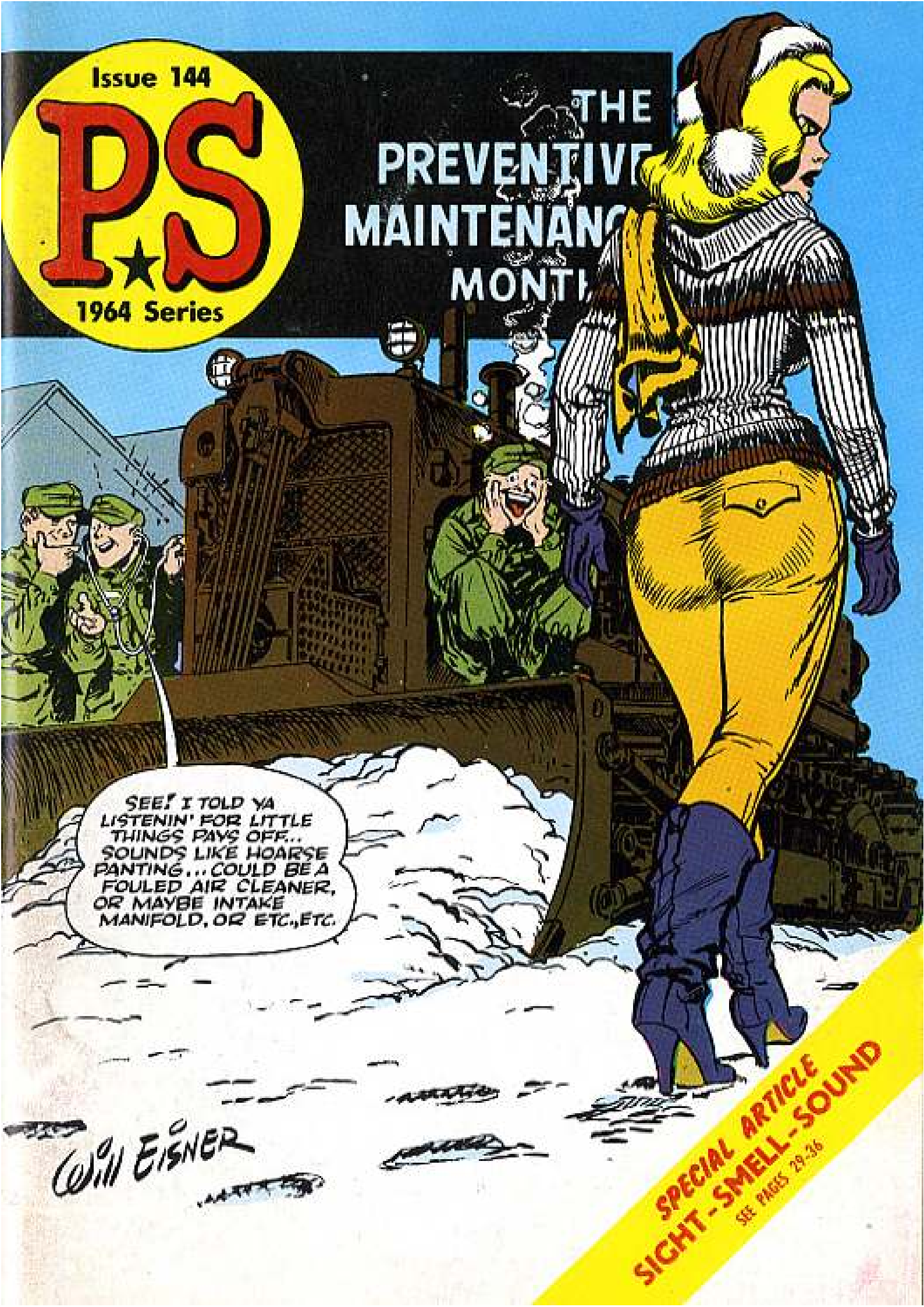


Issue 144

PS

1964 Series

THE PREVENTIVE MAINTENANCE MONTH



SEE! I TOLD YA
LISTENIN' FOR LITTLE
THINGS PAYS OFF...
SOUNDS LIKE HOARSE
PANTING... COULD BE A
FOULED AIR CLEANER,
OR MAYBE INTAKE
MANIFOLD, OR ETC., ETC.

Will Eisner

SPECIAL ARTICLE
SIGHT - SMELL - SOUND
SEE PAGES 29-36

YOU PUT THE "PUNCH" in COMBAT READINESS

All of those records, forms, cards and binders you've got on your hands have one thing as their final goal—helping to keep your combat equipment ready for combat.

Without that goal, we might as well fold up our tents, rack our rifles, box up our rockets and go home. Unready equipment will only clutter up the battlefield and be nothing but a burden to you, the fighting man.

Fighting equipment was made to fight. That's why it has got to be kept ready . . . with good maintenance, good supply of repair parts and, yes, even good maintenance records.

Now—not next week or next year—NOW is the time for up-to-the-minute, accurate and complete maintenance records. With TM 38-750 as your guide, today is

the time to get your records up-to-date. Then, you can keep them that way.

Put more "punch" in your combat readiness.



PS

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THE PREVENTIVE MAINTENANCE MONTHLY
ISSUE No. 144 1964 Series

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If you have any direct and constructive comments, please send them to the Editor, PS Magazine, and we will address the issue in confidence. Please don't write to:

Sgt. Staff. Mead,
PS Magazine,
Good Knox, Ky
40121



TO KEEP YOUR EQUIPMENT SCOOTIN', ALL ANTI-FRICTION BEARINGS MUST BE KEPT ROUNDD FIRM AND FULLY PACKED... AND GIVEN TENDER, LOVING CARE.

Bearings are made and put together with the greatest of care. Because of their highly-polished surfaces and close tolerance, they need and deserve the best you can give 'em.

Because they can move mighty loads they are often misunderstood. Like gems, they're rugged and also like gems they should be given tender lovin' care.

You heard the one about "the wheel that squeaks gets the grease." Well, if that happens to a wheel that rolls on a bearing, it's too late for grease. Chances are that squeak is the bearing's death chant.

A little dirt, sand, rust, rough handling or misadjustment can send a bearing on its last mile. And usually your truck, tank, gun or whatever-you-have that rolls on that bearing goes with it.

BEARINGS

OOOH! AHHHH WOW!

GAAS

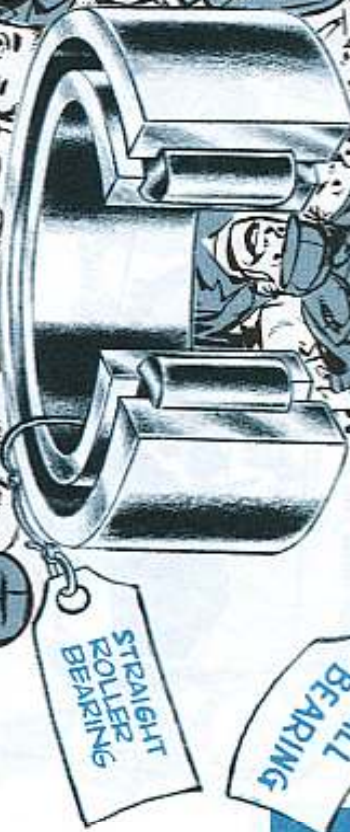
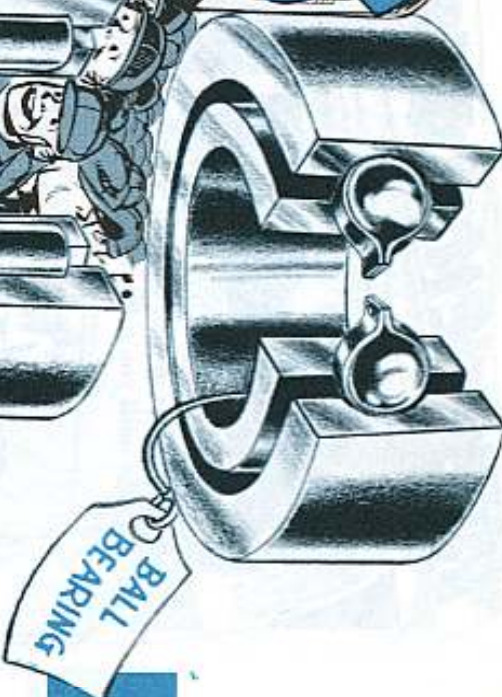
WOT SHE TALKIN' ON?

WHO CARES?

TM 9-214

DEEPER TAPERED ROLLER BEARING

NEEDLE ROLLER BEARING

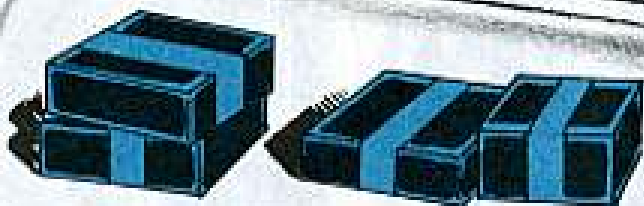


HEY! YOU GUVS!! AHEN... REGARDLESS OF THE TYPE, THEY ALL SHOULD GET THE TLC TREATMENT, AND THIS SPECIAL TREATMENT STARTS OUT WITH...

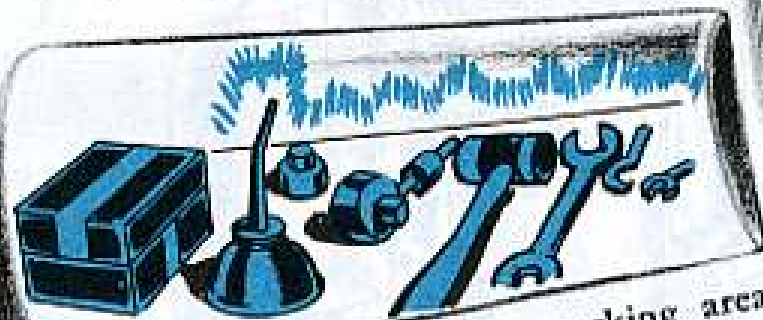
MORE

KEEP 'EM CLEAN

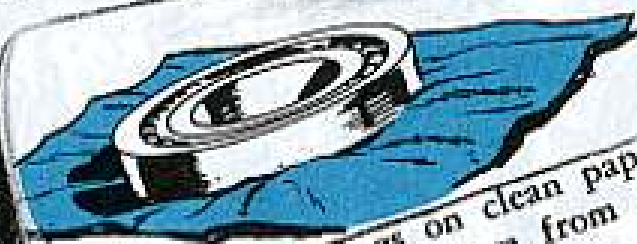
THIS IS A-NO.1 IN THE TREATMENT BECAUSE DIRT IS A BEARING KILLER! SO...FIRST OFF...KEEP YOUR HANDS CLEAN AND DRY!



Keep bearings in their original box or sealed package until you're ready to use 'em.



Keep your work bench or working area clean—use clean tools.



Always lay bearings on clean paper or a clean rag to protect them from moisture and dirt.



Cover the bearing when it's not inclosed in a housing or its package. Never let it around uncovered.



If you must wipe a bearing use a clean, lint-free rag and clean solvents.



HANDLE WITH CARE

DON'T
EVER ROUGH
'EM UP,
'CAUSE IT
TAKES JUST
A WEE BIT
TO RUIN A
BEARING.

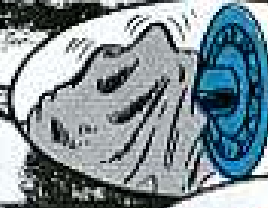


1. Never spin a dirty bearing or a dry one with compressed air.
2. Using abrasive material like emery cloth or steel wool is out.
3. Using wooden drifts or mallets on the bearing itself is also taboo. Splinters could get into the bearing.

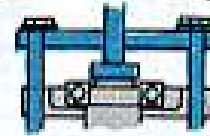
4. Keep your fingerprints off—handle a clean bearing with a clean lint-free cloth or by its inner race. Remove all fingerprints before installing.
5. Treat old bearings just like you do new ones.
6. Never use dirty, brittle or chipped tools.

TO REMOVE BEARINGS ●●●

Clean all oil or grease from around the bearing, shaft and housing.



Check your special and common tool sets for a bearing puller that can do the work.



Press or pull only on the race that is tight.



Remove press-fitted bearings from shafts by force applied to the inner race.



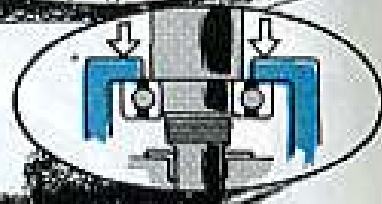
"Tap fits" in housings are removed with pressure applied to the outer race.



Press or pull straight and square. This'll keep from cocking the bearing. A cocked bearing can score the shaft or housing or damage the bearing.



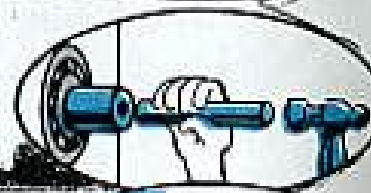
The bearing's shield or separator is tender—never pull or press against 'em. That also goes for the raceway and snap ring.



On tight bearings, where you can't get a grip on the correct ring, pull or press on the other one just enough to get a grip on the tight ring.



When using a drift, make sure it's mild steel. But a soft metal hammer or drift is OK when hammering directly on the shaft. This way, you'll not mark the shaft.



Never hammer directly on the race, cage or roller assembly.



CLEANING SPECIAL

If it's a new bearing it doesn't need cleaning. You never remove grease or oil from a new bearing.

Never use a high-pressure air hose to blow out grease and dirt.

Wash 'em in either of these solutions. And be real careful because all these liquids are highly flammable:

Mineral Spirits FSN 8010-290-6113
 (Paint Thinner) FSN 8010-558-7026
 FSN 8010-246-6115

1 gal
 5 gal
 55 gal

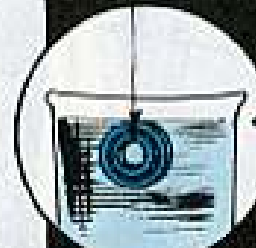
Dry-Cleaning Solvent FSN 6850-281-1985
 FSN 6850-264-9038
 FSN 6850-264-9037

1 gal
 5 gal
 55 gal



Use two washes—one for initial cleaning and another for the final rinse.

Scrub and slosh 'em near the top of the container—scrubbing them near the bottom will let more dirt get in 'em. It's like scrubbing dirt with dirt.

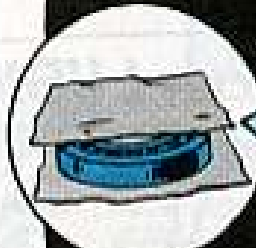


Or you can let it hang in the solvent until grease and dirt are soft.

After first cleaning, rewash and rinse in clean solvent.



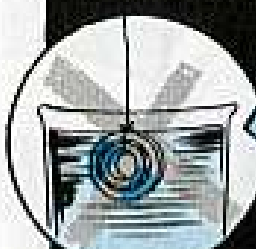
Then dry with a lint-free cloth or with a low-pressure air hose, but don't let it spin. Turn it slowly by hand.



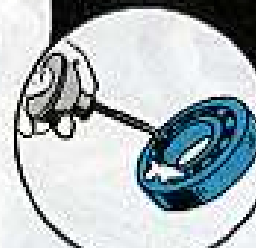
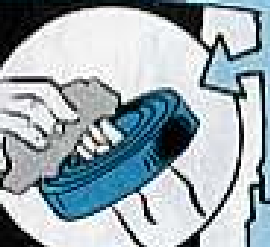
Or lay 'em on a clean piece of cloth or paper away from dirt and moisture. Keep 'em covered; there's more dirt flying around than you think.



If a bearing's gummed or caked tight with heavy or hardened grease, heat some OE 10 oil to about 180°. Then soak the bearing in it until the grease works free. And wash and clean the regular way.



You never put bearings with shields or seals in cleaning solvents. Just wipe the exterior surfaces with a clean rag that's been saturated in cleaning solvent and wrung dry.



After a bearing's been cleaned and dried, put on a thin coat of oil. A dry bearing can rust fast.

After a good cleaning your next important treatment is inspection. So . . .

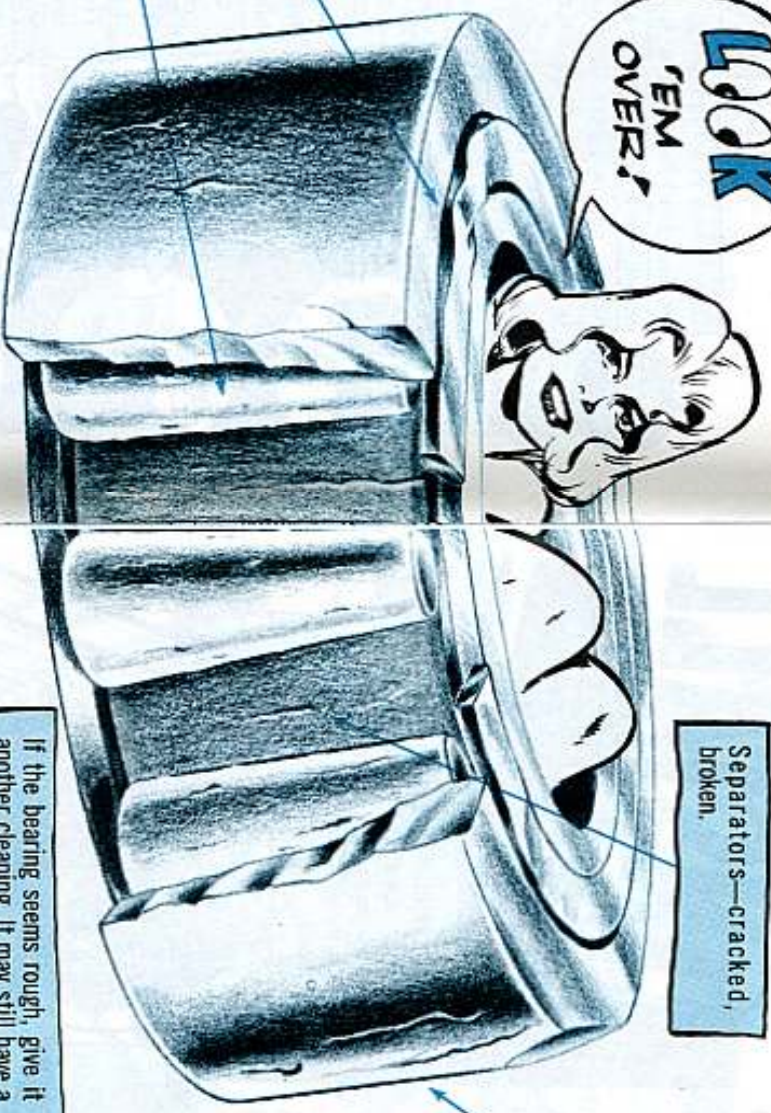
Inspecting a bearing may seem tough, but it is not. Just look it over real careful like for any defect that'll put it in the "unserviceable" class.

Spin the bearing by hand (no air hose drag or binding and coast to a stop.

Listen for excessive noise or any vibration while spinning it by hand. Look it over real close for these defects:

- Rings—broken, cracked, split.
- Shields or seals—dented, split.
- Bearings, (balls or roller) and raceways—flaked areas, rust, deep cuts or scratches, flat spots, pitted, overheated (brownish-blue or blue-black color), broken, showing wear marks.

LOOK 'EM OVER!



Separators—cracked, broken.

Cup and Cone—deep cuts or scratches, flat spots, wear bands. If any one needs changing, replace 'em as a set.

General condition—Too loose (careful here; clean and unmounted bearings are normally loose), rust on critical surfaces, wear bands on any parts, signs of brinelling. Tapered roller bearing cone etched by acid or moisture. Worn (Normal—mirror bright; Worn—dull gray).

After you've inspected it and it's a good one, take off all fingerprints with:

- Fingerprint Remover, Corrosion preventive: FSN 8030-664-4017 ... 1 qt
- FSN 8030-281-2338 ... 1 gal
- FSN 8030-252-83005 gal

Then give it a dip in clean paint thinner or dry-cleaning solvent.

NOW! THE BEARING IS READY FOR LUBING.

Before lubing, look over the lube order covering the piece of equipment in which the bearing belongs. This'll give the grease that's to be used.

If you're to use GAA, use only Amendment 2 or 3 as SB 725-9150-1 (31 Mar 58) says. In short, you never use GAA Amendment 1 in bearings.

It's best to use the bearing packer. The lubricator (packer) comes in your Organizational Common tool set as part of the Lubricating Kit.

IF YOU'RE GOING TO PACK IT BY HAND, WASH YOUR HANDS REAL WELL. THEN COAT 'EM WITH GAA OR THE GREASE YOU'RE GOING TO USE.

Use only clean and fresh grease. Knead the grease into the bearing until it squishes out the other side. Not too much; use just enough to pack the

rollers or balls and a thin coat over the rings. Keep the bearing covered until it's to be installed.

Before installing a clean and lubed bearing make certain the housing in which it's to go is clean. Clean out all rust and rust flakes; repaint the interior if necessary.

On wheel hubs, after they're clean, smear a thin (1/16 inch) coat of GAA in 'em, just enough to keep 'em from rusting. Don't pack hubs; too much grease melts and seeps out . . . and it'll run into your brakes.

Remember how careful you were when you cleaned the bearing? Well, when installing it you have to be twice as careful. It can be damaged seriously by wrong installation.

INSTALL

Clean all shafts. When pressing a bearing on a shaft, any dirt left will move ahead as the bearing's pressed forward and pack between the inner race. This'll cause wrong adjustment.

WITH CARE

THE NEXT STEP IS ALSO MIGHTY IMPORTANT-- IT'S ADJUSTING.

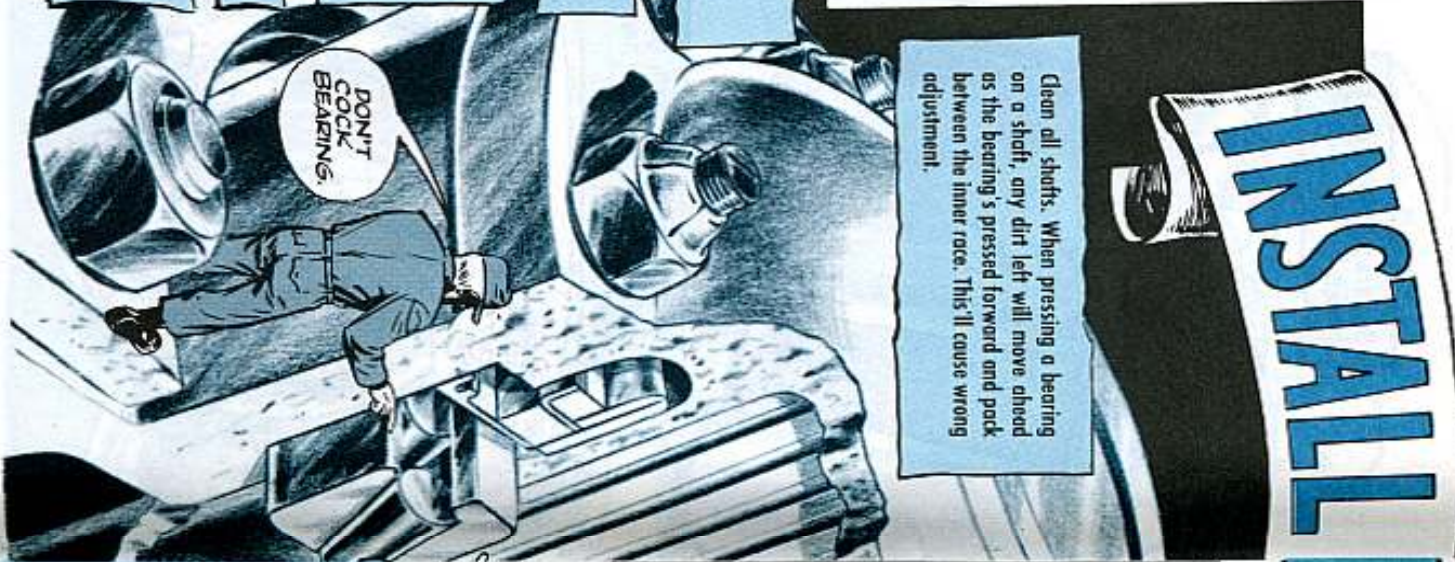
Use drift pins made of unhardened steel and with round edges to square 'em up while mounting. Stay away from soft metals like brass and copper. They'll chip . . . a chip in a bearing leads to trouble.

Never force a cocked bearing.

The best mounting job is done by using drive blocks. They can be made locally and are nice to have when the operation is repeated often.

Never drive it by hitting the bearing directly against the rings.

Drive the bearing in (housing or shaft) evenly and squarely. Don't cock the bearing.



If a bearing's too tight it'll heat up and maybe fall. If it's too loose it'll cause pounding. In the front wheels, it can crack the spindle, cause shimmy, make the truck hard to steer or cause extra tire wear. Play it safe and adjust all bearings just like it says in your equipment's technical manual.



STORAGE

NOW, IF YOU NEED MORE BEARING INFO, DIG INTO TM 9-214 (NOV 59) AND TM 9-273 (JAN 62). MANY OUTFITS NEVER RECEIVED THEM VIA THEIR REGULAR TM DISTRIBUTION. IF YOU NEED 'EM, GET THEM ON A DA FORM 17 AND USE AR 310-1 PARA 63 AS YOUR AUTHORIZATION.

...THIS LETS YOU HAVE A NEEDED PUBLICATION ON A NEED-TO-KNOW BASIS...NOW, HERE IS SOME KNOW-HOW ON STORING BEARINGS.

1. Store bearings in sealed packages . . . and in a place that's away from dust and free from a lot of heat or moisture.
2. Open bearing packages only when they're to be used. If a package is opened, seal it before putting it back on the shelf.
3. Never take off the preservative coating of a new bearing. If you do, then it's got to be cleaned, lubed and the package re-sealed.
4. Never take 'em apart. The rollers and races are correctly matched and assembled at the factory.

5. Stack your bearings just so high. Too much weight will crush the lower boxes, break their seals and let dirt get in.
6. Stack 'em so older bearings are used first. This'll keep some from being around too long and maybe getting a case of rust.
7. If you must rewrap a bearing, keep it away from excelsior or other similar type packing material.
8. Keep all identification marks on a bearing package legible. Put all markings and FSN on a repackaged bearing.



GROUND MOBILITY

GO (LIKE SLOW) ON ICE 'N' SNOW



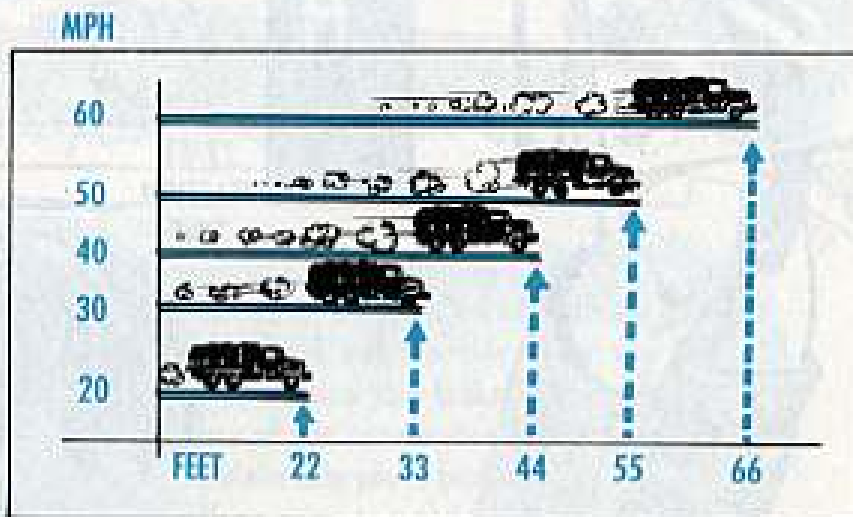
If you go on ice and snow you gotta know what is slow.

On dry pavement 20 MPH is slow—but on ice and snow 20 MPH is faster than you think.

It's like this. No matter what the driving conditions, before you can stop, you first have to move your foot from the accelerator to the brake. For the average driver this takes 4 to 6 tenths of a second. During that time the vehicle moves ahead about another 22 feet at 20 MPH.

The faster you're going the farther the vehicle moves—naturally.

REACTION TIME



Things can slow you down—things like being tired, sad or sick. So take extra care when you're off your oats.

Say it takes you 22 feet to react at 20 MPH. It'll take you another 21 feet before you get your vehicle stopped for a total of 43 feet. This is on good, dry, pavement.

DON'T FORGET—
YOUR AUTHORIZATION
FOR TIRE CHAINS IS IN
TM 9-2300-223-20P (DEC 63).

HERE'S A HANDY



AT 20 MPH

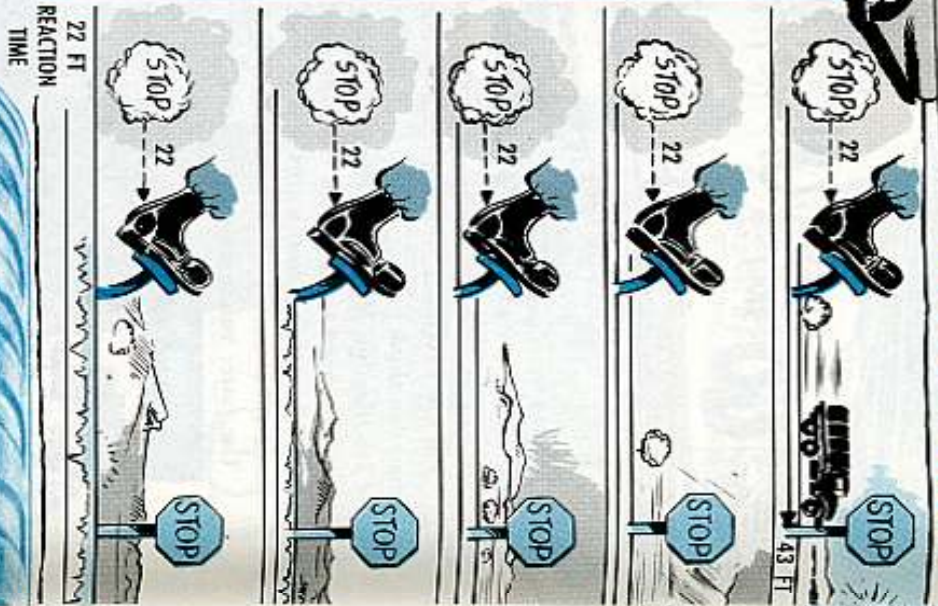
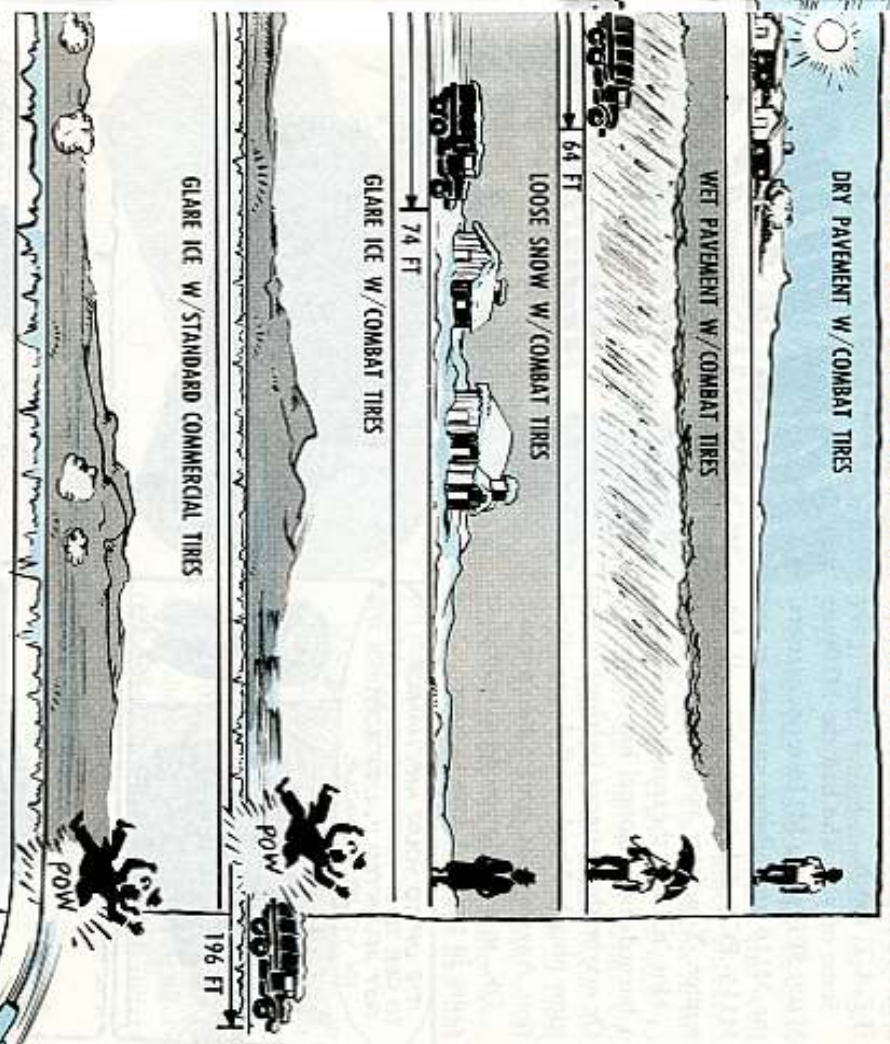


CHART TO SHOW WHAT WE MEAN



Keep your speed down, down, down. Remember it like this... 20 MPH on glare ice is more treacherous than 50 MPH on dry pavement. Use tire chains when the going gets rough. On packed snow they let you stop about a car length quicker and on glare ice they

got you stopped about 75 feet sooner— at a speed of 20 MPH. Chains give you a good bite in snow or mud, but they slide and slip on ice or packed snow. Use your front-wheel drive (if you got the shift type) on glare ice. A car with four-wheel drive behaves better on ice than a rear-drive-only vehicle, if neither vehicle has chains.

Slamming on your brakes suddenly on a slick road will probably throw you into a skid. Pump your brake pedal lightly and use engine compression as much as possible to help you to brake. If you come to a real slick stretch of road, down-shift before you enter it and keep moving. Don't feed your engine any more gas than necessary to keep from stalling.

What do you guys want most of all from your personnel heaters? No sweat to answerin' this one, bechah! You want H-E-A-T, natch.

Some of you who had the M108 or M109 SPH's, the M114-series carriers, the M116 amphibious carriers, or the M113 PC's didn't fare so well last winter. You froze your footies.

More'n' likely the trouble-maker was a burned-out personnel heater igniter. Or maybe the filament (wiring) in the glow plug had broken off due to vibration. Anyway, the igniter didn't ignite. OK, so what do you do to help your cause in the cold days to come?

BLOW IT! BLOW PLUG...

Warmer, Warmer



IT'S UP TO YOUR MECHANICS TO SEE TO IT THAT THE REGULATORS GET ADJUSTED "JUST SO" IN YOUR VEHICLE.



REGULATOR SETTINGS

<p>M114</p>  <p>IF MECHANIC DECIDES FOR REGULATOR ADJUSTMENT SUPPORT WILL DO IT</p> <p>SETTING: 28-VOLT SOURCE: PAGE 67, TM 9-2320-224-35 (JUL 62)</p>	<p>M113</p>  <p>SETTING: 27.5 VOLTS SOURCE: PARA 87 PAGE 118, TM 9-2300-224-20 (DEC 61)</p>
<p>M116</p>  <p>SETTING: 27.5± .5 VOLTS DC SOURCE: PARA 41, PAGE 112 TM 9-2320-223-20 (JUL 62)</p>	<p>M108</p>  <p>SETTING: 28± .3 VOLTS, NO MORE SOURCE: PARA 36, PAGE 164 TM 9-2350-217-20 (OCT 62)</p>
	<p>M109</p> 



Both the Stewart-Warner Heater (FSN 2540-854-4449) and the Perfection Sove Heater (FSN 2540-967-3352) are interchangeable in your SPH's.

If you run into some side interference (while trying to mount 'em) with the fixed fire extinguisher bulkhead bracket, just put a small dimple in the heater's outer case—just enough to slip it by the end of the clamp. Or, you might knock the rivets outta the clamp's hook-end and remove it. Then use bolts, lockwashers and nuts to replace the rivets. No sweat either way. Later produced vehicles have had this corrected.

SPH IGNITER POOP:

Should you have a bad igniter in your S-W heater, you can get it under RSN 2540-785-6349. Repair poop is found on pages 335-337 in TM 9-2350-217-20 (Oct 62).

On those Perfection Sove igniters (FSN 2540-055-7573), it's a bit different. Support ought to do the job as it's a bit on the ticklish side.

THIS 28±.3 SETTINGS ABOUT ALL THE FILAMENT IN THE GLOW PLUG CAN TAKE, SO AVOID TROUBLES BY HEEDING YOUR TM.



Regardless of which vehicle you've got, keep a close check on the voltage regulator settings in those alternating type generating systems. Keep the connections clean and tight so's to hold down any sudden voltage surges.



Doing this'll prolong the life of your heater's igniter and keep heat in your vehicle.



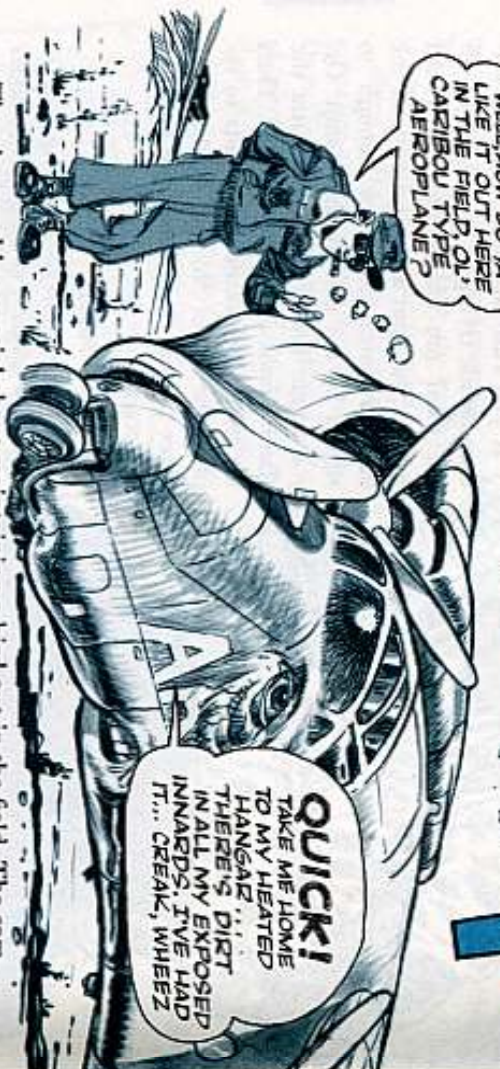
AIR MOBILITY

WELL, HOW DO YA LIKE IT OUT HERE IN THE FIELD, OJ? CARIBOU TYPE AEROPLANE?

WHEN OUT IN THE BOONDOCKS...

STEP UP YOUR

P M



QUICK!
TAKE ME HOME TO MY HEATED HANGAR... THERE'S DIRT IN ALL MY EXPOSED INWARDS. I'VE HAD IT... CREAK, WHEEZ

There's something special about maintaining a bird out in the field. The combination of wind and dirt can foul up a bird—in more ways than one.

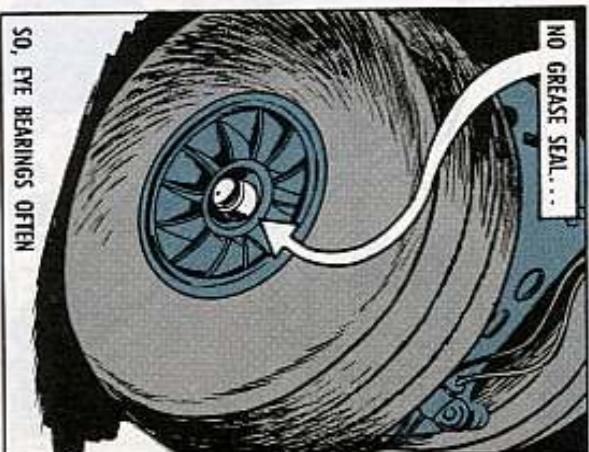
That's why a special, added type of preventive maintenance is needed on certain exposed parts of a bird to keep 'er in the pink.

EYE THE BEARINGS

Take the main landing gear on a Caribou (CV-2). The only protection the wheel bearings have from blowing sand is the closure ring. But there's a grease seal in the works.

The seal is on new birds and will be put on those in the field by an MWO. It should go a long way toward preventing bearings from being chewed up.

Meanwhile, the bearings in wheels, P/N 95-32725, P/N 95-31432R and P/N 95-41743, want to be eyeballed for real. You can tell a wheel with a seal because it'll have either a "R" or "R1" added to the part number.



NO GREASE SEAL...
SO, EYE BEARINGS OFTEN



CHECK THE SCREEN

Another vital spot on a Caribou is the de-icing suction relief valve screen in the wheel well. The cavern is a dirt trap when the prop whips up a dust storm, so the screen just naturally takes it on the chin.

Course a clogged screen isn't going to let in much air to the engine-driven air pump and you know what that can lead to—an overheated air pump, a sheared shaft and no 15-PSI pressure to work the de-icer boots.



DUST



EYEBALL SCREEN UNDER COVER



CLOGGED... NO AIR TO PUMP

DUST + CLOGGED SCREEN = AIR PUMP PROBLEMS

MWO 55-1510-206-34/24, "Modification of the De-Icer System," is on the way to lower high pump temperatures. Locating the screen out of the dusty wheel well is one of the features of the fix.

Meanwhile, it's a good idea to keep close tabs on the screen to be sure that it's not clogged. The same deal goes for all screens, strainers, filters and other exposed bird parts.

So, when the dust begins to fly and your bird starts to cough, remember this remedy. You and your maintenance section can make PM checks in addition to the normal Daily, Intermediate and Periodic Inspections.

ADJUST YOUR TURNBUCKLES WITH...

A MECHANIC'S HELPER

NEED A
HELPING
HAND?



There're times when a bird mechanic can use an extra hand—like when a control cable needs a tension adjustment.

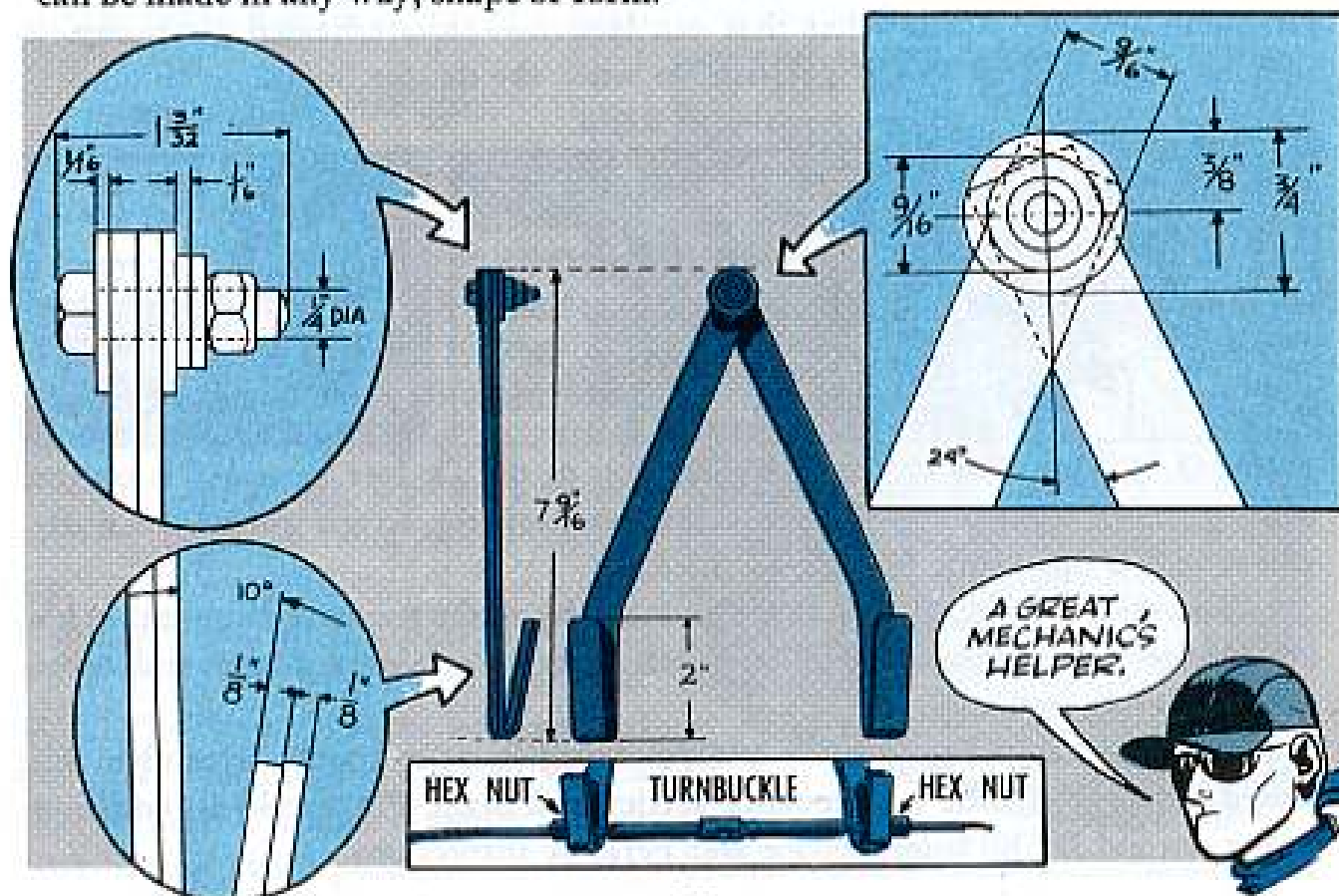
He can hold a wrench on one of the hex nuts with his left hand and another wrench on the other nut with his right hand, all right. But this leaves him with only his teeth to try and adjust the turnbuckle . . . 'tain't easy!

What comes in mighty handy at a time like this is a mechanic's helper. It can be made in any way, shape or form.

One of the simplest designs for use on standard turnbuckles (not the speed-rig type) is this baby, which is made from $\frac{1}{8}$ -in flat steel.

To use the tool you just slip it over the hex nuts with one hand, and make your turnbuckle adjustment with the other. It works like a charm.

Dimensions of the mechanic's helper can be changed to make it usable on many birds.



BEFORE YOU PLUG IN
YOUR APU...

WARM 'ER UP



Nobody would turn the connecting rods of an engine into pretzels on purpose, now would they?

Of course not. But that's what can happen if you put a load on a cold engine—sure 'nough.

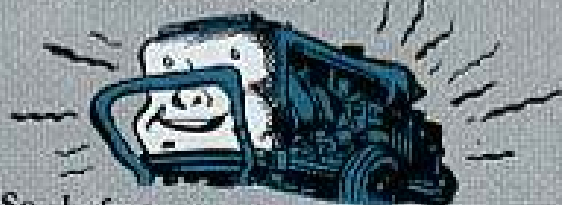
Take the auxiliary power unit in your Aircraft Organizational B and C Tool Kits. The operator's pub on the Waukesha model, TM 9-2805-218-12 (5 Jun 59), has some definite poop on the subject.

Chapter 2, Section III, calls for warming up the APU for from five to ten minutes when you're operating under normal conditions (10 degrees F to 80 degrees F).

When you're out in temperatures of

extreme cold (10 degrees F and below) the warm-up time, given in Section IV of the pub, is 15 minutes.

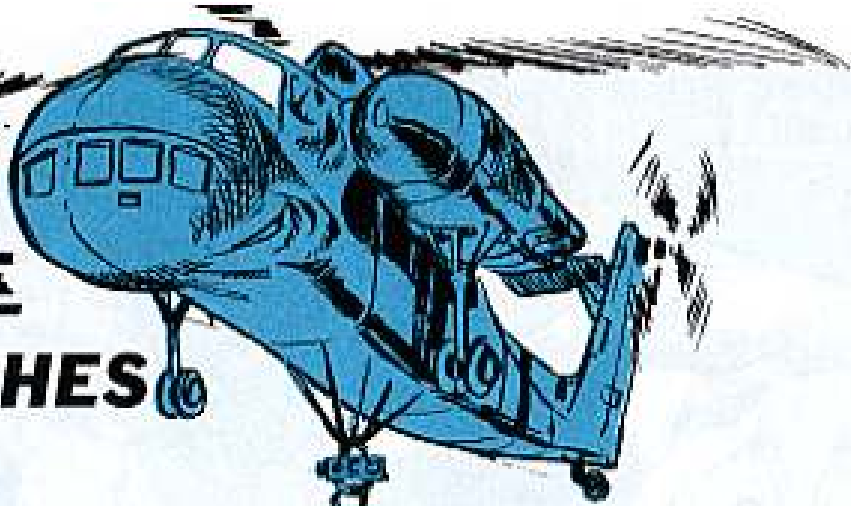
The time may vary from one model APU to another. If you thumb thru the operator's pub and can't find a recommended warm-up time, a good rule-of-thumb is to run your baby until she's operating smoothly, without any further use of the choke.



So, before you plug the APU into a bird, remember that she'll deliver full power and stay in the pink a lot longer—with a proper warm-up.

FOR MOJAVE HOOKUPS...

A NEW WRINKLE IN HITCHES

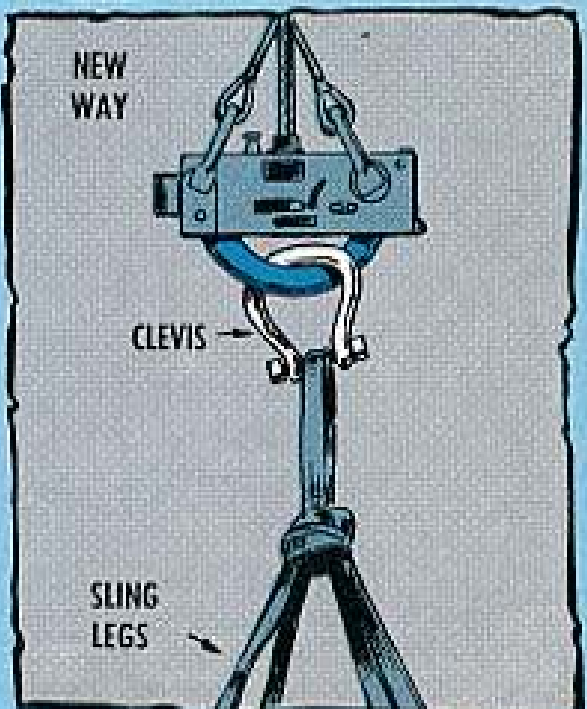


This universal cargo sling system is OK for most other aircraft, but that pliable nylon sling sure hates to part company with that cargo hook when you're trying to release a load.

The hitch in the operation comes from the way the 10-in nylon ring hugs that hump on the end of the cargo hook like they're in love or somethin'. This romance has got to cease.

So the recommended way to break up this affair between the hook and sling is to shove a third party into the act, namely a clevis. The clevis, if used as shown, will allow the load to disengage without trouble. Only now you're back with the old problem of a metallic sling. This metal clevis can bust up cargo after it's released or shake up a ground crew with jolt juice.

Guess you just have to go back to the old precautions of padding the cargo and carrying around a static discharge probe . . . at least until the Army can come up with a universal hook to marry up with its universal cargo sling. New systems always take a while to work out.



BIRD DOGS AND BEAVERS NEED . . .

THE RIGHT SIZE REGULATOR



Watch those voltage regulator numbers if your favorite beast happens to be a Bird Dog (0-1) or Beaver (U-6A). All the regulators listed in your -20P are not the right size for your bird.

However, AVCOM straightens out the confusion by pointing out that **FSN 6110-651-8883** (P/N 1589-1E) is the only number to use in ordering replacement regulators.

Now there're three other regulators with dimensions which also allow them

to be installed in Bird Dogs and Beavers without trouble—and they may be issued as temporary substitutes until the supply's exhausted. So don't sweat it if you get any of these substitutes:

FSN 6110-635-9636

(P/N 1589-1D)

FSN 6110-733-6003

(P/N 1589-1C)

FSN 6110-390-8104

(P/N 1589-1B)

But these are the only four regulators you should accept.

CHOOSE THE BEST PLUG

You pays your money and takes your chances—or so the man said.

The same principle goes when you requisition fine wire plug RHB36P for the engine

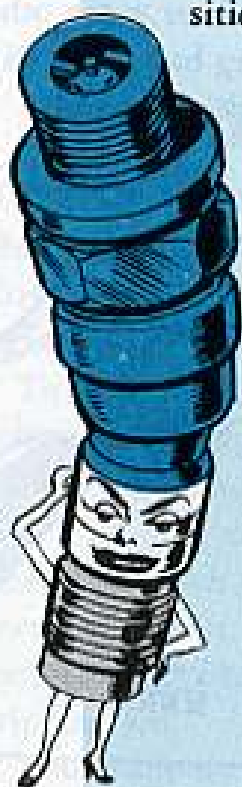
in your Mojave (CH-37). If the engine's an oil burner, however, this type of plug may foul out in a few hours.

So what do you do to cut down on a lot of plug cleaning?

Why, you requisition a massive plug, like RHB37N, sure 'nough.

That's why you'll find both fine wire and massive plugs listed in the spark plug table of TB AVN 25-8 (9 Oct 63) . . . for almost all birds.

And here's one to jot down and remember—if your unit does not have a spark plug cleaner, FSN 4910-786-9271, to recondition and test the dogs you pull, turn all the plugs in to your direct support for reconditioning.



"ME
TARZAN--
YOU
JANE"





Nobody would haul off and throw rocks at a Huey (UH-1) main rotor blade on purpose, would they?

'Course not.

Yet, with some of the shortcut repairs being made to the weight bag at the ends of a tie-down, that's just what's happening.

Some types are stuffing rocks, bolts and other solid pieces of metal into a torn bag and wrapping it with masking tape. When this weight accidentally gets tossed into the blade during tie-

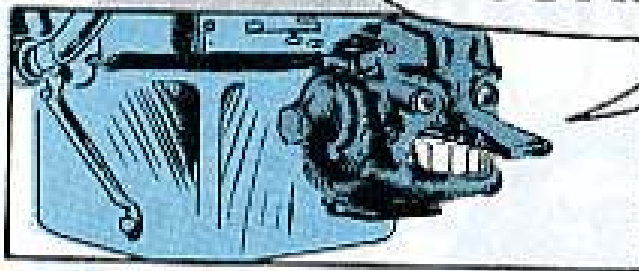
down, the dent it makes can cost five grand—the price of a new blade.

To prevent this type of damage, buckshot is sewn into the bags when the tie-down is made. Then if the weight should happen to hit the blade, the shot takes the blow, not the blade.

So-o-o-o . . . when the weights go, head for the canvas repair shop with a load of buckshot, sand, or some other type of shock absorbing bag filler. Bird blades can't stand rock throwing.



"SOAK ME!"



Dear Windy,

When we draw a new pressure injection-type carburetor from supply for our Bird Dog (0-1), the shipping container it came in was stamped: **CONTENTS READY FOR IMMEDIATE USE.**

My buddy says this label means that the carburetor is ready to be put on the engine, so the diaphragm doesn't need to be soaked.

I say he's all wet! Am I right?

SP 6 E. F. G.

Dear Specialist E. F. G.,

You're right as rain.

Soaking injection-type carburetors is as basic as not soaking float-type carburetors, and no amount of fancy container labeling is likely to change the SOP.

'Tis mighty important, that's for sure. After all, the carburetor was calibrated when the diaphragm was soaked and it's not going to work right until it gets back to the wet state again.

The soaking time and other poop is right in the organizational maintenance pub, TM 55-1510-202-20 (20 Jan 64) . . . Chap 2, Sec.III, Para 3-124.

Windy

LOOK FOR WINDOW CLIP

The sliding cockpit windows of a Choctaw (CH-34) have been known to blow off their tracks in flight, and sail right into the main rotor blades.

To prevent this type of revoltin' development, keep an eye peeled for MWO 55-1520-202-34/27. In it you'll find a holding clip listed, made up of a bracket which gets bolted to the lower forward corner of the window and a nylon track which is attached to the window sill.

Your support performs the surgery.



PUHLEEZE...

NO MURPHYIZED FILTERS



If Private Murphy should happen along when you're pulling an Intermediate on your Sioux (OH-13E, G), ask him to do an about face.

It's not that a little extra help doesn't come in handy at such times. It's just that a cleaned engine oil filter, put in wrong, can louse up an engine in short order.

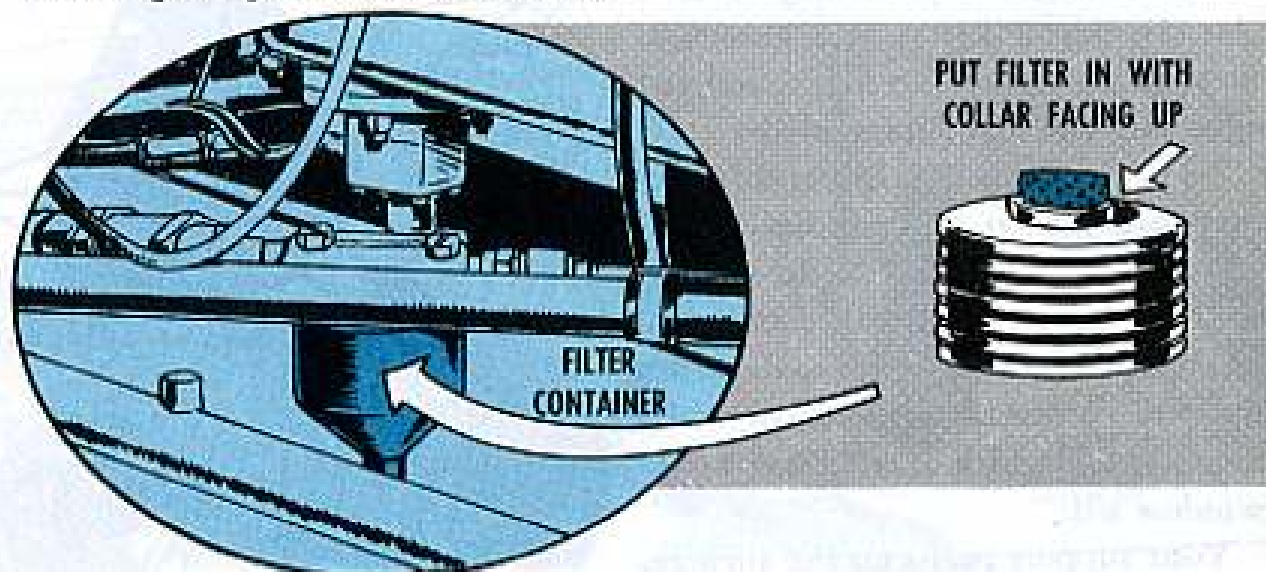
'Course an on-the-stick mechanic knows that the filter pack will fit either way. He also knows that if it's put in backwards, it'll restrict the oil flow to a point where the engine seizes up.

So, the pack goes back in the filter

container with the collar end UP. The collar prevents the pack from being jammed against the top of the container, giving the engine its full share of refined crude.

The final check on the filter comes when you run-up the engine. If the oil pressure on the cockpit gage reads between 40 and 60 pounds, you're in clover... 10 to 15 pounds and the pack's in backwards.

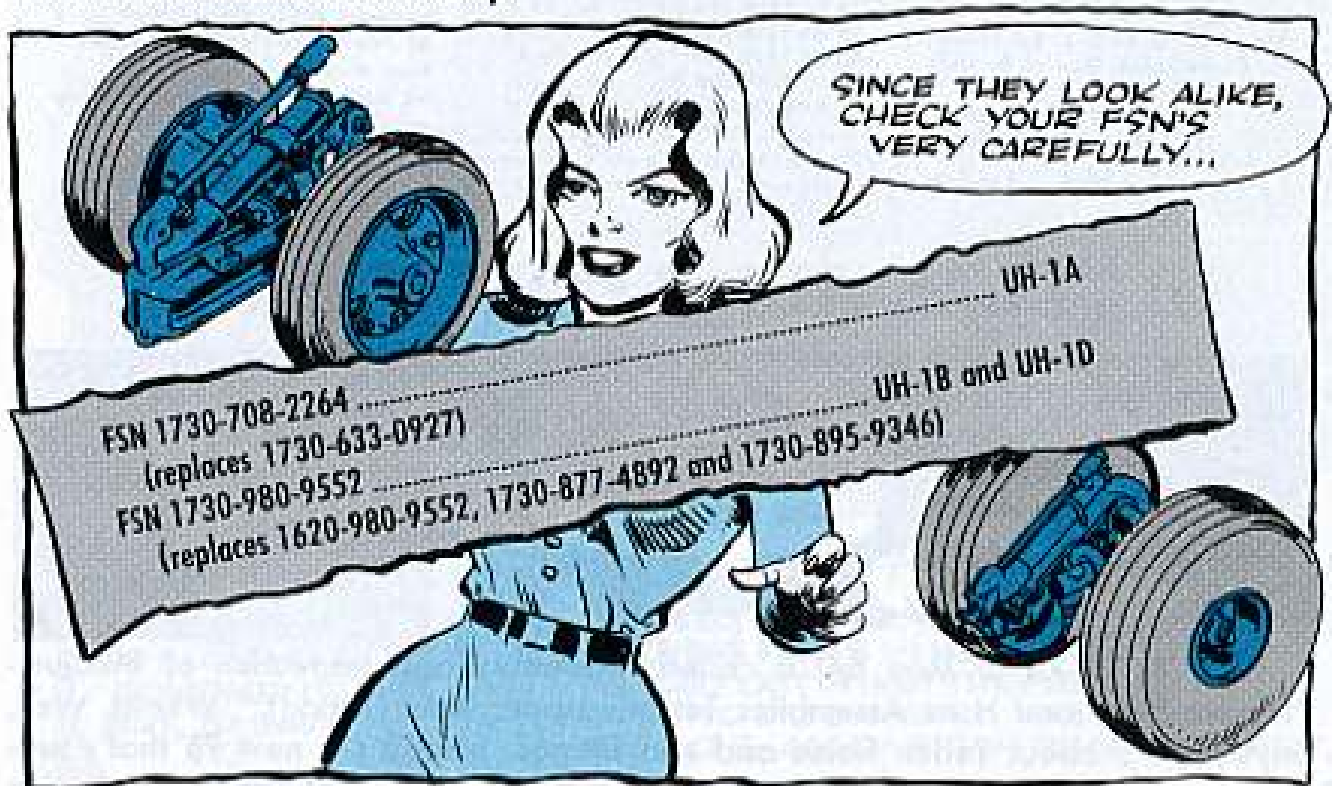
Glory-be, will ya look at the knowing smile on Murph? Looks like he's got it!



FSN'S TO WHEEL YOUR IROQUOIS BY



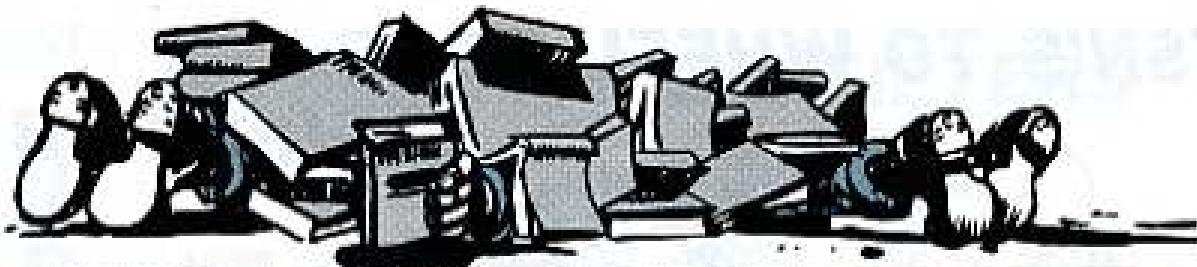
Seems as how some minor turbulence has penetrated the supply situation on ground-handling wheels for the three different models of the Iroquois. So please watch these numbers carefully.



Better back-check your outstanding supply requests to be sure you've got the right numbers for the right model. Since all three ground-handling wheel assemblies are different, the wrong set of wheels will be useless to your outfit. And things like that can ruin your whole day.

FOCUS ON NEW BOLT

If a magnetic particle inspection of the wing bolts from your Beaver (U-6) shows that the front spar attachment bolt is real-gone, don't requisition P/N NAS59-22. It's been superseded. P/N AN179H22, FSN 5306-631-4479, is the baby you want.



A selected list of recent publications of interest to Organizational Maintenance Personnel. This is a list compiled from recent Adjutant General's Distribution Center Bulletins. For complete details see DA Form 310-d with latest changes.

TECHNICAL MANUALS

TM 1-1H-33C-3, C3, Jun OH-23.
 TM 3-4730-306-15, Jun Adapter, Line Filling, 1-Ton Container, M1 (Airplane Smoke Tank).
 TM 9-1340-202-12F/1, Jul Honest John, Ammunition (Other than Atomic Weapons).
 TM 9-1430-268-12/3, Jun Nike-Herc, Nike-Herc (Imp), Training Devices.
 TM 9-1430-269-12/3, Jun Nike-Herc, Nike-Herc (Imp), Training Devices.
 TM 9-1430-511-12F/3, Jul Hawk, Ground Con Equip.
 TM 9-1430-512-12/1, Jul Hawk, Ground Con Equip.

TM 10-3930-253-25F, Jun Truck, Lift, Fork Electric, 4000 Pounds Cap, Baker Model FTD-040, Army Model MHE 136.

TM 11-5965-223-15F, Jul Dynamic Loudspeaker 15-168/U.
 TM 55-1510-206-10, C7, Aug CY-2.
 TM 55-5420-200-12, Jun Air Transport of Bridge, Highway-Type, 38-Foot by Army and AF Ac.
 TM 55-1520-202-20F, Jun OH-34.
 TM 55-1520-210-10CL, Jun UH-1D.

TECHNICAL BULLETINS

TB 9-1400-399-10, Jul Pershing, Mid Operation & Maint.
 TB 55-1510-204-20/13, Aug OY-1.
 TB 55-1510-206-20/15, Jun CY-2.
 TB 55-1510-206-34/9, Jun CY-2.
 TB 55-1520-206-20/3, Jun OH-23.

MODIFICATION WORK ORDERS

MWO 9-1005-233-20/1, Jul Machine Gun, M73 Replacement of Disconnecter Grips and Collar Pins on Receiver Assembly.

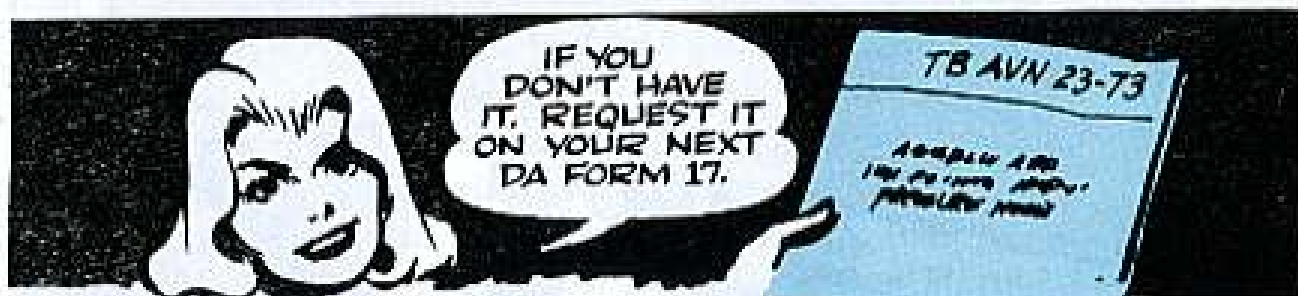
MWO 9-2330-215-20/20, Jun Tank, M80A1, Removal of Low Oil Pressure Warning Horn.

MWO 55-1510-206-34/60, Jul CY-2.
 MWO 55-1520-204-34/11, Jul OH-13.
 MWO 55-1520-210-34/1, Jul UH-1D.
 MWO 55-1520-210-34/3, Jul UH-1D.
 MWO 55-1520-210-34/4, Jul UH-1D.
 MWO 55-1520-211-34/29, Jul UH-1D.

MISCELLANEOUS

AR 310-32, Jun Equipment and Personnel Authorization.
 AR 746-5, Jun Color and Marking of Army Material.
 DA Cir 723-3, Jun Removal of Components from Assemblages and Sets of Equipment.
 SC 6210-93-CL-801, Jul Light Set, Helipart, Pfbis.

TB TELLS ALL ABOUT TEFLON



TB AVN 23-73 (5 May 64) is called "Assembly and Inspection of Medium-Pressure Hose and Hose Assemblies Tetrafluoroethylene (Teflon)." Whew! Well, anyway, it's about Teflon hoses and end fittings. Also, it's a new TB that's supposed to be distributed to you as "other literature of a general nature" according to your own DA Form 12-31 requirements. If you didn't get yours, include this TB on your next DA Form 17 pubs request.

INTRODUCING 12-36 ...

THE AVIONICS PUBS FORM

If you're an avionics type annoyed by the publications distribution system—take heed and heart. There is now a DA Form 12-36 (1 Aug 64) called: "Requirements for Army Avionics Publications." It operates on the same type of pinpoint distribution setup as the DA Form 12-31 you still use for TM 55 type aircraft pubs. Only now you've got a separate form strictly for marking down TM 11 type avionics pubs requirements. The instructions are right on the form, too.



**JOE'S
DOPE**

WHEN YOUR
EQUIPMENT
SENDS OUT
S.O.S. SIGNALS
LISTEN




FRIENDS, SOLDIERS,
AND OPERATORS
(OF MILITARY EQUIPMENT)

**LEND ME
YOUR EARS.**



I COME NOT
TO BURY YOUR
EQUIPMENT...
BUT, TO SAVE
IT!!



INDEED, I SPEAK FOR THE THOUSANDS
OF MOVING PARTS IN MILITARY EQUIPMENT
THAT CRY OUT WHEN THEY'RE HURT... OR
ABOUT TO DIE ON YUH... THEY SEND OUT
AN S.O.S. ANYONE CAN READ. NO SWEAT.

WOW... GREAT!! A NEW PREVENTIVE MAINTENANCE TOOL THAT DETECTS FAILURES BEFORE THEY HAPPEN?? GIMME ITS FSN.

A GREAT OLD SET OF TOOLS (NO FSN NEEDED) YOU WERE ISSUED LONG AGO... LIKE YOUR EARS, MAN, EARS!



EARS? MAN, YOU'RE SLIPPIN' YER PISTON! WHY ALL Y'GOTTA DO IS KNOW Y'R T.M AND PRONTO, Y'KNOW WHAT'S WRONG AND HOW TO CURE IT.

TRUE! BUT YOU MISS THE POINT, YOUNG 'UN... IT'S **BEFORE** SOMETHING GOES WRONG THAT'S **P-R-E-V-E-N-T-I-O-N.**



F'EXAMPLE, WHAT DO YOU DO WHEN YOU KNOW COLD WEATHER IS DUE?

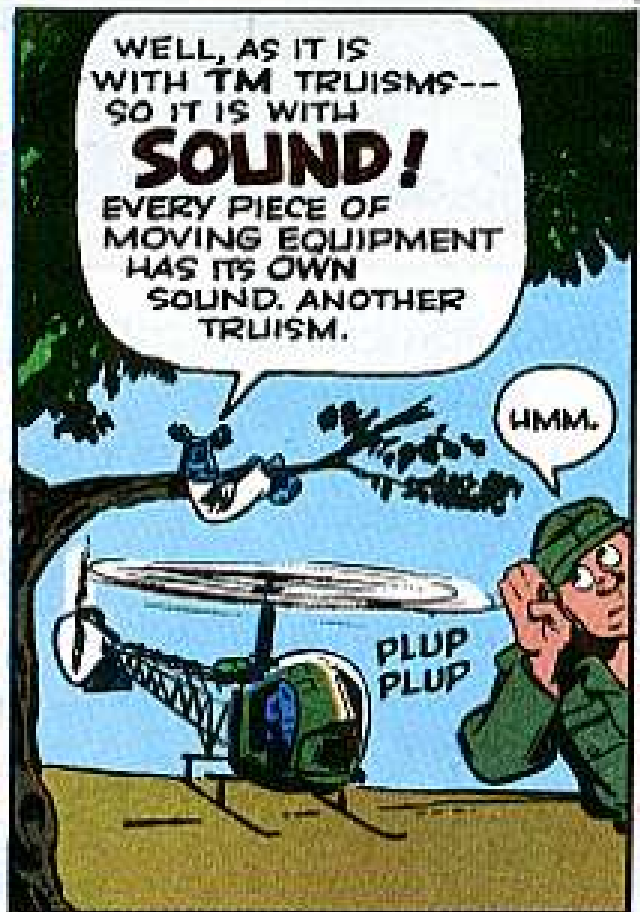
PUT IN ANTI-FREEZE -- NATCH.



... AND WHEN YOU HAVE AIR BRAKES, WOTTYA DO TO THE AIR RESERVOIR?

DRAIN THE TANKS DAILY-- BUB.





Joe's Dope Sheet

Y'r equipment can talk
 out quite clear
 To warn you when failures
 are near!
 If you learn its code
 You'll lighten your load.
 So see, smell, sense, feel,
 and hear!



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.

YOUR
 EQUIPMENT
 HAS A
 CODE OF ITS
 OWN...FOR
 EXAMPLE...



**CLONK
 CLONK**
 Could be worn bush-
 ings or bad shocks...



**THUMP
 THUMP**
 Could be exhaust
 pipe banging against
 frame...



**Chirpi
 chirpi**
 Worn fan belt
 or maybe dry
 bearings...



**SNICK
 SNICK**
 Loose or cut hot wire...



HISS
 'N' that's no snake,
 hoop!



WHINE
 Dry or worn gears
 complainin'?

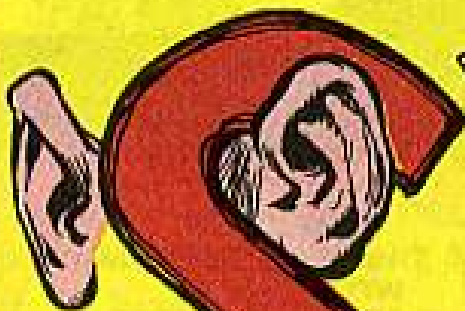


SOVEAL
 Shot brakes...
 could be rivets
 cutting into
 brake drum...



**AND
SO...
THE
VERY
NEXT
DAY**





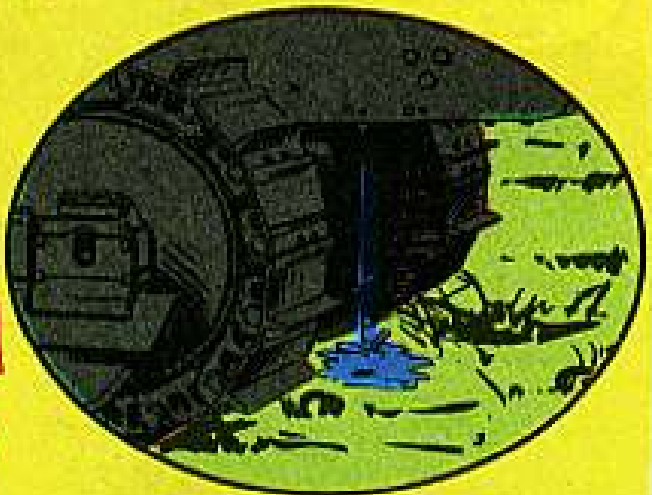
WHIIIIINE



ound

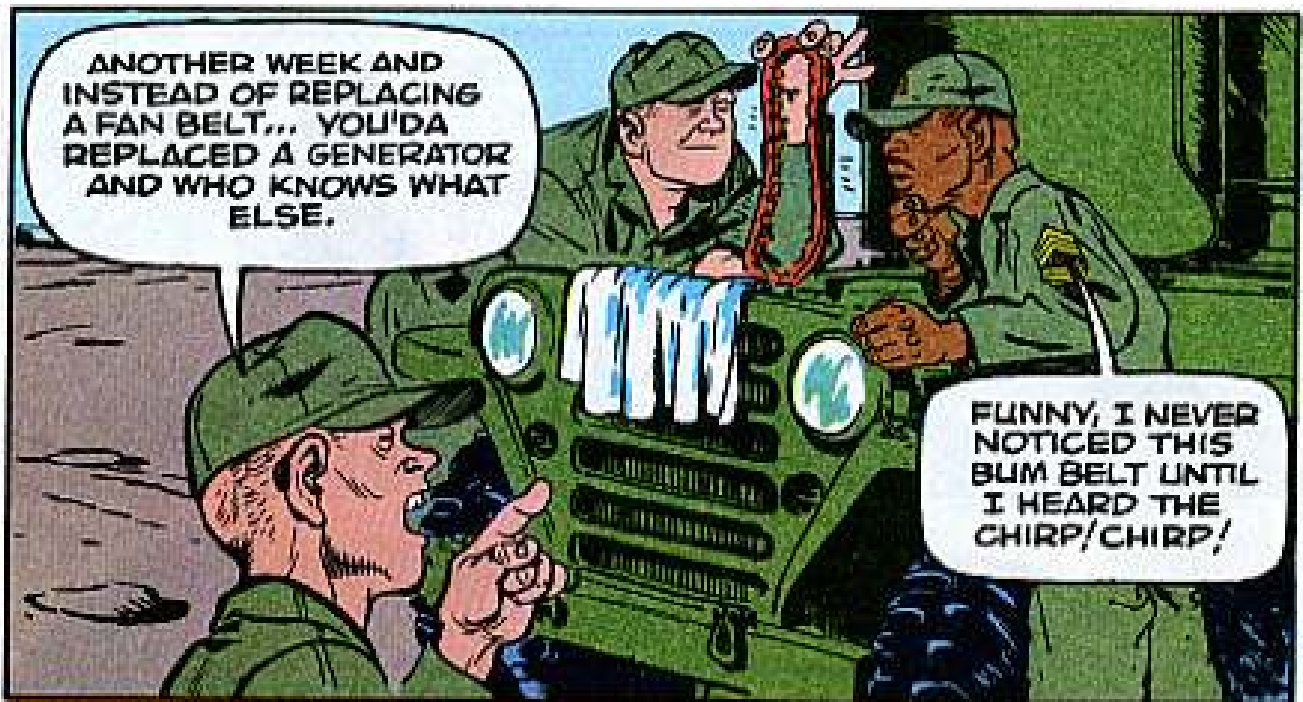


IL
or
fluid
drip



nell





ANOTHER WEEK AND INSTEAD OF REPLACING A FAN BELT... YOU'DA REPLACED A GENERATOR AND WHO KNOWS WHAT ELSE.

FUNNY, I NEVER NOTICED THIS BUM BELT UNTIL I HEARD THE CHIRP/CHIRP!



WELL CONNIE, HOW DO YOU LIKE OUR GUNG-HO OUTFIT NOW??

FINE... BUT I HAVE A PROBLEM WITH ONE OF THE ADMINISTRATIVE VEHICLES I DREW LAST WEEK!! I KEEP HEARING THIS SOUND.



WE'LL CHECK IT OUT.



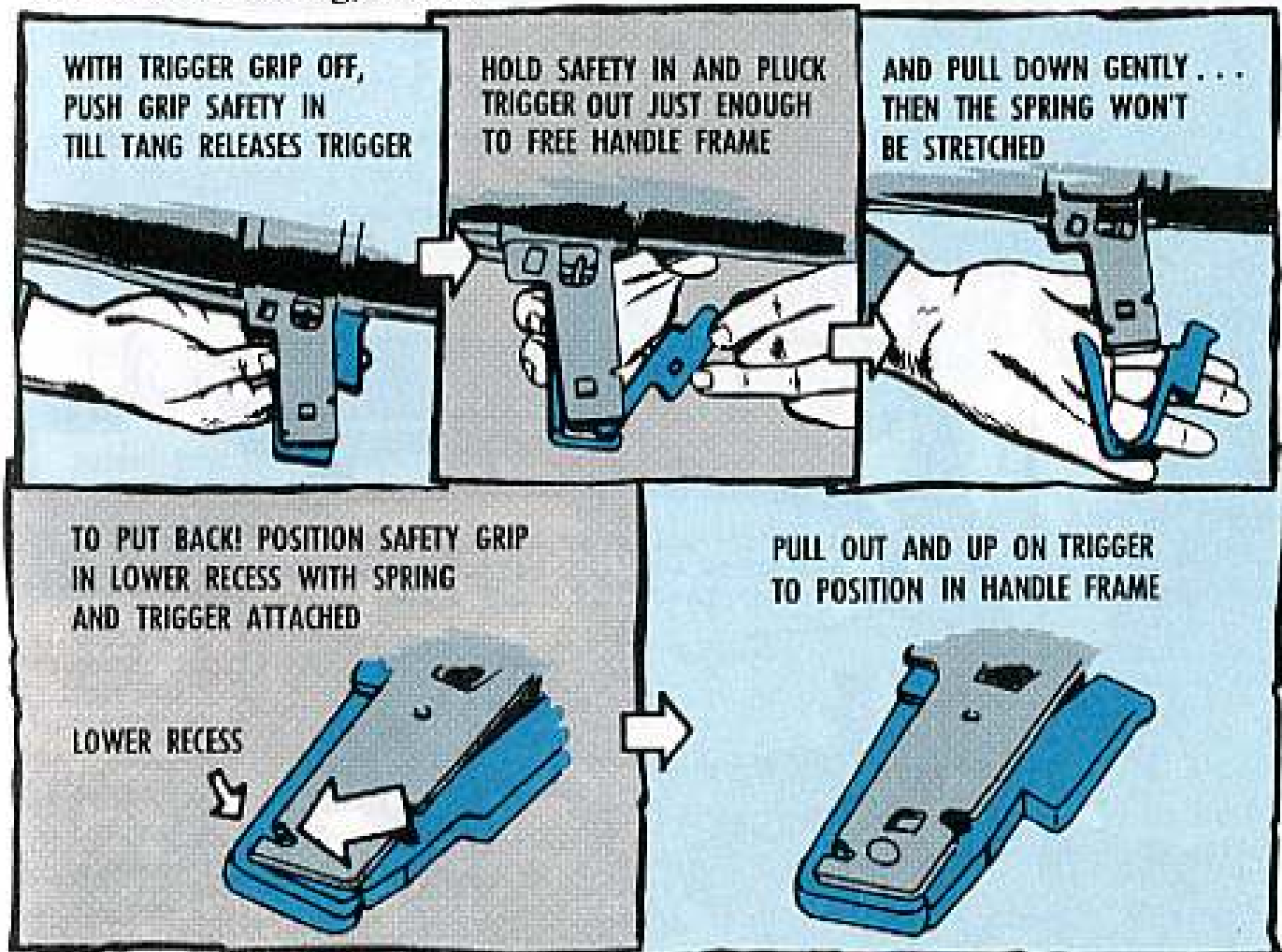
THERE'S NO MECHANICAL MALFUNCTION... IT'S THE DRIVER... HE NEEDS A WEEK OF R AND R.

And that kiddies, is how one man's outfit put the preventive back into maintenance.



Face up to it: An M67 rifle with a weak spring attached to the gun safety grip is worse than a gal with a two-timing heart. If the spring's NG, that grip safety's a hazard, right?

One way to keep it faithful, though, is to change the way you take it off for routine PM servicing, like so:



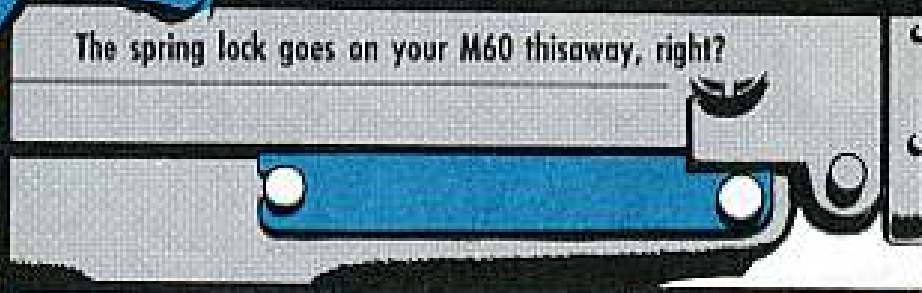


Bugged by lost lock springs
(FSN 1005-608-5216-7269245)
and retaining pins
(FSN 1005-608-5178-7269205)
on your M60 machine gun?

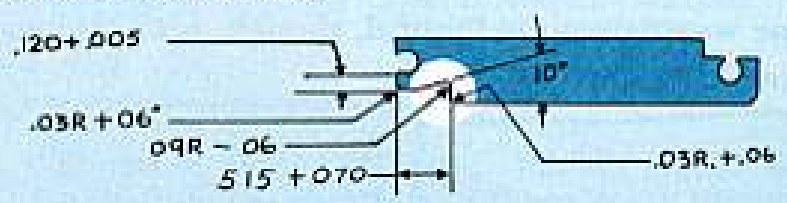
LOSE 'EM NO MORE

Relax. There's a simple solution.

The spring lock goes on your M60 thisaway, right?



OK, so take it off and get your armorer to field fix it by taking a 1/2 x 1/8-in piece off here:



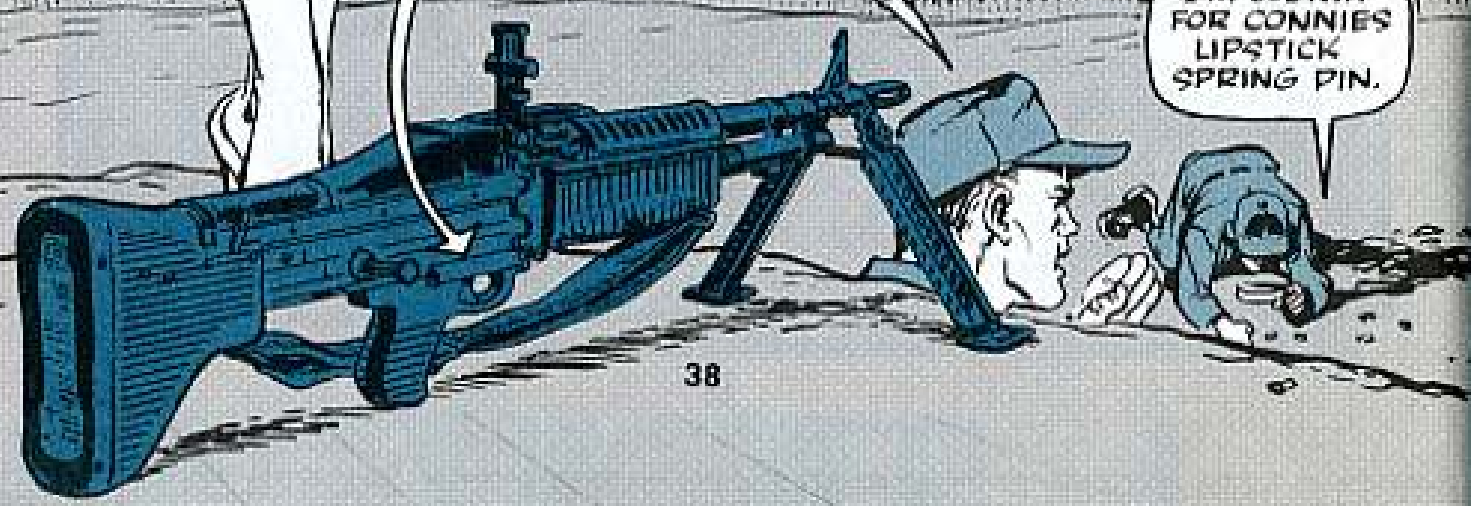
Now, turn the spring around and install it thisaway, with the notched end over the front retaining pin and the other end up and down over the sear pin.

End of sweat.



INCIDENTALLY, THE RETAINING PIN AND SEAR PIN ARE INTERCHANGEABLE AND TAKE THE SAME FSN.

I'M LOOKIN' FOR CONNIES LIPSTICK SPRING PIN.



VERY CORRECT—IF!



THE VCI TUBE IS OKAY HERE.

BUT STRICTLY N.G. HERE.

• Volatile corrosion inhibitor will prevent rust in a rifle barrel only if the whole weapon's inclosed in a sealed barrier bag with a VCI-treated liner after the tube's been placed in the bore.

It won't protect the rifle against rust nohow when shoved into the barrel of a weapon stored in a rack.

So-o-o-o, don't you do like some misguided guys do and requisition VCI tubes for this purpose.

If you want to protect the barrel of your rifle, be sure it's cleaned thoroughly after use and lightly coated with PL Special oil. Then keep it stored in a dry place.

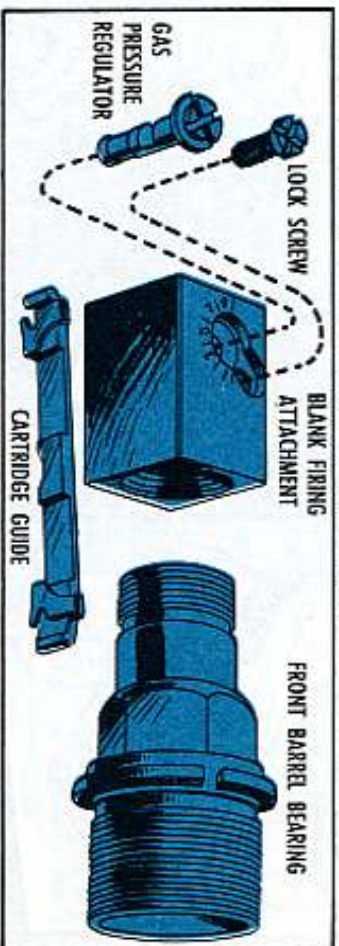
FOR BETTER

BLANKSMANSHIP

Here's what all the chatter's about around you M60 tanks—the new blank ammo firing attachment for the M73 machine gun.

It comes in five parts and answers to

FSN 1005-973-4001. No sweat installing it, but these steps'll save you almost as much time as love at first sight... and maybe a lot more woe.

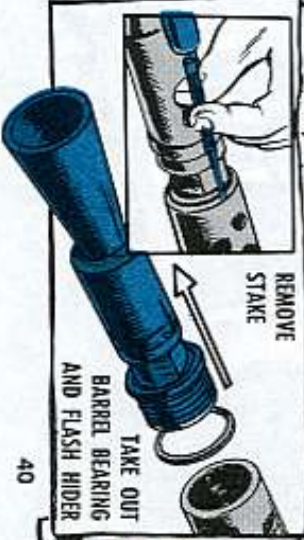


1. Put the new cartridge guide on the feed tray, like so: After you take off the cover



and separate the cartridge stop from the tray, use the stop to attach the guide on the tray.

2. Take off the flash hider this way: After you punch the stoke from the barrel-bearing notch (using a 1/4-in punch), take the front barrel-bearing (with the flash hider parts attached) off the jacket assembly.



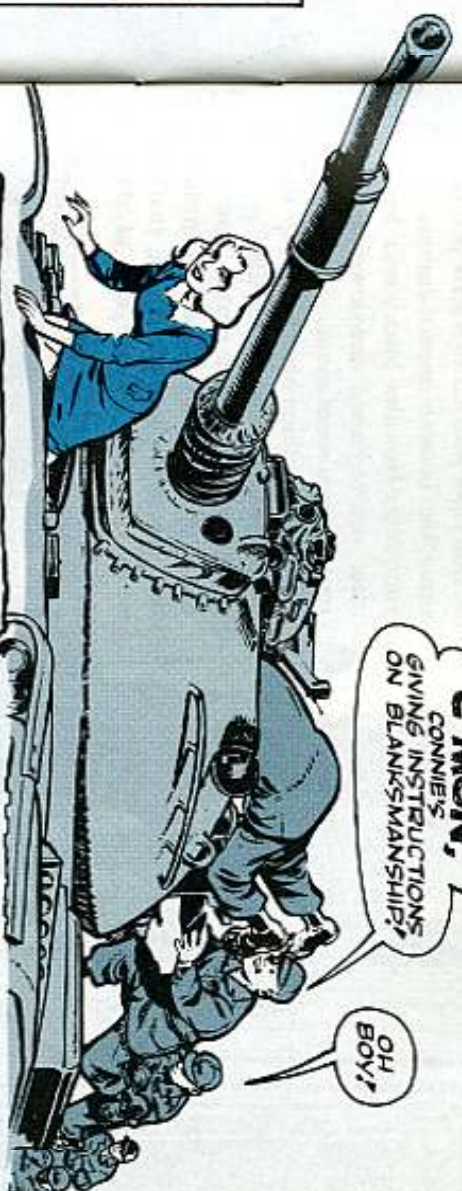
3. Put on the firing attachment this way: Take the bearing lock you removed from the jacket assembly and install it over the large threaded part of the new front barrel-bearing.



Then screw the firing attachment to the small threaded end of the barrel-bearing.



Now screw the barrel-bearing-firing attachment combination into the jacket assembly.



Finally, tighten the bearing to the jacket with a wrench and stoke the bearing lock in two places.



And there you have it.

Now, to take the attachment off, you do these steps in exact reverse. Don't try any other way. Always remove the firing attachment before taking out the cartridge guide after you're through firing blanks. And never—NEVER—put the firing attachment on the barrel jacket till after you install the cartridge guide on the feed tray.

Got it?

This is the sure-fire way to keep from firing ball ammo by mistake.

Of course, you'll have to adjust the gas pressure from time to time to increase or decrease recoil energy or to make up for wear on the regulator. But, to start out, set the arrow at "6". This'll

provide the gas pressure needed for firing the blanks. Later on, if you need more gas pressure, loosen the setscrew and turn the arrow to the left. If you need less, turn it to the right.

But, only change the setting one number at a time in either direction.



FOR MORE GAS PRESSURE TURN ARROW TO LOWER NUMBER. FOR LESS GAS PRESSURE TURN ARROW TO HIGHER NUMBER.

Your blank attachment'll take kindly to the usual good PM. Keep it clean and eye-check it regularly for damage.

You want to be real careful when taking it off and putting it on that you don't hurt any of the M73 parts... especially the jacket assembly. And keep a sharp eye on the smaller parts you remove, like the retainer assembly for the flash hider. Sow any part you're not using in the M73's spare parts box till you need it again.



No Rush Job

Don't get yourself in a stew just because the booster impact cushion on your Nike-Hercules bird works loose after you've raised and lowered the round a number of times.

A loose cushion won't foul up the operational status of the missile.

So don't dejoin the missile just to reglue or replace a cushion. Comes the time when you have to dejoin, that's when you want to take care of the cushion.

The Right Size

Dear Half-Mast,
The two AN 5-13A bolts used to hold the Nike-Hercules missile's hydraulic power unit in place... just how long're they supposed to be? I've seen three different lengths listed for the bolts.

SFC L. B.

Dear Sergeant L. B.,

To unconfuse you... the right length for the bolt is 1-15/32-in. And the stock number is FSN 5306-151-2626.

Half-Mast

42



There's Only One

There may be a number of corrosion preventive compounds on the "market"... but there's only one for you to use on the threads of your Nike-Hercules rocket motor igniter.

And that's the compound mentioned in Change I to your TM 9-1410-250-12. It's listed on page 330 under FSN 8030-569-5724 for 1 lb.

So forget what any superseded TM's you might have lying around say.

Stock It

Page 34 of TM 9-1410-250-12P/1/1 (Feb 64) shows self-locking hex nut (FSN 5310-877-5796) twice. In one place it's listed as not stocked and to be requisitioned as required. In the other place you're authorized to stock the nut. Which listing do you go by? The one that says you're authorized to stock the nut... naturally.

43

CAN YOU IMAGINE
WHAT GOOD MAINTENANCE
WOULDA DONE FOR HER?



Job Made Easier

Go ahead and say it... airbleeding the hydraulic sections of your Nike-Hercules launcher has always been a real chore, or downright nuisance, to be more to the point. The sooner your support unit comes around to apply MWO Ord Y75-W78 (8 Aug 63) to your launcher, tho, the quicker you'll have it made when it comes to air-bleeding. The MWO adds bleeder valve assemblies here and there, making it a lot easier on you.

At Last

You Nike-Hercules people say it's been impossible to come by a copy of IO 9-1400-250-20, the preventive maintenance services IO that TM 9-1400-250-12 (25 Jul 63) tells you to use at your site? No wonder... it wasn't in print. But it is now—under a February 1964 date.

Be Ready

So you don't know which way to turn.

When the mercury starts skidding, IO 9-1400-250-20 (Feb 64) tells you to switch from OHA to OHL hydraulic fluid in your Nike-Hercules launchers.

But, you say, what about the launchers that're underground or in bunkers? The temperature doesn't get down to freezing in these places... so why change to OHL?

The answer: You don't know when the launchers will wind up out-of-doors; therefore, they have to be ready for the unexpected. And that means OHL.

Tool Talk

When you go to adjust the right-hand booster stop screw on your Nike-Hercules launching rail so's the missile will be in the right position on the rail, it's a good idea to remember that:

This is the tool that is best to use:



RATCHET
WRENCH
WITH
EXTENSION

Any other tool will round off or chew up the hex end of the screw. Of course, you know that Change 1 to TM 9-1410-250-12 tells you to use a torque wrench on the left-hand stop screw. And you torque this screw before you go to work on the one on the right.



TORQUE
WRENCH
LEFT-HAND
STOP
SCREW

It's In The TM

You say you're having a hard time coming by the washer used in the adapter or chuck assembly that you use with your Davey compressor when you're pressurizing your Nike-Hercules missile and launcher components? You say you can't find it in a TM?

Here's what you do—

You call it a "gasket" instead of a "washer" and then look on page 65 of TM 5-4310-214-20P (Mar 63). You'll find the gasket listed under FSN 4310-804-7353.

Capping A BA-472/U

Those BA-472 battery protective caps are hard to come by, but there're a coupla ways to beat the heat and still protect the battery when it's outside of the Nike-Herc.

Like you know, the cap's not a replacement item.

So: 1—When you turn in an unserviceable battery, keep the cap . . . and short out pins I and J with a small piece of wire. Cover the receptacle with tape.

2—Or, cover the output receptacle with masking or other adhesive tape when it's outside your bird . . . after you short out I and J.

3—Local purchase it . . . from the Couples Department, Eagel-Picher Co., Joplin, Missouri 64801.

If you local purchase, ask for the BA-472/U protective cap, per Signal Corps Drawing SM-B-360956. It'll set you back about 75 cents.

COMMUNICATIONS

THIS IS A REAL SOLID FIX YOU COOKED UP, OL' SPEC FIVE TYPE BUDDY... WHY DON'T YOU CLUE 'EM IN UP TH' LINE?

THAT'S WOT I'M DOIN'.

WHO'S BEEN CUTTING HOLES IN TH' OL' BATTERY BAGS...?

EXPEDIENT FOR AN H-33/PT

Dear Editor,

We've worked out a real good field expedient when the moistureproof shields are punctured on our H-33/PT handsets.

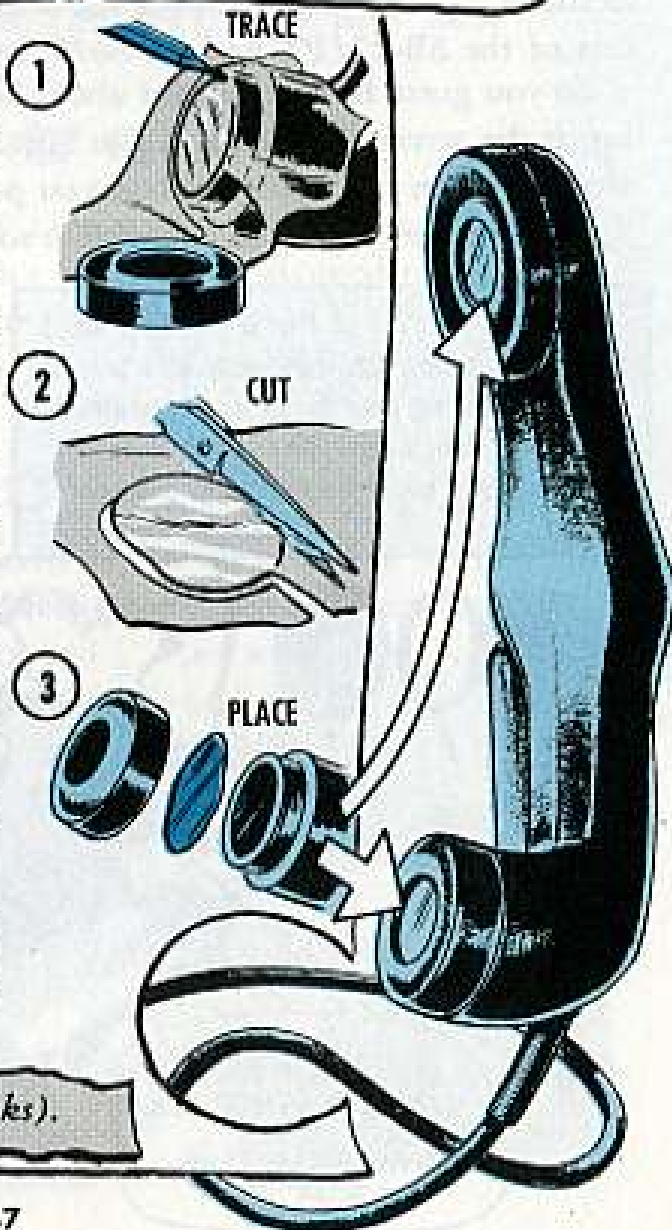
We cut a circle out of the plastic waterproof bags that batteries for the AN/PRC-6 and AN/PRC-10 radio sets come in.

The plastic stretches under the transmitter or receiver cap of the H-33 and doesn't interfere with the operation of the handset. It makes a great temporary moisture seal, and you send and receive loud and clear.

Maybe some others can use this idea.

SP 5 Otis B. Kelly
Co B, 801st. Maint. Bn.
101st Airborne Div

(Ed Note—I'm sure they can. Thanks).



RING-A-ROUND THE EARPHONE



If you're tired of going in circles from the salvage pile to your switchboard, hang your hat here awhile.

Sit down, take the load off, and eyeball these step savers:

Like you know, you can't hardly get parts no more for your switchboard headsets . . . and that includes the headband mounting rings used with the headsets of the SB-22/PT and SB-86/P switchboards.

So you gotta be real careful about how you take the mounting rings off. Doing it the wrong way, natch, can bust the rings in two or bend 'em so bad they won't stay on the headset when you put 'em back in place.

To save the rings, get 'em off like so:

With the H-91/U of the SB-86, first unscrew the receiver cap. Using very little pressure, slip the ring over the lip of the receiver housing. It should give you about as much resistance as a hot knife goin' thru a slab of butter.

The H-81/PT and H-144/U of the SB-22 need one more step to get the ring off. You gotta remove the earphone cover and then take out the earphone element. Don't forget the element or it'll snag the ring. A slight tug'll lift the ring over the housing.



GOT A RADIO? GRAB A LOOK!

WAY OUT TUNING

If you wanna get way out with that radio set, or pull those way out signals in, the first thing you gotta do when you switch your set from one vehicle to another is to retune the antennas. Both the transmitter and receiver antennas, that is. So, if you wanna get somewhere, or have someone get to you, retune as per your TM.

MUTED MIKE MEMO

Two sure bets to keep your radio microphone off the scrap pile are: 1—Lay it down easy when you're using it with your vehicle's radio, and, 2—Don't step on it when it's in the vehicle. If you bang it or crunch it, you gotta scrounge around for another mike and cannibalize parts. You can't order new parts any more.

DON'T TREAD ON 'EM

They may look rugged. And they may be rugged. But those cables coming from the mount of your radio set weren't made to be stepped on or banged around. Which should be clue enough for you to take care of 'em. One good way is to secure 'em to their receptacles on the mounts when the cables aren't in use.

IT'S CLEAR AS CRYSTAL

You shouldn't ever remove crystals, such as those in the AN/PRC-6 radio set, with pliers. The pressure you put on them can cave in the cans that protect the crystal . . . in which case you might as well toss it away. Finger pressure and a little time'll do an undamaged job.



A LIFTING EXPERIENCE



You men, there... line up for brain inspection, ho!



Our test today is on components of the AN/VRC-12 series radio sets. Namely, the lift handles on the RT-246, RT-524 and the R-442. You there! Samson Dannybrook! Give us the word, first, on how rugged you think rugged should be.



Like a tank, you say? Wal, how rugged ya think the lift handles on the -12 components oughtta be? Ya say about like the lifting eyes of a tank? HMMMMMMMM...



And you, Patsy Pint-bottle. You got a opinion on 'is rugged business? Ya do? Ya say rugged should be rugged enuf ta get the job done?



An' ya say ya think, Patsy, that the handles on the -12 series components are rugged enuf... only guys like Samson Dannybrook really treat 'em like the lifting eyes of a tank?



but ya do like your radio set an' ya don't wanna see the components go all the way back to depot for repair... and sometimes even for replacement of the whole front panel — just because somebody like Samson got careless? Or that maybe more than the front panel even, could get damaged if a component should fall?



Also, the handles shouldn't be that rugged 'cause they'd defeat the lightweight function of the components — an' they wouldn't get pulled out if guys like Samson'd quit the rough stuff and lift the components by both handles — an' not yank on 'em as tho the components were glued to the mount or workbench?



Ya got some good points there, son. Those handles kinda taper to a small threaded shaft that goes thru the panel. Workin' together, they're rugged enuf. But, they don't go for the extra rough treatment. Like, if ya were helpin' a neat little package across a creek, you wouldn't lift 'er by one arm... an' risk a broken wing. Some deal with da' handles. Anyway, that cuts it, men. Dismissed. An'...uh...you there, Dannybrook. C'mere a min' an' look in me eyes one more time.



Patsy, why do you hate Samson Dannybrook?

Ya say ya don't hate him...





After a breakthrough, the first order of business is mopping up. The same is true when you have a major change in maintenance record procedures, like the revised TM 38-750 (Jan 64).

AFTER THE 38-750



BUT, FOR THE FULL STORY, LET'S GO BACK A WAY TO THE FIRST WORLD-WIDE EDITION OF TM 38-750, DATED 1 MAY '62. THIS SUPERSEDED THESE OFFICIAL DIRECTIVES.

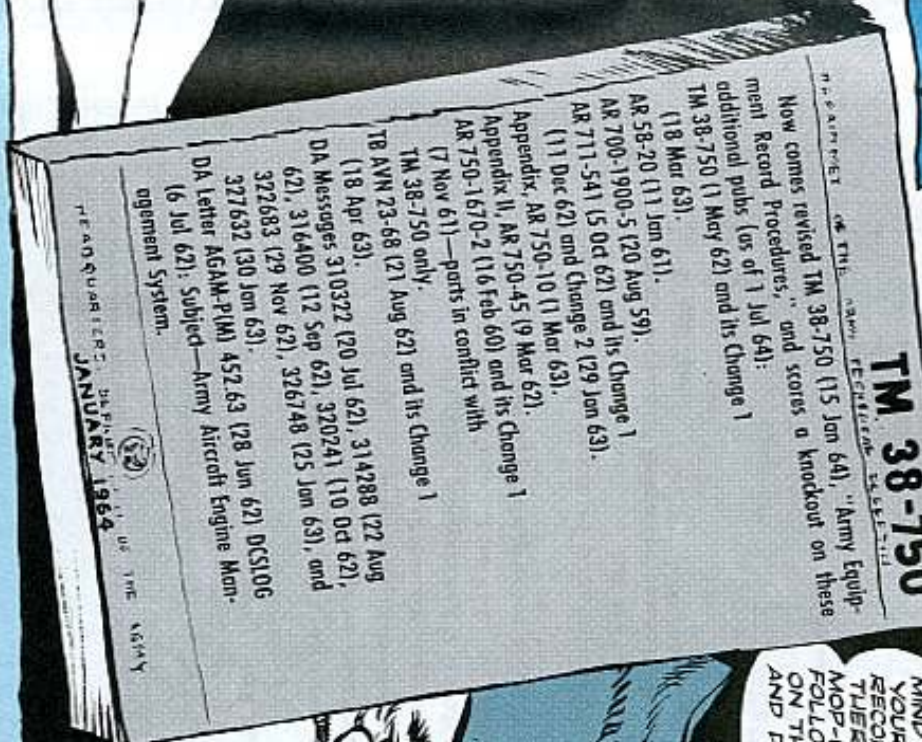
DEPARTMENT OF THE ARMY TECHNICAL BULLETIN
TM 38-750

- TM 3-313 (19 Sep 57).
- TM 9-2810 (4 Aug 58) and all its changes.
- TM 10-1400 (1 Jul 58) and its change.
- TM 10-1600 (6 Apr 53) and all its changes.
- TM 38-750 (4 May 61)—the trial-run edition.
- RCS (SGID 994 and 1005).
- TM 5-505 (12 Aug 59) and its change, paras 15 thru 19, 23, 24, 34, 76, 77, 93 and 97 only.*

*The rest of TM 5-505 (12 Aug 59) was rescinded by DA Cir 310-55 (1 Mar 63) and you'll also find this rescission listed on page 464 of DA Pam 310-4 (9 Jul 63). This TB with its page 464 of DA Pam 310-4 (20 Nov 61), tho. This TB with its Not so with TB 5-505-1 (20 Nov 61). This TB with its rules on operator permits for engine-type equipment is still in effect.

MAY 19 62
OFFICE OF THE ARMY

BREAKTHROUGH



KEEP THESE IN MIND AS YOU MAINTAIN YOUR EQUIPMENT RECORDS, AND REMEMBER, THERE MAY BE OTHER MOP-UP ACTIONS TO FOLLOW, SO KEEP AN EYE ON THE DA CIRCULARS AND DA PAM 310-4.

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN
TM 38-750

Now comes revised TM 38-750 (15 Jan 64), "Army Equipment Record Procedures," and scores a knockout on these additional pubs (as of 1 Jul 64):

- TM 38-750 (1 May 62) and its Change 1 (18 Mar 63).
- AR 58-20 (11 Jan 61).
- AR 700-1900-5 (20 Aug 59).
- AR 700-1900-5 (20 Aug 59).
- AR 711-541 (5 Oct 62) and its Change 1 (11 Dec 62) and Change 2 (29 Jun 63).
- Appendix, AR 750-10 (1 Mar 63).
- Appendix II, AR 750-45 (9 Mar 62).
- AR 750-1670-2 (16 Feb 60) and its Change 1 (7 Nov 61)—parts in conflict with TM 38-750 only.
- TM 38-750 only.
- TB AVN 23-68 (21 Aug 62) and its Change 1 (18 Apr 63).
- DA Messages: 310322 (20 Jul 62), 314288 (22 Aug 62), 316400 (12 Sep 62), 320241 (10 Oct 62), 327683 (29 Nov 62), 326748 (25 Jan 63), and 327682 (30 Jan 63).
- DA Letter AGAM-P(M) 452-63 (28 Jun 62) (DCS)06 (6 Jul 62): Subject—Army Aircraft Engine Management System.

RECORDED JANUARY 1964
OFFICE OF THE ARMY

DO YOU GET AN RSVP ON EIR'S?

It depends. When you send in an EIR (DA Form 2407) the National Maintenance Point'll give you a quick-like reply to acknowledge your emergency or urgent EIR's. However, on a routine EIR you may or may not get a Roger on it from the NMP. The various NMP's prepare EIR Digests in which they sum up the incoming EIR's and tell what action is being taken on 'em. For most routine EIR's, these Digests will give you the word on the status of your EIR—and all other EIR's. So, it's mighty important to latch on to these Digests. They're published periodically as DA Technical Bulletins.

Some already out are: TB Sig 363-series on electronics; TB AVN 23-5-1 on aircraft; TB 9-1400-299-10 on the Nike; TB 9-1400-324-10 on the Sergeant. Each missile system, by the way, has its own EIR Digest. Keep your eye peeled on DA Pamphlet 310-4 for these TB's and order 'em fast-like on a DA Form 17. Of course, you'll be getting some of them automatically if your orders for pin-point distribution are made out right. And for those on formula distribution, you'll have to make sure your pubs section shoots 'em your way.

BILL

Dear Half-Mast,

A highly controversial supply problem exists in our outfit. Here it is:

Are items authorized on a BILL carried on a PLL?

I say no. Basic Issue Items List items should be on hand in required amounts, but they shouldn't go on a Prescribed Load List.

BILL items are not authorized for stockage; they're OK'd in specific quantities for each end item of assigned equipment, and as such aren't subject to the approval of a supporting supply account.

What do you think?

SFC D. E. L.

Dear Sergeant D. E. L.,

You're on the right side.

Item's from the BILL aren't meant to go on a PLL. AR 735-35 doesn't allow it. For example, in para 29a, Change 4, the AR says:

1. Prescribed loads will be computed and selected per instructions in the operator's and organizational manuals. (While in the case of BILL, there's no question of either computing or selecting. The BILL clearly indicates the number of repair parts which belong with an end item.)

VS

PLL

2. PLL allowances are guide factors and are subject to adjustment by the maintenance section according to demand experience. (See Change 4 to the AR, para 31a.)

(But specific quantities of stuff on the BILL should be on hand or on order at all times.)

3. AR 735-35 (para 30a) says that repair parts records may be established at the organizational maintenance activity.

(Organizational maintenance on radio equipment, for example, is seldom done at unit level where the equipment is owned and used. It's usually done at a battalion maintenance section or some other support activity. This means that support and repair parts records can often be at one location while the BILL requirement is at another.)

In brief—

Item's on the BILL are issued as part of the major end item so the operator (or crew) can take care of simple operational chores without losing the equipment to the support outfit. So, the BILL should remain with the equipment it belongs to. And, the operator (or crew) should be responsible for replacement of BILL needs.

Inspections and inventories, of course, should cover the BILL with the end items concerned.

Of course, some BILL items may also be on a PLL—when authorized for stockage by the -20P and supported by demand experience.

STOCKING PLL vs FRINGE ITEMS

THE FORMULA IN PARA 29d, CHANGE 4 (27 NOV 63), AR 735-35, IS FOR SETTING-UP YOUR INITIAL STOCKS OF "AS REQUIRED" (FRINGE) ITEMS.



It lets you figure out your stocks of these items anytime your records show a minimum of three demands in 180 days or less. That is, fringe items (backed-up by demand info on DA Form 2527) can be added to your prescribed load.

The formula for fringe items, however, does not . . . repeat does not, apply to parts authorized on your PLL. The PLL stocks are revised monthly, after the initial six review periods, per instructions in the AR's para 31.

So don't be confused . . . each formula does a different job for you.

- (1) Days of supply authorized
 \times Total quantity demand = Initial stock level
 No. of days (rounded to nearest 15 day increment) in which the demands accrued.

For example:

An item has accumulated 3 demands in 53 days, and the total quantity demanded for the item during this period is 27. If the organization is authorized to stock 15 days of supply; the following computation would be made:

$$\frac{15 \times 27}{45} = 9$$

- (2) The quantity resulting from this computation will be entered on the title insert (par. 30b (1) (d)). Fractional values will be rounded in accordance with paragraph 31c.

(1) SOURCE, PRINT AND RECOVERABILITY CODE				(2) FEDERAL STOCK NO.	(3) NOMENCLATURE EQUIPMENT APPLICATION	(4) UNIT PACK	(5) EQUIPMENT ALLOWANCES			
MATERIAL CODE	PRINT CODE	RECOVERABILITY CODE	RECOVERABILITY CODE				1-5	6-20	21-30	31-180
S	F	O		2990-734-0029	MUTTER, COMBUST	1	*	*	*	

YOU NOW ALSO KEEP TRACK (ON A DA FORM 2527) OF ANY AS REQUIRED (*) ITEMS YOU ORDER, SEE C4, PARA 29, AR 735-35.

DATE	GOODS NO.	CITY OR NUMBER	QUANTITY DEMAND	DATE	GOODS NO.	CITY OR NUMBER	QUANTITY DEMAND	DATE	OFFICER	OFFICER	QUANTITY DEMAND
4216-003	0	①	1								
4244-010	0	1									

DA FORM 2527



**THE LOWDOWN
ON THE NEW
IMPACT WRENCHES**

You've seen some new tools in your No. 2 Common Tool Kit (FSN 4910-754-0650), Change 2 to SM 9-4-4910-A86, and in your No. 2 Supplemental Tool Kit (FSN 4940-754-0743), SM 9-4-4940-A08.

If it's the impact wrench or wrenches that're bothering you, here's some info that should help.

You'll find —

WRENCH SET, IMPACT, HAND, FSN 5120-961-9813
in the No. 2 Common Tool Kit.

The set is also a part of

WRENCH SET, IMPACT, HAND, FSN 5120-961-9815
that's in your No. 2 Supplemental.



The FSN 5120-961-9813 set has a $\frac{3}{4}$ -in square drive and will torque up to 800 lbs-ft. The FSN 5120-961-9815 set includes the $\frac{3}{4}$ -in square drive, 800 lbs ft torque, and a 1-in square drive, 2000 lbs-ft torque.



NOW THIS IS HOW YOUUU... UGH!



Here are the items you find in the sets. All of these are in the No. 2 Supplemental Kit. The items in **blue type** are also in the No. 2 Common Tool Kit.



WRENCH, Model 750,
3/4-in sq drive, 800 lbs
torque.

FSN 5120-442-8047 Mfr Part No. 41-90750



EXTENSION, 12"

FSN 5120-821-8936 Mfr Part No. 41-70775



WRENCH, Model 1000,
1-in sq drive, 2000 lbs
torque.

FSN 5120-440-8011 Mfr Part No. 41-91000



EXTENSION, 14"

FSN 5120-821-8938 Mfr Part No. 41-71075



EXTENSION, 6"

FSN 5120-821-8935 Mfr Part No. 41-70780

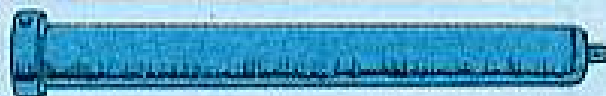
EXTENSION, Budd Wheel

Mfr Part No. 41-71074



EXTENSION, 7"

FSN 5120-821-8937 Mfr Part No. 41-71080



EXTENSION, Special Budd
Wheel.

Mfr Part No. 42-71001



EXTENSION, 9"

Mfr Part No. 41-70781



EXTENSION, Special for
Turret Studs

Mfr Part No. 42-70704

ALL THESE ITEMS
ARE IN THE 9815 SET...
THOSE SHOWN WITH
THE NAME AND FSN IN
BLUE TYPE ARE ALSO
IN THE 9813 SET.



EXTENSION, Special for
Turret Studs

Mfr Part No. 42-71002



WRENCH, Box End

Mfr Part No. 41-00787-6



OFFSET LINK, Short

Mfr Part No. 41-70783



WRENCH, Box End

Mfr Part No. 41-00787-8



OFFSET LINK, Long

Mfr Part No. 41-70783-1



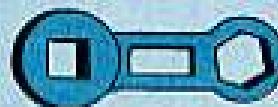
WRENCH, Box End

Mfr Part No. 41-00787-11



OFFSET LINK, Short

Mfr Part No. 41-71083



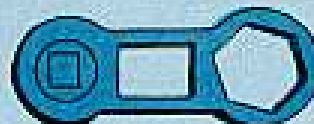
WRENCH, Box End

Mfr Part No. 41-01087-6



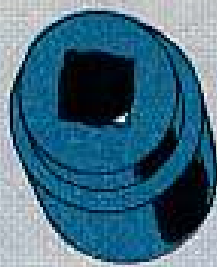
OFFSET LINK, Long

Mfr Part No. 41-71083-1



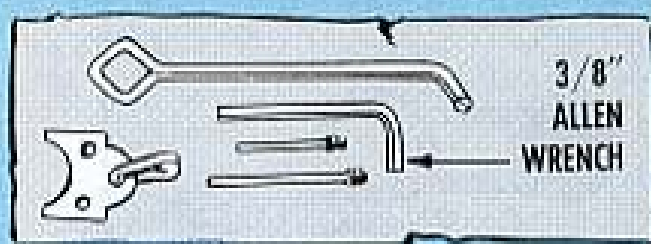
WRENCH, Box End

Mfr Part No. 41-01087-15



SOCKET, Impact FSN	SIZE	MFR PART NO.	SOCKET, Impact FSN	SIZE	MFR PART NO.
5130-227-6701	3/4"	69241	5130-684-0919	1 1/8"	89501
5130-227-6676	1 1/8"	69261	5130-221-8023	1 1/4"	89521
5130-227-6677	3/8"	69281	5130-221-8024	1 3/8"	89541
5130-293-1411	1 1/8"	69301		1 3/4"	89561
5130-227-6679	1"	69321	5130-221-8025	1 3/8"	89581
5130-293-1412	1 1/8"	69341	5130-235-5880	1 3/8"	89601
5130-227-6681	1 1/4"	69361		1 3/8"	89621
5130-293-1413	1 3/8"	69381	5130-235-5881	2"	89641
5130-227-6683	1 1/2"	69401		2 1/8"	89661
5130-227-6684	1 3/8"	69421	5130-293-1375	2 3/8"	89681
5130-227-6685	1 3/8"	69441	5130-293-1374	2 1/4"	89701
5130-227-6686	1 3/8"	69461		2 3/8"	89721
5130-236-3979	1 1/2"	69481	5130-293-1373	2 3/8"	89741
				2 3/8"	89761
				2 1/2"	89781
				2 1/2"	89801

You'd better keep an eye on these items because only the Allen wrenches are in the supply system. You can get the 5/16-in Allen wrench by asking for Key, Socket Head Screw, FSN 5120-240-5274. FSN 5120-198-5390 is for the 3/8-in one. The other items only come with the sets but they aren't listed in the SM's, they don't have FSN's so order by Mfr. number.

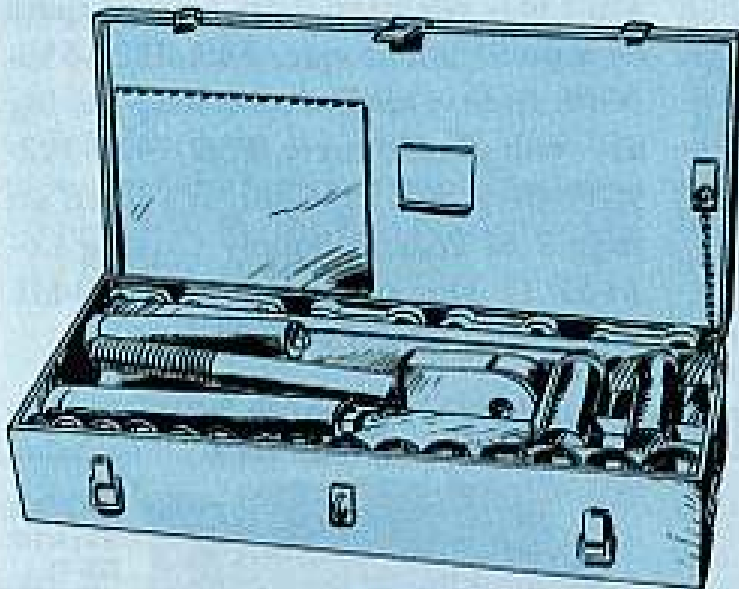
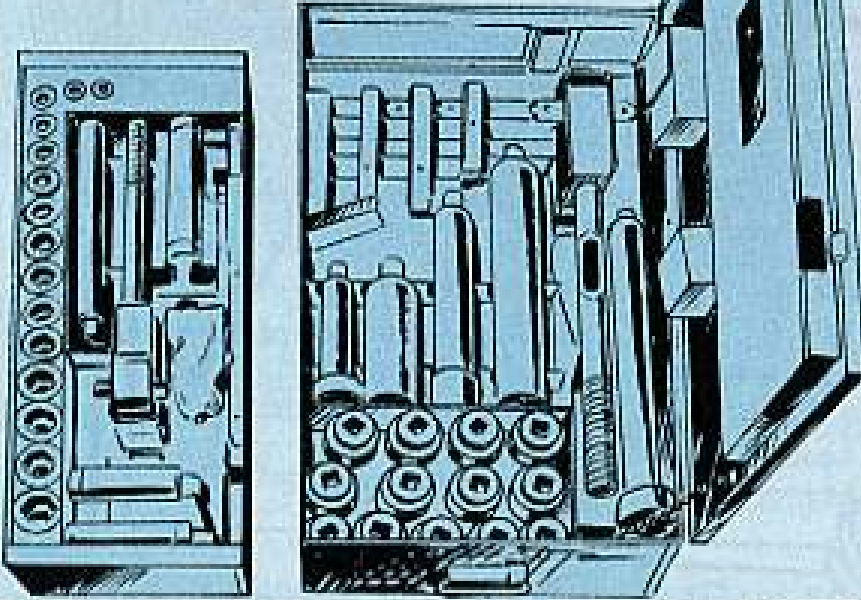


MFR. KIT NO. 410009
CURTISS — WRIGHT

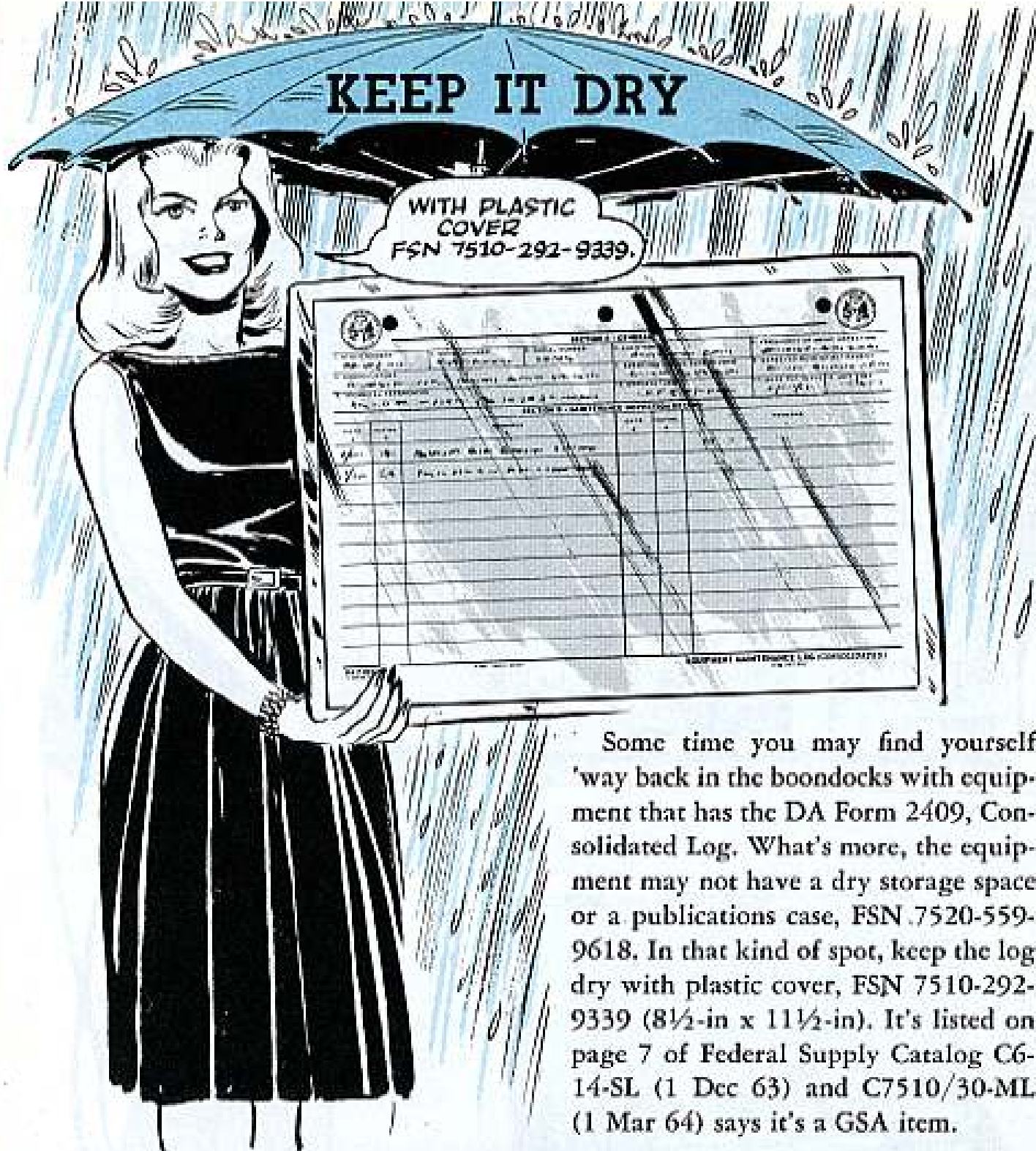


MFR. KIT NO. 410010
CURTISS — WRIGHT

This is the Box, Tool Kit, Mfr Part No. 80899, that you get with the FSN 5120-961-9815 wrench set. (In your No. 2 Supplemental). You also get a maintenance and parts manual.



Here's the Box, Tool Kit, Mfr. Part No. 80789, and a Maintenance and Parts Manual that is a part of the FSN 5120-961-9813 wrench set. This is the box you get with your No. 2 Common Tool Kit.



KEEP IT DRY

WITH PLASTIC COVER
FSN 7510-292-9339.

Some time you may find yourself 'way back in the boondocks with equipment that has the DA Form 2409, Consolidated Log. What's more, the equipment may not have a dry storage space or a publications case, FSN 7520-559-9618. In that kind of spot, keep the log dry with plastic cover, FSN 7510-292-9339 (8½-in x 11½-in). It's listed on page 7 of Federal Supply Catalog C6-14-SL (1 Dec 63) and C7510/30-ML (1 Mar 64) says it's a GSA item.

FINGERTIP MHE POOP

That's what you get in TM 10-1619 (25 Mar 63). It gives you the vital statistics on current MHE procured thru fiscal 1961—their TM's, SM's, LO's, FSN's, model numbers, manufacturers, performance data, capacities, etc. All the dope you need in a quick-check reference.



Connie Rodd's BRIEFS



CONNIE,
WE HAVE
A PROBLEM.



Night sight scope

For a complete run-down on the care, use and capabilities of the transistorized infrared metascope (FSN 1090-790-6197), you can check a new sound film strip, SFS 5-173. The sound strip's 33 frames are in color and run 11 minutes. You'll also want to latch onto the equipment's TM 5-1090-203-15 (11 Jul 62) and its Change 1 (16 Jul 63).

Parallel poop

Need a paralleling cable for the Hol-Gar CE-600-AC/EG generators at your Nike site? It can be had, even tho it's not yet listed in the generator "P" manuals. It's Cable, paralleling, FSN 6115-678-6113, listed on page 20, line 25, of the manufacturer's manual, Stock No. 7610-C-1-0736. The Part No. is H14150 and the item code is 73239.

Return of raven rotor blades

When it comes to disposition of worn-out tail rotor blades, the Raven (OH-23) is an exception. It's economical to re-skin damaged OH-23TR blades as long as the yoke or hub section isn't bent, cracked or broken . . . and finite life hasn't been exceeded. So you don't want to automatically condemn a blade until you've eyeballed its yoke section.

Checked your oil?

MWO 55-1520-206-34/1 has given the clutch in your Raven (OH-23) a new lease on life by providing a separate transmission oil system. To keep your bird in the pink, be sure the oil level gets checked every Daily—and the oil gets changed every 500 hours.

For the sergeant types

For a helpful run-through on the scheduled PM checks and services due the launching station of the Sergeant, have a look at TF 9-3423. The new training film (27 minutes long) is available from your audio-visual communications center.

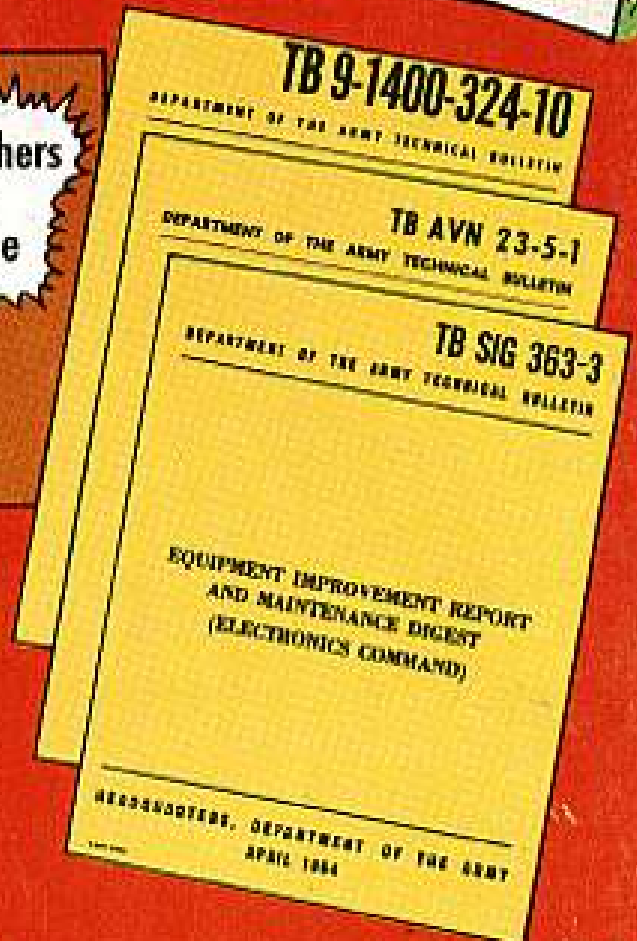
Friendly form 12-4

Get friendly with that friendly DA Form 12-4 if your outfit needs enough copies of PS Magazine each month. Fill in the number your unit needs (don't forget the CO, platoon commanders, all non-coms, armorers and mechanics, as well as every man who uses and maintains equipment.) Your outfit's Form 12-4 goes thru battalion direct to the Army Publications Center, 2800 Eastern Blvd, Baltimore, Md. 21220. PS will be mailed direct to your unit every month.

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



**NOW THAT YOU'VE
GIVEN 'EM* THE WORD
READ WHAT THEY'RE* DOING ABOUT IT!**



*Your Equipment Improvement Reports
and Maintenance Digests
Keep You Updated On--*

- **IMPROVEMENTS**
- **PUB CHANGES**
- **MWO'S**
- **SUPPLY**

*Maintenance and supply managers