



the Army. There's a big push on nowadays to chop down the cost of running

cost-reduction business. your equipment and the way you maintain it all play a part in this You have a big part in that job. The way you operate and use

Saves \$\$. last longer . . . and won't have to be replaced by a new one so soon ming. Keep it clean, adjusted, lubed and perking just right. It'll Operate your gear like it should be . . . no banging and slam-

you moving, shooting and communicating, big for him, he gets the support maintenance outfit rung in to keep how, tools and parts to keep your gear purring. When the job's too Get your unit mechanic in for the tough jobs. He has the know-

it with a new one. Saves \$\$. testers on radios. Know, for sure, before you yank a part and replace voltage circuit tester on your trucks and tanks, for example, or tube tab is using your test equipment to check for bum parts. Use the low-If you're a mechanic, one of the biggest bets for keeping down the

you've got - including parts and supplies. You don't want more to have." Remember that when the whistle blows, you go with what unit needs: No rat-holing for "just in case they're out." No "nice than you can carry. Saves \$5. Supply men, too, know what to do: Get and stock only what your



stack up big for Uncle

he rocks. Saves \$5 and whitewashing "spit-and-polish" Also, cut out

And every day

cut costs.

today to help Do something

can do the sam and it'll real

Your buddies



Army Sedan 2-12 Slave Cables 13 M151 W151 14 GROUND

MOBILITY 2-19 MIGG Mortar

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Use of funds for printing of this publica-tion has been approved by Headquarters, Department of the Army 19 february 1965. DISTRIBUTION: In accordance with re-quarements submitted on DA Form 12-4.



PS Magazina. Sqt Half-Mask good Knoz, Ky.



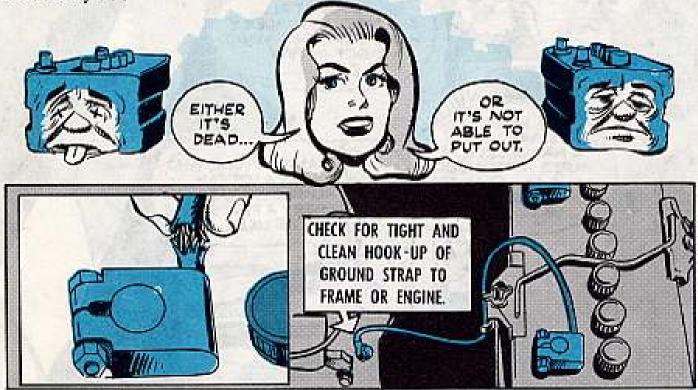
HEY! HOLD ONE! ARE YOU OUT OF GAS?



The way your engine stalled may tell you whether to look into the fuel or the ignition first. If it coughed and choked to a halt . . . sounds like the joyjuice! If it just wouldn't start when you came back to it, then you can't be sure. So let's check out both systems, one at a time.

BUT FIRST ... HOW'S YOUR BATTERY?

Suppose you get little or no signs of life when you try to start the engine. No starter action, no lights, no horn and no flickering of the ammeter needle mean you either have a dead battery or it's not able to put out. So you head for the battery . . .



CHECK FOR BROKEN STRANDS WHERE CABLE GOES INTO TERMINAL CLAMPS.

BE SURE CABLE CLAMPS ARE SNUG ON BATTERY TERMINALS AND THAT POSITIVE CABLE IS TIGHT ON STARTER OR STARTER SOLENOID

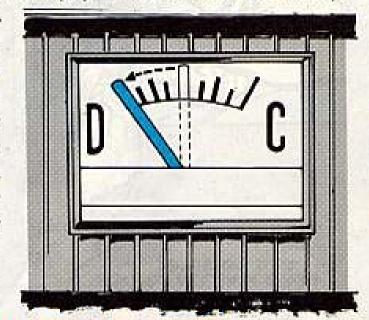
If you get a very weak toot out of the horn, the battery is too weak to crank the engine . . . stop right here and go for help.

OK . . . ON TO IGNITION "FIRSTS"

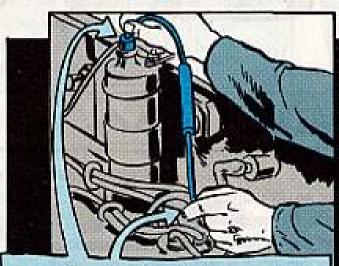
If your starter turns the engine over briskly, you can eliminate the battery,

ignition switch and starter as suspects.

With only the ignition switch on, look for a sharp drop to discharge on the ammeter. (If your vehicle has an "idiot light" instead of ammeter, it will light up to show discharge, but it doesn't tell the difference between heavy and slight discharge.) A heavy discharge means a short in the primary circuit — and there's nothing you can do about it. But, if your primary's okay...



START ON THE IGNITION SYSTEM



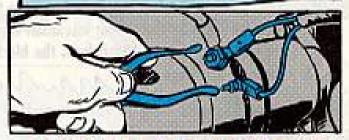
See that the coil-to-distributor cap wire is firmly seated in the socket at each end. This often turns out to be the trouble.



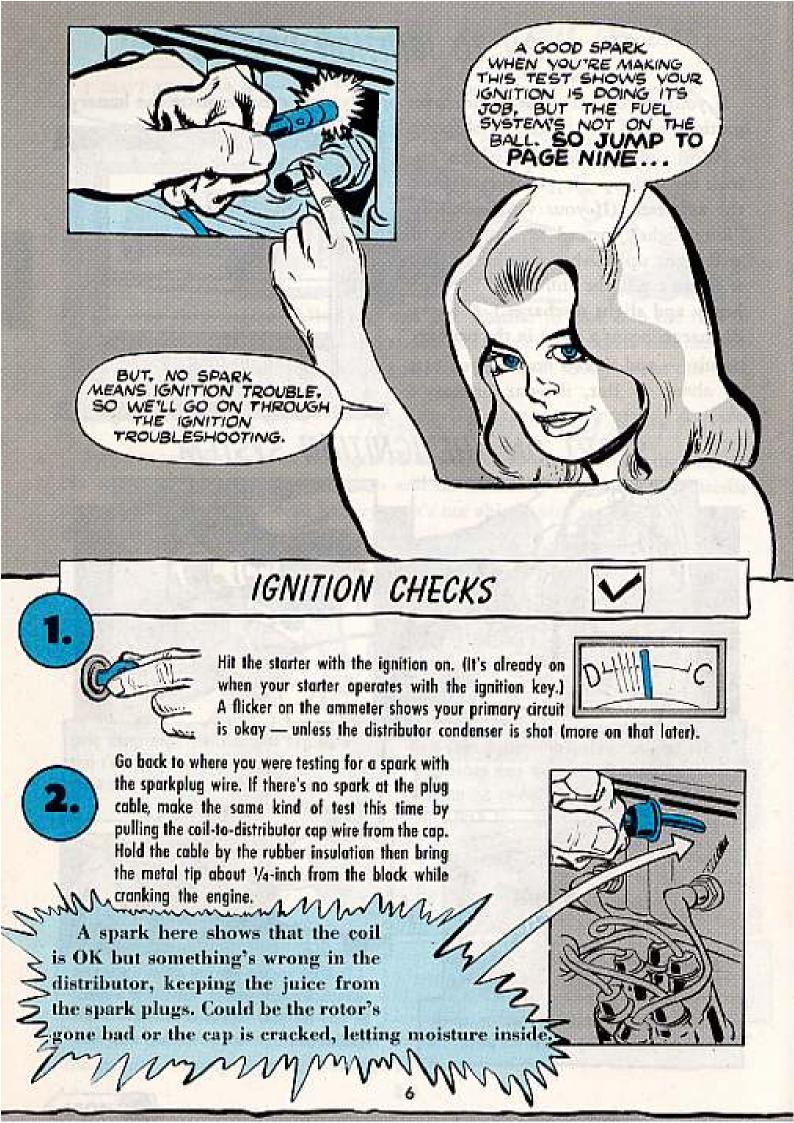
While cranking engine a healthy spark should jump from plug wire to the black .



Wipe dirt and moisture from spark plug porcelain base to make sure spark isn't lost or weakened — remove one cable at a time. Now try to start again.



To crank engine, you can bridge the starter solenoid contacts with the handles of a pliers. Be sure the gear shift is in neutral — if the ignition switch is "on" your wheel may come to life.



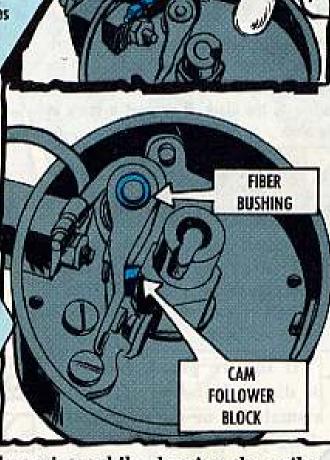
Wipe the inside of the distributor cap clean and dry. Condensation, in damp country or wet weather, can form inside and foul up the electrical operation. Hold the distributor points open while shorting out the coil-to-distributor wire (not the distributor cap wire) from the distributor connection to the block. If you get a spark at the block . . . Examine the points. Tickle the starter until the high point on one of the cam lobes stops under the fiber block on the movable ignition point. This leaves the points wide open. If they're pitted, burned or dirty, clean 'em off with a small file or the next best thing you've got. Ground the moving ignition point. If you don't get a spark, make sure the connection's tight where the movable point's tension spring and the condenser's pigtail attach to the distributor's primary terminal. Now, if you get a spark . . . Make sure the points are opening about .020 inch. A matchbook cover's thickness is about right. The adjusting screw holding the stationary point sometimes loosens and allows the gap to change.



With the points open and nothing on but the ignition switch, see if the ammeter is on or close to zero—it should be. If you get a heavy discharge, remove the condenser clamp screw and hold the condenser out and away from any contact with the distributor. If your ammeter now moves up to zero, the condenser is shot.



Look for a short under the movable point. Check the fiber bushing and the cam follower block. The follower may be worn down so far that the rivet fastening it to the movable point touches the cam.

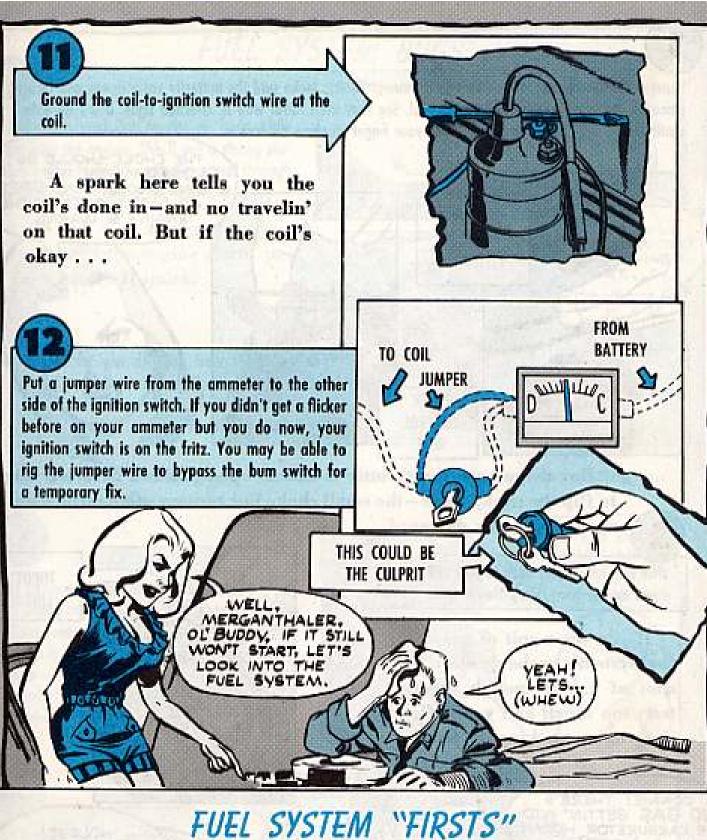


CONDENSER

Going back to when you tickled the points while shorting the coil-todistributor wire at the distributor, if you didn't get a spark . . .







You check the "beginning" and "end" of your fuel system, in that order. Then, if necessary, trace back from the "end." If you've got fuel in the tank, go to the other end—the carburetorGO FUEL TO IN CARBU-TANK? RETOR

Remove the air cleaner. If you've got a manual choke, make sure the butterfly valve opens and closes smoothly as you push and pull the control. See that the control wire is attached tight. If it's an automatic choke, flip it back and forth with your finger to show it's free.



CLEANER

CHECK CONTROL WIRE

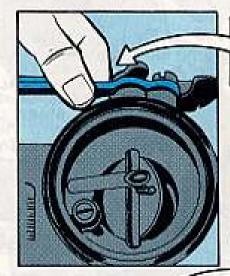
CLOSED WHEN THE OR PARTLY OPEN IF THE ENGINE'S WARM.



But make sure the throttle is in full open position before trying to flip the choke valve-the small choke linkages on some carburctors can be seriously damaged.

With the choke valve open to give you a view down the air horn, work the throttle.

If you see a spit of gas, your fuel system's probably okay. One shot of gas is enough for this test; too much and you'll flood the engine, making it hard to start.



THROTTLE LINKAGE

NO GAS GETTIN' INTO THE CARBURETOR HORN! ANHH... I GIVE UP!

HOLD IT! ... C'MON.. TRACE BACK TOWARDS THE FUEL SUPPLY.

FUEL SYSTEM "BUGS"

Hold your hand flat on the air horn while cranking the engine. This'll put a strong suction on the fuel system and may pull through a bit of dirt clogging the works.

If you feel any gas on your hand or if the engine starts, pull your hand off quick.



Look for gas dripping from the carburetor and eyeball all the fuel line connections back to the line running to the tank. Make sure they're tight. This goes for the sediment bowl on the fuel pump, too.



If gas isn't leaking out of a loose connection, air may be getting in.

Either one spells trouble.

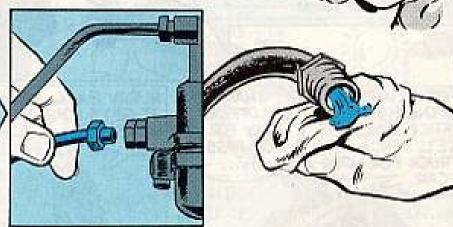


If you see gas around the carburetor or smell a strong odor of gas, you may have a sticking float control needle valve and may be able to fix it. Tap on the float bowl area — gently, now — with a small hammer, screwdriver handle or even a small stone. This may dislodge the dirt and free the needle valve.



4

Unhook the carburetor-tofuel pump line at the carburetor and goose the starter with the ignition off.



If you get a good spurt of fuel, the trouble's in the carburetor's gutsa job for your direct support. But if you don't get gas at this point either, hook it back up and . . .

5.

Take off the tank-to-fuel pump line at the pump. Blow into the tank filler opening to put pressure on the fuel.



If you're alone, wrap a rag around the end of the line and then see if it soaks up any fuel while you blow into the tank.

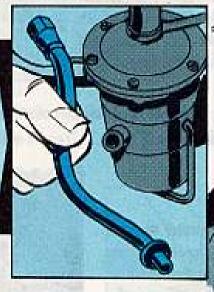


NO GAS
COMING
OUT AT THE
DISCONNECTED
END OF TH'
LINE MEANS
A BLOCKAGE
IN THE LINE.



Remove the short length of flexible line that connects the fuel pump to the fixed line on the chassis. If the obstruction is in this section, blowing may get it out.

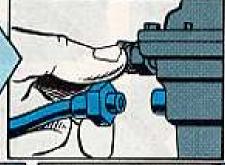
If you finally get gas through to your fuel pump . . .





7.)

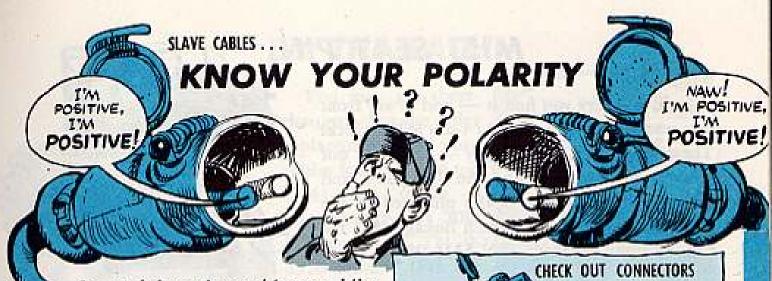
Replace the lines and try again to start your vehicle.



If it's still no-go, you're stuck with a bad fuel pump—and it'll take a mechanic to get your vehicle rollin' again.







Some of these slave cable assemblies seem to end up with end connectors installed one of two ways . . . right or wrong. So when you go to use one, it's anybody's guess which pin's positive—or negative—or . . .

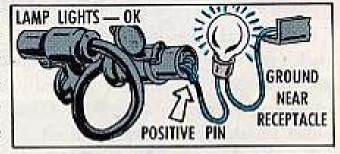
Anyway, if you don't know which way your polarity's running, you can't swear to it that your cable does not have crossed wires. So the next time you connect up this cable to a dead vehicle's slave receptacle, you're taking a chance on belting the heck out of that vehicle's electrical system by reversing its polarity. This practice also causes arcing at the receptacle.

The positive pins in both plugs should mate with the positive hole in the same receptacle. If the cable is wired correctly, the same wire will connect both positive pins . . . the other wire will connect both negative pins.



To be sure the cable wiring is correct, plug in one end to a hot slave receptacle. Then use a test lamp or voltmeter to read current flow by clamping one wire on the positive pin at the other end of the cable and grounding the other test wire on the same vehicle. If the lamp lights, or the voltmeter registers current, you're straight.

If you get no reaction, take one connector apart. Then pull out the contact pins and switch 'em.



FOR PROPER POLARITY

BEFORE USING CABLE.

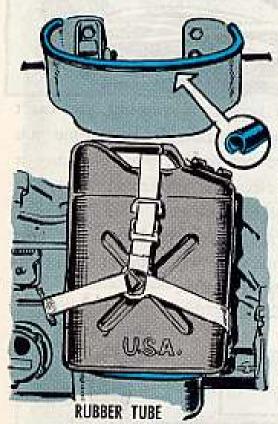


M151 SEAT PIN

Gold is where you find it — and so are front seat retainer pins for your 1/4-ton M151 truck. These pins aren't in supply — at least, not where you'd expect to find 'em. But you'll find that a good substitute is the pin used in the 1/4-ton M38A1 truck's clutch linkage. Ask for Pin, Straight, Headed: FSN 5315-054-4190.



GAS CAN GUARD



ACTS AS BUFFER

So your five-gallon gas can gets dented up because it bounces on the left bumper of your M151 1/4-ton truck?

Well, that's easy to cure. All you need is a couple feet of rubber tubing. Tube, rubber: compounded, ID 7/32-in, is listed as Item 2 on page 65 of your TM 9-2320-218-20P (Dec 63). You order it by the foot as FSN 4720-203-2668. It only costs six cents a foot.

Make a continuous slit along the tubing with a sharp knife and then press it in place along the top edge of the bumper.

Now your gas can (which costs \$2.25) will ride on a rubber cushion (which costs 12 cents) and it'll last longer.

SEALER SEAL

It's general knowledge that the M151 1/4-ton truck's oil filter gets changed every 6000 miles or semi-annually. But it's not generally known that when you're putting on a new filter, the scaling gasket should first be soaked in oil.

Some gaskets may become dry and hard while in storage. A brittle gasket can tear, break or leak.

It's also a good practice to put a thin smear of GAA on the filter's sealing surfaces. This'll let the seal slide in place while the filter's screwed down tight.





BY THE EACH

You may get shortchanged when you order replacement spark plug cables for your 3/4-ton G741-series trucks if you don't dig your -20P.

Page 41 in TM 9-2320-212-20P (Feb 60) lists Cable Assembly, Power Electrical, FSN 2920-620-3964, for five spark plugs. This FSN will not automatically bring you five cables. YOU ORDER THE
CABLES IN QUANTITIES
OF ONE OR MORE—
UP TO FIVE. THE
FSN IS FOR A SINGLE
CABLE AND NOT A
SET OR KIT.



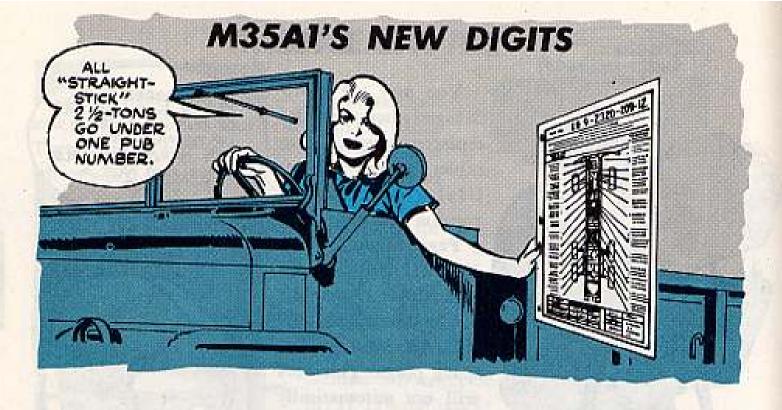
3/4-TON U-JOINT NUT

Are the prop shafts on your 3/4-ton G741series trucks doing the twist because the universal joint bolts are working loose?

If so, then you need a new self-locking nut that comes under FSN 5310-057-7080. This'll keep the U-joints tight. These new nuts get torqued to 40-50 footpounds.



The nut is not in supply yet for SNL G741 use. Have your support people order them from the US Army Tank-Automotive Center, ATTN: SMOTA-F, Warren, Michigan 48090.



Yep. That's right! LO 9-2320-209-12 that came out in May of 1965 is the correct LO for the M35A1 multifuel truck.

No doubt many 2½-ton jockies are wondering why the M35A1 is now covered by this new numbered LO. Well, the M35A1 has been put in the G742 series group — this "G" group and the LO now cover all the straight stick 2½-ton trucks.

This means that all future publications on the M35A1 will come out under this 9-2320-209- number instead of the old 9-2320-235- number.

HIT THE HOLES

Some homemade guides can save you a lot of sweatin' and cussin' when you're lining up holes for reassembling equipment.

Use bolts of the same size as you'll be using in completing the assembly. Cut the head off with a hacksaw, round off the top with a file or grinder and cut a slot across the top for a screwdriver.

Screw these guides in and then you can set the gasket and carburetor — or whatever you're putting together — right down over 'em nice 'n' straight. As you remove each guide with a screwdriver, replace it with the proper bolt.

You can make different size sets of these guides and keep 'em handy for different jobs.





BIIL-OEM-OVM-VT&E ... WHERE TO FIND IT



Where, oh where, are the lists that give the rundown on equipment and tools that're supposed to be on your tactical wheeled vehicle?

You know, the basic issue items that some pubs call BIIL (Basic Issue Items List) or OEM (On Equipment Materiel) or OVM (On Vehicle Materiel) or VT&E (Vehicular Tools and Equipment).

Well, that list can be found in several places—where it is depends on the vehicle. It could be in the operator's TM—or a change to the TM. The right TM for your vehicle may be one of the new -10 series or one of the old ones, put out about 10 years ago, that covers both operation and organizational maintenance.

Before you start looking, it's best to know the G-series group of your vehicle. If you don't know it, you can find your vehicle's G group in the front section of 'TM 9-2300-223-20P, the Consolidated Authorized Organizational Stockage List of Repair Parts for Tank-Automotive Equipment.

FOR MOST OF THE G-SERIES TACTICAL WHEELED VEHICLES:

VEHICLE SERIES	PUBLICATION
G-740 1/4-ton (M38)	ORD 7 SNL G-740 (Jun 56)
G-758 V ₄ -ton (M38A1, etc.)	Change 4 (11 Dec 59) to TM 9-8014 (Apr 55)
G-838 1/4-ton (M151)	
G-823 1/2-ton (M274)	
G-741 3/4-ton (M37, M37B1, etc.)	Change 8 (May 65) to TM 9-8030 (May 55)
G-742 21/2-ton (M34, M35, M35A1, etc.)	TM 9-2320-209-10 (Feb 65) Change 1 (May 65)
G-749 21/2-ton (M135, M211, etc.)	Change 7 (Feb 65) to TM 9-8024 (Oct 55)
G-744 5-ton (M41, M51, etc., including the	
wrecker and trucks with multi-fuel engines)	Change 3 (Jan 65) to TM 9-2320-211-10 (Mar 63)
G-792 10-ton (M123, M125)	Change 3 (Jan 65) to TM 9-2320-206-12 (Feb 60)

MUZZLE DOWN, BREECH UP

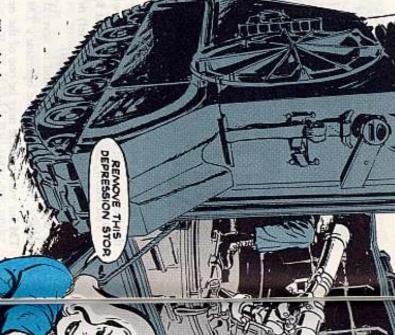
mortar carrier, listen up. If you have an M106 or M106A1

to do if the mortar misfires. page 42, where it tells you what slightly off target in para 161, 2300-224-10 (Nov 61) points Change 7 (Oct 63) to TM 9

you'll be target center when you read para 161 for effect. . . . Change the range like so and

as high as you can. What they 7 it tells you to elevate the mortar as you can. mean is depress the mortar as low In c(3) on page 42 of the Change

so the round will move down the in a horizontal position, the round with the breech end of the mortar tube toward the muzzle. Actually, the mortar to a horizontal position third man raises the breech end of won't move. In c(5) on page 43 it says the



muzzle end will the round start to ward incline. Only when he has horizontal and then give it a forslide toward the muzzle, the breech end higher than the tube slowly and steadily to the The third man has to raise the

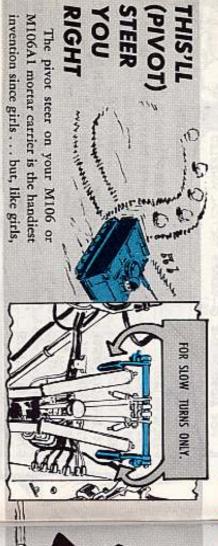
CARRIER STOP STUFF MIO6 MORTAR

round. a real useful article. It kept you from might hit your own vehicle with a cranking your elevation so low you rier the depression stop assembly was When you had an M84 mortar car-

or M106A1's, where it's not needed at used by some outfits with their M106 The assembly (8732403) is being

a problem. Because of the recoil stop turn it in to supply already. the depression stop assembly. So-o-o-o, hit the vehicle. So-o-o-o, you don't need can't crank low enough for a round to and the way the vehicle is made, you With the M106 series you don't have

7 (Oct 63) to your TM 9-2300-224-10 secure like it says on page 37 of Change the recoil stop clamp is in place and Before you fire, though, make sure



it can be dangerous if you don't handle

going slow, like under 10 miles an track on that side. This is OK if you're when you're going fast, you make your vehicle a portable disaster area. hour. But if you pull on the pivot steer back on a pivot steer lever you lock the Thing to remember, when you pull

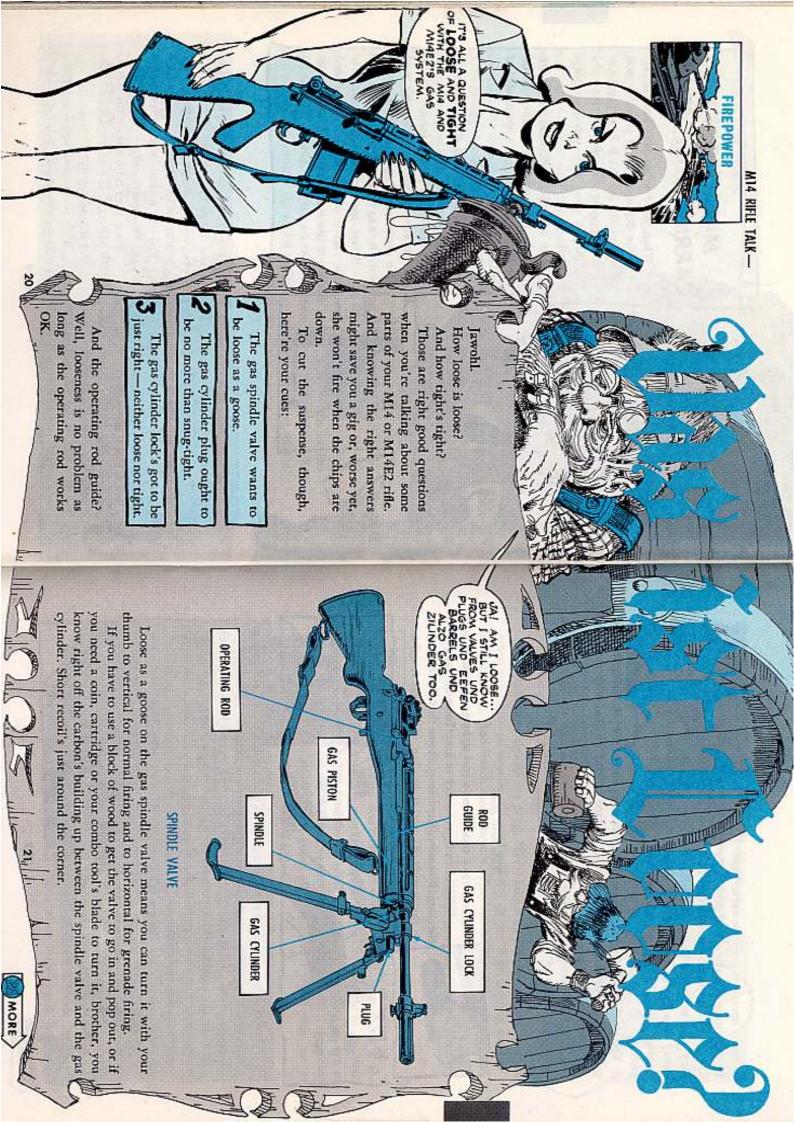
If you're lucky you merely throw a

likely you'd also wreck your differenponents of the vehicle. be heavy damage to the human comtial. If you turned over there could also

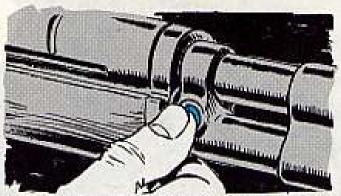
and the repairmen? So why make business for the medics

10 MPH). Use your regular steer han lles if you're going faster. Pivot steer is for s-l-o-w turns (under

track and break a final drive. More sults with your shift in 1-2 or 3-4 range With pivot steer you'll get best re-



Smart operators keep the valve loose by exercising it at the end of each day's firing or at inspection time. Right . . . they push the valve in and out till it's loose, then they turn it on and off a couple times. This'll get rid of the carbon.



You don't have to worry about lubing the back end of the pin, either. It'll get plenty while you're coating the outside surface of your weapon with the lubricant prescribed in your TM.

Just don't forget to end up this exercising bit with the valve slot up-and-down for normal firing . . . or your rifle'll end up as a one-shot Lucy.

PLUG JUST SNUG

There was a time when a real tight gas cylinder plug was believed to be necessary to keep from losing gas or the plug. Not now. Experience shows that if carbon gets on the threads of a real tight plug, it'll freeze it tight.



There's only one right way to hold the M14 when plugging or unplugging it. Put your left hand over the barrel and cylinder, or if the bipod's attached, hold on to that. Of course, if the barrel's hot, you can stick a screwdriver between the barrel and the cylinder for a little leverage when removing the plug. But, don't ever tighten the plug when the barrel's hot. You might never get the darned thing off.



And, for Pete's sake, to remove a stubborn plug, never grab hold of the handguard or you might bust it. Also, never brace the butt between your feet to get more heft on the plug or you'll bust the stock. It's OK to plant the rifle between your size 12's like it shows in the old TM, but don't use your feet like a vise. If the plug's frozen that tight, let your armorer go to work on it.

INCIDENTALLY, YOUR COMBO TOOL, FSN 4933-768-0211, IS THE ONLY GADGET TO USE ON THE PLUG. PLIERS AND WRENCHES WILL HURT IT BAD.



A couple more tips on the plug: Never take it off till you have to . . . and when you put it on be sure it's good and dry or you'll be inviting the big carbon freeze. And watch those threads. They're real fine. You could cross 'em up if you're not extra careful.

As a general rule, you'd only remove the M14's gas plug if the gas piston's on the bum . . . meaning so dirty it won't slide, or it's installed wrong.

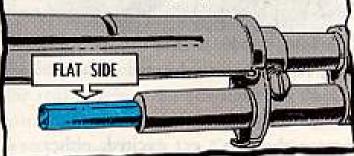
CHECK THAT PISTON

You don't have to take anything apart to see if the piston's working right. Just lock the slide to the rear, then turn the weapon end for end, keeping an eye or ear at the exhaust port (not the drain hole). If the piston slides freely, good; all is well. If it won't slide, you've got a cleaning job.

To check for correct installation of the piston, take off the stock. The flat side of the piston must be facing upwards toward the barrel. If the round side's up, the piston can't work, 'cause the gas port'd be blocked.

NOT Here

HERE



Sound's kind of nutty, but it could happen that the piston'd be in there wrong — and you wouldn't be able to tell the difference by looking at the assembled weapon. Of course, this'd mean that the plug threads would have to be crossed and the plug overtightened. Very bad. This'd lead to a burring inside the cylinder. Very, very bad.

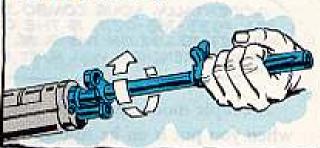
So, get that flat side up every time when installing it, huh?

CYLINDER LOCK

MIA IF THE CYLINDER LOCK'S ON RIGHT.

If you see the shoulder of the front thread on the barrel as you peer over the lock, the lock's on right. But, if it appears to be countersunk, then the lock's on wrong. Which means the piston's not seated right in the cylinder and the port's out of alinement.

Here's the sure-fire way to get it right every time: Thread the lock as far as it'll go, then back off enough (say, half a turn) so's you can insert the cylinder plug through the lock into the cylinder.



EYE THAT ROD

Looseness of the operating rod guide's no problem as long as the operating rod'll slide without binding. To check this out, though, you'll have to strip your rifle a bit further. You already have the stock off, right? Now remove the connector assembly, the operating rod spring guide and the operating rod spring.

OK. With the rod in place, attached to the bolt, tilt your weapon end-for-end. The bolt should move freely under its own weight. If it does this, everything's under control.

But, if you run into any binding whatever, you'd better make a thorough check. The trouble could be minor—like dirt or twigs or burrs or stuff in the camming recesses or on the operating rod. You or your armorer can take care of these.



But, if it's worse than that—like if the long slender part of the operating rod's cracked or bent, or the rear locking lug areas are chipped or burred bad—let your armorer carry the ball. Don't use the weapon.

Now, during this test the operating rod guide might look loose. But don't let this shake you up—and your inspector shouldn't get excited, either.

A guide that's real loose in the disassembled stage like this could be plenty tight enough when the weapon's assembled since the inside contour of the stock would hold it in check.

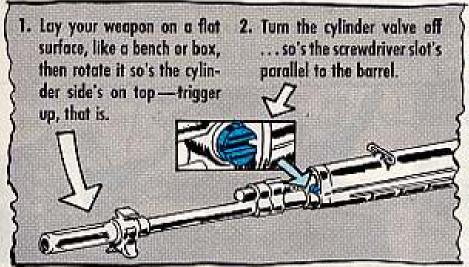
So, don't let anybody tell you you ought to tighten that guide by peening its spring pin. Just 'cause somebody can see daylight through the pin doesn't mean it's loose or damaged. The new split-type pins all look that way. The old pins, of course, were solid. As long as the pin's in place, leave it alone . . . it'll do a better job if you don't irritate it.

In other words, you keep loose, ja?

NO LUBE

Of course, you know you don't ever put any lube at all in the M14's gas system parts. You assemble 'em absolutely dry — and clean. These parts are made of corrosion-resisting steel that don't need lubing. Matter of fact, oil'll only invite trouble — dirt, corrosion, sluggishness, no-go!

But sometimes it's pretty hard to keep oil out of there when you're cleaning and lubing the rest of the weapon. So, here's a little trick to protect the cylinder, piston and plug before you start cleaning and coating the inside of the bore with prescribed lubricant:



This way, if any oil from the patch should happen to sneak into the opening in the cylinder valve, Gravity Gerty'll draw it back down so's the patch can wipe it off next time through. No oil will reach the cylinder plug this way, that's for sure.

But, again, don't forget to turn the cylinder valve upright when you're through.

Your TM 9-1005-223-12 (Fcb 65) is chockful of dope on correct methods for cleaning the M14's gas system parts — pay hard attention to it. Especially, don't use steel wool, a wire brush or scrapers of any kind on these parts. You might change some of the critical dimensions and ruin your fire.

Use CR bore cleaner (FSN 6850-682-6835—2-oz can) for normal cleaning and carbon removing compound P-C-111a (FSN 6850-620-0610—5-gal can) for real tough carbon deposits. In a pinch, you can try dry-cleaning solvent or mineral spirits paint cleaner, but never use gasoline, benzene or high-pressure water, steam or air.

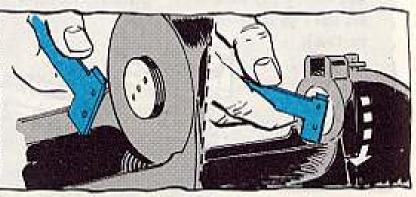


There's a place for muscle—but it's not between the ears and definitely not on the wrench that comes with your M79 grenade launcher.

Too much heft when you're installing the firing pin retainer or when attaching the receiver group to the stock could put your weapon on sick call.

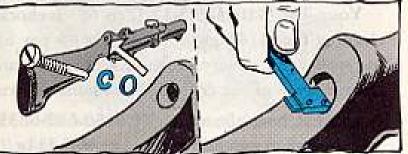
Like, f'rinstance, unless you seat your wrench just right in the retainer's holes and do the twist real easy, you could snap off one or both tips. A busted tool's only part of the woe, too. Worst of it is, the tips stay in the retainer—and it takes a long trip to support maintenance to get 'em out.

So, next time, try it this way: Put both tips all the way in the retainer holes by flattening the face of the tool against the retainer. Then turn the wrench real slow till you meet resistance. Then seat it firmly. Remember, any extra pressure at this point could bust a tip or two.



To save your M79 some major surgery for a split stock, stow the heavy hand when you're tightening the pan-headed machine screw into the stock.

First make sure you get those two washers on the screw in the right order like in Fig 22 of TM 9-1010-205-12 (Feb 61). Next, run the screw up till it's snug... then add about a 1/8 turn with the wrench. Enough, already!



And here's a special tip to guys who've been using a screwdriver instead of their wrench on this job. It's OK to use a screwdriver if you're having wrench trouble, but be sure the blade's wide enough—and, easy on that muscle!

GLOVE IN PLASTIC BAG FIRST

SHAKE THE FLAKE

Dear Editor,

THEN INTO CARRYING CASE

Maybe you'd like to pass along this tip to outfits with M60 machine guns. Before you hit the field, put your asbestos mitten in a plastic bag before stowing it in the carrying case with the spare barrel. This'll keep the pesky white asbestos flakes from getting into the nice oiled bore. Also, it'll make the glove last longer.

(Ed Note - Crackerjack idea.)

SP 4 Ray Forman APO New York 09029

HEAD TO THE REAR ... ALWAYS!

Want to save yourself some face?

Then put this first and last on the pre-firing checklist for your M60 machine gun:

Make darned sure the gas piston's in right—with the head facing the rear toward the trigger.

If it's the other way around, you could get an explosion when you press the trigger. You may be lucky and not get hurt, but your weapon'll be dead. 'Nuff said?



DON'T BUG YOUR RIFLE

Oops, hold everything! If you've been tempted to use a 2-oz plastic insect repellent (bug juice) bottle to hold your rifle oil on maneuvers or otherwise— hold one! It's hard to get those li'l bottles absolutely clean and dry inside, and if you don't, the water and acid from the bug juice can contaminate the oil and foul up your weapon's innards! So, better stick to the 4-oz metal oil can that's issued to you unless you're absolutely sure your plastic container is clean and dry.





Vehicle publications dated after 1 Nov 65 will be distributed by pin-point.

Get your unit's requirements in (thru channels) before 10 Oct 65 to the St.

Louis Publications Center on —

DA Form 12-37 — for Tracked Vehicle Publications.

DA Form 12-38 — for Wheeled Vehicle Publications.

DA Form 12-39 — for Trailers and Dollies Publications.

See DA Circular 310-38 (30 Jun 65) for the word on this new pin-point distribution.

Any forms the Center receives after 10 October will get delayed in getting set up on the pin-point system, so beat that deadline.

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

TECHNICAL MANUALS TM 1-U8-5, Mar. U.S. TM 1-10H-23C-4-20P, Apr. OH-23. TM 1-225, Apr. Fixed & Rotor Wing. TM 3-1040-206-20P, May, Flame Thrower, Mech, Main Armament, TM 3-4240-224-20F, Apr. Breathing Apparatus, Camp Air, ABC-M15A1, TM 3-4240-241-12, May, Filter Unit, Gas Parliculate, GED, 300 CFM, ABC-M6A1 and EMD, 300 CFM, ABC-M6A1. TM 3-4240-241-20P, May, Filter Unit, Gas-Particulate, GED, 300 CFM, A&C-M6A1 [4240-889-2316] and EMD. 300 CFM, ABC-MGAT TM 5-1450-202-20P, Apr., Pershing, Power Gen Equip. TM 3-1450-203-20P, Apr. Penking. Power Gen Laulp. TM 5-2805-203-14, Apr., Eng. Gos. 6 HP, MII SIE 4A032-1 TM 5-3431-217-15, Apr. Welding Mach, Art. 300-Amp DC. Hornischleger W300 MG TM 5-3805-206-20P, Mar, Intre-ching Mach, Barber-Greene 750. TM 5-4120-235-15, May, Nike-Herc (Imp) Air Cond, Heaters, Fons and TM 5-4310-229-20P, May, Comp. Ro-tory, Air. GED, 210 CFM, 100 PSI Davey M-210-RP. TM 5-4310-242-25P, May, Comp. Air, Recip, Champion Procesatic 19-832-TM 5-4320-213-20P, Apr. Comp. Recip, Air, 25 CFM, Champion Pneumatic OE-36-10-ENG. TM 5-6115-312-15, May, Gen Set, GED 5 KW, Hol-Gar Mdl CE-56-AC. TM 5-6115-312-25P, Apr. Gen Set.

5-KW, AC, 5kd Mid Hol-Gar Mdl CE-56-AC. TM 5-6115-321-20P, May, Gen Sel. DED, 30 KW, Wisterized; Port; Skid Mtd, Mil Std SF30MD. 9-1025-200-12, Mar, Hawitzer, Med, Towed: 155-MM, M114, MITTAL; Howitzer, Med, Towed: Aux Propelled, 155-MM, MITTAL. TM 9-1400-500-12/4, May, Howk, Sys Description. TM 9-1410-375-12P/1, Apr. Pershing. Ammo, Mal Oper & Maint. TM 9-1410-375-12P/2, May, Penhing. Ammo, Mal Oper & Maint. TM 9-1430-250-12P/4/1, May, Nike-Here, Ground Con Equip. TM 9-1430-250-12P/9/1, Apr. Nike-Herz (Imp) Ground Can Equip. TM 9-1430-250-12P/12, Apr. Nike-Here (Imp) Ground Con Equip. TM 9-1430-250-12P/13/1, Apr. Nike-Hers (Imp) Ground Con Equip. TM 9-1430-250-12P/21/1, Apr. Niku-Ajax, Nike-Herc, Nike-Herc (Imp) Ground Con Equip. TM 9-1430-250-15P/5/1, May, Nike-Herr, Ground Con Equip. TM 9-1430-250-15P/8/1, Apr. Nike-Here (Imp), Ground Con Equip. TM 9-1430-250-15P/11/1, Apr. Nike-Herc (Imp), Ground Con Equip TM 9-1430-250-15P/20/1, Apr. Nike Ajox, N.ke Herc, Ground Can Equip. TM 9-1430-253-12P/2/1, Apr. Nike-Here (Imp), Ground Con Equip, TM 9-1430-268-15P/1, Apr. Nike-Herc. Nike-Herc (Imp) Ground Con Equip. IM 9-1430-375-12P/1, Apr. Pershing Mil Oper & Maint. TM 9-1430-376-12P/2, May, Fershing, Ground Hnd³g, 5p1 & Svc Equip. TM 9-1430-376-14, May, Fershing, Ground Hadig, Spr & Svc Equip. TM 9-1430-511-15P/1, Apr. Howk, Ground Con Equip. TM 9-1440-250-12P/6/2, May, Nike-Here, Nike-Here (Imp), Ground Hndlg. Spt & Svc Equip. TM 9-1440-250-15P/1/1, Apr. Nika-Here, Nike-Here (Imp), Ground Hndlg, Spt & Svc Equip. TM 9-1440-250-15P/2/1, May, Nike-

Nike-Herc (Imp), Ground Hodig, Spt & Svc Equip. TM 9-1440-375-12P/1, May, Persh-ing, Ground Hndlg, Spt & Svc Equip. TM 9-1440-500-12/3, May, Howk, Graund Hndlg. Spl & Svc Equip. TM 9-1450-375-12P/1, Apr. Penking, Ground Hadig, Spi & Svc Equip. TM 9-1450-376-12P/2, May, Penhing, Ground Hndlg, Spi & Sve Equip. TM 9-1450-377-12P/2, May, Parching, Ground Hadig, Sot & Svc Equip. TM 9-1550-200-20P/2, Apr., Torget McI, Ground Hadig, Spi & Svc Equip. TM 9-2300-224-10/3/2, Apr. Port Two, Carrier, Cnd Post, Lt. Armid. M577, M577A1. TM 9-2300-224-10/3/3, Apr., Part Three, Moriar, SP: 107-MM, M106, M106A1. TM 9-2300-224-10/3/4, Apr. Port Four, Flame Thrower, SP: M132, M132A1 TM 9-2300-224-20/3/4, Apr. Port Four, Flame Thrower, SP: M132, M132A1 TM 9-2320-209-20, Apr. Chassis, Trk: M44, M44A1, M45, M45A1, M45C, M46, M46A1, M46C, M57, M58, MSBA1; Shop, Trk. M185, M185A1. M185A2, Cargo: M34, M35, M35A1. M36, M36C, Trk, Dump: M47, M59, M342, Trk, Maint, Earth Bor Setter, VITA MTQ; Trk, Tank: fuel Ser 1,200-VIBA/MTQ; Trk, Moint; Telep Constn. Gol, M49, M49C, M49CA1; Trk, Tanki Wir 1,000 Gol, M50, M50A1; Trk, Trac- M48, M275, M275A1; Trk, Yanı Exp. M292, M292A1, Trk. Yanı Msi Firg Dala, XM472; Trk. Yanı Shop, M109, M109A1, M109A2, M109C, M109D, XM567; Trk, Wrecker: Cr, M108; Trk, Wrecker: LI, M69. TM 9-2320-223-10, Mar, Cargo Carrier, M116 Amphibious. TM 9-2320-223-20, Apr., Cargo Carrier M116, Amphibious

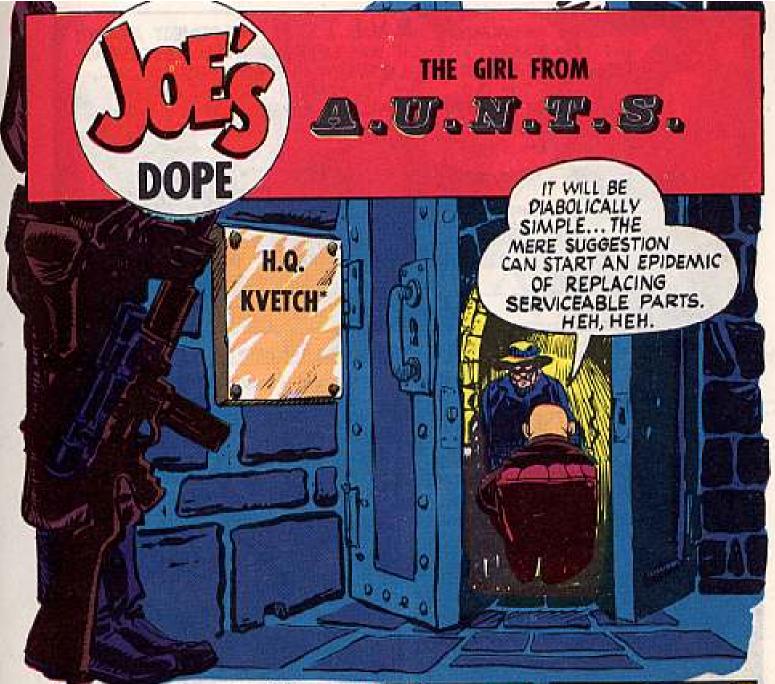
TM 9-4935-303-12P/1, Apr. Surgeont.

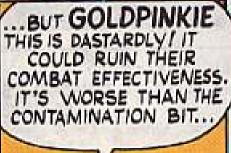
Test Equip.

Here, Nike-Here (Imp), Ground Hndig,

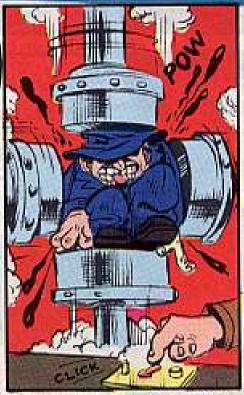
TM 9-1440-250-20/2, Apr. Nike-Hert.

Spr & Syc Equip.











* KVETCH (Killers, Villains, Enemies, Terrible Collection of Humans)

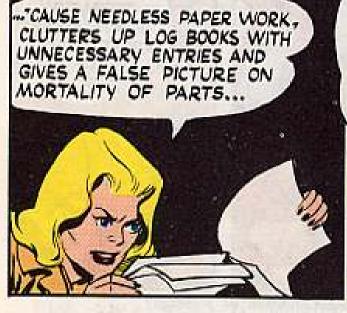
29



* Against Unnecessary Nonsensical Trading and Swapping (of parts)

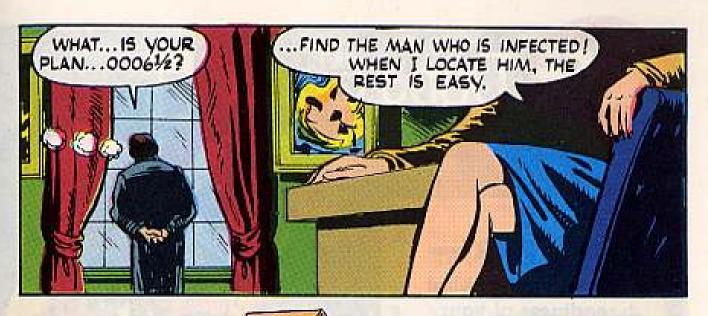


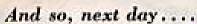




RUNS UP MAINTENANCE COSTS, USAGE RATES AND CREATES SHORTAGES BY DRAINING OFF SUPPORT'S ON-SHELF STOCKS FASTER THAN THEY CAN BE REPLACED.

OUR
MECHANICS
GET ROBBED
OF A CHANCE
TO EXERCISE
REAL SKILL
THEY'RE
TRAINED
FOR.















Dope Shee

"SWAPPER"—

B

- 1. Endangers combat readiness of your outfit.
- 2. Keeps good repair parts from going where they're REALLY needed.
- 3. Overloads repair shops, making them spend vital time checking out turned-in parts that are O K... while the really bum parts wait.
- Builds up paperwork and log book entry chores.
- 5. Gives a false
 picture of parts
 usage and makes
 PLL lopsided.



JOIN UP (9)



DADING and

WAPPING (Of Parts)

Wanton Parts Swapper

- 1. Leaves test equipment lying around unused.
- 2. Never uses maintenance manuals . . . keeps 'em on shelf.
- 3. Never uses special tools and tool kits.
- 4. Unfamiliar with IROAN*.
- 5. Makes no effort to run
 down real cause of
 equipment failure—
 but substitutes parts
 without testing until
 equipment works.
- 6. Replaces parts but does no preventive maintenance.
- Swipes part from other good equipment without concern for the supply situation.
- 8. Turns in large amounts of parts for repair . . . many of them in good serviceable shape.

* Inspect, Repair Only As Necessary

ISTA SIGNATED TWIT





After Chow ...













YOU WERE EASY TO SPOT ... ALL THE TRAITS OF A PARTS-SWAPPER! EVEN A RECORD OF TURNING IN LARGE QUANTITIES OF PARTS FOR REPLACEMENT. JUST MAKING VISUAL INSPECTIONS TO SEE WHAT'S WRONG WITH EQUIPMENT.

(TSK-TSK) MERE PAWN OF GOLDPINKIE WHEN YOU NEVER USED YOUR TEST EQUIPMENT OR YOUR ORGANIZATIONAL TOOL SETS ... YOU SEE, YOU WERE HYPNOTIZED! HOW DO WE SNAP HIM OUT OF IT? NO MORE

YOU WERE A

STOP!

50B :

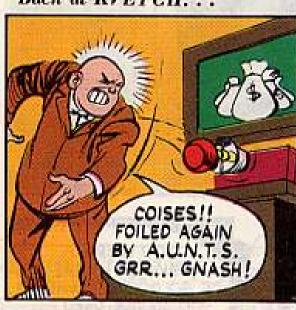
50B



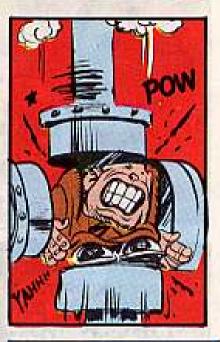




Back at KVETCH. . .









GET ME OUT!
HALP... REPAIR
MAN! MECHANIC!
DO SOMETHING!

FOR YEARS YOU...

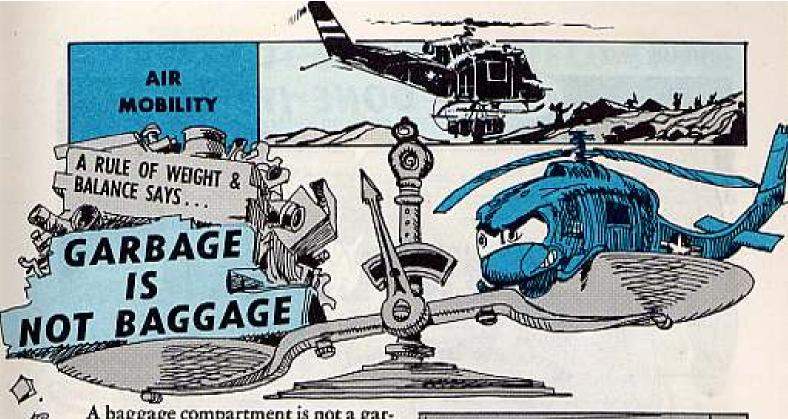
GOLDPINKIE, HAVE TAUGHT
US TO SWAP PARTS AND
SUCH, AND SO NOW...WE
HAVE LOST OUR SKILL
AS MECHANICS
FROM LACK OF USE.





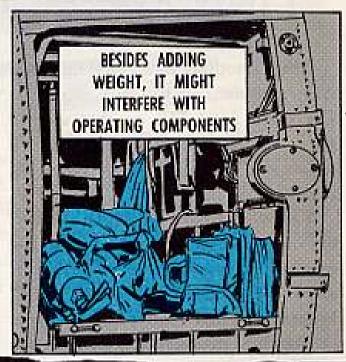


"KVETCH" !!



A baggage compartment is not a garbage compartment . . . whether it be an Iroquois (UH-1B) or any other type aircraft.

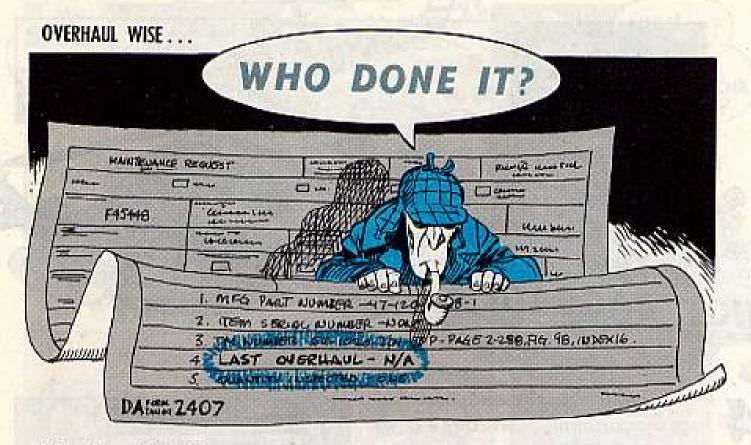
It's not the appearance so much, although a trashy look doesn't say much for your ship during inspections. It's the unknown weight penalty you pay in flight for that trash. You also take a chance on loose rags or papers interfering with internal operating components of your aircraft where the compartment does not have a solid partition surrounding it.



EVEN ITEMS WHICH HAVE A PLACE IN VOUR SHIP—SUCH AS A GENERAL MECHANIC'S TOOL CHEST OR FIRE EXTINGUISHER-HAVE TO BE PROPERLY SECURED, LEST THEY SHIFT AROUND IN FLIGHT!

Besides baggage compartments, trash can accumulate in cockpits and cabins, or even in out-of-the-way places like a Huey heater compartment after the heating unit was removed. In other words, just about any open area of the fuselage is a potential dump.





There's nothing like a well informed Army. So the fact you just fired off a DA Form 2407 EIR on that aircraft part that just failed doesn't hack it unless you've done right by Block 35, item 4.

TM 38-750, para 3-7.4e(3)(b)4, says to "name" the activity that did the last overhaul or manufacture. Sure, you're allowed to put down "N/A" or "UNK" in there. But that doesn't help the types at the big maintenance hangar too much.

Remember, the prime manufacturer or contractor does not always overhaul his own items and the government does not always buy all the smaller parts from the prime manufacturer of the aircraft. So AVCOM has to know who to contact on each EIR.

No sense trying to stick the prime contractor with a failure that belongs in somebody else's lap. The best way to get the most out of your EIR is to "give" with the right contractor's name, sure 'nuff.

DIRTY BIRDS FLY SLOWER



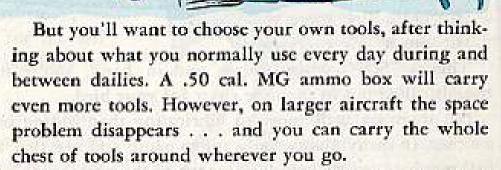
While dirt on the skin of an aircraft won't slow it down anywhere near as much as extended flaps or external stores, it does have the same effect on a smaller scale. Over a long period of time you pay for an unclean bird with increased fuel consumption. Think on it awhile.

FLYAWAY TOOL KIT - FIELD STYLE

Shoving bulky general mechanic's tool chests into light aircraft cockpits has always been sort of a weighty problem during field exercises.

Stripped down flyaway tool kits are a lot easier to handle around outlying helipads and field strips. This is not a subject to be taken lightly when you stop to consider all the necessary field gear that has to accompany your Sioux (OH-13), Raven (OH-23) or Bird Dog (O-1) on combat, observation or admin missions in the field.

HERE'S A FLY-AWAY KIT CUT DOWN TO 16 TOOLS AND 30 CALIBER MG AMMO BOX USED BY A SIOUX CHIEF... WEIGHS ONLY 3-4 POUNDS AT MOST.



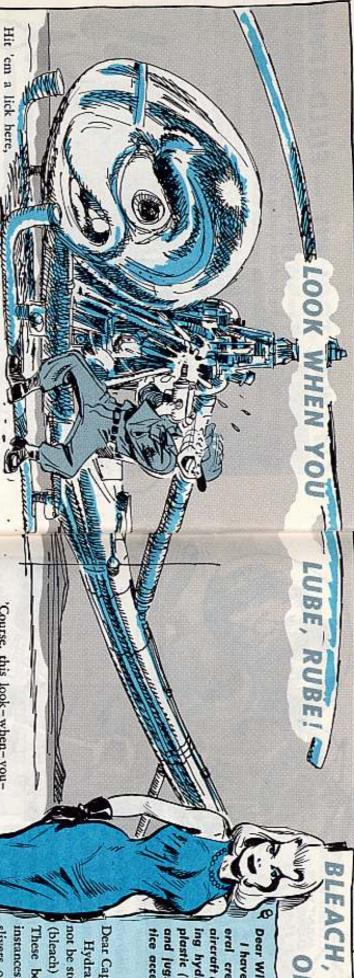
Better get your CO to give the OK on carrying a reduced kit.

NO RINGS AROUND AIRCRAFT — PLEASE

Finger rings, including wedding bands, don't belong on the flight line. It's too easy for them to scratch fiberglass canopies and windshields, or the soft metal surfaces of the fuselage. Even on harder surfaces, a ring can nick the paint cover and let corrosion get a foothold. Besides, you can hurt your hand if that ring catches on some projecting part of the aircraft or hangs up in a tight corner . . . not to mention what can happen if any hand or wrist jewelry comes in contact with certain parts of an electrical system.



O K



Hit 'em a lick everywhere!

Hit 'cm a lick there;

rounds called out in the lube chart for your bird. This is "SOP" when, grease gun in hand, you're making the appointed

another. In many places you want to pause and see that a bearing is getting a full quota of grease before going on to the next fitting. But there's a little more to lubricating than hitting one grease fitting after

A GOOD EXAMPLE IS THE MAIN ROTOR FORK BEARINGS IN THE RAVEN (OH-23)

GREASE

coming out of the relief hale, like rotate the collective in the cockpit white the lube chart in TM 55-1520-206-20 with the gun until you spot clean grease you're shooting the works to give you handy here. Like — having your budd from experience, also comes in mighty (Feb 65) says. A little "savvy," gained During an Intermediate you make

> your Raven. rotor blade and yoke bearings on lube advice also goes for the tail Course, this look-when-you-

until you spot a trace coming thru can force the seals out of place. matter) because too much pressure this fitting (or any fitting for that the seal. Don't use muscle power on You should shoot the grease

at the seal. The grease has to go go inside the blade root fitting someplace. More than likely it'll away and there's no sign of grease cavity if the "O" ring packing in Now, suppose you're pumping LOOK FOR GREASE En .

OOK FOR

GREASE CEAN

Dear Windy,

tice accepted? and jugs. Is this pracplastic (bleach) bottles ing hydraulic fluids in aircraft mechanics storeral crew chiefs and I have observed sev-

Capt J. W. F.

slivers of plastic which instances, contain small These bottles, in many Dear Captain J. W. F., equipment in which slivers - and any other come from the manunot be stored in a plastic clearances are very small. tainer — can cause malforeign matter in the contacturing process. The (bleach) bottle or jugfunctioning of hydraulic Hydraulic fluid should

off when the bird is cranked up. the rudder pedals from the out-of-You'll get a high freq vibration in balance blade. You can tell a filled cavity right-

on the lookout for during a lube bird lube chart list them - a job? The Service Notes in your little "savvy" will resist them. So, what are other pitfalls to be



tor on your Sioux (OH-13E, G) be sure change the engine tachometer genera-Comes the time when you have to

> SLEEVE DRIVE

you're "in the groove."

slot in the tachometer drive sleeve, sure by the latest rock 'n' roll hit. It's the as shootin'. The groove isn't a mood generated

according to TM 55-1520-204-20 (3 When you put the replacement in



CARIBOU CHIEFS...

for real. the job will have to be done over again, into the drive sleeve slot. If you don't the thick edge of the tachometer shaft Apr 64) Para 12-102 you want to put

a broken shaft. scated in the slot . . . snap!!! Another tachometer headed for exchange with unscated tachometer shaft is suddenly

N THICK EDGE

GROOVE

So-o-o-o . . . shaft that groove, man!

torgetful mechanic. fighting chance against a sturdy Cari-

bou (CV-2) crew chief's stand and a

A puny pitot tube doesn't have a

If the engine is cranked up and the

thrown back.

firewall with the engine side cowling

when preparing to work next to the

So you've got to be extra careful

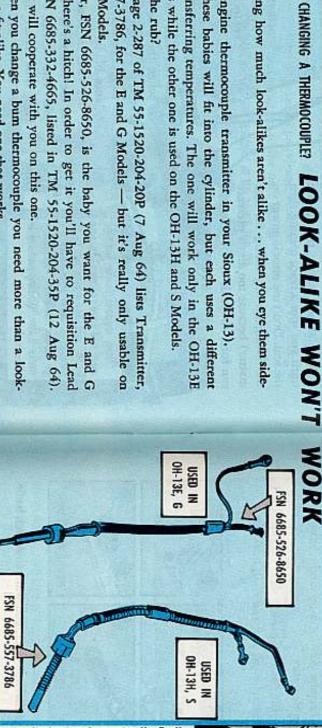
compartment job is with the stand

The safe way to approach an engine

jacked to a low position. This lets you

KEEP STAND AWAY

¥0RK



and G Models while the other one is used on the OH-13H and S Models

So what's the rub?

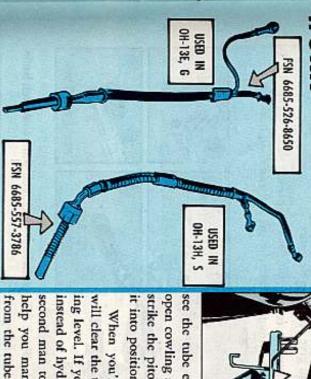
method of transferring temperatures. The one will work only in the OH-13E

Either of these babies will fit into the cylinder, but each uses a different

Take the engine thermocouple transmitter in your Sioux (OH-13)

It's surprising how much look-alikes aren't alike . . . when you eye them side-

will clear the tube, jack it up to workopen cowling so the work stand won't see the tube extending out below the help you manhandle the stand away second man to watch the aft end and it into position. strike the pitot tube as you maneuver ing level. If you use a rigid type stand instead of hydraulic, better round up a When you're certain the platform



43

Models. But there's a hitch! In order to get it you'll have to requisition Lead

Transmitter, FSN 6685-526-8650, is the baby you want for the E and G

Assembly, FSN 6685-332-4665, listed in TM 55-1520-204-35P (12 Aug 64).

Your support will cooperate with you on this one.

Yessir, when you change a bum thermocouple you need more than a look-

alike, or even a fit-alike. You need one that works

FSN 6685-557-3786, for the E and G Models — but it's really only usable on

Just this. Page 2-287 of TM 55-1520-204-20P (7 Aug 64) lists Transmitter,

the H and S Models.



There're times when it pays to be a switcher.

Like, say, a training mission calls for firing blank ammunition in your chopper's M6 armament subsystem.

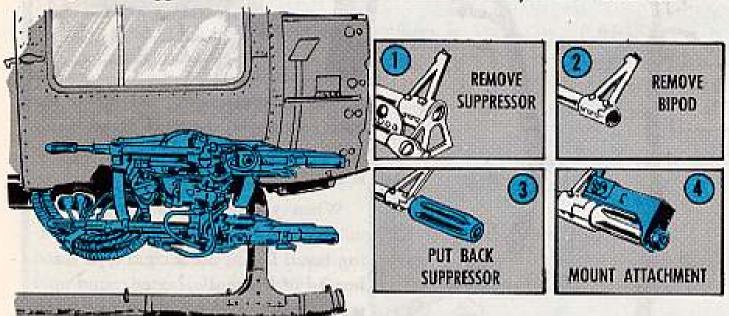
Any M60 ground gunner will tell you that he has to mount the M13 firing attachment to shoot blanks. That's because there isn't enough powder in the ammunition to give the needed recoil for automatic firing. The attachment partially blocks the barrel to give the necessary kick.

The problem with the M60C, of course, is that there's no barrel front sight to mount the M13 attachment on.

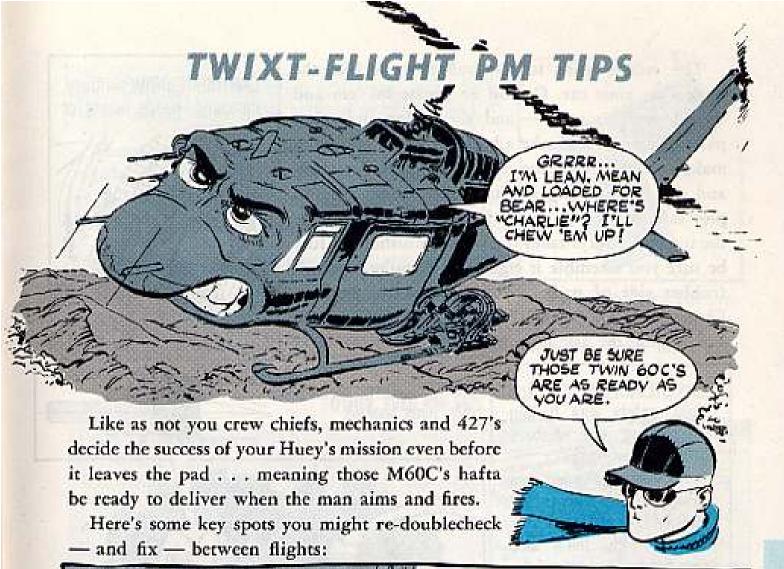
The solution? You guessed it—switch to an M60 barrel. You can even use a shot-out barrel!

Fact is, if you use an M60 barrel in the M2 subsystem on the Raven (OH-23) you need a shot-out barrel. That's because 3/4 to 1-in might have to be taken off the front sight to give you door clearance.

Just have your direct support remove the flash suppressor, take off the bipod and put the suppressor back. Mount the attachment and you're in business.

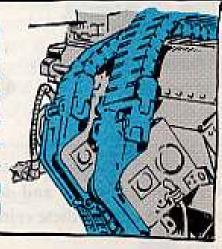


Remember, tho, once the blank firing mission is over, you want to switch back to your M60C barrel for live firing.

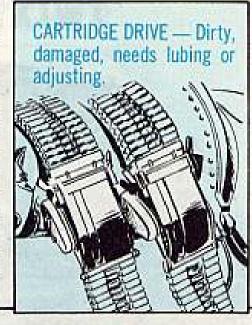


AMMO BOXES — Dented, ammo can't feed through right. (Any dent can foul up the feeding, so warn the guys against using these boxes for steps, stools or seats.)

CHUTES — Clogged with stones, sticks 'n' stuff churned up by the chopper; link tongues blocking ammo; chuting clamps too tight; chuting flexed (meaning the joints are badly worn); wrong number of links in chute (pages 6-7 of your TM'll tell you how many each chute's supposed to have); chuting won't line up right with connecting points in ammo boxes, cartridge drives or weapons (use your adjustable wrench to bend the fitting's flanges enough to line 'em up with the cartridge drive. This way they'll fit everywhere.)



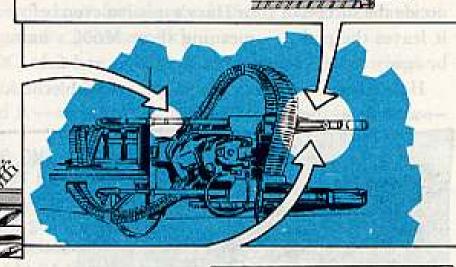
The rubber pads in the buffer work like the brakes on your car. Get oil or grease on 'em and they'll grab or seize — and the buffer and other parts of your M60C take a beating. Smart operators make sure they keep the insides of the buffer clean and dry by servicing it after every firing. And to play safe, they rotate the pads after cleaning, too — the top pad always takes the worst punishment. Just be sure you assemble it right when you're through (rubber side of pads to the front of the buffer). Change 1 to TM 9-1005-243-12 (Oct 63) shows you how to use the assembly tool.



GAS CYLINDER PLUG—Too tight, safety wire broken or missing; key washers broken or worn thin.

You want the plug just snug enough to hold — finger-tight PLUS 1/32-in more with your combo wrench. This'll save wear and tear on you and the plug and the cylinder.

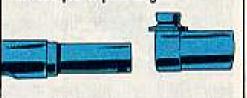




BOLT ASSEMBLY — CLocking lugs chipped, extractor broken, bolt plug pin missing; firing pin and spring busted; actuator (roller) assembly put on wrong.



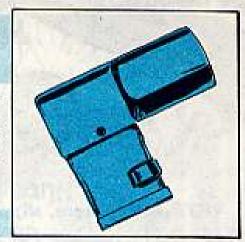
Any or all of these'll give you real trouble. However, you won't lose that plug pin if you assemble it with the raller to the front and not to the rear. There's a hole directly opposite the roller shaft when it's put on wrong that could let the pin slip through.



O'course, your bolt'll last lots longer if you keep up with your homework — like stoning chipped and deformed lugs that do harm to the barrel sockets. So, keep close tabs on these critters.

OPERATING ROD — Roller needs lube, frozen, worn, out of round, tapered; forward end battered or mushroomed.

These're the main parts to watch. Lube the roller regularly with MIL-L-46000. You should be able to turn the roller with your finger. You can fix the forward part easy by stoning.



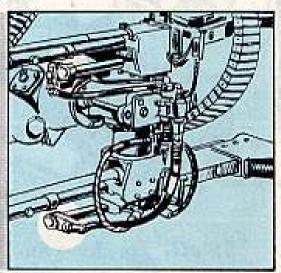
OPERATING ROD DRIVE SPRING - Kinked, worn, broken.

Measure it. If it's not at least 24-3/4-in long, it's NG. Flex it to check for broken strands, and eye it real close for flat spots that got flat by rubbing against the inside of the receiver. Most of the kinking, though, comes from hard handling, so take it easy, huh?

OTHER FREE PM TIPS

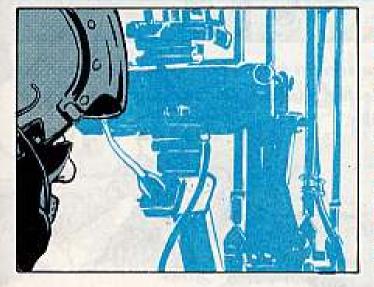
HYDRAULIC CHARGER PISTON — Always keep the piston retracted, whether the gun's on the mount or not. This way the charger body'll protect it from the weather and bumping into by clumsy guys. Press the release assembly in the center of the outer end of the piston rod to retract it.

HYDRAULIC LINES — Make a habit of eyeballing 'em as you go about your business. Even a tiny leak in a line could drain the Huey's oil reserve and force a landing heck-knows-where.



STOW VARIABLE RESISTORS-CONTROL PANEL — Don't make any more adjustments than you have to . . . and be sure to let the electrical system warm up (say, about 15 minutes) before you do any adjusting.





SIGHTING STATION—Keep the hexagon nuts on the suspension linkage of the sighting station torqued at 12-15 inch-pounds. Since the M60C's are boresighted in relation to the command variable resistors in the sighting station, it's real important to have all linkage in the supporting arms torqued the same amount.

(Also, doublecheck the procedure in para 11b(2) of your -12 TM for adjustment of counter-balance.)



THE TWIST

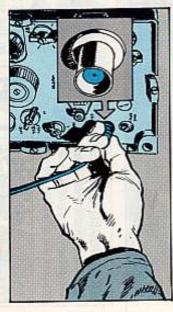
your R-110 receiver (or was it an R-108 or some other animal with the same kinda jack?). 66 There you were, slippin' the coax lead connector on the antenna jack of

you gave the tilted connector a fast push and a cist . . . and waited. 66 Twas the usual hurry up 'n' wait deal, so



66Later, when things began to happen, your and small talk. R-110 (or RT, etc.) wouldn't pull in the large

66 Well, maybe you murders it. but mistreatment really jack. Even normal wear the center of the antenna core free of its seat in push-tilted the plastic n'tear gets to the core,



tor and jack, push easy 'til the connector touches the locking lugs of the jack, and twist it into place gentle-like. 66It makes sense to spare that extra second it takes to line up the connec-



natcherly, means you get no RF output. itself can bust up the jack . . . or loosen the coax wires the wires. Holding it by anything but the connector • When you remove the connector, don't grab u . . or break the wires off. Loose or broken wires

that jack'll give you a lot of service. 66 Take the connector off and put it on in a straight line with the jack, and



transmit or receive. >> antenna jack . . . and you can it onto the center pin of the piece of the insulation. Slip tion and cut off a half-inch down to the rubber insula-Skin a piece of RG-8 cable this emergency field fix: insulator core, you might try that receiver despite a busted 66 If you've really gotta use



it rough when the connector's off. A final reminder: The jack is made of soft metal and can't take much punishment. Don't treat



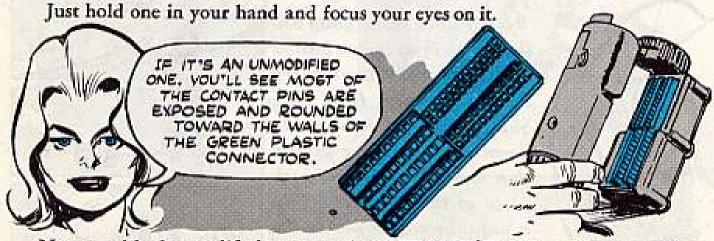
LOOK-A-LIKE PAIR BEST



Likes attract and unlikes repel is a lousy law for magnets, but it works wonders when mating the U-185()/G plug with the U-186()/G and U-187/G receptacle having matching MX-3227/G contact assemblies.

Always connect connectors with look-alike contact assemblies. That'll keep terminal-type telephone, telegraph and teletype equipment putting out at peak efficiency along your 26-pair cables.

It's no sweat to see the difference between the old and new connector and matching contact assembly.



Not so with the modified ones marked MX-3227/G. Using this same eyeing routine, you'll notice the peaks of the pins are covered by a rectangular piece of green or gray plastic. You also ought to find "MWO 11-5935-205-35/1" (Dec 63) stamped or painted nearby.

Don't jump to conclusions, though. It may have come through with the latest connectors marked — MX-3227/G.

Sure, any of 'em will pair up . . . at least for the first time. After that, don't take bets, 'cause one or more of those contact pins will get forced, and be bent or broken off. And that means the whole cable has to be replaced, like it says in SB 11-569 (Dec 63).

While we're on the subject, care is your key when you connect up for communicating. Gently squeeze the connectors together straight on. If you pair 'em up at an angle, you'll damage 'em.

Another thing, if your outfit has any of those receptacle connectors and contact assemblies around that haven't been modified, get the word to your support unit. They'll take care of the job.

TO THE RESCUE, CAP IN HAND

Dear Editor,

Like you know, the note at the top of page 8, TM 11-6665-214-10 (Nov 62) tells you to use clear cellophane tape'n' such to replace lost or damaged caps of the IM-93/UD dosimeter.

We think we've got a better solution . . . and it's easy to come by.

Just point your boondockers toward the nearest motor pool and scrounge some of the throw-away caps which protect the ceramic ends of new spark-plug cables. When the new cables are unwrapped and connected to the plugs, the plastic caps are tossed.

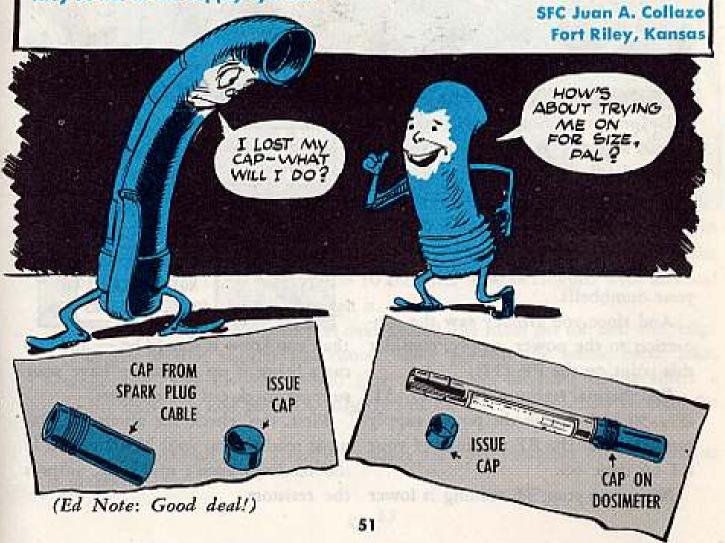
The throw-away caps fit the Landsverk-made IM-93A/UD dosimeters like they were made for them. What's more, they're longer and stronger than the caps issued with the dosimeters...and if they fall or are misplaced, they're a lot easier to find than the originals.

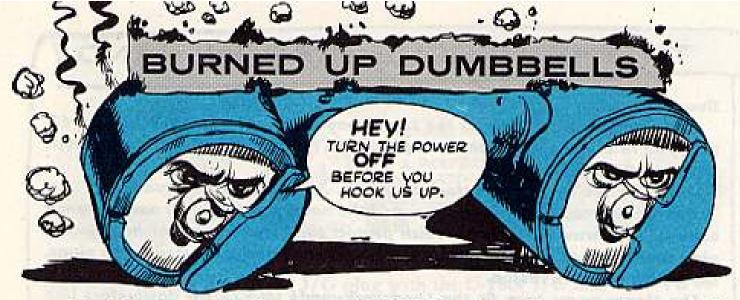
The real bonus is that you can read the dosimeter roentgen scale without removing the caps . . . just like the originals.

One caution: The IM-147 and the Bendix-made IM-93's are a little too fat for the sparkplug wire cap. Those models split the cap... which means you've got to wrap it with cellophane tape. But, that's still an improvement over the cellophane tape by itself.

Safest caution is: If you get resistance, you can bet a nickel the cap'll split.

Like you know, the dosimeter caps are otherwise hard to come by, since they're not in the supply system.

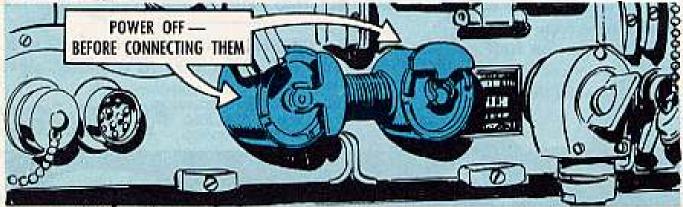




Don't let the dumbbells of your AN/GRC-3 series radio sets make you look like one.

That kinda situation can burn up both you and the dumbbell — in different ways.

Like you know, the dumbbells (CX-1211 and CX-1213 cables) connect the power supply to the RT-66, -68 receiver-transmitters and the AM-65 amplifier to the RT-70.



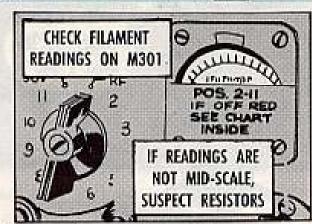
Before you connect them, make sure the set's power is off. This avoids a revoltin' jolt whereby the pins of the connectors get fried . . . sometimes so bad that they keep you from communicating.

So like the man says, get smart about your dumbbells.

And since you already saw the connection to the power supply, consider this point on the PP-112:

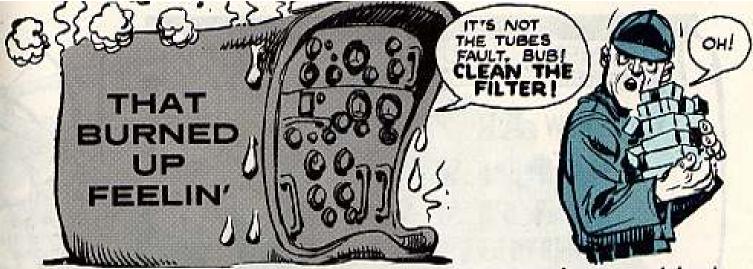
Bad thermal resistors (R-24, -25, -31, -37, -38 and -40) in the power supply can throw off the RF readings of your RT-66 thru -68.

Next time your RF reading is lower



than you know it should be — and you can't bring it up to par — have your support check out the resistors.

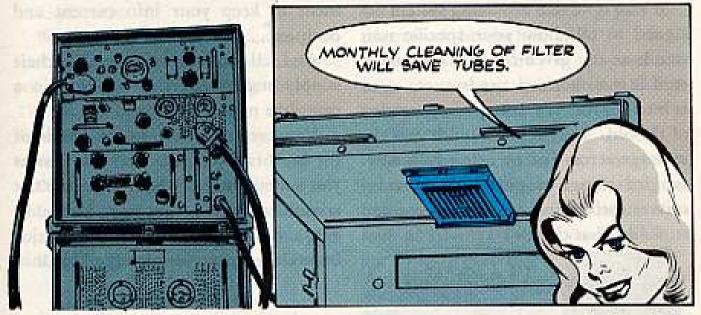
First, tho, check for abnormal filament readings on your M301 meter. If the readings aren't mid-scale, suspect the resistors.



Maybe smoke hasn't gotten in your eyes yet, but you can bet too much heat's gettin' to your T-302 transmitter if you're burnin' out more than your quota of tubes.

The filter's the thing . . . whether you inhale or not. But first, a word from Toby the tube tender.

Watch out for a hot-headed transmitter in your AN/TRC-24 radio set if the T-302 or -302A tube types (like 7259, 4X150A and 4X150G) and the 3CX100-A5 start goin' bad a lot faster'n they ought to.



You can cool that action quick most times with a routine organizational PM chore. Slide the transmitter from its case, take a gander at the air filter in the top of the case . . . and 9 times out of 10 the filter'll be so clogged with dirt and dust that almost no air gets through it.

Result, the transmitter head gets over-heated, the tubes get too hot, and, blip! The pity is that regular PM chores easily prevent the whole mess. Like, Change 5 to TM 11-5820-287-20 (Jan 61) makes cleaning the air filter a monthly duty . . . and para 52, page 113 of the TM tells you how to clean the filter:

Natcherly, if you're in a dusty or sandy area, you clean the filter as often as is necessary.



signed to tell how your specific unit ceivers, processing equipment . . . and message across fast by using such newof the old "212" report, and it gets the is hurting for. It's a souped-up version stuff it is authorized, needs, uses . . . or stands at any given time on reportable stuff like that there. fangled things as punch-cards, trans-It's an up-dated reporting system de-

VERSION OF THE

report, and afterwards you report only Guard or Reserve, you submit an initia the average unit. From time to time, of about an hour's work each month for the changes in your supply statusple, if you're stateside, Active Army It gets to be real simple. For exam-

So what's with the new supply status course, you may be asked to review a ment to keep your info current and complete list of your reportable equipcomplete.

complete report quarterly. supply status report by sending in a And, all units overseas up-date their

consolidated along the way. Each unit you submit it since the reports are not the big brass planners real fast just as gets a master file at the National Major Item Data Agency - identified by unit, Your report gets into the hands of

> headquarters. report code assigned by the unit's Army type, TOE designation, location and its

you better service all along the line. should have . . . and what you don't They'll know what you have, what you feeding in, the supply planners can give With up-dated and accurate info

With this info, they can:

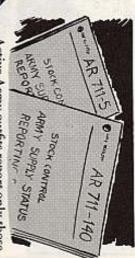
fast (maybe from a unit near you); Locate a replacement item for you

Reduce the number of non-compati-

equipment in your unit - and thus repaperwork headaches; and ble makes, models, kinds and types of duce a lot of maintenance, supply and

in a manner to which you'd like to become accustomed. Generally support you and your unit

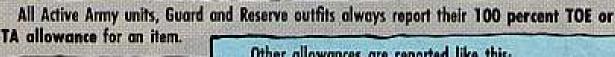
are to be reported. the reporting procedures. Then grab a look at AR 711-140 to see what items around AR 711-5 to get a bearing on OK, OK, OK! So tell me more! Well, wrap your hot, horny fist



status SOP of their higher headquarters plus the other items listed in the supply (see para 6g and 6m, AR 711-5). and Reserve units report the AR items items in the AR. National Guard Active Army outfits report only those







TRAILER CARGO 3/4-TOM1080 TRUCK CARGO 3/4-TOM1080 CDOK SET FIELD
1580 CDOK SET FIELD
1580 CDOK SET FIELD
1580 CDOK SET FIELD
1580 CDOK SET FIELD
1680 TRUCK CARGO 3/4-TOM1680 CDOK SET FIELD
1680 CDOK SET FIELD
1

Other allowances are reported like this:

Active Army units report current operating allowances. This quantity represents additions or deletions made to a 100 per cent full strength TOE or TA allowance, by an activation or re-organization order, by a movement document or by special issue.

That is, if a change adds 50 to a basic authorization of 100 items, the modified quantity reported is 150. If the change cuts 50 from a basic authorization of 100, the modified allowance reported is 50, etc.

On the other hand, if the modified quantity is equal to the 100 per cent TOE or TA quantity, the identical quantity is reported for both allowances.

And, in any case, a unit's report will show the quantity allowed under each authorization, or else zeros will be used to show that no quantity is authorized.

IMDICATOR CLANNEL ALITHMENT ID-292/PRC-6
CASE BC-5
MULTIMETER / JURN SO
RADIO SET AN VRCRADIO SET AN TRCTEST SET ELB JON 18: TW71
TOOL KIT, RA
INVERTER VIL OR 670 1150 RAJER PERSON 5200 665 3616 4790 INVERTER VI 1630 RECOVERY WOODLE TE the. **CUARTERS** PHICAL AGENT VON MAGNETIC LEMSATIC 1.58 IN DIA C MAGNETIC LEMSATIC 1-58 IN DIA T 088 BAYONET KNIFE W/SCABBARD FOR 7-62MM RIF BINOCULAR 6X30 MILITARY RETICLE RIFLE 7.62-MM SEMIAUTOMATIC LT BARREL RADIACHETER 1M-93/UD 670 RADIACHETER IM-108/PD

Active Army units report an item's Minimum Essential Training Requirements (METR) allowance exactly as published. If an item is actually authorized to be on hand under METR, the quantity will be reported.

ADIO SET CONTROL GROUP AH/GRA-1

ING MACHINE CABLE HAND RU

RADIO SET AN/PRC-6 RADIO SET AN/PRC-25

THE QUANTITY WILL BE EITHER EQUAL TO, OR LESS THAN, THE 100 PERCENT TOE OR TA QUANTITY REPORTED.

And, as with other allowances, if the item isn't authorized under METR, a report will show zeros for this allowance.

METR . . . OEG . . . ?

Guard and Reserve units report an item's Organization Equipment Guide (OEG), as published (by USACONARC for reserves and by the National Guard Bureau for the Guard units).

In event no OEG has been published, the quantity authorized for training

will be reported as the OEG quantity.

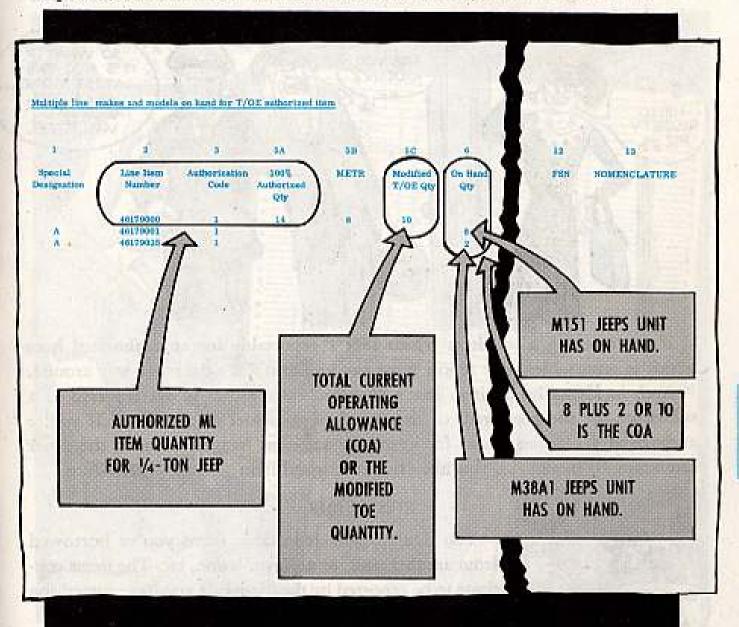
And, like with active Army units, if an item's actually authorized to be on hand under OEG or for training, the quantity will be reported. And, the quantity will be equal to or less than the 100 percent TOE or TA authorized quantity.

If the item's not authorized under OEG or for training, here, too, zeros will explain the lack of same on the report.

MULTIPLE LINE (ML) ITEM ALLOWANCES

You report your authorized allowances under the ML's generic (basic) LIN only. And, for the separate makes and models you have under the ML authorization you simply report the quantity on hand.

That is, your authorized allowance belongs with the ML LIN you report, because you have no exact authorized allowance for each specific make and model. You simply list the quantity on hand for each make and model in LIN sequence, and with FSN and nomenclature, directly under the ML item.



REPORTING DELETED ML'S

When you lose your authorized allowance for an ML item you report the deletion under the basic LIN for the ML item. Then you list the separate makes and models as "on-hand", "unauthorized". You continue to report the separate makes and models that way until they're turned-in and deleted from your property book.

Back at the agency, you see, there's a separate card for each different LIN'd item your unit is authorized, or which you've reported. To get each item scratched off your unit's record you have to say you've given it up.

HOW DO I REPORT UNAUTHORIZED ITEMS, SARGE?

ON THE SUBS

You report substitute items by LIN, FSN, identification, quantity on-hand, etc., just like an authorized item. The report must say exactly what a substitute item is subbing for. And, remember, a sub item must be related in some reasonable fashion to the authorized item.



If you're using a sub item which ISN'T reportable for an authorized item which is reportable, your report must say so. Ditto if it's the other way around.

And, incidentally, an item that's classified Standard B is not reported as a substitute for the preferred, or the Standard A model of that item. If you're authorized a 2½-ton truck, for example, and you happen to have the older (Standard B) model . . . you have the authorized item . . . not a substitute.



ITEMS ON LOAN

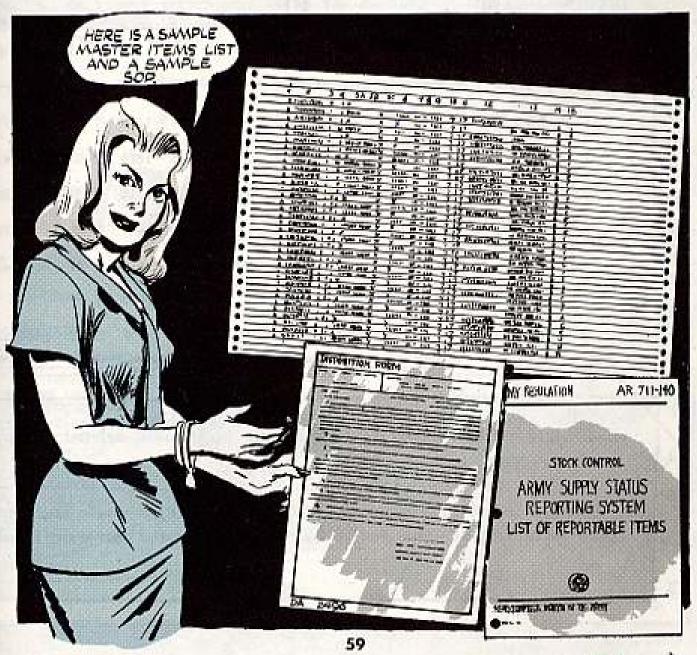
You don't report reportable items you've borrowed from another unit, or an installation, etc. The items continue to be reported by the owner. If you have something out on loan, of course, it remains on your report.

YOU'RE THE TRIGGER, MAN . . .

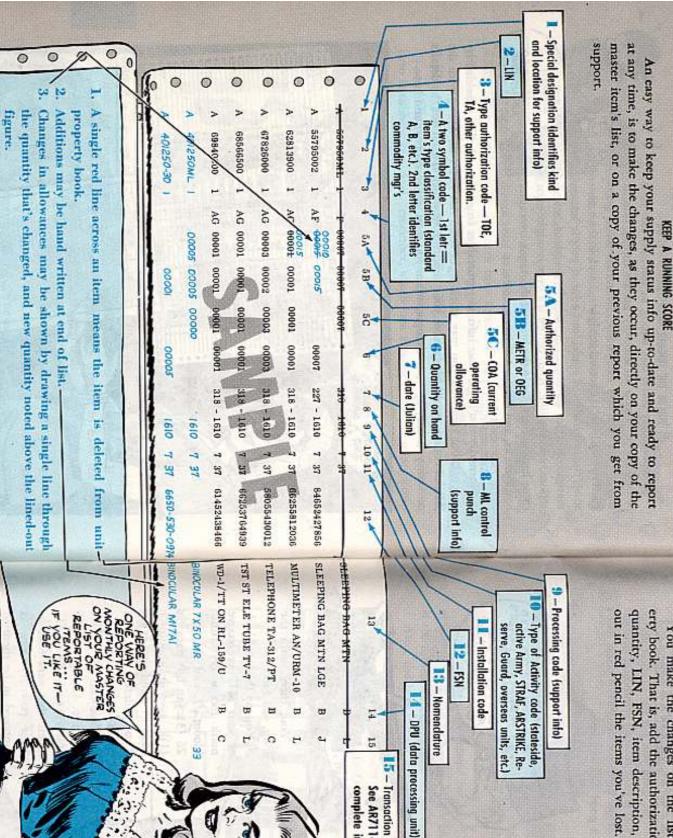
A report that starts out wrong at the unit can feed wrong supply scoop all the way up the supply line. It might take you and everybody else concerned a good spell to finally set the record straight... and, in the meantime, the original goof could lead a lot of people astray, mangle-up a lot of important supply decisions, transactions, and the like. And, before it's over it might even come back to hurt you in the form of shortages, overages, bottle-necks, and similar sad inconveniences.



Normally you'll get your info on reportables from a master list provided by support, but sometime you may work right from AR 711-140. Along with the AR, of course, you'll likely have your supply SOP which'll spell out the details on how you tally-up your changes, when you send 'em to support and how.







quantity, LIN, FSN, item description, etc., on whatever you gain. Or else lineerty book. That is, add the authorization code, authorized allowance, on-hand You make the changes on the listing just as you post 'em in your prop-

SWEAT SAVER

support from the item's master card file. the FSN and LIN which is provided by book disagree with the item's LIN or tion document and in your property When a LIN or FSN on your authorizaimportant time-and-sweat-saving up-FSN in AR 711-140, your report takes And, last but not least, here's an



HI-LINE CAUTION PLATES

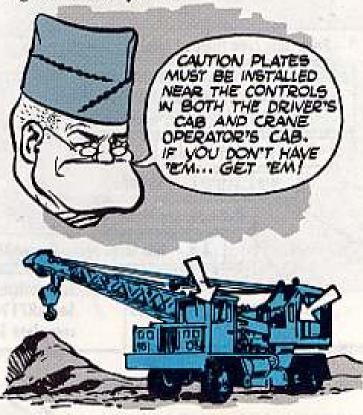
As you know, a high-tension line can kill you if your crane touches it.

Before you get within yelling distance of a high-tension power line with the American H&D 2360 or W2360 crane-shovel, better check to see if it has power line caution plates.

The identification plate at the front of the revolving crane frame will clue you.

Serial numbers GS5810W thru GS-6679W (Contract No. 88-3-49791-11) were issued without the hi-line caution plates. If you've got one of these, ask for caution plates with mounting screws and instructions from: USA Mobility Equipment Center, ATTN: SMOME-MEB-B, 4300 Goodfellow Blvd., St. Louis, Mo., 63120. Give your equipment serial number and mailing address.

So, until you get the caution plates, you'll have to keep reminding yourself of the high-line dangers. 'Course that's a good idea anytime.



You, there, with the long, sad face!

You say the face blank of your M17 protective mask has a crystalline bloom . . . and SB 3-30-26 (31 Jan 64) para 6a (1)k says it shouldn't have . . . and that it's a Type I defect . . . and that's enough to make any face sad!

Smile. Change 2 (16 Mar 65) to the SB says to delete that para 6a(1)k. That powdery film is supposed to be there to protect the mask — and it's no defect after all.



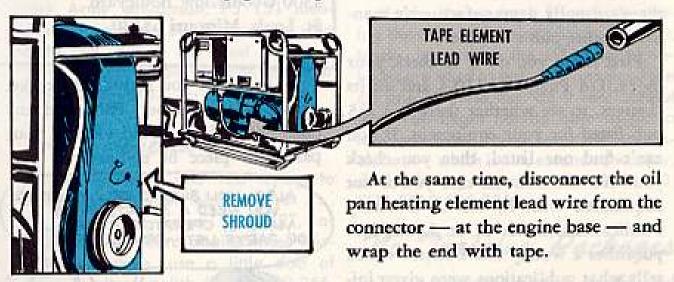


That gasp for breath from your Hollingsworth 3-KW generator could mean that it's overheated — even on a mild day. So, maybe it's time to take off the blanket that holds in the hot air.

There're three generator models that may overheat when the weather is above freezing (32°F) — the JHGV3A, JHGV3B and JHGW3C. And the cure is the same for each — take off its heat shroud.

After the heat shroud is removed, replace the screws that hold it with four new screws.

Use Screw, cap, 1/4-in-20 x 1/2-in, cadmium or zinc plated, FSN 5305-012-0628. They're listed in DoD catalogs C5305-IL-A, Vol 3, page 582 (Jul 65) and C5305-ML-A, Vol 1, page 14 (Apr 65).



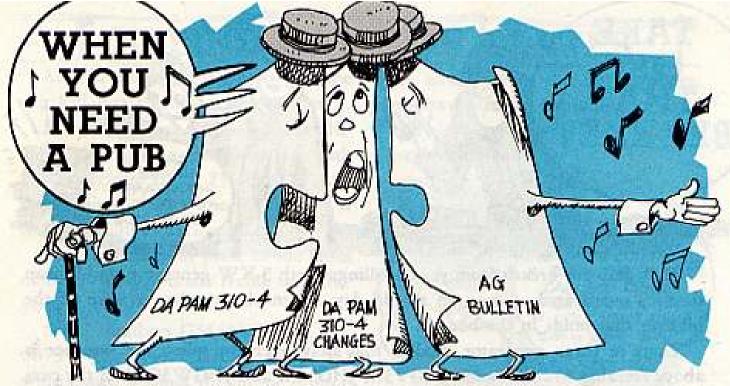
TM guides for getting the job done are:

JHGV3A — Para 75a, TM 5-6115-327-15 (Jun 62) and Fig 4(13), -25P (Aug 62).

JHGV3B — Para 72a(1), TM 5-6115-298-15 (May 64) and Fig 5(8), -25P (Apr 64).

JHGW3C — Para 75a(1), TM 5-6115-282-15 (May 64) and Fig 7(7), -25P (Jan 64).

Parts removed should be kept handy for re-installation when and if needed — just in case you head for a cold country or have a cold winter coming.



You don't have to be a genius to learn the why and wherefores of getting pubs for your Engineer-type commercial equipment.

Every piece of equipment doesn't have a TM, LO, or parts manual, but there's usually a manufacturer's manual or other pub available.

First thing you do is to check your index, DA Pamphlet 310-4 and all its changes, to see whether there is a DA pub listed for your equipment. If you can't find one listed, then you check your AG Bulletin. In case you're not acquainted with it, the U. S. Army Publications Center at St. Louis, Mo. publishes a weekly AG Bulletin which tells what publications were given initial distribution the week before. They send out technical and supply pubs that are listed in your DA Pamphlet 310-4.

Once you've checked your bulletins (as far back as you can go) and you haven't found it there, then your next step is to ask for a manufacturer's publication.

You order it just like you would a

repair part. Your support will then send your request to:

U. S. Army Mobility Equipment Center ATTN: SMOME-STL-E 4300 Goodfellow Boulevard St. Louis, Missouri 63120.

Be sure that you include the make, model, serial number, FSN, and any other info which would identify your particular piece of equipment.

ALSO, YOU SHOULD TELL WHETHER YOU NEED A MAINTENANCE MANUAL, OPERATOR'S MANUAL, OR PARTS LIST -- OR ALL THREE.





Never Use Gasoline

Some soldiers and their gear get burned up every now and then when somebody uses gasoline for cleaning.

You use gasoline as a fuel **only** . . . in engines, stoves and lanterns. Never use it for cleaning; any spark can set it off.

Forget about using gasoline, too, for that "gasoline-soluble" paint used to mark Army equipment. PS 151 mentioned it on page 57. The people who wrote AR 746-5 say that paint is "solvent-soluble." So you can use your standard solvents.

A Swipe in Time ...

Light corrosion and rust trying to buddy up with your telephone set . . . like, f'rinstance, your TA-43/PT, or -312? To help guard against these telephone attackers, use a little dab of liquid furniture polish (FSN 7930-266-7121) on a clean cloth after wiping the outside of the set dry. Extra care is called for when using polish around terminals and switches. The quart-size polish is listed on page 109 in the GSA catalog, dated December 1964.

Oh, yes, if you're thinkin' of putting a shine on your telephone, forget it.

Perfection Igniter

Wondering how to get the igniter for your E510 Perfection Stove 60,000-BTU heater? It's in Parts Kit, Heater, FSN 2540-656-2315. The kits are at the depot.

Save M113 Carrier Track Pin Nuts

Maybe the squirrels have been storing them away for the winter. Anyhow, track pin nuts for the M113 series vehicles are hard to get. So when you take off one of these nuts do it real careful like. You might not be able to get a new one even if you know the nomenclature — which is nut, extended washer, double hexagon, part number 8756580, FSN 5310-655-9863.

No Training Packages

Those training packages on ESC and TAERS described on pages 28-29 of DA Pamphlet 750-6 were distributed to Field Army units long ago, and the U.S. Army Maintenance Board has none left. Check with your local command and when you locate copies make sure you update them to agree with current regulations.

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

