

Issue 327

PS

February
1980

THE PREVENTIVE MAINTENANCE MONTHLY

GOTTA BE
FOD,
CAPTAIN!

WE FOUND THE
FOD
SCREEN
BROKEN!

?

!

?

WHEW!
WERE WE
LUCKY!!!!

THIS IS
THE ONLY LEVEL
SPOT FOR MILES!

YEH-- BUT
IT'S 500 FEET
STRAIGHT DOWN!

FOR SOME
REASON, I KEEP
THINKIN' OF CONNIE'S
ST. VALENTINE'S DAY
SHINDIG THAT WE'RE
MISSING!

WUPPY
ANDERSON

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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Getting it Together...

WELDING

So you'd like to have a skill—know-how to do something—something not everybody can do—something even fewer can do really well.

You won't find many skills in the Army further up that list than welding. Good welders are truly hard to find, in uniform or out. Ask the people who built the Alaska pipeline!

Schools are few. But one dandy, if you can get into it, is Aberdeen—US Army Ordnance Center and School.

With Course 44B10, you not only get welder training, but a package deal with auto body repair and painting thrown in.

Another great spot is the Transportation School, Fort Eustis. For seagoing and heavy-metals people, there's a course you can't beat—704-61F10, Marine Hull Repairman.

For air types, there is 603-68G30, Aircraft Structural Repair.

The whole formal schools bit—Aberdeen, Eustis, and so on, is covered in DA Pamphlet 351-4, Army Formal Schools Catalog.

is Hard to BEAT!

FORMAL SCHOOLS ARE ONLY ONE WAY INTO THE WELDING BUSINESS. LOOK AT SOME OTHERS...

First, there's OJT. You can likely persuade someone in your own outfit who already knows a thing or six about welding to show you the ropes. Unless your unit's situation is unusual, your maintenance sergeant and warrant most likely will welcome the idea of having somebody else around who can hack it with acetylene, inert gas, or electric arc...or all three.

If you get assigned to a big depot like Anniston (that's the word for Heaven, welding-wise) or a field maintenance facility at a big post like Fort Knox—make use of your spare time. Watch what the civilian experts do with welding torches. Ask questions. Get them to give you advice and show you how.

You don't have to hang around the PX or barracks reading "Gent" or "Bosom" of an evening. Many local school systems have night courses in welding. Your education officer may be able to get Uncle to pick up part of the tab.

THE BOOKS 'N' SUCH

Nothing beats a good book—and "top of the line" in this game is TM 9-237 (Feb 76). Get your clerk to order copies from the St. Louis Pubs Center.

Help can be had thru films, too. Check DA Pamphlet 108-1 for the late word.

For example, there's a training film—TF 9-3973, on Welding with Inert Gas (heliarc, in the lingo). It's listed, along with other goodniks like TG 9-507 on Arc Welding, and several other TG's on torches. Check the newest issue of the pam and be first to know.

WELDING MATERIALS

There's a table in Appendix D of that TM 9-237 that's only 2½ inches short of marvelous. It tells you what stock class you'll find metal-working and welding tools and materials in...even such items as gloves, goggles and aprons, along with the hardware.

When you get to be a pro, you'll need to look at the microfiche IL—Identification List, that is—for the 3439 Class to get rods, wire, electrodes, brazing alloys, blocks, fluxes and such.

But any way you slice the salami, most of what you get depends on you and your own git-up-and-git. If you're too lazy to look up courses, too lazy to study for yourself, and don't have determination to learn, you wouldn't make a good welder anyway.

Specialists in this day's Army have to be quality types first...energetic, wanting to learn, determined to get the job done.

That's the kind you find in the fourth-echelon shops, in shop offices bossing the operation, and out-on-twenties to nab five-figure salaries.

That's what that recruiting non-com was talking about when he told you the Army would open doors for you to make something of yourself.

But reaching for the doors is strictly up to you.



Metal & Fiberglass Repair...

GROUND
MOBILITY

Kit Packs A Load

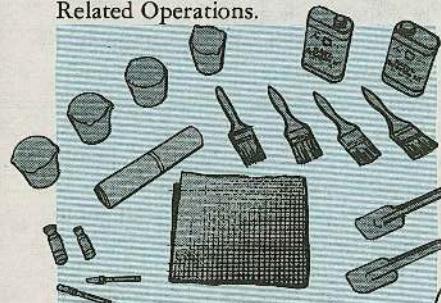
BOY! THIS IS ONE
JOB I REALLY GOT
STUCK WITH!

MAYBE NEXT TIME YOU'LL
READ THE FM AND FOLLOW
THE INSTRUCTIONS IN
THE KIT!



Lots of things—besides metal—can be repaired with the fiberglass repair kit, NSN 5410-00-793-2021.

This kit's specified for commo shelter repair in para 82 of FM 43-2 (Oct 75), Metal Body Repair And Related Operations.



Repair kit, electronic equipment shelter MK-680/G

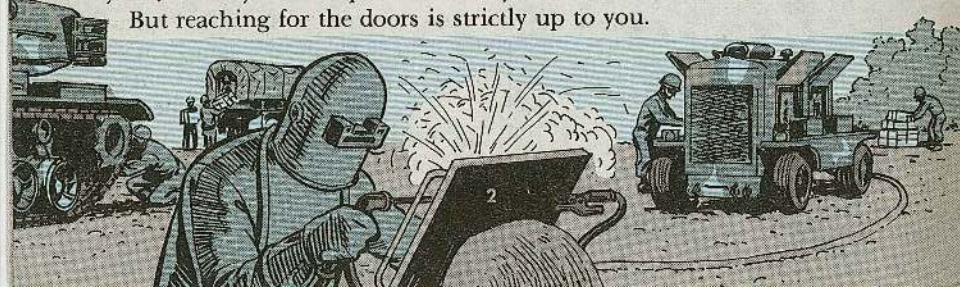
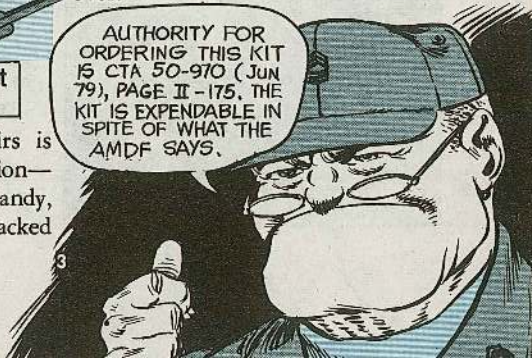
But its use for other repairs is limited only by your imagination—and trial-and-error. It's dandy, frinstance, for fixing cracked

fiberglass seats and battery covers on your Gama Goat. And for patching holes in your M149 400-gal fiberglass water trailer.

Mighty important! Before tackling a repair job with this kit, soak up all of the info in paras 81-83 in the FM. And stick close to the instructions that come with the kit. It's important to both your health and the outcome of your repair job.

It's bad enough to wind up with a sticky, gloppy mess. You may have a heckuva time cleaning it up to start all over.

AUTHORITY FOR
ORDERING THIS KIT
IS CTA 50-970 (JUN
79), PAGE II -175. THE
KIT IS EXPENDABLE IN
SPITE OF WHAT THE
AMDF SAYS.



Ground Electronic Control Unit



You have an M880-series 1¼-ton truck that won't start. The battery's up and the engine will turn over. But it won't fire.

Could be the electronic control unit lost its ground. The coil grounds thru the control unit. And if the coil's not

grounded, there'll be no field in the coil. No field... no spark.

Here're some quick checks to help find the problem:

Pull one of the spark plug cables at the spark plug. Hold the cable about ¾ inch from a ground. Have your buddy crank the engine. If you get a spark, the control unit is grounded and the ignition system is probably OK.

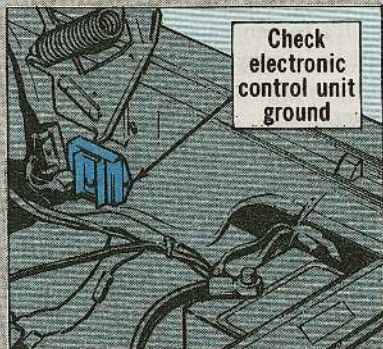
If you didn't get a spark, you need to check the control unit ground.

Here's a way:

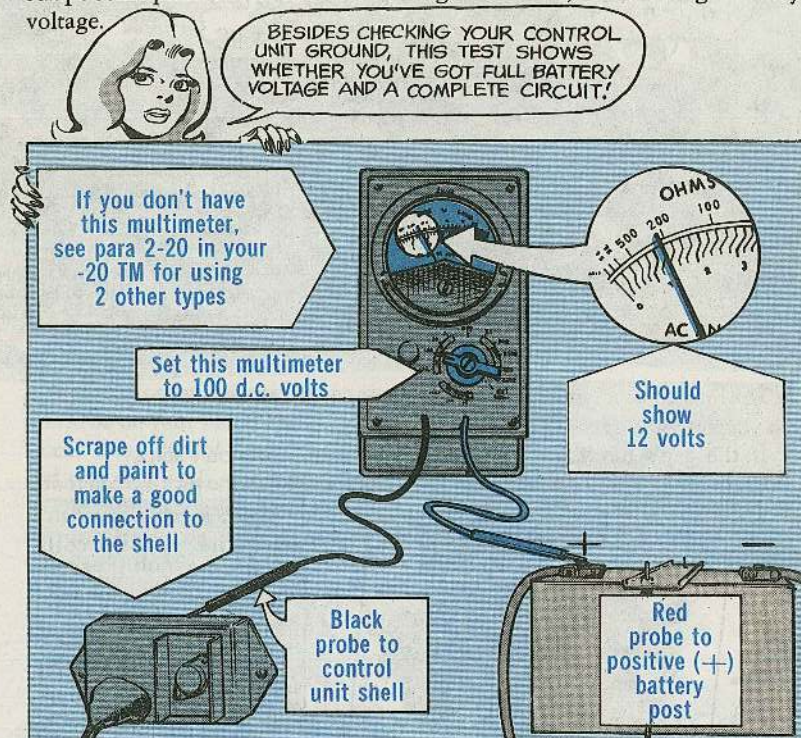
Set your multimeter to 100 VDC (50 VDC on some).

Turn the ignition switch to ON.

Touch the red probe to the battery positive (+) terminal and the black probe to the negative (-) terminal. You should get 12 volts.



Now hold the red probe to the battery positive terminal and touch the black probe to the control unit shell—not the mounting bolt. (You may have to scrape some paint off the shell to make a good contact.) You should get battery voltage.



Can't get it? Remove the control unit. Wire brush the back side of the control unit shell, the fender well and the mounting bolts.

Put back the control unit.

Now try to get battery voltage at the control unit shell.

Still can't get it? Replace the control unit.

If you did get battery voltage, try the spark plug cable test again.

Get a spark? Then the truck should start.

NO SPARK?
MAKE THE TEST
SHOWN IN PARA 2-22,
PAGE 2-26, TM 9-2320-
266-20 (Jan 76).

Correct Air Gap's a Must



The distributor air gap is real important for the electronic ignition on your M880-series 1¼-ton truck.

If the gap's too wide, the truck'll start hard...or won't start.

If it's too close, the teeth on the reluctor can rub the pick-up coil tooth. This'll break a tooth.



Align a reluctor tooth with the pick-up coil tooth.

Set the air gap at .008 inch.

See TM 9-2320-266-20 for details.

Use the brass feeler gage, NSN 5210-01-026-9571. This special tool is listed on page 3-1, TM 9-2320-266-20P (Feb 78).

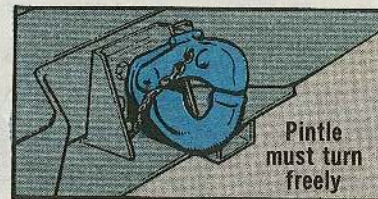
Never use the steel feeler gage from your general mechanic's tool set. The pick-up coil has a permanent magnet. You'll magnetize the blade of your feeler gage and ruin it. And you'll muck up the reluctor and maybe the pick-up coil.

Tow Pintle Adjustment



How tight should the trailer-towing pintle be on your M880-series 1¼-ton truck? Your -20 TM doesn't tell you— and this won't tell you much more.

The pintle should be loose enough to turn freely but tight enough so there's no sloppy end play.



M880 Seal Sealant



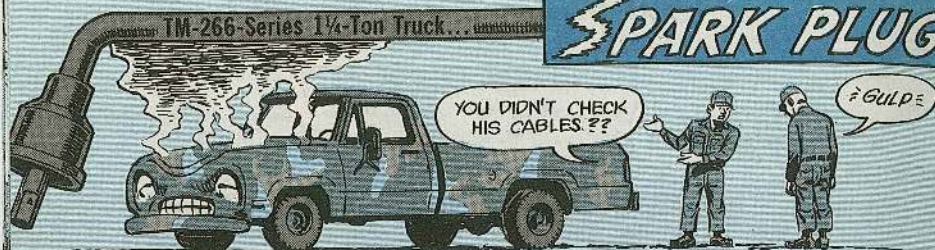
Instructions in TM 9-2320-266-20 (Jan 76), para 2-72c for assembling the front axle on the M880 4X4 models tell you to apply an RTV silicone

sealant to the seal surfaces. NSN 8040-00-728-3088 will get you a 6-oz tube of sealant. NSN 8040-00-865-8991 is for an 8-oz tube and you order it from GSA.

TM-266-Series 1/4-Ton Truck...

SPARK PLUG

CABLES OK?



A bad spark plug cable can knock out the electronic control unit.

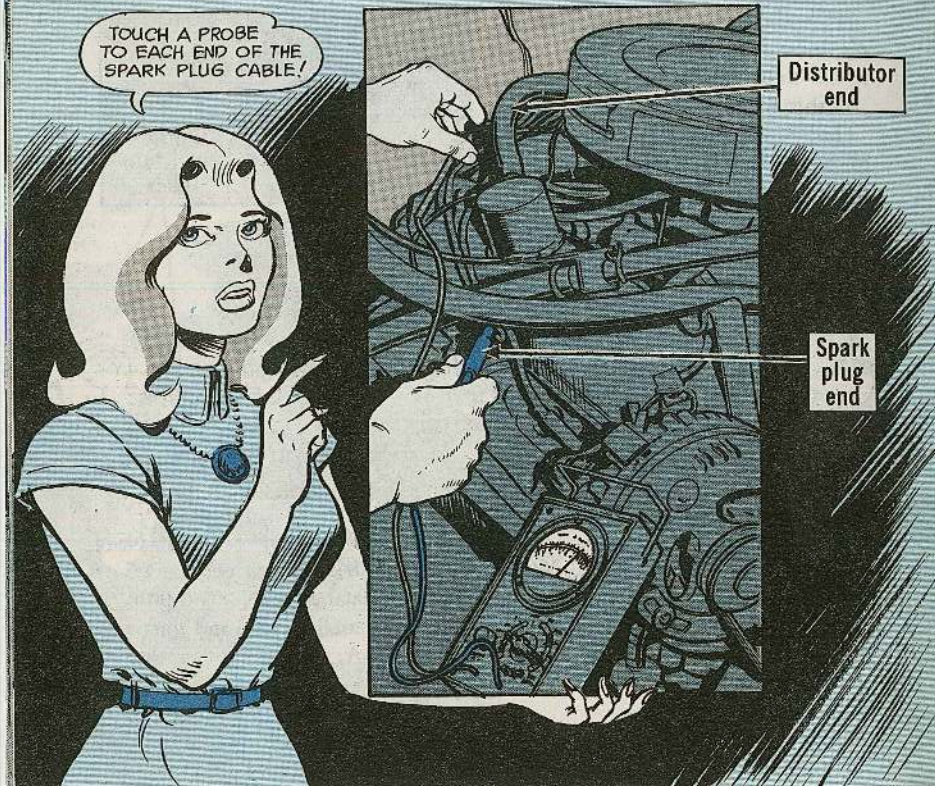
The electronic ignition system develops around 30,000 volts. If a spark plug wire is broken inside, the voltage will find another way to ground. This is usually either thru the pick-up coil in the distributor or thru

the electronic control unit.

Given enough time, that high voltage will burn out one or the other.

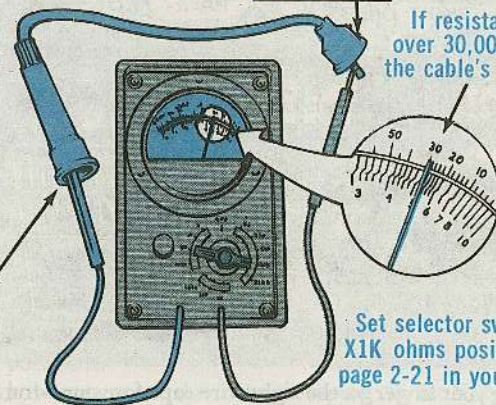
If the engine's missing or running rough, find out what's causing it. Then get it fixed. And be sure to check the spark plug wires like it says in para 2-24, TM 9-2320-266-20 (Jan 76).

TOUCH A PROBE TO EACH END OF THE SPARK PLUG CABLE!



You're putting your multimeter's battery current thru the cable to see how much resistance there is.

Spark plug end



If resistance is over 30,000 ohms, the cable's no good.

Set selector switch to X1K ohms position. See page 2-21 in your '20 TM

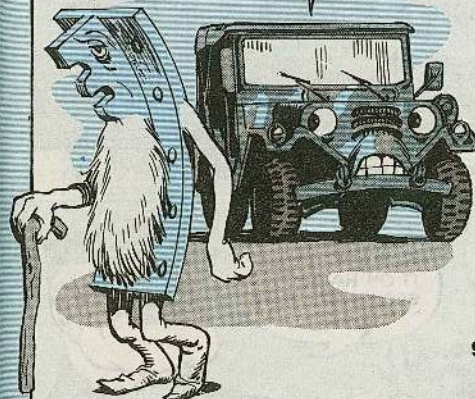
You don't have to take the spark plug cables out of your truck to test 'em. But test only one cable at a time...or you may get mixed up and hook 'em back up to the wrong places.

TM-218-Series 1/4-Ton Truck...

Brake Shoes Go Bonded

SOB! IT'S THE END OF LINE FOR US RIVETED TYPES...

SORRY 'BOUT THAT, OLD TIMER!



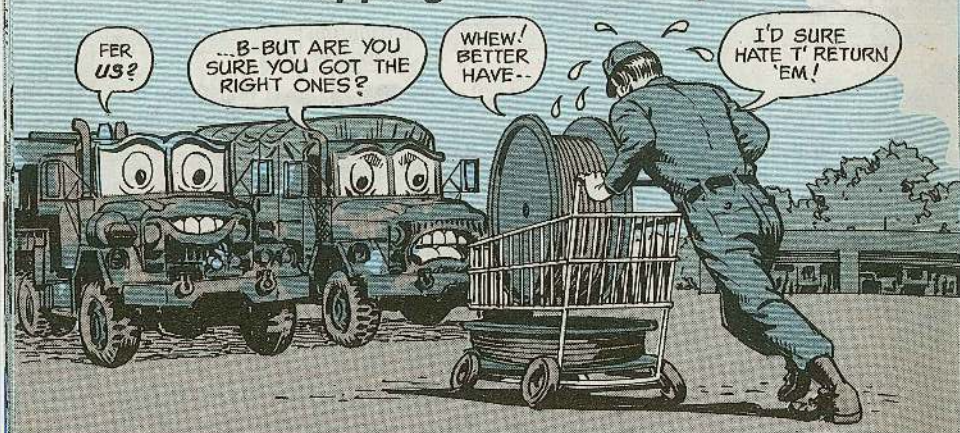
Riveted brake shoes are being booted out. From now on you get only the bonded lining brake shoes.

To convert to bonded shoes, order NSN 2530-01-060-7172. This gets a set of 4 bonded shoes complete with return springs and longer adjusting screws.

If you already have bonded shoes, order NSN 2530-01-061-7326 for 4 shoes. This NSN replaces NSN 2530-01-058-7420 on page 143, TM 9-2320-218-20P (Dec 78).

If you need only the adjusters and return springs for the bonded shoes, order NSN 2530-01-060-7171.

Shopping for Wire Rope



Putting your finger on the right wire rope for your 5-ton truck's front winch or for the rear winch or crane on your wrecker may not be easy. Some info's not in the parts manuals—and some of the info that's in the parts manuals gives you a bum steer.

You may even get a better deal by ordering under one NSN instead of another for the same wire rope.

Location	Wire Rope Diameter	Length Needed	NSN 4010-00-	Unit of Issue And Quantity	Lengths Yielded	Left Over
Front Winch	¾ in	280 ft	274-6817	Reel, 600 ft	2	40 ft
			272-8843	Reel, 1,000 ft	3	60 ft
			274-6824	By-the-foot	—	—
Wrecker Rear Winch (M816 & M543)	¾ in	350 ft	273-8332	Reel, 600 ft	1	250 ft
			618-7697	Reel, 1,000 ft	2	300 ft
Wrecker Crane (M816 & M543)	½ in	96 ft	903-4790	Reel, 500 ft	5	20 ft
			274-6831	Reel, 3,000 ft	31	24 ft
			961-9780	By-the-foot	—	—

If you don't need much wire rope, check with your support before you order a whole reel.



Master Cylinder ID

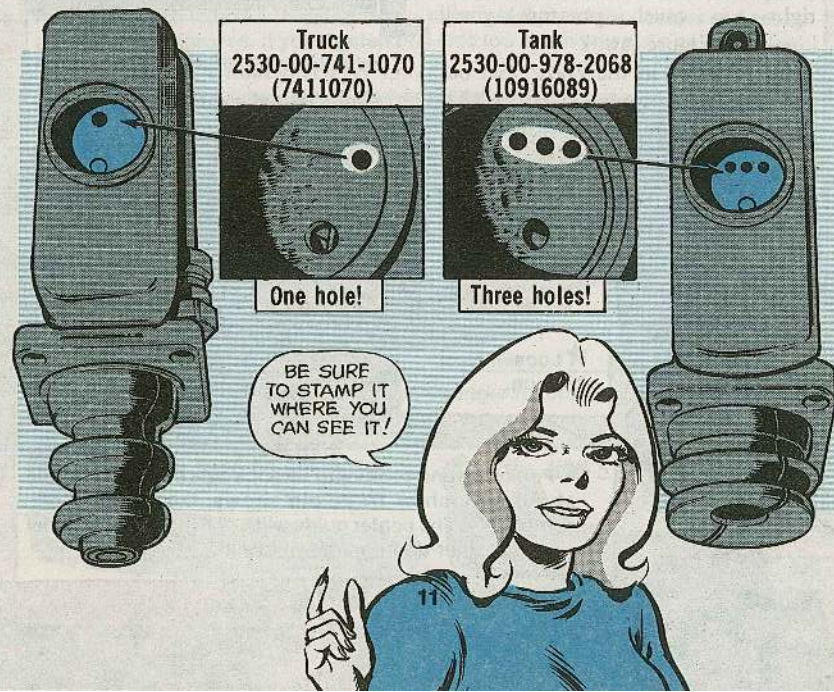


There're a coupla brake master cylinders in the system that look alike—and even fit alike. But they sure don't work alike—so be sure you never use the wrong one.

The right one for your M39 and M809-series 5-ton trucks is NSN 2530-00-741-1070. The look-alike is NSN 2530-00-978-2068, used on M48- and M60-series tanks and the M728 combat engineer vehicles.

The surest way to tell 'em apart is by looking at the return port holes in the bottom of the reservoir. Just unscrew the fill plug and look in. If you see 3 return port holes, the master cylinder is for a tank because the one for the 5-ton truck has only 1 return port hole.

One way to mark them is to use the metal stamping die set NSN 5110-00-289-0007 that's in your No. 2 common tool set. After checking the return port holes, stamp 'em TANK or 5T TRK.



FIREPOWER

M48/M60 Tanks...

Track Fixture Fracture



Disconnecting a track is hard work. And it can be even worse if you break a track-connecting fixture in the process.

That's apt to happen with the old fixture, NSN 5120-00-605-3926, if you're not real careful. If you get the fixture on one side of the track too tight—too much pressure—you'll break the fixture jaw.

Go slow. Be in the know. Get out your crew/operator's manual. Brush up on how to disconnect the track. The procedure is real clear on pages 3-32 thru 3-35 in TM 9-2350-257-10 (Jun 78).

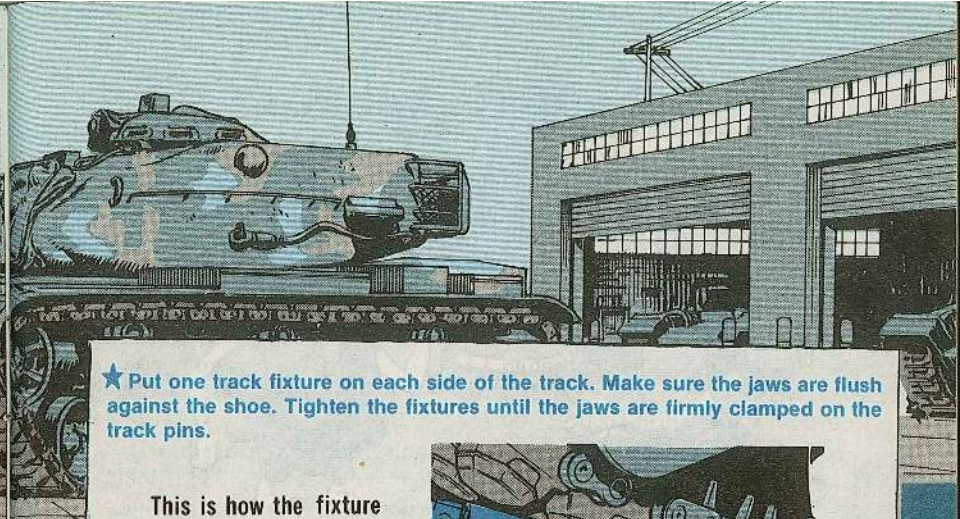


HERE'RE SOME THINGS TO REMEMBER, TOO...

★ **DON'T LET ANYONE STAND IN FRONT OF THE TRACK.**

★ **Loosen track tension.**

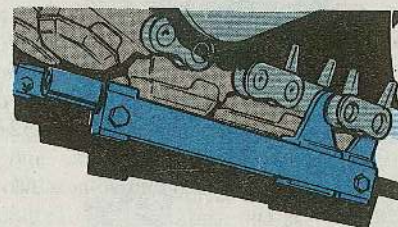
★ **Pull off an end connector on each side of the track until about an inch of track pin shows. Don't pull it off completely! The center guide will be all that's holding the track together and it might not hold.**



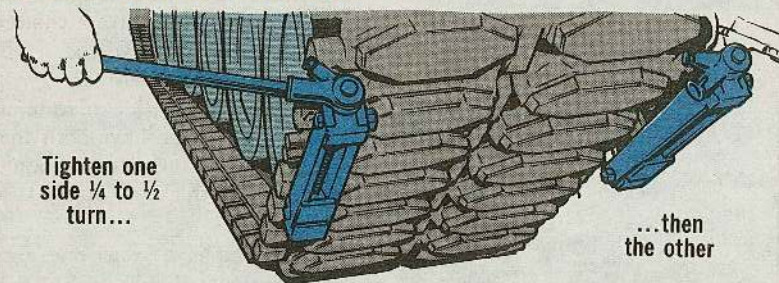
★ **Put one track fixture on each side of the track. Make sure the jaws are flush against the shoe. Tighten the fixtures until the jaws are firmly clamped on the track pins.**

This is how the fixture should be installed

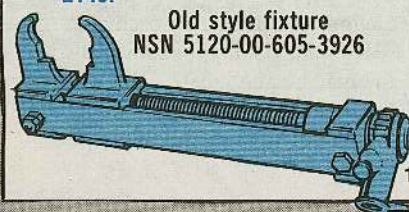
Make sure jaws are flush against shoe



★ **Tighten each fixture alternately ¼ to ½ turn until the end connectors and center guide can be removed. If you tighten one side too much you put a lot of stress on the fixture. This'll likely break a jaw.**



★ **If you do break a jaw, get a new, stronger fixture with NSN 5120-01-016-2149.**



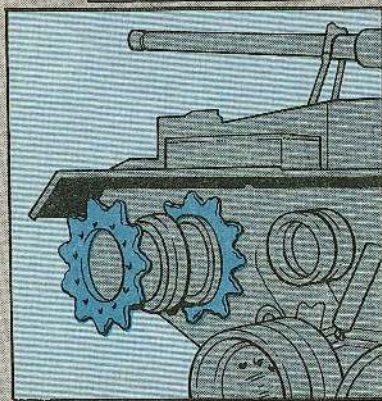
Drive Sprocket Mix



Drive sprockets for the M88/M88A1 recovery vehicles and the M60-series tanks come in 2 sizes. Some are $1\frac{1}{8}$ inches thick and some are $1\frac{1}{4}$ inches.

You could get either kind for your M88/M88A1 when you order a sprocket wheel NSN 3020-00-293-5136.

Keep your sprockets matched and mated



For the M60 tanks, NSN 3020-00-252-5637 gets the $1\frac{1}{8}$ inch sprocket and 3020-00-318-0229 gets one $1\frac{1}{4}$ inches thick.

So what difference does it make? Your vehicle will work better if you can use sprocket wheels all of the same thickness.

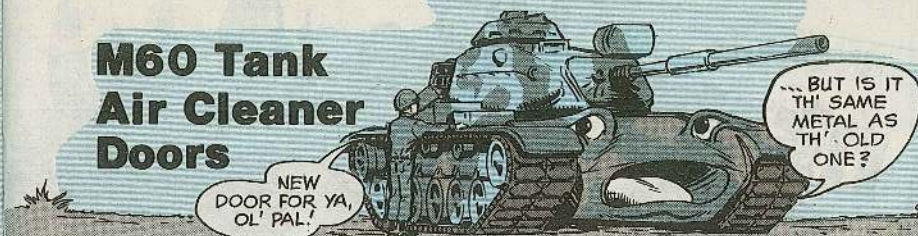
The thick ones wear longer and should be used if you have a choice. However, the thin ones will be issued until the supply is exhausted.

If you have to go with a mixture of different thicknesses, have both the inboard and the outboard sprocket wheel the same thickness on a given side.

That is, if you have 2 thick ones and 2 thin ones, you should have the 2 thick ones on one side and the 2 thin ones on the other side, rather than having one of each on each side.

If you're looking for some thin ones to match and mate, the original equipment spares on most M88/M88A1's are the thin kind.

M60 Tank Air Cleaner Doors



The top-loading air cleaner door on your M60-series tank is made out of either aluminum or steel.

It really matters when you have to replace a smashed door seal!

Use the magnetic retrieving tool, NSN 5120-00-545-4268, a part of your Common No. 1 and No. 2 shop sets to check for a steel door.

Once you know which door you have, order the seal.

The aluminum door seal is NSN 5330-00-259-0469, while the steel door seal is NSN 5330-01-030-6807. No substituting—they are different sizes.

Adhesive, Type II, MIL-SPEC MMM-A-1617, is used on both kinds of door seals. NSN 8040-00-152-0063 gets you a $2\frac{1}{2}$ -oz can while NSN 8040-00-152-0067 brings you a 6-oz can.



Tank Oil Strainer NSN

TM 9-2350-258-20P-1 (Nov 77) has a bum NSN for the transmission oil strainer element. Use 2520-01-059-1534 to get an improved oil strainer which does not have a removable screen element. It costs only \$24.15. It'll be replacing the removable element type strainer in all CD 850-6A transmissions used in M48A5/M60-series tanks. Jot down the NSN in your TM's.

Tankers' Tow Cable

Have problems with the tankers' tow cable NSN 4010-00-202-2425 because it's too long or too short? Ever wish you could have tow cables made the exact length you need? Just order wire rope, NSN 4010-00-542-2391, (1 $\frac{1}{4}$ -in) and 2 ea clevis assemblies, NSN 4030-00-530-3865. The rope comes in 600-ft reels and the clevis as socket, wire rope. You can make 'em any length you want for special jobs.

FRH Hydraulic Fluid...

IT'S NOT FIRE-PROOF



"Fire Resistant" in the nomenclature of FRH hydraulic fluid doesn't mean it won't burn. It's just a little harder to torch off.

FRH has a 180-200 degree higher flash point (400° F) than OHT, but it

can still be ignited by electrical shorts, arcs, open flames, etc.

Any OHT oil you add to the FRH lowers the flash point of the FRH...so never add OHT except in a real emergency.

Special Pubs for Tanks

SEND FOR THESE, PRONTO...
ALL YOU TANK-
TYPE MECHS!



You 63C track vehicle mechanics can get some handy pamphlets filled with helpful PM tips:

"Operation clean air PM, Phase II"
"Track Inspection, Maintenance & Tips"

"Troubleshooting the 650-Amp Charging System"

"M48A5/M60-Tank Series Config-

uration Matrix"

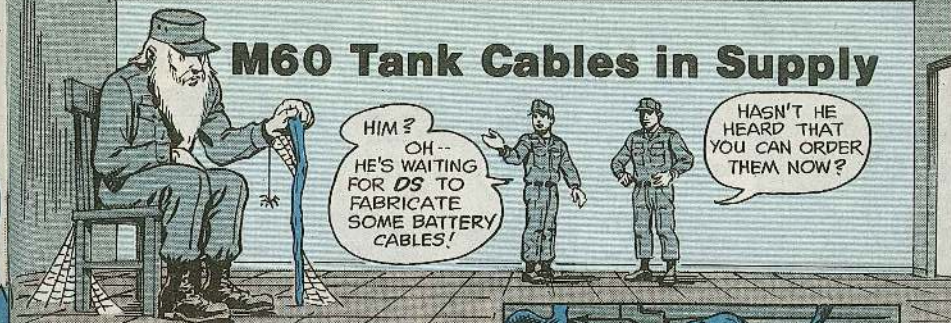
"Troubleshooting Guide for the ADVS 1790-Series Engines"

"Tank Stabilization Troubleshooting Guide"

GET THEM BY
WRITING TO...

Commander
USATARCOM
ATTN: DRCPM-M60-L
Warren, MI 48090

M60 Tank Cables in Supply

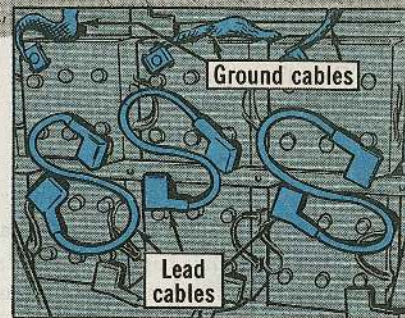


Remember the last time you needed a ground cable or a battery lead cable for your batteries?

It was a real pain waiting around for your DS to fabricate the cables for you.

You can now order the assembled ground cable with NSN 6140-00-460-5792.

You can also get the lead cable with NSN 2590-00-678-4191.



M60A1 (RISE) Test Set News



Trying to order test set adjustable resistor (PN TD 135305) and test set cable (PN TD 135311)?

Forget it.

These items are not authorized and have never even been procured.

So turn to page 2-11 and page 3-13 of your TM 9-2350-257-20-2 (Dec 75)

and give these items a big X so you'll remember you don't need 'em.

This is because you adjust the variable resistors with a multimeter the way it shows in Fig 2-346L on page 2-622P of Change 7 to TM 9-2350-215-20 (Feb 65).



How to Protect a WEAPON

PICTURE THIS...

WITH A PSSSSST- PSSSSST HERE...

...AN' A PSSSSST- PSSSSST THERE...

IF YOU'VE STOPPED LAUGHING AT JOE DUMBO, READ ON...

Joe Dumbo gets his hands on some protective undercoating.

"Great!" he says, and applies it underneath his new vehicles. "Say," he says, "If it does the job there, why not on other parts?"

So he smears it on the hood, under the hood, on the fenders...wherever he can put it.

Obviously, things happen...or don't happen. The coating gums parts. They don't work. It discolors canvas and metal paint. It screws up the vehicle.

And poor ol' Joe did it because he thought it'd help protect his vehicles. Sound ridiculous?

Don't knock it. Armorers, who should know better, are doing the same thing with solid film lubricant, NSN 9150-00-142-9309. They're spraying it onto, into and all over small arms...and the weapons suffer for it. The big victim is the M16A1 rifle, mainly because there are so many.

The lube and its use are spelled out in the rifle's TM 9-1005-249-20. Trouble is, some armorers pull out the NSN for the lube...and never read the how-to in Table 2-3.

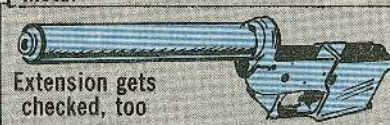
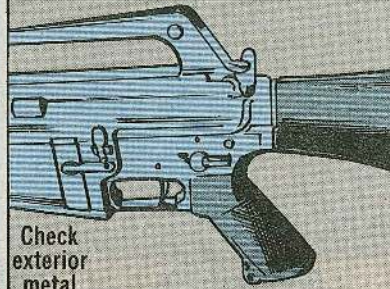
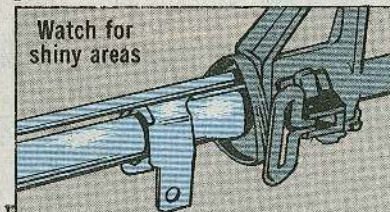
TM 9-1005-249-20

Table 2-3. Cleaning and Lubrication Instructions

Read and heed

Item	Action required
Magazine assembly	1. Disassemble and wipe dirt from the magazine tube, spring, and follower. Apply a light coat of lubricant to the magazine spring. NOTE Because moisture will collect in the plastic magazine bag, from condensation, the magazine must be removed, unloaded, and dried every 24 hours to prevent corrosion. 2. After the cartridges and magazine have been dried, apply a light coat of lubricating oil to the magazine spring.
Upper receiver group	1. Clean the upper receiver of powder fouling with rifle bore cleaning compound (RBC). If the upper receiver is corroded as indicated in figure 2-2, clean as follows: a. Clean corroded area with crocus cloth. b. Wash thoroughly with dry cleaning solvent. c. Apply solid film lubricant. CAUTION If solid film lubricant comes in contact with internal parts of the receiver make certain to wash parts with dry cleaning solvent to remove lubricant. d. Allow to dry 12 to 16 hours before usage. Adequate ventilation is recommended. CAUTION Do not use a wire brush on aluminum surface.

First off, SFL (solid film lube) has just a few specific uses. One is for corroded exterior metal...such as the upper and lower receiver groups of the M16A1. Its general use is as a temporary finish for weapons which need refinishing. You apply and reapply it until depot can put on a permanent finish.



You do not apply it over rust. You do not coat interior parts of a weapon.

If you accidentally spray it on parts, you remove and wash those parts with drycleaning solvent until the lube is removed.

Before applying SFL you remove rust and corrosion with a crocus cloth, wash the area with drycleaning solvent...and then apply SFL. It takes up to 16 hours to dry, after application.



And, you read the TM. If armorers would read and heed, there'd be no problems with SFL; problems such as sprayed gas pistons (which fail), sprayed internal parts (which don't work), gummed-up stocks, and sprayed-over rust, which just keeps rusting.

SFL is a handy lube. Used right it can help keep rust and corrosion from spreading, especially when used as a temporary coating until weapons can be refinished.

So, use it right. If it's not there already, put a little TM reading in your routine.

M16A1

Bolt Storage

The bumps and grinds of M16A1 rifle bolts against each other as they go into, out of and around in separate, secure containers don't do the bolts any good.

You can beat the grind by getting your local canvas shop to make you canvas pouches. Slip the bolts and carriers into separate slots, and then lock the pouches away in secure

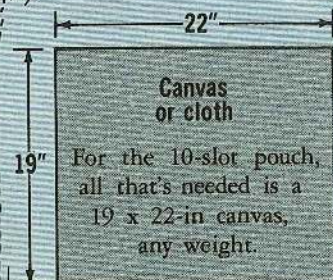
containers.

Neat thing about it is that the pouches do not conflict with AR 190-11 or NGR 190-11.

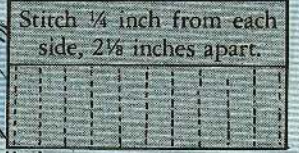
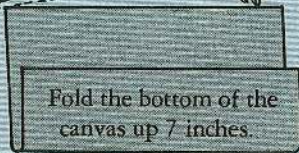
These plans are for a pouch with slots for 10 bolts and carriers. If you have a few more, just make the pouches wider, using additional width canvas. Each added slot would increase the width by 2½ inches.

THESE
DIAGRAMS SHOW
YOU HOW...

IF YOU'VE GOT A LOT MORE
BOLTS AND CARRIERS, JUST MAKE
ADDITIONAL POUCHES!



BOLTS
NEED A
FEATHER
TOUCH!



Tag each bolt with its weapon serial number.

When the pouches are made and the bolts/carriers are in the slots, just fold the flap down. Roll up the pouch as you would a pouch of tools and put it in your secure storage container.

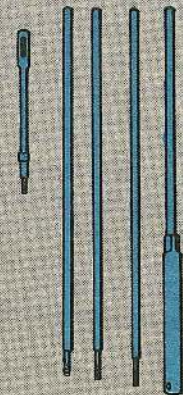
FUNNY-- BUT I
KEEP THINKING
O' MY RIFLE!

M16A1 Cleaning Rod

If you need a cleaning rod for your M16A1 rifle and you're using Change 5 (Mar 76) to TM 9-1005-249-20, you've gotta know what you want...the whole rod or just a section.

Fig B-8 in Change 5 brackets the whole rod, but the NSN is for only the section (NSN 1005-00-050-6357). There's no NSN listed for the whole rod. It could get confusing.

If you want the whole rod, use NSN 1005-00-089-3994. The NSN's for the rod, the sections and the swab holder are on pages 39 and 40 of the -20 TM.



NSN 1005-00-089-3994
gets you this



COMBAT SUPPORT

Decon Screen

Whenever you remove the spray head or clean the container of your M11 decontaminating apparatus, check the screen on the bottom of the siphon tube.

If it's missing or damaged, replace your M11. The screen filters out rust flakes and other debris which could clog the spray head nozzle.



Screen
damaged
missing?...
Replace
your M11

HERE ARE
SOME HANDY-
DANDY TIPS ON
THE M11!

I WOULDN'T
LEAVE HOME BASE
WITHOUT IT!



Painting Your Decon

Next time you paint your M11 decon, do it while it's empty.

That way, you don't have to worry about spills, leaks, etc. which could affect the wet paint.

Of course, you can do minor spot painting when the decon's full.

You can paint the bracket and the complete exterior of the container, including the drain plug head.

You can't paint the spray head assembly.

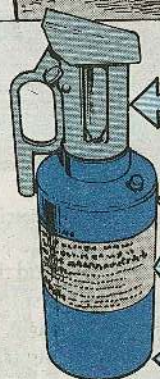
Be sure to mask the decon's instruction plate. It can't be replaced.

Here's the paint you need:

Primer, NSN 8010-00-936-8372, 1-pt can.

Olive drab enamel, NSN 8010-00-297-0560.

Yellow enamel #33538 (to freshen up the yellow fill line and fill note), NSN 8010-00-844-1306.



Don't paint
the spray
head assembly

Paint

Mask the
instruction
plate

Paint

M11 DECON

Rusty But Trusty?

A rusty M11 portable decon can still be a serviceable decon.

No need to hit the panic button.

Just clean the decon inside and outside the best you can.

Hold the water if your decon has had DS2 in it. It'll make the rust worse.

Just wipe the container real well. The siphon tube will catch some of the rust particles.

If the rust gets too bad (large flakes) turn your decon in to support. They can clean the containers with abrasive grain or glass beads.

You can help keep rust down if you store the M11 with its head assembly screwed on tight and use the inhibitor powder called for in the TM. You can get 1 pound with NSN 6850-00-368-5233, or 2 ounces, NSN 6850-00-865-2916.

DS2 Decon Agent

Worried about the storage life of the DS2 in your M11 portable decon?

It'll last indefinitely as long as the M11 doesn't leak. Same thing goes for DS2 in 1 1/3-qt cans and 5-gal drums.

Give all containers the once-over to make sure they're sound. If you find a leak, get support to dispose of the DS2.

When the M11 is kept full, check it carefully for leaks, especially between the spray head and the container. If you find a leak, it's probably the packing, preformed, NSN 5330-00-180-9903. Get it fixed. Then get a fresh batch of DS2.



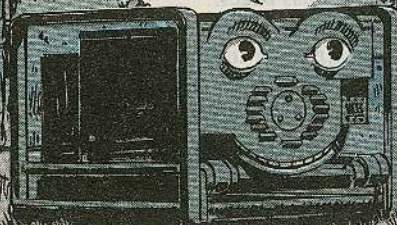
**SAVE
\$103
Per Regulator**

?



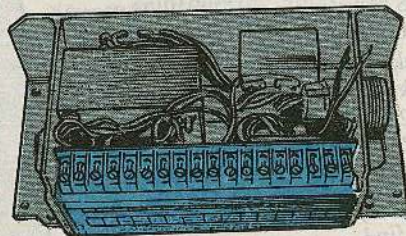
THANKS,
CONNIE--

THIS POOP WILL
KEEP ME PERFORMING,
TOO-- WHEN I'M
REALLY NEEDED!



Overloading small generator sets damages the universal voltage regulator. Up to now, you mechanics replaced and discarded a bum regulator—no questions asked.

Not anymore! The regulator, NSN 6110-00-764-7621, is repairable by DSU.



**Voltage regulators
are now repairable**

Most of 'em can be put back into service by replacing a blown power transistor...a 1-buck item.

It is used on
3-KW Models
MEP-016A, -021A,
-026A;
5-KW Models
MEP-017A, -022A;
and
10-KW Models
MEP-018A, -023A.

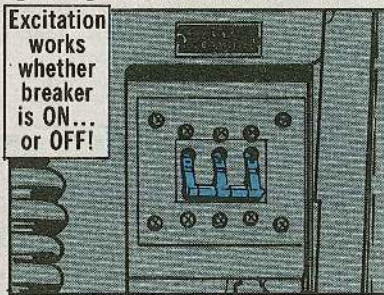
...BUT BUM OPERATOR PRACTICES LIKE
THESE CAUSE POWER TRANSISTOR
FAILURES.

Operators throttle back their sets and let 'em idle at less than rated load, or they leave the circuit breaker ON with load connected during shutdown.

Either action causes the voltage and frequency to drop below the required output. This drop decreases the exciter voltage causing the voltage regulator to operate at max output. Result: Overloading...and blown power transistors.

The generator's excitation system functions any time the rotor is spinning...whether the circuit breaker

**Excitation
works
whether
breaker
is ON...
or OFF!**



is ON (closed) or OFF (open). The rated operating speed is easiest on the exciter, voltage regulator and rotating rectifier diodes.

Follow the step-by-step starting and shutdown procedures in Chap 3, TM 5-6115-271-14 (3-KW); TM 5-6115-332-14 (5-KW); and TM 5-6115-275-14 (10-KW). They'll help unload the high cost of replacing universal voltage regulators.

One more note: The universal voltage regulator NSN 6110-00-764-7621 replaces these older models: 6110-00-065-7505, -066-1171, -930-4818 and -930-6878. If your 3-, 5- or 10-KW set has one of these voltage regulators and it fails, replace it with the universal voltage regulator.

And if the universal voltage regulator fails, turn it in to your DSU for repairs.

YOU'LL LIKELY
SAVE UNCLE
\$103... PER
REGULATOR!



4.2-KW Generators

You need 2 connectors-adapters —NSN 4730-00-842-2198 and 1/4-in hose NSN 4720-00-289-9202 to fabricate the fuel filter to engine hose assembly NSN 4720-00-933-7355 for your 4.2-KW generator set.

15-KW DOD Generator Fuse

NSN 5920-00-131-9897 gets the 40-amp fuse needed for the alternator. Add this NSN to page 160 of your TM 5-6115-464-24P (Oct 78).

5. 10-KW DED Generators...

Exhaust Muffler Fix

YER PRESCRIBIN' AN ELBOW, DOC?

WHEN... SAVED!

THANK GOODNESS!

YOU SAID IT!

YES...

... EITHER A 90° OR A 45°

Dear Editor,

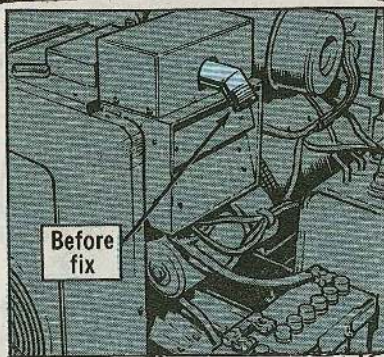
The exhaust muffler on our new 5-KW DED generator sets directs heat down on the batteries.

And you know what extra heat on batteries does to your battery PM program! Pretty soon the distilled water is evaporated, the plates partial-

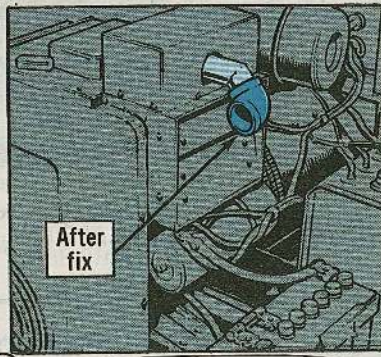
ly exposed, and d-r-y. Dry cell plates can't be reactivated... battery capacity is reduced... replacement is certain.

We mounted a 1 1/4-in 90° elbow on the exhaust muffler. Now heat is deflected away from the batteries.

CW3 Carl E. Beckwith
Ft. Bragg, NC



Before fix



After fix

(Ed Note-Good show! The headshed OKs using a 45° elbow, too.)

YOU'LL NEED 2 ELBOWS FOR 10-KW GENERATOR SETS...

I'LL TAKE TH' RIGHT ELBOW!

... 1 TO KEEP HEAT AWAY FROM THE BATTERIES AND 1 TO KEEP IT OFF THE FUEL TANK!

AN' I'LL TAKE TH' LEFT...

GLAD WE EACH GOT A 5-KW!

250 CFM Air Compressors...

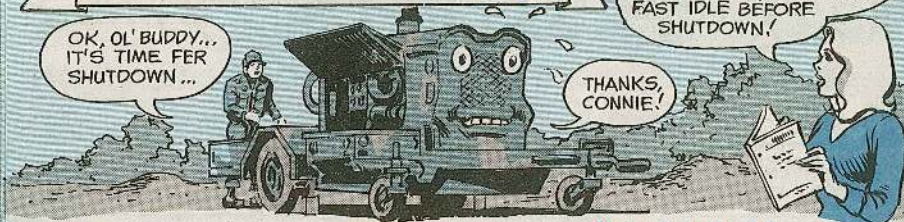
DAVEY PM Do's

HOLD ONE, SOLDIER!

YOUR BIG DIESEL NEEDS A 5-MINUTE, NO-LOAD FAST IDLE BEFORE SHUTDOWN!

OK, OL' BUDDY... IT'S TIME FER SHUTDOWN...

THANKS, CONNIE!



Compressor operators take note: Pay strict attention to the info on stopping the air compressor in your operator's manual, TM 5-4310-250-15 or 5-4310-345-14.

Those diesel engines need time to cool down before you stop 'em. So-o-o-o, "take 5" and run the engine for 5 full minutes in a no-load fast idle (1000-RPM) condition after you close the air outlet or service valves.

Take Another 5

Never start a compressor if there's air in the system. Starting the engine when the compressor is under full air-line pressure cracks compressor seals and vanes...a bad maintenance scene.

Doublecheck the receiver pressure gage...after the engine stops...and before you start it. Be double sure there's no air pressure in the system.

Idle at 1000 RPM...

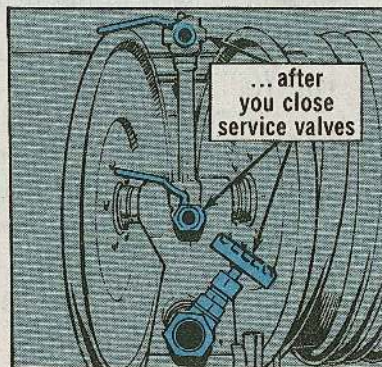


Doublecheck receiver pressure gage

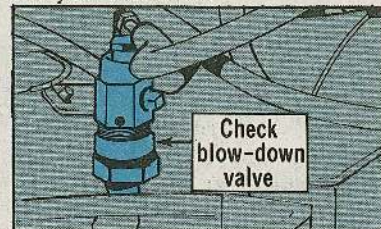


If there's air in the system, check the blow-down valve. It's supposed to automatically release all the air from the system after you close the air outlet valve.

If the blow-down valve is blinko, call your mechanic.



...after you close service valves



Check blow-down 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, TMs, TEs, etc., DA Pam 310-6, SC's and SM's and DA Pam (C) 310-9, COMSEC pubs.

TECHNICAL MANUALS

TM 5-4110-217-24P Aug Refrig unit, 10,000-BTU gas engine and electric driven
TM 5-4110-224-20P Aug Refrig unit, gas engine driven, 9000-BTU, for semitrailer, 7-1/2 ton
TM 5-4120-345-14 Jul Air conditioner, vertical compact, 9000-BTU 115-V
TM 5-4120-350-14 Jul Air conditioner, vertical compact, 16,000-BTU
TM 5-4310-276-24P Jul Compressor, air hand truck mtd, gas engine 5-CFM, 175-PSI
CH 5, TM 5-4330-232-12 Sep Filter/sep fuel, 50-GPM
TM 5-4520-242-13 Sep Heater, space multifuel, 15,000-BTU 28-VDC
TM 5-5420-210-20P Oct Transporter, MOFAB
TM 5-6115-590-20P Sep MUST gas turbine engine
TM 9-1015-234-10-HR Aug Howitzer
TM 9-1370-207-10 Jul Pyrotechnic simulators
TM 9-1425-485-24P Aug Essential repair parts list, Lance

TM 9-1425-485-L Aug Lance pubs
TM 9-1425-525-L Aug List of pubs Improved HAWK
TM 9-1425-550-L Sep List of pubs Land Combat Support Sys (LCSS)
TM 9-1425-655-L Aug AN/TSO-73 pubs
TM 9-1425-1525-12-2 Jun Improved HAWK

Ch 3, TM 9-2300-257-20P Sep M113A1-series
TM 9-2350-259-10 Jun TOW vehicle, M901
TM 9-4940-498-23&P Sep Test set, electron sys XM92
TM 9-6920-484-12 Sep Dragon
TM 11-5820-873-20P Sep Radio AN/URC-92
TM 11-5965-286-23P Aug MK-1697/G headset-microphone kit
TM 39-600 Sep Admin use motor vehicles
TM 43-0103 Sep Nondestructive inspect methods
Ch 1, 2 TM 55-1520-210-23-1, 2 Jul, Aug UH-1D/H/EH-1H
Ch 26, TM 55-1520-220-20 Sep UH-1C/M
Ch 1, TM 55-1520-221-23-1 Oct AH-1G, AH-1Q
Ch 5, TM 55-1520-227-23-2 Oct CH-47B, CH-47C
Ch 6, TM 55-1520-234-23-1 Oct AH-1S (MOD)
Ch 3, TM 55-1520-236-23-2 Oct AH-1S (PROD)
Ch 5, TM 55-1520-237-23-2 Sep Gen Info manual UH-60A
Ch 2, TM 55-1520-237-CL Aug UH-60A

TM 55-1520-237-23P-1 Oct UH-60A
TM 55-1520-237-23P-2 Oct UH-60A
Ch 3, TM 55-1520-237-PMS-1 Aug 10-hr/5-day inspect checklist UH-60A
Ch 1, TM 55-1520-237-PMS-2 Aug Periodic inspect checklist UH-60A

MISCELLANEOUS

CIR 700-18 Dec Prev Measures for Improved Army Logistical Support
CIR 710-21 Oct Unit loss/loss recovery reporting
FM 5-621 Sep Gen construct aqpt op
FM 11-31V/CM Jun Tact commo sys op/mach
FM 11-31V3 Jun Tact commo sys op/mach
FM 11-725 Aug Telecom ctr op
LO 5-3905-274-12 Oct Dump truck body M917
LO 5-3995-371-12 Oct Situm distr body, M918
LO 5-3995-372-12 Oct Concrete-mobile mixer body M919
SB 725-92-1 Aug Missile Cmd reusable container
SB 740-94-9 Aug Storage stds smoke generators
SB 740-95-200 Aug Storage stds small arms
SC 5180-91-CL-804 Sep TE-27A
Ch 1, TB 11-2300-372-14 Oct S-250 shooter on M561
TS 600-2 Jun Select, train, test, quality, and license operators of heavy equipment

AUDIO-VISUAL STUFF

Available at battalion or post Learning Center

Film
TF 3-6121 Chemical agent detector kit, M256
TEC LESSONS
041-061-6041-F Intro to M110/M110A1 howitzer, M107 gun
121-093-6903-J Replace hydraulic oil cooler—HAWK
121-093-6904-J Replace hatch raising cyl—HAWK
121-093-6905-J Replace handpump assy—HAWK
121-093-6906-J Replace temp control unit—HAWK
121-093-6908-J Replace leveling jacks (cyl)—HAWK
121-093-6910-J Replace main reservoir thermo switch—HAWK
202-113-5115-A Inner shelter

cabling, presets for cable repeater
202-113-5116-A System line-up of cable repeater—AN/TRC-145
202-113-5119-A System line-up for cable-to-radio conversion—AN/GRC-103
202-113-5120-A System troubleshoot cable-to-radio conversion—AN/TRC-145
231-906-4402-A PM of a standard manual Morse intercept position—UT-636/U, R390A/UR
612-051-9655-F Battery charging system, Part I—MAB
612-051-9665-F Hydraulic test stand—MAB

Circle That Number!

You drivers, operators and crews who find a fault listed in the "not ready" column of your operator's manual PMCS—make a mental note. Always—but always!—circle the sequence number of that fault in column a of your DA Form 2404. We forgot to circle the sequence number in our example on page 57 of PS 324. But you'll remember—won't you?

For Your Commander

Be sure your commander sees 2 new pubs: DA Pamphlet 750-1, Maintenance Guide for Leaders, and DA Circular 700-18, Preventive Measures for Improved Army Logistical Support.

SB 3-30-2 Still Good

You can still use SB 3-30-2 (Feb 77) to determine the serviceability of your CB protective mask canisters and filter elements. It was left out of DA Pam 310-4 (index) by mistake.

JOE'S
DOPE

FOD
—TOP to
BOTTOM

WHAT A DAY
FOR FLYING...



AWW-- JUST A LITTLE
CASCADE MIST, SIR!

ANYWAY, ANOTHER HALF-HOUR
SHOULD SEE US BACK HOME--

HOPE SO-- THE LADS WILL NEVER
FORGIVE US IF THEY'RE LATE FOR
CONNIE'S VALENTINE
BASH!



YOU SAID IT, SIR--
BEST AFFAIR OF
ANY YEAR!..

THUP-KALUNK
TH-THWUPPK

WHAT
TH'--

RIGHT ON!

...AN' CONNIE'S
PROMISED ME TH'
FIRST DANCE!

OWWOW--
ENGINE'S
FAILING!!
HOLD ON,
EVERYONE..



... WE'RE
GOING
DOWN!

...BREAKING
THRU CLOUD
COVER...
PRAY FOR A
FLAT SPOT,
MEN!

THERE-- AN
ODD-SHAPED
MESA...

ROGER--
TRY
FOR IT!



YAY!
WE'RE GONNA
MAKE IT!

SWISH - SWISH

HANG TIGHT!
THIS'LL BE
BUMPY...

HEY--
DIG TH' CRAZY
GAZEBO!

GREAT!
WE'RE
SAFELY
DOWN...

CHIEF--
RADIO FOR
HELP!...

CAN'T, CAPTAIN!
... THERE'S SOME
KIND OF STRANGE
INTERFERENCE!

WELL...
KEEP TRYING!

OK, EVERY-
BODY OUT!

SERGEANT, WHAT
CAUSED OUR ENGINE
FAILURE?

DON'T BOTHER
LOOKING, CAPTAIN...

THE
ANSWER IS
SIMPLE...

FOD!

C-CONNIE
RODD??

NO-- ALTHOUGH I'VE HEARD OF
HER AND HER PM PROWESS...

TH- THEN
WHO ARE
YOU... ?

SOME
CALL ME
CYTHEREA--

... BUT COME...
WE MUST SEE TO
YOUR AIRCRAFT...

OBVIOUSLY
YOU CAN'T
STAY HERE!

30

WE'LL NEED A
SPECIAL PLATFORM,
SO...

? ? GULP!

HOW'D SHE
DO THAT?

IT'S FORTUNATE
THAT YOUR MECHS ARE
ALONG ON THIS MISSION,
CAPTAIN...

...THEY CAN BENEFIT MOST FROM MY
ANALYSIS OF YOUR PROBLEMS-- AND HOW THEY
COULD EASILY HAVE BEEN PREVENTED!

PLEASE
JOIN ME...

JUST PRIOR TO THIS
TRIP, YOU MECHS
CHANGED THE
ENGINE ON
THIS BIRD...
RIGHT?

RIGHT!

HOW'D
SHE KNOW
THAT?

Changing an engine means
you had to safety the
pillow block...

...connect all the
lines, and reinstall
the main drive shaft.

This left the
engine inlet
wide open...
with no particle
separator and
screen to keep
objects out of
the engine!

THE
INLET AREA
IS NOT THE
PLACE TO DROP
LOCK WIRE, HARD-
WARE--OR TOOLS
LIKE THIS!

? GULP! MY WRENCH--
URG!

WOT TH'!

THAT'S A POSTER MY
SON FEELS YOU NEED!

Joe's Dope Sheet

Before you decide the job's thru
There's one final thing you must do—
Count your tools, can the trash
♥ That could bring on a crash—
'Cause the best FOD fighter is YOU!

SO MUCH
FOR TH' TRASH
AN' DEBRIS...

...NOW TO
CHECK AND
ACCOUNT FOR
ALL MY TOOLS!

LUV
MY
MECH!

WE HAVE THE WORLD'S BEST EQUIPMENT ...*Take care of it*

IF YOU WANT TO DISPLAY THIS CENTERPIECE ON YOUR BULLETIN BOARD, OPEN STAPLES, LIFT IT OUT AND PIN IT UP.



GREAT POSTER!
CONNIE SURE LOOKS
LIKE YOU!

HMMMPH-- PERHAPS SHE'S A
DISTANT RELATIVE...

SPEAKING O' YER
DISTANT RELATIVES--
YER BRAT'S
RUINED MY CAP!



HE DISLIKES
SLOPPY PM--

--IT'S A FAMILY
TRAIT!



TALKING ABOUT
SLOPPY PM...
...THIS PARTICLE
SEPARATOR FOD
SCREEN IS
BROKEN!...

SEE?



MY
CAP!

ZIP

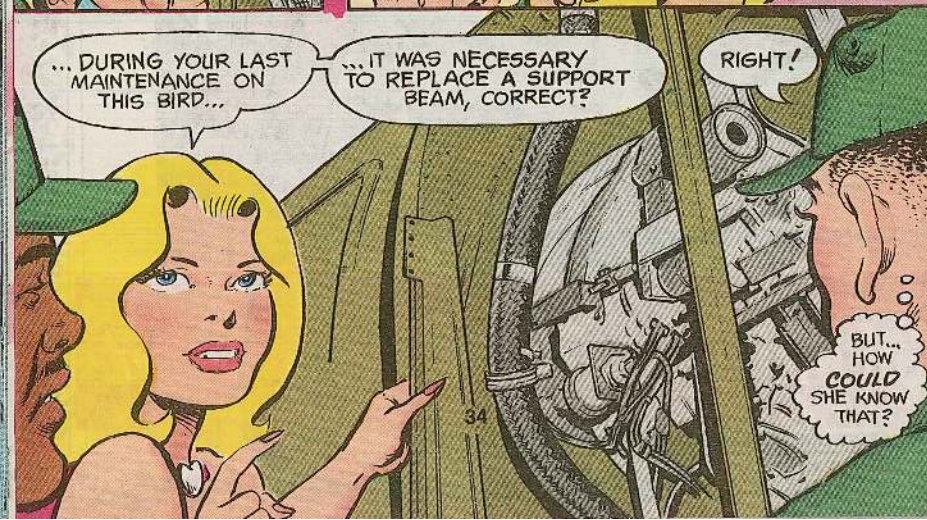


MS.--ER--CYTHEREA--
IS HIS AIM ALWAYS SO
ACCURATE?



WHAT MAKES YOU
THINK HE'S BEEN
ACCURATE SO FAR?

NOW...



... DURING YOUR LAST
MAINTENANCE ON
THIS BIRD...

...IT WAS NECESSARY
TO REPLACE A SUPPORT
BEAM, CORRECT?

RIGHT!

BUT... HOW
COULD SHE KNOW
THAT?



... So you pulled
out your trusty
drill and
removed the
old rivets...



... BUT HOW 'BOUT
ALL THESE METAL
SHAVINGS AND
OTHER JUNK?

?

UHP!

LOOK!
NOBODY

POLICED THIS
AREA TO COMPLETE
THE JOB!...



HEY--
DUCK!

ZIP

WOW!

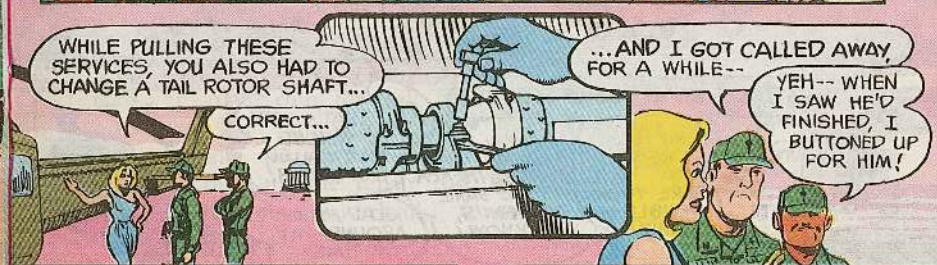
HA! HA!

CUTE
KID!

STU-PID
HE AIN'T!

YOU'RE THE
GUY WHO
REPLACED
THAT BEAM!

COME ALONG...



WHILE PULLING THESE
SERVICES, YOU ALSO HAD TO
CHANGE A TAIL ROTOR SHAFT...

CORRECT...

... AND I GOT CALLED AWAY,
FOR A WHILE--

YEH-- WHEN
I SAW HE'D
FINISHED, I
BUTTONED UP
FOR HIM!



THAT WAS A
BIG MISTAKE --
LOOK...

THIS TOOL
WAS LEFT
BEHIND!

NEVER LEAVE
TOOLS UNSECURED!

OH--

NO!

ZIP

ZIP

ZIP



AIR MOBILITY

The Worth of a Name

Dear Windy,
 How and where do we get the stick-on nameplates for our 1-pc Nomex flight suits? AR 670-1 says they're authorized.

SSG P.P.

Dear Sergeant P.P.,

The cost of the nameplates comes out of your pocket. The AR authorizes you to wear the patch—nameplate—but does not authorize its purchase with unit funds.

Try to get the patch from a Post Exchange concession. It should be able to imprint the patch with your name, rank, aeronautical designation and US Army for less than \$4.00.

Windy

RICK MILLER
 CW2 US ARMY

Protect Rotor Blades

REPAIRS ON THE CUFF?

... BUT I DON'T HAVE A CREDIT CARD, WINDY!

Some rotor blades for the CH-54 are taking it on the chin, for real! The cuffs are left unprotected from moisture, and excessive corrosion develops...runs up the repair cost when you ship 'em for overhaul.

So, coat the taper pin holes and all bare metal on the cuff with corrosion preventive compound, item C-065 in Table 1-8 of TM 55-1520-217-23-1-1 (Mar 77). NSN 8030-00-244-1297

Protect cuff during shipment

will get you a 1-gal can. Then, wrap the area with Grade A greaseproof barrier paper, as called for in Para 5-28 of the maintenance pub. NSN 8135-00-224-8885 will get you a 200-yd roll...item C-030 in Table 1-8.

37

HNMMMM

Your Battery...

TAKE CARE of IT!

It's true that the battery shop rides herd on the nickel-cadmium battery in your aircraft. But it's up to you gung-ho crew chiefs to spot problems before they get out of hand and thereby save an expensive battery and electrical

system...maybe even the aircraft.

Pull a thorough weekly or 25-flight-hour inspection on that baby. The PM info is in the Table 4-1 of TM 11-6140-203-14-2 (Mar 78) on aircraft nickel-cadmium batteries.

HERE'S THE WORD, FOR
EXAMPLE, ON THE BB-433/A
BATTERY IN YOUR HUEY...

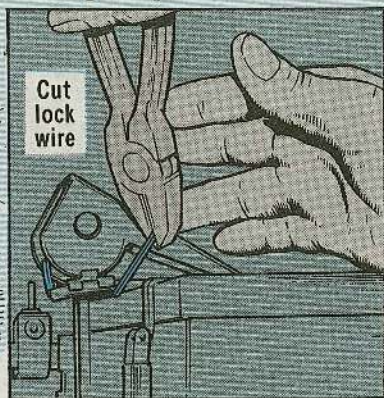
THANKS, BONNIE--
MY MECHS NEED
T'BE UPDATED ON
NICKEL-CADMIUM
PM!

When your bird engine has been operated about ½ hour before the battery check, the generator will have charged the battery enough to raise the electrolyte level above the cell plates. The level may drop if you do not check the battery within 2 hours.

Check the battery in a hangar or other protected area. Blowing dirt entering an open cell can contaminate the electrolyte. This leads to cell deterioration and a shot battery.

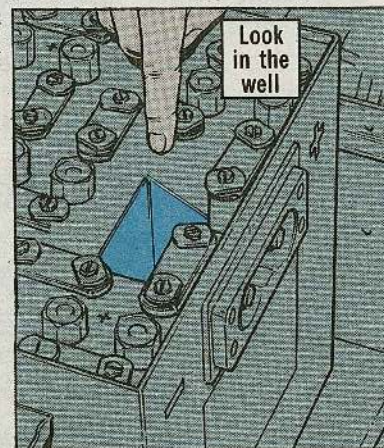
The Overall Look

Open up the battery compartment and cut the lock wire securing the retaining clamps.



Open the retaining clamps, remove the cover, and you're ready to eyeball the cells.

The battery should be dry, clean, and not have any white deposits of potassium carbonate present.



Deposits can collect in the well at the front of the battery. The tech manual has the word on battery cleaning.



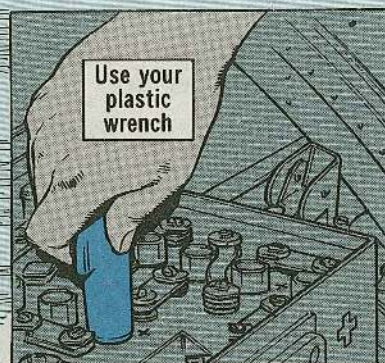
Look for damaged or loose filler caps and hardware. Use your fingers on the connecting links to make sure they're tight.

Eyeball the top of the cells. Any cracks or electrolyte leakage means the battery has to go to the shop for repair. Check the battery connection wiring for cuts, kinks or frayed insulation. Any of those conditions would require repairs.



Open Filler Caps

With the plastic, non-conductive vent cap wrench, open up every cell



and check the electrolyte level. Keep your noggin some distance from the battery. Fumes could still be coming from the battery, even tho it is not used during your check—½ hour to 2 hours following bird runup.



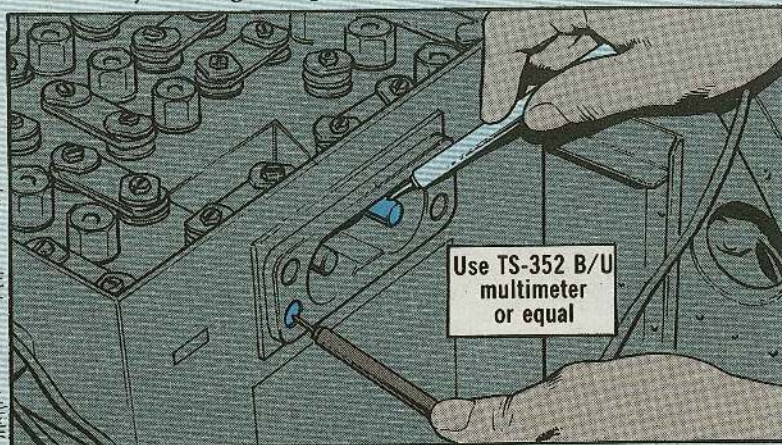
If you don't spot fluid above the cell plates in all cells, replace the battery cover and remove the battery from the bird. Send it to the AVIM battery shop for servicing.

Never, but never add any fluid to the battery in your bird. The battery has to be deep-cycled (discharged and charged) to establish the correct fluid level. Adding distilled water to a battery in a low state of charge can give you a boilover in flight—when the battery becomes charged.

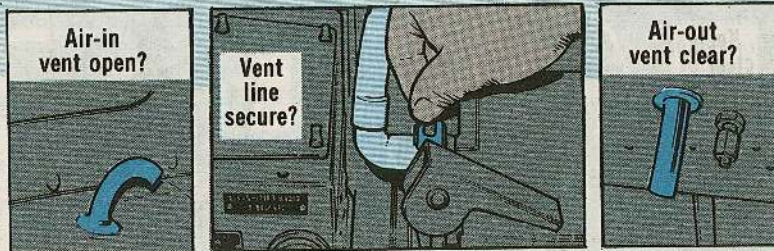


Make Other

Latch onto a TS-352B/U multimeter and make the electrical leakage check outlined in the battery pub. Be sure you use an unpainted part of the battery for the ground probe.



Next, make sure the vent lines to the battery are secure and open. It's the only way to vent fumes which, if trapped, will cause a battery explosion. 'Course the vent is effective only when your bird is flying.



GLAD OUR CREW CHIEF'S ABOARD--

WHAT CAUSED OUR POWER FAILURE, SARGE?

ER-- BATTERY EXPLOSION!

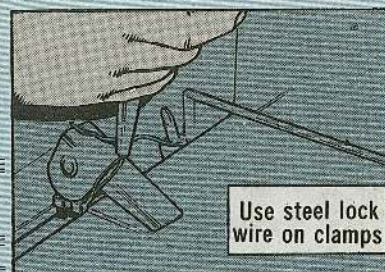
I'D RADIO FOR ASSISTANCE, BUT-- THERE'S NO COMMO!

WE'LL HAVE TO WALK OUT, MEN!

WALK OUT, SIR??

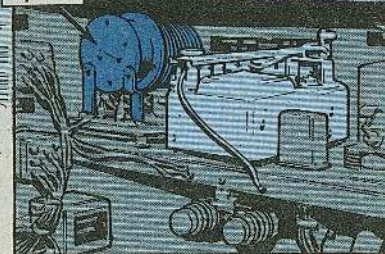
Checks

Make with the steel lock wire on the battery retaining clamps.



If you have a carbon-pile voltage regulator, it has to be seasonally adjusted for your area using a calibrated voltmeter—not the one in

Adjust carbon pile No adjustment needed on solid-state regulator



the cockpit. No adjustment is needed on a solid-state regulator.

Yessir-c-e-e, that's the only PM you pull on your installed nickel-cadmium battery between the 100-hr Phase inspections on your aircraft (or 120 days), when the battery automatically goes to your support shop for servicing.

PS END

Safety-of-Flight Messages

UH-1-79-24 Safety-of-Flight Op—internal rescue hoist DRSTS-MEA 262201Z Oct 79

AH-1-79-22 Op Advisory—Inspect 10-KVA alternator DRSTS-MEA 151415Z Oct 79

AH-1-79-23 Safety-of-Flt Tech Msg—Rerouting hose assy, MWO 55-1520-244-30-1 DRSTS-MEA 302125Z Oct 79

OH-6-79-02 Maint Advisory—Inspect OH-6A main rotor blade attach lugs DRSTS-MEA 161615Z Oct 79

CH-54-79-01 Safety-of-Flight Grounding Action—Failure of horiz pins DRSTS-M 061735Z Oct 79

CH-54-79-02 Maint Advisory—Ground running of CH-54A DRSTS-MEA 101730Z Oct 79

CH-54-79-03 Safety-of-Flt One-Time Inspect horiz pins, TB 55-1520-217-20-13 DRSTS-MEA 262200Z Oct 79

GEN 79-09 Safety of Personnel Eqpt (SOPE)—Safety vest assy, Hoist Oper, NSN 1680-00-982-9973 DRSTS-MAPL 021530Z Oct 79

GEN 79-10 Op Advisory—Aircraft seat belts DRSTS-MEA 222100Z Oct 79

When You Send
A Package...

Show 'em **You** Care

Aircraft engines, transmissions,
main rotor masts, rotor blades and

Protect
main rotor
mast

Rust can
scrap-heap it!

other components are arriving at
overhaul facilities rusted and
corroded—candidates for the scrap
heap!

UH-1 main rotor masts, for exam-
ple, are really taking a beating during
shipment.

You may not be able to lay your
mitts on the reusable metal shipping
container, NSN 8145-00-083-8335,
for the mast. So, use a wooden
container. Chap 3 in TM 38-230-2
(Jun 77) has the word on how to make
containers.

Before you pack the mast, per Para
6-140 of TM 55-1520-210-23 (Feb 79),
remember that shipping and tem-

WE COULDN'T FIND TH'
REUSABLE CONTAINER,
BONNIE...

... SO WE'RE
MAKING ONE!

be ground down once to remove
damage, after which it has to be
scrapped.

So, clean that baby with dry cleaning
solvent, P-D-680, NSN 6850-00-274-
5421. Use dry, filtered low-pressure
air to remove the solvent from holes
and crevices.

Next, coat the entire mast and
bearings with a cold application of
corrosion preventive compound, NSN
8030-00-231-2345.

Wrap the mast with greaseproof
flexible barrier material, NSN 8135-
00-224-8885, and secure it with
pressure-sensitive tape, NSN 7510-
00-663-0199. The wrap will prevent
the preservative from rubbing off.

Be sure you include the DA Form
1577 repairable tag, DA Form 2410
component record, and other records
in the container. Use a greaseproof
envelope for the paperwork.

To protect the mast from damage
during shipping, use cellulose
cushioning material, NSN 8135-00-
183-8814, and make sure the mast is
held firmly in the container.

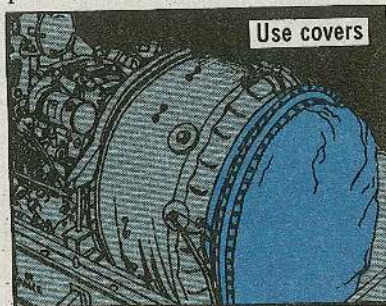
After you close the container eyeball
the markings to see that they agree
with what you're shipping. Then,
stencil the DA Form 2410 control
number on the container.

Removing
mast?...

...protect
it!

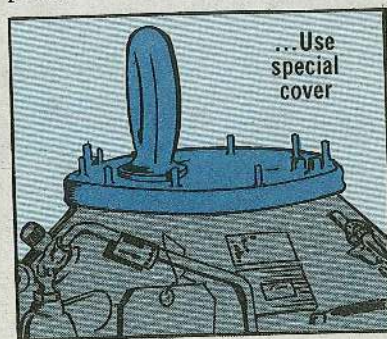
Protect Other Components

When packing aircraft engines in the metal shipping container, use protective covers at the engine inlet



and outlet. Of course, those engine containers are moisture-controlled. To keep 'em that way, be sure you add the right amount of desiccant, as explained in Para 4-2m of TM 38-230-1 (Sep 76).

When shipping CH-47 transmissions, use the special protective cover. The cover not only keeps moisture out of the transmission, it also keeps the planetary gears safely in place.



WE KEEP HEARIN' A VOICE SOMEWHERE, BONNIE...

AN' JONES HAS BEEN AWOL FER TWO DAYS, NOW...

?

Repair Containers

Keep your containers in serviceable condition. Clean the interior and exterior with water and detergent, or by steam cleaning. This'll get rid of all dirt, sand and grease that could get into the components you ship.

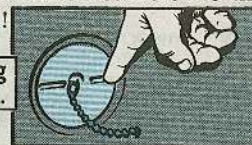


Replace damaged or missing hardware with the items listed in Appendix C of TB 55-8100-200-24, with Change 1 (Oct 78), on maintenance of reusable containers.

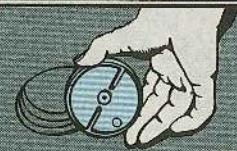
For example, the cover for the paperwork receptacle in the CH-47 rotor blade container must be secured. Without the attaching chain, the cover could be lost and that important

paperwork could be scattered to the four winds!!

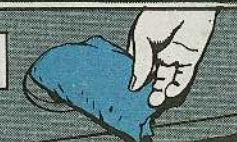
Missing chain...



...can mean...



...lost paperwork!



Replace faulty humidity indicators. Change an indicator card that does not show blue or pink tint in the 50 percent quadrant.

Replace shock mounts with cracks deeper than $\frac{1}{32}$ inch.

Replace contour cushions that have become deteriorated, or damaged. Use the authorized parts listed in the tech bulletin.

Change damaged gaskets, skids, fittings and adapters.

Yessir-e-e-e, by using first-rate containers and preserving the components properly, your package will arrive at the depot in good condition.



The Sling's the Thing

MY TM DOESN'T HAVE TIEDOWN NSN'S SO...

WHEN WE RUN OUTTA THIS STUFF-- I GOTTA SPARE REEL O' FIELD WIRE...

HALP!

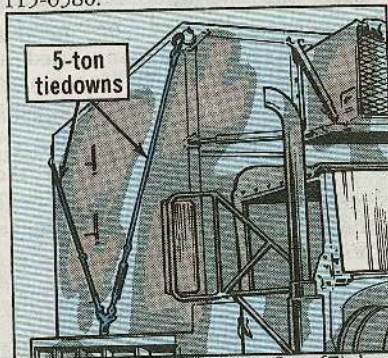
CUT IT OUT, YOU CLOWNS! THE SHELTER TMS HAVE TIEDOWN POOP!

When it comes to fastening shelters in a vehicle, nothing works much better than the right sling.

tiedown assembly is NSN 3940-00-115-6380.



M880 tiedowns



5-ton tiedowns

TM 11-5410-212-15P (Jan 67) has the poop on your S-318 shelter. To sling it, you need 2 ea slings NSN 4010-00-187-3745 and NSN 4010-00-937-0791; and 1 each sling NSN 4010-00-937-0790 and -0792.

S-144? Look for NSN 5410-00-774-6108 in TM 11-5410-205-15P (Sep 71).

But, they're not always easy to find. Especially if you're looking in the wrong place.

The right place is the shelter pub, not the commo gear TM. F'rinstance:

Your S-250 shelter is covered in TM 11-5410-214-12P (Dec 78). The

'Course, to complete the tiedown, you'll need blocking or dunnage info.



To put your shelter in an M880-series truck, SB 11-640 (Feb 78) covers all 3 shelters.

There are a couple of different manuals for the M561 Gama Goat. TB 11-2300-372-14 (Jul 74) shows you how to install the blocking kit for the S-250. The kit is NSN 5410-00-107-1864.

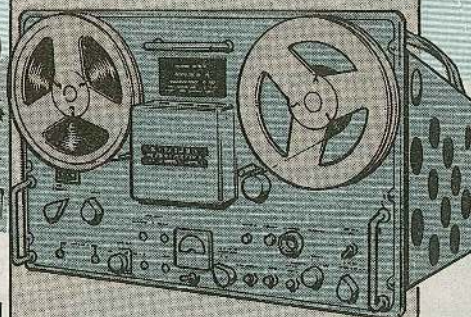


Gama goat tiedowns

The S-318 or S-144 info is carried in TB 11-2300-374-14-1 (Apr 73).

'Course, any maintenance you need to do on the shelter is covered in TB 43-0124 (Jun 79).

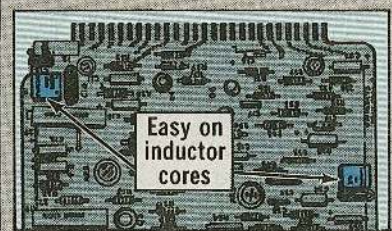
AN/TNH-20 Tool Tip



OK, org mechs, choose your tools carefully before you wade in to tune those AN/TNH-20 or -20A sound recorder-reproducer sets.

Some folks tear up variable inductor cores L1 and L3 on the amplifier assembly by using the wrong alignment tool.

Those cores are made of compressed powdered iron. Not sturdy stuff. Wedge-shaped tools—like some screwdrivers—chip or break 'em.



Easy on inductor cores

The tool you need has a tip .094-in wide, .031-in thick and .125-in long. Your support can get one from Nytronics, Inc, Orange St, Darlington, SC 19532. Ask for their Nytronics tuning tool, part number B-305, FSCM 00213. It costs 75 cents.

Dear Macon,

Keeping the contacts dry on our MX-6707 matching units is getting spendy. We order dust caps by the gross 'cause our operators throw 'em away when they put antenna sections on.

Isn't there a cap somewhere with a retaining ring to keep it tied to the unit when it's not needed? Or, is there another way to keep those caps handy?

CW2 R.J.O.

Dear Mr. R.J.O.,

Yes on both counts, Sir. Change 6 to TM 11-5985-262-15 (Mar 69) added a plastic dust cover with a retaining ring. It doesn't have an NSN yet, so order it with P/N (80063) 911110-2.

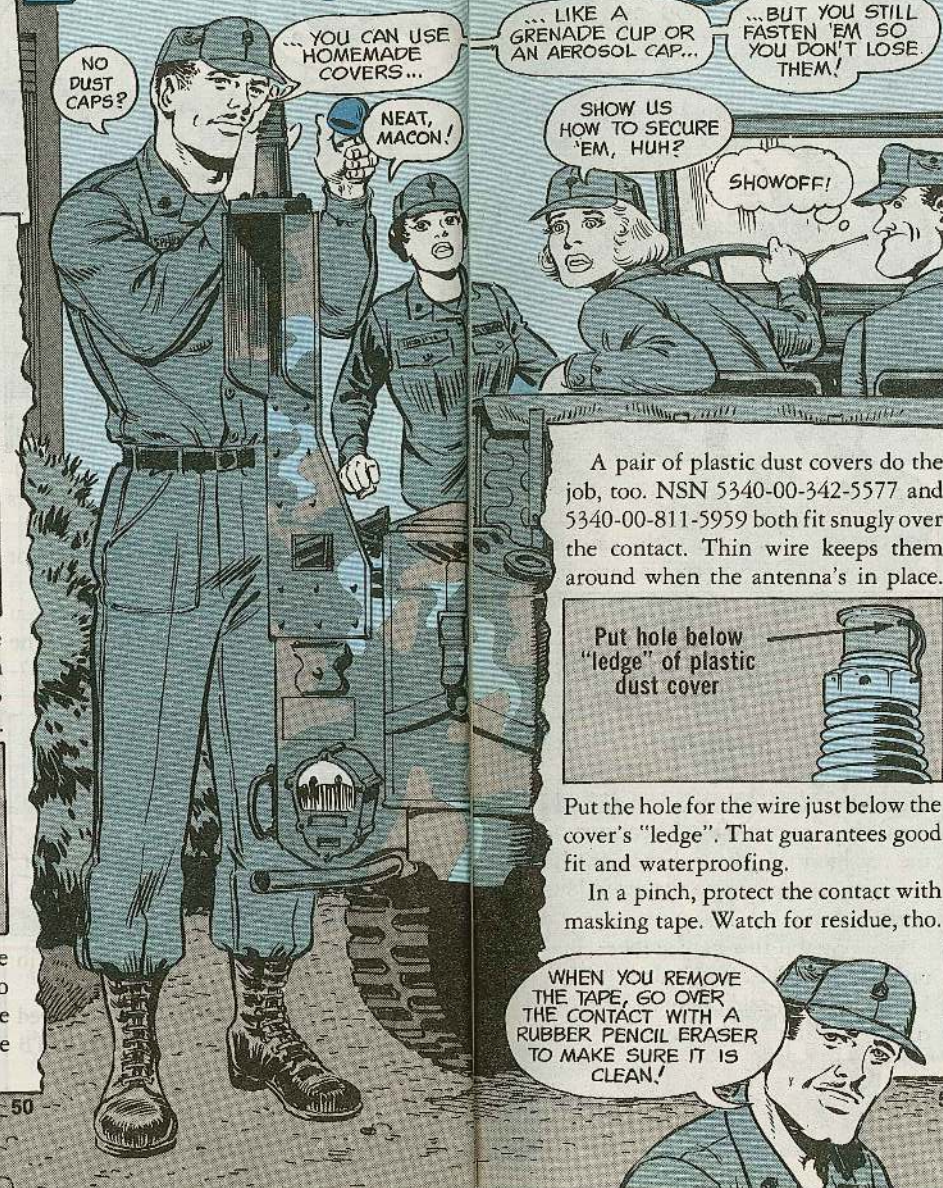


'Course, there are homemade remedies to the problem, too. You can use the protective cups from M203 grenades or tops from aerosol cans.



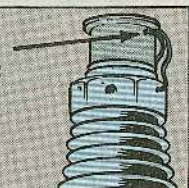
You'll probably want to use rope, like an extra piece of antenna tiedown, to fasten the grenade cup to the matching unit. For the cap, thin wire should do the trick.

Need Captive Caps



A pair of plastic dust covers do the job, too. NSN 5340-00-342-5577 and 5340-00-811-5959 both fit snugly over the contact. Thin wire keeps them around when the antenna's in place.

Put hole below "ledge" of plastic dust cover



Put the hole for the wire just below the cover's "ledge". That guarantees good fit and waterproofing.

In a pinch, protect the contact with masking tape. Watch for residue, tho.

Dry Rot Stopper

FLAKE OFF, DRY ROT!



I'M GOIN'-- I'M GOIN'!



Dear Editor,

Dry rot on handset cords is getting to be a big problem. I find that putting silicone grease on the cord when you first see the rot can make it almost like new.

Dry rot problems on your cords?



If the cord is badly rotted, tho, put on a heavy coat of grease. Then, wipe the excess off the next day.



Rotting bad? Try a heavy dose of grease

The results here have been remarkable.

What say you?

SSG Stephen Waldrop
Ft Hood TX

(Ed Note—I say right on! Make it part of your weekly routine and get rot before it gets you. An 8-oz tube of silicone grease is NSN 6850-00-880-7616.)



Tight's right. Like with the earphone cushions on your MK-1697/G headset-microphone kit.



MK-1697 headset-microphone kit is getting new earphone cushions

That's why the top shop is replacing the vinyl pads you now use with a polyurethane cushion. The new



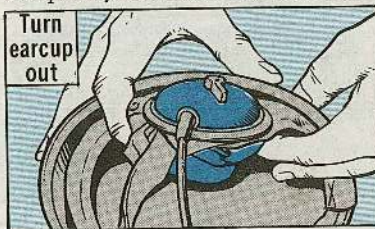
Earphone cushions

material doesn't stretch like vinyl, so it won't lose its grip.

The new pad, NSN 5965-00-135-0505, fits both earphones.

Because it does fit so tightly, it goes on harder.

To put it on, get a good grip on the helmet. Hold it between your knees, for instance. Then, turn the earcup completely out. Fit the cushion attach-



Turn earcup out

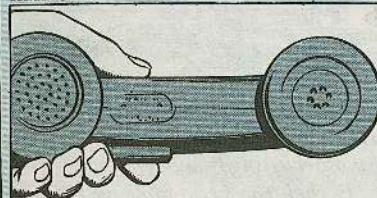
ment ring over one side. Then stretch the cushion to the other side. It may take a couple of tries to get it, but stick with it.

One note on this new grabber. It's only for the MK-1697. It does fit the H-161 headset-microphone, but the correct pad for that set is still NSN 5965-00-815-2525.



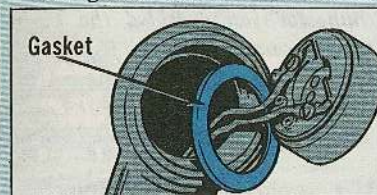
TA-235 Gasket

Got a bad gasket on the TA-235 receiver element of your H-60 handset?



Keep the element and replace the gasket.

The gasket is NSN 5330-00-618-



Gasket

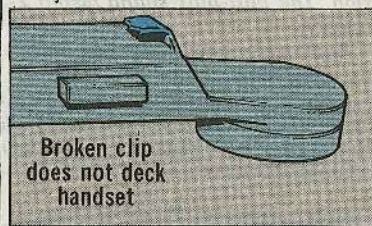
1665. It's being replaced by NSN 5330-00-842-3203, tho, so watch the AMDF.



H-189 Clip Fix

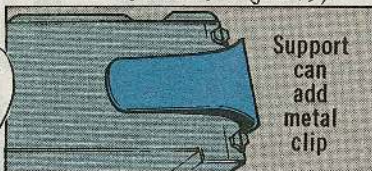


Breaking the molded clip doesn't KO your H-189 handset.



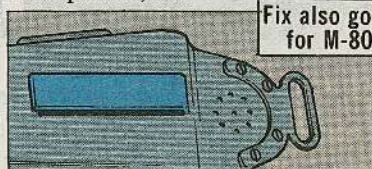
Broken clip does not deck handset

Your support can now add a metal clip, NSN 5340-00-064-5426. Details are in TB 43-0001-9-4 (Jan 79).



Support can add metal clip

The fix is good for M-80 microphones, too.



Fix also good for M-80

AN/GRA-39 Control Group...

UTT-PUTT-PUTT-PUTT-PUTT

Stopping the Motorboat



Dear Editor:

Our AN/GRA-39 radio set control group's remote set started sounding like a motorboat after each transmission. The putt-putt sound lasted 2-3 minutes.

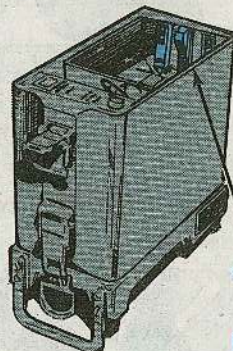
Right away our operators blamed it on a bad local control set. Not so.

Usually, just turning down the volume on the remote unit until the sound stops is enough. If not, we clean all contacts with a pencil eraser.

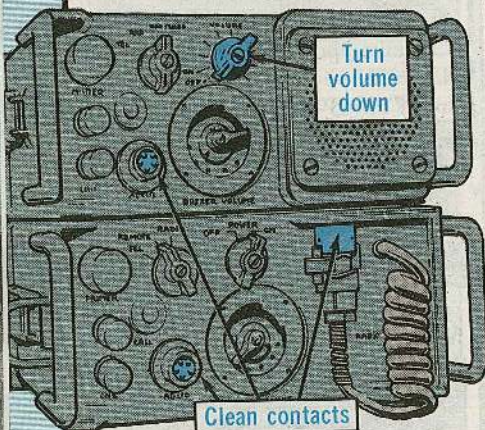
(Ed Note: Good work, Sarge. Here are some other things which could cause "motorboating.")

eyeball the radio cable on the local unit. It should go to the receiver-transmitter's SPKR connector. If you connect it to the retransmit R/W connector you overload the keying relay. It carries too much juice for the control group.

Weak batteries could be the cause. They're only good for about 72 hours.



Clean contacts and check batteries here



Turn volume down

Clean contacts

This "quick fix" keeps our sets on the job and out of the shop.

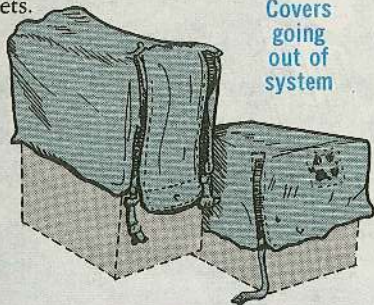
SSG Gary Cathcart
FT Ord, CA

No RT



Coverup's a dirty word... 'specially if you're talking about canvas and radio sets.

Covers going out of system



Coverup



Once upon a time, the top shop wanted you to protect your RT -246, -524, -505, -841 and R-422's with CW-653 and -649 canvas covers.

No more. Seems the heavy covers were creating a bad overheating problem. No air got through.

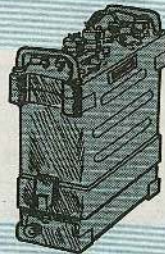
So, don't worry about 'em. They're being dropped from the supply system, anyway.

AN/PRC-77 Loudspeaker



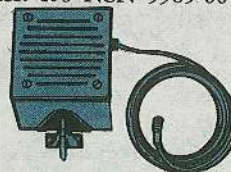
Your AN/PRC-77 radio set's LS-549 loudspeaker has faded out—permanently. That's the word in para 6-6 of Change 7 to TM 11-5820-667-12 (Jun 67).

AN/PRC-77's speaker is out



The headshed offers 2 replacements. The one you pick depends on your need.

For a fixed ground or vehicle installation, use an LS-454 loudspeaker. It's NSN 5965-00-876-2375.



For silent monitoring, get the H-251 headset. Order NSN 5965-00-043-3460.



Odds-On Favorite

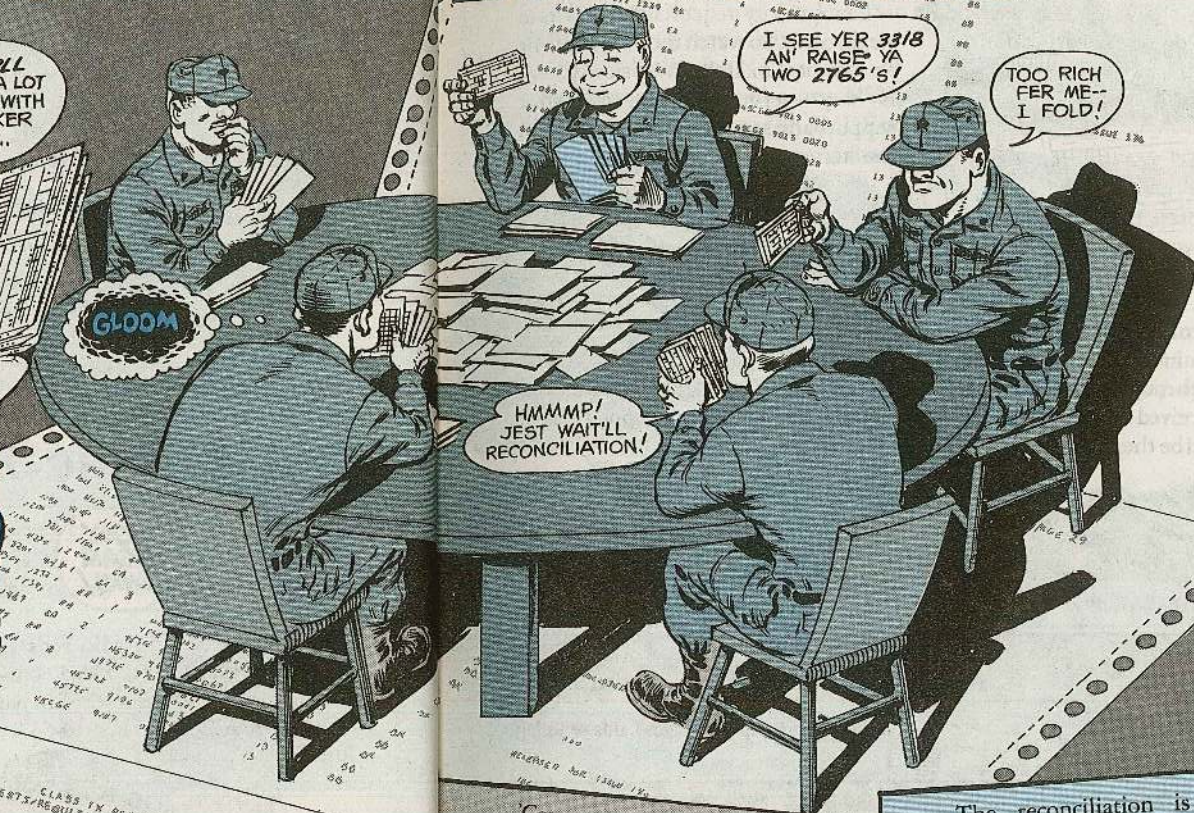


A GOOD POKER
CLERK HAS A LOT
IN COMMON WITH
A GOOD POKER
PLAYER...

GLOOM

You work with a lot of cards—and you gotta play the odds. A winning player improves those odds by keeping up with all the cards—and you should do that, too!

56



I SEE YER 3318
AN' RAISE YA
TWO 2765'S!

TOO RICH
FER ME—
I FOLD!

HMMMP!
JEST WAIT'LL
RECONCILIATION!

Course, instead of a 52-card deck, you have a variety of status cards. But your ace-in-the-hole is your periodic reconciliation listing.

Depending on your supply system, you should be getting a reconciliation listing at least each month or quarter. But are you putting that listing to good use?

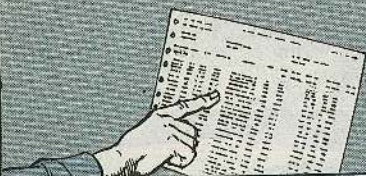
The reconciliation is usually a computer printout—although some people may get computer cards with or instead of the printout.

Whatever you get—and whenever you get it—that's your chance to get straight with—and straighten out!—your supply system. Pull out your document register and start comparing.

57

LISTING INFORMATION

6. Listing shows an item you no longer need.



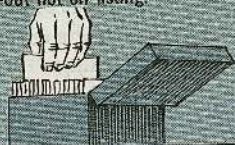
Cancel the item. Put AC1 and the Julian date in pencil in column j of the item's document register entry. When support replies with a BQ or B6 status, put BQ or B6 and the Julian date of the status card in ink in column i. Change the demand information on the item's DA Form 3318.

7. Listing shows RELEASED FOR ISSUE by an item you have not received.

Send in follow-up (AF1) card. Mark document register entry with AF1 and Julian date of follow-up.



8. Unit does out not on listing.



Send in a follow-up status card (AF1). Mark document register entry with AF1 and the Julian date of the follow-up. Close the request if support shows no record. Reorder under a new document number.

9. Listing due out not on document register.

If you do not need the item, cancel it. If you do need the item, write that document number and information on your document register.

10. Reconciliation completed.



See SOP. Some systems ask you to return listing and/or cards. Other systems require units to file listing and/or cards.

Check your system's user manuals for more info and other ways to reconcile your supply requests. A new system, DS4 is on the way. The user manual for that system may have different reconciliation instructions.

When you use your reconciliation listings, you become the odds-on favorite to get what you need every time!



YOU CAN WIN AT THE SUPPLY GAME, TOO...

IF YOU PLAY YOUR CARDS RIGHT!

MANUAL (SSA to Units)

DLOGS (SSA to Units)

SAILS (Unit/SSA "Tops-Down")

Write "CANCEL" to the right of the entry on the listing. Put AC1 and the Julian date in pencil in column j of the item's document register entry. When support replies with a BQ or B6 status, erase the AC1 and put BQ or B6 and the Julian date of the card in ink in column i. NOTE: You cannot cancel an item with RELEASED FOR ISSUE by the entry—that item's already on its way.

Turn the item's AN1 card into a cancellation. Put Advice Code 2M in Block 22. Make the same document register entries as required under DLOGS and manual systems.



Write RELEASED FOR ISSUE on item's document register entry. Put the Julian date of the listing in pencil in column i. Wait for another listing. If the item still has not shown up, write LOST in column i of the document register entry and reorder the item under a new document number.

Not a SAILS listing entry.

Wait for second listing. If item still is missing from listing, write CANCELLED AF1 (BF) on the document register. Reorder under a new document number.



Request sent in before listing cut-off date? Make an AF1 follow-up, using Advice Code 2N in Block 22 of the AN1 card. Mark document register with AF1 and Julian date of follow-up. Request sent in after listing cut-off date? Wait for another listing before taking action.

If you do not need the item, write CANCEL to the right of the listing entry. If you do need the item mark the entry with an X and add that document number and information to your document register.

If you do not need the item turn the item's AN1 card into a cancellation (AC1). If you need the item, post the document number and information to your document register.

Send copy of listing, signed and verified by your CO, to support. File second copy.

J. J. Smith, Jr.

Hold onto unused AN1 cards. Use those cards for any future follow-ups or cancellations. Send any AC1's or AF1's to support. Return AP1 card. File listing.



LUCKY SO-AND-SO...

WAIT'LL NEXT TIME!

HOW'S HE DO IT?

JUS' PLANNING AND FOLLOW-THRU, LADS!

Code Book Requests

FM 38-725-10, Logistic Codes for Unit/Organization (Jan 79), is full of supply information—everything from status codes to classes of supply.

IF THIS FM SLIPPED BY YOU, YOUR PUBS CLERK CAN ORDER COPIES WITH DA FORM 4569!



Your outfit can get new editions on pinpoint distribution if your pubs clerk will fill in Block 337 on DA Form 12-11B. The form goes to the Baltimore Publications Center.

SUPPLY ITEM SUBJECT CLASSIFICATION	QUANTITY
LOGISTICS MANAGEMENT	
Logistics Management	339)
Logistics -- Inventory Management	330)
Defense Procurement Training Handbook	331)
Logistics Maintenance Management	332)
Logistics Management Control	333)
Command and Staff Supply and Maintenance Procedures	334)
Unit Supply Procedures	335)
DSU Supply Procedures (Centralized Stock Control)	336)

DA FORM 12-11B
1 APR 72

Alternate Tools

Dear MSG Half-Mast,
How do we handle differences between tools issued and tools called for on a preprinted hand receipt? I have found several wrench sets that are similar, but have different NSN's from those listed.

CW3 D. T.



Dear Mr. D. T.,

When you get a substitute item, the first thing you must do is make sure the substitute will do the job of the authorized item.

If the tools you receive will do the job of the ones in the supply catalog or on the preprinted hand receipt (HR), add their NSN's to the HR with a note "received ILO (the listed NSN)."

3439-00-910-253	TIP, ELECTRIC DESOLDERING: RECEIVED ILO	1	1
3439-00-910-2552			

Continuation Sheet for DA Form 2062

7 - Total allowance for Hand Receipts. (a) Authorized per item for Hand Receipt Allowance.
C - Current operating allowance for Hand Receipts. (b) Total authorized for Hand Receipt Allowance.

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NO. OF PAGES 79

But maybe the substitute tools won't do the job. Fill out an SF 364 Report of Discrepancy. AR 735-11-2 Reporting of Item and Packaging Discrepancies

REPORT OF DISCREPANCY (ROD)		1. DATE OF PREPARATION	2. REPORT NUMBER
3. TO (Name and address, include ZIP code)		4. FROM (Name and address, include ZIP Code)	
50. DISTRIBUTION OF COPIES			

STANDARD FORM 364
PRESCRIBED BY GSA
FPMR - 101-26.307 364-101

tells you how.

Chances are you won't have that reg. so ask your support for help.

Wait until you get word back on your SF 364 before ordering a new set or new tools so you don't get a repeat on the bum substitute.

PUT ADVICE CODE 28 (DO NOT SUBSTITUTE), ON YOUR REQUEST!

DD 314...

Not For Operator's Services

Dear MSG Half-Mast,
Change 2 to TM 38-750 dropped the words about the DD Form 314 being needed only for scheduled services performed by a mechanic or armorer or by an operator/crew member under the supervision of a mechanic.

Has there been a change in policy?
MSG T.C.F.

Dear MSG T. C. F.,

Nope. The words on that were dropped from TM 38-750 by mistake. The old policy still stands. You schedule only those services performed by organizational mechanics and specialists.

OPERATOR
SERVICES ARE NOT
SCHEDULED!



GUILTY...



YOU'RE GUILTY OF
SPREADING FALSE
RUMORS, SOLDIER!

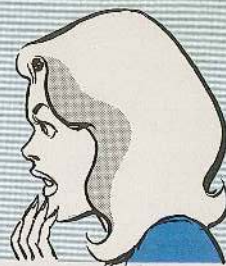
I DIDN'T
REALIZE IT, YOUR
HONOR, SIR...

A nasty rumor's going around about the DA Form 2408-14 Uncorrected Fault Record.

Put Offs on DA 2408-14

Some people think you defer something on the DA 2408-14 only if you have a document number—for a part on order—or a work request number—until your support can take your equipment—in column c.

Sit on that rumor right now! Your CO, or the person your CO gave that job to, can defer a fault or maintenance action on the DA Form 2408-14 for a variety of reasons. That includes postponing the repair until the next scheduled service or trip to support.



More on Antifreeze...

Get up to date on the antifreeze problem! The latest word's in USAGMPA Msg STSGP-FT 231900Z Nov 79. This goes beyond the info in USAGMPA Msg STSGP-IM 231700Z Oct 79—mentioned in PS Magazine 326, page 65.

You may have to carry that military type antifreeze—already in your engine cooling system—beyond the 4-year limit called for in TB 750-651 (Nov 77). Be sure your antifreeze meets the reserve alkalinity test and protects against freezing.

The latest message gives you the poop on which commercial-type antifreeze is the best substitute for military-type antifreeze. And it tells you about mixing different types and brands of antifreeze. You don't!

Tarp Bow Pins

NSN 5340-00-878-5269 gets the quick-release pins for the tarpaulin bows on your PU-620/M power unit that's carried on a modified M101 ¾-ton trailer.

No Aircraft PMCS

You aircraft types waiting for PMCS' to replace your ESC's will wait in vain. No aircraft PMCS' will be published. DA Circular 310-21 (15 Dec 79) rescinded your aircraft ESC pubs with no replacements.

☆ U.S. GOVERNMENT PRINTING OFFICE: 1980-657-085/3

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

Change 3 to TM 38-750

Change 3 to TM 38-750 arrived in time to start your year off right. It's got a new Appendix C and DA Form 2406 paragraph and more! But hold off on using that new DA Form 2406 information or Appendix C until 16 Mar 80. That's when the next reporting period starts. Everything else in Change 3 goes into effect when you get the change. DA Msg DALO-SMM 282055Z Nov 79 has the word.

M240 MG Parts

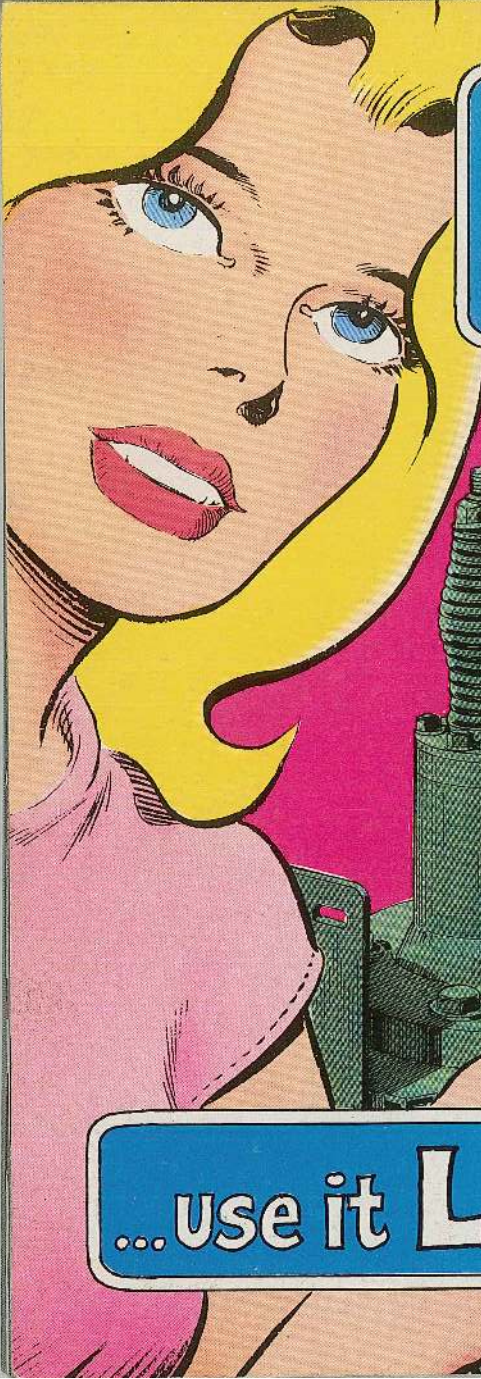
M240 machine gun spare parts are in short supply...just enough for initial deployment. Word has it that some units are stockpiling...which means that a parts shortage could delay issue of the weapon to units which haven't received it yet. The message: If you don't need parts, don't request them.

DR-8 Binding Posts

Need a new M-221 terminal board for your DR-8 cable reel? Get it with NSN 5940-00-164-8112.

For Vulcan Pliers

Vulcan mechs can get replacement pads for those plastic-jawed pliers, NSN 5120-00-624-8065 in SC 4931-95-CL-A16. Use NSN 5120-00-157-3660 for the pads.



Drain it
NOW...

CORROSION KO'S
MATCHING UNIT,
SO...

LET MOISTURE
OUT MONTHLY--
EVEN DAILY IN
WET WEATHER!

...use it **LATER!**