

Issue 188

PS

1968 Series

THE
PREVENTIVE
MAINTENANCE
MONTHLY

WADDYAH
MEAN...
"UNUSUAL
CONDITIONS"?



WILL EISNER

BUT, I HAD THE WORLD'S BEST EQUIPMENT?

HE DID!... until he...



— Started his vehicle with the radio still on.



— Let dirt and sand get on his ammo . . . weapon damaged, wouldn't fire.



— Didn't service his vehicle's filters . . . one engine shot.

— Forgot his battery's PM . . . battery died and his equipment out of action.



— Let dirt build up in his engine's air filter.

Choke . . . grind.



The world's best design engineers and the best manufacturing by industry won't mean a thing if the man—you—who uses the gear does not do the PM that means life to Army equipment. PM means life to your equipment . . . and to you.

— Left a wrench, a rag, a nut, a washer or piece of wire where it got sucked into the aircraft engine.



— Didn't clean his M16 rifle every day and didn't use LSA in the right way.



— Overloaded and cow-boyed his equipment . . . it's busted now.



— Oil level? He forgot about it. Another engine on the junk pile.



PS

Published by the Department of the Army for the Information of organizational maintenance and supply personnel. Distribution is made through normal publication channels. Within limits of availability, other issues may be obtained direct from U. S. Army Maintenance Board, Attn: PS Magazine, Fort Monmouth, New Jersey 07031.

THE PREVENTIVE MAINTENANCE MONTHLY
ISSUE NO. 188 1988 Series
IN THIS ISSUE

GROUND MOBILITY 2-13

Lead-Acid Batteries 24
Sloan Multitool 1213
Lube Dope 1611

FIREPOWER 14-24

M108-M109 14-16
M102 18
M62/M62AS 19
M109 17
Tank Interceptors 20
M16A1 21-24

AIR MOBILITY 25-27

Heavy Turbo Blower 25
Ground Hood Hook-Up 26
Dane Tip 27
Flying Heland Paint 27

COMMUNICATIONS

AN/GR-46 Radio Teletypewriter 37-48

GENERAL AND SUPPLY

Ch 1 to AF 735-35 49-64
New Publications 28
Supply 4, 13, 14, 15, 16, 17, 18,
22, 23, 24, 25, 26 and 27.

Use of tanks for printing of this journal has been approved by Headquarters, Department of the Army, 26 February 1988.
DISTRIBUTION: In accordance with requirements submitted on DA Form 124.

PS wants your ideas and contributions. Write to send to answer your questions. Write your address on left; in care of name, just write to:

Sgt. eddy, Mail,
PS Magazine,
Good News, Ky.
40121



LEAD-ACID BATTERY

YOUR RIVER OF FIRE

IF YOU ANSWER 'YES' TO ANY OF THESE QUESTIONS YOUR RIVER OF FIRE WILL SOON BECOME A TRICKLE.

FRIT

WHEN? ALWAYS!

Power pours from your equipment's storage battery. It's electrical energy flowing through the ignition system, lights and other electrical equipment. This current has to be strong, smooth 'n' steady.

You, the operator, has to be strong, smooth 'n' steady. Your mechanic can keep it that way. There's trouble, but you won't need him much if you do your part. Your battery depends on you first.

- Is your battery dirty... wet... low on water? Is it cracked and leaking?
- Are battery posts and clamps kept up so they don't fit together snug?
- Are battery clamps loose on the die cable terminals loose on the die cable terminals?
- Are clamps showing metal parts? Are clamps eating metal parts? Will bare wires show up?
- Is corrosion build-up too tight? Are battery hold-downs too tight? Or too loose?

You've got to give your battery setup some kind of attention real often. Just looking at it close may be enough sometimes, like checking the electrolyte level. This should be done every day if you're in hot 'n' heavy operations—at least once a week under normal conditions.

Loose connections are easy to spot. Just latch on with a couple fingers and try to wiggle 'em. This little finger exercise could save you from some real trouble later.

Taking good care of your batteries doesn't have to take a lot of time. You can do a little bit now, a little more later. Over a month, you can give your batteries a complete goin' over. If you want to do it all at once, here's the rundown:



“READ DIRECTIONS ON LABEL”

In this case, the “label” is TM 9-6140-200-15 w/Ch 1 (Jan 62), Storage Batteries—Lead-Acid Type. When you know what’s inside your battery and how your battery works, you’ll bear down harder on taking good care of it. Then see what your vehicle’s -10 and -20 TM’s have to say about your own battery setup.

YOU CAN DO SOME OF THESE THINGS WITH THE BATTERY-IN-PLACE ON YOUR EQUIPMENT! BUT LET’S GO THRU THE WHOLE BIT, SO YOU GET THE PICTURE!

- GOT IT
- DISTILLED WATER (or rain water—or even drinking water in a pinch) for filling battery FSN 6140-643-4490 (from No. 1)
- BATTERY FILLER, Syringe, FSN 6140-643-4490 (from Tool Kit)
- Common Tool Kit
- BATTERY FILLER, Gravity, FSN 6140-635-3824 (from Tool Kit)
- to carry distilled water
- BRUSH, Wire, Scratch, FSN 7920-291-5815 (from Tool Kit—or any
- BRUSH, PAINT, FSN 8020-297-6657 (from Tool Kit—or any
- other paint brush)
- CARRIER, Storage Battery, Hand, FSN 5120-529-4124 (from Tool Kit), if you’ve got 2HN batteries (6TN batteries have their own carrying handles)
- 2 WRENCHES (from Tool Kit), for head end of battery clamp bolt and for nut
- LIFTER-SCRAPER, Battery Terminal, FSN 5120-293-1039 (from Tool Kit)
- BLOWTORCH, Gasoline, FSN 5120-222-1371 (from Tool Kit)
- SODIUM BICARBONATE (baking soda), FSN 6810-264-6618 (1 lb) or FSN 6810-290-5574 (100 lbs), in Fed Cat C6800-1L (Jul 67)
- GREASE, Automotive and Artillery (GAA) FSN 9150-190-0904 (1-lb can) FSN 9150-190-0905 (5-lb can)
- COATING COMPOUND, Bituminous, FSN 8030-290-5141(1-gal, in Fed Cat C8000-1L-A (Jan 68).
- SOAKING TUB, like half of a clean steel drum
- SCRUB BRUSH (any brush that does not have metal bristles)
- CLEAN WATER, plenty of



ON YOUR MARK

Remove your batteries:

1. Take off the battery terminal clamp first — use lifter-scraper tool.



2. Take off the other cable clamps.



3. Lift small batteries (2HN) with carrying strap, big ones (6TN) by carrying handles. Easy now, no hangin' the battery against the vehicle. Set it down easy — on a board.



Clean-up, paint-up:

1. Wire brush your battery hold-downs to get off corrosion and cracked paint. Use your blowtorch too. Wear gloves and goggles... be safe!



2. Soak 'em in your tub — 1/2-lb soda to 1-gal water. Then rinse 'em in clean water. Dry 'em. Now paint 'em with coating compound.



3. Battery tray (or box) gets wire brush, soda washdown and clean water rinse. Then dry and paint. Same goes for other nearby metal parts that catch it from corrosion but can't be taken out for the torch 'n' tub treatment.



4. Clean corrosion off cable terminals and clamps, but don't be too rough on 'em. Replace clamps that're mashed so bad they don't fit good on battery posts or when the two ends of the clamps hit when the nut is drawn up.



REPLACE BEAT UP CLAMP

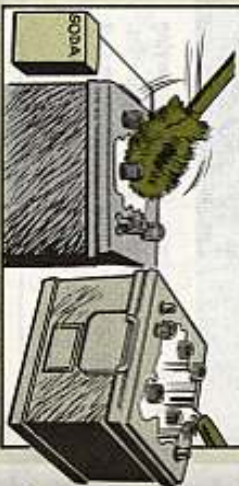


Battery Bath:

1. Keep filler cap vents open so they'll vent battery gas. Take 'em off and use a piece of stiff wire. There're baffie-type, offset hole-type and one-way-valve-type caps. Never put 'em against your mouth to blow 'em out—that electrolyte can give you a real bad pucker. Now put the caps back on and snug 'em down finger-tight.



2. Wash dirt and "electrolyte salt" off your battery top with scrub brush and soda water. There'll be foaming from the soda and acid gettin' together. Be careful to keep this soda out of the filler cap vent holes. Make sure posts are cleaned good. Then flush with fresh water and wipe dry with a cloth. Don't let the soda get inside the battery.



3. Look'er over close for cracks or leaks. Tell your mechanic if the battery's leaking or if posts are mashed or broken.

THIRSTY BATTERY

Your battery comes with a mixture of acid and water. This mixture is called electrolyte. In use, you have to add water to bring the electrolyte up to the right level.

How often do you check your battery's electrolyte level? At least once a week—maybe even every day when you're operatin' a lot in hot weather.

Low electrolyte may be a sign of bad trouble in your electrical system. If you're runnin' ragged tryin' to keep the electrolyte level up, the trouble may be overcharging. This can kill your battery too. Your mechanic will check to see if the voltage regulator needs adjustin' or replacing so your generator can't overcharge the battery.

Low electrolyte leaves your battery's plates open to the air. This's certain death. Those plates have to be covered with electrolyte.

WATER
IS THE MOST IMPORTANT PART OF YOUR PREVENTIVE MAINTENANCE!

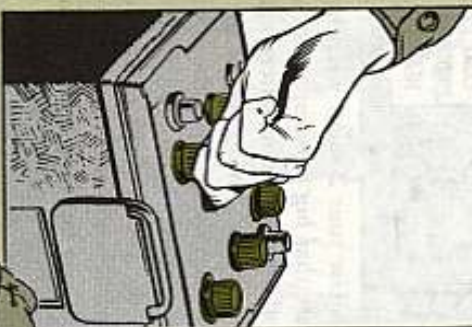
Usually you do your electrolyte check with the battery in your vehicle. While you've got it out is a handy time to see if it needs a drink:

1. Your electrolyte level should be about 3/8-in over the tops of the plates.

2. If your electrolyte's low, add distilled water. Rainwater's dandy if it hasn't been stored in a metal container—almost any clean water's better'n nothing. Not too full—you'll flood out and weaken your electrolyte, or it'll "boil over" for sure during charging.



3. Battery filler caps back and finger-tight.



BACK IN THE HARNESS

Now take it e-a-s-y puttin' your battery back in the vehicle. A good grip with the lifting strap (or carrying handles). Your battery case is tougher'n glass but it wasn't made to be kicked around. Set it down gentle-like in the tray.

BATTERY
HOLD-DOWNS
SHOULD BE
NEITHER TOO
TIGHT NOR
TOO LOOSE

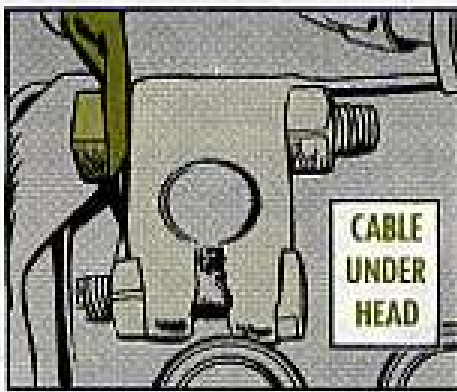
So grab ahold of your battery and try to move it before you tighten those hold-downs all the way. If you can move the battery, tighten a little more. Quit when the hold-downs are just tight enough to hold the battery solid.



CLANK
PARTLE



Check your hold-downs every couple of days to see if they've loosened up.



ABOUT FACE

D'you remember when the word was "under the nut—not under the head"? Not so anymore. Your cable terminal goes under the head end of the battery clamp bolt. This'll keep it from loosening up so easy.

Always put your positive cables on first—the ground cable last. This's so you won't have sparks jumpin' all over the place.

Use your 2 small wrenches for tightening battery clamp bolts 'n' nuts. Never use that big crescent wrench that's in your vehicle OEM; it's almost sure to slip off and bust your battery top.

Hold the head end of the bolt with one wrench and turn the nut down with the other. A little at a time, though. Take ahold of the cable near the terminal with your thumb on top and your pointer finger wrapped around. Try to move the cable by lifting and then pressing down. Tighten the clamp bolt 'n' nut some more if she moves. When you get 'er tight enough so she won't budge, give 'er about another 1/4-to-1/2 turn—then stop, that's enough.



After all that messin' around, check your clamp-to-post hookup. Take ahold with your thumb and 2 fingers. Try to twist the clamp on the post. If she moves, give 'er the same as you did on the cable-to-clamp—tighten, check 'n' tighten. An extra 1/4-to-1/2 turn after she's snug.

TIP:

When you want to disconnect your batteries from the electrical system but don't want to take the batteries out of your vehicle, just take the cable terminal off the clamp—not the clamp off the battery post.)





K-KEEP AN EYE ON THESE HOOK-UPS

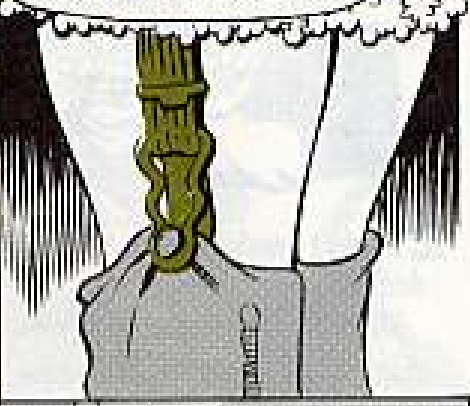
THEY'RE NOT GUARANTEED TO STAY TIGHT.

W-WHEN YOU'RE BOUNCING OVER ROUGH TERRAIN.

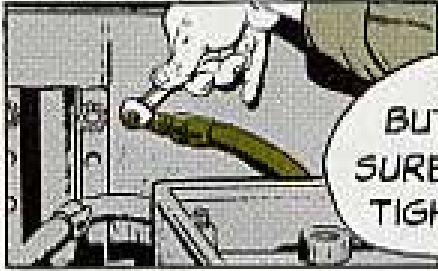
But you can buy a little insurance. Use plastic hanger straps to keep cables from swingin' and bouncin'. This handy li'l item's called Strap, Line Supporting, FSN 5340-074-2072, listed in GSA Stock Catalog (Oct 67), package of 100 for \$3.50.



HANGER



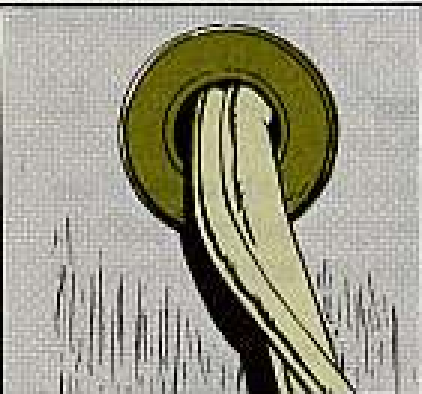
Now you've got your clamps snug on the battery posts and your cable terminals tight on the clamps, smear some ordinary GAA on the clamps and terminals. Get the top, sides and underneath. This'll help fight off corrosion.



BEFORE YOU BUTTON UP, MAKE SURE YOU'VE GOT A TIGHT CONNECTION.



LIKE WHERE YOUR BATTERY GROUND CABLE HOOKS UP TO THE ENGINE OR FRAME!



Make sure rubber grommets are in place to keep cable from getting cut on edge of holes.



In this set-up cables have to be laid on ledge at back of battery box as you slide the box back in. If you slip up, the cables will be chopped off by the . . .



. . . Ledge when you slide the box back into place.

Keep tabs on that battery ground cable hookup . . . and your cable-to-clamp connection . . . and your clamp-to-post connection . . . and your hold-downs . . . and your electrolyte level . . . and corrosion . . . and dirt.

PLAYIN' THE

GAME FAIR

1 Hey, you with the grease gun! what d'ya think of a guy who cheats at solitaire?



2 Doesn't make much sense, does it? Well, what about a guy who skips lube points in a grease job?

WHO? ME?

3 This guy's got the grease gun right there in his hands. He's already as mussed up as he can get! But he's in a hurry—in a big sweat to sit down someplace and clean his fingernails.



5 But, instead, he studies the plug a minute (he knows it's a lube point—his 10 pin-points it). He looks around to see if anyone's watchin'—and then decides: "Theck with it. Won't hurt to skip it this once. Someone else'll get it next time." That doesn't make much sense either, does it?



4 He comes to one o' those lube points where he's got to 1. take out a plug, 2. put in a grease fitting, 3. shoot the grease to 'er, 4. take out the fitting and 5. put the plug back in.



6 Be honest, now—y'have to admit, if one guy'll pull this stunt, the next guy don't the lube job on this piece of equipment may do the same thing.



7 Sure, it's easier to hit the lube points that've got grease fittings in 'em all the time. You just wipe off the fitting, put the grease to 'er and go on to the next one. Wipe—zap—wipe—zap—it's even kind of fun operatin' a grease gun when you can move right along.



9 But let's take that guy who figures, "After all, hitin' most of the lube points is better'n nothin'." So he cheats a little—just a little.

A little? S'pose that piece of equipment is a 5-ton truck. Its crankcase is up to the mark with the right grade of nice, fresh OE—wheel bearings are rollin' smooth in plenty of GAA—gears are sloshin' around happily in their GO. Most, but not all, of the grease gun points have been hit.

11 There she sits—the prop shaft bearings shot. And so's that truck's mission shot. She's goin' no place without a prop shaft—except back to the repair shop where it'll take time, a lot of work and new parts to put 'er back on the road.

All because a guy with a grease gun decided to "skip it this time—somebody else'll get it next time."

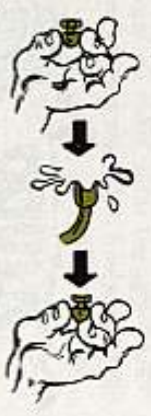


8 That plug-fitting-plug routine upsets your smooth operation. You've got your hands full of a grease gun, a wiping rag, a wrench and either a plug or a fitting. Then you lay the plug or fitting down and have to hunt for it. That's the way she goes, right?



10 Someone didn't pay any attention to Note 9 in LO 9-2320-211-12 (Jun 64) where it says:

"Propeller Shaft Universal and Slip Joints ... remove filler plug of each joint and install pressure fitting, fill using low pressure gun. Remove fitting and reinstall plug...."



12 No matter what kind of equipment you're lubbin', go by your 10—step-by-step and every step. Get those plug-fitting-plug jobs, like the clutch release bearing on the 67/92-series 10-ton truck, like the front wheel U-joints and steering knuckle bearing on the 67/42-series 2 1/2-ton truck, like—well, you'll see 'em pinpointed in the vehicle's LO. This's no game of solitaire. Some other guy and his mission are goin' to be dependin' on how good a job you do.



5-TON

WHERE'S "NORMAL"?

AIR INTAKE ELBOW...

Dear Half-Mast,
 Lost: 1 reincoat, left hanging on right outside mirror of 5-ton multifuel truck (near intake of fender-mounted air filter).

Found: Shredded remains of 1 reincoat, inside air filter.
 So we remembered your tip in PS 165 about turning the air filter elbow in so it points to where the fender and side panel come together. Then that terrific suction won't pull in leaves, twigs, hats or wigs—or reincoats.

But things get sticky when an inspector comes along and sees "NORMAL" on the filter can where the elbow used to point.
 So where's normal?

SP4 L. D. S.

SLURP

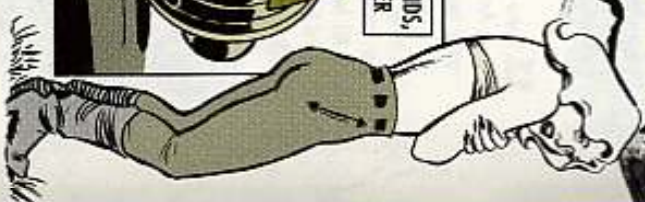


Dear Specialist L. D. S.,

No sweat. That PS 165 piece said to loosen the filter cover clamps and then turn the cover and elbow as one piece so the elbow points in and down.

If that "NORMAL" is giving you trouble, just loosen the 2 bands around the filter can, loosen the bands on the filter outlet pipe and turn the can 'n' all so the elbow points where you want it—and "NORMAL" goes right along with it. And remember to tighten those bands back again.

Half-Mast



AIR FILTER GASKET...

DUE FOR GLUE?

Better eyeball that filter cartridge (FSN 2940-974-9669) in the fender-mounted air cleaner on your G744-series 5-ton multifuel or diesel truck. You may have the kind with a gasket on each end. A loose gasket means a bum seal. Glue it back on.

First, though, clean off the old glue with trichloroethylene — FSN 6810-678-4418, 1 gal. in Fed Cat C6800-1L (Jul 67). Clean the groove in the cartridge too. Let 'em dry.

Then give 'em both a shot of adhesive — FSN 8040-515-2250, 1-qt. in Fed Cat C8000-1L-A-CB1 (Apr 68) — a thin coat on the parts that're to come together. Let 'em dry for about 10 minutes. Put the gasket back on real careful.



5-TON THROTTLE CABLE

For multifuel engine G744-series 5-ton trucks, you get Control Assy, push-pull, FSN 2990-911-5628. It's the right length throttle control. You'll find it in Ch 2 (Apr 67) to TM 9-2320-211-20P.





HERE'S A BOUQUET OF TROUBLE-SHOOTING IDEAS FOR EASY-TO-MISS SPOTS.

M108-M109
SP HOWITZERS:

FORGET

EVN GOES



ON THE M108

Valve Cap Insert — Be sure you check this nylon plug every time you remove the valve assembly for cleaning (meaning after every day's firing or monthly if your M108's on R&R, like the LO says). If the insert's brittle-hard, or dried out or worn, replace it pronto. Matter of fact, it's a good idea to replace it, anyway, after the cap's been removed about 20 times. FSN 1025-821-2421 fetches the plug. Keep a couple extra handy at all times.

This insert acts as the locking device for the valve cap. If it's shot, likely you won't be able to seat the valve and cap snug in the evacuator chamber.

Incidentally, it's also a good idea for you crew members to check a couple times a day during firing to see that the valve cap's tight. If it's not, just snug up that hexhead. Don't over-tighten it.



14

Evacuator Chamber Key Screw — Keep an eagle eye on this screw since it can work loose during firing.

HERE'S A COUPLE OF THINGS YOU CREW TYPES CAN DO.

1. Make sure the key and screw are installed right. Check 'em more often to see that they stay tight.

2. If they keep working loose, get your medic to drill a 1/16-in hole in both the key and the screw and lockwire 'em together with 41/1000-in wire.

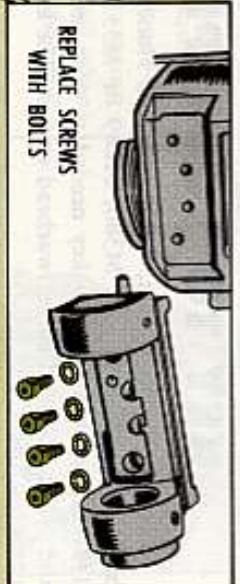


Breech Operating Handle Pin — If you have trouble locking the breech operating handle because this pin gets damaged or loose and the plunger and stop get banged up, could be the wrong pin's in there and it's too small. Get support to replace the 1-1/4-in pin, FSN 5315-058-6089, with a 1-3/4-in pin, FSN 5315-850-5754 (like the other spring pin in the handle assembly). This'll solve it.



1 3/4 INCH PIN
FSN 5315-850-5754

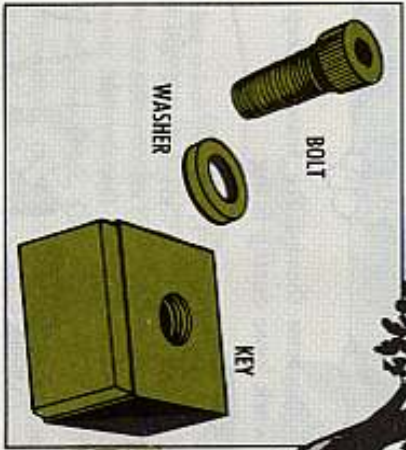
Breechblock Operating Crank Bracket Screws — These 4 screws coming loose and getting sheared off? Sorry 'bout that! Get your support people to replace these screws with 4 bolts (FSN 5306-879-6240 . . . P/N 11577991) to hold the operating shaft bracket. Support'll also use sealing compound (Grade C per MIL-S-22473) on the threads and torque the bolts to 125 ft-lbs when they install 'em.



REPLACE SCREWS WITH BOLTS

15

Evacuator Key — Same deal goes for the M109 as for the M108 about checking the key and the retaining screw frequently for looseness. If the M109's keeps getting loose, get your mechanic busy with his drill . . . boring 1/16-in holes in the key and in the head of the retaining screw. Then wire 'em together, using the same 41/1000 safety wire.



They're redesigning the key and screw (putting holes in 'em) for easier safety wiring. They may not be in your supply TM yet, but you can order 'em with these stock numbers:

KEY . . . FSN 5315-826-5359
BOLT . . . FSN 5306-087-3748



Evacuator Valve — Don't waste y'r muscle tightening the hexagon part of the valve when you're putting it back in. A light tugging pull with the wrench is all that's needed. The valve cap'll hold it in place OK.

If you do over-tighten the valve, you're apt to strip the receiving threads. Then the valve will fall into the chamber and end up ruining the tube.



KEY TO YOUR PROBLEM

It's in the supply system, waiting for you Honest John guys to request as a basic issue item for your M386, M289 or M33 rocket launcher. That's the 1/16-in socket head screw key needed to open and close the ogive on the M6 and M6E1 762-MM rocket warhead section. The key is listed under FSN 5120-198-5398.

SHY OF NITROGEN PSI?

Don't just stand there waiting for trouble. Search it out and destroy it before it deadlines your M109 155-MM self-propelled howitzer.

Meaning . . . look for signs of low nitrogen pressure in your weapon's equilibrator system. Then get support to doublecheck and recharge, if need be.

If you find it harder to elevate than to depress your howitzer with hand elevation (they should balance) . . .

...Or if you find you have to keep adding oil to the equilibrator system and can't find any leakage to explain why (like at hydraulic fittings, lines and piston rod seals) . . .



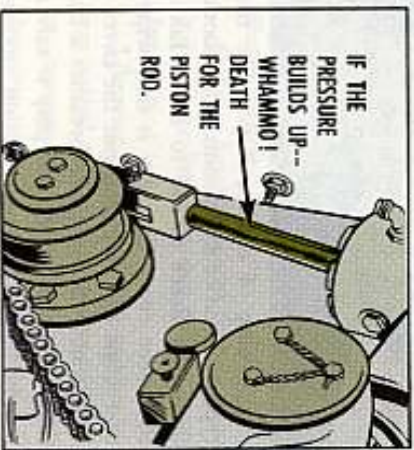
HERE'S WHAT TO LOOK FOR WHILE ON A BEFORE-DURING-AND-AFTER OPERATIONAL PM PATROL.



... You'll know the nitrogen pressure's too low and the system needs recharging.

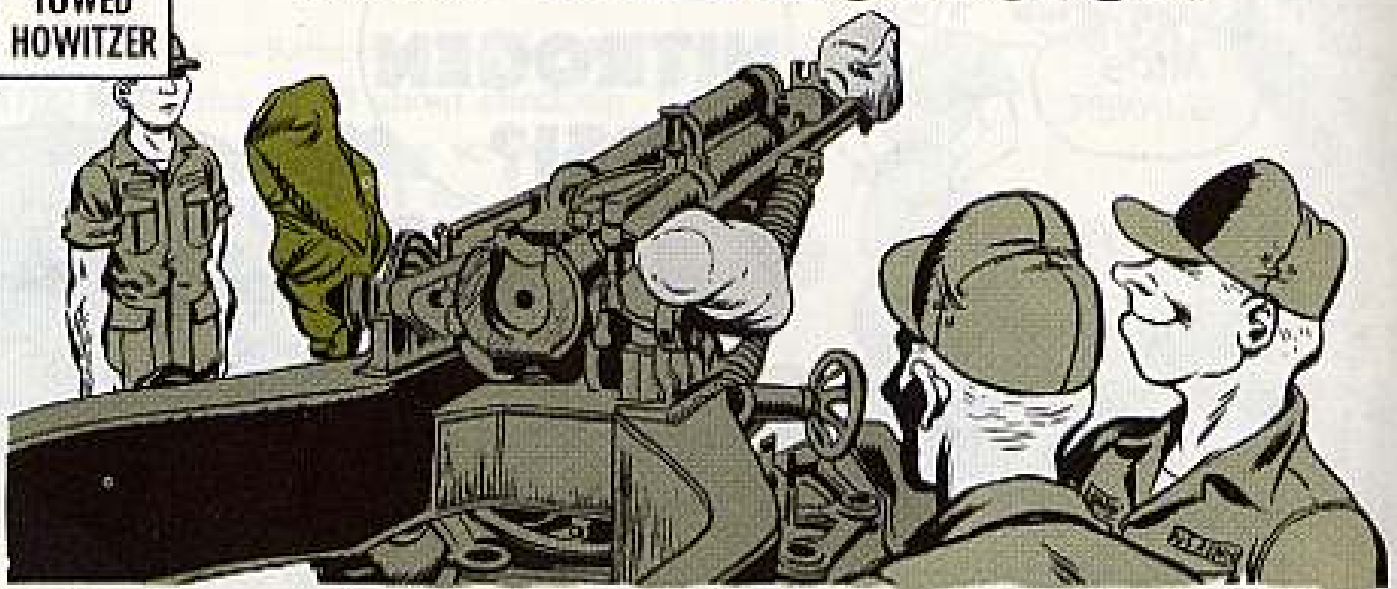
If that nitrogen pressure's too low, y'know, the equilibrator piston rod's likely to bust—and then you will have trouble. What happens is that the absence of enough nitrogen allows too much oil to be pumped into the system and the piston rod runs smack against a solid column of pressurized oil when the gun's fully depressed . . . whammo! So, on your toes, eh?

IF THE PRESSURE BUILDS UP-- WHAMMO! DEATH FOR THE PISTON ROD.



M102
TOWED
HOWITZER

PAN-TEL PROTECTOR



Hey, Gunner, make sure the panoramic telescope on your M102 105-MM towed howitzer is covered every time you're not using the scope — especially when the rig's being airlifted.

Those lenses are the eyeballs of your scope and they're pretty darned delicate. Sand and gravel whipped up by the rotor blades will pit the heck out of 'em.

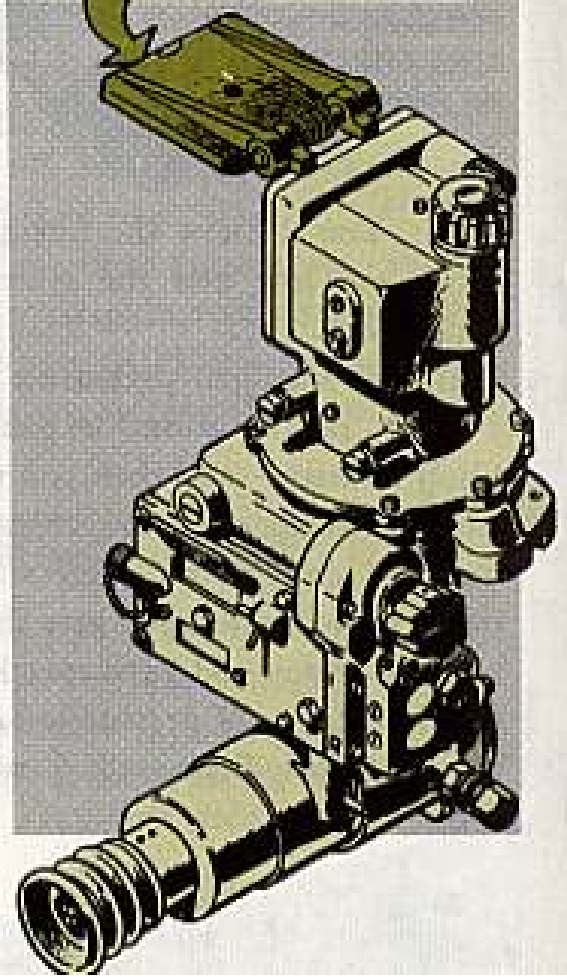
Use the plastic-type cover (FSN 1240-066-4992) or the new canvas-type (FSN 1240-937-8287).



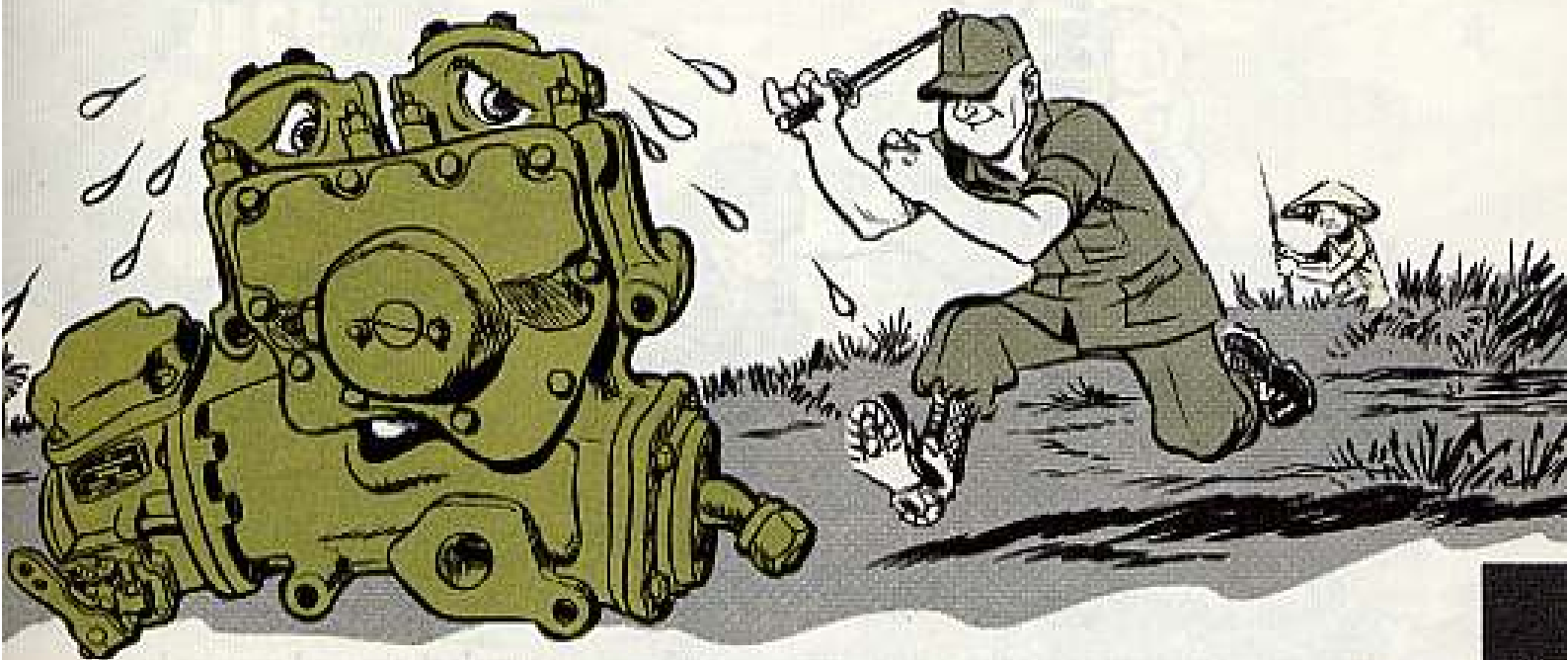
Speaking of covers, if you use the plastic-type, remember to do something about the condensation that's bound to form. Like, remove the cover every day, dry it out, wipe the lens and scope dry and then put the cover back on.

The new canvas cover breathes a little better than the plastic ones, but play it safe and keep an eye peeled for condensation anyway.

If you don't have either, the least you can do is to close the pan-tel's cover assembly.



M60/M48A3 TANK TOPICS



If you have an AVDS-2 or AVDS-2A engine in your vehicle (M60-series tanks, M48A3, M728 CEV, etc.) listen up because this may save you some grief.

The fuel injector pump housing can get beat up because the injector line bracket screws vibrate loose and enlarge their holes in the pump housing.

Ask your talented company mechanic to check out bracket 10865316, whenever the oil cooler fans are removed.

The 2 screws holding the bracket to the pump housing should have split lockwashers FSN 5310-637-9547. They

are listed in Fed Cat C5310-IL-A, Vol 3 (Sep 66) on page 611.

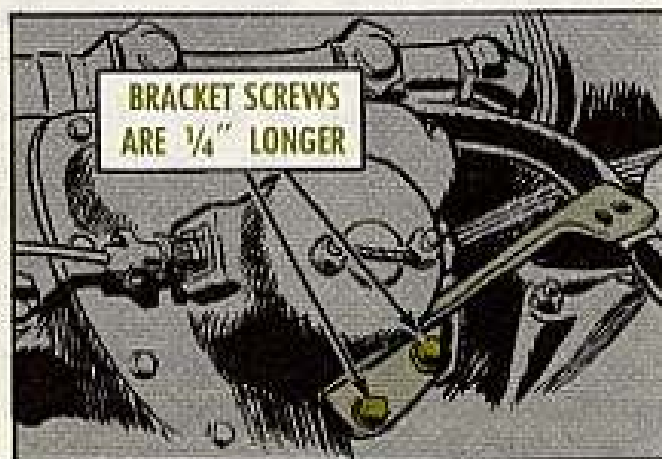
They are not interchangeable with the other 8 screws on the pump housing because they mount both the bracket and the housing so they have to be 1/4 inch longer.

They are listed on page 21 of TM 9-2815-200-35P (Nov 62) in case you have to ask your support to get some for you. FSN 5305-721-5488 is the number, and they are 1-1/8 inch long.

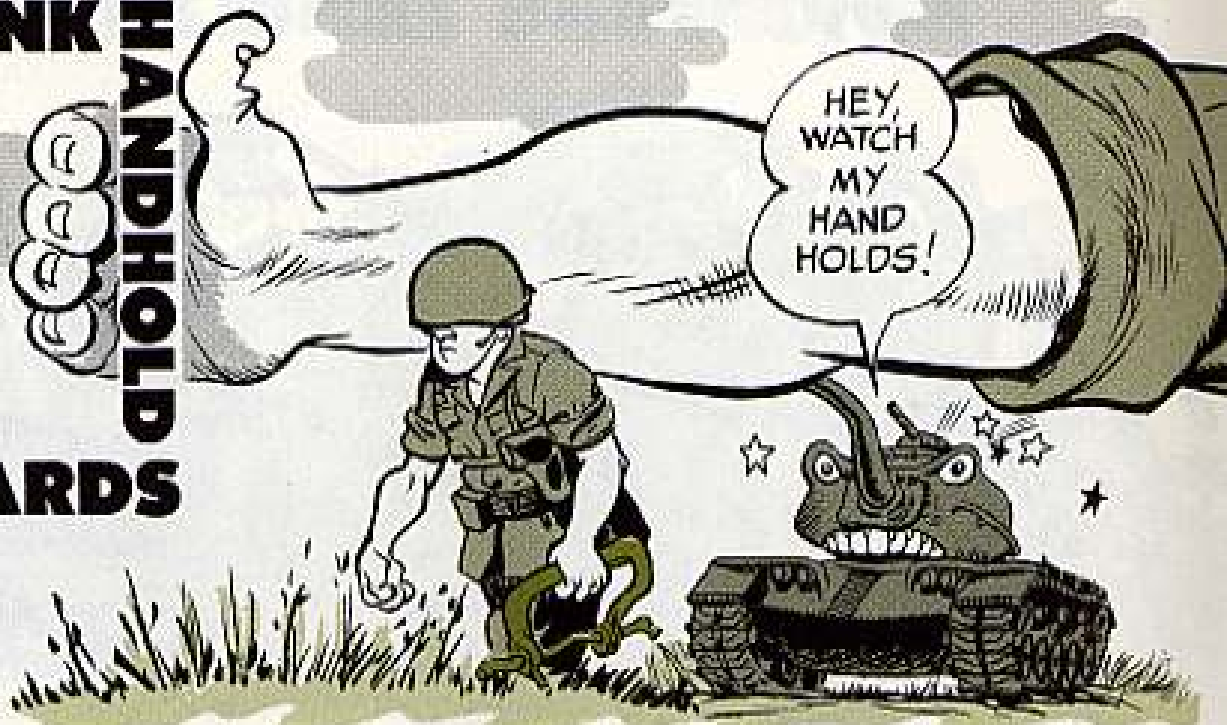
Your company mechanic will put on the lockwashers and then use torque wrench FSN 5120-221-7947 from the special tools set to give all 10 of the screws holding the housing 50 to 60 lbs-in torque.

If loose bracket screws have already ruined the housing, ask your support for help.

Likewise, whenever the cooler fans are pulled, call your company mechanic to torque the screws on the pump housing.

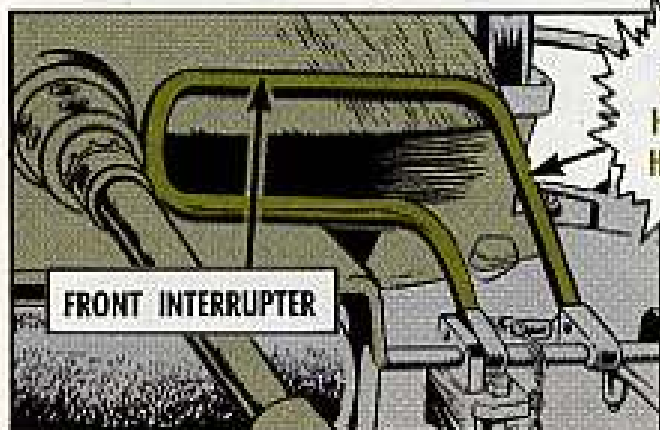


TANK HANDHOLD HAZARDS



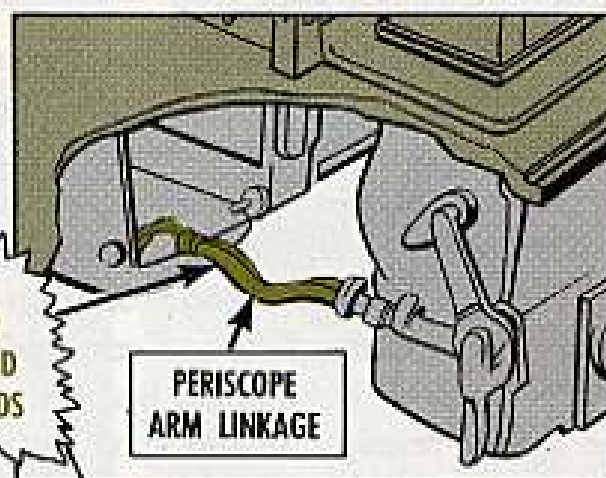
Like all you young bucks know, getting a handhold on the wrong girl can be mighty hazardous. The same is true if you get a handhold on the wrong part of a tank.

The front and rear interrupters on your M48A3 tanks deflect the barrel of the .50 caliber machine gun so you won't shoot out your searchlight in stowed or mounted position.



can bend or break them and maybe hurt yourself.

The same thing goes for the adjustment arm linkage sight between the periscope and the machine gun on



M48A3 tanks and on M60-series tanks with M28C periscopes. It will bend or break if you use it as a handhold to climb in or out of the commander's cupola, and you are likely to damage that other valuable government property — yourself.

If you have an M48A3 tank be sure your support has the rear interrupter positioned according to Ch 1 (Oct 66) to MWO 9-2350-224-30/1 (Jul 66).

If you use the interrupters as handholds to climb around on the tank you

So save your handholding for the girls, and both you and your tank will stay healthier.

M16A1 RIFLE:

RICE PADDY PM HINTS

But first this commercial: It takes teamwork between the rifleman and the armorer to keep an M16A1 on shooting terms with Charlie. Teamwork: Each doing what he's supposed to do — and doing it right. Kee-reck!



OKAY, ZAPPER, AND YOU TOO, SPEEDY!! LET'S TAKE FIVE AND RE-HASH SOME OF THE TROUBLES BUGGING YOUR TRUSTY M16A1... AND SEE WHAT WE CAN DO ABOUT 'EM!



WHY AND HOW OF TOUCH-UP

Comes a time in every M16A1's life when it may need a touch of paint to keep the finish from eating away. Acids from your paw sweat and chemicals from brackish water and mud work on the aluminum after the anodized coating has worn off. If the surface gets scratched, the eating action speeds up . . . could eat right through the metal.

Here's what you shooters should do:

Wipe the metal surfaces a couple times a day with a clean rag or swab to get rid of fingerprints. Then run an LSA-moistened swab over the same areas. LSA: FSN 9150-935-6597 . . . 2-oz plastic bottle.

USE A SWAB MOISTENED WITH LSA



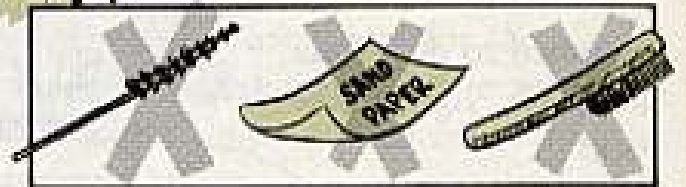
If your weapon gets scummed up with brackish or salty water or mud or the like, wash the metal surfaces with clean water and rag, if you can, and follow through with the light LSA treatment. Then, first chance you get, ask your armorer for some SD dry-cleaning solvent (FSN 6850-281-1985 . . . 1-gal can) to give it a better cleaning job. Then apply that film of LSA.

If the muck gets that thick and hard, let your armorer take a whack at it with



SD solvent. Never try to scrub it off yourself.

NEVER USE A STEEL WIRE BRUSH OR ABRASIVE ON THE OUTSIDE SURFACES OF YOUR WEAPON . . . IT SCOURS THE METAL AND WEARS OFF THE ANODIZED COATING!

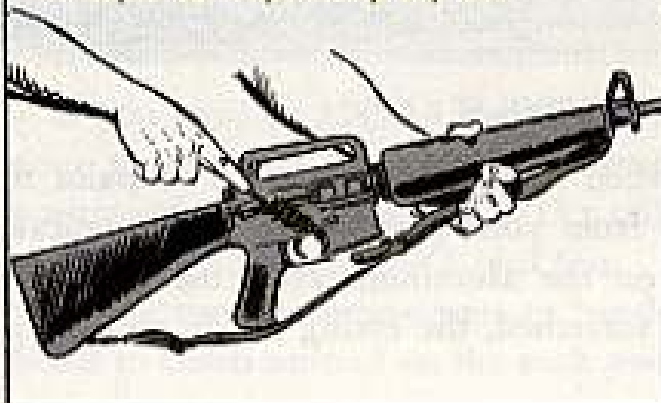


Finally, if the surfaces start to get that seedy look—y'know, the finish gets worn through in spots—don't wait till it's too late: Get your armorer to make with the touch-up, pronto.

PRO JOB NEEDED

OK, Speedy, here's the way:

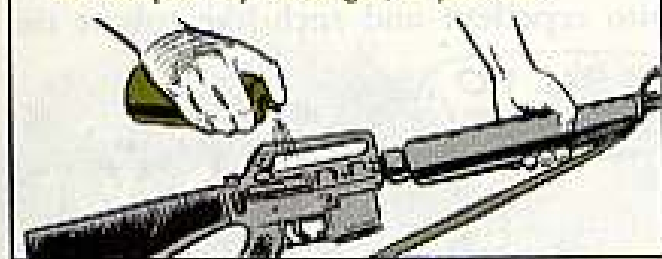
First, clean the surfaces real good with dry-cleaning solvent. (No bore cleaner; it leaves a film.) Make sure you get rid of all the oil, too, or the paint won't stick. Then air-dry it. SD evaporates pretty fast.



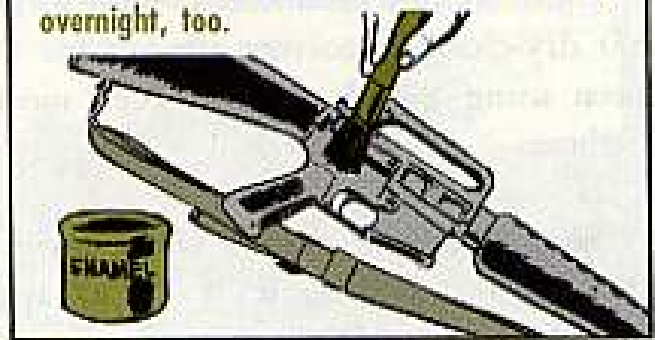
Next, put on a coat of activator primer (FSN 8030-980-3976 . . . 6-oz pressure can) and let it dry about 10 minutes or so. Now put on either of the black (jet) paints in the TM—Lacquer . . . FSN 8010-582-5382, 16-oz aerosol can, or Enamel . . . FSN 8010-297-0546, 1-qt can. Nothing else but.



When using a spray can, apply the stuff in thin layers, not heavy globs, holding the can about a foot away from the surface. Let the weapon dry overnight, if you can.



Using a paint brush with enamel, also apply it in a thin smooth coat and let it dry overnight, too.



Either way, be mighty careful you don't get any primer or paint inside the receivers. Concentrate on the exterior aluminum surfaces.

Let every paint job dry overnight, at least. And make sure it's good and dry before you give it the LSA-moistened rag treatment.

PLEASE LUBE THESE!



THE FRONT SIGHT, TAKEDOWN PIN AND PIVOT PIN ARE 3 SPOTS YOU DON'T WANT TO FREEZE UP ON YOU FOR LACK OF LUBE ... THEY NEED REGULAR GENEROUS DOSES OF LSA!

YOUR BABY, ZAPPER

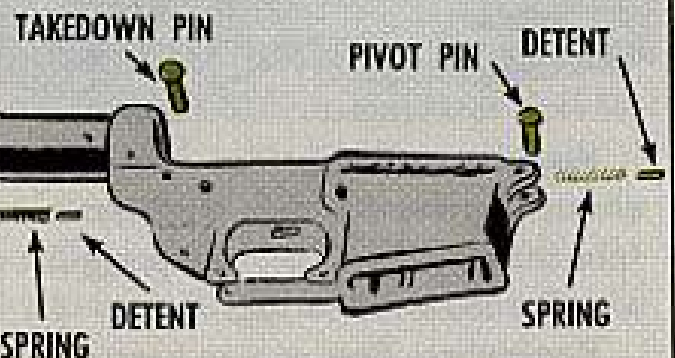
Front Sight—Get the habit of squeezing a couple drops of LSA on it every couple of days or so. Then push down on the detent and spring a few times to let the lube spread.

PUSH DOWN ON THE
DETENT AND SPRING



YOURS, SPEEDY

Takedown Pin And Pivot Pin—Have your armorer put LSA on these parts every so often—say, once a week. The pin, detent and detent spring all need LSA.



BEWARE: HEX MAKERS!

Ugh! Word's around that some guys have been dipping the lower receiver in SD dry-cleaning solvent, trying for a shortcut in cleaning. Other guys have been using gasoline, diesel fuel, mosquito repellent and such-like to cut the carbon.

Nix on these! No good!

First, CR bore cleaner (FSN 6850-224-6656 . . . 2-oz bottle) is all you zap-men'd better use. It's built to cut carbon and gook, sure-nuff . . . and without destroying the lube protection your rifle's innards need. Stick to the poop in para 3-28 of your TM (TM 9-1005-249-14, 1 Aug 66, w/5 Changes).

Second, if things ever get so fouled up with gook and carbon that CR won't



handle it, get Speedy to go to work on it with P-C-111A carbon-removing compound (FSN 6850-620-0610 . . . 5-gal can).

Everything else is out—far out! Reason? Well, why bug up the works?

ANTI-JAM INSURANCE

Sure, Zapper, you're half-right if you think keeping your rifle clean and lubed will prevent jams. But, don't forget the other half: Good clean ammo from a clean magazine!

Ammo—Get rid of dented and corroded rounds. They'll jam in the chamber, won't eject. Never put grease or oil—not even LSA—on your ammo. This attracts gook that'll foul up the guts of your rifle.



Magazines—Empty 'em every day at least and clean 'em inside and out. Bore cleaner's great for this. But dry 'em good afterward and—get this!—never lube the magazine, just the spring . . . a very, very light film of LSA applied with a moistened swab or rag.

Remember: Best way to keep a clean, jam-less rifle is not to let the gook in.

HUEY OIL COOLER

BLOWER BIND

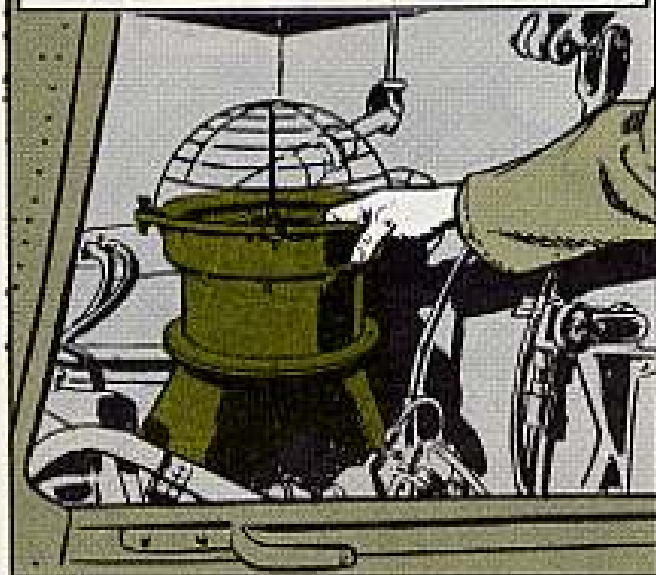


When you're playing peek-a-boo in the boonies with Cong it's easy to get a snoot full of junk in the oil cooler turbo blower of your Huey.

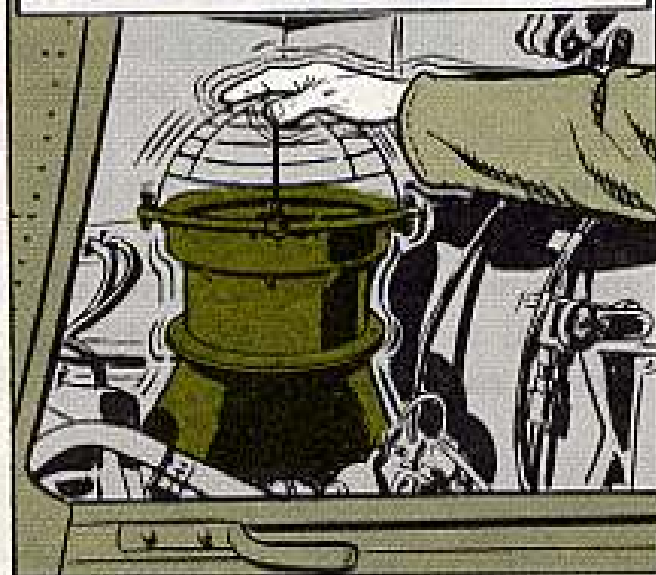
Even the sharpest eye can miss sand and grass hiding under the oil cooler engine turbine fan, P/N 204-060-448-3, when you pull a PMD, PMI, PMP look-see.

So-o-o-o, Knucklebusters, here are a couple of ways to tell if extra stuff is a-roosting under the wire assembly, P/N 204-060-592-1.

1. Hand spin the fan to see if it's goose-loose, drum-tight, or cob-rough. Anything suspicious, and you yell for support.



2. With the blower operating put your hand on the wire screen. If your arm feels like it's getting a massage, trouble is afoot.



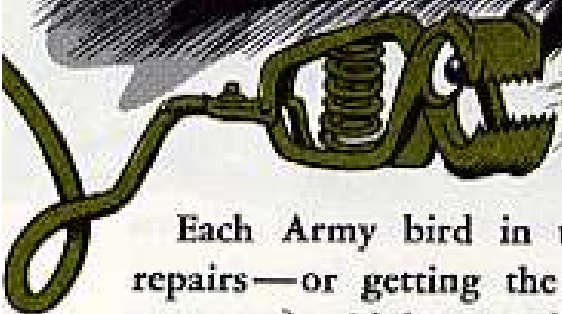
O-level maintenance types leave the inside of the blower alone, but nothing says you can't call support if you're not happy with what you feel or find.

If your MO OK's the hand-on-the-wire check keep a close watch on young mechanics. A bloody stub zaps many a budding wrenchbender PDQ.

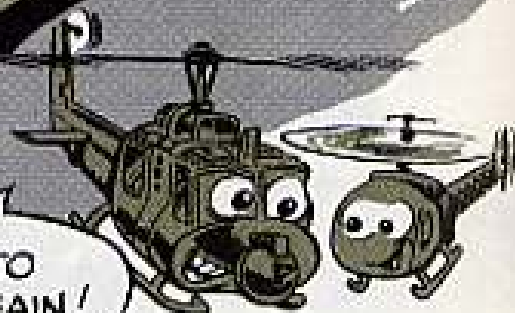
Need a PM reminder to check the oil blower? Replacing a binding turbo blower in Congland ain't healthy a-tall!

GROUND ROD HOOK-UP . . .

SAFE OR SHOCKING?



HE F'GOT TO HOOK UP AGAIN!



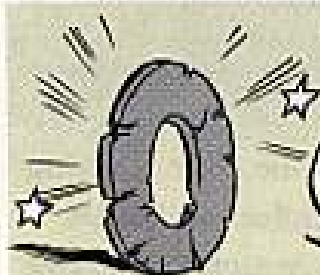
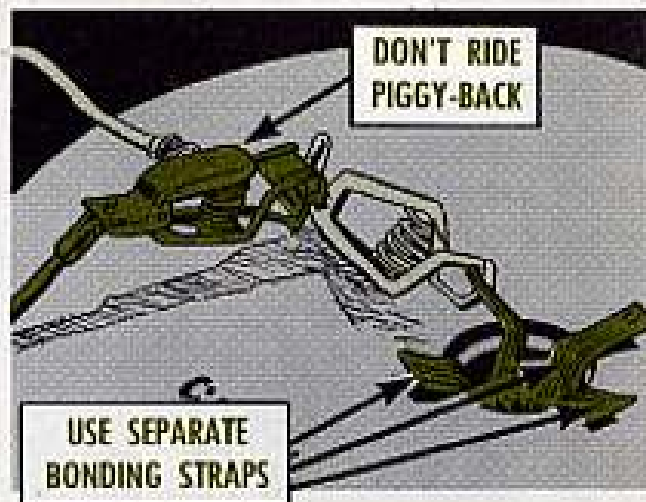
Each Army bird in the shop for repairs—or getting the avgas treatment—should have a direct-cable-to-ground-rod connection to channel static electricity to the ground. If you have terminals hooked-up piggy-back you're in for a shock!

Every time you clip one terminal to another, effective grounding action decreases for all. Now suppose a mechanic unhooks the terminal that's clipped directly to the ground rod and forgets to hook the others back. Oh no! Oh yes! Z-z-z-i-t! or V-o-o-m! You get stung, or burned . . . but good. So never use a piggy-back hook-up system to ground your birds.

Bare, frayed lead-in wires are not good ground material, so never clip a terminal to them. If you need more ground rod cable lead-ins, how 'bout

welding 4 engine bonding straps, FSN 1560-629-4593, to the ground rod. These 4 direct cable-to-ground-rod connections are enough to meet most unit all-birds-at-once maintenance/fueling needs.

You can't prevent static electricity build-up, but you can make it harmless with by-the-book—TM 10-1101 (Jul 65)—bonding and grounding procedures.



US SEALS
FEEL HIGH 'N' DRY
WITH SKY-JUICE!

NO SUBSTITUTE, PLEASE!

Haste makes waste if you reach for JP-4 to clean aircraft neoprene parts—like bearing seals. The neoprene seals will dry out and give you leaks. Fuels should never be used for cleaning purposes. You'll find a complete list of approved cleaning materials in Table 1, Chap 1 of TM 55-405-3 (12 Jul 66).

A HANDFUL OF PM...

WE LIKES THESE DIKES!

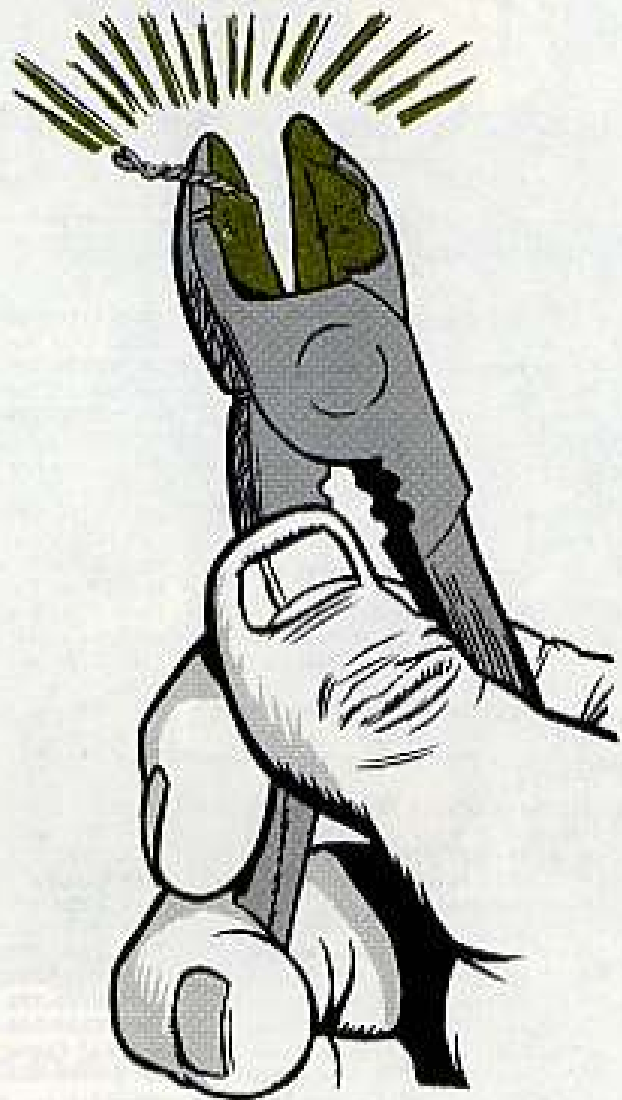
Dear Editor,

Snipping off ends of safety wires with diagonal pliers is maintenance SOP. But wire ends drop into cylinders, drive shafts, moving parts, transmissions . . . then trouble's brewing.

We've come up with a fix that has cut down on electrical shorts and machine failures caused by clipped wire ends.

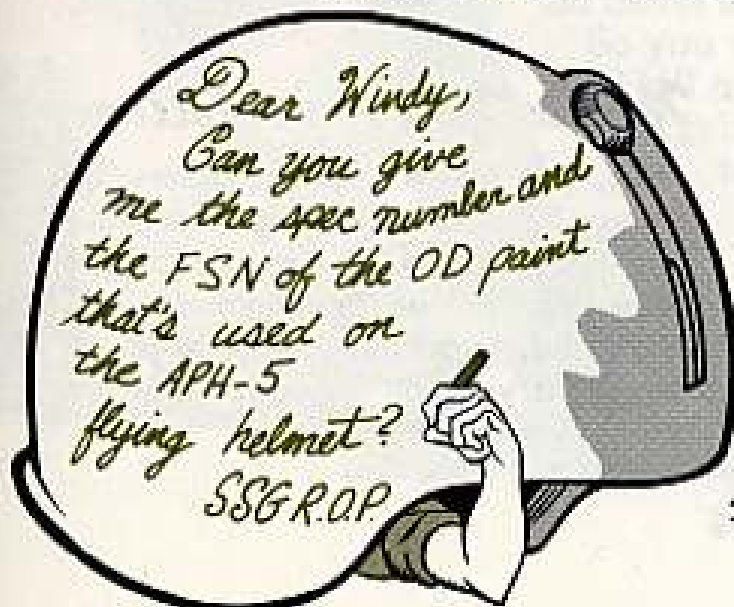
We used a blob of fuel-tank sealing compound, MIL-S-8802, FSN 8030-845-3347 and shaped it to fit the jaws of our dikes. The compound never gets concrete hard, but remains soft enough to hold the snipped wire ends. After molding the mix to the dikes, close the jaws on a piece of thin plastic until the compound sets—about 12 hours. For a faster dry/set/use cycle add more accelerator to the mixture.

Alford Morgan
Fort Eustis, Va.



(Ed Note—Yessir-e-e. Looks like you've got a real handful of PM. Should prevent a batch of eye injuries, too.)

FLYING HELMET PAINT



Dear Sergeant R. O. P.,

You use Enamel, lusterless, OD color, Spec FED TT-E-527. FSN 8010-297-0560 will get you a gallon, and FSN 8010-297-0561 will get you a 5-gal container.

TM 10-8415-202-13 (Sep. 66), tells you how to repaint and touchup your helmet.

Windy



This is a selected list of recent pubs of interest to organizational maintenance personnel. The list is compiled from recent AIG Distribution Centers Bulletins. For complete details see DA Pam 310-4, Ch 4 (Dec 67), TMs, TB's, etc.; DA Pam 310-6, Ch 2 (Jan 68), SC's and SM's; DA Pam 310-7 (Dec 67), MWO's.

TECHNICAL MANUALS

TM 1-AH1-5, Feb, AH-1G.
 TM 1-OH6-5, C1, Apr, OH-6.
 TM 5-4320-248-25P, Feb, 100 GMP Fuel System.
 TM 5-4520-226-13, Feb, 70,000 BTU Heater.
 TM 5-4600-208-ESC, Mar, Water Purif, 420 GPM.
 TM 5-6665-202-15, C3, Mar, Mine Detector.
 TM 9-1005-223-12P, Feb, M14 Rifle.
 TM 9-1005-249-14, C3, Jan, M16 Rifle.
 TM 9-1025-200-ESC/1, Mar, M114A1 Howitzer.
 TM 9-1400-250-15/3, Mar, Nike-Herc.
 TM 9-1425-250-12/1, Mar, Nike-Herc.
 TM 9-1430-301-15P/1, Feb, Hawk.
 TM 9-1430-310-15P/1, Mar, Hawk.
 TM 9-1430-311-15P/1, Mar, Hawk.
 TM 9-1440-300-15P/1, Mar, Hawk.
 TM 9-2300-223-20P, C5, Mar, COAST.
 TM 9-2300-224-20, C11, Mar, M113, M377, M132, M106, M106A1.
 TM 9-2300-224-ESC/1, C2, Mar, M113.
 TM 9-2300-224-ESC/2, C3, Mar, M106.
 TM 9-2300-224-ESC/3, C2, Mar, M377.
 TM 9-2300-224-ESC/4, C2, Mar, M132.
 TM 9-2320-206-ESC/1, C1, Mar, M123 Truck.

TM 9-2320-206-ESC/2, C1, Mar, M123 Truck-Tractor.
 TM 9-2320-206-ESC/3, C1, Mar, M123 Truck-Tractor.
 TM 9-2320-209-ESC/2, C1, Mar, M47, M39, M373 Dump.
 TM 9-2320-209-ESC/6, C1, Mar, M108 Wrecker.
 TM 9-2320-209-ESC/10, C1, Mar, M50 Tank Truck.
 TM 9-2320-209-ESC/12, C1, Mar, M275 Truck-Tractor.
 TM 9-2320-211-ESC/4, C1, Mar, M246 Wrecker.
 TM 9-2320-211-ESC/5, C1, Mar, M51 Dump.
 TM 9-2320-211-ESC/6, C1, Mar, M52 Truck-Tractor.
 TM 9-2320-211-ESC/7, C1, Mar, M54 Truck.
 TM 9-2320-211-ESC/9, C1, Mar, M52 Truck-Tractor.
 TM 9-2320-211-ESC/10, C1, Mar, M51 Dump.
 TM 9-2320-211-ESC/11, C1, Mar, M543 Wrecker.
 TM 9-2320-211-ESC/12, C1, Mar, M292, M292A1 Van.
 TM 9-2320-222-ESC, C2, Mar, M88.
 TM 9-2320-246-ESC, C1, Mar, M274, M274A1 Carrier.
 TM 9-2350-202-ESC, C1, Mar, M42, M42A1.
 TM 9-2350-208-20P, C5, Mar, M4802, M48A2C, M67A1.
 TM 9-2350-215-20, C2, Jan, M60, M60A1 Tanks.
 TM 9-2350-217-ESC/1, C3, Mar, M108 Howitzer.
 TM 9-2350-224-10, C4, Feb, M48A3 Tank.
 TM 10-1670-213-23, C1, Apr, Personnel Parachute.
 TM 10-1670-224-23, C1, Apr, Personnel Parachute.

TM 10-8340-211-13P, C1, Mar, Tents.
 TM 11-5820-267-15, Mar, PP-804/U Power Supply.
 TM 11-5820-738-13, Feb, AN/TRC-97B Radio Set.
 TM 11-5985-246-15, Mar, AS-1834A/O Antenna.
 TM 11-6130-225-12-1, Mar, PP-2926A/U Battery Charger.
 TM 11-6730-226-20P, Mar, Movie Projector.
 TM 11-6730-228-15, Feb, Movie Projector.
 TM 55-405-5, C3, Apr, Fixed and Rotor Wing.
 TM 55-1100-209-12-5, Feb, UH-1A, B, C, D.

MODIFICATION WORK ORDERS

5-3810-233-30/1, Mar, Crane Shovels, Wheeled.
 9-1005-219-30/3, Mar, M48A3, Tank.
 9-2320-224-30/1, Mar, M114.
 55-1520-204-20/10, Apr, OH-13.
 55-1520-209-40/9, C2, Apr, CH-47.
 55-1520-210-30/16, Feb, UH-1D.
 55-1520-211-20/33, C2, Apr, UH-1A-1B.
 55-1520-211-30/15, C2, Apr, UH-1C.
 55-1680-255-30/2, C1, Apr, OY-1.

MISCELLANEOUS

LO 55-1925-203-12, Feb, ALL Marine Equip.
 IB 700-20, Apr, Adopted/Reportable Items.
 SC 5180-97-CL-E50, Feb, Auto Mech Tool Kit.
 TB 38-750-2, Mar, Med Equip Records.
 TB 55-1510-209-20/4, Apr, U-21.
 TB 750-98-23, Mar, M151.
 TB 750-992-1, C1, C2, Apr, Rotor Wing.
 TB AVN 23-65, C2, Apr, Fixed and Rotor Wing.

Not For Cayuse!

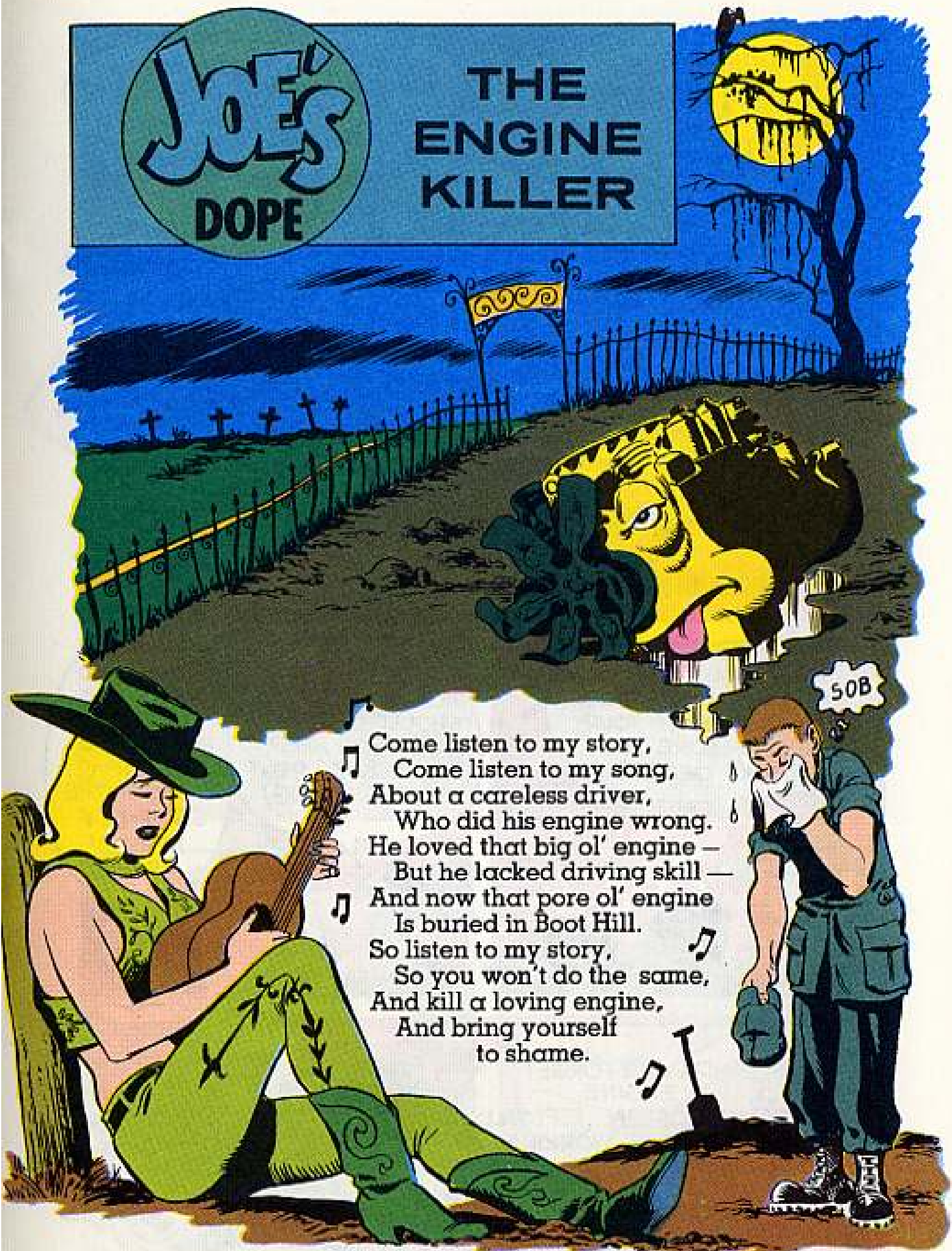
In a pinch it's OK to use Huey (UH-1) ground handling wheels to tote your Raven (OH-23) and Sioux (OH-13) according to the poop on page 52 of PS 181. Don't use 'em on the Cayuse (OH-6A) tho, unless the word comes from the aviation command on a more suitable adapter.

Music You Can Follow

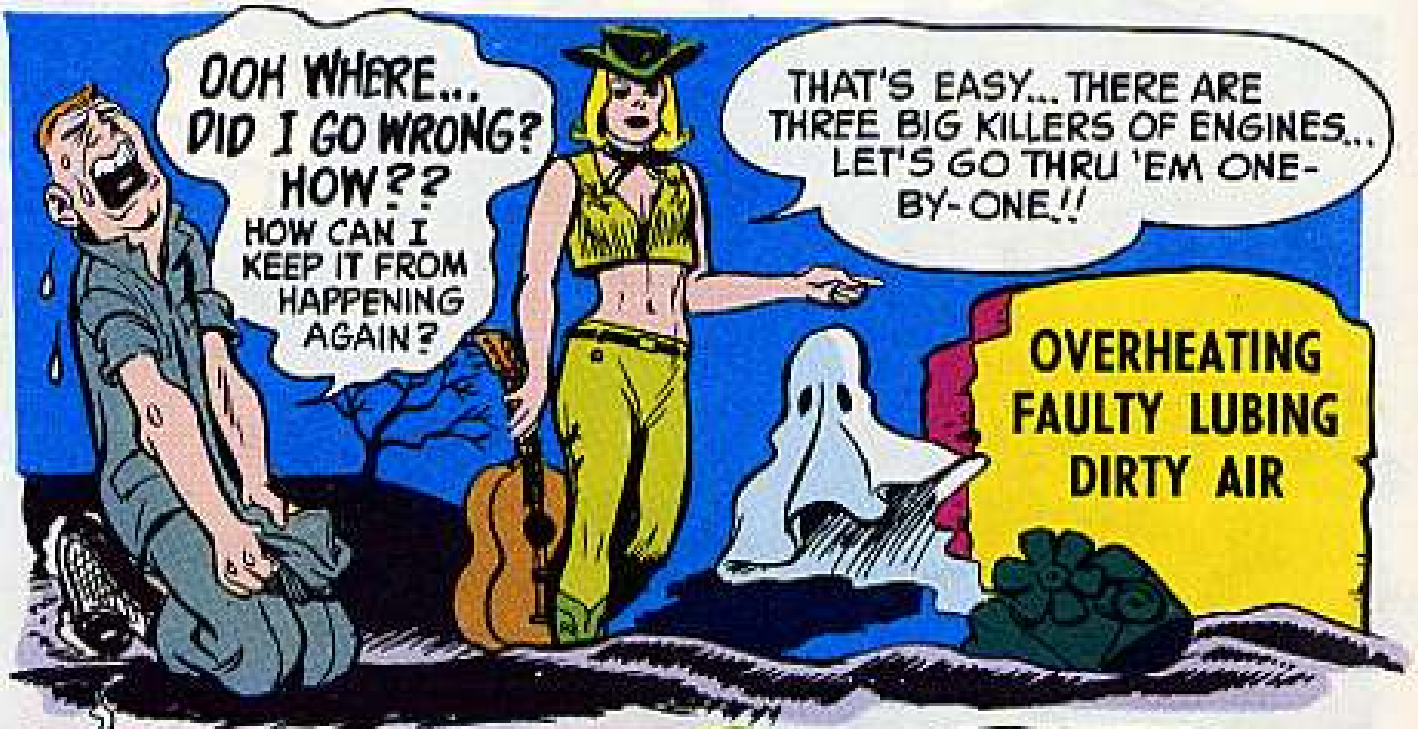
Hey, you M16A1 sharp-shooters, be sure you latch on to Change 5 to your TM 9-1005-249-14. (1 Aug 66). It's the most in plain talk on cleaning and lubing and immediate action . . . easy-to-follow instructions you can memorize and use for your own best interest.

JOE'S
DOPE

THE ENGINE KILLER



Come listen to my story,
Come listen to my song,
About a careless driver,
Who did his engine wrong.
He loved that big ol' engine —
But he lacked driving skill —
And now that pore ol' engine
Is buried in Boot Hill.
So listen to my story,
So you won't do the same,
And kill a loving engine,
And bring yourself
to shame.



OOH WHERE...
DID I GO WRONG?
HOW??
HOW CAN I
KEEP IT FROM
HAPPENING
AGAIN?

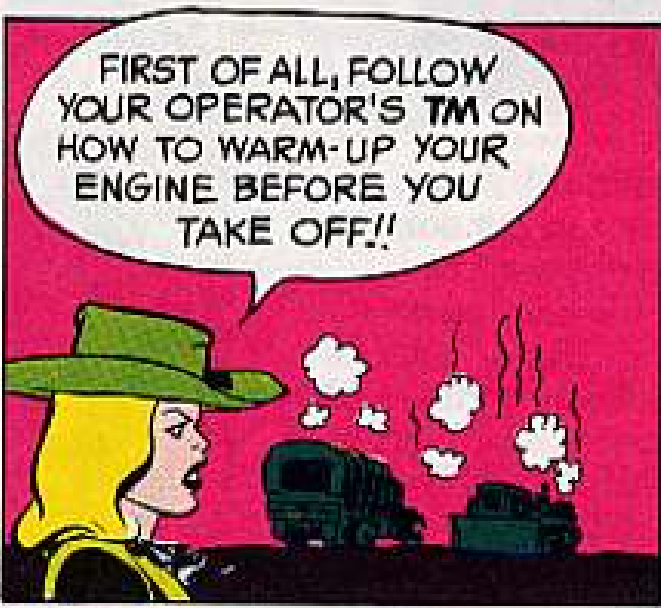
THAT'S EASY... THERE ARE
THREE BIG KILLERS OF ENGINES...
LET'S GO THRU 'EM ONE-
BY-ONE!!

**OVERHEATING
FAULTY LUBING
DIRTY AIR**

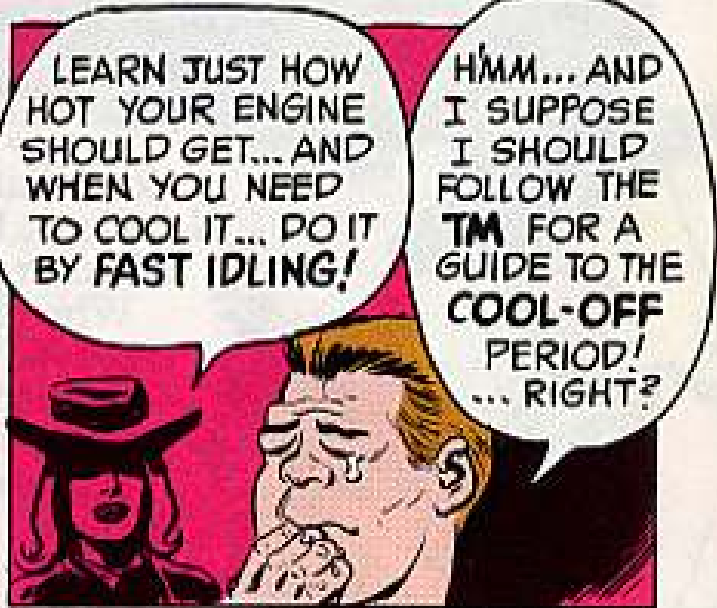


OVERHEATING

PREVENTIVE
MAINTENANCE IS THE
KEY TO THE WHOLE BIT
AS YOU WILL SEE!!



FIRST OF ALL, FOLLOW
YOUR OPERATOR'S **TM** ON
HOW TO WARM-UP YOUR
ENGINE BEFORE YOU
TAKE OFF!!



LEARN JUST HOW
HOT YOUR ENGINE
SHOULD GET... AND
WHEN YOU NEED
TO COOL IT... DO IT
BY **FAST IDLING!**

H'MM... AND
I SUPPOSE
I SHOULD
FOLLOW THE
TM FOR A
GUIDE TO THE
COOL-OFF
PERIOD!
... RIGHT?



RIGHT... AND DON'T FORGET
TO CHECK THE ENGINE
TEMPERATURE **OFTEN**... ESPECIALLY
WHEN YOUR ENGINE IS WORKING
HARD!!

Like in soft dirt,
sand or mud and
steep climbing...

LEARN THE RIGHT GEAR RANGE SELECTION FOR ALL CONDITIONS FROM YOUR TM!!

...and, on track vehicles y'keep tracks adjusted to cut strain on th'engine!!

RIGHT... TRACTORS USUALLY RUN HOTTER THAN MOST OTHER VEHICLES - SO KNOW HOW FAR Y'CAN PUSH 'EM... AND KEEP THAT PRESSURE CAP WORKING RIGHT!



BAD FAN BELTS MEAN POOR ENGINE COOLING. KEEP 'EM TIGHT (CHECK YOUR TM ON TENSION). IF THEY'RE RAGGED, GET NEW ONES -- REPLACE ALL NEW MATCHED BELTS IN SETS.



WHILE DRIVING... WATCH YOUR TACH... AVOID OVER-REVVING. ALSO USE YOUR BRAKES AND DOWN-SHIFT TO CONTROL YOUR ENGINE'S RPM GOING DOWN HILLS.



ON ANY ENGINE...CHECK ITS COOLING SYSTEM OFTEN!! KEEP IT CLEAN - NO LEAKS AT HOSE CONNECTIONS, AND USE RUST INHIBITOR LIKE TB ORD 651 (ARRIL '64) TELLS YOU!!



NOW, BEFORE WE GO ANY FURTHER LET'S POST THIS PIN-UP!!



Joe's

Dope Sheet

Engines Need
Lubing and Care,
Do Not Overheat--

Give 'Em Air!!

So, whatever

You Drive...

Keep that Horsepower

ALIVE,

And It'll Haul Your

Load Anywhere.



**PROTECT YOUR ENGINE
FROM THESE KILLERS**

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.



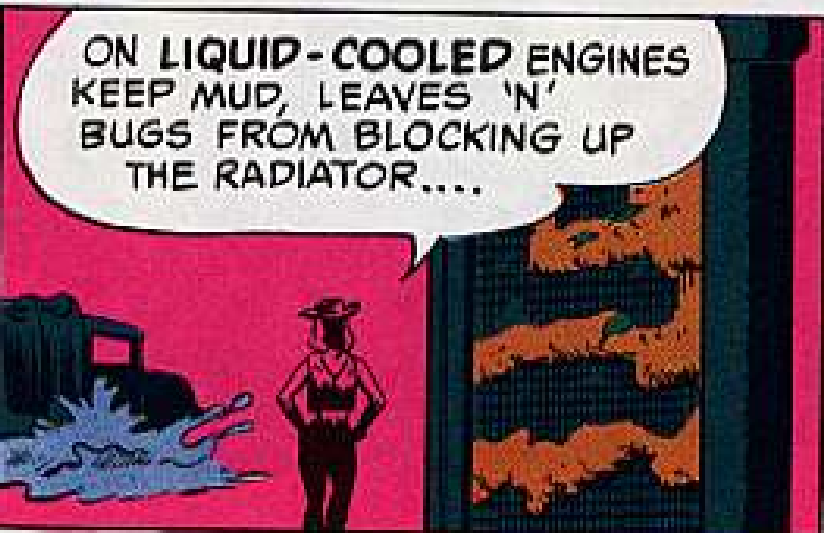
ENGINES
DEPEND ON AIR
FOR COOLING!



WHEN YOU'RE OPERATING
LIQUID OR AIR COOLED ENGINES
MAKE SURE ENOUGH AIR HITS
THE PLACES WHERE HEAT
LEAVES THE ENGINE!



KEEP THE ENGINE
SIDE-PANELS IN PLACE
AND ADJUST 'EM LIKE
YOUR TM SAYS.
TO BE SURE AIR FLOWS
BY YOUR ENGINE THE
RIGHT WAY!



ON LIQUID-COOLED ENGINES
KEEP MUD, LEAVES 'N'
BUGS FROM BLOCKING UP
THE RADIATOR....

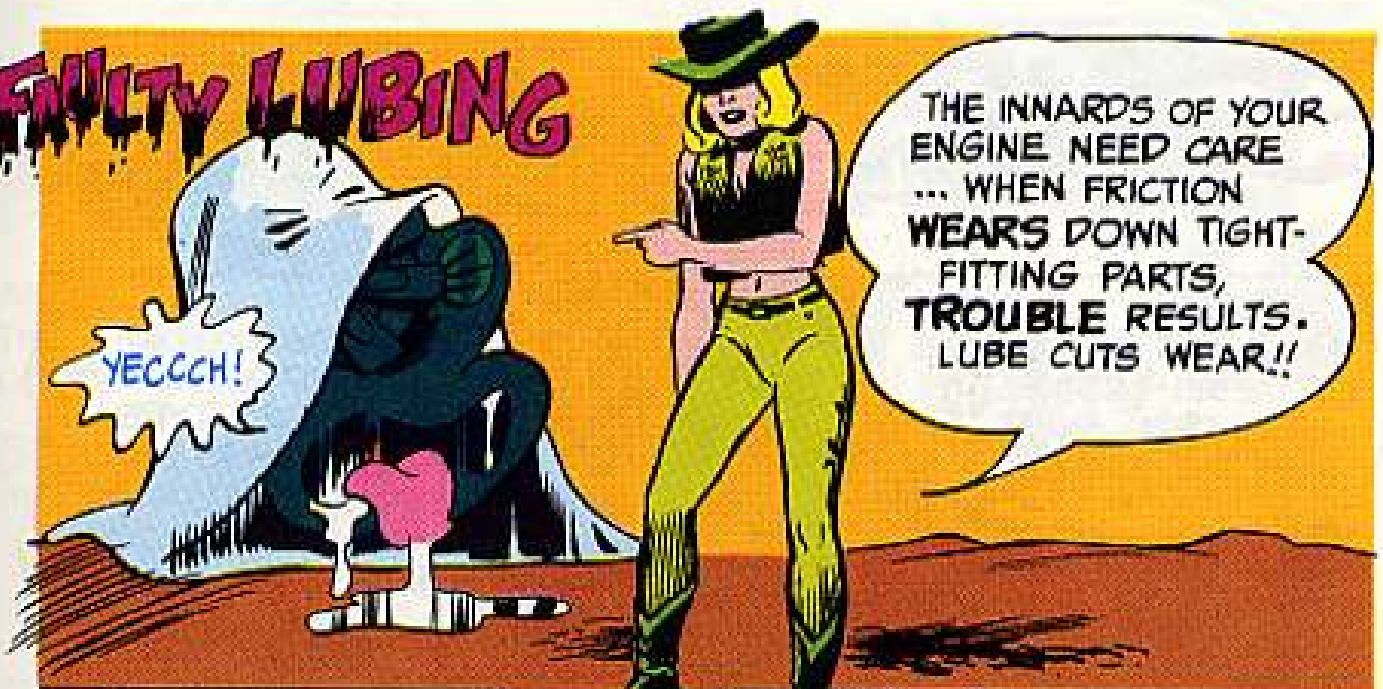


ON AIR-COOLED
ENGINES KEEP
MUD 'N' OTHER
SUCH STUFF OUT
OF COOLING
FINS!



DON'T LET ANY KIND OF
ENGINE GET ITS AIR
CUT OFF BY INCLOSURES!

FULTY LUBING



THE INNARDS OF YOUR ENGINE NEED CARE ... WHEN FRICTION WEARS DOWN TIGHT-FITTING PARTS, TROUBLE RESULTS. LUBE CUTS WEAR!!



KEEP CRANKCASE OIL WELL OVER THE ADD LEVEL AT ALL TIMES!



WATCH THE OIL PRESSURE READING ... IF IT GETS TOO LOW REPORT IT TO A MECHANIC PRONTO!! YOUR OIL MAY BE DILUTED WITH FUEL!



MAKE SURE YOU HAVE THE RIGHT GRADE OF OIL FOR THE LOWEST TEMPERATURE Y'MIGHT RUN INTO, AND REPLACE DIRTY OIL ... ESPECIALLY IF IT'S WATER-CONTAMINATED!

store fuel carefully.



AND KEEP THAT LO HANDY FOR HOW-TO-DO-IT!!

It tells you how to change oils, when and how much.

DIRTY AIR

COUGH

COUGH-

WHETHER Y'R PUSHIN' A GASOLINE OR MULTIFUEL OR DIESEL ENGINE... THE AIR IT GETS MUST HAVE THIS QUALITY!

AIR
1. GOT TO BE ENOUGH OF IT.
2. GOT TO BE CLEAN.

SO CHECK FOR CLOGGED AIR FILTERS, OIL OR DRY TYPE. KEEP THINGS LIKE LEAVES, DUST, TARPS 'N' SUCH FROM BLOCKING THE AIR INTAKE...

...ON DRY TYPE FILTERS BE SURE IT'S POSITIONED RIGHT... OR THE AIR WILL BY-PASS THE FILTER!

It's like no filter at all.

COUGH

CHOK

CHOK

check filters often.

YES, AND SHAKE THE DUST OUT OR DRY IT, IF IT GETS WET!

IT'S ABOUT TIME.

STOP WANTON ENGINE KILLING

ENGINES NEED PREVENTIVE MAINTENANCE.



Back by popular demand—another top-to-bottom . . . outside-to-inside look at your AN/GRC-46() radio teletypewriter set.

This close eyeballing of, and listening to your Angry 46 is the sort of continuous PM that'll help you spot troubles—big and little. As you give your gear the once-over, remember that you're not replacing normal checks and services . . . you're just adding to them.

Another thing . . . what you'll be reading covers the different models of the Angry 46. So when you come across things like shelter steps . . . and your model shelter doesn't have steps, don't sweat it.

Also . . . naturally you'll be on the lookout for dirt, dust, unwanted grease and oil and rust. And in places where you want to look real close for the stuff, it'll be spelled out loud and clear in the pages that follow.

EQUIPMENT SHELTER

ANTENNA—One or more sections missing; corroded at joints; cover missing; ceramic insulator cracked; mounting bracket loose; tie down rope and insulator busted, missing.

EQUIPMENT SHELTER (Overall)—Dented; seams split open; rivets loose, missing, paint missing.

EXTERNAL LINES OPENING—Cover loose, cross-threaded, missing; chain broken, missing.

THE THINGS THAT NEED YOUR PROMPT ATTENTION ARE IN GREEN TYPE.

EXHAUST BLOWER HOOD & FLUTTER VALVE—Hood missing; valve won't open and close (should be open when blower is on), missing.

FUEL TANK—Dented, leaks, loose on mount; cap missing; fuel filter dirty, not installed; shutoff valve hard to turn, won't work; fuel line clogged, cracked, dented, leaks; connections loose, leak; hose storage connector busted.

STENCILLED WARNINGS & DATA & INFORMATION PLATES—Can't be read, missing. Same goes for plates and decals inside shelter.

HEATER EXHAUST—Clogged; hose cracked, not mounted right; clamps broken, not attached to shelter.

GROUND ROD CONNECTION—Thumb-screw missing.



GROUND ROD—Bent, not connected, missing.

RECEPTACLES—Corroded; dust cover cross-threaded, missing; cover chain busted, missing.

FRONT AIR VENTS—Can't be opened or closed (should be open during operation and air transportation); gasket torn or missing.

LIFTING, TOWING, TIE DOWN EYES—Loose, busted, missing.

SLIDING WINDOWS—Can't be opened or closed.

STEPS—Broken, spring won't hold, missing.

HAND HOLD (On top of shelter)—Busted, spring weak, missing.

TIE DOWN HARDWARE—Cable loose, broken, missing; turnbuckle can't be adjusted, not fastened, locknuts loose (should be tight after turnbuckle is adjusted); hook not in the down eye, bent out of shape, latch busted.

DOOR—Outside hinges broken; inside hinge web strap shot, missing; mounting hardware loose, missing; air vent cover can't be opened or closed (should be open during operation and air transportation), gasket ripped, missing, filter dirty, missing; filter latch busted, missing; cover catch (to hold open cover) broken, missing; bracket (for catch) T-slot battered; snap fastener and spring (to hold door open) busted, missing; hasps broken; door latch assembly binds, doesn't hold door shut, locknuts loose, can't be adjusted; handles busted, missing; emergency thumbscrew can't be turned, missing; fuel tank stowage thumbscrews can't be loosened or tightened, missing; security locking pin and chain busted, missing; padlock can't be locked or unlocked, missing; peep hole can't be seen through, glass cracked.



FILTER LATCH



INSIDE HINGE



COVER CATCH



THUMBSCREW



PEEPHOLE



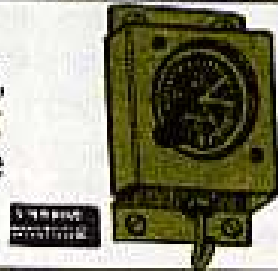
PADLOCK

INSIDE



SHELTER ITSELF INSIDE — Leaks.

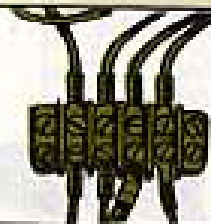
CLOCK — Loose on wall, won't keep time, not working; microphone holding hook missing.



THERMOSTAT — Can't be adjusted, won't work, not mounted tight, electrical connections loose.



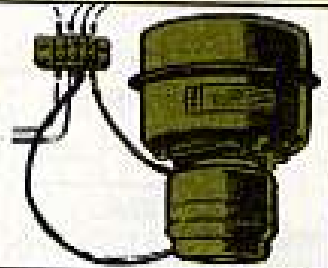
TERMINAL BOARD — Electrical connections loose.



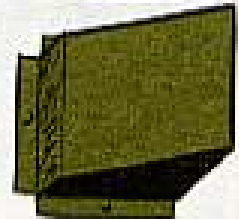
CEILING LIGHTS — Can't be adjusted to different angles, reflectors dented, cracked, missing; bulbs burned out, wrong wattage (should be 25 watts), missing.



BLOWER — Noisy, loose, not working; connections loose.



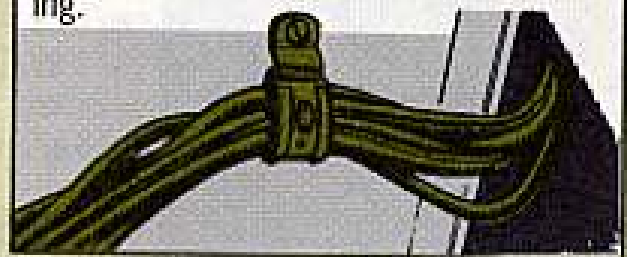
BLACKOUT SCREEN (For external lines opening) — Missing.



BLACKOUT SWITCH — Ceiling lights don't stay on when it's pulled down; doesn't turn lights off when door is open; not mounted right; electrical connections loose.



WIRING & CABLES — Tangled, kinked; identifying bands can't be read, missing; insulation cut; wires broken; cable connectors loose, corroded; pins bent, busted; connector can't be fitted tight on receptacle; loop clamps busted, missing.



FIRE EXTINGUISHER — Inspection tag not dated, missing; nozzle can't be moved; extinguisher missing; clamp doesn't hold extinguisher in place.

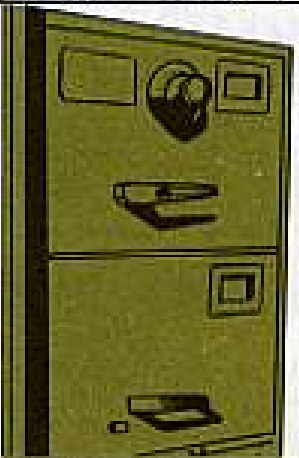


SEATS — Don't stay against wall when not in use, not securely fastened to wall, ripped; seat belt buckle doesn't hold; belt ripped, missing; retaining pin and chain busted, missing (seat belt and retaining pin not on jump seat); jump seat supports bent, busted.

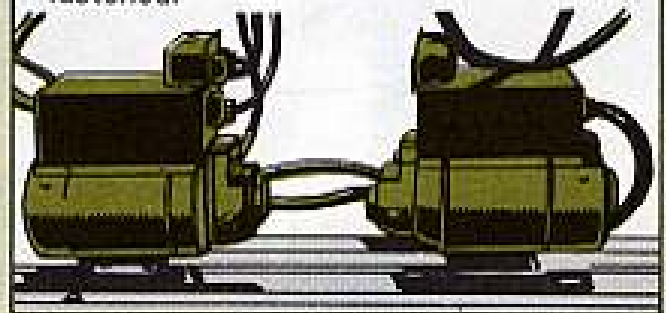


SECURITY FILE —

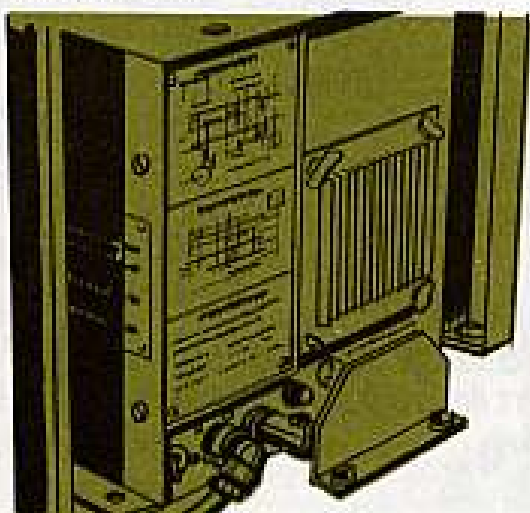
Combination won't turn, numbers can't be read; drawer handle and release busted (same goes for spare parts box); reversible sign for restricted files missing.



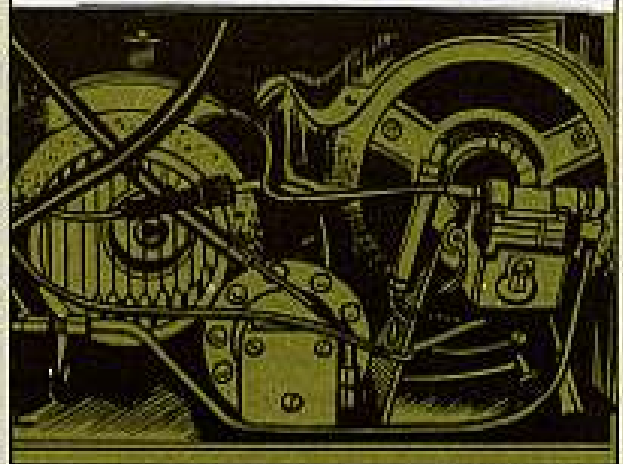
ROTARY CONVERTERS — Noisy, loose, don't work; air vents dirty, electrical plugs not connected; receptacles dirty; floor mounts for converters not tightly fastened.



HEATER (New Model) — Noisy; switches, indicator lights and reset button — as well as entire heater — don't work; fuel line and connections battered, leak; receptacles dirty, corroded; dust covers cross-threaded, missing; cover chain busted, missing; kick plate bent, missing; vent dirty.



HEATER (Old Model) — ON-OFF switch won't work, busted; heat control assembly won't work, broken; heater noisy, won't work; fuel line and connections beat up, leak; protective screen dirty, not installed.



PANEL NUMBERS & LETTERS—Paint missing, can't be read.

KNOBS & SWITCHES—Loose, can't be turned, missing.

FUSES—Wrong rating, burned out, missing.

ELECTRON TUBES—Not fully seated, shot, missing.

GROUND STRAPS—Not fastened, broken, missing; connectors corroded.

SCREWS—Loose, not seated right, missing.

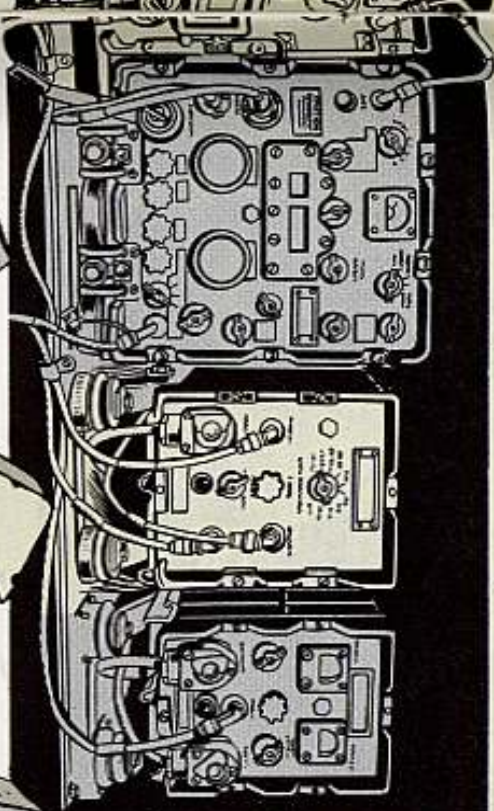
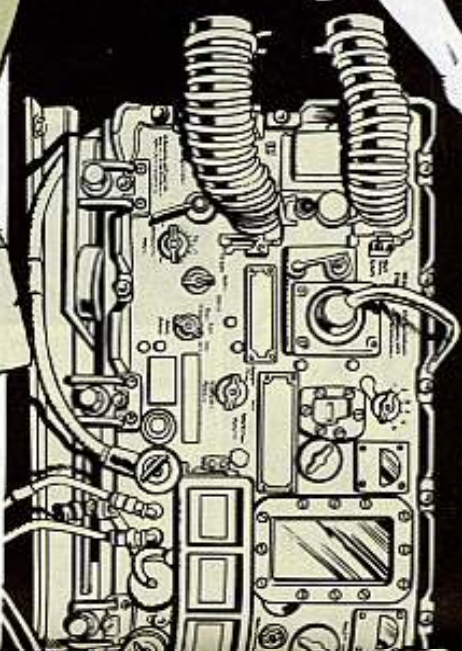
RECEPTACLES—Dirty, corroded.

DATA, INFORMATION & WARNING PLATES & DECALS—Can't be read, missing.

EQUIPMENT RACKS—Loose, hardware missing.

THESE ARE THE THINGS IN COMMON...

...AND THESE ARE THE DIFFERENCES ON EACH COMPONENT.



RADIO TRANSMITTER
T-195 ()/GRC-19

HANDLES—Bent, broken.
AIR EXHAUST VENT COVERS—Missing.
DIALS & METERS—Don't work, face dirty, can't be read; glass scratched, broken, can't be seen through; lamps don't light, missing.

DUST COVERS—Cross-threaded, missing; chain busted, missing.
TUNING INDICATOR—Lamp burned out, missing; cover broken, missing.

AIR EXHAUST VENTS—Locking levers don't hold, busted.
AIR EXHAUST HOSES—Cracked, loose, clogged, missing; clamps missing.

ANTENNA TERMINAL GUARD—Missing. (It's needed. Without the guard, you can come up with a mean RF burn.)
BINDING POST—Cracked, corroded.

AIR FILTER—Dirty, dry; cover locking levers don't hold, broken.
CLAMP SCREWS & CLAMPS (For MT-851 Mounting)—Loose.

RADIO RECEIVER
R-332/URR

DUST COVERS—Covers and chains missing.
CLAMP SCREWS & CLAMPS (For MT-851 Mounting)—Loose.
BINDING POST—Cracked, corroded.
DIAL & METER—Dirty, can't be read, don't work; glass scratched, cracked, broken; lamp doesn't light, missing.

RADIO TRANSMITTER MODULATOR MD-203/GR

INDICATOR LAMP—Won't work, lamp missing; cover cracked, missing.
MOUNT—Bolts loose, lever won't hold.

FREQUENCY SHIFT CONVERTER CV-278/GR

METERS—Dirty, can't be read, don't work; glass scratched, cracked, busted; lamp won't light, missing.
INDICATOR LAMP—Won't work, lamp missing; cover cracked, missing.
MOUNT—Bolts loose, lever won't hold.

FUSES—Wrong rating, burned out, missing.

SWITCHES—Don't move easily, don't work.

RECEPTACLES—Dirty, corroded.

GROUND STRAPS—Not connected, broken, missing; connectors corroded.

MOUNTS—Loose.

SCREWS—Not seated right, missing.

AGAIN ... THINGS IN COMMON ARE AT THE TOP ... FOLLOWED BY THE DIFFERENCES.

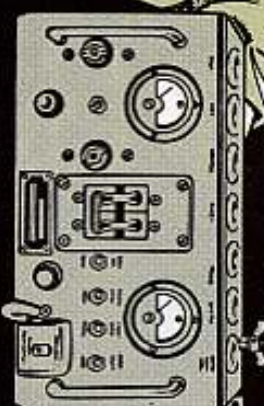
DATA & INFORMATION PLATES—Can't be read, missing.



TELETYPEWRITER REPERATOR-TRANSMITTER TT-76(A)/GGC

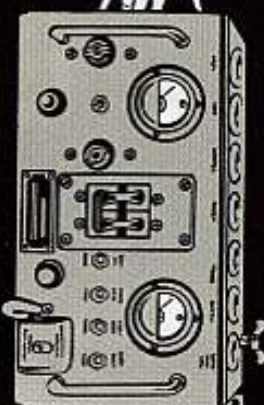


TELETYPEWRITER TT-98(A)/FFG



INTERCONNECTING BOX J-2491/GRC

OR



INTERCONNECTING BOX J-668/GR

CHAD BIN—Loose, missing.

MOTOR—Noisy, speed not right (should be 3600 RPM).

DUST COVER—Not securely fastened; gasket ripped, missing.

ALL LEVERS (Start-stop, tight tape, etc.)—Don't work.

CHAD CHUTE—Clogged.

TUNING FORK—Bent, missing.

COVER LATCH—Won't hold.

COPY LIGHT—Burned out, missing.

BINDING POSTS—Cracked, corroded.

KEYS & SPACE BAR—Cracked, broken; loose on levers, levers bind.

TAPE-ALARM Buzzer & WARNING & SIGNAL BELLS—Don't sound.

INDICATOR LAMP—Won't light, lamp missing; cover broken, missing.

PAPER TAPE—Ripped, not feeding right, jammed; printed type hard to read; punched type holes not evenly spaced.

RIBBON SPOOLS—Don't reverse direction when one empty; spool lock won't hold.

TAPE STORAGE GUIDE—Bent out of shape, busted.

RIBBON GUIDE—Bent out of shape.

TAPE REEL—Binds, won't turn.

TYPE WHEEL—Characters chipped, missing; wheel binds.

INKING RIBBON—Dry, frayed, torn.

TAPE LID—Can't be moved up or down.

PUNCH & DIE ASSEMBLY—Won't punch code and feed holes in tape.



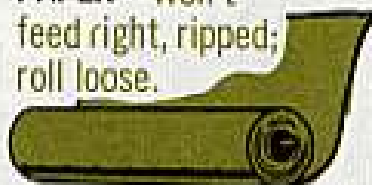


TT-98

W/FG

CHECK KEYS FOR CRACKS!

PAPER—Won't feed right, ripped; roll loose.



KEYS & SPACE BAR—Cracked, broken; loose on levers; levers bind.



INKING RIBBON—Dry, frayed, torn.



RIBBON SPOOLS—Don't reverse direction when one empties, spool lock won't hold.



RIBBON GUIDE—Bent out of shape.



THUMBLOCK—Won't hold.



ALL LEVERS (Pressure roller, ribbon sensing, etc.)—Don't do their job.

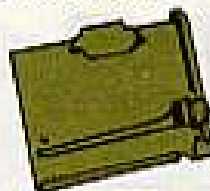


MOTOR—Noisy, speed can't be adjusted to correct 3,600 RPM.

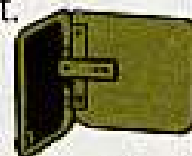
ACCESS WINDOW—Scratched, broken, can't be seen through.



COPY HOLDER—Can't be adjusted; spring weak.



FUSE ACCESS DOOR—Won't stay open or shut.



PLATEN—Dirty.



DUST COVER—Not securely fastened.

COPY LIGHTS—Burned out, missing.



TYPE CHARACTERS—Chipped, missing.



SIGNAL & MARGIN BELLS—Don't ring.

AIR VENTS—Clogged.



INTERCONNECTING BOXES

AND CHECK THE HANDLES... ARE THEY BUSTED OR MISSING?



J-2491/GRC

OR

J-668/GR



METERS—Don't work, face dirty, can't be read; glass scratched, busted, can't be seen through; lamps don't light, missing.

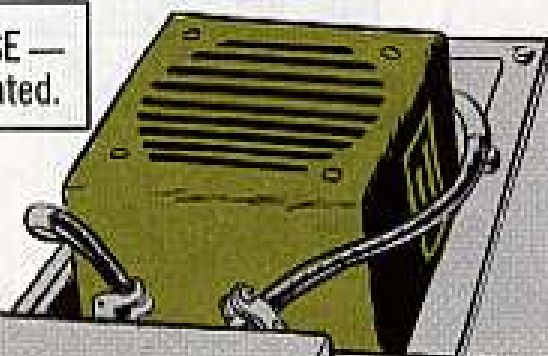
CIRCUIT BREAKERS—Don't work.

PANEL NUMBERS & LETTERS—Paint missing, can't be read.

BINDING POSTS—Cracked, corroded.

LOUDSPEAKER LS-166/U

CASE—Dented.



SOUND—Garbled, can't be heard.

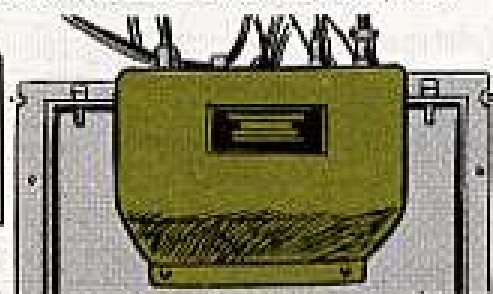
SWITCH BOX SA-871/GRC-46B

COVER—Loose, missing.



INTERCONNECTING BOX J-2498/GRC

COVER—Loose, missing.



DUST COVERS—Missing; chain busted, missing.

INTERCONNECTING BOX J-1194/GRC



BOX—Battered; binding posts corroded, broken; switch won't work; jacks corroded; mounting bolt bent, threads stripped; wing nut missing.



THESE
ARE JUST AS
IMPORTANT!

SWITCH, ELECTRONIC SA-1243/GRC

COVER—Loose, missing.
SWITCH LOCK (Holds switch to left when you're operating crypto)—Broken, missing.

TELEGRAPH KEY KY-116/U

KEY (Overall)—Contacts can't be adjusted, corroded; binding posts corroded; key missing; leg clamp bent out of shape, missing.

MICROPHONE M29()/U

MICROPHONE (Overall)—Switch won't work; element shot, missing; hook missing; cord stretched; insulation torn; wiring broken; connector loose, corroded, battered; connector contacts beat up.

ELECTRICAL HEADSET H-113/U

HEADSET (Overall)—Cord tangled, kinked; insulation cut; wiring broken; connector loose, corroded, beat up; connector contacts battered; headset fits loosely; elements missing; covers cross-threaded.

BAG CW-206/GR

BAG (Overall)—Ripped; straps busted, missing; buckles don't hold.

PUBLICATIONS

AN/GRC-46() Radio Teletypewriter Set:

- TM 11-5815-204-10, Ch 1, 3, 5 and 7.
- TM 11-5815-204-20, Ch 1, 2, 5 and 6.
- TM 11-5815-204-20P (Aug 63)
- TM 11-5815-204-ESC (Feb 66)
- TB SIG 362 (Jun 63)

AN/GRC-19 Radio Set:

- TM 11-5820-295-10, Ch 2.
- TM 11-5820-295-20, Ch 1, 3 and 4.
- TM 11-5820-295-20P (Dec 61)
- TM 11-5820-295-ESC (Jun 64)

Radio Transmitter T-195()/GRC-19:

- TM 11-5820-335-10, Ch 3.
- TM 11-5820-335-20, Ch 1.
- TM 11-5820-335-20P (Jul 65)
- TM 11-806, Ch 1 thru 10.

Radio Receiver R-392/URR:

- TM 11-5820-334-10, Ch 2.
- TM 11-5820-334-20, Ch 1-2.
- TM 11-5820-334-20P (Jul 61)

Radio Transmitter Modulator MD-203/GR:

- TM 11-5820-205-10, Ch 2-3.
- TM 11-5820-205-20, Ch 1 thru 3.
- TM 11-5820-205-20P (Jun 60)

Frequency Shift Converter CV-278/GR:

- TM 11-5805-210-10, Ch 3.
- TM 11-5805-210-20, Ch 1.
- TM 11-5815-266-20P, Ch 1.

Teletypewriter Reperforator-Transmitter TT-76()/GRC:

- TM 11-5815-238-12 (Dec 65)
- TM 11-2225-ESC (Jul 64)

Teletypewriter TT-98()/FG:

- TM 11-5815-200-12 (Feb 66)
- TM 11-5815-200-ESC (Jul 64)

MWO'S

AN/GRC-46() Radio Teletypewriter Set:

11-5815-204-35/1 (Feb 65)	11-5815-204-35/6 (Jun 67)
11-5815-204-35/3 (Feb 65)	11-5815-204-35/7 (Sep 65)
11-5815-204-35/4 (Aug 65) (B model only)	(plain and A model only)
11-5815-204-35/5 (Mar 66)	11-5815-224-35/2 (Oct 62)

UPDATED PLL SOP



You can stop scribbling changes in your AR 735-35. The latest PLL (Prescribed Load List) scoop is neatly packaged for you in Change 1 (dated 14 May 68), to the AR. The change implements DA TWX 822620 (Jul 67), provides new info and expands on previous instructions. Like for example:

1 A new 2-part form, DA Form 3318, which combines the record of demand card and the title insert.



I'M YOUR NEW DA FORM 3318 BIG BOY.

IT'S PERFORATED SO YOU CAN FLIP EITHER SECTION AND RECORD ON BOTH SIDES.



**2**

New PLL Review Period. You now review record of demand cards quarterly (90 days). That's right, no more monthly reviews. And, when you're authorized to revise your allowance, based on demand experience, you count the demands you've had for an item for the last 2 review periods (180 days).

You review all your cards quarterly, and whether you're authorized to revise your allowance or not, you draw a line after the last entry for the quarter.

**3**

MAC Supply. When the MAC (Maintenance Allocation Chart) says your outfit is responsible for replacing an item, and the item isn't listed in the parts manual, you note both the parts manual and the maintenance manual info in block O of DA Form 2765 when you request the item.

**4**

PLL UND. When stocks of PLL items or on-board spares are at zero balance you're to use UND (urgency of need designator) B for your IPD (Issue priority designator) on your request. The AR's new info on supply priority codes is covered in its Appendix II. Also see AR 735-35-1 (Dec 67) for a handy, pocket size chart on codes.

URGENCY OF NEED DESIGNATORS

B

Items required for immediate end-use lack of which is impairing the operations capability of the Force/Activity concerned. The Force/Activity concerned can operate only temporarily as an effective unit. Assigned operational missions and tasks can be accomplished, but with reduced effectiveness and efficiency.

Material is required to effect emergency replacement or repairs to auxiliary equipment systems and the item has been identified as essential to the unit's mission.

Items required by the Force/Activity for immediate end-use to effect repairs to primary weapons and equipment lack of which is impairing or reducing the effective accomplishment of assigned mission or tasks.

Items required to effect emergency repair or replacement of plant equipment essential to providing services for primary weapons/equipment.

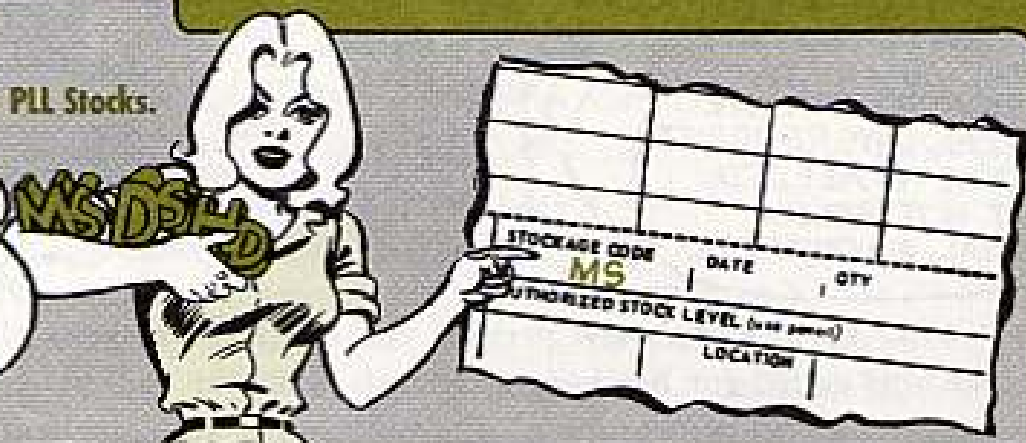
Items required for replacement of prescribed load lists on board spares when the item has reached a zero balance position.

Material required to repair unserviceable repairable items identified as high dollar value items or critical items under approved materiel management programs. This also includes materiel required by depot maintenance activities to repair materiel if it precludes the item from becoming critical system-wide with resultant mission impairment, and is restricted to directed repair programs.

Items required for immediate installation to effect repair or replacement of auxiliary training equipment lack of which would reduce or impair an assigned training mission.

5 Codes For PLL Stocks.

HERE ARE THE REPAIR PARTS CODES FOR YOUR TITLE INSERTS.



—MS (Minimum Stockage). This code identifies TM items you must stock based on equipment density.

—DS (Demand Supported). This one continues to call out the fringe items—the “as required” items, plus the TM items which you can’t stock because your equipment density is too low. In other words, DS identifies items you stock only after you collect demand info on ‘em.

—HD (High Dollar). PLL items costing \$200 or more, and recoverable items coded “T” in TM’s take this code. And, stockage of those babies is strictly by the TM allowances. You can’t change it like you can on MS and DS items.

IT'D BE NICE TO HAVE A LOT OF THESE ON HAND...



BUT THE HD'S YOU STOCK BY THE BOOK.

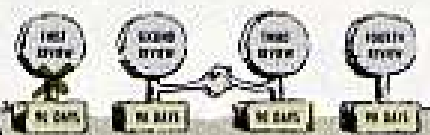


6 Initial Allowances. Once you establish your initial allowances for MS and DS items, the quantities become your minimum allowances for those items. And, your initial allowances are static for the first 2 review periods. During that spell you neither raise nor lower your allowances.

At the third quarterly review, however, you can use the demand info for the last 2 review periods (180 days) to adjust your allowance. But, and watch this closely . . . your initial allowances remain your minimum stocks for 4 review periods.



AT THE THIRD REVIEW PERIOD—YOU TOTAL CUMULATIVE DEMANDS FOR THE LAST 180 DAYS. RE-ADJUST STOCKS AS NEEDED, BUT NOT BELOW INITIAL ALLOWANCES.



AT FOURTH REVIEW, IF DEMAND INFO ALLOWS IT, YOU CAN RE-ADJUST BELOW INITIAL ALLOWANCES WITH OK OF MAJOR COMMANDER.

After the first 2 review periods you can increase your allowances as much as called by demand records, and you can lower 'em—but, you can't go below your initial allowance until after an item has been on your PLL for 4 review periods.

Furthermore, with MS items (even after 4 review periods) your local supply SOP needs a major commander's OK before you can cut stocks below your initial allowances.

With DS items, tho, you don't need a special OK. If demand info allows it, the AR says you can go below your initial allowance after you've had an item for 4 review periods.

7 Revising Allowances. Once you're authorized to revise allowances you work it this way:

DA FORM 3318
RECORD OF DEMANDS - TITLE INSERT

ITEM NUMBER	QTY	DATE	QTY	DATE	QTY	DATE	QTY	DATE	QTY	DATE	QTY	DATE	QTY	DATE	QTY	DATE	QTY	DATE
8008-	0	0	4															
8009-001	0	6	0	8/09-001	6	13	0											
8010-008	2	8	0	8/10-003	6	17	5											
8011-003	3	11	1	8/11-001	5	24	0											
8012-004	1	12	0	8/12-001	6	30	5											
8013-002	3	15	4	8/13-001	7	37	0											
8014-001	4	19	0	8/14-001	9	46	5											
8015-013	5	24	4	8/15-001	8	54	0											
8016-002	2	26	2	8/16-001	6	60	5											
8017-001	4	30	4	8/17-001	5	65	0											
8018-001	4	36	0	8/18-001	5	70	5											
8019-001	1	37	0	8/19-001	4	74	1											
8020-002	7	44	4	8/20-001	2	76	0											
8021-001	5	49	0	8/21-001	6	82	5											
8022-002	1	50	3	8/22-001	7	89	0											
8023-001	-	50	3	8/23-001	5	94	5											
8024-001	4	50	3	8/24-001	8	9	0											
8025-001	5	55	0	8/25-001	8	16	5											
8026-001	6	61	4															
8027-001	1	62	3															
8028-001	7	7	3															

TITLE INDEX: TANK, M60 U2 EA
TAN 9-2300-213-20P
2300-213-20P CASES, MANGLED IGNITION

MS 7280 4
H963 4 58

At the quarterly review you draw a line under the last entry for the period, and you add up the cumulative quantities for the last 2 review periods. If it's necessary to make a change you get your new allowance from the last column in the AR's Authorized Stock Levels

table.

If only 1 or 2 items were demanded during the most recent 180-days, no increase is authorized. And, any stocks of 3 or more will be reduced to 2.

However, to keep an MS or DS item on your PLL all you need is 1 demand for 1 each during 2 review periods.

FOR INITIAL ALLOWANCES ON DS ITEMS USE ALL THE COLUMNS RIGHT THRU "L"



AUTHORIZED STOCK LEVELS								
Number of Days in Which 3 Demands Occurred								
d	e	f	g	h	i	j	k	l
53-67	68-82	83-97	98-112	113-127	128-142	143-157	158-172	173-180
2	2	2	2	2	2	2	2	2
2	2	2			2	1	2	2
2	2	2			2	2	2	2

AR 735-35

FOR REVISING DS AND MS ALLOWANCE, USE THE LAST COLUMN (L) ONLY!

The table covers up to 2 review periods (180-days) and from 3 to 100 items demanded.

If your demands total over 100 use the table's allowance for 100 items, plus its allowance for the figure you have over 100. For example; for a total of 150 items de-

manded during 180-days you —

ADD 8 (the table's allowance for 100 items demanded in 180-days).

PLUS 4 (the table's allowance for 50 items demanded in 180-days).

SO. . . 12 is your revised allowance.

8 Deleting MS, DS & Obsolete Items.

After 4 review periods MS items will be deleted from your PLL if they've not racked up the minimum of 1 demand during 2 review periods. But, here your supply SOP needs the OK of a major commander. And, if the deleted items are not otherwise demand supported at supply support, the items will be stocked at some other level of supply within the command. That's so the items will be within whistling distance if you need 'em again.

YOU SURE I CAN GET 'EM AGAIN?



NO SWEAT, IT'S SOP!

You don't need a special OK to cut DS items below your initial allowance after you've had 'em for 4 review periods. You can also cross 'em off your PLL (after 4 review periods), if you've had no demands for 'em during 2 current

EXCESS?



review periods.

Any stocks of deleted items that you have on hand you immediately turn in as excess. Ditto any parts that become obsolete and parts that belonged to equipment that you no longer support.

9 Seasonal, D/L & Stored Equipment.

Lack of demand experience doesn't count for repair parts for equipment that's been out of action (deadlined, administrative storage, etc.) for most of the previous 4 review periods. You hang on to those parts so you can support the equipment when it gets back on the job.

And, you also hold on to authorized stocks of seasonal items for your equipment.



OH YEAH?
WAIT'LL
RAINY
SEASON
HITS!

10 PLL Exceptions.

To take care of equipment type or density changes, or when called for by geographical or technical changes, a major commander can set up exceptions to the AR's SOP on adding and deleting PLL stocks—paras 6-6a and 6-6d(1). So, watch your local supply SOP real close like.



CHECK
HEADQUARTERS
AND SEE IF THE
CO ISSUED ANY
EXCEPTIONS.

11 Forecasting Special & Seasonal Needs.

It's up to you to alert supply support ahead of time on seasonal supplies that you'll be needing. Same goes for any other anticipated or special PLL demands. Support has to know how much of what you'll need, and also when the stuff should be on hand. The early warning will help support to rustle up the stocks in plenty of time to meet your delivery date. And, to forecast needs as accurately as possible you can use previous seasonal demand experience, or any other usage info you can find covering similar special needs.



12

—**Constraint of Supply Report.** This report sends info on supply problems to higher headquarters. And, the report is due within 2 workdays after the snag shows. It reports any temporary or unusual situation, or interference that blocks or slows up the flow of normal supply demands . . . or, any snafu that limits your outfit's capability to prepare or submit PLL requests to supply support.

In other words, your CO starts the ball rolling by reporting to his higher-ups when there's any problem—personnel, storage, preservation, safekeeping, money, etc., with a pending routine request. The CO's report also tells how long he expects the restriction to last. Replies to reports—from up the ladder—will help the CO to get out of the bind.

MAYBE WE OUGHTA NOT WAIT ANY LONGER AND SEND IN A CONSTRAINT OF SUPPLY REPORT!



Reconciliation Request

This means supply support takes a reading of your requests that've been due-in for over 30 days. Then they send you a list (or cards) covering the status of all your due-in's.

You review the reconciliation request and tell support what due-in's you still need, and which ones you're canceling. And you tell support to cancel any due-in's that are listed on the request, but no longer current on your records.

And, you also ask them to pick

up any due-in's that are in your suspense files, but not listed on the reconciliation request. With those instructions tho, you'll have to provide a duplicate of your original request, with the document identifier code AP1 in block D, and advice code 2P in block 22.

Instead of providing a list or cards, the support types may just ask to match your suspense files with theirs. But, whichever way it's done, they'll give you the details on handling your end of the due-in updating operation.

—**NORS**. Spelled out, this code says, "Not Operationally Ready Supply," and it's used on supply transactions covering the weapons systems listed in Appendix V to AR 735-35. The code, however, doesn't apply across the board for the weapons systems; it's used only to request the items needed to get the systems back on ready status.

HOW WE DOIN'Z.

FEH!

—**Automated PLL**. Yep, the day has come. Where the means are handy anybody's PLL can be automated. That means, for example, that in addition to preprinted DA Form 2765's, the title inserts for PLL items will be preprinted also.

And, that about rounds up the new PLL poop . . . keep it in mind 'cause you should have the AR Change about now.



NOW LET'S LOOK AT THE BIG PICTURE!

PLL Review

For one, remember that your PLL is normally set up to provide only 15 days of supply, and your authorized stocks must be on hand or on order at all times.

Your initial allowances, based on equipment density, are listed in your equipment TM's. The minimum stockage (MS) items show an allowance either in round numbers, or in terms of a factor for 100 pieces of equipment.

Items that you can have for immediate use only are listed with an asterisk (*). And, with demand experience, of course, those items become demand supported (DS) items.

To put a proper PLL together you need the supply publications for all the equipment your PLL supports. You find the supply publications listed in DA Pam 310-4 (the index to TM's, SM's, TB's, SB's, etc.) and in DA Pam 310-6 (index to supply catalogs and supply manuals).



YOU CAN ALSO FIND RELATED SUPPLY PUBS LISTED IN EQUIPMENT MAINTENANCE MANUALS... LOOK FOR 'EM IN SECTION OR PARAGRAPH TITLED... "REFERENCES"... OR "RELATED PUBLICATIONS."

PLL Make-up

You need DA Form 2063-R to list the items you're authorized to stock. The form is set up in FSN sequence, and can be typed or made out in pen or pencil.

Using your supply pubs you first make up a separate DA Form 2063-R for each different type of equipment you're concerned with. And those lists are your PLL worksheets. For tank-auto equipment, of course, you use TM 9-2300-223-20P, the consolidated list of repair parts, as your worksheet.

From the info in the separate worksheets and the TM you compile a single consolidated PLL on a fresh DA Form 2063-R.

BEFORE YOU MAKE UP THE CONSOLIDATED PLL, YOU SCREEN THE SEPARATE LISTS AND THE TM WORKSHEET FOR ITEMS THAT ARE USED BY MORE THAN ONE TYPE OF EQUIPMENT.



Then you combine the allowances for those common items into one total. That way you'll have a single PLL entry for the FSN's concerned.

PREScribed LOAD LIST (AR 730-35)				1. Date	
2. Unit/Organization Title			3. Unit Identification Code		
4. Item of Equipment			5. Density		6. Technical Manual
STOCK NUMBER AND NOUN	UNITS OF ISSUE	AUTHORIZED QTY		REMARKS	
		OP	BOXED		
2530-303-7128	Truck	ea	3		
2530-602-9286	Deering	ea	3		
2910-699-7501	Pump	ea	3		

DA FORM 2063-R, 1 Apr 68

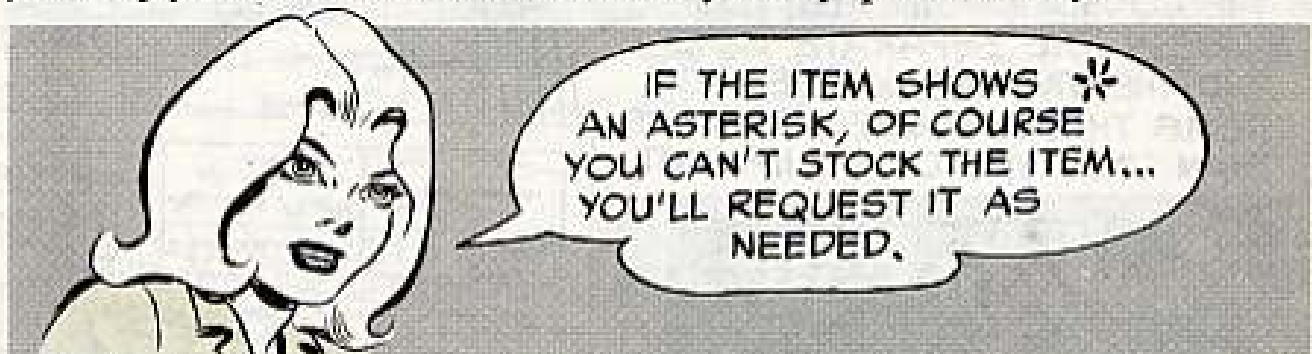
After you make up your consolidated PLL you can toss out the separate worksheets. Or, you can keep 'em for awhile, if you find 'em useful . . . or, of course, if local PLL SOP says to keep 'em. The TM you keep, natch. It's not only a DA pub; it's a fountain of supply info and can also be used over and over as a worksheet to revise tank-auto PLL allowances.

And, you make out a consolidated PLL in the number of copies needed to satisfy your outfit and your supply support.



Checking Allowances

With manuals that quote 15-day allowances in round numbers and use equipment density columns, you've got it made. To find your MS allowance you simply check the column that covers your equipment density."



And, when you have the first demand for the item you make out a record of demand card for it. You keep the card in your fringe item file, and when you've recorded 3 separate de-

mands for the item—anytime within 2 current review periods—the item becomes a DS item and qualifies for your PLL. That means, the item goes on your PLL at the time you record the third demand.



And, all you do to find your initial allowance for a DS item is check the AR's Stock Levels table. Then you complete the title insert on the item's record of demand card and transfer the DA Form 3318 to your visible index file.

At the time you request your initial allowance on a DS item, you notify support that the item has qualified for your PLL. You can use DA Form 2063-R to send PLL changes to support, or you can use a DF (DA Form 2496), or whatever type of written message is most convenient for your SOP and support.

The Fringe File

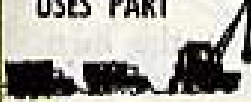
You keep fringe item cards in FSN sequence, review 'em quarterly and toss out any cards that have had no demands within 2 current review periods.

Any suitable box, drawer or file folder that'll keep the cards orderly will do for this file.

Pencil-Work TM's

In manuals that list allowances in terms of a factor for 100 pieces of equipment, you have to use the pub's formula and do a little pencil work to find your 15-day allowances for MS items. You'll find the formula illustrated in the AR's para 6-5, and also in the TM's, but briefly, you work it like this—

Multiply the quantity of equipment you have (that uses the part), times the factor listed in the TM. Then divide that figure by 100, and the answer you come up with is your 15-day allowance.

$$\frac{\text{QUANTITY OF EQUIPMENT THAT USES PART} \times \text{TM FACTOR}}{100} = 15 \text{ DAY ALLOWANCE}$$


When the formula allows you .5 for your equipment density, you're automatically authorized an initial allowance of 2. And, in fact, your initial allowance is 2, when the formula answer ranges from .5 through 2.4.

BUT AFTER THE 2.4 FIGURE YOU FIGURE LIKE SO!



FRACTIONS BELOW .5	<i>You round off to the next lower whole number</i>
FRACTIONS OF .5 OR MORE	
	<i>You round off to the next higher whole number</i>

FOR EXAMPLE:

An Answer From:	Authorizes Stockage of:
.5 thru 2.4.....	2
2.5 thru 3.4.....	3
3.5 thru 4.4.....	4
4.5 thru 5.4.....	5
And, so on.....	

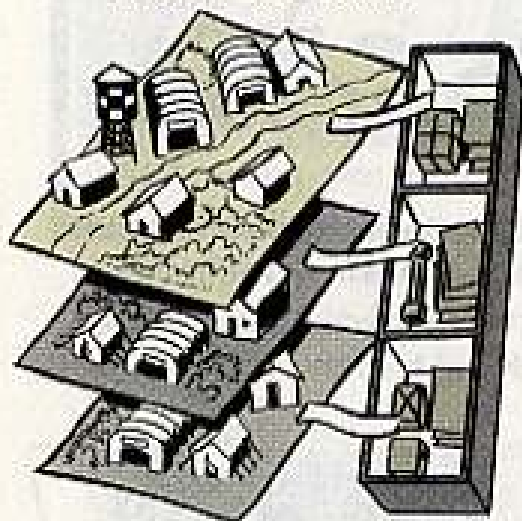
If the complete answer comes out under .5, you're not authorized to stock the item, but you can order it as needed. And, once you have a demand for the item you set up a record of demand card for it in your fringe item file. And, then you can get the item on your PLL by using the same fringe item routine that you use for getting "as required" items into your stocks.

to recap

— Just 3 separate demands, anytime within 2 review periods, and you have another DS item for your PLL. And, you don't do any more pencil work to find your initial allowance for these items. You simply go to the Stock Levels table and select your allowance, based on the total number of items that were requested in 3 separate demands.



SEPARATE OUTFITS GET SEPARATE RECORDS AND LOADS



When the machinery is available support may provide 2 preprinted DA Form 2765's for each item on your PLL. And, anytime you use a preprint form they'll replace it when they issue your request.

The CO responsible for the prescribed load is the approving authority for the PLL. And, a PLL is due at supply support within 3 days after it's been approved.

The support types review your consolidated PLL when they receive it, and they're authorized to correct FSN's, nomenclature, etc., delete items that are used at higher maintenance levels only, and otherwise help to polish up your PLL.

PLL Stocks & Records

PLL stocks and records belong where the men, tools and maintenance equipment are authorized for organizational chores. And, when separate units in an outfit are authorized to do their own organizational maintenance, their separate PLL's and records may be centrally located—for all around convenience, economy, etc., but the PLL stocks and records will not be combined . . . they'll be maintained separately for each unit.

DA Form 2765

I'D PREFER A PREPRINT.

SORRY ABOUT THAT! WE DON'T HAVE THE MACHINERY OUT HERE... YA GOTTA FILL THE FORM YOURSELF!

DA Form 3318

The new record of demand and title insert card is easy to use. You make out a card for each different item on your PLL and use the cards to keep track of all the demands you

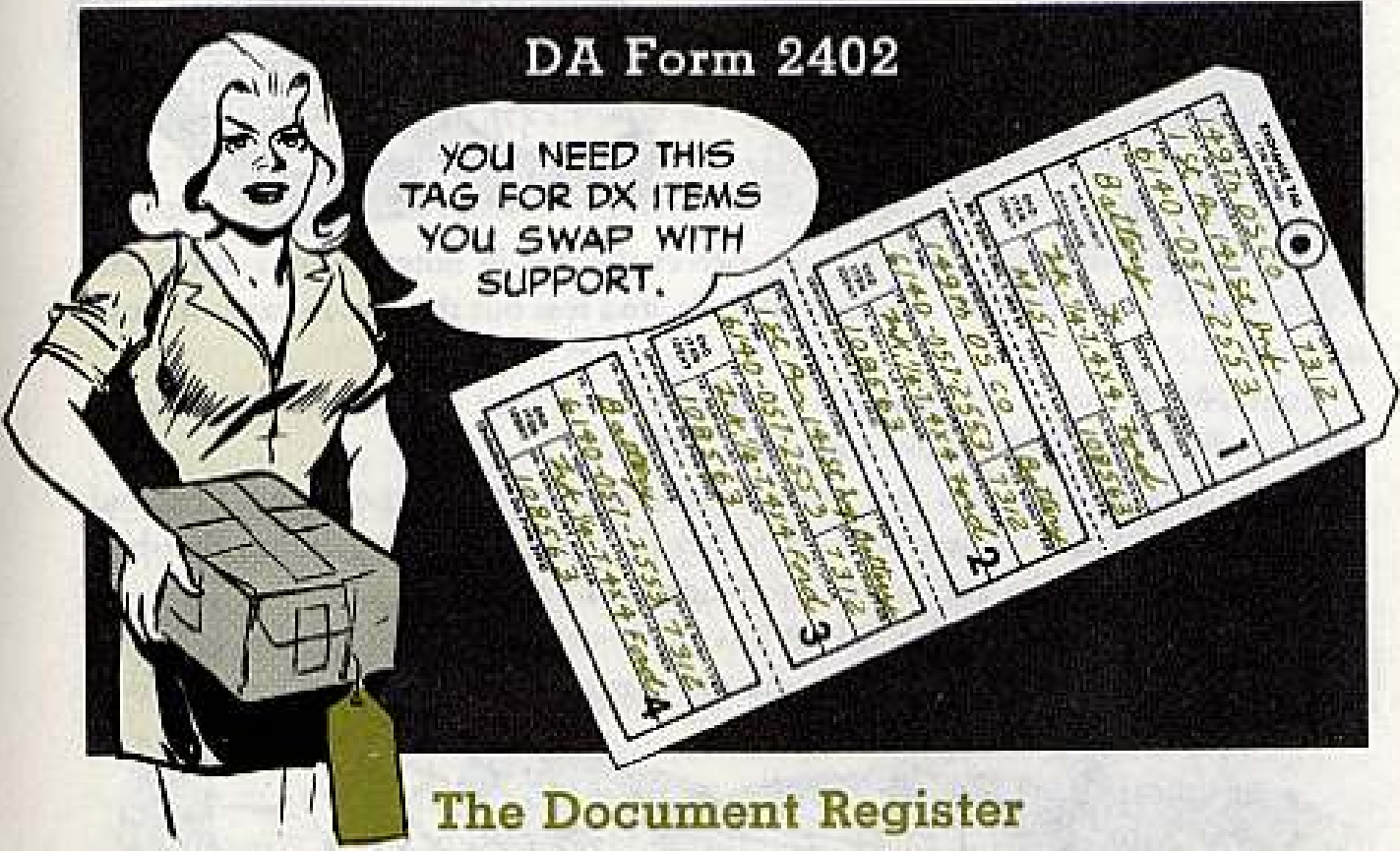
have — regardless of who or what satisfies your demands. For example, DX items, SALT items, items you borrow from a neighbor, and any items you (yourself) may have to cannibalize



in an emergency... all are recorded on your cards.

You can keep the cards in alphabetical or FSN sequence, whichever suits your operation best. Any preprinted DA Form 2765's you get from support you can keep in the visible index file along with the record of demand cards the preprints cover.

You can use colored tabs in the file to clue you on an item's stock status—due-in, zero balance.



The Document Register

Your document register, DA Form 2064, keeps tabs on your requests for issue and turn-in. The only transactions you don't record in the register are your DX swaps with support. DX'd items you handle on DA Form 2402 and you record only on your record of demand cards.



Serial numbers authorized for the register run from 001 through 999, or 0001-9999 daily, as needed by your outfit. Your outfit, of course, may assign

you a specific block of serial numbers, within the authorized range, for your PLL document register. And, you use the Julian date followed by the document serial number to make up your organizational document numbers.

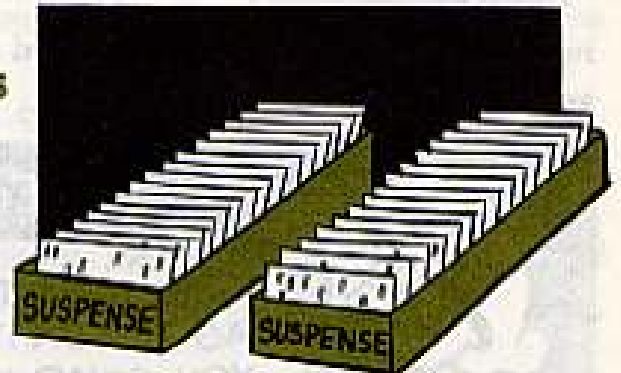
FOR
EXAMPLE...



8166-001 or 8166-0001, is the document number for the first transaction you record in the register on 14 Jun 68.

Suspense Files

You need 2 due-in suspense files. A temporary file for the DA Form 2765's support returns to you with due-in info. In this file you keep the cards by your organization document number.



When due-in items come in you correct the due-in notes in your document register and in the record of demand cards, and toss out the due-in cards in your suspense file.

Your No. 2 due-in suspense file holds copies of your requests which support converts to MILSTRIP requisitions (AR 725-50).

That means support has sent your request further on up the supply line, and from there on your request will be handled by support's requisition number. You file these cards by support's requisition number.

If a request that goes MILSTRIP has any previous due-in cards in your temporary file, you'll have to toss out the old cards, and add support's requisition number to your document register info.



When you receive supply status cards on a request—that is, new DA Form 2765's with specific supply info on a due-in request—you file the latest card in front of any other cards you may have on the request.

Supply status cards bring you all kinds of important info on your due-in requests, but the info is mostly in code so you have to be real hep on status code talk. All the code info you'll be concerned with, of course, is laid out for you in Appendix I and IV of AR 735-35 and in your local supply SOP.

And, when you want to initiate follow-up or cancellation action on a request you use the latest due-in card you have on the request.

Your suspense files are also very important when it comes to reviewing support's reconciliation requests. (See page 55).

When all the due-in items are received on a request, you complete the info in the document register and the record of demand card and destroy the cards in the suspense file.

PLL Inventory

The physical check of PLL stocks is due semiannually, or as called for by the CO. When you pull an inventory, the record of demand cards get the Julian date and the note "inv" in column a, the current accumulated demands in column c and the inventory count in column d.



Vessel PLL's

PLL's for each different type vessel are set up and maintained by the vessel supply officer. And, the initial PLL allowances are as authorized by the equipment manuals.

The on-board spares are listed on the PLL's, but the items are identified, as such, on the list. And, on-board spares are supposed to be stored aboard the respective vessels.

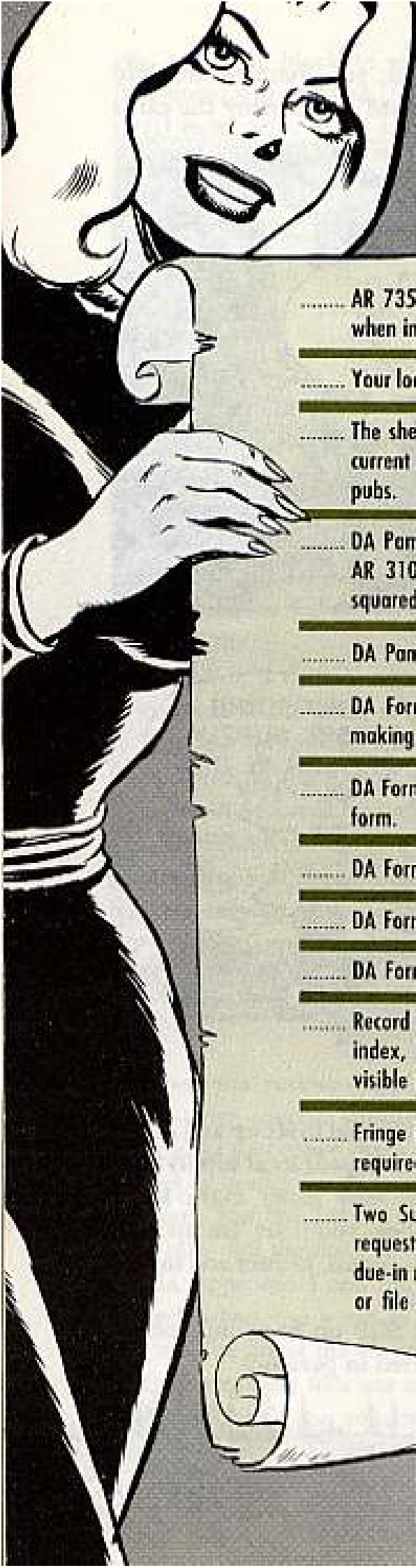


Special Loads

If you're required to set up and maintain special loads, your local supply SOP will tell you how many extra loads you'll keep, how you'll set 'em up, and how you'll maintain, inspect and inventory the stocks.

The AR's SOP on handling special loads is covered in para 6-9.

FOR PLL DOPE
ON MISSILE OR
NUCLEAR MATERIAL
SEE THE AR'S
PARA 6-7.



HERE'S YOUR **PLL CHECK-LIST**

- AR 735-35 (Oct 65), and its Change 1 (14 May 68). And, remember, when instructions in other supply pubs disagree, the AR has the last word.

- Your local supply SOP.

- The shelf-load of supply pubs for the equipment your PLL supports, and current copies of DA Pam 310-4 and DA Pam 310-6, indexes for supply pubs.

- DA Pam 310-10 (May 64) Guide for Publications Supply Personnel, and AR 310-1 (Mar 62), general policies on publications, to help you get squared away on ordering publications, pin-point distribution of pubs, etc.

- DA Pam 750-1 (Jun 64), PM Guide for Commanders, Section VII.

- DA Form 2063-R, for working up your TM authorized allowances and making out your consolidated PLL.

- DA Form 2765, Request for Issue and Turn-in. The single line item supply form.

- DA Form 2402, The Exchange Tag for identifying your DX Items.

- DA Form 3318, Record of Demand and Title Insert.

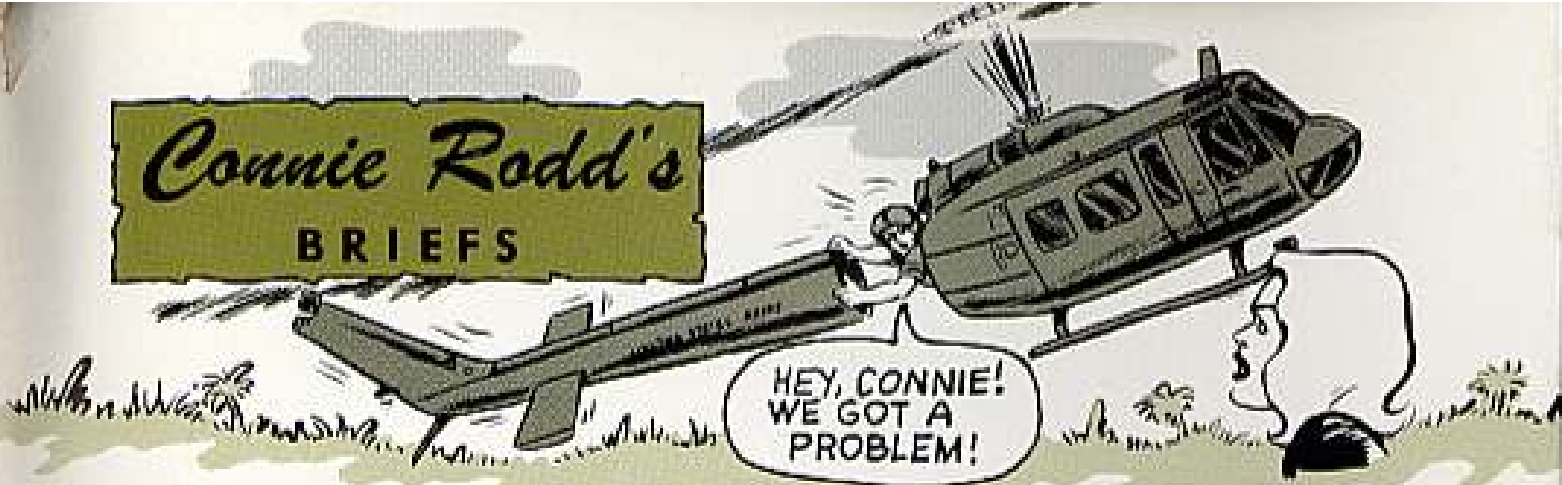
- DA Form 2064, your document register.

- Record of Demands File. You can use the cabinet or book type visible index, depending on the size of your operation. For supply info on visible record equipment, see Fed Cat C7460/90-IL.

- Fringe item file. For the record of demand cards you make out on "as required" items.

- Two Suspense files. One is a temporary suspense file . . . for due-in requests from your immediate supply support. The other is for MILSTRIP due-in requests. Like with the fringe item file, any suitable box, drawer or file that'll keep the cards safe and handy, will do for this file.

Connie Rodd's BRIEFS



M134 Gunmen, Heed This!

On your toes there, you M134 Minnie Gun 45J's. Make positive you've got the right plunger and spring in the right clearing solenoid (FSN 5945-922-8056) in your subsystem's feeder/delinker. The Lisk solenoid has a .748-in diameter plunger, while the Electroid company's has a .779-in diameter. If you goof and put the smaller one in the bigger hole, there'll be room for sand and dirt to tip, bind and freeze the plunger in the solenoid case. Result: The gun might not clear and somebody'll get hurt!

Keep this in mind: One solenoid'll operate as well as the other when used as a complete assembly, BUT the parts of one won't—repeat WONT—work with the other.

Swig-Size Bottles

Even less sweat now getting supplies of LSA semi-fluid (Weapons Oil Medium) lube oil and CR rifle bore cleaner handy for PM-ing your M16A1 rifle. These goodies now also come in 2-oz plastic squeeze bottles under FSN 9150-935-6597 for LSA and FSN 6850-224-6656 for the CR. Tuck 'em in your ammo pouch, pocket or gear . . . and use 'em as needed.

Engine Mount Mix-Up

About face with the deep notches on Seminole (U-8) rear engine mounts, page 40, PS 186. On your PE, be sure you see notches in the mounts as you face the firewall.

M16A1 Rifle Movies

Seen any good movies lately? Try these: TF 21-3907 and TF 21-3908, a 2-part production starring the M16A1 rifle. Part I covers care and maintenance and Part II offers field expedients.

D7E Air Cleaner Core

To get filter elements for your D7E tractors, use FSN 2940-849-3293, Cat P/N 455348, and put Routing Identifier Code S9C on your request. Nomenclature is Element, Air Cleaner—and that's a new number the catalogs and TM's are picking up.

Adapt For Calibration

Push that puzzled look aside, you equipment calibratin' types, and feast your eyes on SB 11-611 (Nov 67). The supply pub gives you a picture spread of all types of adapter cables, connectors, jacks and plugs, as well as their stock numbers.

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

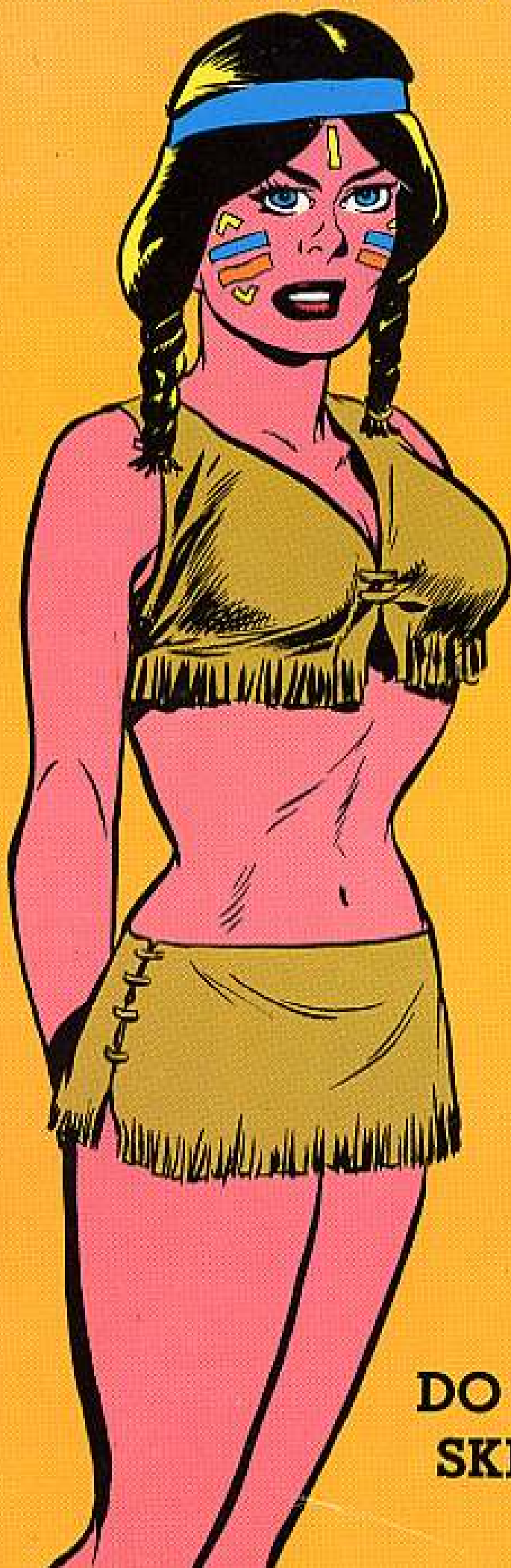
PM IS MORE THAN SKIN DEEP!

a little touch-up

WAR PAINT

**is heap good
pm medicine!!**

BUT... TOO MUCH PAINT AIN'T



**Unnecessary painting...
too much spit'n' polish...
tire painting... all take
more time than they're
worth.**

**DO YOUR PM...AND
SKIP THE GLITTER!**