

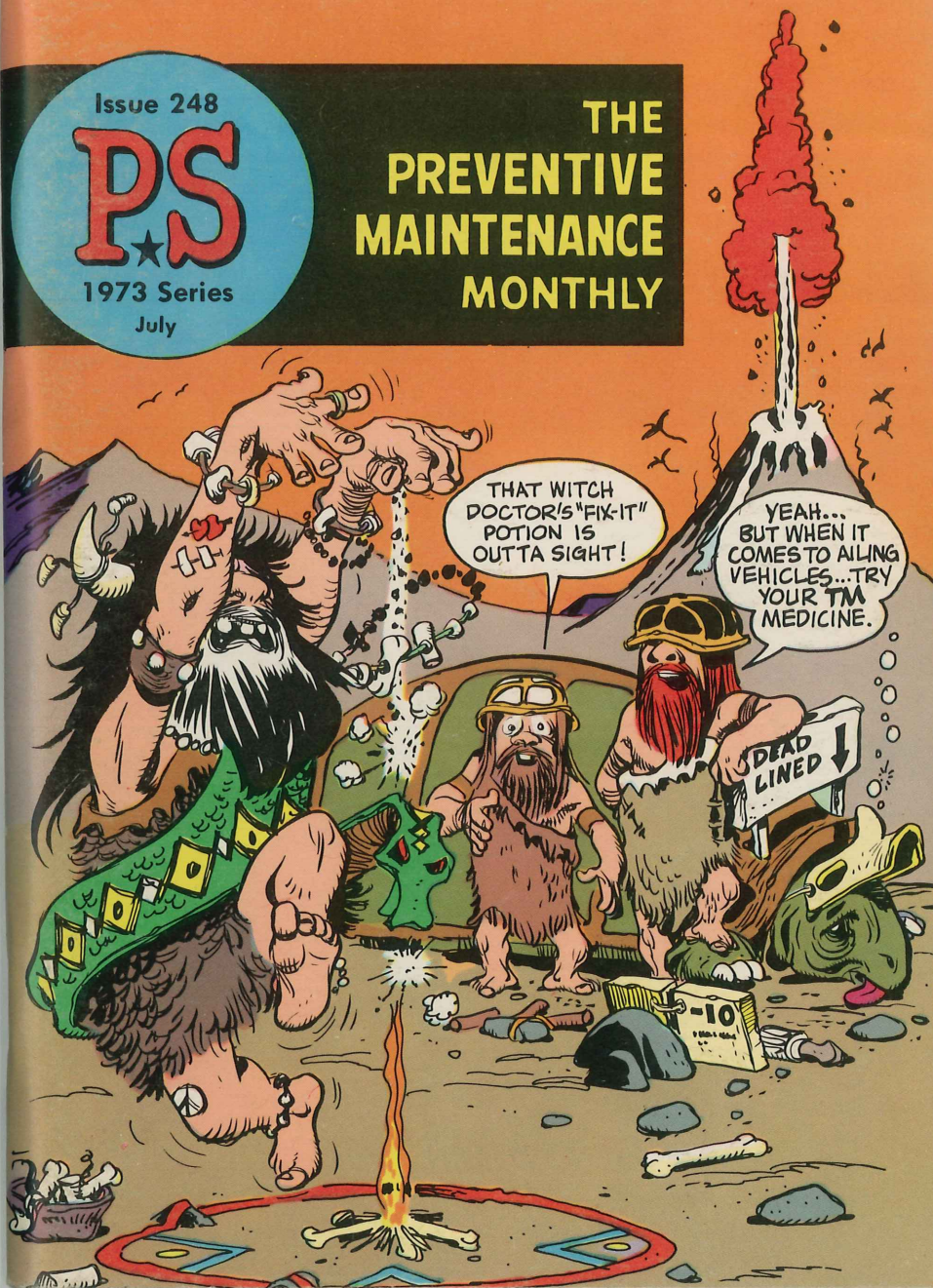
Issue 248

PS

1973 Series

July

# THE PREVENTIVE MAINTENANCE MONTHLY





MAKE YOUR POINT WITH THESE . . .

# RAP rules

YOU'RE REALLY UPTIGHT, TIGER...WHAT'S BUGGIN' YOU?

I'M ZAPPED, BONNIE...IT'S THEM PUBS, MISTAKEN INFO, EQUIPMENT FOUL-UPS, ETC... WOT DO I DO?

What's your hangup?

**MANUALS**—If there's missing, misleading or downright mistaken info in your maintenance and supply pubs, crank up a DA Form 2028.

Send it to the crew that made the mistake—as identified near the front of the manual.

**EQUIPMENT**—When your hangup is an equipment problem—design, manufacture, maintenance or whatnot—that can't be cured by normal repair or adjustment, fire in an EIR (as spelled out in TM 38-750) on DA Form 2407.

**FRESH CASH**—Could be you've found an answer to the problem? Then you may be able to collect cash for it by jotting details of your solution on DA Form 1045. Read all about it in AR 672-20. Send your suggestions to your command's incentive awards committee.

Do you react negatively to forms?

Then, write a note—any size, shape or color as long as it says what you want to say—and mail it to the outfit responsible for the pub or equipment.

And if you've got something hot, try your hot-line phone.

TRY THESE ON FOR SIZE...THEY BEAT ASPIRIN ANY DAY...THESE PUBS AND FORMS TELL HOW.

AR 310-1

PUBLICATIONS, BLANK FORMS, AND PRINTING MANAGEMENT

EFFECTIVE 28 September 1971

DA 2028

TM 38-750

THE ARMY MAINTENANCE MANAGEMENT SYSTEM (TAMMS)

HEADQUARTERS, DEPARTMENT OF THE ARMY

DA 2407

SUGGESTION

AR 672-20

DECO

INCENTIVE AWARDS

Effective 15 June 1972

HEADQUARTERS, DEPARTMENT OF THE ARMY

DA 1045

## PS THE PREVENTIVE MAINTENANCE MONTHLY

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ISSUE No. 248 JULY 1973

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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:

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

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GROUND MOBILITY

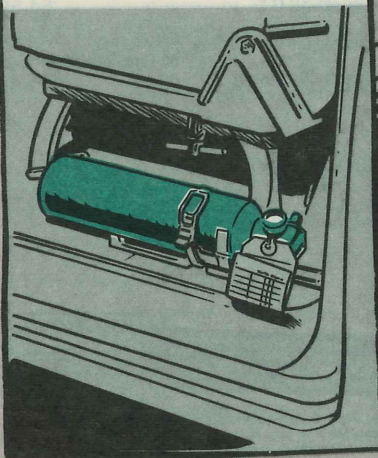
CHECK OUT YOUR TRUCK . . .

# ...BY THE NUMBERS

THESE POINTS ARE COMMON TO MOST TRUCKS.

## BEFORE OPERATION

**1 Tools and Equipment:** Make sure you've got all the tools, forms and pubs required for your vehicle. If you're s'posed to have a fire extinguisher on your truck, see that it's serviceable and mounted correctly. Fill out top of DA Form 2404, but leave off the date and signature.



### FRONT OF VEHICLE

**2 Damage:** At the front of the vehicle, check these for damage:  
Fenders: Dents, splits, rust spots, missing or loose nuts and bolts?

Grill: Breaks, missing or loose nuts and bolts?

**3 Leaks:** On the ground or underside of vehicle?



ADD 14

**4 Oil and Water Levels:** Oil level over ADD mark? Not overfull? Liquid in radiator covers the end of tubes? Cracked, loose, or broken water hoses? Loose parts? Broken or leaking fuel or oil lines? Anti-freeze recorded on DA Form 2408-1 (monthly)? Fan belt loose?

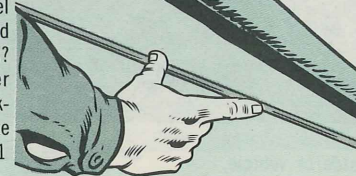
Radiator: Leaks? Bent or punctured tubes? Bugs, dirt, trash in cooling fins?

Lights: Cracked lenses, loose mounting rims? All lights secure?

Bumper: Dents, broken welds, loose or missing nuts and bolts? Any spots need painting?

Hood: Dents, cracks, missing or loose bolts? Any spots require repair or paint?

Air line connections: Dummy couplings in place? Connectors damaged?





## RIGHT SIDE

1 Damage: Look for any damage that might've happened after the vehicle was parked the night before. This should include such items as broken windows, dents, scratches, etc.

YOU SAY  
Y'R VEHICLE  
WAS FINE WHEN  
YOU PARKED  
IT LAST  
NITE?

RIGHT!  
BUT,  
I DON'T KNOW  
WHERE THAT  
DINOSAUR  
CAME FROM!

2 Tires and Wheels: Make sure tires are inflated. Make sure all wheel nuts are tight and none are missing. Valve caps on? See TM 9-2610-201-14 (Jul 72) for tires.

3 Gas Cap: Check for bad gasket.

4 Leaks: Look for leaks on the ground and underside of vehicle. Look close on inside of wheels, around transmission, transfer cases, crankcase and differentials.

## REAR

1 Damage: Look for any damage to tailgate, rear lights, trailer electrical connections, tow pintle. Connector corroded? Pintle lubed?

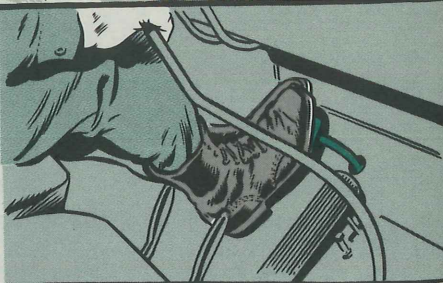
2 Air Hose Connections: Check for damage and see that dummy couplings are in place. If a trailer's hooked up to your truck, make sure all lines are connected right.

LEFT SIDE SAME AS RIGHT SIDE



## INSIDE CAB

**1** Brake pedal: Mash down on the brake pedal and hold it. The brake pedal should not creep down. If it does, there's a leak in the system—get it fixed soonest. Make sure there's plenty of space between the bottom of the brake pedal and the floorboard when the pedal's down. If the space is less than  $\frac{1}{2}$  pedal travel, the brakes should be checked and adjusted.



**2** Clutch Pedal Adjustment: See if there's enough free-travel. That's the easy movement of the clutch pedal before you feel pressure and the clutch starts to disengage. Use your hand, not your foot, so you can feel it better.

Does your free travel agree with this table?



DOES YOUR **FREE TRAVEL** AGREE WITH THIS TABLE?

### CLUTCH PEDAL FREE-TRAVEL MUST BE NO LESS THAN

1/4-ton (M151A1 etc.)	... 1 1/8 in
3/4-ton (M37B1 etc.)	..... 1 in
1 1/4-ton (M561 etc.)	.... 3/4 in
1 1/4-ton (M715 etc.)	.... 3/4 in
2 1/2-ton (M35A2 etc.)	... 1 1/2 in
5-ton (M54A2 etc.)	..... 2 in
5-ton (M813 etc.)	.... 1 1/2-2 in
10-ton (M125 etc.)	..... 1 in

FROM HERE, IT LOOKS LIKE A DEFINITE DRIVE SHAFT PROBLEM.

I GUESS Y'R RIGHT... THEY DON'T HATCH'EM LIKE THEY USE TO.

**3** Unusual Noises: Run your engine at a fast idle (do not "race" or "gun" it) and check under the hood. If you hear any strange noises, turn off the engine quick and report the trouble. If your oil gage doesn't show pressure within a few seconds, shut down and get a mechanic on it.



**4** Engine controls: Check your accelerator, throttle and choke to see that they're working right.



VERY STRANGE... I STEP ON THE ACCELERATOR AND THE HORN BLOWS.

**5** Instrument check: After your engine's been warmed up by idling for about 3 minutes, check the instruments like so:

Oil pressure: When your engine's idling, oil pressure should register not less than 15 pounds. Pressure means your engine oil pump is working. But, remember, oil pressure does not mean the crankcase is full! Pressure readings may go up or down as engine speed is increased or decreased, but a sudden drop or uneven change of pressure signals trouble. Stop the engine and find out what's causing it.





# DURING OPERATION

There's no set time for making your during operation checks. You should keep tuned in for trouble all the time you're operating.

## WHILE DRIVING

1 Brakes: Make sure all wheels are braking the same—no pulling to one side or the other. Watch for any unusual loss of pedal pressure when you apply the brakes.

2 Odd Noises: Keep a sharp ear for any unusual noises in the engine, clutch, transmission, transfer case, drive shaft and rear end.

3 Steering: Be sure there's not too much free play in your steering wheel. Notice any hard steering, wheel wobble or wandering of your vehicle from side to side. If you think something's wrong, stop and check.

4 Clutch: There should be no slipping or chatter when your clutch starts to engage. Never "ride" the clutch—keep your foot off the pedal when you're not using it.

5 Engine Operation: Be sure your engine runs smooth at all times. Listen for any knocks or pings. Your engine should be hitting on all cylinders and getting fuel right. Report any trouble.

6 Instruments: Keep an eye on 'em. A casual glance at the instrument panel will help warn you of trouble. This goes for your oil pressure, charging system, engine RPM's, fuel, air pressure, temperature and road speed.



Battery-generator indicator: With switch ON (engine not running), needle should settle up in the yellow panel; with engine running at high idle (about 1,500 RPM), needle should stay up in the green panel (at the nub).

Tachometer: It should be registering the RPM of the engine.

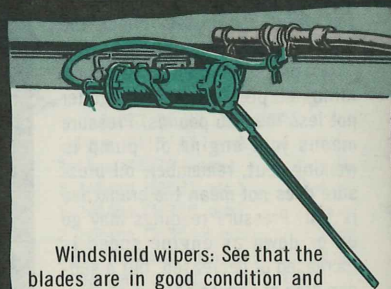
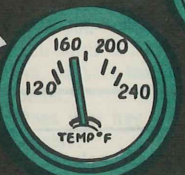
Fuel Gage: Your fuel gage should show full.

Air brake pressure gage: This tells the pressure you need to operate your brakes (100 to 105 PSI for 2 1/2 and 5 ton trucks).

Temperature gage: Normal range is from 160 to 180 degrees.

Safety Devices:  
Air Pressure Warning Buzzer: You should hear it buzz until your operating pressure reaches 65 PSI. Never move your vehicle until the warning buzzer has stopped.

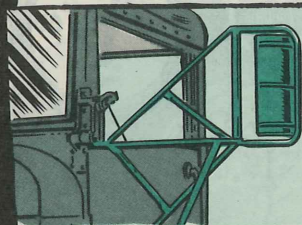
Lights: Make sure they're all burning, both high and low beam, and that tail and stop lights are OK.



Windshield wipers: See that the blades are in good condition and wipers operate.



HORN: For your own good, give a hoot for your toot



Mirrors: Make sure the mirrors are not damaged. Adjust for driving.



## AT HALT

GET OUT AND CHECK AROUND ANYTIME YOU'RE STOPPED FOR A FEW MINUTES.

WHOA THERE... VARMINT!

OK. LET'S CHECK'ER OUT.

1 Leaks: Look at the ground under your vehicle for any signs of leaks. Eyeball under the hood for fuel, oil or water leaks.

2 Tires and Wheels: Check your tires to be sure they're inflated. Check all wheel lug nuts; make sure they're in place and tight. Take out any rocks you find between dual tires.

3 Loose Nuts and Bolts: Look at undercarriage and body mountings for loose or missing nuts and bolts.

4 Oil, Water and Fuel: At your last halt of the day, and before parking your truck for the night, check and refill as needed: Crankcase with Oil, Radiator with Water, and Fuel Tank with Fuel. Record fuel and oil on the (DA Form 2408-1).

VAROOM  
VAROOM

## AFTER OPERATION

RUN'ER UP AGAIN. I HEAR SOME WEIRD SOUNDS.

1 Run the Engine: Listen for any unusual noises you may have not noticed during operation. And, at the same time, hit these:

Air Pressure Warning Buzzer: Make sure it's operating and quits buzzing at the right pressure.

Mirrors: Not broken or loose. Adjusted for rear-view vision.

Lights: See that all lights are in operating condition (check high and low beams), including the tail and stop lights.

Windshield Wipers: Make sure they operate, and rubber on the blades is not damaged.



## UNDER HOOD

1 With the engine idling, lift the hood and look for:

Leaks: Look around the valve cover, oil filters and fuel lines.

Loose parts: Vibration in the generator, water pump, fan and air cleaner; any loose wiring or mountings.

Check exhaust and intake manifolds for cracks or signs of leaks. Same for the cylinder head gasket. See if there're leaks in the radiator tank, core or connecting hoses. Watch out for that fan—and keep your fingers on your hands.

WELL, SEE ANYTHING STRANGE?

I SURE WILL, WHEN YOUR FINGERS START TOUCHIN' THAT FAN...

2 Engine stopped—check fan belt tension.

MORE

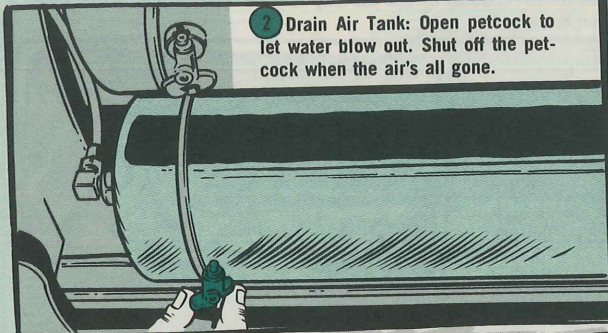


# LEFT SIDE

1 Leaks: Signs of leaks on the ground and underside of vehicle.



2 Drain Air Tank: Open petcock to let water blow out. Shut off the petcock when the air's all gone.

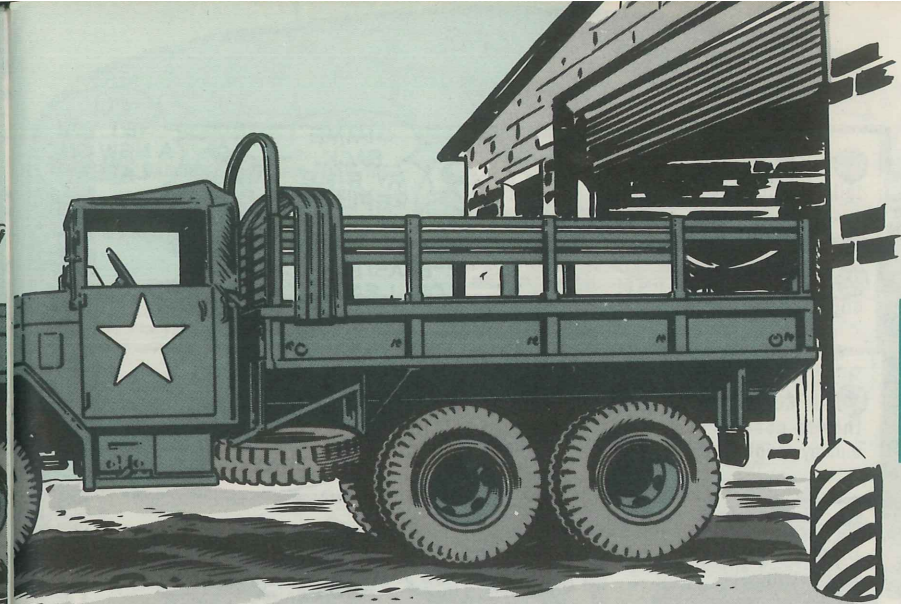
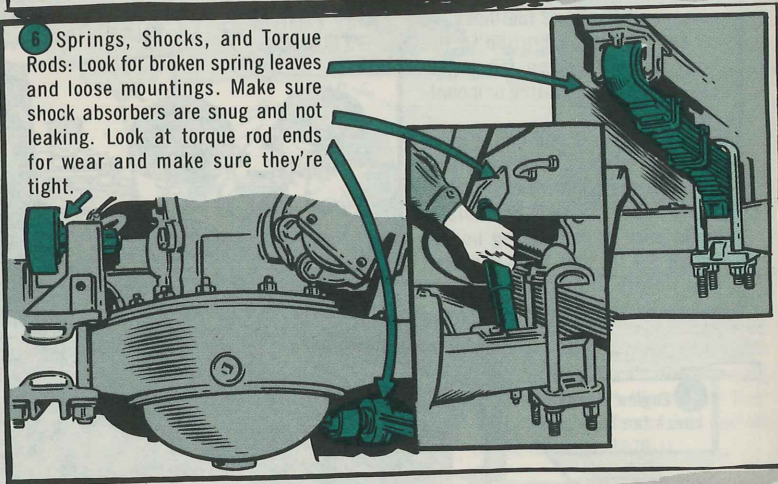


3 Fuel Tank: Check for bad gasket on cap.

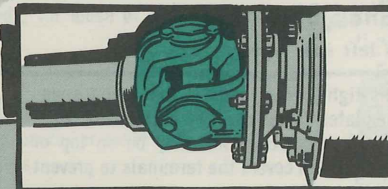
4 Damage: Dents and scratches (bare metal spots that need painting).

5 Tires and Wheels: Make sure tires are correctly inflated. See that all wheel lug nuts are in place and tight.

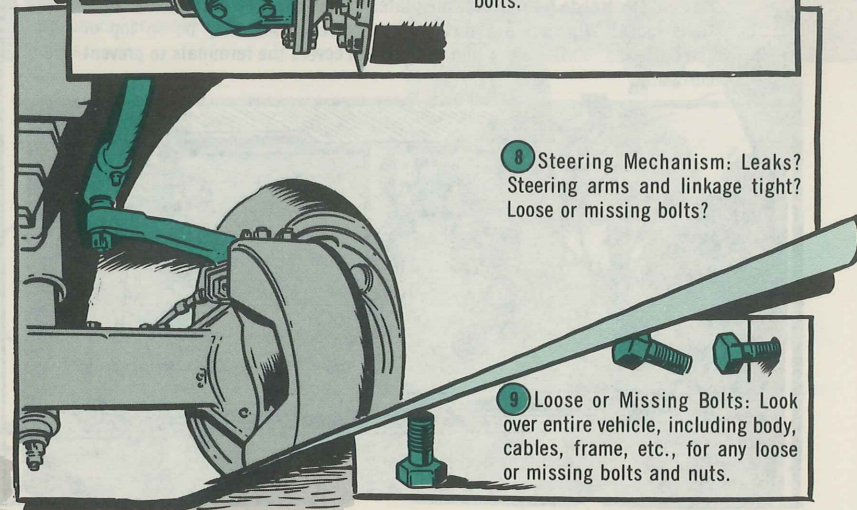
6 Springs, Shocks, and Torque Rods: Look for broken spring leaves and loose mountings. Make sure shock absorbers are snug and not leaking. Look at torque rod ends for wear and make sure they're tight.



7 Drive Shaft and U-joints: Look for sloppy play and loose nuts and bolts.



8 Steering Mechanism: Leaks? Steering arms and linkage tight? Loose or missing bolts?



9 Loose or Missing Bolts: Look over entire vehicle, including body, cables, frame, etc., for any loose or missing bolts and nuts.



## REAR

① Damage: Lights, reflectors, tailgate and body.



I'LL GET YOU A NEW ONE LATER.

② Leaks: Wet spots on the ground, dripping from the gear cases.



BLASTED OIL LEAKS.

③ Air Connections: Make sure they're not damaged and that dummy couplings are in place.



IT AIN'T NO SNAKE...SO IT'S GOTTA BE THE AIR CONNECTIONS.

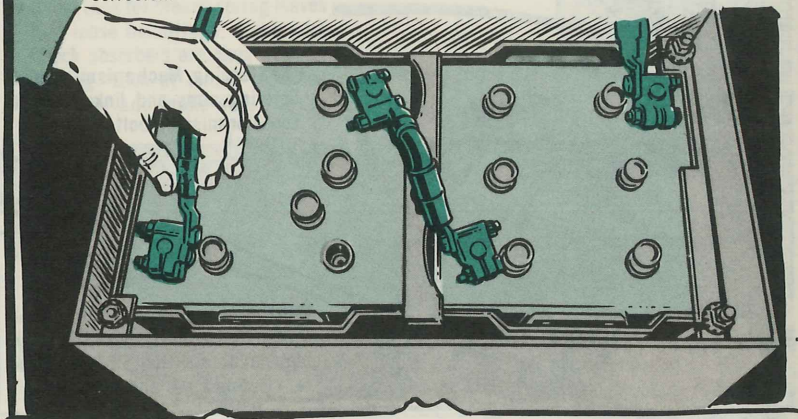
④ Loose or Missing Nuts or Bolts: On the tailgate, mud flaps and undercarriage.



## RIGHT SIDE

Right side same as left side except for . . .

Battery: Holddown connections tight? Filler caps in place and snug. Be sure electrolyte level is over the plates (do not overfill). Terminal connections loose? Wipe off any dirt or condensation that may be on top of the batteries. Make sure a thin coat of GAA covers the terminals to prevent corrosion.



## FRONT

① Damage: Look over front fenders, grill, hood and bumper for dents, rust spots, broken welds, missing bolts and nuts.



A SLIGHT MISHAP, NO DOUBT!

② Leaks: Signs of leaks on the ground and underside of vehicle.



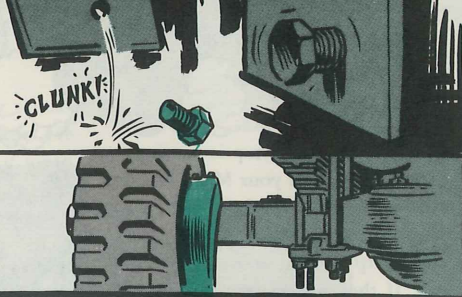
I WOULD SAY YOU HAD THIS LEAK FOR A WHILE.

③ Steering linkage: Look for loose tie rod ends and drag link play.



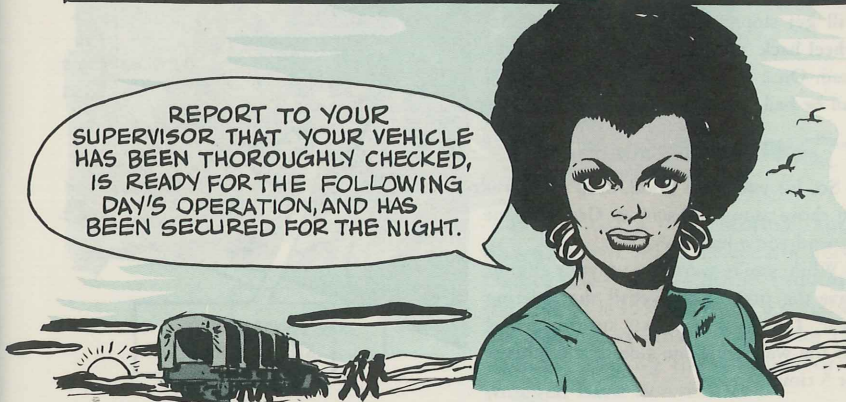
CLUNK!

④ Loose Nuts and Bolts: Run your eyes over all mounting bolts, including those on the fender and body, for loose or missing parts.



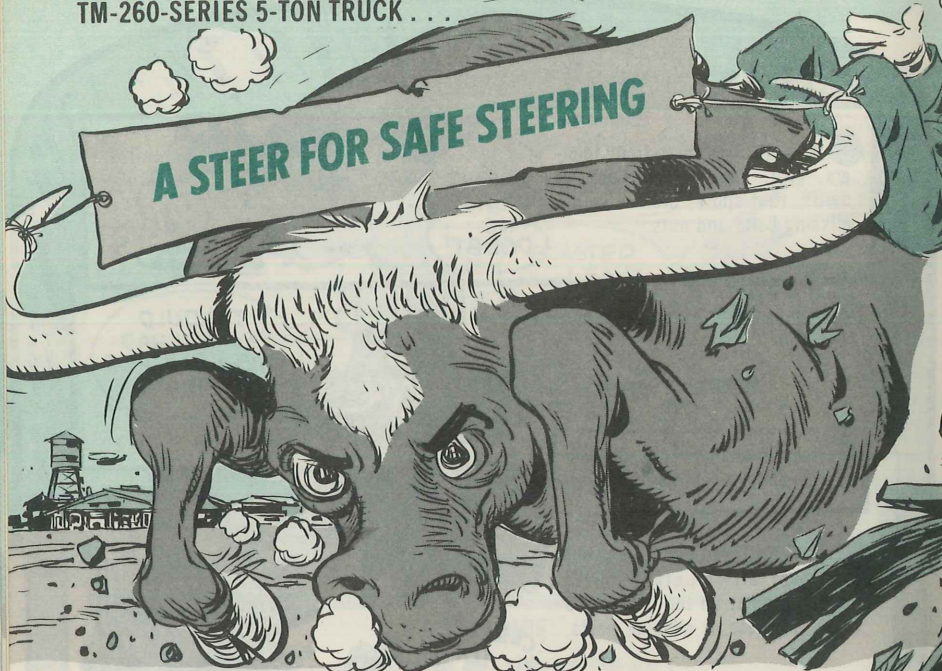
⑤ CV Joints: Look for torn or leaking boots, or rusty and worn ball joints.

REPORT TO YOUR SUPERVISOR THAT YOUR VEHICLE HAS BEEN THOROUGHLY CHECKED, IS READY FOR THE FOLLOWING DAY'S OPERATION, AND HAS BEEN SECURED FOR THE NIGHT.





## A STEER FOR SAFE STEERING



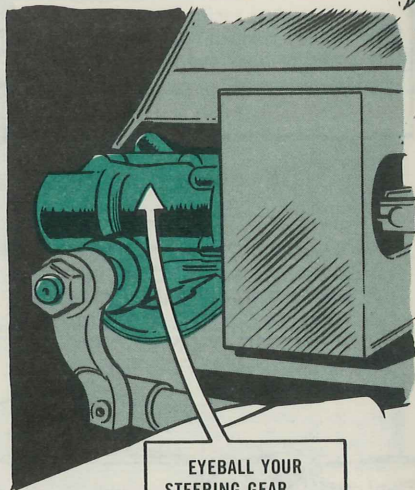
A better mounting setup is coming for that steering gear on your M813 or other TM-260-series 5-ton truck.

But, in the meantime, you'd sure better keep a sharp eye on those 4 mounting screws. If they loosen up, your steering will get sloppy. You'll be cranking that wheel back 'n' forth trying to stay on the road. On a curve or in heavy traffic, that can be bad—read bad!

### EYE THOSE SCREWS

So, for your own good, keep close tabs on those mounting screws. Get someone to lend you a hand, like so . . .

While you're warming up your engine, have the other guy eyeball the steering gear. Then you turn your steering wheel all the way from one side to the other 4 or 5 times.

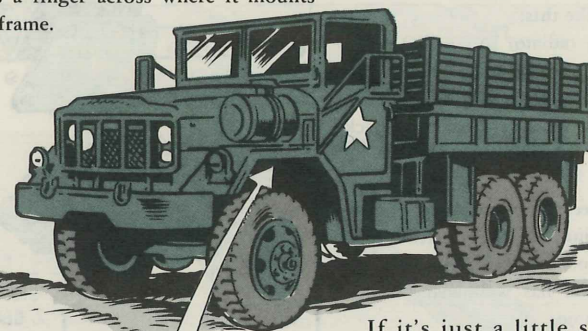


EYEBALL YOUR  
STEERING GEAR . . .

I'VE GOT  
A BUM  
STEER!!

Your sidekick will probably see the steering gear move or twist a little. This's because it's working hard to turn your wheels sittin' still. That's OK.

But if he sees the steering gear shucking around—even a little—it's loose! He may even hear it. Or he can feel it when he lays a finger across where it mounts to the frame.



. . . LOOK UP  
UNDER HERE

If it's just a little sloppy, shut down, right now! There's a good chance one—or all—of the 4 mounting screws is loose. You're a sure bet for steering trouble if you take off without getting the whole works snugged back down.





## NOW, YOU MECHANICS

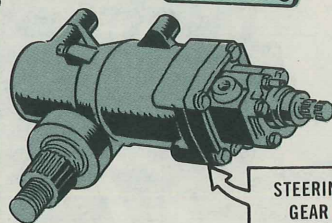
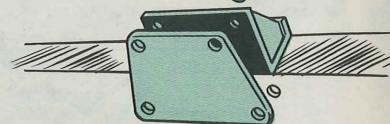
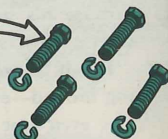
This's where you mechanics come in—with your torque wrench. First, though, get your support's OK to tackle the job. The steering gear and mounting parts are in DS territory. If they give you the nod, go at it like this:

Take off the radiator so you can get at the bottom front mounting screw. Now loosen all 4 screws just enough to take off all torque. Then tighten 'em back down to 260-280 lb-ft torque. That should do the trick.

But if the steering gear still won't hold snug after testing, the screw threads may be bugged or even stripped. Or the shucking around has wallowed out the holes in the frame.

If your DS gives you the go-ahead, take out the screws and look for damaged threads. New screws come under FSN 5305-836-8346. They're coded "F" in TM 9-2320-260-35P/1 (Jun 70), so your support'll have to get 'em for you.

THESE GET  
260-280  
LB-FT TORQUE



While you've got it torn down, scrape off every bit of paint where the parts come together. This'll give you a good metal-to-metal contact when you put 'er back.



There're 2 different shear pins for winches on TM-206-series 10-ton trucks. That one in TM 9-2320-206-20P (Dec 71) w/Ch 1—listed under FSN 5315-421-1676—is only for the M123A1C and M123E2 trucks. FSN 5315-282-2583 brings the right shear pin for the M123, M123C and M125 trucks. The straight poop is on page B-5, TM 9-2320-206-10 (Feb 72).

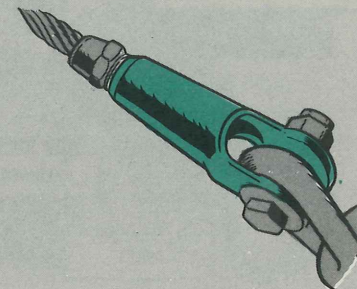
They look alike, but . . .

FSN 5315-421-1676  
only for  
M123A1C and M123E2 trucks

FSN 5315-282-2583  
only for  
M123, M123C and M125 trucks

## WRECKER WINCH PART

That 3/4-in clevis clamp for your TM-211-series 5-ton medium wrecker truck (M62, M543, etc.) is now called "socket." You get it with FSN 4030-706-5553. This's shown as Item 13, Figure 109, TM 9-2320-211-20P (Mar 63). It's the same item listed as Clevis Assembly: 3/4-in Cable in TM 9-2320-260-20P (Jun 70) for the M816 5-ton wrecker.





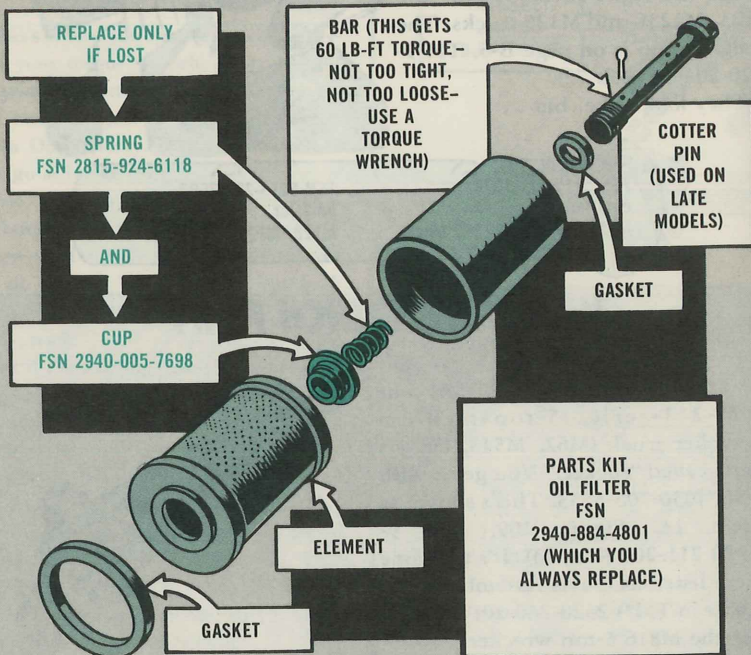
# MF OIL FILTER PARTS

They're for all multifuel engine oil filters:

—Parts Kit, Oil Filter, FSN 2940-884-4801, listed in Ch 3 (Apr 70) to TM 9-2320-211-20P and in TM 9-2320-209-20P (Oct 72). This includes the filter element and gaskets you need—plus some gaskets you don't need.

—Spring, FSN 2815-924-6118 } **NOT INCLUDED IN KIT**  
—Cup, FSN 2940-005-7698 }

The spring and cup are in TM 9-2320-209-20P. You won't need new ones, though, if you're careful. Some guys don't know they're in the filter and toss 'em out with the old element.



## M113/M113A1 SERIES CARRIERS

### UNLATCHED HATCH HAZARDS

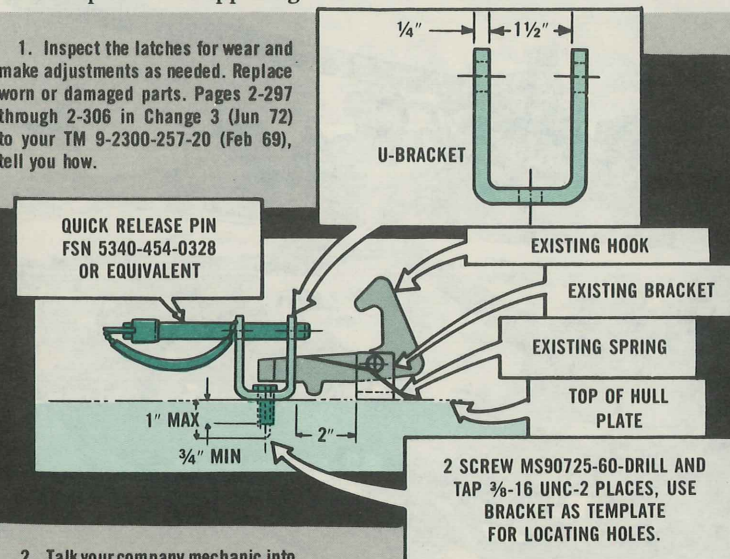


The driver's, commander's, or cargo hatch on your M113/M113A1 series carrier could give you a bad lump on the head—or worse—if it slips its latch at the wrong time.

Say you're going cross-country with the cargo hatch latched in the open position. If the latch lets go, somebody could get badly hurt, if he happens to be standing in the hatch opening.

To keep it from happening:

1. Inspect the latches for wear and make adjustments as needed. Replace worn or damaged parts. Pages 2-297 through 2-306 in Change 3 (Jun 72) to your TM 9-2300-257-20 (Feb 69), tell you how.



2. Talk your company mechanic into making some U-brackets to hold open the driver's and cargo hatches. (The commander's hatch should be strapped down in the open position, because the U-brackets won't work on it.) Item 3-8 in TB 750-981-1 (Jan 73) has the word.





STOP! LOOK & LISTEN—

# DIESEL ENGINE DOPE

If you haven't read the poop in TB 750-652 (Jun 70), now's the time to glue your eyes to it.

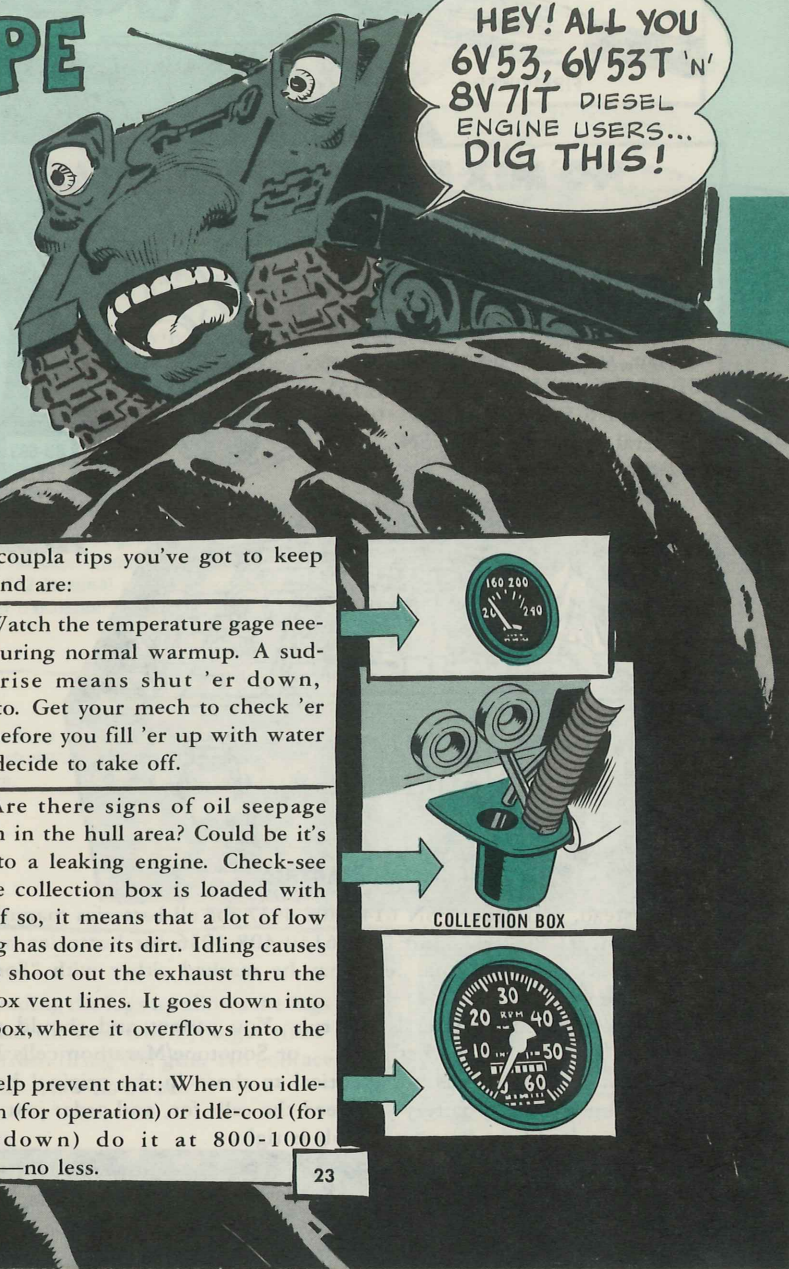
The PM message there for the 6V53, 6V53T and 8V71T diesel engines (found in a lotta track-type vehicles) is worth scads of dough, maybe even your own skin.

It's the word on good daily PM for you operators and the pulling of services by mechs that can mean long life for your engine.

You'll find things like the causes of overheating . . . and what dirt in the air and the fuel will do to your engine. Then, you'll read about slip-shod operations by some operators and sloppy PM services by some mechanics. And lots more, things you avoid like the plague.



22



A coupla tips you've got to keep in mind are:

- Watch the temperature gage needle during normal warmup. A sudden rise means shut 'er down, pronto. Get your mech to check 'er out before you fill 'er up with water and decide to take off.

- Are there signs of oil seepage down in the hull area? Could be it's due to a leaking engine. Check-see if the collection box is loaded with oil. If so, it means that a lot of low idling has done its dirt. Idling causes oil to shoot out the exhaust thru the air-box vent lines. It goes down into the box, where it overflows into the hull.

To help prevent that: When you idle-warm (for operation) or idle-cool (for shutdown) do it at 800-1000 RPM—no less.



23



# VULCAN TIPS

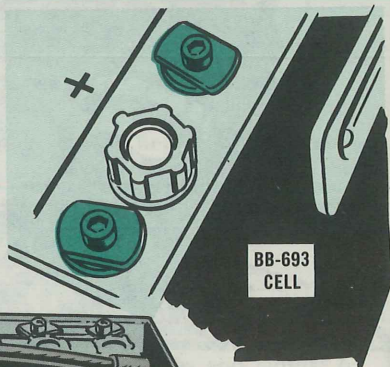


FIREPOWER

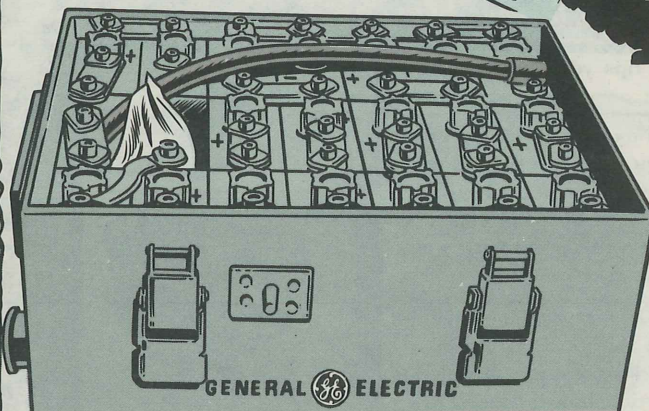
## NO MIX FOR BATTERY CELLS

Stop here a minute if you're about to request replacement cells for the BB-693/U battery used with your Vulcan ADA rig.

First off, new cells are in the supply system, so you no longer order the BB-600/A cell FSN 6140-842-0433 (Gulton); FSN 6140-881-6889 (General Electric), or FSN 6140-881-6887 (Sonotone).



BB-693  
CELL



Instead, you order FSN 6140-408-4937 for all batteries manufactured by General Electric, and FSN 6140-408-4936 for batteries made by Sonotone. The Sonotone cells may be marked either with "Sonotone" or "Marathon."

And there, of course, is the rub. You cannot and should not put GE cells in a Sonotone battery . . . or Sonotone/Marathon cells in a GE battery. The new cells are identical to those in the original batteries.

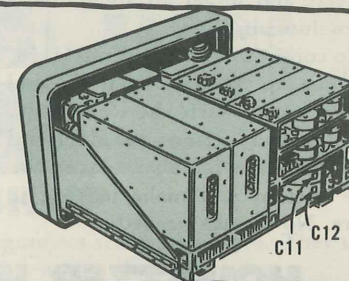
So, know which battery you need the cells for, and order just enough cells to rebuild the battery. Supply is tight.

## VPS - 2 SHORT FIX

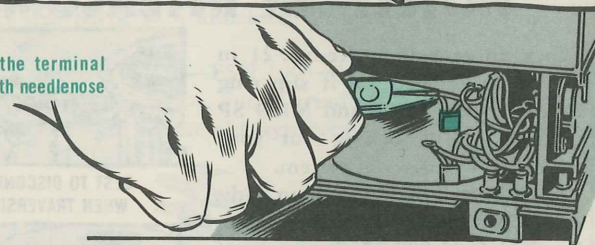
If shooting is giving the shorts to your AN/VPS-2 radar set, here's a fix that'll keep your XM163 and XM167 Vulcan AA systems on target:

Disconnect the power supply cables to keep 'em from being twisted.

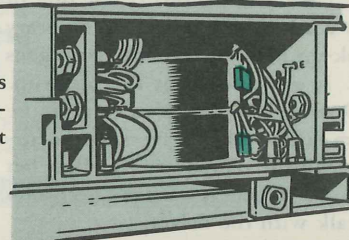
Take the radar's power supply from the case. Eyeball the C11 and C12 terminal lugs on the power transformer.



S-l-o-w-l-y bend the terminal lugs straight up with needle-nose pliers.

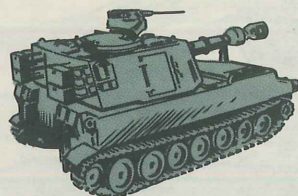


Bending the lugs up allows the lugs to clear the case when you get vibration from firing the gun. No contact—no shorts—no sweat.





## M109 SP HOWITZER



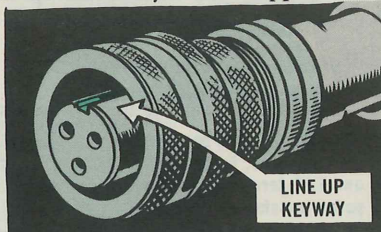
# TELESCOPE CABLE CONNECTION

Cable assembly FSN 1240-864-0363 is its name and connecting is its game. It's the electrical link between the M146 mount and the M118 telescope in your M109 SP howitzer.

Now, the end that you're supposed to attach to the M118 can shake you up. It has no threads—even though the M118's connector has threads where the cable is supposed to fit. So what do you do?

Relax and forget all about the threads . . . they're not supposed to screw into anything.

To connect the cable to the M118, you line up the keyway at the end of the cable with the key in the threaded connector on the M118 and push the cable in as far as you can. The friction will make it hang in there. No threads needed.

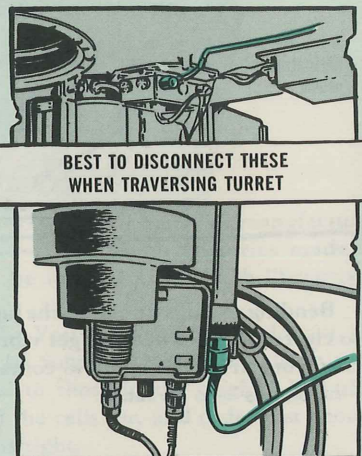


## HOWITZER INTERCOM FIX

Lock an eyeball on item 2-21 in TB 750-911-2 (Feb 73) if slip ring failures on the M108 and M109 SP howitzers are knocking out your AN/VIC-1(V) intercom system.

The TB authorizes use of an additional CX-4723 (20-ft) cable assembly, FSN 5995-889-0757, or one of two cord assemblies as a temporary hook-up if the driver intercom goes out. It also spells out the hook-up.

One big caution: You've gotta be extra careful when traversing the turret with the temporary rig. Best bet is to disconnect it until it's necessary to talk with the driver.



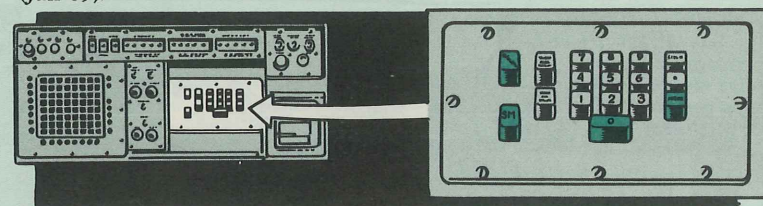
# NEW FADAC KEYS

You can now get these replacement keys for your FADAC keyboard:

KEY	FSN
ENTER	1220-562-6708
RECALL	1220-562-8123
SM	1220-562-8403
0	1220-562-6699

When any of these wear out, you no longer have to replace the keyboard. Just order the keys you need.

The new items are going in a change to your TM 9-1220-221-20P (Jan 69).



## BRUSH UP

Top notch M60 7.62-MM machinegunners score big on PM. They use the right tool for those before-and-after-action cleanup chores.

"Jury rig" tools scar parts, skin knuckles, blow tops and cost money for damaged replacement items.

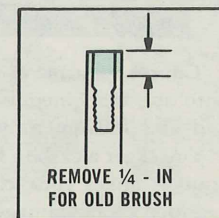
So, use the new receiver brush—FSN 1005-350-4100—with cleaning rod section, FSN 1005-726-6109. Or, cut or grind off ¼ inch of cleaning rod so it'll fit good and tight on the old style receiver brush, FSN 1005-650-4508.



OLD RECEIVER  
CLEANING BRUSH  
1005-650-4508



NEW RECEIVER BRUSH  
1005-350-4100



CLEANING ROD SECTION  
1005-726-6109





RAT-TAT-TAT!  
POW-BANG!

KEEP  
MAKING LIKE  
AN M60  
TILL I GET  
THIS BFA  
FIXED...

M60  
BFA PM

Getting short-changed by your M60 7.62-MM machinegun when using the blank firing attachment? Like maybe you'll get off only 50 or 100 rounds before the automatic fire sputters to a single b-u-r-r-pht!

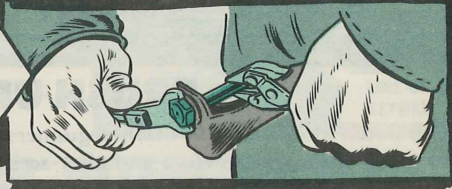
Take a look at the BFA. A loose one lets too much gas escape out the muzzle. No recoil pressure—no chambering—no automatic fire.

Make this adjustment—on new as well as on old BFA's.

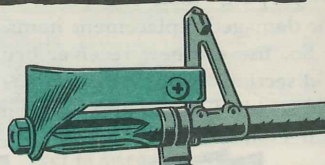
Turn the orifice tube a smidgen, or enough so that the BFA fits real snug on the muzzle.



Use an adjustable wrench or pliers to turn the orifice tube in the mount frame.



No end play is what you want—after the rear of the frame is forced around the front leg of the front sight.



'Course, you never want the BFA to come unglued when it's hooked onto the machinegun. MWO 9-1005-224-20/2 (Feb 63) helps stop side and end movement with a pair of stiffener plates and center spacer.

You'll get a carbon buildup inside the weapon f-a-s-t when using blank ammo. This's your clue to extra PM coming up. Eyeball the M60 for unlubed spots, damaged or worn parts, and carbon buildup in the receiver and gas cylinder.

Clean the cylinder if the piston fails to move when the barrel is tilted end for end.

RBC is the cleaner, and LSA is the lube to use.

ARMS ROOM  
PADLOCK

Here's the latest FSN info on the arms room padlocks called for by AR 190-11 (Aug 71).

FSN 5340-799-8248 covers the high security lock with a shrouded shackle.

FSN 5340-799-8016 is for the one with the shackle exposed.

Both locks come with a clevis and chain.

Secondary padlocks for your arms room are:

FSN 5340-158-3805 (without clevis and chain).

FSN 5340-158-3807 (with clevis and chain).

The one with clevis and chain is best in most places because you can anchor it.

Keeps the lock and its key from getting banged up or busted.



HIGHER,  
HIGHER,  
GRUNT!

GET A  
WINCH!

ARMORER  
CAVE

CHECK OUT  
YOUR SMALL ARMS  
TOOL KIT. IF IT'S  
SHORT, OR IF YOU  
NEED REPLACEMENTS,  
SEE SC 4933-95-  
CL-A07 (APR 71).

# SMALL ARMS REPAIRMAN TOOL KIT

Small arms need big doses of by-the-book PM to keep 'em battle ready. Pulling PM with the right tool at the right time heads off big clean up and maintenance headaches.

Match your Small Arms Repairman Tool Kit—FSN 4933-357-7770—with these shown here. If you don't have all the tools, or if some are battered, busted or broken, replace 'em ASAP. SC 4933-95-CL-A07 (Apr 71) will steer you straight.

BOX, PLASTIC, SMALL PARTS: 16 compartments 1 in x 1½ in, 1 compartment 4¾ in x 1½ in, 7¾ in lg x 4¼ in w x 1¼ in h, w/ hinged cover



FSN 8115-663-0212

2

CAPS, VISE JAW: copper face, 2½ in w jaws



FSN 5120-246-4746

CHISEL, COLD, HAND: ¾ in w cut, 5½ in lg o/a



FSN 5110-242-3457

30

DRIFTPIN: sgle taper, ¼ in largest dia, 4 in lg o/a



FSN 5120-239-0035

DRIFTPIN: sgle taper, ½ in largest dia, 4 in lg o/a



FSN 5120-239-0036

FILE, HAND: American patt, fl type, dble cut sm faces, sgle-cut sm edges, 6 in heel to pt



FSN 5110-234-6532

FILE, HAND: American patt, half-rd type, dble cut sm face, sgle-cut sm face, 6 in heel to pt



FSN 5110-241-9149

FILE, HAND: American patt, rd type, 1¼ in dia of largest sec, sgle-cut sm cut, 6 in heel to pt



FSN 5110-234-6550

YOU SHOULD'A  
PUT A  
HANDLE ON  
TH' FILE.



FILE, HAND: American patt, slim taper type, sgle-cut handsaw faces and edges, 6 in heel to pt



FSN 5110-234-6528

FILE SET, HAND: sw-patt, needle type, No. 0 cut, 5½ in lg o/a, 12 files, w/case, c/o 1 ea barrette



crossing ..... 5110-249-2883

equaling ..... 5110-166-1207

flat ..... 5110-249-2882

half-round ..... 5110-245-4160

joint ..... 5110-239-3276

knife ..... 5110-166-1203

marking ..... 5110-293-1488

round ..... 5110-166-1201

slitting ..... 5110-239-7609

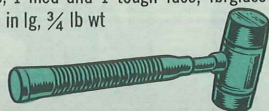
square ..... 5110-239-7597

three square ..... 5110-239-7586

FSN 5110-204-2684



HAMMER, HAND: 1 in dia screw-in inserted faces, 1 med and 1 tough face, fbrglass hdl, 11 $\frac{3}{8}$  in lg,  $\frac{3}{4}$  lb wt



FSN 5120-903-7871

FACE, HAMMER, INSERTED: med plastic

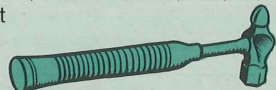
FSN 5120-293-3003

FACE, HAMMER, INSERTED: tough plastic

FSN 5120-596-1072

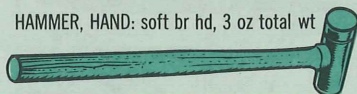


HAMMER, HAND: machinist's, ball peen, 8 oz hd wt



FSN 5120-061-8541

HAMMER, HAND: soft br hd, 3 oz total wt



FSN 5120-242-3908

HANDLE, FILE, WOOD: 1 in dia, 4 in lg o/a small size



FSN 5110-263-0342

4



HANDLE, FILE, WOOD: 1 $\frac{1}{4}$  in dia, 4 $\frac{1}{2}$  in lg o/a med size



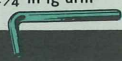
FSN 5110-263-0349

HANDLE, SOCKET WRENCH: rvs rtc palm grip type,  $\frac{3}{8}$  in drive end, 1 $\frac{1}{8}$  in lg o/a



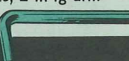
FSN 5120-786-3782

KEY, SOCKET HEAD SCREW: hex type, L-type hdl,  $\frac{1}{8}$  in w across flats, 1 $\frac{3}{4}$  in lg arm



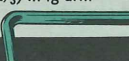
FSN 5120-198-5398

KEY, SOCKET HEAD SCREW: hex type, L-type handle,  $\frac{3}{32}$  in w across flats, 2 in lg arm



FSN 5120-242-7410

KEY, SOCKET HEAD SCREW: hex type, L-type hdl,  $\frac{7}{64}$  in w across flats, 2 $\frac{3}{32}$  in lg arm

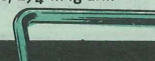


FSN 5120-889-2162

TOO MUCH MUSCLE BUSTS KEY WRENCHES.

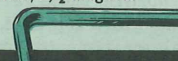


KEY, SOCKET HEAD SCREW: hex type, L-type hdl,  $\frac{1}{8}$  in w across flats, 2 $\frac{1}{4}$  in lg arm



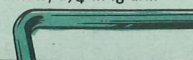
FSN 5120-240-5292

KEY, SOCKET HEAD SCREW: hex type, L-type hdl,  $\frac{3}{32}$  in w across flats, 2 $\frac{1}{2}$  in lg arm



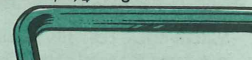
FSN 5120-198-5392

KEY, SOCKET HEAD SCREW: hex type, L-type hdl,  $\frac{3}{16}$  in w across flats, 2 $\frac{3}{4}$  in lg arm



FSN 5120-240-5300

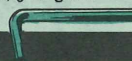
KEY, SOCKET HEAD SCREW: hex type, L-type hdl,  $\frac{3}{16}$  in w across flats, 3 $\frac{3}{4}$  in lg arm



FSN 5120-240-5274



KEY, SOCKET HEAD SCREW: hex type, L-type hdl,  $\frac{3}{64}$  in across flats, 1 $\frac{7}{8}$  in lg arm



FSN 5120-224-2504

OILER, HAND: 6 oz cap, pressure fed by int pump S body, ni-pltd fin, 1 $\frac{1}{8}$  in bottom dia, 6 in lg spout w/removable tip, w/closure cap attached, w/o holder bracket



FSN 4930-985-2604

PADLOCK: pin tumbler type, individually keyed, 5,000 key changes, 1 $\frac{1}{2}$  in w x 1 $\frac{1}{4}$  in h br-bz case,  $\frac{3}{4}$  in clearance .240 in to .323 in dia br-bz shackle, w/clevis, chain, and 2 keys

FSN 5340-682-1508



PLIERS: lg rd nose, w/cutter, 6 in size



FSN 5120-247-5177

PLIERS, DIAGONAL CUTTING: 6 in size



FSN 5110-239-8253

PLIERS: parallel action jaws, w/cutter, 6 $\frac{1}{2}$  in size



FSN 5120-224-1541

PUNCH, CENTER, SOLID:  $\frac{5}{32}$  in dia at top of tapd pt,  $\frac{3}{8}$  in stk dia, 4 in lg o/a



FSN 5120-293-3509

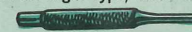
PUNCH, CENTER, SOLID:  $\frac{3}{64}$  in dia at top of tapd pt,  $\frac{1}{4}$  in dia of stk, 3 $\frac{3}{4}$  in lg o/a



FSN 5120-293-3510

2

PUNCH, DRIVE PIN: stght type, 0.070 in dia, 1 $\frac{1}{8}$  in lg pt



FSN 5120-840-7288



PUNCH, DRIVE PIN: stght type, 0.055 in dia,  $\frac{5}{8}$  in lg pt

FSN 5120-840-7289

PUNCH, DRIVE PIN: stght type,  $\frac{1}{8}$  in dia,  $1\frac{1}{2}$  in lg pt

FSN 5120-752-9030



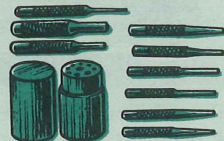
PUNCH, DRIVE PIN: stght type,  $\frac{1}{8}$  in dia,  $3\frac{1}{2}$  in lg pt

FSN 5120-223-1014

PUNCH, DRIVE PIN: stght type,  $\frac{5}{32}$  in dia, 2 in lg pt

FSN 5120-752-9031

PUNCH SET, DRIVE PIN: 9 stght punches, w/ case



pt dia in	pt lg in	
$\frac{1}{16}$	$\frac{1}{2}$	5120-240-6082
$\frac{3}{32}$	$\frac{1}{16}$	5120-242-3435
$\frac{1}{8}$	$\frac{3}{4}$	5120-242-5966
$\frac{5}{32}$	$\frac{1}{8}$	5120-240-6104
$\frac{3}{16}$	$\frac{1}{8}$	5120-293-0791
$\frac{7}{32}$	1	5120-293-0792
$\frac{1}{4}$	1	5120-240-6083
$\frac{5}{16}$	1	5120-293-0793
$\frac{3}{8}$	1	5120-273-0001

FSN 5120-883-3003

RASP, HAND:  $1\frac{3}{8}$  in w x  $\frac{3}{8}$  in thk at largest sec, sm cut faces, file cut edges, 12 in heel to pt

FSN 5110-233-9722

SCREWDRIVER, CROSS TIP: plastic hdl, Philips No. 1 tip, 3 in lg blade,  $\frac{3}{8}$  in female sq-drive in end of hdl

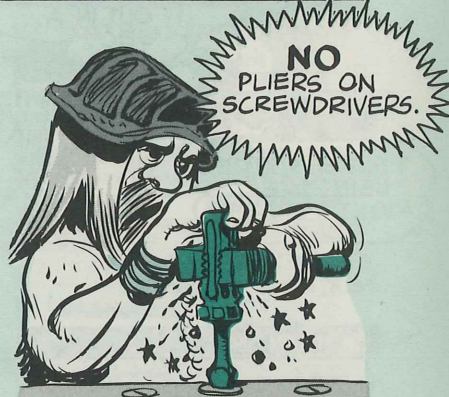
FSN 5120-764-8080

SCREWDRIVER, FLAT TIP: plastic hdl,  $\frac{1}{4}$  in w flared tip,  $1\frac{1}{2}$  in lg blade,  $\frac{3}{8}$  in female sq-drive in end of hdl

FSN 5120-832-6223

SCREWDRIVER, FLAT TIP: plastic hdl, plain,  $\frac{1}{4}$  in w flared tip, 4 in lg blade,  $\frac{3}{8}$  in female sq-drive in end of hdl

FSN 5120-764-8058



SCREWDRIVER, FLAT TIP: plastic hdl, plain,  $\frac{3}{8}$  in w flared tip, 8 in lg blade,  $\frac{3}{8}$  in female sq-drive in end of hdl

FSN 5120-764-8060

SCREWDRIVER, FLAT TIP: plastic hdl, stght sided tip,  $\frac{3}{4}$  in w, 5 in lg blade,  $\frac{3}{8}$  in female sq-drive in end of hdl

FSN 5120-010-7913

SCREWDRIVER, FLAT TIP: Hercules Tool Corp. No. CB316-5, or equal

FSN 5120-042-6837

SCREWDRIVER, FLAT TIP: plastic hdl, w/pocket clip,  $\frac{1}{8}$  in w flared tip, 2 in lg blade

FSN 5120-236-2140



SCREWDRIVER, JEWELER'S SWIVEL KNOB: 0.070 in w tip, w/1 removable blade

FSN 5120-180-0728

STONE, SHARPENING: half-rd, syn, al-oxide, fine grit, 4 in lg x  $\frac{3}{8}$  in w x  $\frac{3}{8}$  in thk o/a

FSN 5345-224-6595

STONE, SHARPENING: natural, unmtd, hard grit, sq,  $\frac{1}{4}$  in thk x  $\frac{1}{4}$  in w x 3 in lg

FSN 5345-243-6087

STONE, SHARPENING: natural, unmtd, hard grit, rd-edge slip, 4 in lg x  $1\frac{3}{4}$  in w x  $\frac{1}{2}$  in thk edge,  $\frac{1}{8}$  in thin edge

FSN 5345-243-6086

STONE, SHARPENING: rd, syn, unmtd al-oxide or silicon carbide, fine grit, 4 in lg x  $\frac{3}{8}$  in thk

FSN 5345-584-4554

STONE, SHARPENING: sq, syn, al-oxide or silicon carbide, fine grit, 6 in lg x  $\frac{3}{8}$  in w x  $\frac{3}{8}$  in thk

FSN 5345-584-4607

STONE, SHARPENING: tri, syn, al-oxide fine grit, 4 in lg x  $\frac{3}{8}$  in w x  $\frac{3}{8}$  in thk

FSN 5345-584-4615

TAPE, MEASURING: S, general purpose distance measuring type,  $\frac{1}{2}$  in w x 72 in lg, grad in units of  $\frac{1}{32}$  in,  $\frac{1}{16}$  in, and 1 in,  $\frac{1}{32}$  in increments 1st 6 in upperside,  $\frac{1}{16}$  in increments on bal of ribbon, lh to rh reading, w/case, butt end type, pull-push rewind

FSN 5210-287-3335

TOOL BOX, PORTABLE: S, enmld fin and painted, 16 in lg x  $8\frac{1}{2}$  in w x  $10\frac{3}{4}$  in h o/a excl projections, 5 drawers, w/panel front, lkg facilities incl, nonintegral lock, 2 additional handles located on sides

FSN 5140-449-6856

VICE, BENCH, CLAMP BASE: stationary base, w/anvil back,  $2\frac{1}{2}$  in w jaw,  $2\frac{1}{4}$  in jaw opng

FSN 5120-243-1372

WRENCH, OPEN END, ADJUSTABLE: sgld-hd type, 0 to 1.135 in opng, 10 in lg o/a

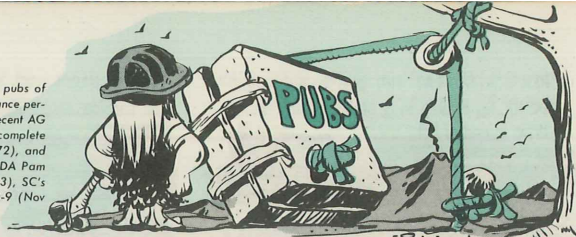
FSN 5120-449-8083

WRENCH, OPEN END, FIXED: sgld-hd type,  $\frac{3}{4}$  in opng,  $\frac{3}{32}$  in thk hd,  $4\frac{1}{2}$  in lg o/a

FSN 5120-293-1828



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 (Jun 72), and Ch 3 (Feb 73), TM's, TB's, etc.; DA Pam 310-6 (Jul 72), and Ch 2 (Jan 73), SC's and SM's; and DA Pam (C) 310-9 (Nov 71), COMSEC Pubs.



#### TECHNICAL MANUALS

TM 5-5420-203-14 Oct Bridge, Arm'd Veh-Launched, 60-Ft  
TM 5-6115-319-20P Apr Gen, Dsl: 150 KW, AC, 120/208 V, 3 Ph (Cat D353)  
TM 9-1005-307-24P Mar Cupola, 20-MM, XM27, Cupola, .50 MG Mt  
TM 9-1010-207-12 Mar Armament Subsys, Helicopter, 40MM Grenade Launcher: M5 on UH-1B or UH-1C  
TM 9-1015-223-ESC Mar M67 90-MM Recoilless Rifle  
TM 9-1190-216-14 Feb T-4138 Test Set  
TM 9-1425-382-10-3, -6, -7, and -8 Jan PERSHING Arty Msl  
TM 9-1440-485-20P Apr Launcher, Guided Msl LANCE  
TM 9-2320-206-ESC Mar Truck, Tractor: 10-Ton, M123, M123C, M123A1C, M123E2 and Truck Cargo: M125  
TM 9-2320-260-20 Jul M813 5-Ton Truck  
TM 9-2330-205-14 Nov Chassis, Trailer: Gen, 2 1/2 Ton, 2-WHL, M200A1  
TM 9-2330-227-14 Mar Semitrailer, Van: Shop, 6-Ton, 2-WHL M146 and M146C  
TM 9-2350-232-10 and -20-1 Apr M60A2 Tank

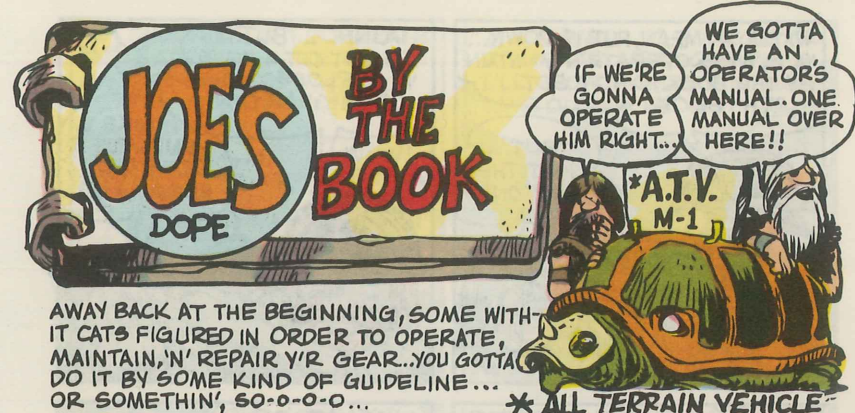
TM 9-6920-485-20P Apr M6, M32 and M33 Training, LANCE  
TM 11-1520-210-20P Mar Electronic Equip, UH-1D, H  
TM 11-5820-562-14 Jan Repeater Sets, Radio AN/TRC-113(V) and AN/TRC-113A(V)  
TM 11-5895-213-20P Mar Sound Ranging Set GR-8  
TM 11-5915-224-14 Jan Suppressor, Electrical Transient MX-7778A/GRC  
TM 11-6130-247-24P-1 Mar Power Supply PP-3940A/G  
TM 11-6625-520-15 Apr Maint Kit  
TM 11-6720-245-10 Mar KS-104A, KS-104B  
TM 55-1510-201-L Mar U-8D, RU-8D, U-8F and U-8G Pubs List  
TM 55-1510-202-L Mar O-1A, D, E, F, G, TO-1A and TO-1E Pubs List  
TM 55-1510-204-L Mar OV-1A, B, C and D Pubs List  
TM 55-1510-209-L Apr U-21 Series Pubs List  
TM 55-1520-209-CL Mar CH-47A Pilot's Checklist  
TM 55-1520-209-PMP Apr CH-47A PMP  
TM 55-1520-209-10 Mar CH-47A  
TM 55-1520-209-20-1 Apr CH-47A

#### MISCELLANEOUS

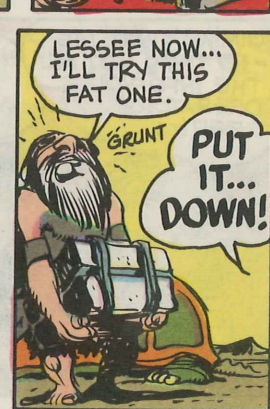
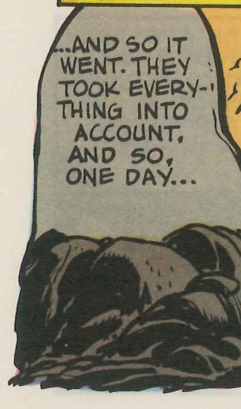
DA Cir 385-59  
Mar Safe Operation 1/4-Ton Truck, M151  
SB 700-20-1 Mar Reportable Items List  
TB 55-1510-209-20-14 Mar Insp Nose Wheel Steering Bracket (50-820188) for Looseness, U-21A, G, RU-21A, B, C, D, E  
TF 3-4437 Care of M17, M17A1 Masks.  
TF 9-4385 5-Ton Truck, M809—Operation, Maintenance.  
TF 9-4434 Daily Crew Maintenance, M13A1 APC.  
TF 10-4423 Petroleum Safety Hazards at Unit.  
TF 11-4395 Tactical Switchboards Orientation  
TF 11-4396 Tactical Typewriters TT-4, TT-76.  
TF-4402 Ground Radar Orientation.  
TF 11-4405 Avionics Navigation Equip.  
TF 38-4464 Preservation of Equip.  
TF 44-4554 Vulcan Operator PM.  
TF 55-4260 Automotive PM Part III—After Operation.  
TF 55-4508 Multimeter in Aircraft Electrical Troubleshooting.

#### NEW MOVIES

TF 3-4437 Care of M17, M17A1 Masks.  
TF 9-4385 5-Ton Truck, M809—Operation, Maintenance.  
TF 9-4434 Daily Crew Maintenance, M13A1 APC.  
TF 10-4423 Petroleum Safety Hazards at Unit.  
TF 11-4395 Tactical Switchboards Orientation  
TF 11-4396 Tactical Typewriters TT-4, TT-76.  
TF-4402 Ground Radar Orientation.  
TF 11-4405 Avionics Navigation Equip.  
TF 38-4464 Preservation of Equip.  
TF 44-4554 Vulcan Operator PM.  
TF 55-4260 Automotive PM Part III—After Operation.  
TF 55-4508 Multimeter in Aircraft Electrical Troubleshooting.



\* ALL TERRAIN VEHICLE \*



## M107/M110

You say the FSN for the spade stowage box for your M107 gun or M110 howitzer is not listed in TM 9-2300-216-20P (Jun 68) or any of the changes? Use FSN 2540-453-5392 (P/N 10904364). Routing identifier code is AKZ.

## Hold Two!

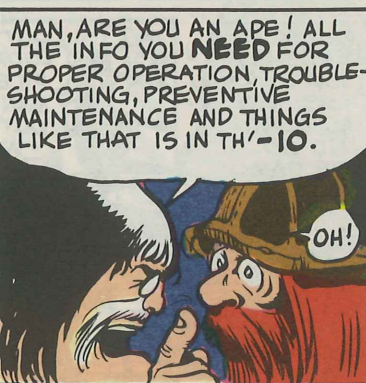
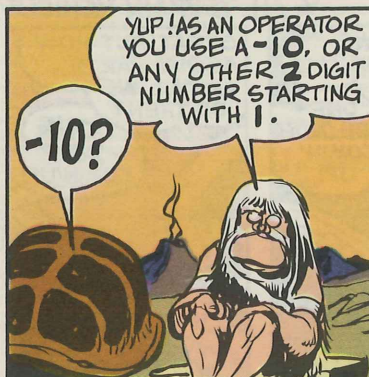
The Army's done an about-face on rescinding 2 TM's listed for retirement in DA Cir 310-21 (Jul 71). So if you can stop the trash-truck in time, grab 'em and hold 'em. They're TM 9-213 (24 Jul 62) and its Ch 1 (1 Feb 65), Painting Instructions for Field Use, and TM 9-247 (25 Oct 60), Materials Used for Cleaning, Preserving, Abrading and Cementing Ordnance Material and Related Materials including Chemicals. Both are reinstated as current DA pubs and available for order on DA Form 17 (if it's too late to hold 'em). DA Cir 310-47 (Mar 73) has the word.



WATTA YA MEAN, PUT IT DOWN...  
YA ALWAYS OPERATE 'N' MAINTAIN  
BY THE BOOK, AND I GOT  
"TH" BOOK.



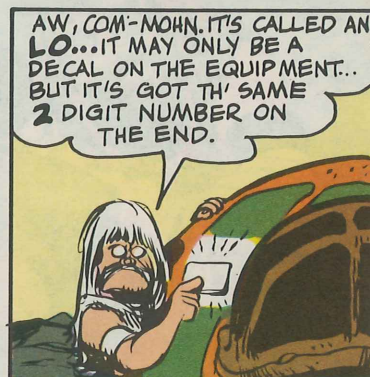
DUNNO... BUT  
IT'S GOT CUT-A-WAYS  
'N' EXPLODED VIEWS  
OF TH' GEAR TRAIN.



NOT ONLY THAT... BUT IF **REPAIR  
PARTS** ARE LISTED, THE NUMBER  
MAY BE FOLLOWED WITH THE  
LETTER **P**, LIKE **-14P**.  
YOU DIG?



OK, I WANT TO BORROW Y'R  
RIG TO DELIVER SOME PUBS.  
I'LL SHOW YA HOW THIS ALL  
LAYS OUT AS WE GO.





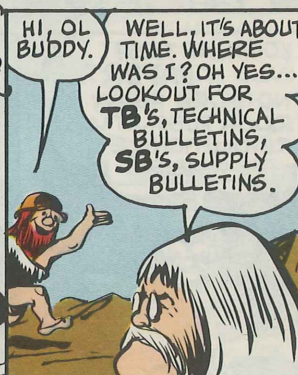
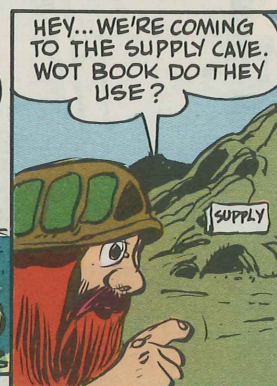
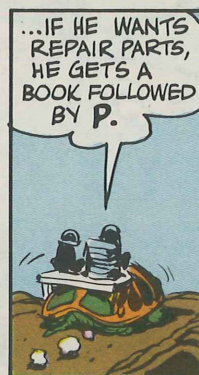
# JOE'S Dope Sheet



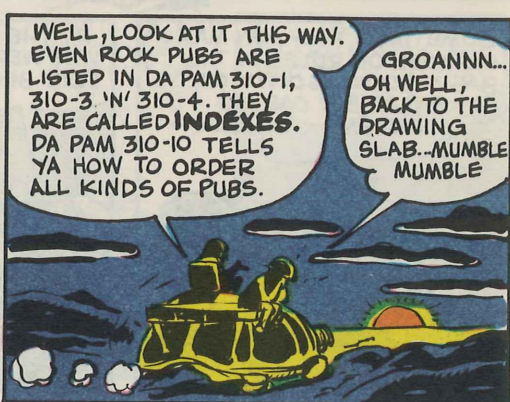
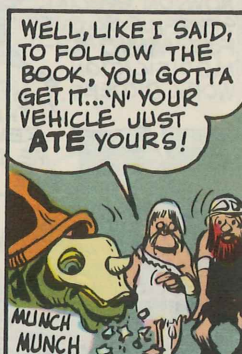
WE HAVE THE WORLD'S BEST EQUIPMENT ... *Take care of it*

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

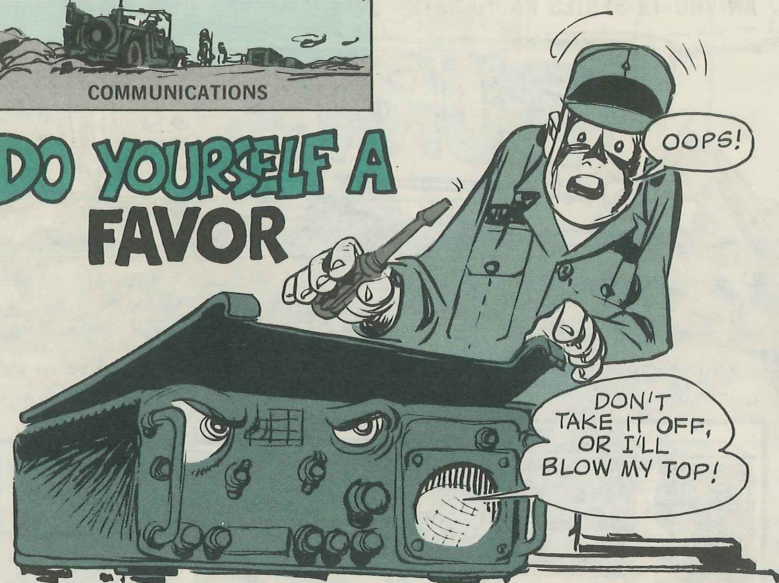








## DO YOURSELF A FAVOR



Everybody is a radio operator, but not everybody is a mechanic.

Which means—if you operators can't get a set working, never try to fix it unless you're authorized to do it.

Take the RT-524/VRC in a ¼-ton truck, for example. A lot of A-OK sets end up on the bench when an operator decides to take the cover off to have a look-see.

The result is broken wires, damaged modules and faulty tuning adjustments which really put that baby out of commission.

There's a good chance the radio doesn't work because the operator hit the wrong frequency or set the squelch switch on "OLD" position. The vehicle battery could even be dead.

'Course, you wouldn't pull a stunt like that, right? Not when the RT-524/VRC tuning and operating poop is right in para 3-14 and 3-17 of TM 11-5820-401-12 (Sep 72).

Fact is, no matter what set an operator keys, he'll save the Commo mechs a lot of extra sweat and elbow grease by brushing up on set operation.



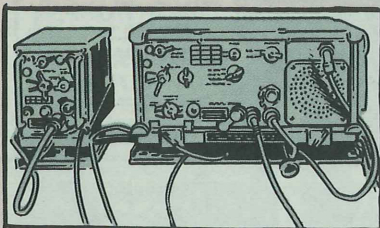


# BURNS

AND

# OTHER CONCERNS

Your Victory-12 radio set has a lot in common with mom's apple pie,

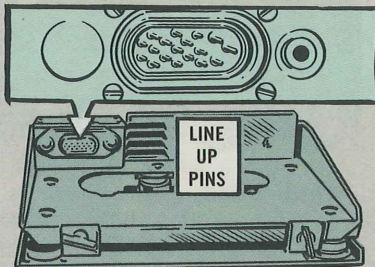


ice cream . . . and a few other goodies that have no real substitute. When you want 'em, man, nothing else will do.

To keep your radio equipment ready as fresh-baked apple pie, here're some points to chew on:

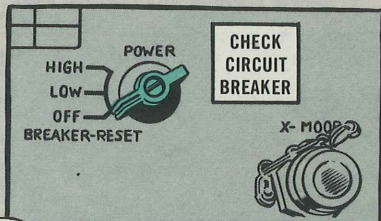
Turn off all power before you push the RT-524, RT-246 or R-442 into the mounts. Turned-on power can

single contact pins. Be sure to get those pins lined up right before you shove that RT or receiver home.



Instead of keying the radio right after you turn it on, let it heat up before you get down to business. A minute or two should do it. This little wait can save your PA tubes.

If your set won't transmit, check that circuit breaker before you call the mech. The circuit breaker might



WOW!  
SOME APE  
REALLY LAID  
IT ON THIS  
AN/VRC-12.

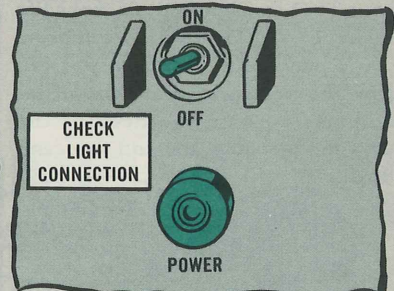
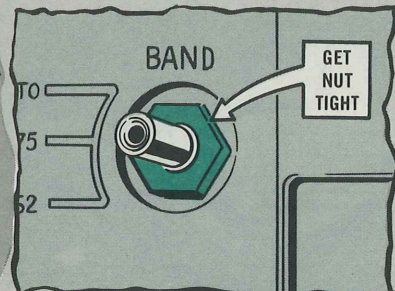
SOME  
GUY IS  
GONNA GET  
THE DINOSAUR  
DETAIL F'R  
THIS...

just be tripped. In which case, all you do is reset it. Should it trip again after being reset, then call the mech.

Snug up those nuts on the connectors and switches on your radio's

jiggled back and forth or turned too far. That could mess up wiring.

Beware of looseness in the power light connection on your AM-1780 amplifier. Twisting it too far counter-



front panel. You'll have to take off the control so you can get at the nut. Tightening this jewel can keep the switch or connector from getting

clockwise can make the wires inside look like jungle undergrowth. Your set could go out of commission, and support would have a job.



GULP!  
DSU'LL HAVE  
A FIT WHEN  
THEY SEE  
THIS...

LOOK!  
SMOKE SIGNALS,  
THEY GOT PM  
TROUBLES TOO.

IF THIS  
KEEPS UP,  
WE'LL BE  
USING SMOKE  
SIGNALS.

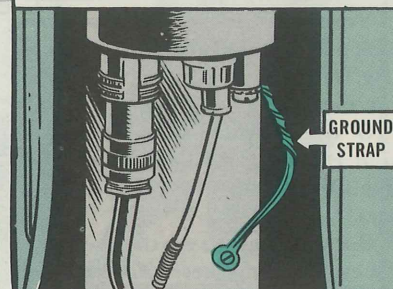
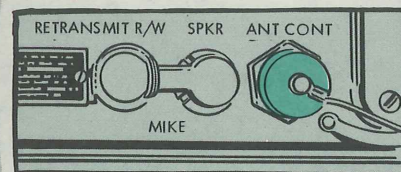
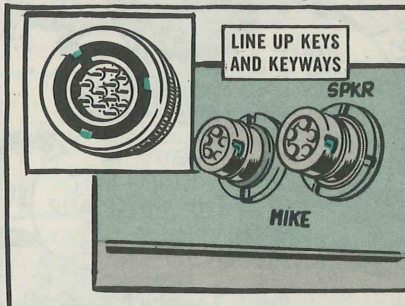
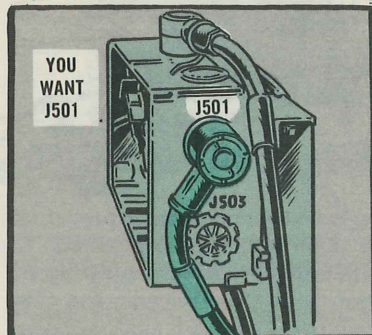
GUARD  
POST #3

When you run the CS-4723 power cable from the MT-1029 mount to the amplifier, be careful not to go for the wrong jack. You want the J501 connection. Marrying that cable to J505, J506, or J507 can burn up

Whenever you're puttin' in any cable, be sure to line up the key and the keyway first. Jamming a cable

Never connect the matching unit cable to the radio while the radio is on. You can burn the pins on the cable and burn the ANT CONT receptacle of the radio. Burning the

## WHEELED VEHICLE SET UP



your T521 transformer. To make life easier, FSN 5975-918-8164 will bring you a package of decals so you can label the receptacles. Put those letters and numbers on the neck of the appropriate cable, too and you can't miss.

in clumsily and hard can damage the cable, the connector and the pins.

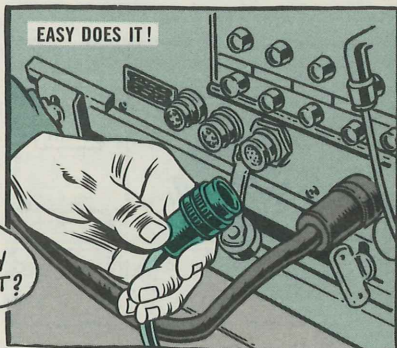
receptacle bad enough will close a contact, meaning more hurt next time a cable is put in.

Unless you like shocks, you want ground straps attached to your MX-6707 matching unit and to your mounts. In tanks and APC's, the MX-6707 ground strap connection is to a bolt near the bottom of the MX-6707. In wheeled rigs, it's to a bolt and nut in the antenna mounting bracket. With your antenna

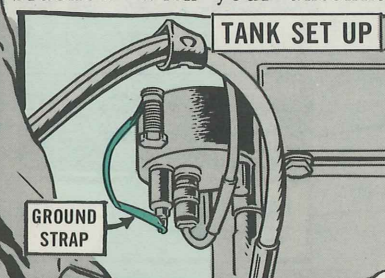
extended, a ground strap for your matching unit's especially important. That antenna could slap some wires overhead. Then your radio will be fried worse than burnt bacon. And not only will ground straps save you and your set from a jolt, they'll also improve transmission.

When Old Man Winter's starin' at ya, keep the recessed nuts on the mounts free of ice. Ice can lift an

DECALS!  
WOT WILL THEY  
THINK OF NEXT?



Then you might have to use pliers to pull the cable out. This could make matters worse if you're not careful.



RT or receiver so that its pins won't match up with the receptacle. You wind up with the contacts being bent or broken.



# GETTING HIP ON YOUR PIPSY-4

NEGATIVE, KILLER,  
THAT TREE STUMP  
DOWN TH' HILL DID  
NOT MOVE...COOL  
IT...

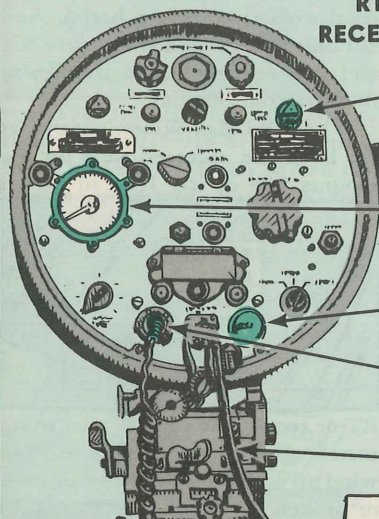
Your AN/PPS-4() radar set can look out for you better than a watchdog. It can even scan a can—if the can moves.

O' course, you'll want to operate your Pipsy-4 and take care of it just like TM 11-5840-211-12 (April 1971) says.

But you've got to eye this mechanical eye to keep it keen. To keep that peppy Pipsy perkin', here're some baddies to scout. The worst ones are in bold type.



## RT-553 OR RT-752 RECEIVER-TRANSMITTER



**KNOBS** — Loose, missing.

**LENS**—Cracked, broken, dirty.

**METER FACE COVER** — Cracked, broken, dirty.

**RECEPTACLE COVERS**—Chain broken, missing.

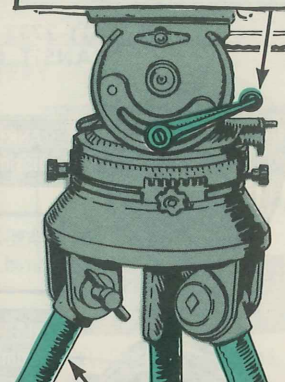
**CONNECTORS**—Dirty, corroded.

**CABLES**—Frayed, cracked, broken, painted.

50

## MT-1946 RT TRIPOD

**ELEVATION CONTROL LOCK**  
— Loose, broken, missing,  
threads stripped.



**TRIPOD**—Dirty, corroded, legs bent.

**CARRYING HANDLES**—Loose, missing.

**MAGNETRON TUNER COVER**—Missing; gasket hard, cracked; chain broken.

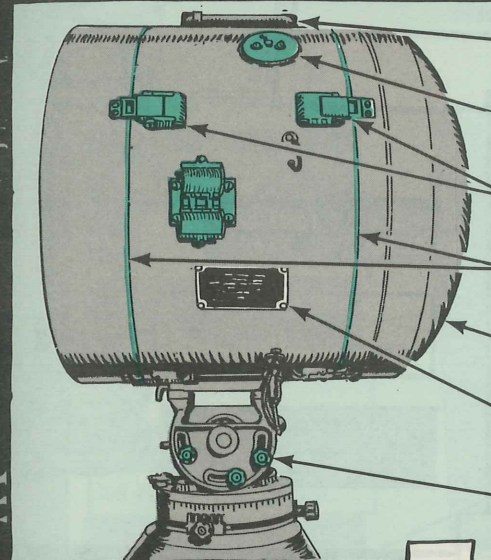
**LATCHES** — Bent, loose, broken.

**GASKETS**—Hard, cracked, missing.

**RADOME**—Scratched, cracked, broken.

**CASE**—Dirty, corroded, dented, punctured.

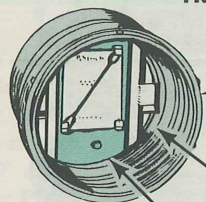
**AZIMUTH AND ELEVATION DETENT SCREWS** — Loose, broken, missing, threads stripped.



51

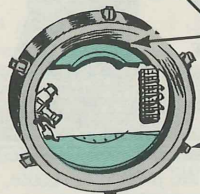


### CY-2733 RT TRANSIT CASE



**GASKETS**—Cracked, worn, missing.

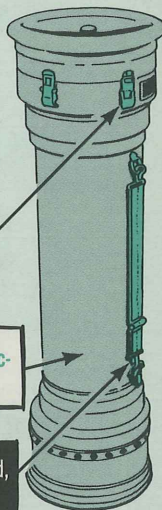
**CASE**—Dented, dirty, punctured.



**RUBBER BUMPERS**—Cracked, crumbly, pulling loose from case.

**LATCHES**—Loose, bent, broken.

### CY-2734 TRIPOD TRANSIT CASE



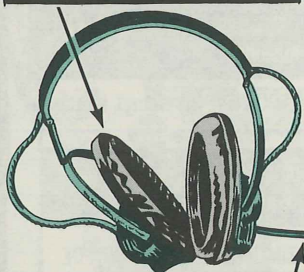
**LATCHES**—Loose, bent, broken.

**CASE**—Dirty, dented, punctured.

**CARRYING STRAP**—Frayed, cut, broken, missing.

### H-183 HEADSET

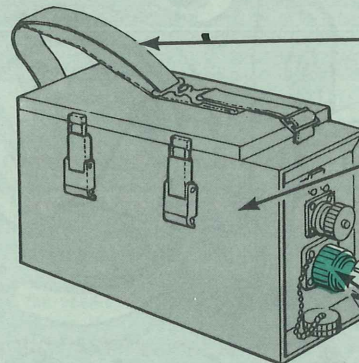
**EARPHONES**—Dirty, broken.



**CABLE**—Frayed, cracked, broken, connector dirty.

WE'LL NEVER BE  
HAPPY, PIPSY-4...  
YOUR GENERATOR  
SET HAS NO  
PEDIGREE!

### BB-422/U BATTERY



**STRAP**—Frayed, mildewed, broken.

**CASE**—Dirty, corroded, dented, punctured.

**GASKET**—Hard, cracked, missing.

**CELLS**—Dirty, corroded, cracked, leaking.

**CONNECTOR**—Dirty, corroded, broken.

### PU-532 GENERATOR SET

**DOOR COVER**—Loose, bent, missing; holder bent, broken.

**CASE**—Dirty, dented, corroded.

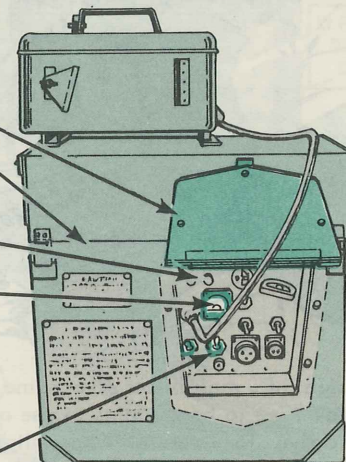
**PANEL**—Dusty, connectors dirty.

**METER FACE**—Cracked, broken, dirty.

**AIR FILTER**—Dirty, missing.

**AIR VENT**—Dirty, clogged.

**SWITCH COVERS**—Cracked, missing.





## USING THE . . .

One of the several multimeters commonly used by organizational mechanics and repairmen is the AN/URM-105.

Since much of today's equipment has some electric or electronic circuits, the use of a multimeter is almost a must to run down bad wiring or circuits.

KEEP YOUR  
AN/URM-105  
MULTIMETER  
TM HANDY.  
IT HELPS OUT  
IN TIGHT SPOTS.

STEP RIGHT  
UP, YOU CATS...  
I'M GOOD FOR  
WOT AILS YOU!

TM11-6625-203-12

The sight of a multimeter gives some mechanics the jitters. No sweat. You don't have to be a genius to use one. They're simple instruments, but you do have to be careful—especially if you're measuring high voltages.

Here're the A—B—C's on using the AN/URM-105 multimeter . . .

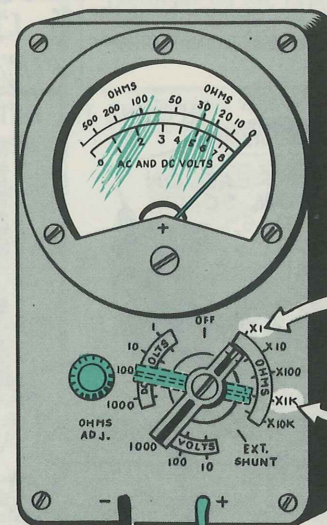
# AN/URM-105 MULTIMETER



## BATTERIES

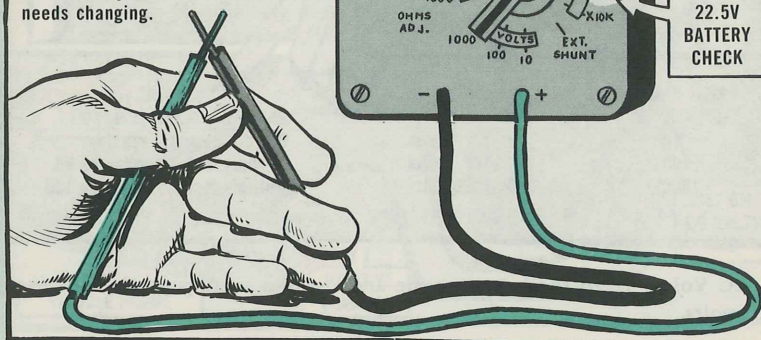
Before using the URM-105, check its batteries. If they're weak your reading will not be true. To check . . .

1. Set the switch to OHMS X1.
  2. Touch the tips of both test prods; the needle should swing to the right.
  3. Turn OHMS ADJ completely clockwise. The needle should go to "0" or beyond on the ohms (top) scale.
  4. If the needle does not go all the way to the right, the 2 BA-58/U, 1.5-volt batteries (FSN 6135-120-1030) need changing.
  5. Now switch to OHMS X1K; keep the prod tips together and the OHMS ADJ knob turned completely clockwise.
  6. The needle should again go to the extreme right.
- If it doesn't, the BA-261/U, 22.5-volt battery (FSN 6135-160-7159) needs changing.



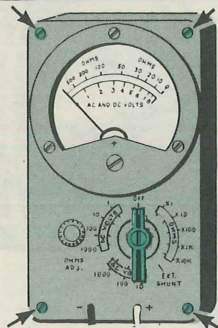
X1 FOR 1.5V  
BATTERY  
CHECK

X1K FOR  
22.5V  
BATTERY  
CHECK

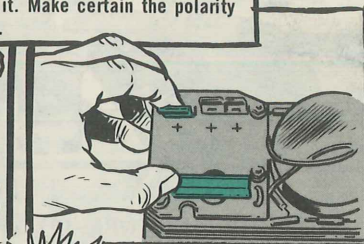
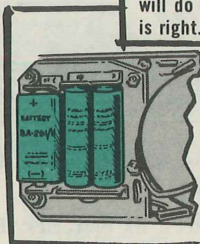




To put in new batteries, take out the 4 screws from the panel and remove the panel. Now replace the batteries.



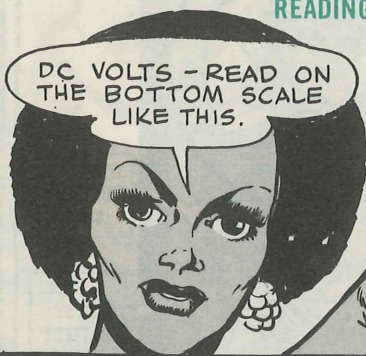
If the batteries are not snug in their clamps, squeeze the contact together, easy-like. Slight pressure will do it. Make certain the polarity is right.



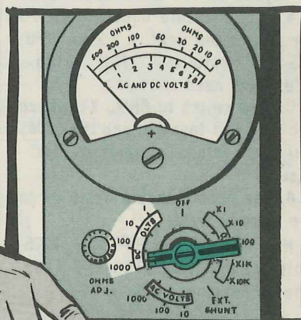
COOL IT!

When replacing the panel screws, don't overlook the washers. Snug the screws up finger tight—not muscle tight.

### READING THE METER:



DC VOLTS - READ ON THE BOTTOM SCALE LIKE THIS.



#### Switch setting

#### Range

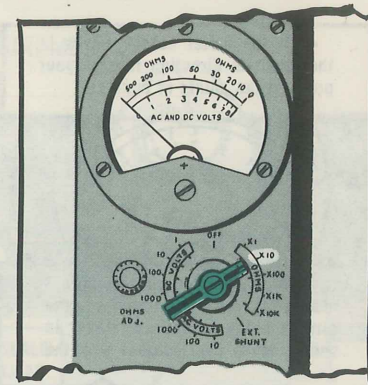
#### You do

1	0 - 1 volt
10	0 - 10 volts
100	0 - 100 volts
1000	0 - 1000 volts

Divide the readings by 10.  
Use direct meter reading.  
Multiply meter reading by 10.  
Multiply meter reading by 100.

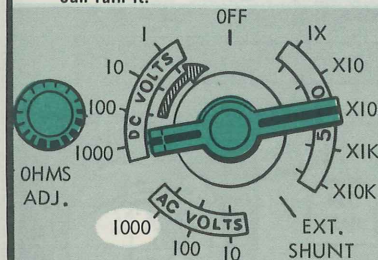
AC Volts—Read the bottom scale and use the same procedure as for DC volts.

OHMS—Read the top scale. Multiply the reading by the number on which the switch is setting. Like—if the switch is set on X10, multiply the meter reading by 10.



### DC VOLTAGE MEASUREMENTS:

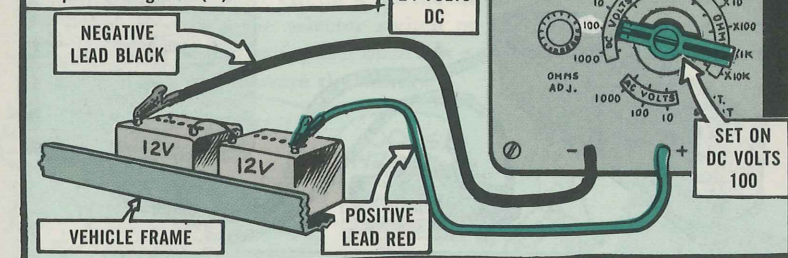
1. If you don't know the voltage value to be measured, set the selector switch on 1000. Then work down one step at a time until the meter needle reads about midscale. You do this to protect the meter. An overload can ruin it.



3. On DC automotive circuits you'll mostly use the 100, 10 and 1 switch settings. Always start at the 100 position and work down if you need to.

### CHECKING YOUR VEHICLE'S 24-VOLT BATTERY SYSTEM

2. Always maintain polarity. That is, RED prod to positive (+) and BLACK prod to negative (-).

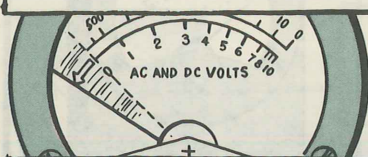


BOTTOM SCALE 24-VOLTS DC

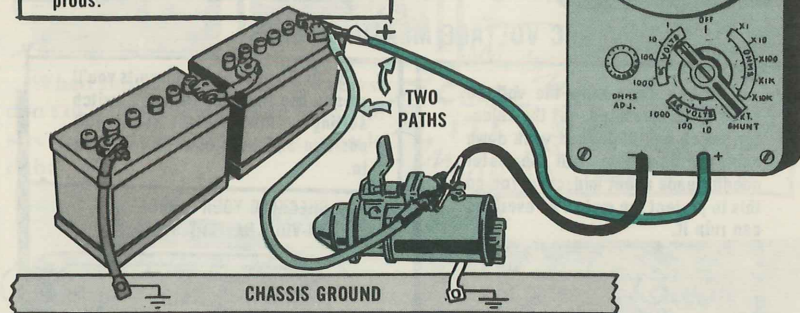
SET ON DC VOLTS 100



4. If the meter needle moves in the opposite direction, reverse your prods at the points of contact.

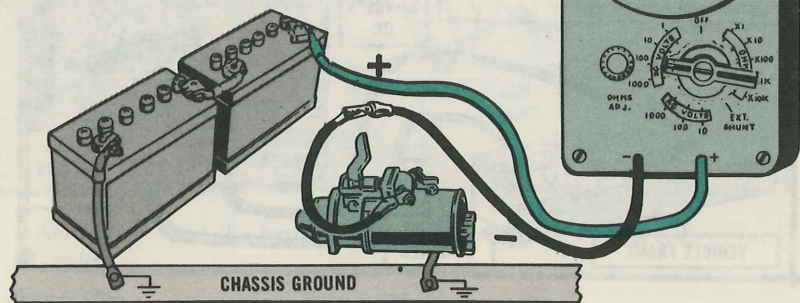


5. On ALL voltage checks, always put the test prods in parallel with the circuit being measured. Never in series. Make firm contact with the prods.



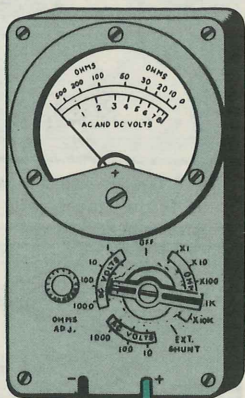
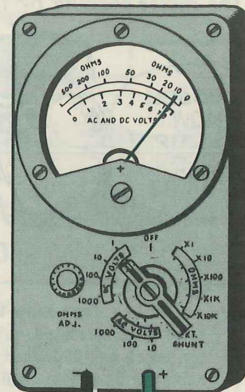
NOT IN SERIES—LIKE THIS . . .

(Circuit connected end-to-end to provide a single path for current flow.)



IN PARALLEL—LIKE THIS . . .

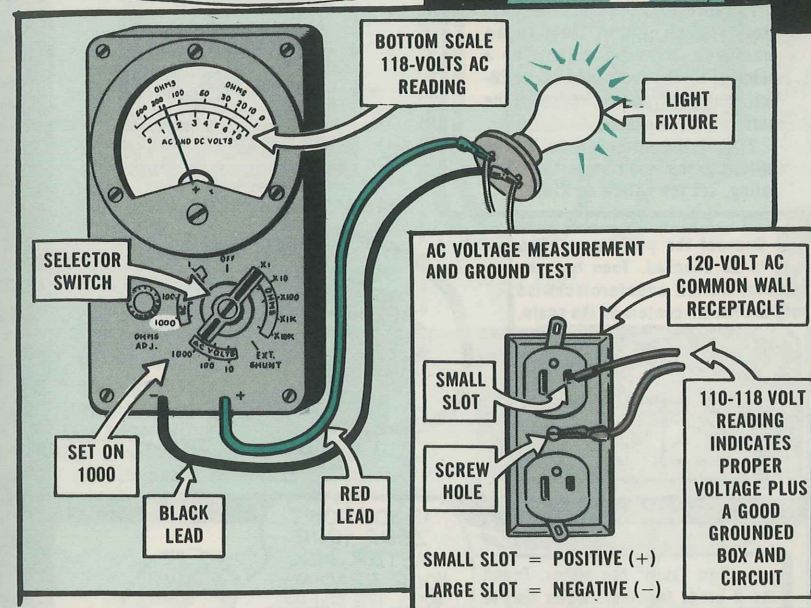
(Two circuits side-by-side to provide two paths for current flow. Also called a shunt connection.)



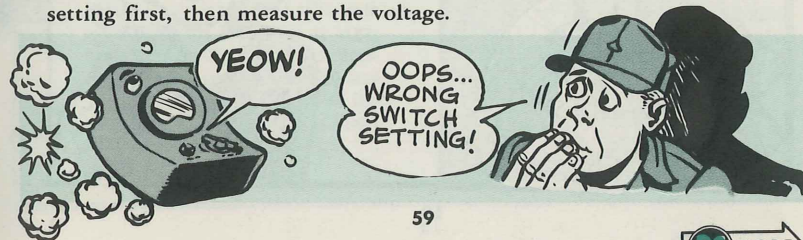
## AC VOLTAGE MEASUREMENTS:

Use the same procedure as for DC volts. But set the selector switch on AC VOLTS.

ALWAYS START ON THE 1000 POSITION, REMEMBER—REGULAR COMMERCIAL CIRCUITS ARE AT LEAST 110 VOLTS.

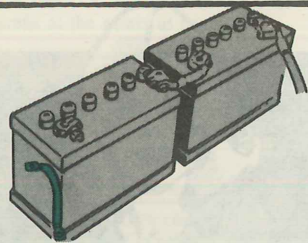


Never measure an AC circuit when the multimeter is set on DC Volts—or vice versa or with the selector switch on OHMS. Measuring a circuit when on the wrong setting can burn out a resistor. So check your switch setting first, then measure the voltage.





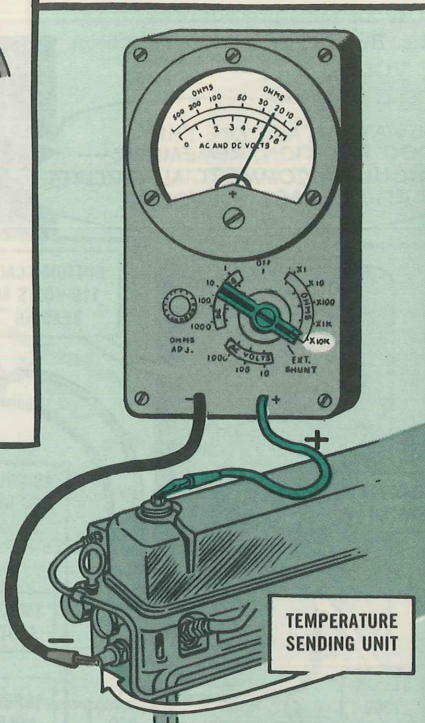
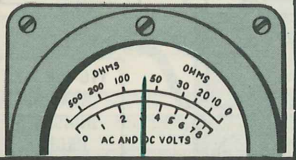
## RESISTANCE MEASUREMENTS:



1. Turn off or disconnect the power from the circuit or item to be measured. If you're working on a piece of equipment having 12- or 28-volt charging system, disconnect the battery ground cable.

2. Set the selector switch on OHMS. If you don't know the ohms rating, set the switch on X10K.

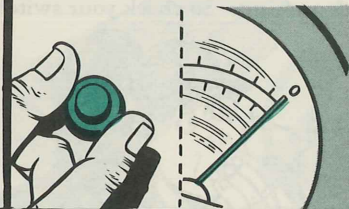
3. Connect the prods across the item to be checked. Then turn the selector switch counterclockwise until the needle centers on the scale.



TEMPERATURE SENDING UNIT

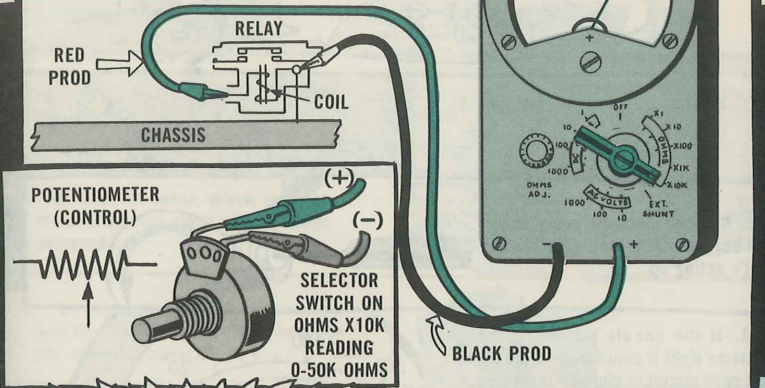
IF YOU DON'T ZERO YOUR METER, ALL YOUR READINGS WILL BE FALSE. SO FOLLOW THIS PROCEDURE.

4. Now "zero" the meter. Touch the 2 prods together. While they're together, turn the OHMS ADJ knob until the needle settles right over "0" that's on the top scale.



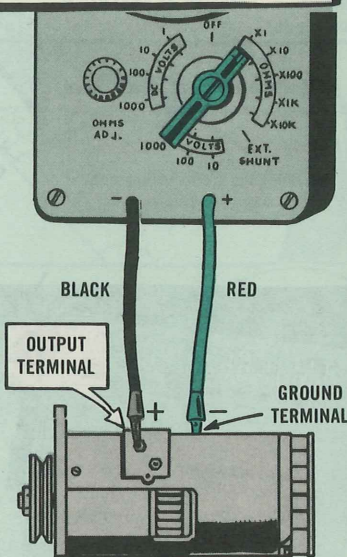
5. Connect the test prods across the item or circuit to be measured and read the value on the top scale. Don't forget to multiply the reading by the "X" setting figure.

6. Every time the selector switch is set on another OHMS "X" setting, repeat the zero adjust.



7. When measuring resistance of transistor circuits use the X1, X10 and X100 settings only. This'll limit the meter's power supply to 1.5 volts. The higher settings put 22.5 volts in the meter circuit and this can blow transistors or electrolytic capacitors and you must maintain METER BATTERY polarity.

To maintain METER BATTERY polarity during resistance and continuity checks on alternators and solid state circuits use the RED probe as negative (-) and the BLACK probe as positive (+). Why? Because the RED lead is connected to the (-) side of the meter's batteries, and the BLACK lead to the (+) side.





## CONTINUITY TESTS:

Testing for broken or loose wires, closed or shorted circuits and switches, plus testing for burnt-out bulbs is one of the greatest uses of the multimeter. To make continuity checks with the -105 . . .

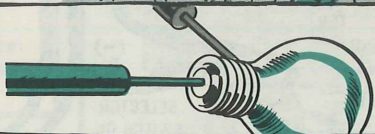
BEFORE TESTING, MAKE CERTAIN **NO** BATTERY VOLTAGE IS IN THE CIRCUIT.



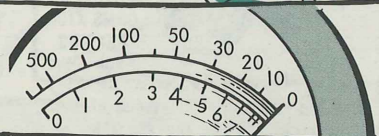
1. Set the selector switch on OHMS X1.



2. Now just touch the prods across the bulb, switch, cable or circuit that's acting up.

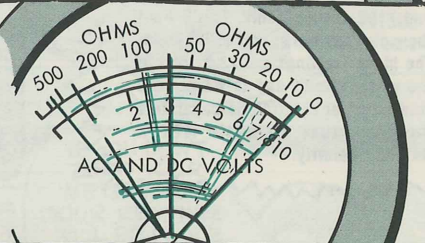


3. If the needle swings to the extreme right it could mean a closed but good circuit or closed but shorted circuit . . . depends on what you're looking for.



4. If it doesn't move at all you've got a break or open circuit.

5. A jumping or flickering needle means a loose connection.



## IT CAN DO MORE

Your AN/URM-105 multimeter can do a lot more. Like reading DC voltages up to 50,000 volts and current measurements up to 100 amperes. But to do this you'll need auxiliary equipment. TM 11-6625-203-12 (Jun 59) gives the dope on all this.

TAKE GOOD CARE OF THIS VERY HELPFUL PIECE OF TEST GEAR.



## MULTIMETER CARE:



1. After using, always set the selector switch to "OFF". This'll stop battery drain.



2. Coil the leads, place them on top of the panel along with the clips and prods.



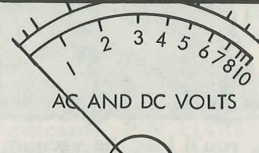
3. Replace the cover. Make certain there're no leads crushed between the case and cover.



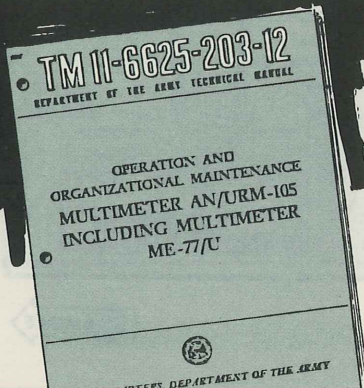
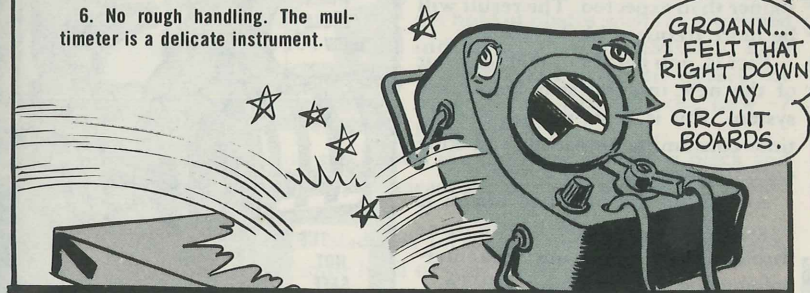
4. Test leads should not be cut or prods corroded.



5. Needle should rest over "0" on the lower scale when the selector switch is on DC or AC VOLTS—and when the meter is on its back. If it doesn't, have your DS unit look it over.



6. No rough handling. The multimeter is a delicate instrument.





# AIR MOBILITY

Once a King, always a King. Once a Knight is enough. A day, anyway. Never use the indicator push-to-test button on your Chinook ISIS rotor blades more than once on the Daily, bird mechs.

ONCE PER DAILY ON INDICATOR BUTTON

If you do, you'll lose the vacuum sooner than expected. The result will be more frequent blade changes.

Fact is, you get about 400 tests out of the new integral spar inspection system. But it beats pulling the old time-consuming borescope and eddy current inspections by a mile.

Air within the modified blades is evacuated from the blade spar through an air valve, until the internal spar pressure is about 1 PSIA.

WHEN THESE SHOW...

... IT'S NOT SAFE

64

# OR SOOTH I SAY

"GROAN! I'VE BEEN GROUNDED, KNIGHT, BABY. AIN'T THAT A GAS?"

"VON VARLET'S HAVE BLOWN IT WITH MY TRUSTY CHARGER... TOO MUCH USAGE OF THE ROTOR BLADE TEST BUTTON."

If a crack should develop in the spar, or socket, the blade loses its vacuum. The visual indicator will then show alternating black and white stripes. You have an unsafe blade. When that happens stable your Charger for a new blade.

Sure, you'll lose a little vacuum every time you push the button on indicator, P/N 114RS100-1, FSN 6685-486-9006. No sweat if you can get hold of blades with the improved indicator, P/N 114RS100-2, FSN 6685-090-8912. No air enters the blade when you test the new -2 indicator.

'Course, when you push the button the indicator will show black and white stripes (unsafe). When you release the button the indicator should return to all white stripes (safe).

The weight of the ISIS blades is increased over the non-ISIS type, so never mix 'em on the rotor head of your trusty steed.

65



# SHAFT SAVER

Dear Windy,

Any Chinook (CH-47) mech who removes the adapter and plate assembly, along with the support assembly, from the synchronizing shaft has a job on his hands. The shaft is usually clamped in a vise and it can be damaged beyond repair limits.

To save some moola, we came up with an adapter and plate assembly holding tool.

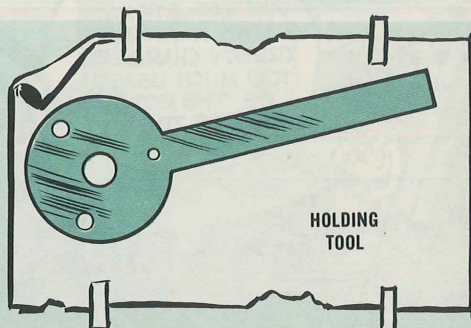
To use the tool, remove the unriveted  $\frac{5}{8}$ -in bolt from the adapter assembly. Place the 2 large holes in the tool over the special washers in the 2 riveted bolts.

Line up the  $\frac{5}{8}$ -in hole in the tool with the hole in the adapter assembly where the bolt was removed. Replace the bolt and nut to hold the tool onto the adapter.

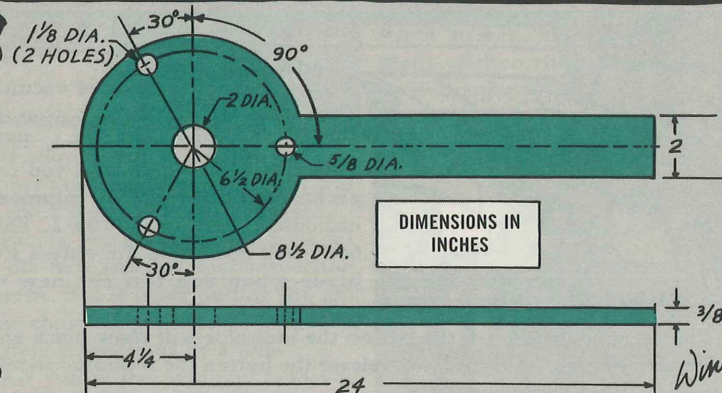
While you restrain the assembly with the installed tool, you can loosen the retaining nut with a standard  $\frac{1}{2}$ -in drive extension.

No more damaged shafts! Works like a charm.

SFC Solaman L. Skeen  
Ft Rucker, Alabama



HOLDING TOOL



DIMENSIONS IN INCHES

(Ed Note:—Right! AVSCOM recommends local manufacture of the tool since it won't be made available in the supply system.)

YOUR  
BABY  
UP TO  
SNUFF?

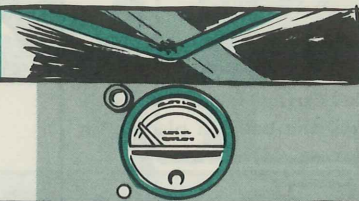


You can always tell when a bird is maintained right. It not only looks great . . . it performs well.

Which is why you mechs should follow the Daily, Intermediate and Periodic preventive maintenance checksheets on aircraft.

For example, only YOU can:

1. Discover a chafing line to prevent a system failure.



2. Eyeball cockpit gages with range markings on the glass for a loose glass. Busy pilots depend on those range markings being in the right place!

3. Pull the door jettison release handles to make sure the pins are not rusted . . . when ya gotta go they have to work.



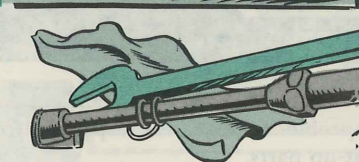
4. Put your mitts on the battery to make sure it's tight and won't damage any of the sheet metal.



5. Replace missing hardware in access panels so you don't lose 'em in flight.



6. Help prevent FOD by removing tools and parts used during your checks.



Yessir-e-e-e, bird mechs, pull a complete inspection. Correct small problems on the spot, before they become worse and ground your bird.

NOPE!  
THERE'RE  
SOME  
BOTHERSOME  
THINGS  
BUGGIN'  
US.



Your baby will then be more available, not tied up in organizational or support maintenance for major repairs.



# BEARING TWIST!

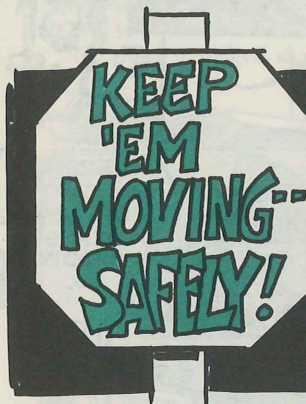
So your Huey has the new 1-piece tail rotor crosshead bearing, which takes the place of the old 2-piece bearing.

The old bearing could be Murphied. Not so with the new one, which works installed either way.

But—if you use a little force during removal or installation, the inner race will pop . . . happens!

To help keep the bearing in 1 piece, use only finger pressure on the inner race during removal or installation.

If the bearing separates, tho, just clean the parts thoroughly and reassemble the bearing. It may be necessary to stick the balls in place with a dab of grease, MIL-G-25537.



**OPERATIONAL HAZARD REPORT**

For use of this form, see AR 95-1, the proponent agency is Office of the Assistant Chief of Staff for Force Development. (An operational hazard is any condition or act that affects or may affect the safe operation of Army aircraft, associated equipment, facilities, or cause injury to personnel.)

1. THIS HAZARD OCCURRED OR WAS OBSERVED WHILE:			
a. <input type="checkbox"/> IN-FLIGHT	c. <input type="checkbox"/> OTHER (specify)		
b. <input type="checkbox"/> ON THE GROUND	d. <input type="checkbox"/> LOCATED AT	DATE	HOUR
2. THIS HAZARD IS CONCERNED WITH (select most appropriate category):			
a. <input type="checkbox"/> AIR TRAFFIC CONTROL	c. <input type="checkbox"/> WEATHER	e. <input type="checkbox"/> AIRCRAFT	g. <input type="checkbox"/> OTHER (specify)
b. <input type="checkbox"/> AIRFIELD	d. <input type="checkbox"/> PUBLICATIONS	f. <input type="checkbox"/> PERSONNEL	
3. IN THE AREA (select one or more to describe above category):			
a. <input type="checkbox"/> PROCEDURES/INSTRUCTIONS	d. <input type="checkbox"/> FACILITIES		
b. <input type="checkbox"/> POLICIES/REGULATIONS	e. <input type="checkbox"/> MAINTENANCE INSPECTION		
c. <input type="checkbox"/> OPERATIONS	f. <input type="checkbox"/> SERVICE(S) (e.g., WU)		

**DA FORM 2696**

If you're assigned to any type of airfield duty, report any aircraft ground-handling problem. You could keep a bird from being deadlined for repairs from bent-up parts.

Use a DA Form 2696 (1 Aug 69), Operational Hazard Report. Just fill in blocks 1,2,3 and describe the problem.

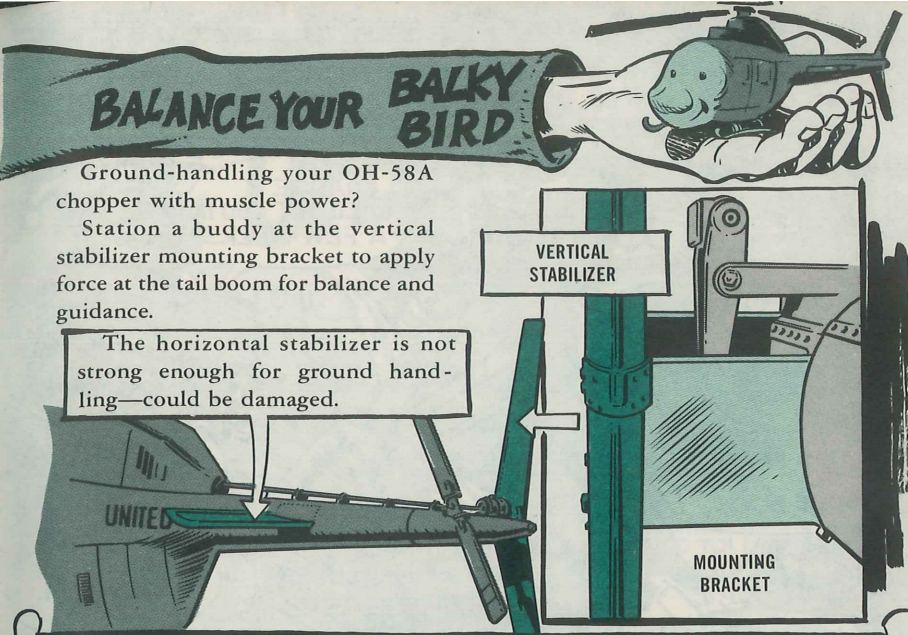
Airplane drivers have been using the form right along. Your safety officer also reviews ground operations, per AR 95-1.

# BALANCE YOUR BALKY BIRD

Ground-handling your OH-58A chopper with muscle power?

Station a buddy at the vertical stabilizer mounting bracket to apply force at the tail boom for balance and guidance.

The horizontal stabilizer is not strong enough for ground handling—could be damaged.



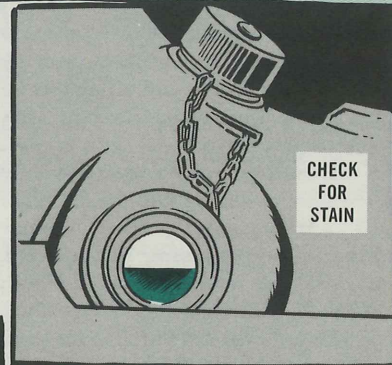
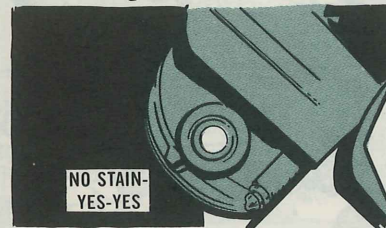
# SIGHT GLASS SURVEY

Stained sight glass on the 42- and 90-degree gearboxes on the Huey can give false readings and lead to gear damage through under-lubrication.

So you fight stain, natch.

How? Like so:

First, when you skin-clean your bird, let no solvent slosh around the sight glass. It can ooze in and react with the lube oil and stain-coat the inside of the glass.



Second, when you're pulling your inspections, follow the TM and eyeball each gearbox sight glass. Take it out and clean it if it's stained and cleanable, or replace the glass.



## AR 710-2 IS CHANGED

THIS FAT AR 710-2 IS SOME BOOK.

CHANGE I WILL HIT YOU IN A FEW WEEKS!

CHANGE I

...IT'S GOT THE LATEST PLL SCOOP.

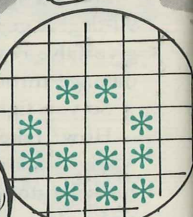
CAN'T USE ZOP'S FOR INITIAL PLL INFO??

Got your copy of Ch 1 (Apr 73) to AR 710-2 handy? Check its Sect V, Chap 2. It covers some new scoop on setting up your initial repair parts allowances.

For one, you don't use your -20P TM's for collecting info for an initial PLL. How come? Mainly because most new TM's simply show the asterisk ("as required" item code) in their allowance columns.

You use your TM's to find out what items are authorized for use at organizational maintenance level, for looking up supply info on your PLL items, and for your "as required" item requests. But you don't use them for working up your initial PLL.

MOST TM ALLOWANCE COLUMNS USE ASTERISKS ONLY. SO COOL IT.



## PLL\* UPDATE

\*PRESCRIBED LOAD LIST.

BORROW PLL DOPE

Whether your outfit is newly organized, or it gets a new piece of equipment—you work your initial PLL allowances from borrowed PLL info.

That's right. You simply borrow PLL demand history from a similar unit that maintains the same equipment (same FSN) that your shop supports.

Your outfit, of course, is authorized to modify the borrowed demand history according to its own mission needs. See para 2-36c.

THE MESSAGE WAS ATTACHED TO THE ARROW.

IT SAYS, "KIN WE BORROW SOME PLL DATA FROM YOU GUYS," THANKS...

CAN'T FIND ANOTHER HEAVY TORTOISE OUTFIT. WOT'LL I DO FOR PLL INFO?

TRY YOUR DSU... THEY'LL GIVE YOU A HAND.

So what happens if you can't track down a like unit . . . or your outfit doesn't have the capabilities for working up PLL info?

No sweat. Whether you're concerned with only one piece of equipment or the whole kit and caboodle in your TOE—you can ask your DSU (Direct Support Unit) to check its resources for PLL info for your gear. They may have access to PLL demand history for a like unit that you can use.



If your DSU can't help you, then (thru your DSU) your outfit can request PLL help from:

Commander  
US Army Maintenance Management Center  
ATTN: AMXMD-1  
Lexington, KY 40507

The request must give complete info on your outfit's equipment.  
For example:

—End item FSN and nomenclature.

—Make and model of each different type of equipment, or series and manufacturer identification.

—On aircraft (using multi-application engine) list the make, model and FSN of the bird and the FSN of the engine it's using.

—Quantity of each type of major end item on hand.

—Anything else you think'll help to identify your gear.

—Days of supply. Specify—PLL for 15 days of supply.

—Maintenance level. Specify organizational maintenance level PLL.

—Your outfit's ID.

See para 2-37e(1)(b) in the Change.

You'll get an automated listing covering the organizational maintenance items authorized for your equipment.



STOP GRUMBLIN',  
I GOTTA HAVE  
THE WHOLE BAG  
TO ASK  
FOR PLL HELP.



SUPPLY AND MAINTENANCE  
MANAGEMENT INFORMATION

## PREScribed LOAD LIST

END ITEM SEQUENCE

M/F

OH-WOW!  
LOOK-IT...  
AN  
AUTOMATED  
PLL...

### PLL REVIEW

Whether your PLL info comes from a like unit or from Lex—your DSU reviews it right off. That means they give the list a technical edit. The editing is needed so they can come up with a PLL that's more in line with your outfit's needs. It's also needed so your DSU can set up its ASL (Authorized Stockage List) to support your outfit's recurring PLL demands and its "as required" item needs.

DON'T  
PANIC...DSU  
IS JUST TAILORING  
IT TO YOUR  
OUTFIT'S NEEDS.

LESSEE NOW, WE  
STOCK THIS, BUT NOT  
THIS. THIS'LL BE "AS  
REQUIRED" OR DX--  
AND THIS...

SOB  
MY BEAUTIFUL  
AUTOMATED PLL,  
SHOT TO PIECES.

For example—

1. Support'll scratch items that aren't on its ASL and items coded R, S, or T (recoverable—repairable).

The deleted items will become "as required" or DX items for your shop.

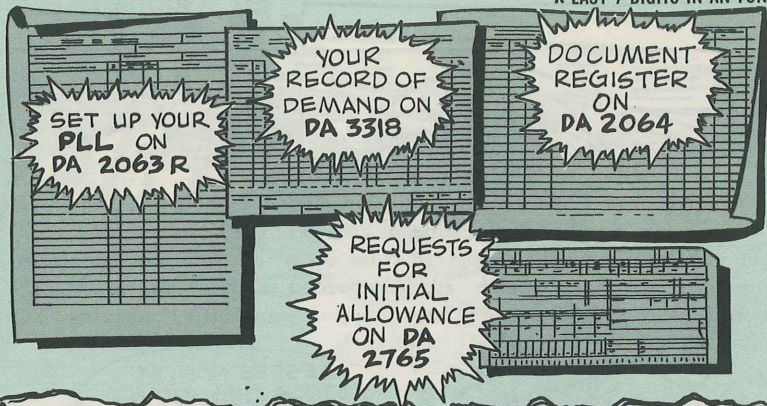
2. From the edited info support'll make up a new list. From that list your CO selects the items that are essential for his maintenance readiness PLL. He's the approving authority for your PLL.



## THEN WHAT?

From the items he selects, you set up your consolidated PLL (in FIIN\* sequence) on DA Form 2063-R, your record of demand cards (DA Form 3318's), and your document register (DA Form 2064). Then you deliver a copy of your consolidated PLL and your DA Form 2765 requests for your initial allowances to your DSU.

\* LAST 7 DIGITS IN AN FSN



Items selected for your initial PLL make up your minimum allowances for 360 days. It works like so—

You review your record of demand cards every 90 days or at the end of each calendar quarter. When you have 180 days of demand experience on an item, you can increase its initial allowance—if need be. But you can't decrease the item's minimum allowance, or delete it (no matter what your demand records say), until it's been on your PLL for 4 review periods (360 days).

You can add an "as required" item to your PLL when you've recorded 3 separate demands for it on its DA Form 3318 (non-stocked item file).

See para 2-42b in Ch 1 for info on setting up a non-stocked item file, and para 2-43 for info on making changes to your PLL.

REVIEW YOUR 3318'S EVERY 90 DAYS, OR AT THE END OF THE CALENDAR QUARTER.

## AUTHORIZED STOCK LEVELS

STICK WITH THIS TABLE FOR ADJUSTING YOUR PLL ALLOWANCES--

...BUT, SARGE, DINOSAUR EYE-LASH GUARDS ARE HARD TO COME BY...

The Authorized Stock Levels table (Fig 2-28) in the AR's Ch 1 is your guide for adjusting your minimum allowances and for setting up your initial allowances for "as required" items that make it to your PLL.

## EXCEPTIONS

PLL's for special gear (medical, missile, COMSEC, Army Security Agency equipment) are set up and maintained according to SOP provided by the responsible commands. See para 2-37e(1)(c).

YOU CAT'S WITH SPECIAL GEAR DIG THIS...

## PLL FORMS AND RECORDS

For scoop on setting up and bird-dogging your PLL forms and records flip over to para 2-41 in Ch 1.

And, that's about it . . . keep good demand records and you'll have it made with your strictly demand-supported PLL. And, maybe some day you can loan it to some neighboring outfit that's just getting started, or needs PLL help with a specific piece of equipment.



ESC RATINGS FORECAST YOUR EQUIPMENT . .

# COMBAT READINESS

If you operate equipment, inspect it, maintain it—and fight with it when the chips are down—you've got to be sure it's fit to fight.

That's your routine, regular and ready way of doing your thing as a member of your Army unit.

So the Army's combat readiness rules also make you a forecaster—and you don't do this part of your thing by reading tea leaves or sludge in your coffee cup.



## WHO DOES THE ESC RATING?

Operator or crew (at organizational level)—

When equipment is assigned to them.

Any available personnel—When equipment's in a shop or in storage (the rating is still a job for the owning unit).



Keeping track of your own equipment's combat readiness is your job. That's why you'll find an Equipment Serviceability Criteria (ESC) TM in the log book of your equipment.

Each ESC TM is a rock-bottom check list of what's needed on the equipment—and in what condition—to make sure it'll do its combat job and do that job for at least 90 days ahead with only normal maintenance support—barring major hits by shot and shell, o'course. This 90-day rule applies to all units reporting under AR 220-1.



That makes you your own forecaster—and for the safety of your skin you'd better be good at it. A lick-and-a-promise is not even half safe.

Here are the major points to remember so you'll be a top-notch forecaster when you do an ESC rating—

1. Make sure you have an up-to-date ESC TM in the equipment log. The latest ESC rates each check point as either GREEN, AMBER or RED. (The old type, with point scores to be added, is dead—except for a scattered few that will soon fade away.) The new type ESC needs no mathematical mumbo-jumbo—just read and check.

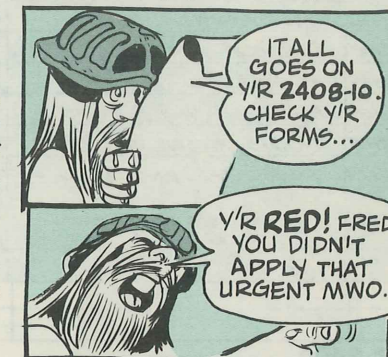
2. If there's an ESC TM—as there should be for combat essential items—and you report under AR 220-1, you give the equipment a rating component-by-component at least once each 90 days. Do it oftener if your command says so.

3. Record the results of your ESC check on DA Form 2404. That's the same form used for daily inspections—but you do the ESC on a separate DA 2404.

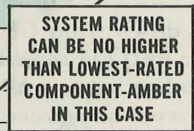
4. Your ESC check must show the rating for each component listed in its ESC TM—plus the overall rating for the equipment or system.

5. You must keep an eye on the forms in the equipment log. Make sure all components that have to be rated except on aircraft are listed on DA 2408-10—plus any hourmeter or odometer used to keep track of operating hours or miles. Update the entries for all component changes, too.

6. Watch DA Form 2408-5 like a jealous lover. An Urgent MWO not applied turns your equipment RED—instantly.





[illegible]



8. Are there any X or circled X status symbols on your equipment's DA Form 2408-1—or DA Form 2408-13 for aircraft? If so you've got a deficiency that gives the equipment a RED rating. You also check engine oil usage on DA Form 2408-1.

9. Also—except on aircraft—you need to check for circled X status symbols on DA Form 2408-14. (These are not allowed on DA Form 2408-14 for aircraft.)

10. For equipment with a gun tube, you need to check DA Form 2408-4 to see if the tube's nearing the end of its service life.



11. On aircraft, besides checking DA Form 2408-13 for deficiencies, you also need to check DA Form 2408-16 component status or condition and DA Form 2408-18 for inspections due on components that are changed at calendar intervals.

12. After you complete your ESC check on the equipment, hand the DA Form 2404 to your maintenance supervisor. He'll check it, take necessary steps to get repairs needed to upgrade RED or AMBER ratings and record the system or equipment rating on DD 314.



He'll also transcribe uncorrected faults that are allowed on DA Form 2408-14 to that form and make sure that it's updated as faults are corrected.

The DA Form 2404 is then filed (logbook pocket or unit files, as required by unit SOP). Keep it until the next ESC rating is made.

13. When you're dealing with a system that has 2 or more ESC TM's, staple the separate DA Form 2404's together. Then write the rating—GREEN, AMBER or RED—for the system across the bottom of the DA Form 2404 that's on top. (Normally the top DA Form 2404 should be the one for the system as listed on the DA Form 2406 report—or DA Form 1352 for aircraft.)

## SMOOTH AS A YO-YO

Your CO needs your equipment readiness ESC forecast for reports like DA Form 2406 and DA Form 2715, Unit Readiness. So make sure they're right and that they show each change in rating—UP or DOWN.

In skilled hands, most equipment

that goes down from GREEN to AMBER or RED can come back up again smooth as a yo-yo. All it takes is a sharp eye on equipment condition and log records—plus PM and repairs when needed.

## Connie's Mini Mini's



## Address Changes

Questions and suggestions on supply and equipment maintenance records go separate ways beginning 1 Jul 73. Thru command channels, those on AR's 710-2, 710-3 and 711-5 go to: Commander, US Army Logistics Evaluation Agency, ATTN: LEA-LS, New Cumberland AD, New Cumberland, PA 17070. Those on TM's 38-750 and 38-750-1 go thru channels to: Commander, US Army Logistics Center, ATTN: Systems Directorate, Fort Lee, VA 23801. These address changes went out in DA Msg DALO-SMZ-A 18200Z May 73.

## PCS for Half-Mast

(Connie and Bonnie, Too)

Half-Mast is still unpacking his duffle bag; Connie and Bonnie are getting curlers, eyebrow pencils and other female gear recalibrated after their PCS to Lexington Army Depot.

Yep. They hauled out of Fort Knox a few days ago and are now in business at Lexington.

Fire off your letters to them at this Address:

PS MAGAZINE  
C/O USAMMC  
Lexington, Ky 40507

## Plastic Plugs, Podner?

Hurtin' for a selection of plastic plugs? The kind you sometimes use to seal the open holes in your Armybird's environment-resisting electrical connectors?

Relax . . . they're not in the supply system.

Use spare wires in unused holes, pins, as spelled out in para-3-62, TM 55-1500-323-25 (Aug 68).

## Brass Fitting Kits

Back off, Knucklebusters. Take another look at your tube-pipe fitting kit FSN 4730-203-0398 or FSN 4730-470-6625. Order only those items—tees, nipples, nuts, elbows, etc.—that you need to keep your kits up to snuff.

Paying 50 bucks or so for a new completely stocked kit when all you need is a 2c sleeve is a waste of Green Machine moola.

## Polish A Plug?

Want a good polishing cloth for switchboard plugs and packs? Try FSN 7920-985-6849. It's a silicone-treated cotton polishing cloth measuring 13 1/2 by 11 inches. It's referenced on page 3.11 of Fed Cat C7900-IL-A (Jun 71), Cleaning Equipment and Supplies.

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Would You Stake Your Life <sup>right now</sup> on the Condition of Your Equipment?



# NOTHING MUST STOP THE ARMY AIR CORE

THE STRAIGHT  
IS IN  
TM 750-254,  
TB 750-651

KEEP MY  
INNARDS FREE  
OF RUST, CRUD  
'N' CORROSION--  
MY OUTSIDES  
FREE OF LEAVES,  
BUGS 'N' STUFF.

