

YOU CAN GET ...

ply just won't hack it. ... and your maintenance and supjust drops out of the whole outfit Sometimes it seems the bottom

you can get help. It's a 1-2 deal, like lems on maintenance and supply, When you have real bad prob-

specialists, or they train your guys direct support unit. DS either gives to do the jobs they need training on. you some special help using its own Your outfit contacts your own

2. If DS can't help, it'll call on

civilian technicians who are supequipment or in supply. specialize in particular kinds of located at your own post; others plied by the Army. Some may be may have to be brought in. They

... how to do an ESC ... how to get repair parts and publications.... equipment . . . supply procedures training on subjects you need help of operation and maintenance of in. It might be on the right kind and give on-the-job or classroom These guys come to your outfit

> maintenance men...how to use test equipment and diagnose probhow to get the right kind of trained

get it for you. DSU. They'll either give you help or So . . . get on the horn with your

command channels to the comsistance as outlined in AR 700-4 ... by the most expeditious means modity commands for technical as-Your DSU sends a request thru



THE PREVENTIVE NAINTENANCE MONTHLY Issue No. 220 1971 Series

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COMBAT SUPPORT

Generators

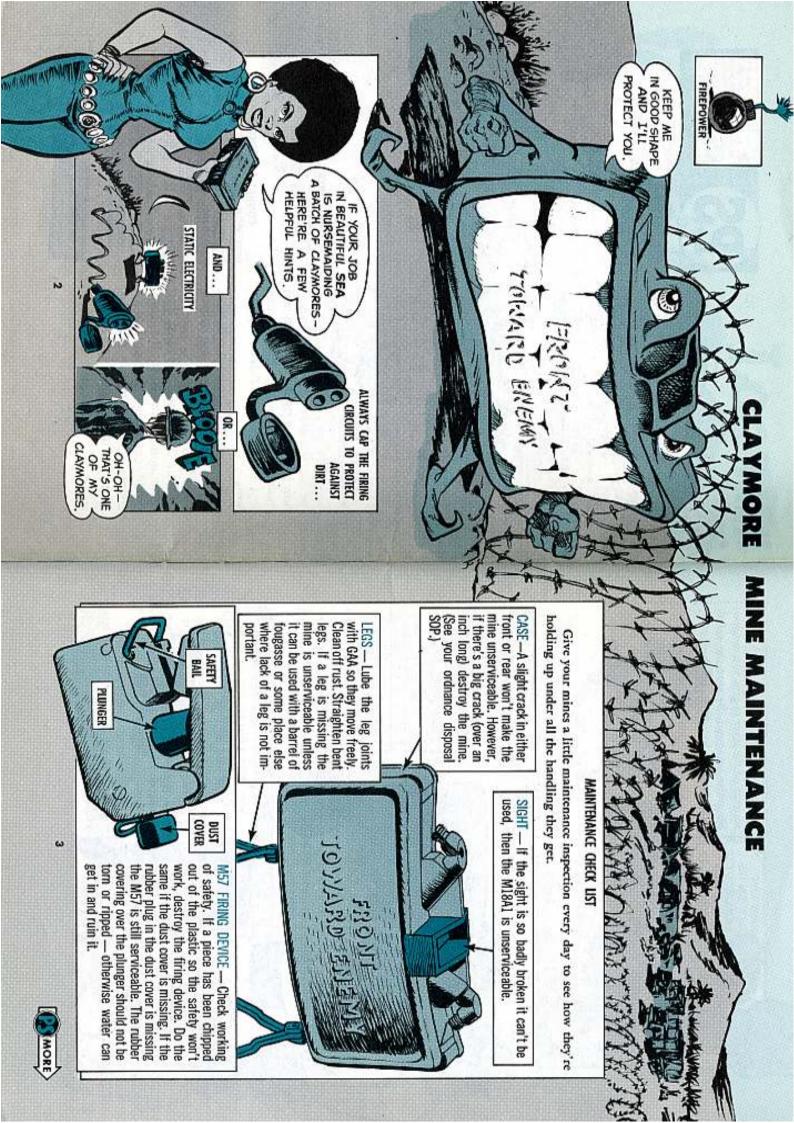
Comptessor Tip AR 310-49 Unit Supply Commercial-Type Pubs Wrench Set Cases locis, Special & Supply 6, 10, 13, 14, 15, 25, 35, 47, 48, 49, 65, 71, 74, 77 and 79. 2380 KT Crans

Use of funds for printing of this publica-tion has been approved by Headquarters, Department of the Army, 26 February 1968. DISTRIBUTION: In accordance with re-quirements submitted on DA Form 12-4.

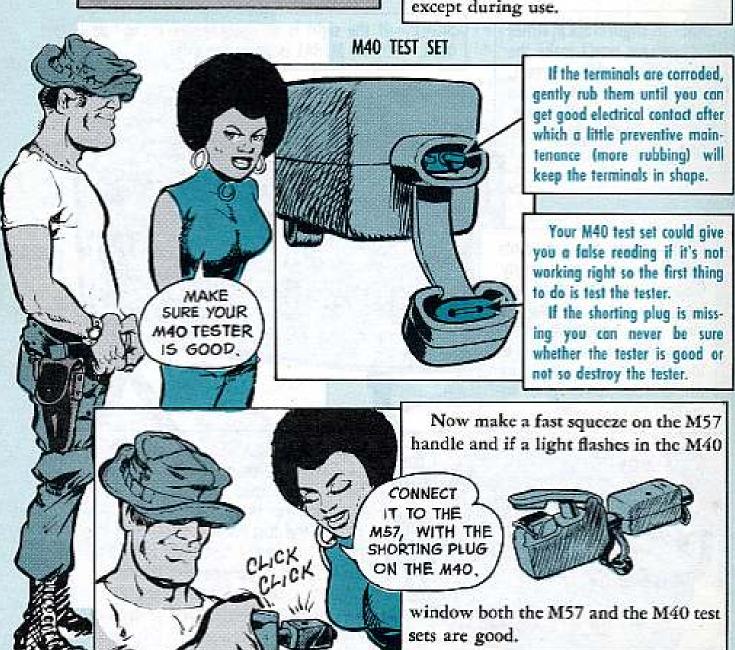


DS Magazine, Gord Knox, Ky

40121







(Note: The dust cover shorting plug must be on the end of the M40 before you make this test because otherwise you would have an "open" in the line and the light would not flash in the M40 window.)



(If the test set shows that several M57's are faulty, retest with another test set before you discard any M57's because your test set might be defective. Be sure you hold the window of the test set close enough to your eye so you can see the lamp flash in bright sunlight.)



(Note: Test your line before you put the blasting cap in the detonator well. That way, if something goes wrong, you'll only blow the cap and not the cap and the mine too.)

Use a quick, firm squeeze to work the handle of the M57. A slow squeeze of the handle may not complete the action of the firing device. That could make the mine go off accidentally at a later time if the M57 got jarred, releasing the upward action of the device and giving an electric pulse to the blasting cap.





If you get a flash in the window, both your wire and blasting cap are good. If there's no flash, either your wire or cap may be bad. Replace as necessary. A good M57 supplies enough electricity to fire a blasting cap.

Still, you have to assume that something could go wrong so make sure nobody who belongs to our side is close enough to the cap to get hurt if it should blow

while you're testing the line.

### IMPORTANT POINT

'Course you have to remove the M40 test set from the circuit if you want to blow the mine. Naturally . . . Naturally . . . Even though it is obvious, people have forgotten and frantically tried to set off the mine while the M40 was soaking up so much of the current the M57 was generating that not enough current was getting to the mine to blow it.



CLICK

CLICK

I CAN'T UNDERSTAND

BOOM!

REPLACEMENT CAP

BOOM.

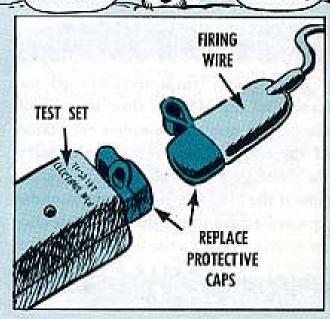
TESTER'S

STILL ON

THE LINE.

This is blasting cap, special, electric, M6, FSN 1375-028-5224 (500 per box). The M6 cap is spliced to the 100-ft lead wire after the bad blasting cap has been removed. (The M6 is the same cap found in the original equipment. In fact, the M4 blasting cap assembly is just an M6 blasting cap and 100 feet of firing wire.)

Before inspecting the wire to see if you need to replace the blasting cap, disconnect firing wire from the test set and replace the shorting plugs both in the test set and at the end of the firing wire.

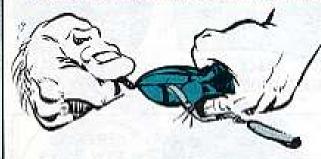


Check out the wire, paying special attention to the last 6 inches near the blasting cap because experience shows most of the breaks happen there. If you find a break in the wire, either tape it up or string new wire, depending on where and how serious it is.



If the break is within 6 inches of the blasting cap, replace the cap. This is the way you do it:

 With wire cutters cut through both strands of rubber-coated wire an inch back from the break.



Get rid of the blasting cap and attaching wire according to your local SOP for explosive ordnance disposal.



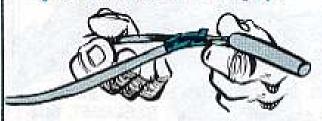
3. Working back from the cut you made in the wire, separate and pull apart the 2 strands for a distance of about 4 inches. (A penknife or long fingernails would help you get it started.) Then with a knife or wirestripper, get the insulation off the last 1/2 inch from the ends.



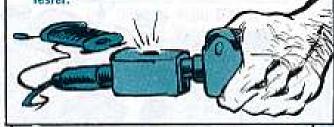
 Unroll the wire of an M6 blasting cap from its plastic shipping spool. With the blasting cap in a safe position, take the short-circuiting tab off the wire.



5. Now splice the blasting cap to the firing wire in any one of the approved ways, making sure the wires are firmly twisted together before insulating both connections with insulating tape.



 Before putting the blasting cap into the detonator well, check the continuity of the firing wire and cap by using the firing device and circuit tester.



Safety Note: Before connecting the firing wire to the M40 test set and M57 firing device, make sure the safety bail on the device is in the safe position and everybody is under cover within an area 250 meters to the front and sides of the mine and 100 meters to the rear. Never — like NEVER — take up a position — covered or uncovered — that's less than 16 meters from the mine.







FRONT TOWARD ENEMY



BACK TOWARD FRIENDLY TROOPS FIRST ...

ARE YOU SURE

YOU HAD IT FACING

THE RIGHT

DIRECTION?



OR COULD BE CHARLIE SIMPLY SNEAKED IN AND TURNED IT AROUND!





IMBED THE LEGS IN CONCRETE

HERE ARE A FEW WAYS TO PREVENT SABOTAGE...



USE LUMINOUS
TAPE TO SEE
IF IT'S BEEN
TURNED AROUND

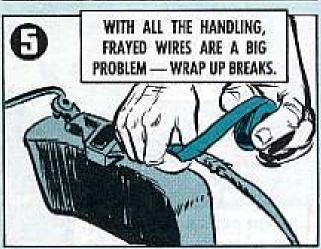


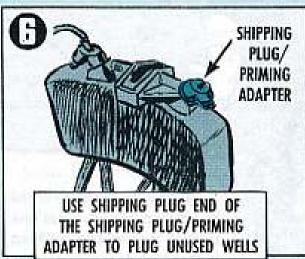
### WARNING

Never blow a claymore while friendly troops are within an area of 16 meters to the rear and sides of the mine. The backblast causes injuries in this area both by concussion and by throwing around stones and gravel. Between 16 and 100 meters, friendly troops should be in a foxhole or dugout or lie prone in a depression.



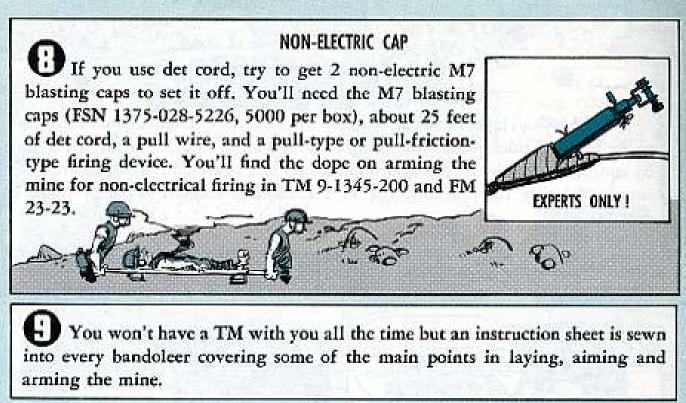














### SPECIAL MAINTENANCE

Whenever you maintain a claymore or move it, make sure the blasting cap is out of the detonator well. The claymore won't go off by itself but people get careless and accidents happen.

Most of these accidents are "one of a kind" and would never have happened if ordinary care and common sense had been used.

Here are some examples of unsafe practices:

Several claymores were piled on top of an A-CAV with blasting caps still in the wells, frayed wires on the cap lead -ins, and the firing lines not capped. Even with all these blunders nothing happened until the driver pressed his TRANSMIT button. The RF (radio frequency) energy from the antenna exploded the caps and blew the mines. There were several casualties.

A 2-man team was setting out a

claymore. The lead man was carrying

the claymore with the blasting cap in

the well. The other man was carrying the M57 firing device in his pocket at-

tached to the line. He heard firing and

dived to the ground, setting off the M57

which exploded the mine and blew his

buddy away.

Several claymores were piled on A perimeter guard checking out a noise during an electrical storm got in front of a claymore, the firing line for which was neither capped nor at tached to an M57.

A lightning flash set up a current in the uncapped line, blowing the mine and killing the guard.

Taking the C4 out of a claymore to heat your rations is dangerous 2 ways: (a) When burning it gives off

dangerous fumes that, in a confined space can send you into convulsions. (b) It's a poison and if any of it gets into your food you'll be sick or worse.

Some instructors have been showing how safe the C4 is by chewing a piece of it. This grandstand stuff is now out, like OUT. There've been some serious hospital cases on account of this . . . so find something better to chew on, huh?





Your 40-MM single shot M79 grenade launcher (M203 when used on the M16A1 rifle) is a real cong buster!

So is its kissin' cuzzin, the 40-MM rapid-firing aircraft grenade launcher (M75, XM129). They'll both give outstanding performances if the right ammo is used in the right gun. Never, like n-e-v-e-r, mix the rounds!

If any of you grunts find a maverick 40-MM round and aren't sure if it's authorized for your M79 leave it be! It ain't worth the effort to find out.

Using the high-powered aircraft ammo in your M79 can blow the barrel to smithereens. And what it does to your shoulder, you wouldn't believe.

More'n likely you grunts will happen across several different aircraft GL 40-MM rounds. They're used in Huey gunships and the HueyCobra (Snake).

Like maybe a practice round M385, or a high explosive job (M384). Each round will have its number stamped on the cartridge.

# Use this ammo only on your M75 aircraft grenode louncher:





12

### ONLY!

M79 GL GRUNTS... USE RIGHT AMMO

Use this arrive only in your M79 and M203
High Explosive — M381, M406, M386,
M441

Protice — M382, M407A1
Multiple Projectile — XM576E1,
XM576E2

Parachute — XM583, XM661, XM662, XM658, XM659, XM660, XM669



Cluster — XM585, XM663, XM664 Smoke Canopy — XM679, XM680, XM681, XM682 Tactical CS — XM651E1 Riot Cantrol CS — XM674 Red Smoke RS — XM675

One other point:

The M79 grenade launcher's not designed to fire pyrotechnic cartridges used in the AN-M8 Very pistol or AN-M9 hand projector. Cartridge AN-M37 thru AN-M58 are .055 inch smaller in diameter than the 40-MM ammo and have no rotating band.

Don't be a ghost loader when you use your M79 grenade launcher. Use the right ammo for the best whammo!

High Explosive — M384
HE w/proximity fuze — XM684

Practice — M385
WP White Phosporus — XM574
HE DP (dual purpose) — XM430

## NEW .45 CALIBER PISTOL PART



Good news if you've got at M1911A1.45-caliber pistol.

The firing pin stop has now been authorized for replacement by your unit armorer.

Ask for it under FSN 1005-501-3205.

The firing pin stop is likely to crack if you do a lot of dry firing during training. Now it'll be easier to get a new one. See Page 6, TB 750-951-4 (Sep 70).





How about giving the Hawk supply system — and yourself — a helping hand?

You can by not holding on to any leastra cradle assemblies you might have, such as the cradle assemblies used with the electron tube liquid cooler in your AN/MPQ-34.

And, uh, friend, you can't justify holding an assembly back on the grounds the replacement'll come without a cradle.

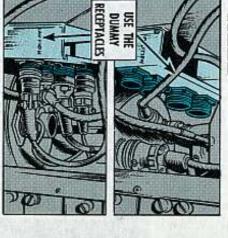


## NEED TO HEED

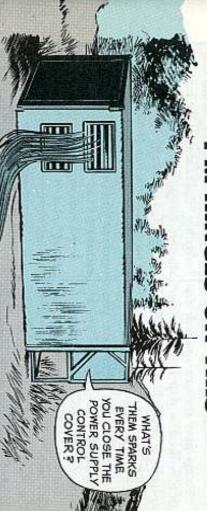
When it comes to your Hawk AN/ MPQ-34 CW acq radar, it's right there in step C, para 43, TM 9-1400-500-12/1 (Aug 65):

"Disconnect the pedestal electrical connectors from the pedestal electrical connector receptacles and connect them to the dummy receptacles on the dummy receptacle stow bracket."

Stow the connectors on the dummy receptacles for air shipment only. For road march you stow lock the antenna in operate position.



# PM HINGES ON THIS



When you open and close the cover on the power-supply control in your Hawk battery-control central, do you eyeball the sliding hinge on the right side to see where it's going?

WIRING

You might find it's going through the wiring harness that goes to the J2 connector. And that's bad 'cause the hinge can fray or bust the wiring . . . or clobber the jack pins.

So move the harness out of the way—cven if it doesn't look like it's in any trouble now—by lacing it to the wiring harness for the J1 connector. Use the nylon twine that's on page 3-11 of TM 9-4935-501-25P (Aug 69). FSN 4020-527-9089 is worth a 1-lb spool.





OF NYLON

TWINE ?

THE FSN



### TIME FOR A

hydraulic accumulator is out of date. air filter decal on your Hawk launcher Things have changed and now the

sure reading. That's the latest. The de-500-12/2 (Aug 67) gives you a leeway cal says ± 50 PSIG. That's wrong. of 400 PSIG for the accumulator pres-Table 2-2 of page 2-2, TM 9-1440-

the one that's now on the accumulator. your best bet is to make the change on No new decal is in the works . . . so

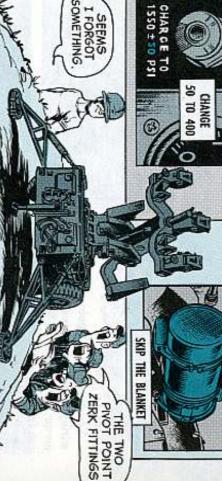
## OCT WITH I

changer. Not any more. insulating blanket around the heat exthat your Hawk launcher needed that The slide-rule people used to figure

exchanger a bad case of the corrodes. have 'em. What's really bad, though ... ly needed . . . and new launchers won't turns out the blanket can give the heat Seems now that the blanket's not real-

of the blanket on your launchers. And if they find any corrosion, they'll take care So ask your support people to get rid





# LAUNCHER BOOM LUBE

launcher. They're hidden by a handy access plate. pivot point zerk fittings on the boom assembly of your Hawk Out of sight, out of mind. That's the sad story on those 2

wears. So, remove the plate and get to 'em. ing on hours of use). Unless they get it, the boom assembly The fittings take grease quarterly, or more often (depend-

12/1 (Jul 66). For a refresher, eyeball item 4, page 3-3, TM 9-1440-500-

6

REMEMBER THE ZERKS

### NOT REALLY ZMMUMU

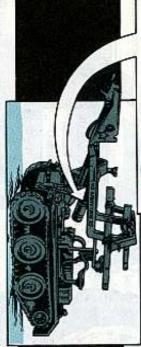
WEIGHT DOGST STOCK NO. derrescura ORDER NO. COUNTRIES ORDNANCE NO. SERIAL NO. PART NO. ASSEMBLY EXTENSION MANUFACTURING COMPANY

Dear Half-Mast,

transporters. How do we get a new one? on one of our Hawk XM501E2 loaderplate for the extension cylinder assembly Somehow we've lost the nomenclature CPT R. K.

Dear Captain R. K.,

of the extension cylinder assembly. The of issue and doesn't affect the operation goes for the XM501E3. identify the assembly on delivery. Same manufacturer put on the plate just to You don't, It's not an authorized item



## IDEA FOR PS?

and send it to: see in PS Magazine, jot a note about it If you have something you'd like to

Fort Knox, KY 40121 PS MAGAZINE MSG Half-Mast

I'd like to see an article in PS on-



(If you need more space, use another sheet of paper.)



## SQUAD RADIO AN/PRI-4, AN/PRR-9 THE POINT

A healthy squad radio set's essential to long-term communication.

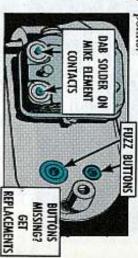
So, keep yours fit to talk like so:

Fuzz buttons from your AN/PRT-4
transmitter's mike element get lost
quick when the element's off. They
could fall out of their cavities and you'd
never know it . . . until you came up
with intermittent or no sound.

MIKE ELEMENT SCREW WAS BACKED OFF.

YOU'RE RIGHT,

So-o-o-o, if you're bugged by sound troubles, check to see if you've got the fuzz buttons. If you've got 'em, stretch the brass contacts a little to promote togetherness with the element contact points.



Another thing . . . if contact is zero or haphazard between the fuzz buttons and the element contact points, the 2 points can be built up slightly with solder to make better contact.



Check the tightness of the microphone screws on the transmitter. If these get loose, you can't talk. Same goes for the volume control setscrews of the PRR-9.

IS PM

FSN 5970 - 882 - 1900, OR OTHER

SO, USE A PAB OF GLYPTOL



MATCH THE
BATTERIES, TOOTHAT MEANS THE
BA-505/U ON THE
RECEIVER, AND THE
BA-399/U ON THE
BA-399/U ON THE



If you spot any sign of leaking, put in another battery.

Make sure you line up the receptacles and contact pins right. This applies especially to the BA-505, since reversing the normal line-up of the 2 battery contact pins can make the battery connector holes bigger—like maybe when the larger contact pin on the PRR-9 hits the small hole on the BA-505 and does some gouging.



SEALER.

Same thing goes for the BA-399, except that with this battery it's a matter of line-up and easing the contact pins into the 4 battery receptacles.

Too much force and you crack the receptacle, or break it. If you're not using your squad set for a day or so, take out the batteries for good PM.

To put in the BA-505, just slide it into the retaining clip. Then, line up the receiver contact pin with the battery connector and give 'er a gentle push straight in.





When you're making the scene with your PRT-4, give the AS-1999 antenna a gentle nudge upward with your thumb, to start it. Then pull the antenna to its full length, to reduce chances of bunged-up transmission when the antenna base hits against the battery-case clamp.

Clamp.

GIVE IT A
NUMBER TO
GET IT
STARTED
THEN PULL
IT OF FULL
IT OF FULL
INGETH

If you protect the AS-1999 from knocks, bangs, and such you'll be makin' a smart down payment on long life for your antenna. Same for your AS-1998.



When you're transmittin', keep that antenna away from your helmet . . . which grounds 'er out.



If the receiver-horn won't bring in the music, the glue in the element could be swollen. This means less sound . . . or no sound. You can try a new battery under these circumstances—but if you still don't get that happy rushin' noise when you up the volume, a new horn may be needed.

When you connect the earphone with the receiver jack, push the plug in straight. Don't wiggle it in. Wiggling the plug can bend the connector spring, and that could bug your receiver.

If you've got a non-filter horn, blowing in it for cleaning purposes is no-go. That damages the membrane-type element, or it could even blow the dust deeper into the horn, since there's nothing to stop it.

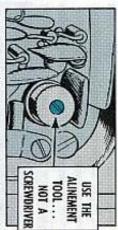
When your horn needs cleaning, take it off and tap it. That's the safest way.

The newer horns are equipped with dirt-stopping filters.

The power switch on your PRR-9 can crunch . . . all it takes for a break is an over-enthusiastic twist when you "OFF" the receiver — or maybe even a little too much turnin' when your BA-505's at low ebb and that good ole rushin' noise doesn't rush enough.



An alinement tool (FSN 5120-935-0810) is the only tool to use when you're alining the receiver or transmitter in a frequency change. This comes with ID-1189/PR channel alinement indicator. A screwdriver can cause all kinds of trouble movin' around, say, in the innards of your PRT-4. Like, a hard turn on the R-36 variable resistor, frinstance, could fracture it and goof up the entire piece of equipment.



Same with the antenna loading coil and the capacitors. They're fragile; they break. Ya'got no communication when they do.

Remember, keep the lanyard clip away from the eyes of the PRT-4 and PRR-9. That clip leechin' onto one of the eyes can cause the eye to break off. The eyes are meant for the lanyard cord loop, not the metal clip.







WORD FOR

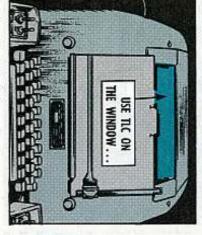
For PM, that's what.

tions cold. can break or bend and stop communicatangling in a sliding chair. The wiring which connects to the floor receptacle on your AN/FGC-25. Protect the cord from accidental kicks or bangs . . . or Like for taking care of the power cord

Like when you place the fuse contact Same goes for the back power cord.

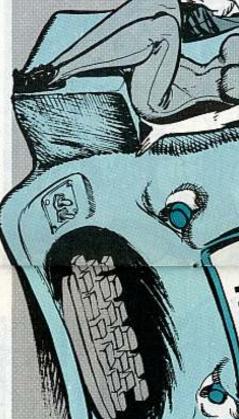
kind of angle can mean crumpled conslanted or at an oblique angle. That even, straight-in style, not with the fuse points into the fuse-holder, do it in an tact points.

teletypewriter, the observation window On your AN/FGC-58, or any other



hard, either. is fragile. Don't lean on it, or set anything on it. Best not to slam the door too

window by putting in the glass incor-



rectly. The side with the beveled edge goes up.

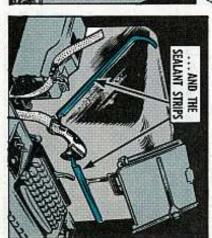
of the lower cover.

on your FGC-25X and other machines Take care of the rubber sealant strips

gentle-hand this panel as well.

hits and kicks and accidental skirmishes

The access panel can be bunged up by



knocked oft. Avoid snagging the strips, they can be

You can also come up with a cracked seal against dust, and they keep you from cutting yourself on the sharp edge They serve a double purpose: They

FINGER-TIGHT ONLY

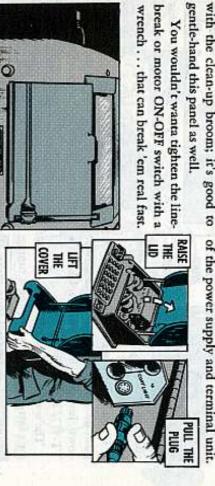
Full-finger-tightness is all y'need. This goes for all TT models.

plays a big part in the operation of your the page printer to the reperforator IT set. The intercommunication cord from

wires and deadline your machine. doesn't take much of this to mangle the jerks below the cord insulation. It So-o-o-o, shun all twists, pulls and

maybe, and it can downtime your TT plug, too. It can break or crack if something's dropped on it, like a clipboard 76()/GGC reperforator-transmitter. Easy with the intercom cord plastic

copy-light plug from the J12 connector cover to your TT-76()/remember . . . . . . You have to separate the P12 When you want to remove the dust



its rubber mounting grommets. Then, lift the dust cover straight off

the copy-light plug, you could come up on the dust cover without disconnecting with a botched plug or connector. If you disremembered and gave a jerk

23

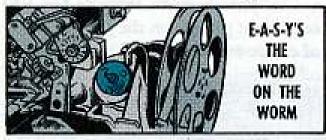
To lube your teletypewriter is good, but, heed this: Doo't over-lube and end up with an oil-dripping TT that can



latch onto more dirt than a backyard gossip-fest.

You can keep on top of the lube situation by recording each lubing on DD Form 314 and watching the intervals. The lube poop's in TB 11-5800-204-20/1 (Feb 66). This pub also lists FSN's so you can order the lubricants.

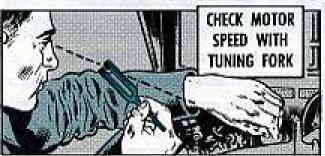
Remember, it doesn't do much good to ram or jerk or tug on the governor



adjustment worm. What you'll get at best is the message in pieces.

If you wanta speed up the motor, you push the worm in; if you wanta slow it down, just pull the worm out, like on a TT-4()/TG or TT-76/GGC.

The way you know whether your motor's fast or slow is by tapping a tuning



fork on the heel of your hand and getting an eyeful of one of the little dots on the governor target.

If the dot's going leftward, you speed up the motor. If it's moving to the right, the motor'll stand some slowing.

It takes a gentle hand—and light finger—to deal with the adjustment worm, 'cause if you heavyhand 'er and manage to lock the governor worm spring, then it'll take a trip to support to get 'er unlocked.

EASY, BUB!

Unauthorized, unnecessary adjustments on your TT are exactly what she doesn't need.

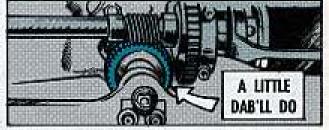
Turning and adjusting knobs and switches for no better reason than curi-



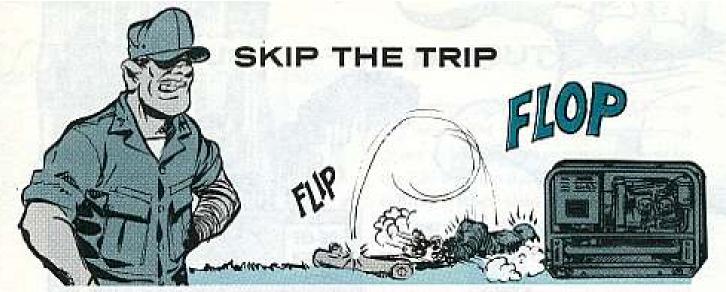
osity doesn't improve the performance of your set—in fact, it can downright put it down.

So-o-o-o, hands off . . . unless the TM gives the OK.

A little dab of grease on the carriage feed driven gear, especially when opera-



tion's continuous, can surely help keep that gear from losing teeth prematurely. So, grease that gear on the next goround, won'tcha?



Having circuit breaker troubles on that 28-volt DC, 3-KW generator set?

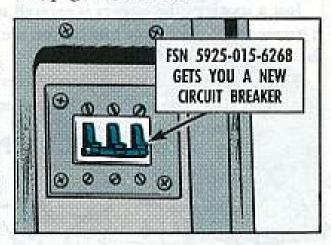
Is it tripping to the OFF position when you use the generator as auxiliary power to operate teletypewriter set AN/GRC-46B?

No need. Here's what you do:

Use FSN 5925-015-6268 as a replacement for the original circuit breaker. This new breaker will beat the tripping problem.

Your authority for requesting the re-

placement breaker is TB 750-971-1 (Jan 70), page 15, Para 28.





Uh, if you're getting chatter or feedback on the C-2328A control of your AN/GRA-39 radio set control group, it doesn't necessarily mean there's something wrong with the control.

Before you call a repairman, try this: turn the radio set's volume control knob all the way down, and then up about 1/6 of a turn. Should put you in business. With the radio's volume too high, the C-2328A gets sound sensitive.

And, turn the control unit's volume control no higher than mid-point.

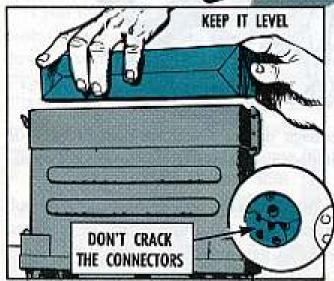


But, man, how on or off do you think it has to get?

Just a touch of the fingers is enough to turn it one way or the other. No muscle is necessary . . . and the white line on the switch doesn't have to go clear around to the "ON" or "OFF" marks.

You know, just click it in place. Saves broken switches and such . . . and keeps your AN/GRC-106 radio set in business.

# ASSAULT 'N' BATTERY WHOA!



Why assault a perfectly good BA-386 battery by hitting it with a heavy RT-505—hopin' the contact pins and battery receptacles line themselves up OK?

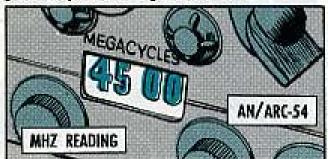
If they don't line up, you could be out a battery.

A good way of installing a BA-386 is to upend the RT and insert the battery on a level line. The contact pins should slide in the battery receptacle with no strain. Finally, buckle the battery in and you've got it made.

# YOU SAY THE RF OUTPUT OF YOUR AN/ARC 54 RADIO IS DROPPING OFF AT 44-45 MHz AND THEN PICKS UP AT 46MHz

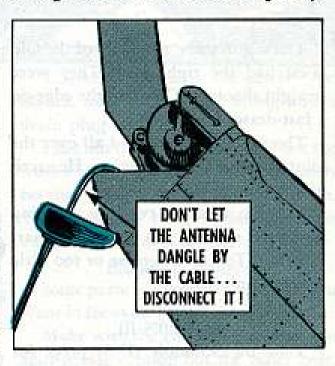
OR 50?

Chances are your set's got harmonic filteritis — which is a good reason to get your support to check it out. The filter probably needs replacement.



### ARC-54 OUTPUT

'Nother point: Your ARC-54—or any other FM set for that matter—is going to be hard put to put out if you let the FM antenna dangle by connectors or cables. Rather than let it dangle and damage itself, disconnect it completely.





Floor switches on your UH-1 are handy gadgets to be able to push when you wanna make with the talk, but. . . .

.... Piling gear, boxes and whatever on said switches will make for nothing but headaches.

There's no way to have good commo with a forever stomped switch. Either you have a continuously hot mike . . . or everything goes out.

So give a look, man, and remember the blinker on the floor.





WILL ? SLURP! DO THE

TRICK ; SLURP;

JUST A LITTLE

The 6-gun totin' marshals of the Old West had the right idea. They were straight shooters. They had the edge on a fast-draw, fancy Dan.

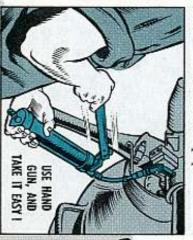
The villain sprayed lead all over the joint with his fanning action. He sacrificed accuracy, and it cost him!

To keep turning, twisting, rotating bird parts moving you want lube chart accuracy. Too much grease or too little grease won't hack it.

### EASY DOES IT

Take the Seminole (U-8) prop, for example. It gets greased every 50 hours. Some of the older blades have only one fitting. Never use a power lubricator on that baby or you'll blow the blade cuff seals, for real.

Never use muscle on a hand gun, either—or the seal will pop.



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You can spot an over-lubed prop real casy. Grease slung past the shot seals will form a ring inside the spinner. That means the prop has to come off, the seals changed, the whole shebang lubed, balanced and put back on the bird.



It's that type of extra sweat and elbow grease that gives maintenance and operations types gray hair.

So, use a hand gun on the zerk fittings and let up when you feel the need for more pressure on the handle.

YOUR BIRD

ON DOWN

TIME

TWO HOMBRES

DAN ARE THE

GUS 'N'

Back off from the fitting.

Use a fingernail to push in on the ball check and let out any grease under pressure.



Course, if you have the newer type blades, they have a zerk fitting and a drain plug.

Take out the plug when you shoot the works and you'll never blow the seals because there is no pressure built up. You're actually purging the old grease and putting in new grease.

### ENOUGH IS ENOUGH

Some parts have a relief hole that you want to focus on when lubing a bird.

Make with the gun and as soon as you spot grease coming out the relief hole, it's lubed—stop!

If you continue to pump grease in the head, you'll build up pressure that the relief hole can't release. The bearing seal will go on you.

Those bearings, and a lot more on the Raven, get greased every 25 hours. It's

\*\*COFF !: COFF ! KEEP

\*EM DRY \*\* COFF! IT'S

A 10T EASIER TO

SERVICE EM \*\*\* COFF!

no sweat to shoot the works when your bird is at home base. On hand is the organizational maintenance pub with the lube chart in it.

When you're scheduled out of your AO for any length of time, tho, you probably won't have the lube chart handy.

So, learn the points of lubrication by running your peepers over the chart every chance you get. After all, if you miss a fitting several times, a bearing could go dry, heat up and seize. You could be headed for a not-so-gentle let down! Fact is, you could have from 1 to 3 Intermediates and lube jobs to pull before you get back to your pad for a Periodic inspection.

That's why up-tight crewchiefs carry a grease gun on board.

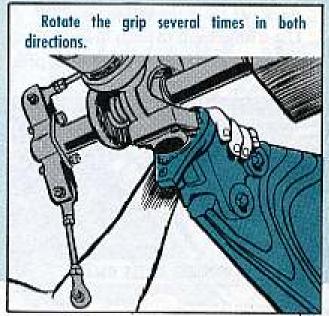


Totin' a grease gun with you also comes in mighty handy for purging bearings after you've been riding shotgun in the rain. Water can wash out grease and ruin a bearing real fast.

The Huey (UH-1) tail rotor hub and blade grip bearings are a good example. Although the bearings are scheduled for lubrication every 100 hours, wet weather or dusty operating conditions could mean you should move it up to every 25 hours . . . maybe sooner.





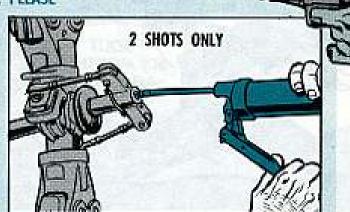


Purge it again and clean up. Reconnect the pitch link. Give the other blade the same treatment.



When you draw a bead on the Huey crosshead bearing, again, accuracy counts. Give 'er two shots only, every 100 hours. Be sure your gun is loaded — fire one before connecting.

If you try to force extra grease thru the gun needle noze adapter into the bearing, you'll contaminate the gear box oil—grease and oil don't mix!



### BEARINGS OK?

When you purge a bearing you can tell if it's shot by making the eye-and-feel test.

Take the Hook (CH-47) for example. When purging the swashplate, finger the grease for foreign material. If you find metallic particles, the assembly has to be changed.

### CHART'S A CHECK LIST

Your favorite throttle jockey uses the check list before lift-off. He knows that without a routine system of checks an item could be overlooked . . . the whole crew could buy the farm.

Think of the lube chart for your fixed-wing or rotor-wing baby as a check list. It tells you where to lube, what spec to use, the type of lubricant (grease or oil), how often to use it and whether you use a grease gun, hand, brush or oil can.

The lube chart is revised to give you the latest poop.

The marshal never faced an opponent without first checking his weapon that would be asking for it.



Check the lube chart when you use your grease gun. It's one way to successfully defy the law of gravity.





in the Cobra's wing stores jettison system . . . if they get tender lovin' care. Impulse cartridges put the big punch

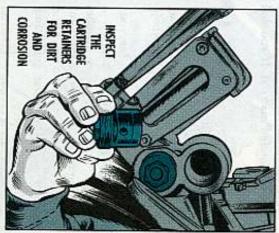
They have to be clean to do their job.

CARTRIDGE FSN 1377-585-929 CARTRIDGE RETAINER FSN 1560-997-4629

para 14-27, TM 55-1520-221-20 (Apr 69), tack on a check during PE. In addition to the inspection tips in

your cagle-eye inspection. turned in anytime they don't satisfy Corroded or damaged cartridges get

> ejector rack systems during PE. eye treatment when you do the clean-up bit on the inboard and outboard stores Give the cartridges a good PM peep-



on DA Form 2408-18. Keep this inspection info up-to-snuf

keeping-to your unit's SOP, too. Add the PMP bit - and the record

REPLACE BOTH

CARTRIDGES

take a looksee at the cartridge retainers. A snafued cartridge can clog the re-Every time you inspect the cartridges, powder in the piston block cavity. the rocket pod split bit, clean out the When the Cobra's pilot has pulled

Give the firing contact special atten-

tainer gas ports, build up crud at the

GAS PORTS

CLEAR?



hang-up . . . and give the pilot a case conditions is guaranteed to cause a pod It takes both cartridges to jettison an electric continuity check - with cartridges removed, of course! After jettison system inspection, pull

switches from pilot's and gunner's seats. Double insurance, you might say. Finally, check the wing stores jettison

the pod, so when you replace one,

of instant dry-mouth!!

replace 2.

systems will guarantee success if your Snake charmer has to punch his load. the impulse cartridges and the jettison An extra minute of PM attention to

you? 'bout landing his draggin' dragon, do You don't want to hear him braggin



32

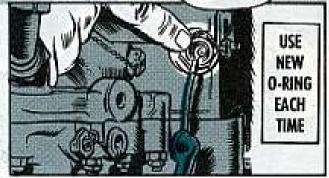


Some things should be extra tight but the chip detector plug in your Huey (UH-1) engine is not one of them!

When you take the plug out for a look-see, scrap it if it's damaged.

Use a new packing when you thread the plug back into the gearbox.

If you use the old O-ring it'll leak on you. Someone will come along and over tighten the plug to stop the leak . . . strip out the female threads in the accessory drive gearbox!



Last, but not least, tighten the plug to 90-100 inch-pounds with a torque wrench.

That's the only way to keep from stripping the gearbox threads.





Dear Editor,

Knucklebusting had a painful meaning for our mechanics when removing or replacing the shroud cover on the Kiowa's cockpit console. Like - when taking out the 3 front screws on top of the cover.

We solved the problem with a pair of metal snips in 5 minutes . . . by routing out the cover around each screw.

Now all we have to do is back out the screws just enough to free the shroud. Saves us 30 minutes on each job, plus some skin.

> SSG J. F. McHenry Fort Rucker, AL

(Ed Note - A real cozy fix, Sarge. You might even substitute AN3 hex-head bolts for the screws . . . and you won't lose support or strength. Use a 3/8-in openend wrench for the tug-o-war bit.)

### LIGHT UP!

Dear Windy,

Our unit is using a battery-powered fluorescent lamp (Safari Lite) for night-time aircraft maintenance. How bout an FSN breakdown on the replaceable items?

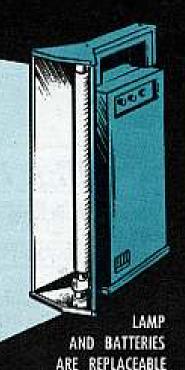
MAJ J. R. D.

Dear Major J. R. D.,

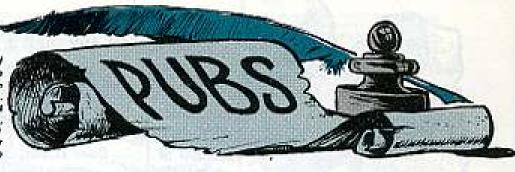
Happy to oblige, Sir. The portable 12-in light carries FSN 6230-901-7301, and lamp, fluorescent, has FSN 6240-299-5546.

You get those dry-cell batteries only thru an exception-type requisition. After Air Force FSN 6135-192-0745, add "equivalent to commercial battery Z46". Routing Identifier Code is GGO (for GSA); contract No. is GS-00S-78357.

You can also tell supply that the batteries are for end item 7301, LIN L63480.



This is a selected list of recent pubs of interest to organizational moinfenance personnel. This list is compiled from recent AG Distribution Centers Bulletins. For complete details see DA Pam 310.4 (Jun 70), and Ch 1 (Aug 70), TM's, TB's, etc.; DA Pam 310-6 (Jul 70), and Ch 1 (Oct 70), SC's and SM's; DA Pam 310-7 (Jul 70), MWOs; and DA Pam 310-7 (May 69), COMSEC Pubs.



### TECHNICAL MANUALS

TM 5-3431-228-14, Sep, 300 AMP AC/DC Are Welding Mach. TM 5-3610-227-23P, Oct, Offsel Pittlemaker and Copier. TM 5-3805-218-12, Oct, 18 Co Yd Towed Scraper. TM 5-3005-224-20P, Sep. 71/2 Cu Yd TM 5-3810-290-15, Sep, Wheel Mid Rough Terrola Crone. TM 5-3820-204-20P, Oct. Rock Drilling Equip. TM 5-3895-263-20P, Oct. Pavers, Rollers, Billum, TM 5-3895-330-25P, Oct, Sprenders: Aggregate. TM 5-3895-331-12, Oct. Concrete Paying Finisher. TM 5-4110-230-24P, Oct. 2000 BTU Refrig Unit. TM 5-4120-225-20P, Oct. 6,000 BTU Floor May Air Cond. TM 5-4120-268-20P, Sep. 36,000 BTU Air Cond. TM 5-4120-308-25P, Sep. 18,000 BTU Compact Air Cond. TM 5-4120-310-23P, Oct. 36,000 BTU Air Cond. TM 5-4310-208-20P, Oct, Trainer Mtd Recip Air Compress. TM 5-4310-216-20P, Oct. 5 CFM Air TM 5-4310-224-20P, Oct., 15 CFM Air Compress TM 5-4310-228-25P, Oct. 60 CFM AIr TM 5-4310-249-20P, Oct. 5 CFM Recip Air Compress TM 5-4320-216-20P, Oct. 200 GPM Fresh Water Centrifugal Pump. TM 5-4330-230-12, Sep. Petro Distribution.

TM 5-4520-233-24P, Sep. 60,000 BTU Space Mealers. TM 5-6665-293-23P, Oct. Mine Detector TM 9-1005-224-10, Oct. M60 MG. TM 9-1090-203-ESC, Oct., XM28, XM28E1, TM 9-1090-203-12 C2, Nov. XM28/XM28EL TM 9-1100-375-20P, Dec, Pershing. TM 9-1290-325-12/2, Sep. Rodar Chrono Set. TM 9-1430-253-14P/2/2, Oct. Nike-Here. TM 9-1430-383-20P, Sep, Pershing. CJ TM 9-2320-209-20P, Oct. 0742-Series 21½ Ton Tk. TM 9-6920-378-20P, Oct. Forshing. TM 10-3520-201-20P, Oct. Shoe Repair Equip. TM 10-3930-607-20P, Oct. 4,000 Lb Cap GED Fork Lift, TM 10-3930-615-20P, Oct. 4,000 Lb Cop ED Fork Lift Th. TM 10-8415-202-13, Oct, Flying Holmets. C10 TM 11-284 Nov AN/ORC-3, -4, -5, -6, -7, & -8 Radio Sels. TM 11-6625-1841-20P, Nov. AN/ PCM-15 Telephone Test Set. TM 55-1100-200-12-10, Oct, CH-47. TM 53-1100-204-12-1, Oct, UH-1A-18-1C-10. TM 55-1510-204-20PMD & -20PMD/1, Oct. OV-1. TM 55-1510-205-20P, Oct. U-1. TM 55-1510-205PMD & -205PMI, Oct. U-1. TM 55-1520-201-20PMD, Sep, UH-19. TM 55-1520-209-20P-1 & -2, Nov, CH-47. TM 55-1520-210-20P-2, Oct. UH-1A-18-1C-1D.

TM 55-1520-214-20PMD & -20PMP, Oct. OH-6. TM 55-1520-227-20PMP, Jul. CH-47. TM 55-1520-228-20PMD & -20PMP, Oct. OH-58.

### TECHNICAL BULLETINS

TB 9-2800-206-14, Oct, Corriers, Tonks, SP Arry, VTRs, TB 55-1500-212-20/1, Dec, CH-54A, CH-54B, TB 55-1500-307-25, Oct, All F/W, R/W, TB 55-1500-311-25, Nov, All Fixed and Rater Wing. TB 55-1510-205-20/5, Dec, U-1, TB 5-1560-276-24/1, Nov, All F/W, R/W, TB 55-2620-202-15, Nov, F/W, R/W, TB 55-4920-329-35, Dec, All Fixed and Rater Wing.

### MISCELLANEOUS

LO 9-2590-213-12, Aug, MBAJ Tonk Mig Bulldage MWO 9-1240-312-30/1, Nov. M551 Sheridan. MWO 55-1500-210-30/36, Nov. CH-MWO 55-1510-209-30/21, Nov. RU-MWO 55-1520-221-30/33, Nov. AH-1G. 5C 3820-97-CL-EO1, Oct. Preum Tool and Compress Ouifili 250 CFM; Tk Mid. SC 5180-90-CL-R18, Oct, Screw Threading Set. SC 5180-91-CL-R54, Oct. TK-169GG. SC 5180-97-CL-ELS, Oct, Wire Rape Rigging Tool Kit.

### M715 B.9.9.L

Make a note for possible 1 ¼-ton truck needs:

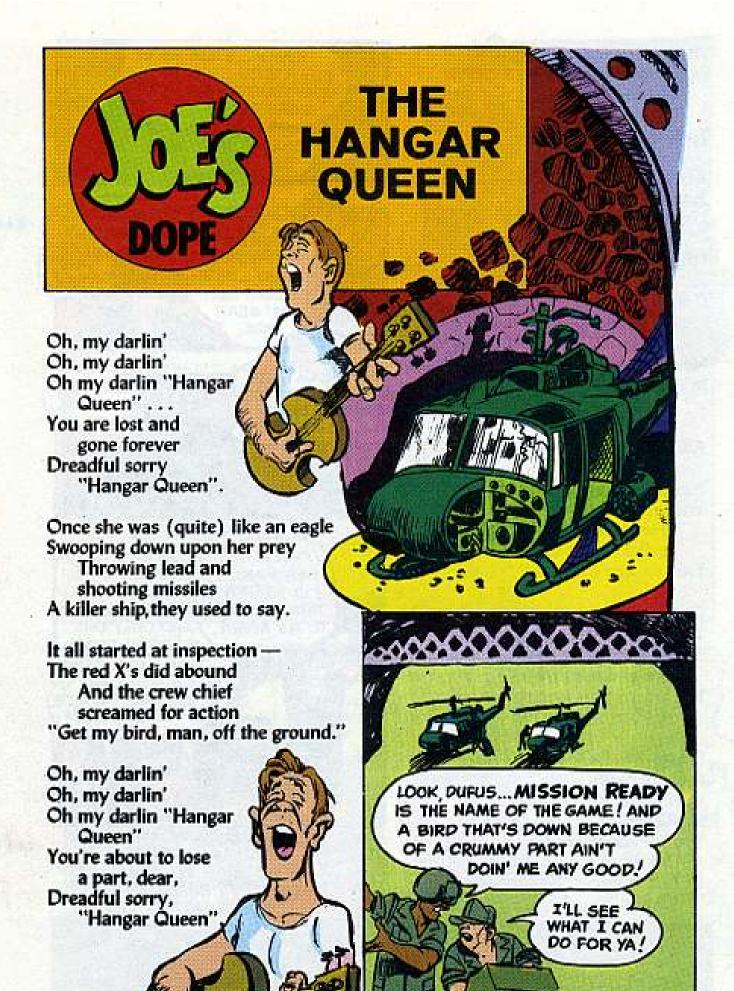
FSN 2590-934-1959 for the winch chain.

FSN 5120-168-2341 for winch chain repair links.

This's how they're supposed to be listed in the BIIL section of TM 9-2320-244-10 (Aug 68).

### Rigging Strap

You no longer have to make a platform retainer strap for rigging platform loads. You can order Strap, platform retaining, FSN 5340-181-1383. Your authority is SB 700-50. The parachute harness adapter is sewed in the strap so you don't have to order it separately. TM 10-500 (Nov 68) Airdrop of Supplies and Equipment tells how to use the strap.



The mechanic (hopping to it)
Failed to check with his supply,
Got the nod from
his top honcho
Took the part without a "why?"

Just one part, man
Just one part, man
I can't wait for channels,
heah!
LIBERATE IT from this
"grounder"
Dreadful sorry, "Hangar
Queen".

Now his bird was fixed and ready In the "GREEN" and all gung ho, While another bird mechanic Adds more to this tale of woe.

Now, the crew chief (of the victim)
Tries with all his might and main.
Tries to halt the
endless stripping
Tries to stop this deadly game.

One-by-one (they) pick'd the carcass
Till' one day she's standing there
Nothing more than
ribs and skin, man —
Yes indeed they've stripped
her bare.

Oh, my darlin'
Oh, my darlin'
Oh my darlin "Hangar
Queen"
You are naught but a
bone bag
Dreadful sorry, "Hangar
Queen".



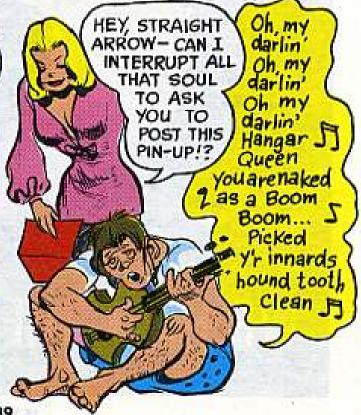
Came the day, oh, sometime later The top honcho got up tight Found his log books (and his records) All loused up and nothing right.

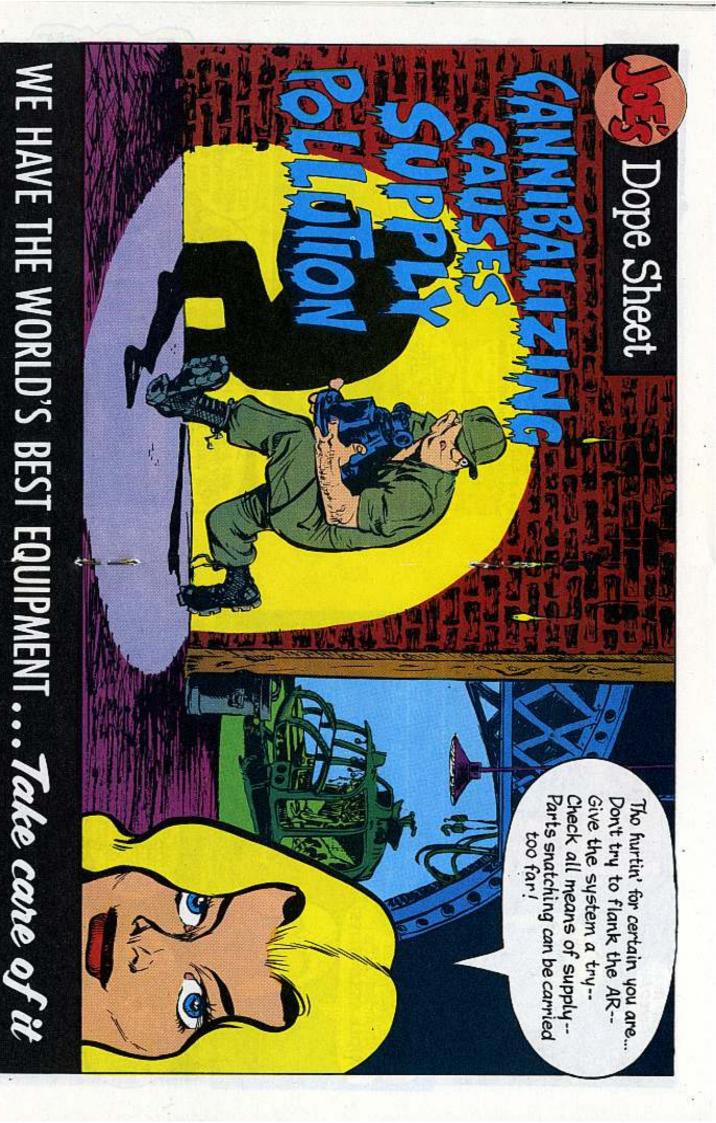
What was more, man, the Supply types Could not meet his parts requests Soon Supply dropped to a trickle -X-ed his birds and all the rest.

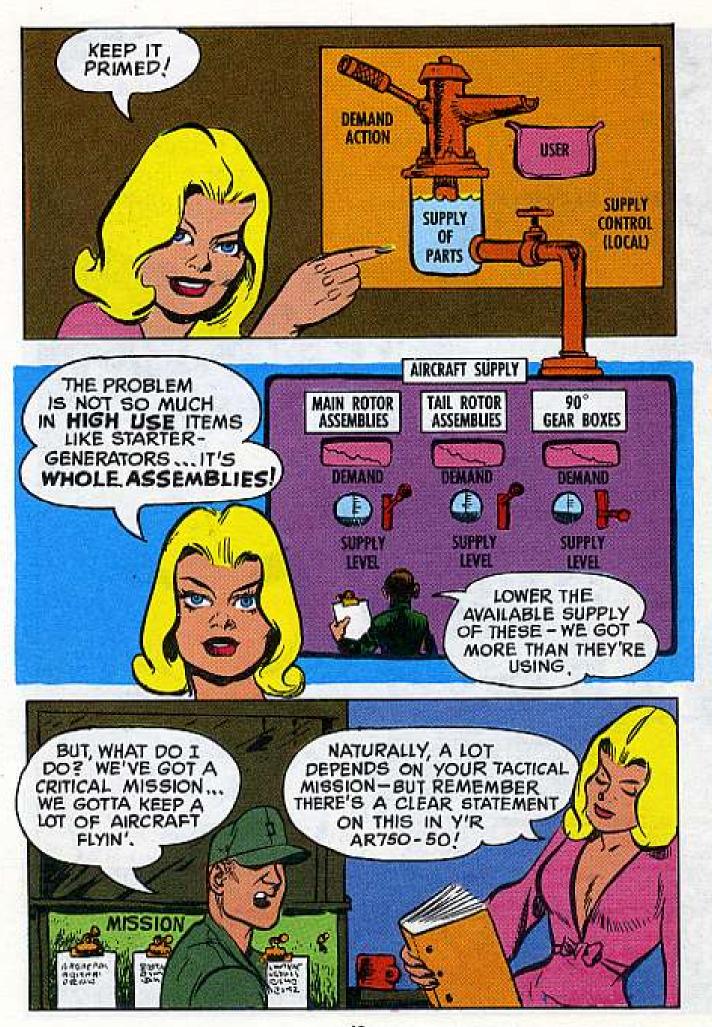








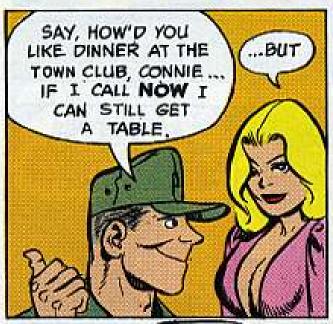


















Dear Half-Mast,

Some new dry-charged batteries are coming through with a plastic seal down in the bottom of the filler holes. We've been told to lift these seals out with a bent wire hooked down through the tiny hole in the center of the seal.

Trouble is, the seals usually won't break loose that easy, so the wire just straightens out. Or the seal won't come out because it's a shade bigger than the filler hole.

Any ideas?

SP5 J. J. H.

Dear Specialist J. J. H.,

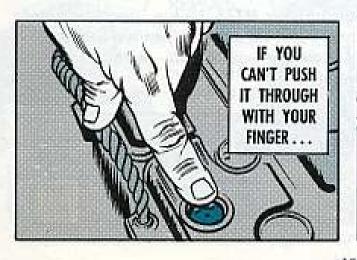
Glad you asked. I've run across a coupla cases where the people didn't know those seals are s'posed to be removed—and, somehow, they managed to put the electrolyte in through that li'l hole.

Those scals are to keep air out of the battery during storage so the plates inside won't sulphate (like what happens when you don't keep electrolyte over the plates of that battery in your equipment). So you leave those scals in place until you're ready to activate the battery.

If a bent wire doesn't do the trick, you'll have to push the seal on through — into the battery. Try pushing it in with your finger.

Still no go? Then use a bolt that's a little smaller than the fill hole. Hold onto it good so it won't go on through and hit the plates. Now tap the head end of the bolt v-e-r-y lightly with a small hammer or stick of wood.

The seal may drop in whole or break into pieces. Either way, it won't hurt anything inside your battery.





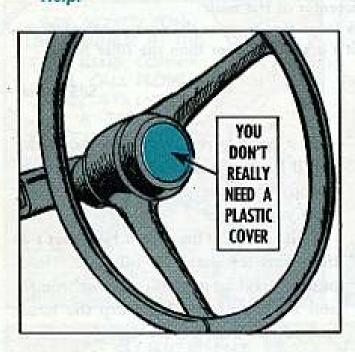


We're running all over the place trying to find the OD-colored plastic horn button cover for our M715 11/4-ton trucks. Somebody must be eating them, because a lot of those covers are missing.

I don't know what useful purpose that cover serves, but we get gigged when it's missing. There's no mention of it in the parts manuals.

Help!

CW2 C. M. B.



Dear Mr. C. M. B.,

Walk, don't run, because you won't find a replacement for that horn button cover—unless you're lucky enough to latch onto one in the bone yard. There's no FSN for it and there won't be—it's a non-stock item.

You don't need that cover, anyway. It was put on there only to cover up the manufacturer's name on the horn button. If the color of the horn button bothers somebody, your CO can authorize you to paint it OD.

Half-Mast



Here's a tip for others and a question for you:

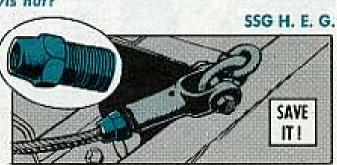
Tip—When you replace the winch cable on your M715 1½-ton truck, be sure to save the clevis nut. We tossed out the nut with the old cable. When we realized our mistake, we hot-footed to the salvage yard—too late—cable gone—with nut.

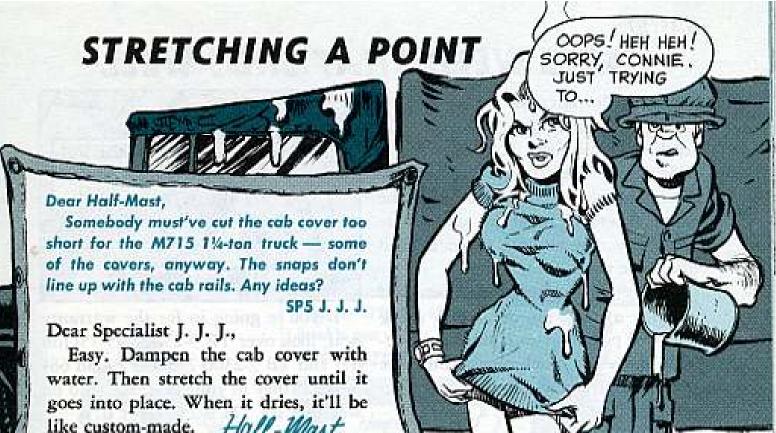
Question - How do we get another clevis nut?

Dear Sergeant H. E. G.,

Thanks for passing along the tip.

The nut comes only as part of the clevis, so you'll have to order the whole clevis assembly, FSN 5340-087-8050.





### **ENGINE BLOCK DRAIN**

Dear Half-Mast,

We're busting our knuckles taking out the coolant pipe plug from the 11/4-ton truck's engine block, what with the starter motor in the way. Could life get a little easier there?

SGT P. H.

Dear Sergeant P. H.,

Your scraped and cut knuckles will get relief if you put in a drain cock (FSN 4820-849-1220) in the place of the pipe plug. Natch, you take out starter before drain cock goes in. Your CO has to OK the whole deal. Good time to make the change is during your regular cooling system service.

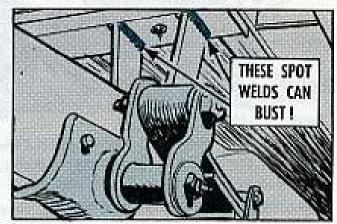


### ALL'S WELD THAT ENDS WELL

You don't want to be the fall guy for a broken spot weld on your 11/4-ton truck cross members.

Some of these trucks went out into the field with this jinx right from the assembly line. If you've got one of these lulus, you may be able to get it fixed under the truck's warranty.

Matter of fact, it wouldn't be a bad idea for all 11/4-ton drivers to check the weld points on each side of the vehicle above the brackets mounting the body to the frame. A big shock, or plain metal fatigue could bust a weld.



If you're going in for the warranty deal, look over TB 9-2300-295-15(Jun 67) and TB 9-2300-295-15/2 (Jan 68) to see if they fit your case. For info on welding, see TM 9-237 (Nov 67).

G742-SERIES 2 1/2 -TON TRUCK ...

#### FRONT AXLE-OLD OR NEW?

Dear Half-Mast,

What's with the front axle shafts on our late production M35A2 2½-ton trucks? These're U-joint-type shafts instead of the older ball bearing-type. Repair parts in TM 9-2320-209-20P w/Ch 1 & 2 (Apr 69) aren't identified as to which axle shaft setup they go with.

What's the answer?

SFC N. H. S.

Dear Sergeant N. H. S.,

Until the -20P TM is straightened out, you'll have to peek at page 6, Ch 3 (Scp 66), TM 9-2320-209-35P for the answer.

You'll find the repair parts identified with-



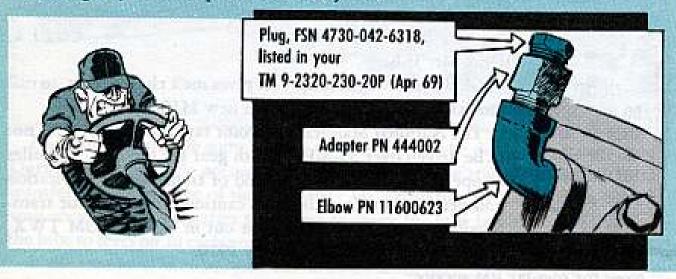
### M656 MISSING LUBE FILLER?

Right now—check to make sure you've got the elbow, adapter and plug on your M656 5-ton truck's steering gear housing. Same goes for the XM757 and XM791 5-tonners.

And make sure this lube filler setup is positioned straight up.

This's mighty important. The lube level inside the housing has to be high enough to cover the upper steering worm bearing. Otherwise, the bearing will run dry (you'll know it by the hard steering) and then it'll poop out.

Missing any of these parts? Here they are:



### SUFFERIN' SUFFOCATION!

You're movin' out in your M656 5-ton cargo truck. You're pickin' up speed. Everything's goin' smooth 'n' steady.



All of sudden she quits on you! Bum engine? Nope. Bum PM. You'll find that you didn't keep the engine air intake hose clamps tight. One of the 2 hoses slipped off. The terrific suction collapsed the rubber elbow—like shutting off a valve. No air for your engine. Surprise—stalled engine.

If a clamp is missing, get a new one —FSN 4730-782-5459 and FSN 4730-782-5458 in your TM 9-2320-230-20P (Apr 69).

This story goes, too, for your XM 757 tractor truck and XM 791 van.



# O-TON POOP

### END THE CONFUSION

Dear Half-Mast,

68) — it doesn't line up with what's in LO 9-2320-206-12 (Mar 66). Part of the trouble is the servicing info in para 2-160, TM 9-2320-206-20 w/Ch 1 (Aug M123A1C 10-ton truck tractors—mainly about draining, filling and inspecting the lube. There's some confusion here on that "integral" transmission and transfer on our

Can you give us the straight poop?

DO NOT DRIVE OVER 35 MPH IN 5TH GEAR FOR THE FIRST 500 MILES. NOTICE

Dear Mr. J. R.,

CW2 J. R.

attention to a special caution on new M123A1C's. Glad you brought it up - it gives me a chance, first, to call

of operation. This's for the good of transmission lubrication AMSTA-M (NMP) 11802; May 1970. mission failure. The word went out in USATACOM TWX. and gear run-in. Ignoring this caution is begging for transto be driven over 35-MPH in 5th gear for the first 500 miles The National Maintenance Point says the M123A1C is not

Now for regular PM service:

transfer to the level of its fill hole. Then you fill the transmission to the level of its fill hole. And you fill the has its own drain and fill holes. When draining, you remove both drain plugs. Although the transmission and transfer share the oil circulating system, each





the lube to level off in each gear case. wait about 20 minutes after shutdown to check the lube levels. This wait allows transfer. This's because of that "shared" oil circulating system. So you have to During operation, it's normal to have more oil in the transmission than in the But here's a wrinkle some people forget - or maybe don't even know about

bring it back up even with the fill hole. If the lube level in either gear case is down more than 1/2 inch, you add oil to

## CLEAN YOUR

a good cleaning. suckin' the supply dry. That element M123A1C 10-ton truck tractor—you're probably has more life in 'er yet with engine air cleaner element in your it! Don't throw away that

you let 'er dry out good for about 3 days If it's in good shape, you wash it - but blow out the dust. Then you inspect it. you toss out the dirty element. You just before putting it back into service. 1,000 miles," but that doesn't mean (Jun 70) says "Replace element every Sure, TM 9-2320-206-10 w/Ch 2

Change 2 to the TM. para 3-24 of your -10 TM—including Make sure you soak up the info in



5

OF PS 201

PAGE 49



How do you keep water from collecting on top of the cargo trailers, like the ¼, ¾- and 1½-ers?

SP4 J. A. B.

Dear Specialist J. A. B.,

Trick with 'em is to pitch the paulin high enough to get the drainage.

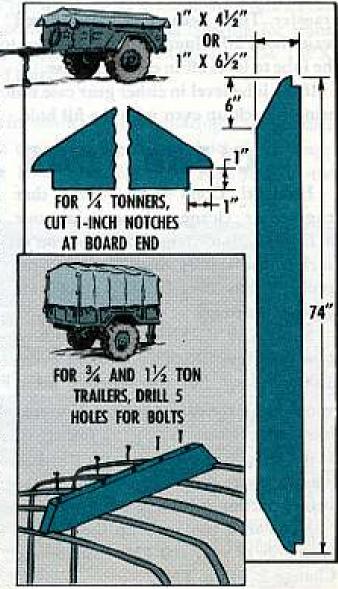
With the 1/4 tonners it's a simple deal. You just place a smooth board, 41/2-in to 6-in wide, under the paulin the length of the body. Store the board in the body when you're not using it.

On the bigger babies you use a 1-in by 2-in ridge pole made from wood stock. Put it atop the center of the bows from the front to the rear.

Drill a ¼-in hole through the center of each bow assembly and line up 5¼-in holes in the ridge pole. Secure with ¼-in carriage bolts, flat washers, lock washers and nuts.

'Course, in all cases, you round off top edges and ends of the wood stocks to keep 'em from tearing canvas. Then, too, you gotta prime and paint 'em with semi-gloss olive drab paint.

Do this little chore on your trailer and you'll rid yourself of the sagging, the messy puddles and paulin damage.



Half-Mast 52



What's the straight poop on switching from oil to grease in the M113 and M113A1 personnel carrier's suspension system?

I keep hearing the story, but I haven't seen the word. Do we or don't we?

CW4 J. A. M.

Dear Mr. J. A. M.,

The word's been out for quite a while in a world-wide letter sent out in May 1969 by the U.S. Army Tank-Automotive Command (TACOM). Instructions were given for putting grease fittings in the upper roadwheel arm housing and in the track idler upper arm assembly so they could be lubed with GAA instead of OE.

If your command didn't pass the word along to you, it must be they decided to stay with OE.

Pretty much the same poop on this switch is in TB 750-981-3 (Jul 70), Article 3-17.

But this TB article doesn't change the picture as far as you're concerned. You still need your own command's specific authorization to make the switch. Like the TB says, such a change is "optional with the user."

The switch from OE to GAA can apply to all vehicles in the M113 and M113A1 family.

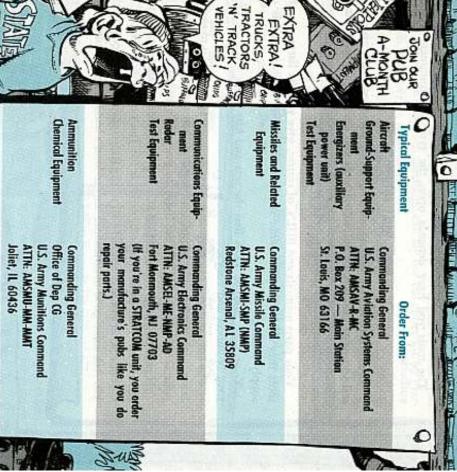


Unless your material handling hoist has 2 lifting slings your M548 cargo carrier may have a hairy experience when it's cargo loading time.

Although the lifting slings are not yet listed in TM 9-2320-247-20P nor the -35P, they are available to operating crews that have the hoist. Your support can get them with an exception type requisition, using part no. 11647539 and RIC AKZ.



## CIAL-TYPE PUBS



E OM

Trucks

Tracked Vehicles

your equipment. You should include

Keep tab of the pubs you get with

If you're in a TOE unit, order the manual from DS the same way you'd order a repair part. Give complete info on the "exception" type supply request.

the manuals when you turn your equip-

ment in for another model

## A TOOL FOR

Big ones, little ones, special, and common—there's a tool for every job whether it's big or small. Whether it does that job depends upon Y-O-U.

The tools you have depends upon the type of equipment you're authorized.

## HERE'S WHAT AUTHORIZES 'EM

Your TOE/MTOE, TDA/MTDA, MOS, parts manuals, and BIIL tell you what kits, sets, or individual tools you need to do your maintenance.

## HERE'S WHAT LISTS 'EM

Your parts manuals and BIIL's, of course, give you the listing on the tools they authorize. The other tools are listed in supply manuals or supply catalogs.

Your TOE, and/or TDA lists the sets and kits along with the Line Item Numbers and FSN's.

The only way you can keep up with your tool sets and kits is to get the latest supply manual or supply catalog and then watch for changes in your DA Pamphlet 310-6, the index to your SM's and SC's.

If you didn't get your SM or SC on pinpoint distribution, then you should ask your pubs people to order it for you on DA Form 17.

Your SC or SM may not have all of the illustrations of the tools in the kit. Ask some good maintenance men to lend a hand in identifying them.

TTOO BIG OR

NO JOB

TOOL BOARD

## EVERY JOB"

Once you've got the tools pegged to the nomenclature, you can make it easier to identify them if you make a tool board for your kit, if practical. Outline each tool and then fill in the silhouette with paint. When you have a board like this, each mechanic can lay out his entire kit by placing each tool over its silhouette.

When you find tools missing from your kit, you shouldn't have to order another complete kit—just order the tools that'll bring it up to snuff.

### TOOL LIS

Here's a list of some of your tool sets and kits. You'll find the complete list in your DA Pam 310-6.



Aircraft Armament Repairman, MOS 45J, Basic SC 4933-95-CL-A13 (Jan 70)

Aircraft Mechanic's, General SC 5180-99-CL-A01 (Mar 69)

Army Aircraft, Sets A, A Supplement, B, and C SC 4920-99-CL-A71 (Feb 69), C1

Special Airborne Preventive Maintenance SC 4910-95-(L-A56 (Apr 70)



Artillery

Antiaircraft Artillery Mechanic SC 5180-95-CL-A50 (Jan 70)

Artillery Mechanic, FSN 5180-699-3594 SC 5180-95-CL-A43 (Dec 67)

I per arty mech when supporting 105-MM, 155-MM howitzers

Artillery Mechanics, FSN 5180-357-7727 SC 5180-95-CL-A12 (Sep 66)

1 per Sr FA repairman, Sr air defense arty, Sr turret arty repairman, FA repairman, Air defense artillery repairman, turret arty repairman, 1 per armament maint inspector

SC 5180-95-CL-A13 (Sep 67)







#### Tank and Automotive



Automotive Maintenance, No. 1 Common SC 4910-95-CL-A74 (Mar 70), Ch 1 (Sep 70) (1 per co, batry, troop or similar unit authorized 8 to 75 Motor Vehicles and responsible for periodic Maint. Services)

Automotic Maintenance, Set No. 1 Supplemental SC 4910-95-CL-A73 (Feb 70)
(1 per sep unit responsible for semi-annual PM services)

Automotive Maintenance and Repair, No. 2 Common SC 4910-95-CL-A72, Ch 1 (Sep 70)
(1 per bn. or sqdn maint. plat. or sep unit authorized 76 to 350 motor vehicles and responsible for performing semi-annual PM services)

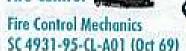
Automotive Mechanic's, 5180-754-0641 SC 5180-90-CL-R16 (Jun 70)

Vehicle Full Tracked No. 2 Supplemental SC 4940-95-CL-A08 (Dec 69) (Used for PM services on tracked vehicles)

Waterproof Electrical Connector Repair Kit SM 9-4-5935-S01 (May 62)

Turret Mechanic's SC 5180-95-CL-AS1 (Jan 70)

#### Fire Control



Fire Control Instrument Repairmon SC 4931-95-CL-A09 (Aug 68)

#### Small Arms



Small Arms Repairman SC 4933-95-CL-A07 (Apr 69) 1 per Sr SA repairman, SA repairman

Small Arms Repairman, Light Weight SC 4933-95-CL-A08 (Jul 70)

1 per small arms repairman assigned to contact maint team.

#### Electronics



MK-356/G Wire Splicing Kit SC 5975-91-CL-D01 (Jun 65)

MK-693 / A Electronic Equipment (Maintenance of aircraft wiring harnesses, and cables)
SC 5821-91-CL-E04 (Feb 70)

TE-21 Lineman's Equipment SC 5180-90-CL-R08 (Oct 69)

TE-33 Lineman's (Pouch, Pliers, and Knife) SC 5180-91-CL-S12 (Jun 65)

TE-49 Telephone and Telegraph Repair SC 5180-91-CL-S08 (Dec 64)

TE-50B Telegraph Printer Equipment SM 11-4-5180-CL-S05 (May 63), C1

TE-73 Individual Wireman SC 5180-90-CL-R04 (Jun 69)

TE-123 Carrier Equipment Repair SC 5180-91-CL-SO7 (Nov 64)

TK-61/SR Shipboard Radio Equipment Repair SM 11-4-5180-R26 (Jun 64), C3

TK-77 / GF Photographic Repairman SM 11-4-5180-R05 (Sep 63)

TK-105/G Radio and Radar Repairman SC 5180-91-CL-R07 (Apr 69)

TK-100/G Radio and Radar Repairman SC 5180-91-CL-S21 (Mar 69)

TK-101/G, Tool Kit, Electronic Equipment SC 5180-91-CL-R13 (Apr 69)

TK-145/G Communications Equipment SC 5180-91-CL-R34 (Sep 69)

TK-165/G Intercept SC 5180-91-CL-R37 (Nov 69)

TK-187 / MSC-46 Electronic Equipment SC 5180-91-CL-R48 (Sep 69) THESE LISTS HANDY



THE CASE OF THE MISSING ROLLS



Dear Half-Mast.

How do we get replacement cases and rolls for the wrench sets in the No. 1 and No. 2 common tool kits, and the automotive mechanic's tool kit? There're no FSN's listed. CW2 J. R. D.

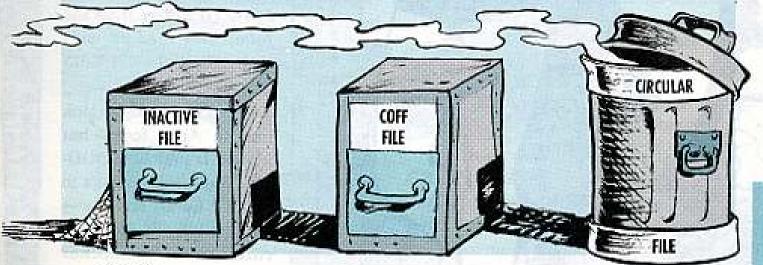
Dear Mr. J. R. D.,

When there's no FSN's listed it means the rolls and cases are not in the supply system as separate items.

So . . . you either get 'em thru local purchase, or have 'em made. If all else fails your support can send through a requisition for a non-standard item. Be sure to include the FSN of the wrench set and the name of the manufacturer.

Half-Mast

#### SUPPLY RECORDS COFF



Hold it-

Keep your inactive property book pages in the book's inactive section until the end of the year (FY or calendar, whichever you use). Then put them in your COFF file for 1 year. After that give them to the records management people. They keep your records for I year and then destroy them. See App C, page C6, AR 340-2 (Sep 69), and change item 17, page 66, PS 210, to read 1 year in your inactive file, instead of 2.



## BY THE EQUIP MENT ESC

AS YOU CAN SEE.

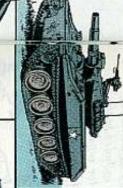
AND YOU GIVE US THE ANSWERS CONNIE - I'LL

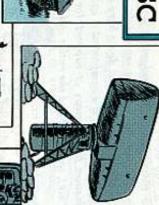
READ THE QUESTIONS

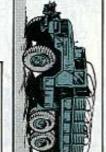
BUT THERE'RE SOME

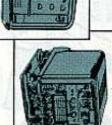
QUIRKS.

LESS FIGURING









cards, the ESC TM's call for the either a calendar or Julian date on date in the ESC TM's. And para 3mally are not transferred to punch DOD-style calendar date on ESC DA 2404. Since ESC ratings nor-4c (2) (e) in TM 38-750 permits This is referred to as a "calendar"

cause it's possible to get clapsed for on specific feedback forms be-The 4-digit Julian date is called



time (in days) by subtracting Julian date from another on punch

type date.

71040

rules call for another except where specific be used by all servicesstyle 6-digit date that's to it's not. It's the new DOD-

stand for the day of the month (01 style date, where 2 digits stand for for 1 April) - or 710401. the month (04 for April) and 2 the year (71 for 1971), 2 stand for You can't do this with the DOD-

### ESC'S FOR C&T'S

each point in the ESC TM? items. So why do we need a rating on C&T are rated RED just like obsolete TM 38-750 says that items classified fied CST (contingency and training) items (example: TM 9-2320-210-ESC for the M135 truck) that are type classi-Q - There are some ESC TM's for



TM 38-750 TAMMS

Julian date used on most

Jorms.)

like an April fool-but

A - That date may look

2404? (It differs from the the ESC rating form, DA on the 6-digit date (called

Q-What's the story 6-DIGIT DATE

for by the ESC TM's) for

FOR COMBAT T'S RED BUT IS II RAINING? FIT FOR

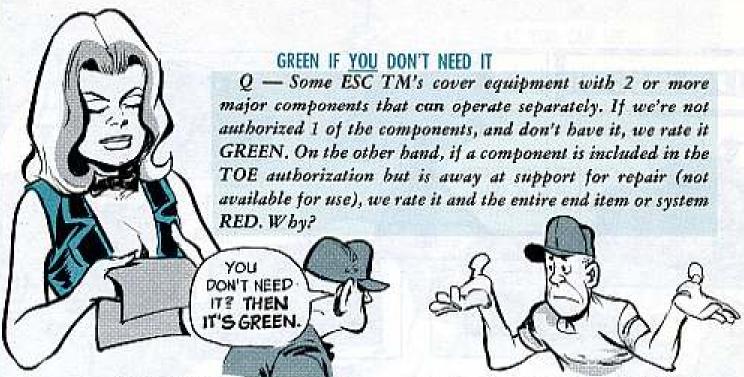
serve use C&T items for training.) sion. (Both National Guard and the Reequipment's fit to do its training misstance, it may tell you whether the overall rating for reasons other than unit). But those component ratings tel C&T end item rating (RED for a combat GREEN or AMBER won't change the you a lot more about equipment condithe condition of components. F'rintion—even if the item still gets a RED A-It's true that rating components



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人のこと

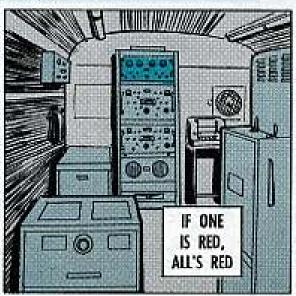


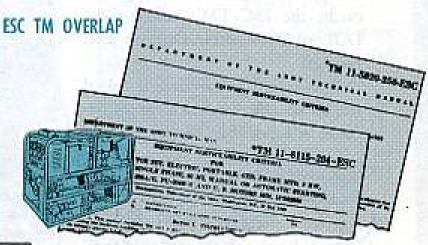


A — Equipment you don't need for your mission is not authorized. What's missing but not needed still leaves your equipment GREEN for your assigned job.

If it's authorized you need it for your assigned mission. What you need for your mission but ain't got is rated RED (or AMBER if that's the lowest rating for that component in the ESC TM. It's a shortage, temporary or otherwise).

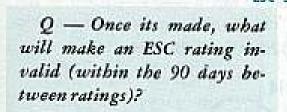
Q — Some ESC TM's cover an entire system, even though some individual components or subsystems have ESC TM's of their own. In such cases, must we do both the subsystem ratings and the overall system rating?





A—Yes. And before you blow your system, see para 3g, f'rinstance, in TM 11-5820-256-ESC, which says any separately published ESC TM will be used if it applies to a subsystem or component.







A—Any end item or system status change that changes the rating (up or down) for the end item or system or one of its rated subsystems or components makes the entire rating invalid. (This can happen, f'rinstance, if component mileage drops its rating from GREEN to AMBER or if an AMBER component is replaced by another that's GREEN.)

And once that rating is found invalid, only a complete point-by-point inspec-

tion can update the rating.



Q — Some of our service school items have published ESC TM's but are not reportable on DA 2406 (TM 38-750) or DA 2715 (AR 220-1), Are ESC rating required?

A—For equipment not reportable to DA (TM 38-750, AR 220-1 or AR 135-8) it's optional with your CO. He can require ESC ratings or drop 'em (the next change to TM 38-750 will say so).





#### CROSS CHECK IF YOU NEED TO

Q — Some ESC TM guidelines are vague. "Service brakes do not operate properly" from TM 9-2320-209-ESC for example. What's the requirement on this?

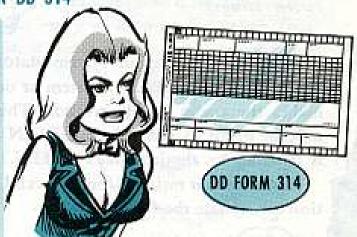
SHALL
I DROP THIS
FROM THE

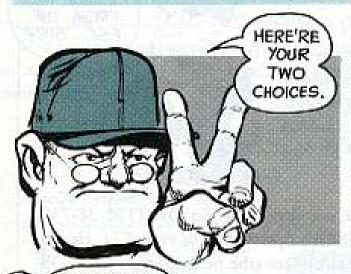
ESC, SIR?

A—Taken alone, that statement is a bit woozy. But a note in para 3 of the ESC says you also make maximum use of PM checks and services and trouble-shooting tables in the equipment TM (TM 9-2320-209-10, in this case).

#### RATING ON DD 314

Q — Para 3-3c(4)(f) in TM 38-750 says record the ESC rating on DD 314 for items reportable on DA 2406. After the rating is recorded, para 3-4d(2)(c)—covering everything but aircraft—says the DA 2404 rating form will be destroyed. How do we keep a record of the rating for items not reportable on DA 2406?





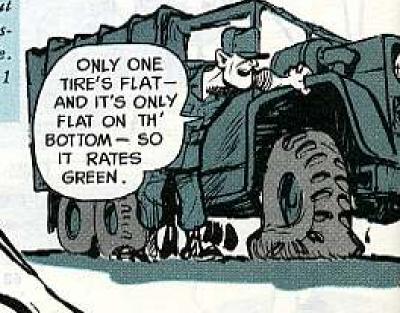
A—You have 2 choices. (1) Record the rating on DD 314 just as you do for reportable items; or (2) keep the DA 2404 rating sheet until the next rating is due, if your CO agrees. DA msg 191853Z Aug 70 gave the CO the option to retain DA 2404 ESC rating forms until the next inspection. (Only aircraft rating forms are required to be kept—unless the CO says to hold the others, too.)

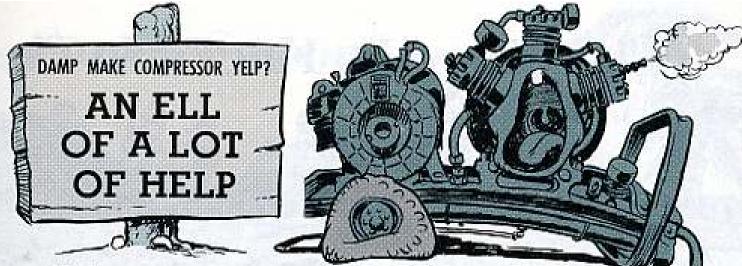
### FLAT MAKES

#### WHAT FOR 1 FLAT

Q — TM 9-2320-209-ESC for 2-1/2-ton trucks says tires rate GREEN if all tires are OK but AMBER if 2 are flat, missing or unserviceable. What's the rating for 1 flat?

A—Guess you could rate it GREEN minus, by stretching a point. But the ESC writers say 1 flat makes it AMBER.





Locks are real great on banks, stores, and ignition panels—but bad news inside of engines or air compressors . . . especially water-lock.

Units like Compressors, LP-832-ENG-2 and -512-ENG-2 get locked up casy. It's all because of an air inlet muffler filter that faces the falling rain . . . on No. 1 cylinder . . .

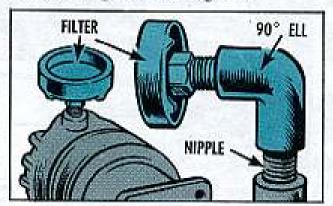
When you run one of these wrongway items in the weather . . . it can gather in water that either sludges up your crankcase oil or causes hydrostatic lock . . . or both.

To avoid this, take off the filter, and

put in a 3/8" x 1" NPT Nipple—like FSN 4730-050-1393—

Then insert a 90° cll, NPT female 3/8" like FSN 4730-722-2759, facing down—

Screw the filter back in, facing out ... and forget the falling rain.

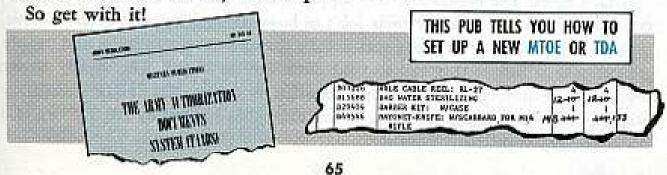


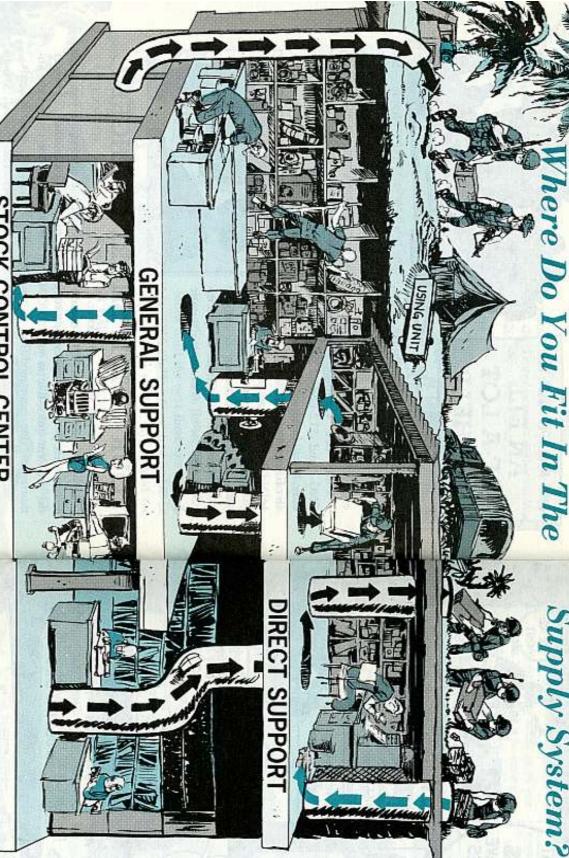
#### YOUR OUTFIT SHORT-CHANGED?

Well, don't just sit there yakking.

If your unit's TOE or TDA doesn't authorize all the equipment you need —or, worse yet, it authorizes the wrong gear for your unit's mission . . . report the problem quick-like to your CO. He can start the ball rolling to get the authorization document modified, so your unit will have exactly what it needs.

Setting up an MTOE or a new TDA is easier than ever. The new AR 310-49 (Mar 70), Authorization Documents System, gives step-by-step instructions, and it provides sample documents for telling the wheels in the Pentagon exactly what your outfit needs to do the job it's responsible for.





In the driver's seat, that's where!

That's right. The big-daddy, DA supply system and all the supply support types at all levels—whether their job's to buy, manage, catalog, receive, store, or issue supplies, have only one reason for existing—to get supplies and supply info to you as fast as they can so your outfit can do its job. The supply system that's set up to keep you properly supported is called MILSTRIP—Military Standard Requisitioning and Issue Procedure—It's covered by AR 725-50, and it's a speedy, on-the-ball operation.

But, for the supply system to work right, you have to stay in the right lane, and use the right signals. To start your supplies flowing, and to keep 'em coming, you have to know your supply SOP and AR 735-35 and AR 710-7 and you have to follow through like a pro on your requests.

### DIRECT SUPPORT

Fills your requests from its stocks or other sources (cannibalizes or has 'em mode or buys 'em).

### GENERAL SUPPORT

General Supply backs up your DS.

They have their own stocks and other sources like DS. But if they can't come up with what's needed by DS they go to a stock control center of some kind to locate the supplies and have them shipped to DS.

## STOCK CONTROL CENTER

This outfit is like a command post. They know where it's at and how to get it to DS, fast.

They can go to other DS or GS outfits in the area, or to DA, GSA or DSA depots, or to manufacturers, to help your DS fill your request.

Normally they can order the supplies to be sent directly to your DS.

In a real pinch, the, your DS can code a MILSTRIP requisition so that the supplies will be sent directly to you. When this happens you'll get supply status cards on DD Form 1348m, instead of DA Form 2765. But, the DD Form uses the same codes you get on your 2765's . . . so no sweat!

First and foremost, remember—all your supply business: Your PLL, your requests for issue, turnin, cancellation, follow-up, etc., go to your direct support (DS) outfit. They're the ones that are responsible for giving you what you need. They also keep tabs on your regular needs, and keep the supply system posted on how much of what's needed to keep your equipment

If your DS doesn't have the supplies you need, it's up to them to get 'em for you from whatever sources back them up. Like so—



67



HERE'S WHAT
HAPPENS
IF YOUR D S
DOES NOT HAVE
THE SUPPLIES
ON HAND.

 First off, your DS has stacks on hand, which include all your PLL items, and other things you need on a regular basis.



 What DS doesn't have on hand they can order from their own back-up support — a GS (General Support) outfit. They can work back through supply channels all the way to Army depots, GSA (General Services Administration), and DSA (Defense Supply Agency) depots, and manufacturers.



 They can buy some things for you locally, or have 'em made for you at local shops. 4. They can cannibalize to fill some of your requests.



OUT

Or, they can borrow from another outfit to fill your request in an emergency. C'MON; REMEMBER THE TIME I FOUND YOU ONE IN AN EMERGENCY.



OKAY, I CAN SPARE ONE... BUT SEE THAT I GET ONE BACK.

MILSTRIP

OPERATES

ON AN

ISSUE

PRIORITY

SYSTEM



A B C P YOUR

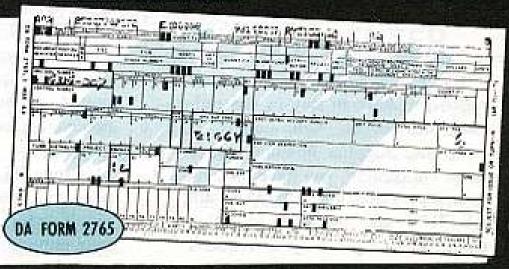
5 17

YOUR IPD (ISSUE PRIORITY DESIGNATOR)
ON YOUR DA FORM 2765 TELLS
SUPPORT HOW FAST TO FILL YOUR
REQUEST. SO USE IPD'S RIGHT!

But, for the system to work right, you have to run a good PLL operation.

For example:

Use the PLL preprints (DA Form 2765) that support provides. The preprints have the latest supply info on an item. They save work, time and trouble all ground.



Double-check your entries on all your requests. The right digit in the wrong place can cause you a lot of sweat, doublecross you and DS, and leave you empty handed.

Keep good demand records on your DA Form 3318 (Record of Demands). They keep your PLL current and support's bins filled with the things you need the most. DA FORM 3318

Up-date your supply records when support provides new FSN, or other supply info on an item. PUT IT
OFF... IT
CAN BUILD
UP ON YOU
FAST,

APPENDIX D
DOCUMENT IDENTIFIER CODES

BUT EVERYTHING YOU BEEN ORDERING IS HOT... HOW COME?



2 3 4 ¢ † Requisition 4 ¢ 2 Requisition 5 0 3 Requisition

For oversea altiment/with PSN.
For oversea shipment/with part number.
For oversea shipment/with NATO stock number.

Know your IPD SOP, and use it right. The wrong use of high priority IPD's will bog down the supply system . . . and, leave you holding the bag.

APPENDIX A

ADVICE AND STATUS CORES

Advice Codes

Advice Codes

Advice Codes

Advice Codes

Advice Codes

A Requisitioned quantity exceeds R/O with insertings of the constant Quantity requirestrated does not coded R/O beings are hard plus descent reveal darwise Remark

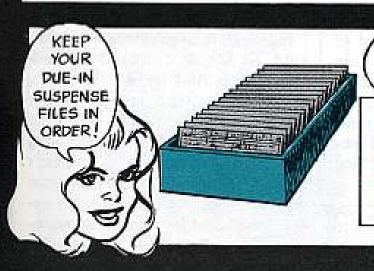
E/O will be submitted within 10 days. (For all only by Army stresses impundanters on requisitions for only angles; manager.)

B Sequisitional quantity exceeds R/O with insertings of the command, Quantity required and only and the advices on hard plus despend minus show in Revised R/O not required and will not be submitted. (For one only by Army overses required forms on requisitions for only single immanger.)

B A lims is not locally obtainable through manufacture, fabrication, or greenweeds.

Learn the codes that concern you on the supply status cards that support sends you on your requests.

If you don't dig the codes your PLL operation's lost. See Appendix A and D, AR 735-35.



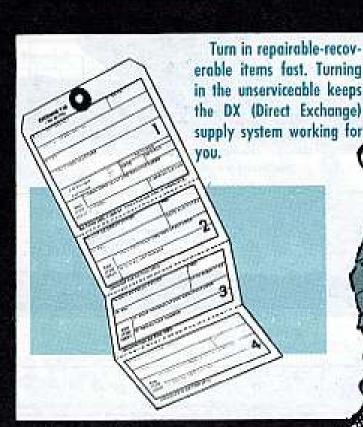
DO I REALLY NEED ALL THESE?

Quick-like cancel requests for parts you no longer need. Saves money, time, paperwork, and sweat all around.





Pull a close check on your suspense files when you do a reconciliation report. (See para 4-8, AR 735-35, for the scoop on followups, cancelling, and reconciliation reports.) Keep your follow-up requests timely. Send 'em in only ofter the date on columns 62-64, or block 21 on your status cards.



WHEN
YOU TURN
IN "REPAIRABLE"
ITEMS - BE SURE
THEY GET THERE
IN REPAIRABLE
CONDITION!





Turn in excess and unauthorized items. They are just added weight and spaceeaters for you, and someone in a bad spot may be hurting for things you are hoggin' for no good reason.

Know your pubs real good. You need AR 735-35, AR 710-7 and your PLL SOP, along with the latest catalogs and supply manuals for your equipment . . . SB's, TB's, manufacturer's manuals, and any other pubs that concern the equipment. SB 700-20, adopted items of materiel; SB 700-50, for expendable items not listed in supply pubs.

YOUR PUBS ARE YOUR ROAD MAP IN THE SUPPLY NETWORK. The indexes to DA publications — DA Pam 310-1, for AR's, DA Pam 310-2 for blank forms, DA Pam 310-4, for TM's, TM-P's, SB's, TB's, etc. DA Pam 310-6, for supply catalogs and supply manuals. DA Pam 310-7, for MWO's. DA Pam 700-2, for info on filling forms and keeping supply records. And, that's about it. That's the kind of supply know-how you need so you can help the DA supply system (and all those Joe's behind you) to support you like you're supposed to be supported.

#### REGULATED MOVE

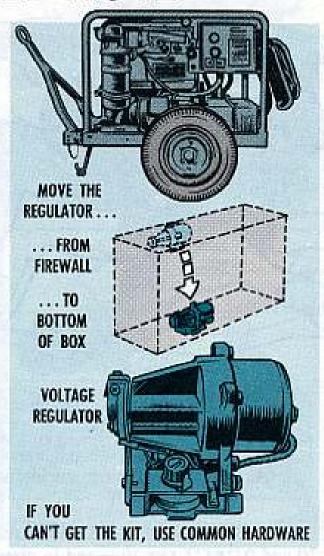
Regulations you always got, right? Make things go smoother.

Same with generators—voltage regulators even up the juice.

But regulators do get zapped, like on the 7.5-KW, 28-VDC, JHGV7.5A Hollingsworth sets. Mounted wrong, they don't live long.

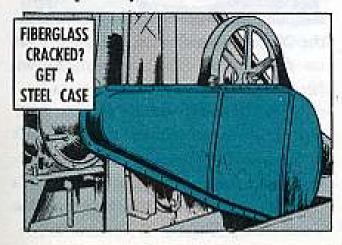
It's easy to see whether your own set is in such danger. Just open the control box and look inside. If the voltage regulator is mounted on the bottom of the box, forget it. If it's up on the back wall, you need a retrofit kit to relocate it from the rear wall to the bottom surface.

What kit? One should have been strapped on the set's shipping container as issued. It contains 3 longer wires, 2 cable straps, 4 rubber plugs for the old holes, a template for drilling holes in the bottom plus an instruction sheet. This minor alteration is authorized by AR 750-35.



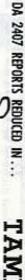
### 2380 RT CRANE CHAIN CASE

Is the fiberglass chain case on your crane's primary drive cracked? Or leak-





ing oil? If so, you can now get a kit that completely replaces the fiberglass section with steel parts. Have your support requisition Kit, P/N (02280) SK-69-8-28GSO, using RIC A12. You'll get a steel case plus all the attaching hardware. The lube capacity of this steel case is 4 quarts, one more than the fiberglass job.





- done as spelled out in TM 38-750 All DA Form 2407 reports on aircraft and installed armament / avianies maintenance will be
- graphic areas or designated units and for a limited time only will be required New "sample" reports — limited to named types or models of equipment in specific geo-

70 and 021847Z Oct 70-and in directives within commands The word on the new DA 2407 streamline went out in DA Msgs 281851Z Sep

### WHAT IT MEANS

of sending it to the Army's Logistic aircraft which still go to higher levels) data processing installation. They hold and reporting remain unchanged. pile data for local control and filed for item forms, they'll be used only to comtion. Except for the aircraft and sample 2407 will go to your local data installa-Data Center. (The NMP copies of DA and use it for local control-instead the data (except for sample items and There's a big change, tho, at your local levels, this means DA 2407 recording At both organizational and support



file.) no data installation, keep your own the 90 days specified in TM 38-750. II

Grass Army Depot. sult from these) will go to the Army's maintenance (or punch cards that rereporting sample items and aircraft Logistic Data Center at Lexington-Blue Only the NMP copies of DA 2407

## STREAMLINE

"GHOST" STILL LIVES

still a very live "ghost." But don't get the idea that DA 2407 itself is ready for burial on boot hill. It's

- EIR's for all equipment still will be submitted on or phone) DA 2407 (except the emergency type by wire
- 2. MWO applications, at all levels, still will be reported on DA 2407
- Sample reports will be filed on DA Form 2407, as nated time (6 to 12 months), then stop only the sample reports will continue for a desigare to report will be notified. From these units are needed on the 11/4-ton truck, the units that required by the circular. Frinstance, if reports





### KEEP 'EM ACCURATE

to call for reports on certain equipment is still a top priority need because the at any time. Army's Logistic Data Center may need low, keep in mind that report accuracy Logistic Data Center) drops to a new processing installation to the Army's nance reporting (from the local data As the amount of required mainte-

ment identification (nomenclature, serial number, if it has one). enclature, FSN or part number and model, serial number, FSN) and the unit identification code (UIC), equipcomponent or part identification (nom-That's especially true of your own

> and that all parts, components or assemment (such as miles, hours or rounds) item they belong to. blies are identified as part of the end for all blocks that apply to the equip-Make sure you put in accurate entries

Appendix A of TM 38-750. Use only the latest codes as listed in

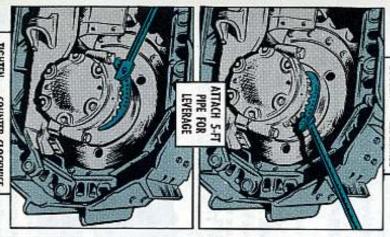




## SUSTINE

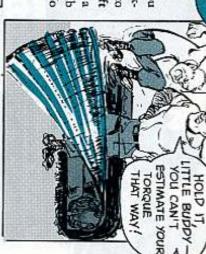
Thing to keep in mind is when you turn the adjusting nut you go clockwise to loosen and counter-clockwise to tighten. To get the 1100-1200 lb-ft torque, use a 5-ft pipe rammed up a foot on the wrench handle get a 200-lb guy to put steady pressure on it. No jerking or jumping up and down.

### TOOSEN — CLOCKWISE



## TIGHTEN — COUNTER-CLOCKWISE

You do have to estimate torque, since there's no wrench to read a dial on for such... and be sure your retaining nut threads are well-oiled.



You have to do this chore by the clock and the day and by the word in that para 3-71 of your -12 TM . . . otherwise, vibration will score the cone end of the drive shaft, and a ridge will wear on it.

Then if you try to shoot grease in the cap fitting, grease won't reach the bearing. It also won't come out the pipe plug hole like it's s'pozed to (you do know you take out that pipe plug to put grease here, dontcha?). Instead, it balls up between the cone and the seal, and blows the seal.

Then if you get obstinate and try to run, you'll probably burn up a bearing ... which can bring on a broken shaft ... which can bring on a broken track and would you also like a fractured frame?

The lack of a couple hours' time and 31 cents worth of grease can add up to a \$5,000 deadline.



ONE AND ONLY



Our 45-KW AC 400-cycle generators' engines are having problems with their 24-volt electrical system. I suspect it's because the 2 12-volt batteries are installed wrong. I say they should be installed so the polarity is positive-to-ground. But others say that everyone knows that all engine batteries are hooked up negative-to-ground. Even TM 5-6115-235-10, page 6 says so.

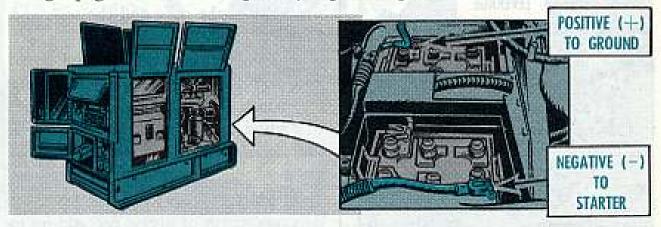
Please give me the straight dope so we can get our generators back on the line.

SP4 L. B. S.

#### Dear Specialist L. B. S.,

There is one exception to that battery hookup theory about all generator engines having their 24-volt system grounded on the negative side. And that is the 45-KW 400-cycle generator that you have. It's the only one in the system that has a "positive" ground polarity. All others are negative ground.

If you'll check Change 2 (Jan 68) to TM 5-6115-235-10 you'll see that it changes page 6 to read "unit polarity is positive ground."



In other words, the cable from the battery positive post goes to ground. And the negative cable goes to the starter. On all other generator engines with a 24volt system, it's the other way around.

To keep others from hooking up the batteries wrong it may be worth stenciling one-inch letters across the battery case covers saying POSITIVE GROUND POLARITY. Half-Mast

76



Dear Half-Mast,

Several of our 5- and 10-KW Mil Std generators have the habit of draining their crankcase oil all by themselves. The nut on the bottom on the crankcase drain valve vibrates loose, allows the valve to raise and out comes the oil. Especially when we least expect it.

Is there any way to keep the valve from vibrating open?

SP5 W. G.

Dear Specialist W.G.,

Your first chore is to get rid of that vibration. Excessive vibration can shake a lot of parts loose.

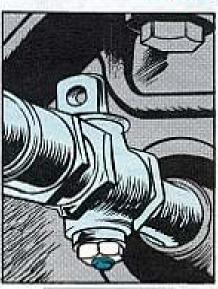
Dig out your engine TM—either TM 5-2805-258-14 or 5-2805-259-14—and troubleshoot the engine for "runs erratically."

Next check the engine and generator's mountings for looseness.

Last, after you re-tighten the nut at the underside of the crankcase drain valve, stake or peen the threads lightly.

And every day during your daily PM service give the valve's "off position" a quick glance.

Half-Mast



STAKE LIGHTLY AFTER TIGHTENING

TIRED BATTERIES?

Your 5- and 10-KW generator sets suffering from a tired battery?

Give your battery a shot of electricity
. . . by running the set at least 15 minutes a day. Keeps batteries charged.

And when you disconnect the battery cables to remove the battery, mark each with positive and negative labels so's you won't reconnect 'em wrong.



The clamps'll fit either lug, and what with the cables disappearing into the bowels of most sets, it's hard to tell which is which. The positive label can be had with FSN 7690-477-3714; negative, 7690-477-3715.



Dear Half-Mast,

We want to support the roof of our 1.5-, 3- and 5-KW generator revetments with sand bags like it's shown in the generator's TM's. Our safety people say it's a no-no 'cause the roof may collapse if the bags shift or are cut.

Can you give us some guidelines on this?

5HOULD BE ADDED TO EACH CORNER, THO 8 X 8'S WOULD BE BETTER.

Dear Sergeant J. C. B.,

When in doubt play it safe.

The purpose of the revetment is to protect personnel and equipment. Anything that'll jeopardize either has got to go.

The TM's warn that caution should be taken when adding sand bags to the roof and the supports should be sturdy enough to carry the load. If the bag supports are a possible hazard then, as a minimum, a 4x4 timber post should be added to each corner. An 8x8 post at each corner would be the safest.

Half-Mast



SGT J. C. B.



Dear Half-Mast,

The oil-pressure-gage needles on our 10-KW MEP-018A generators peg over past 60 PSI, TM 5-6115-275-15 (Jul 69) says operating range is 30 to 40 PSI, Which is right?

SP5 D. A. P.

Dear Specialist D. A. P.,

Your gage is. Oil pressure from 20 to 60 PSI, at 1/4 throttle to full rated speed, is OK. No sweat either if it goes a little past 60 PSI. The TM is getting corrected.



NO SWEAT AREA

Half-Mast

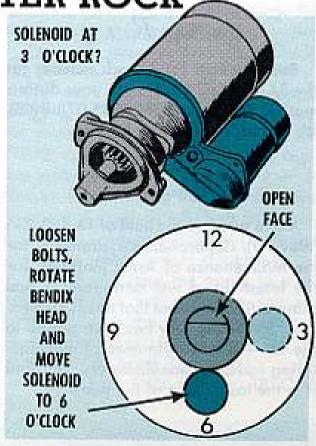
WATCH THE CLOCK ...

6-HP STARTER ROCK

The starter solenoid on your 6-HP Military Standard Engine has to be in the 6 o'clock position on your 4A032-I or-II engine or it'll bump into the preheater shroud.

Some replacement starters, FSN 2920-882-3401, such as those from Prestolite, may have the solenoid mounted at 3 o'clock position . . . or straight up 12 . . . or 9 o'clock.

You can adjust these to work by turning the Bendix head of the starter on the case. Loosen the bolts that hold on the "business end," slip out their shanks, turn the gizmo to match your engine, retighten the bolts . . . and there, you have it.





## Jound: Josp Cold Kit

If you have trouble getting the Door and Side Curtain Kit in TM 9-2320-218-20P for your M151 and M151A1 quarter-tons, try this number: FSN 2590-788-6262. The number in the manual will get you a switch.

## Mark Before Moving

If you're packing equipment for a move — retrograde or otherwise — get the latest edition of SB 38-100 (Jul 70), Army preservation, packing and marking materials, supplies and equipment. Save time, equipment — and your jangled nerves.

## Distress Battery

Been looking for a stock number for the BA-1574/U battery for your distress marker light? Use FSN 6135-073-8939. It's on page 4, Ch 2, to SB 11-6.

## Calibration JB

Make sure you get hold of TB 750-236 (Nov 70), Calibration Requirements for the Maintenance of Army Material, for the latest list of test measurement and diagnostic equipment that needs calibration. Something new has been added to the TB — a cross reference of manufacturing codes to manufacturers. You find it in the last section of the pub.

## M-2 Meter?

If you've got the M-2 time totalizing meter on the front panel of your AN/ARC-134, count it an unofficial bonus — use it. The M-2 was originally for Air Force use, but you can use it when reporting the hours since the last failure on EIR's (DA Form 2407).

### No Monthly DA 2406 To DA

DA has dropped the monthly accumulative materiel readiness reports for items marked by asterisk (\*X) in Appendix C of TM 38-750. Hereafter, accumulative DA 2406 reports for items identified by ECC's FB, GL, HI, ND and PG will be made only on the 20th of March, June, September and December, just as they are for other DA 2406 items in Appendix C. Word on the change went out in DA Msg 142143Z Dec 70.

## Pot That Current Drip

Current shorting thru load receptacles, FSN 5935-374-5087 on your 45-KW Mdl 52300 Stewart-Stevenson generator is curable. Clean and fill the receptacle backs with potting compound, FSN 8030-881-5238, to block out rainwater and condensate . . . and it's smart to keep receptacles capped when you can. TB 750-971-4, page 6, gave the word 'way

## Hying Helmet TM

You'll find the latest maintenance and repair parts info for your APH-5, APH-5A, APH-5B, SPH-4, and AFH-1 in TM 10-8415-202-13 (Oct 70).

## Jeta ISM Switch

When your 15 KW Jeta MD 151815WA generator set needs a starter, ask for FSN 2920-679-5875. The old starter, FSN 2920-830-6568, isn't around any more, and the substitute that you may get under that FSN will fit but wan't let you close your front panel.

### Hang It Up!

Hey, troop. Do your telephone handset a favor by securing it after you use it. Letting it dangle loose in a van, a shelter or a vehicle can get it stomped, bounced, banged and butchered. Which won't help anybady.

### J" For Ford

Type "F" is the, only ail you use in the automatic transmission of your Ford vehicle (1967 and later). If you use Type "A," you're askin' for ail loss, band wear and early transmission failure. Type "F" comes under FSN 9150-843-1636 (or, if you local purchase it, make sure it carries the Ford spec number, M-2C33-F).

## Less Paperwork

Tass the engine turbine wheel record, DA Form 2408-19, out of your Kiowa and Cayuse lag books, mechs. It's no longer needed per DA Msg 29 1945Z Oct. 70.

## 204 Just Filters

Hold one, Birdmecs. OH-58A and OH-6A fuel filters are condition items . . . not replaced at 300 hours as noted an page 27 in PS 216.

## Antifreeze Stays

wo years or more!

That's how long you may keep the antifreeze in your engine cooling system.

This's the new word in TB 750-651 (22 Jan 71).

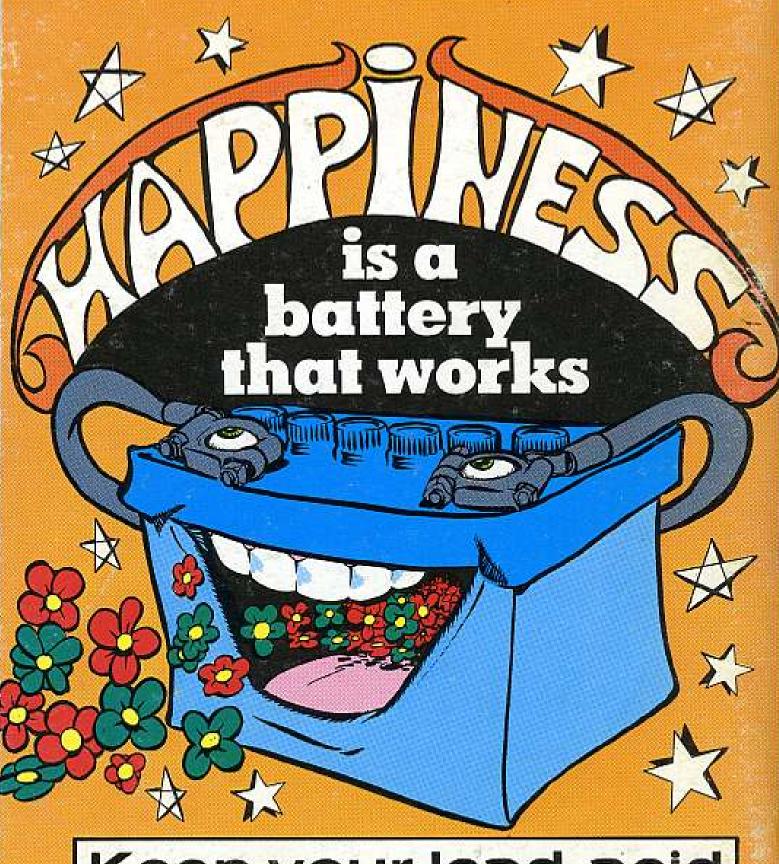
No more dumping your antifreeze every spring like the TB used to say. So the antifreeze you put in last fall (1970) could stay in your engine coaling system until the fall of 1972 — or longer. Just how long will depend on the outcome of your periodic tests for freeze protection, reserve alkalinity (corrosion protection) and coolant cleanliness.

TB 750-651 does not apply to commercial-design administrative-use vehicles. You go by the manufacturer's recommendations. Like it says in TM 38 600 w/Ch 1, 2 and 3 (Aug 68).

Many older TM's mention TB ORI 651. That's now TB 750-651.

Would You Stake Your Life won

the Condition of Your Equipment?



Keep your lead-acid batteries working

**■WATER LEVEL UP ■CLEAN ■CONNECTIONS TIGHT**