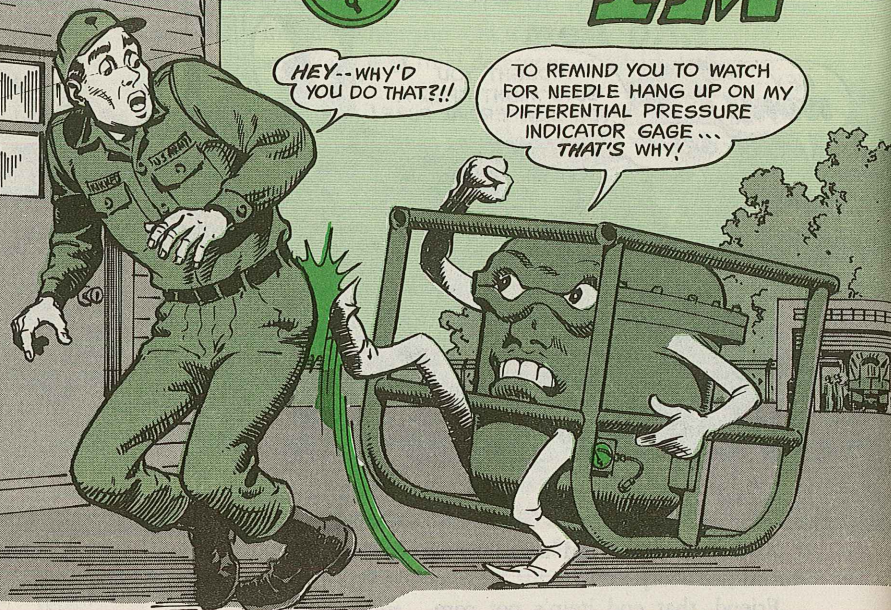
Use these numbers to get carburetors for your 2,000-4,000-lb forklifts and warehouse tractor. The RIC is S9C.

Army Model	NSN	PN/FSCM
MHE-192 (Clark Mod C20B-series)		11981 (79960)
MHE-229 (Clark Mod 2329397)		11981 (79960)
MHE-217 (United Tractor Mod G40C)	2910-00-358-4540	



Filter-Separators...

Dial For *PM*



HEY--WHY'D YOU DO THAT?!!

TO REMIND YOU TO WATCH FOR NEEDLE HANG UP ON MY DIFFERENTIAL PRESSURE INDICATOR GAGE ... THAT'S WHY!

A needle on the differential pressure indicator gage shows the condition of your filter-separator filters on a 3-color dial...green, yellow, and red.

As long as the needle moves, the filter-separator is working "as advertized". It's when the needle stays in one spot--no matter what--that PM makes the big play.

And it seems some troops don't pay attention to Para 2-2b TM 5-4330-217-12 (Apr 73) about checking the gage during operations. A hung-up needle could mean you're letting contaminated fuel get into an aircraft's fuel tank and into the engine. A busted dial plays all the way!



Mechanics can remove and clean the pressure differential indicator gage, piston, spring and fuel passages.

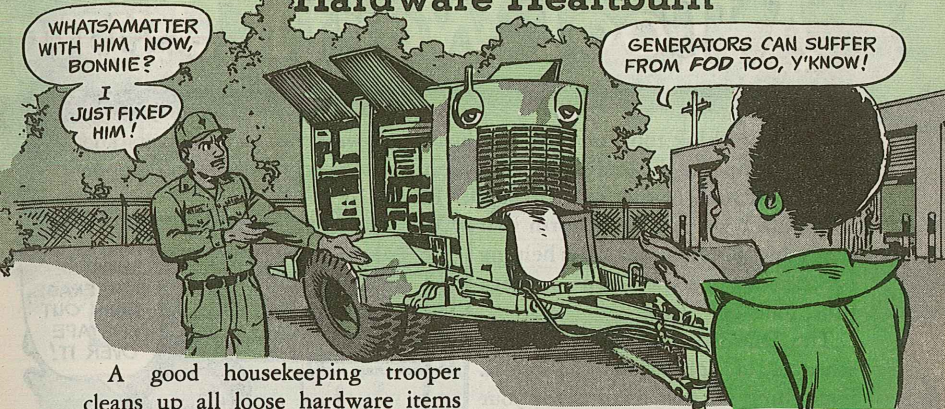
Para 4-15a(4) to Change 1 has info on how to service the gage components. Don't overlook the Caution note in the paragraph.

After you clean the gage, check it like Para 4-16 says.

This differential pressure indicator gage check-clean-service-check biz goes for operators of 50-and 350-GPM filter separators.

60-KW Generators...

Hardware Heartburn



WHATSAMATTER WITH HIM NOW, BONNIE?

I JUST FIXED HIM!

GENERATORS CAN SUFFER FROM FOD TOO, Y'KNOW!

A good housekeeping trooper cleans up all loose hardware items after he finishes a repair and maintenance job.

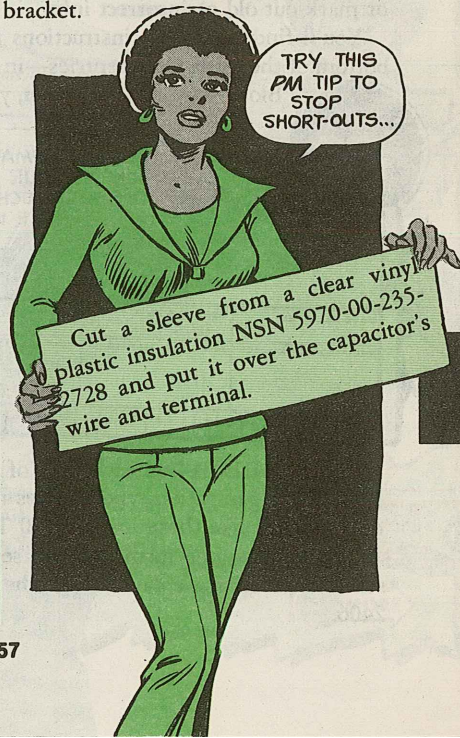
Like maybe you're working on the load connection group on a 60-KW DOD Mod MEP006A, MEP105A and MEP115A generator sets. You've just replaced or checked the noise suppression capacitor NSN 5910-00-561-8847.

Now you're buttoning up. Doublecheck for loose items you might have left behind...screws, nuts, washers, loose wire or any metal junk that could cause equipment short circuits, burned wires, or nearby components to fail.



Don't leave loose screws around!

It has happened! More than once a screw has caused damage by falling between the capacitor's terminal and the reconnecting board mounting bracket.



Cut a sleeve from a clear vinyl plastic insulation NSN 5970-00-235-2728 and put it over the capacitor's wire and terminal.

TRY THIS PM TIP TO STOP SHORT-OUTS...

A Tool Worth Using

You may think tools of the trade just cover wrenches, screwdrivers and hammers. But for the mechanic or maintenance-type concerned with PM, one of the best tools of the trade is the DD Form 314.

The DD 314 is a small form that does a big job. And that job is helping maintenance people—you—manage time, tools and space.

The DD 314 is your form. It's a schedule of your time and effort. Everything on that form is for your information and use.

It's easy to fill out a DD 314. You make entries in pencil or pen—as para 3-3 of TM 38-750 tells you—and erase or mark out old or incorrect info.

You'll find just a few instructions for filling out the blocks at the top or bottom of the form. Other entries—in the blocks left blank or in the Remarks Block—are left up to you, your SOP and your equipment's needs.

USE THE REMARKS BLOCK OR UNUSED BLOCKS AS YOUR CO OR SOP STATE TO HANDLE OVERFLOW SCHEDULING OR SPECIAL SERVICE INFO.

MAKE A MISTAKE? JUST ERASE, MARK OUT OR TAPE OVER IT!

DD Form 314

REMARKS																														
DATE RECEIVED										RECEIVED FROM										DISPOSITION										
REGISTRATION NUMBER										ADMINISTRATION NO.										NOMENCLATURE										
NB6738										HH6										Truck V4-ton HB X60833										
										MODEL										ASSIGNED TO										
										M151A1										HHB 3d ADA										

Fill out a DD 314 on each item of equipment you have with its own TM requiring organization-type services not covered by another TM. (Operator-only services like those in most -10 TM's do not go on the DD 314.)

You can use one form to cover several like items—when you pull their services on the same day—unless the items are reportable on the DA Form 2406.

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31																														
REGISTRATION NUMBER										ADMINISTRATION NO.										NOMENCLATURE										
JAN										FEB										MAR										
APR										MAY										JUN										
JUL										AUG										SEP										
OCT										NOV										DEC										
DATE RECEIVED										RECEIVED FROM										DISPOSITION										
REGISTRATION NUMBER										ADMINISTRATION NO.										NOMENCLATURE										

AT YOUR SERVICE, SOLDIER!

What to Schedule

What gets scheduled on a DD Form 314? Any organizational-level periodic maintenance service or lubrication.

Go through the organization TM on each item and list the required services.

SERVICES COME OUT OF THE ORGANIZATIONAL TM--USUALLY IN THE PMCS!

Table 2-2. Preventive Maintenance Checks and Services

Sequence No.	Organizational	Items to Be Inspected	Semi-annual Schedule	Procedures	Para
1	Cooling System	Inspect radiator core, hoses, cap, and gaskets. Check core	2-61		

Most of the services will be in the organization PMCS. A few—like tire rotations—may have a paragraph all their own. Watch for 'em.

CHECK THE TM CAREFULLY!

Section XXIV. WHEELS AND TIRES

c. Tire Rotation. To maintain equal wear, rotate tires in accordance with tire rotation plan shown in figure 2-379 at intervals of approximately 2000 miles.

d. Tire or Tube Replacement

PS MORE

Pull out the LO. Each time the LO mentions a lube action—even if it's just a filter change—that's an L you need to schedule.

LO 9-2320-218-12

LUBRICATION ORDER

28 JUL Y 1978 (Supersedes LO 9-2320-218-12) 30 MARCH 1976

Now scan the intervals block in the LO. That block tells you when you need to lube something. It does not tell you the type of service to pull. All services required by an LO are L's.

INTERVALS

See NOTE 6

D—Daily (Operator)

1—1,000 Miles

6—6,000 Miles or 6 Months*

12—12,000 Miles or 12 Months*

24—24,000 Miles or 24 Months*

*Whichever comes first

THIS BLOCK ON YOUR LO IS IMPORTANT... BUT IT ONLY TELLS YOU WHEN TO LUBE... NOT THE TYPE OF SERVICE!

Does the LO code those intervals with a letter or a number? You can adapt the coding as additional symbols or subsymbols of your L's. But make sure you explain those subsymbols or codes in your SOP or the Remarks Block of the DD 314.

If the LO calls for services by miles or hours, put those actions—the symbols for each and the number of hours or miles needed—in the Remarks Block of the DD 314.

Watch the timing on your symbols. The second quarterly is not automatically a semiannual. Just because a service falls at a specific time does not change its symbol.

You schedule—and pull—a service only when the pub calls for that service. If a quarterly is your highest service, then you'll have 4 quarterlies on the DD 314—not a quarterly, semiannual, quarterly and annual. If you pull a lube every 1,000 miles or monthly, that's still an L service. It is not a monthly.

DD FORM 314

REGISTRATION NUMBER ADMINISTRATION NO.

	1	2	3	4	5	6	7	8	9	10
JAN										
FEB										
MAR										
APR										
MAY										
JUN										
JUL										
AUG										
SEP										
OCT										
NOV										
DEC										
REMARKS										

QUARTERLY YOUR HIGHEST SERVICE?... THEN YOU'LL SHOW ONLY "Q"'S... NO SEMIANNUALS ("S") OR ANNUALS ("A") ON YOUR FORM!

Pulling A Service

When a service is due, make sure you check everything. Look at the TM and the LO and the equipment records on that item. The TM and LO give you tips, checkpoints, needed tools, parts and supplies and other service info. The equipment records—like the DA Form 2408-14—tell you about deferred maintenance or trouble spots.

Never, but never, just depend on the TM or the LO alone to carry you through.

Since the DD Form 314 helps you manage your time, tools, space and people, the form gives you some operating leeway. As long as you pull a service within 10 percent of when you scheduled that service, you just ink in the original date and add the actual miles or hours on the equipment at the time of the service. That 10 percent applies to whatever scheduling interval the equipment pubs give you: days, miles, hours or a combination.

For example, you can pull a semiannual service 18 days before or 18 days after the scheduled date and still be within the 10 percent variance.

DD FORM 314

REGISTRATION NUMBER ADMINISTRATION NO. HOME

JAN FEB MAR APR

MAY JUN JUL AUG SEP OCT NOV DEC

REMARKS

REGISTRATION NUMBER ADMINISTRATION NO. HOME

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31

"S" DATE CAN VARY AS MUCH AS 18 DAYS!

Use that 10 percent leeway to pull services together, avoid rush times, training periods and holidays or whatever else slows down your regular PM.

If you pull a service outside the 10 percent variance, erase the original scheduled date, ink in the symbol on the day you actually pulled it—and reschedule the following services from the new date.

When the equipment is DA Form 2406 reportable—either alone or as a subsystem of an item in Appendix C of TM 38-750—use the back of the DD 314 to keep up with downtime. (See pages 56-59 of PS 321 on keeping up with downtime on the DD 314.)

Where you keep your DD 314's and the other uses you have for the form depend on you, your SOP and how you're organized.

Are you using the DD Form 314 to make your job easier—or is it just another piece of paper in your shop?

CHECK IT OUT!

Give 'em **ALL** the Facts ?ATTAGIRL,
BONNIE--
LAY IT
ON HIM!

You drivers and operators filling a DA Form 2404 can stop a maintenance shop cold—or help it along.

How's that? You find a fault on your equipment. First thing you do is check the TM. Can you fix it? Do it. Not your job? Write it up on the DA Form 2404.

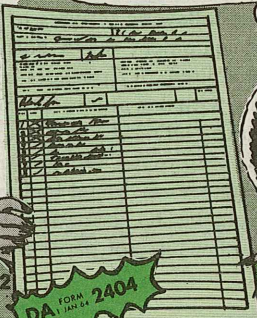
That's where you make or break a maintenance shop. What you write on that DA Form 2404 tells your maintenance people what's wrong and where.

Maybe you find a bolt or cotter pin missing. Simple, right? Nope. Most of your gear has a bunch of bolts and cotter pins—sometimes even the same one with the same NSN—all over the equipment. If you forget to write which bolt or where the cotter pin's missing, you force a mechanic to pull a complete inspection before the problem can be found—and fixed.

If the fault is deferred while your PLL clerk orders that bolt or pin, it gets messier.

What you write on the DA Form 2404—and exactly what you write on that form—goes on the DA Form 2408-14. And the DA Form 2404 with its clues to which bolt or cotter pin you meant—like the sequence number from the PMCS—is lost. That really poses a problem for the mechanic trying to replace that item.

Give your mechanics all the help you can. Tell 'em which item's missing or broken and where that item is on the end item. Give them all the facts they'll need to find and fix the problem.

A PROPERLY FILLED OUT
DA 2404 WILL HELP GET YOUR
GEAR BACK IN SERVICE SOONEST--
B'LIEVE
IT!

Create a Serial Number

HOW CAN I
FILL OUT THESE
*OOPS!! FORMS-- WHEN
THIS EQUIPMENT DOESN'T
HAVE A SERIAL NUMBER!THERE IS
A WAY,
SOLDIER!

In a stew over equipment with no serial number?

If the equipment requires a DA Form 2408-9, use the control number from its Acceptance or Gain Report. That's still good procedure—even with the note on that missing from TM 38-750.

For equipment with no DA Form 2408-9 (like your commo gear): Leave the serial number block blank or put the NSN there—depending on what TM 38-750 says for each form.

But some forms—like the DD Form 314 and DA Form 2408-14—really need a serial number. Try assigning an admin-type number as the serial number. Make sure you keep a record of which item carries which number, tho.

For some simple gear, you can use component serial numbers. But be wise and wary. Your maintenance people and support can exchange or replace components without changing the end item identification. Watch for that and note the new serial numbers.

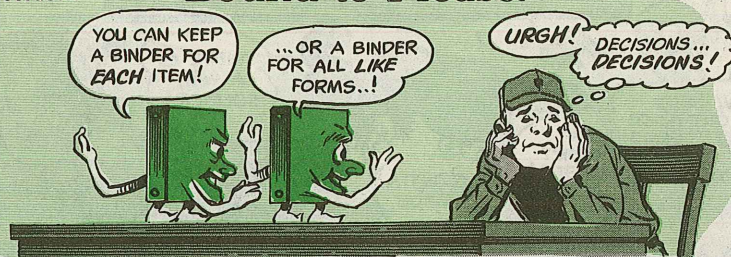
Report the Carrier

Your unit authorized a mortar with mount and a carrier to haul it around? When both items are listed in Appendix C of TM 38-750, report only the carrier on your DA Form 2406. The mortar becomes a subsystem of the carrier system. 'Course, if the mortar is not operational, the carrier system is NOR. You report the mortar on your DA Form 2406 only when it is a separate ground-mount weapon—no carrier authorized.

Back Issues of PS

YOU CAN GET
BACK ISSUES
OF PS BY SENDING
A NOTE TO:SFC Macon Sparks
c/o PS Magazine
Lexington, Ky.
40511THEY'RE
FREE!

Bound to Please!



The new equipment record-keeping instructions in TM 38-750 cut 'way down on the number of binders you keep now.

That's what the new set-up was supposed to do. Those of you in small units with 6 or fewer items listed in Appendix E of TM 38-750 may have ended up with **more** binders than you started with.

So the TM 38-750 headshed's giving you a choice. Here's how it works:

Organizations with 6 or fewer items of equipment listed in Appendix E may keep one binder for each item of equipment.

Instead of combining like forms in a binder—say, all your DA Forms 2408-1

in one binder, DA Forms 2408-14 in another binder—you can keep one binder for all the forms on each of your 6 or fewer items.

In other words, you'll have one binder with all the forms applying to one item of equipment.

Just go to that binder and pull the forms you need when you dispatch that item

Maybe you prefer the new setup, though, with like forms in each binder. You can go that route if that suits you better. The choice is yours!

Units with 7 or more items listed in Appendix E of TM 38-750 go with the new equipment records—keeping program all the way. Only like forms in each binder!

DA 2408-1

When you're starting a new DA Form 2408-1 for equipment with an hourmeter, put the hourmeter reading and total fuel and oil added since the last oil change on your "Brought forward from previous DA Form 2408-1" line. You do not need an entry at the top of column c. That applies to vehicles only.



When you're making a entry on the DA Form 2408-1, always remember to glance at Block 3. Block 3 shows—in pencil—the next scheduled periodic maintenance action—TM service or LO lube—due on the equipment. One coming up soon? Remind your maintenance people.

Connie's Mini Minis

CONNIE --
I GOT A
MAINTENANCE
PROBLEM!
WASHER'S
BROKE DOWN...
WITH ALL MY
DIAPERS IN IT!



Aircraft Status Reg

A new AR 95-33 on Army Aircraft, Inventory, Status and Flying Time Reporting (Dec 79) just landed. It goes into effect 1 Jan 80. Grab your copy and start reading now. The pub changes procedures, terms, the reports control symbol and forms for reporting your aircraft status.

Don't Drain Antifreeze!

Keep that antifreeze in your engine cooling system—if the freeze protection is OK for your area—unless you've got fresh antifreeze right there in your hot little hands! Antifreeze is in short supply—and'll probably stay short thru this winter season. That's the word in USAGMPA Msg STSGP-IM 231700Z Oct 79.

New Licensing TB

TB 600-2, Procedures for Selection, Training, Testing, Qualifying and Licensing Operators of Construction Equipment, Material Handling Equipment and Armor-Vehicle-Launched Bridge (AVLB) (June 79) is out! Did you get your copy?

New Pubs Guide

You know anybody in the pubs business? Tell 'em about DA Pam 310-10-2, The Standard Army Publications System: Resupply Guide (Sep 79). The Resupply Guide tells you everything you need to know about ordering pubs through AUTODIN and filling out DA Form 4569.

.50-Cal BFA Story

If you've been looking for a blank firing attachment for your M2 or M85 machine guns, sit back awhile. The BFA is still being tested and won't be fielded until after June 1980.

5-KW Generators

Operators take note: Always make sure your set is shut down completely before connecting load cables. This warning is being added by a change to Para 4-2a(3) (b) TM 5-6115-332-14 (Dec 77).

WSDC Source

Before you put a Weapon/Equipment System Designator Code (W/ESDC) on a request, check and double-check it in Appendix H of AR 710-2 with 5 changes. If no code is listed for your equipment then no code has been assigned. Only those codes in Change 5 to AR 710-2 are good now.

Match Mattress With Bag

Can proper reading habits keep you warm? You bet!

For you arctic types, the proof is on page 79 of FM 21-15. It reminds you to use the insulated pneumatic mattress, NSN 8465-00-518-2781, with the extreme cold weather sleeping bag, NSN 8465-01-033-8057. That bag will provide maximum protection only when it's used with the insulated mattress.

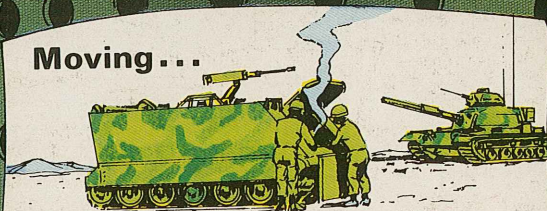
Would You Stake Your Life *right now* on the Condition of Your Equipment?

DIRTY FILTERS

CAN STOP ALL

CLEAN
'EM...

Moving...



...OR
CHANGE
'EM!

Shooting...



Communicating ...

