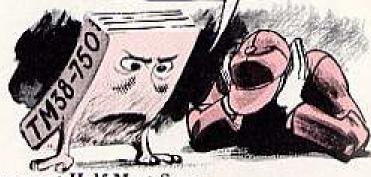




### DON'T FIGHT

OKAY, SO I LOOK BIG FAT AND COMPLICATED...BUT AM I REALLY ??...TAKEN IN BITS, I'M VERY DIGESTIBLE.



Sergeant Half-Mast Says-

The man who "fights the problem" is really fighting himself and not solving his problem or getting his job done.

A lot of guys are "fighting the problem" when they see TM 38-750 and think about getting their equipment records in shape-correct and up-to-date.

LET'S FACE IT,
YOU DON'T GET NOTHIN'
FOR NOTHIN' ... YOU GET
AS MUCH OUT OF A
SYSTEM AS Y'PUT INTO IT...
Y'CAN'T HARPLY INVEST
YOUR TIME BETTER.



AFTER ALL, I WAS MADE TO HELP YOU MAKE YOUR JOB EASIER.

can get help from your support unit; the technical people have the knowhow on record keeping as well as on maintenance and supply.

Get copies of DA Pamphlet 750-38 (dated 25 Aug 64); it's designed for easy reading and easy understanding of the equipment record system.

Then, you apply what you've learned. Use the forms, and with

was designed to provide information on your equipment and its maintenance, to give you, your CO, and all the people up the line the word on how your gear stands, maintenancewise.

So, read "The Book," TM 38-750, "Army Equipment Record Procedures," from cover to cover. Then, if you need help on any points, see your sergeant or your CO. The CO EVERY NEW SYSTEM...
EVERY IMPROVEMENT
GETS THE PANIC RECEPTION
AT FIRST.



True, you can't sit down, read and completely understand TM 38-750 during your next coffee break. You'll need plenty boning up on the TM and the forms. But once that's done, you'll see that the TM and forms are not so tough.

You've got the Army Equipment Record system . . . work with it, and make it work for you. After all, it



some practice and checking back at the manual, you'll soon be the expert.

If a real tough problem arises that you, your sergeant, CO and support can't solve, shoot it in to the guys who wrote the book: U. S. Army Maintenance Board, Fort Knox, Ky. 40121.

Give 'er a twirl. You'll be amazed how easy it is to whip a problem if you don't fight it.



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THE PREVENTIVE MAINTENANCE MONTHLY
ISSUE No. 145 1964 Series
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Use of funds for printing of this publication has been approved by Meadquarters. Department of the Army, 4 April 1952. DISTRIBUTION. In accordance with requirements submitted on DA Form 12-4.

PS wants your ideas and contributions, and is plad to answer your questions, there and address are kept in certidence, just write to: Sql. Half-Mast, PS Magazine, Gart Knox, Ky. 40121



THEY'RE JUST YOUR

CAMS OF YOUR MODAL'S TANK WHAT THOSE FAST... LIKE THIS ON THE MGO TANK, RIGHT? WHICH ? AND SUCH LIKE? THE BREECH OPERATING

expose yourself to some educating. Well, pull up a stump, trooper, and

able, though, so no sweat here. model M140's and the variable on lateor the variable FSN 1015-968-6329 The reversible FSN 1015-874-6754, two types of breech operating cams: on the M60A1 comes with either of production jobs. They're interchange-You'll find the reversible on early To start with, the M140 gun mount

FASTI

ONV MOTS! TWO SPEEDS REVERSIBLE

SPEEDS

ISLOW TO

NATION

ARIABL

able gives you sixteen speeds, ranging cases from the chamber, while the varithat the reversible gives you two speeds the M60 tank has only one speed, refrom slow to fast. The M116 mount on (slow and fast) in ejecting expended member? The main difference between 'em is

perature conditions. F'rinstance, when be pretty important under certain tem-A change in ejection speed gets to

> say, in the arctic), cartridge cases won't eject completely. the mercury's dragging bottom (like,

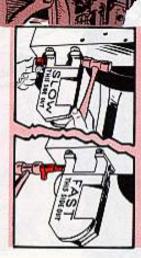
counter-recoil to the point that empty This could be dangerous to man and you'll get slow

ally speed up and you'll have to switch to SLOW. recoil action and ejection will gradukeep on firing your "105," counterbreech operating cam. However, as you A situation like this calls for a FAST

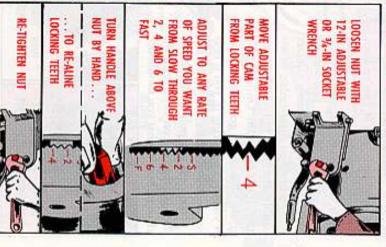
expended cases are being ejected. under the same conditions. All you can weapons will operate exactly the same to SLOW, and vice versa, since no two can be given for changing from FAST cither. No definite temperature range speed to another. Not an easy decision, do is keep your eyes on how fast the it's time to switch from one ejection guys who have to figure out just when You loaders and gunners are the

casier'n falling into bed. vice versa with the reversible cam is Switching from FAST to SLOW or

> CAM OVER AND TAP THE SHAFT BACK IN. YOU GUARD TO TURN THE TRICK DON'T EVEN HAVE TO REMOVE THE LOADER'S ALL YOU DO IS: TAP OUT THE SHAFT, FLIP THE



VARIABLE CAM'S EVEN EASIER GETTING THE RIGHT EJECTION SPEED WITH THE



so that you don't damage the cam parts ful with this flipping and adjusting bit Of course, you want to be real care-

## PRESS THE PLUX GER

M31 PERISCOPE POOP



M60-series tank gun. Only trouble semble the breechblock on your plate when you disassemble or aspush down on the firing contact up the bloody thing. if you keep pestering it, you'll beat is, the plate won't go down . . . and Sure, the TM says you should

215-10, that is) comes up with the change, here's what you should do: Well, till the pub (TM 9-2350)

TO DISASSEMBL

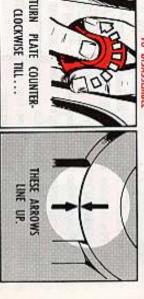


plate clockwise till the plunger engages the locking notch on the plate. Savvy? And to replace the contact plate, line up the arrows, depress and turn the

PLUNGER NOT THE PLATE DEPRESS FIRING CONTACT

CLOCKWISE TILL...

IN MY BODY ASSEMBLY—EVEN
IF THEY HAVE HOLES IN
THEIR HEADS.

you're worried? with lacing wire? And you're not sure maybe they need to be locked together have holes through their heads like if they should be lockwired? And (gunner's) periscope on your M60 tank You say some screws on the M31

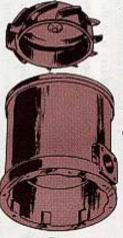
lace them if they're not already laced laced together. But you don't need to for locking wire and the screws were Some of the first M31's were drilled

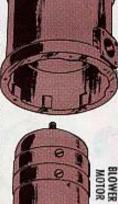
The later-produced screws are not

drilled for wires.

# M60 TANK IMPROVEMEN

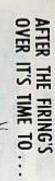
motor, (Ord 10884177), is part of Blower Assembly FSN 2920-785-9085. Having trouble with the generator cooling motor on your M60 tank? This





has a beefed-up motor, Ord 10898760. A new blower assembly, FSN 2920-895-3417, is in the supply system and it

this check could keep you from ruining your generator. (Sep 62) on page 145, para 12, to make sure the blower is working. Making Meanwhile, remember to check often like it shows in TM 9-2350-215-10







other shoulder. This'll help prevent it from the tripod. Carry it by the strap you hand-carry the M2, always remove they're handled during travel. When ahead of time because of the way the compass—if you happen to trip. damage to the instrument-especially in one hand and the tripod over the A lot of M2's meet their ancestors

tween your feet. that, place it on something soft bethe M2 in your lap. Or, if you can't do vehicle, it's a good idea to sit with When you're riding with it in a

delicate critters. You just can't be too kind to these

When you're through with your M2, close and lock it up right, like so:

Lock the needle in place. If you don't, it'll

bang around and get hur

If you don't get rid of dust and dirt first, camel's hair brush first to remove the dust Every time you dean the optics, use a Then wipe off the smears with lens tissue.

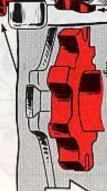


else, the cover won't fit right If you locate it anywhere knob over the notation strip. Place the azimuth micrometer Then, if you try to force a fit, you'll damage the instrument



base plate. Then back strument down on the -which'll bring the inscrews all the way up Turn all three leveling

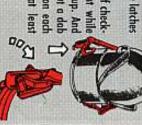
the knobs from freezoff one full turn to keep



stuff get into the screw receptacle and foul up the busted spring'll let dirt and support to replace it soonest putting the cover on. If the plate cover assembly before with FSN 1240-692-1519. A spring's weak or busted, get Check the spring in the base-

> be sure you snap the latches After you put the cover on,

mounting knob at least of light lube oil on ead ing the equipment while don't forget to put a dab once a month. you're closing it up. And Make a habit of check-

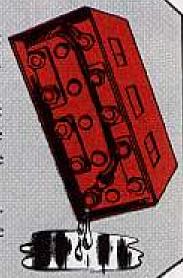


### JUICE ON THE LOOSE

A drip and a flip nets you juice on the loose if you get a little forgetful with the batteries used with the Model 9903 infrared weaponsight.

The drip goes like so: You store the weaponsight components, includin' the BB-429/U battery, in the storage case. Then you forget and flip the case upside down.

Naturally, the battery, too, goes upside down . . . and the electrolyte leaks out of the cells through the vent cap. Loose juice.





### A FLIP...

Now to the flip, such as you give the rotary switch: Like, leaving the switch on when the weaponsight's not in use can drain the life out of the high voltage power supply, the BA-42 battery. And that's juice on the loose with no purpose to serve.

There are four positions for the switch, and since OFF isn't marked, it's not hard to walk away and leave the current on. So make sure—by clicking the switch all the way back counter-clockwise.

### A BLURR ...

Another loose point: If rifle recoil keeps throwing your objective lens out of focus, or if the lens stays out of focus, suspect the body liner has worked loose. The image tube slides into the liner.

Sometimes the liner works free, allowing the parts to move, and throws the lens out of focus.

If you suspect the liner is riding free, turn in the weaponsight to your support.

IF LINER IS RIDING FREE, IT'S A JOB FOR YOUR SUPPORT.



Is there anything in the regulations that would keep us from painting identifying numbers or initials on the stocks of our rifles?

Sgt. R. C.

Dear Sergeant R. C.,

You won't find anything official that says you can't-but it's not a good idea. Paint's too hard to get off once a weapon's been turned in for re-issue.

If local SOP says you're to number or initial or otherwise label your rifle, it's better to use masking tape. This comes off easy and'll leave the stock good as new.

A good out-of-the-way place to put tape is in front of the front swivel. But be sure you do a neat job.

To get paint off your stock (whether it's made of wood or plastic), use a few dabs of paint remover. However, after you wipe the paint off a wooden stock, apply a good dose of raw linseed oil to keep the wood healthy.



But, whatever you do, never use sandpaper or any other abrasive to get the paint off. You'll do more harm than good. Half-Mast

# **DUAL-DUTY RIFLE ITEMS**

items do double duty on M1 and M14 rifles. Here's a handy pin-up for your arms room to show what

FSN 1005-600-8868 APERTURE, Sight.

(6008868)

SWAB HOLDER SECTION FSN 1005-726-6110 small arms cleaning rod

(726-6110)

FSN 1005-731-2737 KNOB, windage: rear sight.

(7312737)

small arms. ROD, section, cleaning,

FSN 1005-726-6109

(726-6109)



SLING, small arms, MI.

(6544058)

compression, hammer. SPRING, helical,

FSN 1005-600-8887

(6008887)

BRUSH, cleaning small arms, bore.

FSN 1005-556-4174



FSN 5315-501-3668

(5013668)

PIN, straight headed,

CASE, small arms, cleaning rod. FSN 1005-650-4510

(7287754)

AS LINSEED OIL

BOOO IL

ENVELOPE, fabric. FSN 1005-722-8907

FSN 1005-600-8618

PLUNGER, extractor spring.

NATURALLY, YOU'LL FIND THE M1 ITEMS IN TM 9-1005-222-12 P/2 (21 AUG 61) AND THE M14 ITEMS IN TM 9-1005-223-20P (16 MAR 62).



your M14. want to remember when you're zeroing Here're a couple things you might

you don't get the screw too tight. screw on the rear sight. And be sure tightening the elevating knob lock blade or a right-sized screwdriver when Be sure you use your combo tool's

HTIM TON



screw or strip its threads, either of which means the pinion assembly. a dead rifle till the armorer gets around to replacing too much muscle. Result: They bust the locking by using pliers or over-sized screwdrivers . . . and A lot of guys are fouling up pinion assemblies

they don't need much tightening to retain a zero The way the locking screw and plate are made,



swell so bad it'll interfere when you fire the rifle. during a road march in the rain-the stocks can moisture. If they're exposed for a long time-like doesn't mean they won't ever pick up too much with raw linseed oil when they're made. But this Yeah, you're right. M14 rifle stocks do get treated

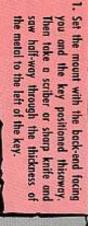
the stock water-resistant. in raw linseed oil every couple of days till you get Best way to cure this is to don't let it happen. Rub

5

busted shields on M110 telescope mounts for your outfit's M67 rifles? That what's bugging you, Speedy, ol' Y'say you're going nuts replacing

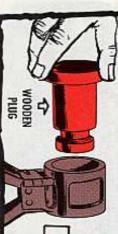
when the scopes are not installed. dirt and stuff out of the spring cavities some wooden plugs you can use to keep you get your support guys to whip up with a better mount. But make sure off and leave 'em off till they come up solution. Just take the busted shields Relax. You couldn't find 'a simpler

the shield without even taking the the M103 telescope, you can strip off No sweat a-tall. After you remove





some up for you if you give 'em the pattern wooden plug. Your support'll gladly make That's all there is to it, except for the



2. Next, stick your scriber or knife under the shield and buckle it inward. Now, grab The shield'll slide out easy when you put till the metal breaks along the scribed line. pair of pliers and bend it back and forth the metal where the shield's bent with a



of the mount into the groove provided in the the rubber packing ring located on the front however: After you stick it in the mount, push touled up. plug. This'll keep the packing from getting One thing to remember on using the plug.

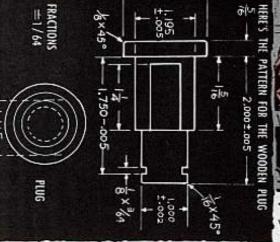


12

### SHUCK THE

SHIELD'S OUT...





### NUMBER?

DEPARTMENT OF THE ARMY MODIFICATION WORK ORDER MW0 9-1055-215-30/1



LEY, JOE, GOT A MO?
CHECK OUT THE SERIAL
NUMBER ON YOUR M91
NULTIPLE FOCKET
LAUNCHER, IF IT'S 158 OR
LESS, GET YOUR SUPPORT
PEOPLE TO APPLY
MWO 9-1055-215-30/1
(22 APR 63), PRONTO.



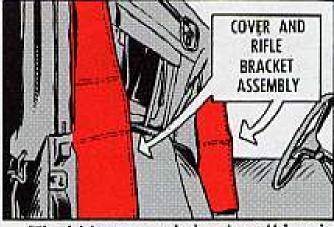
plugs separating from cluster tip jacks. an end to your trouble with wire tip trical continuity during firing and put retention device that'll maintain elec-This'll equip it with a jack plug

devices installed. above already have these retention M91's with serial numbers 159 and



If the "tactical situation" in your area should get hit by a sudden heat wave, you might be needing your rifle fast . . . and in shape to shoot.

To keep that rifle fit, keep it in a rifle bracket that can be installed on your truck—if your CO okays it—except on ¼-ton Jeeps. TB 9-2300-209-20 (11 June 59) tells you one universal Rifle Bracket Kit, FSN 2590-572-0740, gives you support brackets and mounting plates to install two Cover and Rifle Bracket assemblies, FSN 2590-505-6736.



The kit's not needed to install brackets on G749-series trucks. All you need is the attaching parts shown in Figs 3 and 4 of the TB.

The TB's got dope on stowage of rifles in G741, G742, G744, G749 and G792-series vehicles. The 1/4-ton vehicles don't have space for 'em. And o'course rifle brackets're not allowed in any ambulance or other vehicle that wears the red cross.

Remember, tho, you need authority from your command to install rifle brackets. But if a major command or the CO of a big outfit calls for installing 'em on all its vehicles, there's your authority right there.

Your rifle's rugged, but don't try turning it into a rough-rider.

4 3 mile of

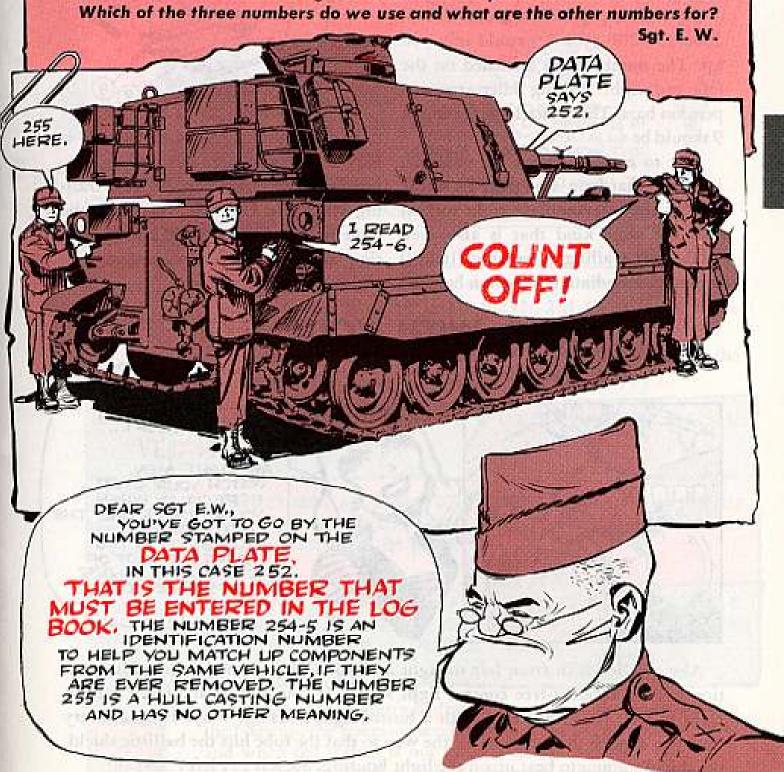
### THE HULL STORY

Dear Half-Mast,

There are several different numbers stamped on the M108 105-mm howitzer and we need to know which is the official serial number to be entered in the log book.

In the past we have used the number stamped on the hull—in this case 254-5. This number is found in several places on the hull, both front and rear. However, there is another number—in this particular case 255—on the left, rear, of the hull.

Neither of these numbers agrees with the data plate number which is 252. Which of the three numbers do we use and what are the other numbers for?



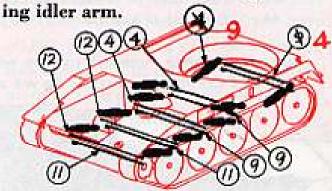


Replacement torsion bars for your M107 175-mm SP gun and your M110 8-in SP howitzer work fine if you get 'em in the right place,

Fig 45 on page 72 of your TM 9-2300-216-20P (Jul 62) could mix you up. The numbers got swtiched on the left and right trailing idler-arm suspension bars. The 4 should be 9 and the 9 should be 4.

Just to make it easier for yourself, jot down that Item-4 on page 73 of the -20P is the intermediate right torsion bar, the same kind that is also used in the left trailing idler arm. Item 9 is the intermediate left torsion bar, the

type that is also used in the right trailing idler arm.

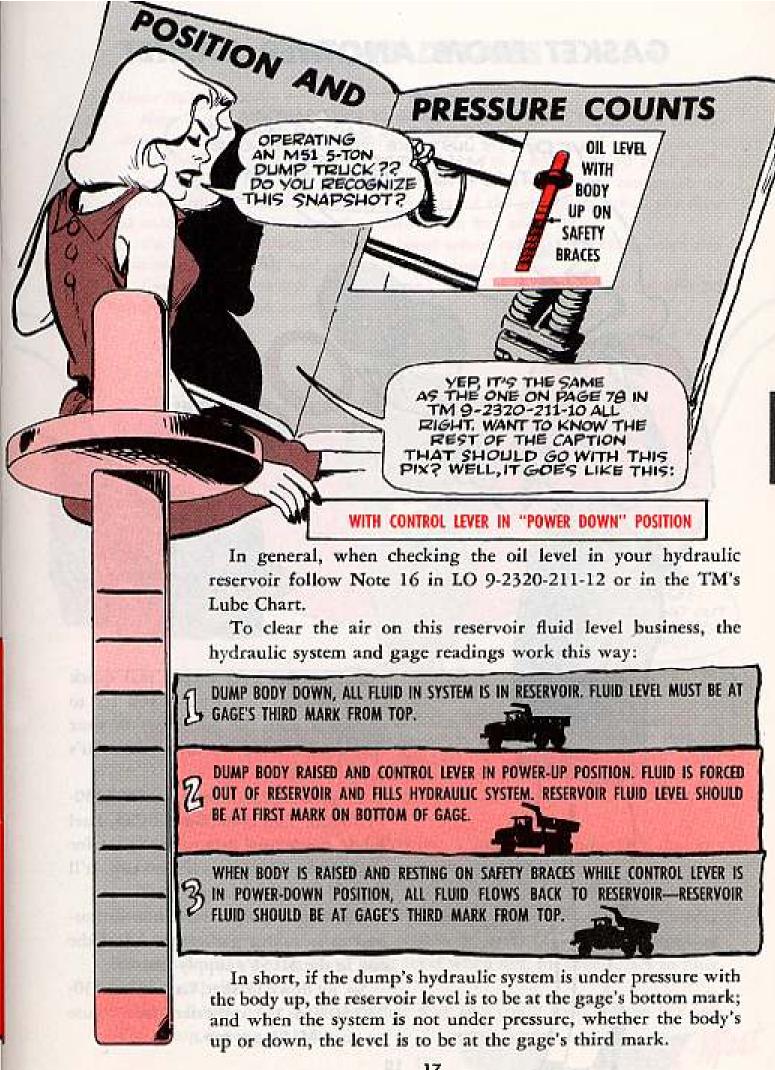


In other words, Item 4 on page 73 is FSN 2530-752-8981, torsion bar, suspension, intermediate right, and trailing idler, left. Likewise, Item 9 on the same page is FSN 2530-752-8983, torsion bar, suspension, intermediate left, and trailing idler, right.

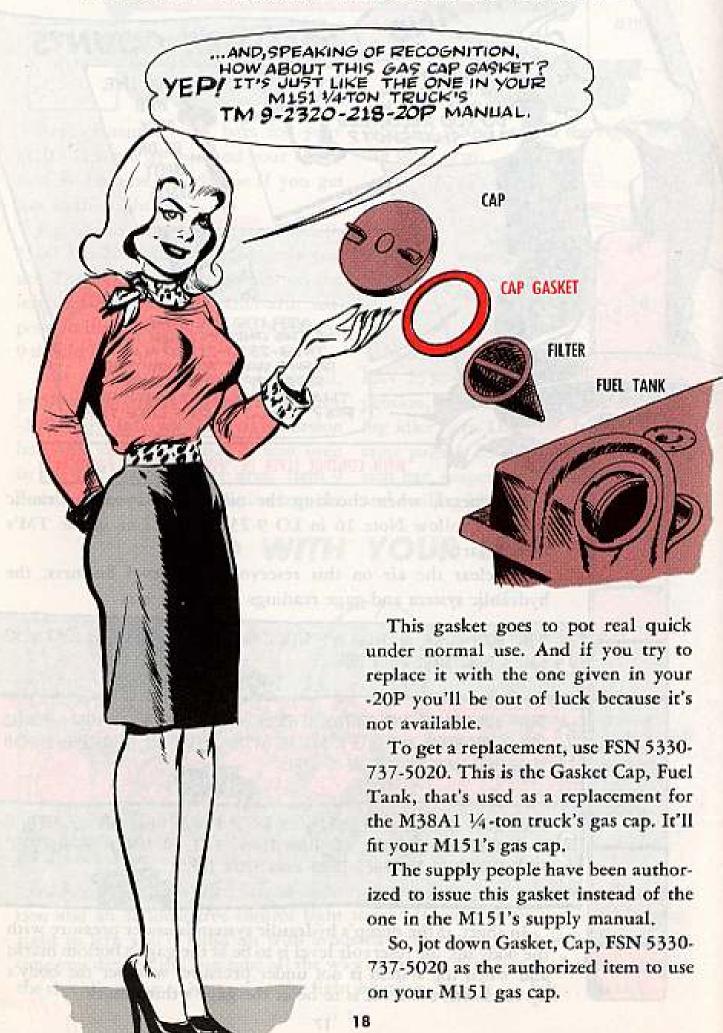
### LEAD WITH YOUR LEFT



Always slide it in from left to right and you'll enjoy good reticle illumination and an accident-free control light source. If you goof up and insert it from right to left, you'll wind up with a busted light housing. Why? Because every time you depress the gun tube all the way so that the tube hits the ballistic shield, the shield's going to beat up on the light housing. So, left . . . left . . . yeah?



### GASKET FROM ANOTHER BASKET



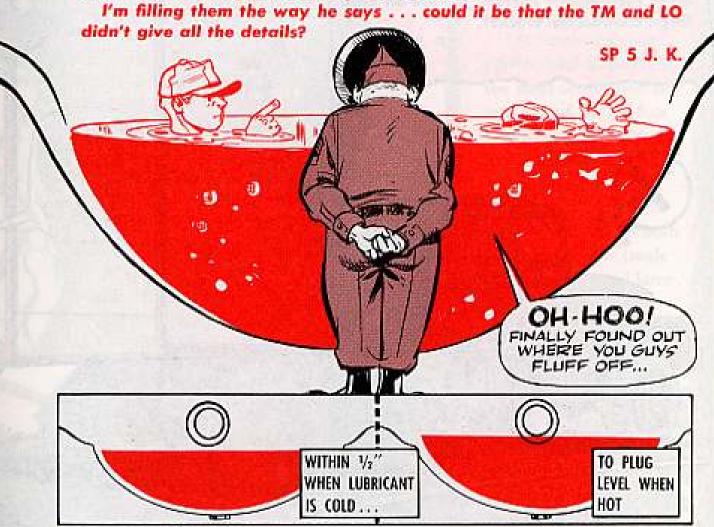
### MORE DETAILS

Dear Half-Mast,

How much lube do I put in our G744-series 5-ton truck axle differentials, transfer case and transmission?

LO 9-2320-211-12 and the LO chart in TM 9-2320-211-10 both indicate that the lube must be at the level plug hole; my maintenance officer says it should be within 1/2 inch of the plug hole when the lube is cold or level with the plug hole when hot only.

He says that filling it to plug level when cold is overfilling and will cause vents to clog and possibly force some seals.



Dear Specialist J. K.,

You'll never go wrong by following a man who knows his maintenance. He's right; all the details were not spelled out.

Note 6 in the LO and TM meant to give the same information that's found in the 21/2-ton truck LO's. That is, "at axle differentials, transfer and transmission, check level to within 1/2 inch of level plug opening when lubricant is cold or to plug level when hot, fill other cases to plug level at all times".

Keep lubing your 5-tonners that way and you'll soon see the LO and Hall-Mast TM doing it your way too.



5-ton tractor? Did you ever tow a load with the MS2

avoid having an accident when you dedrives you to your wit's end trying to pend on those small vibrating side- and rear-view mirrors. If you haven't, then I can tell you it

large commercial trucks? large rectangular mirrors you see on most Is there anything we can do to get the

SP S C. L. B.





mirrors on an 'as required' use of the 10-ton truck command can authorize the similar to those used on the basis. The mirrors can be Mirror Assembly (Left) (Right) FSN 2540-575-8391 numbers: Mirror Assembly had under these stock jobs are available, your 10-ton trucks. Until the new be mounted on brackets FSN 2540-575-8392.

motor vehicle accidents. is the safety AR for the prevention of mirrors is AR 385-55. This using the 10-ton truck The authorization for

on the 5-ton tractor has been OK'd by the people modification authority." Putting the 10-ton jobs be accomplished under existing vehicle funds are available locally and installation can greater safety on the highways provided that mirrors \* \* \* in the interest of promoting devices such as large modified rear and side view "Commanders are encouraged to install Here's how para 30 in the AR reads:

mirrors that'll be designed for the 5-ton truck But don't put 'em on if you can wait for the having logistic responsibility for that vehicle.

### M49C HOSES

delivery hoses, that is. your M49C gas tanker hose, you wanta hose-When you wanta

There sure is.

Dear Specialist C. L. B.

about 7 x 16 inches and wil

5-ton tractor. They're to be

being designed for use on the New mirrors and brackets are

one end of the 35-foot later-produced 49C's. connection for those had a male and female discharge hose so you the male connection on you've had to convert For some time now

ends). on both ends) and later hose (female-male -the early type (male Now you can get both

Studebaker and Curtiss 565-5172. It's used on Discharge, FSN 2590hoses ask for Hose, and for the Reo jobs serial number M49266 Wright tankers before before serial number (now White Motors) For earlier discharge

884-4841, with maletake Hose, FSN 2540 these serial numbers female connections. All M49C's after ABOUT THOSE OF CHANGES ...

Dear Half-Mast,

Some people around here, say that tactical wheeled vehicles should have their engine oil changed every 3000 miles or semi-annually, whichever comes first.

DA Circular 750-10 (April 1963) is being cited as the authority for this new oil-changing deal.

I've been going by the specific vehicle's LO, which says crankcase oil changes should be every 6000 miles or semi-annually.

Could you clear up this mileage hassle?

SSgt M. T. C.

100

FIRST, LET'S
FIND OUT WHAT
IS MEANT BY
SEMI-ANNUAL
SERVICES.
THIS IS WHAT'S

THIS IS WHAT'S CAUSING THE CONFUSION.

On most tactical wheeled vehicles, other than towed items, you've got two different types of semi-annual services required. They are:

0:0:2:4

RIOL 1965 2. A semi-annual preventive maintenance 1. A semi-annual periodic service relubrication service quired by the vehicle's required by the vehi-TM. This "S" service cle's lube order. This 6 replaces the old "Q"'s is done every six and was first set up months or 6000 miles by DA Circular 750-10. whichever comes first. And it's applied every six months or 3000 miles, whichever comes first.

Now, engine oil changes are covered in the vehicle's LO and are normally done semi-annually (six months) or 6000 miles, whichever comes first. The exception to this "6 or 6" deal are vehicles that do not have an odometer to record mileage. These vehicles usually use an hourmeter ... which means their oil changes are based upon hours of operation or six months, whichever comes first.



The important thing is to make certain that you have the latest LO for your vehicle and do just as that LO says.

Regular or scheduled engine oil changes are not required at the semiannual "S" preventive maintenance



(3000-mile) periodic service.

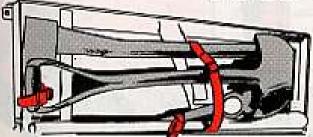
But . . . you can do an oil change at the "S" or 3000-mile periodic service. You see, this periodic service requires you to check the condition of the engine oil. And if an oil change is necessary, you change oil and replace the oil filter.

Of course, this would only be necessary if you had been operating under unusual conditions which contaminated the oil.

So, with exceptions considered, under normal operating conditions, engine oil changes are scheduled for 6000 miles of operation or six months, whichever comes first.

Hall-Mast

TOOL RACK STRAPS



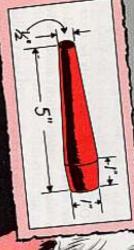
F\$N 5340-536-0003 LISTED IN DOD C5340-IL-A, VOL5 (1AUG 64) WILL GET YOU THE STRAPS.

There are chin straps, knapsack straps, wrist watch straps and a dozen and one other straps you can name, but the one that seems to be a bit of a trouble-causer is the strap that holds the axe, pick and shovel on the pioneer tool rack.

In case you've been searching for the strap, here's something that should help you. You ask for Strap, Webbing, FSN 5340-536-0003. You'll find it listed in DOD C5340-IL-A, Vol 5 (1 Aug 64).

Dear Editor,

sults than we got with screwdrivers here are using it with far better re-It does a "no sweat" job, and units for opening battery terminal clamps. has produced an almost costless tool My idea, plus a lathe from support



wants to make use of it: here's a run-down for anyone who We'd like to share the wealth, so

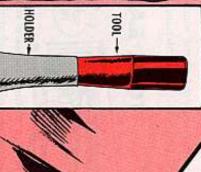
eral, a satisfactory taper is 31/2 to 4 1-in diameter stock metal to match the taper of a battery post. In genthe shaft to 1/2 inch at the tip. inches long, tapering from 1 inch on We tapered a 5-in long piece of

the 1-in stock in three minutes or less. have his support use a lathe to taper An organization mechanic could

on a wall or board . . . and slip the would allow him to hang the holder A drilled hole near the lip of the pipe tool in it when he's through with the pipe to hold the tool when not in use. Also, the mechanic can crimp a 1-in







## BATTERY CLAMP TOOL

off the clamp nut far enough so's the clamp can spread. To use the tool, remove the clamp from the battery post and back

solid (have a care here) until the damp opens enough to fit like this: well down on the battery post, Insert the tool like so: Hit the tool with a hammer

before you install it.

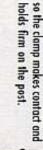
to the underside of the damp

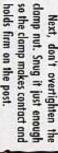
Then, apply a coat of grease

Overtightening

the nut, or







Hob:

the clamp look like this useless over the battery post, can make not seating the clamp well







the tool necessary. It's that kind of tightening first off that makes

to open it. You need a new clamp. you take it off, don't bother using the tool to try Finally, if the clamp's cracked anywhere when

be helpful alsowhere. Like I said, the tool's helped us here and it should

A CLAMP?

Fred Kruse Fort Carson, Colo.

aren't tied up.) about. I would suggest catching those buddies in support when their lathes (Ed Note-Sounds good-and more economical than other tools I've beard

## FOR DUMMY COUPLINGS

797-9294 (Ord No. 741-1021) through your regular supply channels for the service and emergency rear outlets? Order them as FSN 2530-Does your M332 11/2-ton ammunition trailer need dummy couplings



Dear Half-Mast.

I got gigged recently for having extension handles on the air-tank bleedpetcocks of all my vehicles.

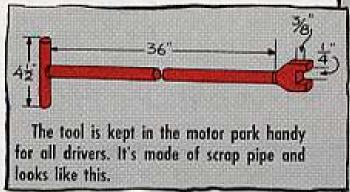
I've always found that without the handle the simple bleed chore is neglected and some air tanks get damaged. Nobody likes to get out and get under. MSgt H. C. O.

Dear Sgt H. C. O.,

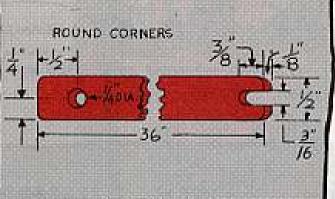
Inspectors frown on the stationary handle because it could get hit and accidentally open the valve, or the extension could get rammed or snagged and break or damage the drain valve. This is especially bad for vehicles in off-the-road operations. Also, the permanent attachment is considered a modification.

In some units a tool makes the bleed job casier . . . any outfit would like it if

they're where it's muddy.



The petcock usually has to be repositioned, tho, so the tool can lock into it easily. Coating the petcock's threads with sealing compound (like white lead paint) will help set it in the right position.



Here's another tool for the job.

It's a piece of Ve-in strap iron, 1/2 inch wide and 36 inches long. The slot in one end grabs the petcock. The drilled hole in the other end takes a rod (or a screwdriver) to form the handle.



Here're a coupla good numbers you'll want to jot down for your M332 ammo trailer. The body cover listed on page 55 of TM 9-2330-231-14P (Aug 62) should have part number 10910838. The FSN that'll fetch it is 2540-446-3163.

### LOG ANTIFREEZE

Adding antifreeze comes under scheduled maintenance services which you owe your equipment. And, like any such maintenance service, it must be recorded by organizational maintenance on the equipment's DA Form 2408-3. See para 4-7b(5), TM 38-750 (15 Jan 64). (Support and higher echelons, o'course, record antifreeze service on DA Form 2408-6, like the TM says in para 4-10a.)

### QUICK-LIKE A RABBIT

Hop—like a bunny for DA Circular 750-3 (12 Jun 64) that lists a whole truck load of TM changes that have the new Scheduled Maintenance Services for your equipment. It should have hit your unit already; if not, order a copy, quick.

### WELDER WARNING

Anytime you're assigned to do a welding job on or near equipment that's been used as a container for fuel—including vehicle gas tanks—better latch onto TB Ord 1047 (13 Feb 63) and read it. Just a little combustible vapor can make a jumbo size explosion that'll sear your eyeballs. So read and heed!



### CHECK AND TRIPLE-CHECK

Check your equipment log to see if you have the latest ESC (Equipment Serviceability Criteria) as listed in DA Cir 750-4 (8 Sep 64).

Appendix II of the circular lists all the ESC's that have been published for use as log book inserts.

If you don't have the latest ESC listed in the DA circular, check with post publications (or with whatever office supplies your AG pubs) to see if you have a requisition that's still valid.

When ESC's were ordered and the pubs were not available, the AG Publications Center didn't set up a "due-out." That means if you didn't get the ESC on the first try, you'll need to follow with a DA Form 17 up thru channels to the U. S. Army Publications Center, 1655 Woodson Rd., St. Louis, Missouri 63114.

A selected list of recent publications of interest to Organizational Maintenance Personnel. This is a list compiled from recent Adjutant General's Distribution Center Bulleting For complete details see DA Fam 310-4 with latest changes.

### TECHNICAL MANUALS

TM 3-220, Jul CBR Decontomination. TM 3-1040-225-12, Jul Compressor, Recipro, 60 CFM, 3,000 PSI, (Dovey Mdl B51RCDV).

TM 5-4310-253-15, Jul Compressor, Recip, Air, 15 CFM, PSI, (Champian Pneumatic Mdl OEH-458-Eng-1).

TM 9-1005-212-12P, Jul Machine Guns, Cal .30, M1917A1, M191A4, and M1919A6 Mounts.

TM 9-1190-214-15, Jun Little John. TM 9-1450-376-12P/1, Jel Pershing. Spi & Syc Equip.

TM 9-4935-303-12P/1, Aug Sergeon!, Test Equip (Ord).

TM 9-4935-377-12P/1, Aug Pershing,

Test Equip [Ord]. TM 9-4935-381-12P/1, Aug Parshing,

Test Equip [Ord]. TM 9-8140-375-12P/1, Avg Penshing,

Spi & Svc Equip.

TM 10-269, May General Repair for convas and webbing.

TM 10-3930-234-20, Aug Truck, Lift, Fork, Gos, 4000 Lb Cop, Army Mdl MHE-188 Boker Mdl FJF-040.

TM 11-4940-202-25P, Jul AN/MSM-16, Electronic Shop.

TM 11-5805-218-20P, Jul Power Supply PP-691/G.

TM 55-1100-375-12-2, Aug CV-2.

TM 55-1510-201-10, C4, Jul. U-B. TM 55-1510-201-20 PMD, -20 PMI, &

-20 PMP, Jul U-8 TM 55-1510-202-20 PMD, -20 PMI, &

-20 PMP, Jul O-1. TM 55-1510-202-20, Cl. Aug O-1. TM 55-1510-203-20 PMD, -20 PMI,

6 -20 PMP, Jul U-6; TM 35-1510-203-20, C2, Avg U-6.

TM 55-1510-204-20P, -20 PMI, 8 -20 PMD, May OV-1.

TM 55-1510-205-20 PMD, -20 PMI. & -20 PMP, Jul U-1A. TM 55-1510-205-20, CI, Aug U-1A, TM 55-1510-206-20P, -20 PMD, -20 PMI, 8 -20 PMP, Jul CY-2, TM 55-1520-201-20P, -20 PMD, -20 PMI, -20 PMP, Jee UH-19 TM 55-1520-201-20, C1, Aug UH-19. TM 55-1520-202-10, C2, Jul CH-34, TM 55-1520-202-20 PMD, -20 PMI, 4 -20 PMP, Jul CH-34. TM 55-1520-202-20, C3, Jul CH-34. TM 55-1520-203-20P, -20 PMD, -20 PMI, & -20 PMP, Jul CH-17. TM 55-1520-205-20 PMI, Jul CH-21. TM 55-1520-210-20P, Jun UH-18, TM 55-1520-211-20P, Jun UH-18, TM 55-1520-211-20, Jul UH-1,

### MODIFICATION WORK ORDERS

MWO 9-1005-240-30/2, Aug XM2. MWO 9-1005-243-30/2, Sep M6. MWO 9-2350-215-20/14, Jul M60

MWO 55-1510-201-34/3, Aug U-8. MWO 55-1510-202-34/9, Aug O·1. MWO 55-1510-203-34/4, Sep U·6. MWO 53-1510-204-34/41, Aug OV

MWO 55-1510-205-34/2, Jun U-1A. MWO 55-1510-206-34/57, Jul CY-2. MWO 55-1610-211-40/1, Avg CV-2.

MWO 55-1520-201-34/6, Sep UH-19. MWO 55-1520-202-34/3, Aug CH-

MWO 55-1520-203-34/19, Aug CH-

MWO 55-2810-204-20/2, Aug OH

MWO 55-1520-204-34/23, -34/26, Aug OH-13,

MWO 55-1520-205-34/1, 34/2, 34/4, -34/5, -34/6, -34/7, -34/9, -34/11, & -34/17, Aug CH-21,

MWO 55-1520-206-34/17, Aug OH-

MWO 55-1520-209-20/25, -20/28, -20/30, -34/17, -34/66, -34/73, -34/84, -34/95, -34/96, & -34/106. Sup CH-47.

MWO 55-1520-209-34/106, Jul CH-

MWO 55-1520-210-20/4, Jul UH-18. MWO 55-1520-210-20/7, Sep UH-

MWO 55-1520-211-20/17, Aug UH-

MWO 55-1520-211-20/21, Jul UH-

MWO 55-1520-211-20/24, -34/10, & -34/25, & -34/28, Sep UH-1. MWO 55-1520-211-34/25, Jul UH-

### MISCELLANEOUS

DA Form 12-36, Aug w/DA Cir 310-15 31 Jul 64 Avionics Pubs.

LO 9-1055-205-10, Aug Honest John, Ground Handling Equip.

LO 9-1430-503-12, Avg Hawk, Ground Con Equip.

LO 9-1430-511-12, Aug Howk, Ground Con Equip.

LO 9-2320-209-12, Jet Corporal, Howk, Little John, Honest John, La-Crossa, Nike-Herc (Imp), Redstone,

Sergeant, Vehicles. 58 11-30, Jul Dry Battery Requisitioning.

58 11-492, Jul Barometer ML-330/FM. ML-331/TM, ML-332/TM, ML-333/

TB 9-1400-299-10/1, Aug Nike-Ajax, Nike-Herc, Nike-Herc (Imp), Oper & Maint.

TB 9-1400-324-10, Jul Sergeoni, Oper & Maint.

TB 9-1400-549-10/1, Aug Hawk, Oper & Molet.

TE 9-6135-200-20/1, Sep Fld & Dep Maint, Safety.

TB 55-1510-204-20/4, 124/1, Sep. OV-1.

TB 55-1510-204-24/1, 5ep OV-1. TB 55-1510-206-10/4, Jun CV-2.

TB 55-1520-210-10/1, Jul UH-1. TB 750-93-1, Jul Combai, Toci, and Sup Veh and Spec Pur Equip.

TB AVN 23-5-1, C1, Jul EIR Digest. TB AVN 23-65, Aug General.





### HAPPY NEW YEAR! BY THE WAY, THOSE REP NUMBERS ARE THE JULIAN DATES FOR YOUR EQUIPMENT RECORDS

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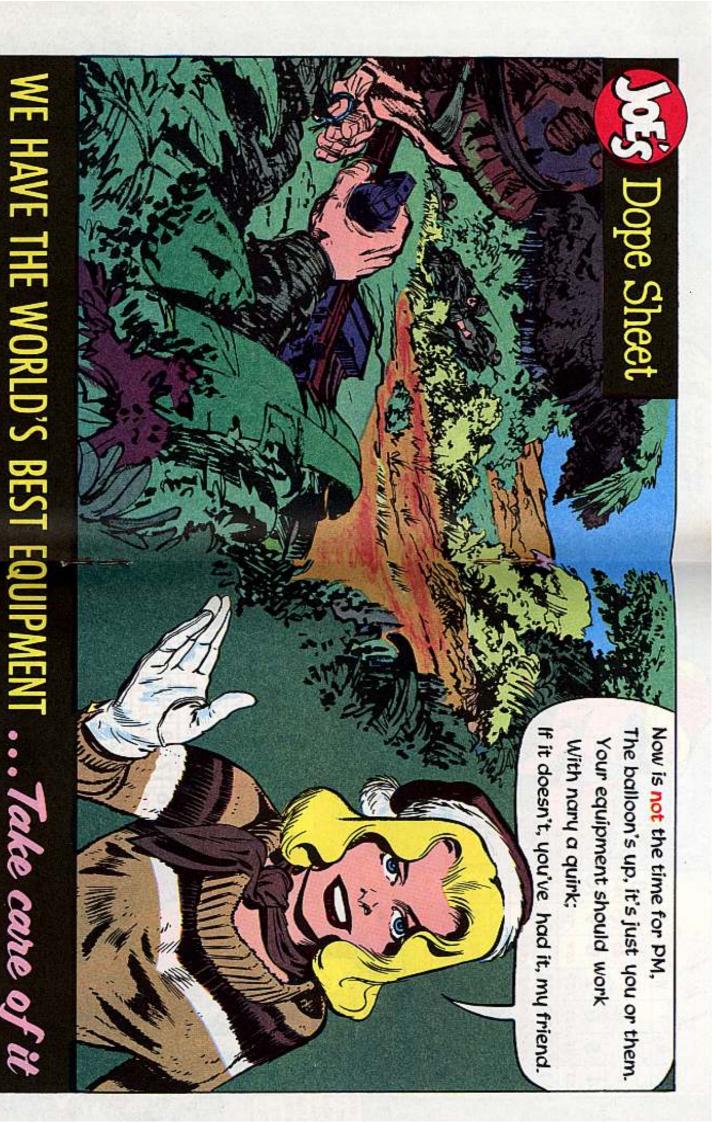
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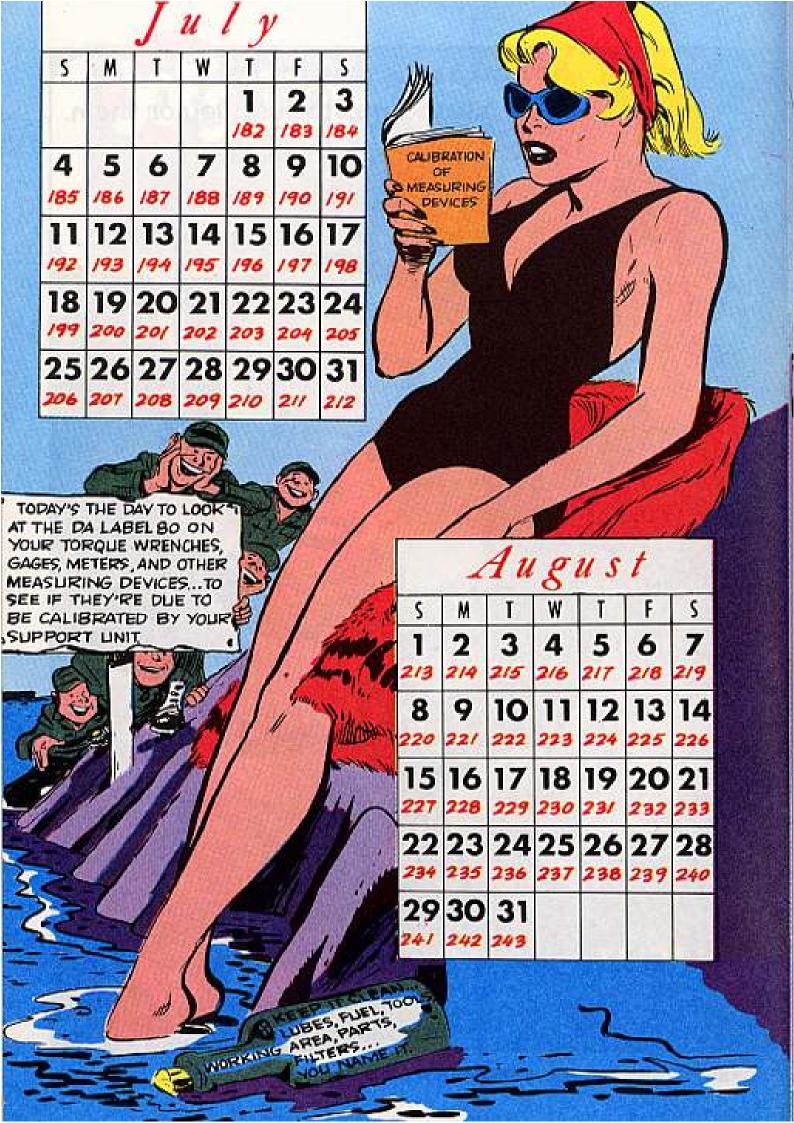
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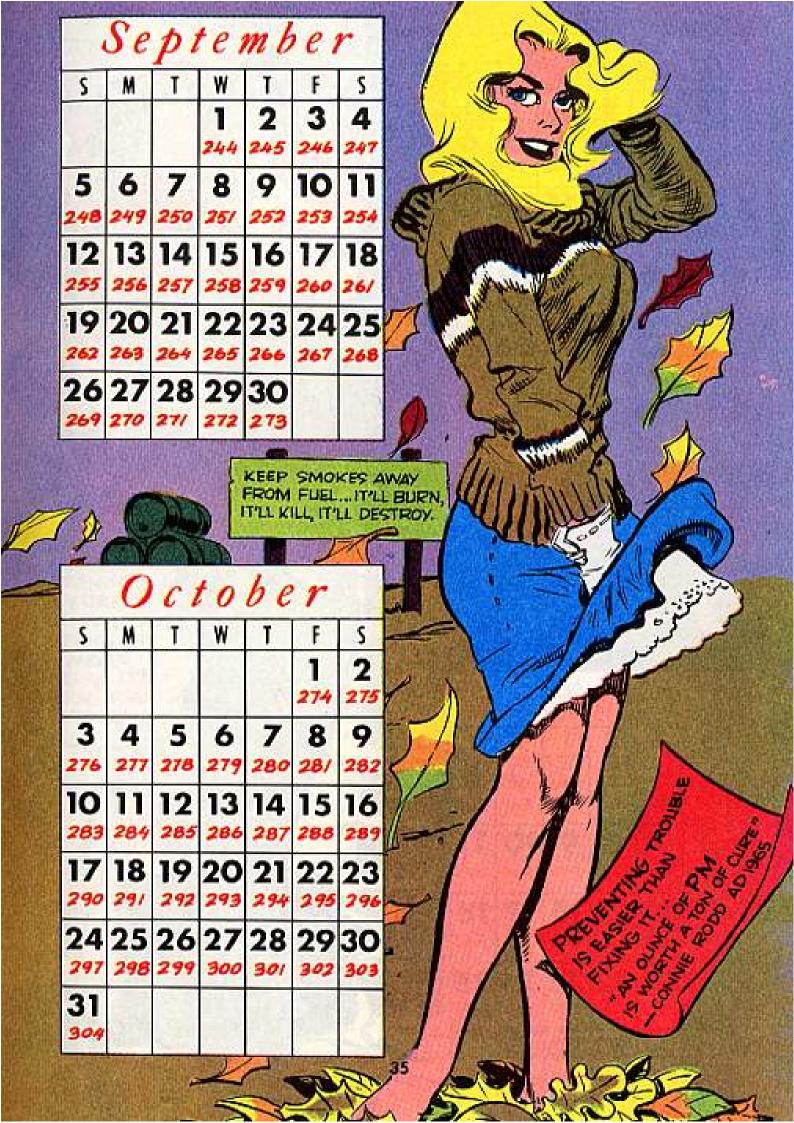








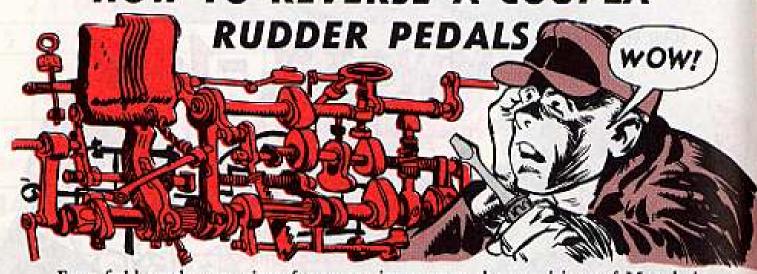




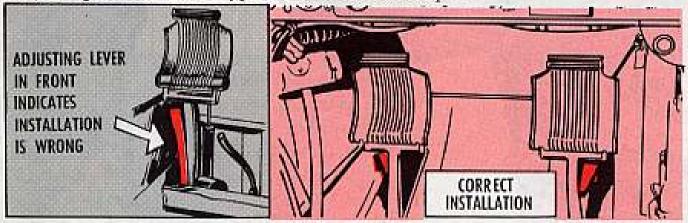




### HOW TO REVERSE A COUPLA RUDDER PEDALS



Even field-grade type aircraft are not immune to the provisions of Murphy's Law. Once upon a time there was a pair of switched rudder pedal arms and adjusting levers in an F type Seminole (U-8) cockpit.



Since each arm has a definite built-in forward curvature, pointing toward the nose of the aircraft, this switch pointed both arms toward the tail. This meant the last few inches of pedal travel got cut off and the extra foot pressure needed to overcome the stiffer feel on the pedals resulted in a little unwanted braking action each time the pedals were depressed.

This Murphy went undetected for several months following the Seminole's last visit to field maintenance. Then, a crack at the top of one arm, where it was pinned to the pedal, made the crew chief realize that the pedal was being banged against an arm which was facing backward.

He also noticed the adjusting lever sitting in front, instead of rear, of each rudder arm.

Should this ever happen on your F model, the position of the adjusting lever is an easy to spot indication that your pedal arms are reversed. Or the slightly harder pedals, caused by the arm fighting the foot pressure, can also point to something being wrong.

Just when you think all the possibilities have been used up, along comes a new application of Murphy's Law. It's a never ending battle.

WITH YOUR AIDIN' FORM EIR . . .

### YOU CAN DREAM YOU'RE AN ENGINEER

Nothing like a few facts from the field to help bring about improvements in an engine. And that's what AVCOM types are looking for on your R-2000 Caribou (CV-2) engines or any of the 0-480 series used on your Seminoles (U-8's) or Aero Commanders (U-9's).

So each time you pull a jug, how 'bout feeding in some info on any problem areas you've noticed? Just grab a DA Form 2407 and fill in Section III with EIR-type facts, such as engine operating hours since overhaul, cylinder position, type of failure, operating hours on that cylinder at time of failure, cylinder dimensions, and any significant events leading up to the failure. Address the form (separate EIR's) . . . ATTN: SMOSM-EEW at AVCOM.

'Preciate it!

Everybody benefits when you share a "close call" with other aviation types, via the DA Form 2696 route.

---

First, you get a chance to soundoff about air or ground hazards in facilities, equipment, operations, training and environment.

Second, the poop is studied by safety types who hunt for ways of getting rid of an accident potential problem.

You can read all about the voluntary aviation hazard report program in AR 95-29 (10 Jun 63).





broken bird parts, and not just because of hitting an obstacle, either.

Sure, we station wing walkers, and have someone in the cockpit, to prevent the bird from being towed into a hangar wall. This sort of thing is a natural, what with that three-story tall as a reminder.

But the broken parts we mean are the ones you can get if you don't secure the torque arm and link, before hooking the tow bar to the nose wheel.

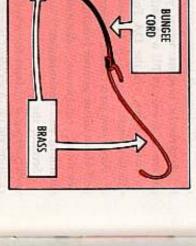
Here's what happens:



BACKS UP, LINK
DIGS INTO CONCRETE
BUSTED TORQUE LINK!

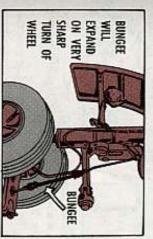
To prevent this sort of revoltin' de- pand, no matter hovelopment, we came up with a three- the wheel is turned.

in-one hook. It's made from two pieces of brass rod, measuring 15 inches and five inches, and a piece of bunges cord, 12 inches long. Two nuts and bolts hold the hook together.



When we use the hook, the bunges end gets linked between the link and the arm. This way the bunges will expand, no matter how sharp a degree the wheel is turned.

We also disconnect the weight switch cable to prevent it from getting busted. After all, a sharp turn by the tug operator could move the wheel beyond the 45-degrees allowed for a connected cable.



Now that we have several of these dandy hooks on hand, towing's a breeze.

The Ground Crew

Right. Looks like a good deal even if you use the nosewheel lifting dolly, since the torque link will hang below the wheel.

Windy

PUBS

It might seem fitting that the more complicated the aircraft plumbing, the bigger the manual. But these Mohawk (OV-1) and Chinook (CH-47) organizational maintenance and parts manuals are getting hard to handle. So, until these king-size -20's and -20P's are published in several parts, separate them yourself into easier to handle volumes . . . as many as you need to fit 'em into the issue binders.



Your organization may have been told it's been authorized maneuverable type troop chutes in place of T-10's.

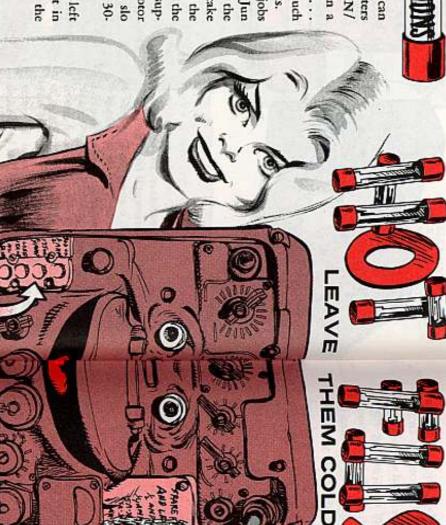
AVCOM notified the depots by Supply Letter 52-64. It gave individual FSN's and allowances for the main and reserve chutes, SCUBA accessory set and chute repair parts. TM 10-1670-219-23 (Jan 64) is the maintenance manual you need with the new chutes.

### COMMUNICATIONS

A hot dynamotor fuse can leave the receiver-transmitters of the AN/VRC-24 and AN/TRC-68 radio sets colder'n a healthy hound dog's nose ... after said fuse allows too much current through the circuits.

So, hold those 30-amp jobs that TM 11-5820-222-10 (Jun 60) tells you to use in the RT-323 and RT-441, and take a hard look at Change 2 to the TM. You get the word in the change that what you're supposed to use for a dynamotor fuse is a 15-amp, 32-volt, slo blo type . . . and NOT a 30-amp!

The 15-amp fuse was left off the running spares list in the TM, but it's added to the list by the change.



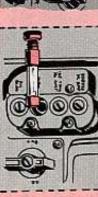
with a screwdriver or whatever, off mit der pressure. Like, you can either snug 'em up—or strip their threads. Take your choice, but don't start cryin' on payday. The threads can't be repaired, and the whole fuse-holder's gotta be replaced.

When you turn them down with a screwdriver, you another word on those four fuseholders: The contacts should have come to you with insulating tape on 'em. Otherwise, repaired, and the whole fuseholder's gotta be replaced.

this fuse and three others go into, tenderly is the way you

As for the fuseholders that

bandle em.



the receiver-transmitters.

If the insulation's off, wrap
the outside of the contacts with
Tape, insulating, FSN 5970284.8410

short-circuits between the ter-

minals and the front panel of

Now, slide your cychalls over to the other side of the RT's... to the spare fuse cover.

The spare fuses are attached to the underside of the cover, and the side facing you is marked from top to bottom with the amperage ratings.

When you slip the spares in place, put 'em in the slot under the corred amp marking.





It save you time when you need fuses in a hurry, although even then you should take a second to inspect the amp rating stamped into the fuse metal. Haully, that some fuse cover is held by four confive screws—

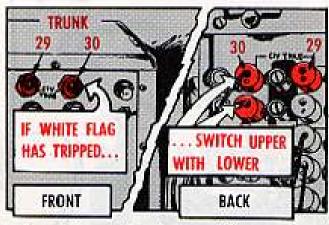
Finally, that spare fuse cover is held by four captive screws-which means you don't have to take the screws all the way out ... where they can get lost.



"doublecross" as an act of betrayal and a breach of trust, among other colorful definitions. Well, you can kind of doublecross your SB-86/P switchboard and come close to those categories-in reverse. Like, the SB-86'll betray you for doublecrossing it. It just won't work for you. You can cross-up the SB-86 in all kinds of ways, but the worst add up to a pretty common triplecross . . . no less! And that ol' triple dip'll pop fuses or have the switchboard buzz back at you like an angry bec. F'rinstance, say you're hookin' up the civilian trunk lines (29 and 30), and allofasudden the alarm starts buzzin' back at you. This revoltin' development's real unexpected, since you're not quite set up for calls yet. But . . . Two bits says if ya peek around the corner at the line signal, you'll find the white flag has tripped.

The dictionary defines

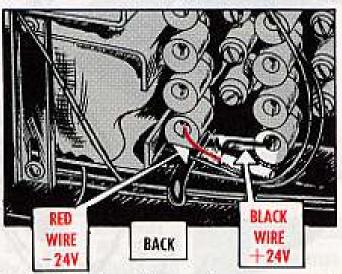
Chances are you made the first cross-up. So, reach back to the binding posts (depending on which flag is showing), and switch the upper and lower post wires around. If you're flyin' the flags on 29 and 30 trunks, switch both



upper and both lower posts. That should get the bees off your back.

The next cross of the triple variety still is up there in the TA-207 assembly . . . at the -24V and +24V binding posts. A red wire leads to one post and a black one to the other.

To avoid popping a fuse, you gotta be sure not to reverse the wires when you first hook 'em to their respective posts.

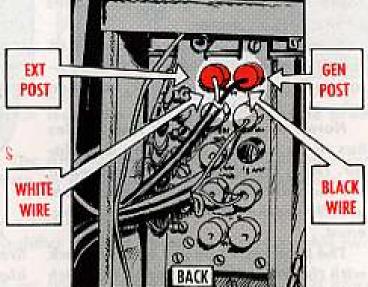


A color check sets you straight quick-like. The red wire goes to the -24V post (next to the spare parts compartment), and the black goes to the +24V post.

Remember that color scheme, and the fuse you save may be your own.

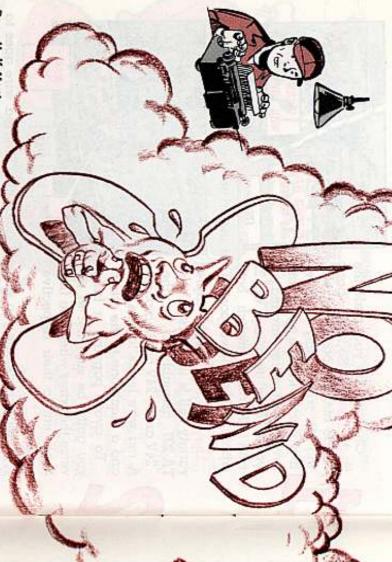
The third cross-up concerns
the leads to the generator and
extension binding posts. One
lead's black; the other's white
—and crossin' 'em pops still
another fuse (the 1½-amp job
two posts down from the GEN
post).

Avoidin' misadventure here is as easy as with the 24V posts. Color's the clue.



Like, the white lead goes to the EXT post on the left (next to the line of screws), and the black goes to the GEN post.

It all boils down to not crossing a friend . . . even the the friend may be only an SB.



NO WRENCH

NO ZAPI

Dear Half-Mast,

Too many times have I seen the modulator subassembly removed from the RT-349 of the AN/ARC-55 radio set by bending the fan blades of the B-1501 motor.

So-o-o, can you drop a word in PS to tell people to do like the TM says—take off the fan blades FIRST, and then take out the subassembly?

Here's why: One of the four blades has to be bent up to get the modulator. Then, the blade's bent back when the modulator goes in. The aluminum usually cracks. At the least, it's weakened.

The blade can't be put back in track with the other three (anyone of which might have been bent before).

At 10,000 RPM, the blade can bust loose and fly into the gear train. Or, the vibration might make a mess of the bearings. The fan's controlled by

a thermostat, which gets complicated when a bent blade can't move the amount of air it was designed to do.

Onward: If the blade's bent too far down, the tube shield right under it tears it up. Or worse, the blade comes to a dead stop . . . and burns out the



A minute used to take the blade off first could save a lot of minutes, and blades, and ad infinitum.

Another RT-349 story: When the shop sets the sensitivity adjustments on a final inspection, it seems they sometimes do it with an over-sixed monkey wrench. And with muscle, yet!

From there, the unit radioman installs the set in the aircraft. Naturally, he has to readjust the sensitivity because of the voltage difference in the aircraft.

ON FINGERTIGHT

SCREWDRIVER USED HERE

SENSITIVITY SENSITIVITY

No sweat so far—but. This ol' Point One man seldom has a wrench handy. A scrowdriver's more his tool. A wrenched up control plus one screwdriver, alas, leads to a broken slotted shaft.

Up here, we put the sensitivity locking nut on finger tight. It only takes a little tension to do the job. And that way, the Point One man has no problem with his adjustment.

One final reminder, if you will. The ARC-55 needs a warm-up before being keyed. The TM calls for a full minute—or until you can hear signals above the squelch level.

If the set's keyed before proper warm-up, Zapill

There goes the 2C43 power amplifier tube at 18 bucks a throw, plus two 7289 tubes at \$17.88 each.

Like, you just put down \$53.76 on your first try to the tower. Add more bucks in downed aircraft for radio repair.

Dear Specialist Richards, Wilco and out.

> SP 5 Ken L. Richards Support Command Fort Richardson, Alaska

Half-Ma

# A SHORT GAFF CAN SHAFT YOU

A short gaff on your tree and pole climbers can give you the long shaft . . . if

and don't hold an edge like the longer, narrower jobs. splinter your personality-and more. They're shorter, have a more rounded tip, Fact is, those gaffs on the later-model climbers, FSN 4240-273-9668, can really

edge, but with the new jobs it's almost a necessity to sharpen 'em every time sharp. Like, you could chip a lotta bark with the older types and still hold an So, to keep from gettin' gigged where it hurts the most, keep those gaff edges



out a long way from the ground. In short, they lose their edge pretty quick . . . and you wouldn't wanna find it

An anchor point: you could get away with a little ground walkin' with the old gaffs, but for your safety, hold it to a minimum with the short ones.

# TRY THESE PARTS BB-433 FOR YOUR

ment parts for your BB-433 ( )/A nicad battery. to requisition a coupla' three replace-Hold one if you're just getting ready

07181-pp-61). 24498 (such as Sonotone Order No. be used with Air Force-type batteries purchased under Military Standard MS Nov 61) lists three parts that can only Seems TM 11-6140-205-20P (13

6456; Seal "O" Ring, FSN 5330-845cell (FSN 6140-842-0433). The parts used on the BB-433's battery storage 5120-618-5320. 7906; and Wrench, Vent Cap, FSN are: Filler Cap, Battery, FSN 6140-735-Which means these parts can't be



FSN's, etc., should be getting to the field shortly. The -20P revision with the proper

5120-064-5326 WRENCH, FSN

# THE PAINTING PICTURE

then you can't go wrong by reading TB SIG 364 (26 Feb 64), The TB fills purposes of painting, what . . . and and preparing surfaces for painting, the various kinds of paint and other

PRESERVE THIS

ers, abrasives, brushes and the like. paint, preservatives, primers, sealand other into on such items as gives you the FSN's, cost, source plies. Among other things, the SB ment, tools and miscellaneous supand preserve electronics equip-(26 Feb 64) if it's your job to paint Focus an eyeball on SB 11-573

# HERE'S A BULLETIN FOR YOU

# LEAD A SHELTERED LIFE?

cause temperature changes hurt the contents of the MX-680, using units have to turn in their excess MX-680/G shelter repair kit. Be-(13 Jan 64) if you use or stock the for the equipments. re-listed in the -20P parts manua Items List for 21 equipments and

# SIGNAL FOR REPAIR PARTS

You can cancel your May-Day mes-

SB 11-566 (30 Jan 64), "Combat

tions-electronic end items. ing certain repair parts for communica-Essential Repair Parts," is here. It gives you some hot scoop on stock-

combat essential repair parts for the and indicates specific allowances of end items covered The SB lists several pages of TM's,



Dear Half-Mast,

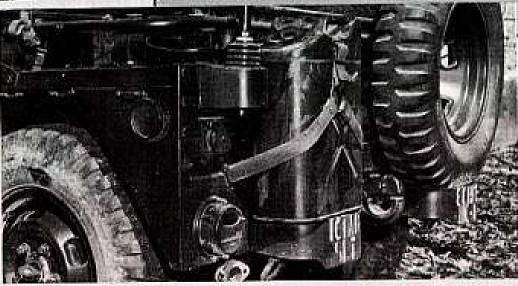
The AN/VRQ-3 antenna mount on the M151 1/4-ton Is flush with the gas can. Would the combination of a leaking gas can and RF output create a safety hazard? Lt. J. C. B.

Dear Lieutenant J. C. B.,

The leaky gas can creates a hazard, all right, Sir, but the chance of gas fumes being sparked by RF is remote.

Since the RF output of the transmitter is relatively low there's not much chance of a spark escaping from the antenna. But if one did, it normally would seek a path with the least resistance to the transmitter ground—thru the antenna metal mounting base and not the gas can.

Also, the ratio of air-to-fuel vapor caused by a leaky gas can would be such that it wouldn't be likely for an explosive mixture to result. But for general safety reasons, you should avoid using leaky gas cans. Any spark, from any source, is potentially dangerous.



WITH A LEAKY
GAS CAN, ANY
SPARK CAN BE
DANGEROUS.



# TELETYPEWRITER LUBE FSN

Dear Half-Mast,

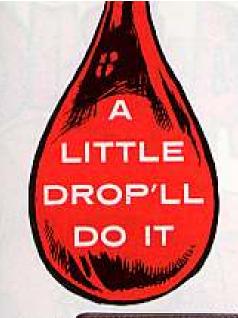
What's the latest word on lube oil and grease for teletypewriter equipment? SP 5 L.A.C.

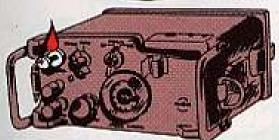
Dear Specialist I. A. C.,

The latest in TT lubes is this:

FSN 9150-223-4003 will get you a one-pound can of Grease, Aircraft, High Temperature, MIL-G-3545-A. Also, FSN 9150-223-4129 gets you a quart can of Lubricating Oil, Aircraft Instrument, Low Volatility, MIL-L-6085A.

TB SIG 365 (Aug 64) spreads the word on lubing all teletypewriters.

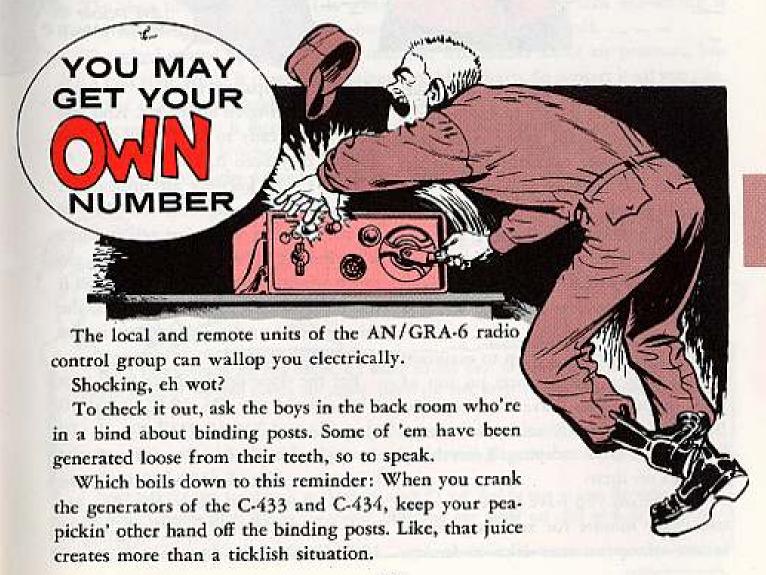




A drop this way keeps the repairman away. Or—if you don't wanna look like a drip, then drip a drop of oil on the RINGER button shafts of your AN/GRA-39 local and remote control units.

Since a "no-buzz" RINGER button means a trip to support for the radio set control group, that drop of lightweight oil gets you off the hook cheap. You should oil the RINGER shafts when needed and before you use the control units. Don't get carried away with the oiling; tho. Use it only when the shaft is dry or binds.

With oil, less pressure is needed to depress the RINGER button. Less pressure means the inside switch mechanism isn't liable to shift. If the mechanism doesn't shift, the ringer voltage can get to the buzzer . . . and you save a trip or two to your support people.





Air-supported tentage for the Nike-Hercules missile is here to stay—and a lot more like it for other equipment and maintenance operations is on the way. So it'd behoove you to get with it, right quick.

These balloon-type shelters, y'know, have one more job to do than their canvas-back sisters. They have to keep the air in as well as keep the weather out.

Actually, they're a snap to maintain if you keep a couple facts on top of your mind: You have to keep the blower going steady and you have to keep the air from escaping. Everything depends on these.

This means you have to be on your toes every minute for anything that'd lessen air pressure—like a faulty

blower, or rips or tears in the tent fabric, or left-open doors, etc. And you have to be ready to fix 'em or get 'em fixed if they need it.

Here's why keeping air pressure at the peak is so important: Any loss of air may cause a whipping action when it's windy. This whipping will put too much strain on the anchor points and if the fabric comes into contact with the missile fins or other equipment in the tent, goodbye tent!

For the dope on the Nike-Herc tent take a bead on TM 10-8340-201-10 (Jan 63) and TM 10-8340-201-25 (10 Apr 62). You'll find the info on the blower in TM 5-4450-200-15 (Aug 63). And for spare parts, kits, etc. for both the tent and blower look in TM 10-8340-201-24P (Apr 63).

The time to be most careful is when you're putting your tent up, taking it down, repairing it and storing it—just about all the time, is all.

MAINTENANCE?

The vinyl-coated nylon the tent's made of will take a lot of air pressure, but it's a real sissy when it comes up against anything sharp. So protect it all you can. Never drag it on rough ground, like gravel or the edge of the concrete pad. And never walk on it during erection and repair operations. The only time it's safe to walk on it is when it's placed on a flat surface that's free of stones and other stuff that might damage the fabric, and this, only when required during



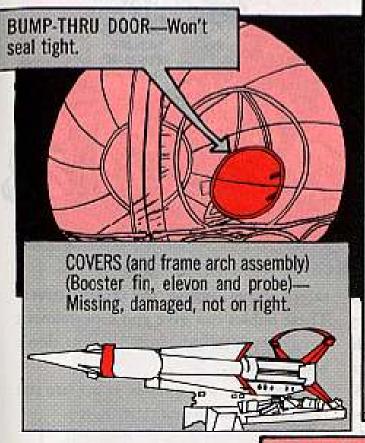
When you're joining the two halves, it's smart for two guys to pull together and line up the halves ahead of the man pulling the zipper. This'll put less stress on the slide fastener scoops and webbing.

Remove the "bump through" door before folding the shelter. This will prevent damaging the stiffener ring in the door. When boxing the tent for shipment, place the door on top of the folded tent.

Don't fold the tent for storage or shipment when it's wet. And be sure to keep the anchors and hardware separate when folding the shelter. Otherwise you might get stuff in there that'd rip

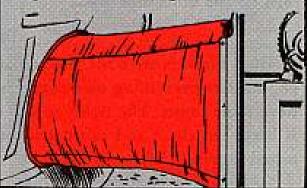
53





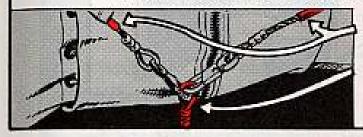
AIR DUCT SLEEVE-Not lined up right, not open all the way, extra sleeve material between tent and blower flange.

(If you find any extra sleeve material there, pull it inside the tent and smooth out the opening. This'll let the full amount of air in from the blower.) Have your support reposition the blower if necessary to get the sleeve straightened out.



# UTSIDE

Now hike around the outside of the tent and check these:



CATENARY CABLES-Loose, cut, broken; channels torn.

ANCHORS-Not secured right. (If the anchors are not tight, there'll be too much strain on the fabric and lines.)

### CLEANING AND REPAIRING

tent fabric, so keep it clean. To get dirt rinse it with clear water. off, use a soft brush or cloth or mop

Grease, oil and dirt can ruin your and either clear or soapy water. Then



Oil and grease are tougher to handle, natch. Kerosene or 140-degree flash dry cleaning solvent, FSN 6850-637-6135, will do the trick for cleaning, but check with your CO before using this stuff. When you use kerosene or dry cleaning solvent, make sure it's in a well ventilated area. And whatever you do. NEVER use methyl ethyl ketone for any cleaning except for patching, hear!

A repair kit is authorized each battery (Repair Kit, tentage, Nike-Hercules, Air Supported, FSN 8340-753-6178). The kit contains patching materials. You'll find patching instructions in TM 10-8340-201-25.

The important thing to remember in any repair job is that you have to get the area clean—and put the patches on the underside of the fabric, first, and then on the other side last.

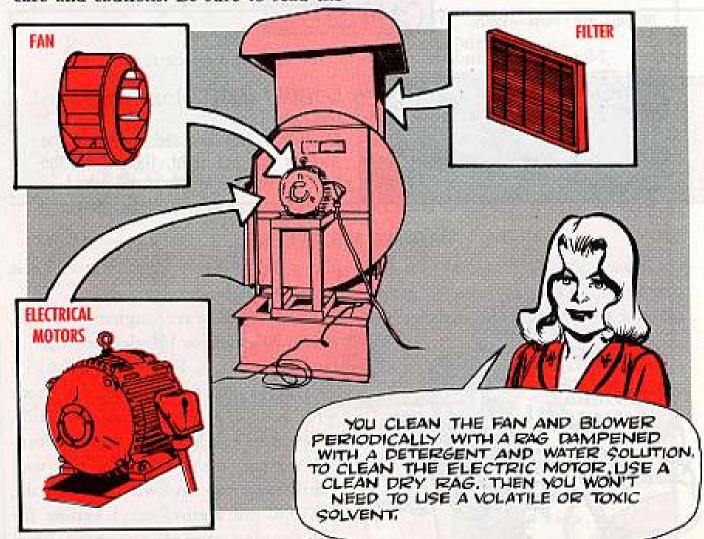


### THE BLOWER

These blowers are built to go on and on, but like everything man-made they have some limits. The best you can do is keep 'em clean and lubed and protected against bad weather. TM 5-4450-200-15 is chock full of dope on care and cautions. Be sure to read the

safety hints inside the front cover. These babies can give you a permanent burn by electrical shock if you don't watch out.

The important spots to check are the fan, filter and the electric motor.



Check the filters often, and take action as soon as you see it's needed. Don't wait till the air flow slows down because of the dirt. By then it's too late.

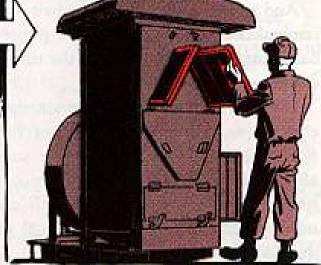
### HERE'S A 4-STEP CURE FOR DIRTY FILTERS



Then use a regular garden hose to flush the filter down from the dirty side toward the clean side. You can use cold water for this, but warm water'll do a better job.



4. Install the two dry filters that are stored in the drying rack on the side of the plenum chamber. Place the washed filters in the drying rack for use next time you have to use the filter.



Keep your cars tuned for unusual noises like excess vibration and the blower wheel rubbing against the blower. And keep your sniffer tilted for the smell of over-heating. If you catch anything wrong on either of these, stop the blower quick and get your mechanic on the ball.

You also want to make sure the centrifugal fan is well protected from the weather. When the fan's not being used, keep it covered with a tarp. Another thing, if you're expecting freezing and sub-freezing temperatures make sure to remove the air filter from the blower. This will keep blowing snow, sleet, fog and freezing rain from clogging it. A heavy fog will freeze in the filter.

### REMEMBER THIS:

These air-supported tents "mother" valuable babies. Any time you neglect the tent you run the risk of wasting Uncle's dough—or worse yet—fouling up a critical mission. So, on the ball, eh, Dad?



# DIESELS ARE DIFFERENT



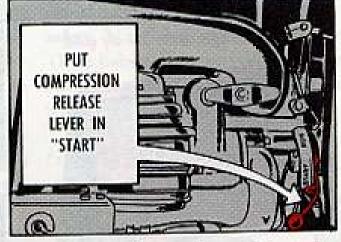
That flick of the switch you use to start and stop your favorite hot-rod definitely won't do when you're starting and stopping a Cat D-8 or D-8 9Aseries tractor . . . as all you hep operators know.

And there's a lot more to it than just remembering that you've got a piggyback starting engine to help the diesel engine get going.

Before you try to start the starting engine—as spelled out in Fig 9 of TM 5-2410-204-10 (Jun 62)—make sure all the diesel engine and tractor controls are in starting position. Check 'em step by step like it says in Fig 8 of the TM.

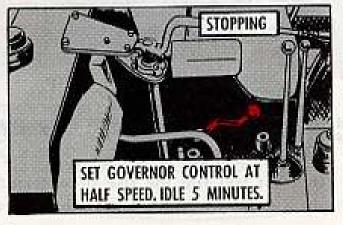


Pay special attention to the compression release lever on the diesel. This you shift to START before firing up the starting engine. That'll release compression on all cylinders so the engine'll turn over easier.



As soon as the starting engine turns the diesel at normal cranking speed, follow thru with steps in Fig 10 of the TM. Shift the compression release lever to RUN. Compression heat will warm the diesel's combustion chamber and make the fuel fire easier.

Then open the diesel engine throttle (governor-control lever) to 1/4 to 1/2 the governed speed. After the diesel starts you shut down the starting engine.



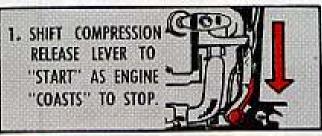
Take it easy, too, when you're stopping by the numbers as spelled out in Fig 11 of the TM.

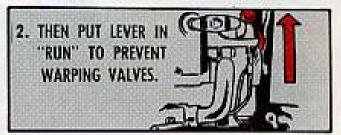
After you've allowed the diesel engine to idle five minutes at half speed with engine clutch engaged, shift the throttle control to the closed position.

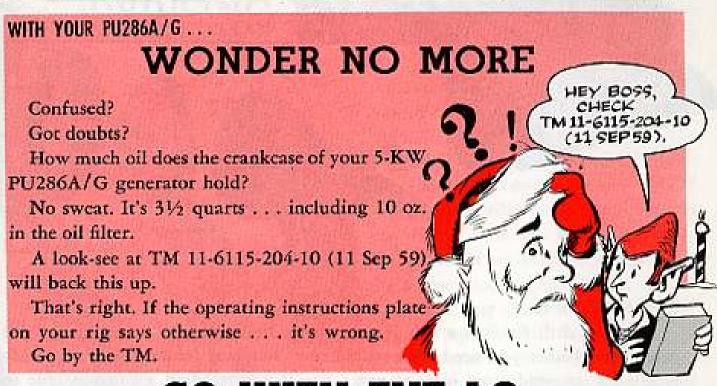
Then as the engine slows down,

shift the compression release lever to START. This'll help the engine to "coast" nice and easy to a stop.

Once it stops, tho, shift the compression release lever back to RUN. If you don't, the hot valves may warp as they cool down. Then you'll lose compression 'cause they won't scat tight.







# GO WITH THE LO

Dear Half-Mast,

When should we change the oil in our Waukesha 6-NKDBS-EU1 150-KW

We've been changing the oil on these rigs at "Q" service or 100 hours of operation, whichever comes first. However, sometimes we only have as much as 20 hours of operation on them by the time "Q" service is due.

Sgt J. M. K.

Dear Sergeant J. M. K.,

Let's go back to the old, old story—follow the lube order. LO 5-6115-303-15, covering your Waukesha, says, "Change oil at 100 hours of operation." That's what you do.

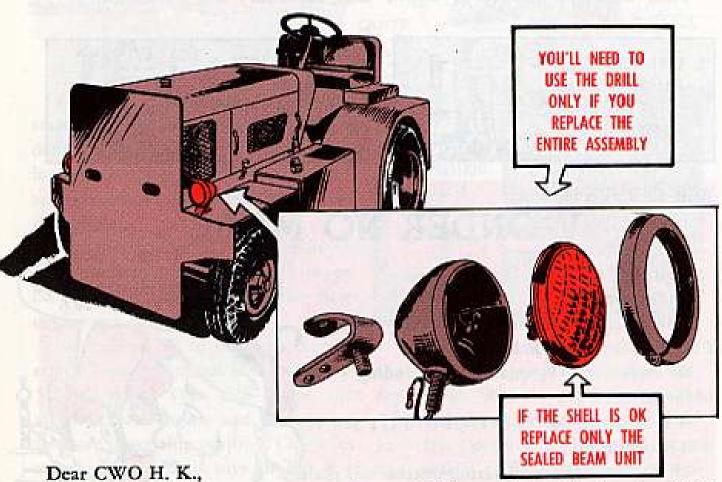
Half-Mast

# IS THIS DRILL NECESSARY?

Dear Half-Mast.

The new headlight assembly and sealed beam lamp listed on page 29 of TM 10-3930-407-20P (Apr 61) for the Minneapolis-Moline MT 40 tractor, MHE 172, don't fit.

Is this a mix-up in the equipment or do we drill a hole and install it? CWO H. K.



Hold the drill for just a sec! It depends on whether you need the entire headlamp assembly or just a new sealed-beam lamp.

If the headlamp assembly (shell) that came with your MHE 172 tractor is still OK, you replace the sealed beam unit with Lamp Unit, headlight, FSN 6220-726-9108 listed in the -20P. This should fit as-is.

Once the headlamp shell is shot, tho, you'll need to use Headlight, w/ bracket, sealed beam, 12v, FSN 6220-774-4704. (This assembly includes the sealed beamed unit.) And to install this new standard replacement assembly you'll need to drill a 7/16-in hole in the fender for the bracket and a 7/16in hole in the bracket to run the headlight wire thru. These holes are necesary because of small differences in the design of the replacement assembly.

After this switcheroo, you'll use Lamp, incandescent, FSN 6240-605-1223, listed in the -20P, when you need to replace the sealed beam unit.

So, drill if you must, but not till you hafta. See? Half-Mast



Hold that paint! You say you're about to re-stencil your John Henry on your duffel bag because you're trying to follow AR 746-10 (3 Apr 64)! That AR does apply if you don't already have your name on your duffel bag. But if it's already there—but not in the location called for in the AR—then it's up to your local commander to decide if it has to be remarked in a new area.

# DDILLING FIFCTDICKLLY

Anytime you have need to pick up a 1/4-in electrical drill, look it over real close.

There's one out under FSN 5130-293-1386 (Speedway, Model 1251S Thor Speed Drill), which is unsafe. Its ventilating slots are too wide. Your pinkies could accidentally tangle with the motor's cooling fan.

Turn-in any defective drills you've got for replacement, toot sweet. The manufacturer is correcting the problem, and all the bad drills should be out of service soon.

# PLUG THE DUST OUT

You been dishing out oil in dusty and desert areas . . . like from a 55gallon drum or whatever? Good, but don't forget to replace the bung in the drum hole when you're not giving with the oil. That dust is always around. In desert areas, 'specially, you might not even see it . . . but it's there. And sand and dust sure can contaminate oil quick-like.

# SHOOT THE HOT POOP

Got something on your chest?

brand new DA Form 2028 (1 Apr 64). you can get it off real quick with the If it's about an Army publication

sports a new title and is designed to ent types of pubs. make it easier for you to use on differmended Changes to DA Publications," The new Form 2028, "Recom-

Puntication Husban

TH 10-7310-201-25F

Special Tool Lists and SM's and SC's. mending changes to Repair Parts and You use the front (Part I) for recom-

PAGE

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8 E

OF MAJOR 17EUS SUPPROBLED

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MSA

see in TM's, MWO's, LO's, SB's and ting down the changes you'd like to You use the back (Part II) for put-

copy of the DA Form 2028. make up only ONE (count it . . . 1) And, to make your life simple, you

about the address you use. For example, setup in the last few years, think twice directly to the address listed in the pub you no longer send anything to Raritan been a lot of changes made in the pubs you want to change. But since there've For the most part, you send the form

DA . 2028

TYPES HAME, SHAGE.

should go, send the 2028 to the address 750. Find the equipment category numlisted in Appendix II of your TM 38-Arsenal, Metuchen, N. J. ber in Appendix III and then send your If you're in doubt as to where it

62

28 May 1964

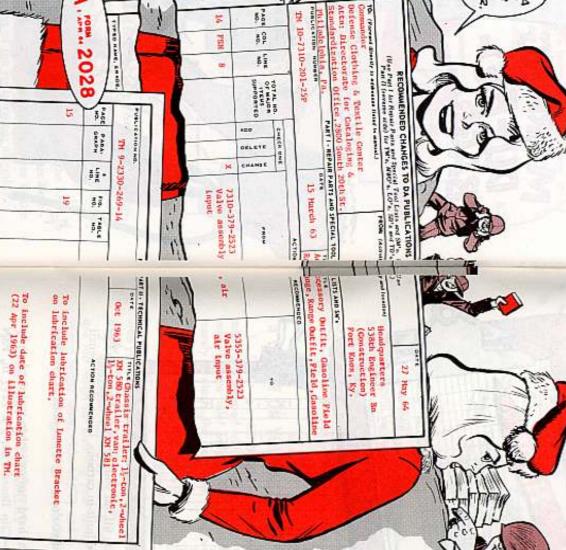
William E. Tay

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OATE TYPED NAME, COLDE, OR THE





this for the addresses that're obsolete. ment category. Remember, you only do 2028 to the address given for the equip-

when you have the info at your fingerthe 2028. Don't leave blank spaces You fill out all blanks possible on

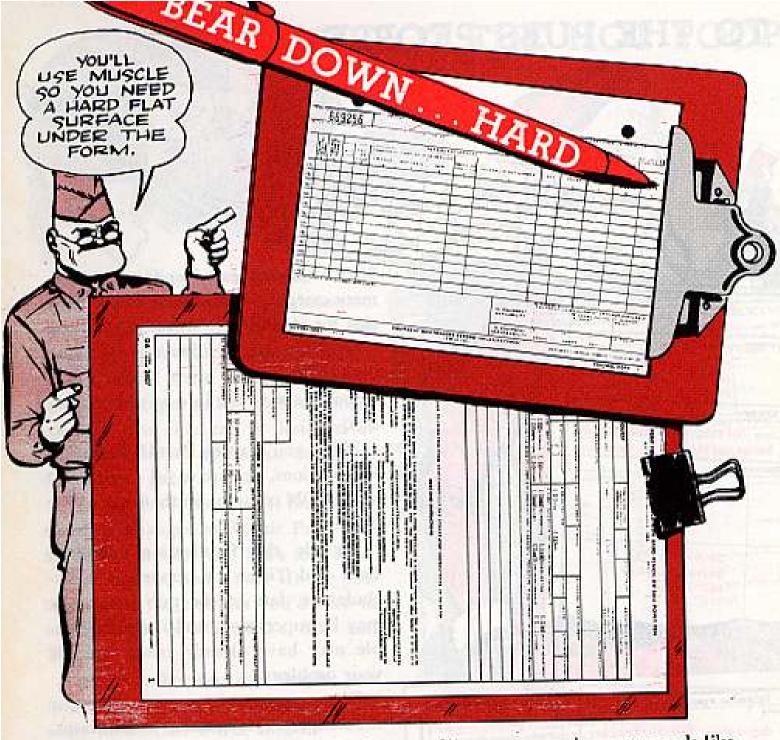
and FROM columns on the front of the Publications, be sure to fill out the TO torm. When you're using Part II, Technical

clude the date of the pub because it your problem. may be superseded, and the pubs people may have already taken care of Date and Title. It's important to in-Include the Publication Number,

but be sure you identify the equipment. the complete title of many publications, There may not be enough space for

eral and not just one particular pub. tion for pubs. That is, if you have somea general recommendation or suggesbeing continued to the REMARKS blocks. Be sure to tell which block is run out of space in some of the other You can also use that space if you've thing that would apply to pubs in gen-Use the REMARKS space if you have

ble check the form before you mail it. It's a good idea to go back and dou-



That's right—bear down hard when you fill out your equipment records like DA Forms 2408-3, 2407 and any that have built-in carbons. Use a sharp pencil or ballpoint pen.

You've got to use a little muscle. And if you're going to use muscle, you need

a hard, flat surface under the form.

Say you're where there's no flat, smooth, hard surface—then you need a clip board... like the one GSA has in stock—Clip Board File, 9 x 12½ in, FSN 7520-281-5918. It's big enough to hold DA Form 2407.

Till you get a clip board, cut a piece of sheet metal the same size as the form

or a little bigger if you want to add a clip.

Any message important enough to write has got to be sharp and clear. So lay those forms flat on a smooth, hard surface and bear down on a sharp pencil or ballpoint so all copies can be read.



### **NEED A KNOB?**

You'd better take note if you're needing Knob, Flame Valve Stem, FSN 7310-379-2523, for your M1937 field range. It's listed in TM 10-7310-201-25P (Mar 63). The FSN has been changed to 5355-379-2523 and assigned to Single Manager, DISC.

## A COUPLE ON YOUR M17 MASK

 Some new M17 field protective masks are shipped with strips of plastic covering the inlet valves. The plastic merely protects the bag the mask is shipped in.

It can fool you, tho, cause it looks so natural there. But, don't hesitate—it's to come off as soon's you spot it. Otherwise your mask won't function at all. Just gently peel it off and throw it away.

 Remember, hot water and a brush are too rough for cleaning your mask.
 Warm soapy water (100-125°F) and a clean cloth or sponge will do the job OK.

## **FALCONRY & FALCONERS**

For checking out the new men on your Hawk team (and for keeping the older ones sure-and-ready) take a look at DA training circular, TC 44-10 (Jan 64). It's a training guide for making good firecontrol crewmen.

## AIRLIFT

Got a Davey MC2A compressor but no Army pubs for same? That figures 'cause there are none yet. Instead, you requisition Air Force Technical Orders 34Y1-87-21, 34Y1-87-23, and 34Y1-87-24 direct from: CO, Mobile Air Force Area, ATTN: MONSC Technical Div., Brookley Air Force Base, Alabama. Roger, and out.

## THE TM IS RIGHT

The TM is right when it comes to the oil in the hydraulic system of your MHE 183 6000-lb forklift truck. TM 10-3930-232-10 (Jan 64) page 22 says to use OE 10. So, in spite of anything else you may have seen or heard, stick to the TM info for this lubing chore.

### HERE'S A HOT ONE

Ungrounded capacitors, even little ones, can retain enough juice to knock you off your bar stool—or whatever you may be sitting on or leaning against when you grab it. Even a slight tickle from a "hot" capacitor might throw you off balance enough for you to injure yourself or damage equipment. Safest bet is to ground all capacitors before you work on 'em or take 'em out of equipment. And remember: the bigger the capacitor, the harder it can hit you.

Would You Stake Your Life igh on

