

Issue 51

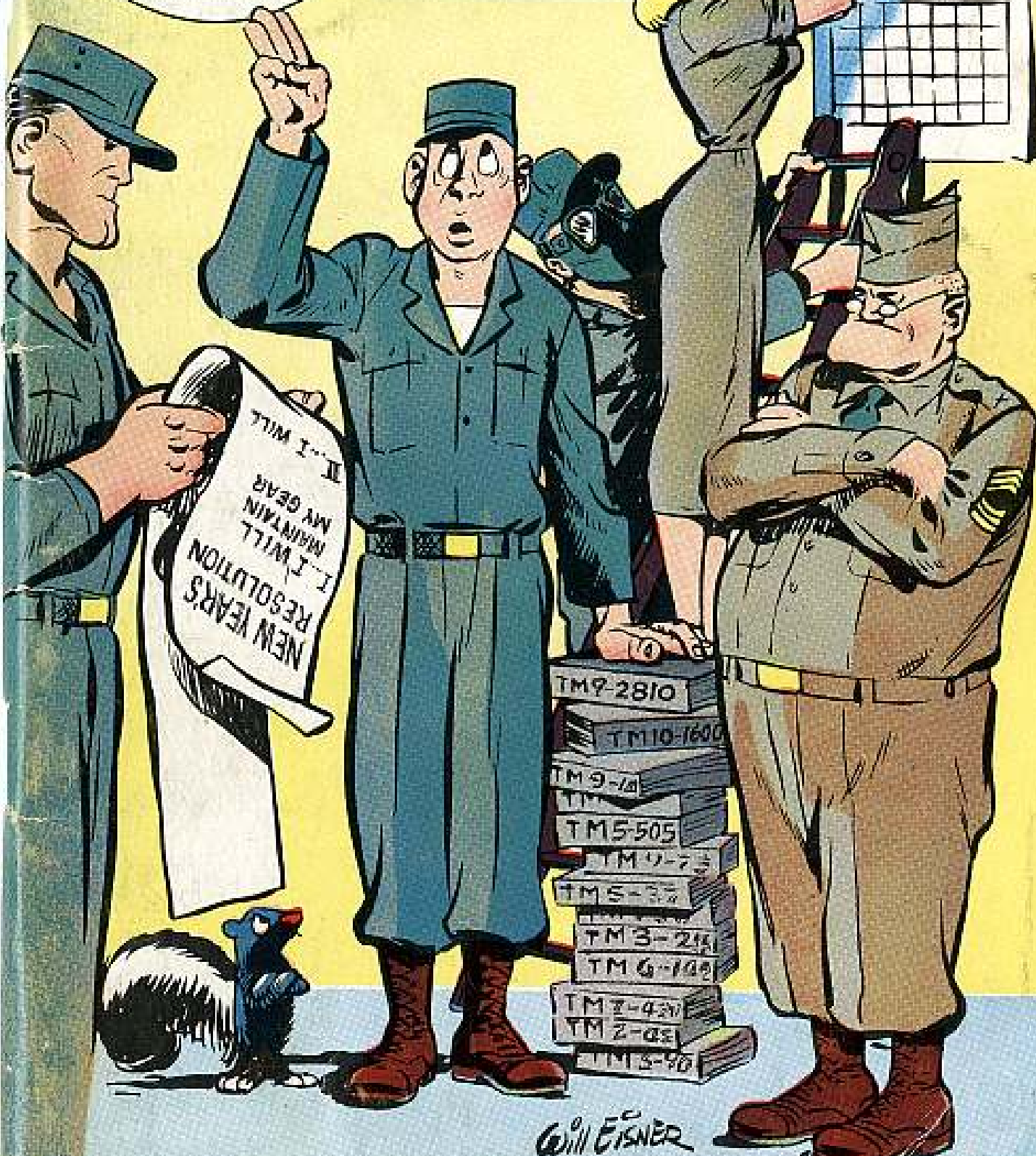
PS

1956 Series

THE
PREVENTIVE
MAINTENANCE
MONTH

1957

JANUARY—



Will Eisner

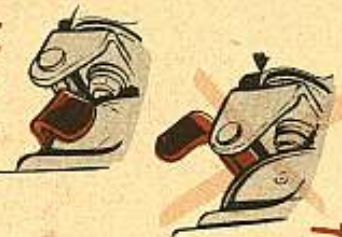
M48 TANK TURRET TABOOS

BUT DO YOU KNOW WHAT NOT TO DO?
THERE'RE PLENTY OF SNARES AND PITFALLS LURKING ABOUT A TURRET, CARELESS OR UNWARY. SO HERE ARE A FEW THOUGHTS TO KEEP TUCKED AWAY IN A CONVENIENT CORNER OF YOUR SKULL. TO STEER CLEAR OF TURRET TROUBLE ON YOUR M48, YOU'LL ALWAYS AVOID---

A TANKMAN WHO'S ON-THE-STICK, KNOWS WHAT TO DO TO KEEP HIS STUFF UP TO SNUFF - READY TO DELIVER THE GOODS (AND GET HIM BACK) WHEN THE CHIPS ARE DOWN!



TRAVELING?



LOCK IT—

Leaving the range finder out of travel lock (early M48's only) when it's not in use. This lock—on the front end of the range finder—is there to hold it steady, keep it from swinging free, slamming about and damaging your optics.

SPLINES NOT LINED?



Using force to insert the splined steel pivot shaft which holds the .50-cal machine gun (AA) mount to the commander's cupola. This shaft fits into a soft brass bushing, and the splines on the bushing are easy to damage if you don't line em up right with those on the steel shaft. Take your time—take your time...

WRONG "O"?



Setting the range drive (T-25... "O" prior to bore-sighting. The range scales on this drive will turn a lot of confusion as to when they're at the right "O". To get things straight, turn the range knob counter-clockwise until it locks; then slowly turn it clockwise to "O". Now she's right and ready.

"...AND HERE'RE MORE
YOU'LL WANT TO WATCH,
ALL THE REST OF THESE
APPLY BOTH TO THE
M48 AND M48A1."



NOT CLEAR?

Turning the turret power switch ON without checking to see if all crew members are out from under the breech end—and not above the muzzle end—of the gun. Some tanks have interference circuits which elevate the gun tube when it's traversed over the rear deck. Should your tube be flipped, the gun may immediately elevate... which can smash up anything under the breech, including somebody's leg. (You can get similar troubles if your control handles are not in neutral when the switch is flipped.)



TURRET MOVING?



Turning the turret power switch OFF while the turret's still traversing or elevating. Burns the contacts on your 5-HP motor relay.

DROOPY?



Allowing the bore evacuator to partially hang onto the end of the gun tube when removing it. This'll foul the thin seal on the rear inside of the evacuator. When removing or installing the evacuator, keep its center line parallel with the center line of the gun tube.

GO STRAIGHT—



Screw evacuator forward firmly against the muzzle brake after the key has been completely inserted in the muzzle brake keyway—like your TM says.

LOCK UP?

Leaving the gun travel lock raised when the gun's out of lock. A raised travel lock is in a good way to get battered by a traversing gun tube.



DOWN, BOY—



Or—it can get pushed over and bash anybody who happens around it working around it at the time—like checking the transmission oil level, etc.

NO GO—

Using the fire control linkage as a step or a handle to hoist yourself from seats. Good way to throw your gun out of bore-sight, and cause increased backlash and synchronization trouble.



NO EMERGENCY?



Using the emergency accumulator hand pump except in an emergency—such as a power failure. This pump gets its oil supply from the very bottom of the reservoir... and if any dirt or trash has snuck in and settled there, the pump'll shoot it into the elevation system. (On those tanks which don't have a filter in the line, that is.) The accumulator can be charged by turning on the turret power switch—and traversing in slow. So, use the pump only if you have to.

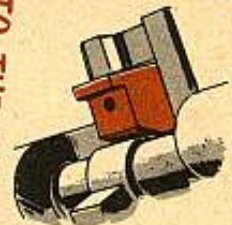
YOU SUREGROW YOURSELF UP AS A POOR TANKMAN IF YOU PULL ANY OF THESE GOOPS OR FLUBS.

STOP OFF?

Neglecting to make sure that the breach block crank stop is in place (rearward) after the breach block is assembled and installed in the breach ring.



TO THE REAR



If the stop is left off (or forward), the block might drop out of the ring when the breach is opened. Wham! Ouch! Look—no toes!

DON'T RAISE IT...



Removing the breach block from the top of the breach ring. It's no easier than via the bottom route—and it makes for banging up your range finder. Stick to the way the manual tells you—out the bottom. TM 9-7012, C2, 3 Oct 59.

LOWER IT!



CLOSED?



Failing to leave the accumulator shut-off valve open. It's located on the turret just in front of the gunner ring—and is the height of the turret operated valve in the turret. It isolates the accumulator from the rest of the elevation system—and you'll have no manual elevation if the valve's closed.

OPEN UP—



EAGER BEAVER?



Sweeping the handle too long. If override fails to work in 30 seconds, lay off it till Ordnance has checked it over.

NO SWEEP?



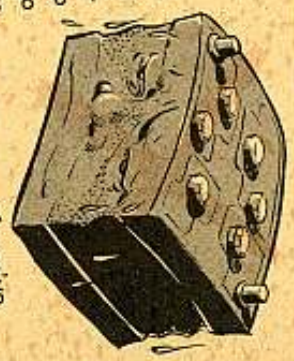
Trying to override without "sweeping" commander's control through neutral—in both elevation and traverse—in both commander's side of the override clutch will engage.

CRUSHER?



Gripping the control handle (commander's or gunner's) too tight. A light but firm touch does the best job—TAKE IT EASY!

PULEEESSE!



Using power traverse or elevation when neither engine is running. The turret motor pulls enough juice to drain your batteries fast. Lt Joe is capable of putting out 300 amps, which is plenty to handle your turret—provided there's no other big electrical load on the system at the time. Likewise with your main engine generator—if you've got the 300-amp type. But some 48's still have the 150-amp engine generator—which is not hefty enough to handle the turret on its own.



ON YOUR M1 (MODEL 30) COMMANDER'S CUPOLA...

KEEP THOSE

LOCKS STRAIGHT

Seems there's been some confusion about a couple cupola locks on the M48A1 tank.

Trouble comes when somebody starts mistaking the interlock (pin) assembly for a travel lock. Thass bad.

That pin lock (at the right front of the cupola) is there for just one purpose: to align the cupola with the turret—so that the cupola sight and machine gun line-of-sight are parallel to the 90-mm gun line-of-fire. It's just not sturdy enough for travel lock duty. Damages the pin in a hurry.

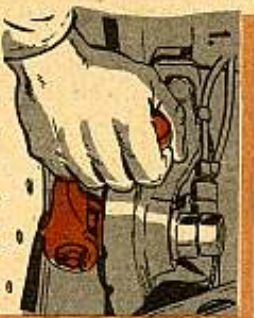
The only traverse travel lock on the M1 (Model 30) commander's cupola is a friction lock. It's located left front. It's the gimmick you use to hold the cupola snug while the tank's moving. (And, of course, release for free traversing.)

So—to align the cupola with the 90-mm gun, you first set the interlock pin. (It drops in its hole in the cupola ring gear when you lower the handle.) Then you can apply the friction lock for travel.

If sometime you find the friction lock won't hold the cupola in place when the tank's on the move, it likely needs adjustment.



HERE'S HOW:



1. Move the friction lock handle up as far as it will go in the locked position.



2. With a 3/8-in wrench, loosen the jam nut at the top of the lock.



3. Tighten the adjusting nut beneath the jam nut; then tighten the jam nut.

4. Release the friction lock—by moving the handle down.

5. Now try to lock it by moving the handle up.

6. If the handle won't go up without your straining a muscle, loosen the jam nut and back off the adjusting nut two flats.

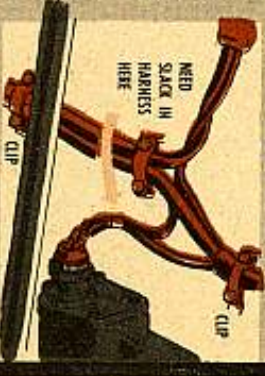
7. Tighten the jam nut and repeat steps 4, 5 and 6—till the handle can be moved to the locked position without straining.

HOW'S YOUR SLACK?

Got a range finder in your M48 tank? Then how's about a quick look at the electrical harness (No. 8693697) that connects at the back of it.

Gotta have plenty of slack in your harness there, or it'll get torn loose from its receptacle—maybe when you're needing it most.

Way to check the slack is to move the finder through its full range of elevation and depression. If the harness stretches tight at either extreme, loosen the electrical clips that hold it in place. Then pull all available slack toward the range finder, and elevate and depress again to make sure you've got plenty (slack, that is). Then tighten the clips. Simple, huh?



S'NO SHIM SHAM

"You may need Shims"



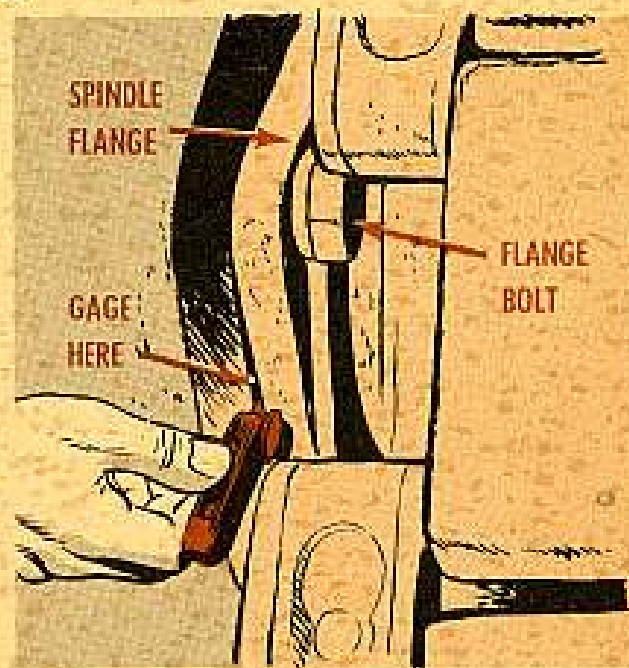
Check the compensating idler mounting set-up on your M48 tank lately? No? How about giving it a quick look right now. The bolts that hold the idler wheel spindle flange to the hull may be loose.

Those bolts are there to hold the spindle flange tight against the hull — so as to prevent free movement of the spindle pilot in the hull bore. A loose spindle not only gets you sheared bolts, it also leads to elongation of the pilot bore as your buggy bounces around in the rough. (Which can mean real trouble and a big repair job.)

Here's how to keep this from happening to you:

First, keep those bolts tight. Inspect them for looseness every week (at the B service)—with end wrench No. 41-W-1065-80 from your second echelon Tool Set #2, Supplemental.

Loose bolts mean a loose-fitting pilot. When y'find 'em loose, tighten your track to proper tension (TM 9-7012); then back off loose bolts until bolt heads are clear of the spindle flange. The weight and tension of the track will pull the top and front portion of the spindle assembly away from the hull—and show the amount of free play between the spindle pilot and pilot hole.



Now insert a feeler gage between the hull and pilot flange. A gap of .005 inch or less is OK... just get those bolts tight. To do this, y'take off the front fender, disconnect your track, remove the idler arm, and put the torque to the bolts—400 foot pounds is what they need. Use wrench 41-W-3635 ($\frac{3}{4}$ inch, square drive, 420 foot pounds capacity).

But — a gap of more than .005 needs attention from Ordnance. Just tell 'em the trouble, and they'll take care of your mount... either with shims (if the gap's between .005 and .050) or a repair (bushing) job, if the gap's over .050.

You'll find more dope on this subject in TB 9-7012-2.

TRACK SHOES

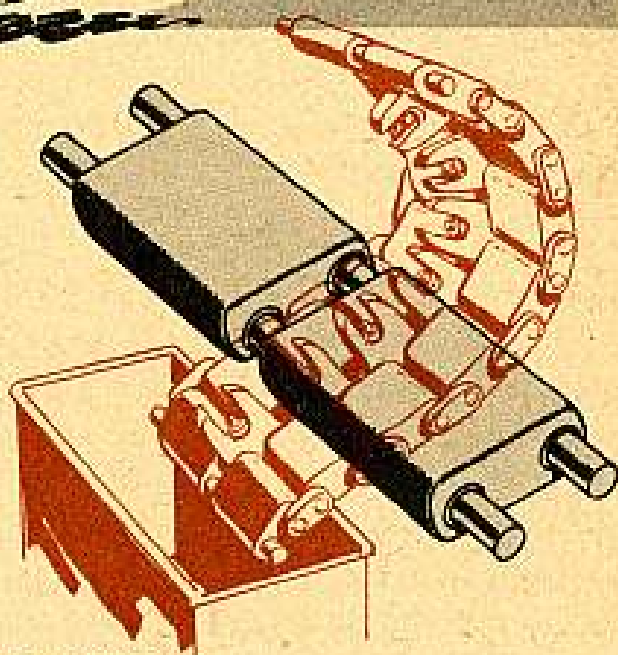


In ordering track items for your battle buggies, you'll find different stock numbers for entire tracks, track sections, track strips, track shoes, etc.

That'll soon be no more. To simplify the supply set-up on section-type track, these items of issues are being boiled down to just *one* stock number you'll need be concerned with — and that's the number y'find listed for the single *track shoe*.

That's the number to use for all future requisitions.

But here's the big pitch. You'll be able to get track shoes only in multiples of eight. You know . . . 8, 16, 24, 32, etc. Which means the fewest single shoe assemblies you'll be able to get at one time is *eight*. The "unit of issue" is eight. This set-up will apply to all tracks except the endless band type.



UNIT OF ISSUE

UNIT OF ISSUE



MULTIPLIES OF EIGHT

So — you can save a lot of confusion by taking care to specify the exact number of single shoe assemblies y'want. And — again — that number must be in multiples of eight. OK?

For more useful dope on tracks in general, be sure to latch onto a copy of TB Ord 562 (revised).

Connie Rodd's

"SHORT 'N SWEET DEPT"

HURRY
UP WITH
THAT
SPOTLIGHT
FIX!

WOT'S Y'R
RUSH?

Spotlight wire saver

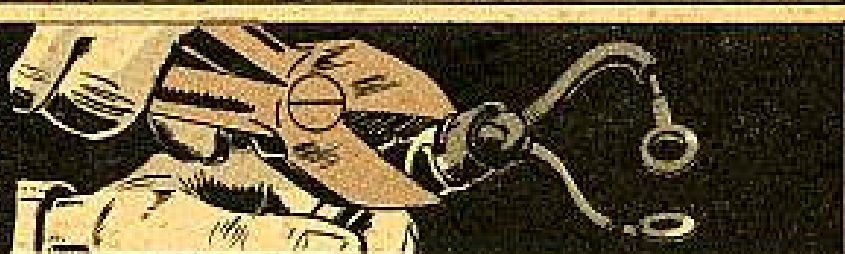
Like to put a coupla minutes to good use around your M8E2 cargo tractor? After a few ticks of the clock, you'll have a rubber spotlight cord that won't short out because of binding against the spot where it goes into the reel.

The step-by-step fix goes like this:

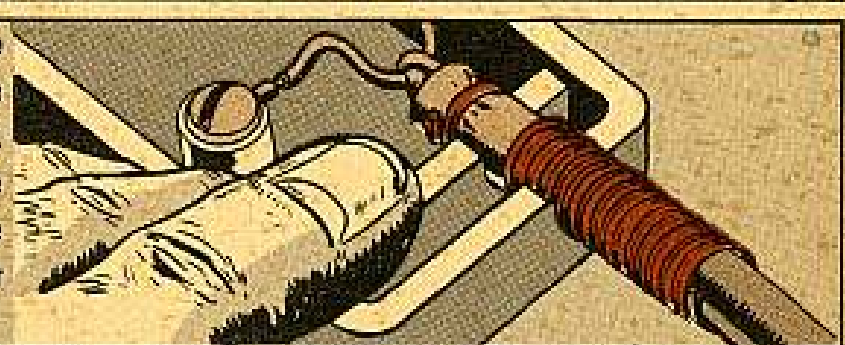
1. Remove the cord from the spotlight handle and move the stop ring back about $8\frac{3}{4}$ -in from the beginning of the insulation.



2. Crimp a 1-in piece of locking wire (Ord Stock No. H009-0102280) around the cord—about $\frac{3}{8}$ -in back from the beginning of the insulation.



3. Reassemble, making sure a few of the spring coils go inside the handle—like before the fix. The end of the spring should be on one side of the notch in the handle . . . the stop ring on t'other side.



Now that you've applied the fix, what do you have? Well . . . the ring farthest from the spotlight grip keeps the cord from winding all the way into the reel. That means you have enough cord left over to mount the spotlight in its bracket without putting extra strain on the wiring in the handle. The same ring also keeps the cord from rubbing against the reel under tension because some slack has been provided.

The second ring keeps the wires in the handle in a set position.

What...no decal?



Word's been getting around that a lot of decals are missing from vehicles, storage boxes and the like. The decals, or parts of 'em, come off and nothing is done about it.

But all is not lost. Get a 1-in stencil set from your second echelon common tool set. Or requisition a ½-in set from Quartermaster under FSN 7510-00-19045. You might even get a QM, Post Engineer or Post Ordnance man to cut you a stencil with just the right wording.

Then there's always the possibility of painting on the information—without a stencil to show you the way. Course ...it'll take a Joe with a steady hand.

Where'd it go?



Hold it a minute, chum. Don't throw away that copy of TM 9-804 (Sept 50) on the M38 Jeep, even though you got the manual that supersedes it—TM 9-8012 (Jan 56).

There's a section of TM 9-804 you'd better lift and paste in TM 9-8012, right next to para 111. It has to do with servicing the Cuno oil filter, and you'll find

it on pages 93 and 94, para 72 c to e. This dope isn't in TM 9-8012.

The dope sets up a before-operation, bi-weekly and 1,000-mile maintenance service for the filter. It stacks up this way:



BEFORE-OPERATION—Rotate the handle on top of the filter a few times to let all that junk drop down.



BI-WEEKLY—Remove the drain plug from the bottom of the filter's base and let all the junk drain.



1,000 MILE—Remove the filter unit and clean the discs in volatile mineral spirits.

A horny problem

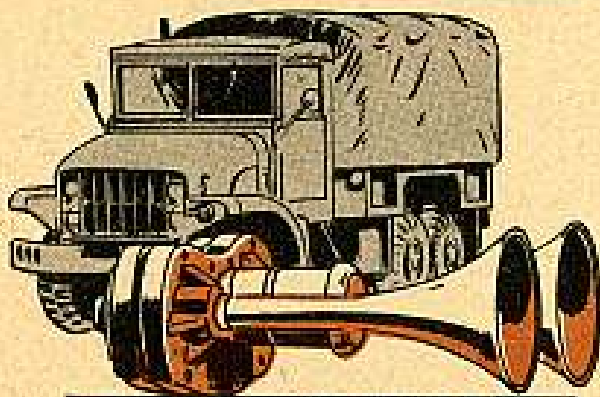
It could get a lot of guys down. They're lugging air horns on their G742 and G749 2½-ton series trucks, and yet their Ord 7's say they're supposed to have electric horns only.

Well, the poop as far as your G742 series trucks are concerned is that all trucks with serial number 121098 or under should have an air horn (FSN 2520-752-6286). If the serial number's above this, you take an electric horn (FSN 2540-735-1412).

As far as the G749 series trucks, they all should have air horns.



G-742 SERIES TRUCKS WITH SERIAL NO. ABOVE 121098 ... USE ELECTRIC HORNS ONLY. BELOW 121098 USE AIR HORNS ONLY.

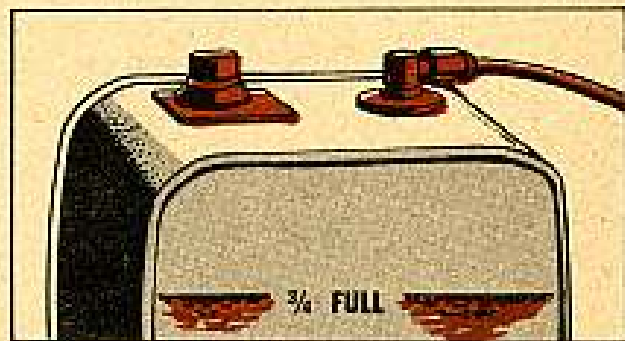


ALL G-749 TRUCKS USE AIR HORNS.

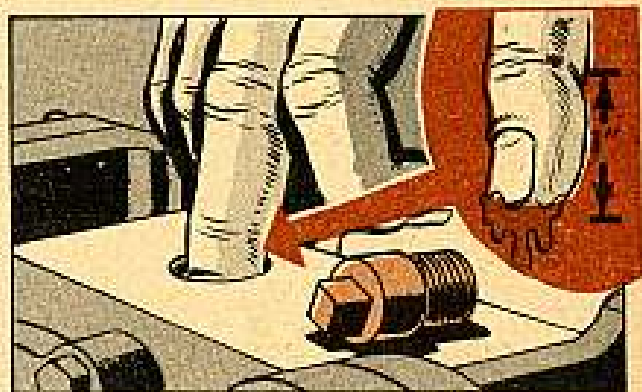
This stuff will show up in the next revisions to your SNL's. Until they come out why not make a notation in your SNL so the next man will know.

Finger feel it

Does your steering hydraulic reservoir or steering gear case on your G744 5-ton trucks have the runs? Do you find oil leaking out those steering "cans," despite all the fuss about new leak-proof, guaranteed-or-double-your-money-back oil seals?

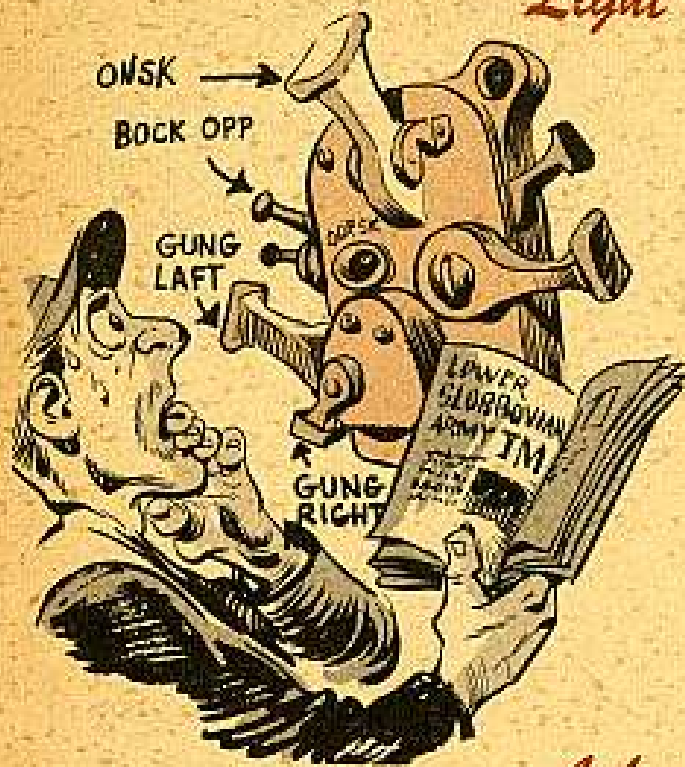


If so, the trouble's probably lying with the way those things are being filled with oil. The secret of the whole thing is never fill them to the top. Fill the steering hydraulic reservoir only ¾ full like LO 9-8028 says in note 9.



For your steering gear case, leave about an inch air space between the filler hole and the top of the oil. To know when you've got an inch there, stick your middle finger (a clean finger) in that hole up to the first joint—the tip of the finger should just be touching the top of the oil.

Light of your life



Hear tell there's some guys who find the light switches on their M-series tactical vehicles as hard to figure out as a Lower Slobovian jigsaw puzzle. Got news for you—it is, unless you understand it.

Any one of your M-series tactical vehicle TM's will give you the full low-down on how to operate this switch. And, if you have PS 31 handy, you'll find the full scoop on pages 2 to 5. Makes handy dope to have in the upper part of your cranium.

Ack ack misfire

Word's been goin' round that some fellas have been runnin' into trouble with their 90mm M2A1 AA guns. Seems as tho' there've been some misfires that weren't according to Hoyle.

Have you ever thought the root of the trouble might be the grease in the firing locks? Yessiree, too heavy lube can gum the works.

You say you haven't put any heavy grease or oil there? Could be, could be, but maybe the fella that had his hands on that gun 'fore you did doused it with heavy grease or oil.

To keep from runnin' into heavy lube trouble, best use that all season lube on that firing lock assembly. It's a general purpose lubricating oil (PL Special) MIL-L-644. You can get it by the ounce, quart or gallon from the Quartermaster

**USE
THE**

**RIGHT
OIL!**



Corps. Here are the Federal Stock Numbers to use: 9150-185-0629, 2-oz oblong screw top can; 9150-257-5436, 4-oz oblong can w/spout; 9150-231-6639, 1-qt can; 9150-281-2007, 55-gal drum.

The Wiseman Hath Said: Said He...

NO TOOLIE, NO FOOLIE



TOOL SET

GENERAL MECHANICS

Ord Stock No 41-T-3534-30

FSN 5180-754-0641

There are guys who know how to do things but can't because they have no tool. Just goes to show you that having the know-how isn't enough—tools and know-how go hand-in-hand.

That goes for the mechanic too—without his General Mechanic's Tool Set he could be a bust.

Just so you mechanics can get any job done, go over this list of tools. You should have every one of them—your MOS says so.

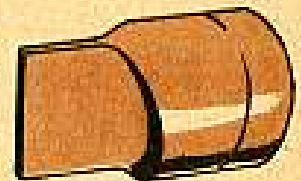
BAR: pry, rolling hd,
diam ½ in, lgh 16 in



ORD 41-B-292

FSN 5120-224-1389

BIT, SCREWDRIVER: ½
in sq-drive, 1 7/16 in blade



ORD 41-B-647

FSN 5120-223-6986

BIT, SCREWDRIVER: ½
in sq-drive, 1 5/16 in blade



ORD 41-B-648

FSN 5120-237-3600

BOX, TOOL, STEEL:
loose tray, aprx $7\frac{5}{16}$
in x $8\frac{1}{2}$ in x 21 in



ORD 41-B-1840

FSN 5140-357-5483

BRUSH, SASH TOOL,
OVAL: $17\frac{1}{16}$ x $11\frac{1}{16}$ x $2\frac{3}{4}$
in



ORD 38-B-3345

FSN 8020-229-0959

CHISEL, COLD, HAND: S,
width of cut $\frac{1}{2}$ in, lgh
6 in



ORD 41-C-1106

FSN 5110-186-7107

CHISEL, COLD, HAND: S,
width of cut $\frac{3}{4}$ in, lgh
7 in



ORD 41-C-1120

FSN 5110-236-3272

DRIFT: S, rd, stght, w/
br tip, $\frac{3}{4}$ in diam, 10 in
lg



ORD 41-D-1545-338

FSN 5120-754-0840

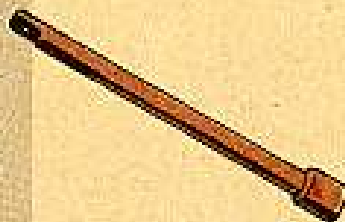
EXTENSION, SOCKET
WRENCH: (formerly
BAR) $\frac{1}{2}$ in sq-drive, 5
in lg



ORD 41-B-307

FSN 5120-243-7326

EXTENSION, SOCKET
WRENCH: (formerly
BAR) $\frac{1}{2}$ in sq-drive, 10
in lg



ORD 41-B-309

FSN 5120-227-8074

FILE, HAND: AS, flat, sm
cut, 10 in pt to shoulder



ORD 41-F-886

FSN 5110-249-2850

FILE, HAND: AS, rd, bast
cut, 8 in pt to shoulder



ORD 41-F-1304

FSN 5110-234-6551

FILE, THREE SQUARE,
sw-patt, No. 4 cut, 6 in
lg



ORD 41-F-2545

GAGE, thkns, No. of
leaves 26, range 0.0015
to 0.025 in



ORD 41-G-411-6

FSN 5210-221-1999

HAMMER, HAND:
machst, ball peen, wt
 $\frac{1}{4}$ lb



ORD 41-H-520

FSN 5120-243-2985

HAMMER, HAND:
machst, ball peen, wt
 $1\frac{1}{4}$ lb



ORD 41-H-524

FSN 5120-224-4046

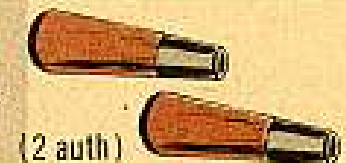
HANDLE, FILE, WOOD:
 $1\frac{1}{4}$ in diam of hand grip



ORD 41-H-1116

FSN 5110-263-0349

HANDLE, FILE, WOOD:
sm size, 1 in diam of
hand grip



ORD 41-H-1117

FSN 5110-263-0342

HANDLE, SOCKET
WRENCH: hinged; $\frac{1}{2}$ in
sq-drive, 11 in lg



ORD 41-H-1503

FSN 5120-221-7958



HANDLE, SOCKET WRENCH: rtc, rvrs, 1/2 in sq-drive, 9 1/2 in lg



ORD 41-H-1505

FSN 5120-221-7968

HANDLE, SOCKET WRENCH: brace type; 1/2 in sq-drive, 12 in lg



ORD 41-H-1507-800

FSN 5120-230-6364

KNIFE, PUTTY: 1 1/4 x 3 1/2 in blade



ENG 41-5153.720-500

LOCK: pad, pintumbler mechanism, br case, cd-pltd shackle, FS FF-P-101, type EPB, 1 3/4 in, w/o clevis, keyed individually, w/2 keys



ENG 42-5752.475.102

PLIERS, SLIP JOINT: strgt nose, comb, w/cutter, 8 in nom size



ORD 41-P-1652

PLIERS, side cutting, lg nose, 6 in lg



ORD 41-P-1991

FSN 5120-247-5177

PLIERS, diagonal cutting, 6 in lg



ORD 41-P-1714

FSN 5110-239-8253

PUNCH, CENTER: 3/8 in diam, 4 1/2 in lg



ORD 41-P-3185

FSN 5120-197-9488

PUNCH, DRIVE PIN: 1/8 in pt



ORD 41-P-3640

FSN 5120-242-3433

PUNCH, DRIVE PIN: std, 1/4 in pt, 4 in lg



ORD 41-P-3606

FSN 5120-240-8880

PUNCH, DRIVE PIN: std, 3/8 in pt, 4 in lg



ORD 41-P-3608

FSN 5120-273-0001

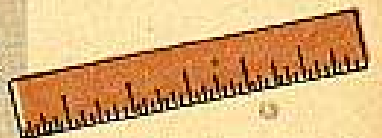
PUNCH, DRIVE PIN: lg taper, 3/16 in pt, 9 in lg



ORD 41-P-3756

FSN 5120-293-1408

RULE, STEEL, MACHST: 1/8, 1/16, 1/32 and 1/64 in; 6 in lg



ORD 41-R-2990

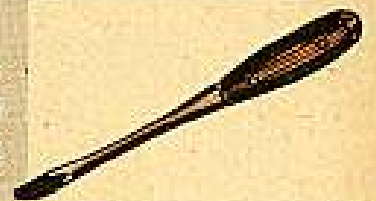
FSN 5210-234-5223

SCREWDRIVER, POKKET: 1 3/4 in blade, 1/4 in tip, 4 in lg



ORD 41-S-1063

SCREWDRIVER, COMMON: integral hdl, 6 in blade, 3/8 in tip, 11 1/4 in lg



ORD 41-S-1076

SCREWDRIVER, COMMON: 4 in blade, 3/4 in tip, 9 in lg



ORD 41-S-1102

FSN 5120-277-9491

SCREWDRIVER, OFFSET: dble-end, 3/8 in tip, 6 in lg



ORD 41-S-1399

SCREWDRIVER, CROSS-POINT: 3 in blade, No. 1 tip



ORD 41-S-1636

SCREWDRIVER, CROSS-POINT: 4 in blade, No. 2 tip



ORD 41-S-1638

SCREWDRIVER, CROSS-POINT: 6 in blade, No. 3 tip



ORD 41-S-1640

SHEARS, METAL CUTTING, HAND: comb, 1 3/4 in cut, 7 in lg



ORD 41-S-2806



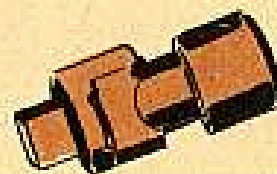
SOCKET, SOCKET WRENCH: 1/2 in sq-drive, 12 pt, (formerly WRENCH) size of opng:



ORD 41-W-3005	7/16 in	FSN 5120-189-7924
ORD 41-W-3007	1/2 in	FSN 5120-237-0984
* ORD 41-W-3009	9/16 in	FSN 5120-189-7932
ORD 41-W-3011	19/32 in	FSN 5120-239-0019
* ORD 41-W-3013	5/8 in	FSN 5120-189-7946
* ORD 41-W-3015	11/16 in	
ORD 41-W-3017	3/4 in	FSN 5120-189-7985
* ORD 41-W-3019	25/32 in	FSN 5120-189-7915
* ORD 41-W-3021	13/16 in	FSN 5120-189-7933
* ORD 41-W-3023	7/8 in	FSN 5120-189-7934
* ORD 41-W-3025	15/16 in	FSN 5120-277-7935
ORD 41-W-3027	1 in	FSN 5120-277-7927
* ORD 41-W-3029	1 1/16 in	FSN 5120-277-7929
* ORD 41-W-3031	1 1/8 in	FSN 5120-277-7914

* SOCKET, WRENCH, COMMON

UNIVERSAL JOINT, SOCKET WRENCH: (formerly JOINT) 1/2 in sq-drive



ORD 41-J-380

FSN 5120-269-7971

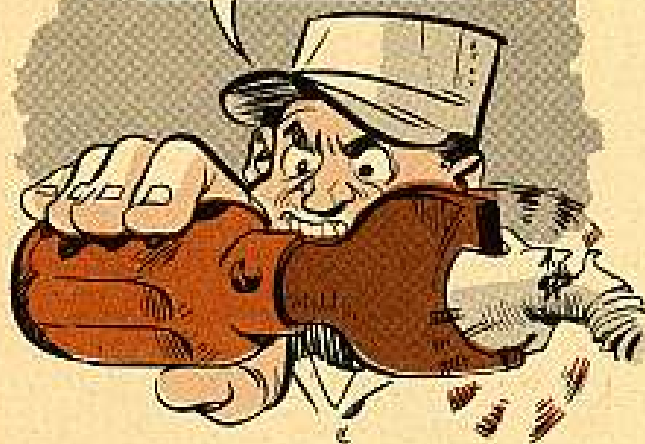
WRENCH, ADJ: sgle open end jaw opng 15/16 in, lgh 8 in



ORD 41-W-486

FSN 5120-240-5328

...SIZE IS IMPORTANT, BUT BIG AINT ALWAYS BETTER!



WRENCH, BOX: dble-hd, 12 pt, half moon, $\frac{9}{16}$ and $\frac{3}{8}$ in opngs



ORD 41-W-635

FSN 5120-313-9495

WRENCH, BOX: dble-hd, 12 pt, $\frac{3}{8}$ and $\frac{7}{16}$ in opngs



ORD 41-W-620

FSN 5120-184-8679

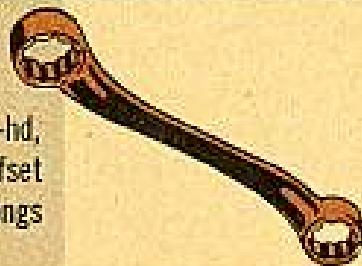
WRENCH, BOX: dble-hd, 12 pt, $\frac{1}{2}$ and $\frac{9}{16}$ in opngs



ORD 41-W-622

FSN 5120-224-3154

WRENCH, BOX: dble-hd, dble-hex, short, offset 45 deg, size of opngs $\frac{5}{8}$ and $\frac{3}{4}$ in



ORD 41-W-625

FSN 5120-224-3138

WRENCH, OPEN END, FIXED: 15° angle, alloy-S, $\frac{3}{8}$ and $\frac{7}{16}$ in opngs



ORD 41-W-991

FSN 5120-277-2342

WRENCH, OPEN END, FIXED: 15° angle, alloy-S, $\frac{1}{2}$ and $\frac{9}{16}$ in opngs



ORD 41-W-1002-40

FSN 5120-187-7124

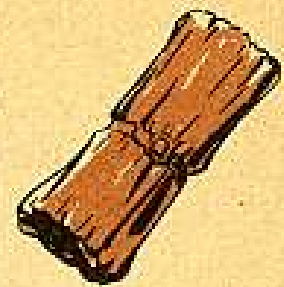
WRENCH, OPEN END, FIXED: 15° angle, alloy-S, $\frac{5}{8}$ and $1\frac{1}{16}$ in opngs



ORD 41-W-1007-60

FSN 5120-277-8301

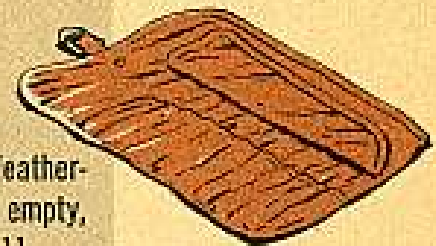
WRENCH SET, comb, box and open end, angle and offset 15 deg, dble-hex, alloy-S, range $\frac{3}{8}$ to 1 in, set of 11 wrenches, in leatherette roll. This set consists of roll and wrenches below:



ORD 41-W-867-40

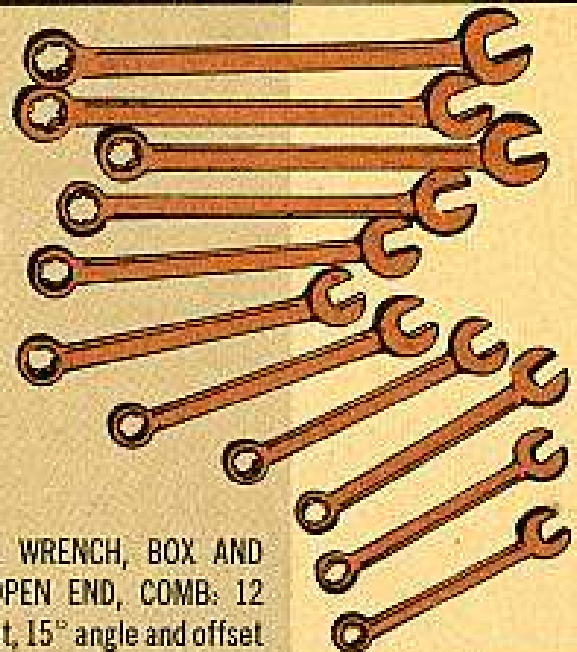
FSN 5120-357-8411

1 ROLL, tool, leatherette or canvas, empty, No. of pockets 11



ORD 41-R-2737

FSN 5140-322-6009



1 WRENCH, BOX AND OPEN END, COMB: 12 pt, 15° angle and offset

ORD 41-W-867-100	$\frac{3}{8}$ in	FSN 5120-228-9504
ORD 41-W-867-105	$\frac{7}{16}$ in	FSN 5120-228-9505
ORD 41-W-867-110	$\frac{1}{2}$ in	FSN 5120-228-9506
ORD 41-W-867-115	$\frac{9}{16}$ in	FSN 5120-184-8642
ORD 41-W-867-120	$\frac{5}{8}$ in	FSN 5120-184-8643
ORD 41-W-867-125	$1\frac{1}{16}$ in	FSN 5120-228-9509
ORD 41-W-867-130	$\frac{3}{4}$ in	FSN 5120-228-9510
ORD 41-W-867-135	$1\frac{3}{16}$ in	FSN 5120-228-9511
ORD 41-W-867-140	$\frac{7}{8}$ in	
ORD 41-W-867-145	$1\frac{5}{16}$ in	
ORD 41-W-867-150	1 in	FSN 5120-228-9514



JOE'S DOPE HANDLING HOTSTUFF

GOOD EVENING, FOLKS... THIS IS A P.S. MOBILE UNIT... AT A NIKE SITE... APO 043210 ASTEROID "B".

NIKE SITE RESTRICTED TO UNAUTHORIZED PERSONNEL

WE'RE APPROACHING THE POST'S CLASSROOM WHERE THE MEN HAVE BEEN GATHERED TO HEAR THE LATEST DOPE ON HANDLING RADIO ACTIVE ELECTRON TUBES!

YOU MIGHT ADD WE'RE TALKING ABOUT M33 OR T38 ...NIKE OR CORPORAL GUIDED MISSILE EQUIPMENT.

HI YAH JOE...WE'RE ALL SET UP FOR CLASS. WHO'LL TEACH US?

NONE OTHER THAN CONNIE RODD!

YAWN REALLY? HOW NICE.

HO HUM

HELLO BOYS

?



... and don't stack them up. Stacking hot tubes just concentrates their radiation intensity. So keep them in their corrugated cartons and give them plenty of elbow room.



HOW TO CLEAN UP A CONTAMINATED AREA

THE WET WAY



WIPE (DON'T RUB) THE AREA WITH A WET CLOTH... THERE'S A SPECIAL WAY TO DO IT... LIKE SO...

WIPE ONCE

FOLD CLOTH IN HALF... AND WIPE AGAIN WITH CLEAN PART THAT'S LEFT

FOLD AGAIN AND WIPE... KEEP DOING THIS TILL CLOTH IS TOO SMALL TO USE... THEN DISCARD

AND DON'T WIPE WITH A BACK AND FORTH MOTION... OR YOU'LL RUB TINY PARTICLES INTO THE SURFACE!

WEARING RUBBER OR PLASTIC GLOVES PICK UP THE LARGER PIECES LIKE THIS

THE DRY WAY

GO OVER THE AREA CAREFULLY WITH A VACUUM CLEANER

... USE THE TYPE WITH DISPOSABLE BAGS

NOW, BEFORE I TELL YOU HOW TO GET RID OF THE TRASH YOU'VE CLEANED UP... LET'S HANG THIS PIN-UP WHERE IT CAN BE A STEADY REMINDER!

WANT TO HELP ME... BOY???

HERE'S A HAMMER, DO IT YOURSELF!

Joe's Dope Sheet



Best get hep
to all tubes that're hot—
Give 'em all
the respect that you've got!
Then the sobering fact
That they **RADIOACT**
Cannot ever put you on the spot!!

THESE ARE ALWAYS

HOT

TUBE ELECTRON	ORD STOCK NO.
ATR 5921	F342-7599345
ATR 5922	F342-7599346
TR 5927	F342-7599347
TR 5863	F342-7599354
ATR 5864	F342-7601750
ATR 5883	F342-7599348
0A2	F342-7599320
0A4G	F350-7645283
0C3	F350-7643228
6033 (1B35)	F350-7653491 (F350-7628937)
6034 (ATR 1B37A)	F350-7653492 (F350-7630646)
6035 (TR 1B63A)	F350-7653493 (F350-7628938)
6163	Y004-8175707
6164	Y004-8175708
6167	Y018-8019341
1B56	Y999-193-5094
1B58	Y999-193-5095
BL-31 (Modified 1B27)	Y999-193-5092

AND THESE
MAY BE HOT



1B43	1B31	313C	721B
1B44	1B35	313CA	723
1B45	1B35A	313CB	724A
TR-361	1B36	313CC	724B
372A	1B37	313CD	727A
376A	1B37A	333A	WL-759
5791	1B38	346A	1960
5792	1B40	353A	1961
5793	1B41	359A	Z-1972
BL-1	1B42	376B	5790
BL-2	1B49	395A	5829
BL-25	1B50	405A	5853
BL-35	1B51	413A	5865
1B22	1B52	423A	5925
1B23	1B53	471A	5939
1B24	1B54	WL-642	6022
1B24A	1B55	702A	6024
1B25	1B57	702B	6038
1B26	1B60	WL-707	6117
1B27	1B62	708A	6162
1B28	1B63	709A	6214
1B29	1B63A	721A	6276

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



SEAL ALL DEBRIS AND CLEANING CLOTHS (OR VACUUM BAGS) IN CONTAINERS ... LIKE THESE ---



Keep your CO informed about any tubes that are sealed up like this. He'll receive instructions through channels from the Chemical Corps on how to dispose of this stuff and all defective or burned-out radioactive tubes. Take a look at TB Ord 648 (27 July 56).

NEVER

TRY TO GET RID OF THE HOT JUNK BY BURNING IT ... THIS ONLY SCATTERS CONTAMINATED SMOKE AND ASH INTO THE AIR ... WHICH ISN'T VERY HEALTHFUL FOR ANYONE WHO BREATHES IT.



NOW BEFORE THEY'RE USED FOR ANYTHING ELSE CLEAN UP THE TOOLS OR EQUIPMENT YOU USED IN HANDLING THE HOT STUFF.



WASH THEM THOROUGHLY WITH SOAP AND WATER



AND RINSE WITH CLEAN WATER

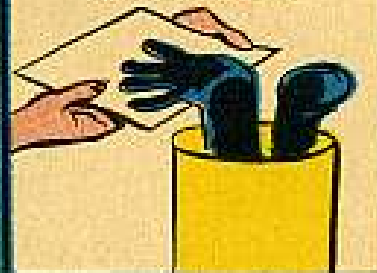


OR... If it's practical... package the contaminated tools along with the junk

THEN, **AS SOON** AS YOU LEAVE THE AREA... IF YOU'VE BEEN HANDLING THE HOT STUFF IN ANY WAY...



REMOVE AND CLEAN... OR DISPOSE OF ANY CLOTHES THAT MIGHT HAVE GOT CONTAMINATED



WASH HANDS, ARMS REAL GOOD... WITH SOAP AND WATER... ESPECIALLY BEFORE EATING, DRINKING OR SMOKING...



HOW ABOUT CUTS OR WOUNDS FROM ONE OF THEM RADIOACTIVE PARTICLES.

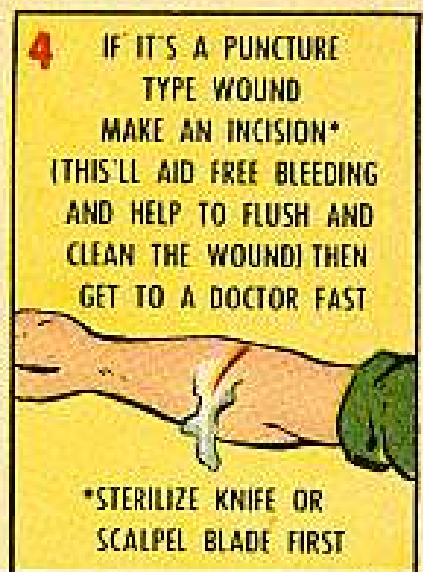
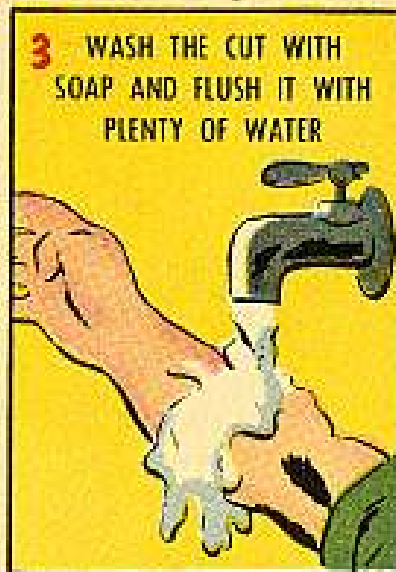
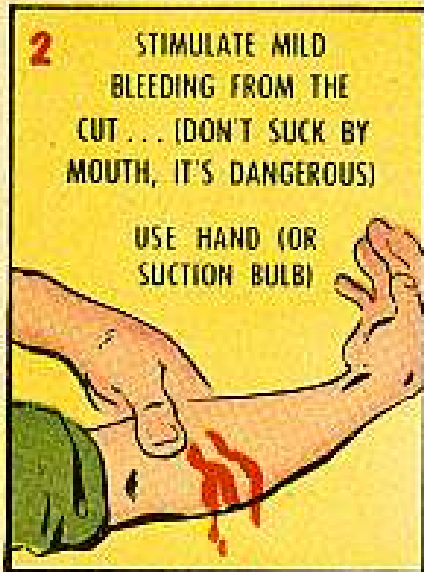
NATURALLY YOU'D BE EXTRA CARE-FULL TO PREVENT THIS... BUT IF IT OCCURS, TREAT IT BUT FAST!!



1

IMMEDIATELY... APPLY A TOURNIQUET (IF THE WOUND'S IN SUCH A PLACE THAT'LL PERMIT IT)





And, of course, you'll want to read all the scoop on Radioactive tubes in TB Sig 225 (6 Feb 56) and TB Ord 648 (27 July 56).





SLOW DOWN — DANGER

Dear Half-Mast,

We had a bad accident here a few months back, involving our M62 5-ton wrecker. Although this was the first accident we've had with this baby, there were many more times that it came awfully close.

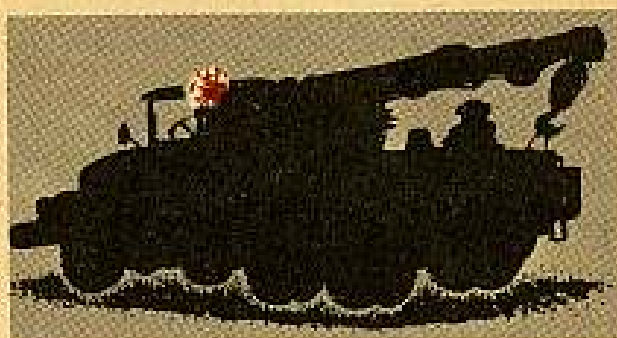
You see, I was out one night picking up a tow. On the way back to the shop, some poor guy slammed right into the rear of the tow. There wasn't much left of him. The rear lights on the tow weren't working because of a dead battery and, of course, the rear lights on the wrecker were completely hidden by the tow.

There was quite a stink about this accident. We, naturally, got blamed for it, and it didn't do our public relations any good. And that's bad for a National Guard outfit.

Well, my CO, some of our maintenance men and myself got together to try and figure out how we could avoid any more accidents of this sort. We came up with a scheme that other PS readers may be able to use.

We put a warning light (Ord Stock No. G744-7409973) on the cab of our

wrecker. The light's high enough so it can be seen over the boom of the wrecker and over any tow by anyone coming up in back. We also use it in addition to a red signal flare, when we're stopped in the middle of a highway working. It tells anyone coming up—slow down if you want to live.



That warning light is the same light that's used on the left-front fender of the wrecker, and it's tapped into the same circuit—wire #325.

Our CO gave us the blessing on it. He feels that as long as that wrecker's being used on public highways, everything should be done to protect other people using the road. Although the addition of the light makes the silhouette of the wrecker slightly higher, the CO feels that in this case, the safety of the people here stateside is more im-

portant than keeping that wrecker combat-ready. And, it only takes a few minutes to take that light off and lower the silhouette again.

Our CO used AR 385-10 para 2e as his authority to put on that light.

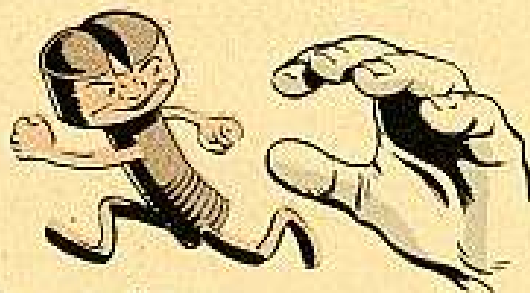
Cpl S. E. L.

Dear Cpl S. E. L.,

That sounds like a real fine solution to your special problem. The design boys are working on a fix to take care of all those wreckers. In the meantime, that AR you mention should work as authority for a commander who has a highway safety problem. (Be sure to watch the highway laws of your state...and follow 'em.)

Half-Mast

SCREW LOOSE



Dear Half-Mast,

The governor on my G749 2½-ton truck keeps working loose from the carburetor. We're not authorized to tighten it, so every time something like this happens we have to hike our trucks back to Ordnance—just to tighten a few screws.

Can anything be done?

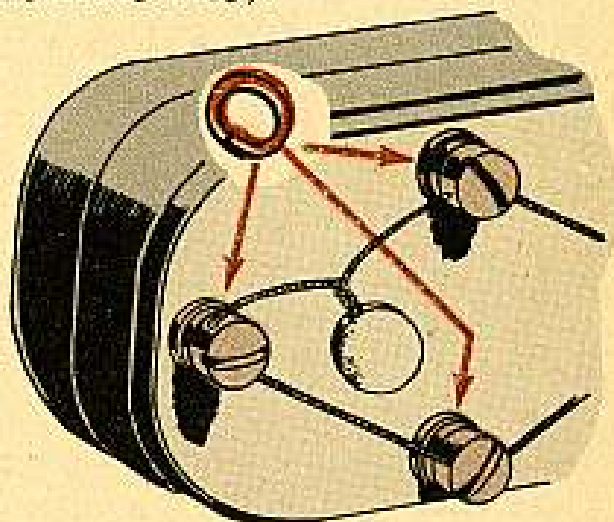
SFC L. O. W.

Dear SFC L. O. W.,

Sure can.

Next time you take your truck back to Ordnance to have its governor re-

paired or rebuilt, have the guys doing the job replace the plain aluminum washers (Ord Stock No. G742-7538863) holding the governor mounting screws. They'll put in No. 10 steel lockwashers (Ord Stock No. H001-7023621, FSN 5310-013-1183).



If they ask you where you got your info, ask them to look at TB Ord 573 (28 Aug 54), which tells them to do the job.

Half-Mast

MAKE YOUR OWN

Dear Half-Mast,

We need your help if we're gonna keep the winches on our M26A1 tractors in running order.

MWO Ord G160-W7 has been applied to the winches. And, as you know, the MWO says to use a modification kit (Ord Stock No. G160-5701930) on the front and rear winches of the M26 and M26A1 tractors. The kit provides the winches with a dog clutch that prevents accidental release of the winch load.

That's all well and good. Now . . . supposing the shear pin in the clutch snaps. How do we get another one? The pins aren't listed anywhere.

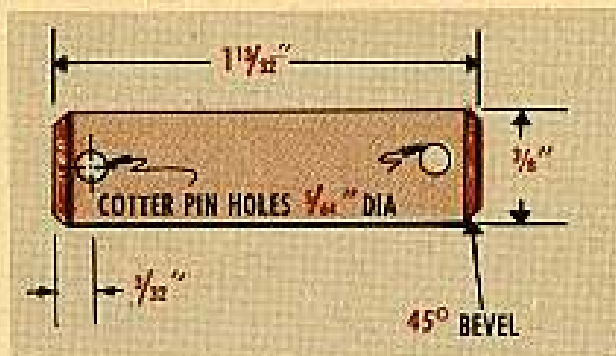
Lt G. M. O.

Dear Lt G. M. O.,

I've never heard of those shear pins breaking—at least not when only one winch at a time is used. But, since you never know when one of the pins is going to give, you sure do need to know about getting a new one.

The only pins around are those which come in the modification kits. Right now the pin is not in the supply system as a separate item.

Until it becomes an item of supply, your best bet is to make your own shear pins. All you need is some $\frac{3}{8}$ -in round steel stock. Make sure it's SAE 10/15 hot rolled (Stock No. 9510-00-13015) or SAE 10/18 cold rolled (Stock No. 9510-00-13069). That way you get metal that's just right for shearing when it has to.



Cut the metal so's you get pins that are $1\frac{1}{2}$ -in long. File a smooth 45-degree bevel all the way around each end. You're done when you drill a $\frac{1}{64}$ -in cotter pin hole $\frac{1}{2}$ -in from each end of the pin.

Half-Mast

CHECKING ARTILLERY GAGES



Dear Half-Mast,

I'm in a National Guard outfit and we have service gages and master gages for our artillery. Where can I send these gages to have them checked?

CWO L. L. J.

Dear Mr. L. L. J.,

Artillery service pressure gages used by the troops are tested for accuracy by their Ordnance maintenance companies. They check them against a master gage. This master gage is in the 200-kg gage-testing outfit which is issued to the Ordnance support companies for making these tests (TB ORD 572 tells them all about it).

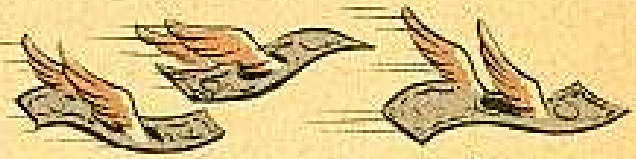
So, only the master gages need be checked for accuracy at least once a year (or more often if necessary). They're to be sent to Benicia Arsenal, Benicia, California, or to Rock Island Arsenal, Rock Island, Illinois.

Half-Mast

ARMAMENT



BYE, BYE BUCKS



Would you believe it?

Some guys don't practice what they learned about handling ammo—especially when they accidentally damage it.

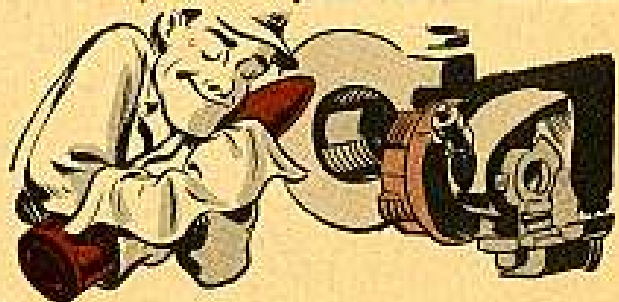
Damaged ammo is put in the weapon and the guy gets a misfire or a premature burst. At best, nobody gets hurt.

But that's not the end of the story. The pocketbook belonging to the man with the whiskers often is hard hit—sometimes to the tune of many thousands of dollars.

What happens is that a report saying the ammo was defective gets sent in without mentioning a word about the way the ammo was accidentally damaged before put in the piece.

The Ordnance people are left holding the bandoleer and may be forced to destroy an entire batch of ammo because they don't want to take a chance on a bad batch of ammunition being in the field. That's when you start talking in big figures.

Those greenbacks will be grounded if Ordnance is told all the facts about why the ammo didn't act right. It's best, though, to treat the ammo with care. That way . . . everyone saves—for sure.



SAVE FACE WITH HEADSPACE

Headspacing troubles with the .50-cal M2 machine gun are still causing some headaches and weapon breaks.

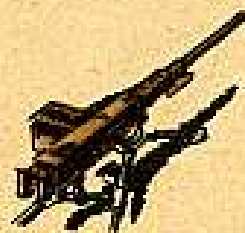
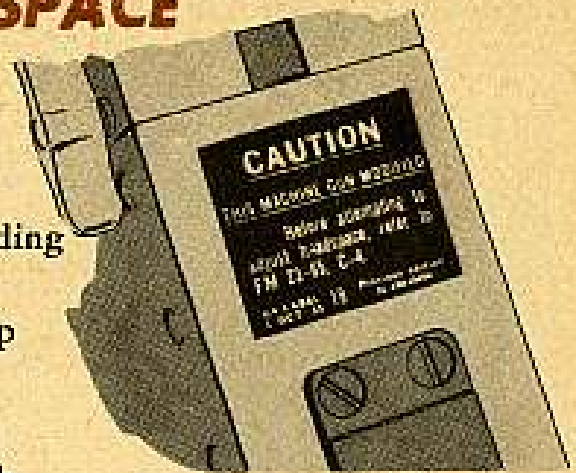
Could be that some gunners haven't been reading the decal attached to the receiver top plate on the gun. That's the one which tells you to look up Ch 4 to FM 23-65 for correct headspacing.

Maybe you've run into other trouble because of a missing decal or the wrong one to start with.

That's all water over the dam now because even the decal that mentions the change to the FM is outdated. There's a new FM 23-65 on the market and is the one for you. It's dated Dec 55 and includes dope given in all the changes to the old FM. Even has pictures on headspacing.

OK . . . so you know all about the how's of headspacing. What about the when's?

Different story, you say. Well . . . keep these four points in mind and you'll have the when's down pat.



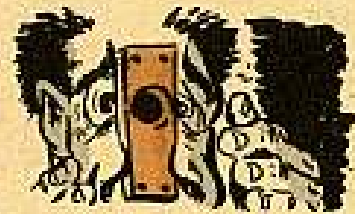
1. When the gun is assembled.



2. Before firing.



3. When the barrel or any part of the receiver is replaced.



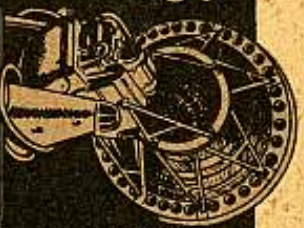
4. Any time you're not sure the headspace is right.

YOU CAN TAKE IT WITH YOU!

"A bird in the hand is worth two in the bush," 'tis true, 'tis true. What's that got to do with the price of eggs? It's just this, if you're going to the range, make sure you take all the parts and tools you're going to need with your machine gun, mortar, howitzer, launcher or what-have-you.

Your SNL Ord 7's for your weapons'll give you a list of the things you'll need and their stock numbers. So before you shove off, run a check on the items you're going to take so you'll have that wrench, or spring, or pin, in your hand when it's needed instead of back in supply.





OUTFOX OLD MAN WINTER

Old Man Winter is right here, and the brass monkeys have lined their britches with fur. Which means that the M/T33 FCS is in line for extra special care for freezing weather operation.

Course, there're some things routine as putting on your gloves before going outside. Like being careful with rubber, metal and plastic when the mercury's sunk way down.

Those materials won't stand up the way they do in normal temperatures. They crack or break in temperatures below zero.

CABLES

For instance, take cables. Here's what not to do . . . or how to cause cracking and splitting.

1. Put sever bends in interconnecting cables when temperature is below freezing.



2. Pull a cable at the middle and allow ends to drag, causing a big bend.
3. Let kinks form in cables.
4. Reel in a cable without a cable reel.

393A THYRATRON RECTIFIER TUBES

The tubes used in the low-voltage power supplies have to be warmed up before operating 'em in the cold. Specially when the power supply is carrying a big load, because then one of the tubes could go blooey trying to carry the whole load.

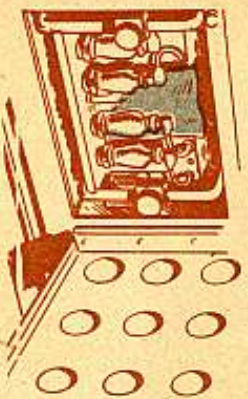
WARM 'EM UP LIKE THIS:

1. After throwing Radar Power switch to ON, open the upper center compartment door of the radar cabinet and leave it open for 30 minutes. What happens? The cool air circulated by the



ventilation blower goes out the top of the cabinet instead of down across the power supplies. Lets the tubes heat up faster.

2. In the lower center compartment of the radar cabinet do this: put a piece of cardboard or something similar over the front of the ventilating holes of both 320 or 220 volt power supplies. This prevents the blower from moving air



through the hole in front and the chassis and past the four 393A rectifiers to cool them. Natch, if that air flow is blocked the tubes heat up faster. Leave that cardboard in place for the first 15 or 20 minutes after throwing the Radar Power switch ON.

Note this: remove temporary dampers before turning Low Voltage switch ON.

And this: never shake a cold 393A tube to get it to fire. Mercury might spatter on the grid and cause a burnout.

ANTENNAS

Rotate the acquisition and track antennas manually before operating in



below-freezing weather. That's to break her loose if she's frozen stiff. If you try to run a frozen antenna, a drive motor could burn out.

PERSONNEL AIR HEATER

Every day after operation drain the gasoline sediment bowl of the heater. Keeps the fuel line from freezing.

For more pointers on how equipment acts in brass monkey weather and extreme cold maintenance procedures, see TM 9-2855.



MISSILE NOTES



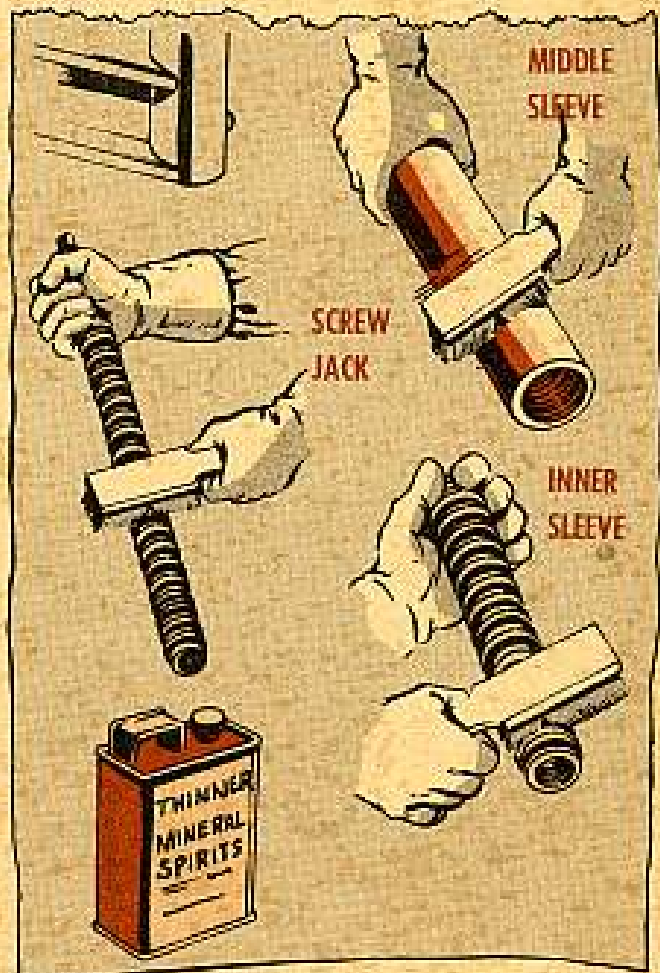
SOFTEN 'EM UP

Outrigger jacks on the Corporal launcher XM27 (Type II) need a monthly cleaning and a dose of GAA (Mil-G-10924), or else they go stubborn on you.

The jacks need to be taken apart (like it says in para 79 of your Maintenance Notes on the XM27 launcher) and the jack screw, inner sleeve and the middle sleeve given a good scrubbing with Thinner, mineral spirits (FS TT-T-291). If any of the parts show excessive wear or damage you'll need to ask for replacement parts, but if everything's OK just pack the parts with GAA and reassemble the jack.

A change resulting from this new lubing care is the addition of jack spare parts (jack screw, inner sleeve and middle sleeve, plus attaching parts) to the next revision of Ord 7 SNL Y-68.

If you need any of these parts, in the meantime, check with your supporting Ordnance unit. Your authority is Letter, ORDDW-NMP 312.1 (2 Mar 56) Subj: Lubrication, Outrigger Jacks Corporal XM27 Type II Launcher, Redstone Arsenal, Huntsville, Ala.



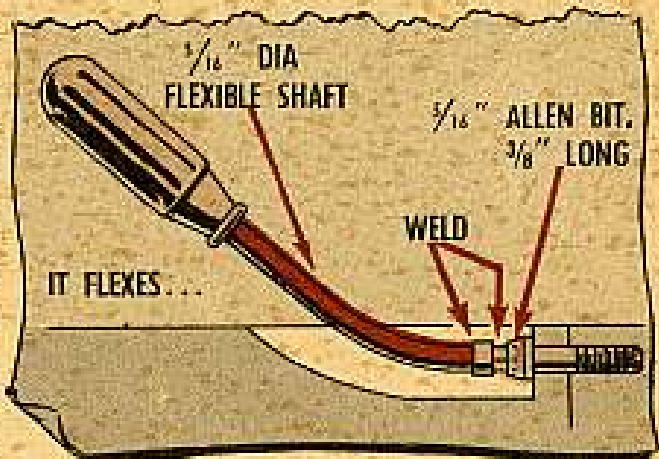
Removing Nike I Guidance Sections...

NEW TOOL...EASIER JOB

Removing Nike I guidance sections from the missile body is tough because of those eight $\frac{3}{16}$ -in Allen head screws.

A fellow can't get at 'em with a screwdriver-type Allen wrench. An offset-type Allen wrench is needed to break loose and tighten those bolts. But there's not much space for swinging it, and it takes a l-o-n-g time to get those eight bolts out and put 'em on.

No trouble, though, with this do-it-yourself project. Make the flexible-shank, screwdriver-type Allen wrench above and the job's a lot easier and faster.



CORPORAL Signal Generators

SO LONG FOR A WHILE



When the wife goes home to mother, the situation can get a little rough while she's away. But things smooth out when she comes back.

Same deal with the Rollin Model 80 generator in the Corporal system. It's time some of 'em went back to mother—meaning the manufacturer.

Modifications are needed on those generators, according to Redstone Arsenal letter 400.113. You may not get a replacement item when you turn yours in because there's not enough to make a complete switch. The quicker you get yours in the better the generators will work when you get them back.

Overseas, the deal is taken care of by

the area commander. In the Z1, turn your generator over to your Ordnance officer if it has one of these serial numbers.

2	7	21	27	34	40	47	52	59	65	75
3	9	22	28	35	41	48	54	60	66	76
4	10	23	29	37	42	49	55	61	69	77
5	15	24	32	38	44	50	56	62	72	79
6	20	26	33	39	46	51	58	63	74	

Some guys hold back from turning in their generators because they don't get a replacement to take its place. They're wrong. Even though you don't get an exchange item, your generator needs those modifications to get and keep her in tip-top shape.

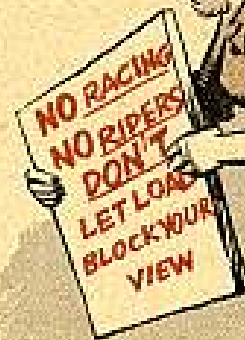
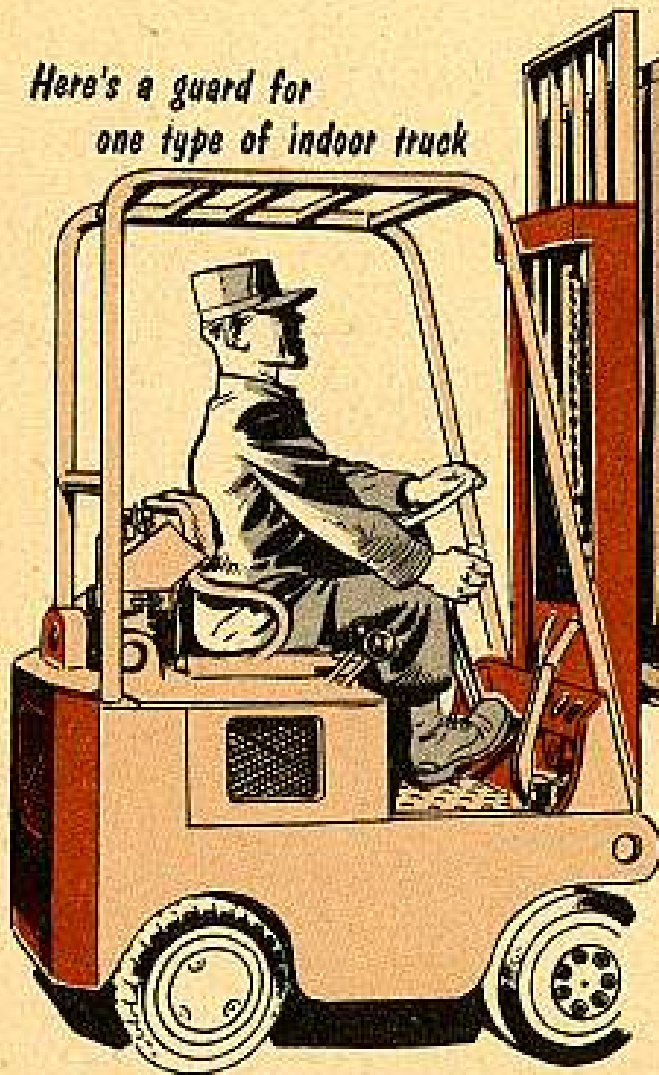


QUARTERMASTER

Tipsy Load Smash

A forklift that does any kind of hoistin' and stackin' rates an overhead guard—as any safety-man will tell you. Without some type of protector overhead part of the load could slip off and land on you during a short stop or a jerky start.

*Here's a guard for
one type of indoor truck*



Any time you draw one of the older model forklift trucks that doesn't have a ready-made guard you best suggest that it be rigged with a suitable skull-saver.

The size and shape of a protector depends on the type of truck you have. But for any good guard all that's needed is some suitable scrap metal, a welder with a sure hand and a bit of drilling.

Of course, it should be big enough to cover the space over the operator's compartment. It's got to be removable so it won't interfere when work's needed on the mast, tilting or lifting mechanism.

And if you use a cover on the guard (for wet weather) be sure you can see through it—don't use canvas.

Slantwise Does It



Dear Connie,

How do you carry Frame, tent, maintenance shelter on your truck? It's too long for the bed of a 2½-ton, and is taboo on the outside of the truck. Can you help me?

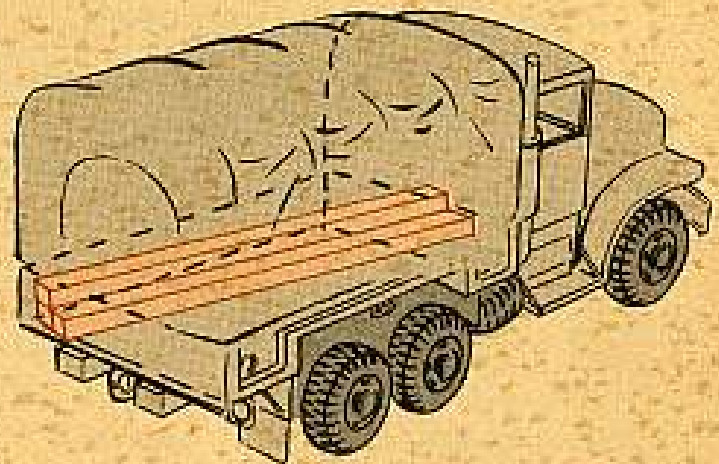
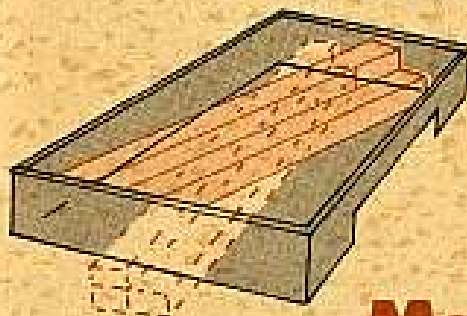
Lt D. R. H.

Dear Lt D. R. H.,

Shouldn't be too much sweat in finding a way to carry that frame. It's 153 inches long when folded for transport. Your 2½-ton truck beds range in length from 144 inches to 204 inches and 81½ inches to 88 inches in width.

Just load the frame on the diagonal and you've got it licked. This way it'll fit in the shortest truck bed.

Connie



Materials Handlers

Anybody who needs to know all about handling material can get a lot of good out of TM 743-200 "Storage And Materials Handling" (June 55).

It sets up rules and regulations for material handlers in all branches of service—stateside and otherwise.

The book is primarily designed to help outfits concerned with training a big gang of material handlers. It even sets up an on-the-job-training course for MHE operators which graduates licensed operators—but it's also got ideas that'll help anybody in the material handling and storage end of the business.



CHEMICAL

THE RIGHT WAY TO KEEP A COOL SMOKER



M3A1 and M3A2 smoke generators must use up between 40 and 50 gallons of fog oil an hour—otherwise there's danger of engine overheating. That's why you've gotta keep 'em adjusted just right.



Both of these smokers will give you a fair smoke screen on a leaner diet, but don't let 'em mislead you. It's false economy, 'cause the fog oil itself works as the engine coolant.



As the fog oil vapor flows thru the engine tube and fills the inner shell on its way to the outlet nozzles, it also cools the combustion chamber and the engine-tube-flange assembly. And it takes a minimum of 40 gallons an hour passing thru the smoker's innards to keep the heat under control.



The maximum fog oil intake recommended for these smokers is 50 gallons. If you're feeding yours pretty close to one drum (55-gallons) an hour, you shouldn't run into any engine overheating problems.



It's also very important to make sure that all the flange bolts are in place. If any of 'em are missing, you can get replacements easy. Just ask for: Bolt, machine, FSN 5606-207-4604. Don't use the bolts that hold the flange to the support lugs as replacements. They're too long.



And the flange bolts should be well coated with anti-seize compound, FSN 8030-274-4170 (2000°F, 1-lb container) or FSN 8030-597-5367 (1800°F, 2½-lb container) before they're re-installed.



If you still get leaks after tightening all the bolts, you've got no choice but to let your shop remove the engine tube, carefully work at straightening out the flange, and install a new spirodielk gasket, (FSN 5330-285-3479 or the new flat-type gasket FSN 1040-508-0213).



Another important setting for these babies is the fuel intake. To provide top operating performance the generators should be set to burn a minimum of three gallons (almost one tankful) an hour.



5 THE DANGER
Here's why you've gotta be fussy about feeding 'em so they'll not overheat. Engine overheating causes warping of the engine tube flange. A distorted flange will allow fog oil to leak. That creates real danger such as fire hazards and weak smoke screening.



6 Periodic Tightening
To guard against fog oil leaks around the engine tube flange make a check of the engine flange bolts for tightness every month.



11
With these things in mind, you're all set to lay down a real smoke screen. So shoot 'er the fuel and fog oil in the right amount, and you won't have to worry about overheating.



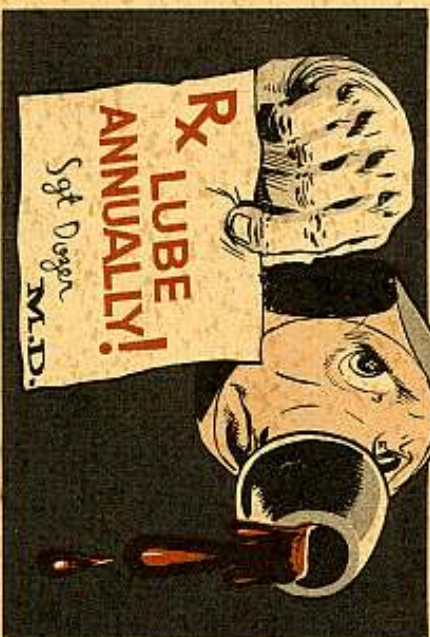


TOO MUCH... TOO BAD

If you've got a Darley Model E 300 or F 500 pump mounted on your fire truck, lend an ear. It seems that the lube fitting leading to the bearing on the pump clutch is getting too much attention instead of not enough. Yep, 'tis so. Too much lube is sometimes as bad as too little.

The fitting's located in a place that's easy to get to, so it always gets a shot or two of grease when a man's lubing the equipment. The LO's say to give this fitting a shot of grease annually—not every time the equipment's lubed.

Too much lubing for this fitting pushes grease into the clutch and damages the fiber clutch disc. That means costly repairs that could've been eliminated. Some of the boys have replaced the grease fitting with a pipe plug. Then, on the side of the clutch housing, they've made a notation with white paint saying "Lube Annually." That might be all right as a last resort. But, better yet, use the LO when you lube your equipment and follow it closely. That's what it's for. It's LO 5-2049 for the F300 and TM 5-2043 for the F500.



NO TWO-WAY STRETCH BUT...

HERE'S REAL SUPPORT



Dear Sgt Dozer,
 Just thought you'd like to know about the dandy support we've been getting from our Engineer Field Maintenance Company. When our unit has a field maintenance job coming up on a piece of equipment that's not a deadline item, we send the shop boys a work order.

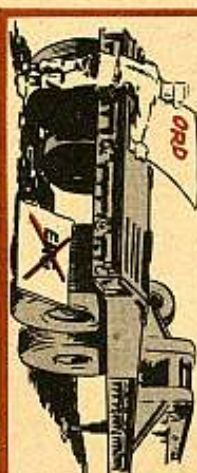
The shop lists the work order on its control sheet as "P", which in this case means Projected. Then they get parts to do the job. When they actually have the parts on hand, they call the machine in and do the work. This eliminates a long deadline wait of about three weeks for parts. It sure is a big help to us in getting our jobs done and keeping our equipment rolling.

Dear Sgt J. O.,

Thanks for that bit of info. It's no secret why you wanna tip your fedora to an outfit like that. Wish there were more like 'em. Yep, that'll work OK—just as long as the equipment won't be damaged by operating it while waiting for repair. And remember... it's no go on deadline items. Using "P's" on them would goof reports to higher headquarters.

Sgt J. O.
 Ft. Bragg, N. C.

DOZER TO HALF-MAST



In case you've been wondering what tech service is responsible for all M172 25-ton semi-trailers, here's a chance to put your mind at ease. All you gotta do is grab up a copy of SR 700-110-1, C2, dated 13 June 56. That 'un will tell you that the responsibility for these trailers has been transferred from the Corps of Engineers to the Ordnance Corps.



Here's hoping you Nike men have your eyes on the pre-filter element on the Rix model capping compressor.

Some Joes have been letting those filter elements go too long without a change. Let this happen and the dryer'll taper off on its operating efficiency.

When the pre-filter element gets soaked with oil, there's nothing to stop the oil vapor, so it moves on over to the drying towers. This causes the activated alumina to become loaded down with oil so it can't absorb moisture any more. Then you've got moisture being carried in the air stream to the missile. And that's no good.



See how many troubles can be caused by neglecting that filter element? If you're smart, you'll stay ahead of the game and not let these troubles haunt you. On the subject of pre-filters, you can find some good dope in para 20 of Nike Handbook No. 21, dated 15 Apr 55.

The handbook says you ought to inspect the pre-filter every three to six weeks. This is under normal operating conditions.

You'll have to keep a close tab on the amount of



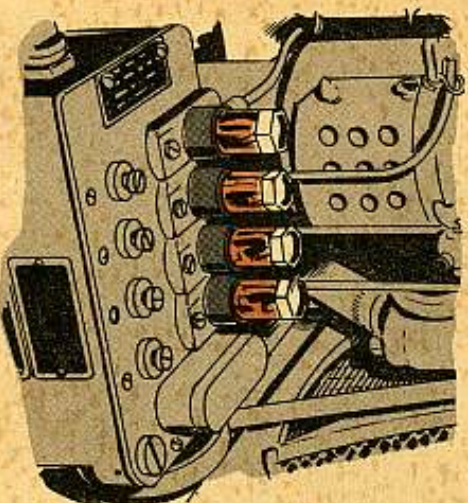
oil going from the mechanical lubricator to the cylinder. If the mechanical lubricator is feeding more oil than it should, you have to replace the filter element as

often as every two weeks.

Here's a good thing to remember when you're inspecting the cartridge and wondering if it should be replaced: If the alumina is dirty or oil-soaked, **REPLACE THE ELEMENT IMMEDIATELY.**

When it comes to replacing the filter element, you'll need a couple of new gaskets, 'cause the old ones won't fit in the grooves. For the Model 1262 pre-filter element (Part No. 324-K678) they're carried under Part No. 324-K696.

When replacing the model SS600 pre-filter (Part No. 324-659-1), the two gaskets you'll need are listed under Part No. 324-K697.

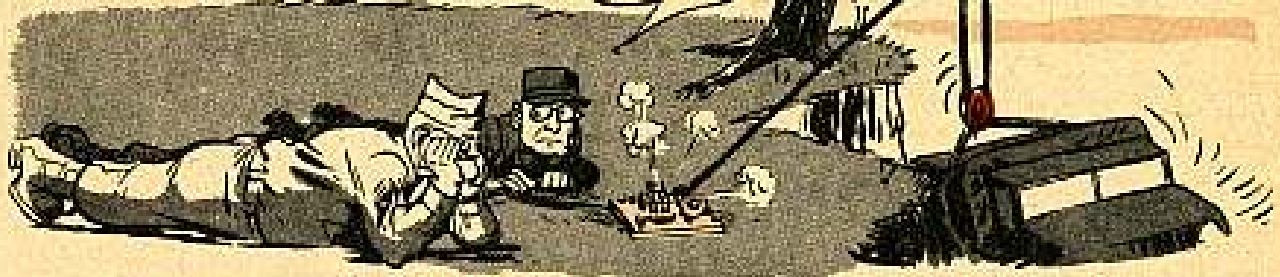


THESE GASKETS ARE AVAILABLE NOW AS INDIVIDUAL LINE ITEMS IN THE ENGINEER SUPPLY SYSTEM.



CONTRIBUTIONS

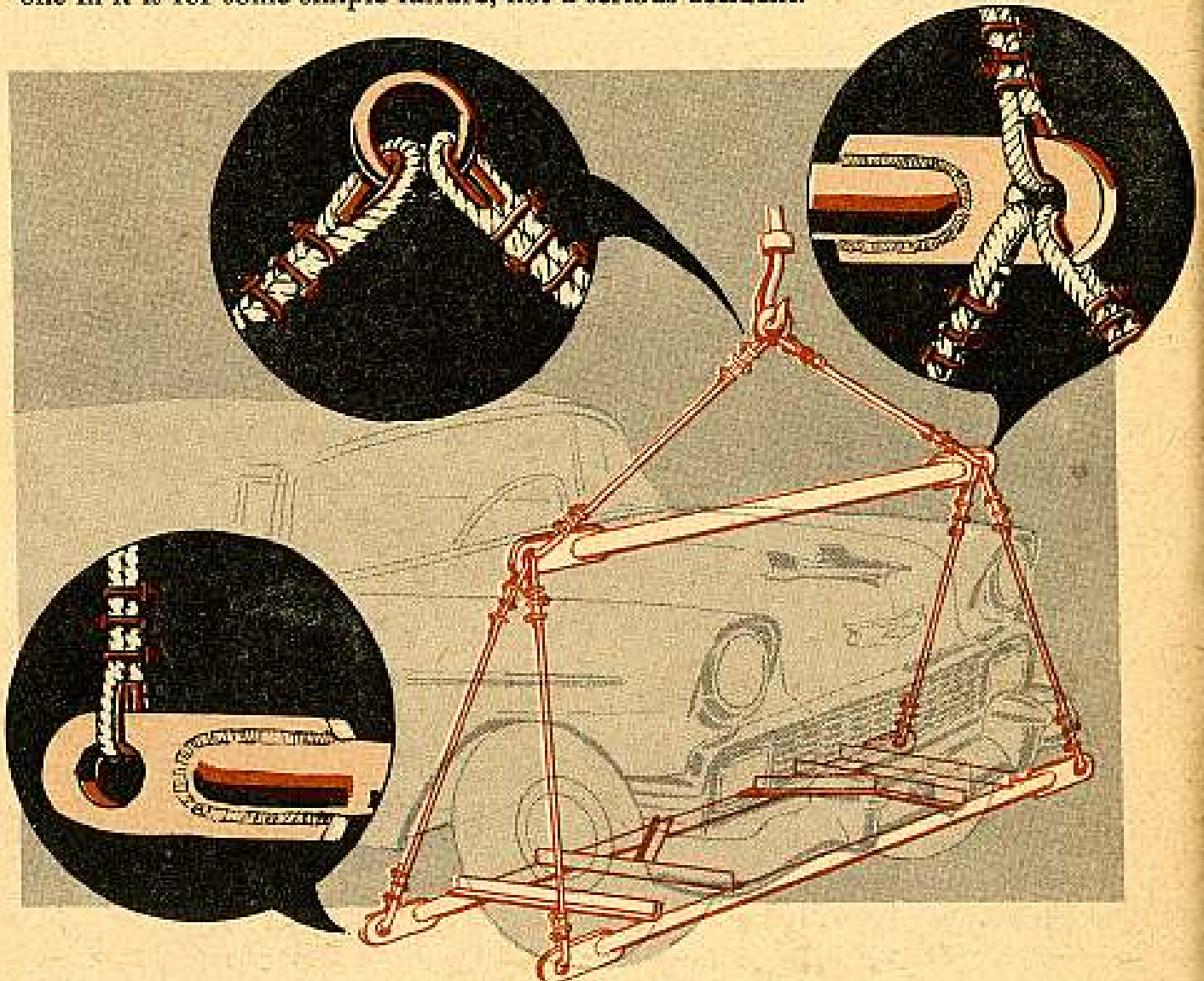
OH THE LIL' POCKET WINCH
WORKS OKAY... MY
PROBLEM IS FINDING
STRONGER TREE
LIMBS.



TOW SLING

Dear Editor,

Here's a rig we have whipped up out of scrap pipe and angle iron to pick up staff cars and other commercial-type vehicles with our M62 wrecker. We support quite a few of the commercial-type vehicles, and most times when we have to pull one in it is for some simple failure, not a serious accident.



But with the new splash guards on the bumpers, etc, we found that often we did more harm to the vehicle picking it up than the original trouble. Since we've had this bridge, or hoist, or sling, whatever you want to call it, we haven't scratched as much as a fender in towing. Also, of course, it is better for the coil spring front ends to be carried with the weight of the car resting on 'em normally.

As you can see from the pictures, we have a frame and we push or tow the crippled car onto it. The frame has slings at the ends, which attach to a spreader bar above the hood. This spreader bar is then lifted by the crane of our M62, and lifts the entire front end of the towed vehicle. We also have a set of adjustable clamps, padded, which attach to the bumper of the towed car and to the standard towbar of the M62. This bar provides the pulling force and also of course, prevents the tow overrunning the wrecker—save radiator grills, you know.

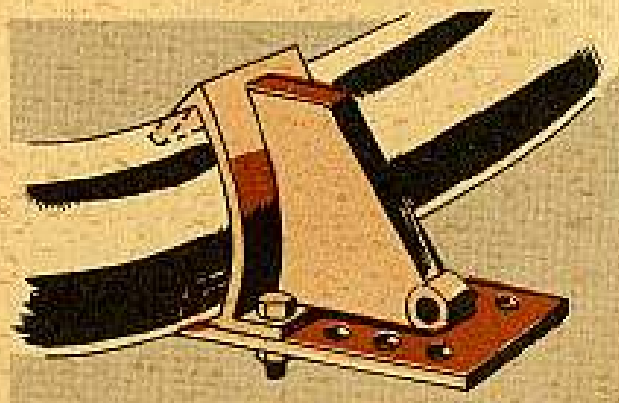
We made the frame for bolted joints so that we can tear it down for easier stowage on the wrecker when not in use. A conservative estimate would be that this frame has saved us at least ten times its cost in one year.

Sgt Royal M. Gordon
Japan

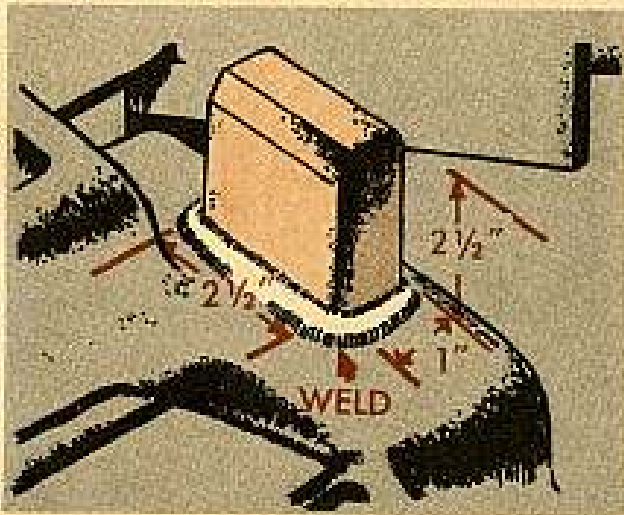
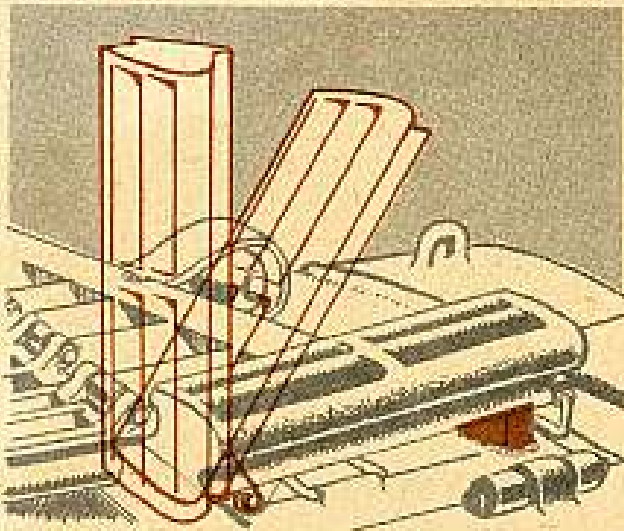
(Ed Note—Sergeant, that looks like a fine rig for anybody who has to maintain many commercial-type vehicles. I can well believe that it has paid for itself many times over by preventing towing damage. The new commercial



vehicles just don't have places to latch onto 'em anymore. I wouldn't expect to see it made part of the M62's OVM, because most M62's will never have to pick up a sedan, but if you need it, and if your Old Man approves it, fire away. Another point, if and when Army decides to buy its commercial-type vehicles with the automatic transmissions, you can lengthen your sling cables a little bit and use this gismo to tow cars in with the rear end in the air. Easier than lying in the mud dropping a drive-shaft.)



STOP IT—



Dear Editor,

On some of our M47 tanks the rear grill door assemblies have a stop located on the outside upper edge of each assembly. When the first door section's opened, this stop catches it before the handle hits the framework and gets banged up. Saves a lot of handles and hands of guys who handle the handles.

Some M47's don't have the stops. But we find them simple to fabricate. All it takes is a chunk of scrap armor plate and a little cutting and welding.

SFC R. A.
France

(Ed Note—Neat fix. Looks like a couple of teeth off an old drive sprocket might be an even simpler way to fill the bill—if y'happen to find one in the salvage yard.)

SPLIT SEAM

Dear Editor,

As you know, the M38 Jeep has a two-piece hood—the two sides of the hood are welded together to form one piece. Well, we found that these hoods are breaking along the original weld.

To stop this, we welded a piece of metal 1-inch wide by 16-inches long underneath the hood across the seam. This makes the spot real solid. Maybe some of your PS readers can use this idea to keep that seam together.

PFC Richard H. Desrosiers
APO 111, New York, N. Y.



(Ed Note—This is one for a UER. If you find that seam splitting, get one off as soon as you can.)



T34E1 storage story

The T34E1 sighting system with the Skysweeper is seldom—if ever—used. But that doesn't mean to leave her in a box like Christmas tree trimmings. Take it out to perform preventive maintenance services like TM 9-361, Section XV says.

No wind

In spite of what you may've read on page 484 of TM 9-8022 keep compressed air away from those wheel bearings. Heed the caution on page 199. When you think you're doing those bearings a favor by blowin' 'em dry, you may just be sending 'em to salvage in short order.

Lights out

You'd better hang on to Light, head, service, assy G251-7765212 if you've got a 155-mm SP howitzer M44 (T194). It won't exhaust to G260-7419686 light. Due to the size and location of mounting, the light and connectors hit the light guard and won't position right.

OK O-rings

Any trouble with the O-rings in Nike missile? Could be you're not zeroed in on removing, installing and lubing. The right scoop is in Nike Handbook No. 11.1 (revised Feb 56). For OK O-rings, that's the method for you.

For damp RCATs

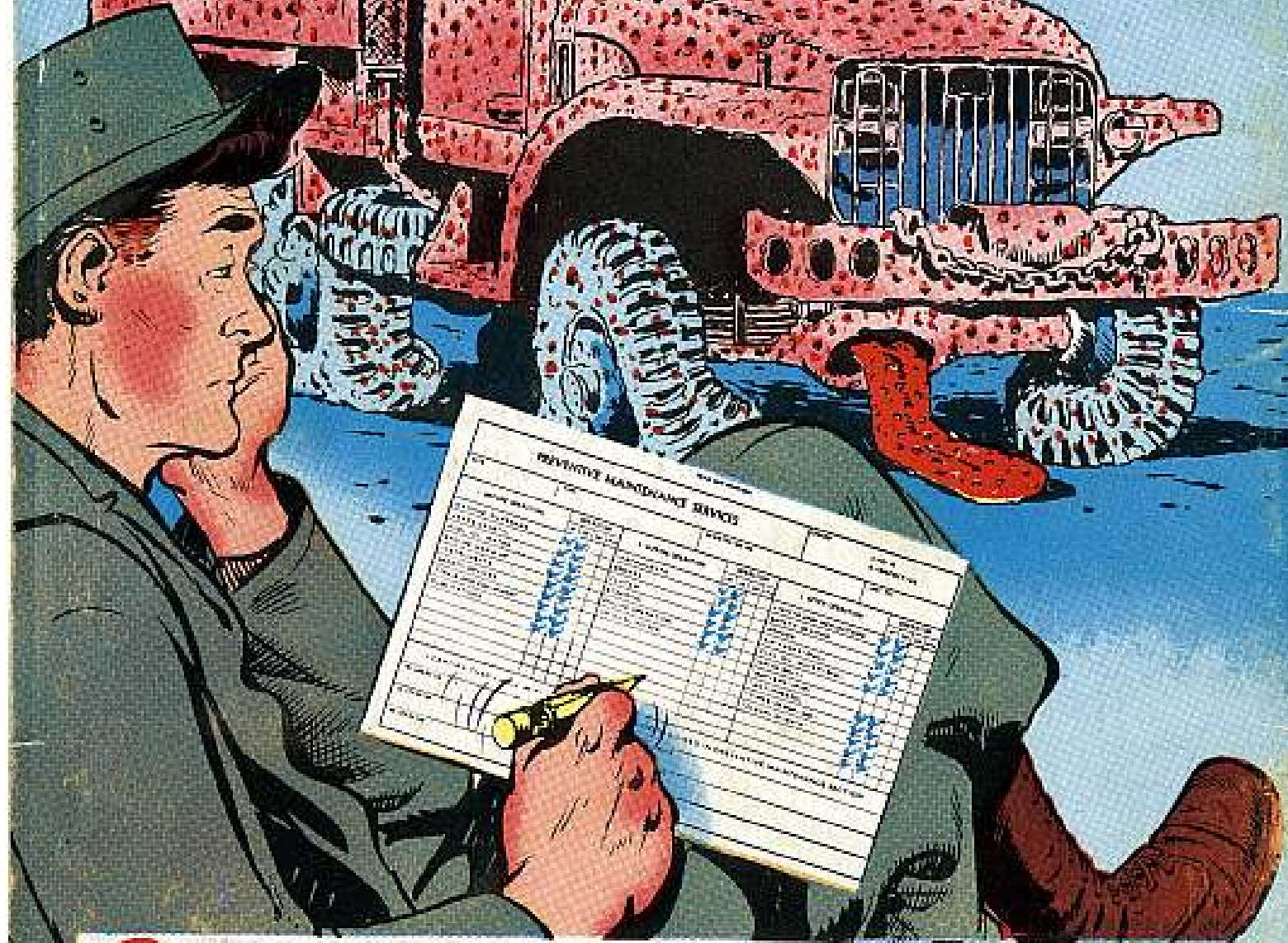
RCATs OQ-19B and OQ-19D used on over-water flights need insulation on the waterproof seals of the J-1 controller, servos, receivers, and junction boxes. Use Electrical insulating compound paste (FSN 5970-224-5276 formerly FSN 5790-251-9149 as listed in Ord 3 SNL K-1). It'll be put in a revision of Ord 7 SNL Y-32.

No drips wanted

You got drips dropping into your Fire Control (M244, M244E1, M258, M259 or M262) trailers? If so, there's a TB out that'll tell you how to keep the roofs of these trailers from leaking. The publication is TB 9-8224-1 (19 Oct 55), and it tells you how to apply and maintain sealant material on those roofs. Why not get yourself a copy?

ARE YOUR VEHICLES SUFFERING FROM

CHECKING POX?



WONDER DRUGS
CAN'T CURE IT...

BUT YOU CAN

GIVE 'EM REAL SERVICE—NOT PENCIL SERVICE