

Issue 259

PS

June
1974

THE PREVENTIVE MAINTENANCE MONTHLY

HEY!
TH' CARGO
LIFTING HOOK
HAS GONE
HAYWIRE!

MURPHY'S
LAW STRIKES
AGAIN!

OH, NO!
THEY'RE
LETTIN' OUR
HOWITZER
FALL!

M114A1 155-MM Towed
Howitzer Pg. 2

THE MURPHY PROBLEM
Pg. 29

MURPHY
ANDERSON



YOUR IDEAS

For every job the ideal tool — that's the Army's goal.

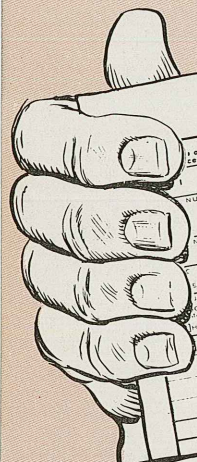
A faulty tool can cost a broken arm or neck, equipment downtime . . . and Uncle a lot of money.

If you've got a common hand tool that's defective, made wrong for the job, or fails to work as advertised, the Army

wants to hear about it. The right tool for this job is an Equipment Improvement Recommendation (DA Form 2407).

JUST FILL OUT YOUR EIR
AND MAIL TO:

**US Army Troop Support Command
ATTN: AMSTS-MAT
4300 Goodfellow Blvd.
St. Louis, MO 63120**



MAINTENANCE REQUEST
This form is to be filled out by the proponent agency or the Deputy Chief of Staff for Logistics.

1. NUMBER: **301098**

2. ORGANIZATION: **99th Artillery**

3. LOCATION: **Port Happy, KY 40507**

4. LINE NUMBER: **1**

5. MODEL: **WH1AAK**

6. FEDERAL STOCK NUMBER: **5120-754-0641**

7. REPORTS CONTROL SYSTEM (ESLD-1947 (RI))

8. ORGANIZATION ISSUE PRIORITY DESIGNATOR CODE

9. UNIT IDEN CODE

10. HOURS: 1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12.

11. BILLED

12. ROUNDS

13. STARTS

14. UTILIZATION CODE*

15. FIRST INDICATION OF TROUBLE (check one)

16. OVERHEATING

17. OTHER

18. IS DETECTED DURING (check one)

19. STORAGE

20. FLIGHT

21. SCHEDULED

22. TEST

23. OPERATION

24. HANDLING

25. RECOMMENDATION/Action (check one)

26. LOCATION

27. DESCRIBE CONDITIONS UNDER WHICH FAILURE OCCURRED ATTACH PHOTOS OR SKETCHES IF AVAILABLE

28. IMPROVE DESIGN

29. REVISE PROCEDURE

30. MODIFY

31. OTHER (specify)

32. AUTOVON No. **745-4936**

33. FEDERAL STOCK NUMBER

34. HOUR NOMENCLATURE

Tool Kit

This unit received 8 tool kits in September of 1972 and after six months of normal use the following tools have broken. The tool kits were all purchased under contract GSCC-09-70.

A. Wrench, open 1/2x9/16 inch, FSN 5120-277-2342 jaw broken (7 each); B. Handle, socket wrench, 9 inch, FSN 5120-730-6085 ratchet broken (6 each); C. Handle, socket wrench 18-inch FSN 5120-236-7590 hinge broken (30 each)

DA FORM 2407
1 JAN 64

NEEDED

Tell 'em like it is with any common tool problem. Don't hold back the info. And keep the bum tool until TROSCOM tells you what to do with it.

For a hurry-up answer, call the tool managers on Autovon 693-2428.

If you have a complaint against a tool set or special tool — or set — send the EIR to the Army commodity command that's responsible for it. You'll find the address in each supply catalog you use to identify the item. TM 38-750 is being changed to show correct addresses.

PS THE PREVENTIVE MAINTENANCE MONTHLY

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PS wants your ideas and contributions, and is glad to answer your questions. Name and address are kept in confidence. Just write to:
M S G Half-Mast PS Magazine Lexington, KY. 40507

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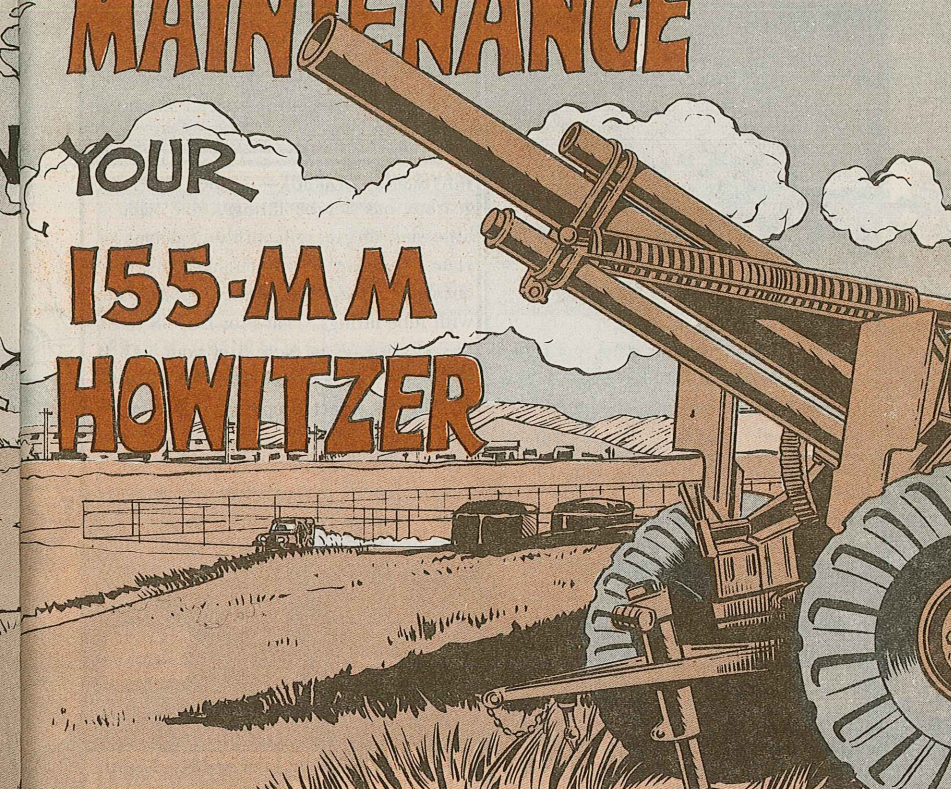
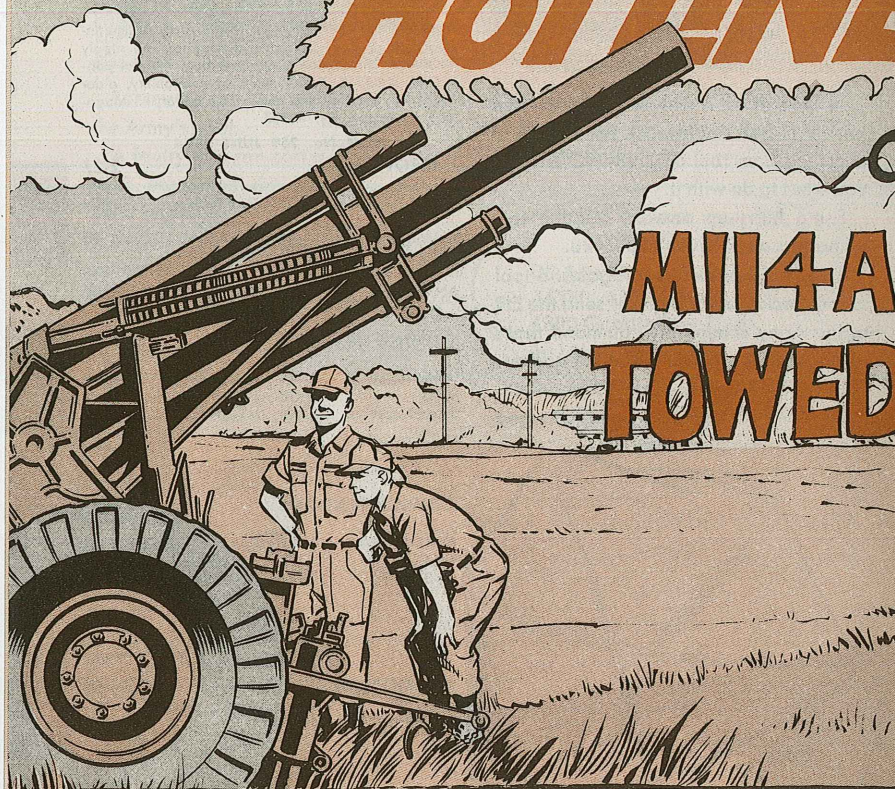
HOTLINE

MAINTENANCE

ON YOUR

M114A1 TOWED

155-M M HOWITZER



Want good shooting with your M114A1 towed howitzer?

Give it **HOTLINE** maintenance.

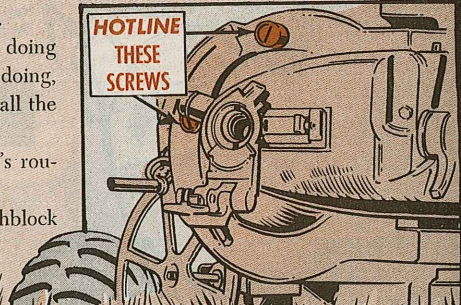
HOTLINE maintenance means doing all the good stuff you're already doing, plus getting A.J. Squared Away on all the things you've been sluffing off.

Like, you check your tires. That's routine maintenance.

But when you check your breechblock

can roller housing for loose screws. That's **HOTLINE** maintenance.

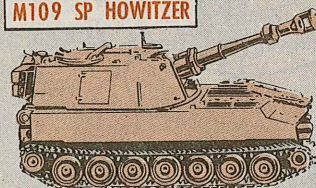
**HOTLINE
THESE
SCREWS**



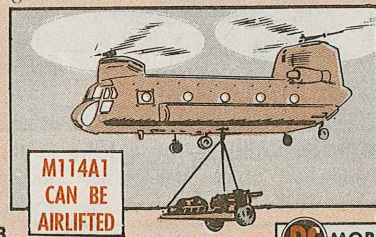
Before you start **HOTLINING** your M114A1, think good thoughts about it. It can do anything for you that an M109 SP howitzer can. It shoots the same rounds and sends them the same distance. In some

ways the M114A1 is even better because it can be airlifted into places you couldn't get with an M109.

M109 SP HOWITZER



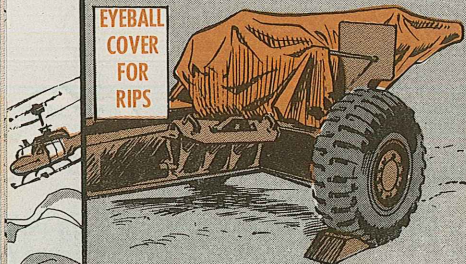
**M114A1
CAN BE
AIRLIFTED**



BEFORE OPERATIONS *HotLINE*

COVER (OVERALL)—Look for rips and holes before you take it off and again after you

EYEBALL COVER FOR RIPS



have it off. If it's too far gone, get a new one. It's FSN 1025-489-8372 (8455000). They're hard to get so keep the one you have in good repair for as long as you can.

TRAVERSING HANDWHEEL—No sticking or binding when moved through its complete arc of 84 turns.

THIS GETS 78 TURNS...

...THIS 84 TURNS

ELEVATING HANDWHEEL—No sticking or binding through its complete arc of 78 turns.

LUBE HERE EVERY WEEK

BOTH HANDWHEELS—The 2 holes in the handwheel handle sleeves need lubing every week.

OIL CAN POINTS—The handwheels and the other items in Note 4 to your LO 9-1025-200-10 (Apr 66) are **HOTLINE** maintenance points that need special attention every week.

TRAVERSING GEARBOX—If the traversing gearbox has 2 lube fittings, give them a little shot of grease monthly or whenever your traversing seems rough. Never take out the plugs and temporarily replace them with lube fittings. That's for DS/GS to do the way it says in Note 5 of your LO. If your gearbox does not have the 2 lube fittings, get direct support to put them in for you if you think it would help your traversing. Otherwise, don't bother.

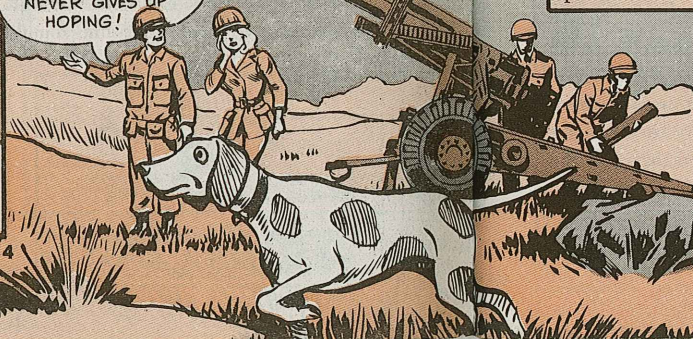
PLUGS

LUBE PINION...

...AND ARC

ARCS & PINIONS—Not bent or dirty. Lightly lubed with PL - not GAA.

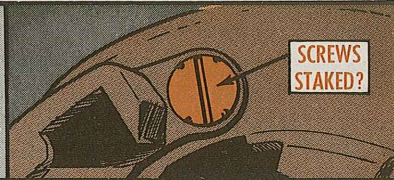
HE ALWAYS COMES ON MANEUVERS, CONNIE!... NEVER GIVES UP HOPE!



BREECH MECHANISM *HotLINE*

BREECHBLOCK ROTATING CAM AND ROTATING ROLLER—Both screws should be tight. If they haven't been staked, get your friendly field artillery mechanic to do it. Eye-ball the working surfaces of the housing for burrs or flat spots.

SCREWS STAKED?



COUNTERBALANCE—Only direct support can adjust the counterbalance, but crewmen can disconnect it. The counterbalance has to be disconnected and the breech has to be open before you can take the breech mechanism apart. This prevents accidental closing of the breech, which could be dangerous.

BREECH OBTURATING PARTS—Like Note 2 in your LO tells you, when you clean your breech obturating parts, you never lube the gas check pad. To clean it use hot, soapy water, then dry it. No lube. Also, when you put the parts together after cleaning, the front split ring and the rear split ring have to be positioned so their split ends are 180° apart. This prevents blow-back and gas erosion.

Clean the obturator spindle with crocus

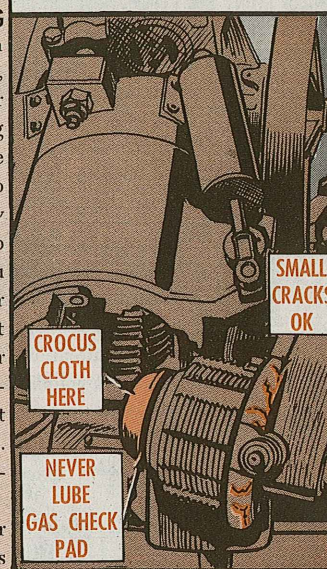
CROCUS CLOTH HERE

NEVER LUBE GAS CHECK PAD

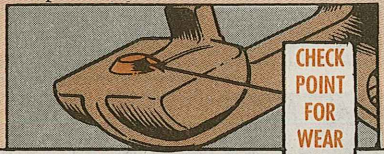
cloth, not heavy abrasives. You can get it shiny with abrasives, but all that glitters is not good. This goes for both the barrel and the obturator. High polish is not required.

BREECHBLOCK DRIVER—Small cracks on the face of the driver are not dangerous if the breechblock closes and seats the way it should. Replace the driver if cracks go clear across its face. (Note: The most usual reason for a breechblock driver getting cracked is because it bangs against the breech ring. The counterbalance should be adjusted so the breechblock driver is stopped before it hits the breech ring.)

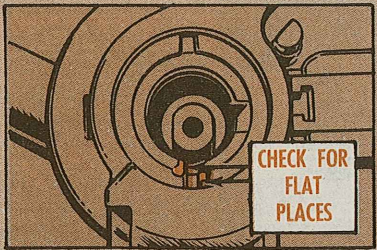
SMALL CRACKS OK



PERCUSSION HAMMER—Check for wear. The striking surface should contact the firing pin when the lanyard is pulled. This is important because a percussion hammer with a blunt nose might not do its job of firing the primer.



FIRING MECHANISM HOUSING—Check for flat places. If the percussion hammer is snapped a great many times without a primer

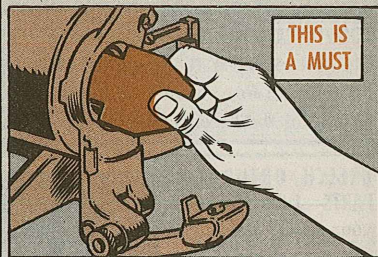


in place, the hammer can flatten the housing and wear out its own point. If you



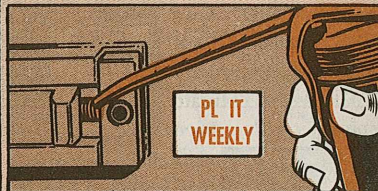
must dry fire, tie a piece of cloth around your hammer to protect it and the housing.

CHECKING HEADSPACE—Unless your headspace is correct, you'll have maintenance problems with your spindle and breech.

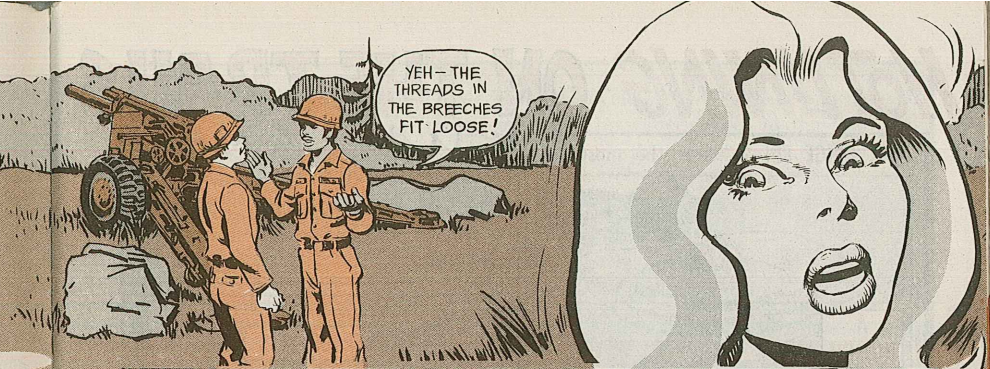


Use headspace gage, FSN 4933-722-5952, and set your headspace to $1/16 \pm 1/32$ inch measured from the shoulder of the gage to rear face of the housing.

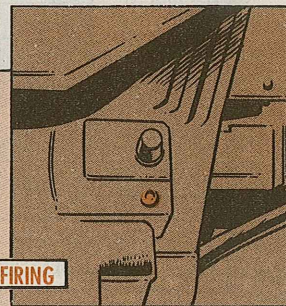
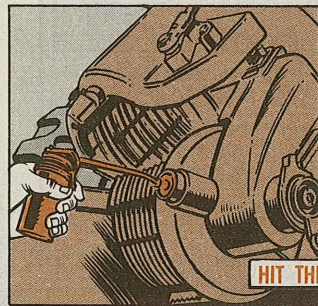
FIRING MECHANISM SAFETY LATCH—The spring in the firing mechanism safety latch is a **HOTLINE** maintenance point because it needs attention that it often doesn't get. Squirt a couple drops of PL on the spring once a week. Also, make sure the firing



mechanism safety latch plunger is in place. It is possible to put the firing mechanism in without having the safety latch plunger in place. If you fire a round that way, the firing lock will likely unscrew and somebody can get hurt.



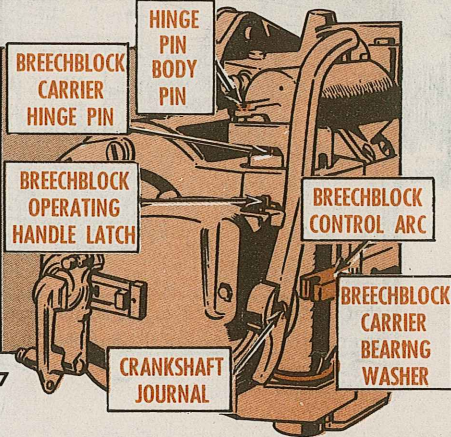
LOOSE FIT—The threads in the breechblock and breech ring are supposed to be a loose fit until the breechblock is almost completely closed. (Note: If the breechblock closes with a snap when you let go of the breechblock operating handle, the counterbalance needs adjusting by your support.)



HIT THESE OILERS WEEKLY... OR AFTER FIRING

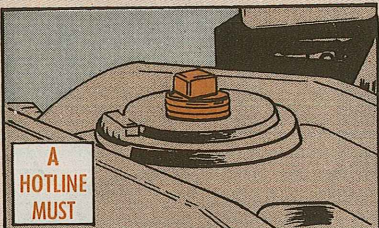
CIRCULAR OILERS—There are 3 circular oilers in your breechblock and breechblock carrier. They are **HOTLINE** maintenance points that need 2-3 drops of PL weekly.

HINGE PIN BODY PIN, BREECHBLOCK CARRIER HINGE PIN, BREECHBLOCK OPERATING HANDLE LATCH, BREECHBLOCK CONTROL ARC, CRANKSHAFT JOURNAL, BREECHBLOCK CARRIER BEARING WASHER—These are all **HOTLINE** maintenance points in the breech neighborhood that need their weekly 2-3 drops of PL.



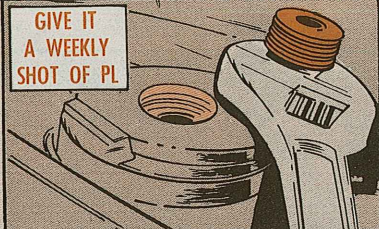
HOTLINING ON THE TRAILS

TRAIL HINGE PIN—This is the most fre-



A
HOTLINE
MUST

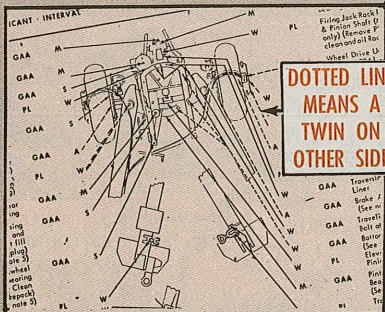
quently passed over part on the M114A1 which makes it the hottest item on our maintenance **HOTLINE**. Use a wrench to



GIVE IT
A WEEKLY
SHOT OF PL

take out the plug before you give the trail hinge pin its weekly shot of PL.

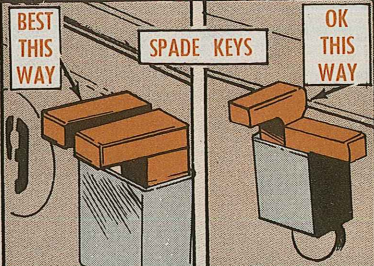
FOLLOW THE DOTTED LINE—When you see a dotted line like this in your LO, it means



DOTTED LINE
MEANS A
TWIN ON
OTHER SIDE

that the item it points to has an identical twin on the other side of the howitzer that

needs identical attention. So do both of them. Like, for instance, there's a hinge pin on the left trail and another one on the right trail.



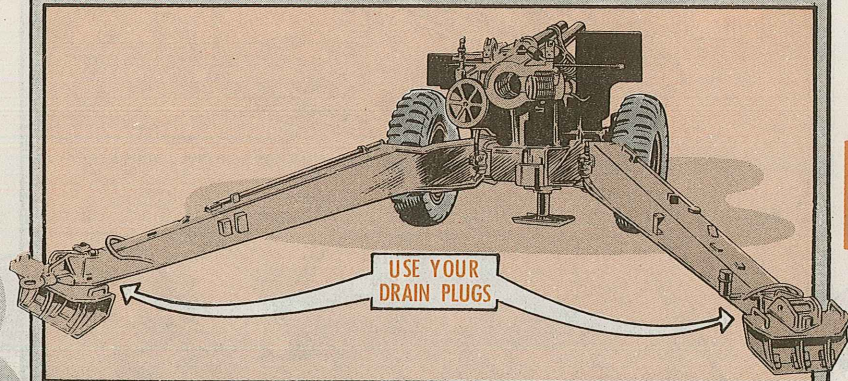
BEST
THIS
WAY

SPADE KEYS

OK
THIS
WAY

SPADE KEYS—They can be carried in the spade key bracket in either of 2 ways: 1. Side-by-side or 2. At right angles to each other. Put 'em in side-by-side. They're more secure that way. This is particularly important when the howitzer is to be airlifted.

DRAIN PLUGS—Your trails should have 2 drain holes closed with 1-in pipe plugs, so you can drain the water out of the trails every week. In winter, water in the trails can freeze and break welds. Winter or summer, water in the trails makes them heavy and



USE YOUR
DRAIN PLUGS

hard to move and messes up airlift weight calculations. If your trails don't have any drain plugs, get your support maintenance to put them in for you.

TIRE PRESSURE—Pressure is 50 pounds. A note saying this should be stenciled on one of the trails so you won't forget.

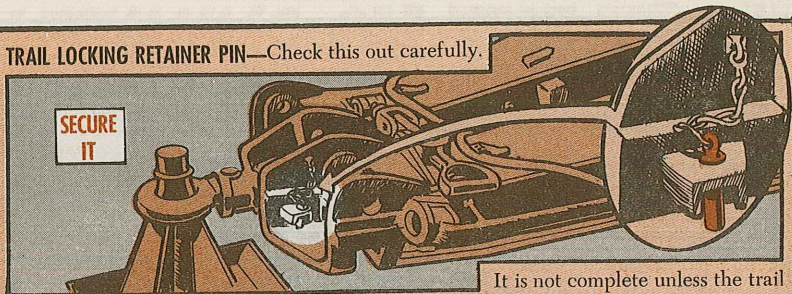
TRAIL LOCK—The trail lock hinge needs a weekly going over with PL. (Some guys forget it.) Adjust the tension with the adjusting nut and jam nut so it takes a slight downward pressure to lock the trail lock handle.

CAREFUL PREPARATION
FOR AIRLIFT IS GOOD
P.M.

ANOTHER
WEEKLY
PL SPOT

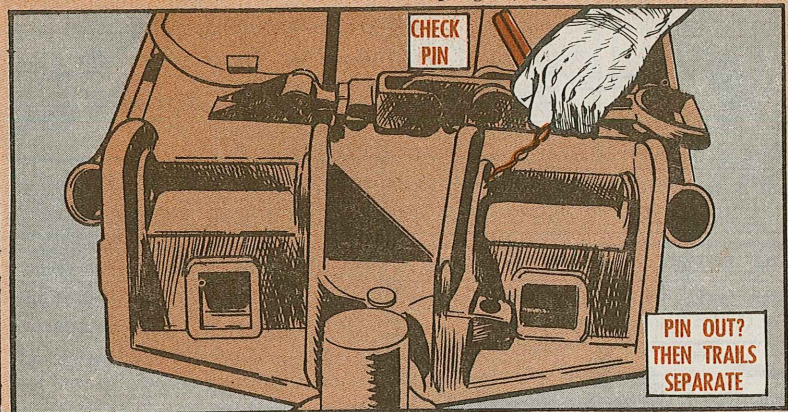
TRAIL LOCKING RETAINER PIN—Check this out carefully.

SECURE IT



It is not complete unless the trail lock retaining pin spring, the "S" hook and chain are all in place, lubed, and the chain is secured at both ends. Note: If the retainer pin gets joggled out of its hole, the trail

CHECK PIN



PIN OUT? THEN TRAILS SEPARATE

lock handle is the only thing keeping the trails together. Trails spreading when the howitzer is being towed or airlifted could be dangerous. Check condition of retainer pin assembly FSN 5315-619-2997, if spring FSN 1025-619-2998, is serviceable. The pin assembly will hold the trails in locked position.

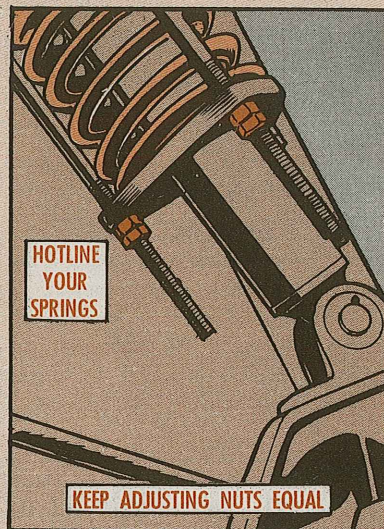
ALWAYS MAKE SURE THE TRAIL LOCK RETAINING PIN SPRING, THE "S" HOOK AND CHAIN ARE ALL IN PLACE... LUBED AND SECURED!

IF THE RETAINER PIN IS JOGGLED OUT OF ITS HOLE, IT CAN MEAN BIG TROUBLE!

EQUILIBRATOR *HotLINE*

EQUILIBRATOR SPRINGS—The equilibrator springs, rods and tubes need a weekly

If you can now elevate and depress the weapon through its entire range with elevating and depressing taking about the same effort with the handwheel, then your

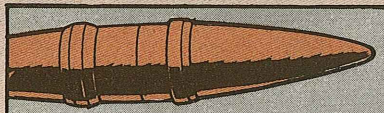


HOTLINE YOUR SPRINGS

KEEP ADJUSTING NUTS EQUAL

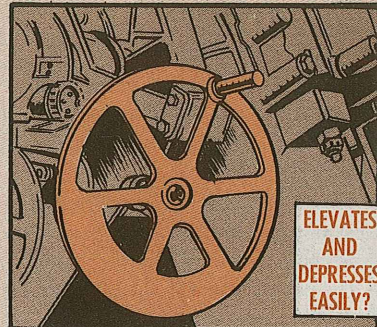
going over with PL, but that's not the most important thing. The important thing is to have all 3 adjusting nuts on a given equilibrator the same distance from the end of the rods. This shouldn't vary a thread from one rod to another.

Before you mess around with this, put a load of about 54 pounds into the powder chamber. (A dummy projectile with the



USE DUMMY PROJECTILE FOR TEST LOAD

head screwed off is about the right weight. Sandbags on the breech is another way to do it.)

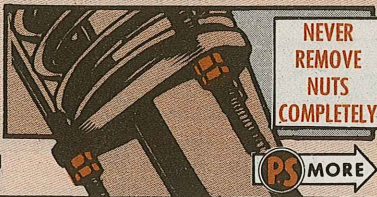


ELEVATES AND DEPRESSES EASILY?

equilibrators are OK, and they don't need any adjusting.

(WARNING: If you have to adjust the equilibrators, never take the adjusting nuts all the way off. Only your support unit can do that safely. The spring is under a lot of tension and is dangerous. You could be injured or killed. So, never take the nuts all the way off.)

You shouldn't tighten—or loosen—one nut too much. If you do, both you and the plate will be in a bind.



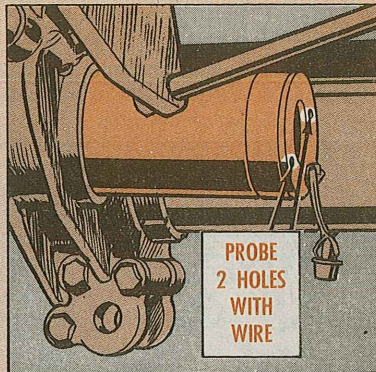
NEVER REMOVE NUTS COMPLETELY

REPLENISHER—Replenisher rules:

1. A reading of within 3 1/2 inches from the rear face of the replenisher means you've got too much fluid in the replenisher. Drain it until you get a reading of 5 1/2.
2. If you get a reading of 7 1/2 inches or more, add fluid.
3. If you're going to do rapid fire, draw out fluid until you get 7 1/2-in reading. The heat of firing will expand the fluid enough to bring the piston to the normal position.

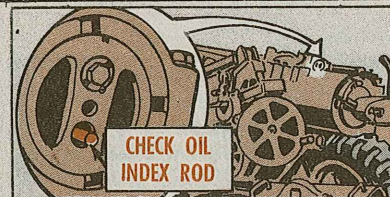
The 2 air holes in the rear of the replenisher piston guide are **HOTLINE** maintenance points. Use a wire to keep 'em open.

The poop in the TM about getting the replenisher piston moving with the tap of a hammer has led to a lot of pistons getting broken. If it won't move, tap it



gently with a **rubber hammer** and if that won't free it, call your direct support.

You'd probably have no trouble with sticking pistons if the replenisher gets exercised monthly the way it says on page 128 of Change 7 to your TM 9-1025-200-12 (Mar 65).



RECUPERATOR—The oil index rod should stick out 1/4 to 3/8 inch. If it's not in this range, add or drain oil to get it there. If it won't move, tap it gently with a rubber hammer. If that won't free it, call your direct support.

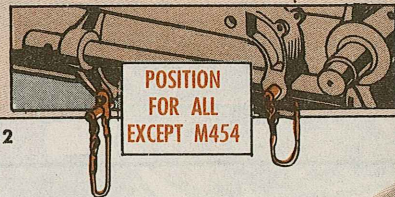
VARIABLE RECOIL CYLINDER—Both the large pin and the small pin must be present and serviceable, but you never have both of them in the active position at the same time.

For firing the M454 projectile, you stick the small pin through the variable recoil shaft and stow the large pin in its bracket.

For firing any round except the M454 you reverse the positions with the small pin in its bracket and the large pin stuck through the variable recoil shaft.



12



FIRING JACK *HOTLINE* POINTS

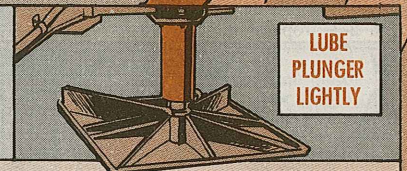
TO KEEP ON HITTING THE **PM BULLSEYE**...

YOU'VE GOTTA KEEP A CONSTANT WATCH ON ALL PARTS.

F'RINSTANCE...



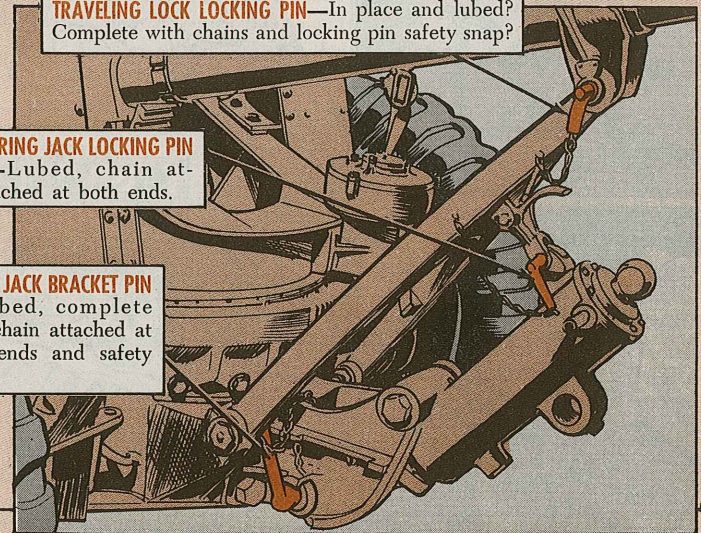
'Most everybody keeps the firing jack plunger lightly lubed the way he should, but the pins and chains get neglected. With the traveling lock in travel position, check from top to bottom:



TRAVELING LOCK LOCKING PIN—In place and lubed? Complete with chains and locking pin safety snap?

FIRING JACK LOCKING PIN—Lubed, chain attached at both ends.

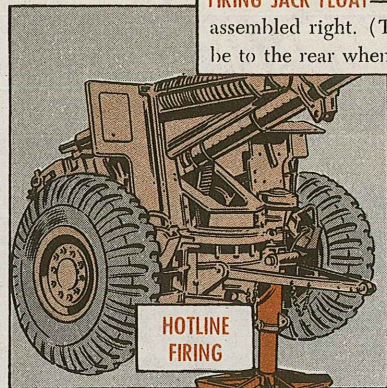
FIRING JACK BRACKET PIN—Lubed, complete with chain attached at both ends and safety snap.



If any of this hardware is missing or needs welding, see your friendly DSU mechanic.

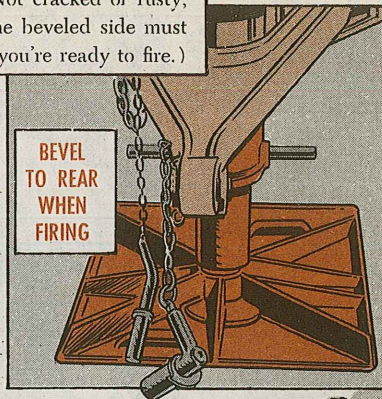
13

FIRING JACK FLOAT—Not cracked or rusty, assembled right. (The beveled side must be to the rear when you're ready to fire.)

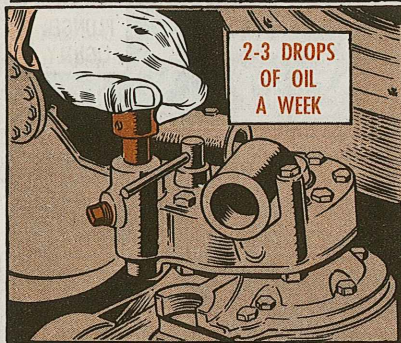


HOTLINE FIRING

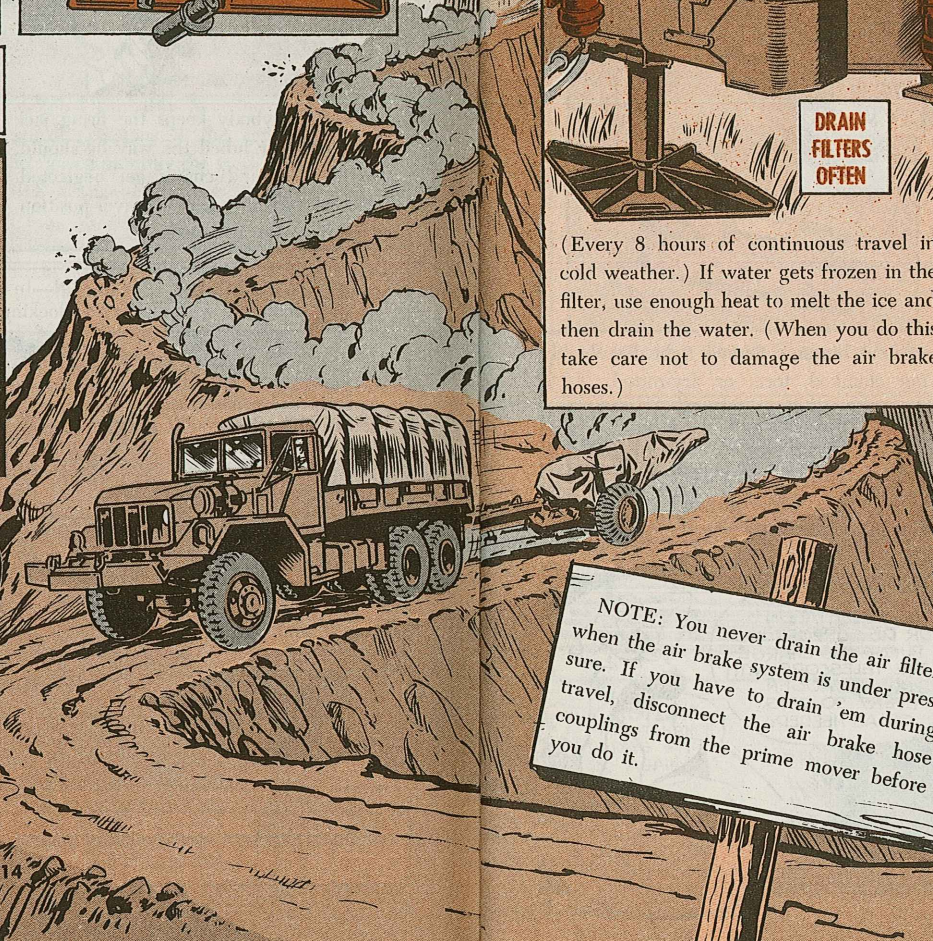
BEVEL TO REAR WHEN FIRING



FIRING JACK RATCHET PLUNGER—Every week screwout the 1/2-in square plug and put in 2-3 drops of oil.



2-3 DROPS OF OIL A WEEK



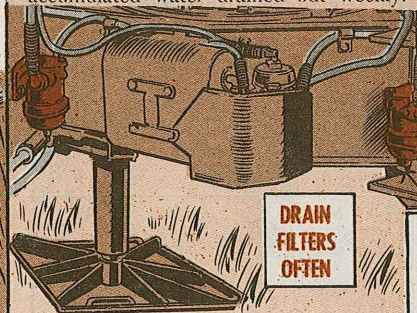
BRAKE *HOTLINE* CHECKS

BRAKE LINES—In working order, seals present and serviceable on both service and emergency lines. No paint on rubber lines or seals.



SEALS OK?

AIR FILTERS—Both air filters need to have accumulated water drained out weekly.



DRAIN FILTERS OFTEN

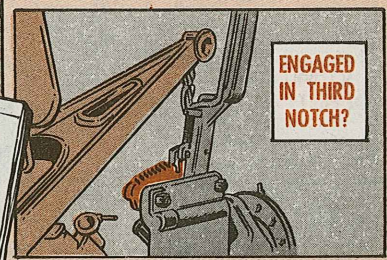
You drain the air filters by taking the drain plug from the bottom of each air filter.

You clean the filters (every 2 weeks) by taking them apart and washing the parts in drycleaning solvent or volatile mineral spirits. Make sure the parts are completely dry before you put the filters back together again.

(Every 8 hours of continuous travel in cold weather.) If water gets frozen in the filter, use enough heat to melt the ice and then drain the water. (When you do this take care not to damage the air brake hoses.)

EMERGENCY BRAKE—Close emergency air line cutout cock on prime mover. Now disconnect the air brake hose coupling from the prime mover. If your emergency brake is OK, the brakes on your M114A1 will go on automatically.

HAND BRAKES—(This applies to both the left and the right hand brake.) If the brake is not completely engaged when the hand brake latch is in the third notch, then that brake needs adjusting by your battery mechanic.



ENGAGED IN THIRD NOTCH?

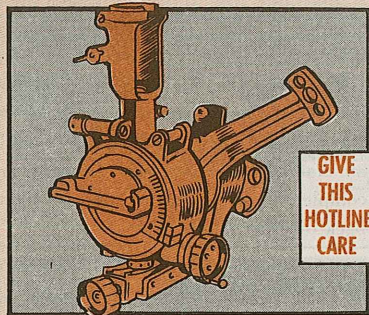
NOTE: You never drain the air filters when the air brake system is under pressure. If you have to drain 'em during travel, disconnect the air brake hose couplings from the prime mover before you do it.

GIVE YOURSELF A BREAK--ALWAYS BE SURE YOUR BRAKE SYSTEM IS IN TOP CONDITION!



FIRE CONTROL INSTRUMENTS

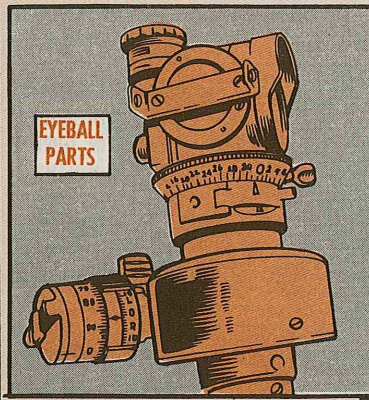
M25 TELESCOPE MOUNT—Covers present and easy to move. Level vials not cracked, broken, loose in mounting or missing covers. Knobs operate smoothly for eleva-



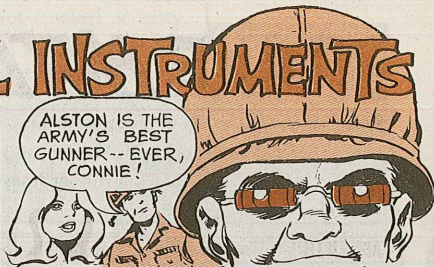
GIVE THIS HOTLINE CARE

tion and cross leveling. Wing knob rotates easily and clamps telescope firmly. Mounting surfaces free of dirt, dents, burrs and paint.

M12A7Q PANORAMIC TELESCOPE—Rotating head and elevation knob screw tight. Target image clear. Index door works in both open and closed positions. Panoramic head, azimuth knobs and levers operate

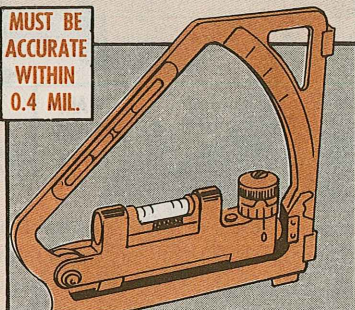


EYEBALL PARTS



M1A1 GUNNER'S QUADRANT—Level vial not cracked or loose. Pads not nicked or burred. Scales readable. End-for-end check accurate within ± 0.4 mil.

MUST BE ACCURATE WITHIN 0.4 MIL.



without binding. Screws tight. Eyeshield not chunked, torn, or dry-rotted.

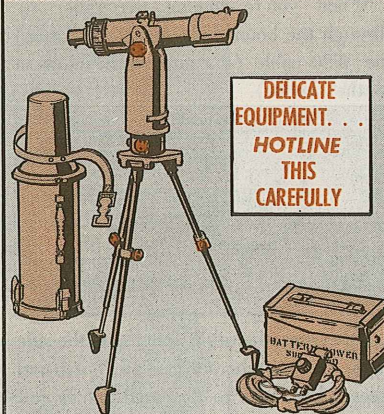
HOTLINE FOR DRY ROT



YOUR BATTALION OR DS SUPPORT WILL PURGE AND CHARGE THE TELESCOPE WITH DRY NITROGEN EVERY 90 DAYS OR AS NEEDED.



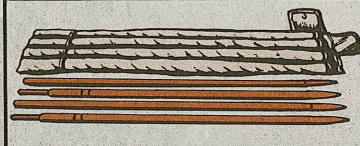
COLLIMATOR M1—All 3 knobs, reticle level clamping, elevation clamping and azimuth clamping in good working order. All 3



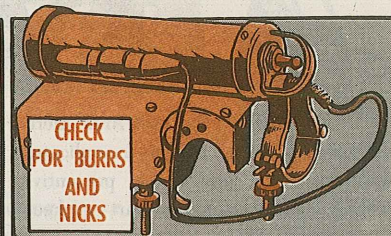
DELICATE EQUIPMENT... HOTLINE THIS CAREFULLY

tripod leg clamps working easily and holding at any given position. Remote control light source cord and rheostat in good order. Battery power supply in working order. Box not dented or rusted. Instrument cover not dented. Straps and latches OK.

AIMING POST M1A2—All parts present and in working order. Stake points not broken off. Fire control instrument cover M401 not ripped or mildewed.



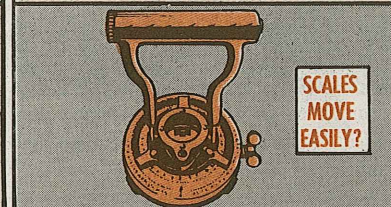
HOTLINE MAINTENANCE PAYS OFF AGAIN!



CHECK FOR BURRS AND NICKS

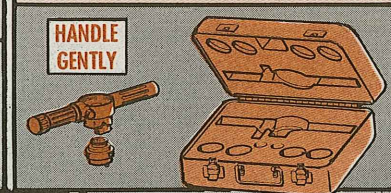
INSTRUMENT LIGHT M34—Clamp hinges and nuts turn freely. No nicks or burrs on mating surfaces of lamp brackets. Illuminating tubes not broken. Toggle switch works and lamps will light when batteries are put in.

M26 & M28 FUZE SETTERS—Scales slip freely. Scales and indexes easy to read. Dial lights up when button is pushed. Thumbscrew locks at any given setting.



SCALES MOVE EASILY?

M63 FUZE SETTER—Complete with handle, socket and case. Socket fits easily into handle and rotates freely.



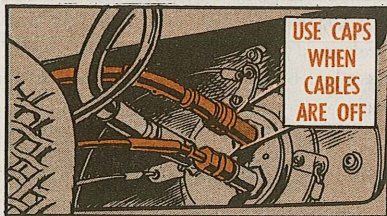
HANDLE GENTLY



FAAR

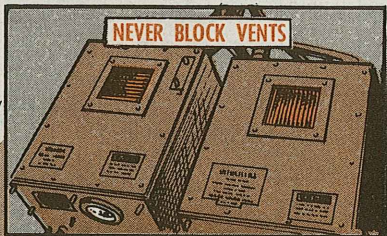
The AN/MPQ-49 Forward Area Alerting Radar (FAAR) is some complicated machine, but a few simple preventive maintenance tricks on your part can keep it tracking targets.

For instance, a simple task like putting the dust caps on the 3 rotary joint jacks (J-1, J-2 and J-3) at the top of the mast can protect them and prevent crud and corrosion from getting to the connectors and disabling the antenna assembly.



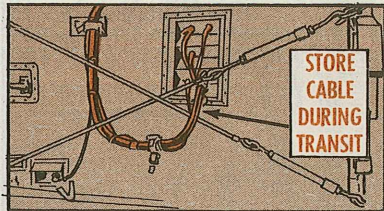
So remember: when you disconnect the cables, or install or remove the horn assembly, put on the caps.

Another memory exercise that'll prevent damage in the shelter: Keep TM's, clothing, tools and such off the blower vents of the PP-6238 power inverter and J-2863 distribution box.



The vents are on top of the inverter and D-box, and if you block them you can cause heat damage to those components.

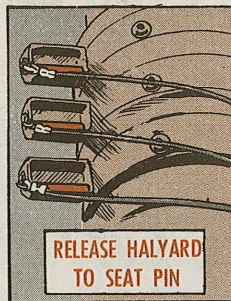
When you're tooling the radar rig through the boondocks, remove and store the W20 cable (it connects the antenna to the shelter).



Otherwise, the cable dangles on the side of the shelter, where it grabs at brush and trees. That leads to damaged cables and connectors.

And while you're traveling, remember how high that radar is riding on the rear of your M561 Gama Goat.

OUT PM



Be sure the latching pins on the antenna mast are fully engaged after you erect the mast.

Surest way to do that is to release your hold slightly on the latch halyards when the mast is fully erected. The halyard slack allows the pins to slip into place.

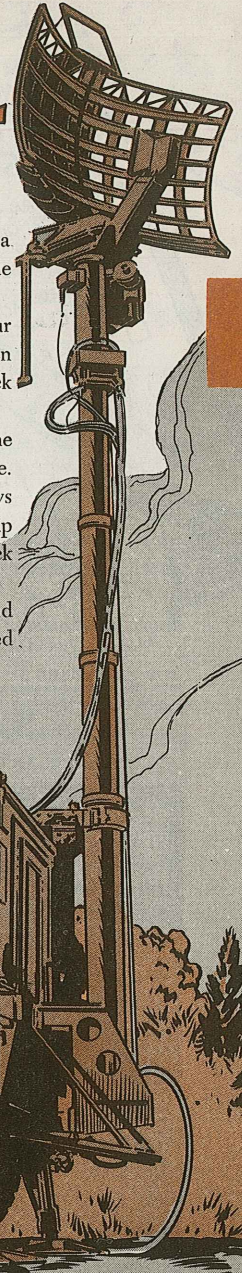
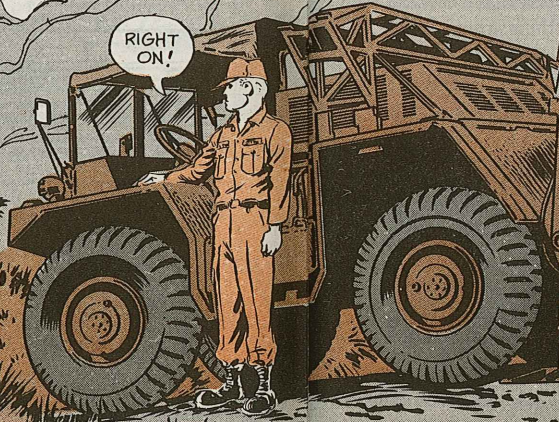
Naturally, if the pins aren't seated, the mast can slip down, with resulting damage.

As you lower the mast, there's always a chance that the winch cable can slip . . . and there just may be enough slack to whack somebody.

So, keep the area under the mast and antenna assemblies clear. That combined weight can give one whale of a whack.

AVOID STEEP SIDE ANGLES... AND SAVE A RADAR FROM TOPPLING!

RIGHT ON!

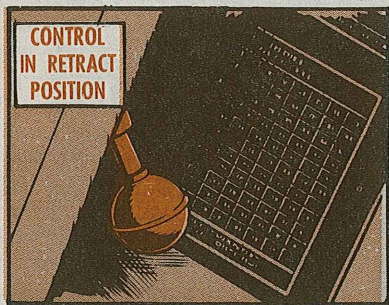


VULCAN SUSPENSION LOCKOUT



Make a checklist, Charlie, if you're jockeying an M163 SP Vulcan.

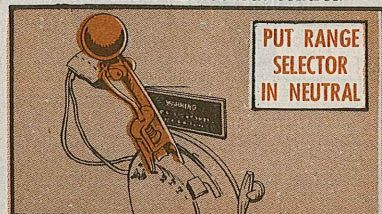
High on the list of things not to forget, put: "Retract suspension lockout control before moving vehicle."



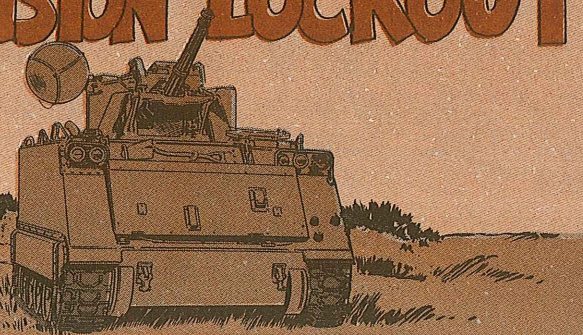
There are other things to remember about the suspension lockout system:

For one, bring the vehicle to a complete stop before you put the lockout control in EXTEND position. And, put the range

selector lever in "N" before you either extend or retract the lockout control.



Hanging down from the warning lights panel is a SUSP. LOCKED OUT light, which goes on whenever you extend the control. Never move the vehicle when that light's on.



After you release the lockout control (by putting it in RETRACT position), wait about half a minute before you move the vehicle.

The lockout control must be in RETRACT position for firing or simulated firing. Remember those points, and you'll save repairs. Forget any one of them, and you can damage the suspension system.

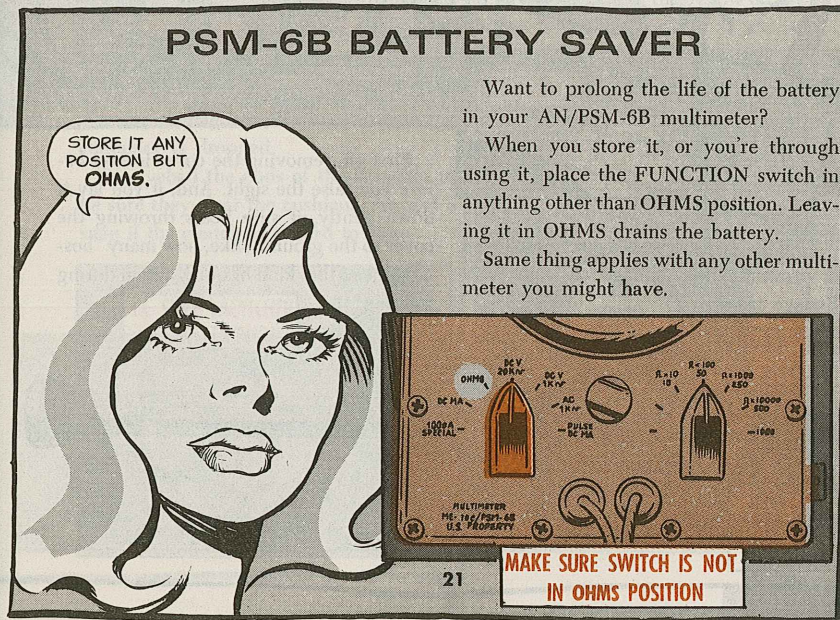
Para 2-9 of TM 9-2350-300-10 (Mar 71) is a refresher on the suspension lockout system.

PSM-6B BATTERY SAVER

Want to prolong the life of the battery in your AN/PSM-6B multimeter?

When you store it, or you're through using it, place the FUNCTION switch in anything other than OHMS position. Leaving it in OHMS drains the battery.

Same thing applies with any other multimeter you might have.



MAKE SURE SWITCH IS NOT IN OHMS POSITION

HOW TO PREVENT

DAMAGE

WITHOUT REALLY TRYING



JUST A LITTLE THOUGHTFUL PM CAN SAVE UNCLE SUGAR MANY \$\$\$-- AND MAKE SURE YOUR REDEYE IS "GO" WHEN YOU NEED IT!

F'RINSTANCE.

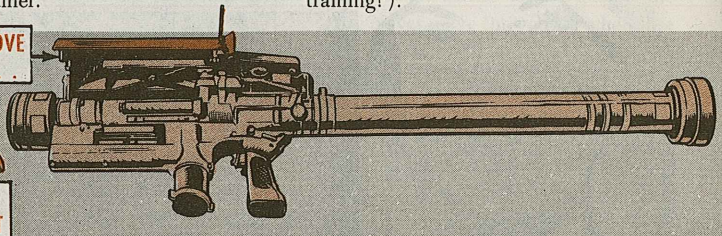
1. Remove the front cover.
2. Raise the open sight.
3. Lay the cover down gently.

That 3-step exercise is a guaranteed way to prevent cover damage on your M49 Redeye trainer.

First off, removing the cover is easy *before* you raise the sight. And, if you lay it down gently, it sure beats throwing the cover to the ground (like, how many "hostiles" need that kind of quick action during training?).

FIRST, REMOVE COVER. . .

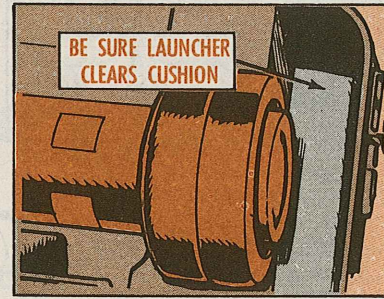
. . . THEN RAISE SIGHT ASSEMBLY



A quick look while storing the trainer or weapon in its container can prevent damage to the container cushions . . . and possible damage to the hardware if the container is dropped.

So, eyeball the ends of the launcher to be sure they clear the cushions. Suspect a snag if the container is hard to close.

BE SURE LAUNCHER CLEARS CUSHION

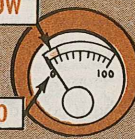


PRESSURE GAGE

If you're getting muscles while trying for a high reading on the low pressure gage of your M49, remember this: the needle goes *down* as you pump. When the needle's on "O" you're in good shape. Actually, anywhere in the yellow on the gage meter is OK.

YELLOW

ZERO



PUMP IT DOWN TO ZERO

As you use the trainer, the pressure advances toward the "100" end of the gage meter. Then, you've got to pump it back toward "O".

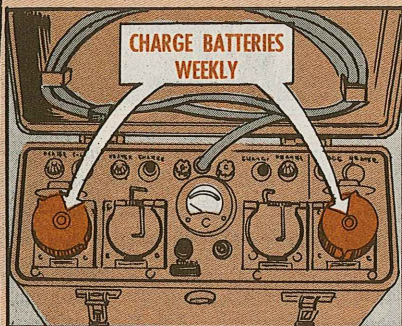


AFTER ALL THAT "REDEYE" I HAD LAST NIGHT-- D'YA THINK RECHARGING MIGHT HELP MY RED EYES, CONNIE?



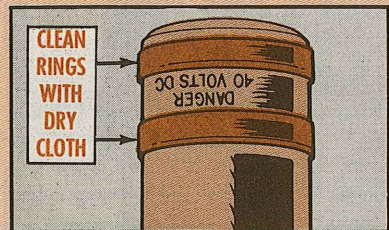
BATTERIES

For best performance, your BA-523 batteries should be checked and charged at least weekly.

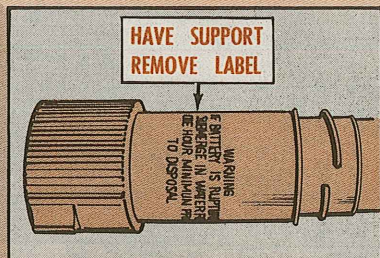


Recommended charging time is 5 hours (after which, you remove the battery from the charger). If your battery's tired or aged, you may have to go up to 8 hours.

To insure a good charge and prevent other damage, clean both contact rings of the battery with a dry cloth before you slip it into the charger. Clean one ring at a time . . . so you don't get shocked from touching the 2 rings at once.

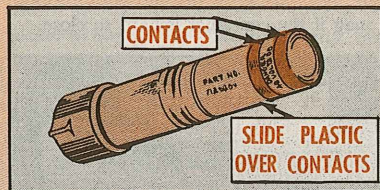


If the warning label on battery rupture is still attached to your battery, have your support remove the label. The battery should *never* be submerged in water as the label suggests, because it can burst.



Instead, unserviceable or ruptured batteries should be disposed of like so:

Replace the plastic shield over the contacts. Put the battery in a plastic bag, and put the bag in a lidded container . . . for transport to your supply support.



YOUR BATTERY IS NOW A RECOVERABLE ITEM. IT HAS TO BE RETURNED TO DEPOT FOR RECONDITIONING.

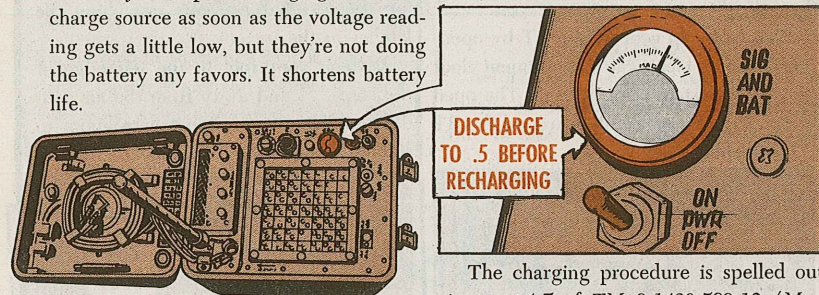


Never thought you could lengthen the life of a battery by discharging it, did you? Amazing!

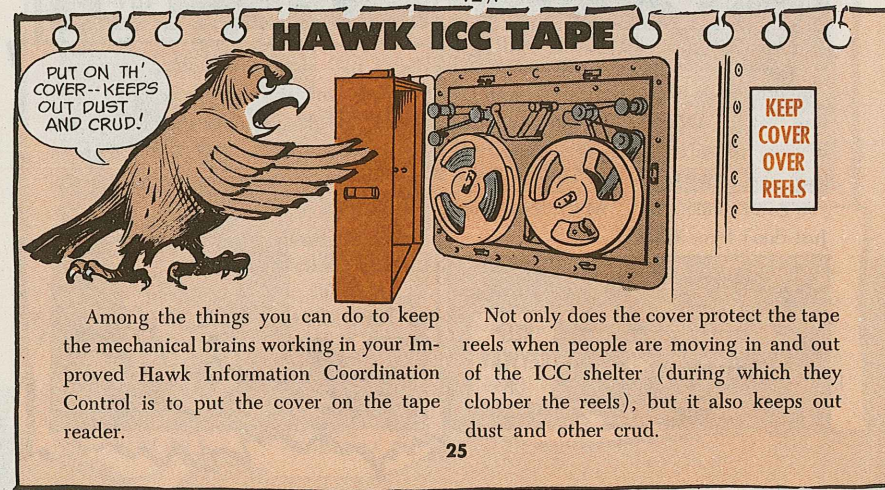
The theory works in the charging scheme of the nickel-cadmium battery used with the AN/GSQ-137 target alert data display set (TADDS).

Some Joes slap the charging cable to a charge source as soon as the voltage reading gets a little low, but they're not doing the battery any favors. It shortens battery life.

Actually, when the battery gets low (SIG and BAT meter reading of .59) you should completely discharge it before you charge it. About the easiest way to discharge it is to turn the PWR switch of the TADDS to ON and leave it that way until you get a reading of .5 on the SIG and BAT meter.



The charging procedure is spelled out in para 4-7 of TM 9-1430-589-12 (May 72).



Among the things you can do to keep the mechanical brains working in your Improved Hawk Information Coordination Control is to put the cover on the tape reader.

Not only does the cover protect the tape reels when people are moving in and out of the ICC shelter (during which they clobber the reels), but it also keeps out dust and other crud.

CHAPARRAL CHATTER

I SAY, OLD CHAPARRAL, A BREATH OF FRESH AIR CERTAINLY HELPS KEEP ONE GOING!

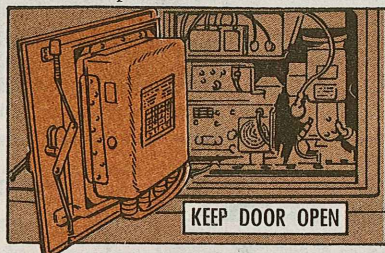
RIGHT-- THAT'S NOT 'IDLE CHATTER OL' BEAN!



A cool swallow of air can keep the RT-524 receiver-transmitter in your Chaparral missile system going a lot longer.

The location of the RT-524 (next to the engine area) makes for overheating problems in the commo system.

You can help cool off the RT by opening the rear electrical compartment door when the system's not moving. The open door allows air to circulate around the RT . . . and helps cool it.



KEEP DOOR OPEN

Another way to protect the RT is to insure that the ANT CONT connector cable is never forced on. Easiest method is to keep the cable keyway at the top when you go to connect it . . . which lines it up. Just don't force it.



KEEP KEYWAY UP

LATCH WORK

Air conditioner latches can last a lot longer if you remember to do 2 things:

1. Be sure the latches are in open position when you swing the air conditioner into place (that prevents crunching the latches in the turret).
2. Keep your foot to the left edge of the step . . . and away from the air conditioner latch . . . when you're about to step over the canopy threshold.



LATCH

KEEP FOOT TO LEFT

CONTROL PANEL

When you're putting the other boot down from that step into the canopy, aim it at the footrest . . . and well back from that line of switches on the left control panel.



PLANT FOOT HERE ON FOOT REST

When you get seated, and it's time to talk, stay loose on that commo switch.

No muscle is required to put it in the position you want . . . and forcing the switch beyond its stops only makes for a repair job.



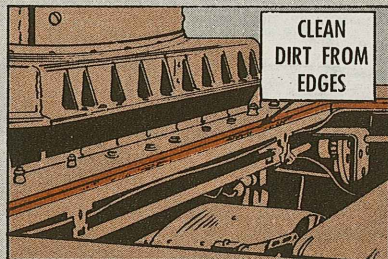
NEVER FORCE COMMO SWITCH

RELEASE SWITCH FOR RADIO USE

And about that knee switch next to the right panel: When you depress it, you cut out everything but the intercom. If you want to use the radio, take your knee away . . . instead of calling a repairman.

MPU & CREW DOORS

Never allow dirt, sand or gravel to build up around the edges of the MPU and crew equipment access doors.



CLEAN DIRT FROM EDGES

Clean the edges of crud before you close the doors . . . and resist the urge to force the latches closed.

Forcing jams the doors, breaks latch brackets or bends catch pins. Jammed



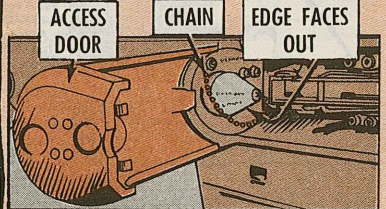
NEVER FORCE ACCESS DOOR LATCHES

latches also can give the gunner a structure inner-lock warning light . . . which means he can't fire the weapon except under emergency procedure.

RAIL ACCESS DOOR

Before you close the access door to the missile launch rail, be sure the chain on the rail dust cover is clear. Otherwise, you can shear the chain.

A good way to keep the chain clear is to place the tapered edge of the dust cover pointed toward the outside edge of the rail. That holds it up out of the way of the door.



ACCESS DOOR

CHAIN

TAPERED EDGE FACES OUT

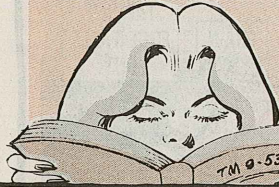
TENSION

Chain tension on the erect/retract system of the launch station must be set like it says in TM 9-1440-585-12. If the tension's not right (set by guesswork or "feel"), the turret can tilt, collapse or fail to rise.

REMEMBER-- KEEP A CONSTANT EYE OUT FOR DIRT AND CRUD BUILD-UP! IT CAN BECOME A REAL PROBLEM!

PUBS

This is a selected list of recent pubs of interest to organizational maintenance personnel. This list is compiled from recent AG Distribution Centers Bulletins. For complete details see DA Pam 310-4 (Aug 73), TM's TB's, etc.; DA Pam 310-6 (Jul 73) and Ch 2 (Jan 74), SC's and SM's; and DA Pam (C) 310-9 (Mar 73), COMSEC Pubs.



TECHNICAL MANUALS

TM 5-236-75 The American Ephemeris and Nautical Almanac 1975
 TM 5-1940-201-14 Mar Boat, Bridge Inboard Aluminum 27 Ft. (Highway HPI-27C)
 TM 5-4320-260-14 Jan Pump, Centrifugal Petroleum 245 GPM (John Reiner GP58)
 TM 9-1425-470-12 Jan TOW Weapon System
 TM 9-2320-206-20 C4 Mar Truck 10-Ton, M123 M123C M123A1C M123E2 M125
 TM 11-2337 C6 Feb AP-4(1) Still Picture Projectors
 TM 11-2531 C6 Feb AN/TIQ-3 Public Address Set
 TM 11-2586 C9 Feb AN/TIQ-2(1) Public Address Sets
 TM 11-4940-207-20P Mar Shelter Mounted AN/GSM-44 Electronics Shop
 TM 11-5410-200-20P Mar 5-56(1)/G Shelters
 TM 11-5805-358-15 C3 Feb AN/TCC-60, -69 telephone terminal set
 TM 11-5805-391-15 C2 Feb AN/TTC-23 manual Telephone Central Office
 TM 11-5815-306-12 C4 Feb AN/FGC-80 Teletypewriter Set
 TM 11-5820-203-15 C2 Feb AN/MRC-54(V) Radio Repeater Set
 TM 11-5820-251-14P Mar AB-155(1)/U Masts
 TM 11-5820-334-10 C3 Feb R-392/URR Radio Receiver
 TM 11-5820-433-14P Mar AN/FRA-15 Radio Repeater conversion group
 TM 11-5820-535-15 C2 Feb AN/TRC-110(V) radio repeater set
 TM 11-5820-536-15 C2 Feb AN/TRC-109(V) radio repeater set
 TM 11-5820-546-15 C2 Feb AN/TRC-111 Radio Repeater Set
 TM 11-5820-759-12 C3 Feb Operator's and Organizational Maintenance Manual Including Repair Parts and Special Tools Lists AN/GRC-165 Radio Set and C-7648/ Control Radio Set
 TM 11-5825-202-12 C1 Feb AN/GRN-6 Radio Beacon Set
 TM 11-5826-226-20 C1 Feb AN/ARN-82(1) Radio Receiving Set
 TM 11-5830-239-15 C1 Jan AN/PIQ-5A Public Address Set
 TM 11-5840-229-20P Mar AN/TPS-33(1) Radar Set

TM 11-5855-217-12-1 C5 Feb AN/VSS-3A Infrared Searchlight Set
 TM 11-5895-367-15 C3 Feb AN/TRC-108(V) Radio Terminal Set
 TM 11-6110-243-15P C1 Feb J-2317(1)/U Distribution Box
 TM 11-6125-210-12 C1 Feb PU-126(1)/U Motor Generator
 TM 11-6625-261-12 C3 Feb TS-382(1)/U Audio Oscillator
 TM 11-6625-433-15 C1 Feb AN/URM-98(1) Wallmeters
 TM 55-1510-201-20P-1 Feb U-8D, U-8F, U-8G, RU-8D
 TM 55-1510-201-20P-2 Feb U-8D, U-8F, U-8G, RU-8D
 TM 55-1520-210-20 C12 Nav UH-1D/H
 TM 55-1520-221-20P Dec AH-1G TH-1G
 TM 55-2840-230-20P Feb Engine, Aircraft, Free Turbine T-73-P-1 T-73-P-700
 TM 55-2840-233-20P Feb Engine, Aircraft, Turboprop T-53-L7 T-53-L7A T-53-L15 T-53-L701 T-53-L701A

MISCELLANEOUS

LO 5-4310-280-12-1 Jan Compressor, Rotary, Air: 600 CFM, 100PSI (Worthington 2016)
 LO 9-2320-260-12 Dec Truck, 5-Ton, M812A1; M813; M814; M813A1; M815; M816; M817; M818; M819; M820; M820A1; M820A2; M821
 TB 9-4935-152-14-3 Oct Troubleshooting Procedures for Test Station AN/TSM-93 (Land Combat Support System)
 TB 43-0001-9-1 Dec Electronics Maintenance Digest
 TB 43-0001-9-2 Mar Electronics Maintenance Digest
 TB 43-0001-17-2 Dec Maintenance Digest (CHAPARRAL)
 TB 43-0001-18-2 Dec Maintenance Digest (HAWK)
 TB 43-0001-28-2 Dec Maintenance Digest (Forward Area Alerting Radar System)
 TB 43-0001-39-1 Jan Equipment Improvement Report and Maintenance Digest Tank and Automotive Equipment

NEW MOVIES

TG 5-4-23 250 CFM Rotary Air Compressor
 TF 10-4664 Field Kitchen Tent M1948
 TF 55-4607 T-63 Gas Turbine Aircraft Engine Storage
 TF 55-4684 Larc Amphibians



EIR Digest TB List

In the MICOM list of EIR Digest TB's in PS 256, make these changes on page 34—
 43-0001-21 AN/GSA-77
 43-0001-22 LAND COMBAT SUPPORT SYSTEM
 43-0001-23 PERSHING
 43-0001-24 SHILLELAGH
 43-0001-25 SERGEANT
 43-0001-26 TOW

43-0001-32 Calibration Std and Access
 Also add these TB's to the MICOM list—
 43-0001-27 LANCE
 43-0001-28 FAAR
 43-0001-29 BA Targets
 You order these on DA Form 12-32 except TB 43-0001-32, which you order on DA Form 12-34.

AND 50... TIME... MARCHES ON...



HEY, MURPH, WHICH HOSE THE YELLOW OR THE RED? BOTH FIT--

HMMM... IS THIS A POSITIVE OR A NEGATIVE CONNECTION, MURPH? WIRES ARE TOO DIRTY TO TELL THEIR COLOR..

OH-- TRY IT THIS WAY!

HEY, THIS BEARING FITS EITHER WAY-- WHICH IS RIGHT?

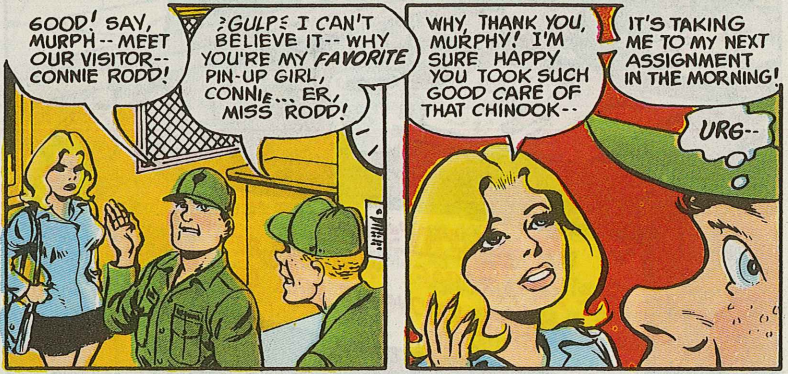
AH-- MOX NIX!

SUIT YER-SELF!



WELL, MURPH-- IS THAT BIG BIRD READY FOR A LIFT-OFF TOMORRA AM?

NATCH, SARGE! EVERYTHING'S BACK IN PLACE-- NEVER A LEFT OVER NUT OR BOLT ON A MURPHY JOB TO CAUSE FOD!



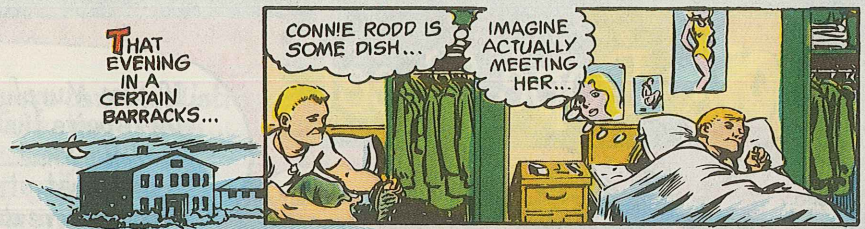
GOOD! SAY, MURPH-- MEET OUR VISITOR-- CONNIE RODD!

GULP! I CAN'T BELIEVE IT-- WHY YOU'RE MY FAVORITE PIN-UP GIRL, CONNIE... ER, MISS RODD!

WHY, THANK YOU, MURPHY! I'M SURE HAPPY YOU TOOK SUCH GOOD CARE OF THAT CHINOOK--

IT'S TAKING ME TO MY NEXT ASSIGNMENT IN THE MORNING!

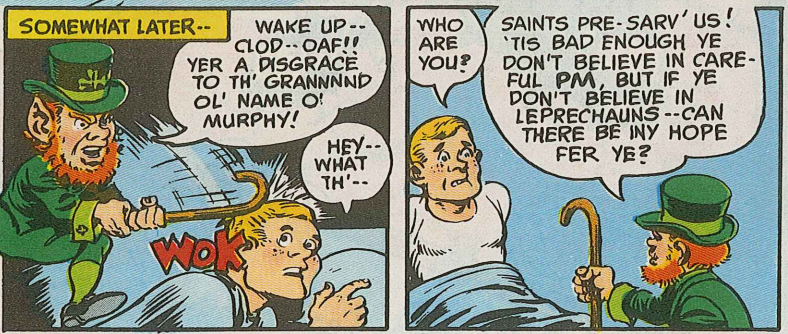
URG--



THAT EVENING IN A CERTAIN BARRACKS...

CONNIE RODD IS SOME DISH...

IMAGINE ACTUALLY MEETING HER...



SOMEWHAT LATER--

WAKE UP-- CLOD-- OAF!! YER A DISGRACE TO TH' GRANNND O' NAME O' MURPHY!

HEY-- WHAT TH'--

WHO ARE YOU?

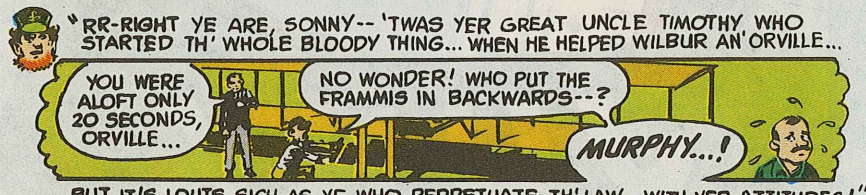
SAINTS PRE-SARV' US! 'TIS BAD ENOUGH YE DON'T BELIEVE IN CAREFUL PM, BUT IF YE DON'T BELIEVE IN LEPRECHAUNS-- CAN THERE BE INY HOPE FER YE?



O' M' ALOYSIUS P. MURPHY-- AN' ME PERTIKLAR ASSIGNMENT IS TO PUT AN END TO THAT BASE LIBEL O' THE NAME MURPHY-- MURPHY'S LAW!

AN' TH' BEST WAY TO SEEK OUT CULPRITS SICH AS YE AND RAP SOME SENSE INTO YER NUMB-SKULLS!

HEY, NOW JUST A MINUTE, HALF-PINT-- I AIN'T RESPONSIBLE FER MURPHY'S LAW--



'RR-RIGHT YE ARE, SONNY-- 'T WAS YER GREAT UNCLE TIMOTHY WHO STARTED TH' WHOLE BLOODY THING... WHEN HE HELPED WILBUR AN' ORVILLE...

YOU WERE ALOFT ONLY 20 SECONDS, ORVILLE...

NO WONDER! WHO PUT THE FRAMMIS IN BACKWARDS--?

MURPHY...!



BUT IT'S LOUTS SICH AS YE WHO PERPETUATE TH' LAW-- WITH YER ATTITUDES! "

WATCH YER FLAPPIN' TONGUE, OLD MAN!

MY, BUT YER A FOINE ONE TO BE GETTIN' YER IRISH UP...

HOLD ONE, AN LOOKIT THIS PINUP I BROUGHT FER YER COLLECTION...

Joe's Dope Sheet

ATTA
GIRL,
CONNIE.

OUR
HEROINE!

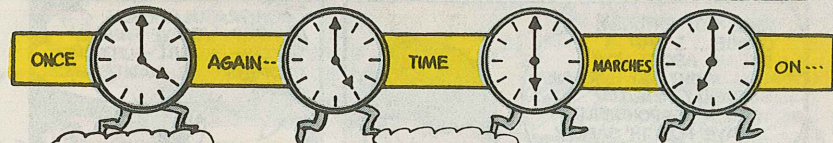
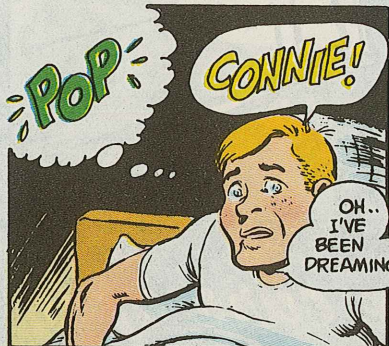
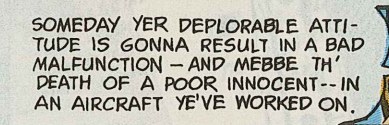
If, like Murphy, you're causing distress
By repairs that are really a mess ...
If it's true... well, my friend,
All that stuff's gotta end--
Man, you're dealing in facts--
not a guess!

Murphy's Law
If an aircraft part can
be installed wrong,
somebody will do it
that way.

JUNK

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

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





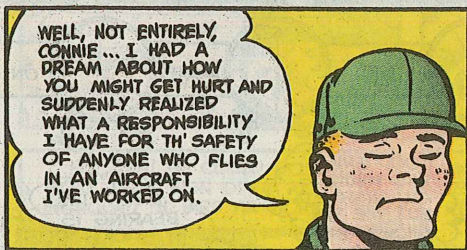
MORNIN', SERGEANT!

MORNIN', MURPHY! I SAW YOU LEAVIN' THE CHINOOK-- ANYTHING WRONG?

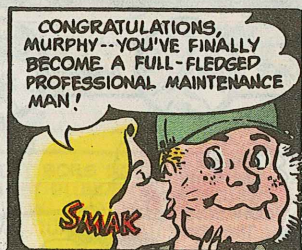


NOT ANY MORE, CONNIE-- I'VE JUST DOUBLE-CHECKED EVERYTHING!

WHY-- HOW THOUGHTFUL OF YOU! DID YOU DO IT JUST FOR ME?



WELL, NOT ENTIRELY, CONNIE... I HAD A DREAM ABOUT HOW YOU MIGHT GET HURT AND SUDDENLY REALIZED WHAT A RESPONSIBILITY I HAVE FOR TH' SAFETY OF ANYONE WHO FLIES IN AN AIRCRAFT I'VE WORKED ON.



CONGRATULATIONS, MURPHY-- YOU'VE FINALLY BECOME A FULL-FLEDGED PROFESSIONAL MAINTENANCE MAN!

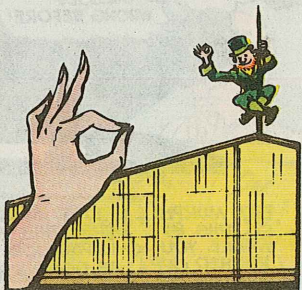
SMACK



NOW, I GOTTA RUN... 'BYE!

BOY! NOT ONLY DO YOU RATE A KISS... SHE'S GIVIN' YOU THE A-O-K SIGN, MURPHY!

AWW...



WHA-- HEY, PHIL-- DID YOU SEE HIM-- A LITTLE MAN HANGING ON THAT ANTENNA MAST? ... BUT HE'S GONE NOW...

TAKE IT EASY, SID... JUST WHAT WAS IN THAT GROG YOU HAD LAST NITE?



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

PICK STEERING PARTS



LET'S USE UP THOSE PARTS FOR OLDER 1/4-TONNERS

Whoops! You guys with older TM-218-series 1/4-ton vehicles—M151, M151A1, etc.—are upsetting the supply system on steering parts. Until older stocks are used up, *only the newer* 1/4-tonners—M151A2, etc.—get these parts listed in your TM 9-2320-218-20P (Jan 72):

For newer 1/4-tonners (M151A2, M825, M718A1) use:
 Link and Idler Assy, FSN 2530-176-3349
 Linkage Assy, FSN 2530-176-8942
 Wheel, Steering, FSN 2530-176-8941

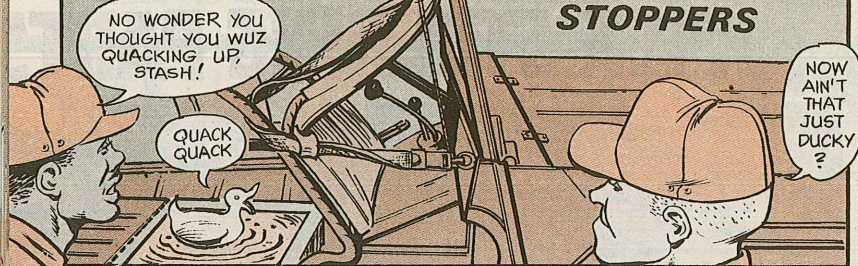
There's no "Usable On" coding to tell you this, but that's the straight poop. Most, but not all, other parts in Group 1401 (pages 159 & 161 in your -20P) can be used on either the old or new model vehicles.

For the older 1/4-tonners (M151, M151A1, M151A1C, M718) use:
 Parts Kit, Linkage, FSN 2530-973-3188 (Linkage and Idler Assy)
 Parts Kit, Linkage, FSN 2530-678-3116 (Linkage Assy)
 Wheel, Steering, FSN 2530-678-3078

A -20P TM change or revision will be picking up these parts.

M151 BATTERY COMPARTMENT DRAINS . . .

METAL-EATIN' STOPPERS



NO WONDER YOU THOUGHT YOU WUZ QUACKING UP, STASH!

QUACK QUACK

NOW AIN'T THAT JUST DUCKY?

Pulling battery PM on your M151 ¼-ton series trucks should include an eagle eye looksee at the 2 battery compartment drain tubes.



CHECK THOSE DRAIN TUBES

They get clogged with crud from the inside of the vehicle, or with mud 'n' stuff from the underside. Or they rot off, wear

short or break off after too many trips thru the boonies. Battery acid eats 'em, too.

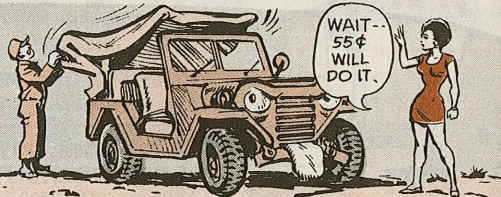
A busted or stopped-up tube just won't hack it. When you flush the compartment you'll have water standing in the compartment or acid flying back on the undercarriage instead of draining to the ground.

You can order these metal-savin' battery drain tray tubes with FSN 2540-832-5654. It'd sure be a shame to use manpower and maintenance downtime to fix a corroded bottom just because you neglected a couple of 16-cent drain tubes.

TM-218-SERIES ¼-TON TRUCK . . .



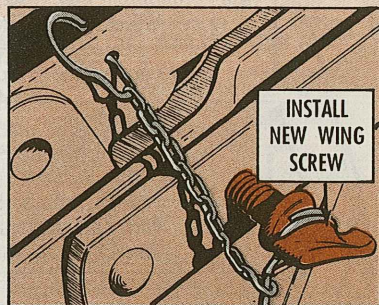
DRAT! 50 BUCKS SHOT.



WAIT-- 55¢ WILL DO IT.

Do you really need a whole bow assembly, FSN 2540-165-4029, for your M151-series ¼-ton truck?

It looks like some outfits may be blowing 50 bucks for a whole bow assembly when maybe all they need is a 55-cent wing screw for the bow supports. That wing screw comes under FSN 5305-165-8125, listed in Ch 1 (Aug 73), TM 9-2320-218-20P.



INSTALL NEW WING SCREW

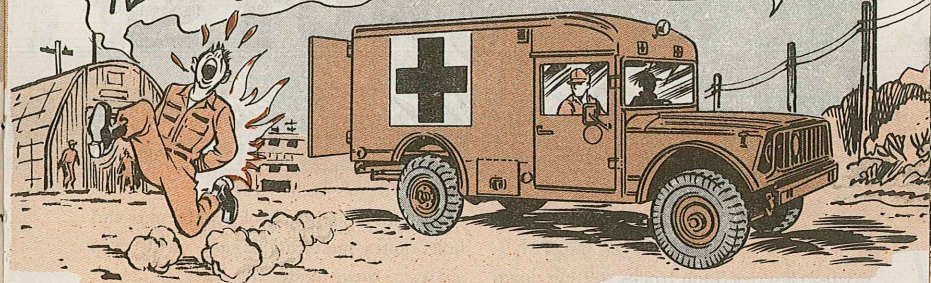
AMBULANCE



SEAT!

YEEEEOWWWW

HE MUST BE FEELIN' BETTER! HE COULDN'T EVEN WALK WHEN WE PICKED HIM UP!

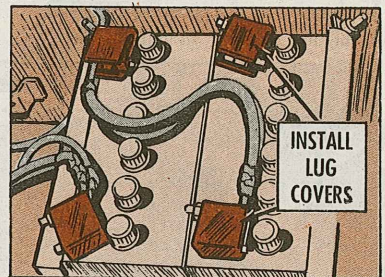


A shocking surprise is waiting for somebody if he sits on top of the battery box in the patient's compartment of your M725 1¼-ton ambulance.

The battery box cover, under the seat, can mash down on the battery posts. This short circuit may start a fire—or, at least run down your batteries.

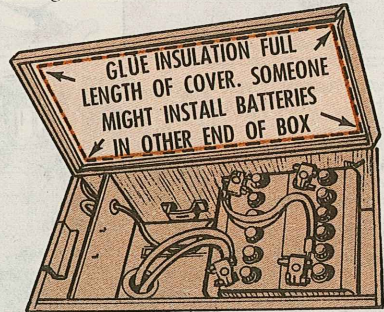
The fix is easy—an insulator between the metal cover and the batteries. If your CO gives it the OK.

Glue it on the cover with Adhesive, 1 pint, FSN 8040-664-4318.



INSTALL LUG COVERS

To get extra protection, install Cover, battery terminal lug, FSN 2920-738-6272, on all of the post-clamp hookups. This cover comes as standard equipment on a lot of different new vehicles.



GLUE INSULATION FULL LENGTH OF COVER. SOMEONE MIGHT INSTALL BATTERIES IN OTHER END OF BOX

Cut a piece of ½-in thick neoprene sheet to fit the underside of the cover. This comes under FSN 9320-241-9740 or FSN 9320-241-9741.



ONE PLACE YOU'LL FIND THE POST-CLAMP COVER IS IN TM 9-2320-218-20P (JAN 72) FOR THE ¼-TON TRUCKS.

Here lies Private Rufus J. McButts, who so knowingly did decline, to tighten his steering gear nuts 'Ere descending a steep incline.

5-TON NUTS

and there goes your steering.

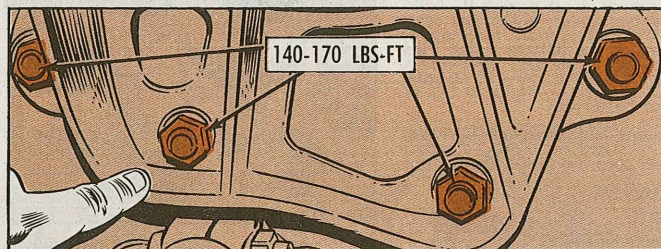
If you're operating one of the TM 9-2320-211-series 5-ton trucks, getting down to nuts and bolts is a daily must.

Basic among operator checks are the 4 lower nuts on the steering gear bracket.

An "out of sight" check are the nuts and bolts on the mounting flanges of the prop shaft . . . down under the truck.

When they work loose, the prop shaft drops and you stop. Period.

So, if you find any of the above loose, get 'em tightened.



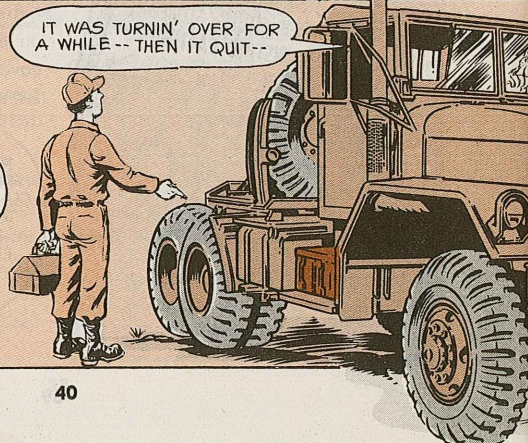
HAVE YOUR MECHANIC TORQUE BRACKET NUTS TO 140-170 FT.-LBS.



TM-260-SERIES 5-TON TRUCKS . . .

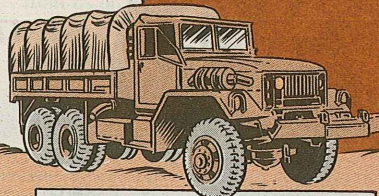
USE ALL 4 BATTERIES

YOU SURE YOU GOT ALL 4 BATTERIES IN THERE?

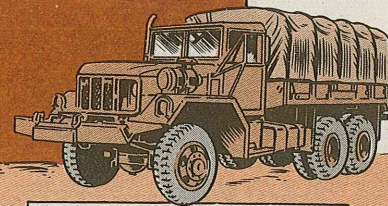


CLICK
CLICK

5-TON BRAKE SHOES



BRAKE SHOE FSN 2530-864-2990 FOR TM-211-SERIES 5-TON TRUCKS



BRAKE SHOE, FSN 2530-162-1986 FOR TM-260-SERIES 5-TON TRUCKS

This's for both of the 5-ton 6x6 truck fleets—TM-211-series and TM-260-series:

You won't get new brake shoes-with-lining with that FSN 2530-152-2250 in TM 9-2320-211-20P (May 73) or FSN 2990-152-2550 in TM 9-2320-260-20P (Nov 72).

Instead, order FSN 2530-864-2990 for the TM-211-series 5-tonners and FSN 2530-162-1986 for the TM-260-series jobs.

Sure, all of those trucks can use the same brake shoes. But the TM-260-series is getting a new, improved type. The TM-211-series will get the new shoe, too, when stocks of the older type are used up.

THOSE BRAKE SHOES FOR OLDER 5-TONNERS ARE OK-- SO, LET'S USE 'EM UP!

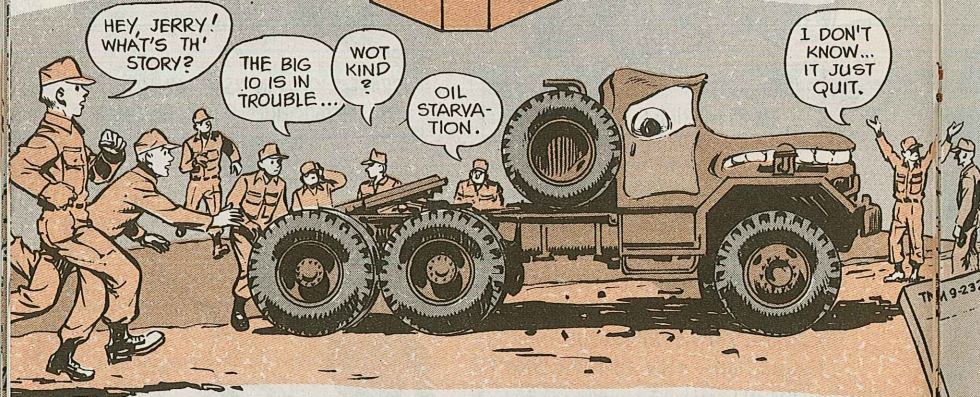


That's a slip in TM 9-2320-260-20 (Jul 72), para 2-90, about running on only 2 batteries.

Forget it—make sure all 4 batteries are hooked up and in top shape. You need all the poop you can get to start that powerful engine—even in warm weather.

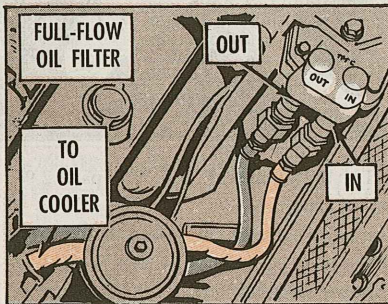
Sure, in a real pinch—like a shortage of batteries—you might be able to get by with only 2. You'll get your 24 volts OK if you hook 'em up in series—like in any other vehicle with a 2-battery setup. But your batteries may run down before you get your engine started. In an emergency, though, it's worth a try.

THE INS AND OUTS OF IT

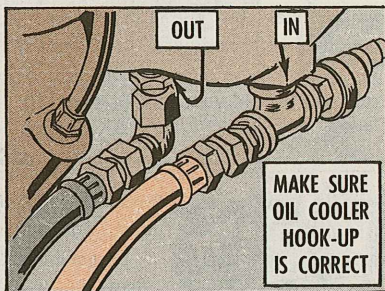


Run—don't walk! Your M123A1C or M123E2 10-ton tractor truck may be in deep trouble!

Your engine will burn up from lube starvation!



Check out those 2 hoses that run between your full-flow oil filter and the engine oil cooler. They may be hooked up wrong. If so, the filter won't filter—the bag-type element has collapsed—and oil won't go through the cooler. Your oil will over-heat and get thin.



It's all a matter of ins-and-outs. That's what it says on your oil filter—IN and OUT. And it says the same thing on your oil cooler.

Trouble is, some guys must think IN goes to IN and OUT goes to OUT.



Make sure those 2 hoses are hooked up so one goes from IN on the filter to OUT on the cooler—and, natch, the other will then go from OUT on the filter to IN on the cooler.

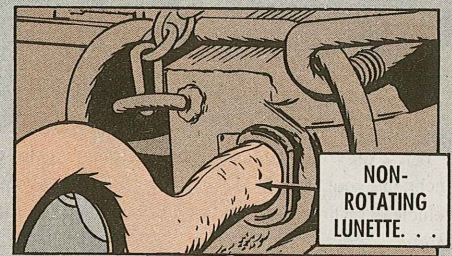
JUST LIKE IT SHOWS IN FIG. 2-49, CH2 (APR 73), TM 9-2320-206-20.



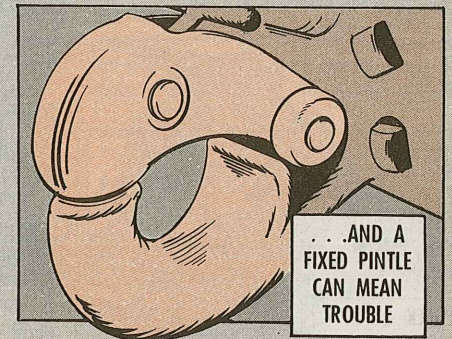
TOWING WITH COMMERCIAL VEHICLES



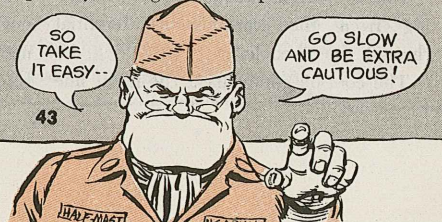
Towing a military trailer with a commercial vehicle may be hazardous to your health. At least, that's so if you're towing a trailer with



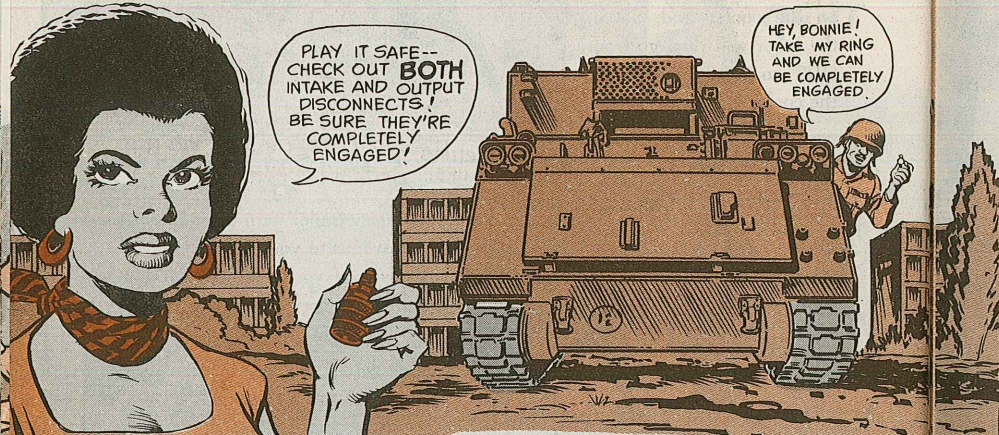
a non-rotating lunette behind a commercial vehicle equipped with a non-rotating pintle. The hazard is



that either one of 'em can cause the other to overturn, especially during off-road operation.



DIFFERENTIAL DISCONNECT DANGER

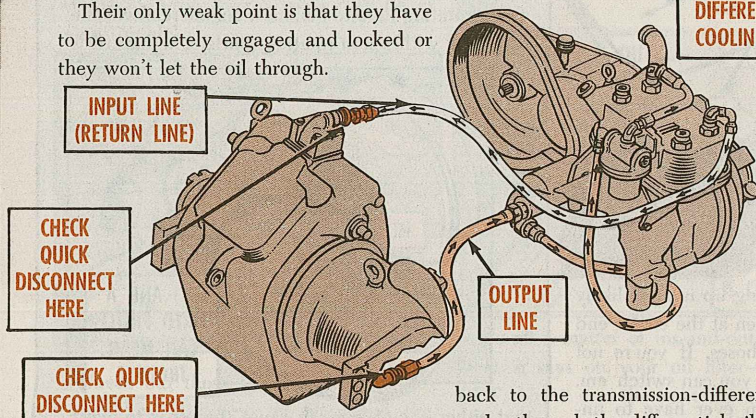


The 2 differential oil line quick disconnects on your M113/M113A1 family of vehicles are fine and dandy like bourbon candy.

Their only weak point is that they have to be completely engaged and locked or they won't let the oil through.

(also called the "return line"). After picking up heat in the differential the oil leaves by the differential output line and goes

DIFFERENTIAL OIL COOLING SYSTEM



Your differential is cooled by oil circulating from the transmission-differential through the oil cooler.

The cool oil comes in at the input line

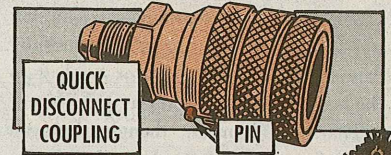
back to the transmission-differential oil cooler through the differential oil filter.

If the quick disconnect at either the input or output line is not completely connected, oil can't circulate through the differential.

Naturally, the differential will overheat. Also, the block in oil circulation can build up enough pressure to bust the oil filter housing.

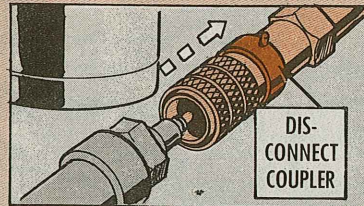
So-o-o-o, to keep this from happening, check out **both** the intake and output quick disconnects—make sure they're completely engaged. If there's a 1/16-in clear-

ance between the nose piece hex nut and the disconnect-coupler, and the pin and groove are not lined up, then your connection is OK.

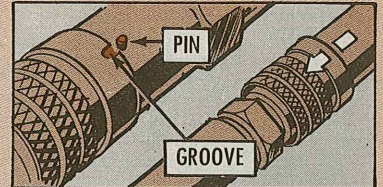


To get 1/16-in clearance between the nose piece hex nut and the disconnect coupler, run through this little 4-part drill:

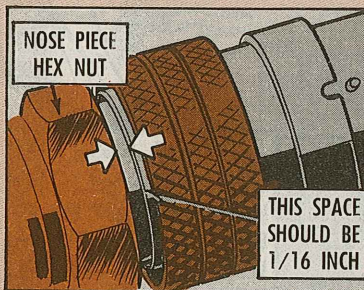
1. Disconnect the coupler assembly from the nose piece.



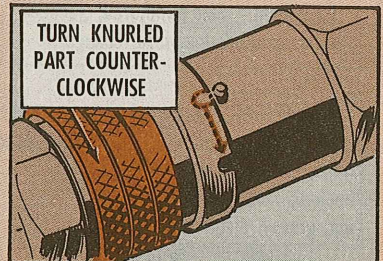
2. Line up the pin and groove of the coupler and push the coupler over the nose piece.



3. Keep on pushing the coupler far enough so that when you let go of the knurled part of the body, it will return to within 1/16-in of the nose piece hex nut.



4. Now, without changing the 1/16-in clearance, turn the knurled part counterclockwise for about an inch so the groove and pin don't line up anymore.



If both your input and output oil line quick disconnects are completely connected you should have no problem with an overheating differential.

If you do, something else is wrong. Have your friendly mechanic check it out.

BYOI ON A TTC-23. . .

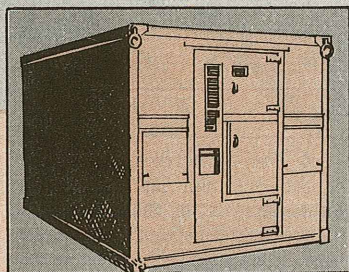
HELLO, CENTRAL, HELLO.

The AN/TTC-23 manual telephone central office is bedrock rugged and dutifully dandy. You can heli-carry or truck it to the boonies. . . or wherever.

That doesn't mean, though, that you sluff off on your daily dose of PM. No, sir-e-e-e!

Fact is, you oughta be twice as nice to this area type commo gear after moving it into operating position.

Here are what you wanna eyeball real close. If you find any of these conditions, correct 'em PDQ.



EXTERNAL—Skin punctured, cracked; seams ruptured; moisture leakage.

GROUNDING — Loose lead connections; strap unhooked; rod missing, greasy, dirty.

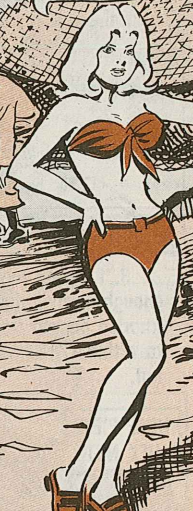


GROUNDING STRAP

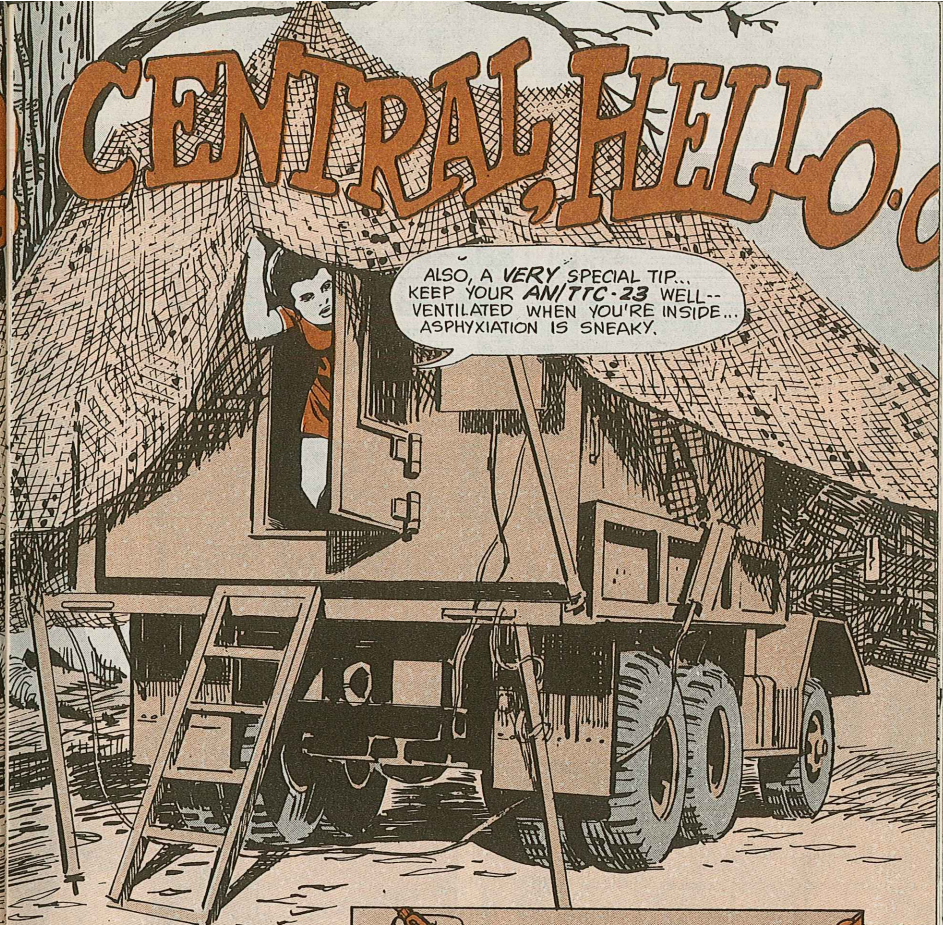
POWER & SIGNAL ENTRANCE BOXES — Dirty; unused receptacles uncapped; ground terminal wing nuts missing; receptacle covers, retaining cable missing; rubber protective shields deteriorating, missing; screws loose, missing.

46

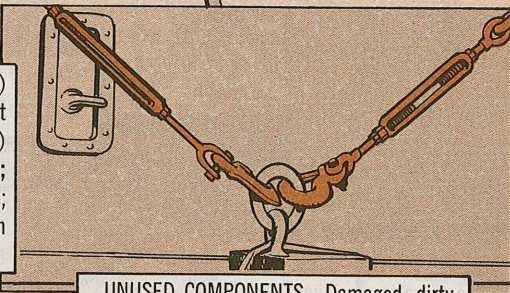
GIVE A LISTEN, YOU COMM TYPE. BE YOUR OWN INSPECTOR ON YOUR TTC-23 -- AND LOOK OUT ESPECIALLY FOR **ITEMS IN BOLD TYPE!**



ALSO, A **VERY** SPECIAL TIP... KEEP YOUR **AN/TTC-23** WELL--VENTILATED WHEN YOU'RE INSIDE... ASPHYXINATION IS SNEAKY.

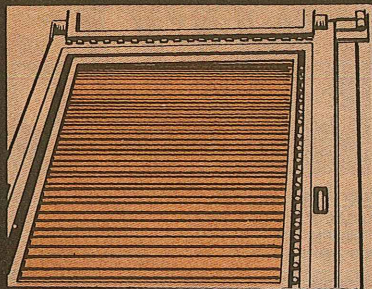


SLING ASSEMBLY—(Truck) Turnbuckles loose; ring bolt threads stripped. (Helicopter) Sling assembly cable **broken**; frayed; turnbuckles loose; sling hooks **broken**; catch bent, **missing**.

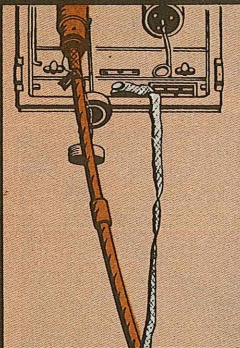
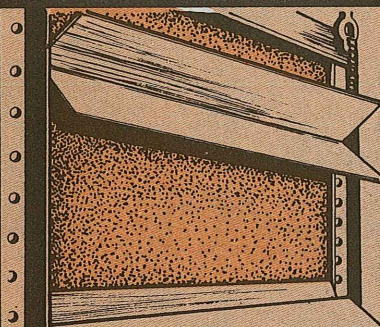


UNUSED COMPONENTS—Damaged, dirty, greasy, rusty, cruddy with fungus, uncovered.

47



BLOWER VENTS — Stuck, closed, damaged; air filter dirty, obstructed.

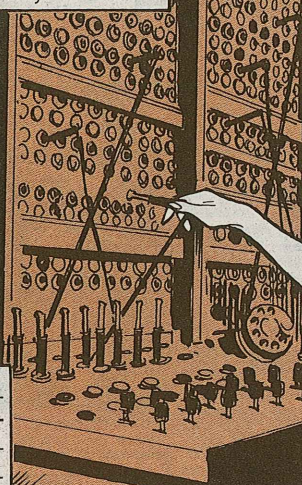


POWER & SIGNAL CABLE ASSEMBLIES—Outside insulation and connectors dirty, loose; unused connectors uncapped.

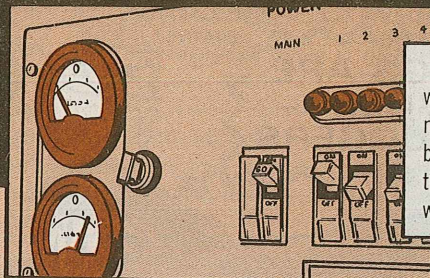
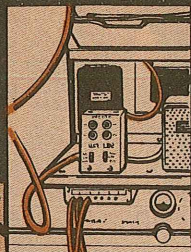
CEILING LIGHTS—Loose, missing, won't come on when switch is ON.

SIGNAL & POWER CORDS, CABLES, WIRES, HARNESSES — Loose, dirty, cut, worn, cracked, kinked, strained.

STORAGE COMPARTMENT—Crummy, junky, dirty.



LIGHT-TIGHTNESS—With door closed and vents open, light leaks outside.



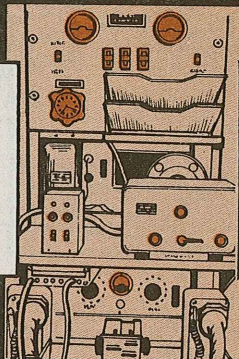
POWER DISTRIBUTION PANEL—Indicator won't glow when MAIN circuit breaker is ON; no voltage on voltmeter; ammeter needle bounces around; lights, heaters, air conditioning equipment and blower, neon lamps won't glow when circuit breakers are ON.

TM 11-5805-391-15 (MAR 69) WITH CHANGE 1, GIVES YOU ALL THE MAINTENANCE DETAILS.

POWER INDICATOR NEON LAMP — Broken, won't light when power is on.



KNOBS, DIALS, SWITCHES—Dirty, missing, binding, unreadable, broken.



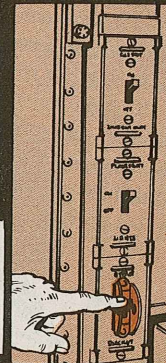
MAJOR COMPONENTS—Connections loose, missing, dirty, corroded.

HEATERS — With switch on HEAT, fails to get warm airflow when operating temperature control; with switch on FAN, heating element stays on, fails to blow air; with switch OFF, fan continues to blow.

BLACKOUT DOOR SWITCH — With door open lights stay on when blackout bypass switch is OFF.

EXHAUST BLOWER—Blower switch ON, fails to exhaust.

BLACKOUT BYPASS SWITCH—With door open lights go off when switch is ON.



DO TH' SPRINGS HAFTA BE SO TIGHT?

SPRINGS ARE SNUGGERS - NOT HUGGERS

NEGATIVE!

RETAINING SPRING

Dear Half-Mast,
What gives, Sarge? We're gettin' gigged 'cause the retaining springs in our TA-43/PT and -312/PT telephone sets won't hold when the H-60 handset is used to pick up the set. We're having to get a lotta springs replaced because of this. Do the springs have to hold the handset that tight?

SFC F.S.

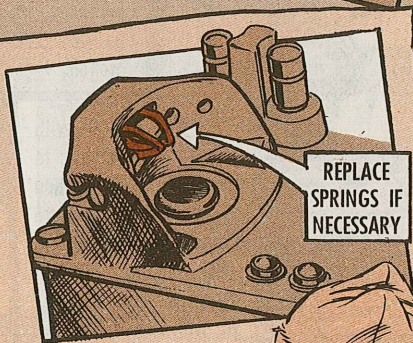
Dear Sergeant F. S.,

Negative! Those retaining springs were never designed to take the full weight of the set. Like it says, in Para 4-4 of the TM, the springs need enough tension to HOLD the H-60 in the cradle . . . like a baby.

The right way for testing is to hold or stand the set vertically. If the springs hold the handset in place they're OK. If the H-60 falls out the springs need to be adjusted or reset, or replaced.

Half-Mast

BE SURE YOU HAVE A HAND HANDY TO CATCH THE HANDSET. NO NEED ADDING BROKEN HANDSET WOES IF THE SPRINGS DON'T HOLD!



REPLACE SPRINGS IF NECESSARY



PHONETIC ALPHABET

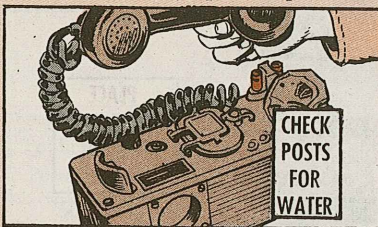
Been getting tongue-tied trying to remember Alfa, Bravo, Charlie and other call words of the phonetic alphabet? Well, FSN 7690-243-9103 will bring you a decal of the alphabet to stick on or near your telephone or radio. SC 7660/90-IL is your source.



PITTER PATTER PM

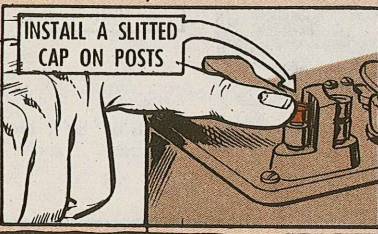
AH-H-H, MY KIND OF WEATHER.

Where dampness is a drag on your TA-43/PT or -312/PT telephone set, giving 'er a lotta lip won't dry up the drip.

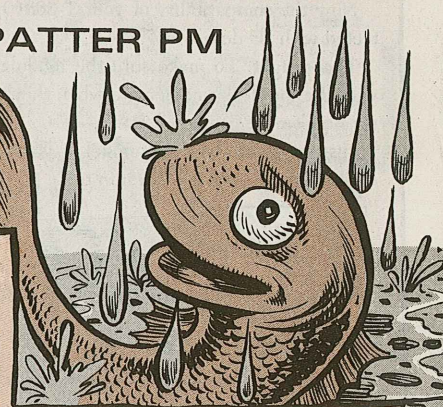


CHECK POSTS FOR WATER

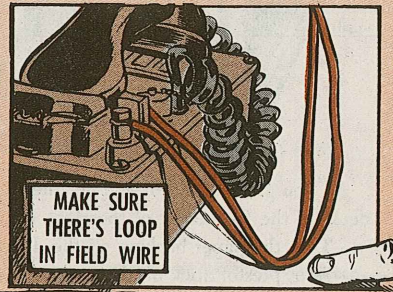
Like, frinstance, when the binding posts keep getting wet, slap a slitted cap (FSN 5940-283-5393) on 'em. This'll help shed the moisture for you.



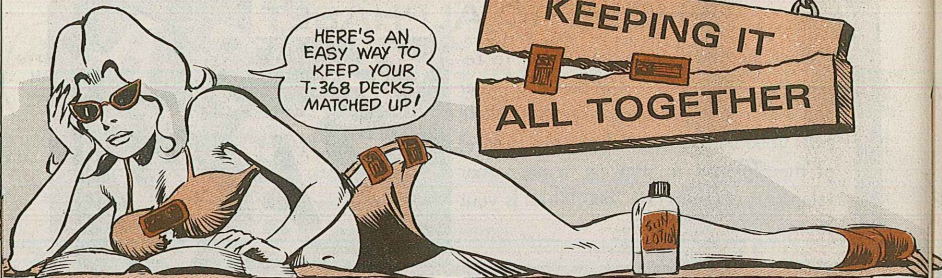
INSTALL A SLITTED CAP ON POSTS



And, when the gear's tied up to a tent pole, make sure there's a loop in the WD-1/TT field wire coming into the posts. Wire angled downward may be a shortcut to your set, but when the raindrops are falling it can be a short stop to your communications.



MAKE SURE THERE'S LOOP IN FIELD WIRE



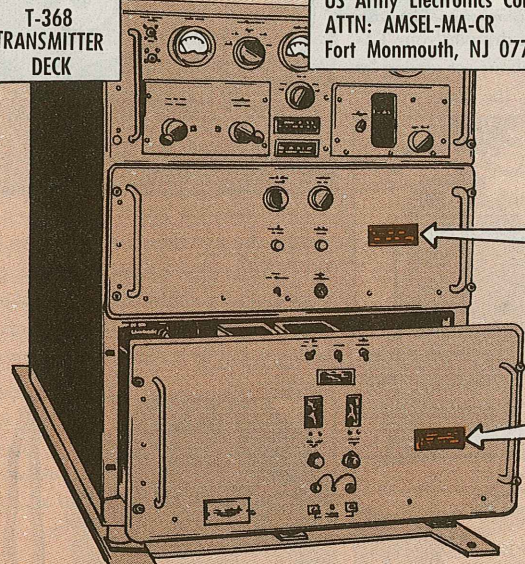
Now the compatibility of your T-368(C)/URT transmitter communicator can be protected with ID decals.

That's right. To make sure the modulator and power supply decks are matched up with the top deck's nameplate when they're out for repair, you can get Army decals to stick on 'em.

Just jot down the exact model of your transmitters and how many you have on hand, double it, and send all this info to:

Commander
US Army Electronics Command
ATTN: AMSEL-MA-CR
Fort Monmouth, NJ 07703

T-368
TRANSMITTER
DECK



PLACE
MODULATOR
ID DECAL
HERE

PLACE
POWER SUPPLY
ID DECAL
HERE

All you gotta do when you get the decals is clean a spot on each of the 2 lower decks to the left center of the right handle—

—Take the paper backing off the decal—

—And, presto! Stick on the decal.

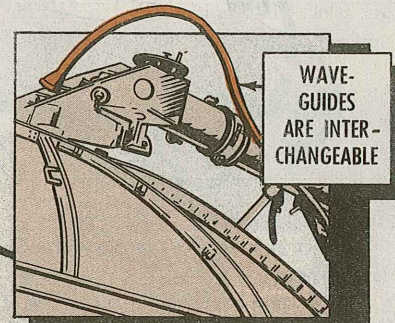
ALL FOR ONE-- ONE FOR ALL



Any time one of your AN/TRA-37 antenna group's 3 waveguides won't work, don't sweat it. They're interchangeable because they're identical.

So, ignore the RECEIVER A, RECEIVER B or TRANSMIT markings on em. It makes no difference.

When you gotta get one from supply use FSN 5985-412-9252. It's cheaper.



POSTERS FOR PM

Need a poster to help your preventive maintenance? A DA Form 17 to the Army AG Publications Center, Baltimore, MD 21220, can get you any or all the following DA Posters:

750-8—PM Enlisted Leadership

750-11—Roadside Check PM

750-14—PM Forms

750-16—PM Time

750-17—Multi-fuel PM

750-20—Operator Know-how

750-22—PM Reminders

750-24—Chassis Greasing

750-26—Gages Talk

750-27—Clean Air Filters

750-29—Turn In Repairables

Also, new PM posters come out every now and then. You can get them automatically on pin-point distribution by putting your unit's order for them on DA Form 12-4, Block 9. Send the order to Baltimore.

AIR MOBILITY

KIOWA (OH-58A) UP- DATE

SAY, YOU FLY GREAT! IS YOUR MECH A BOOK LEARNER OR AN OJT?

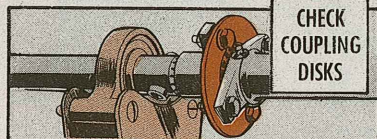
?

Gather 'round, Kiowa mechs and avionics types.

With some book learnin' and a lot of OJT you can keep your baby up-to-snuff. Here are some pitfalls to avoid when you pull maintenance.

COUPLINGS OK?

When you remove any sections of the tail rotor drive shaft, focus in on the coupling disks, for real.



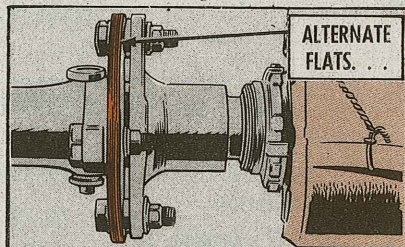
Eyeball the disks for cracks, wear or damage.

Never mix used and new disks together. If a disk is shot, replace all the disks.

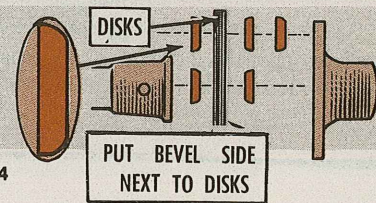
Once the disk assembly has been "running" on your baby, never change the stack-up. Changing the sequence or reversing

the indexing flats will make the assembly useless. You'll have to make up another assembly with new disks.

The grain of each disk runs parallel to the indexing flats. So, when you put together a new stack, alternate the indexing flats to get alternate grain direction.



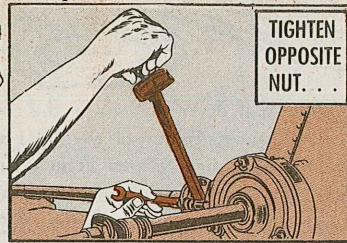
Watch your step when you install the bolts, washer and nuts. The washers you put next to the disks must be located with the bevel (curved) side next to the disks.



Otherwise, the flat side of the washer will give you stress points . . . crack the disks. Your bird will be laid up for repairs.

And, when you make with the 50-70 inch-pounds on the disk bolt nuts, alternate use of the torque wrench.

Tighten one nut to 20 inch-pounds, then —go 180 degrees and tighten the opposite nut the same amount. Repeat this deal while increasing the torque on each go around in 15 inch-pound increments to the final torque value.

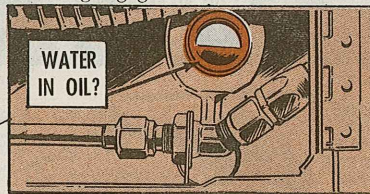


Otherwise, some of the disks will bulge, and you won't get the 0.005-in limit you're allowed between disks.



NO PLUGGED HOLES, PLEASE!

The next time you eyeball the transmission oil level in your Kiowa, look real close at the sight gage.



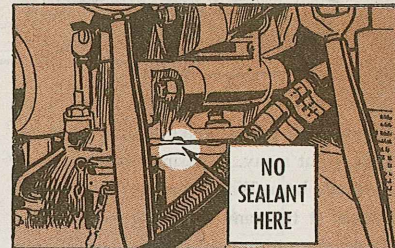
If you spot any water in the transmis-

ion oil, flush the transmission with oil and service it with a new supply.

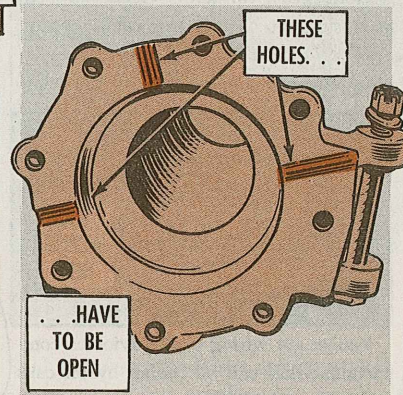
When the drain holes are sealed, water can gather and seep past the main mast bearing seal and into the transmission.

Which is why you knuckle busters want to make sure the drain holes are not sealed, during your Periodic.

With the nose of your bird representing the 12 o'clock position, those holes are located at 6, 9 and 12 o'clock on the support. Keep 'em clear, man!



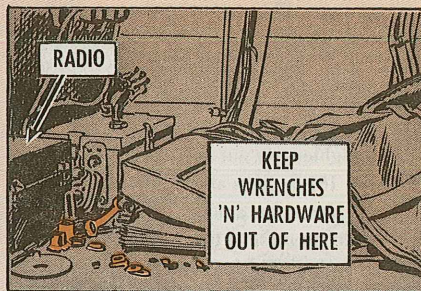
You can get water in the oil if you've had a lot of rain in your area. Same-same if the 3 rectangular drain holes in the base of the washplate are plugged up with dirt.



HOT CARGO

You can carry cargo in the passenger compartment of your Kiowa, crew chiefs. But, you can't carry anything in the avionics compartment. That includes: pitot tube covers, tie downs, engine inlet and exhaust covers. That's the poop in Fig 13-2 of TM 55-1520-228-10 (Sep 72).

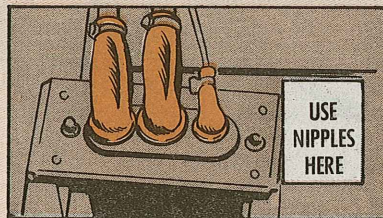
Makes sense. The structural honeycomb floor paneling and radios can be damaged by tool boxes, oil cans, tools and hardware.



Any time you come across a punctured honeycomb panel, make a temporary repair, right away. A permanent repair can be made later. Water that gets into a panel causes it to come unglued and corrode. Pressure-sensitive tape works real fine but even bubble gum will do the trick.

There is a "hot" battery relay in the avionics compartment. If metal crosses the bare posts, sparks will fly. Oily rags can really make it a hot compartment!!

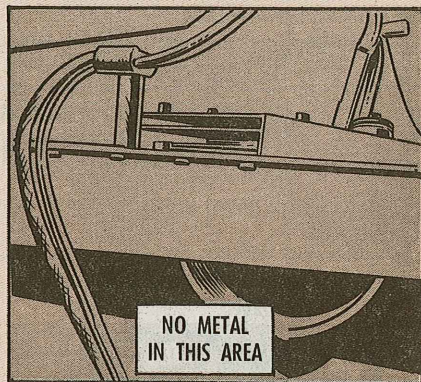
That's why you crew chiefs want to make sure you have 2 large cable nipples, FSN 5975-250-6871, and a small nipple, FSN 5975-553-6995, protecting the relay.



You've got wiring in the avionics compartment that can be chafed by oil cans and tools and can short out.

Metal that doesn't belong in the compartment also can throw off the T-611 flux gate valve for the AN/ASN-43 directional compass. Your favorite throttle jockey could get a bum steer.

Keep the avionics compartment clean, man!

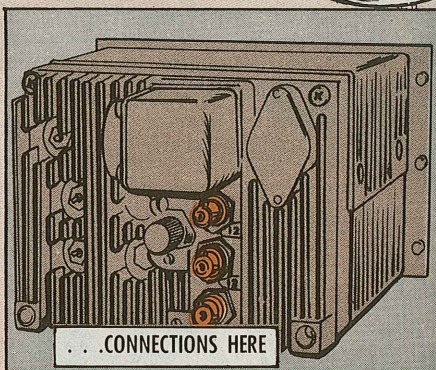
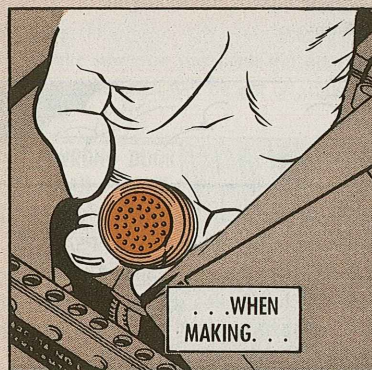
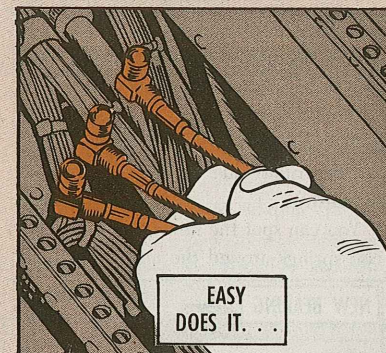


LOST, I RECKON --
SOMETHIN'S THROWN OUR
DIRECTIONAL COMPASS
OUT OF WHACK!

EASY DOES IT

Any avionics repairman worth his salt knows that cable connectors on the AN/ARN-89, AN/ARC-114,-115 and-116 are a mite delicate. Make your connections carefully so that you don't bend or break connector pins and put the set out of operation.

Take the AN/ARC-114 in the Kiowa, for example. The contact pin in the three antenna cables is a cast pin and it'll break very easily.

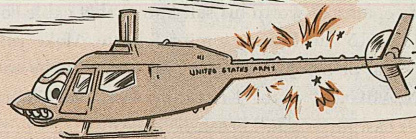


So, when you hook up the cables never use force. Insert the connectors straight in, not at an angle.

The same deal goes for the signal cable. Find the master guide slot and go straight in . . . you won't bend any of the connector pins.

RIGHT HANGER HOOK-UP?

OUCH!
MURPHY'S
LAW STRIKES
AGAIN!

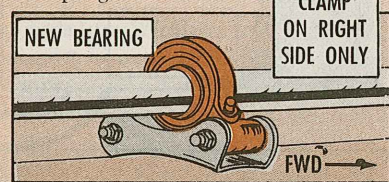


Those right-sided tail rotor driveshaft bearing hangers look wrong to you, bird mech? Yearn to change 'em to the other side, to strengthen out your OH-58A?

Careful, now.

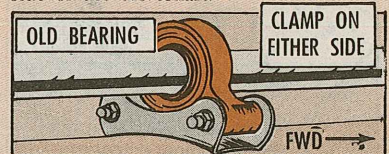
The new-model bearing hangers clamp on the right side of the shaft, facing forward.

You can spot the new hangers by the 3 coil springs around the nut.



Some recent OH-58's were made with the new hangers clamped on the left side. If you have one, change the clamp to the right side no later than the next Periodic inspection.

The old-model hangers clamp on either side of the driveshaft.



If a well-intentioned mech should get the new hangers on the wrong side, that driveshaft could be damaged.

So-o-o-o....

KIOWA CROWFOOT

NUT UNDER HERE

To get snug handling for your OH-58A's tail rotor main retention nut, FSN 5310-131-2660, latch on to a new 1/4-in crowfoot attachment. It's winging its way into TM 55-1520-228-20P. (Aug 73), under FSN 5120-935-7394.

USE NEW
CROWFOOT
ON NUT

NO MUSCLE, PLEASE!

Course, you need a 0.175-in clearance between the driveshaft coupling and the 90-degree gearbox input shaft on your Kiowa, bird mechs. But that's for initial installation only.

HANDS OFF SHAFT, PLEASE!



You do not need to maintain that clearance during operation. The shaft is free to move fore and aft while your bird is in the blue. This is normal.

So, keep your cotton pickin' hands off the shaft, man. Too much muscle will bend the shaft and damage the bearings.

During inspections just flex the coupling and check the splined adapter for freedom of movement.

If the coupling must be repositioned, remove and replace the assembly according to the poop in the Kiowa organizational maintenance pub.

STOP THE POPPIN'

A pilot's or co-pilot's door poppin' open on an in-flight OH-58A can be something more than embarrassing. . . to the airmen. . . and to any bird mech who puts on the wrong door.

Make sure you put back the door you took off. If you install a door from another Kiowa, the latch will be out of adjustment, and door-poppin' may be a part of your future.

WRONG DOOR
CAN DAMAGE
FRAME



FINE!
70-15581

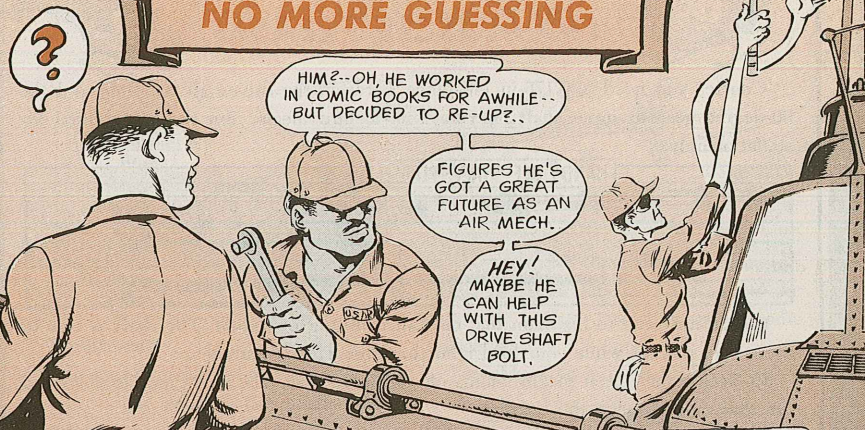
STENCIL BIRD SERIAL
NUMBER—PREVENT MIX-UP

Fact is, the door latch is adjusted to the airframe by means of a roll pin. If the wrong door is accidentally put on, the latch must be adjusted to the airframe.

Speaking of doors, when the bird is on the ground, keep the doors latched.

Strong winds can catch an unlatched door and crack out the airframe portion next to the bushing.

NO MORE GUESSING



HIM?--OH, HE WORKED IN COMIC BOOKS FOR AWHILE-- BUT DECIDED TO RE-UP?..

FIGURES HE'S GOT A GREAT FUTURE AS AN AIR MECH.

HEY! MAYBE HE CAN HELP WITH THIS DRIVE SHAFT BOLT.

Dear Editor,

There's a lot of guesswork going on when it comes to torquing the main drive shaft bolts on the Kiowa (OH-58A). You don't have enough clearance for the torque wrench and socket wrench to reach the bolts. Mechs use an offset wrench and skip the torque wrench.

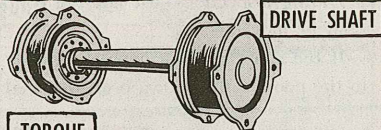
To overcome this revolting development we came up with this handy little offset tool which will fit nicely over the bolts and allow you to use the torque wrench.

The tool is made from a 1/4-in drive socket welded onto a 5/16-in box wrench, both from salvage.

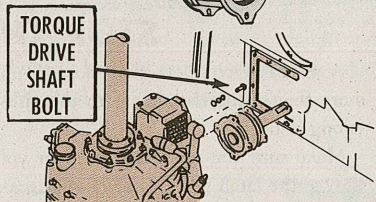
Now, getting an even torque on the short shaft bolts is a breeze.

Mr. Benjamin Mundwyler
Ft Ord, CA

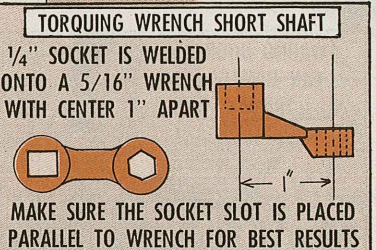
(Ed Note—Good going! The head shed (AVSCOM) recommends the tool. Remember, tho, the tool gives you a 1-in extension of the torque wrench. You have



DRIVE SHAFT



TORQUE DRIVE SHAFT BOLT



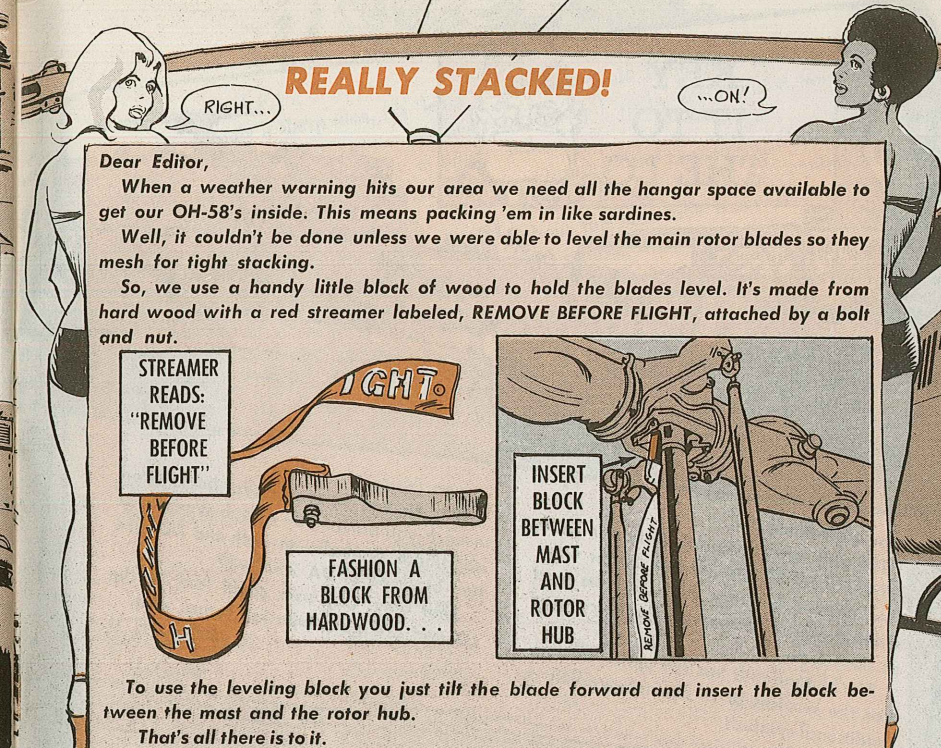
TORQUING WRENCH SHORT SHAFT

1/4" SOCKET IS WELDED ONTO A 5/16" WRENCH WITH CENTER 1" APART

MAKE SURE THE SOCKET SLOT IS PLACED PARALLEL TO WRENCH FOR BEST RESULTS

to use the formula in Fig 6-62 of TM 55-1500-204-25 (Apr 70) to get the actual torque to use on the bolts.)

REALLY STACKED!

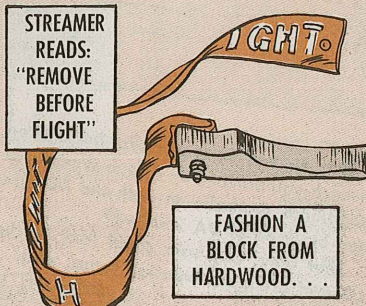


Dear Editor,

When a weather warning hits our area we need all the hangar space available to get our OH-58's inside. This means packing 'em in like sardines.

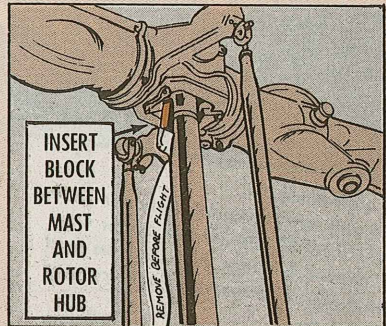
Well, it couldn't be done unless we were able to level the main rotor blades so they mesh for tight stacking.

So, we use a handy little block of wood to hold the blades level. It's made from hard wood with a red streamer labeled, REMOVE BEFORE FLIGHT, attached by a bolt and nut.



STREAMER READS: "REMOVE BEFORE FLIGHT"

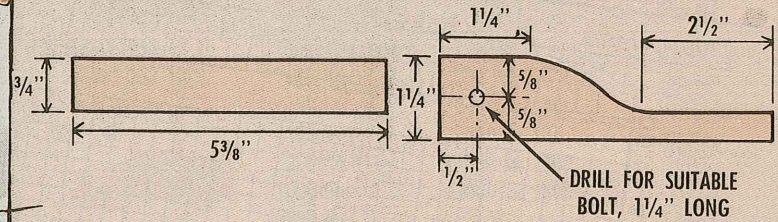
FASHION A BLOCK FROM HARDWOOD...



INSERT BLOCK BETWEEN MAST AND ROTOR HUB

To use the leveling block you just tilt the blade forward and insert the block between the mast and the rotor hub.

That's all there is to it.



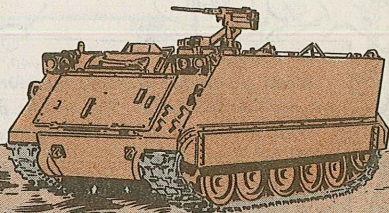
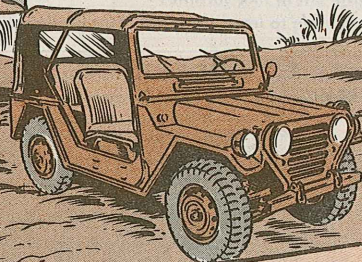
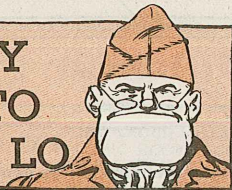
DRILL FOR SUITABLE BOLT, 1/4" LONG

(Ed Note—Right on!

SP 5 A. Nix
Ft Sill, OK



KEY IT TO THE LO



Dear Half-Mast,

The only symbol for lubrication in para 3-3c(3) of TM 38-750 is L—no matter what the interval between lube services and without regard to the lube points covered in each lube.

The commander has the option to number the services or to use sub-symbols or additional symbols.

Why not use the symbols for lubes listed in each equipment LO—as sub-symbols or additional symbols—on both the DD 314 and block 3a of DA 2408 -1?

That way, any user could look at the LO and see what lube job comes next.

SFC A. F. U.

For use of this form, see TM 38-750; the proponent agency is Office of the Deputy Chief of Staff for Logistics.

1. NOMENCLATURE TRUCK 1/4-TON M151A2		2. REGISTRATION OR SERIAL NUMBER 02652471		3. TYPE L1		4. NEXT SERVICE OR LUBRICATION DUE a. HOURS/MILES -17025 b. DATE 13 MAY 74	
4. TYPE LOG <input checked="" type="checkbox"/> DAILY <input type="checkbox"/> MONTHLY		5. OIL CHANGED OR ADDED (Ch or Qts)		6. OPERATIONAL STATUS		7. NONAVAILABLE DAYS	
8. REGISTRATION NUMBER		9. ADMINISTRATION NO.		10. NOMENCLATURE		11. MODEL	
12. DATE RECEIVED		13. RECEIVED FROM		14. NOMENCLATURE		15. MODEL	
16. REGISTRATION NUMBER 02652471		17. ADMINISTRATION NO. H-10		18. NOMENCLATURE TRUCK 1/4-TON HBX60B33		19. MODEL M151A2	
20. DATE RECEIVED		21. RECEIVED FROM		22. NOMENCLATURE		23. MODEL	
24. DATE RECEIVED		25. RECEIVED FROM		26. NOMENCLATURE		27. MODEL	
28. DATE RECEIVED		29. RECEIVED FROM		30. NOMENCLATURE		31. MODEL	

REMARKS
LO 9-2320-218-12
L1 = 1000-MI
L6 = 6000-MI
L12 = 12000-MI
ESC - GREEN 18 MAR 74

ROTATE TIRES 8000-MI LUBE DUE 7025-MI

DD FORM 314 PREVIOUS EDITIONS ARE OBSOLETE
 THIS FORM IS TO BE USED FOR SCHEDULED AND RECORD MAINTENANCE

DA FORM 2408-1, 1 May 67

Dear Sergeant A.F.U.,





That's not only a sharp idea, it's "legal" as the TM now stands. It's recommended—as long as it's set up that way in your unit SOP and explained on the DD 314 (remarks block).

Some lube intervals are stated on the LO in hours only with no matching cal-

endar intervals. Other lube intervals may be speeded up by accumulated hours or miles.

Obviously the L, standing alone, won't tell you as much as the LO symbol will about the next lube that's due. And the LO symbol, written alongside the L, gives you a quick clue on what's needed.

Here's how LO symbols line up on a few typical LO's—

Equipment LO	Lube Symbols on LO	L (for Lube)+ Matching LO Symbol	Periodic PM Symbol* (Used When Lube is Coordinated With It)
LO 9-2320-218-12 for Truck M151A2 	1=1000-mi 6=6000-mi or 6 mo 12=12000-mi or 1 yr	L1 L6 L12	S or S1 S or S2
LO 9-2300-257-12 for Carrier M113A1 	W=weekly Q=quarterly S=semi-annually A=annually	Lw Lq Ls La	Q or Q1 & Q3 Q or Q2 Q or Q4
LO 5-3805-251-12-1 LO 5-3805-251-12-2 for Scoop Loader MW-24B 	Operating hours 10-hrs 50-hrs 100-hrs 250-hrs 1000-hrs 2000-hrs	L10 or L1 L50 or L5 L100 or L10 L250 or L25 L1000 or L100 L2000 or L200	Q or Q1 thru 4 (No exact equivalent in operating hours)
LO 5-6115-270-20 for Generator Set JHW3B 	5-hrs 25-hrs	L5 L25	Q or Q1 thru 4 (No exact equivalent in operating hours)

* When lube is scheduled or performed concurrently with (coordinated with) periodic PM service, only the periodic PM symbol is used. LO symbol is recommended for use when lube is scheduled and performed separately.

ESC UPDATING

Dear Half-Mast,
What's the score on updating an ESC rating within the 90-day period between evaluations—especially on systems?
1LT. J. L. Y.

GOOD NEWS --
YOU DON'T HAVE TO
REMAKE THE ENTIRE FORM
FOR THE EQUIPMENT. HERE'S
TH' SCORE:

Dear Lieutenant J. L. Y.,

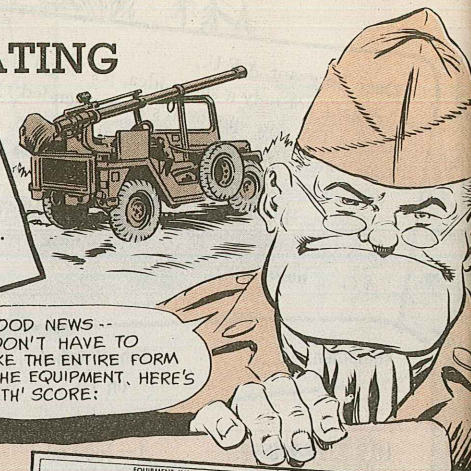
The rule is found in para 3-6b (6) (b) of TM 38-750—the paragraph that deals with reporting ESC status on DA 2406.

It says that ESC status updating, within the 90-day period, "will be executed by hand written changes made by the commanding officer or his designated representative to the existing ESC evaluation (DA Form 2404)."

That means you don't need to remake the entire form for the equipment—just record the change on the original made at the beginning of the 90-day period.

Just one extra step is needed for a system. After the CO (or his representative) has updated the DA 2404 for a component of the system, he must also update the system evaluation. This is found on the top DA 2404 for each system with 2 or more components that have to be rated on separate forms. Easy does it.

Half-Mast



EQUIPMENT INSPECTION AND MAINTENANCE WORKSHEET

CO B 11TH INF BN

7-185-241-ESC 4 APR 73

FIRST—CHANGE COMPONENT ON ITS DA 2404

GREEN RIFLE BORE + CHAMBER
GREEN BARREL ASSY
GREEN BREECHBLOCK GP →
GREEN ELEV + FIRING ASSY

Broken trigger spring changed to RED 14 July 73
Lt. R. O. Wilson, Coi. Commanding

EQUIPMENT INSPECTION AND MAINTENANCE WORKSHEET

CO B 11TH INF BN

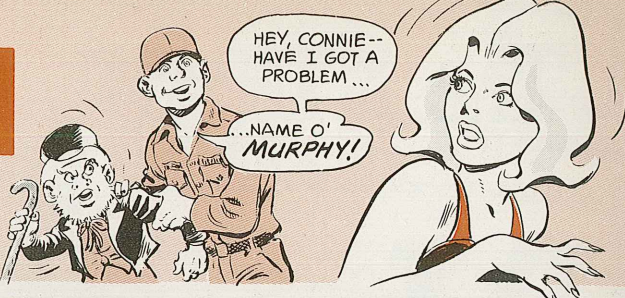
9-232-2.5-ESC

THEN—CHANGE SYSTEM RATING ON TOP OF DA 2404

SYSTEM EVALUATION GREEN
SYSTEM EVALUATION - RED 14 July 73

Connie's Mini Minis

UNHAND ME, YE MISBEGOTTEN VARLET!
SO WOT IF ME NAME IS MURPHY?



Urgent On H446 Crane

Got a Hanson Model H446 wheel-mounted 5-ton crane? Better let your DS outfit know so they can apply MWO 5-3810-233-30 (July 73). It's urgent. Boom hoist cylinder anchor shafts are a safety hazard.

Seal Out Weather

Looking for a sealing compound to go around those bolts, screws and brackets when installing a radio set in your vehicle? FSN 8030-226-6436 will get you an 8-oz tube of the waterproofing sealer which is listed as MIL-S-45180.

Torque All Screwed Up

Pages 16 and 17 of PS 254 said the torque on the engine mount screws of your M551 Sheridan should be around 130 ft-lb if MWO 9-2350-230-30/7 has not been applied or around 175 ft-lb if the MWO has been applied. This is correct. The info near the bottom of page 18 of the same issue has the figures the opposite way and is wrong.

5-Ton FSN Switch

'Tain't a bit funny when you order a washer, FSN 2510-737-2507, listed on page 2-172 in TM 9-2320-211-20P (May 73), and end up with a frame cross-member for the M38 1/4-ton truck. So-o-o-o, use FSN 5330-483-2408 to get the washer, (gasket) for your 5-ton truck's mirror brace rod.

Nylon For Your Seat

Your seat been saggin' lately? The seat in your Huey, (UH-1) that is. FSN 4020-240-2146 will bring you some nylon cord you can use to lace things up.



Follow Local Rule

You use your supply document numbers alongside small arms serial numbers on property book pages only when your command directive or local SOP calls for 'em. Some do but others may not. DA Msg DALO-SMS-R 301410Z Oct 72, cited on page 63 of PS 257, doesn't set up a DA requirement for document numbers on PB pages.



Trailer Gasket

Make a note — that Gasket (Part No. 7698578) on page B-78, TM 9-2330-211-14 (Oct 69) comes under FSN 2520-899-1351. It's for M172A1 25-ton semitrailers.

☆U.S. GOVERNMENT PRINTING OFFICE: 1974 - 758-447/11

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

The **ARMY** goes to--

NATIONAL

STOCK

NUMBERS

ON 30 SEPTEMBER 1974

HERE
ARE
EXAMPLES.

FSN 5306-145-0879 29 Sep 74 } Same item
NSN 5306-00-145-0879 30 Sep 74 }

(2 zeroes convert FSN to NSN)

NSN 5306-01-145-0879 New item of supply added
after 30 Sep 74.

SEE
DA CIRCULAR
708-3
(JUL. 72)
FOR
DETAILS.