
IN ANY FIGHT...
PM
IS A TICKET HOME
PAYS OFF
Issue 101
P.S
1961 Series
THE PREVENTIVE MAINTENANCE MONTHLY
SIX MONTHS AGO WHEN I SAID "FILE A UER" YOU JUST YAWNED.
I CAN'T HOLD IT UP MUCH LONGER, SIR!
WHO NEEDS AN L O NOW? REQUISITION A NEW CHAIN.
PULL! NOTHIN'S HOLDIN IT UP BUT A COUPLE OF SKINNY SHORT TIMERS.
OTH TURNER


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BY BRUNER

NEED HELP . . .

(In Your Maintenance Training?)

Does every day seem like Friday the 13th?

The driver who's just now getting in shape and doing a fine job getting transferred?

Your peak-of-perfection missile crew losing two key men?

That "dream" mechanic getting out?

Despair and gloom!

Hold it . . . before you hit the headache-pill bottle, try a dose of some real Preventive Maintenance medicine the technical services have whomped up specially for your unit.

What is it?

Big words: **Technical Assistance.**

Sounds rough, but it's that kind of service that makes the tough O, so gentle.

Here's what it is and how it works:

Your unit (company, battery, battle group, battalion, etc.) is having a rough time keeping enough men trained right in operating and maintaining all your equipment. Enlistments run out, trained men get transferred . . . you know how it is. You're not sure your unit could provide the firepower, movement and communications it's supposed to when the word comes.

So, after your unit itself has done all it can to solve its problems, what's next?

Your unit can pass along the word it needs help (thru channels, of course) to the technical support officer—Signal, Ordnance, Chemical, Medical, Engineer, Quartermaster or Transportation.

Let him know your problem. Find out what help he can give.

And here's what he may come through with:

He may shoot over to your outfit some of his top-notch officers or enlisted men to lend a hand in your operation and maintenance training.

But here's what he's more likely to do:

Let his civilian maintenance technicians or maintenance representatives do the job. And they're real whizzes at that kind of work.

They can come right to your unit and help your CO (or his S-3 and S-4) plan the kind and amount of training your men need.

That's not all. They'll stick right with your outfit and assist in the actual training themselves as long as you need them.

They'll "tailor" the training to fit your unit's needs.

You may need only a few hours of "on-the-job" training. Or you may have a lot of new men who'll need several days or weeks of training. In that case, they'd set up a special school to do the job right.

Then, your unit would have men trained to operate and maintain their equipment right.

Simple?

Easy?

Sure . . . just let your support know what you need.

SEND NO MONEY:

NOTHING TO CLIP

PS THE PREVENTIVE MAINTENANCE MONTHLY

Issue No. 101 1961 Series

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IN THIS ISSUE

ARTICLES

DEPARTMENTS

PS wants your ideas and contributions, and is glad to answer your questions. Names and addresses are kept in confidence. Just write to:

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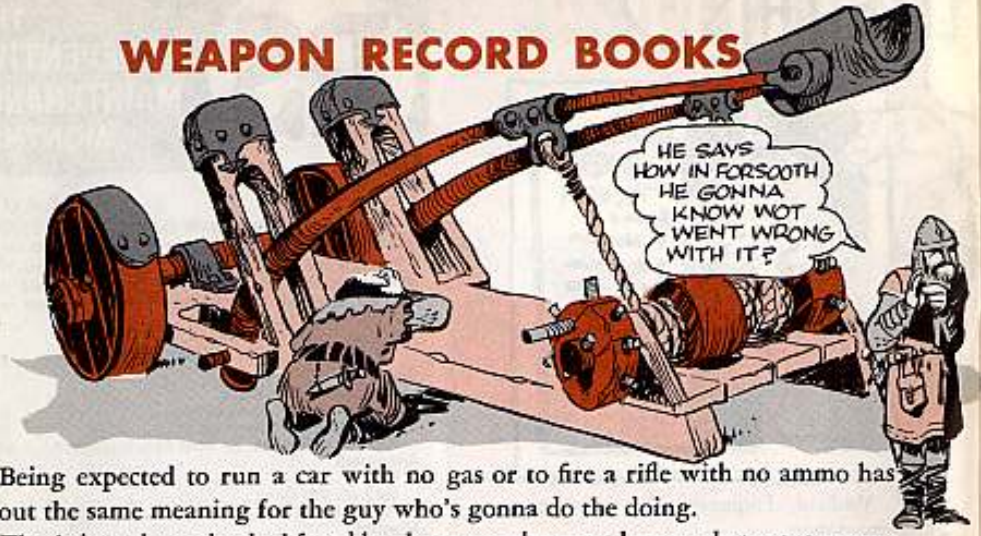
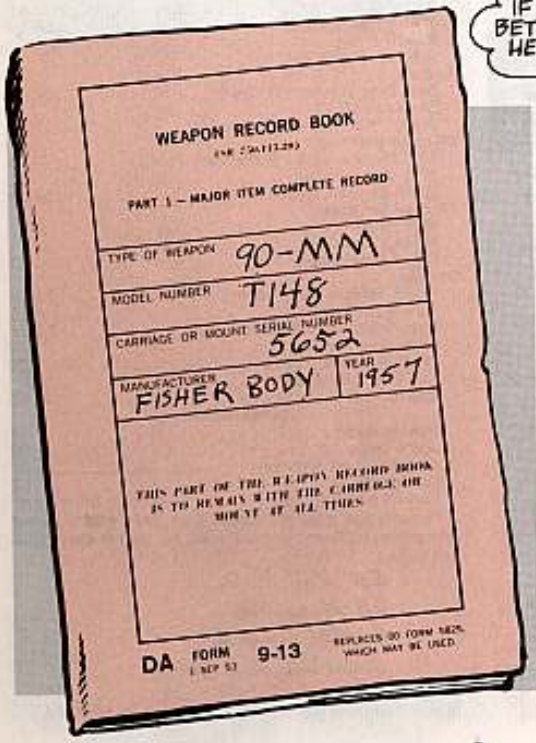
WEAPON RECORD BOOKS



Being expected to run a car with no gas or to fire a rifle with no ammo has about the same meaning for the guy who's gonna do the doing.

That's just about the deal faced by the guys who must know what went wrong when your support unit condemns one of your outfit's guns or tubes. Ordnance gets the piece all right, but sometimes you have a few facts on hand to give 'em the lowdown on what might have led to the shootin' iron going on the blink.



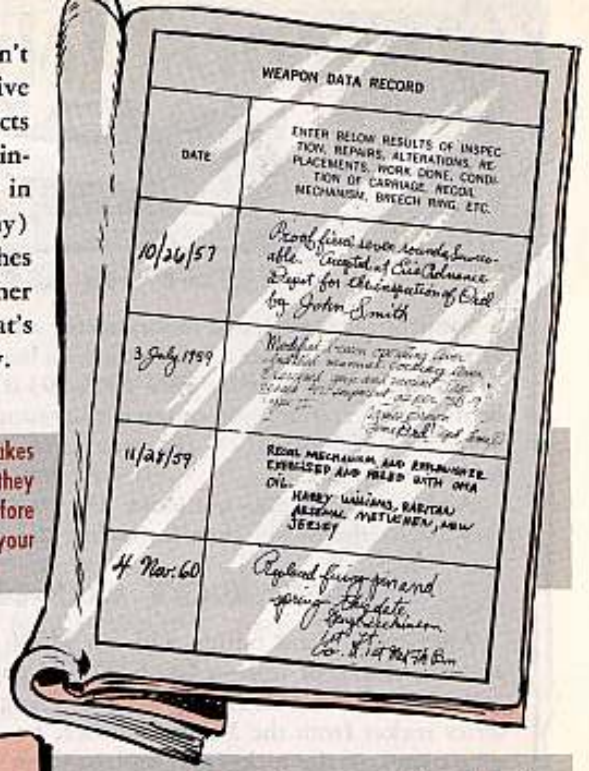
It's a sad story when you don't tell the gun's full history in its Weapons Record Books (DA Form 9-13 and DA Form 9-13-1). The problem's even worse when you don't send any record books back a'tall. So how can you help the guys who are trying to make better guns?

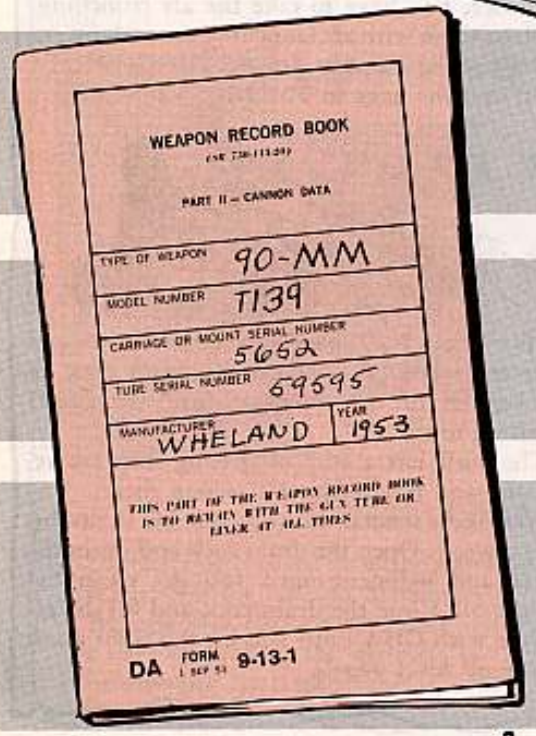
Here's how:

When one of your gun tubes or guns is condemned, make sure all the facts about it are pegged into its books before you let 'er go. Full info should be in 'em when the weapon is tabbed unfit for duty.

Notes that're too brief aren't enough. The books should give the full scoop about the defects you can spot such as, f'rinstance, "Dents (or bulges) in tube" or "Crack (so many) inches long at (so many) inches from breech face." In other words, put down just what's wrong and, if possible, why.

1. And make sure, if your support makes repairs or does work on it, that they enter their jobs in the books before you take back the weapon so your gun's history is complete.





2. Even when a weapon, tube or liner is unfit, busted or slated to be turned in for salvage, the full scoop about the piece should be in those two Weapon Record Books.

3. DA Form 9-13-1 is the record of the gun's tube and liner—it should go wherever the gun goes. DA Form 9-13 is for the record of its carriage or mount. It tags along, too.

4. And, just as AR 750-1000-8 says, the books get sent through channels to Ordnance Weapons Command, Rock Island, Ill., ATTN: ORDOW-FM. And that's the place you send those Weapon Record Books that get separated from their weapons.

Honest John Notes

JUST IN CASE . . .

Some of the superseded thermometer and case assemblies are still floating around in some Honest John units . . . here's the latest scoop.

If yours is listed under FSN 1055-393-0238, turn it in and tell the man behind the support unit counter you want Thermometer and Case Assembly, FSN 6685-345-6125. He's got word to exchange the assemblies on a one-for-one basis.

And go by the FSN—not looks. The two assemblies are so much alike . . . they could almost be taken for twins.

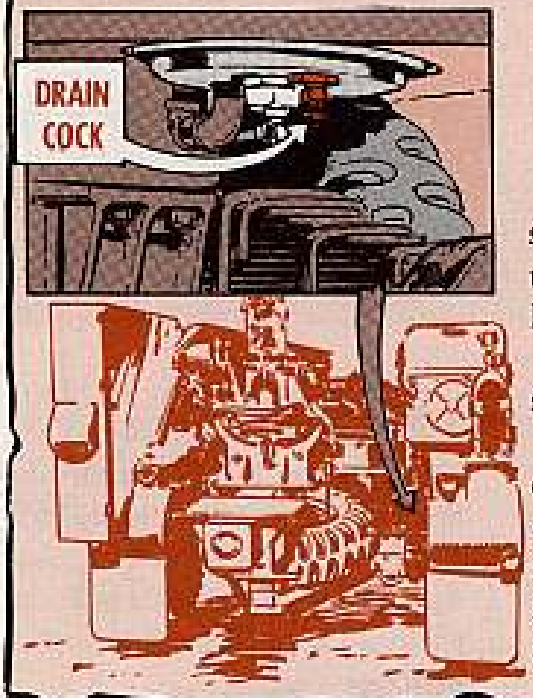
NO GOT GO-NOT-GO?

All Honest John outfits with an M386 launcher need a small, but important, chunk of iron—a GO-NOT-GO gage.

As it says in TM 9-1340-202-12 (Aug 60), before you fire an M31 series rocket from the M386 launcher, you have to take the aft launching shoe plates off the rocket and replace them with aft launching shoe adapters.

And to get the right distance between the adapters, you need the GO-NOT-GO gage like the TM says. You'll find the gage in TM 9-1055-205-20P.

GOT TO GO

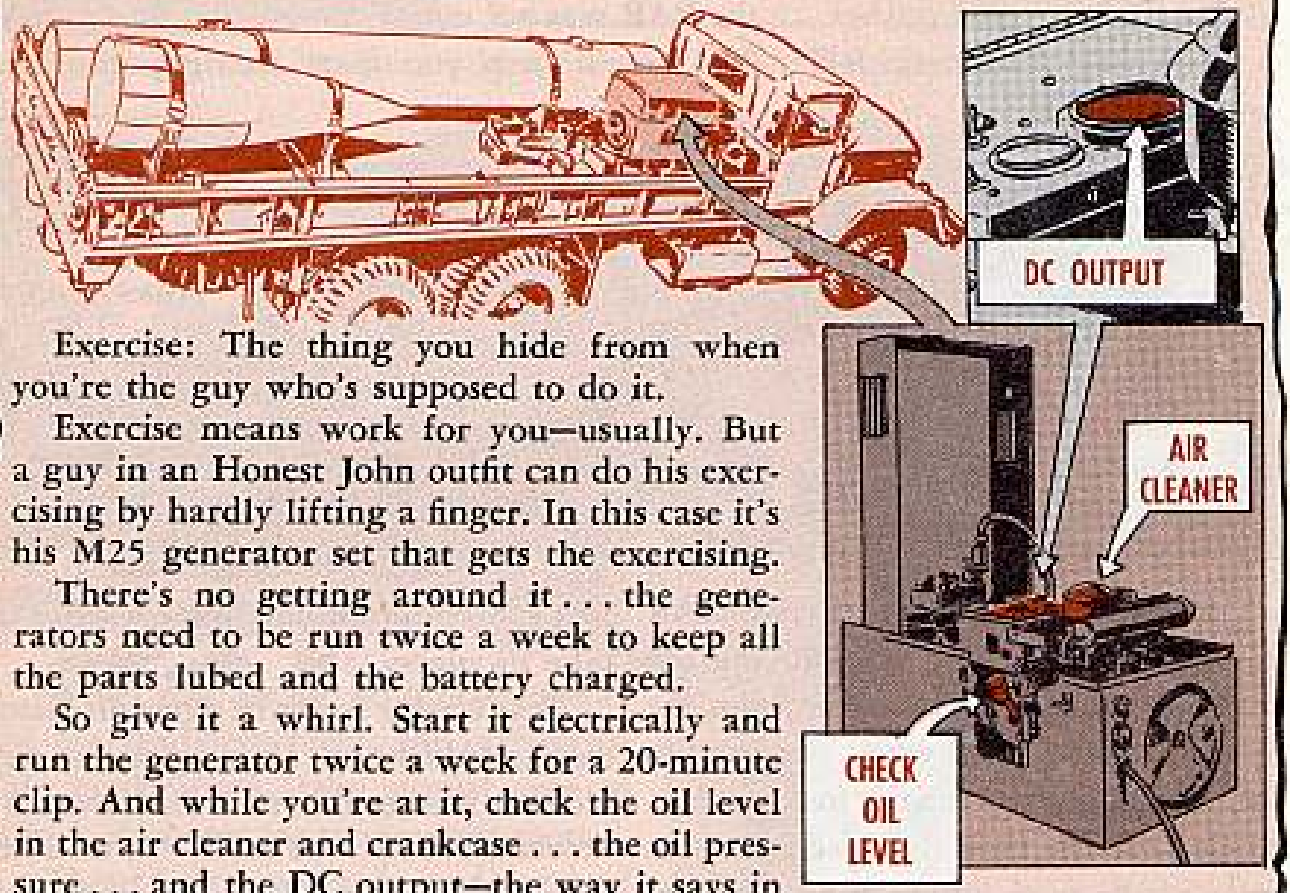


How about it . . . have you spotted water and sediment when you opened the drain cock on the bottom of the reservoir for your M405 handling unit?

The stuff has a way of getting into the reservoir—and it sure doesn't belong there.

So make a mental note on your LO to do this once a week: Open the drain cock and drain the water and sediment until you get clean hydraulic oil. Close the drain cock and fill the reservoir with OHA until you hit the right mark on the oil level gage.

HANDS ON HIPS, PLACE



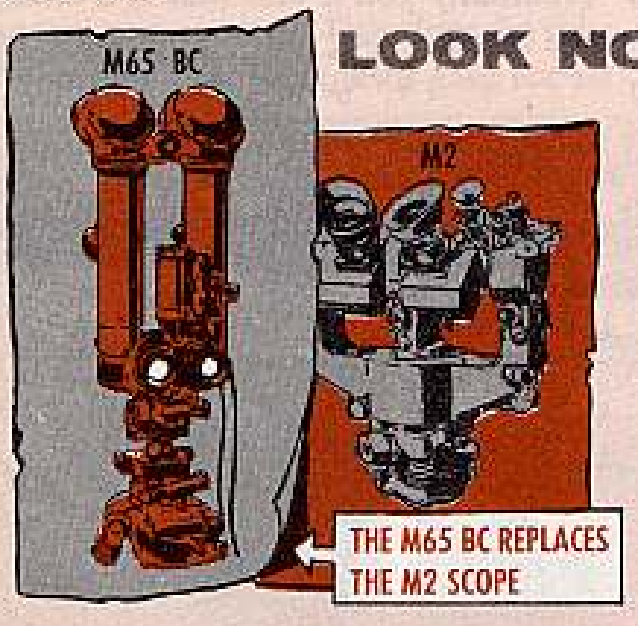
Exercise: The thing you hide from when you're the guy who's supposed to do it.

Exercise means work for you—usually. But a guy in an Honest John outfit can do his exercising by hardly lifting a finger. In this case it's his M25 generator set that gets the exercising.

There's no getting around it . . . the generators need to be run twice a week to keep all the parts lubed and the battery charged.

So give it a whirl. Start it electrically and run the generator twice a week for a 20-minute clip. And while you're at it, check the oil level in the air cleaner and crankcase . . . the oil pressure . . . and the DC output—the way it says in your TM.

LOOK NO MORE



There's no need to thumb through supply manuals for scoop on your M2 spotting instrument. There's no info for any echelon of maintenance.

That's because the spotting instruments are few and far between.

And so . . . unless your support unit can cannibalize parts to fix your M2, they'll be sending you an M65 BC telescope in its place.

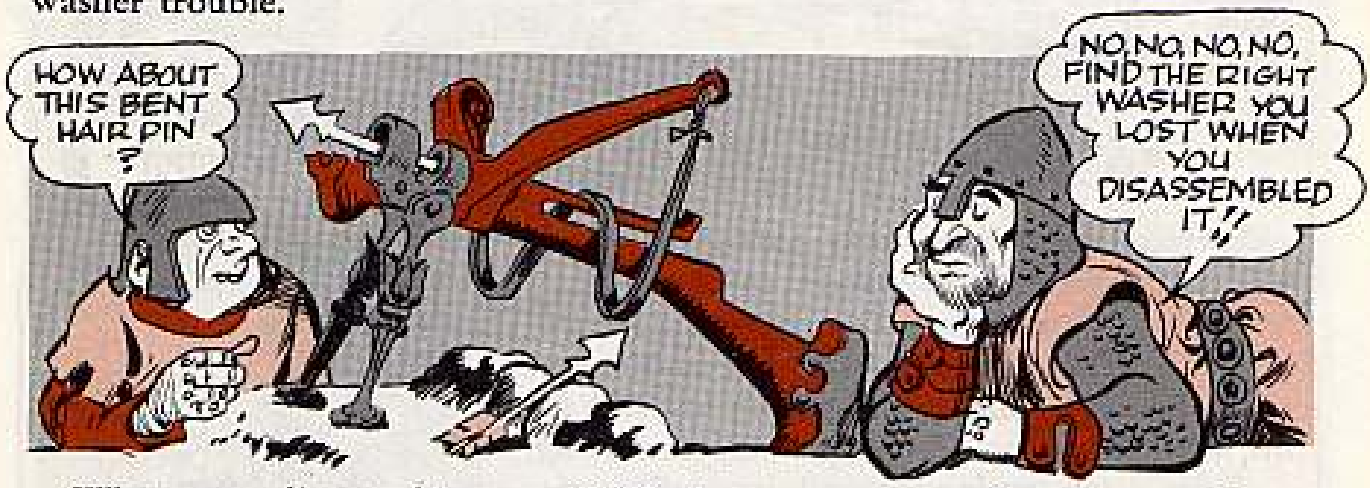
TENDER SKIN

So maybe it is easier to sit or stand on your Honest John rocket when you cover it with the heating blankets.

But the skin surface can't take that kind of treatment. And it takes only one dent to foul up the ballistics of the rocket enough to make you think your shooting eye is off.

SOME BAR FACTS

For the want of a washer . . . the BAR was put out of commission. If you have a Browning Automatic Rifle, this dope'll keep you from running into lock washer trouble.

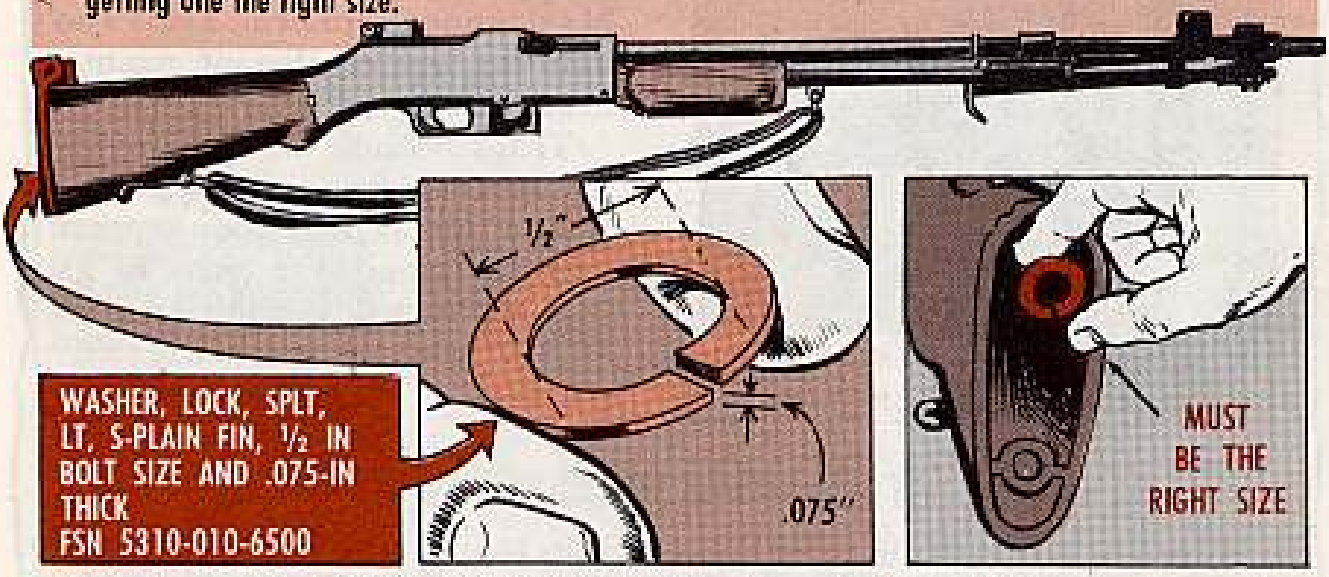


When you disassemble your BAR and get to the point of removing the actuator spring and actuator from the actuator tube, that's when you have to be on the lookout for the lock washer.

Because the next thing you do is to remove the stock and turn the stock on end Out falls the lock washer. If you aren't Eagle-eye Eric you could lose it—then comes the trouble. You can't use just any common-hardware washer to take its place.

That washer has to be a certain diameter and thickness. If you put just any old lock washer that's too thick over the actuator tube you're askin' for trouble. It pounds the inside of the stock and eventually you'll find that it'll change the recoil.

In case you get your hardware mixed, here's how you can measure to make sure you're getting one the right size.



You know that FSN 5310-010-6500 lock washer's a third echelon maintenance item. So if you're going to keep your BAR in operating condition keep your eye on that lock washer and don't try substituting . . . it must be "Washer, lock, splt, lt, S—plain fin, ½-in bolt size and .075-in (75 thousands) THICK."

Connie Rodd's
"SHORT 'N SWEET DEPT"

Something new has been added for you M48A1 tankers.

When you use the bulk hose instead of the ready-cut pieces for carburetor air intake lines, take special care to check the hoses for spongy soft spots.

These hoses are made up in several layers and the inner layers have been known to tear away. This clogs the tube and makes your carburetor gasp for air like a man with asthma.

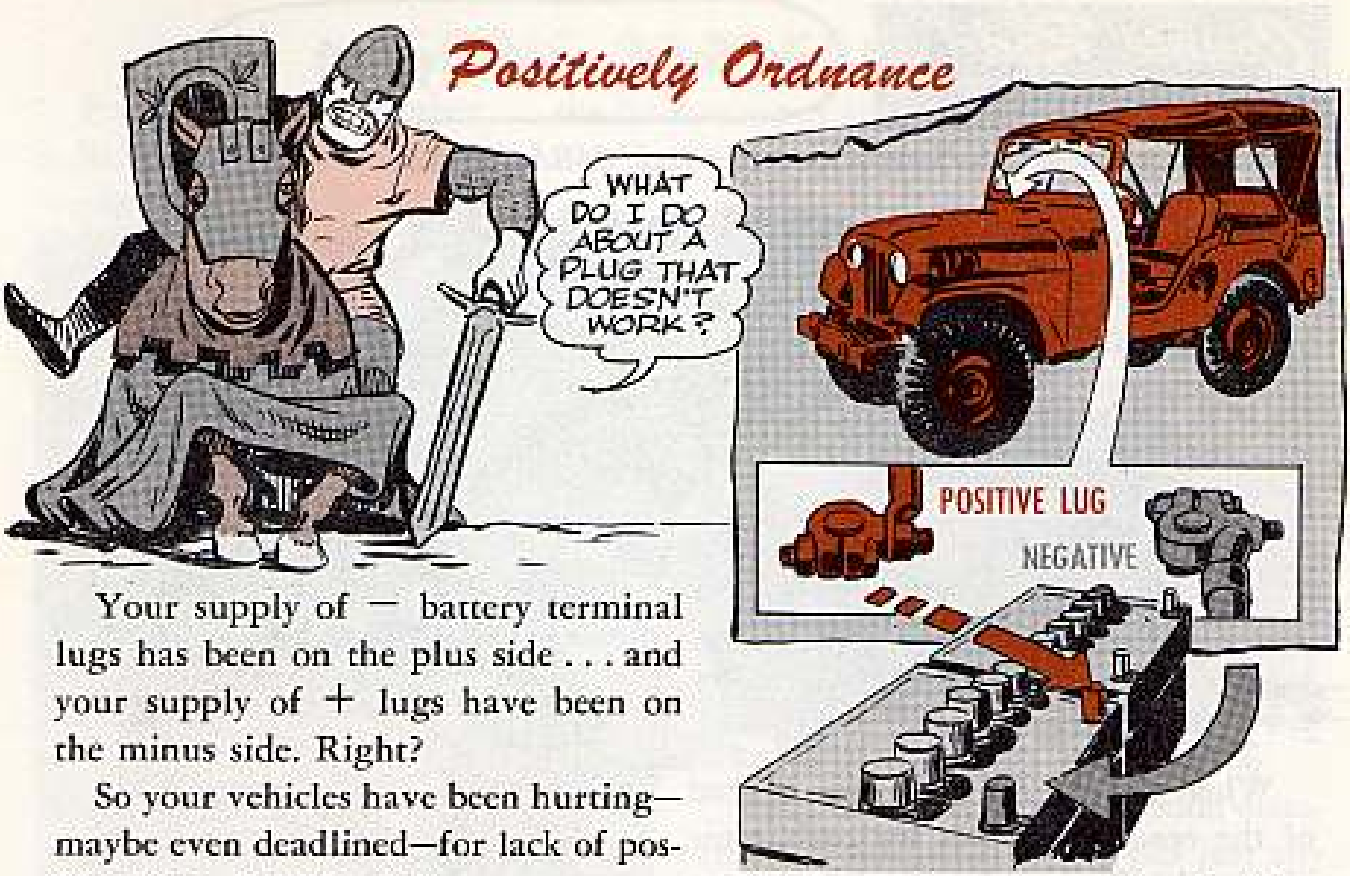
Your hose can be partly clogged even though it looks good from the outside.

Give your hose a feel now and then. If you find a soft spot, take off the hose and see if the inner layers have broken down. If they're broken down, replace the hose. Weak hoses pulsate quite a bit when you speed up and decelerate the engine. This pulsation leads to air leakage around or through the hose.

Check the hose to be sure no unfiltered air enters the engine. You can tell air leakage real easy by the piercing sound it makes and you can find the spot that is leaking by feeling for it.

While you are checking hoses, don't forget the hoses that connect the intake manifold sections.

Positively Ordnance



Your supply of — battery terminal lugs has been on the plus side . . . and your supply of + lugs have been on the minus side. Right?

So your vehicles have been hurting—maybe even deadlined—for lack of positive lugs. Double right.

But the supply knot that sometimes developed with Ordnance having the negative lugs and Signal the positive ones has been untied.

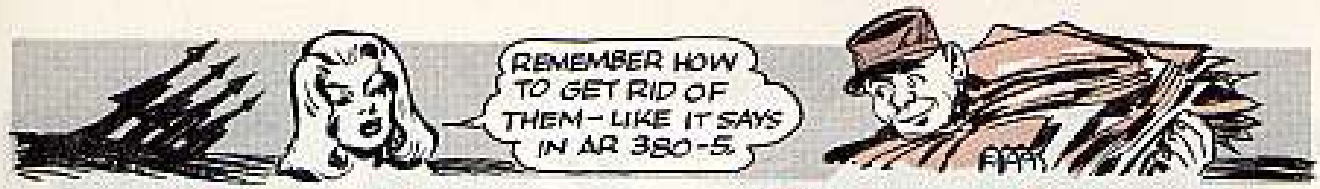
Ordnance began supplying both lugs again in February 1961. They have the negative lug under FSN 5940-549-6582 . . . and the positive one under FSN 5940-502-3729.

Blue streak holdup

Did you hear the one about this hot outfit that had Blue Streaked an item? It wasn't long before they were notified that the item was available for pickup.

It seems it was a Thursday and the next day was a holiday. So what does this outfit do but say it won't be able to pick up the part because the holiday was coming up and that meant a bunch of guys would be off on 72-hour passes.

That might be all right with other kinds of requisitions—but not a Blue Streak. A Blue Streak gets fast action from the start. And it wants to get the same kind of action at the finish—at your end of the supply line.



Only so long

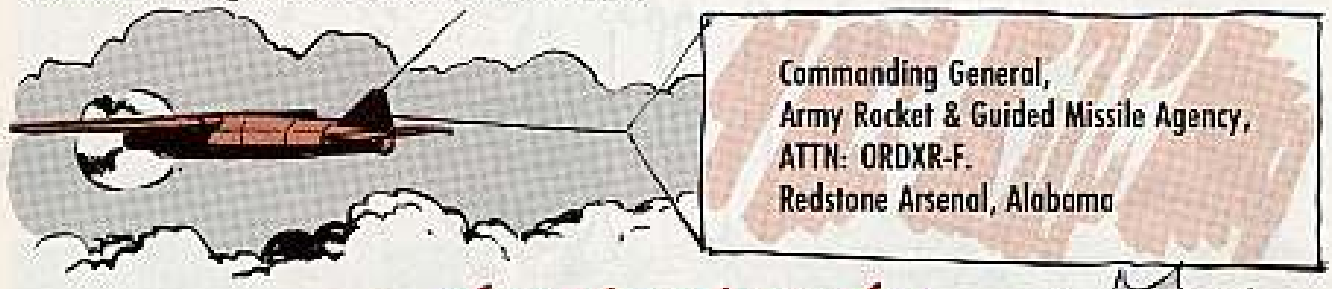
You guys who take care of putting the "Receipts and Expenditures of Large Rockets and Guided Missiles" reports (RCS ORD-30) on to DA form 1527-R know that the job's done monthly. But there's nothing in any AR that tells you how long to hold on to the reports. You can't go wrong if you keep 'em in your battery area as long as they're needed for local purposes. And when you go to get rid of the reports, do it the way it says in AR 380-5—seeing's how they're classified "Confidential."

Wax on the tracks

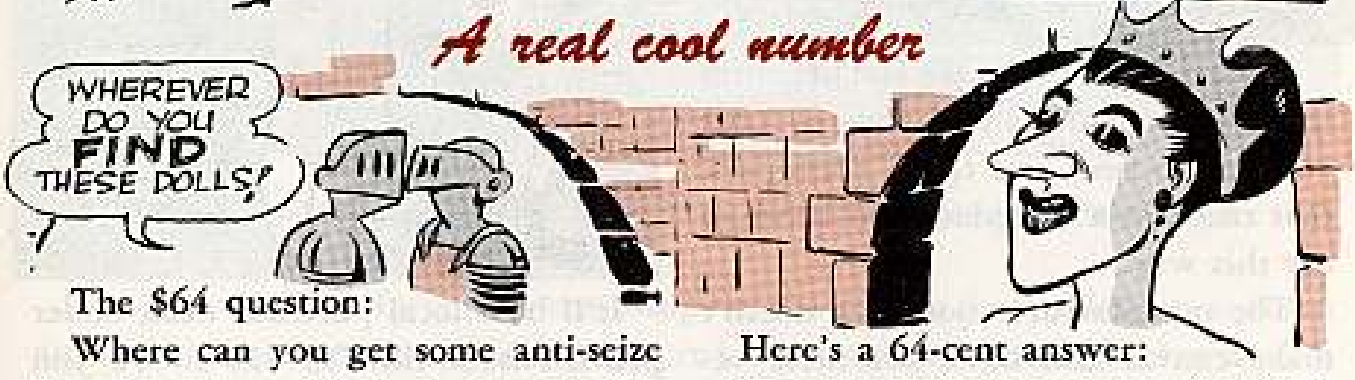
Wax, paraffin, technical. That's all you need to call a halt to sticking zipper slides on your Nike-Hercules track radome covers. Hit the slides now and again with wax you can get from Quartermaster. FSN 9160-285-2044 gets you a one-pound cake. And it won't hurt to attach a note to your requisition telling the supply people why you need the wax. It's listed in SM 10-1-C4-1 (Federal Supply Catalog C4-1, FSC Group 91, Sept. 1959).

New address

Take a listen . . . you outfits that maintain the OQ 19-series aerial target. You've been sending letters asking for technical help . . . for answers to supply problems, etc., to Raritan Arsenal—but from now on you want to use a new address. That would be . . .



A real cool number



The $64 question:

Where can you get some anti-seize thread compound that you can use with liquid oxygen-nitrogen generating and charging equipment?

Here's a 64-cent answer:

You can get it through regular Engineer repair parts supply channels under FSN 8030-778-6099.

Lock that spat

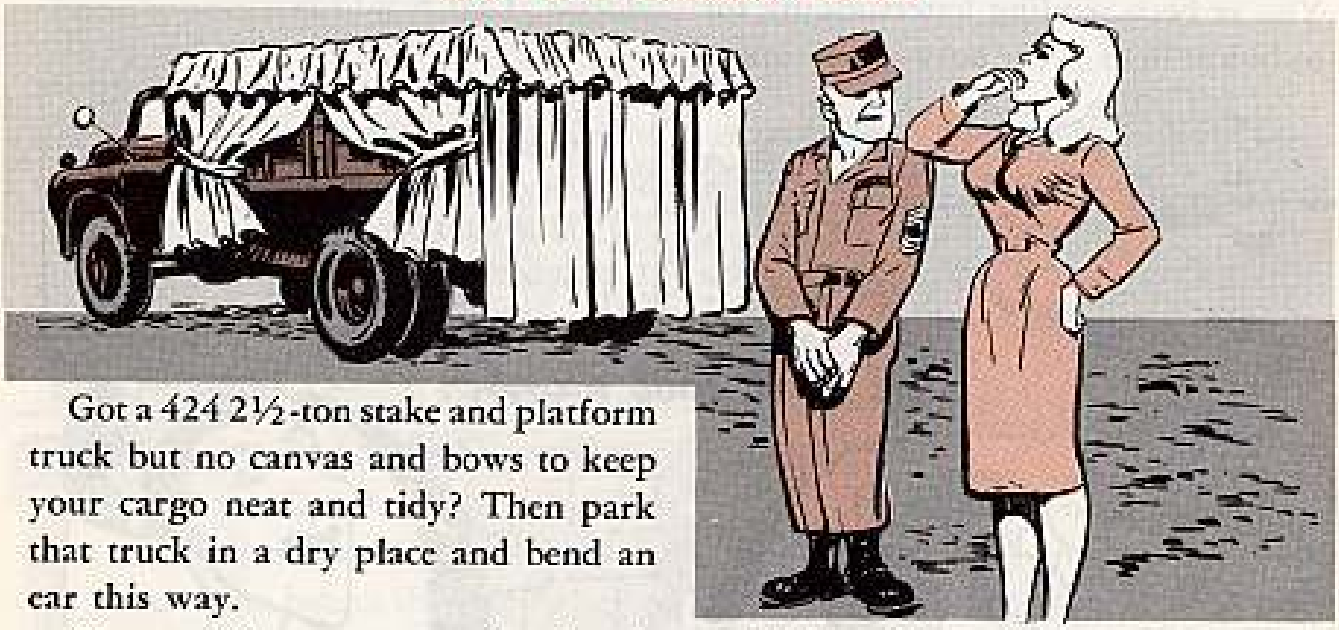
Any time you move a M56 SPAT (serial number 319 or under)—even if it's only an inch—be sure to lock the traverse. Moving a SPAT with an unlocked gun can tear up the traversing mechanism and break teeth off the top carriage gear ring. To remind you, stencil this on the inside of the windshield frame like TB 9-2350-213-10/1 (12 May 59) says:

"WARNING: ENGAGE TRAVERSE LOCK BEFORE MOVING VEHICLE."

Help is on the way from another direction. A new, beefed-up, housing FSN 2520-767-9073 (Ord Part No. 108688-42) now stocked by your support unit, should end some of this traversing mechanism damage.

BUT STILL, **LOCK THE TRAVERSE BEFORE YOU MOVE.**

M424 under cover

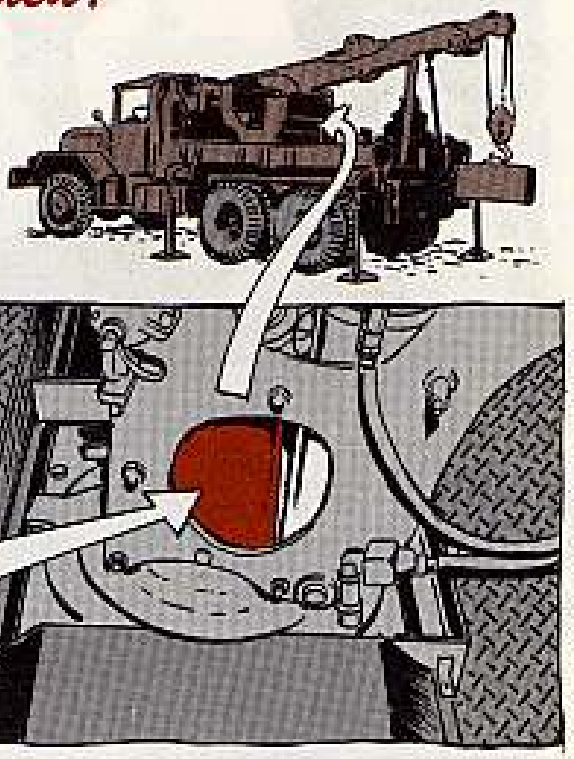


Got a 424 2½-ton stake and platform truck but no canvas and bows to keep your cargo neat and tidy? Then park that truck in a dry place and bend an ear this way.

The manufacturer normally doesn't make canvas and bows for these vehicles. But it's likely that a supplier can be found in your area who'll make 'em up.

It'll be a local purchase deal, under provisions of SR 715-110-50 (2 Jun 54). So take it up with your Ordnance support. Give 'em a full description of the truck with all dimensions.

Getting loaded?



So . . . if the M62 wrecker is your vehicle remember:

The truck's not going to tip if you have all four outriggers down and set up the right way . . . like TM 9-8028 says.

You give the pivot post a break instead of breaking it by going along with the boom weight limits on the safe load chart.

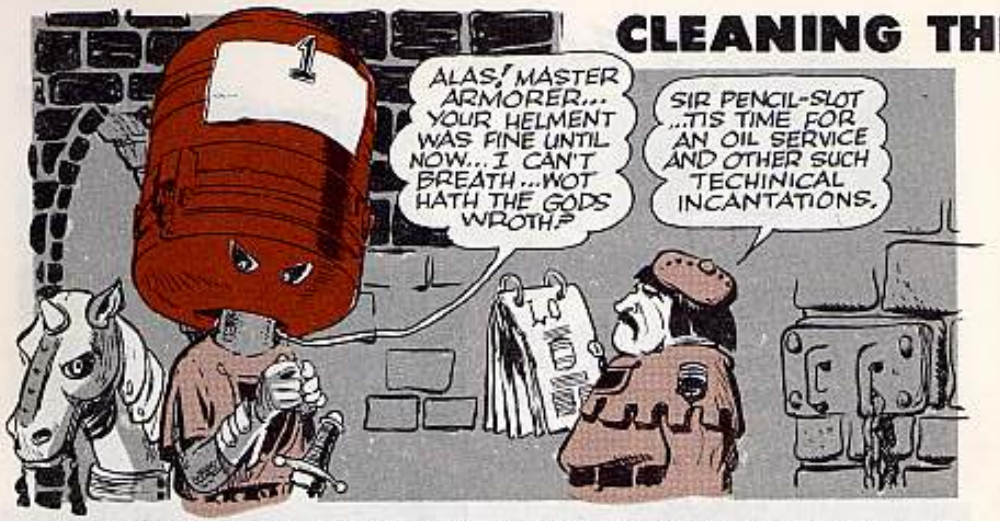
Nope on the big slope

The M2 Corporal erector may look like nothing can get in its way. Sure . . . it can go most places—that's for sure.

But some guys are forgetting one thing—you don't run that vehicle up or down any more'n a 15 percent slope for long runs. A coupla minutes—OK—but no dice for a steady grind. The electrical circuits aren't built to take it.

Another thing . . . the erector'll be hurting if you try to raise a missile with the erector sitting on anything more'n a 10 percent slope.

CLEANING THE CLEANERS



If you don't breathe, you don't live—right? Same way almost with your track vehicles. You've got to keep your main engine's air cleaners in the best condition . . . to keep dirt and grit from being drawn into the engine. If not, your engine's moving parts will wear fast from what is known as abrasive action.

If the cleaner's oil level is too high the fuel-air mixture is going to get all snafu'd by oil being sucked into the fuel system.

If the oil level is too low, the cleaners won't filter out the engine-killing particles of dirt as the air passes over the oil. Also, a dirty screen mesh wire will cut down on the flow of air to your engine's fuel system.

So's to keep your air cleaners working for you instead of against you, here's what to do:

1. Most track vehicles have two air cleaners for the main engine—remove the oil pan from them by unsnapping the latch on the side. (On some air cleaners, unscrew the wing nuts that hold the metal bar under the oil pan.) Lift the oil pan, twist it to the right, lower it and take it out.

2. Remove and wash the filter screens with dry cleaning solvent, FSN 6850-264-9038 (5-gal) or mineral spirits paint thinner, FSN 8010-242-2086 (5 gal).

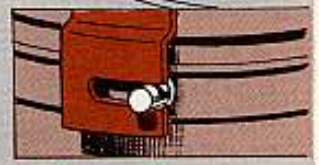
3. Dip your fingers into the pan and feel for sludge on the bottom. If there is no sludge put the pans back on the air cleaner. If there's a layer of sludge as much as 1/8-in deep, drain off the top clean oil and wash out the dirt.

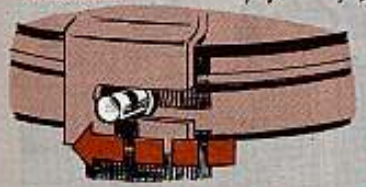
4. Wash the pans with solvent. Use dry cleaning compound solvent or a mineral spirit paint thinner.

5. Refill each pan until the oil's even with the OIL LEVEL line. It's OK to use used oil. Use OE 30 oil when the temperature range is above +32 degrees...OE 10 when the temperature settles between +40° and −10°...and OES when it dips from 0 to −65°.

6. Replace the filter element and install the oil pan by holding the oil pan in place under the air cleaner.

Then, slide the clips on the top edge of the pan into their slots in the air cleaner...





...and twist the pan to the left until it locks in place.

Make sure the air cleaner gaskets are in place before installing the oil pan.

Slip the safety ring over the handle of the latch. Snap the latch in place on the side of the air cleaner.

AIRING THE AUXILIARY

If you have a Li'l Joe, its air cleaner may be small, but it still needs to be cleaned. So, if it's necessary ask the gunner to traverse the turret so that you can get to the auxiliary engine's air cleaner. Then:

1. Unsnap the two latches on the side of the air cleaner.

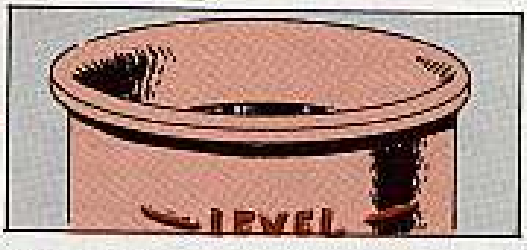
3. Reach up under the cleaner, squeeze the clip and pull out the filter screens.

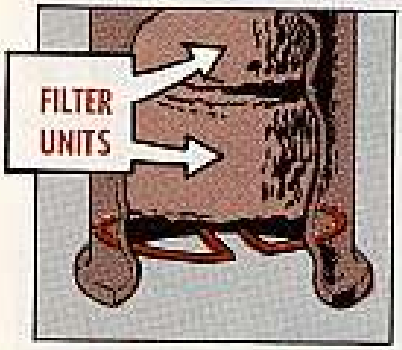
4. Use your fingers to feel for dirt and grit on the bottom of the oil pan. If there's as much as ⅛-in of dirt or grit do not install the oil pan on the air cleaner again until you clean the oil pan.

5. Check the filter screen. If it's clean, put it back. If it's dirty, clean it with solvent.

6. Clean the oil pan with solvent. If there's no solvent around, use rags.

7. Fill the oil pan to the bead level. You can use used oil here, too.





8. Squeeze the clip, push the filter up in place and release the clip.

9. Holding the oil pan in place under the air cleaner, hook the wire hooks under the lip of the pan.

10. Snap the latches on to the side of the air cleaner.

HELPFUL HINTS

Put the same weight oil in your air cleaner as the oil in your engine. In fact, it can be the same oil you drained from the engine when you changed. See your vehicle's LO for the right OE to use.

Regardless of time or mileage . . . you want to change oil when the dirt is as much as ⅛-in deep in your Li'l Joe air cleaner and in your main engine air cleaner. Even if it means doing it more than once a day. Pay special heed to the info in your LO Note 1 about "Desert or Extremely Dusty Operation."

Make darn sure that the filters are seated on their gaskets when they're put back.

This as absolutely the latest official dope and you can rely on it.

GET MORE BOUNCE TO THE OUNCE . . .

DON'T SNUB YOUR SNUBBERS

That's quite a hunk of iron you got wrapped around you when you're riding in your M48A2 medium tank. Being as heavy as it is there's one thing that rules whether you're going to have a smooth ride or a hard one . . . it's your tank's snubbers.

The snubbers take up the shock that hits your vehicle. So's to stop your stomach from becoming as shook up as a malted milk and to keep hard jolts from snapping torsion bars and other parts of the suspension—here's what you might do to check the snubbers on each side of your M48A2 tank:

1. Check snubbers immediately after a test run of at least 5 miles of high speed operation or 4 miles cross-country.
   Touch a finger lightly to each snubber at the center of the tube to see if it's hotter'n the hull near the snubber. If the snubbers are working right they will be much hotter than the hull.

   Caution: To avoid a bad burn, touch the snubbers **lightly.** They get hot enough to fry eggs, let alone your fingers. Let 'em cool at least 30 minutes before taking a firm hold.

2. The front snubbers have four bolts on the top bracket and four on the bottom, the other two snubbers on each side have three bolts on the top bracket and four bolts on the bottom. Make sure that none of the bracket bolts are loose or missing. If a bracket bolt is missing get yourself a new one and bolt it in tight . . . real tight, about 250 ft-lbs torque.

3. Check for cracked mud or shiny metal where the bolt touches the bracket. If the bolt is loose, tighten it with a $^{15}/_{16}$-in socket and $^{3}/_{4}$-in drive T-handle.

4. Kick or shake each snubber. If the snubber rattles, report it.

5. Be sure that there's a cotter pin in the top and bottom mounting pins of each snubber. If a cotter pin is missing or broken, get yourself another one. Then, push it through the mounting pin and spread the ends.

It's best to make these checks after operating cross-country or at every Q services.

BEEF UP YOUR FIREFIGHTERS

Gets hotter'n the hinges sometimes on the desert or back in the boondocks. But it can get even hotter there . . . or in a snowbank . . . when your combat vehicle engine catches fire.

Sure . . . you've got fire-fighting gear to put out any blaze that starts. But have you checked it lately to see if it's fit to fight?

On maneuvers a while back one M48 tank crew got a bit redfaced a coupla ways when they pulled those extinguisher handles and there wasn't even a fizz. Wound up waving down a passing truck to get help. And that tank engine was so well-done it had to go for a complete overhaul.

Seems their fire-fighting gear had lost a lot of CO_2 . . . and a lot of weight that hadn't been missed until that fire started.

Here's what you do to keep yourself and your combat vehicles from getting burned . . . one way or t'other:

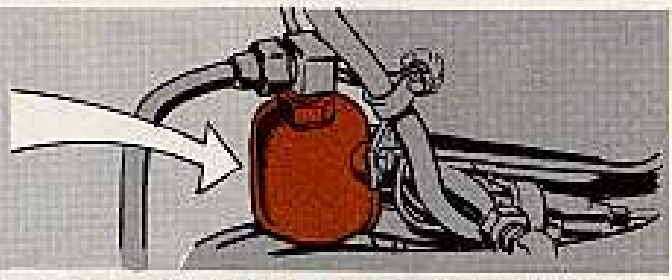
Every day—

1. Check your fixed fire extinguishers for broken seals. If you find one broken . . . on the remote control handle or on the inside control . . . deadline the vehicle until the extinguisher is weighed to see if the charge is too low.

2. Take a special squint at the inspection tag, DA Form 253, inside its waterproof holder, and the cylinder recharging data card.

3. Make sure you've got a spare safety disk and washer (in a waterproof envelope on the cylinder). They're not for you to replace, but your support may need 'em in a hurry.

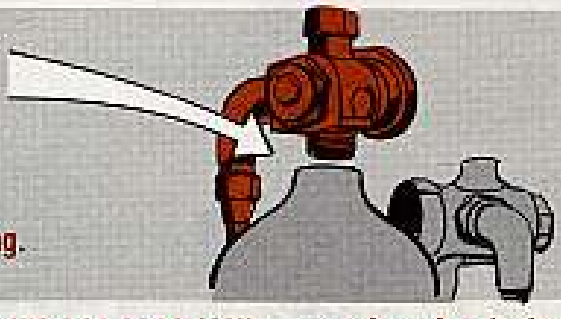
4. Then lay an eye on the mounting brackets and extinguisher controls to see if they're loose. And on the discharge nozzle to see if they're blocked up.



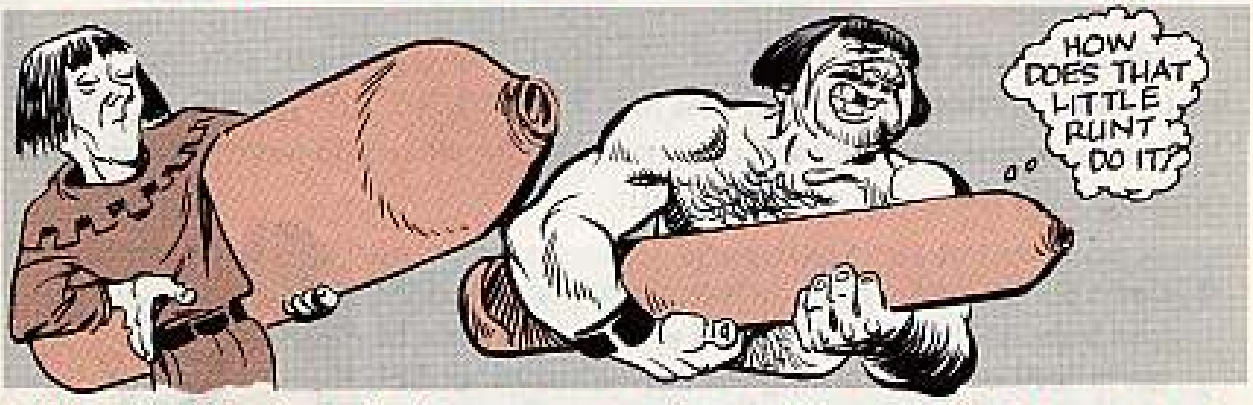
Every quarter—give those fire bottles a daily check . . . plus these extra services . . . if your support or local SOP OK's it:

1. Disconnect the control head and pressure lines from the valves on top of the cylinders. Then disconnect the discharge lines.

2. Take the extinguisher down from its mounting.



3. Using a common spring scale . . . like FSN 6670-164-0564 (QM) . . . weigh each cylinder separately, and mark the weight and date on DA Form 253. (Weight EMPTY and weight FULL are stamped on the extinguisher valve. Subtract weight EMPTY from weight FULL to get the weight of the charge. If 10 percent of the charge is gone, see that the extinguisher gets recharged pronto.)



4. If the safety disk's damaged, ask your support to replace it and the washer. The disk gets replaced only **after** the extinguisher's completely discharged.

5. With the remote control gear removed from all the vehicle's extinguishers, pull the outside discharge handle. If it drags or binds, unfreeze it before you re-install the extinguishers.

6. Rewind the cable in the control head, see that the arrows line up, and replace the head.

7. Make sure the extinguishers are re-sealed. Use a type made of thin copper wire with lead seal that'll break easy when you give it a quick pull in an emergency.

8. Give the portable extinguisher in the crew compartment a check-out, too. Fixed extinguishers only take care of fire in the engine compartment.

That way, you're ready if ol' smokey starts to blaze.

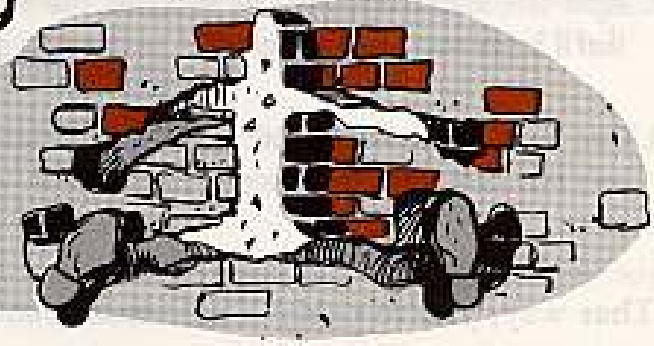
The automatic transmission of 2½-ton G749 trucks can slip into gear all by itself under certain conditions, just like TB 9-8024-1 (19 Jan 56) says.

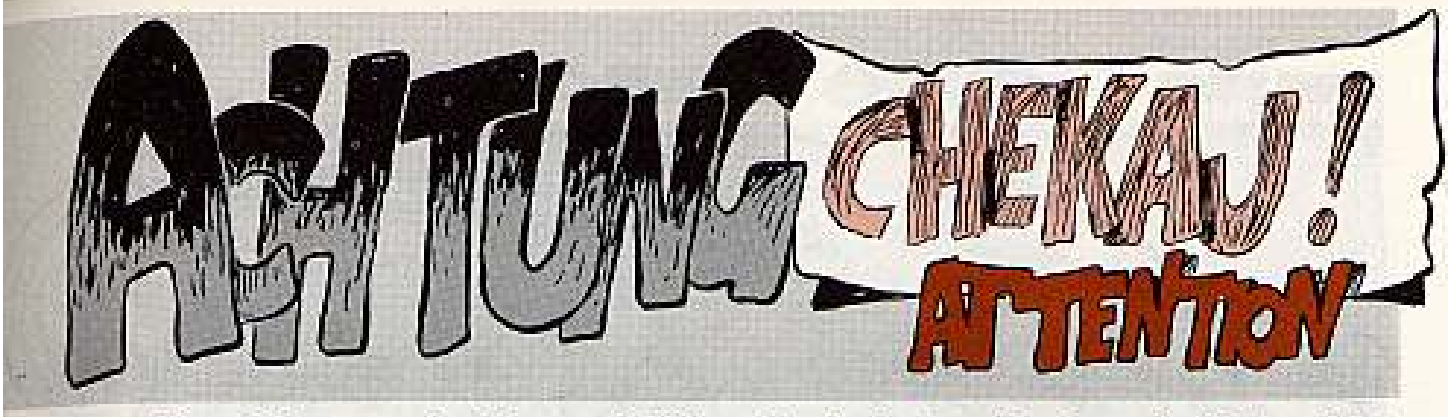
To avoid smashing yourself or somebody else when you have to keep the engine running with the truck at a standstill:

1. Always put the transfer and transmission in neutral and set the hand brake until you're ready to roll. If you have to let it idle, be sure to throw on the neutral safety lock that MWO ORD G749-W34 put on your truck shift tower 'way back. Don't leave the cab **until** you **turn off** the engine. If you need to check the transmission oil level, take the necessary precautions and check the oil like it says in LO 9-2320-210-10 (19 Jan 59).

2. The hand throttle shouldn't be pulled out any more than you absolutely need to keep up the engine at idle speed.

3. Don't let anybody crawl under the vehicle or walk in front of it while the engine is running.

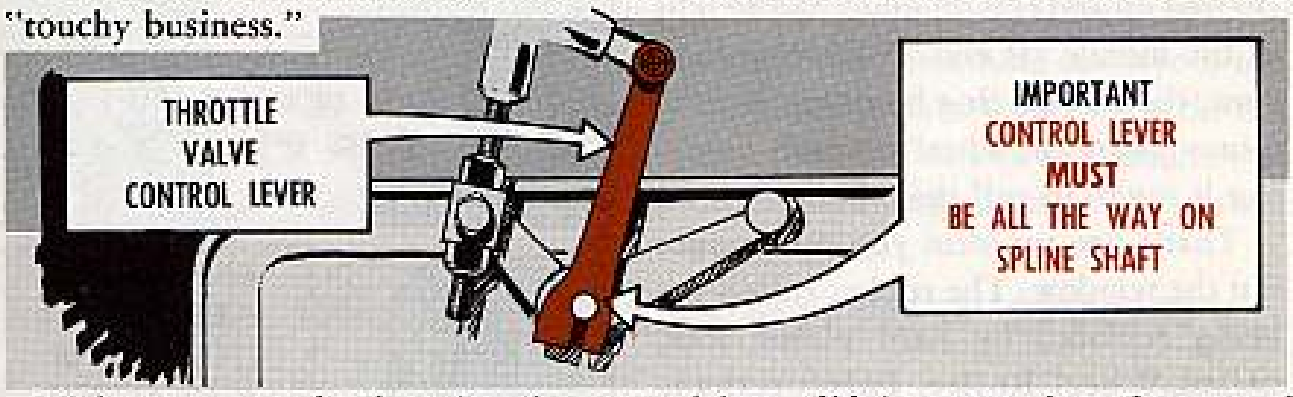




Your life, or anybody's, could "hang in the balance" unless the Hydra-Matic transmission linkages are adjusted, positioned or inspected . . . just so.

A check and look-see at that TB 9-8024-1 is a must for every driver and mechanic on these trucks. Besides telling you to always set your parking brake before the engine is started the TB also says only authorized mechanics'll make with the adjusting and positioning of these links.

The reason a mechanic should be real familiar on this score is because it's really "touchy business."



F'rinstance, say the throttle valve control lever didn't get put into the control valve spline shaft far enough, it'll allow the shift lever to wander off the spline and you'll lose control of the shift range. You'll put your shift lever into neutral, but that's not what you'll get on the shift pattern in the transmission. Guess you see the picture now??? You just might be in a forward gear . . . right?

Follow the TM 9-8024 to a tee when adjusting the linkages—no short cuts. When the throttle valve control lever is put on, make sure it's shoved on until the end of the shaft is flush with the outside surface of the lever, and then tighten up the lever bolt real tight.

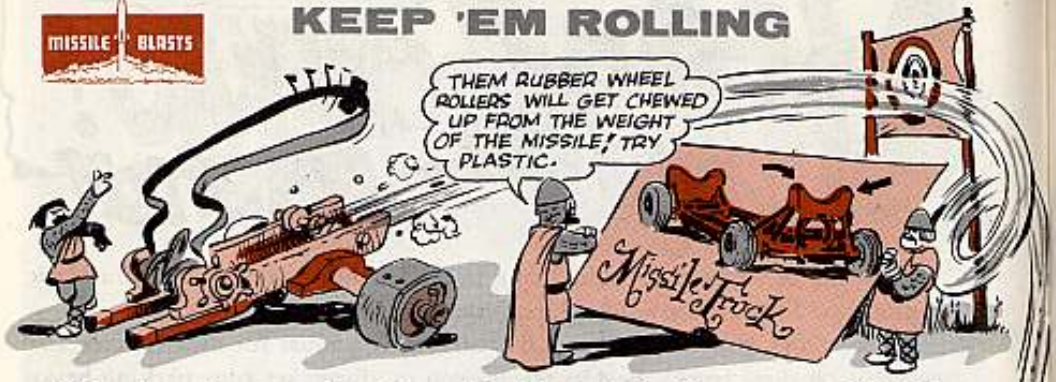
Check the pins, levers, yokes, etc., for signs of wear and get new parts pronto if needed. If the splined ends are bad, get support to help out—even if this means deadlining the vehicle.

Making sure the serrations in the levers and the shafts match up and not forcing them into place, is a must.

All this Dope applies to 2½-ton cargo trucks M135 and M211, dump truck M215, gasoline tank truck M217, shop van truck M220, truck tractor M221, and water tank truck M222.

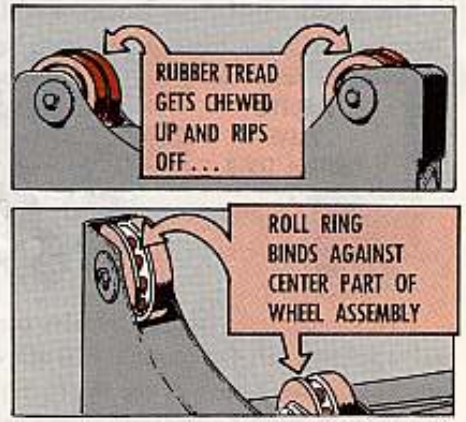
MISSILE BLASTS

KEEP 'EM ROLLING



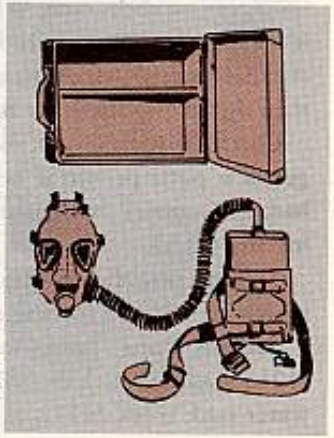
How about it . . . are those forward rubber-wheel rollers on your Nike-Hercules XM 441E1 body section truck giving you a hard time?

You know . . . the rubber tread gets chewed up and rips off under the weight of the missile aft end. When this happens, the aft roll ring binds against the center part of the wheel assembly—making it tough to roll the missile.



That's one problem you can bounce out the window. The rubber rollers are being replaced by hard plastic jobs, called, Wheel, Roller, Polyeurethane thread, FSN 2530-773-6839. See your support unit about putting on the new rollers. It's their job.

M21 GAS MASK

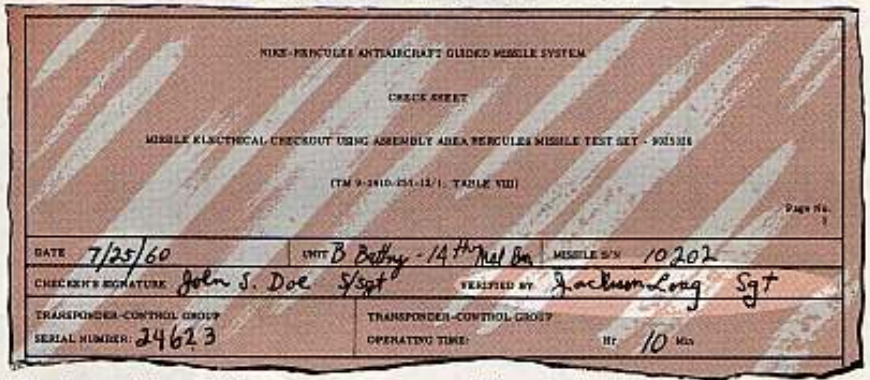


Missile-men, and anybody else handling liquid rocket propellants, take a look at TM 3-4240-218-15 (6 July 60), for the story on the M21, the new rocket propellant gas mask.

The new mask's convenient for you when you're operating in an area where there's only a low concentration of fuel vapors.

It doesn't replace your old M15 compressed air breathing apparatus, which you depend on when the air's really foul . . . but, the M21 will hold up through five-minutes of heavy vapors . . . so's you can scoot away from big spills or leaks.

DOUBLE CHECK


NIKE-HERCULES ANTIAIRCRAFT GUIDED MISSILE SYSTEM

CHECK SHEET

MISSILE ELECTRICAL CHECKOUT USING ASSEMBLY AREA HERCULES MISSILE TEST SET - [illegible]

(TM 9-2810-251-12/1, TABLE VIII)

Page No. 1

DATE 7/25/60 | UNIT B Battry - 14th Mal Bn | MISSILE S/N 10202

CHECKER'S SIGNATURE John J. Doe S/Sgt | VERIFIED BY Jackson Long Sgt

TRANSPONDER-CONTROL GROUP SERIAL NUMBER: 24623 | TRANSPONDER-CONTROL GROUP OPERATING TIME: Hr 10 Min

There's nothing to it.

You fill out the DA Form 9-series check sheets on the assembly and maintenance of your Nike-Hercules missile. Then you sign the "verified by" block . . . or have the first guy who passes by do the signing.

There's nothing to it. But that's the wrong way.

When you make the checks, you want another man breathing down your neck. He wants to know what the checks're all about. And, if he's on the ball, he won't do any verifying unless he sees you make every check.

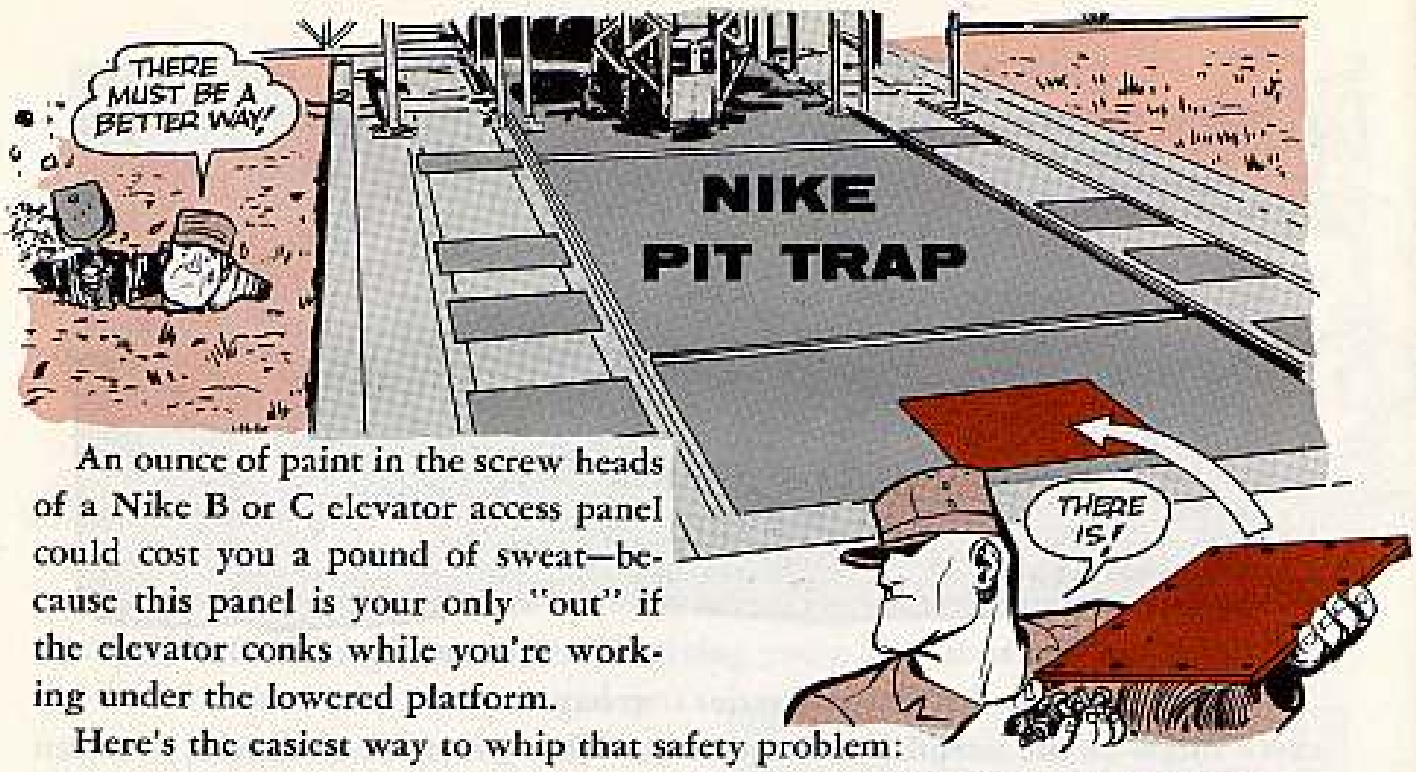
A SHORT NIKE COMPUTER STORY...

BY: R. U. CHECKING

You know what they say . . . never put off 'til today what you should do yesterday.

And that sure goes for your Nike computer over-load checks.

Yet . . . some guys'll say to themselves, "I'll leave well enough alone." That's bad when things are going along normal-like. But it's real bad when the computer's not predicting right because of a bum part—like a tube—that you could spot in your checks.



An ounce of paint in the screw heads of a Nike B or C elevator access panel could cost you a pound of sweat—because this panel is your only "out" if the elevator conks while you're working under the lowered platform.

Here's the easiest way to whip that safety problem:

Simply replace the original flathead screws with a fresh set of hex-head capscrews. Just ask Ordnance for the needed number of Screw, Cap, hex-head FSN 5305-057-1028.

Even if the hex-heads get paint-coated, it's no sweat to turn 'em out and remove the plate.

DON'T USE THE MAIL

Whoa . . . stop . . . come to a screeching halt.

You special weapons outfits that wind up with more classified publications than you need . . . don't send 'em back to the AG publications center in St. Louis.

This is bad business 'cause they're classified. And the cost of handling a coupla publications is a lot of times higher'n the pubs themselves—classified material, or no.

If you have less than 10 copies of one publication, get rid of 'em according to the word in AR 380-5. And, if you have 10 or more, let the AG publications center people know. They're at 1655 Woodson Road, St. Louis 14, Missouri. They'll send word on what to do.

And . . . any time an outfit's going to lose its special weapons mission, it wants to get word to the publication center by using section III of DA Form 12-6. That'll stop the flow of special weapons pubs.

A selected list of recent publications of interest to Organizational Maintenance Personnel.

TECHNICAL MANUALS

TM 1-1H-19C-1 Oct.
TM 1-1L-19AITID-4-20P Dec.
TM 1L-20A-4-20P Dec.
TM 1-1L-230-4-20P Dec.
TM 3-1040-205-12 Nov Service Unit, Flame Thrower, Truck-Mounted, M4.
TM 3-1040-214-12 Nov Irritant Gas Disperser, M3.
TM 5-3695-202-15 Nov Saw, Chain Elec 24 In. L-M, Strunk Mod G2E.
TM 5-3805-211-10 Nov Grader, Road, Diesel, Letourneau-Westinghouse Mod 220.
TM 5-3820-206-15 Nov Breaker, Paving Pneumatic Mod R-1424.
TM 5-3895-232-25P Nov Kettle, Heating, Bituminous; Mod 750-US.
TM 5-4120-214-25P Dec Air Cond, Mtd on Mod M109 Van; AC, 208V, 3Ph, 60Cy.
TM 9-1055-212-12 Nov 318-MM Rocket Launcher XM-34, Trailer MX-449, and Handling Unit.
TM 9-1055-212-20P Nov 318-mm Rocket Launcher XM-34, Transport Cart XM-449, and Handling Unit.
TM 9-1300-205 Sep Ammunition For Mortars.
TM 9-1340-204-20P Oct Ammunition, Rocket, 318-mm, XM-51.
TM 9-2320-204-20P Nov Recovery Vehicle M51.
TM 9-2320-222-10 Nov Recovery Vehicle M88.
TM 9-2330-238-14 Oct Chassis, Semitrailer: 6-Ton, M-295A1 and Van: M-447.
TM 9-2330-245-24P Dec Chassis Trailer 1½-Ton, M103A1 and M103A3.
TM 11-1550-200-20P Nov Drone, Surveillance OA-2343/USD-1.
TM 11-5410-205-12P Dec Shelter Electrical Equipment.
TM 11-5507, C1, Dec Rotary Converters PU-134/U, 140, 141, 143.
TM 11-5805-242-25P Dec Telephone Set TA-236/FT.
TM 11-5805-254-15 Nov Telegraph-Telephone AN/TCC-14.
TM 11-5805-275-20P Nov Repeater, Telephone AN/TCC-5 and AN/TCC-22.
TM 11-5805-311-12P Nov Amplifier, Audio Frequency AM-904/G.
TM 11-5805-315-12P Nov Chair Relay Rack, Telephone RE-164/G.
TM 11-5810-216-12P Dec Controller Test Set TSEC/ST-1/ST-1.
TM 11-5815-205-25P Nov Central Office, Teletypewriter, AN/MGC-17.
TM 11-5815-238-20P Nov Teletypewriter Sets AN/GGC-3 and AN/GGC-3A, Reperforator-Transmitters Teletypewriter TT-76/GGC, TT-76A/GGC.
TM 11-5815-275-20P Nov Facsimile Equipments RC-120, RC-120A & RC-120B.
TM 11-5820-219-12P Nov Restorers, Pulse Form TD-68/F and TD-68A/G.
TM 11-5820-334-10 Nov R-392/URR.
TM 11-5820-343-20P Nov Power Supplies PP-1126/U, PP-1127/U & PP-1128/U.
TM 11-5820-393-20P Nov Receiver-Radio R-853/URR.
TM 11-5820-395-12P Nov Radio Transmitting Set AN/URT-7C and AN/URT-7D.
TM 11-5820-396-20P Nov Power Supplies PP 327/GRC-9Y, PP 327A/GRC-9Y and PP 327B/GRC-9Y.
TM 11-5826-209-15 Nov Antenna Support AB-461/GL.
TM 11-5835-207-20P Nov Recorder-Reproducer RD-318/U.
TM 11-5835-215-20P Dec Recorder-Reproducer Sound RD-31C/U and RD-31D/U.
TM 11-5840-217-20P Nov Radar Set AN/TPS-25.
TM 11-5895-223-25P Nov Communications Operations Central AN/MSC-31.
TM 11-5895-244-20 Oct Test Set Electronic Circuit Plug-in Unit TS-1209/MSQ.
TM 11-5895-246-20P Nov Surveillance System, Airborne Drone AN/USD-1.
TM 11-5895-284-20P Nov Radar, Surveillance Set AN/APS-94.
TM 11-6115-219-15P Nov Generator Set, Gasoline Engine, Trailer Mounted PU-248/U.
TM 11-6115-223-15P Nov Generator Set, Gasoline Engine, Trailer Mounted PU-294/G.
TM 11-6115-225-15P Nov Generator Set, Gasoline Engine, Trailer Mounted PU-332/G.
TM 11-6115-226-15P Nov Generator Set, Gasoline Engine, Trailer Mounted PU-269A/G and PU-269B/G.
TM 11-6130-209-12P Nov Power Supply, PP-1499/G.
TM 11-6130-210-10 Oct Battery Charger PP-775/U.
TM 11-6130-222-15P Dec Battery Charger Gen Set, PP-1087/G.
TM 11-6140-202-15 Nov Battery, Storage BB-422/U.
TM 11-6615-202-20P Nov Automatic Pilot AN/ASN-23.
TM 11-6615-205-20 P Dec Compass-Controlled Directional GYRO System Type MA-1.
TM 11-6625-214-24 Oct Signal Generator AN/URM-52 and AN/URM-52A.
TM 11-6625-315-20P Nov Test Set Group Radar OA-2228/TPS-25.
TM 11-6625-346-20P Nov Distortion-Noise Level Test Set TS-705/U & TS-705A/U.
TM 11-6625-355-20P Dec Audio Oscillator TS-421/U & TS-421A/U.
TM 11-6625-359-20P Dec Spectrum Analyzer Set AN/UPM-84.
TM 11-6625-361-12P Dec Test Facilities Kit MK-387/MPM-49.
TM 11-6625-369-12P Nov Indicator, Standing Wave Ratio AN/USM-37A.
TM 11-6625-398-12P Dec Stroboscope TS-505B/U.
TM 11-6625-398-24 Sep Test Set Radar AN/APM-66.
TM 11-6730-208-10 Oct Projector Set AN/PJP-1.
TM 11-6740-206-20P Nov Drier, Photographic Print PH-679/U.
TM 11-6740-221-25P Nov Printer, Contact, Photographic PH-131(1).
TM 11-6760-207-20 Nov Mount, Aircraft Camera LA-140A.
TM 11-6940-203-12 Dec AN/URA-TI, AN/URA-TIA, and AN/URA-TIB.

LUBRICATION ORDERS

LO 3-1040-205-12 Nov Service Unit, Flame Thrower, Truck-M13, M4.
LO 5-3805-211-20-1 Nov Grader, Road: Diesel Mold - Letourneau-Westinghouse Mod 220.
LO 5-3805-211-20-2 Nov Grader, Road: Diesel - Letourneau-Westinghouse Mod 220.
LO 5-3805-212-20-1 Dec Intrench Mach, Combat: Unit Rig Mod 4262.
LO 5-3805-212-20-2 Dec Intrench Mach, Combat: Unit Rig Mod 4262.
LO 5-3805-212-20-3 Dec Intrench Mach, Combat: High Speed; Unit Rig Mod 4262.
LO 5-3805-213-20-1 Nov Loader, Belt Type: Gas Driven; Adams Dim, Letourneau-Westinghouse Mod 30, Traveloader.
LO 3805-213-20-2 Nov Loader, Belt Type: Gas, Letourneau-Westinghouse Mod 30, Traveloader.
LO 5-3805-213-20-3 Nov Loader, Belt Type: Letourneau-Westinghouse Mod 30, Traveloader.
LO 5-3805-219-15-1 Dec Loader, Scoop Type: Diesel 2½ Cu Yd Hough Mod H-90M.
LO 5-3805-219-15-2 Dec Loader, Scoop Type: Diesel 2½ Cu Yd Hough Mod H-90M.
LO 5-3805-225-12-1 Dec Loader, Scoop Type: Gas ¾ Cu Yd Clark Mod 55A-M.
LO 5-3805-225-12-2 Dec Loader, Scoop Type: Gas, ¾ Cu Yd Clark Mod 55A-M.
LO 5-3895-236-12-1 Dec Spreader, Conc: Concrete Machinery LTD Mod S-200-250.
LO 5-6115-291-15 Nov Generator Set, Diesel 60 KW, Lumen Inc. Mod 2207.
LO 5-9494-1 May Crane, Crawler Mtd, Diesel, 65 T, Manitowoc Mod 3900.
LO 9-2320-222-10 Nov Recovery Vehicle, M-88.
LO 5-9494-2 May Crane, Crawler Mtd, Diesel, 65 Ton, Manitowoc Mod 3900.
LO10-3930-405-20 Oct Tractor,Wheeled, Warehouse, Army Mod MHE-168.

FORMS

DA Form 9-90 Nov Herc Weekly Check Sheet
DA Form 9-91 Nov Herc Monthly Check Sheet
DA Form 9-94 Nov Herc Monthly Check Sheet
DA Form 9-100 Oct Daily Check Sheet -(Ajax) Pad.
DA Form 9-101 Oct Ajax Weekly Check Sheet
DA Form 9-112 Nov Herc Monthly Check Sheet
DA Form 9-113 Nov Herc Monthly Check Sheet
DA Form 9-187 Nov Spot Check Sheet, SS-10/11.
Da Form 9-188 Nov Spot Check SS-10/11 Simulator S-55.

MISCELLANEOUS

AR 735-35, C1, Dec.
DA Pam 310-4 Nov.
FM 6-40 Nov Field Artillery Cannon Gunnery.
MWO 5-3810-202-35/1 (Corrected Copy) Nov Carrier, Crane Shovel, 20 Ton GED Mod MUC.
MWO 5-6115-227-35/1 Dec Generator Set, Diesel 60 KW, AC, Skeleton Mod 501.
MWO ORD Y61-W16 Dec Erector M2: Installing Towed Vehicle Electrical Brake Release Cable (Corporal II).
SB 11-511 Dec Replenishment Auth. BA-472/U.
SIG 7 & 8-MX-2442/FSG-1 Nov.
SIG 7 & 8-OA-1409/FSG-1 Nov.
SIG 7 & 8-OA-1865/FSG-1 Nov.
TB 9-1430-253-20/4 Dec Tracking Stet: Changing Stamping on Plug, Herc.
TB 9-2320-211-20/2 Jul Chassis, Truck: 5-Ton, 6x6, M-39, M-40, M-40C, M-41, M-43, M-43C, M-139, M-139C, M-139D: Truck Cargo: 5-Ton, 6x6, M-41, M-54, M-55.

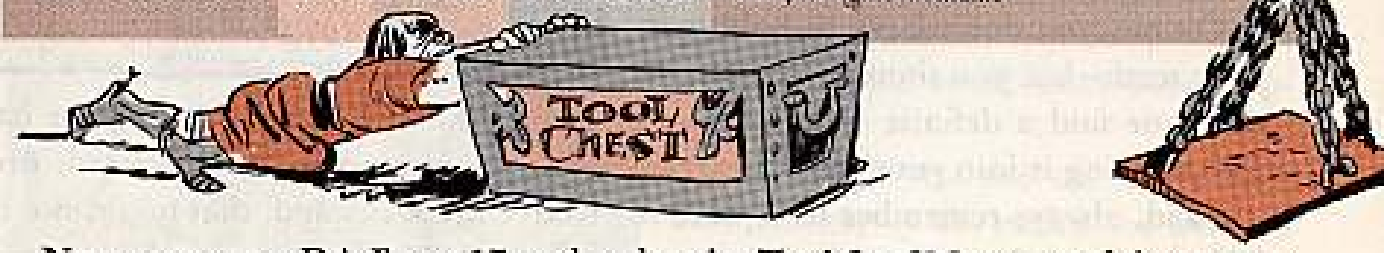
WHAT'S WHAT ON TOOL SETS

Maybe you too have been running into trouble trying to find the latest Supply Manual number for your tool sets. Here's something that should help.

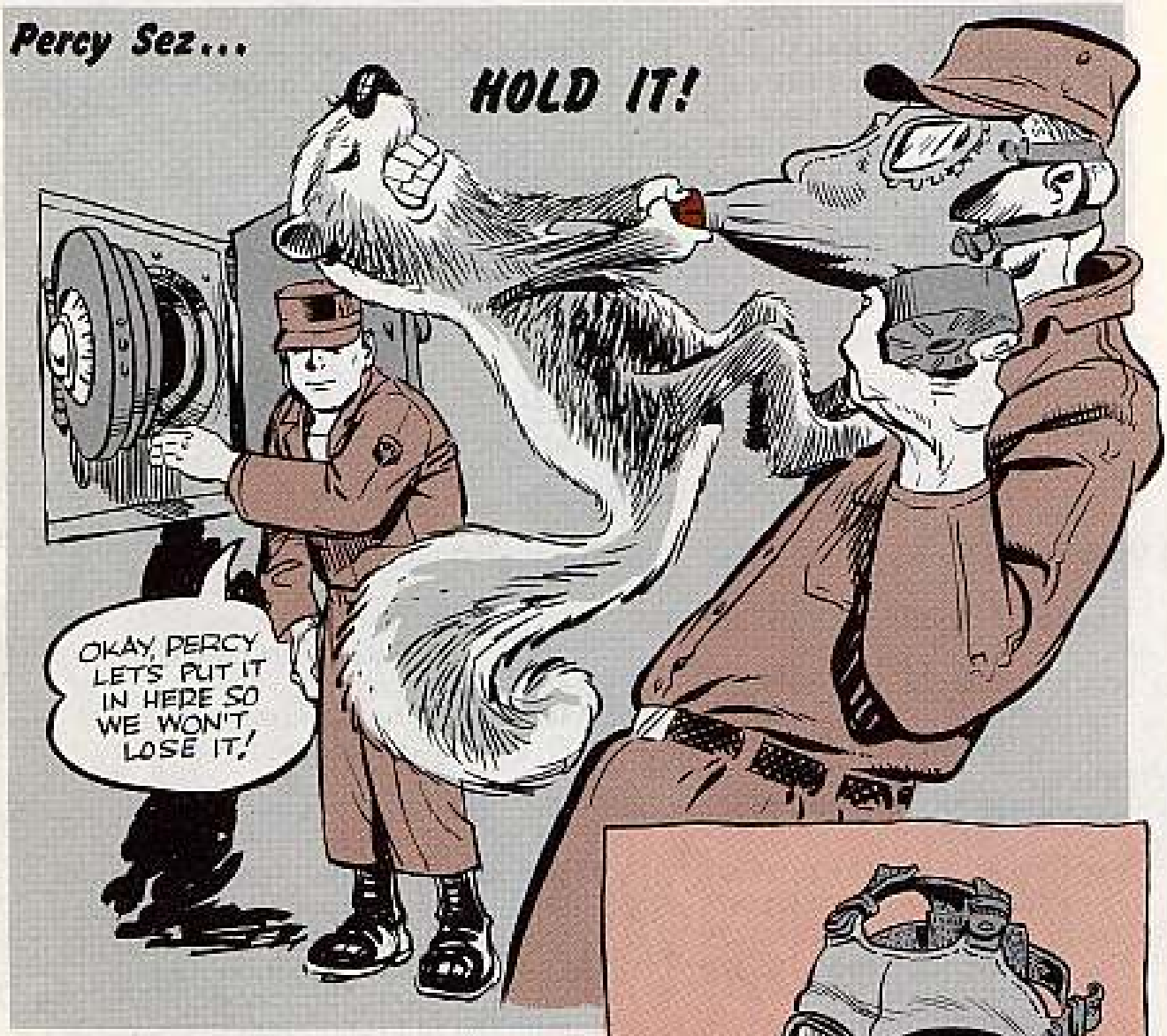
OLD	NEW	FSN	TOOL SET
SM 9-4-5180-J7-1	SM 9-4-5180-A01	5180-754-0654	No. 1 Common (2d echelon)
SM 9-4-5180-J7-2	SM 9-4-5180-A17	5180-754-0653	No. 1 Supplemental (2d echelon)
SM 9-4-5180-J7-3	SM 9-4-5180-A20	5180-754-0650	No. 2 Common (2d echelon)
SM 9-4-5180-J7-4	SM 9-4-4940-A08	4940-754-0743	No. 2 Supplemental (2d echelon)
SM 9-4-5180-J7-6	SM 9-4-5180-A03	5180-357-7778	(2d echelon), Set No. 5, oxy-acetylene
SM 9-4-4910-J7-7	SM 9-4-4910-A01	4910-252-0636	Heavy duty tire remover (obsolete)
SM 9-4-4910-J7-8	——	4910-754-0651	Set No. 9, Ground anchor (obsolete)
SM 9-4-4910-J7-9	SM 9-4-4910-A58	4910-754-0652	(2d echelon), Set No. 7, Hoist & Towing
SM 9-4-3470-J7-12	SM 9-4-3470-A01	3470-343-8864	Radio controlled aerial target
SM 9-4-5180-J7-13	SM 9-4-5180-A04	5180-034-8470	762-mm rocket, org maint & assembly
SM 9-4-5180-J7-14	SM 9-4-5180-A05*	5180-323-4947	Set A, Army aircraft, org maint
——	——	5180-323-4948	Set A, Supplemental
——	——	5180-323-4979	Set B
——	——	5180-323-5037	Set C
SM 9-4-5180-J7-17	SM 9-4-5180-A07	5180-695-0137	Guided missile maint: Nike Ajax & Hercules
SM 9-4-5180-J7-18	SM 9-4-5180-A08*	5180-545-8641	GM launcher-loading rack Nike Ajax & Hercules
SM 9-4-1375-J7-19	SM 9-4-4940-A09	4940-047-3750	Demolition equip. set, elec. & nonelectric
SM 9-4-1375-J7-20	SM 9-4-4940-A10	4940-047-3751	Demolition equip. set, nonelectric
SM 9-4-5180-J7-21	SM 9-4-5180-A09	5180-600-2597	318-mm rocket, org maint & assembly (Cancelled)
SM 9-4-5180-J7-22	SM 9-4-5180-A10	5180-611-7924	Medical Equip maint & repair: org maint
SM 9-4-5180-J7-23	SM 9-4-5180-A11	5180-631-9417	Missile shipping container: For aft section of missile body, M351, Corporal
SM 9-4-5180-J7-24	SM 9-4-5180-A12	5180-647-2880	Spl weapons: support, U. S. Army Engineers
SM 9-4-5180-J7-25	SM 9-4-5180-A13	5180-647-2882	Spl weapons: org maint (Nike-Hercules)
SM 9-4-5180-J7-32	SM 9-4-5180-A14	5180-607-3738	Missile ground handling equip: org maint, Corporal II, guided missile system
SM 9-4-5180-J10-1	SM 9-4-5180-A56	5180-754-0640	768.20 Armorer's
SM 9-4-5180-J10-2	SM 9-4-5180-A57	5180-357-7770	421.10 Small arms repairman
SM 9-4-5180-J10-4	SM 9-4-5180-A58	5180-754-0641	General mechanic's
SM 9-4-5180-J10-5	SM 9-4-5180-A59	5180-357-7727	442.10, 443.10, 424.10/Artillery repairman
SM 9-4-3432-J10-6	SM 9-4-3432-A04	3432-754-0661	442.10 Welder's Tool Kit
——	SM 9-4-3431-A06*	3431-754-0661	442.10 Welder's Tool Kit

*Not yet published

OLD	NEW	FSN	TOOL SET
SM 9-4-5180-J10-7	SM 9-4-5180-A60	5180-754-0643	441.10 Body and fender repair
SM 9-4-4910-J10-8	SM 9-4-4910-A57	4910-754-0655	634.10 Fuel & electrical system repair
——	SM 9-4-4910-A60	4910-754-0712	Tire rebuilder & inspector
——	SM 9-4-4910-A61	4910-754-0713	Vulcanizer's (Obsolete)
SM 9-4-5180-J10-13	SM 9-4-5180-A61	5180-357-7735	301.2 Fire control repairman
SM 9-4-5180-J10-14	SM 9-4-5180-A62	5180-357-7743	403.20 Instrument repairman
SM 9-4-5180-J10-15	SM 9-4-5180-A63	5180-754-0731	462.20 Canvas & leather: 462.10 Repairman
——	SM 9-4-5180-B17	5180-322-6053	234.1 Fire control, 233.2 Repairman
——	SM 9-4-5180-B18	5180-322-6055	1361 Guided Missile: Corporal
SM 9-4-5180-J10-25	SM 9-4-5180-A64	5180-034-8472	147.2 Rocket self-propelled 412.10 Gun: (762-mm)
——	SM 9-4-5180-B19	5180-092-9077	433.10 Guided missile: repairman (Nike)
SM 9-4-5180-J10-28	SM 9-4-5180-A65	5180-511-1950	Machinist's
SM 9-4-5180-J10-29	SM 9-4-5180-A66	5180-699-3594	141.10 Field artillery mechanic's 105-mm & 155-mm How.
SM 9-4-5180-J10-30	SM 9-4-5180-A67	5180-699-3595	141.10 Field artillery mechanic's 155-mm guns and 8-in How.
SM 9-4-5180-J10-31	SM 9-4-5180-A68	5180-699-3601	141.10 Field artillery mechanic's 8-in guns & 240-mm howitzers
SM 9-4-5180-J10-32	SM 9-4-5180-A69	5180-323-4915	685.10 Electrical repairman's: Army aircraft
SM 9-4-5180-J10-33	SM 9-4-5180-A70	5180-323-4692	671.20 Aircraft mechanic's: 672.20 Gen
SM 9-4-5180-J10-34	SM 9-4-5180-A71	5180-323-4913	688.10 Instrument repairman's: Army aircraft
SM 9-4-5180-J10-35	SM 9-4-5180-A72	5180-323-4909	684.10 Propeller & rotor repairman's: Army aircraft
SM 9-4-5180-J10-36	SM 9-4-5180-A73	5180-323-4891	687.10 Hydraulic repairman's: Army aircraft
SM 9-4-5180-J10-37	SM 9-4-5180-A74	5180-323-4876	686.10 Air frame repairman's: Army aircraft
SM 9-4-5180-J10-38	SM 9-4-5180-A75	5180-323-5114	679.4 Aircraft inspection: 679.5 Technical
SM 9-4-5180-J10-39	SM 9-4-5180-A76	5180-323-4944	781.1 Engine & power train repairman's: 676.10 Army aircraft
SM 9-4-5180-J10-40	SM 9-4-5180-A77	5180-695-0139	424.10 Turret mechanic's
SM 9-4-5180-J10-41	SM 9-4-5180-A78	5180-532-9112	253.10, 254.10, 232.10, 241.10, 242.10, 243.10, 244.10, 251.10, 252.10, 247, 248 Electronic repairman's
SM 9-4-5180-J10-43	SM 9-4-5180-A79	5180-611-7923	208 Medical equipment, maintenance & repair
SM 9-4-5180-J10-42	SM 9-4-5180-B20	5180-695-0138	192.2 Anti-aircraft artillery: 191.2 Mechanic
SM 9-4-5180-J10-44	SM 9-4-5180-B21	5180-545-8642	172 Mechanical assembler, guided missile
SM 9-4-5180-J10-45	SM 9-4-5180-B22	5180-545-8643	223.10 Electronic assembler, guided missile
SM 9-4-5180-J10-46	SM 9-4-5280-A01	5280-278-9919	Measuring tool set, Machinist's, No. 6
SM 9-4-5180-J10-50	SM 9-4-5180-A81	5180-313-3045	355.1 Electrician's: No. 1
SM 9-4-5180-J10-51	SM 9-4-5180-A82	5180-545-8645	355.1 Electrician's: No. 2
SM 9-4-5180-J10-52	SM 9-4-5180-A83	5180-625-7906	RCAT, Auto pilot control system mechanic
SM 9-4-5180-J10-53	SM 9-4-5180-A84	5180-625-7907	RCAT, Airframe mechanic



Now, get out a DA Form 17 and order the Tool Set SM you need from your publications section.



At inspection-time, do yourself a favor . . . hang on to your M9 or M9A1 protective mask's outlet-valve cover.

Once that small, rubber cover's pulled off, it has a way of wandering off for keeps.

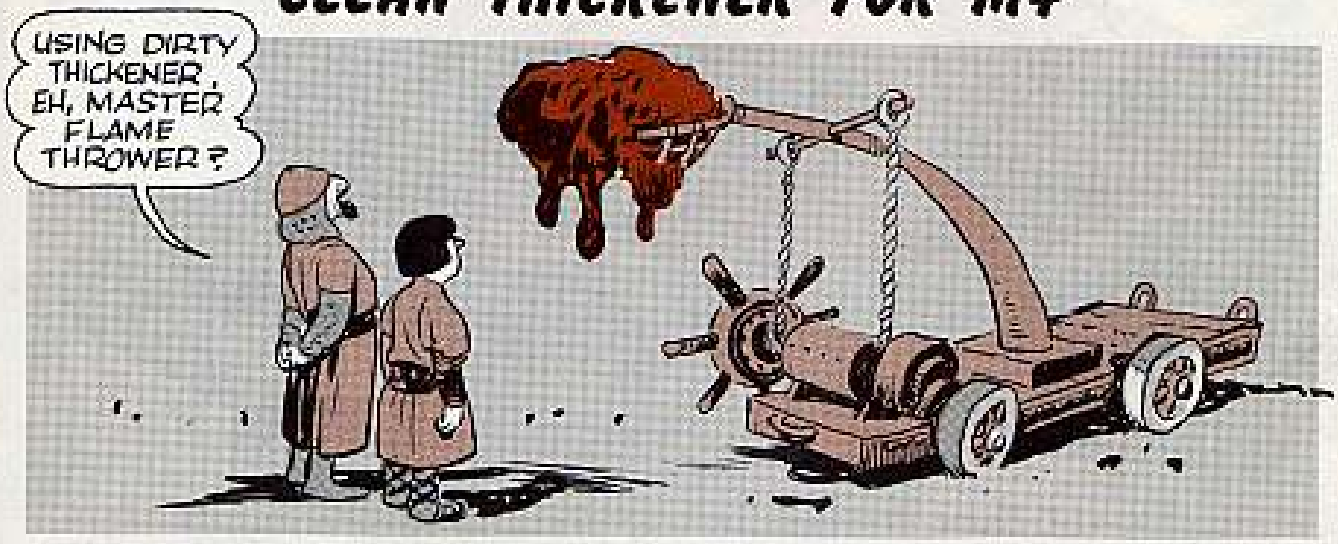
Best way to guard it is to grab it when it's pulled off, and then replace it soon's the valve's been inspected.

Course, you don't have to hold it in your teeth—but you should keep an eye on it, or find a definite spot for it . . . like slipping it into your mask's carrier . . . and, always remember to replace it before you pack your mask away.

As you well know, if that cover's lost you're likely to be left holding the bag with an incomplete, unprotected, protective mask . . . and, that might not be too good. That cover's put there to protect the outlet valve disk.

CHECK IT GOOD,
DUMP WITH CARE...

CLEAN THICKENER FOR M4



You're likely to be out of business fast if you use dirty thickener in your M4 service unit. So play it safe. Be extra fussy about the cleanliness of the M1 thickener you pour down the mixing tank.

When you open a container of M1, for example, get rid of the tear strip key immediately. Toss it away, stomp it into the ground, if you have to, just don't let it hang around—it can easily end up in the thickener.

And while you're stirring the dry stuff around to break up lumps, check it carefully for any odd pieces of junk, like loose stuff that can fall out of anyone's pockets. Small pieces of metal or wood, nuts, nails and similar junk can get past the ¼-in mesh screen at the bottom of the vat and foul up the pump but good.

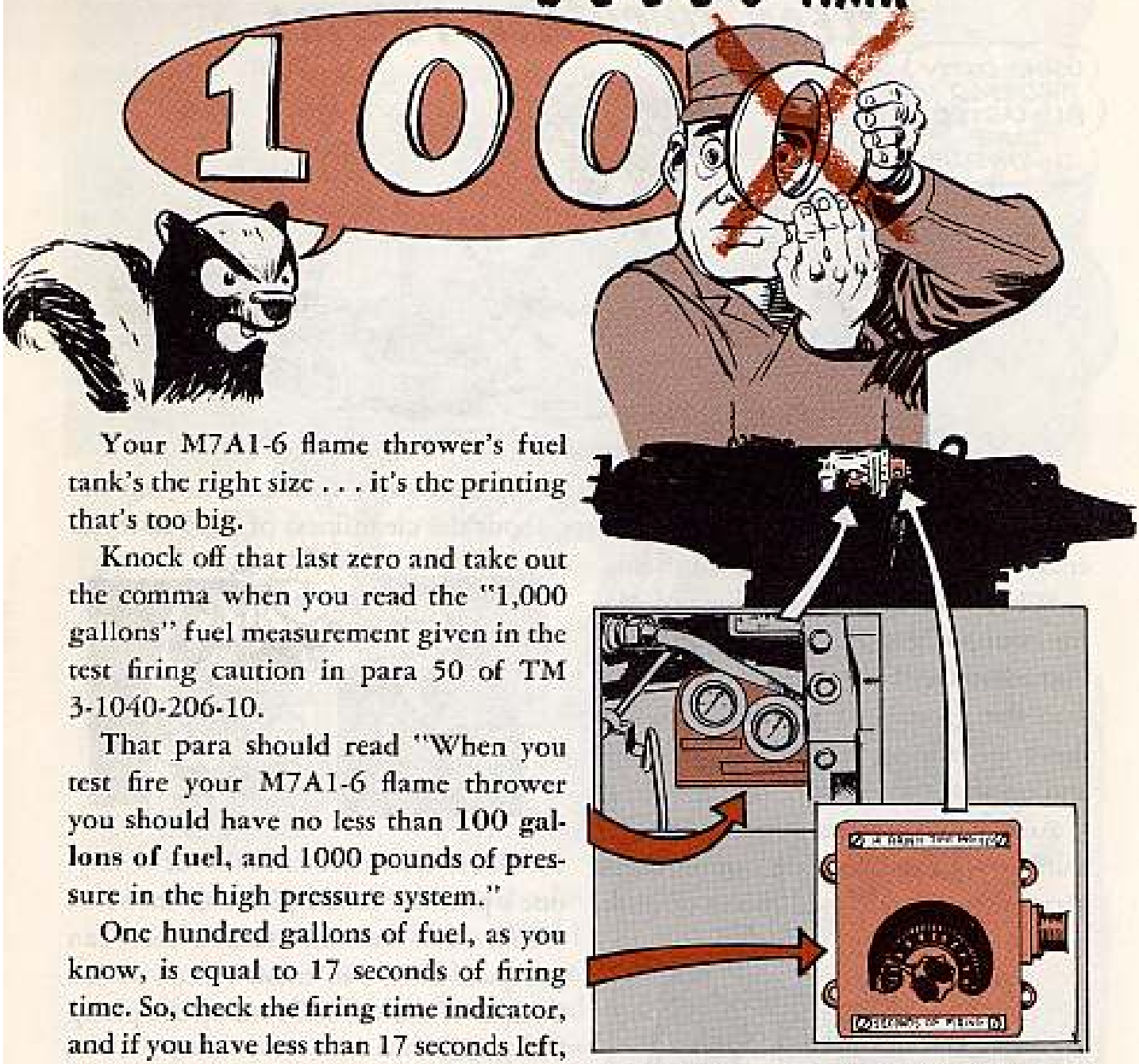
Also make sure that the transfer buckets you use are clean.

Something else that'll help safeguard the service unit from damage of contaminated thickener is to keep the vat screen installed at all times during operation.

And when you use oil that's been used before, by all means see that it's strained through a fine mesh strainer before you use it.

TIPS ON M7A1-6 ....
FLAME THROWER OPERATION —

B-E-E-E-G TANK



Your M7A1-6 flame thrower's fuel tank's the right size . . . it's the printing that's too big.

Knock off that last zero and take out the comma when you read the "1,000 gallons" fuel measurement given in the test firing caution in para 50 of TM 3-1040-206-10.

That para should read "When you test fire your M7A1-6 flame thrower you should have no less than **100 gallons of fuel**, and 1000 pounds of pressure in the high pressure system."

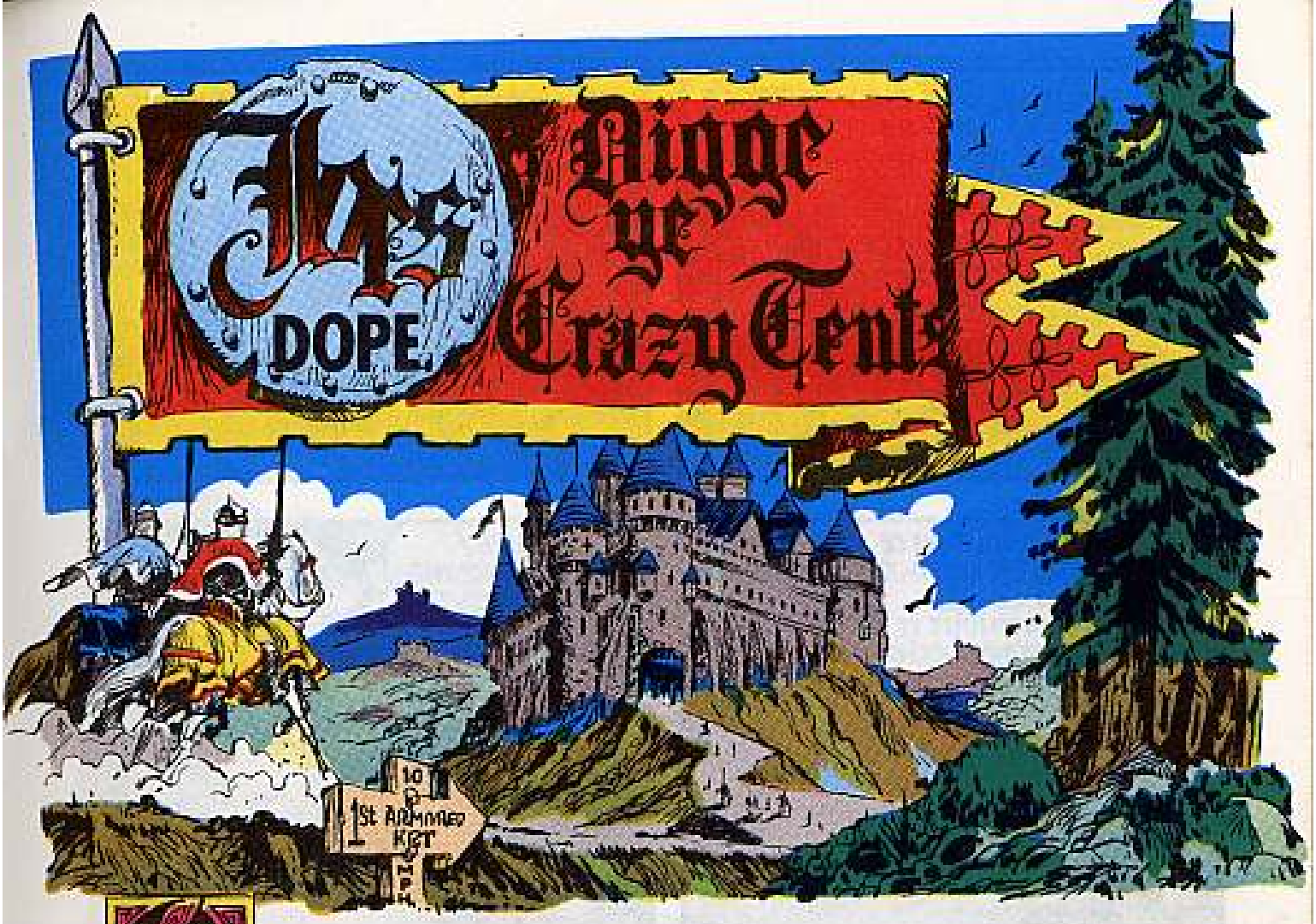
One hundred gallons of fuel, as you know, is equal to 17 seconds of firing time. So, check the firing time indicator, and if you have less than 17 seconds left, add the necessary amount of fuel before you test fire.

Now leaf over to page 43 of TM 3-1040-206-10—para 60 should also refer you to TM 9-7022 . . . the book you need like your right arm when it comes to operation and maintenance of the components in the flame thrower's M48A2 tank hull.

The M7A1-6 MAC (Appendix II) in TM 3-1040-206-20 needs a few more lines of references, like TM 3-1040-206-20P, TM 3-1040-206-30P, TM 3-1040-206-45P, TM 9-2300, TM 9-7022, TM 9-2350-208-20P, TM 9-2350-208-35P.

All of these publications are available now, so start scratchin' around for 'em.

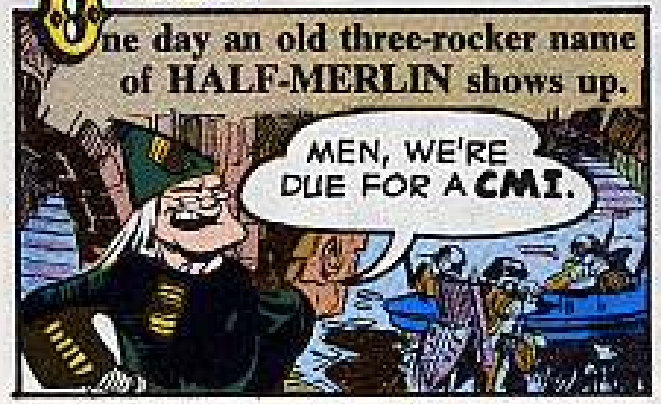
It's a good idea to keep your eyes peeled for any TM Changes or any pubs that will give you new dope on your flame thrower tank.



nce upon a time, and all that jazz, there was stationed in Camelot, a real cool line outfit, name of 1st Armored Knights of the Round Table.

Top honcho of this pack was a loaded old cat, name of King Arthur, who, because he had drag up at personnel managed to staff the outfit with some real sharp types.

Besides, they were really ape, and between the Old Man being bugs for shining armor and a pack of crazy cats hot for jousting and dragon-killing scenes, this mob was like murder when it came to mortal combat.




HOW ABOUT YOUR TENTAGE??
OH, YOU BREAK US UP... WHAT'S WITH THE TENT BIT? YOU DON'T KNOCK OFF DRAGONS WITH TENTS, PADDY-O
YEAH MAN, LIKE WE GOT THE SHINING ARMOR. BESIDES, WE SLAP PAINT ON EVERYTHING THAT SHOWS!
YEA, VERRILY, AND FORSOOTH. WE GOT IT MADE!
LOOK AT THE CONDITION OF THIS CANVAS! DON'T YOU VARLETS DIG THAT CANVAS IS FOR THE PROTECTION OF BOTH YOU AND YOUR EQUIPMENT? WITHOUT IT MAYBE NEXT STOP ENDSVILLE FOR YOU OR YOUR GEAR.
BEWARE! CAREFUL HANDLING AND FREQUENT INSPECTIONS ARE KEYS TO GOOD CANVAS MAINTENANCE.
...AND WHO ROLLED THE CANVAS WHILE IT WAS WET??
UNLESS CANVAS IS CLEAN AND DRY... AND STORED FOR VENTILATION, MILDEW WILL HEX IT, VERILY.
LIKE I SAID... CHECK EVERYTHING.
Chicken!

eanwhile, the Red Knight from the fief in the east decides to put the snatch on a fair doughnut dolly, name of Lady "Kid" Diver. In nothing flat, he has this chick stashed in his well-defended stone pad and is demanding 50% of the company fund to spring her. All things considered, he figures he's got the situation pretty well knocked.

aturally the balloon goes up. The 1st Armored K. of R. T. is put on alert and the Old Man holds a meet in the war room back of the officers' club.


JOE'S Dope Sheet
In olden days when knights were bold,
They kept tents "tight" and free of mold;
Kept ropes unfrayed;
Sewed seams that stayed-
'Twas P*M helped a knight get old!!
WE HAVE THE WORLD'S BEST EQUIPMENT... Take care of it

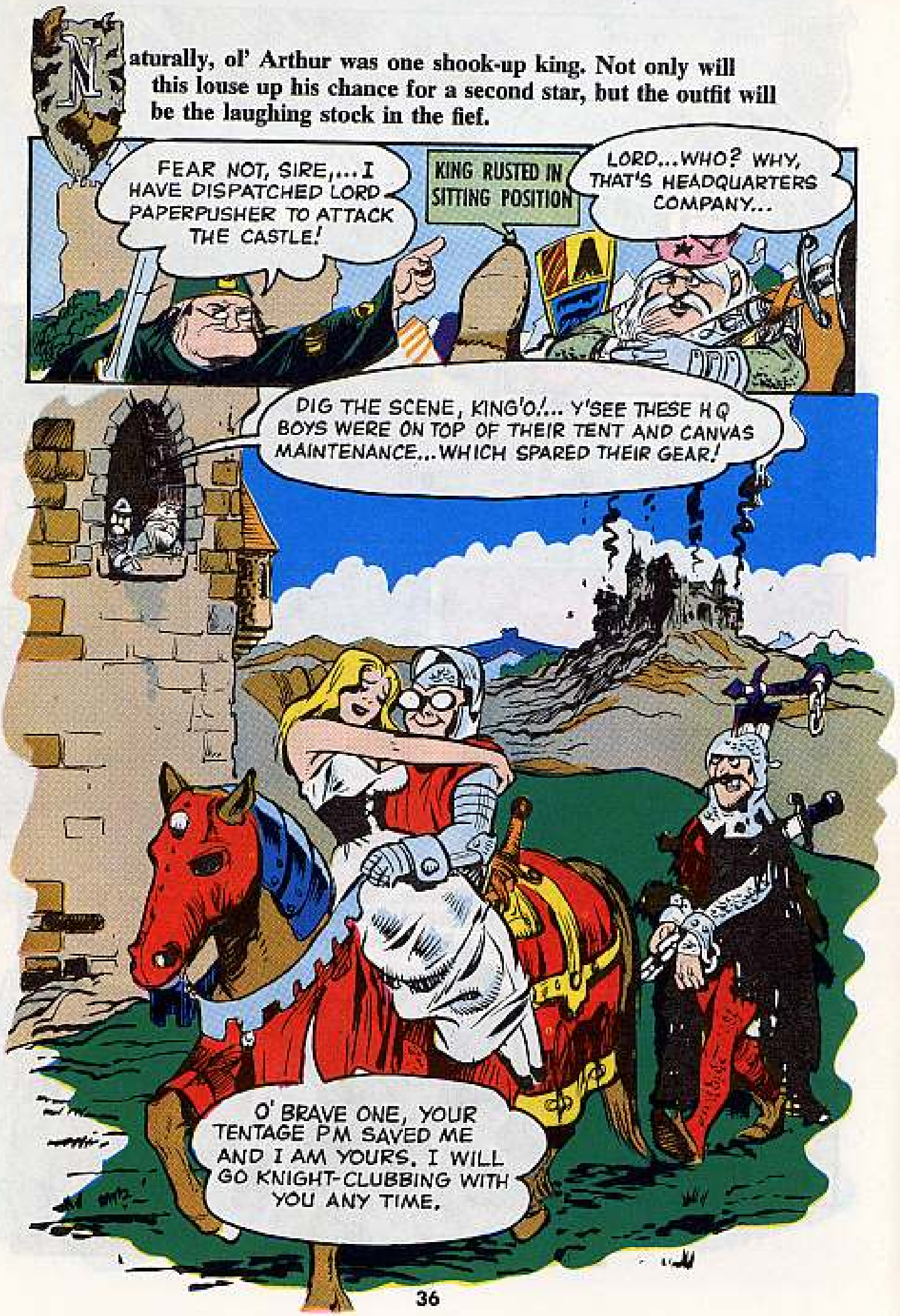
ig the scene . . . like it's Cinemascope . . . there is the Red Knight's castle, and deployed out in siege formation are the good guys—ready for the rumble.

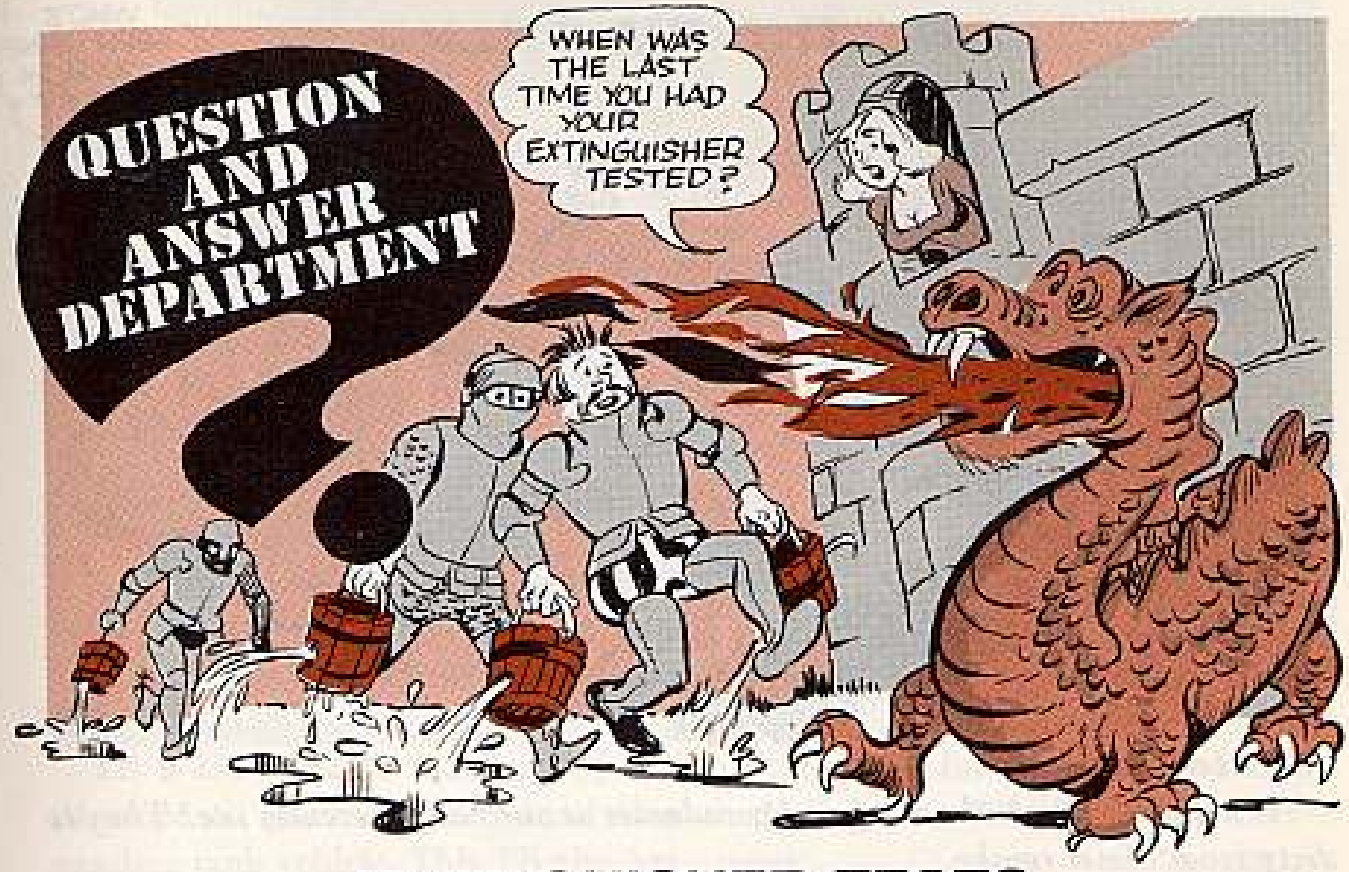
nside the castle the Red Knight (who has had no trouble getting appropriations for kooky weapons) pulls a real socko from his arsenal.

And before you can say "call Div-Arty-Metro"—he's got a rain storm going for him that makes the Johnstown flood look like a leaky faucet drippin' on a flat rock.


Confusion reigns, as ol' Half-Merlin sadly states . . .
ALAS! FM-20-IS WAS THE BALM TO CURE YON TENTING ILLS.
Canvas, mildewed, frayed, ripped, not waterproof.
Grommets, loose, not firmly seated, missing.
General . . . tents not stored properly . . . visual inspection not made; periodic check not maintained.
BUT... THEY'RE SAFE, AIN'T THEY?
Ropes . . . frayed, missing, not tied properly . . . not properly taut.
Seams . . . weak, leaking, repaired wrong, proper repair materiel not on hand.
?
CREAK
AWW... THREE PEGS IS ENUF!
Alas SODDEN FIRE ARROWS... RUINT!
NOW..,SEE THE HAVOC WREAKED BY FAULTY TENT MAINTENANCE?
ACHOO! HALF THE ROUND TABLE'S ON SICK CALL.
MORNING REPORT
GAD! IMMOBILIZED BY RUSTY ARMOR.
Tent Pegs — split, cracked, missing, not positioned properly.

Naturally, ol' Arthur was one shook-up king. Not only will this louse up his chance for a second star, but the outfit will be the laughing stock in the fief.





EXTINGUISHER TESTS

Dear Half-Mast,

Are you sure you gave us the right scoop in Issue 89 on the hydrostatic tests for CO_2 fire extinguishers?

*AR 700-8120-1 (25 Sep 59), which covers Safe Handling, Storing, Shipping, Use, and Disposal of Compressed Gas Cylinders, says you give CO_2 cylinders a hydrostatic test every five years—**only** if they are empty. Otherwise, you empty filled cylinders and hydrostatically test them before refilling if it has been 12 years since they were tested before.*

What say you?

Lt B. J. B.

Dear Lt B. J. B.,

At the time the article in PS 89 was set up, the info on the 5-year hydrostatic tests was the straight dope based on AR 700-8120-1 (26 Aug 55). But, right after that the new AR came out superseding the old regs and changing the hydrostatic tests from five to twelve years if the extinguisher has not been discharged. You still have to test the cylinder if it has been emptied and five years have gone by since the last test.

Dear Half-Mast,

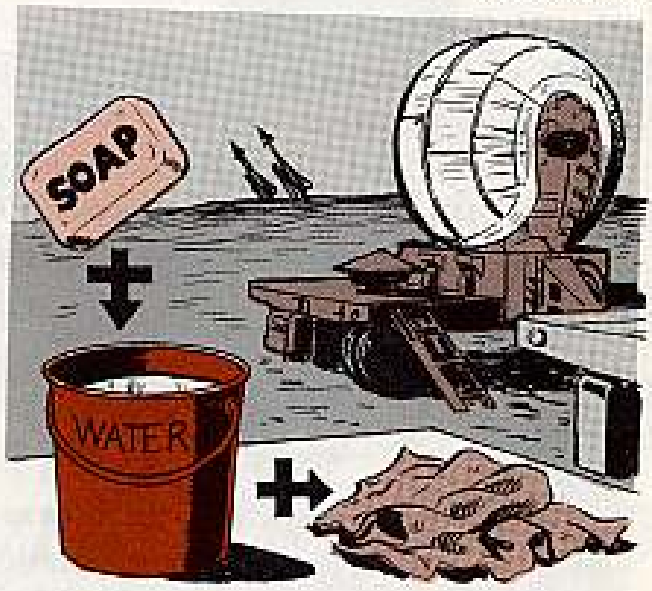
How can we clean the track radar radomes at our Nike-Hercules site? They're dirty from diesel smoke.

SP5 L. P.

Dear Specialist L. P.,

The only way of cleaning the radomes that Ordnance OK's is in TM-9 1430-253-20. And on page 199 it says to use soap and water. You can also use a mild liquid detergent—as long as you follow the directions on the can. It says to do the cleaning once a month—but you can do it more often. If you want to remove the radome so you have it fairly flat for working on, that's all right, too. Don't rub so hard that you batter the radome, tho.

Just don't go fooling around with solvents—carbon tet, turpentine, volatile mineral spirits and the like—you think might make the radomes real white. They might . . . and also ruin the silicone rubber covering in the process. The same goes with brushes and cleaning powders and pastes made with abrasives. They're too rough.



And don't go fooling around with paint or some other coating to make the radomes real white. That stuff fouls up the radar.

Remember . . . weather, smoke and what-have-you are working on the radomes all the time. You'll never get them as clean as the first day they were put up.

Half-Mast

GROUNDED GASSER

Dear Sgt Half-Mast,

What is the regulation way to ground the M131A2 gasoline semi-trailer? I have made a local fix but it's a lot of trouble. There must be an easier way.

Capt T. C.

Dear Capt T. C.,

TB 9-2300-212-20 (21 Jan 59) has the dope on grounding any kind of a gasoline tank vehicle. This TB also has all the details for rigging a ground line including the FSN's for the needed parts.

Half-Mast

IT'S RIGHT TOOLISH

Dear Half-Mast,

We have a couple of socket head screw key sets in our tool sets for working around equipment in the IFC area at our Nike-Ajax site. You know the keys . . . they have the "L"-shaped handle.

The trouble is, they're not long enough for a lot of jobs we have to do. So, what's the story on getting longer keys?

SP5 F. L. C.

Dear Specialist F. L. C.,

Ordnance knows all about your problem.

And, until the long-series key set gets put in your Ord 7 SNL Y4-6, your best best is to pick one up on local purchase. You'll want a set that runs .050-in through 5/16-in across the flats and goes under Fed Spec GGG-W-652, Type 1, Class B.

Half-Mast

LONG TIME NO RUN

Dear Half-Mast,

When vehicle engines can be started only once a week, how much running time is needed to keep them in operating condition?

I've recommended at least an hour. This will get the oil hot, evaporate any oil dilution, and re-charge batteries on our wheeled vehicles (¼-ton through 5-ton), M59 APC's, M48A1 tanks, and M51 VTR's.

What do you think?

CWO R. P.

Dear CWO R. P.,

There's really no answer that'll fit all types of vehicles and weather conditions. Each commander's responsible for making sure his vehicles are in operational condition, so it would seem a local SOP is called for.

Your one-hour running time may be a bit on the high side, depending on how long it takes those engines to reach normal operating temperature.

Under average summer conditions (Stateside, temperate zone weather), 15 minutes of running after the engine is up to operating temperature should be about right. That's usually enough to remove most of the water and fuel dilution from the crankcase, relubricate the engine, and sweep any rust off the cylinder walls and bearings.

In winter, it's likely to take at least 30 minutes, after the engine gets up to operating temperature, to do this job.

When you have the personnel and fuel, it's better to run 'em a little too much 'stead of too little. 'Cause you may be saving the engine from damage that's often caused by things like rust and sticky valves.

Half-Mast

TEST YOUR METAL

Dear Half-Mast,

Some of the guys at our commo section say certain radio mountings (MT-297/GR, for example) are made out of steel. Others say they're aluminum. What do you say, Sarge?

SFC R. F. M.

Dear SFC R. F. M.,

Both sides are right. Some of those mountings are steel, others aluminum. The aluminum mountings are lighter, rust proof, and require paint mostly for uniformity and camouflage. Easier to maintain.

Steel ones have to be watched for rust, corrosion, etc., and will always need a zinc chromate primer whenever they get new paint.

A magnet will tell you quick enough which is which since aluminum is not magnetic.

Half-Mast

GAPING GAPS

Dear Sgt Dozer,

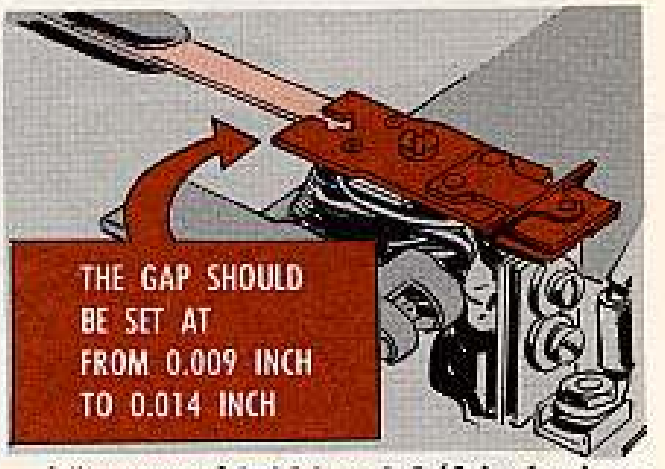
We checked out a regulator installed by our field maintenance shop in a Cat-12 8T series grader.

According to TM 5-3805-208-20, this regulator was set right. But something tells me that a gap of 0.038 to 0.043 inch is too big for the cutout relay on this rig. What do you say, Sarge?

M/Sgt R. G.

Dear Sgt R. G.,

I'd say you make a good point. The F-Series voltage regulator that goes on Cat-12 8T Series graders should be set up with a cutout relay gap of only 0.009 to 0.014 inch.

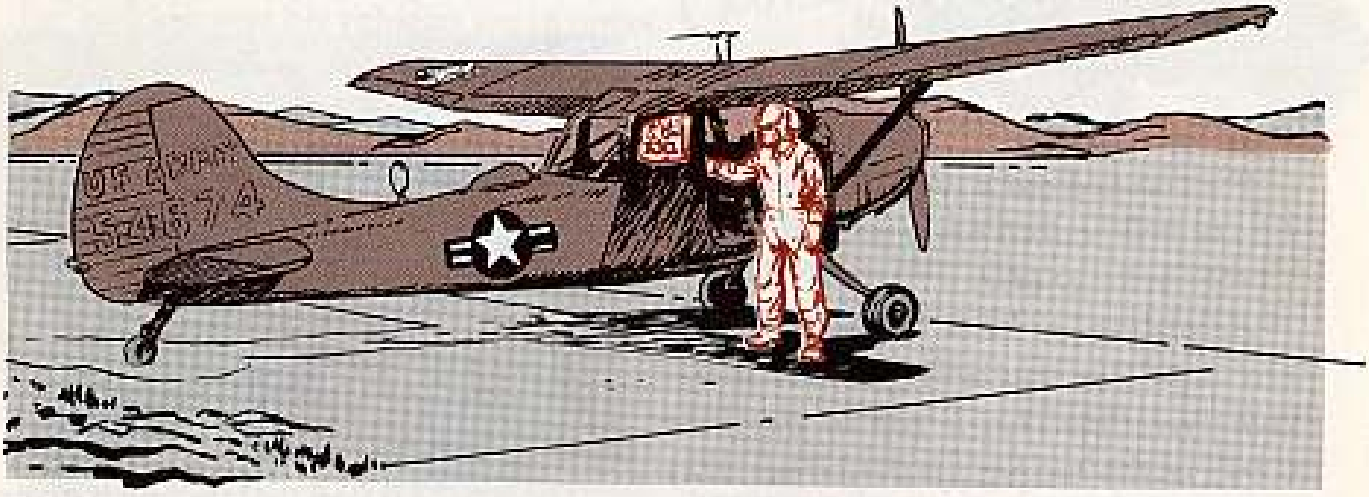


The gap of 0.038 to 0.043 inch given in TM 5-3805-208-20, or the gap of 0.033 to 0.038 inch given in TM 5-3805-208-30 would be OK for the cutout relay in Series C, D and E regulators—but not for the Series F regulators on your Cat-12 8T series graders.

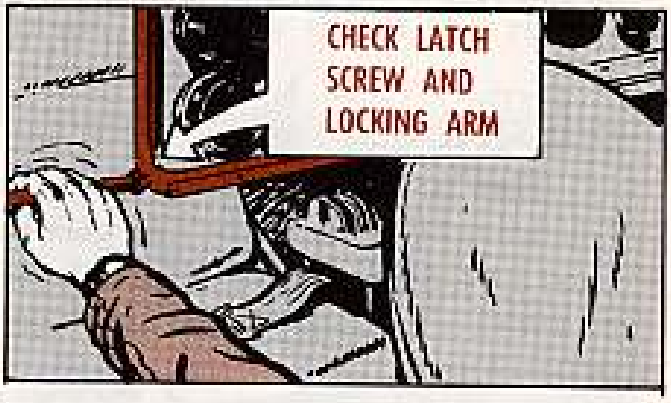
Sgt Dozer

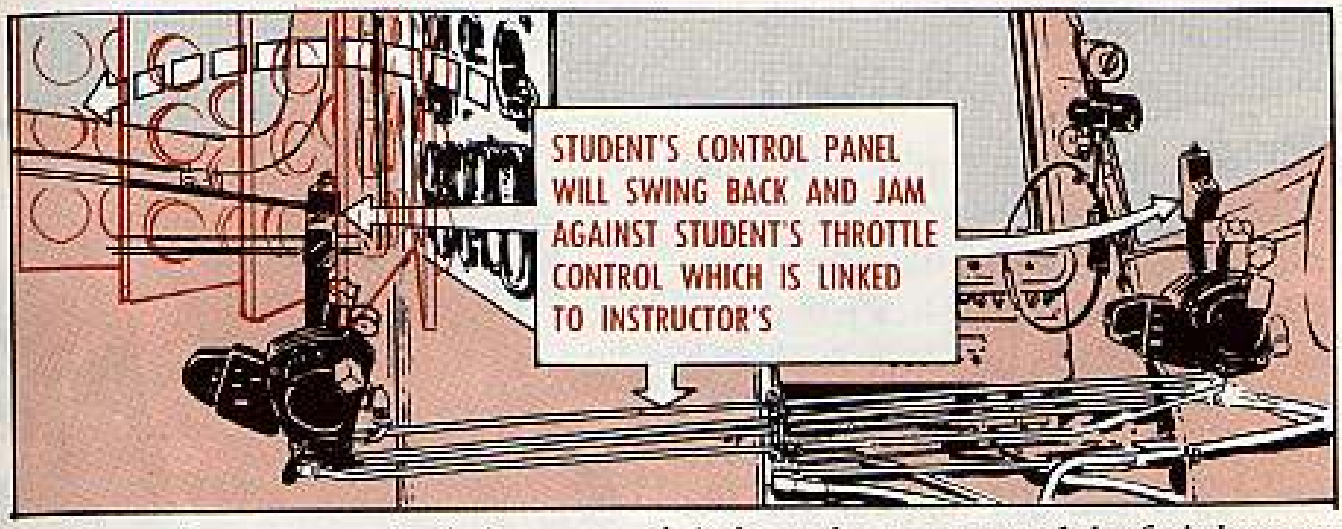
LOCK IT GOOD

No one would be careless enough to ignore the -1 and try soloing a Bird Dog trainer (TL-19D) with the student's instrument panel in the stowed position. But a careless preflight can give you the same results.



It only takes an extra second to see that the latch screw on the end of the locking arm is seated all the way down in the right sidewall. Just try to jiggle the arm back and forth a few times to be sure the arm won't pull out in flight.





The only reason you're being so careful about the snugness of the fit is because the two cockpit throttle controls are mechanically linked together.

If the locking arm should jump out in flight, the lower edge of the rear instrument panel could hinge back against the rear cockpit throttle control, jamming both throttle levers.

Which would lead to some interesting in-flight situations for birdmen without three hands.

STUD NUMBERS

Dear Half-Mast,

Got a little problem at this field identifying the two stud sizes used for thermocouple terminals in the H-21 (Shawnee) fire detection system. The only place they're listed is TM 1-13F1-4-2 (19 Apr 60), P/N 875479-85224 and 875482-5. But the supply section needs the Federal stock number to order by.

PFC P.T.J.

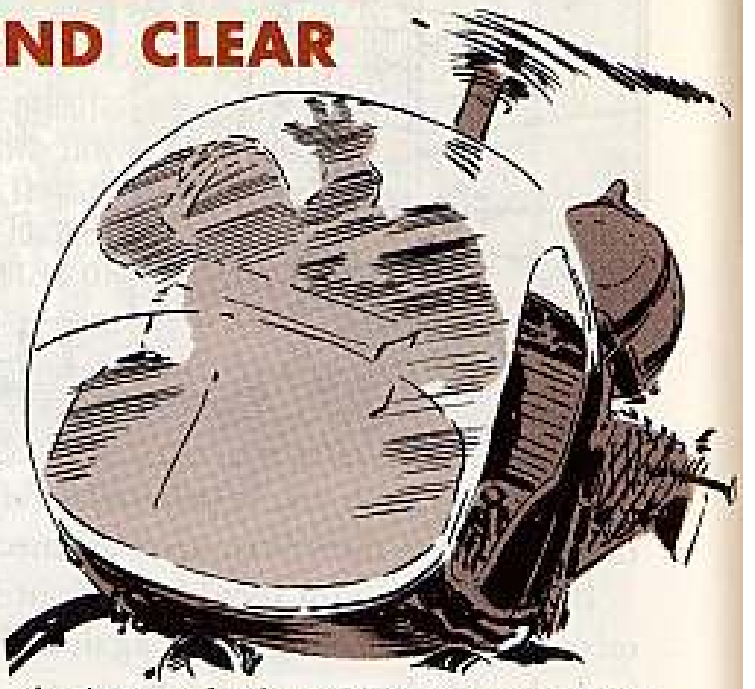
Dear Private P. T. J.,

Those two P/N's are not in the Army's supply system. Tell your supply section to use FSN 5940-283-5280 (P/N MS 25036-6) for No. 6 stud and FSN 5940-557-4337 (P/N MS 25036-53) for No. 8 stud. Right now there's no way to crosscheck old AF or AN part numbers with the newer MS (military standard) numbers.

Half-Mast

PLASTIC SURFACES . . .

BRIGHT AND CLEAR



Plastic bubble canopies and cabin windows deserve the kindest care you can give 'em—that is, if you're a man who likes to see where he's going.

TM 1-1-1A-12 lists FSN 7930-282-8255 and FSN 7930-376-9036 as the only two types of plastic cleaners you're allowed to use. QM supplies 'em. But never—no, never—dip that rag into kerosene, gasoline, mineral spirits, thinners or the like. They'll do such a good job of clouding up plastic the crew'll think that bird's sitting in a constant ground fog.

A mild soap and water treatment will do a fair job in a tactical situation, if the authorized stuff's not around.

Also, anything rougher than a chamois rag, FSN 8330-257-2492 (QM), is guaranteed to scratch plastic, just about as bad as a ring if you forget to take it off. Of course, with no water around, don't even bother using that rag. Rubbing a dry cloth across plastic sets up an electrostatic charge on the surface which is the greatest little . . . Attracter, Dust: invisible-type . . . you ever saw.

The glass surfaces on some of your aircraft will stand up to a wee bit harder handling, but the safe way is to treat 'em with the same respect as plastic.

SICK SACK

Dear Half Mast,

We air crewmen and pilots need help fast. How do we get the waterproof air sickness bags some of our passengers (ah, even VIP!) need on occasion? What's the number, and who supplies them?

SP/5 R.C.K.

Dear SP/5 R.C.K.,

The Army Medical Service has just what you need to handle whatever comes up on these flights. It's called: Sack, shipping paper, emesis, 5 lb: 2-ply, adhesive seal and loose wall construction, disposable air sick bags . . . FSN 8105-788-5475.

Half-Mast

MANEUVER, MEN

As every skipper knows, the real tricky part of handling a vessel comes when you've gotta maneuver in close quarters, like running in a crowded harbor, or docking or undocking.

The larger the vessel the more this is true. And when you get up to vessels that depend on the engineer to start, stop and reverse your engines, you've complicated the job by making a one-man task into a team play.

Consequently, no smart skipper ever depends on a green man, either a helmsman or engineer when working in or out of harbor. Naturally, your men have gotta be trained in maneuvering the vessel, but you give 'em their first crack at it well offshore. A few hours spent running slow ahead, stopping, reversing, and going ahead again out where it doesn't matter will assure you that when you want your engine astern to check your approach to the dock, astern is what you'll get, and right when you ring for it.

Small craft coxswains can practice both picking up a mooring and coming alongside the buoy as though it were the dock until they can handle their craft proficiently. Practice approaches upwind, downwind and crosswind will prepare you for any conditions when actually docking.

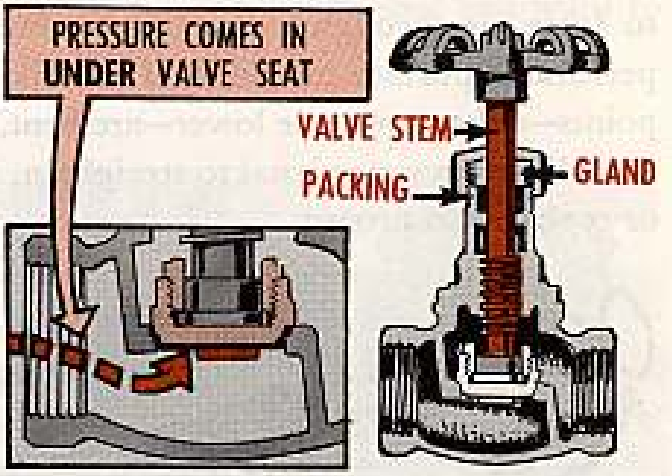
And you won't have to patch and paint your topsides.

VALVES IN RIGHT?

Here's a simple little trick that can save you lots of trouble. When you install or replace a globe valve anywhere in your vessel's piping system, always be sure you put it in so that the pressure comes in **under** the valve seat.

Why?

So that whenever you close the valve the pressure is sealed away from the valve stem and packing. Then you can repack the valve stem when you have to without looking for another shutoff farther back in the system, or perhaps having to drain a tank or bleed off air pressure.



Simple, isn't it?

SPOTTING DANGER SIGNALS ON YOUR...

DAVEY RPC-15

Your compact Davey RPC-15 compressor can do a man-size job of capping missiles. If it's not, chances are it's suffering from one or more of these temporary ailments:

SYMPTOM

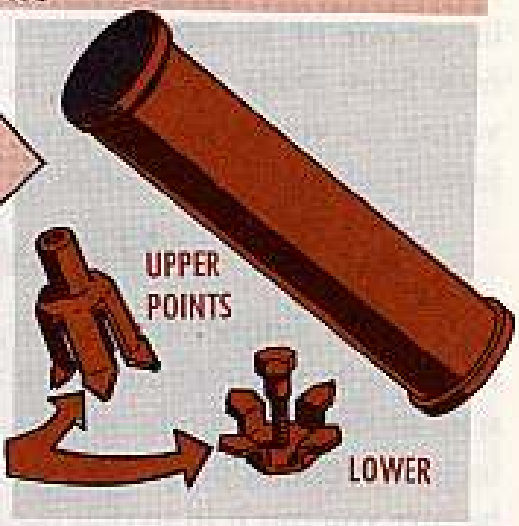
SERVICE LINE PRESSURE SAGS

Rx

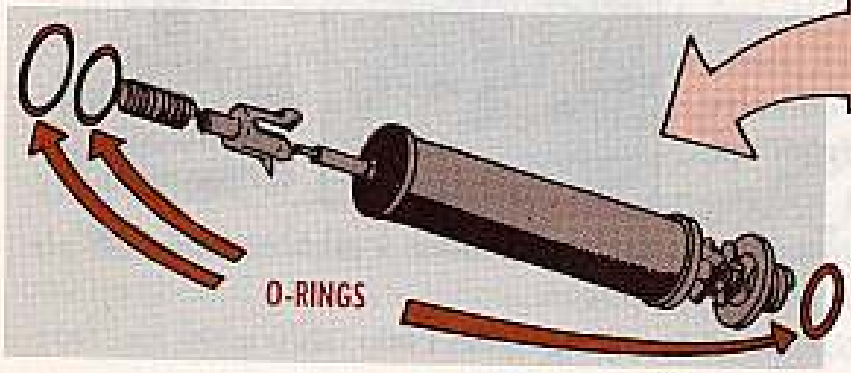
Could be caused by:

1. Poorly perforated purifier cartridges.

Seems like the compressor has trouble holding pressure at 3500 PSI while wasting power trying to force air through a brand new, but poorly perforated purifier cartridge. If your perforator points—either upper or lower—are bent, broken or dull, that's your signal to straighten, sharpen or replace 'em pronto.

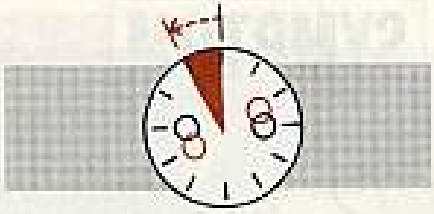


2. Purifier units not properly assembled and seated.



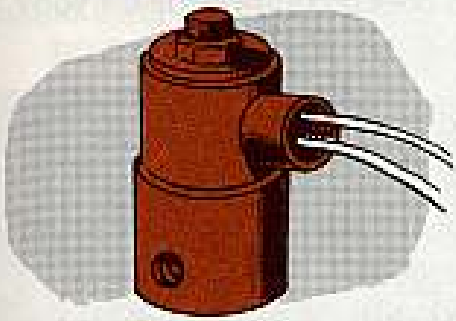
First you want to make sure that each O-ring still has enough "give" to do a good sealing job, and is seated right in its groove.

When you screw down the head cover, keep on turning until the cover seats tight against the cylinder. Then be sure to back off about 1/12 turn so the O-rings can spring up just enough to give you a solid seal.



You can save time and sweat in turning those covers by latching onto a piece of steel about an inch wide and long enough to fit over the studs through a pair of ⅝-in holes. You weld a spare 1-in hex nut in the middle, and you're all set to screw the cover with a ratchet wrench—twice as quick and easy as a pry bar.

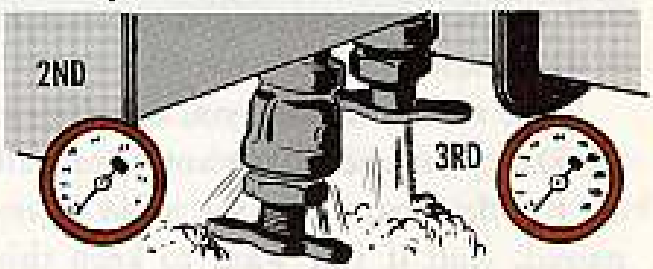
SYMPTOM — COMPRESSOR FAILS TO START LOADING



You already have "solenoid valve defective" listed as a probable cause in your pubs—but that's not the whole story.

This solenoid should do its job for a long time if you keep it clean, warm and dry. When you cover the compressor while it's not working, and keep it inside out of dust and rough weather, odds are the solenoid won't let you down.

Your special signal, when the solenoid is sick, is the sound of air escaping down the drain tube when there's no pressure reading on the 2nd and 3rd stage gages.



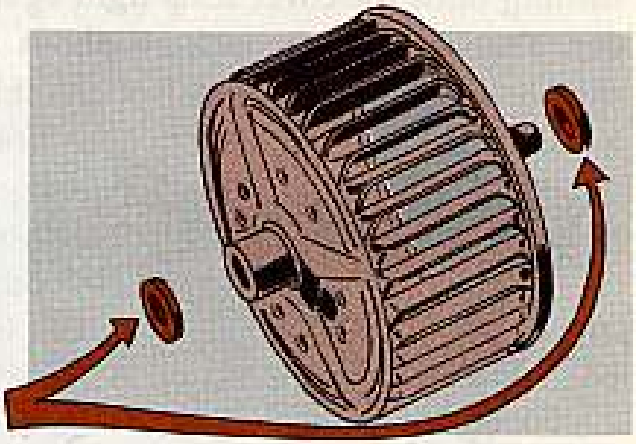
℞ Sometimes you can goose the solenoid back to life by stopping up the drain tube for a few seconds—but you want to replace a weak solenoid quick like a mink.

SYMPTOM — OIL BACKS OUT OF AIR INTAKE

℞ You won't find this signal of faulty operation in your TM for a very good reason. It should never show up.

But if you do see oil backing out of the air intake, don't try to "Doctor" the trouble with home remedies. Call your support unit, and let them locate the stuck valve or leaky O-ring that's making trouble.

SYMPTOM — COMPRESSOR OVERHEATS



℞ A lagging blower wheel, failing to rev up with the motor and move its fair amount of cooling air, is one more danger signal you can add to the other "probable causes" of overheating listed in your pubs.

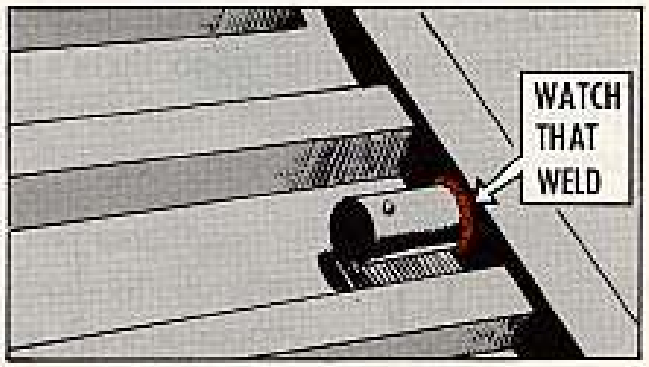
Chances are you'll find damaged or wornout friction discs on the wheel shaft when the blower goofs off on its job.

Takes a little time to pull the end panel and the duct cover to get in there and replace those friction discs. But the disc deal is a breeze compared with the flap that blows up when you suddenly have a heat-cooked compressor on your hands.

SYMPTOM — FRONT AXLE PIVOTS ON ITSELF

℞ This condition won't cripple your Davey's capacity for compressing air, but it sure lames the frame for towing purposes.

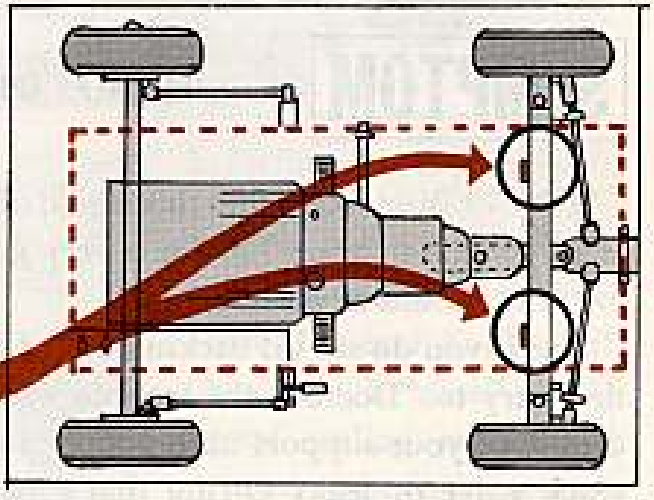
When you troubleshoot this situation, first thing you do is open the door and focus an eyeball on the drawbar trunnion sleeve where it's butt-welded to the frame.



If the weld is broken, you don't horse the Davey around or put any hard pull on the drawbar until the weld is repaired. And if you want to keep this trouble from laming your Davey, here's a coupla things to do before that weld get fractured—

1. Adjust the stabilizing plates (sometimes called rubbing plates) so they are just loose enough to allow about ¼-inch of fore-and-aft play at each front wheel. This leeway lets the front axle "give" on uneven ground without breaking the trunnion weld.

2. Regularly lube the stabilizing plates sparingly, like it says in Item 9, LO 5-4310-214-20.



No reason a-tall, for you tankers to operate in the dark when you can use your 18-in shuttered searchlight to throw light on the situation.

Like many another bright eye, if you're good to her—she'll be good to you. When you flick that switch on, it's a mighty fine feeling to see that beam of light cut through the darkness.

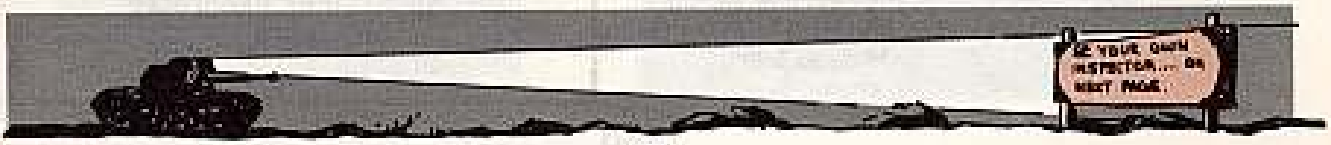
Here's a look-see at some gig points that you may run into with your searchlight . . . things that could darken your life.

Minor shortcomings are the ones that won't keep your light from working, but could lead to a major deficiency.

The major ones—and they're in **bold type** — cause extra wear and tear, or make it unsafe to operate.

Make a note of any minor condition that crops up during the operation of the searchlight and take care of it as soon as you stop operating. Call a halt when you come up with a major defect that would damage the equipment if you continued to operate it.

In any event, pass the word along to your section chief if you can't fix the light or don't have the OK to do the job. He'll want to know about it pronto.



GENERAL

APPEARANCE — **Loose mounting. Rusty.** Dirty. ID Plates missing, not legible. Paint scuffed, chipped.

UNUSUAL OPERATION —**Lamp fluctuates. Shutters fail to operate.** Unusual noises.

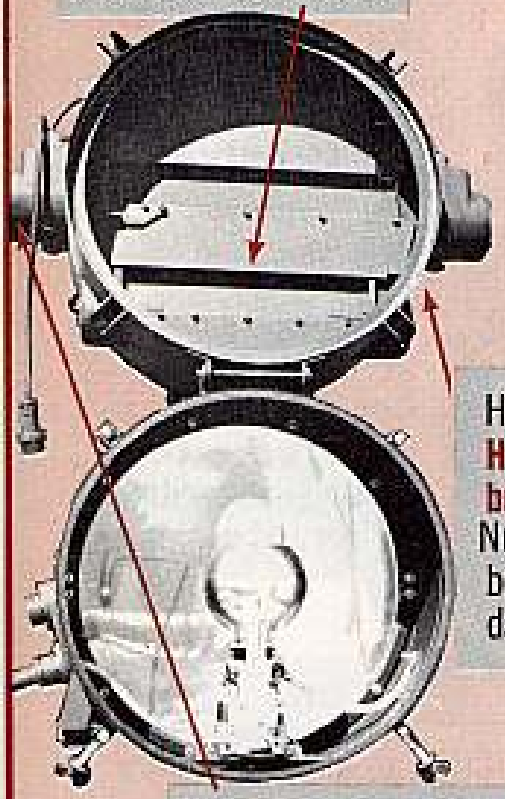
PUBLICATION — Missing. Unserviceable. Should have DA Form 285 and TM 5-6230-201-15 or TM 5-7900 (depending on model) aboard.

PUBLICATIONS CASE—Missing. Ripped, torn. Unserviceable.

PROTECTION — **Cover missing, unserviceable. Light uncovered when not in use.**

SHUTTER HOUSING ASSEMBLY

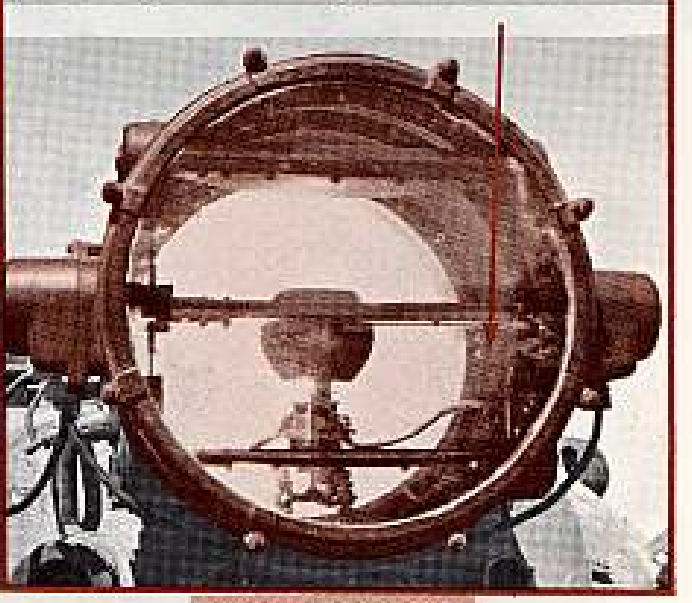
SHUTTER — Bent, binds, **won't close tightly. Springs** weak, **broken.** Missing or loose nuts and screws.



HOUSING— **Hinge, pin broken.** Nuts, bolts missing, damaged.

SOLENOID — Housing loosely mounted, cracked. **Defective solenoid.**

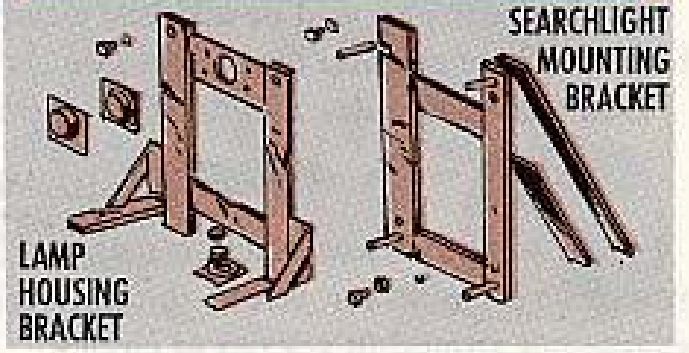
LENS—**Cracked.** Badly scratched. Dirty. Lens retainer cracked, bent, fits loosely. Gaskets chipped, cracked. (The gasket will be destroyed if removed from lens. Remove, replace only as necessary.)



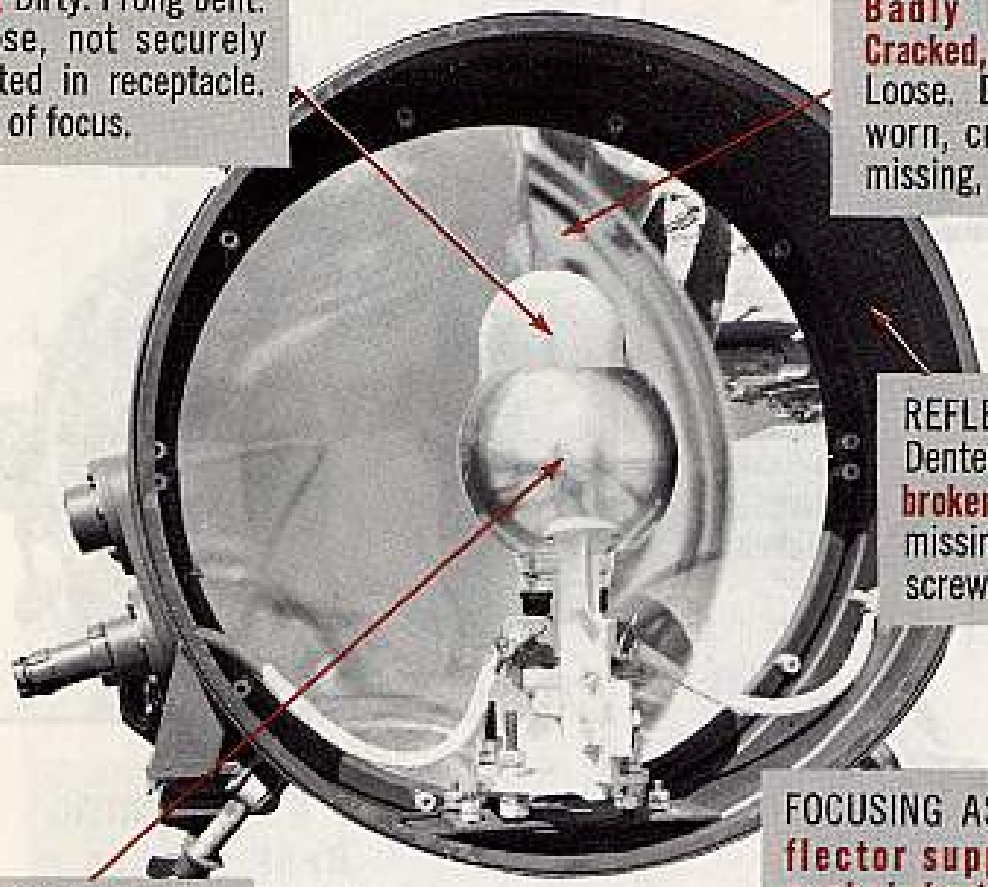
BASE ASSEMBLIES

SEARCHLIGHT MOUNTING BRACKET — Bent, broken. **Cracked, split welds. Missing, loose,** damaged **studs.**

LAMP HOUSING BRACKET — Bent, **broken. Cracked, split welds.** Mounts worn, cracked. Missing, loose, damaged screws and nuts.



REFLECTOR CASE ASSEMBLY



LAMP—**Cracked, burnt out.** Dirty. Prong bent. Loose, not securely seated in receptacle. Out of focus.

MAIN REFLECTOR — **Badly scratched. Cracked, dented, bent.** Loose. Dirty. Gasket worn, cracked. Nuts missing, loose.

REFLECTOR CASE — Dented. Cracked. **Split, broken welds.** Loose, missing, damaged nuts, screws and wingnuts.

FOCUSING ASSEMBLY—**Reflector support bracket cracked, bent, out of alinement. Mica insulation cracked, chipped, thin.** Wiring, connections loose or corroded. Missing or loose bolts and screws.

SPHERICAL REFLECTOR — **Bent. Dented.** Badly scratched. Loose. Dirty.

DON'TS

Don't touch the lamp when it's hot.

Don't try to look it in the eye when it's lit. Protect yourself with a pair of welders goggles or a piece of smoked glass.

Don't use strong acid or alkaline cleaners on the lens or reflectors. Same goes for any type of cleanser that might scratch or damage the glass or polished sufaces.

Don't use a circular motion when cleaning or polishing the main reflector.

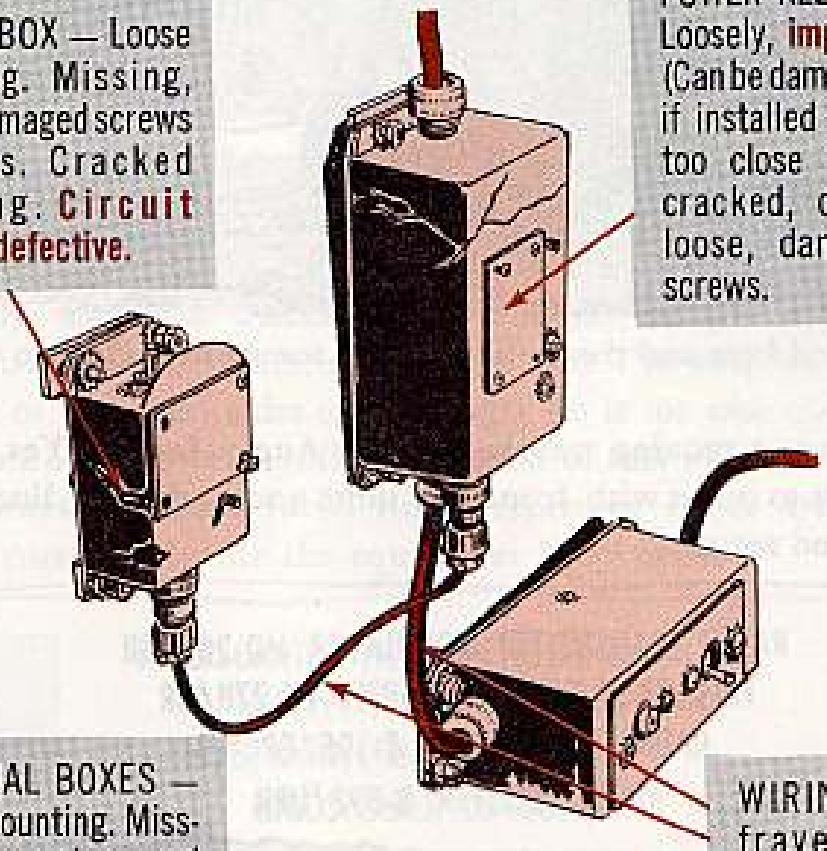
CLEANING

Use a soft cloth and alcohol, soap and water, or a liquid wax cleaner when you clean the reflector. Stroke the cloth from the center of the reflector out to the edges—not around in a series of circles.

CONTROL AND ELECTRICAL SYSTEM

SWITCHBOX — Loose mounting. Missing, loose, damaged screws and nuts. Cracked housing. **Circuit breaker defective.**

POWER RELAY ASSEMBLY — Loosely, **improperly mounted.** (Can be damaged by gun mount if installed at front of turret too close to gun). Housing cracked, dented. Missing, loose, damaged nuts and screws.



CONTROL SWITCH— Loose mounting. Missing, loose, damaged nuts and screws.

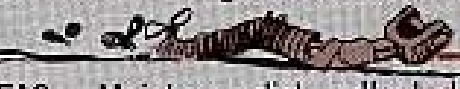
TERMINAL BOXES — Loose mounting. Missing, loose, damaged screws and nuts. Box, cover cracked or damaged.

WIRING — Cracked, frayed insulation. **Broken,** loose **wires.** Connections loose, corroded.

UNUSUAL CONDITIONS

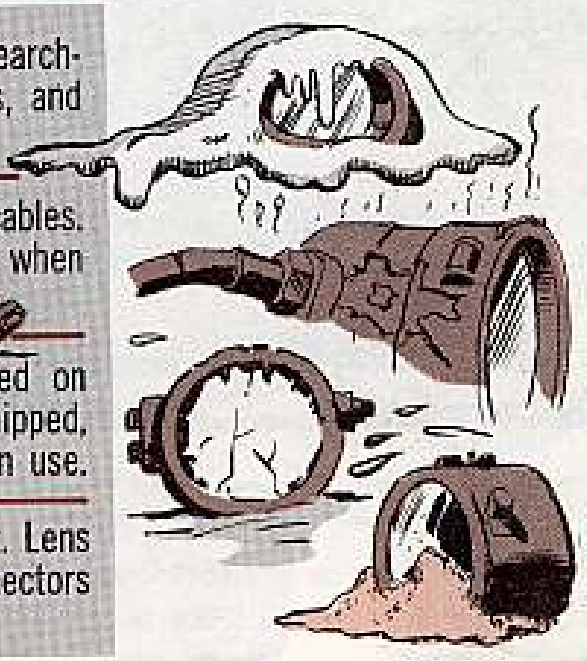
COLD WEATHER—Snow and ice collected on searchlight, cables, connections. Frost on lamp, lens, and reflectors. Uncovered when not in use.

EXTREME HEAT—Swollen, frayed insulation on cables. Scuffed, chipped paint on housings. Uncovered when not in use.



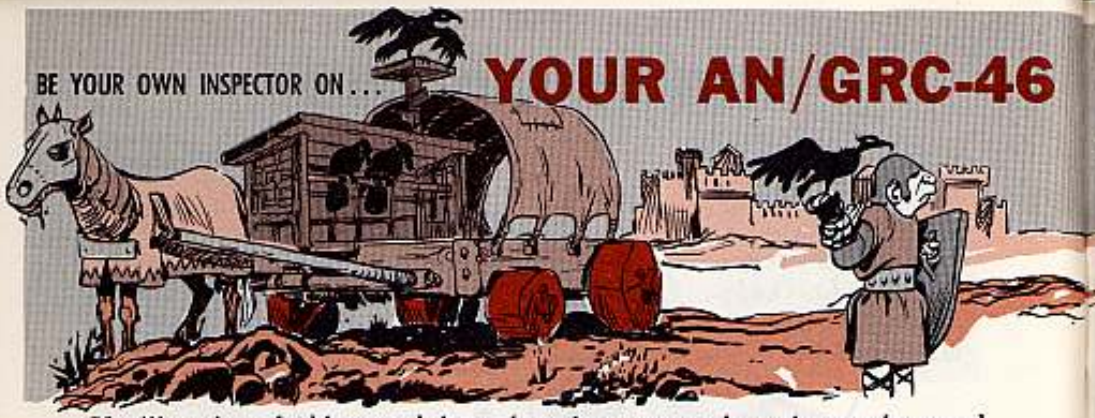
SALT WATER AREAS — Moisture, dirt collected on searchlight, cables, and connectors. Paint chipped, scuffed. **Housing rusty.** Uncovered when not in use.

SANDY, DUSTY AREAS—Sand, dust inside light. Lens retainer, eyebolt, shutter shaft covers, connectors loose. Uncovered when not in use.



BE YOUR OWN INSPECTOR ON . . .

YOUR AN/GRC-46



You'll see it parked here and there—but always somewhere close to the sound and scene of action.

Just about the fastest moving member of the Angry family. Yes, Sir, that AN/GRC-46 is built to move with front line units and keep their lines of communications open and secure.

Naturally, when the traffic is heavy and the equipment's hot, there's little time for maintenance, repair, and all the rest. The time for that comes before.

Yet one of the sweet sides of the Angry 46 is the ease of pulling preventive maintenance on it. Sweeter still is the payoff of that PM later on.

Like always, the **bold faced items** represent major trouble spots which should be corrected before the equipment is operated.

RADIO TRANSMITTER MODULATOR MD-203/GR
FREQUENCY SHIFT CONVERTER CV-278/GR
RADIO TRANSMITTER T-195/GRC-19
RADIO RECEIVER R-392/URR

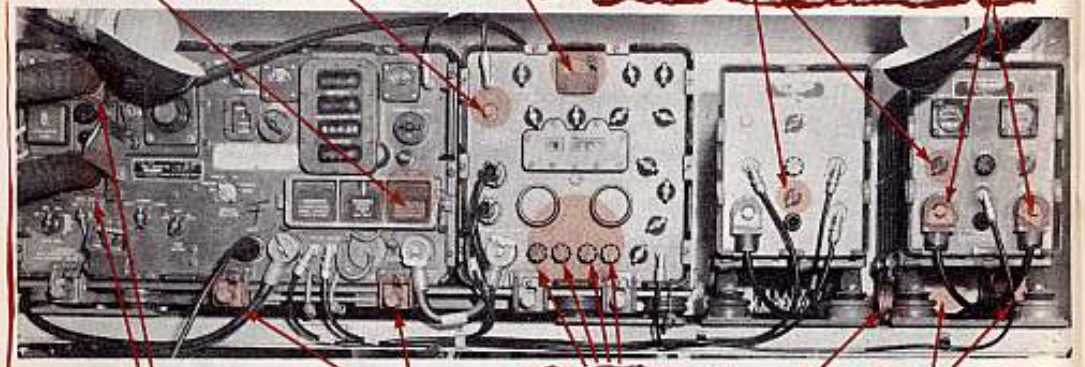
PANELS AND DECALS—Scratched; dented.

BINDING POSTS—Cracked; corroded.

DIAL AND METER WINDOWS—Cracked; **broken.**

DIALS AND KNOBS—Loose; **broken;** binding; **fail to make contact.**

RECEPTACLE CONNECTORS—**Missing;** broken; dented.



VENT CONNECTIONS—Loose; **hoses missing.**

MOUNTINGS—**Bolts loose;** locking handles loose or binding.

FUSES—**Missing; wrong rating.**

GROUND STRAP—Loose, **not connected;** dirty.

CABLES—Insulation cracked; frayed; **loose.**

EXTERNAL WIRING—Dried out; tangled.

REPERFORATOR-TRANSMITTER TT-76/GGC
TELETYPEWRITER TT-98B/FG
INTERCONNECTING BOX J-668/GR
LOUDSPEAKER LS-166/U

CHAD BOX—Loose; missing.

PAPER—**Not feeding right;** roll loose.

RIBBON—Worn; **tangled.**

DIAL AND METER WINDOWS—Cracked; **broken;** dirty.

DUST COVERS—Cracked; loose; glass cracked or broken.

KEY LEVERS—Cracked; dirty.

FUSES—**Blown out; missing; wrong rating.**

MOTOR SPEED—Too fast or too slow; tuning fork missing.

VISIBLE SCREWS—Loose; improperly seated.

RECEPTACLE CONNECTORS—**Missing;** broken; dented.

One thing to bear in mind on the teletype equipments: "Operators should make no adjustment of equipment. 'Tinkering' causes trouble." Strictly a hands-off policy except for the simple checks needed to keep the gear operational.

NEXT PAGE

ELECTRICAL EQUIPMENT

GROUND ROD—**missing;** badly bent.

AIR VENT COVERS—Loose; not operating properly.

LIGHTS—Bulbs broken; shades cracked, dented.

RECEPTACLES—Corroded; damaged.

ANTENNA—Ceramic insulator cracked; **tie down rope and insulator missing;** mounting bracket loose.

FUEL TANK—Loose; dented; **connections loose.**

FUEL LINE (HEATER)—Damaged; dented; **clogged.**

SHELTER S-89C/G

EXHAUST FAN VENT—Clogged.

FAN—**Not working,** loose.

HEATER—**Not working.**

HEATER EXHAUST—**Clogged;** flexible hose not positioned right.

JUMP SEATS—Loose; not adjustable.

ROTARY CONVERTERS

CABLES—Cracked; **loose.**

MOUNTINGS—Loose; bolts missing.

RECEPTACLES—Dirty.

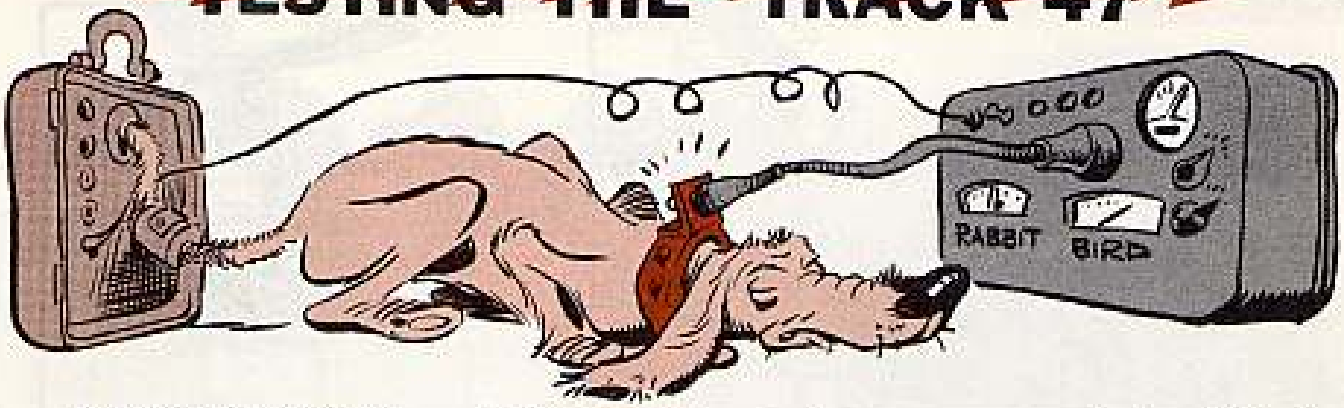
Naturally, the folder hanging underneath the clock is where your DA Form 11-238 goes. Keep your preventive maintenance checks up to the minute and keep the forms for at least two months.

MAINTENANCE FORMS—Missing; not properly filled out.

Pubs, extra paper rolls and ribbons and all that, of course, will be kept handy in the compartment over the heater. Keep that compartment free of anything extra—and keep it latched.

Routine, regular preventive maintenance servicing will make sure that your AN/GRC-46 does exactly what she was built to do—with ease.

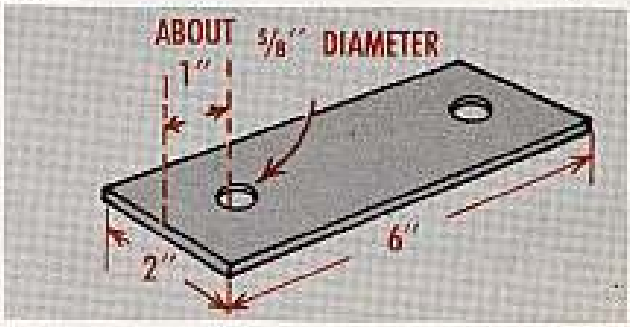
TESTING THE "TRACK 47"



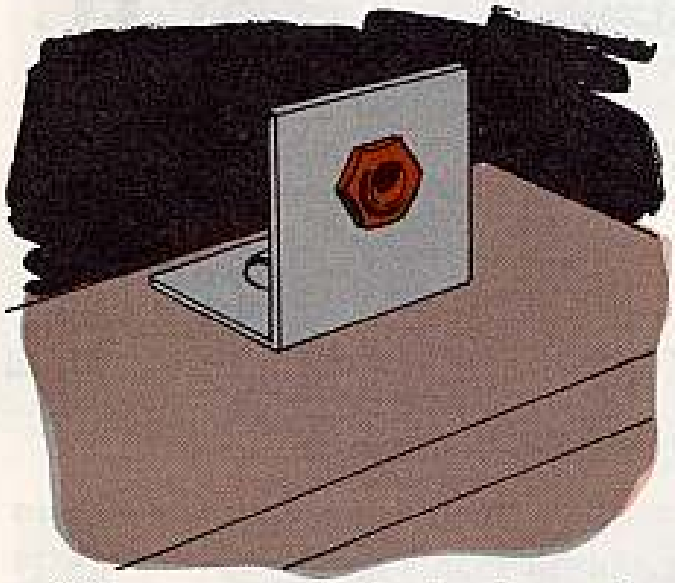
A thin strip of metal . . . a wire or two . . . and some common electronic hardware. Put them together and you have a combination that'll speed up on-the-spot testing of any AN/TRC-47 radio set.

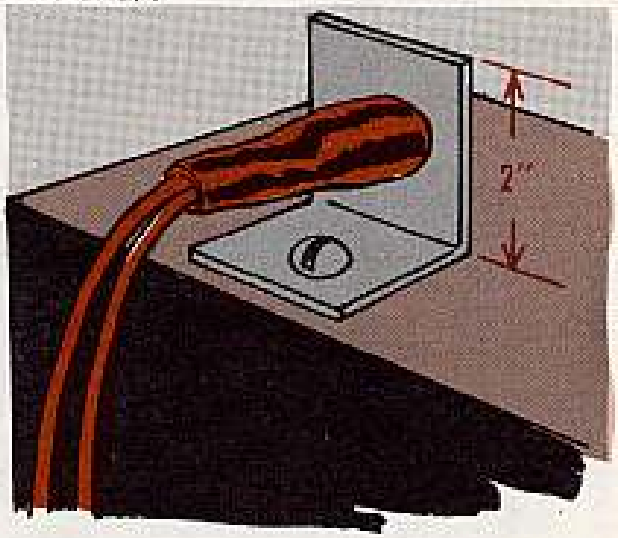
The idea is to hook the Track 47 directly to a field telephone, without going through the switchboard. Easy enough to do.

Make one of the world's simplest brackets from a piece of sheet metal 2 inches wide and 6 inches long. Then drill two holes: one to serve as a mounting hole to line up with the holes holding the back cover on, and the other (⅝ in dia.) about an inch from the other end of the bracket.



Then mount a standard telephone jack JJ-033 (FSN 5935-192-4729) into that second hole—the one an inch from the end. Follow that up by attaching two leads to the jack, and then secure the bracket to either the left or right side of the back of Case CY-2126/TRCG-47.

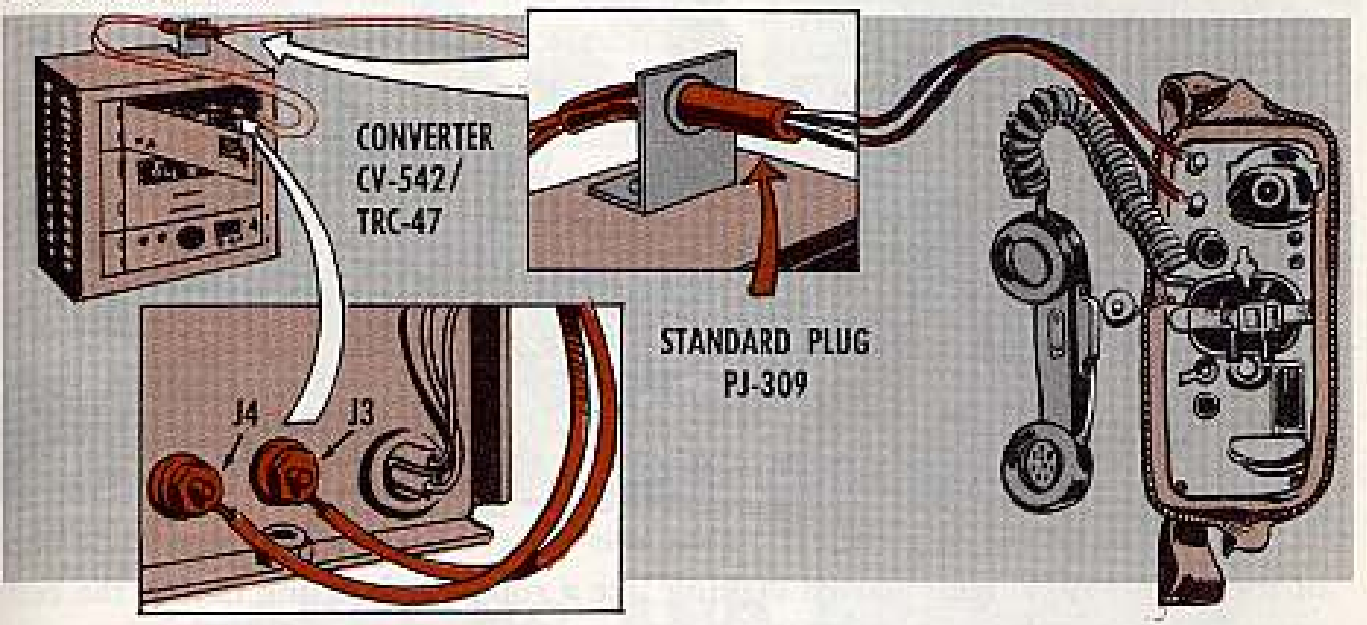




When you attach the bracket to the case, figure on letting the end with the phone jack stick up about two inches above the top of the case. Also, slide some vinyl tubing or other spaghetti over the phone jack connection to serve as insulation.

Once the bracket is secure, take the leads from the phone jack and connect them to terminals J3 and J4 of the Converter CV-542/TRC-47.

All that's needed after that is a standard 2-conductor wire—maybe five feet long—with a standard plug PJ-309 (FSN 5935-192-4778) on one end. The other end of the wire, of course, is hooked up with a field telephone such as TA-43/PT or TA-312/PT.



With this simple hookup, a man can pull operational testing and system line up of his TRC-47 without running back and forth 'twixt switchboard and radios.

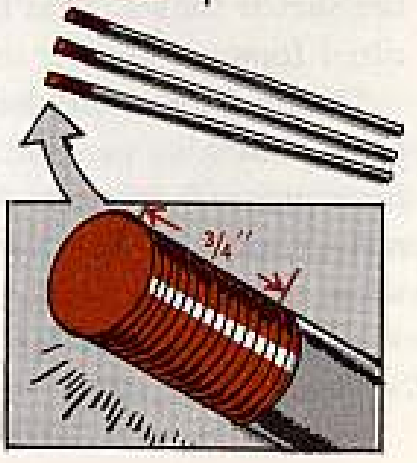
Speeds things up and reduces sweat.

TIP FOR A TIP

Two PM tips to bear in mind for the tips on those MS-116A, MS-117A, MS-118A, AB-22/GR and AB-24/GR mast sections.

First: always keep 'em shiny with any kind of brass polish. But—watch 'em. Soon as the thin, shiny copper coating fades—and base metal shows through—it's time for a new tip.

The copper makes the contact—the base metal breaks it.



RACK 'N' REEL

Dear Editor,

"Set 'em up in the other alley!" That was the cry for a while every time one of those RL-159/U reels started making like a runaway bowling ball in the bed of our ¾ ton trucks.

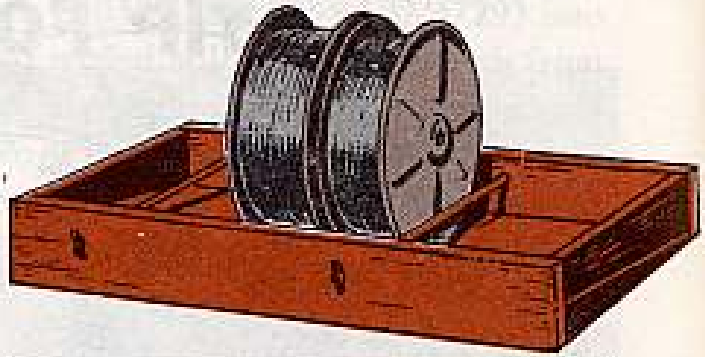
We had knocked knees . . . knocked reels . . . knocked cargo compartments. . . and were pretty well knocked up all around. Until we racked up a handy solution to our rolling reels.

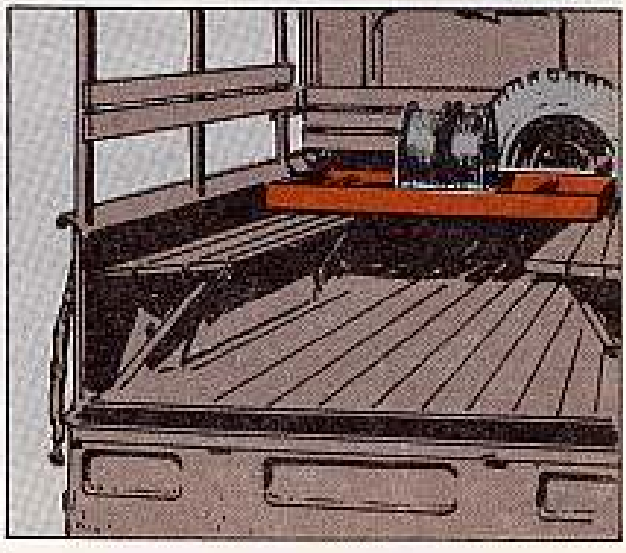
It's a simple rack that secures the RL-159's against the front panel of the cargo compartment. We used scrap lumber and ammo-box rods to make it. Just bolt, screw, or nail together a frame, or rack, that can be laid right across the seats of the rear compartment.

Build it up on one side so as to give it a slight tilt toward the front panel. Like the sketch shows. That'll keep the reel tilted forward against the front panel.

Our racks not only keep the reels in place, but also provide a handy spot for temporary stowage of other equipment, tools, etc. We just lift them out when they aren't needed.

S Sgt F. W. Petchnik
2nd How Bn 8th Arty,
A Battery, 7th Inf Div



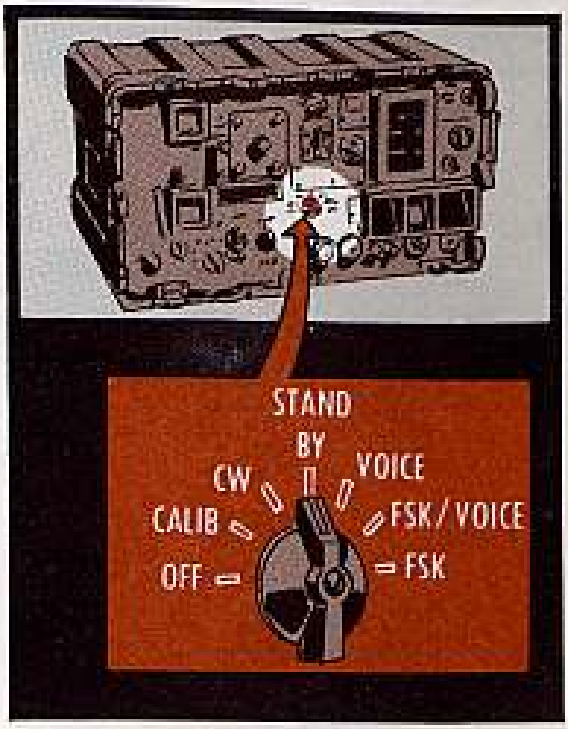


STAND BY WITH STAND BY

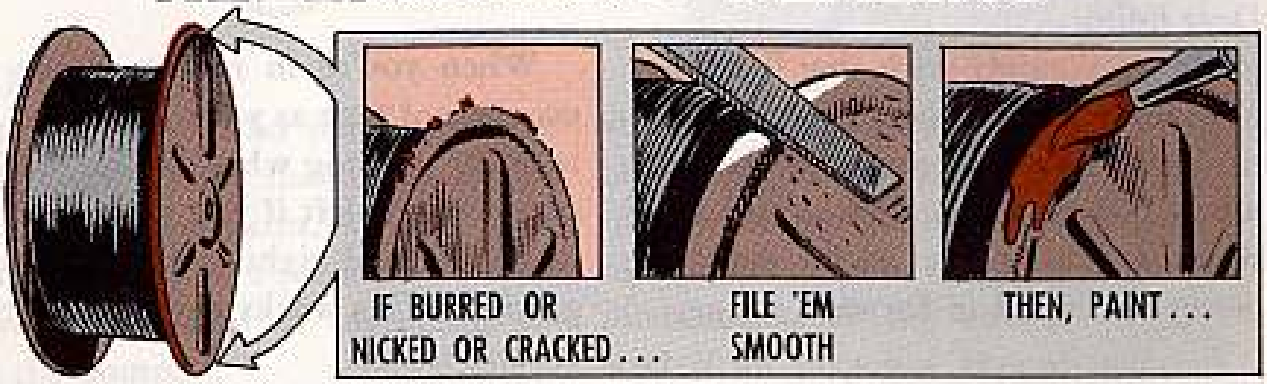
Finished sending? Just standing by now with your AN/GRC-19?

Why not put a finger or two on the Service Selector switch on the T-195 Transmitter and flick 'er to STAND BY?

That'll leave just the tubes heated and the blower motor running. Just standing by, so to speak. Most important, though, it will cut way down on the drain imposed by the radio set on the vehicular battery. And anything that eases the load on the battery adds up to longer and stronger communications.



REELING AND DEALING



Wire and reels.

They go together like . . . well, Connie Rodd and preventive maintenance!

And when you talk about PM on that kind of wire equipment, such things as nicks, burrs, cracks and rough edges come to mind.

Because any reel worth its wire has to be checked for anything that might damage the wire during operations. Especially the rim or flange of the reel, which usually bears the brunt of the banging around.

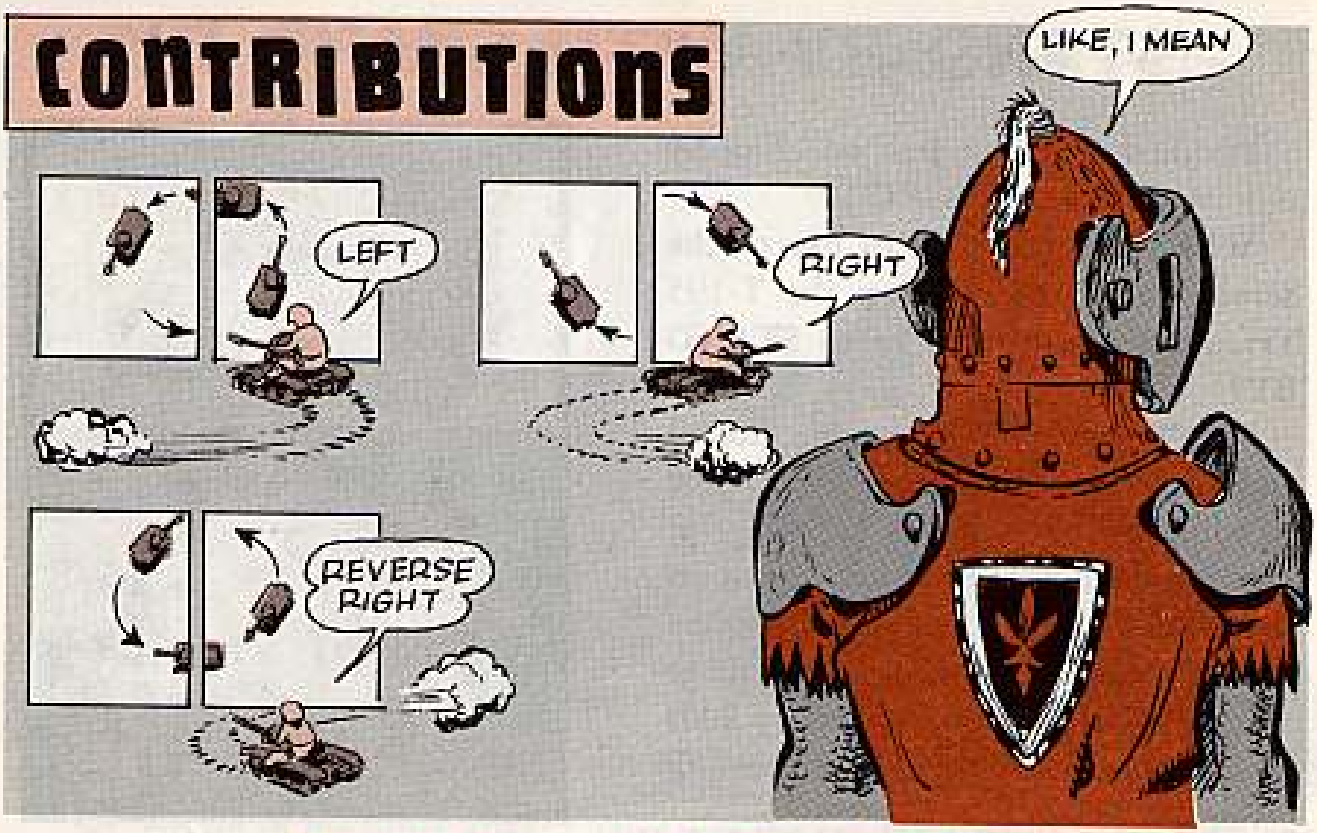
Two PM tips should prevent your WD-1 wire from snagging or tearing on the reels, or maybe snagging a man's hand.

First, try to handle the reels carefully so's to help reduce any damaging contact.

Second, it only takes a few strokes with a file to smooth off any rough or sharp spots on a rim. Follow that up, of course, with a little touch-up paint.

A little care in handling . . . a few minutes work with a file . . . and a few minutes more with a paint brush will keep any reel ready to roll.

CONTRIBUTIONS

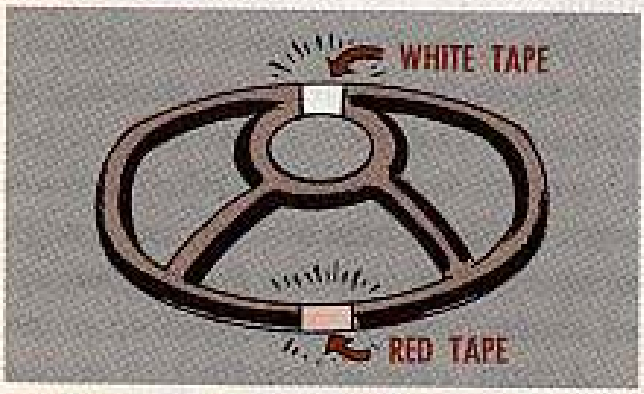


THIS IS A GOOD STEER

Dear Editor,

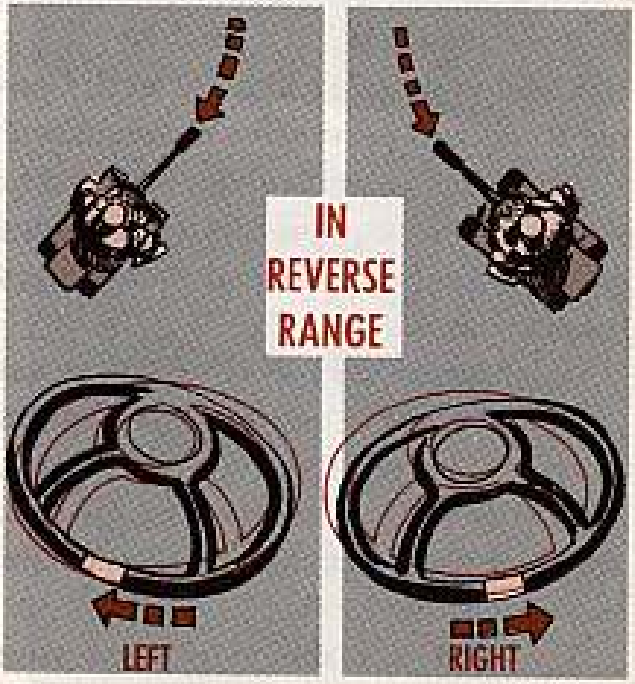
Here's a handy trick that'll tell any M48-series tank driver which way to turn the wheel to make the tank go where he wants it to. This applies to all situations, even the tricky ones like going backward in forward range.

ALL YOU HAVE TO DO IS STICK A PIECE OF WHITE TAPE ON THE FRONT CENTER OF YOUR STEERING WHEEL LIKE SO:



THEN YOU WRAP A PIECE OF RED TAPE AROUND THE WHEEL DIRECTLY OPPOSITE THE WHITE TAPE, AND YOU'VE GOT IT KNOCKED.

When you're in reverse range you use the red tape as your guide and you turn the steering wheel so the red tape moves to the left if you want the tank to go left and right if you want it to go right. This works anytime you're in reverse range.

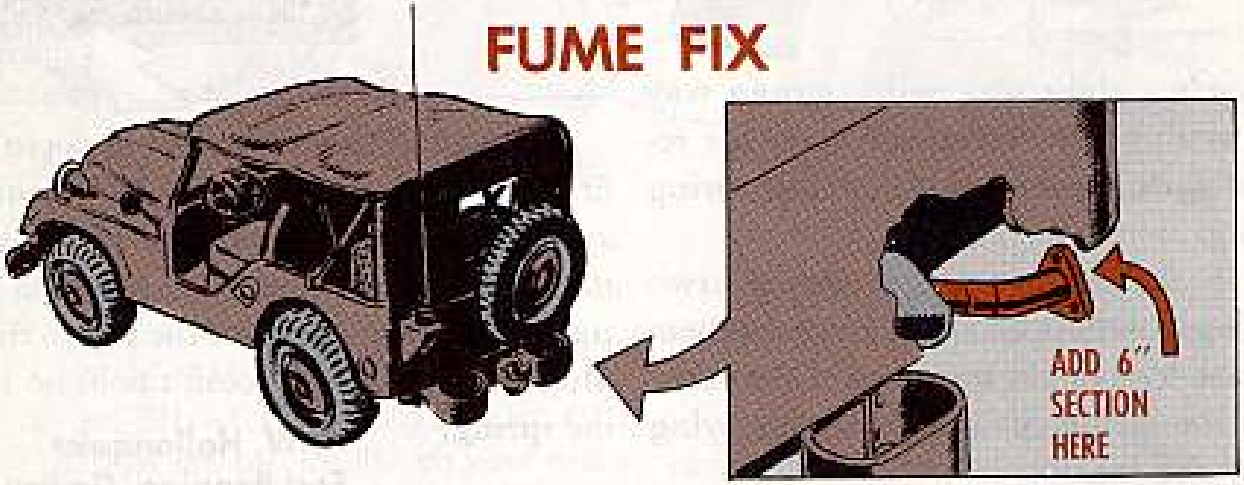


The white tape is your guide for neutral, low, or high. You want the tank to go left, you make the white tape go left. The same with the right.

SFC Jack Bollard
APO 169

(Ed Note—Good idea, but once the driver gets used to it he can take the tapes off entirely and the shape of the wheel will clue him which way to turn. Actually, you should learn to guide by feel even in the daytime so you don't take your eyes off the road or guide.)

FUME FIX

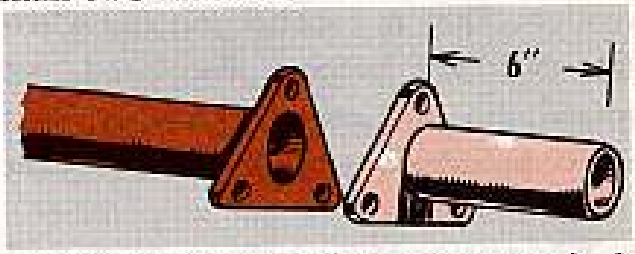


Dear Editor,

Some of our radio operators have been fuming about the fumes comin' from their Jeep exhaust. As you know, the tailpipe ends at a point underneath the vehicle—instead of extending beyond the bumper.

So when the Jeep is standing still—with its radio operating and its engine running—those exhaust fumes start seeping up into the vehicle instead of being thrown out to the side. Hour after hour. You can figure what that could mean to the man operating the radio set.

So our CO gave us the green light to add a short extension to the tailpipe so's to carry the exhaust an inch or two beyond the rear right bumperette. It's nothing more than a six-inch section of pipe held onto the existing tailpipe with the usual three bolts and three nuts used to secure exhaust pipe sections. No modification of the vehicle required. And if an inspector should make exhaust about it, she'll come off in less than two minutes.



The important thing, as we see it, is to keep those deadly fumes away from the vehicle. And our extension does it neat.

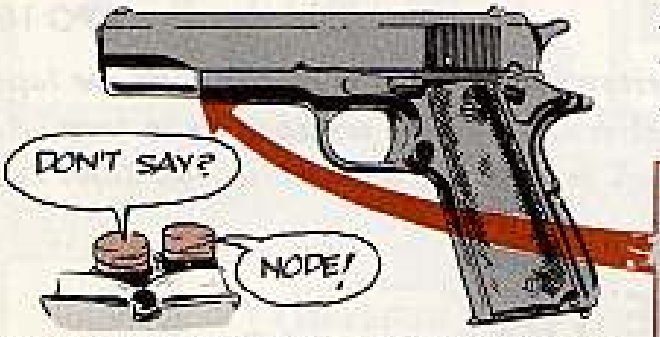
SP4 R. M. E.
Fort Hood, Texas

(Ed Note—Looks like you've come up with a quick fix for an exhausting problem. Just as long as your CO says affirmative.)

ENDS'RE DIFFERENT

Dear Editor,

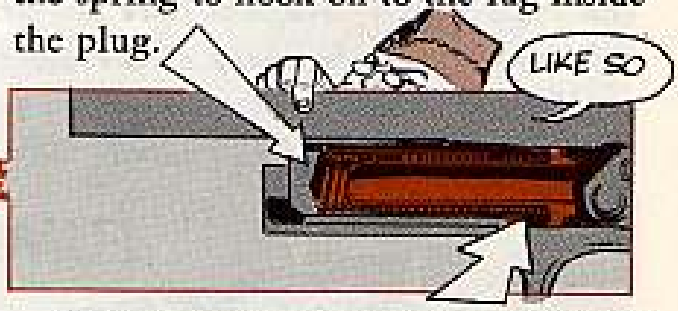
There's nothing in writing so it's easy to see why the man who's supposed to maintain the .45-cal pistol doesn't know



there's a right way and a wrong way to assemble the recoil spring to the recoil spring guide and the recoil spring plug.

If they're assembled wrong, two things can happen when you take them apart. You might lose some of the parts. Or the spring can send the plug flying fast and far.

So the guy who takes the pistol apart should know that the small end of the recoil spring is slipped on the guide. The larger end gets put in the plug and is pushed far enough for the end coil of the spring to hook on to the lug inside the plug.



If the small end of the spring doesn't fit tight around the guide, have your armorer-artificer work on the spring so the coil is small enough to give you a tight fit. He can also give the lug in the plug a few taps if it doesn't hold on to the spring.

K. W. Hallonquist
Fort Benning, Georgia

GET YOUR GEL WELL

Dear Editor,

In operating our M42 twin 40-mm guns, we were forever replacing the selica gel containers in the drive controllers. They're a sealed unit and when the desiccant became discolored, we tossed out the entire assembly. But we've found a way to give the desiccant added life.

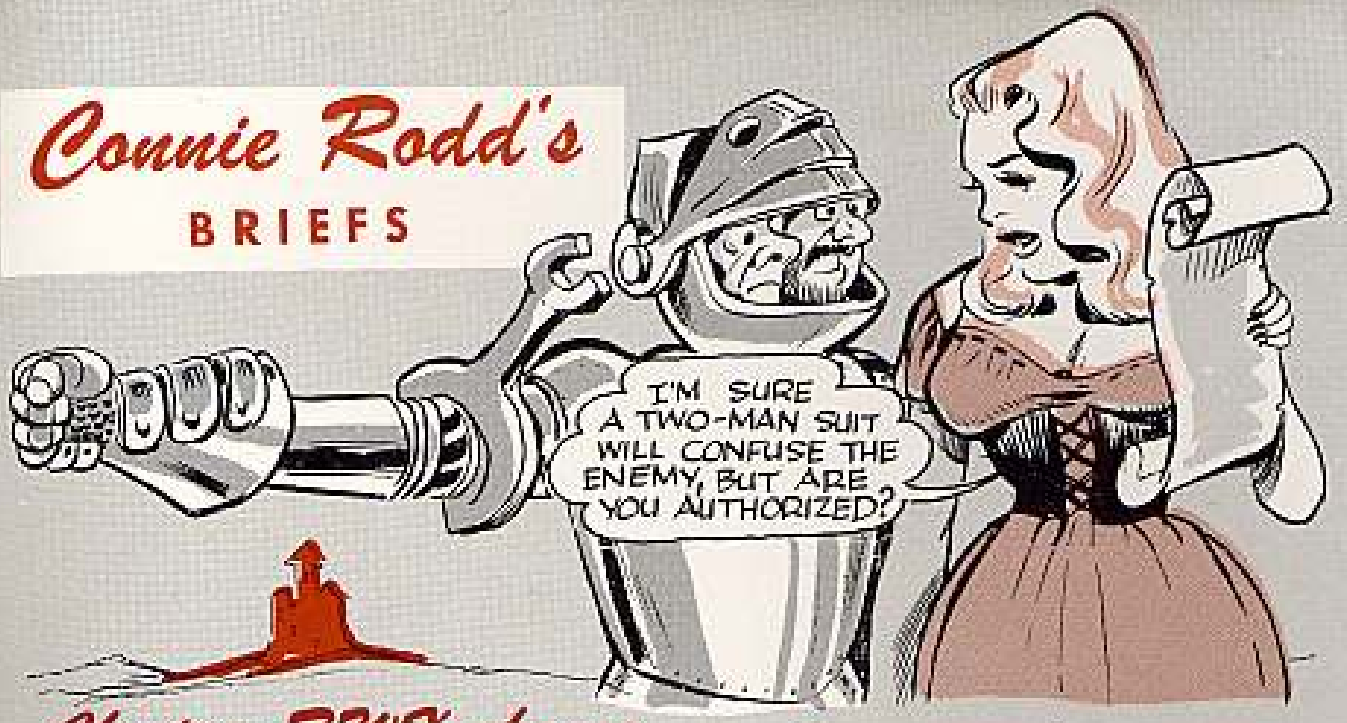
We drill a ½-in hole in the top of the container, empty the desiccant and bake it under a heat lamp until the (dark blue) color returns. Then we pour it back into the container and seal the container with a $\frac{1}{16}$-in thick piece of plexiglass. The seal is held by acetate cement.

We find we can use contents and container three times instead of once.

Armament Section
Comb Fld Maint Shop
Richmond, Va.

(Ed Note— Watch that heat. The desiccant'll be destroyed if it hits 300° or higher for an hour. So as soon as the desiccant turns dark blue, take it from the heat. Also, if the desiccant doesn't contain much moisture to begin with, you can put the whole container in an oven set at about 150° heat. That saves you the trouble or removing the desiccant.)

Connie Rodd's BRIEFS



Choctaw TWX change

If you Choctaw (H-34) wrench benders are confused about following the -6 or TCMAC-EH-34-08-0374 (4 Aug 60) . . . forget this TWX. It's superseded by TCMAC-EH-34-10-2449 (26 Oct 60), which puts the service life on your main rotor blades, FSN 1560-511-9517 and FSN 1560-511-9522 (both P/N S1615-20100), back in step with the replacement time in your -6. Check the new info!

Not staked any more

You may have a carbine that doesn't have the gas piston nut staked. It's no goof. It's been found that when the nut's securely seated there's no need for the nut to be staked.

Look for damage

Next time you're around your Nike-Hercules M442 rocket motor truck, take a long, hard look at the towbar. If you spot any cracks or breaks where the tube assembly is welded to the yoke assembly, buzz your support unit.

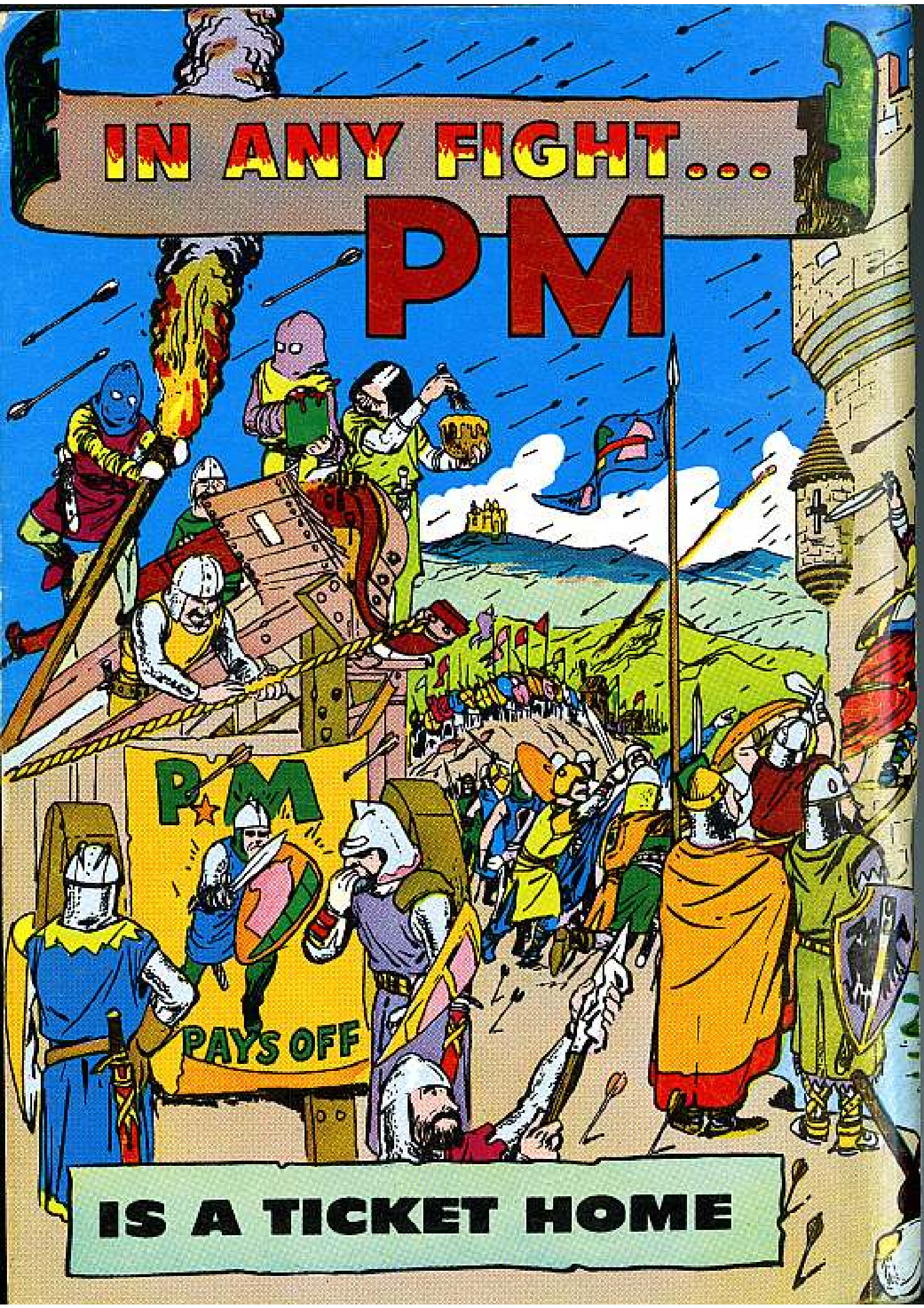
Steel wool's wrong

Your publications don't say anything about using it . . . so don't mess around with steel wool when you clean the electrical parts on your 3.5-in and 4.5-in rocket launchers. The chances are you'll leave some slivers of the stuff behind . . . and that's a right good way to set up things for a short circuit. Stick with dry cleaning solvent or volatile mineral spirits for cleaning any electrical parts. If they don't do the trick, ask your support unit for help.

Quickway MWO

MWO 5-3810-207-35/1 (12 Sept 60) covers modifications to your Quickway Model M200 crane-shovel. This is an urgent deal and includes the installation of new gas tank, grease fittings in crane houselock shafts, clutch cross shaft and transfer case shift lever, and guard over sending unit of carrier gas tank. Check with your support unit pronto. You'll need the serial number of your rig on the requisition for the MWO kit.

Would You Stake Your Life on the Condition of Your Equipment?


IN ANY FIGHT...
PM
P M
PAYS OFF
IS A TICKET HOME