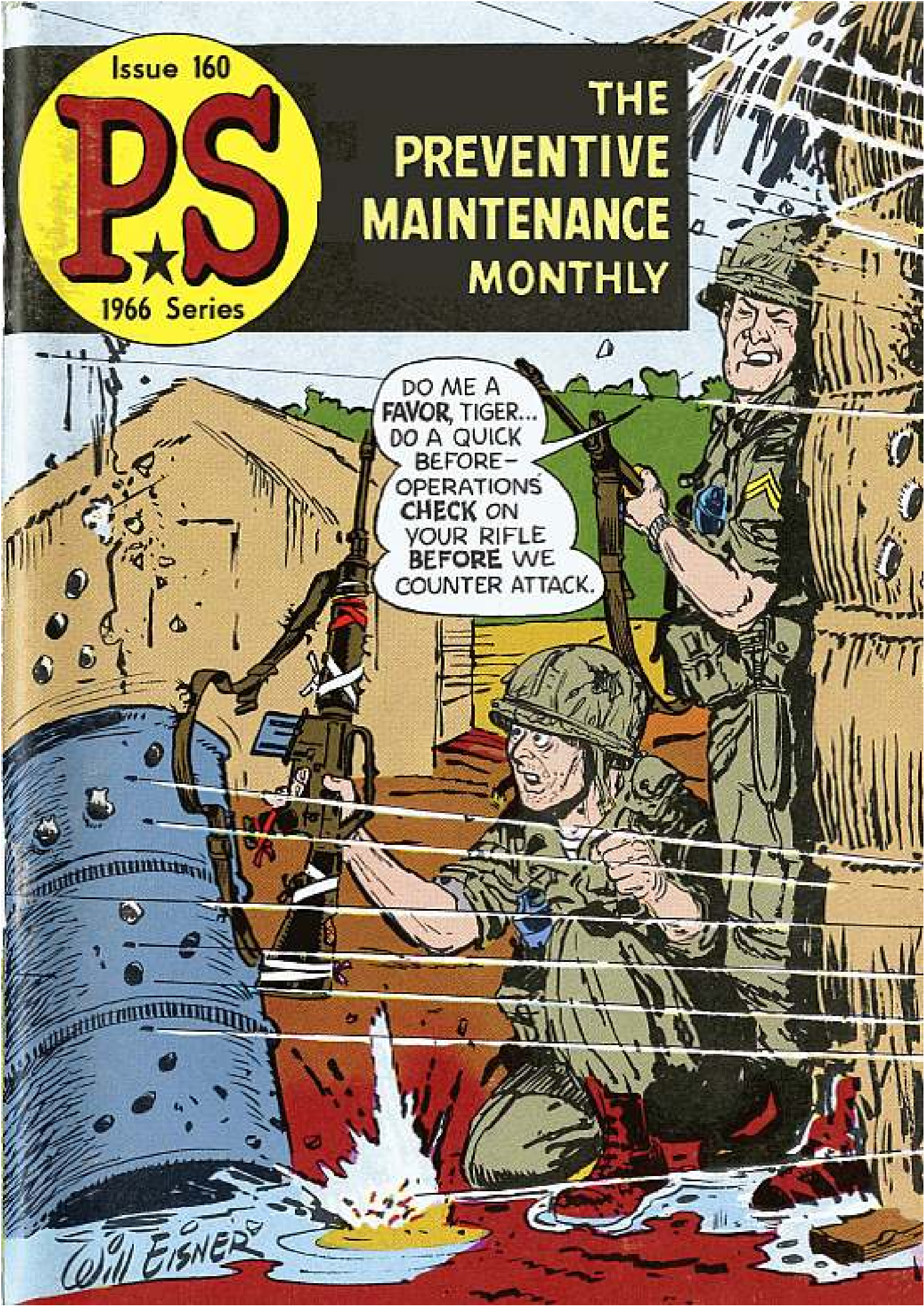

Issue 160
PS
1966 Series
THE PREVENTIVE MAINTENANCE MONTHLY
DO ME A FAVOR, TIGER... DO A QUICK BEFORE-OPERATIONS CHECK ON YOUR RIFLE BEFORE WE COUNTER ATTACK.
Will Eisner

SUPPLY

You've got to be accurate when you order repair parts for your maintenance operations and supplies for your outfit.

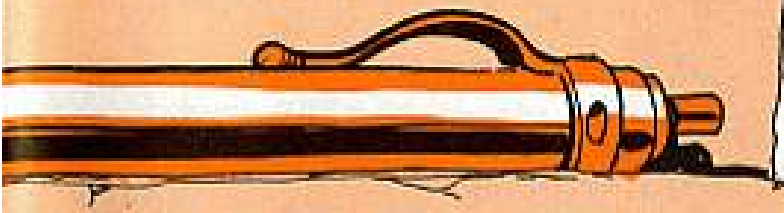
No. 1—Accurate manuals. You've got to use the latest up-to-date parts manual for your equipment. If you don't have the latest, see the index, DA Pamphlet 310-4 dated May 65 for

No. 2—Accurate pencil. When you fill out your requisition, DA Form 2765 or 2765-1, be real careful that you jot down the right numbers. You and your buddy can read it back and forth a couple of times to make sure. Too often the eye, the brain and

If you don't give with accurate, up-to-date stock numbers when ordering, you won't get parts and supplies. The right FSN will get you what you order.

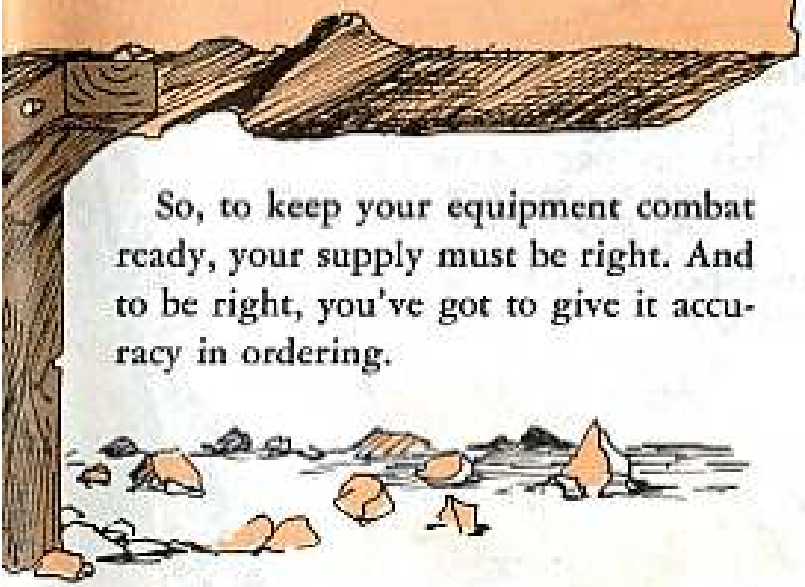
ACCURACY

what's available, and order copies on DA Form 17. The same goes for supply manuals except the index you use is DA Pamphlet 310-6 dated Jul 65.



the hand won't work together—two 2's and a 3 come out two 3's and a 2, and such-like. A recent check showed that more than half the bounced requisitions were caused by "human error," the slip of the pencil, eye or brain.

So, to keep your equipment combat ready, your supply must be right. And to be right, you've got to give it accuracy in ordering.



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, older issues may be obtained direct from U. S. Army Maintenance Board, Attn.: PS Magazine, Fort Knox, Kentucky 40121.

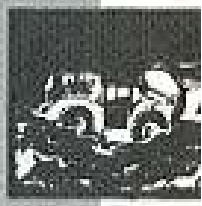
THE PREVENTIVE MAINTENANCE MONTHLY

Issue No. 160 1966 Series

IN THIS ISSUE

FIREPOWER 2-17

Nike-Hercs Section 2-13
3.5-in Rocket Launcher 14-16
BIIL 16
M14 17



GROUND MOBILITY 18-27

Engine Heat Shock 18-19
M107-M110 20-21
M108-M109 22
M113 23
M151 24, 25
M378! 25
Tube Repairs 26
G749-Series 26
M131A2 27
M543 Cable 27

AIR MOBILITY 37-45

OH-13E 37
Torque Tips 38-40
Don't Tinker 41
Cannibalizing 42-43
Ni-Cads 44
AN/ARC-44 45
Chute Straps 45

COMMUNICATIONS 46-53

Angry-106 46-48
Perk-8-10 48
AM-1780 50-51
Mercury Battery 52
V6201 Tube 53
Perk-25 53

GENERAL AND SUPPLY

No. 1 Supplemental Tool Kit 54-58
Mil Std Generator 58
Cap-Plugs 61
Mine Detector 62-63
DA 2408-2 64
Tool IOU 64
Publications 28
Supply 1, 7, 10, 22, 25, 27, 40, 43

Use of funds for printing of this publication has been approved by Headquarters, Department of the Army, 19 February 1965.

DISTRIBUTION: In accordance with requirements submitted on DA Form 12-4.

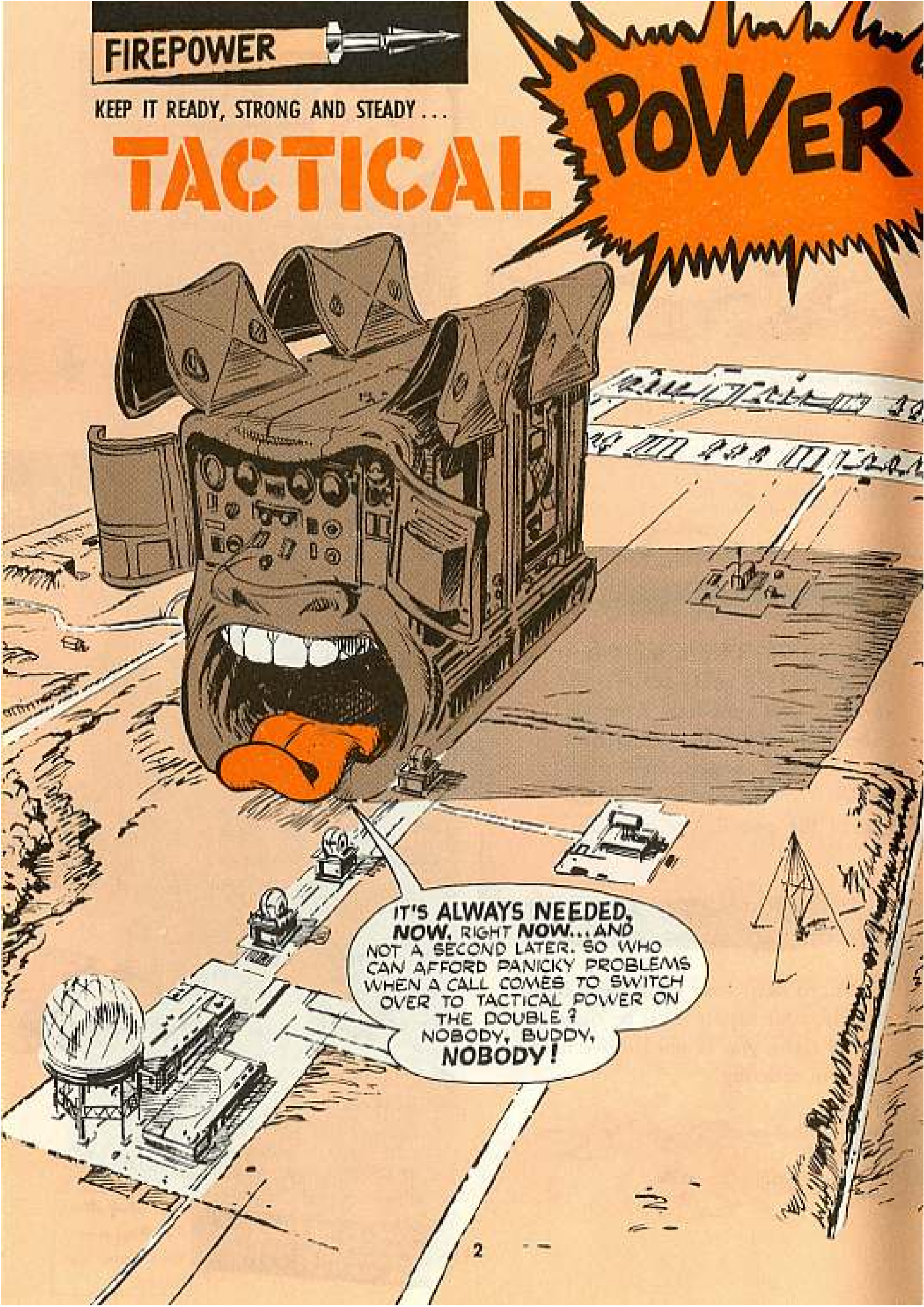
PS wants your ideas and contributions, and is glad to answer your questions. Name and address are kept in confidence. Just write to:

Sgt. Half-Mast,
PS Magazine,
Fort Knox, Ky.
40121

FIREPOWER

KEEP IT READY, STRONG AND STEADY . . .

TACTICAL POWER



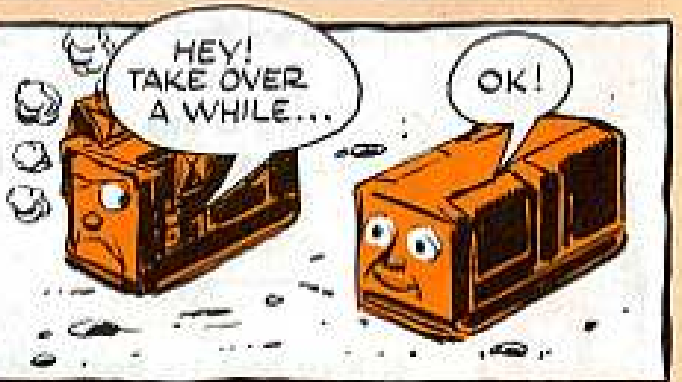
PM

That's why top-notch generator operators are always spoutin' off special maintenance rules, like so:

Whatever the make, model, capacity, age or temperament, there's no such thing as routine PM on power generators. You tackle the simplest before-, during-and after-operation checks and services with sharp eyes, ears and nose, and one-day-pass determination.

Learn your trouble shooting SOP's up-and-down and sideways, but never part with the maintenance manuals. Operator's and maintenance manuals must always be either on the spot or within easy yelling distance.

Whether the generators are run just long enough so the crew can pull its daily equipment checks with tactical power, or whether the outfit stays on tactical power a good bit of the time, you alternate generators at least daily. That way each one (including the one selected for standby) will get in some operating time regularly.



Never shy away from a generator just because it's hard to start, or it takes more than normal watching during operation. Favoring a stubborn one, keeping it idle (and your fingers crossed hoping you'll never need it) can cause real panic if it's ever needed in an emergency. The answer is: Work with it until you learn all its tricks. If the rebel continues to defy your wits, let the support people check it over.

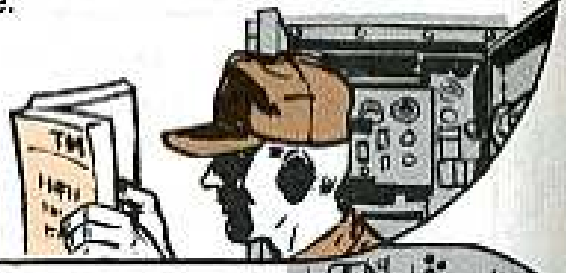
And, above all, check with support on the double on any problem you can't take care of right away.

MORE

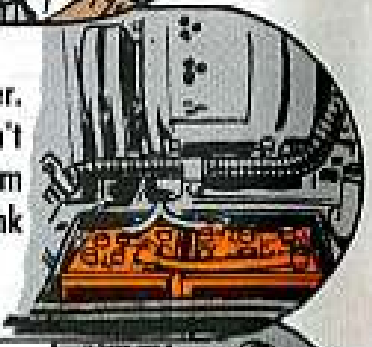
BASIC POINTERS ON PANIC-CONTROL

1. Keep a current DD Form 314, "Preventive Maintenance Schedule and Record" on each generator. This is a must.

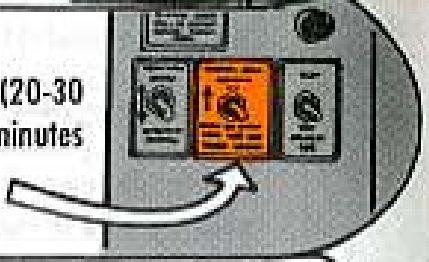
2. Pull daily checks and inspections (on the engine and the generator) with TM in hand. Go by the TM on the quarterly (or 250-hour) scheduled maintenance. Report problems on DA Form 2404, and keep maintenance log forms and records up-to-date.



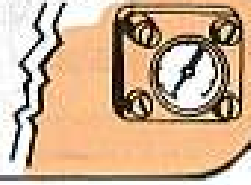
3. Clean and check batteries daily. And, nix on just adding water. Pay special attention to electrolyte reading. If batteries aren't as strong as they should be, the current will be drained from the engine safety circuit and the engine won't start, or it'll conk out. Check and clean battery charger daily.



4. Never press the starter switch longer than TM allows (20-30 seconds). If the engine doesn't start, allow the motor 2-5 minutes for cooling before you hit the start switch again.

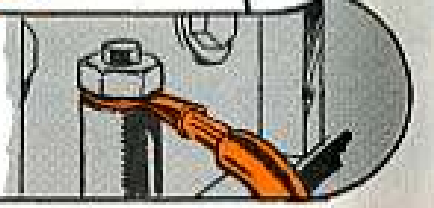


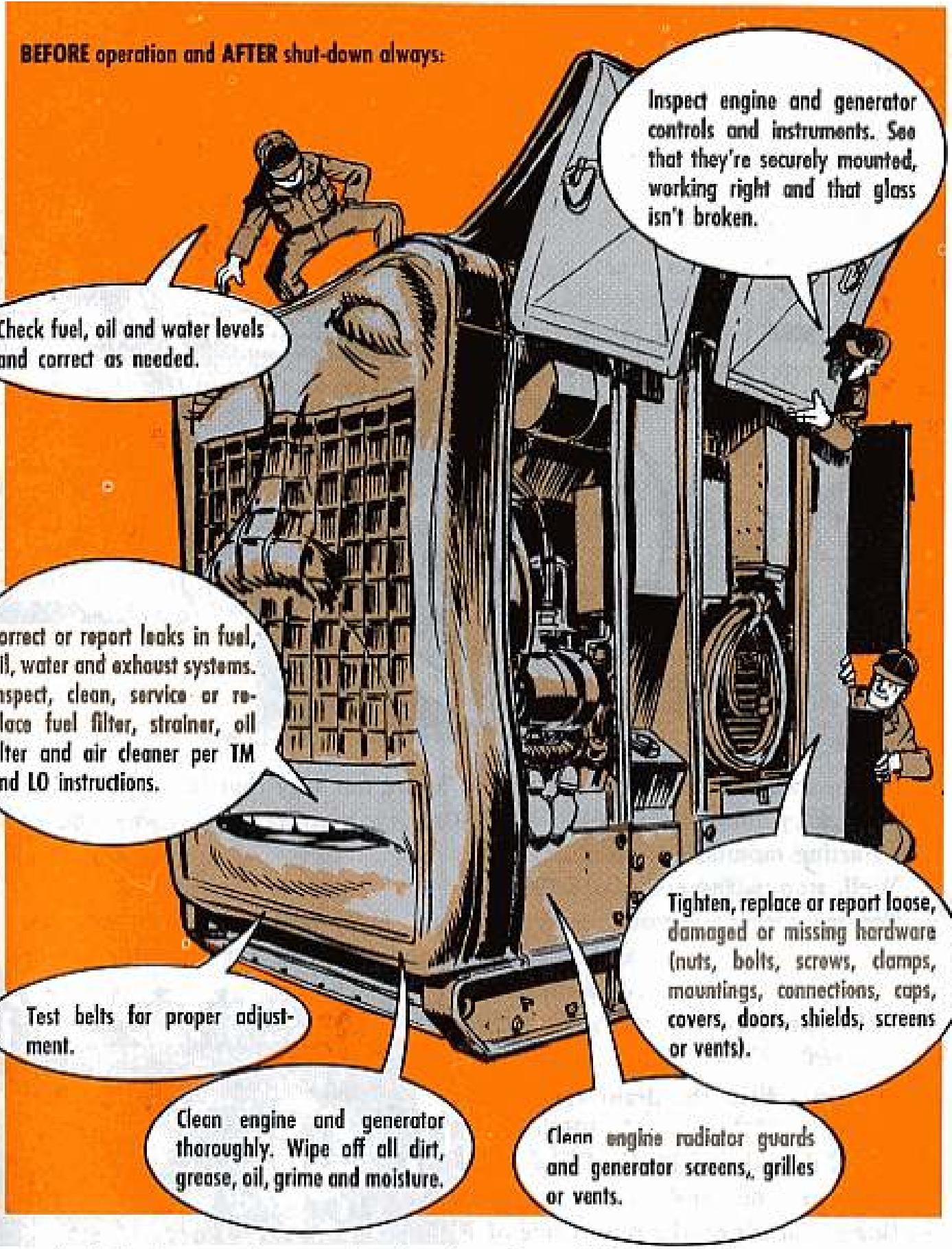
5. Run the engine for five minutes (or as long as necessary) to warm-up, and check the oil and fuel instruments before you apply the load.



6. Let the engine idle for five minutes (for even cooling) before you shut-down.

7. Check the condition of the generator ground daily.



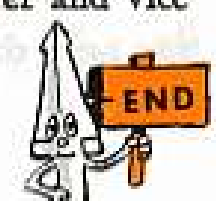


And, last but not least, review (again and again) TM procedures on:

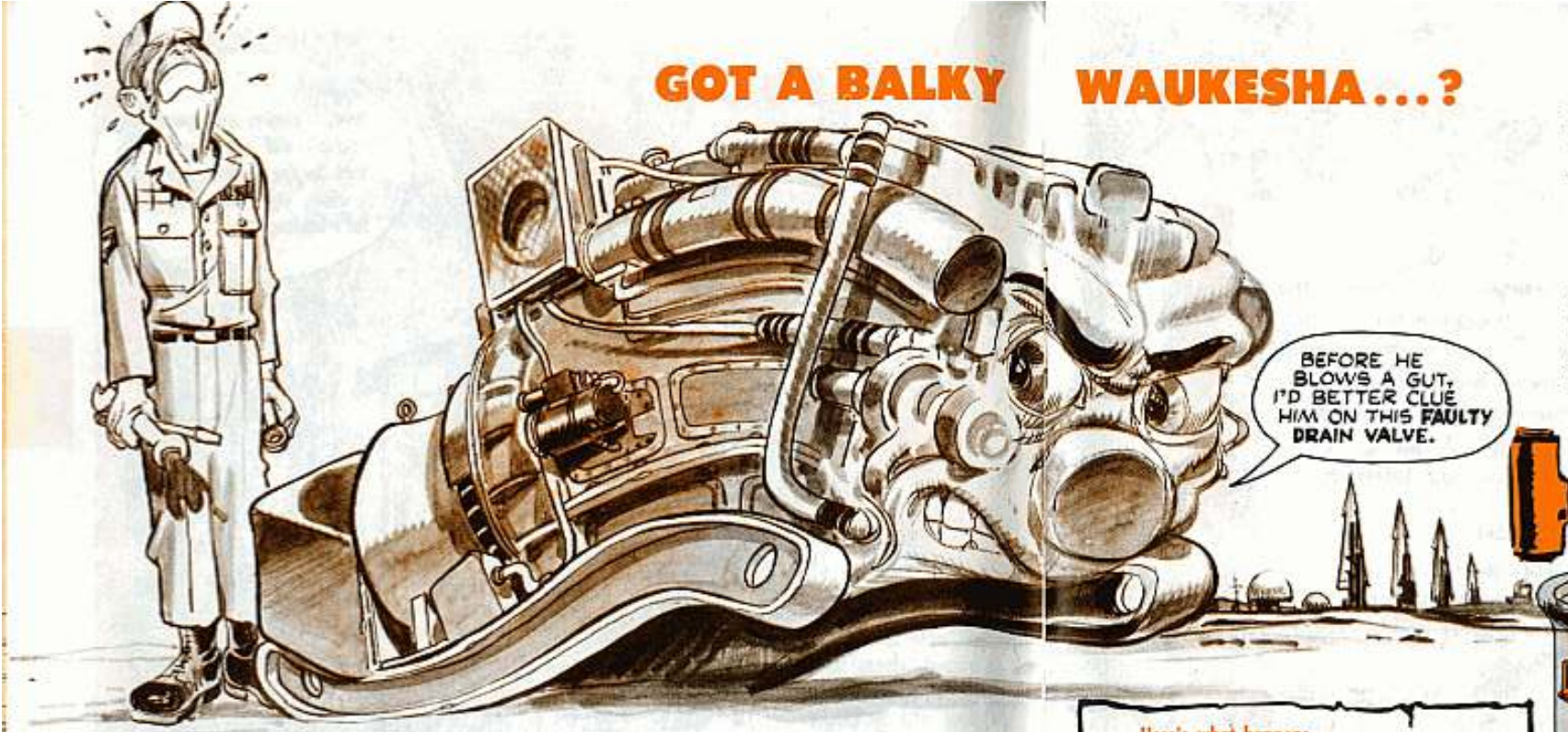
Starting generators (singly or in parallel).

Stopping generators (normal shut-down, emergency shut-down and stops by safety devices).

Power transfer (synchronizing commercial power to tactical power and vice versa).



GOT A BALKY WAUKESHA...?



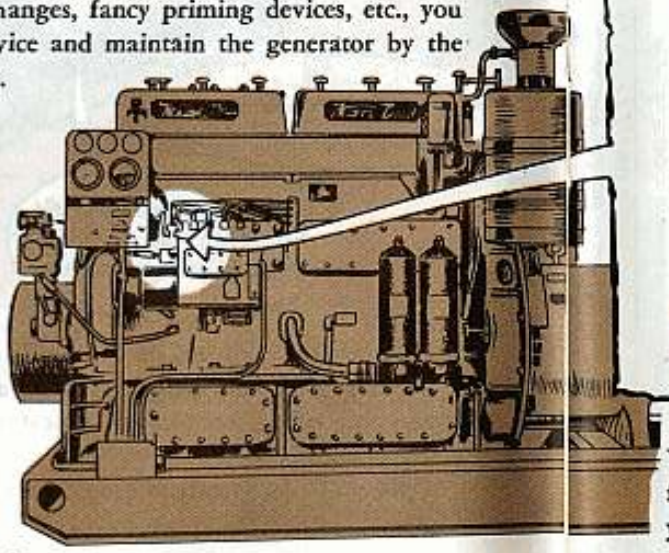
Been pacing the floor nights trying to figure out why that Waukesha, 175-KW, diesel, generator (FSN 6115-600-3404), is so hard-starting . . . why it burns out starting motors like nothing?

Well, stop pacing and give a listen.

For one, forget any costly fuel line changes, fancy priming devices, etc., you may have in mind. As long as you service and maintain the generator by the book, the fuel system will do its job OK.

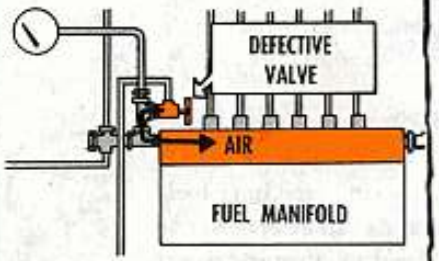
For two, check the drain valve on the return side of the fuel injector pump. If the valve is damaged or worn that's where your problem is.

Being that it's on the return side of the injector pump, few people suspect the drain valve of being responsible for air blocks. But, it's a fact. If the valve's seat is damaged or worn, air will leak into the fuel injector pump the instant you press the starter.



Here's what happens:

1. When you press the starter and the engine turns, the injector pump starts feeding fuel **immediately.** This, natch, instantly lowers the fuel level in the pump's fuel manifold.



2. Then, before the manifold can refill, the pump sucks air into the manifold through the defective valve.

Once that happens you're in trouble. You've got an air block that'll keep the fuel from feeding properly . . . and, you just don't start.

So check that valve soonest. And, if you need a replacement it comes under FSN 2910-831-7292 and it's called cock, drain fuel, injector pump.

LOOK AHEAD

Your clue to this air-leak problem is a fuel leak at the valve when the system is under pressure. So it's a very good idea to check the valve for leaks when the generator is running.

EITHER/OR FOR JOY

It's either/or when you go to use the general purpose lubricating oil for your Joy (Model RP125-GC40-MS-3 GED) air compressor (FSN 4310-691-0877).

You can use either the general purpose oil MIL-L-15016, Military Symbol 2075, FSN 9150-235-5571, or the general purpose oil, MIL-L-17672, Grade 2075TH, that's replacing it in the supply system.

Here're the FSN's for the new oil:

9150-985-7230	1 pt
9150-985-7231	1 qt
9150-985-7232	5 gal
9150-985-7233	55-gal drum

You'll find these listed in your DOD Catalog C9100-IL (Dec 64).

POWER SWITCHING CARE

P-U-L-E-E-Z-E . . . don't be misled!

That manual switch for transferring power in the launcher area is really two, **independent** switches in one. One side of the switch turns commercial power on and off. The other side does the same for tactical power. Only that and nothing more. Power transfer is not automatically synchronized by the switch, and don't let anyone tell you different.

SWITCHING CARE

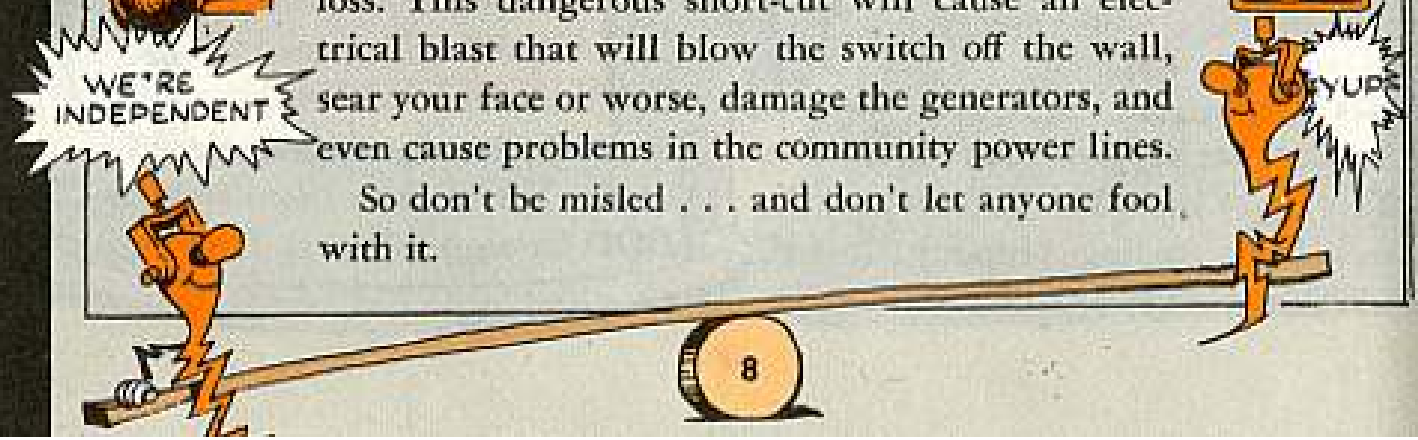
You do the on/off synchronizing by hand when you throw the switch. And, the important thing is that one switch must be completely opened before the other is closed.

And, of course, as long as the see-saw type, inter-locking hook-up on the switch is in good order you've got nothing to worry about. It'll keep you from accidentally turning both switches on at the same time, and causing a frightening short and a fiery mess. That being the case, you have to respect that safety device and see that it stays in good working order. If it ever gets loose, binds, hangs, or is in any way defective, you call support soonest.

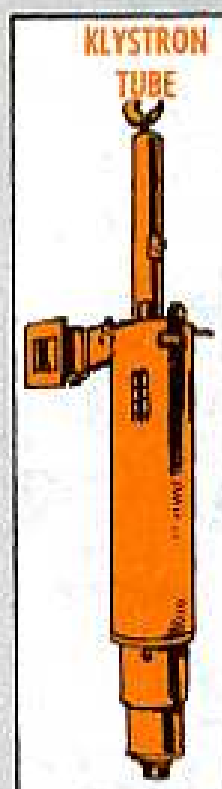
SAFEGUARD

Never monkey with the power transfer switch safety device. Never force, or change the inter-locking hook-up, so the power sources can be opened and closed at the same time to avoid momentary power loss. This dangerous short-cut will cause an electrical blast that will blow the switch off the wall, sear your face or worse, damage the generators, and even cause problems in the community power lines.

So don't be misled . . . and don't let anyone fool with it.



HEAT: A KILLER



Putting the heat on . . . that's what some guys are doing to the klystron tubes in their Nike-Hercules HIPAR.

It happens when the transmitter filament is run without having the heat exchanger energized. And this is a good way to send the klystron to its happy hunting ground long before it's due to make the trip.

So give the klystron a break by going along with the HIPAR turn-on procedures spelled out in TM 9-1430-253-12/3 (Dec 63) and TM 9-1430-250-12/6 (Dec 63) for HIPARs up to serial number 537. For those from 538 and up use TM 9-1430-253-12/1 (Apr 63) and TM 9-1430-250-12/5 (Apr 63).

And really lay on that scoop about cranking up the heat exchanger before you energize the transmitter control.

GIVE TRUCK A BREAK

Whoa . . . W-h-o-a . . . WHOA . . .

In other words, you want to call a halt to mishandling the brake handle on your Nike-Hercules XM473 body section truck.

That's what you're doing if you're using the brake handle as a lever to lift the missile for one reason or another.

The handle's only to be used to brake and keep the missile body in place on the truck—period.

HOLD BACK THE MOISTURE

A headache and a half.

That's what some guys call the power distribution box for their Nike-Hercules launcher.

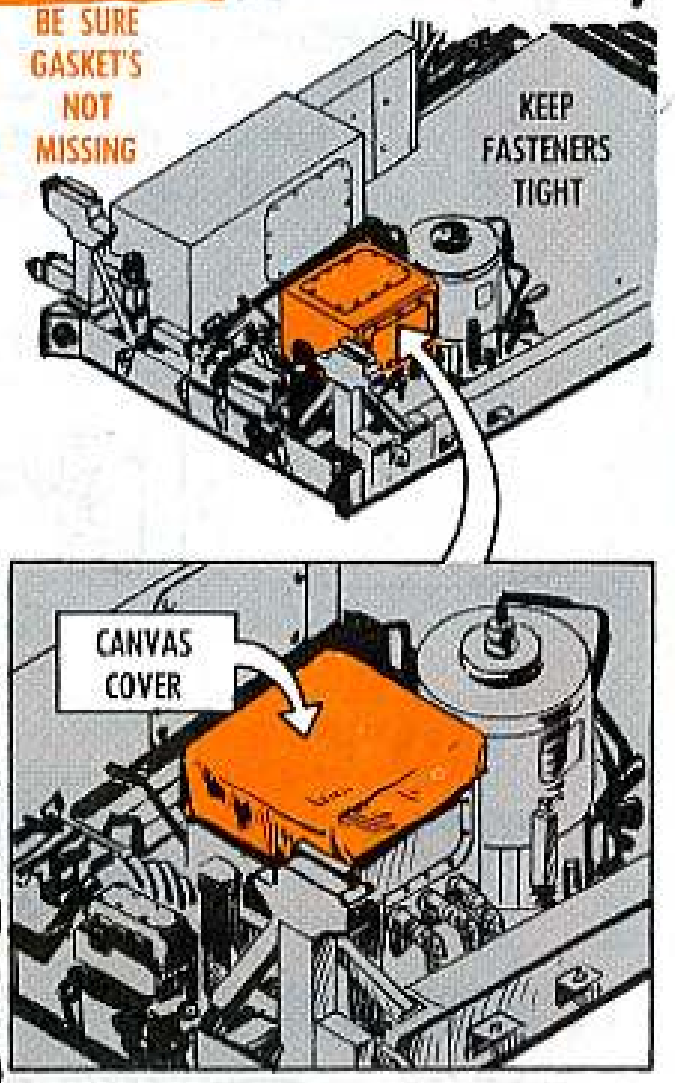
The box sure can give you fits, what with the way moisture gets inside and then goes to work on such things as the terminal board and the relay panel. It doesn't take long for rust to show, but even worse . . . moisture and electricity can combine to cause short circuits. And shorts are short cuts to burned wiring harnesses.

Maybe you can't win the moisture battle, but you can stay on the offensive. F'rinstance . . .

- Keep the access door closed when there's no need to have it open. And make sure all 11 captive fasteners are doing their job.
- The cover has to be in place, with its 14 machine screws holding it tight. Be sure that the cover gasket's not missing. The gasket, FSN 1440-083-2762, and the screws FSN 5305-754-4409, are in TM 9-1440-250-15P/1/1 (Apr 65).

You might also try using a canvas cover on the distribution box. This helps keep out water, but temperature changes could lead to a build up of moisture in the box.

So you want to keep checking the inside of the box for moisture or water.



If you find any water, drain it out the petcock in the bottom of the box. Wipe away whatever is left. You also go to work with a rag on any moisture you find.

Could be you'll spot rust or corrosion on the terminal board or relay panel. That's when you call on your support people. They'll take care of that situation.

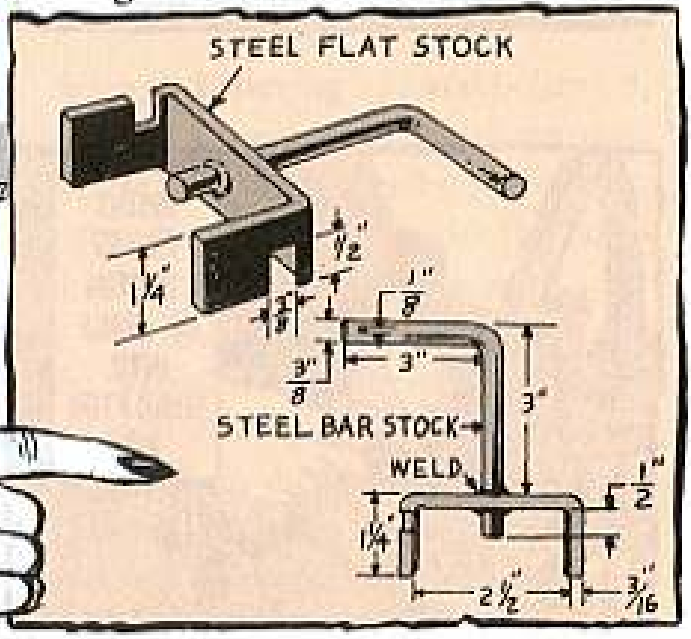
There're different things you can use to hold down the rods in the two T-tracks when you want to raise your Nike-Hercules launcher's erecting beam without a missile aboard. Some guys use a screwdriver (which is all right except that that's not what it's made to do) . . . a plain and simple 6-penny nail . . .

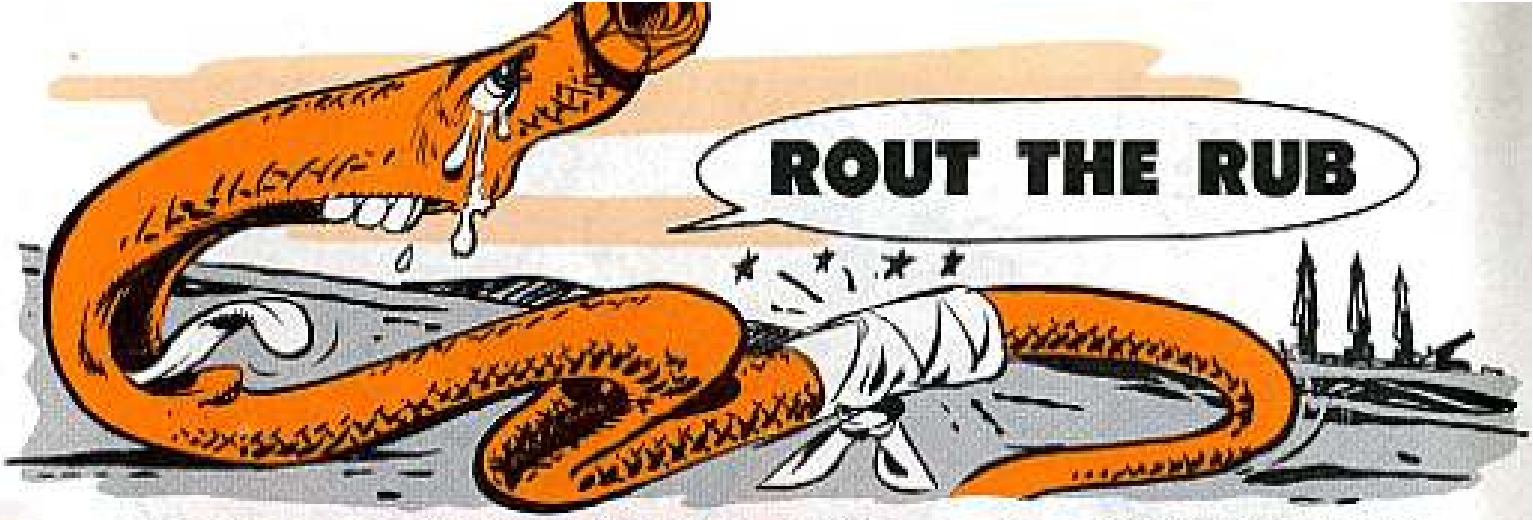
The important thing to remember is that you want to tie some sort of warning flag on whatever holder-downers you use as a reminder to remove them after you lower the erecting beam.

If you leave the tool in place and then go to slide the launching and handling rail onto the erecting beam, one of two things can happen.

If you push the rail slow and easy-like, it won't get past the tools.

Or if you really lay into the rail to slide it onto the beam, its stabilizing hook assemblies will break the tools and maybe damage the rods in the T-tracks. A busted 6-penny nail is no sweat, but a battered rod is something else again.



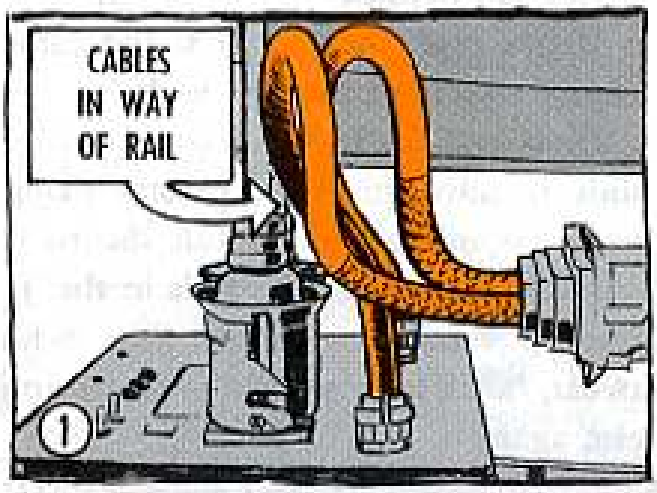


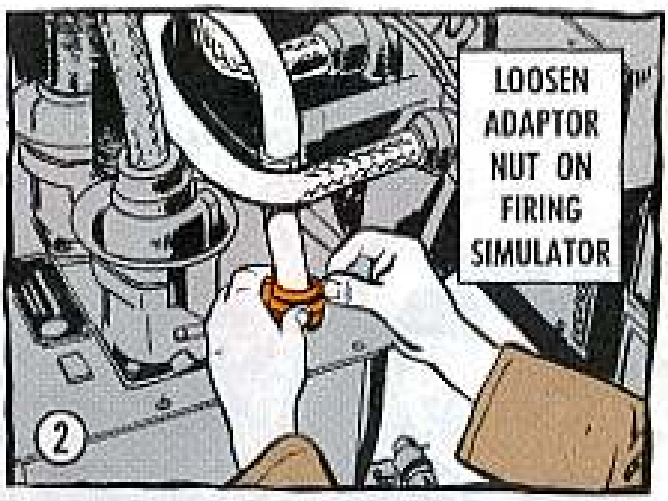
In case you missed it, Para 42 of TM 9-4935-250-15 (Jun 64) has the latest solution to your problem with hard-kissing cables on the Nike-Hercules prelaunch signal simulator box (FSN 4935-994-3082—OPN 9028436). You know, the ones that rub against the launching and handling rail when it's rolled on and off the launcher.

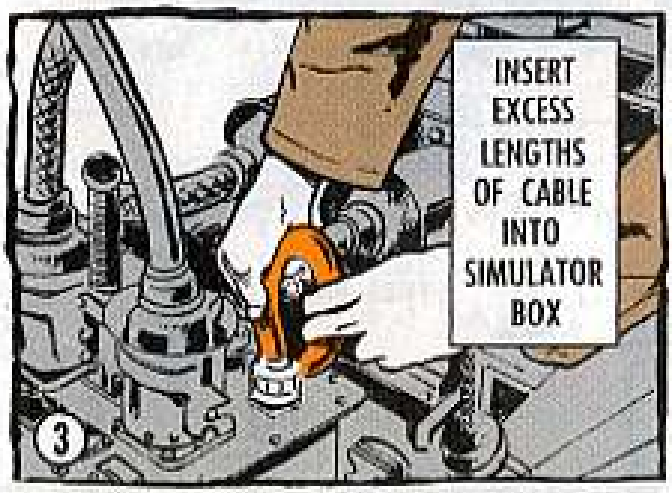
Any old how, you can avoid this chafing easy by adjusting the cables, like so:

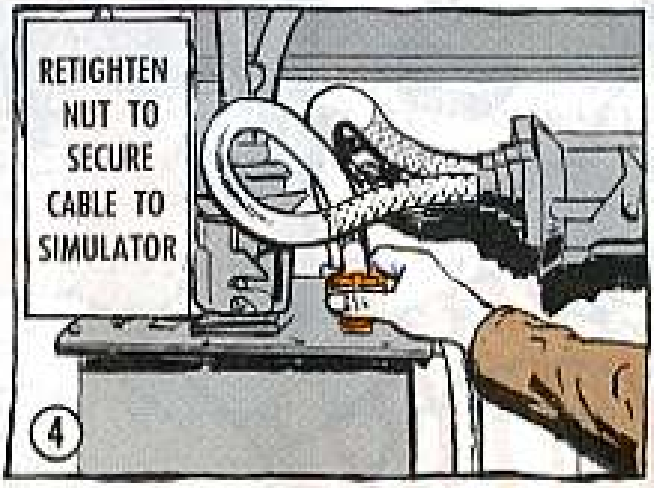
Loosen the adapter nut (FSN 5935-502-4906—MS-3057-20B) at P1Y and P72B on the firing simulator. Insert the excess lengths of cable into the simulator box. Then retighten the nut to secure the cables to the simulator.

This'll provide the clearance you need to remove the rub.

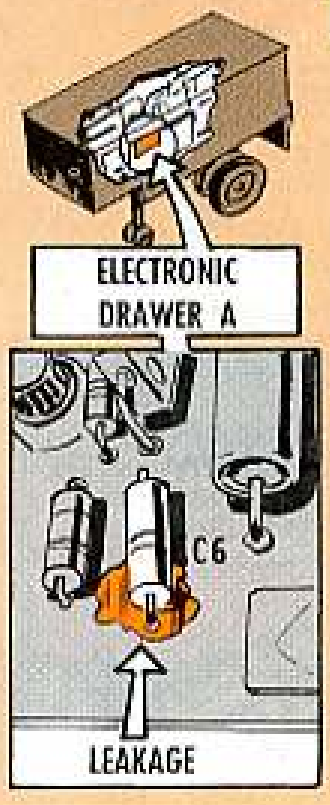








LOOK FOR LEAKS



OK . . . so maybe there's nothing in writing that tells you how often to do it. It's a good idea, tho, to take a close look at least once a month at the component boards in electronic drawer A of your AN/MPQ-T1 simulator station.

What you want to look for, like on board A84, is a leaking tantalytic capacitor. C6 capacitor has been known to spill its insides on to the board. When this happens, the stuff starts to eat away at the board. And the operator in the TTR goes batty trying to lock on to simulated target 4. Looking at the other side of the coin . . . when the operator has a tough time trying to lock on to the target, you have a clue that C6 on the effected TTR gating generator may be on the bum.

Call support at the first sign of leakage.

ON THE BEAM

Seeing's believing . . . and believe it, your DSU people could work on your Nike-Hercules launcher by putting the erecting beam support under the beam and when the work is done leave your site with the support still in place.

So eyeball the front end of the erecting beam after your DS unit has finished a job on the launcher. If you try to lower the beam with the support under it, you could wind up with your launcher needing some alinement work.

3.5-IN ROCKET LAUNCHER CREWS...

BEWARE THE SELF-MADE HEX

When the action's hot and heavy, little PM-wise things count most on your 3.5-in rocket launcher . . . especially on parts like the firing mechanism, the contactor latch assembly and the sight.

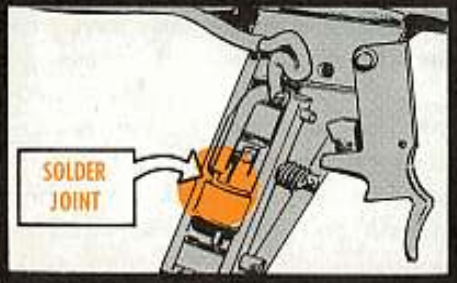
If your baby chickens-out at the crucial moment or you can't hit what you aim at, brother, you're in a fix.

The unfunny part of it is that you could be creating your own woes even while you're performing your PM—and never know till it's too late.

Here're some examples to chew on. Maybe you'll think of a few others yourself as you go along.

Firing Mechanism

When you have the grips off and you're eyeballing the mechanism for damage, dirt and so on, be real careful not to rough-up those delicate parts . . . especially the solder joints around the electrical contacts. A careless finger could put it out of action.



Do all you can to keep the firing mechanism from getting wet. If moisture gets a chance to collect inside it, it'll short it out for sure.

Some guys beat this hex by always carrying the weapon with the trigger down. This way the water runs off and stays out of the firing mechanism.

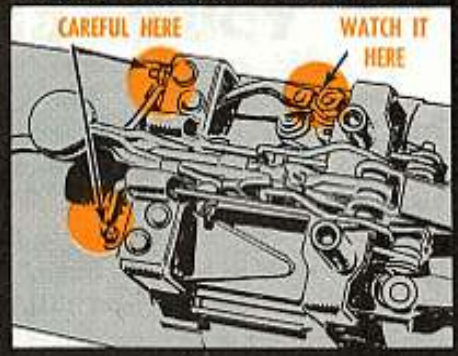
Other guys keep a plastic bag in their pocket and stick this over the trigger like a raincoat. This is OK, if you remember to remove the bag after the flood's over so's you won't get condensation troubles.

But, if the firing mechanism does get wet, take the grips off and dry the mechanism as much as you can. Then—next chance you get ask your armorer to give it a lube job.

Contactor Latch Assembly

There're two places here to guard against creating a no-fire hex—the firing contact lead and the contact point itself.

F'rinstance, watch out for disturbing the "lay" of the contact lead, especially when you're cleaning it and also while you're sloshing through underbrush and the like. If the aluminum tube that holds the contact lead gets bent the contact will likely be broken and you're out of business. You can't fix it yourself, though. That's a job for your armorer or direct support 'cause it involves disconnecting the lead from the electrical contact group and twisting or springing the tube back to its original snug position against the barrel.

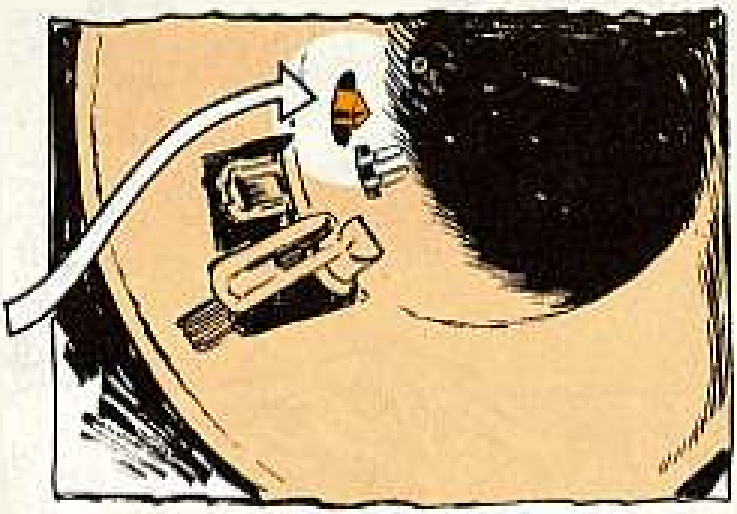


MORE

However, if she'll still fire, go on and use it till the next chance you get to have the experts work on it.

If you're careful, you shouldn't have to disturb the lead at all to clean under and around the contact lead. In a pinch you could use a toothbrush or shaving brush to do the cleaning job. Just avoid lifting that tube!

As for catching the contactor latch assembly on bushes and so forth—well . . . be careful. OK?



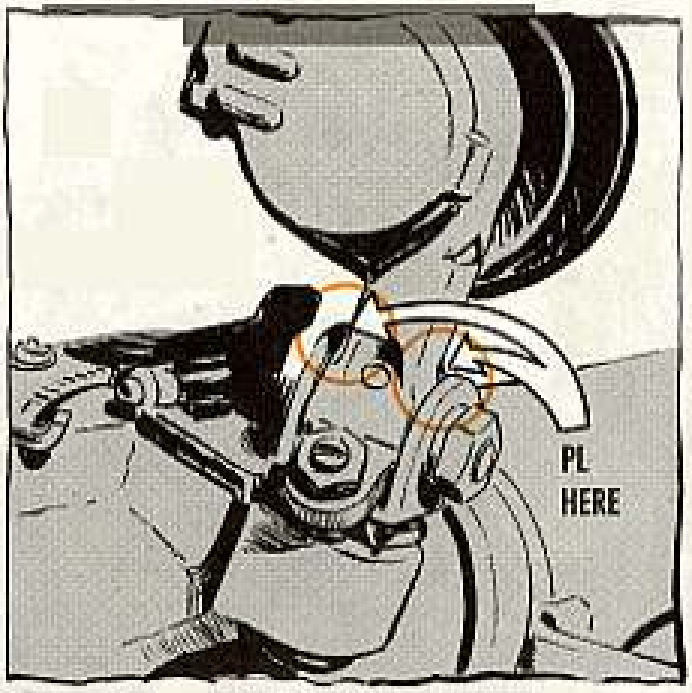
The contact point is one of your weapon's most critical parts. Since it's made of steel, it's a patsy for rust and corrosion from powder fouling.

Your best bet's to scrub it good with bore cleaner after every firing —and top this off with a couple drops of lube oil on the point. This'll un-hex it for you.

Sight Pivot

Some guys seem to forget that this pivot needs constant care and attention. If you neglect it, you're liable to find yourself in a real spot —the sight won't flip and hold in position. A "frozen" pivot is Dead-Eye Dick's worst hex.

The cure's easy and quick, though. Get the habit of putting a drop of PL Special oil on the pivot area once a day and then rotate the pivot a couple times to make sure the oil penetrates.



YOU'VE GOTTA HAVE IT

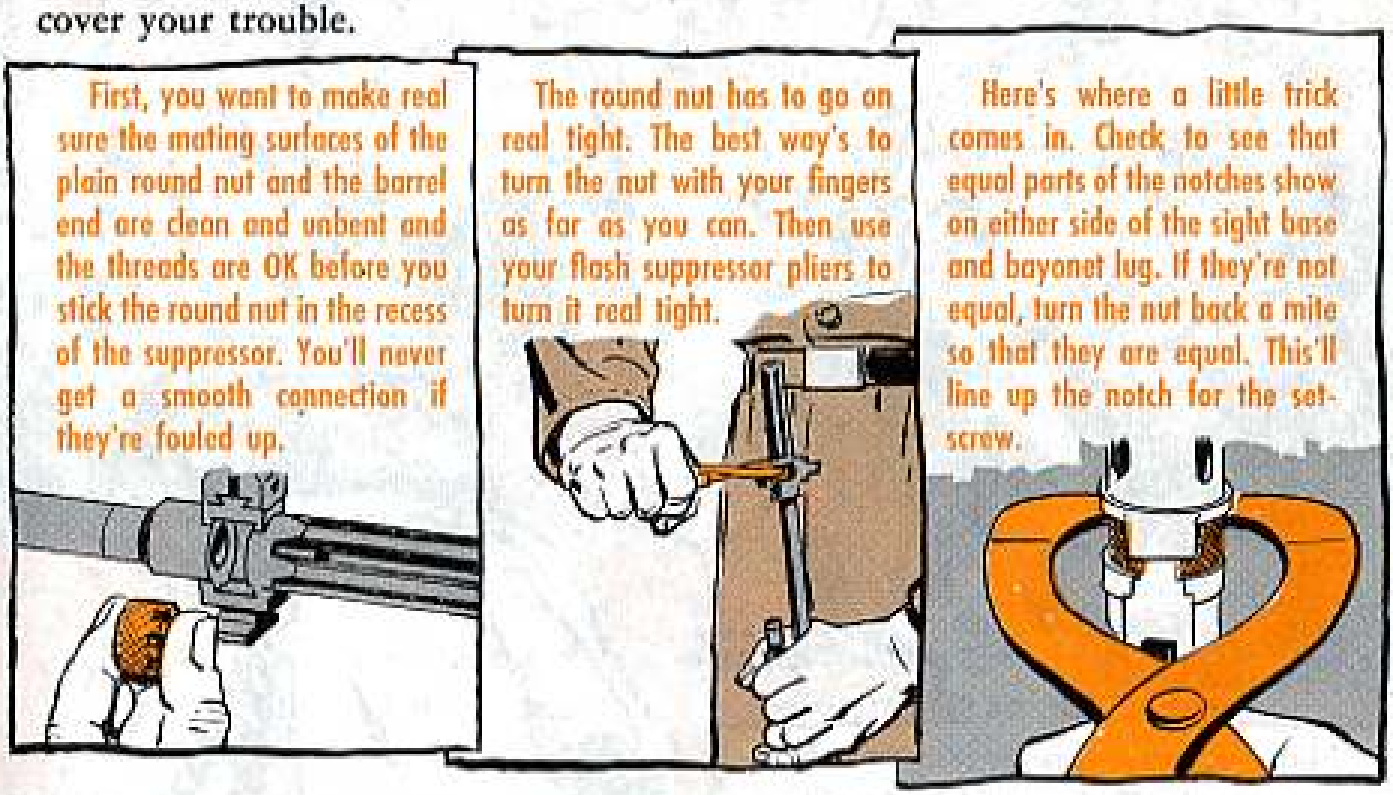
There's no doubt about it . . . you've got to have the Operator's Manual (-10 TM, or it could be -12, -13, -14 or -15 TM) on or with your equipment. AR 310-3 (Mar 62) says so when it talks about the Basic Issue Item List on page 58.2: "Items listed quantitatively (in the BIIL) are required for stockage by the operator." That operator's manual is listed in most BIIL's, so, if you don't have it, get in an order on DA Form 17.

M14 FLASH SUPPRESSOR . . .

ON RIGHT . . . STAYS TIGHT

Getting any gripes these days about loose or misalined flash suppressors on your unit's M14 rifles?

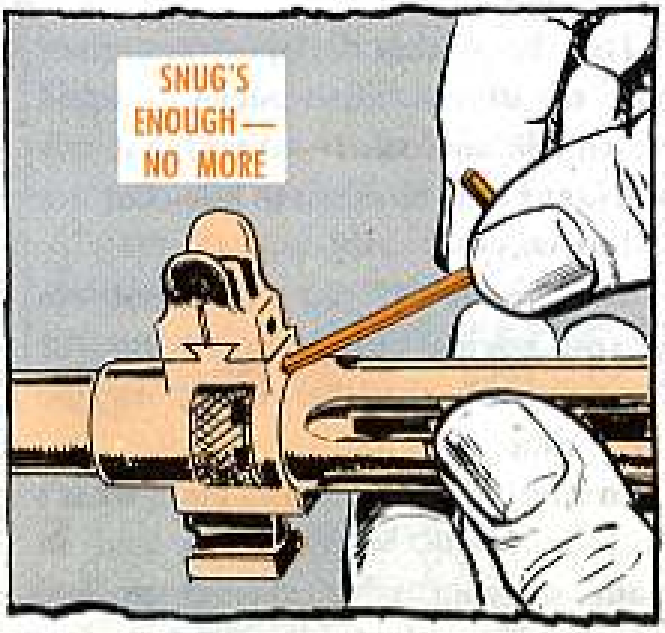
Maybe a look-see at how you go about installing the suppressors would uncover your trouble.



Now try to wiggle the suppressor. It shouldn't move. If it does, you either didn't get the round nut tight enough or some part's damaged. Keep at it till you get it tight.

Once it's tight, be sure you're locking it right. After you get the suppressor tight, insert the setscrew below the sight and tighten it with your 1/32-in socket-head screw key till it's just snug. Snug's enough. Any more pressure than that could ream out the hexagon head of the screw or strip the thread—and leave you with a big problem next time you try to remove it.

A flash suppressor that's put on right hardly ever comes loose.



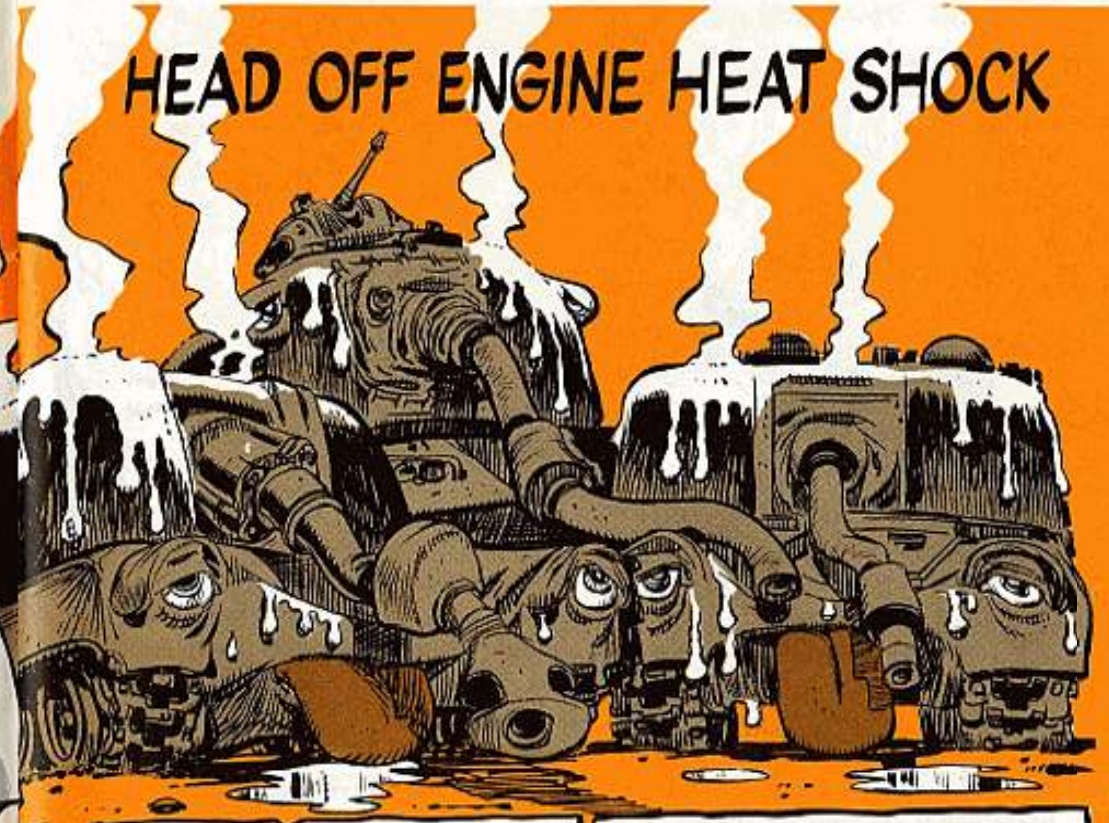
Many drivers wonder why it's necessary to cool off their vehicle's engine by idling 'er a coupla minutes or so after a hot run.

They know that the operators' manuals on almost all vehicles — liquid cooled and air cooled — direct that this wee bit of time be taken to idle-cool 'em — but why?

The answer: If you don't cool 'em off, the engine can go into a case of thermo-shock that'll ruin an engine every time.

In a liquid-cooled engine, like what's in your M108/M109 SPH's and in many of your wheeled and tracked vehicles, if you don't idle-cool 'em after

HEAD OFF ENGINE HEAT SHOCK



a "hot" run the heat that's left in the engine's block will shoot on thru to the engine water jackets and turn the water to steam. That's when the trapped heat in the block does the dirty-work.

It can crack or warp a head, or valves, ruin a head gasket and carbon up the rings. On a diesel engine, like the GM 8V71T, it can cause the fuel injection nozzles to plug up.

The same damage holds true with air-cooled engines. Without a flow of cooling air it can go into the same type of thermo-shock.

When possible, it's a good idea to idle the engines at even a slower speed than what's called out in the TM's . . . just as long as the engine doesn't labor. On combat vehicles like the M108/109, and others, idle 'em at 1000 RPM. The time usually varies from 2 to 5 minutes. Always try and idle it the maximum time but never cut it short of the minimum time.

PSSST... GOTTA M107-M110?

How is your M110 8-in howitzer or M107 gun like a pretty girl?

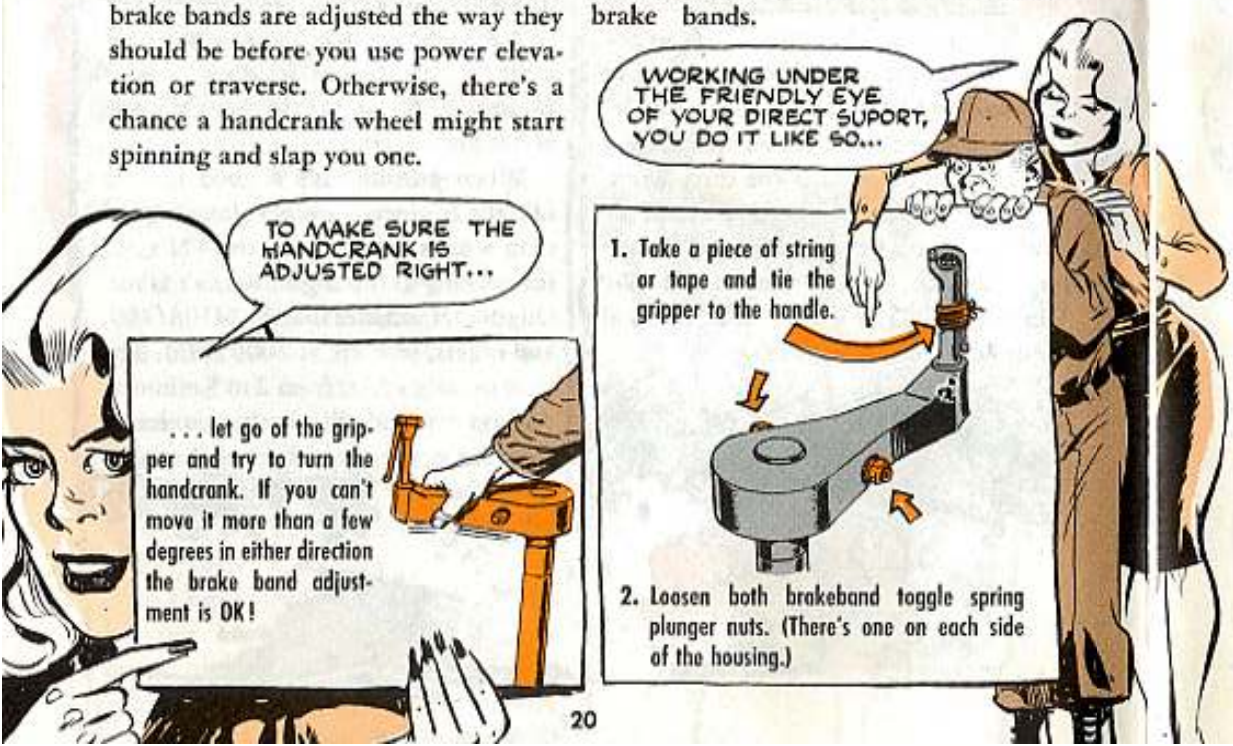
Answer. If you don't handle it right you might get slapped.

With the girls we can't help you but with the SP hardware there is an easy way to keep yourself slapless.

Always be sure your manual elevation and manual traversing handcrank brake bands are adjusted the way they should be before you use power elevation or traverse. Otherwise, there's a chance a handcrank wheel might start spinning and slap you one.

Now when you go into power operation the manual handcranks should stay put and not slap at you—unless a handcrank brake band fails. This shouldn't happen if the handcrank brake bands are checked and adjusted now and then.

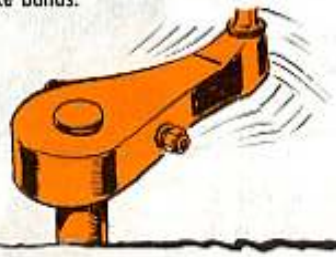
No sweat to adjusting the manual elevation and traversing handcrank brake bands.



HERE'S A HANDY HAND-CRANK HINT

3. Working with one side at a time, use an allen wrench to tighten the toggle spring plunger (also called a toggle pin) until the brake band it controls is locked.

4. Loosen the toggle spring plungers, one at a time, until the handcrank will turn freely in the directions controlled by both brake bands.



5. Leaving the toggle spring plungers in that position, retighten the brakeband toggle spring plunger nuts.

After you cut the string or tape to put the gripper back in operation, test your adjustment.

Holding gripper and handle together you should be able to move the handle freely in either direction and it should elevate (or traverse) evenly and smoothly. Holding the handcrank handle but not the gripper, you should not be able to turn the handcrank more than a few degrees in either direction.

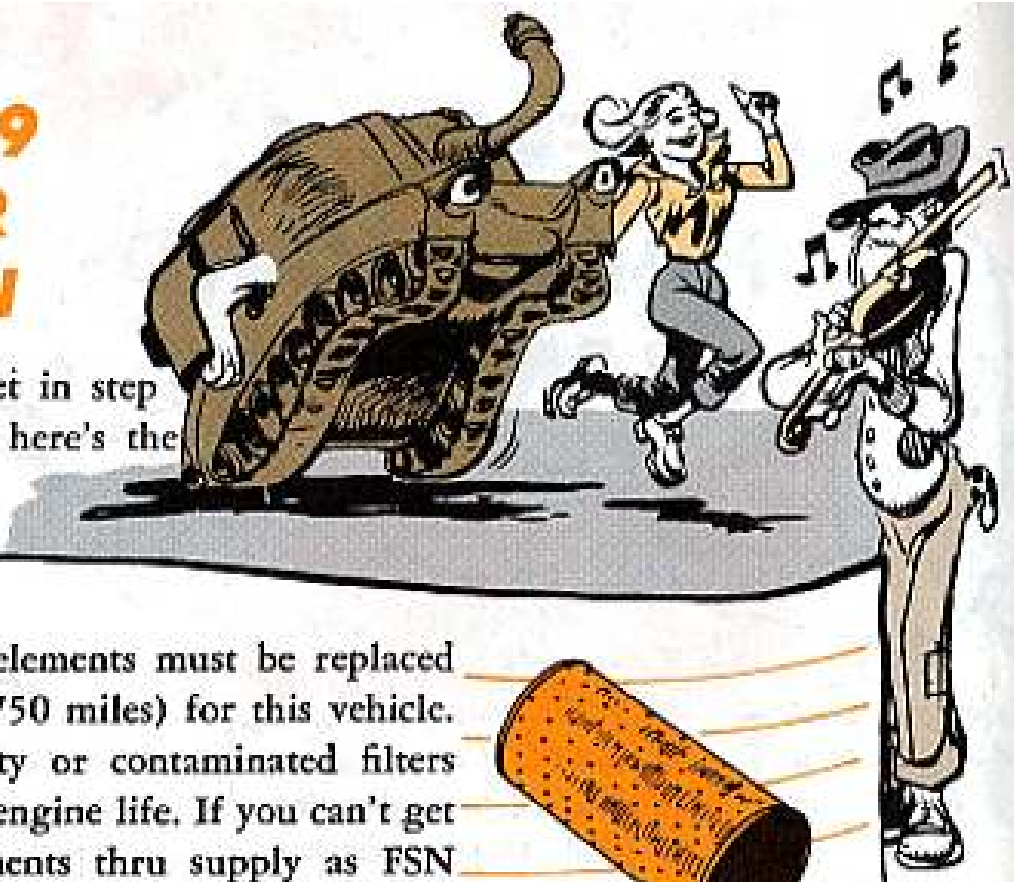
Brake bands adjusted right on your manual elevation and traverse handles are a real safety factor.

Another safety rule—you gotta watch that pistol or cartridge belt when you're working around your M107 or M110 vehicle because it's easy to get the belt caught on the handcrank gripper. If the weapon is in power elevation or traverse when this happens you could get slapped.

A modification work order is in the mill to replace the brake band type of elevating handcrank with an improved handcrank that has a torque lock . . . but for now, play it safe and make sure your brake bands are adjusted right.

M108—M109 HOWITZER HOEDOWN

Just so everybody can get in step on this howitzer hoedown, here's the latest words and music . . .

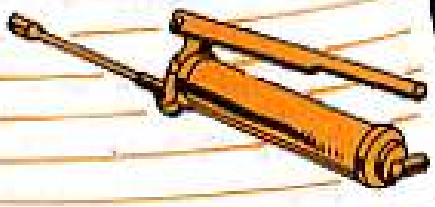


FIRST CHORUS

Engine oil filter elements must be replaced quarterly (or after 750 miles) for this vehicle. Operating with dirty or contaminated filters will cut down your engine life. If you can't get these oil filter elements thru supply as FSN 2940-555-6348 you can buy 'em on the local market, Mfg. No. PF 132, at two bucks each.

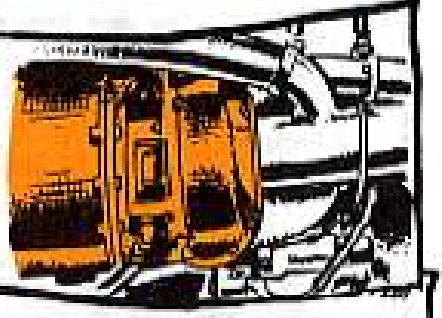
SECOND CHORUS

A new, high-pressure (10,000 PSI) grease gun is stocked for track adjustment on these vehicles. Get it from supply under FSN 4930-766-3545.



THIRD CHORUS

The engine turbo-charger is now available in supply and the number is FSN 2990-736-3576.



LAST CHORUS

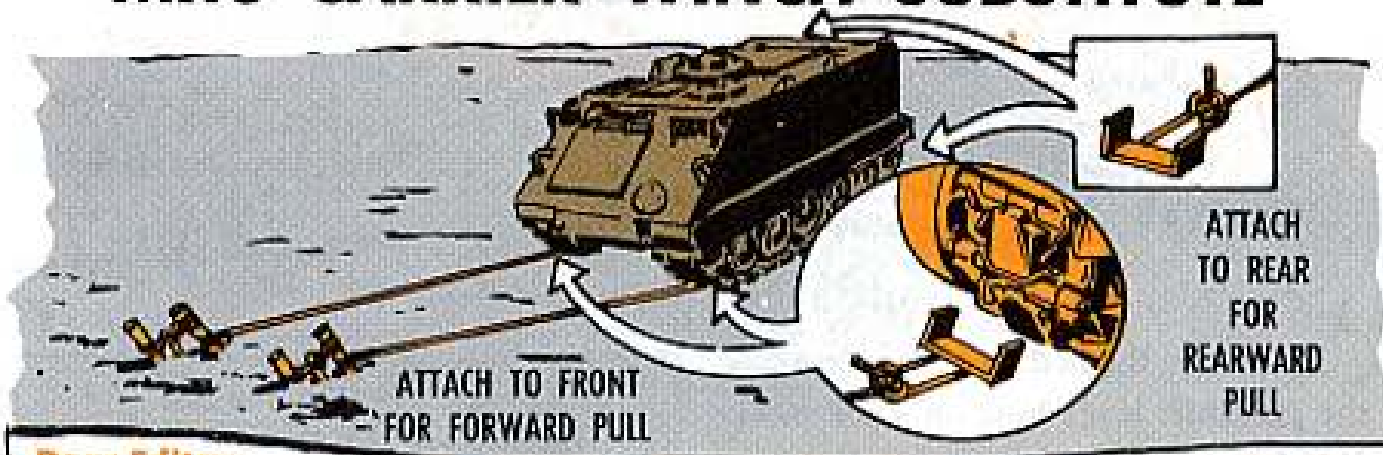
An improved rectifier blower fan motor is coming into the supply system. This motor is in the rectifier fan motor replacement kit which you order as FSN 2590-900-8311. Since the new motor is slightly larger it is installed differently. Go by the instruction sheet included in the kit. With the new motor you don't need the circuit breaker listed as Item 13 of Fig. 57, page 75 of TM 9-2350-217-25P/1 (Jan 65). The circuit breaker and its bracket (Part No. 10925824) as shown in the figure are not needed.

CIRCUIT BREAKER

BRACKET

NOT NEEDED WITH NEW MOTOR

M113 CARRIER WINCH SUBSTITUTE

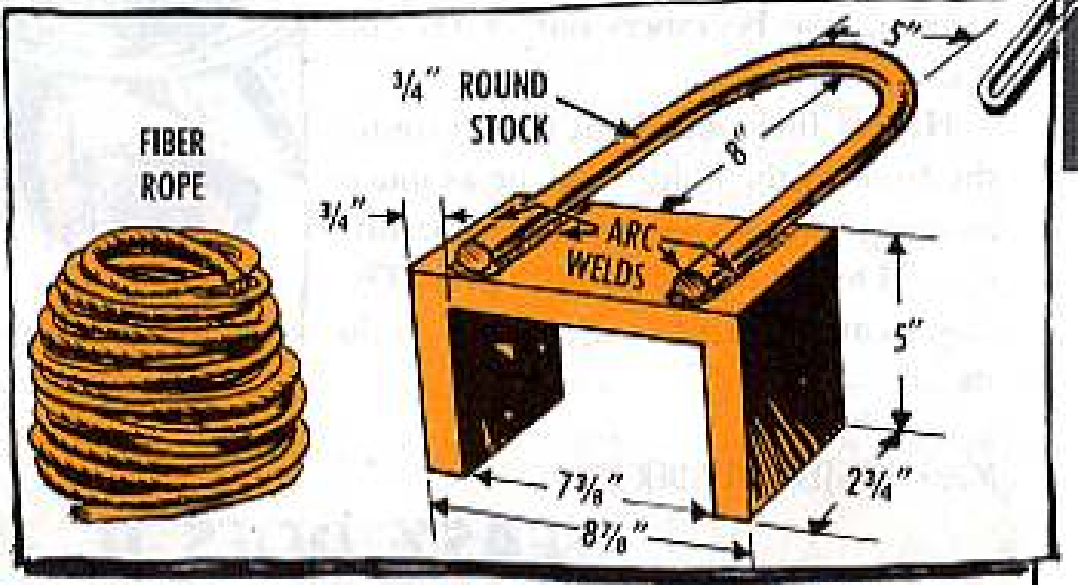


Dear Editor,

A self-recovery capability would be very handy for M113 personnel carriers operated in terrain with steep, slippery banks and plenty of mud holes.

Here's a track anchor I have developed to do the job.

Using salvaged metal, a welder should be able to turn out a pair of these anchors real fast.



The only other things you need are two 100-ft lengths of one-inch fiber rope.

You can pull yourself out either frontward or rearward.

Your anchors disconnect automatically after you've gone a vehicle's length. If you have to repeat after you've moved the vehicle its own length, untie the anchors and retie them to the ropes with a half-hitch. The first vehicle length of rope will now be under the track but that won't matter.

You can go on like that, retying the anchors as needed until you get back to solid footing.

If there's no tree or other solid object to attach your ropes to, use one of the methods it tells about in pages 41-49 of your FM 20-22 (Oct 62) on vehicle recovery operations..

If you have to operate in sticky-type real estate, these anchors could save your assets.

Floyd W. Grensing
Fort Knox, Kentucky

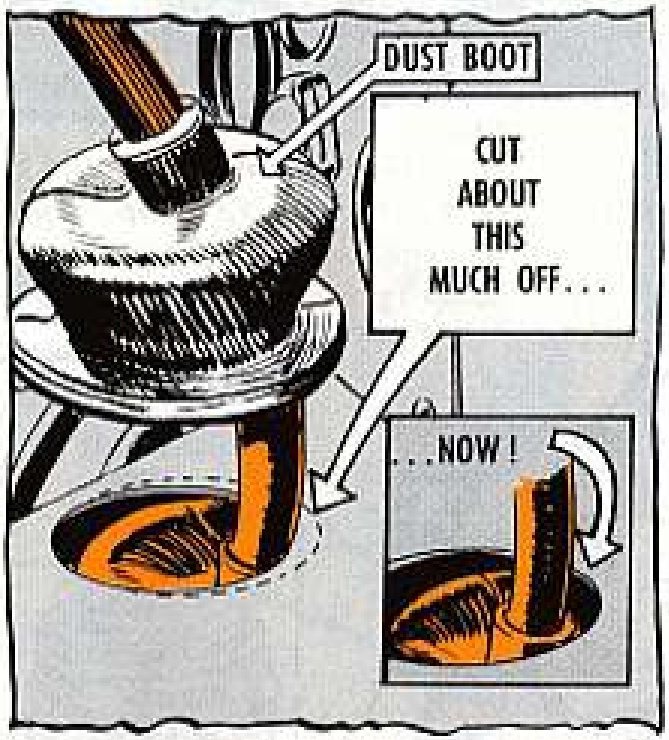
(Ed Note—Simple, fast and efficient! This won't solve all recovery problems but it should be useful in many cases.)

M151 ¼-TON TRUCK . . .

HOLE TOO SMALL?

Like a tire that's flat only on one side, the gearshift lever hole on some newer M151 ¼-ton trucks is too small on one side. The room you need is on the back side, because the hole's not lined up right for the gearshift lever. So the lever bangs against the front of the hole, chewing the bejabbers out of the top dust cover.

Have a little metal cut from around the front of the hole—maybe as much as a quarter-inch—and your gearshift lever'll have enough room to play. The dust boot'll still fit snug enough to do its job.

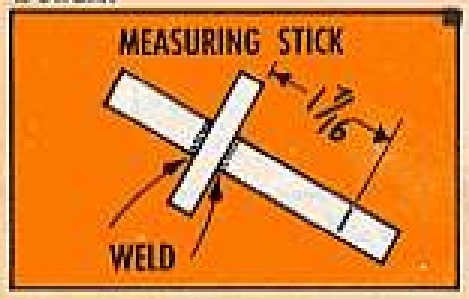


M151 MASTER CYLINDER . . .

EASY DOES IT

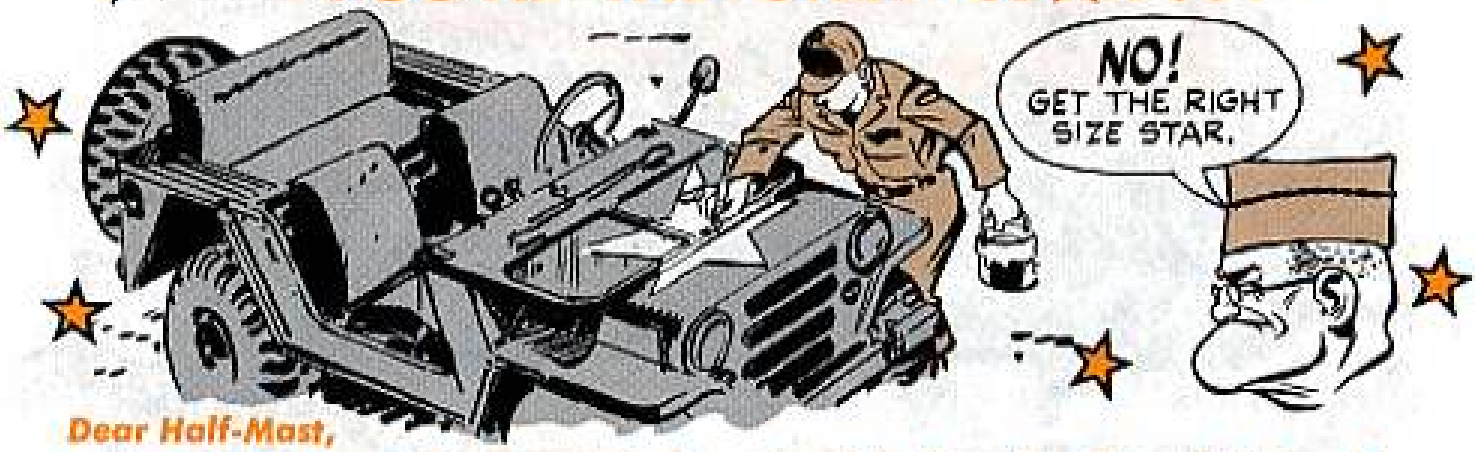
A 90-lb weakling has enough muscle to tighten the master brake cylinder plug on an M151 ¼-ton truck—because the plug doesn't have to be any tighter than just snug.

There's no pressure against the plug—it's just a cover for a reservoir. If you wrench the plug down too tight, it can bust then or when you're trying to break it loose later. So save your muscle for the beach.



And on adding hydraulic fluid to the brake system, whether you go by the TM or the LO, it boils down to this: Fill to 1 1/16 inches from the top of the filler opening—no more, no less. With a couple little pieces of metal soldered or welded together, you can come up with a simple measuring stick.

"YOU'RE THE ONLY ST★R . . ."



Dear Half-Mast,

I'm seeing stars like I was hit by a boxful of national symbol decals! What's the right size star for the M151 ¼-ton truck hood?

TB 746-93-1 (Oct 64) says the star will be "as near as possible to the center" of the location chosen. Then it says the star "will not be applied in a location where it will, in normal usage, be obscured by . . . windshields . . ."

The star's supposed to be "the largest size practical for use in the available space," and Table A of Appendix I recommends the 20-in size.

We've got three different sizes in our battalion, all backed up in some way by the TB, but only the smallest of the three misses being partly covered when the windshield's folded down. How about settling the argument?

MSgt T. B. H.

Dear Sergeant T. B. H.,

The 12-incher is the right star, because it's the biggest that won't be overlapped by the windshield. The TB gives "recommended" sizes, leaving room for judgment under different conditions.

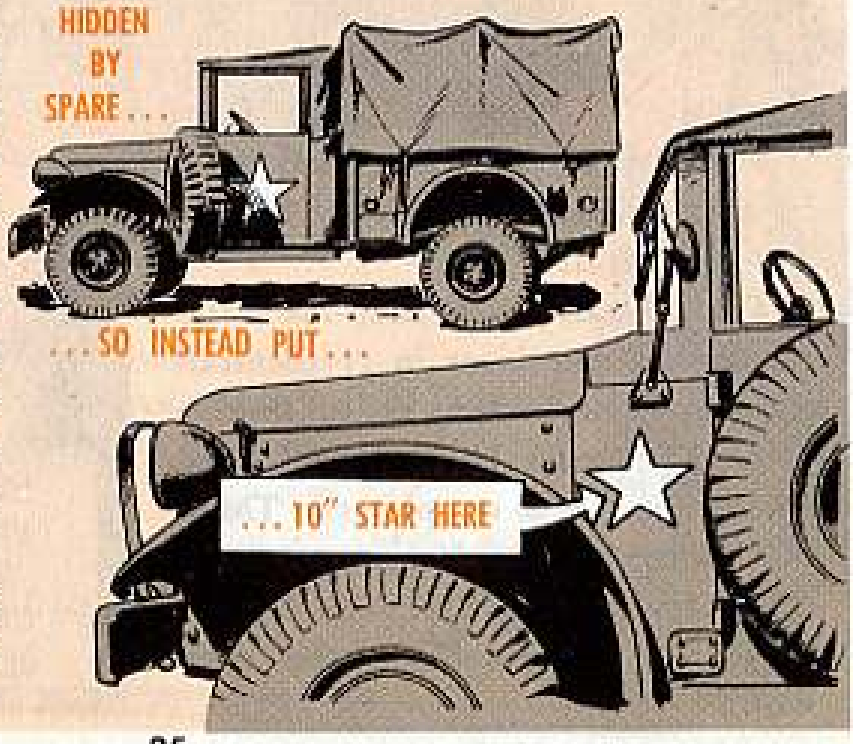
Half-Mast

10-IN STAR ON LEFT

What good is a National Symbol hidden under the spare wheel on the M37B1 ¾-ton truck? No good—that's why the star doesn't go there.

You put a 10-in star on the left side of the M37B1. It goes on the side panel just ahead of the door. Position the star so it misses the knock-out for the cold weather kit hose.

A 16-in star goes on the right door just like TB 746-93-1 says.



Dear Half-Mast,

How many hot patches can we have on an inner tube before it's considered unserviceable for a tactical vehicle? The story around here is that three is the limit. Is this right?

CWO C. J. B.

Dear Mr. C. J. B.,

No. As long as an inner tube has been repaired and checked out by your direct support as being serviceable, it's OK to use it regardless of the number of patch repairs.

Half-Mast

G749-SERIES TRUCKS . . .

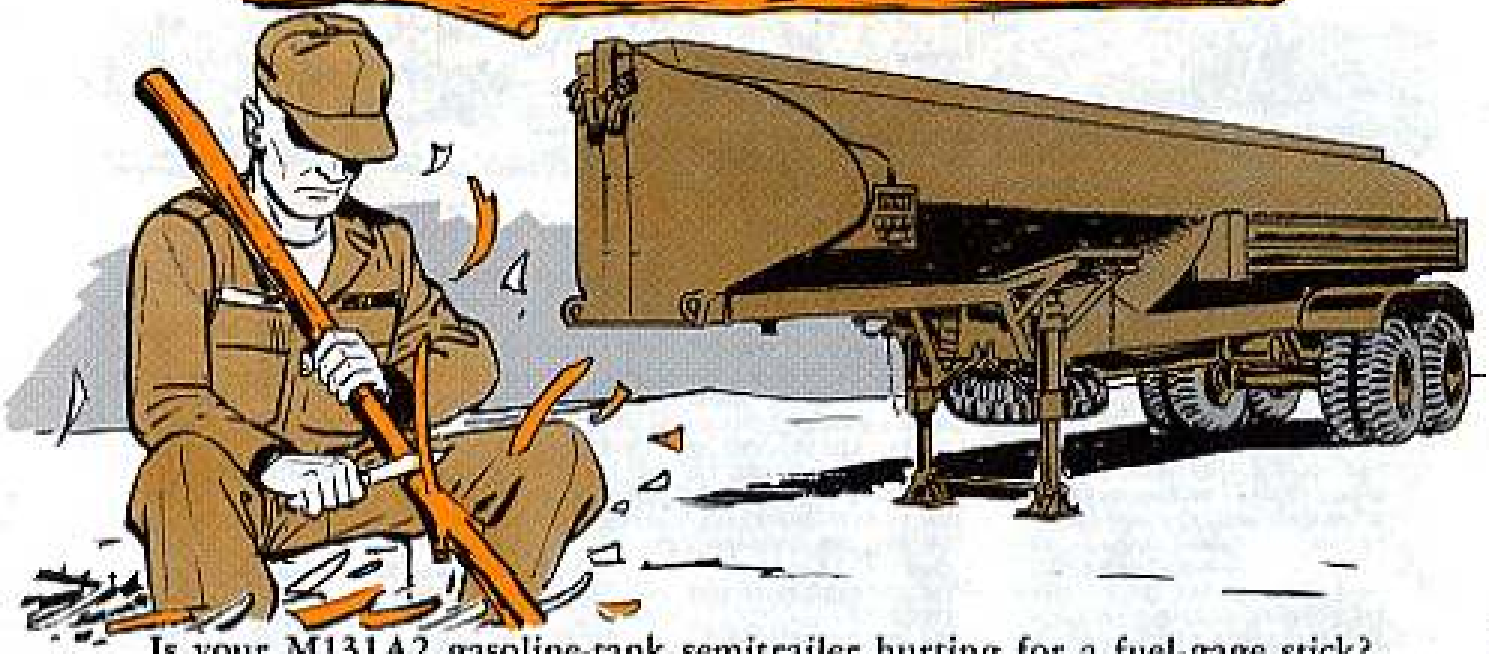
HYDRA-MATIC OIL LEVEL

Think of "L" for "latest" and you'll be on the right track with LO 9-2320-210-12 (Dec 62).

The LO tells you to keep the transmission selector lever in N (neutral) position when checking the oil level in your G749-series Hydra-Matic truck. Close your eyes to the places in TM 9-8024 (Oct 55) where it says to make the check in a different way.

Neutral is the word—the latest word.

STUCK FOR A STICK?



Is your M131A2 gasoline-tank semitrailer hurting for a fuel-gage stick?

Change 1 (Jun 62) to TM 9-2330-208-15 lists the 70-in measuring stick under FSN 2540-678-5363, but chances are you may not be able to get it right off the supply shelf. Since this vehicle was down-classified to Standard C, replacement parts consist of on-hand parts only . . . and the measuring stick has been long gone.

If you can't get a stick through cannibalization, have your support supply people buy it under Army Part Number 8360470, direct from the Hiel Co., 3000 W. Montana St., Milwaukee, Wis. AR 715-30 authorizes procurement of civilian off-the-shelf type items.

M543 HOIST CABLE

Need to replace your M543 wrecker's hoist cable and clevis assembly?

If so, have your support requisition—Wire, rope, steel, ½ inch, 6x19, 300-ft reel, FSN 4010-285-4208, or Wire, rope, steel, ½ inch, 6x19, 600-ft reel, FSN 4010-285-4209. The wire rope is a GSA item.

You'll need a length of 95 feet and 5 inches.

The 300-ft length reel FSN is listed in TM 9-2320-211-35P (May 64). It's the same rope that's listed for the M62 and M246 wreckers.

The Clevis Assembly, wire rope, (boom hoist cable anchor), comes under FSN 4030-961-9781. It's listed in supply catalog C4000-IL-A (1 Dec 65).

A selected list of recent publications of interest to Organizational Maintenance Personnel. This is a list compiled from recent Adjutant General's Distribution Center Bulletins. For complete details see DA Pam 310-4 with latest changes.

TECHNICAL MANUALS

TM 1-1H-34A-1046, C1, Nov, CH-34.
TM 5-2410-209-12, Sep, Tractor, Full Trkd, Low Speed; W/Bulldozer, Hydraulic Tilting W/Backrip, Scarifier; W/Winch, (Allis-Chalmers Mdl HD16M) W/Ripper, Hydraulic, (Allis-Chalmers Mdl HD16M).
TM 5-2805-206-24P, Oct, Eng Gas Mil Std (1A08-1, -A08-2, 1½ hp; 2A016-1, 2A016-2, 3 hp).
TM 5-3431-216-25P, Aug, Welding Machine, Arc Gen, Gas Driven 300 AMP, 115V, DC, 3KW, Skid Mtd (Hornischfeger Mdl Weg 300 S).
TM 9-1005-243-12, C4, Oct, M6.
TM 9-1005-262-15, Aug, XM23, XM24.
TM 9-1430-250-15P/21/1, Oct, Nike-Herc, Nike-Herc (Imp).
TM 9-1430-505-15P/1, Sep, Hawk.
TM 9-1430-510-15P/1, Sep, Hawk.
TM 9-1430-512-15P/1, Sep, Hawk.
TM 9-1450-376-15P/1, Oct, Pershing.
TM 9-2330-211-24P, C1, Oct, G744 series 5-ton truck.
TM 9-2350-222-25P, Oct, Vehicle, Combat Engr, Full Trkd: T118E1 W/E (2350-795-1797).
TM 9-4935-253-15P/1/1, Sep, Nike-Herc, Nike-Herc (Imp).
TM 9-4935-253-15P/2/1, Sep, Nike-Herc, Nike-Herc (Imp).
TM 9-4935-274-15P/1/1, Sep, Nike-Herc, Nike-Herc (Imp).
TM 9-4935-375-15P/1, Oct, Pershing.
TM 9-4935 378-15P/2, Sep, Pershing.
TM 9-4935-507-15P/1, Sep, Hawk.
TM 9-6930-200-14, Nov, Trkd Veh Driving, Trainer M34, Including Repair Parts List.
TM 10-500-22, Oct, Airdrop of Supplies and Equip Rigging M56, SP Full-Trkd 90-MM Gun.
TM 11-5820-401-10, C4, Nov, AN/VRC-12 Series Radio Sets.
TM 21-305, Nov, Wheel Vehicle Driver's Manual.
TM 55-1510-204-10CL, Oct, OY-1.
TM 55-1510-204-20, C2, Oct, OY-1.
TM 55-1510-206-20, Aug, CY-2.
TM 55-1520-209-20, C3, Nov, CH-47.
TM 55-1520-209-20PMI, C1, Nov, CH-47.
TM 55-1520-209-20 PMP, Nov, CH-47.
TM 55-1520-211-20P, C1, Nov, UH-1.
TM 55-6930-201-25P, Oct, Flight Simulator.

MODIFICATION WORK ORDERS

MWO 9-1100-227-20/2, Oct, Wpns System, OP/ORG Maint, ADC XM55 (TADM), UFD XM41, (Normal)
MWO 9-1190-233-20/2, Dec, Wpns System, OP/ORG Maint, Pershing. (Normal)
MWO 9-2300-219-20, Nov, Tank, Combat, Full Trkd, M48 Series, M60, M60A1 and M103, M103A1: Provide New Headrest to Alleviate Discomfort And Permit Use of New Helmet T-56-6 On Mount Periscope M102, M102A1; Periscope M24; And Range Finder M13, M13A1, (Normal)
MWO 9-2300-276-20/1, Oct, Tank, Combat, Full Trkd: 105-MM Gun, M60 and M60A1, and Tank, Combat, Full Trkd: 90-MM Gun, M48A3; Installation of Spring Tension Washers At Transmission Mount. (Normal)
MWO 9-2350-217-20/5, Nov, Howitzer, SP: M108 and Howitzer, Med, SP: M109: Realignment of Eng Sling Crossbeams. (Normal)
MWO 55-1510-201-20/1, Nov, U-8. (Normal)
MWO 55-1510-201-20/2, Nov, U-8. (Normal)
MWO 55-1510-206-20/3, Nov, CY-2. (Normal)
MWO 55-1510-206-34/12, Nov, CY-2. (Normal)
MWO 55-1510-206-34/63, Nov, CY-2. (Normal)
MWO 55-1520-202-20/1, Nov, CH-34. (Normal)
MWO 55-1520-206-34/12, C3, Nov, OH-23. (Normal)
MWO 55-1520-210-20/15, Nov, UH-1. (Normal)
MWO 55-1520-210-34/9, Nov, UH-1. (Normal)
MWO 55-1520-211-20/33, Nov, UH-1. (Normal)
MWO 55-2925-200-30/25, Dec, OH-23. (Normal)

REPRINTS

Listed here are older publications that are freshly available as a result of reprinting. Order copies on DA Form 17.

TECHNICAL MANUALS

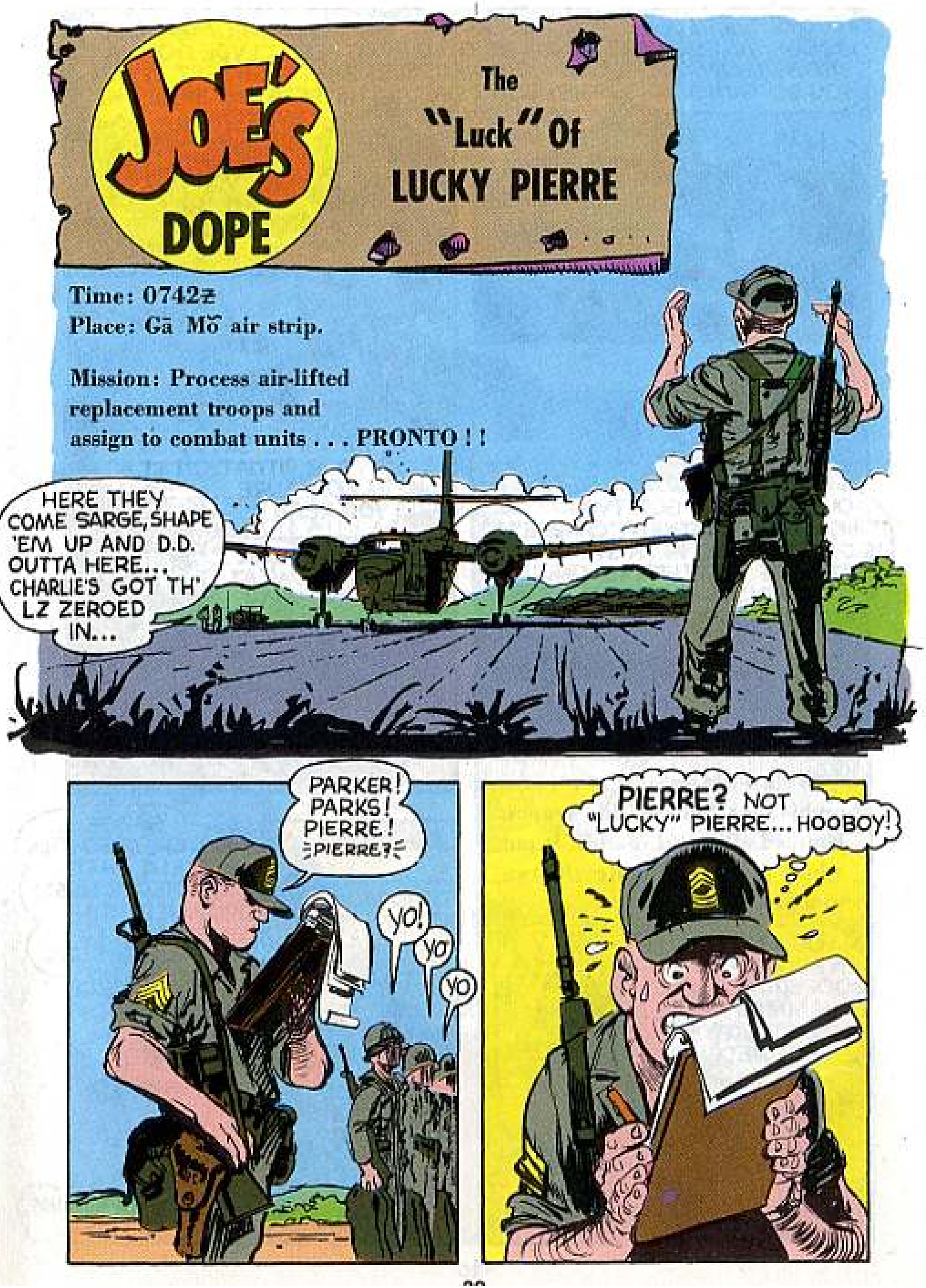
TM 9-243, Sep 60, Use and Care of Handtools and Measuring Tools.
TM 9-1005-243-12, Oct 63, XM3 Armament Subsystem.
TM 9-1095-202-10, Jul 62, Cal .30 rifle and Cal .30 MG, Fire Simulator.
TM 9-1430-250-12P/6, Oct 64, Radar Course (Nike-Herc).
TM 9-2350-213-20, Jun 58, M56 Antitank Gun, SP.
TM 9-2350-215-20, Oct 62, M60, M60A1 Tank.
TM 9-4935-461-15/3, Feb 65, ENTAC Power Supply.
TM 9-4935-461-15/4, Jan 65, ENTAC W/M22 Subsystem.

Wet But Dry

Are you expecting a brand-new M151 ¼-ton utility truck? Well, there's a batch being issued stateside with their dry-charged batteries in place but without the packaged electrolyte. If you get one of these you'll have to requisition the electrolyte to activate the batteries. Get Acid, Sulfuric electrolyte FSN 6810-249-9354; it's listed in TM 9-2300-223-20P (Oct 64). The M151's concerned were made under contract DA-20-113-AMC-02787(T)-Ford Motor Co.

Marking Vehicles and Equipment

You with aircraft fuel and oil dispensing vehicles and equipment had better grab your paint brush and get busy. Change 1 (Aug 65), to TB 746-93-1 (Oct 64), says the grade of fuel or oil will be marked on each side of the tank. Marking will be the same color as the registration number, and here are the sizes you use: semitrailers, 6 inches high; trucks, 4 inches high; and 2 wheel trailers, 3 inches high.


JOE'S DOPE
The "Luck" Of LUCKY PIERRE
Time: 0742≠
Place: Gā Mŏ air strip.
Mission: Process air-lifted replacement troops and assign to combat units . . . PRONTO ! !
HERE THEY COME SARGE, SHAPE 'EM UP AND D.D. OUTTA HERE... CHARLIE'S GOT TH' LZ ZEROED IN...
PARKER! PARKS! PIERRE! =PIERRE?=
YO!
YO
YO
PIERRE? NOT "LUCKY" PIERRE... HOOBOY!


LOOKEE HERE, LUCKY! I KNOW YOUR RECORD. ...NOW, IN MY OUTFIT YOU GO GUNG HO!
NO SWEAT, DAD! YOU'LL BE GLAD, FOR I'M A WINNER, SEE! THEY DON'T CALL ME LUCKY F'R NAUGHT!
HEH, HEH... MAN THAT THERE CLYDE GONNA BUST A GUSSET WHEN HE SEES ME BEAT THE SYSTEM.
. . . Well, that was it, I thought . . .

. . . But Pierre had other ideas.
OUT HERE YOU GOT TWO THINGS TO SWEAT OUT. "CHARLIE" IS ONE AND TWO IS TH' WEATHER. BOTH ARE TREACHEROUS ON YOU AND Y'R WEAPONS.
PIERRE! BETTER SHAPE UP Y'R RIFLE SAVVY OR ELSE YOUR SITUATION 'LL BE No. 10 FOR SURE... YOU READ?
DON'T SWEAT IT, SARGE.


Well, I did sweat it . . . 'cause on his first "outing" his weapon jammed after two rounds. It put a hole in our cover. Result: two wounded . . .
YOU CALL Y'R SELF AN ARMORER? YA GOOFED MY RIFLE... IT JAMMED ON ME! ALMOST GOT ME ZAPPED.
?
Later . . .
SARGE... I CHECKED THIS M14. THAT FINK PIERRE MUSTA DROWNED IT IN LINSEED OIL! MOVING PARTS ARE GUMMED UP.
IT'S HAPPENING.


Yessir! Lucky Pierre soon conned a buddy into cleaning his weapon for inspection . . .
THESE PEARLS ARE PRICELESS!
OK, OK, I'LL DO IT!
I couldn't stand it any longer, so I . . .
PIERRE, LET ME CLUE YOU ON A FEW TIPS ON RIFLE CARE... IT MIGHT SAVE YOUR LIFE.
DAD! YOU ARE TALKING TO LUCKY PIERRE!
OVERLUBE IS MURDER! DUST 'N' LUBE MEANS STICKY PARTS... COVER Y'R ACTION WITH A SMALL RAG...IT KEEPS OUT DIRT 'N' BUGS...
SWEAT CORRODES METAL— SO WATCH IT...KEEP WOOD IN SHAPE WITH LINSEED OIL... MAKE SURE YOU ASSEMBLE CORRECTLY...'N' DON'T SWAP PARTS...BECAUSE EACH PART WEARS DIFFERENTLY... GOT THAT?
TRY TO KEEP YOUR WEAPON DRY... OUT HERE IT MAY BE TOUGH...BUT TRY... CLEAN MUD OFF AS SOON AS POSSIBLE...CHECK YOUR WEAPON EVERY SPARE MOMENT YOU GET... YOU BETTER BE SURE WHEN YOU HOLD AND SQUEEZE!
From the look on Lucky's face however, it was a toss-up as to how much I sold.

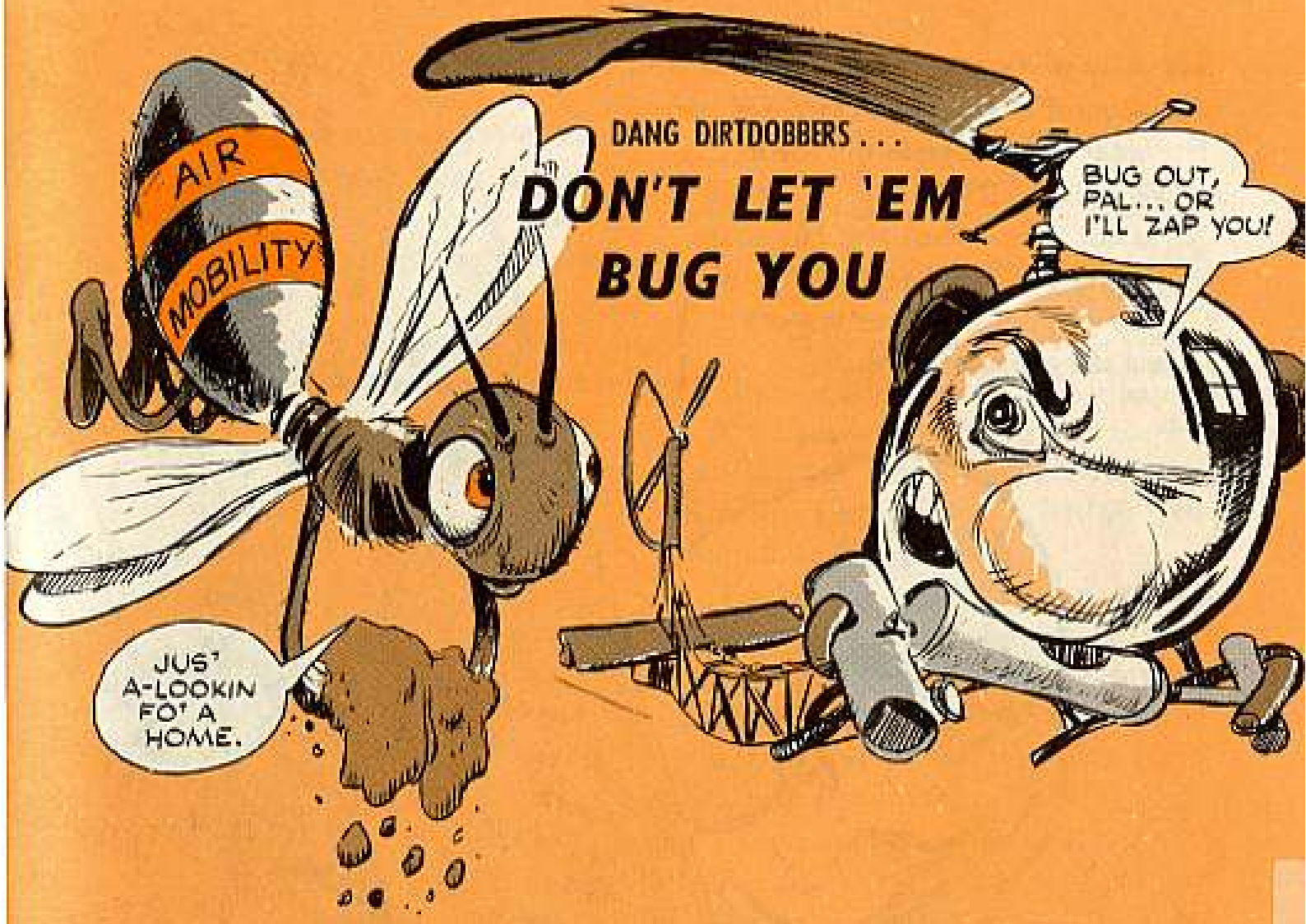
IF YOU WANT TO DISPLAY THIS CENTERPIECE ON YOUR BULLETIN BOARD, OPEN STAPLES, LIFT IT OUT AND PIN IT UP.

That night we got a taste of the monsoon. As soon as it stopped . . . the patrol naturally stripped 'n' cleaned their weapons and gear . . . by 0550 they were ready to go.

Pierre's weapon failure landed me here.

DANG DIRTDOBBERS . . .

DON'T LET 'EM BUG YOU



The Sioux (OH-13E) came in for a perfect landing. The crew shut down the bird and got out. The mission was half over.

It was way out in the boondocks, and a little on the wet side, but not enough to affect operations.

Minutes later, a gremlin in the form of a dirtdobber began to investigate the sling-wing machine.

It spied the fuel tank vent pipe just inches above the damp ground and decided this pencil-size tube was just the right place for a new home.

No one noticed the frequent trips the insect made between a mud puddle nearby and the chopper, and before the crew was ready to buzz off again, the dirtdobber had his new home finished, and the tube plugged but good.

A little later—it was the Sioux crew that was nearly finished! On the return trip down they went in autorotation. The trouble—fuel starvation, caused by a vacuum in the fuel tank.

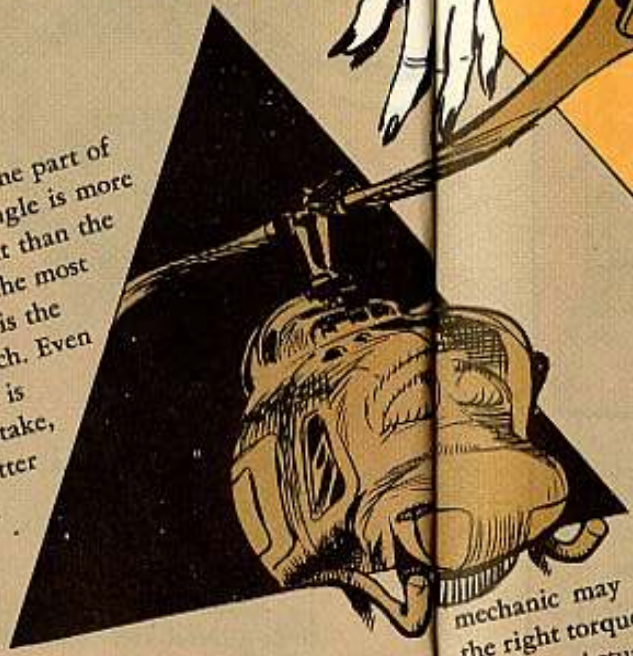
If you're operating in damp or wet areas, remember this little story. It's true! Keep a piece of wire handy for those boondock missions and get in the habit of checking the vent tube before takeoff to be sure it's free of stowaways.

It might prevent a classic bugaboo!

For want of a cotter pin the nut was lost.
For want of a nut the aircraft was lost.
For want of an aircraft the battle . . .
but hold one!!!
All is not lost— when you put your bird in the safety triangle by using the right nut, a torque wrench and the right cotter pin.

TRIANGLE OF SAFETY

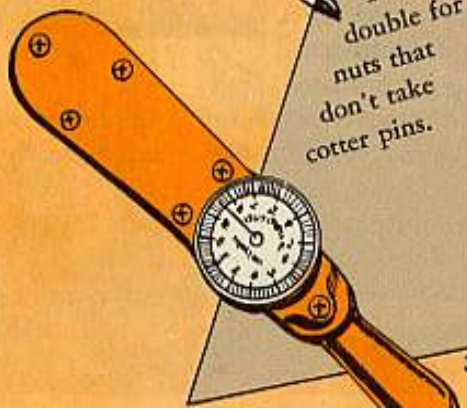
No one part of the triangle is more important than the other but the most overlooked is the torque wrench. Even if a cotter pin is left out by mistake, the nut has a better chance of staying put until the next Daily, if it's tightened right. This goes double for nuts that don't take cotter pins.

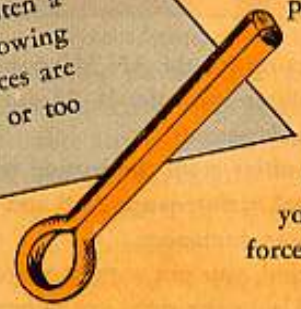


TORQUE ALL NUTS

All nuts have a torque value. Oh, you don't usually see it given in the text of your maintenance pubs. Torquing a nut is such a routine operation that all the torque values are put into a convenient table in the manual.

The trouble with a routine operation, like putting on a nut, is that a mechanic may think he's got "about the right torque" with his trusty socket wrench. Actually, nothing could be farther from the truth. You can prove it to yourself next time you tighten a nut with a socket wrench by following up with a torque wrench. Chances are you'll find it's either too tight or too loose.





FOLLOW THE SPECIAL TORQUES

'Course there's always an exception to a standard torque. This is a torque value put on a nut by the manufacturer and is given right in the text of the maintenance operation.

Let's take a f'rinstance. Say you're changing the main rotor hub and blade on a Huey (UH-1A, B).

The Caution on Page 8-15, Chapter 2, of TM 55-1520-211-20 (9 Apr 65)

says that you torque the pitch-link bolt nuts to a special value of 80-100 inch-pounds on the A Model.

You'll also notice that you should pull a special torque inspection of the newly-installed nut after the first 10 hours of operation. That's because this nut and bolt combination has a tendency to lose initial torque.

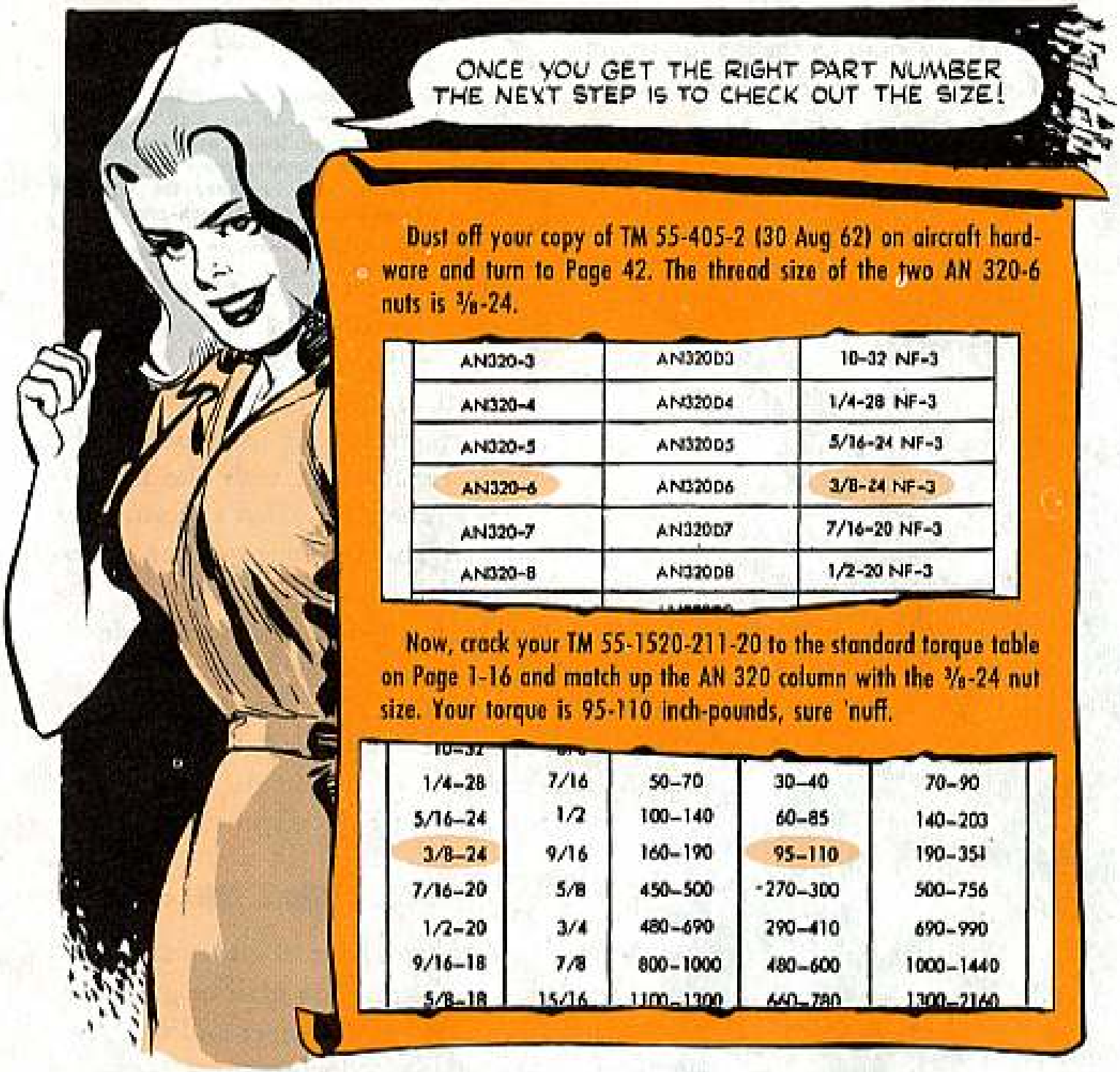
When you're changing the main rotor hub and blade on the B Model according to the poop on Page 8-15 of TM 55-1520-211-20, you'll notice that there's no special torque value on the pitch-link bolt nuts. So you use the standard torque table in the maintenance pub for this larger-size bolt and nut combination.

USE THE TORQUE TABLE

You don't have to eye a nut with a magnifying glass or guess the part number and size. One foolproof method is to check the parts pub, TM 55-1520-211-20P (24 Aug 65). This step pays dividends by giving you the right nut . . . beats forced landings caused by use of the wrong one.

25 MORE

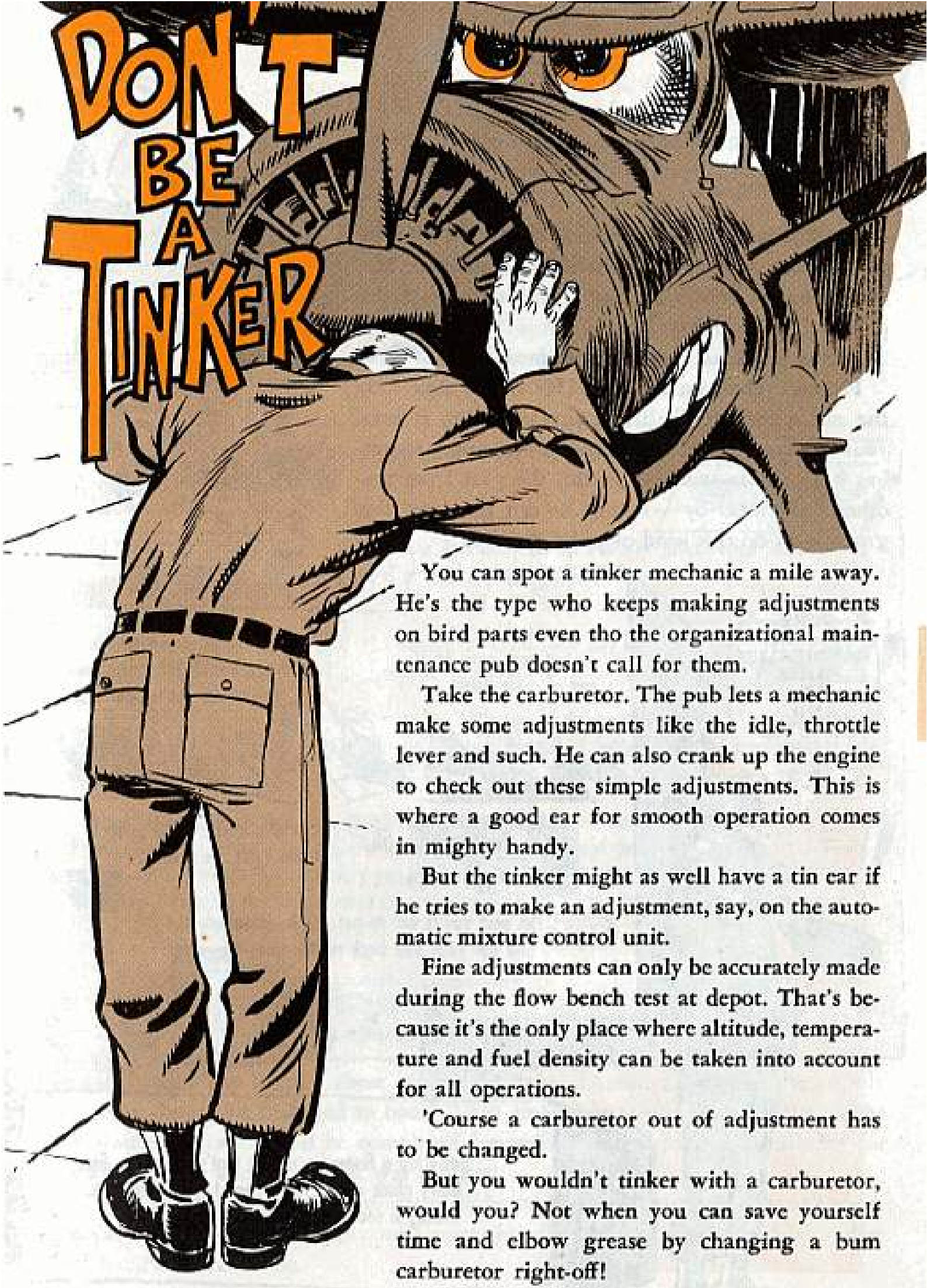
Figure 176, index numbers 7, 26 and 30 of the parts pub calls for nut, AN 310-4, for the A Model . . . no sweat since this baby has the special torque. For the B Model the three nuts are AN 320-6 and AN 310-6.



You follow the same set-up for the AN 310-6 nut . . . TM 55-405-2, Page 37. Match up the AN 310 column with the 3/8-24 nut size in the torque table and your torque is 160-190 inch-pounds.

Yessir, getting real familiar with the torque wrenches in your general mechanic's and organizational maintenance A, B and C tool kits is a sure sign that you're pulling top-drawer maintenance.

So-o-o-o . . . the next time you put a part on your bird be sure your bird's in the triangle of safety. Using the right nut (a new one at all control and other critical places), a torque wrench and the proper cotter pin or safety wire is all it takes.



You can spot a tinker mechanic a mile away. He's the type who keeps making adjustments on bird parts even tho the organizational maintenance pub doesn't call for them.

Take the carburetor. The pub lets a mechanic make some adjustments like the idle, throttle lever and such. He can also crank up the engine to check out these simple adjustments. This is where a good ear for smooth operation comes in mighty handy.

But the tinker might as well have a tin ear if he tries to make an adjustment, say, on the automatic mixture control unit.

Fine adjustments can only be accurately made during the flow bench test at depot. That's because it's the only place where altitude, temperature and fuel density can be taken into account for all operations.

'Course a carburetor out of adjustment has to be changed.

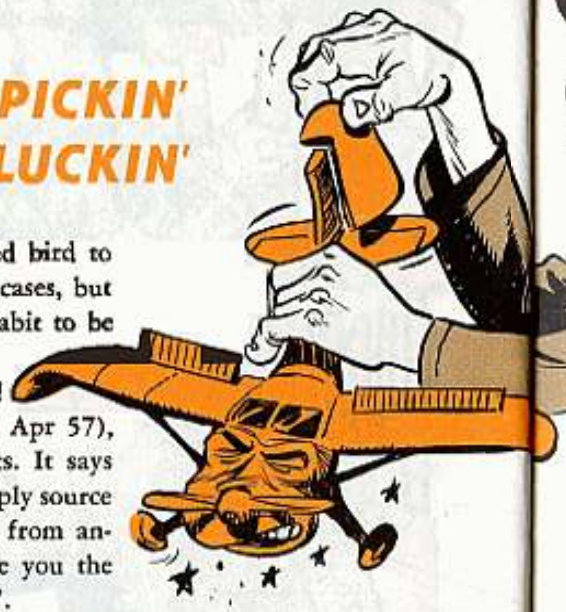
But you wouldn't tinker with a carburetor, would you? Not when you can save yourself time and elbow grease by changing a bum carburetor right-off!

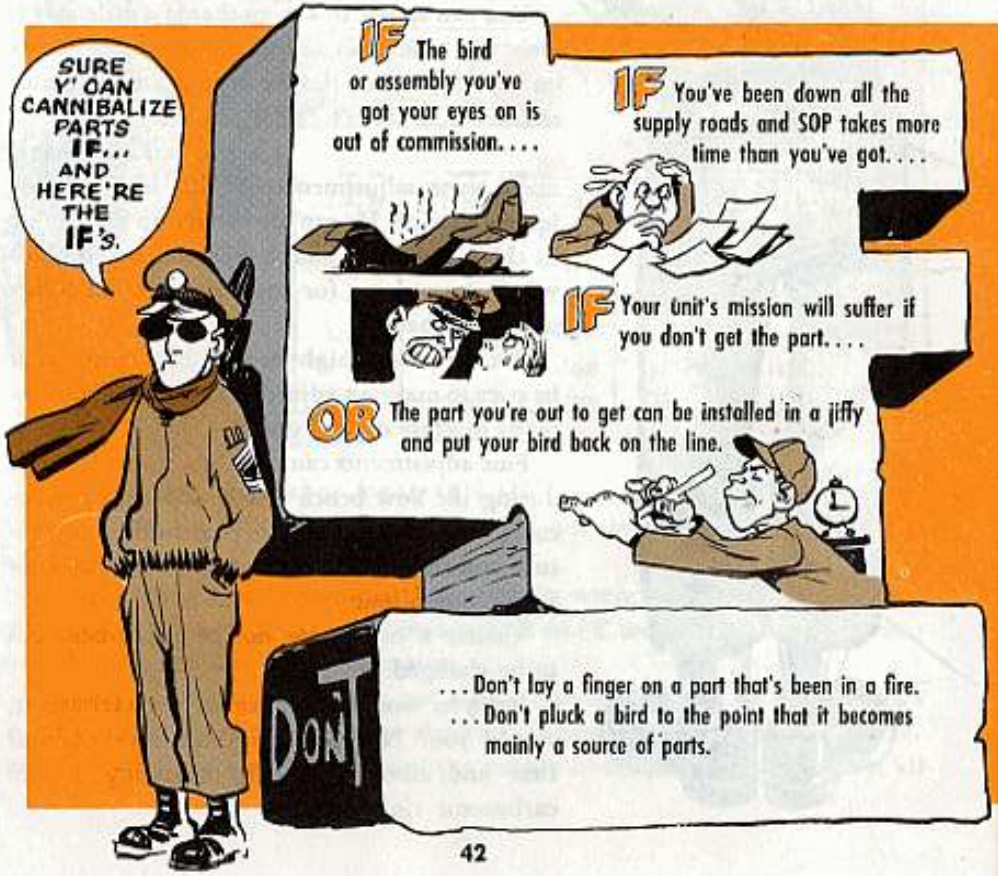
COTTON PICKIN' PARTS PLUCKIN'

Cannibalizing parts from one grounded bird to get another into the blue is OK in some cases, but even Murphy knows it's not a healthy habit to be gettin' into.

Fact is, it's a last resort supply measure!

Fix an eyeball on AR 750-1500-8 (10 Apr 57), the guide for cannibalizing aircraft parts. It says your CO has to be sure that every other supply source has been tried—such as gettin' the part from another outfit near-by—before he can give you the green light on this kind of parts snatchin'.





KEEP THE RECORDS STRAIGHT

There's no set practice for the pile of paperwork involved in cannibalizing, but it's mighty important to keep that paperwork straight.

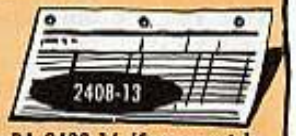
Generally speaking—

If you take the part off, you make an entry on the aircraft's DA Form 2408-13 (Aircraft Inspection and Maintenance Record) to show it's gone.

If you put it back on your bird, you make an entry on DA Form 2408-3 (Equipment Maintenance Record).

You make a date entry on DA 2408-14 (Uncorrected Fault Record) if the record of need for replacement was made there.

You make an entry on DA 2408-13—unless it was a same-day installation and did not affect the flight status of the aircraft.



You record the exchange of the part on DA 2408-16 (Component Installation and Removal Record) of both birds if the component is listed in TB AVN 23-65.

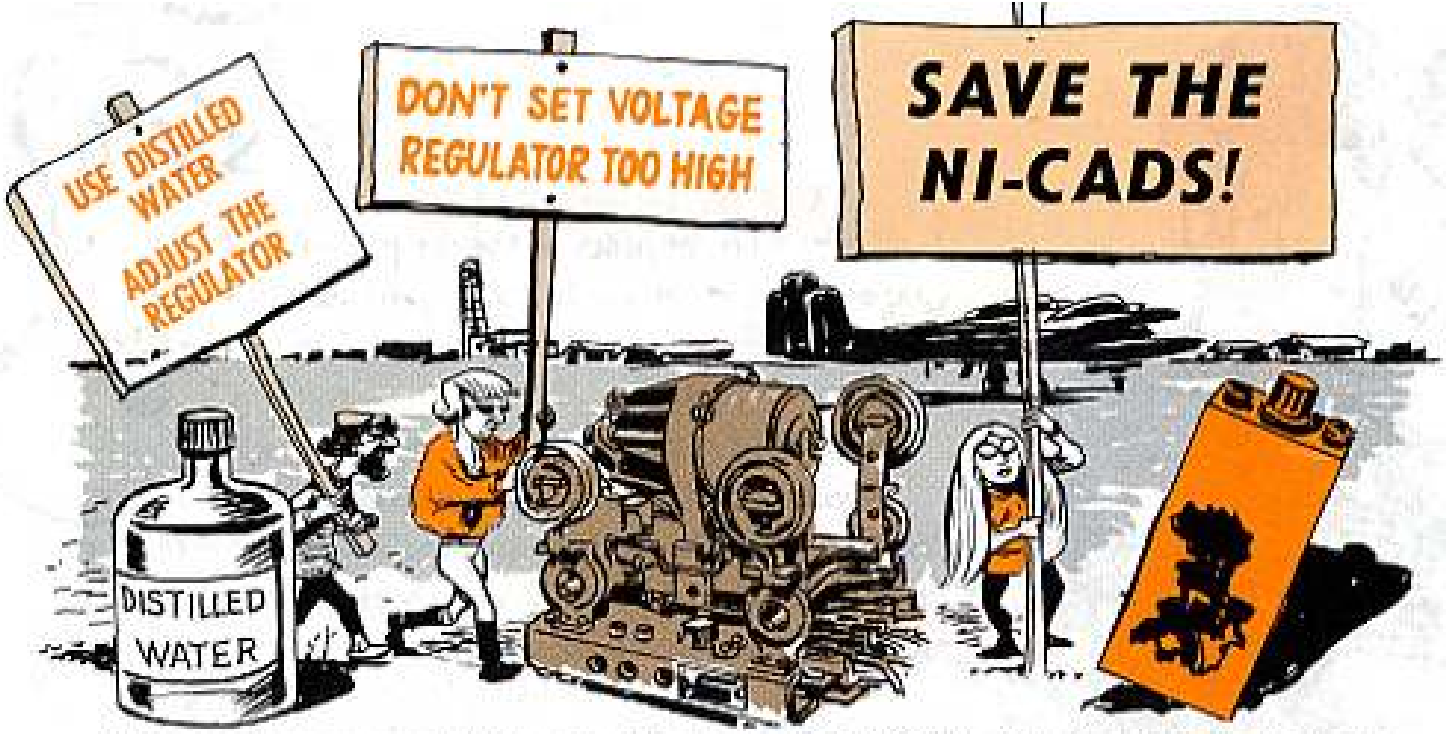
You'll also have to turn in a DA 2410 (Component Removal and Repair/Overhaul Record) if the part's listed in TB AVN 23-65 and you take it off an aircraft. And naturally you complete copy 6 of DA Form 2410 and forward it to the addressee in appendix II, TM 38-750, when you put the component on your aircraft.

Confusin'? There's more:

Only equipment that's not part of the bird itself, like radio sets, etc., are entered on DA 2408-17 (Aircraft Inventory Record).

In addition to keepin' those records straight, verified copies of these supply actions should be included to boot! They should bear the John Henry of the maintenance officer and be completed for each shortage citing the authority for cannibalizing and the date it was granted.

The paperwork's enough to discourage most parts cannibals, but it's darn necessary to keep the supply mill operatin'. It helps cut down on the number of hangar queens, too.



There's been some talk lately about the BB-433/A nickel-cadmium battery getting too hot under the collar in the Mohawk (OV-1) and taking it on the chin.

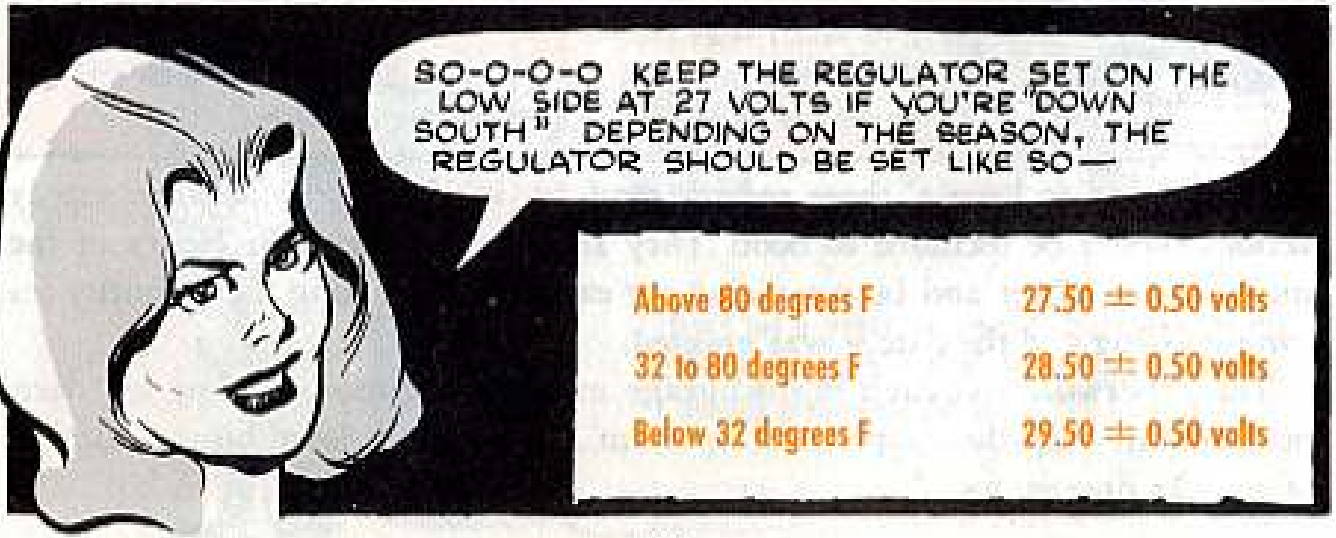
'Course, that battery compartment is a real hot-box with inverters 'n' everything running. Still, the ni-cad is supposed to outlast the equipment it's in . . . and it will if you give it half-a-chance.

Like, f'rinstance, when you adjust the electrolyte level in the BB-433/A, be sure you use only distilled water. That's the poop in TM 11-6140-205-12 (7 Jul 61).

If you use, say, water from an air conditioner, salt and acid will contaminate the battery solution and ruin the cells.

Another thing that can cause the battery to fail is too high a setting on the voltage regulator. During periods of high ambient temperatures (above 80 degrees F) the regulator setting on an aircraft has to be kept at 27.50 ± 0.50 volts. This info is in para 159 of TM 55-405-3 (10 May 62) on maintenance of aircraft systems.

In a steaming climate, a setting above 28 volts leads to overcharging and boiling over of the electrolyte with shorting and burning of the cells . . . and a ruined battery.



WHEN YOU GOTTA GO . . .

TAKE ALL THE RIGHT UNITS

So you're going to pull a sick radio in your bird for an operational bench check? OK! But remember, your support can't check it out unless you bring all the necessary units with you.

Take the tactical AN/ARC-44 FM radio, used in just about any bird you'd care to mention.

For a bench check you need the RT-294A, dynamotor DY-107/AR, SB-327/ARC-44 and SB-329/AR control panels. Leave any of them behind and you'll only have to retrace your steps.

The same deal goes for the airfield AN/ARC-60 UHF radio in lighter aircraft. Receiver R-508( )/ARC, both converter-transmitters, CV-431( )AR, and dynamotor, DY-86/ARN-30, are needed to spot a malfunction.

Of course, with the AN/ARC-55 UHF in heavier birds, there's no problem. When you pull the RT-349 you've got everything in one package.

And so it goes—or so it should go—with the avionic gear in your bird. 'Course each operator's and organizational maintenance pub will clue you on the units needed for a bench check, to save you time and elbow grease.

OOPS, YOUR STRAP IS SHOWING

Carrying the chute by one strap usually leads to a frayed or torn support—and eventual chute rejection, because of undue strain.

If you don't want to go to the trouble of slipping all the way into the harness, then carry it like a bundle of papers under your arm, or over the arm supported by both straps.

Take it from Connie, a snapped strap can be embarrassing . . . especally if that strap supports you somewhere between the wild blue yonder and solid terra firma.

COMMUNICATIONS

NO SKIP, NO DIP, NOR AM FLIP . . .

THE NEW AN/GRC-106 IS READY

Remember when you used to dream about a long range AM radio set that'd dip into that deep hole where skip distance left you with nothing in your earphone? A set that'd end a nightmare of mid-range radio silence?

Or maybe you lulled yourself to sleep thinking about a set that'd carry your voice with at least 90 per cent accuracy out to 100 miles?

Or did you daydream about a tactical single sideband set that'd give you sweet clarity?

Well wake up, ol' buddy. It's here!

Yezzir. The new AN/GRC-106 will fill all those dreams and give you quite a few extras as a bonus.

As an eye-opener, consider this boon to the busy operator who's tired of cleaning air filters: The Angry-106 doesn't have any!

Instead, the new set has mechanical heat exchangers, which eliminate the need for air filters. This keeps the cases sealed against moisture, dust and dirt, something you had to worry about continually with the set the GRC-106 replaces, the AN/GRC-19.

Another bonus baby is ease of maintenance. Modules and transistors make maintenance easy. There're only two tubes in the transceiver, RT-662, and three in the amplifier, AM-3349. Transistors, which replaced tubes, increase reliability.

Not only do the modules simplify maintenance, but they also make for less weight and bulk than the Angry-19 . . . which means there's more room for you—or equipment.

Daily operator PM has taken a nosedive, too . . . thanks in large part to no air filters.

About all an operator has to do is clean the exterior of the set daily (make sure the power is off) as per para 29, page 34, of TM 11-5820-520-12; check meter glass for cracks (and have them replaced, if so); inspect cable connectors for breaks, and make sure spare fuses of the correct value (2-amp, 250-volt) are in the spare fuse wells.

As for accessories, attachments and minor components, most are old familiars which you're already living with . . . such as the H-33 handset, M-29 microphone and LS-166 loudspeaker.

Combined with other components in existing configurations featuring the Angry-19, the GRC-106 will make up the following replacements:

CONFIGURATIONS

Old	New
AN/GRC-19	AN/GRC-106
AN/GRC-46	AN/GRC-142
AN/VRC-29	AN/VSC-3
AN/VSC-1	AN/VSC-2

All configurations, including the Angry-106, will be used at company level and above.

MORE

Lest you get too wide awake and lively with anticipation, relax a little. Initial distribution of the Angry-106 or its components will be thin. Tomorrow it'll be here, but it'll take a lot of tomorrows to replace the Angry-19s that are all over this globe.

When you get it, though, the wait'll be worth it. Those 400 watts (peak power), the 28,000 points at which frequencies can be assigned . . . and virtual freedom from skip distance are the big prizes at the end of the rainbow.

Especially worthy is the skip distance freedom. Normally, long range AM sets blank out or fade to a whisper in that never-never land which averages, but isn't limited to, the 40-60 mile range from the transmitter. For radioteletype, the skip area is a bad dream.

With the Angry-106 or a configuration using it, you get better than 90 per cent teletype accuracy at all distances to 50 miles. Actually, you push 100 per cent on the great majority of frequencies with the Angry-106's big brother, the AN/GRC-108 . . . which is a tribute to single sideband that's hard to match.

Unlike those of the Angry-19, the components of the Angry-106 can be stack-mounted. You can get the set on a fender well of a ¼-ton truck . . . which makes room in the rear for another man or whatever.

A few other extras:

Unlike the AM sets you're used to, the GRC-106 will put out for you even under severe terrain conditions. Weather means maybe you should put your poncho on . . . but it doesn't bother the output of the set.

For teletype buffs, the RT-662 combined with a 2000-watt amplifier (AM-3399) provides full duplex facility, as in the AN/GRC-108 radio teletypewriter.

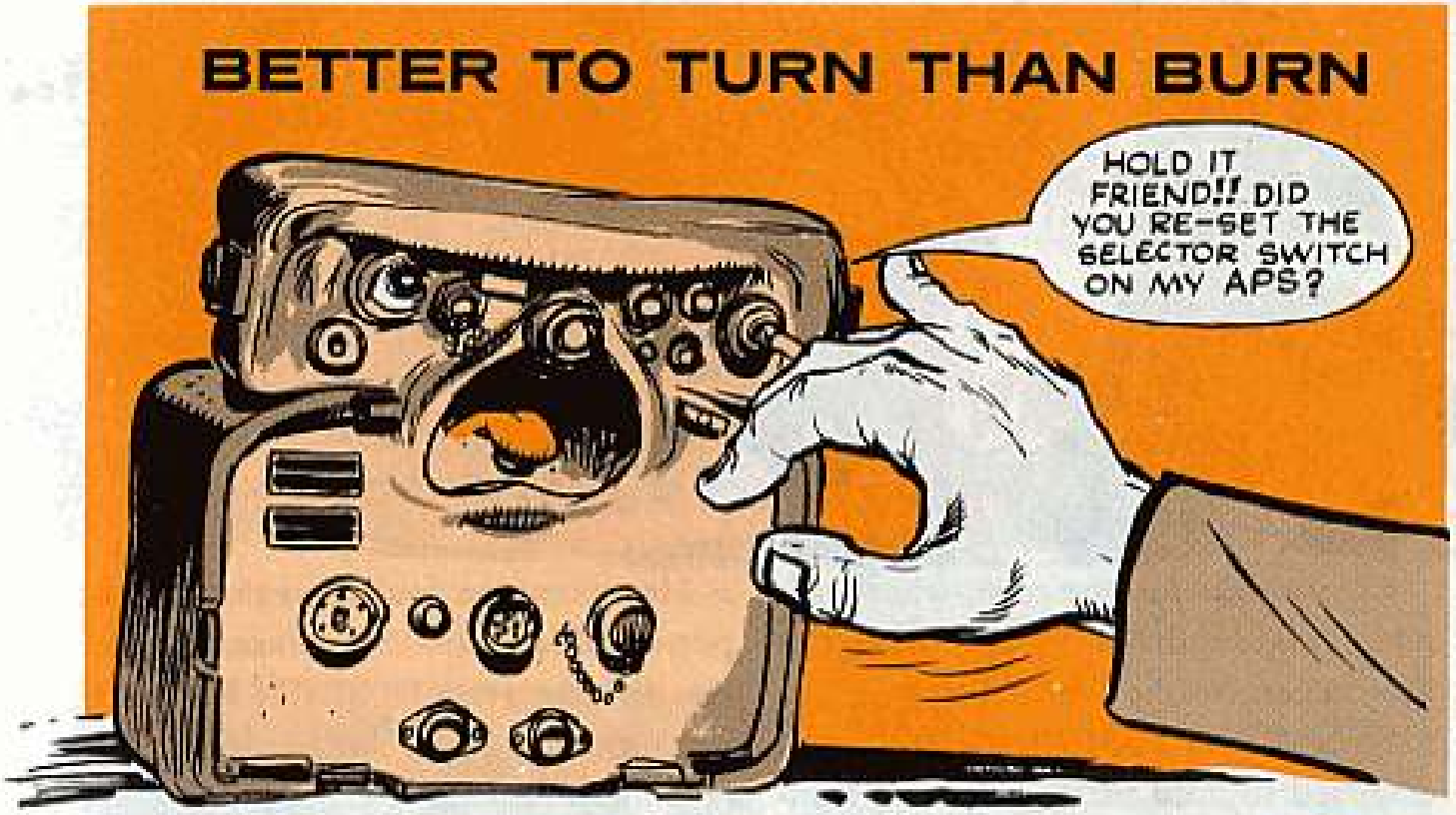
Finally, digital tuning makes for dialing speed and reduces operator error in the stress of emergency operation. The set nets with existing high frequency tactical AM sets and radio teletypewriters.

Publications you need include:

TM 11-5820-520-12 (Aug 64) Operator and Organizational Maintenance

TM 11-5820-520-20P (Aug 64) Repair Parts and Special Tools List

The last word: Hands off the antenna when the set's operating, or that RF energy will make you burn . . . and we don't mean blushingly.

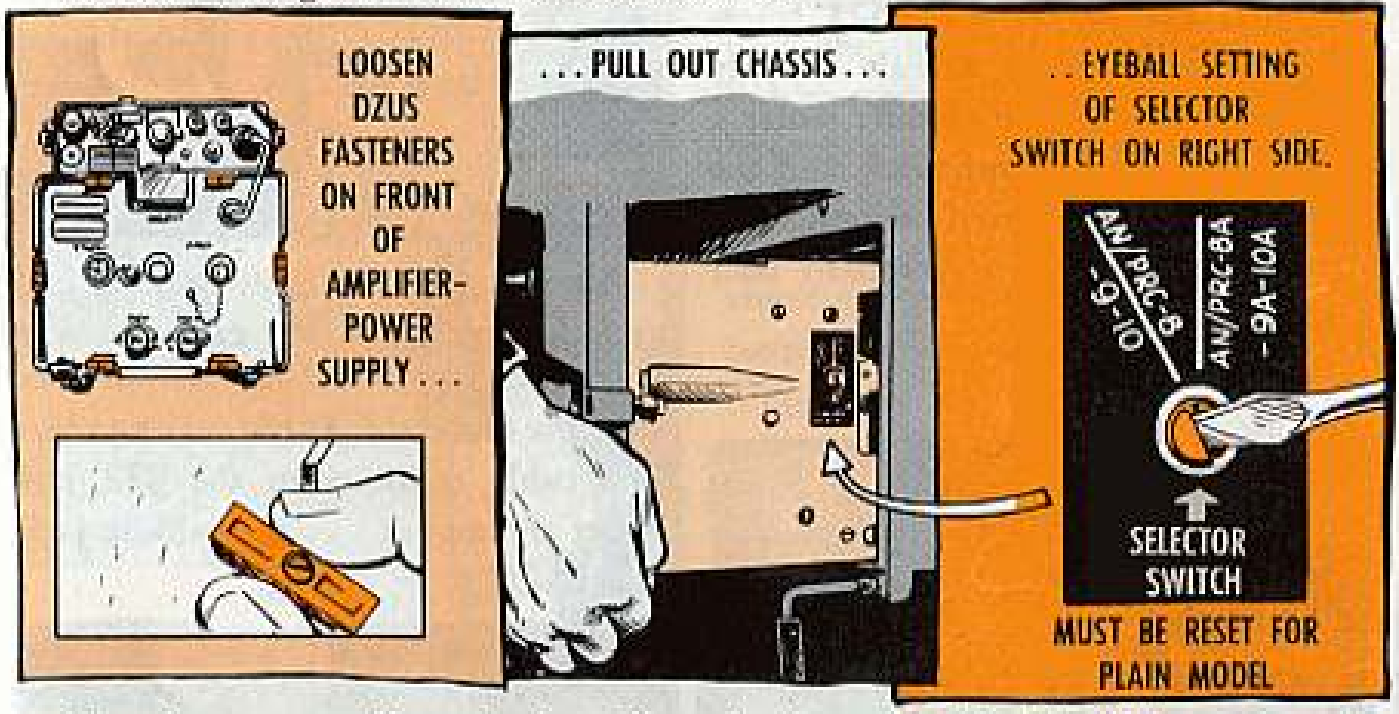


Hey! Hold one, Hank.

That is if you're gonna substitute an AN/PRC-8, -9 or -10 radio set for that Perk-8-10 A-model when it's teamed up with your AM-598/U amplifier-power supply for vehicle operation.

Make sure the AM-598's selector switch is reset for the plain model radio or your Perk'll pop its IF cans and a J5678 tube (FSN 5960-230-5262).

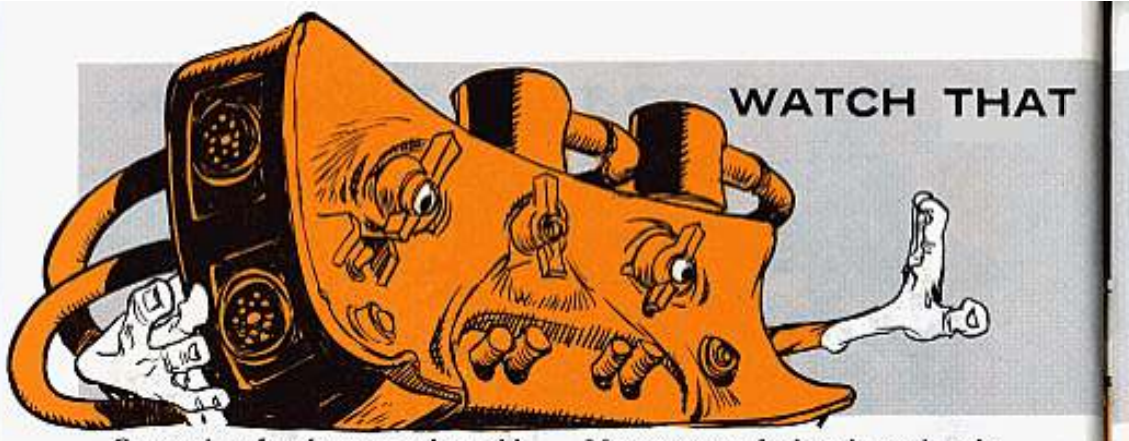
Before making the Perk model switcheroo:



There's no sweat if you're installing the A model. Nothing'll happen to its insides if the switch isn't turned.

Only the unlettered model can wind up with the woes.

There's no problem if your amplifier-power supply's an AM-598A/U. It'll handle all Perk models without switching.

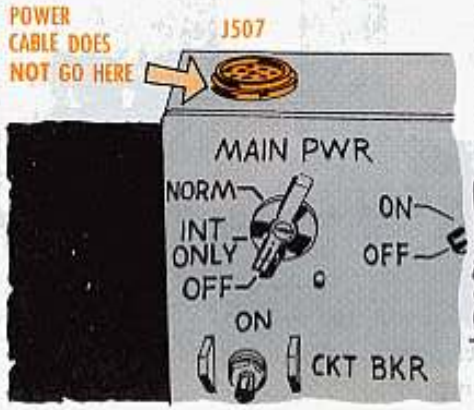


WATCH THAT

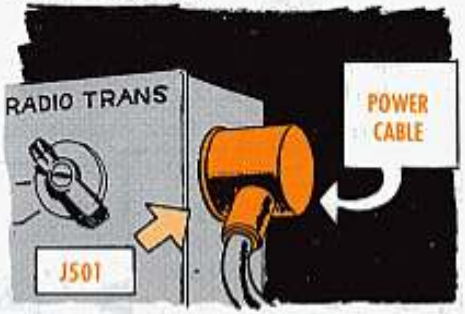
Comes time for the cure, what with AM-1780 amplifiers poppin' off fast as firecrackers on the 4th of July.

Since MWO 11-5820-401-35/1 was designed to hold its own against transients, the next cure is puttin' the power cable (CX-4723/U) to the right jack on the AM-1780, the J501. The wrong jack can make the inside of the amplifier look like it's been through . . . well, a 4th of July celebration.

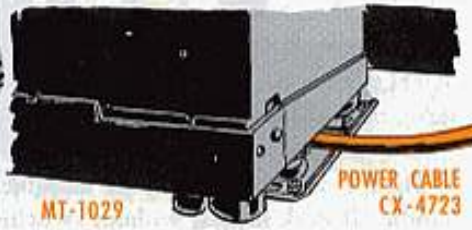
If you put the cable to the J505, J506 or J507, f'rinstance, the T521 transformer on the A520 module literally explodes. It chills the module worse'n The Hawk over Baumholder, and the few hundred bucks each one costs can pretty well deplete the company beer fund.



Most common foul-up is putting the power cable to the J507, since that jack sits directly over the MAIN PWR letters on the panel of the amplifier. Mox Nix mit der lettering. That's for the switch directly below it. The jack you want is on the upper right hand side of the amplifier.

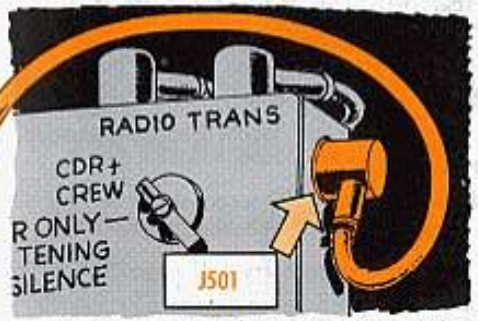


Avoiding the big blow-up is as easy as following the power cable from its nest under the MT-1029 mount used with the Standard A, FM series radios. The cable connects to the J22 jack under the mount . . . the middle jack, that is.



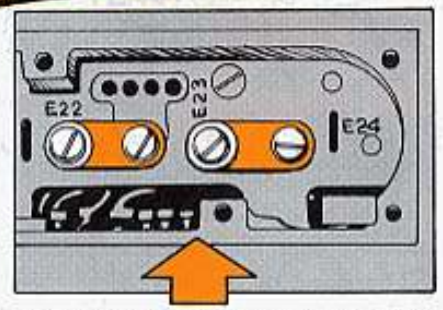
CONNECTION!

From there it goes to the J501 jack on the amplifier, like so:



An easy way to keep it going to the right jack is to mark the connector head with "J501," and then mark the amplifier front panel next to the proper jack with "J501."

Or, color code the connector and jack. Either way, you keep from making a zzaaappp!!! of your A520.



Still another point: The link in the MT-1029 junction box must be changed to the remote operation position.

Like, connect points E22 and E23 with the link. Which means, use the link to connect the middle point to the left screw.

That way, if you cross the cables you won't blow the A520, although you won't get amplification, either. In the latter case, just make the proper cable connection.

WHEN THIS MERCURY GOES UP... POW!!

If you're around a discarded mercury dry cell battery when the temperature takes a sudden rise, better be ready to duck!

That kind of mercury doesn't take kindly to heat. It reacts downright explosively.

Which means don't just get rid of a used-up mercury dry cell—get rid of it safely. Be considerate of the next Joe, who may not know about the mercury dry cells and innocently toss it into a fire. He could learn a painful lesson.

The batteries (for gadgets like flashlights, test sets, radiac meters—or maybe your own portable radio) should be disposed of soonest when you remove 'em from equipment. Chances are your post or division has a SOP on handling 'em.

The safest—and recommended—method is to bury them. Never mutilate them, **and never, never burn them!**

If you're just temporarily removing the batteries (like, to store equipment) drape tape over the end terminal to prevent a short circuit which could drain the battery. Store the batteries (and new ones) in well-ventilated areas.

SEAT TUBE, THEN TIGHTEN

Putting the squeeze on the V6201 power amplifier tube the easy way'll go hard on your RT-246 or RT-524 receiver-transmitter.

Sure, it's no sweat to hold the heatsink block and tube in your hand or some other handy place to tighten the yoke screw. But, you'll short out your RT's power supply when you push in the tube.

So, seat the tube first before setting the block's yoke screw . . . like it says in Para 14b in TM 11-5820-401-20 (Dec 61).

BULGING PERK-25 STRAP

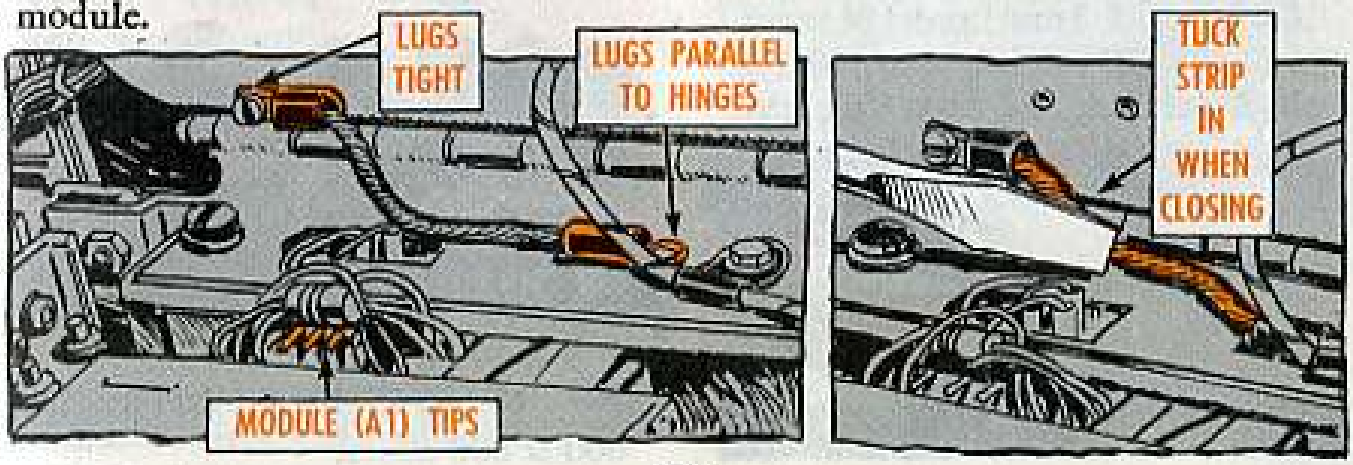
A kink in your RT-505/PRC receiver-transmitter's grounding strap'll lead to a silent radio set.

Yep. If the strap lugs are loosened from the mother board or chassis, the strap'll cuddle up next to the module (A1) tips and put your set to sleep when you need 'er most.

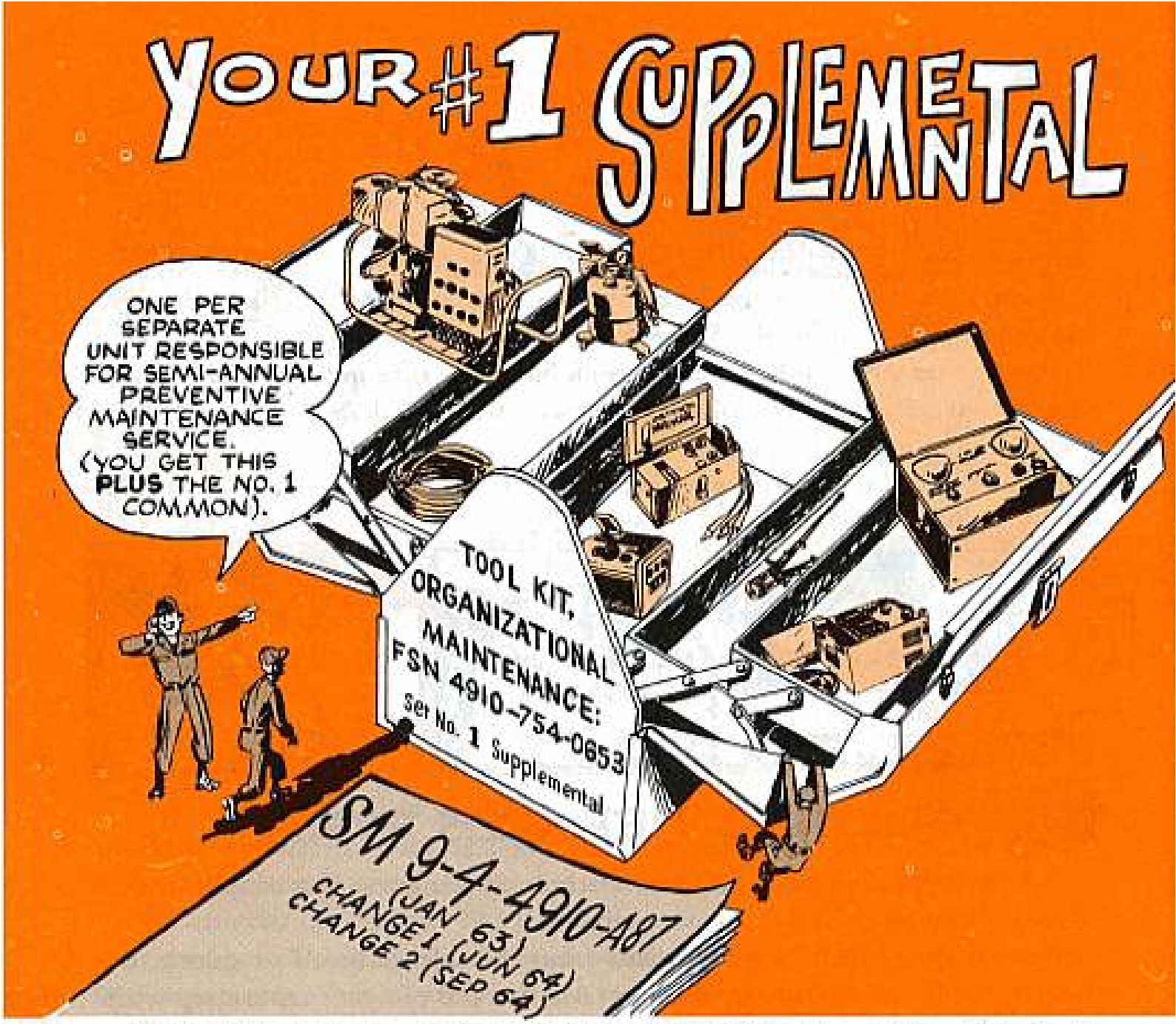
There are a coupla f'rinstances you can do which will keep your RT-505 wide awake.

Like, see to it the lugs are tight and running parallel to the hinge.

And, you might have to tuck the strap in with a screwdriver as you're closing the mother board on the chassis. This'll keep the strap from pressing against the module.



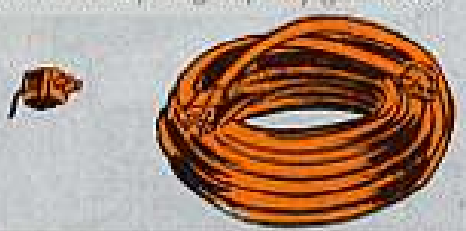
YOUR #1 SUPPLEMENTAL



Some of your tools — made by different manufacturers — may not look exactly like the ones you see here but they'll do the same job.

You're supposed to have one each unless noted.

CABLE ASSEMBLY, POWER, ELECTRICAL: no. 12 AWG, type SO, 3 cond stranded 84 strands no. 31 AWG, 600 v working voltage, 50 ft lg overall, male fitting 1 end, female fitting other end, w/3 wire to 2 prong adpt w/gnd wire.



FSN 6150-682-3460

CLEANER AND TESTER, SPARK PLUG: bench mtd, spark plug sizes 10-mm, 14-mm, 18-mm, and ⅝ in., 120 to 150 psi air pressure reqd, ½NPSH, var pressure, ac, 110 v, 60 c, sgle-ph, spark plug reflection observed in S mirror.

FSN 4910-261-5868

For parts see TM 9-4910-389-20P (11 Jun 62) Champion Model, 600 & 800 series,

ADAPTER SET, ENGINE ELECTRICAL TEST: five adapters in metal box (4910-348-7600). The complete set may be requisitioned under its own stock number. Any individual item may also be requisitioned under its own stock number for replacement purposes.

FSN 4910-348-7600

COMPONENTS

ADAPTER, ENGINE ELECTRICAL TEST, GENERATOR TESTING: elec, generator to regulator harness, w/armature & field term. 1 & 2, w/two sw links.

FSN 4910-092-9026

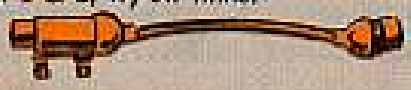
ADAPTER, ENGINE ELECTRICAL TEST, IGNITION UNIT:

FSN 4910-356-7508

ADAPTER, ENGINE ELECTRICAL TEST, PRIMARY CIRCUIT: w/spg loaded thru cond plunger & male thd connections.

FSN 4910-356-7492

ADAPTER, ENGINE ELECTRICAL TEST, REGULATOR TESTING: btry to regulator harness, w/ btry term. 1 & 2, w/sw links.



FSN 4910-092-9025

ADAPTER, ENGINE ELECTRICAL TEST, SPARK PLUG: w/three cond ignition cable.

FSN 4910-356-7504

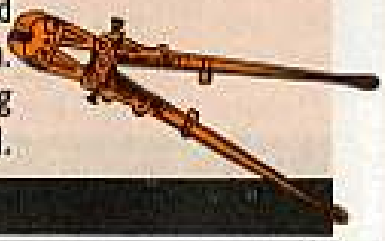
CASE, ADAPTER SET, ENGINE ELECTRICAL TEST: S, butt hinged cover, draw bolt fasteners, & instruction pl.

FSN 4910-348-7691

CUP, PAINT, SPRAY GUN: 1 qt cap., clamp type, w/al cover attachment.

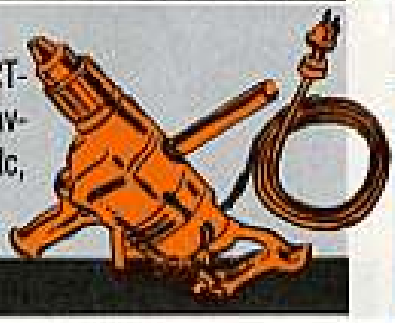
FSN 4940-190-5164

CUTTER, BOLT: rigid hd clipper cut type, 5/16 in. dia mild S rod cutting cap., 18 in. lg overall.



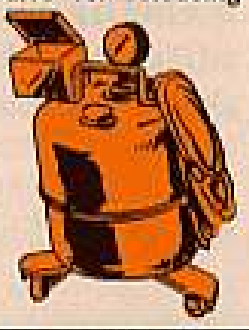
FSN 5110-596-9162

DRILL, ELECTRIC, PORTABLE: ½ in. size, hv-duty, 650 rpm, ac/dc, 115 v.



FSN 5130-889-9004

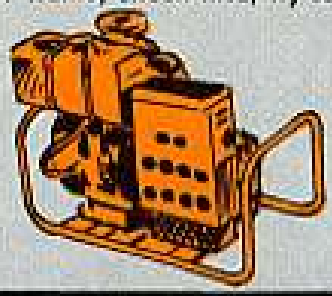
FILLER AND BLEEDER, HYDRAULIC SYSTEM: caster mtd, 3 gal porm ½ gal cap., w/o air and fluid separator, 1 pressure type ga 0 to 60 psi min scale range, 120 in. lg hose, manual control valve, w/safety valve for releasing excess air pressure, w/e.



FSN 4910-580-9750

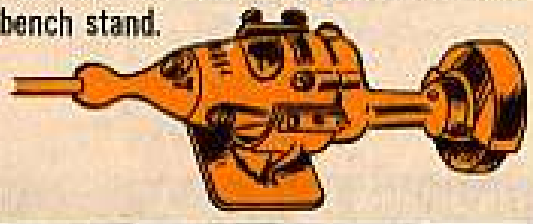
MORE

GENERATOR SET, GASOLINE ENGINE: 2 kw, dc, 12 v, 2 wir service, air cooled, partially inclosed by tubr frame, shock mtd, w/carrying case.



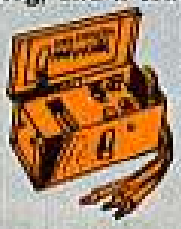
FSN 6115-240-0393

GRINDER, ELECTRIC, PORTABLE: 6 in. dia x 1 in. thk wheel cap., ¾ in. dia spdl, ac/dc, 115 v, shielded to prevent radio interference, w/bench stand.



FSN 5130-293-2488

LIGHT, IGNITION TIMING: 3 lead type, 4½ v btry reqd, neon bulb element, rect sh-mtl case, 8½ in. lg x 3½ in. w x 4 in. h overall excl wire leads, 48 in. lg pos, neg, and h tension leads, spg clip type term.

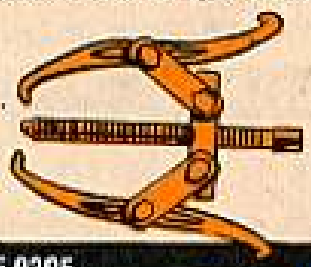


FSN 4910-255-1449

MULTIMETER: ptbl type, general purpose, 0 to 5000 v ac/dc in 5 steps, 0 to 500 ma dc in 3 steps, 0 to 400000 ohms in 2 steps, 3 percent accuracy on dc range, 1000 ohms per v ac and dc range sensitivity operates on 1.5 v mtl btry, w/two 48 in. lg cables.

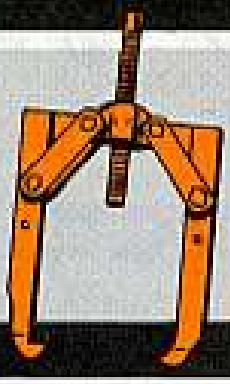
FSN 6625-543-1438

PULLER, MECHANICAL: gear and brg, dble-end grip, 2 exter jaws 0 to 8 in. spread range, 5½ in. reach.



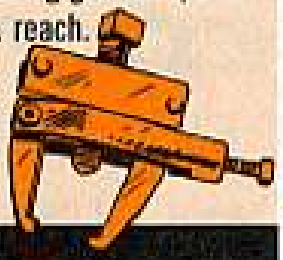
FSN 5120-595-9305

PULLER, GEAR, UNIVERSAL: gear and brg, sgle-end grip, 2 exter jaws 0 to 14 in. spread range, 14½ in. reach.



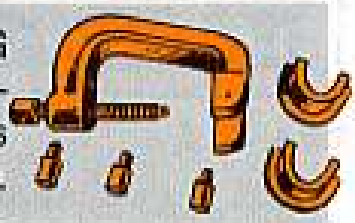
FSN 5120-378-4293

PULLER, MECHANICAL: steering gear arm, 0 to 2⅜ in. spread range, 3 in. reach.



FSN 5120-595-9308

PULLER, STEERING WHEEL: C-shaped puller body, w/adapters (Ord dwg no. 7540936).

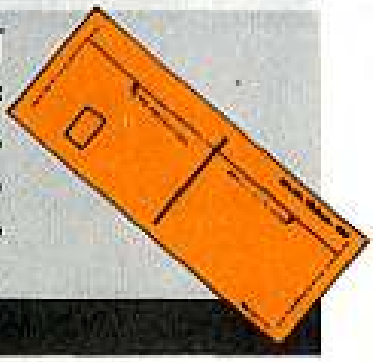


FSN 5120-620-0020

PULLER KIT, MECHANICAL: gear and brg, in mtl bx.

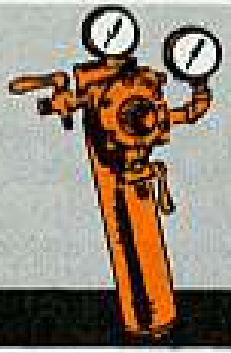
FSN 5120-423-1596

SCREEN, HEADLIGHT BEAM ADJUSTMENT: unmounted univ type, cloth, white surface, 10 ft lg x 42½ in. h, adj ref lines.



FSN 4910-240-7529

SEPARATOR, OIL AND WATER, SPRAY GUN: 1 regulator, corrosion resistant material, wall type mtg.



FSN 4940-242-4100

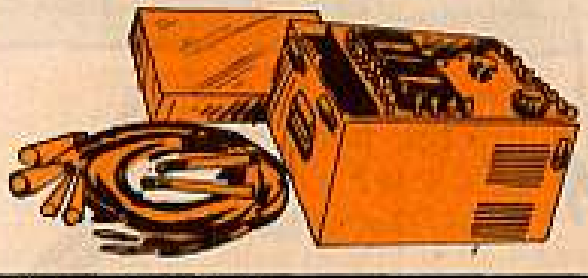
SPRAY GUN: hand operated, nonbleeder type, exter mix air cap, 5 cfm air consumption at 50 to 60 lb pressure, al body, ¼-18NPSH air connection, and ⅜-18NPSH fluid connection.

FSN 4940-261-8414

STUD REMOVER AND SETTER: wedge type, ¼ in. to ⅝ in. stud dia range, ½ in. female sq-drive.

FSN 5120-596-0980

TEST SET, GENERATOR AND VOLTAGE REGULATOR, AUTOMOTIVE: measurements of voltage and cur. in the low tension circuits of 6/12/24 v test, ammeter 3 to 0 to 10 amp, 15 to 0 to 50 amp, 30 to 0 to 100 amp, and 150 to 0 to 500 amp ranges, voltmeter 0 to 1 v, 0 to 10 v, 0 to 20 v, and 0 to 50 v ranges, S, 15 in. lg x 18 in. w x 12 in. h, for general purpose use, w/carrying case.



FSN 4910-092-9136

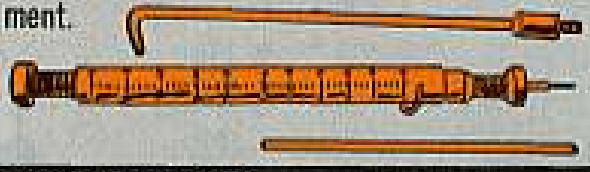
These are the Tech manuals for this test set: Atomic Model TV-100 and Auto-Test Model 10308—TM 9-4910-401-12 (Nov 62), TM 9-4910-401-20P (Feb 62); Electro Mechanisms Model 1060—TM 9-4910-402-12 (Jul 62) w/C1 (Oct 62), TM 9-4910-402-20P (Feb 62).

TEST SET, TACHOMETER-DWELL: ptbl type, tachometer scale 0 to 1000 rpm range of numerical markings w/20 rpm smallest increment and 0 to 5000 rpm range of numerical markings w/100 rpm smallest increment, dwell meter scale 20 to 50 deg range of numerical markings w/1 deg smallest increment, nonluminiferous, 15 in. lg x 9 in. w x 12 in. h overall, 4 leads 108 in. lg, 1 ea for gnd, btry, tachometer, and dwell meter, w/4 position manual selector, w/2 instruction books.

FSN 4910-395-1996

TM 9-4910-416-12 (Sep 63) is the maintenance manual for the General Meters Models TD100, TD100-A, TD100-B, TD100-C, and TD100-D.

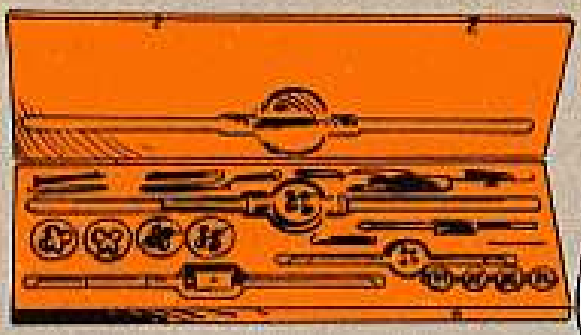
TESTER, SPRING RESILIENCY: ptbl, tests tension type spg, weighing scale type, manually operated, hook load receiver, marked in oz, 0 to 80 oz range of grad, 1 oz smallest increment.



FSN 6635-449-3750

MORE

THREADING SET, SCREW: rh thd; rd split type dies; c/o the following:



FSN 5180-448-2362

Item Name: Die, Thread Cutting	Thd Size
FSN 5136-224-1449	¼-20NC
FSN 5136-197-9298	5/16-18NC
FSN 5136-889-6605	3/8-16NC
FSN 5136-197-9304	7/16-14NC
FSN 5136-197-9307	½-13NC
FSN 5136-189-3220	9/16-12NC
FSN 5136-189-3221	5/8-11NC
FSN 5136-189-3222	¾-10NC
FSN 5136-189-3223	7/8-9NC
FSN 5136-189-3224	1.0-8NC

Diestock

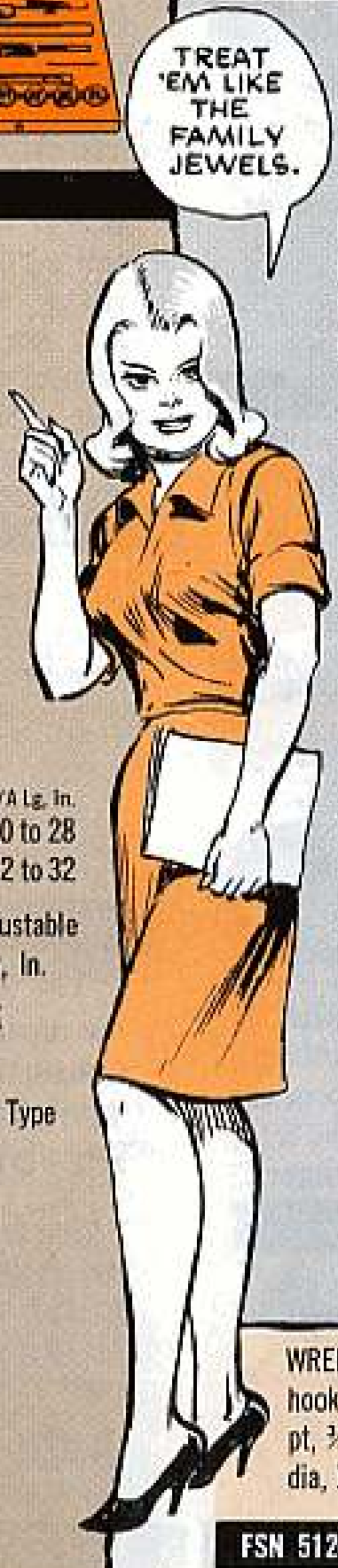
	Die Dia, In.	O/A Lg, In.
FSN 5136-180-0548	2	20 to 28
FSN 5136-224-7114	2½	22 to 32

Wrench, Tap and Reamer, Adjustable Bolt Tap Holding Capacity, In.

FSN 5120-289-0539	No. 8 to ¾
FSN 5120-289-0537	¼ to 1¼

Tap, Thread Cutting: Plug Type

	Thd Size
FSN 5136-729-5693	¼-20NC
FSN 5136-276-1031	5/16-18NC
FSN 5136-276-1032	3/8-16NC
FSN 5136-729-5691	7/16-14NC
FSN 5136-729-5692	½-13NC
FSN 5136-729-5690	9/16-12NC
FSN 5136-223-6228	5/8-11NC
FSN 5136-729-5702	¾-10NC
FSN 5136-203-6621	7/8-9NC
FSN 5136-227-7260	1.0-8NC



THREADING SET, SCREWS: rh thd; rd split type dies; c/o the following:

FSN 5180-422-4975

CASE, THREADING SET

FSN 5140-322-5976

Item Name: Die, Thread Cutting	Thd Size
FSN 5136-189-3194	¼-28NF
FSN 5136-189-3195	5/16-24NF
FSN 5136-189-3196	3/8-24NF
FSN 5136-189-3197	7/16-20NF
FSN 5136-189-3198	½-20NF
FSN 5136-189-3199	9/16-18NF
FSN 5136-189-3200	5/8-18NF
FSN 5136-189-3201	¾-16NF
FSN 5136-189-3238	7/8-14NF
FSN 5136-820-8090	1.0-12NF
FSN 5136-821-0462	1.0-14NS

Diestock

	O/A Lg, In.
FSN 5136-224-7113	12 to 18
FSN 5136-224-7114	22 to 32

Tap, Thread Cutting: Plug Type

	Thd Size
FSN 5136-580-7360	¼-28NF
FSN 5136-580-7359	5/16-24NF
FSN 5136-555-8910	3/8-24NF
FSN 5136-580-7182	7/16-20NF
FSN 5136-580-7184	½-20NF
FSN 5136-580-7186	9/16-18NF
FSN 5136-555-3177	5/8-18NF
FSN 5136-580-7342	¾-16NF
FSN 5136-580-7188	7/8-14NF
FSN 5136-820-2998	1.0-12NF
FSN 5136-580-7343	1.0-14NS

Wrench, Tap and Reamer, Adjustable Bolt Tap Holding Capacity, In.

FSN 5120-289-0539	No. 8 to ¾
FSN 5120-289-0537	¼ to 1⅛

WRENCH, SPANNER: adj hook type, fixed pivot pt, ¾ in. to 2 in. circle dia, 11/32 in. thk hook.

FSN 5120-286-6468

SO WHAT'S A MILITARY STANDARD GENERATOR?

You can't tell a Military Standard generator set at a glance any more than you can tell a book by its cover. It takes a little looking into.

Some Military Standard generator sets hit the field without a nameplate on the generator so the only way you can identify them is by make, model and FSN. Others correctly carry a nameplate on the generator which reads MIL STD GENERATOR.

So what's the difference between the non-military standard generator set and the Military Standard generator set?

Just this: You may have a Military Standard engine hooked up with a non-military standard generator which means the whole outfit is not a Military Standard generator set.

When you have a Military Standard engine hooked up with a Military Standard generator (military design) the whole outfit is a Military Standard generator set, sure 'nuff.

A 1.5-KW non-military standard generator set, for example, gets only a 2408-7, 2408-8 and 2409. A Military Standard generator set, however, gets a complete log book.

Here's the up-to-date list of Military Standard generator sets which are not indicated as military standard generators on the nameplates:

5-KW	FSN 6115-074-8830	Onan Model 5GF-8X R3100
1.5-KW	FSN 6115-906-3686	Hal-Gar Model CE-017-DC-1.5 Military Design
1.5-KW	FSN 6115-736-8509	Hal-Gar Model CE-016-AC (or SF) 1.5 Military Design
10-KW	FSN 6115-792-8260	International Fermont Model J109
.5-KW	FSN 6115-577-8123	Continental Engine Co. Model HF-0.5 Military Design

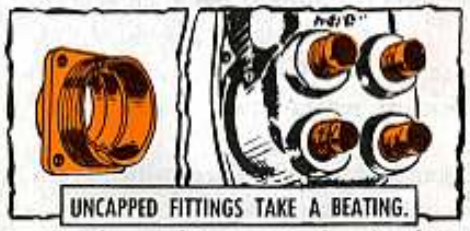
WHEN DELICATE PARTS ARE EXPOSED . . .

BE SURE TO CAP

There're more vulnerable recesses and exposed protrusions in this Army's equipment than you can shake a finger at and lots of 'em get split, pinched, cracked, mashed, or contaminated just because they're not given a little protection.

These unprotected parts and recesses show up when you remove or disconnect a component from its end item. To be exact, they're found on distributors, voltage regulators, generators, starters, fuel injector pumps, electrical cables, carburetors, hydraulic fittings, tubing, air lines,etc., etc.

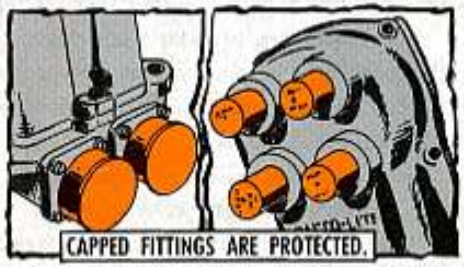
If left unprotected, the threaded nipples and connections become damaged or knocked out of shape; the openings let in dirt and moisture.



UNCAPPED FITTINGS TAKE A BEATING.

A subassembly usually has its delicate parts mangled when it's moved back and forth between the using units and the repair shop. This unnecessary damage just makes for extra manhours of work, bogs down the supply pipe line and runs up the co$t for your favorite Uncle. All this can be avoided with a little protection applied right at the start.

Now covering or wrapping these tender areas with tape is OK—if you don't have anything better. But the best yet are the all-purpose plastic cap-plugs that're now available from supply.



CAPPED FITTINGS ARE PROTECTED.

Each cap becomes a plug by reversing it and vice versa. Just pop one on a protruding threaded nipple or plug it in an opening.

Local support repair shops can use 'em on all parts being shipped to the using units. On DX items, organizational mechanics can swap the cap-plugs from the new part onto the unserviceable part being turned in. This'll protect the equipment while it's traveling thru the repair pipeline. In fact, some field maintenance DX shops that're already using these cap-plugs won't allow parts to be turned in unless their vital parts are safeguarded with cap-plugs.

OR PLUG THEM

WHERE TO GET 'EM

These protective coverings should be on the shelves of your local country store. To get them there, your support people can put in a supply of 'em by consulting Federal Supply Catalog C5340-IL-A, Vol 2 (Nov 65). Tables 370, 370A and 390 (pages 88-93) include the plastic as well as other types of . . . CAP-PLUG, PROTECTIVE, DUST AND MOISTURE SEAL. Each cap-plug is identified by its FSN and the necessary dimensions (ID, OD, shoulder length, pitch, thread, exterior surface, etc.). Detailed descriptions are covered in MIL-C-52078 and MIL-5501-D and the management data are in Federal Supply Catalog C5340-ML-A, Vol 1 and 2 (May 65).

The only thing missing from the catalog listing is the name of the part which each size cap-plug fits. Experience shows that the following cap-plug stock numbers and vehicle subassemblies go together:

FSN	Fits This Subassembly
5340-286-3508	Generator & Regulator, M151, M37, M35, M62
5340-290-0973	Starter, M113
5340-290-0974	Distributor, M35, M62
5340-290-7221	Distributor, M113
5340-290-7225	Starter, M113
5340-295-6309	Fuel Pump, M37
5340-342-5577	Generator, M60
5340-573-5800	Carburetor, M37
5340-597-4480	Generator, M52
5340-597-4532	Distributor, M151, M37, M35, M62
5340-682-1761	Starter, M88
5340-682-1721	Starter, M62
5340-682-1817	Generator, M35
5340-682-1818	Distributor & Generator, M151, M37, M35, M62
5340-682-1819	Carburetor, M113
5340-721-7921	Compressor, M62
5340-721-7922	Generator & Regulator, M151, M37, M35, M62
5340-753-3691	Regulator & Generator Control Box, M60
5340-811-4482	Cylinder, Air, M62
5340-813-4913	Fuel Pump, M151
5340-846-0991	Distributor, M125

All of these are reusable as long as you keep them free of bad cracks, chips or deformities which would keep them from sealing right. You can use them on a one-time basis, too, if you want to cover that entire subassembly with paint or protective grease.

GOOD HUNTING TIPS FOR . . .

MINE DETECTORS

You old coon hunters know the best way to track an animal is with a good hunting dog. He'll lead you to your game. The dog's reward for such a feat is lots of TLC from you.

There's something else that does a good job of tracking, and it also needs tender loving care if you expect to depend upon it. That's your battery-powered AN/PRS-3-series mine detector set (FSN 6665-223-7295).

Here're some things to keep in mind if you have this mine detector.

BATTERIES—One of the first things you learn about that detector is that the batteries must be tested to make sure you're getting enough voltage.

You can check the batteries under load by connecting them to the mine detector set—or to a simulated dummy load in a battery checker. If you're using the battery checker, be sure and follow the instructions you get with it.

You can also test the batteries with a voltmeter.

As you know, your mine detector takes one A battery, type BA-15-A, and two B batteries, type BA-51.

To make sure there's enough juice, the BA-15-A battery should not test any lower than 1.1 volts, and to be on the safe side with the BA-51 or B batteries, they shouldn't test any lower than 122 volts.

It pays to eyeball those batteries often because if they leak, acid will play havoc with your detector.

TWO OF THESE . . .

. . . ONE OF THESE

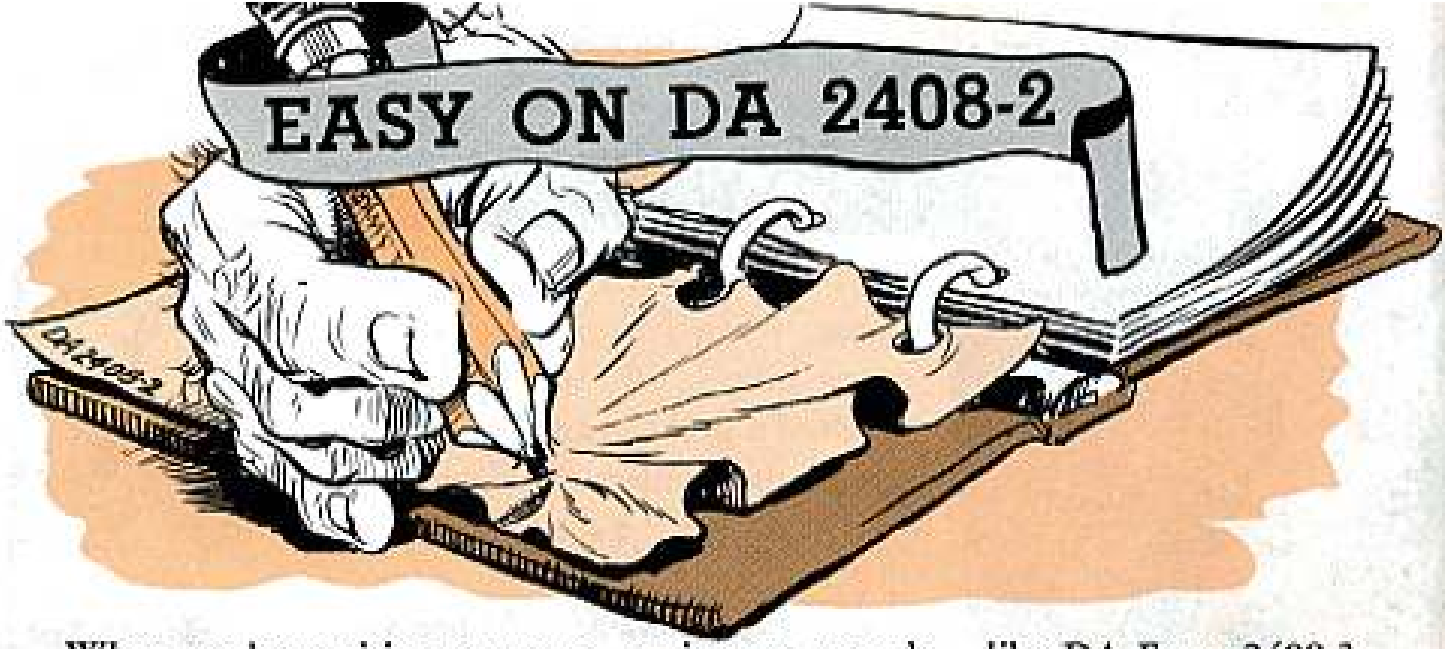
HEADSET—No rough stuff, please, when you put the headset on or take it off. It doesn't take much of a pull to yank those wires out of the headset. Without 'em, you won't get the message.

AMPLIFIER HOUSING—When you put the end plate back on the amplifier housing, make sure you line it up with screws and see that the gasket is seated right. That way you'll keep out that old trouble-causing moisture.

METER ASSEMBLY—Easy does it when you're storing the meter assembly. Don't bend the cable when you're putting the meter in the case or you may pull the wires loose.

SEARCH HEAD—Keep the cable on your search head reasonably taut so that it won't form a loop and get pinched then ruin the cable.

CARRYING CASE—The cover has to be seated just right or it could crack the case and moisture can get in. When you try to close the case and the lid doesn't fit, open the case and make sure the cables, straps, or carrying harness are not caught between the lid and the top of the case.

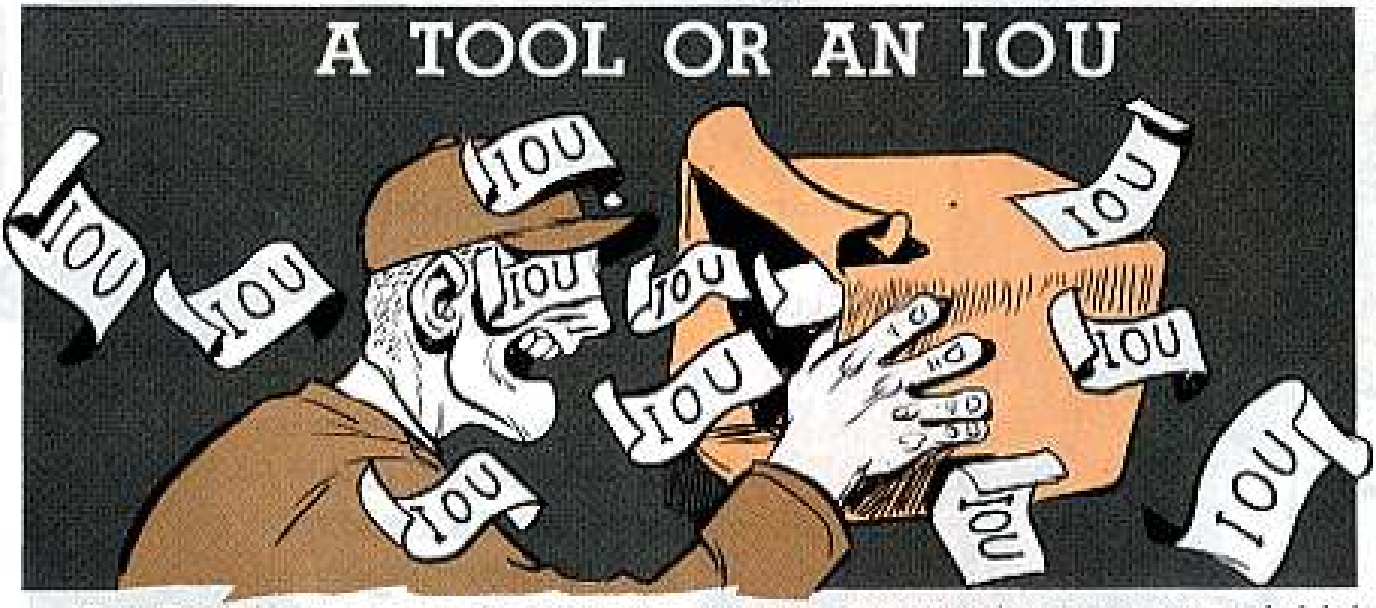


When you're writing on some equipment records—like DA Form 2408-3 and DA Form 2408-7—you need muscle power to get clear carbon copies.

But take it easy when you write on DA 2408-2, especially if it's on top of the DA 2408-3 with all its carbons. Bear down hard on DA 2408-2 entries and you may find they show up on the 2 and 3 copies of DA 2408-3. And hwata smear that makes, as the phonetic spellers say.

Ease up on that pen or pencil on DA 2408-2 and save your strength for DA 2408-3. Or slip a cardboard between the 2408-2 and 2408-3 before you test your strength. It makes for cleaner copies.

(The same rule also goes for your support when making entries on a DA 2408-6 atop the DA 2408-7 if the carbon paper's still in it.)



You should get one or the other (a tool or an IOU) when you get an initial issue of a tool set or kit.

You get an itemized list when you get your set or kit. It'll show the FSN, quantity, and availability date.

If there's a shortage of tools, or maybe not the number authorized, then you should get a due-out. When the tools are available, they'll be shipped to you.

AR 725-40 (Aug 65) has the dope on these tool kit policies.

Connie Rodd's BRIEFS

Who's On First?

Been trying to keep track of who's responsible for what in the Federal Supply Classification (FSC) class assignments? If so, then you'll want to take a look at AR 701-5 (27 Aug 65). This AR "scorecard" supersedes the ARs in the 701-series that gave the different FSC class assignments.

More Power to You

Like a cool shower on a muggy Mekong day is new TM 5-766 (Jul 65), Power Generation in the Field. It's chock full of latest helps for field juice production. TM 5-760 (Jan 57), Electrical Wiring and TM 5-765 (Jan 57), with Change 1 (Aug 59), Electrical Power Transmission, are still available too.

Con-Fuse-You Ended

If the FSN for the F2701 fuse for the SM-154/MPQ-4A antenna position simulator has been buggin' you by bouncin' like a bad check, be of good heart. The word has it that FSN 5905-281-0244 is a bad 'un, even though it's in TM 11-6625-541-12 and the -20P. What you really need is Fuse, Cartridge, MIL Type FO2GR500A, FSN 5920-356-2193.

Handy, Handy, Handy

That's the word for DA Pamphlet 310-6 "Military Publications Index of Supply Catalogs and Supply Manuals". This pub has the info that was listed in the old "Index of Supply Manuals" (DA Pams 310-21, 310-22, 310-23, 310-25, 310-28, 310-29, 310-30, and the part of DA Pam 310-4 that had type 4 and 6 supply manuals and type CL supply catalogs). It's also an index to your DoD Catalogs.

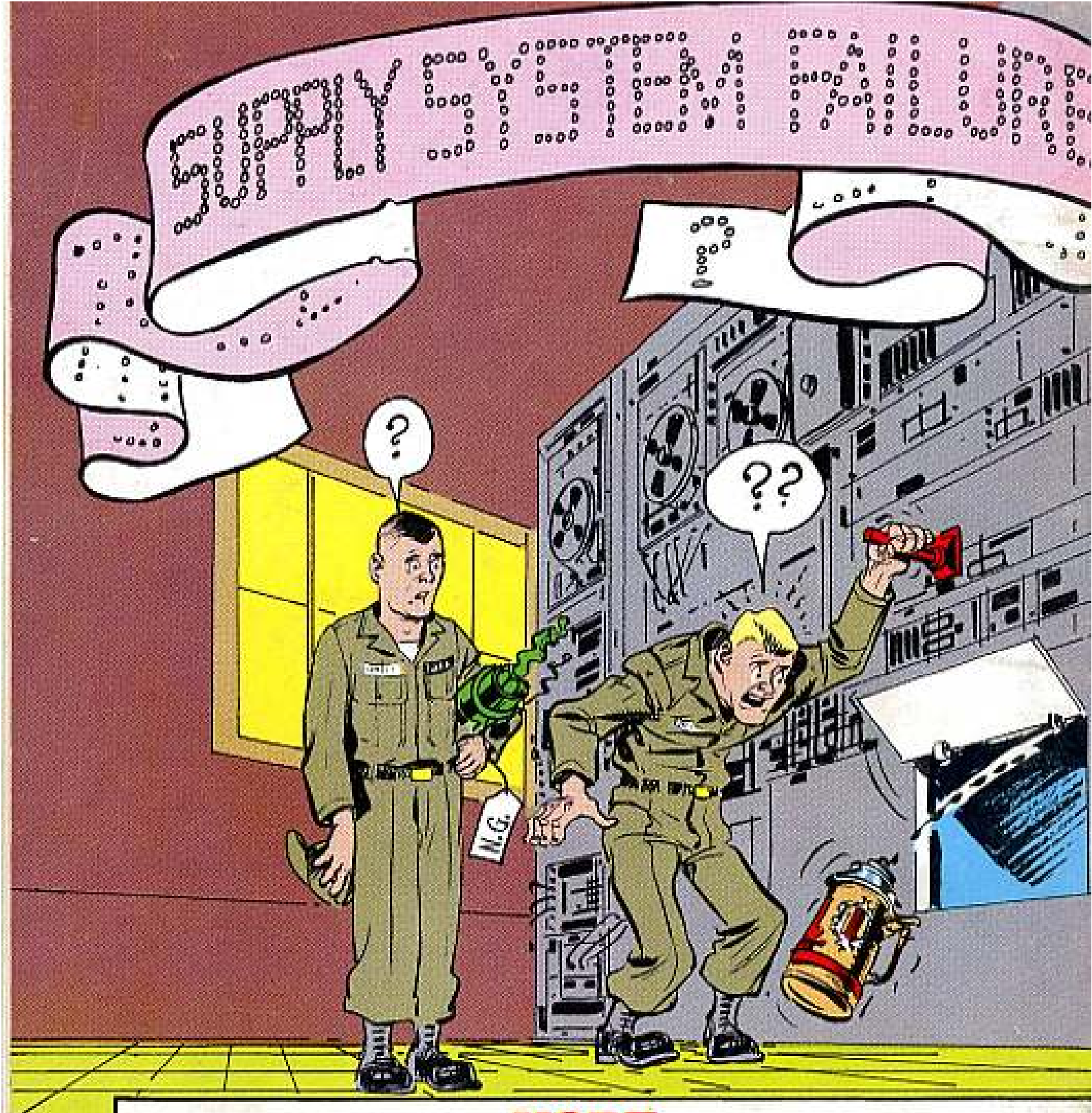
Date With Julian

If you need Julian dates for your equipment and supply records, then order FSN 7510-226-5401, Julian Calendar (pkg of 50) in the GSA catalog. It gives you both regular and leap years. Real handy. Your country store may have 'em in stock.

Add A Brake Tool

A brake adjusting tool is authorized as part of the Tool Kit, Organizational Maintenance, No. 2 Common. It was missed in the list—SC 4910-95-CL-A72 (Nov 64). It's the same one (FSN 5120-596-1034) that's in the No. 1 Common Tool Set.

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



NOPE...

TWO BIGGEST CAUSES OF SUPPLY FAILURE ARE:

1 USING **OUT-OF-DATE** PARTS MANUALS
(Stay up-to-date with DA PAM 310-4 and changes)

2 PUTTING **INCORRECT** PARTS NUMBERS ON DA FORM 2765
(Put your references on the requisition)

GOT THAT? ...FINE.