

PS

## March

# THE PREVENTIVE MAINTENANCE MONTHLY

IT'S A  
COMMAND  
RESPONSIBILITY!

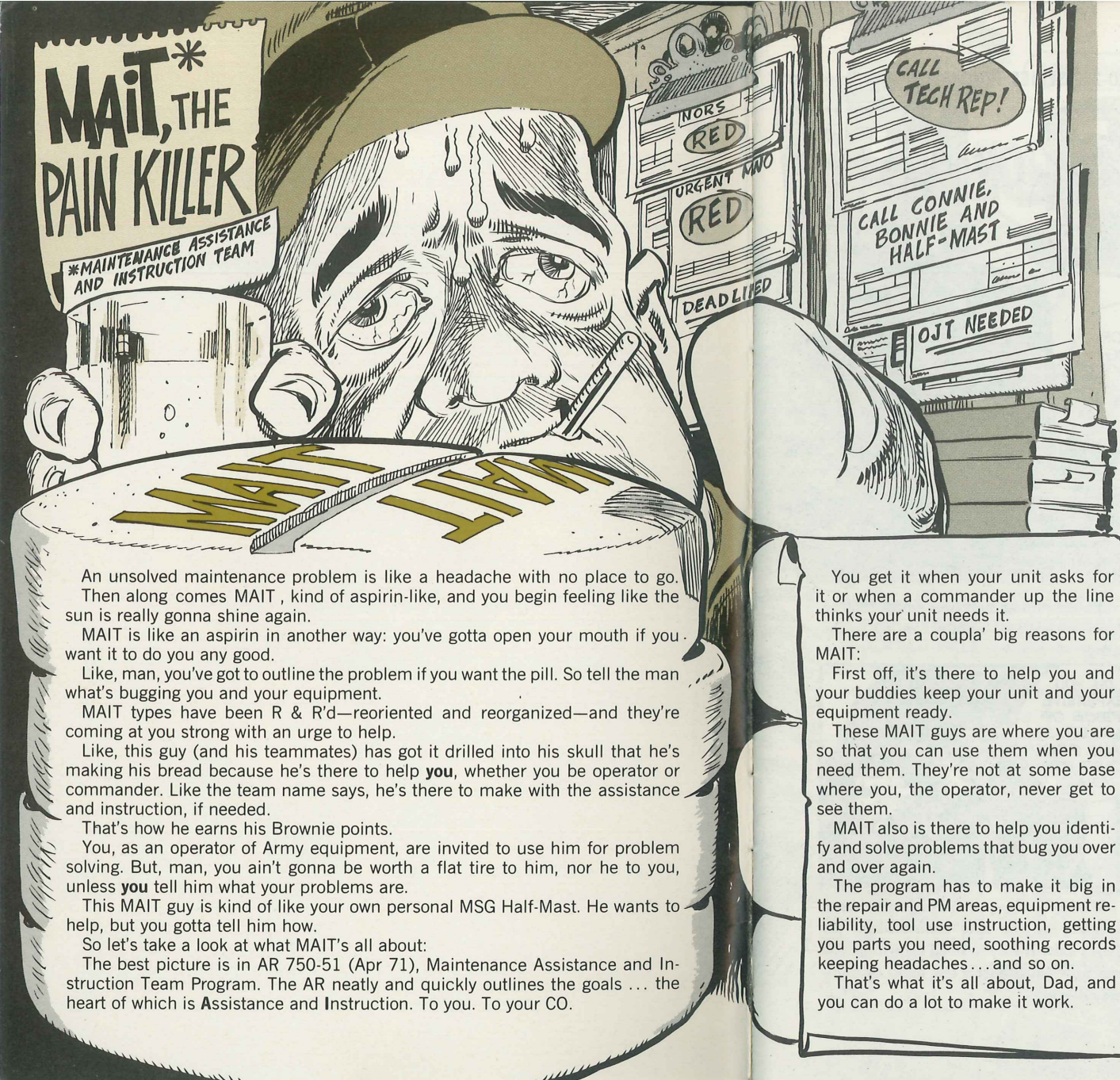
YEAH, HE  
CAN'T HOLD HIS  
BREATH ANY  
LONGER.

CHUCK WALKER



# MAIT, THE PAIN KILLER

\*MAINTENANCE ASSISTANCE AND INSTRUCTION TEAM



An unsolved maintenance problem is like a headache with no place to go. Then along comes MAIT, kind of aspirin-like, and you begin feeling like the sun is really gonna shine again.

MAIT is like an aspirin in another way: you've gotta open your mouth if you want it to do you any good.

Like, man, you've got to outline the problem if you want the pill. So tell the man what's bugging you and your equipment.

MAIT types have been R & R'd—reoriented and reorganized—and they're coming at you strong with an urge to help.

Like, this guy (and his teammates) has got it drilled into his skull that he's making his bread because he's there to help **you**, whether you be operator or commander. Like the team name says, he's there to make with the assistance and instruction, if needed.

That's how he earns his Brownie points.

You, as an operator of Army equipment, are invited to use him for problem solving. But, man, you ain't gonna be worth a flat tire to him, nor he to you, unless **you** tell him what your problems are.

This MAIT guy is kind of like your own personal MSG Half-Mast. He wants to help, but you gotta tell him how.

So let's take a look at what MAIT's all about:

The best picture is in AR 750-51 (Apr 71), Maintenance Assistance and Instruction Team Program. The AR neatly and quickly outlines the goals ... the heart of which is Assistance and Instruction. To you. To your CO.

You get it when your unit asks for it or when a commander up the line thinks your unit needs it.

There are a coupla' big reasons for MAIT:

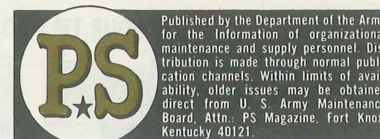
First off, it's there to help you and your buddies keep your unit and your equipment ready.

These MAIT guys are where you are so that you can use them when you need them. They're not at some base where you, the operator, never get to see them.

MAIT also is there to help you identify and solve problems that bug you over and over again.

The program has to make it big in the repair and PM areas, equipment reliability, tool use instruction, getting you parts you need, soothing records keeping headaches ... and so on.

That's what it's all about, Dad, and you can do a lot to make it work.



THE PREVENTIVE MAINTENANCE MONTHLY  
Issue No. 232 1972 Series  
March

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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





YOUR TM 9-2320-230 SERIES TRUCKS ...

# TIRES ON NEW 5-TONNERS

WHETHER YOU HAVE THE M656 CARGO, THE XM757 TRUCK TRACTOR OR THE XM791 VAN, THE FIRST THING YOU NOTICE IS THE TIRES. THEY'RE BIG AND THERE'RE A LOT OF THEM.

You're rolling on 8 tires worth \$880 so keep 'em inflated right according to the TM.

OH, YOU EXPENSIVE PIECE OF RUBBER. I'LL TAKE GOOD CARE OF YOU ...

Watch for signs of unusual tread wear, specially on the tires connected to the No. 2 axle. If they're lined up wrong you can ruin 'em in just a few miles of high-way driving.

2



SOME HUNK OF WHEELS!

**AIR PRESSURE CHECKS**— Your air pressure system will leak some but how much is too much?

If the air pressure gage shows 90 PSI or more after parking overnight, your air system is in great shape. If the low air pressure alarm buzzer sounds off after your truck has been sitting for just an hour there's too much leakage.

Put your truck in a quiet place and listen for the leaks.

Hold down on your brake for 3 to 5 minutes. If the pressure is still dropping at the end of that time you have a bad leak.

Likewise, if the pressure is still dropping 5 minutes after you've pressurized for fording, (M656 only) chances are the vehicle would leak too much to stay afloat.

Another thing rough on tires is operating over paved roads with the transfer case selector lever in the ALL AXLE position so driving power goes to all 8 wheels. Use the REAR AXLE position except for cross-country and real steep hills.

Start engine and run it at idle to have power assistance in turning the wheels.

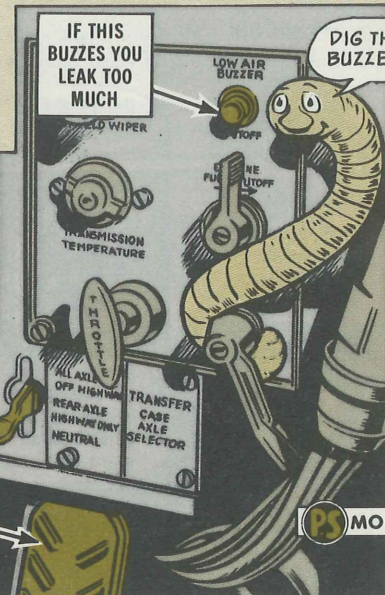
THIS IS GOOD FOR MORNING AFTER

USE THIS POSITION FOR NORMAL DRIVING

HOLD BRAKE DOWN TO CHECK FOR LEAKS

IF THIS BUZZES YOU LEAK TOO MUCH

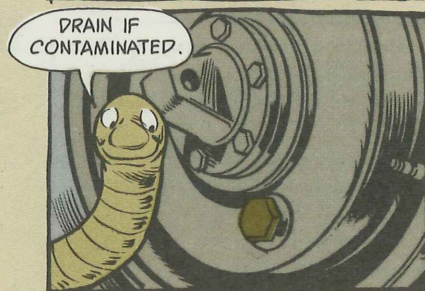
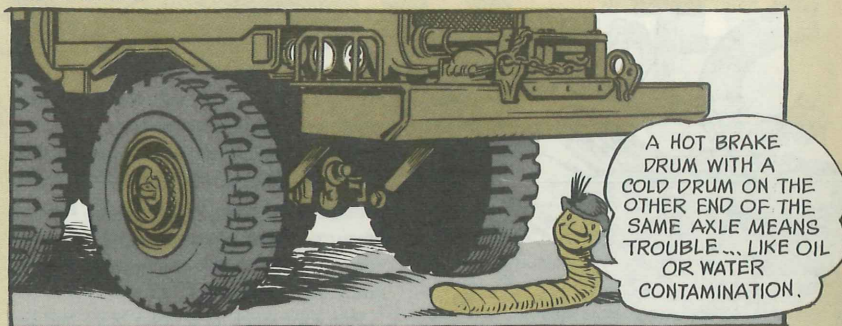
DIG THIS BUZZER.



PS MORE



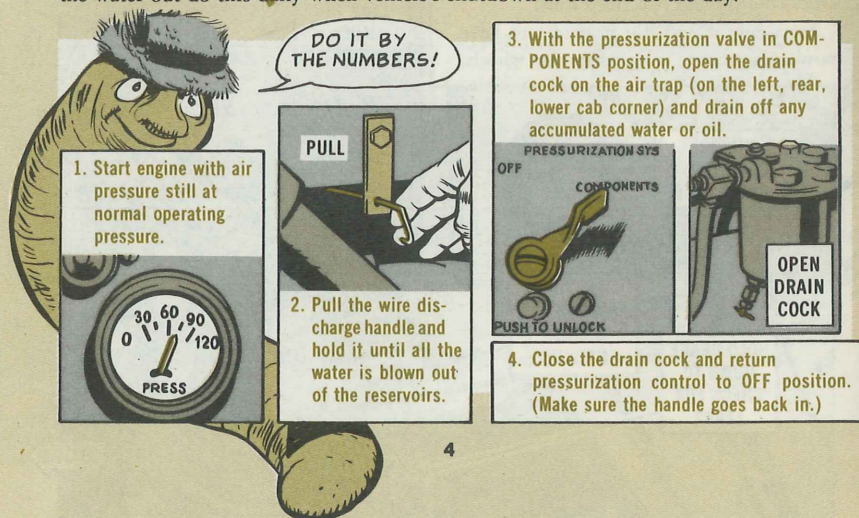
**TIRE AND BRAKE DRUMS**—After giving your vehicle a good workout, feel the brake drums and tires. A tire hotter than the others is either under-inflated or has weak sidewalls.



Unscrew both drain plugs and if you find contamination, move the vehicle until the plug is on the bottom to drain the brake cavity. Then clean and repack wheel bearings the way it says in Note 5 to your LO.

(NOTE: A leaking seal or O-Ring—because of overfilled power steering—can work through vent lines to contaminate brakes.)

**AIR RESERVOIR**—Moisture in the air will condense in your air reservoirs. To get the water out do this daily when vehicle's shutdown at the end of the day.



4

**ALCOHOL VAPORIZER**—Keep your alcohol vaporizer bottle filled during freezing or near-freezing weather. It's under the passenger's seat in the cab, or it may be located on the engine heater in the cab side wall near the front. Use methyl alcohol O-E-760 (1602). The vaporizer keeps water from freezing in the air system.

If the air brakes lock-up on the trailer you are towing with your XM757, it is a sign your tractor air system is in big trouble. Could be an empty alcohol vaporizer.

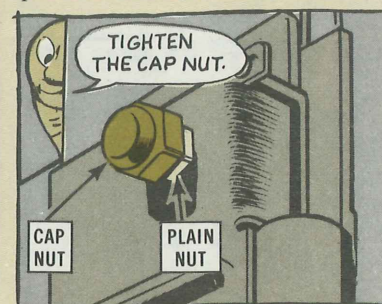


**AIR HEATER DUCTS**—Water can get into your air heater ducts and rust the terminals on the heater. Check the ducts from time to time and if they're loaded with water get it out.



Water gets into the ducts if you try to clean the inside of the cab with a high-pressure hose. So hold your hose low and run it slow.

**CAB DOOR LOCK**—The only thing worse than not being able to close your cab door is having the door come open when you don't want it to. You can cure both problems by getting the plain nut on the door latch tightened until the door latch works smoothly. Once you get it right, tighten down the cap nut over it so the plain nut can't shift around.



**SELF-ADJUSTING BRAKES**—Your M656 brakes adjust in reverse like some civilian cars. However, after the brakes have been taken apart for maintenance, you may have to apply the brakes 40 or 50 times (—with the truck moving—) before they work without causing an extreme pressure draw down that sets off the low air buzzer in 1 or 2 brake applications. Repeat until they adjust smoothly.

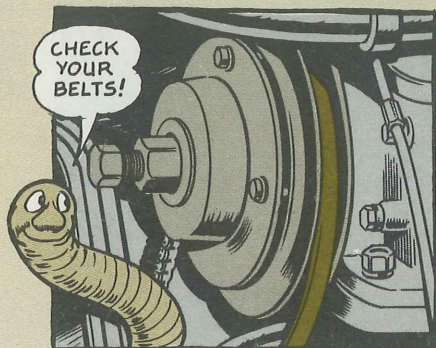


5



**AIR COMPRESSOR CHECKS**— Air pressure operates the service brakes so make sure your air compressor's healthy.

Take off the engine access cover (it tells how on page 3-22 of your TM 9-2320-230-10) and look over the compressor drive belt for cuts, breaks, etc. The automatic tensioning pulley should keep the belt good and tight.

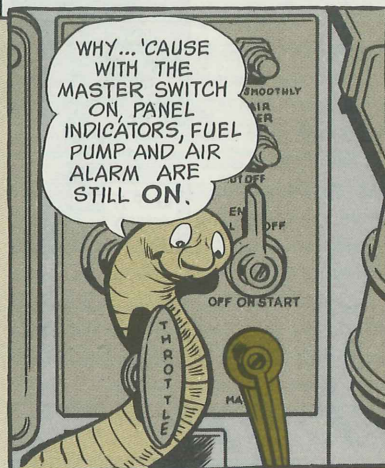


Start the engine and see how the compressor runs. Does the belt slip, is there oil leakage, is the compressor noisy? Anytime a compressor fails by overheating in one spot at the crankshaft pulley, get the compression replaced. It may seem serviceable but it's a booby-trap.



**DEAD BATTERY HAZARDS**— There are 2 ways you can wind up with dead batteries on your M656 series truck without doing anything that seems wrong:

1. First way. You stop the engine with the fuel cutoff switch and then go away. The next day you can't get the truck started because the battery is dead.



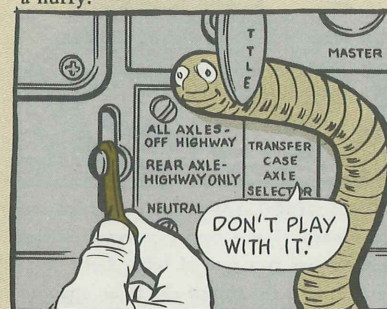
2. Second way. This time you are careful to shut off the master switch but you still have a run-down battery the next day.

Why? Because you (or somebody) left the personnel heater RUN-OFF-START switch in the RUN (upper) position. This kept the personnel heater fuel pump running even though the master switch was OFF.

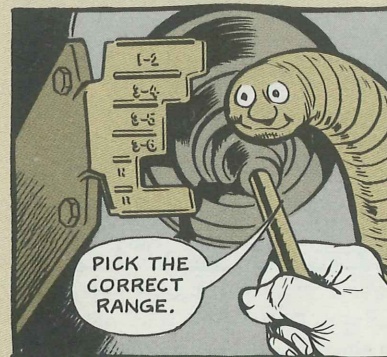


6

**TRANSFER TRAUMA**— Some drivers just can't keep their hands off the transfer case axle selector lever. They play with it by flipping it up and down. Because of this habit they might be driving in ALL AXLES down the highway without even knowing it, which wears out the tires in a hurry.

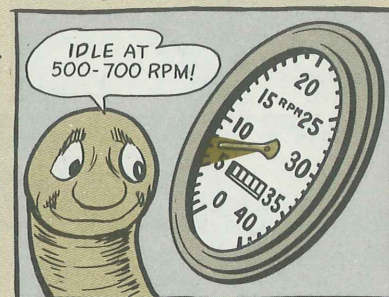


**TRANSMISSION TIPS**— The Allison TX-200-6 transmission is fully automatic but it needs help from you to put it in the right range for conditions of terrain and load. For extreme loads, grades or other heavy pulling, start in 1-2 range and upshift into 3-4, 3-5 or 3-6 as needed.

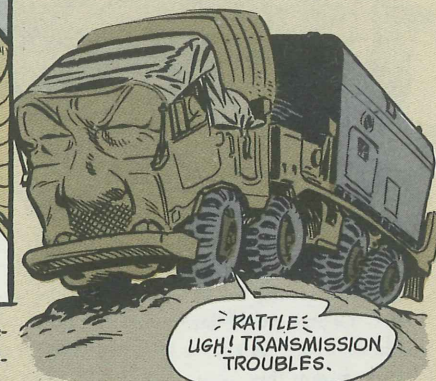


Downshifting should be done only below the maximum speeds shown in fig 2-20 of your TM 9-2320-230-10.

Some transmissions have been busted up because the driver forgot to come to a complete stop and let the engine drop back to idle (500-700 RPM) with the shift lever in N (neutral) before shifting to another speed or reverse.



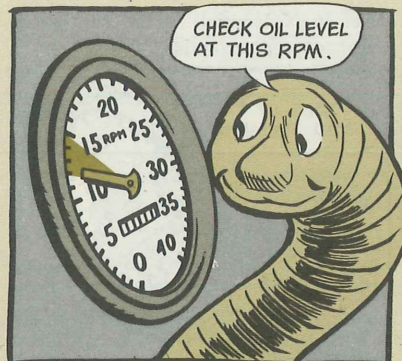
The heavy duty transmission is not supposed to work as smooth as an automobile transmission, and it won't. You may feel a little jolt as the transmission upshifts or downshifts within a given range. This is normal and nothing to bother your mechanic about. However, if it almost snaps your head off your shoulders, check for loose cab mounts before deciding that you've got transmission trouble.



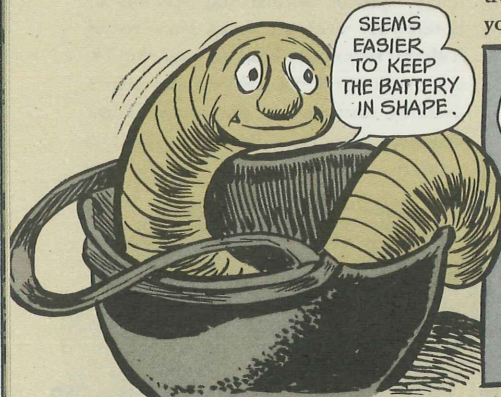
7



**TRANSMISSION OIL LEVEL**—The only way to get a correct reading is to check it with the transmission in N (neutral) and the engine running at 1200-1500 RPM's.



**ENGINE SHUTOFF PROBLEM**—If your battery goes dead you can't shut off your engine because the fuel cutoff is electric. Stop the engine either by unhooking the fuel line or by blocking the air intake.

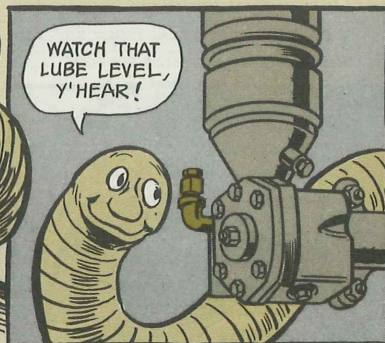


You can also stop the engine in 1 or 2 minutes if you open the top vent and bottom drain on the fuel strainer behind the tank. 'Course, you'll have to bleed off the system before the engine will start again if you stop it this way.

**NO SWAMP BUGGY**—Your vehicle will go in pretty rough terrain when all axles are pulling but, even so, it's no swamp buggy and if you drive it into mud above its hubs it will likely get stuck.



**TRUCK STEER HARD?**—Your truck can steer hard if the upper steering worm bearing has run out of lube. Lube level should be at the top of the filler opening (elbow and adapter vertical in the steering gear housing) 2-in above bottom of filler hole opening in gear case. Your truck should be checked for this when you get it and every 6 months after that.



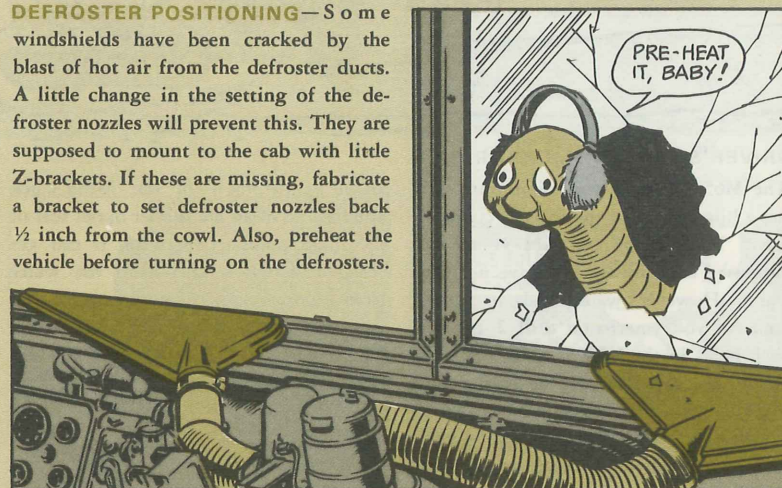
**KEEPING THE RIGHT SPEED**—If you go real slow (20-25 MPH) your truck tends to shimmy and wobble. This will stop when you go a little faster ... on the way to your maintenance shop to get the front end aligned.

**WINCH MAINTENANCE**—Lube the winch parts the way it says in your LO. Make sure GO (gear lubricant) is used where called for. The winch cable must be coated with new OE oil, not GAA grease which does not give the winch cable enough protection against corrosion.

Keep a spare winch pin, FSN 5315-880-5861, in the tool bag in the stowage box. The pin is a drive fit at the lead end and must be driven in to secure it. Be sure you have the right pin.



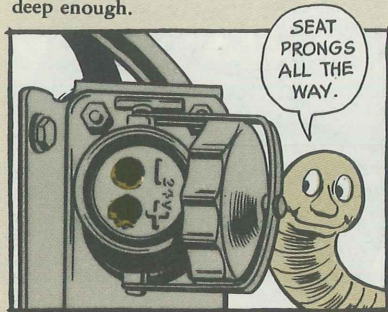
**DEFROSTER POSITIONING**—Some windshields have been cracked by the blast of hot air from the defroster ducts. A little change in the setting of the defroster nozzles will prevent this. They are supposed to mount to the cab with little Z-brackets. If these are missing, fabricate a bracket to set defroster nozzles back 1/2 inch from the cowl. Also, preheat the vehicle before turning on the defrosters.



**TURNING TIP**—These vehicles corner faster than other 5-ton trucks because you sit further forward with respect to the front wheels and this tends to cut corners shorter. This is handy when you get used to it but might be a little dangerous until you do.



**SLAVE RECEPTACLES**—Many of the slave receptacles are getting pitted and burned by flashing. This is caused by not seating the prongs of the power cable deep enough.



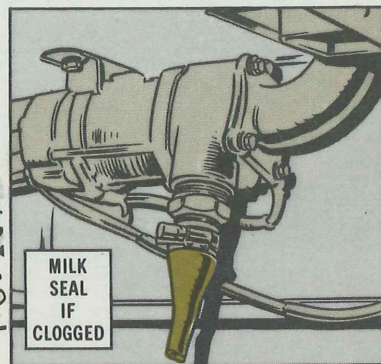
**WHITE SMOKE SIGNAL**—If your vehicle exhausts a lot of white smoke or vapor it means you better shut down your engine fast and call direct support.



#### DRIVER'S COMPARTMENT DRAIN

The M656 is made for swimming so it has a bilge pump in the driver's compartment. The XM757 and XM791 are not supposed to swim so they have no bilge pump. However, water tends to gather, so have your mechanic drill 2 quarter-inch holes in the XM757 or XM791 cab floor, one on each side of the engine compartment. To find the lowest spot (which is where you want to drill the hole) position your truck on level ground and see where the water gathers.

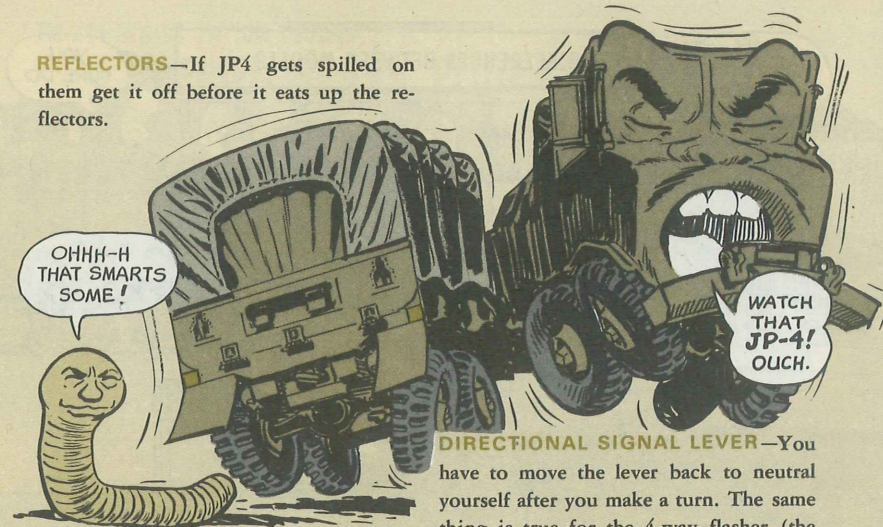
**BILGE PUMP PM**—On the M656 truck you have to clean the rubber outlet seal of the bilge pump. Otherwise, it can get clogged which would keep the water from running out. Water trapped that way can freeze and crack the bilge pump.



You clean the seal by milking it so the water and gook runs out.



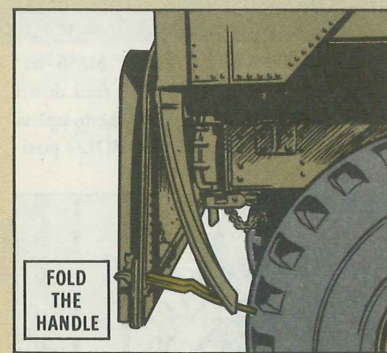
**REFLECTORS**—If JP4 gets spilled on them get it off before it eats up the reflectors.



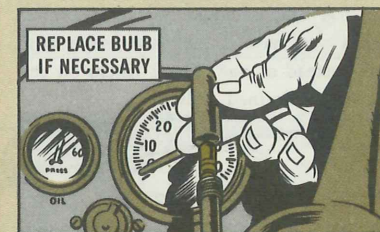
**DIRECTIONAL SIGNAL LEVER**—You have to move the lever back to neutral yourself after you make a turn. The same thing is true for the 4-way flasher (the far right position of the lever).

If everything is going well the light in the end of the lever will blink off and on when the lever is in the left, right or 4-way position.

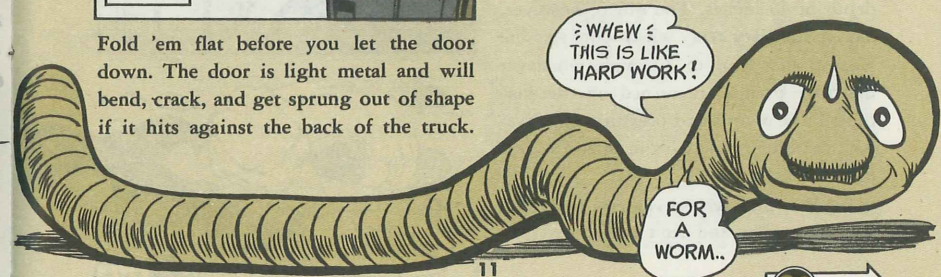
**CARGO DOOR LATCHES**—The cargo door latch handles can damage the rear tires if you let the M656 cargo door fall with the handles in the extended position.



Fold 'em flat before you let the door down. The door is light metal and will bend, crack, and get sprung out of shape if it hits against the back of the truck.



**MASTER SWITCH**—The FSN for the master switch is FSN 2920-134-5036.





## DIFFERENCES BETWEEN MODELS

HEY!  
YOU LOOK  
LIKE ME.

YOU  
SURE DO.

DRAIN THE  
TWO ENGINE  
FILTERS  
DAILY.

**FUEL TANKS**—The M656 and XM791 have one 80-gallon fuel tank each. The XM757 has 2 80-gallon tanks. That means you have 2 fuel strainers at the tank instead of one. The 2 filters on the engine get drained daily.

**FORDING vs SWIMMING**—The M656, XM757 and XM791 all have the same basic 30-ampere alternator. The XM757 and XM791 can both be forded to a depth of 40 inches. The M656, however, has an auxiliary relay which converts the 30-amp alternator to 80-amps, whenever the bilge pumps are turned on. Because of its bilge pumps and pressurization system, the M656 can swim in inland waters of any depth.

All Pershing system vehicles have 100-amp alternators and can't swim.

**TROOPS OR CARGO**—Your M656 has built-in troop seats but they'll fold down when the troops try to use them unless the locking springs are in the HOLD position.

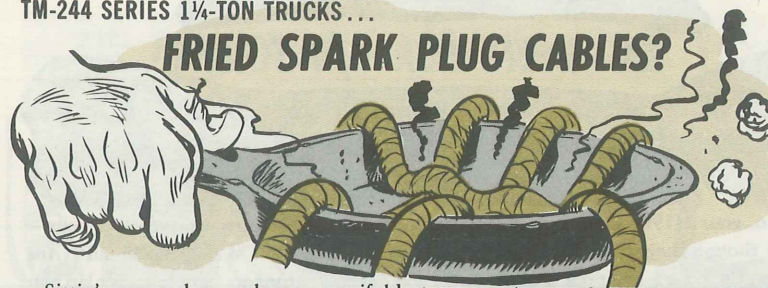
LOCK  
SEAT IN  
POSITION

OOPS!  
GOTTA SPLIT!

PS END

TM-244 SERIES 1½-TON TRUCKS...

## FRIED SPARK PLUG CABLES?



Sittin' on a hot exhaust manifold doesn't do a thing for those spark plug cables in your M715 or other 1½-ton vehicle.

So why let it happen?

Hose clamps usually do the trick, Where the back 4 cables come together, use FSN 4730-908-3194. Then where all 6 cables come together, use FSN 4730-908-3193.

You can add cable protection by hooking a spring from the 4-cable clamp to the forward hold-down bracket on the rocker arm cover. Almost any spring will do, as long as it's hooked at each end and is limber enough to let the cables ride easy.

SPRING WILL  
GIVE MORE  
PROTECTION

USE  
HOSE  
CLAMPS

HOT  
EXHAUST  
MANIFOLD

...ALSO FOR YOUR 1½

## GET THE RIGHT PLUG

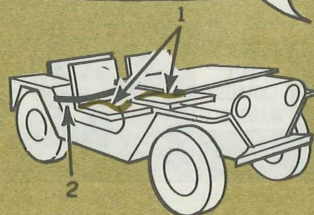
Check those spark plugs in your vehicle. You should have the new, "hot" plug — FSN 2920-134-7643, listed in Ch 1 (May 70), TM 9-2320-244-20P. Any one of these plugs comes under that FSN: Champion XML-15Y, AC WR44LS, Autolite AER72S.



## LAP BELTS FOR 1/4-TON?

No, your M151-series 1/4-ton utility truck does not usually get lap-type seat belts—even though they're shown on the utility truck in Fig 73, TM 9-2320-218-20P (Apr 68) w/Ch 1, 2&3 and even though the new A2-series 1/4-tonners have holes for lap belt mounting

FORGET ABOUT ITEM 1 IN THIS-20P TM PIC, UNLESS YOUR M151A2 UTILITY TRUCK IS USED FOR ADMINISTRATIVE PURPOSES AND YOUR CO WANTS IT EQUIPPED WITH LAP BELTS. THAT'S THE WORD IN CHI (DEC 69) OF TM 9-2320-218-10.



Yes, the ambulance does get lap belts—plus the side and rear safety straps—just like it shows in Fig 73.

The tactical-use utility truck takes only the side strap—Strap Webbing, safety belt, assistant driver, FSN 5340-591-3444.

## CLIP FOR 1/4-TON

Clips for your accelerator-to-carburetor linkage on M151-family trucks can be had. Try FSN 2910-214-2707, with RIC of S9C.



JUST DON'T LAY THERE... GET IN THAT CARBURETOR LINKAGE.

## AIR TANK DRAIN-OPEN OR CLOSE?



Dear Half-Mast,

There's some head-butting around here on draining brake system air tanks. The TM's say to drain 'em daily—after operation. OK, no argument.

But some people say you're supposed to leave the drain open overnight. Then you close it next day, during the before-operation check. I say close that air tank drain right after you drain the tank.

Leaving it open just to get rid of a few more drops of water isn't worth the risk. Some guy in a big hurry might jump in that truck next day and take off without closing the drain. With no air pressure, he'd have no brakes. How'd you like to meet him at a crossroads?

Sure, you're not s'posed to move out until the air pressure warning buzzer quits—and it'd never quit with the tank drain open. Try explaining this to the driver after his brake-less truck has you pinned against a tree.

Why gamble with safety? Best bet is to close the drain after draining. What do you say?

CW2 R. N. F.

Dear Mr. R.N.F.,

I say you're absolutely right.

Half-Mast



## 10-TON WINCH SWITCH

You guys with the new M123E2 10-ton tractor truck, hold one!

That winch control data plate for your dual winches is wrong.

Instead, stick to the poop in para 2-63, TM 9-2320-206-10 (Mar 66) w/Ch 2—especially the caution in Table 2-5:

"Do not permit engine speed to exceed 1,000 RPM at any time during winching operations."

And get a new data plate to replace that bum one. Use "exception data" and order by Part No. 19207-11659789. RIC is AKZ.



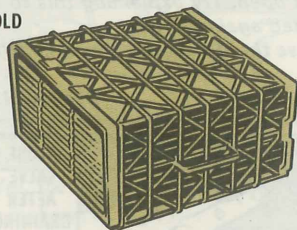


# NEW TANKS... NEW AIR CLEANERS

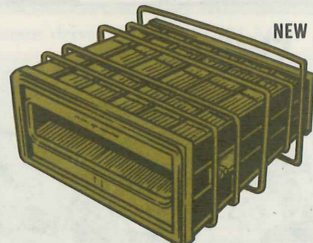
M60A1 tanks, M728 CEV's and bridge launchers now coming off the assembly line have a different air cleaner.

The filter element, FSN 2940-070-1112 is built in one piece, comes out through the top instead of the side, and is bigger than the present side-loader air cleaner.

OLD



NEW



THIS NEW FILTER ELEMENT (FSN 2940-070-1112) WON'T BE READY AS A REPAIR PART TILL JULY 1972

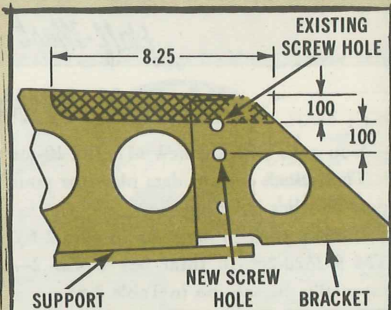
With the bigger filter, the blower motor (the same one you have now)

sometimes hits the top inside edge of the cleaner housing and the top of the fender support when removing it for replacement.

CHECK HOUSING FOR CLEARANCE



If this happens, get your happy hull mechanic to cut the support and bracket and relocate the bolt like this:

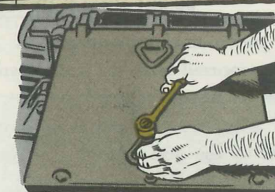


You service the new element like the present filter ... either by blowing out the dust with compressed air or by washing the element in water.

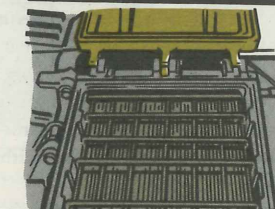


1. Stop the engine (otherwise a lot of dust will get sucked in).

2. Open the filter access door by taking out the 3 bolts ...



... lift the door and gently rest it on the fender.



3. Gently move the dust filter element to the front of the air cleaner box (forward) and ...



... then lift it out, being careful not to knock any dust out of the element.



4. Clean out the air cleaner box with a damp cloth but keep dust out of the outlet casting. Never use compressed air, here!



Now you're ready to service the filter element.

If the filter is just dusty, blow it out with compressed air. That's the best way.

Move your air jet up and down against the inside (clean air side) of the element. Slowly play the jet back and forth across the pleats until no more dust comes out. Never use more than 100 PSI. Keep the nozzle at least an inch away from the filter.

In washing with water you first shake or blow out most of the dust and then use 2 ounces of non-sudsing detergent for each gallon of water.

Dissolve detergent in a small amount of cool water, then add water warmed to 70°-140°F. (The warmer the solution the better it cleans.)



Soak the dust filter element in this solution for 15-20 minutes then gently shake it in the solution 2-3 minutes.

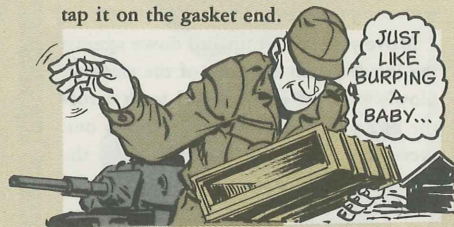


Rinse the element with clean running water directed on the clean air side. (If you use a hose keep the pressure at 40 PSI or below so's not to rupture the filter material.)

The element must be completely rinsed and then thoroughly dried before further use. (Not over 180°F temperature if circulating air is used.)

Soap and water is OK if you can't get detergent but the results won't be as good.

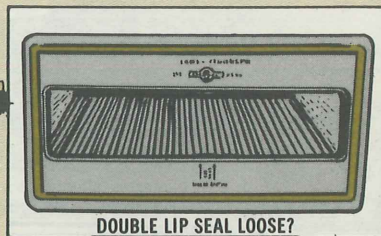
In an emergency, you can give the dust filter a partial cleaning by gently tapping it with the palm of the hand. (The key word is gently.) You don't bang the filter against some solid object and you don't tap it on the gasket end.



Course, like you already know, you never, but NEVER, clean the filter in gasoline or other solvents.

Inspect the filter for damage after cleaning. (A light placed inside the element can help you see if the filter is ruptured.)

Replace the element if you see any holes or ruptures. You also replace it if the double lip seal is loose or damaged because you get rapid engine wear if there's any leakage past this seal.



Seals can be damaged if stored or transported with the seal down or if elements are stacked end to end.

When you install or remove the element, the seal can be damaged if it is rubbed against the door seal.

To keep this from happening during installation you lower the element to the bottom of the housing before sliding it toward the door seal, where it must be positioned so the locking arms on the air cleaner door will engage with the filter element pins.

Likewise, when you remove the element, you first slide it back so the element seal and the door seal are no longer in contact.

You service the air filter element quarterly or every 750 miles of tank operation. Do it sooner if you notice loss of engine power or heavy exhaust smoke.



## SHOCKING NEWS ON SHOCK ABSORBERS



The shock absorbers on your tanks (4 later. Meanwhile, if you order shock No. 1 you may be issued shock No. 2.

1. Direct action shock absorber, (also called friction shock or snubber) FSN 2540-690-2756 (P/N 8382077). This is the early type.



2. Direct action shock absorber (also called hydraulic shock), FSN 2540-179-5526 (P/N 11645792). This is the latest kind. It is listed on page 16-5 of TM 9-2300-378-35P/ 1-2 (Feb 70) even though the figure it refers to shows shock absorber No. 1.



Shock absorber No. 2 is not yet listed in TM 9-2300-378-20P/1 but it should be

Either kind will work OK, but it's best not to mix 'em on the same vehicle. If possible use all shock absorber No. 1's or all shock absorber No. 2's.

If you have to mix 'em, at least try to do it in pairs, with shocks of the same number on the left and right sides of the tank at any given position.

If you have only one pair of No. 2 shock absorbers put them left and right on the front position.



One other thing to remember on No. 2 type (hydraulic) shock absorbers. Some manufacturers made them with the self-aligning bearing and spacers as a non-removable part of the shock. Other manufacturers made the bearings and spacers as individual items which are assembled to the shock.

Be careful not to lose any of the parts because you can't get the individual items separately.



## M551 SHERIDAN OBTURATOR MAINTENANCE!

WE'RE DIFFERENT  
FROM MOST OTHER  
TUBE ARTILLERY.

Steel and rubber are different. Right? So you maintain the steel obturator gasket on your gun-launcher a bit different from the rubber obturator gaskets on most other artillery.

Rubber obturator gaskets will take a lot of abuse while you're getting them off for cleaning.

The steel obturator gasket FSN 5303-937-2028 (P/N 11577694), won't.

It's made slightly oversize for a "snap-in" fit, and it won't work right if you wear it down or enlarge the gasket retaining area in the rear of the gun launcher tube.

So ... never use sandpaper, emery cloth, steel wool or a sharp instrument for cleaning.

After firing, carefully unsnap the obturator gasket with offset screwdriver FSN 5120-287-2130 (P/N GGG-S-121).

E-A-S-Y  
DON'T  
DAMAGE  
THE  
GASKET

It is real important that you do this carefully and gently. Forcing it by hammering with a straight screwdriver, hammer and punch or pliers, can distort the gasket and bearing surfaces, and you ruin the gasket.



Also after firing, scrub the obturator gasket, the gun-launcher retaining groove and the forward edge of the breech chamber thoroughly with rifle bore cleaner (RBC) Type (MIL-C-372) and a rag, bristle brush or old tooth brush.

All surfaces, including the gun launcher retaining groove, must be free of carbon, dirt or other gunk.

When everything is clean, carefully snap the obturator gasket back into position. Hammering or pounding the gasket into position is not necessary. You could damage the gasket.

## M60-SERIES TANKS NOW WARRANTED

Yep! Something new has been added. If your M60A1 tank, bridge launcher or M728 CEV is new—delivered to the Army after June 1971—it's protected by a warranty.

If you're not sure, check your data plate or log book for the acceptance date.

Vehicles shipped from September 1971 and later have a decal in the commander's station reading:

### ATTENTION

THIS TANK IS WARRANTED UNDER CONTRACT NUMBER DAAFO3-71-C-0015 REFER TO TM 38-750 FOR PROCESSING WARRANTY CLAIM ACTION. COMPONENTS AND PARTS WARRANTED ARE LISTED IN THE TB-9-2300-295-15-10. WARRANTY EXPIRES 11/15/77 (ACCEPTANCE DATE IS REFLECTED ON DATA PLATE).

All vehicles the Army bought under contract DAAFO3-71-C-0015 have the warranty even if they don't have the decal. Your support unit will apply it to the June, July and August vehicles later.

Meanwhile, if something breaks, get a warranty claim real fast. It could save Uncle some money.

THE WARRANTY IS  
COOL, BUT HOW ABOUT  
THE WHITEWALLS?

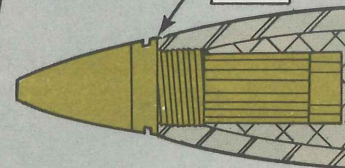


HOLD  
YOUR  
FIRE!

NO  
GAPOUS  
HERE!

Check, then doublecheck, before you fire that round with a proximity fuze. There should not be a gap between the proximity fuze shoulder and the projectile.

NO GAP  
WHEN  
FUZE IS  
FULLY  
SEATED



When you fire a round with an improperly seated VT fuze, it can cause premature detonation in either the tube or over the heads of friendly troops. That could result in death or injury to your buddies, and it could put your equipment out of commission.

If you find a round with a gap of any kind between the proximity fuze shoulder and the projectile, either refuze with point-detonating fuze or get rid of the round.



GET TO KNOW  
THIS REAL  
SWINGIN' ONE  
OUNCE LITTLE  
DOLL. SHE CAN  
REALLY DO  
A JOB.

# SWEET SIXTEEN CLEAN.

HI, FELLAS.  
=BLUSH=

YOU TURN  
ME ON.

An ounce of prevention is worth a pound o' cure 'specially if you have the new 1-oz toothbrush-like PM cleaning tool for the M16/M16A1 rifle.

ELEVEN B grunts can get down to the cleaning job with FSN 1005-494-6602.

This brush has a set of bristles at each end: A single row of short stiff bristles at the narrow end, and 3 rows of V-notched longer bristles at the other. Makes cleaning the upper and lower receiver groups and components a heap easier, faster.

Here're some items that this light-weight brush takes to the cleaner. Use large/small end like it shows.

22

## UPPER RECEIVER GROUP

All outside surfaces—large.

Barrel nut assembly—large.

Front and rear sights—  
either end works  
wonders.

Flash suppressor—either.

All inside areas—large.

Forward assist  
assembly—large

Charging handle—large.

Gas tube—small end gets into those close quarters.

23



GIVE IT A FIRST-CLASS  
CLEANING JOB WITH THIS  
SUPER DOG DIRT GETTER.  
SMALL, STIFF BRISTLES  
ARE BEST.

## BOLT CARRIER GROUP

Bolt locking lugs.

Bolt face.

Bolt extractor recesses.  
Get into all of 'em.

In front of and back of bolt  
rings.

Front and rear of firing pin recess.

Inside of  
bolt carrier.

## LOWER RECEIVER GROUP

All outside areas—large.

Automatic sear—small.

Magazine well—large.

Inside of pistol grip—large.

Buffer area—small.

Trigger and spring—small.

Hammer and spring—small.

Butt plate area—large.

Clean the brush with RBC. If your  
M16/M16A1 has the latest rifle stock,  
store the brush in it. That way you'll al-  
ways have it where it's needed most ...  
with the rifle. If you've still got the old  
solid stock—no sweat. Just tote the brush  
in your pocket.

A  
CLEANER RIFLE  
IS A SWEETER  
SIXTEEN!



## READY-MADE ARMS ROOM

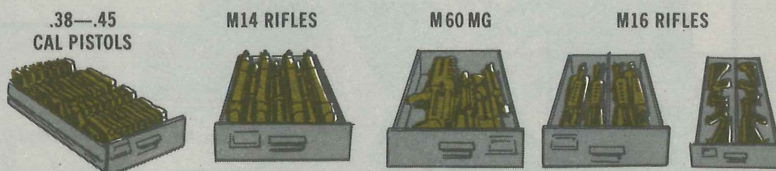
WHAT AN IDEA  
FOR OUR ARMS  
ROOM!

If yours is a small or isolated unit, could be this'll grab you.

AR 190-11 (Aug 71), para 2-1d(3), authorizes a ready-made arms room for storing your small arms. Here's the deal:

The standard Class 5 map and plan security cabinet (FSN 7110-931-0770, with a key-change combination lock) has been modified for use as a weapons storage cabinet. It's authorized for use in a secure building in place of a standard arms room.

The cabinet stands 50 1/4 inches high, 22 inches wide, and 39 inches deep. Its basic components are specially designed drawers and a set of 4 vertical channels which form the rack for the drawers. It'll take up to 7 or 9 drawers, depending on the type of weapons you're storing. It's also available without the components, and you can set up your own storage arrangement.



The cabinet's also authorized for storing limited amounts of ammo (see para 3-1a from the AR)

### CABINET CARE

There's no DA pub on the weapons storage cabinet, so hang on to the manufacturer's instructions you get with the cabinet. Put 'em in a safe place. They give you maintenance and locking scoop you can't do without. Same goes for the lock's key.

Tape it to some handy spot inside the cabinet. The key's the tool you need for changing the lock combination. If you're ever in a bind for operating instructions or a key, tap the nearest physical-security equipment-specialist. He's usually located with the intelligence or physical security types at the Provost Marshal's Office.



## PM POINTERS

Its PM needs are few and simple, but they're for real.

1. First off, don't touch the lock until you've memorized the locking, unlocking and combination-changing info. The scoop on handling the lock is listed inside the cabinet door and in the manufacturer's instructions.

Goofing up the lock will cause a lock-out that'll bring down the roof . . . you'll not be able to grab your weapons quicklike. A lock-out may also call for forced-entry and damage that'll ruin your portable arms room.

3. If the drawers drag or bind use a light grease (like Lubriplate, FSN 9150-921-7085) on the drawer rollers. A light coat'll do. Never bang-up or rough-house the drawers or their rails. If the drawers don't work right, the door may not lock.

4. If the door is hard to work give its hinges a few drops of your small arms general purpose oil, FSN 9150-273-2389.

5. Except for the lock-box panel, never remove any parts from the cabinet door.

6. If the door handle, or the locking bolts are hard to work, or the lock dial is loose call in the equipment specialist. Same goes, natch, if any other part of the locking assembly is loose, missing or damaged.

7. When the door is open keep the locking bolts retracted, otherwise they'll be rammed if the door is accidentally slammed shut.

8. For rules on how and when to change the combination and on the use of DA Form 672, Safe or Cabinet Security Record, and DA Form 727, Classified container information, see paras 6-3 and 6-4, AR 380-5 (Mar 69).

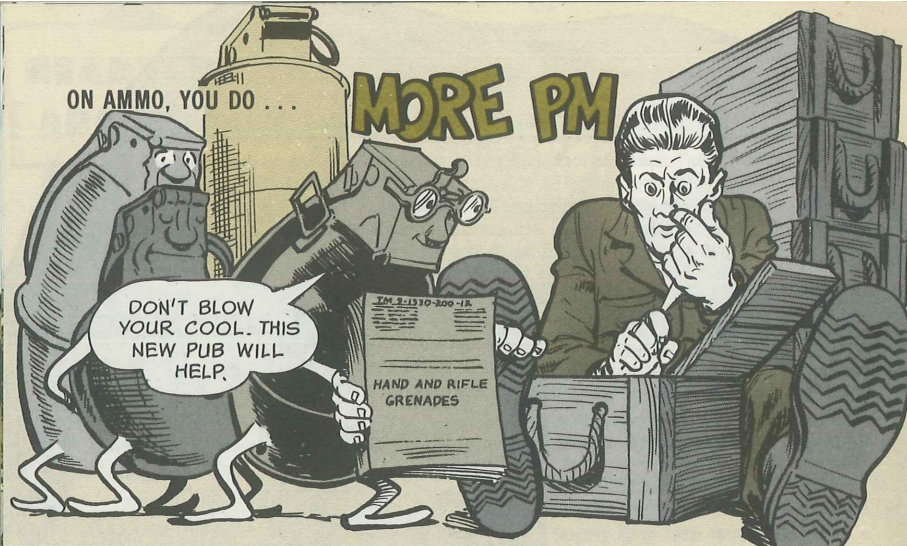
9. Use cleaning solvent to wipe off grease or oil and for otherwise cleaning your cabinet as needed.

## SUPPLY SCOOP

The cabinet is a GSA (General Services Administration) item and it's listed in your DSU's Federal supply Schedule Price List, FSC Group 71, Part XI. Components for the cabinet are on the list.

If you have any (supply or maintenance) questions or problems on the cabinet, fire off a DA Form 2407 to: U.S. Army Mobility Equipment Command, as called for in App B, TM 38-750.





The Army is starting on a new deal on care and maintenance of ammunition:

You in the firing units will be doing more of it. In the past, about all you had to do was keep ammo clean and dry and not bang it up.

But, with the switch coming, ammo users will do more of the maintenance work that in the past was done only by the ordnance ammo specialists.

No sweat! It's like "a stitch-in-time saves 9." Step-by-step procedures cover what you'll have to do maintenance-wise for each kind of ammo.

The first manual to have these procedures is TM 9-1330-200-12 (Sep 71) on hand and rifle grenades.

The TM calls out your ammo cleaning and inspecting chores. It OK's minor sanding, spot-painting and repair jobs on some grenades, and gives you loads of info on safety, storage and protection of grenades and their packing materials. It also tells you when to keep your cotton-pickin' fingers to yourself and yell for your ammo support.

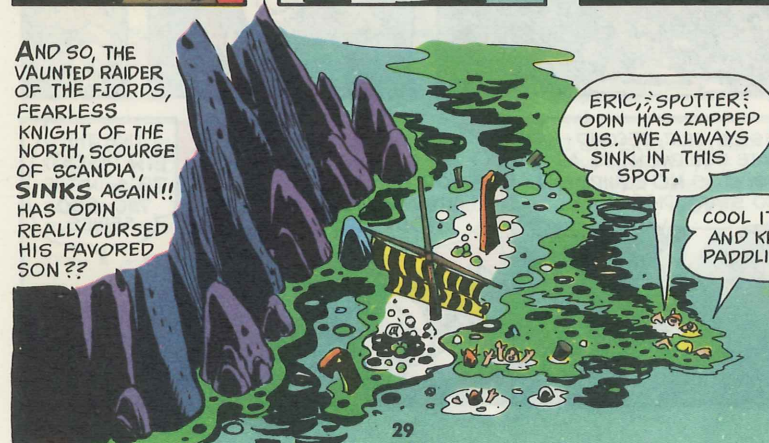
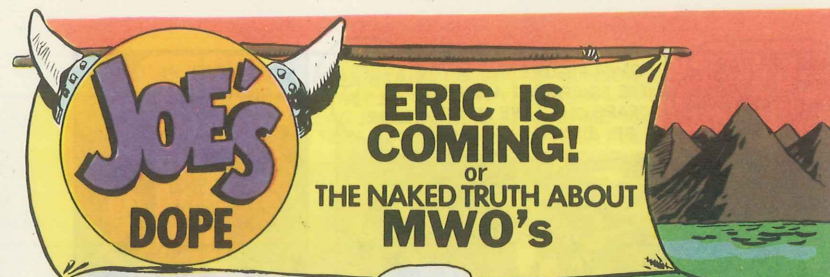
Natch, it illustrates, identifies and describes your practice and for-real grenades, and tells you how to get them ready for use.



The MAC's (Maintenance Allocation Chart) in Appendix C of the -12 TM assigns the authorized maintenance functions to each level of maintenance including yours—operator/crew.

Repair parts and painting and cleaning supplies for the various grenades are covered in separate charts and tables.

It's an example of how things will be with ammo in the future.







HAR DE HAR!  
HERE COMES  
ERIC... SWIMMING  
HOME AGAIN!

CAN'T FIGURE IT!  
THE EQUIPMENT ALWAYS  
CRAPS OUT... WE MUST  
BE JINXED.

ERIC!  
LET'S ASK  
OL' I.  
THOR.

I HEAR HE  
KNOWS ODIN  
PERSONALLY.

I. Thor  
SOOTH  
SAYER

DON'T SAY IT. I KNOW  
EVERYTHING.. STOP DRIPPING  
ON MY RUG. OK, DO YOU  
EIGHT-BALLS KNOW WHAT  
AN **MWO** IS?

? WHICH  
GOD IS  
HE?

**MWO** MEANS MODIFICATION  
WORK ORDER. GET THAT !!  
IT'S AN ORDER. SO YOU DO  
IT, ODIN SAYS SO.

DID YOU KNOW AN **MWO** COULD  
HAVE KEPT THAT TUB FROM  
SINKING? SO, WHY DID YOU SHOVE  
OFF WITH SECOND RATE  
EQUIPMENT?

WE WENT OUT WITH WHAT  
WE GOT. WHO'S GOT TIME  
FOR THINGS LIKE LEAKS.

AHAH!

LISTEN, ERIC, SECOND  
RATE EQUIPMENT IS AS  
GOOD AS **NO** EQUIPMENT.  
SO START DIGGIN' ME.

SEE THESE.. THEY ARE  
THE READING MATERIAL  
YOU NEED TO SEE IF  
ANY **MWO'S** APPLY TO  
YOUR STUFF.

...LIKE THE  
**EIR** DIGEST,  
**TB'S** IN THE  
**750-900**  
SERIES.

HOW DOES  
A MORTAL GET  
DOCUMENTS  
OF THE  
GULP?  
GODS?

EASY.. VALHALLA GET'S 'EM  
FROM A PLACE IN ST. LOUIS.  
IT'S THE AG PUBS CENTER.  
THAT'S HOW YOU GET 'EM.

I KNOW, SO DON'T SAY IT..  
JUST ORDER 'EM ON THE  
SAME DA FORM THAT GETS  
OUR PIN-POINT ON  
EQUIPMENT TM'S.

ODIN ALSO SAYS CHECK  
YOUR WEEKLY BULLETINS  
FROM THE AG PUBS CENTER  
FOR PERTINENT POOP.

LIKE  
WOT?

LIKE NEW **MWO'S** AND **MWO**  
CHANGES... THEN CROSS-  
CHECK THE WHOLE SCORE  
IN DA PAM 310-7... THE  
**MWO** INDEX.

FOOEY! A  
POX ON Y'R  
SOX. I DON'T  
DIG YOU...  
I. THOR...

OH MIGHTY ODIN!  
LAY IT ON HIM.

CRASH!

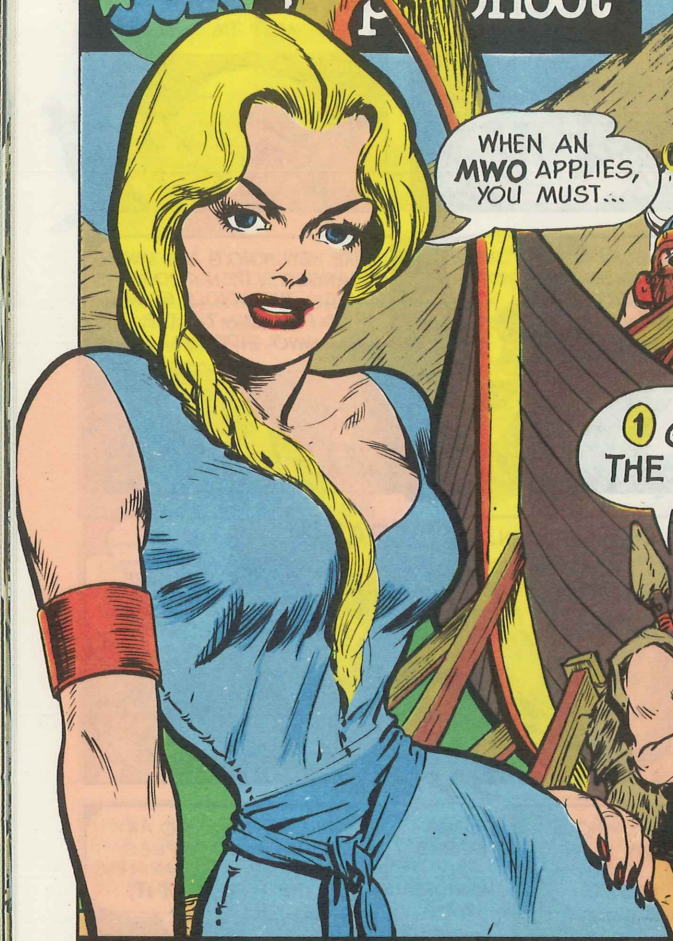
OK, OK,  
COOL IT...  
I BELIEVE,  
I BELIEVE IN  
**MWO'S**.

YOU SEE, ERIC... THE WHOLE  
DETAIL IS TO KNOW IF AN  
**MWO** APPLIES TO YOUR  
EQUIPMENT. THE REST IS  
BY THE NUMBERS.

ODIN  
WORKS  
IN  
WONDROUS  
WAYS.

RIGHT ON, ERIC. SO ANY  
TIME AN **MWO** APPLIES  
TO Y'R GEAR, REGARDLESS  
OF THE TYPE, **GET IT,**  
JUST GET IT!





WHEN AN  
MWO APPLIES,  
YOU MUST...

1 GET  
THE MWO.

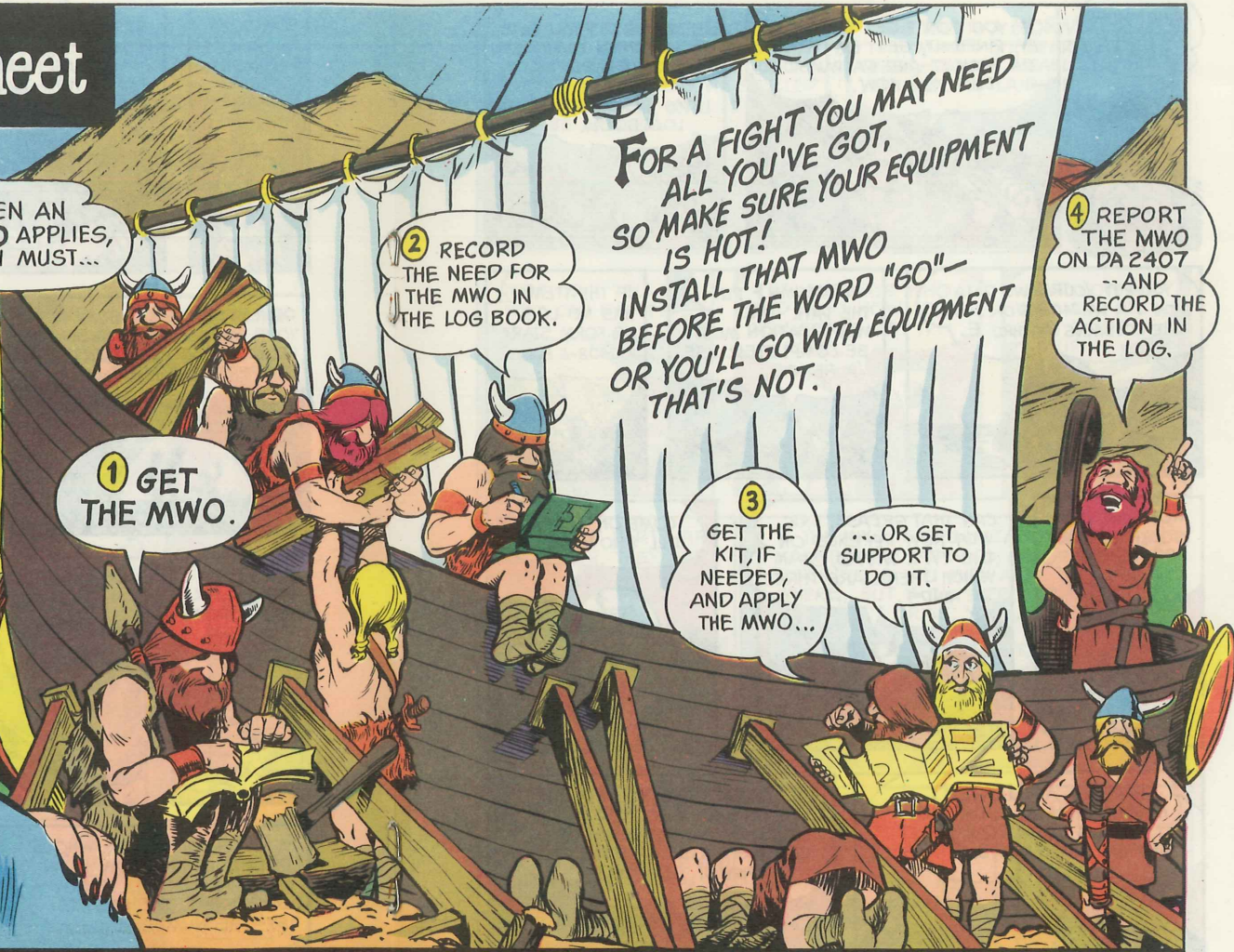
2 RECORD  
THE NEED FOR  
THE MWO IN  
THE LOG BOOK.

FOR A FIGHT YOU MAY NEED  
ALL YOU'VE GOT,  
SO MAKE SURE YOUR EQUIPMENT  
IS HOT!  
INSTALL THAT MWO  
BEFORE THE WORD "GO"—  
OR YOU'LL GO WITH EQUIPMENT  
THAT'S NOT.

3  
GET THE  
KIT, IF  
NEEDED,  
AND APPLY  
THE MWO...

... OR GET  
SUPPORT TO  
DO IT.

4 REPORT  
THE MWO  
ON DA 2407  
--AND  
RECORD THE  
ACTION IN  
THE LOG.



WE HAVE THE WORLD'S BEST EQUIPMENT ... If we apply MWO's

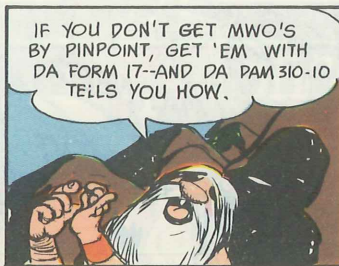
as spelled out in DA Cir 750-39 (Nov 71)

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

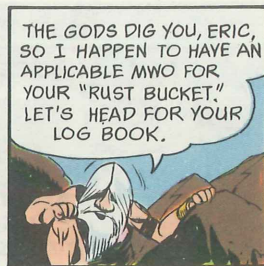




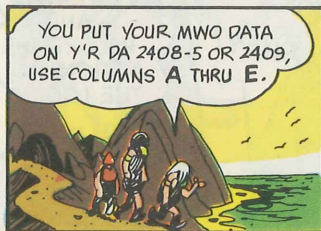
FINE! HOW DO I GET THEM?



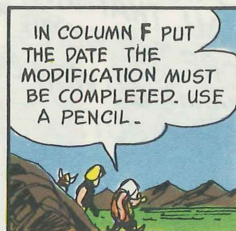
IF YOU DON'T GET MWO'S BY PINPOINT, GET 'EM WITH DA FORM 17-AND DA PAM 310-10 TELLS YOU HOW.



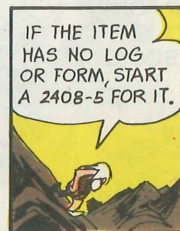
THE GODS DIG YOU, ERIC, SO I HAPPEN TO HAVE AN APPLICABLE MWO FOR YOUR "RUST BUCKET." LET'S HEAD FOR YOUR LOG BOOK.



YOU PUT YOUR MWO DATA ON Y'R DA 2408-5 OR 2409, USE COLUMNS A THRU E.



IN COLUMN F PUT THE DATE THE MODIFICATION MUST BE COMPLETED. USE A PENCIL.



IF THE ITEM HAS NO LOG OR FORM, START A 2408-5 FOR IT.



WOT NOW, OH SOOTH-SAYER, SPOKESMAN OF ODIN.



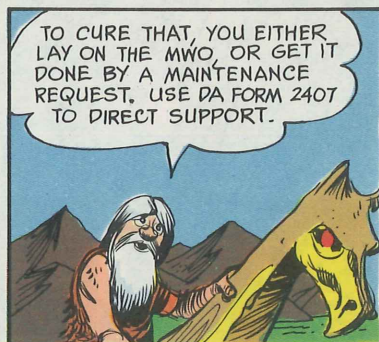
CAN THAT GREASE, ERIC. WOT NOW DEPENDS ON THE TYPE MWO, OF WHICH THERE ARE THREE KINDS.



COME ON, ERIC.. I'LL SHOW YOU.



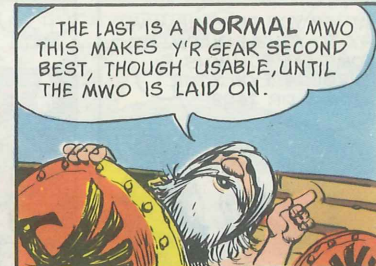
THERE IS AN **URGENT** MWO, LIKE FOR YOUR TUB. IT MAKES YOUR EQUIPMENT "NO-GO" IMMEDIATELY.



TO CURE THAT, YOU EITHER LAY ON THE MWO, OR GET IT DONE BY A MAINTENANCE REQUEST. USE DA FORM 2407 TO DIRECT SUPPORT.



THEN, THERE IS THE **URGENT** MWO, WITH LIMITATION. IT MAKES IT NECESSARY TO COOL IT ON Y'R EQUIPMENT USE, AS SPELLED OUT IN THE MWO, UNTIL IT CAN BE APPLIED.



THE LAST IS A **NORMAL** MWO THIS MAKES Y'R GEAR SECOND BEST, THOUGH USABLE, UNTIL THE MWO IS LAID ON.



DOES ODIN TELL YOU WHO CAN DO IT?



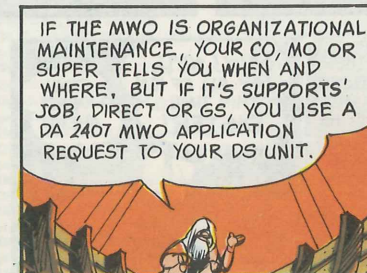
THE MWO SAYS WHO AND ALSO HOW LONG YOU GOT TO GET IT DONE.



.. AND HOW AND WHY.. AND ALL THAT GOOD STUFF.



IF KITS OR PARTS ARE CALLED FOR, THEY ARE NEATLY LISTED BY NAME AND FSN OR PART NUMBER.



IF THE MWO IS ORGANIZATIONAL MAINTENANCE, YOUR CO, MO OR SUPER TELLS YOU WHEN AND WHERE, BUT IF IT'S SUPPORTS' JOB, DIRECT OR GS, YOU USE A DA 2407 MWO APPLICATION REQUEST TO YOUR DS UNIT.



?



THERE'RE JUST A FEW DEPOT LEVEL MWO'S. THEY'RE DONE DURING OVERHAUL. BE SURE YOU JUST RECORD 'EM ON 2408-5 OR 2409. **GAHEM!**

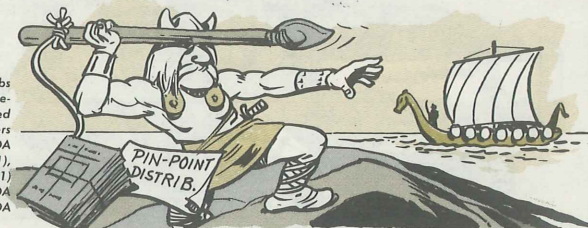
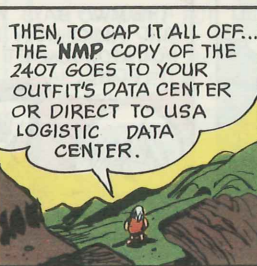
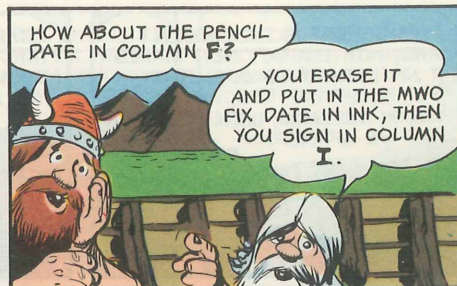
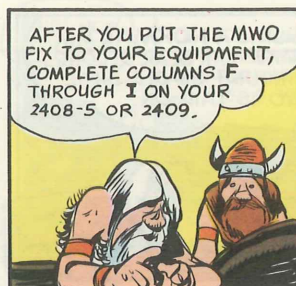


DON'T SQUIRREL AWAY MWO PARTS OR KITS... THEY'RE BOUGHT FOR USE ON SPECIFIC EQUIPMENT. ONE FOR EACH SERIAL-NUMBERED ITEM.



ODIN THINKS OF EVERYTHING.





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 71), and Ch 2 (Oct 71), TM's, TB's, etc.; DA Pam 310-6 (Jul 71), and Ch 1 (Oct 71), SC's and SM's; DA Pam 310-7 (Aug 71), MWO's; and DA Pam 310-9 (Nov 71), COMSEC Pubs.

#### TECHNICAL MANUALS

TM 5-1450-203-20P Oct  
Conditioned Air: 38,000 BTU/HR  
TM 5-3820-241-12 Sep Pneumatic Drill  
TM 5-3830-237-12 Sep D7E Treedzer (Rome Plow)  
TM 5-3895-341-14 Oct Vibrating Towed Roller  
TM 5-4120-239-20P Oct 9,000 BTU Air Cond  
TM 5-4120-243-14 Oct 18,000 BTU Air Cond  
TM 5-4120-243-20P Nov 18,000 BTU Air Cond  
TM 5-5420-200-12 C7 Nov M48A2 Tank Chassis for 40 and 60 Ft Bridge, Arm'd Veh Launched  
TM 5-6115-303-20P Oct 150 KW Gen Set  
TM 5-6115-339-12 Oct 60 KW Gas Turbine Gen Set  
TM 5-6115-345-20P Oct 15 KW Gen Set  
TM 9-1005-206-14P/4 Sep Oper Org DS and GS Maint Repair Parts and Special Tools Lists, 22, 30 cal rifles  
TM 9-1400-300-ESC C2 Sep Sergeant GM System  
TM 9-1400-465-14P Sep Surface Attack Guided Missile XMGM-51C (Shillelagh)  
TM 9-1430-560-ESC Nov Air Defense FDS AN/TSQ-51  
TM 9-2320-206-20 Oct 10-Ton Truck  
TM 9-2320-218-20 Sep 1/4-Ton Utility Truck  
TM 9-2320-224-20 C5 Nov M114/M114A1/M114A1E1 Cmd and Recon Carrier  
TM 9-2320-264-14 Sep Trailer, Air Conditioner 1 1/2 Ton 2-Wheel M463

TM 9-2330-287-14 Oct M796 Gen Purpose 4-Wheel 4-Ton Bolster Trailer  
TM 9-2350-242-20 C4 Oct Org Maint Recovery Veh FT M88

TM 11-5305-262-20P Dec Telephone Switchboard SB-22A/PT

TM 11-5805-304-20P Dec Telephone Switchboard SB-86/P  
TM 11-5805-603-14 Oct Central Offices Telephone AN/TTC-35(V1) and AN/TTC-35(V2)  
TM 11-5820-773-15 Oct Radio Repeater Set AN/TRC-138  
TM 11-5820-790-25P Sep Radio Frequency Monitor Set AN/USQ-46A, Power Supply Group OP-63/USQ-46, MT-4261/USQ-46  
TM 11-5826-245-20 Sep Navigational Set, internal AN/ASN-86  
TM 11-5840-293-20P Sep Radar Set AN/FPN-40  
TM 55-1500-219-30/1 C3 Dec Bleed Air Line Particle Separator UH-1 B/C/M  
TM 55-1510-201-10/4 C3 Oct U-8D, RU-8D and U-8G  
TM 55-1510-201-20 C3 Feb Org Maint U-8D, U-8G, RU-8D and U-8F  
TM 55-1510-203-10 C4 Nov Oper U-6A Act  
TM 55-1510-204-CL/5 C3 Sep OV-1D: Oper and Crewmember  
TM 55-1510-204-CL/5 C4 Oct Oper and Crew OV-1D  
TM 55-1520-206-CL Jul Operator and Crewmember Checklist OH-23D, -23F and -23G  
TM 55-1520-206-10 C2 Nov Operator OH-23D, -23F, -23G  
TM 55-1520-209-10 C12 Dec Safety of Flight Oper, CH-47A  
TM 55-1520-210-PMD C3 Oct UH-1D/H PMD Insp Checklist  
TM 55-1520-210-10 C3 Dec Safety of Flight Oper, UH-1D/H  
TM 55-1520-217-CL/2 C3 Oct Oper and Crewmember Checklist CH-54B  
TM 55-1520-217-20/2 C7 Oct Org Maint CH-54B  
TM 55-1520-217-20PMD/2 C3 Sep CH-54B PMD Insp Checklist  
TM 55-1520-217-20PMI/2 C3 Oct

CH-54B PMI Insp Checklist  
TM 55-1520-221-20 C1 Nov AH-1G  
TM 55-1520-227-10 C10 Dec Safety of Flight Oper CH-47B and CH-47C

#### MODIFICATION WORK ORDERS

9-1290-325-20/1 Dec M36 Radar Chronograph Set  
9-1430-251-30/42 C1 Dec Trailer Mtd Guided Missile Director Sta AN/MSQ-93  
9-2300-257-30/1 C1 Nov M577A1 Li Tracked Cmd Post Carrier Modif of Ballast  
9-2350-217-20/15 Dec M109 Med SP Howitzer  
9-2350-230-20/2 Dec M551 Full-Tracked Arm'd Recon/Abn Aslt Veh  
9-6650-215-40/1 Nov Binocular I. R. M18 to Provide Non-Rotating Eyeshields  
55-1520-210-30/14 C2 Dec Standardization of Avionics Sys UH-1 D/H  
55-1520-210-30/15 C2 Dec Standardization of Avionics Sys FY 65, UH-1D/H  
55-1520-211-30/29 C1 Dec Standardization of Avionics Sys UH-1C  
55-1520-214-30/36 Dec Modif of Lower Vert Stab Instal OH-6A  
55-1520-221-30/38 Nov Removal of XM-20 Internal Smoke Grenade Sys and Heat Shields AH-1G and TH-1G Hel  
55-1520-221-40/3 C3 Dec Instal of the Imp Anti-Torque Sys AH-1G and TH-1G Hel

#### MISCELLANEOUS

LO 9-1090-203-12 Aug Armament Subsys, 7.62: M28 and M28A1 (Used on AH-1G)  
TB 9-2300-280-30 C3 Nov Cargo Trailers and Trucks and Dump Trucks: Instal of Universal Tiedown Anchors  
TB 746-93-2 C1 Oct Painting and Marking of Army Aclt

## MWO Of The MONTH

Truck-mounted water purification units need MWO 5-4600-218-20/1 (22 Jun 70). It gives you a lifting kit that makes slinging your truck and van a cinch. Lifting the whole unit without this kit can damage the van or bend the truck frame. Dig out your copy of the MWO and order the kit pronto—while it's still issued free.





KEEP US  
"ANGRY" TYPES  
IN THE NET!

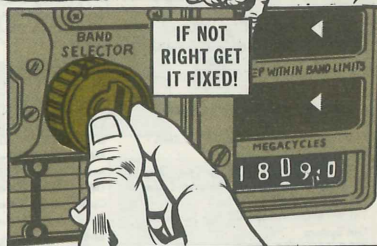
## SWITCH HITCH

You're doing neither yourself nor your T-195 transmitter any good by playing around with the band selector switch when it develops a case of hit-and-missitis.

Even though a little jiggle here and there will sometimes seat the switch, you're risking your capability to communicate.

Sooner or later you'll have to get the switch adjusted or replaced by the men at the support shop.

Why not make it sooner? If you keep putting off your T-195's trip to support, your transmitter may not work when you really need it.



## FUSE NEWS

Fuse trouble with your T-195A or T195B transmitter?

Weep no more, my laddie ... it's FSN 5920-280-3473 you want for these 2 models. This'll get you a 25-amp fuse for the F603 position on the control panel.

FSN 5920-687-2064, as listed in MWO 11-5820-335-35/1 (Jul 65), is the wrong fuse for the A and B models, which have transistorized high-voltage power supplies.

The plain T-195 model takes a 30-amp (FSN 5920-565-0035) fuse for the F603, as listed in Ch 3 to TM 11-5820-335-10 and the -20P.

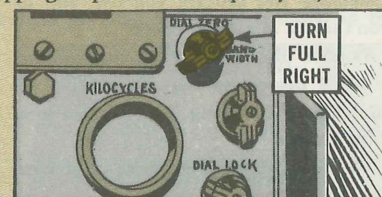


BY THE  
**NUMBERS,**  
HOO-O!

A simple twist of a knob can save unnecessary wear ... and repair downtime ... on the frequency adjustment mechanism of your R-392/URR receiver.

Or, in this case, get lucky ... by not skipping Step 13 of the frequency adjustment procedures in TM 11-5820-334-10.

Like it shows on page 20 of the TM, turn the DIAL ZERO control as far to the right as it'll go before you adjust the KILOCYCLES control for a zero beat. Take Steps 13, 14 and 15 in that order ... and you'll stay out of the repair shop.



Turning the DIAL ZERO control full right disengages the VFO clutch drive from the gear train. Which not only lets you adjust to zero beat, but also saves the aforementioned wear.

Big point: any good operator gets that way because he doesn't take damaging shortcuts. In short, if you're gonna adjust the frequency, use all the steps in the TM.

## HANDSET HANG-UP

When you've got a stuck-up receiver cover on your H-33()/PT handset, you're gonna come up with mighty little reception.

The thin rubber cover binds to the receiver element and seals the "hearing holes."

You can improve the situation with a little talcum powder applied to the inside of the handset receiver cover after you clean and dry it thoroughly.

But be sure to leave only a thin coat of the powder, since too much of the white stuff might combine with moisture and leave you right back where you started from. Stuck.





## HELP THE HANDSET

IT MUST  
BE HIS  
FUZZ BUTTONS,  
OOPS!  
SORRY!



If you're commanding a flaked-out H-189/GR handset, and you're disgusted and 'bout ready to slant it to Support for better things ...

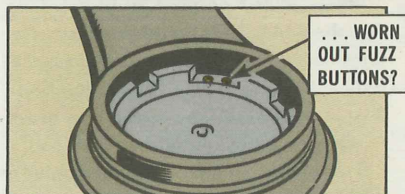
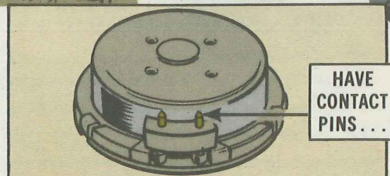
Hold on, Harry! The trouble might be something you can fix yourself, and it won't take a minute to check.

Remove the receiver or transmitter element, depending on what kind of trouble you're having, and eyeball the "fuzz buttons."

These are the 2 small pieces of copper mesh that cozy up to the 2 element contact pins.

If you find either of these fuzz buttons cut through by pin friction, use a small tool to work the mesh around until you get contact again.

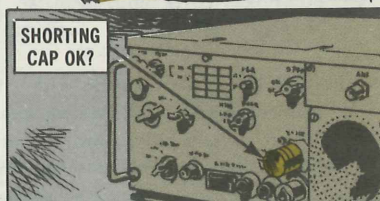
Be careful not to lose one of the mesh buttons. They disappear easily and they're not anchored in.



## ZAP CAP

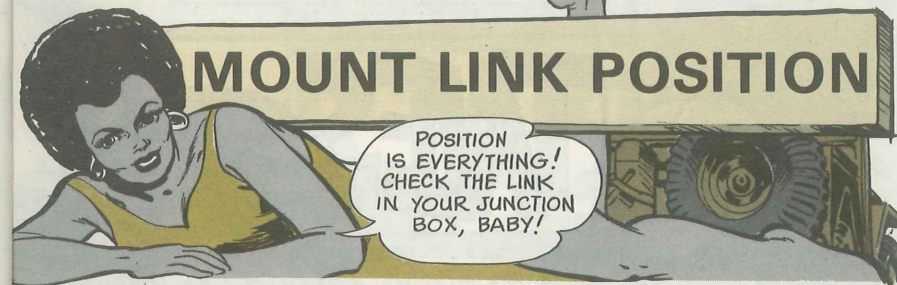
If your AN/VRC-12 series radio set has gone mum and you don't know why, the fault could be a cap that's either lost or not installed right.

If the shorting cap for the X-mode receptacle is missing or loose, your set will be mute.



## MOUNT LINK POSITION

POSITION  
IS EVERYTHING!  
CHECK THE LINK  
IN YOUR JUNCTION  
BOX, BABY!



You say you've just replaced the radio mount in your outfit's vehicle, but the radio won't work?

Before you call in support, check the position of the link in the junction box of your MT-1029 or MT-1898 mounts.

In most wheeled vehicles, or wherever you turn the set on and off directly at the receiver-transmitter and receiver, the link must go from the center terminal in the MT-1029 to terminal E23.

With the MT-1898, the link goes from the center to terminal E13.

For remote turn-off, as in tracked vehicles from the AM-1780, the link hook-up is from the center terminal to E22.

For the MT-1029, the link goes from the center terminal to E22.

In the MT-1898, it goes from the center to E12.



## MANAGE THE MODULES

When you turn in your aching radio set to Support, be sure to include all the modules—even if you're not convinced they're any good.

IF YOU  
DON'T...

1. You delay repair of your equipment because your DS has to get modules for it.

2. There's a chance Support might be able to repair a module, or at least thoroughly test it.

3. If you keep good ones, you're only throttling the supply system, making unnecessary expenses, delays, etc.

So get 'em all together, good and bad, and send 'em along as part of the equipment.





# TALES OF

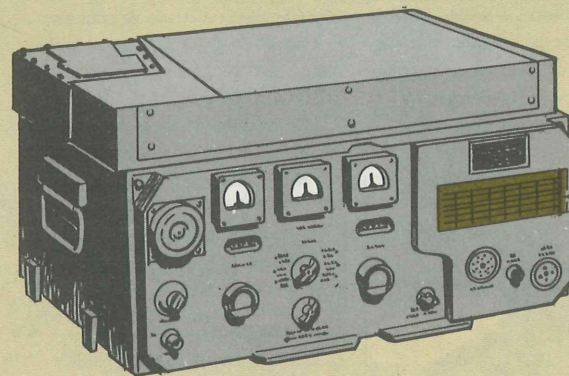
# 3

# RTT'S

GATHER 'ROUND!  
IT'S NOT WHAT  
YOU KNOW, IT'S THE  
WAY YOU KNOW IT...

...AND KNOW-HOW  
HELPS YOUR NEWER  
MODEL AN/GRC-122,  
GRC-142, AND VSC-2  
RADIO TELETYPEWRITER  
SETS PUT OUT FOR  
YOU.

AM-3349



RIGHT  
CHART  
FACE  
OUT

A good way to extend the life of component parts is to keep the amplifier heat exchanger clean.

## 50 OHM DOUBLET ANTENNA

| FREQ  | TUNE | LOAD | FREQ   | TUNE | LOAD | FREQ   | TUNE | LOAD |
|-------|------|------|--------|------|------|--------|------|------|
| 2,000 | 600  | 500  | 5,000  | 600  | 800  | 16,000 | 400  | 950  |
| 2,500 | 600  | 600  | 7,000  | 500  | 850  | 29,999 | 400  | 950  |
| 3,000 | 600  | 700  | 15,000 | 500  | 900  |        |      |      |

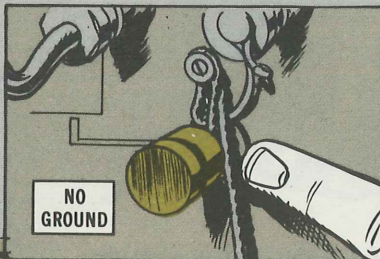
Be sure the side you need of the antenna tuning and loading chart is facing out.

You sure wouldn't wanna use whip antenna readings if you're tied into a doublet. The top line on the chart tells you whether it's whip or doublet.



HERE'S SOME  
SCOOP ON  
YOUR  
RT-662

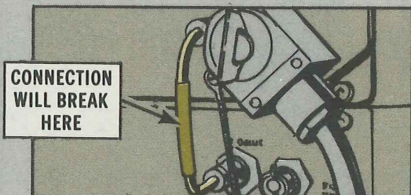
That binding post jack under the RECEIVER IN jack of the receiver-transmitter isn't a ground wire connector ... so don't try to make it act like one.



If you slip a ground wire in there, you'll short out the antenna.

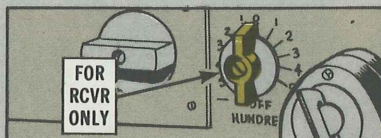
The jack's for connecting a long wire antenna lead when the RT-662 is used as a receiver only.

The right kind of connection also is important when you're running the RF drive coax from the amplifier to the receiver-transmitter.



The coax goes from the RF DRIVE connector of the amplifier to the RF DRIVE connector of the RT.

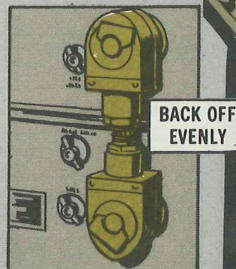
The frequency vernier on the RT-662 varies only the receiver frequency ... not the transmitter.



Nother point: the channel switches on the RT must be replaced exactly the way you took them off ... or you'll be searching for channels the hard way.

The dumbbell connectors between the RT-662 and the AM-3349 (PA control connections) have a rigid metal cover joining them. The covering breaks, exposing wiring, when you're not careful in taking the connectors off or putting them on.

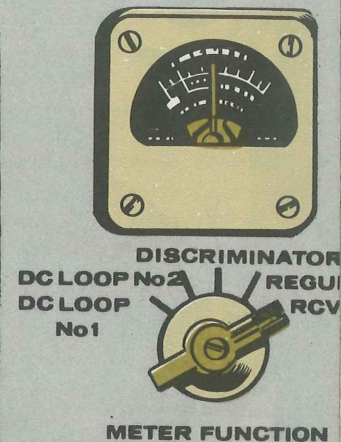
To prevent damage, back the connectors off alternately, a little at a time on each one.



HERE'S THE  
STRAIGHT INFO  
ON THE  
MD-522

The METER FUNCTION switch of the MD-522 modem should be in RCV level positions when you're not transmitting ... for a number of good reasons. And ... the meter needle should be in RCV block ... Not below it; not above it.

Saves operators running for a repairman because the set won't copy.



So, if the needle's out of the RCV block, do this:

When the needle's low, or to the left of the RCV block, crank the RT-662 AUDIO GAIN switch to the right, until the needle's where you want it.

If the needle's high, bring it down into the RCV block by turning the RT-662 AUDIO GAIN switch to the left.

If you transmit with the RECEIVE REV NORM switch in REVERSE position then the set receiving you must also have its MD-522 REV-NORM switch in REVERSE position.

Otherwise, you won't get through.

Of course, you can solve the problem by transmitting with the switch in NORM ... which is SOP.

Anywho, before you call a repairman because you think your set's not sending or receiving right, check the position of the switches ... on both ends of the net.

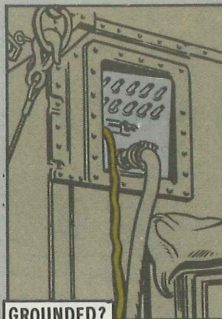




## HERE ARE SOME GROUNDING TIPS.

The ground for the 2 sheltered configurations needs special attention ... even more so during AC operation.

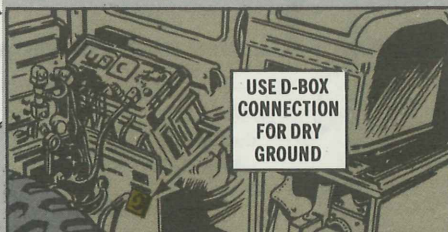
To prevent serious electric shock the frame ground wire has to be grounded to the frame of the power unit. With commercial AC the frame ground wire should be grounded to the power distribution box. See para 2-7 of TM 11-5815-334-12.



GROUNDING?

No matter what the power source, you need a ground connection from the shelter to a driven ground rod (that's in addition to the previous-named grounds).

If the ground is dry, use the ground connection at the power distribution box.



USE D-BOX  
CONNECTION  
FOR DRY  
GROUND

First, connect the green frame ground wire of the CX-10951 AC power cable to the frame of the power unit ... or the ground stud in the power distribution box.

Second, drive the ground rod and connect the braided ground wire from it to the shelter frame.

Finally, connect the black and white leads of the CX-10951 to the AC power source.

If you're not going to use the equipment for a day or more, disconnect the power lines. Otherwise, the shelter stays hot.

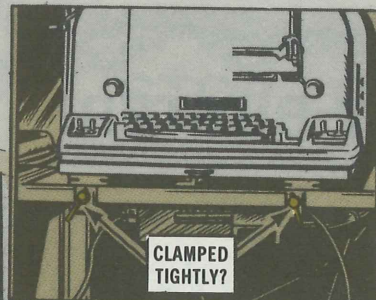
## MISCELLANEOUS

If you can't get your set to remote through the AN/GRA-6, you may have to detour through the J-654/G junction box. Your clue for the fix is that the set doesn't modulate when you key it.

In which case, try remoting by going to the GRA-6, through the J-654, and then to the radio set.

The problem occurs because the output pins on the C-434 don't match up with the input pins on the RT-662.

Be sure components of all 3 RTT's are clamped tightly in place before you roll your rig.



CLAMPED  
TIGHTLY?

The clamps prevent considerable damage to equipment ... and maybe to the back of your head.

Tune the set by the book. Shortcuts lead to problems which make repairs ... or bring in a repairman unnecessarily.

And, uh, friend, if you're not authorized an air conditioner even though you may need one, the combination of the blower and the white tarp that comes with the sheltered sets can save you sweat ... even in SEA.



TARP IS  
BETTER  
THAN  
NOTHING

Finally, take your crypto box to crypto repair, not to Direct Support. Saves you considerable time by not misrouting it.





WHEN YOUR HEAD  
IS IN THE CLOUDS,  
MAKE SURE YOUR  
AVIONICS ARE NO. 1...

## KNOCK THE NOISE

Noise bugging your radio-set when you're operating in the TRANSMIT mode of radio set AN/ARC-114?

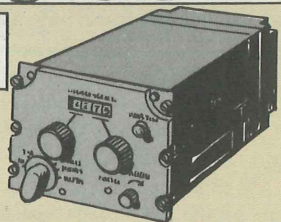
That buzzing background's no good for communications in your chopper or fixed-wing, so here's your move:

Have support check the guard receiver X-mode audio circuit. The manufacturer

was supposed to disconnect the circuit by removing pin D of in-line connector P503—but some hot-shot may have re-inserted the pin or it might never have been removed. Getting rid of the pin should shut off the buzzing.

This won't interfere with the normal functions of the AN/ARC-114.

CHECK  
X-MODE  
CIRCUIT



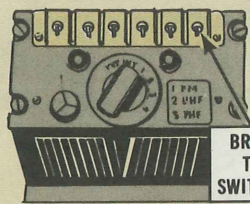
## NEED A DUST BUSTER?

Airdrops or other "open door" operations can really pile the dust and dirt on your C-1611 and SB-329 intercom controls.

Dust can pack in so thoroughly that you can't even flip the switches.

So wot to do? Same thing an unnecessary trip to support would do. Like, wipe off

the dust with a lint-free rag and get down in the cracks with a soft bristle brush. Keep compressed air away, since it'll only blow dust deeper into the controls.



BRUSH  
THE  
SWITCHES

## ARC-54 NOTEBOOK

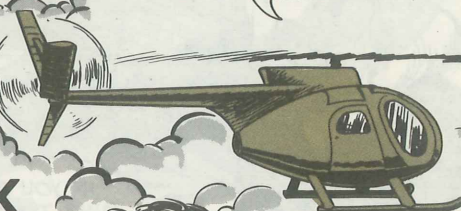
Your AN/ARC-54 radio set will give you a lot more than otherwise if you take an extra minute to prevent damage when installing it.

Like, before you slide it back in its mount, be sure it's sitting flat on the mount.

Otherwise, you can bend the set's connector and/or the plug on the aircraft. Which means... the set won't work.

Particular patience and special handling are required when installing the set in the OH-6. Because of cramped space, it's difficult to seat the set before sliding it home. The effort pays, though—with a working set.

HEY! NOTHIN' ON  
THIS '54" RIG.  
WOT HAPPENED?



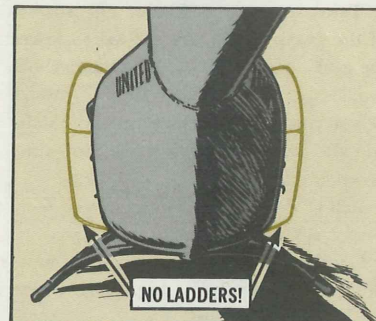
## STOP-LOOK-LISTEN

Use caution when you approach the antennas on your OH-58.

STOP... when you feel like using the homing antenna like a ladder. Man, you won't know where you're going if a careless foot knocks your homing signals out of alinement.

LOOK... out. Your signals can really get crossed if you get metallic base paint on your ADF loop antenna.

LISTEN... up. Either remove the antenna or cover it when the aircraft is painted.







AIR MOBILITY



NO  
MUSCLE,  
PLEASE!

IF YOU OVER-  
PUMP THE LANDING  
GEAR, YOU'RE IN  
REAL  
TROUBLE!

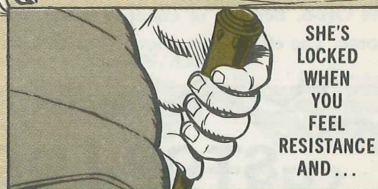
Seminole airplane drivers have been known to work up a sweat over a hung-up landing gear—leading to the use of extra muscle on the manual extension system.

'Tain't necessary. About 150 strokes of the pump handle are needed to lower the gear on the RU-8D, U-8D and U-8G models ... 50 strokes on the "F" model. When you feel resistance on the handle and the gear indicators come "on" she's down and locked.

Relax! Further movement of the handle will collapse the actuating spring—may even crack the actuator support brace.

On the next retraction the gear motor will run but the gear won't come up if the system is binding. A high pitch whine will clue you that unless the motor is turned off you'll burn it out!!

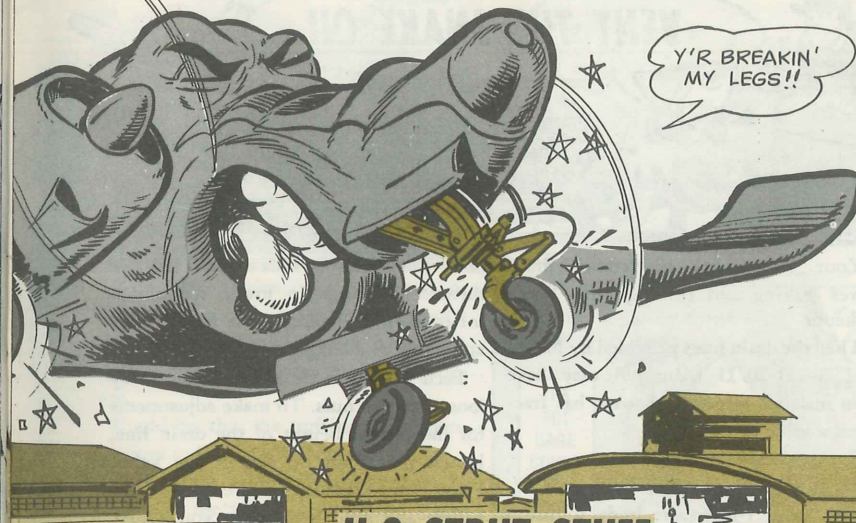
'Course, this type of bind means extra maintenance. Take it easy, huh?



SHE'S  
LOCKED  
WHEN  
YOU  
FEEL  
RESISTANCE  
AND...



...THE INDICATORS  
COME ON



Y'R BREAKIN'  
MY LEGS!!

## U-8 STRUT STUFF

Dear Windy,  
I am curious, fella!

We just got a Foxtrot model Seminole from factory overhaul with gray tape on the main and nose wheel struts. I've also seen a red paint stripe on struts. I can't find any reason for the tape or paint in a tech manual. What gives, Windy?

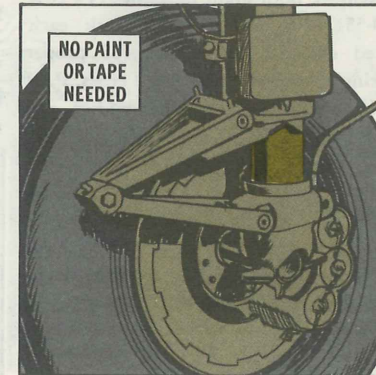
SP5 J. E. M.

Dear Specialist J. E. M.,

There's no reason for any paint or markings on the struts on any Armybird. It's just something that got started and kept on going. So no need to add paint or tape. Remove the tape and ignore any paint you may find there.

Your PMD inspection check calls for cleaning the struts and checking for 3-in strut extension. Wipe the strut with a clean rag to stop sand, dirt, and grit from scratching or scoring the chrome shock absorbers.

Windy



NO PAINT  
OR TAPE  
NEEDED





Your HueyCobra oil cooler drain valves leaking and ruining your bird's makeup?

Then the drain lines provided by MWO 55-1520-221-20/11 (Aug 69) may have been installed wrong and stress has fractured a valve or tube.

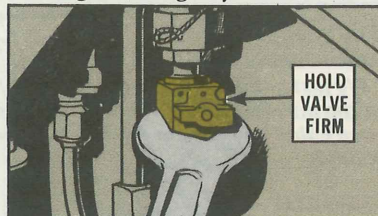
So, try these PM beauty tips:

First, the drain valve, P/N 465C62-NSW, has a 1-in square body so use a 1-in wrench to hold it firm while loosening or tightening the B-nut above it.

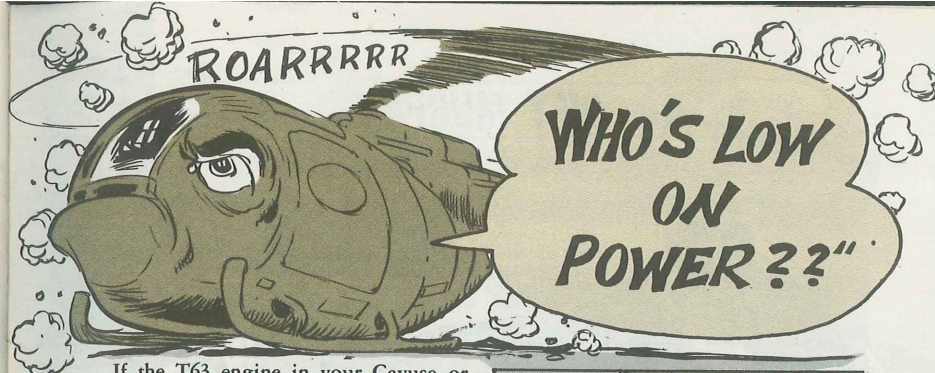
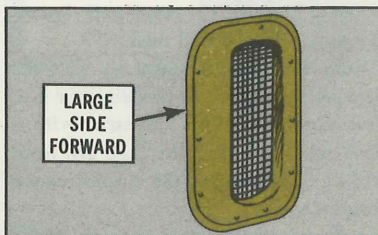
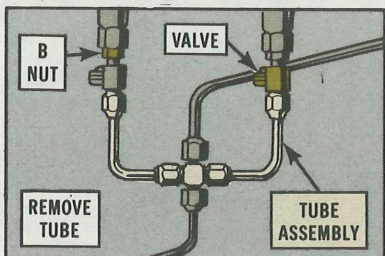


"B" nuts for cracks and stripped threads; packings in lower tee outlets for condition. Replace those items which appear to be damaged.

Each valve can be adjusted for fit by loosening jam nuts. To make adjustments for the proper height of the drain line, loosen the B-nut on top of the valve. Place your wrench above the drain handle and hold firm while you adjust. Then tighten, but gently.



When you're ready to button 'er up, be sure you replace the air inlet screen with the tapered (longest side) forward. You can put the screen on bassackwards but you'd restrict the air blowing thru the transmission and engine oil coolers.



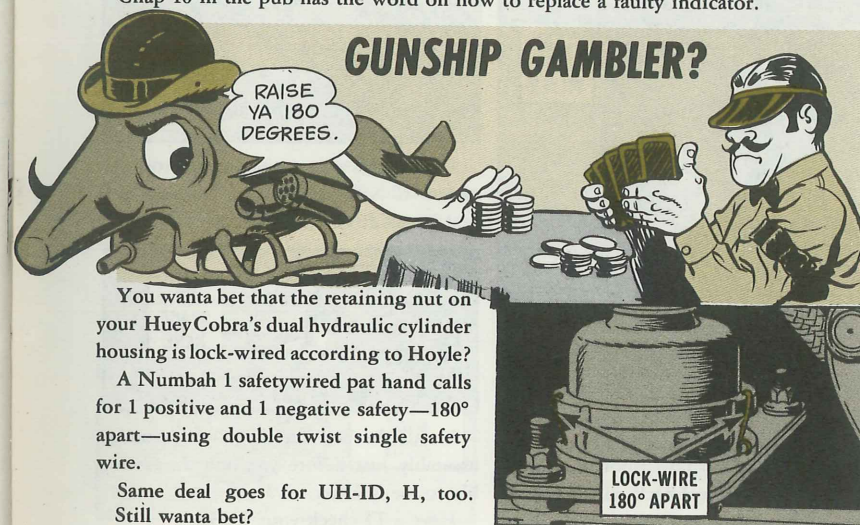
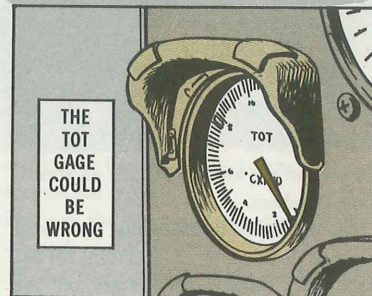
If the T63 engine in your Cayuse or Kiowa has a maximum turbine outlet temperature before normal torque is reached maybe you have an engine problem.

Could be, tho, the turbine outlet temperature indicator is the culprit.

The engine troubleshooting chart in Chap 5 of the bird organizational maintenance pub shows that the problem could be either one, birdmechs.

You could save yourself some witch hunting by checking out the TOT system from thermocouples through to cockpit gage.

Chap 10 in the pub has the word on how to replace a faulty indicator.



You wanta bet that the retaining nut on your HueyCobra's dual hydraulic cylinder housing is lock-wired according to Hoyle?

A Numbah 1 safetywired pat hand calls for 1 positive and 1 negative safety—180° apart—using double twist single safety wire.

Same deal goes for UH-ID, H, too. Still wanta bet?



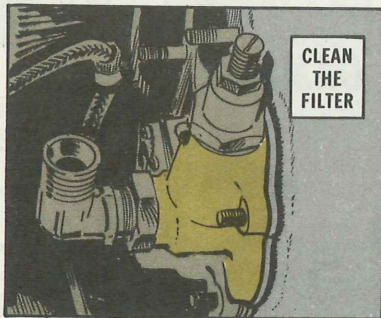
## OILY MURPHY

CURSES!  
A MURPHY  
PROOF BIRD!



A bird in the air is what it's all about, Hook Handlers.

Like when you're following thru with sequence 5.32, TM 55-1520-209-20PMI (Aug 70). Those 3 oil filters on the Chinook's combining transmission have to be clean.

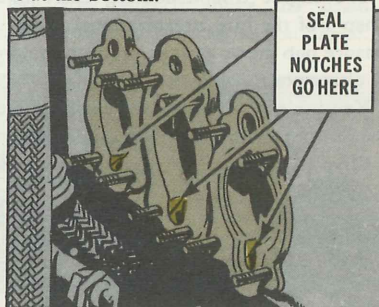


To clean 'em you remove 3 seals.

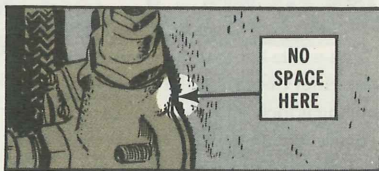
A B-I-G plus in PM is replacing the oil filter seals on the oil tank mounting studs. the right way. If you put 'em on upside down they'll restrict the oil flow, pronto!

Here're some Murphy-proof tips that'll help you get each seal back on right-side-up.

Make sure the notch in the seal plate is at the bottom.

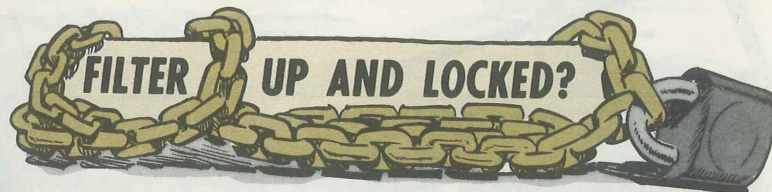


If you notice any space at the top between "c" box and the filter housing, the seal is upside down.



Install the seal on the filter housing assembly just before you bolt the assembly to the "c" box.

Have a TI check your work.

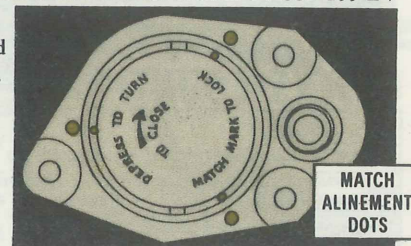


Easy does it, birdmen, when you put a clean main oil filter back in a Hook T55-L-7 series engine.

Otherwise, you'll damage the tangs and won't be able to lock the filter in place.

An unlocked filter can pop out, resulting in complete loss of oil ... and a seized engine.

There're 3 yellow alinement dots on the filter cover and another 3 on the filter cap.



Insert the filter into the cover at the accessory gear box with the 3 alinement dots on the cap midway between the alinement dots on the cover.

Press in on the filter and turn it clockwise until the cover and cap dots are lined up. You should feel the filter snap in place—which means it's locked.

Turn the filter handle counterclockwise. If the filter doesn't move it's locked in place.

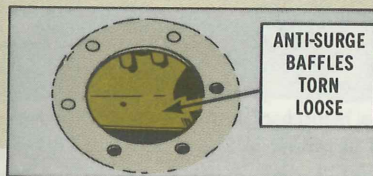
## FUEL TANK TLC



Hold it, AVGAS-er Mescalero-type! Refueling your T-41 calls for extra care when handling the fuel nozzle.

That nozzle is long enough to reach the anti-surge baffles. Rough and tumble nozzle wigglewagglng will jar those baffles loose. That means a new tank—a lotta downtime.

If you have to replace a fuel tank, tho, here's a time-and-temper-saving tip.



Get a new filler neck, P/N 0311240-17, when you order the new tank. Here's why:

Tain't easy to remove the filler neck from the old tank without mashing it in. Those pipe wrenches do make a mess ... 'specially if the neck has "set" to the tank.







## CLOCKS COUNT!

Dear Windy,

Our unit has restricted an aircraft to VFR for not having a clock installed. Some of us do not agree that the missing clock in our Huey prevents the bird from flying IFR.

What's the good word, Windy?

SSG F. S., Jr.

Dear Sergeant F. S., Jr.,

The clock is definitely needed for instrument flight. Eye Chg 1 (Apr 70) to AR 95-1 on aviation general provisions.

Para 3-5d says that if flight is to be made into known or forecast instrument conditions, the aircraft will be equipped with: airspeed indicator, altimeter, turn and bank indicator, **CLOCK WITH SWEEP SECOND HAND** . . . plus other gages.

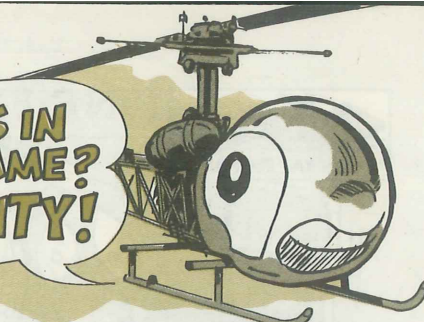
*Windy*



Never, no never wax an Army aircraft. Wax is too hard to remove and keeps later coats of paint from sticking. That's the word in paras 2-3a(2) and 3-3a(8)e, TB 746-93-2 (Jan 71).



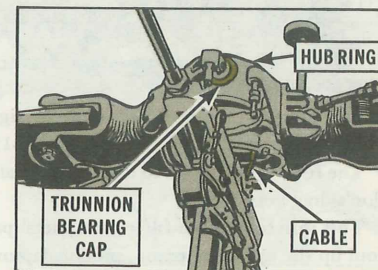
WOT'S IN A NAME?  
PLENTY!



When you Sioux (OH-13) flyboys focus in on the main rotor hub gimbal ring during preflight, hold one!

Some pilots say the bird won't fly if they can't get any movement of the trunnion bearing cap. They figure the cap is set up too tight and could lead to bearing failure so they ground the bird.

Actually, the cap that you should get movement on, by flexing the dynamic stop cable, is the pillow block bearing cap.



Depending on the blade weight load or recent lubrication of the bearings you may, or may not, get movement on either trunnion bearing cap.

Course those caps are set in the gimbal ring in a static position, within certain tolerances by support mechs. Security of the caps can only be determined under "no-load" conditions.

So, before you red X your baby, touch base with the MO . . . could save some unnecessary downtime.







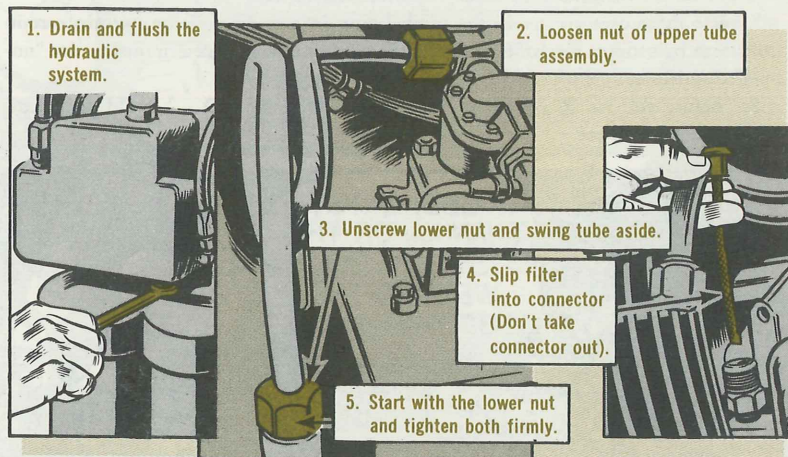
## FINE FILTER FINGER (FOR FREE)



Save your mighty 60-KW military design generator set from biting the dust. Put in the new filter screen, FSN 2910-159-8825, to keep its hydraulic system clean. The filter screen is a free issue in normal supply channels. For your generator's sake, don't drag your feet.

This thin finger of a filter traps metal particles, rust and other contaminants which foul up the hydraulic pump, pump adaptor and actuator.

It fits neatly into the hydraulic reservoir connector, but you have to watch your step getting it there. Do it by the numbers.



Make sure you refill the hydraulic system with MIL-H-5606 hydraulic oil and check it for leaks.

You'll have the whole deal well in hand if you take out and clean the new filter screen every 100 hours of operation.

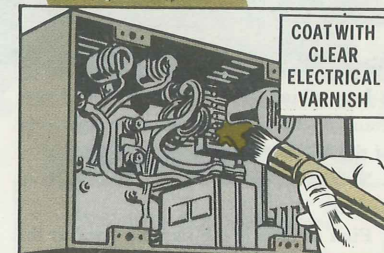


Your 1.5-KW Mil Design generator set losing its spunk lately due to current flashovers in the regulator?

Could be moisture or corrosion on the printed circuit board's terminals.

If so, get it to your DS shop fast. It needs a coat of clear electrical insulating varnish (MIL-V-173) over the exposed connections.

FSN 5970-548-9520 will get you a gallon and FSN 8010-515-2487 brings a 1-pt fungus aerosol spray can.



## GAS FABRIC TANK ABC'S



There's no denyin' ...  
A fabric petroleum tank is no trampoline, and ...  
PM care for it will extend its 1-year service life.

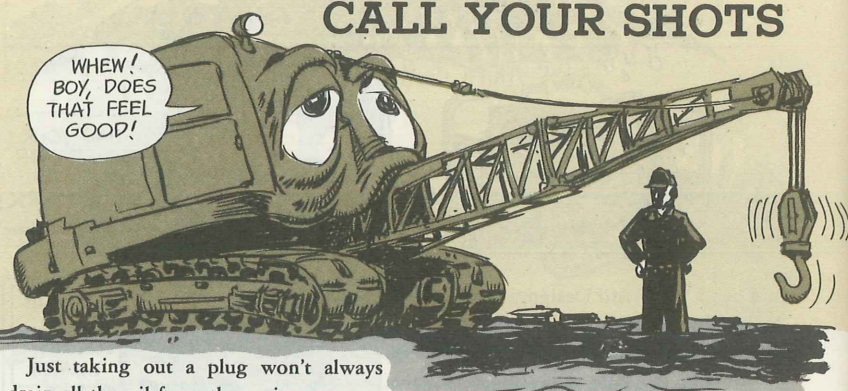
HERE'RE THE  
FACTS OF LIFE.

- Never drag the tank.
- Fill only to 70 per cent capacity.
- Keep pit free of water.
- Keep fungus growth off tank.

You'll never make the grade, though, without TM 10-1109 (Sep 63).  
Section II of this manual tells you how to stay in business every day with the collapsible tank.



## CALL YOUR SHOTS

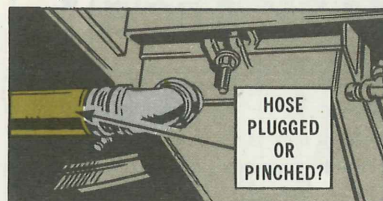


Just taking out a plug won't always drain all the oil from the main gear case of the M22BM 12 ½-ton crane-shovel.

You gotta go through all the steps to be sure.

First off, see if the flexible hose to the center cavity of the upper works is plugged or pinched.

Then, get the sump drained completely.



If it's clogged, oil won't drain from the vertical swing and travel gears. Could be as much as 12 quarts stashed away up there.



Some crane-shovel models have two drain plugs there. Both have to come out to drain all the oil.



Not a drop of new oil goes in till the entire gear case has been checked out. This is the only way to fill the bill of 32 quarts in the LO.

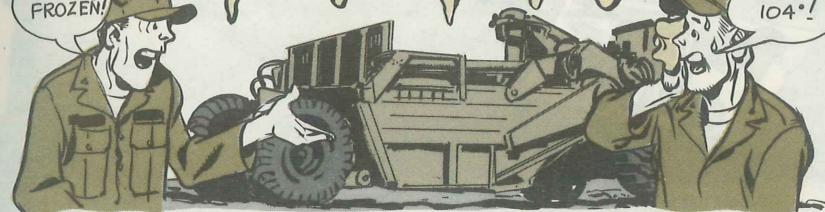
How do you get an accurate oil level check after filling?

You'll be on target only if you engage the master clutch and run the machine a few minutes before you check to see if the oil is up to the level plug.

## FROST-FREE PIVOT PIN

MY PIVOT PIN'S FROZEN!

FROZEN? IT'S 104°!



That freezing apron pivot pin on your CT4 18-cu yd scraper can be defrosted for good.

If you've been tearing out your hair on how to make the fix, here's what you do. If overseas, contact the MECOM Service Office (MSO) in your area. In CONUS, write to:



**USA Mobility Equipment Comd**  
4300 Goodfellow Blvd  
ATTN: AMSME-MMC  
St. Louis, MO 63120

A new fix calls for drilling lubrication grooves into the pin and the substitution of bigger pin stops. With lube, this should keep any apron pivot pin from sticking to its bushing and shearing off the pin stops.

If you're a lucky Joe who hasn't had this headache yet, be sure to keep your eye (and lots of lube) on the apron pivot pins you now have. PM on 'em can go a long way.

## TRACTOR SAFETY TB

HEY, GET YOUR OWN CRAWLER TRACTOR SAFETY MANUAL.

I'VE ALREADY SENT MY DA 17 TO ST. LOUIE, BUT I JUST CAN'T WAIT!



A dozer-blade load of great man-saving tricks fills the TB 385-5 (Mar 70). Its 24 pages of pictures spell out a good world-wide SOP for preventive damage and injuries on tracked tractors. Title: "Safety Manual, Crawler Tractor." Order copies soonest on DA Form 17 from the St. Louis Pubs Center.



## DIRECTIONAL TREAD TIRES ...

**POINTS OF ORDER**

The way you mount a directional tire depends on the axle ... whether it's dead or alive.

On live axles (the driving wheels) the directional tread is put on with the point of the V meeting the ground first. This is for maximum traction.

LIVE AXLE... POINTS HIT FIRST



On dead axles (non-driving wheels), the open part of the V hits the ground first, so the tread cleans itself and makes for easier steering.

DEAD AXLE... POINTS HIT LAST



This goes for all construction or off-the-road equipment.

Never mix tires. For the traction you need, mount the same tread design and the same type of tire on each axle, even if they're snow-trail or cross-country types.



Rig a chain or a protective device 'round the tire before you inflate it, and ...

Use a tire lubricant on the bead for easier mounting and dismounting.

Stock numbers for the lubricant are FSN 2640-256-5526 for the 1-qt size, either FSN 2640-045-0571 or FSN 2640-256-5527 for the 1-gal size and FSN 2640-256-5529 for 5 gallons.

Never use a petroleum product—it's slow death for tires.



## REPLACE THE CYLINDER

THIS @ ☆ 44 \* m !!  
MONOBROMOTRIFLUOROMETHANE  
= WHEW FIRE EXTINGUISHER.

P-f-f-f-t—that's the end of the chemical in your monobromotrifluoromethane fire extinguisher, FSN 4210-555-8837—or at least you think it is. That's the end of the fire, but it doesn't mean that it's the end of the extinguisher, too.

The empty cylinder is a "throw-away" item, but you can replace it with a charged cylinder, FSN 4210-708-0031.

Make sure there's no unspent pressure in that old cylinder. Just point it in a direction away from everyone, and press the trigger.

Before you throw that empty cylinder away, remove the Instruction and Data plate and slip it on the new cylinder.

REMOVE OLD PLATE

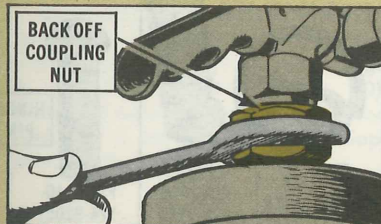


MAKE SURE IT'S EMPTY

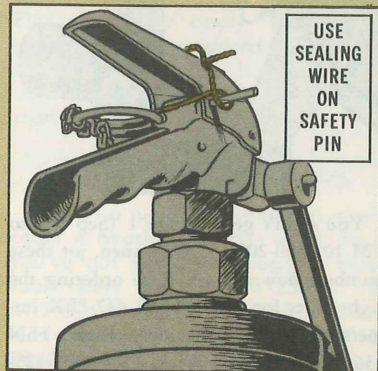


Back off the coupling nut enough to remove the used cylinder.

BACK OFF COUPLING NUT



USE SEALING WIRE ON SAFETY PIN



You can get the self-locking seal with FSN 4210-779-3516.





A wick or a strand of mop yarn stuck down into the gas tank of the immersion heater—that's how some outfits get rid of that extra gas in the bottom of the tank. When the yarn or wick sticks out of the tank the gas will evaporate.

It's an explosive idea because that's what it might lead to—an explosion.

You don't have to drop a lighted match into a gas tank to have an explosion. A lighted cigarette around fumes will do it, too.

So drain the gas tank on your immersion heater and put the cap back on the tank when you're going to store it. No wicks!



You didn't get Change 1 (Sep 70) to TM 10-4500-200-13? Well, then, jot these numbers down so you'll be ordering the right parts for your Model 447-2EX immersion heater: Retainer, wick, FSN 5365-182-5509, and Wick, FSN 9390-125-3784. If you're in need of a hinge pin—FSN 5340-124-9205 will take care of you.



**Connie's  
Mini Mini's**

## New Boot

There is a new Huey mast boot that makes replacement a breeze, knuckle-busters ... no need to take off the main rotor. FSN 1615-419-5944 in TM 55-1520-210-20P (Apr 71) will get you a boot that is split vertically and has a flap for joining the boot after installation.

## Give Your All

You gotta give complete identification of your equipment when you're submitting an EIR, including all info on an overhaul data plate if there's one. Put the data plate info in the remarks section of DA Form 2407, Block 35.

## Vibration Situation

Periodically snug those bolts in the top assembly of the AN/FPN-40 radar set.

Why?—Vibration loosens the bolts, and more vibration causes 'em to turn up missing. Plus, loose bolts can let moisture seep in.

## Clip Tip

Need a belt clip for your TA-1/PT telephone set? The stock number (FSN 5340-064-5426) is listed on page 6, TM 11-5805-243-35P (Jan 70), where it's called "electrical clip." You can't put it on, though. Direct Sup- port'll do the job for you.

## Brake Hose Flash!

Make sure you get your mitts on TB 9-2300-405-14 (Oct 71). It's got hot poop on "Mandatory Brake Hose Inspection And Replacement—Tactical Vehicles." It could save your neck!

## New Turn Signal Lamp

A new long-life (2,500 hours) bulb is in the system now for solid-state turn signal indicator use. FSN 6240-155-8707 is replacing the old 500-hour-life bulb in your directional control handle, FSN 2590-808-6072.

## Report By UMR

If defective new or overhauled materiel is received by your unit direct from a DOD contractor, you may need to file an Unsatisfactory Materiel Report (UMR), DD Form 1686—in addition to any other report (such as an EIR) which may apply. Items under warranty are considered "new" until the warranty expires. If you get such defective items, ask your major command to help with the UMR.

## Faucets For Filters

What's a fuel filter without a drain cock? A headache, that's what. So if you've got just drain plugs in those fuel filters on your M123A1C (or M123E2) 10-ton tractor truck, replace 'em with drain cocks—FSN 4820-752-9040.

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



# THE KEY MAN

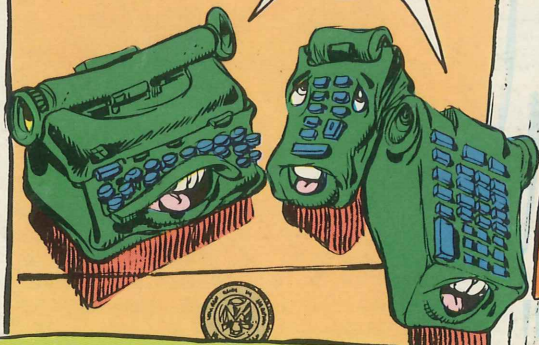
KNOWS

TM 10-7400-201-10

DEPARTMENT OF THE ARMY TECHNICAL MANUAL  
(SEE CH1)

OPERATOR'S MANUAL  
OFFICE MACHINES

WE NEED  
P.M.  
TOO!



OPERATING  
INSTRUCTIONS

MAINTENANCE  
INSTRUCTIONS

PREVENTIVE  
MAINTENANCE  
INSTRUCTIONS

TROUBLESHOOTING

FOR  
TYPEWRITERS  
ADDING MACHINES  
CALCULATING  
MACHINES

ORDER YOUR TM (DA FORM 17) TODAY!