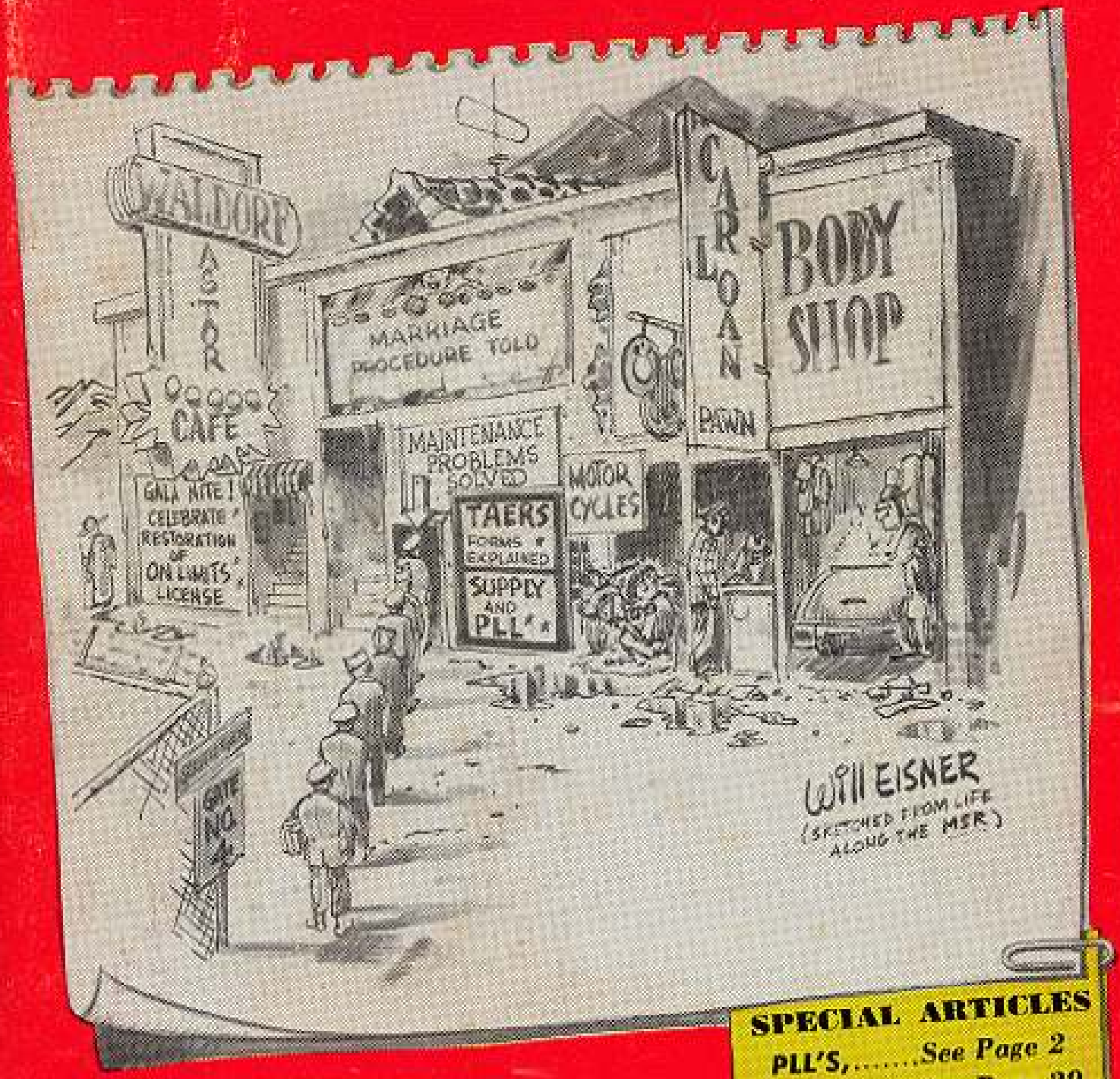
Issue 149

PS

1965 Series

THE PREVENTIVE MAINTENANCE MONTHLY



SPECIAL ARTICLES

MAINTENANCE WON'T WAIT

One thing's sure—time doesn't stand still for anything or anybody.

While the hands on the clock circle surely and endlessly . . . and the pages flutter off the calendar with ceaseless regularity . . . you can't sit idly by and hope that your equipment will be ready to go when the whistle blows.

Your gear may have been ready yesterday . . . is it ready today?

Will it be ready tomorrow?

Like the relentless passage of time, your maintenance must be constant and keep pace with time.

Whether it's your weapon, your commo set, your vehicle, chopper, generator . . . it makes no never mind. Your equipment is designed to play an important part in your future—and you're betting your life on its ability to come through when the chips are down.

So don't do half-a-job . . . or put off today's inspection or PM until tomorrow. Someone may push the button tonight . . . .

Tomorrow may be too late.

PS

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THE PREVENTIVE MAINTENANCE MONTHLY

Issue No. 149 1965 Series

IN THIS ISSUE

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

Sgt. Half-Mast,
PS Magazine,
Fort Knox, Ky.
40121

PLL SPECIAL

Could be some day your outfit will shoot, scoot and communicate with gadgets that'll mend themselves. Or, at least, maybe your maintenance buddies will be able to maintain equipment simply by pushing a few buttons.

Some day, maybe. . . .

Meantime, Mr. Parts-man, consider yourself a VIP, and your work tagged top priority. 'Cause, friend, it's your very important job to keep a few repair parts (just the right ones) always handy so your outfit can keep its equipment perking at top speed at all times.

Like How Few . . .
Like Which Ones . . . ?

Well, like how many of which ones do you really need?

Mostly, that's what it amounts to since repair parts supply is based primarily on usage (demand).

To begin with, the load of repair parts you're authorized to stock is a light load . . . just enough, in fact, to tide you over till the supply-wagon can get to you again. Or, as the DA pubs tell it, your normal prescribed load (PL) represents a 15-day level of supply.

The parts manuals for your equipment list your initial allowances, but once you start operating, your authority to stock, or not to stock (most things), is based on the demand your unit has for an item.

And, so, as honcho in the repair parts department, it's up to you to ride herd on the parts usage records so you can prove your needs . . . or lack of same, for anything you're authorized.

THE DA WORD

MORE

PLL SOP

Your TOE tells you what kind and how much equipment your outfit can have. Your property book officer keeps an up-to-date tally on unit equipment . . . it's called the equipment density list, and normally your section has a copy. It's your job to provide the repair parts needed to maintain that equipment.

The kind of form used for the list, and when and how the list goes to support is decided by the installation commander (state-side) and overseas, by the comparable overseas commander. (See para 30c, AR 735-35).

It's usually a simple listing, columned off to keep things orderly and easy to read, and with enough space to enter corrections and changes as needed. Here's a sample PLL.

PRESCRIBED LOAD LIST

UNIT ORGANIZATION: 26 FA Bn

STOCKAGE CODE LEGEND: C - Combat Essential

DATE: 5032

STOCK NUMBER & NOUN		UNIT OF ISSUE	AUTHORIZED QUANTITY	STOCKAGE CODE	REMARKS
3110-156-5460	Bearing	ea	1	C	
5310-655-6687	Nut	ea	20		
5340-682-2084	Plate	ea	20		
6105-511-5496	Motor	ea			
6140-057-2554	Battery	ea			
6140-191-3485	Battery	ea			
6810-249-9354	Acid	ea			

Your PLL tells support he must stock your items for quick replenishment. Therefore, any changes (on your need for a part) which you make on your list, you must also forward to support for their information. You can send support the change on a DF (DA Form 2496), a memo, by letter, or whatever written notice your support prefers.

PARTS AND RECORDS PARKING

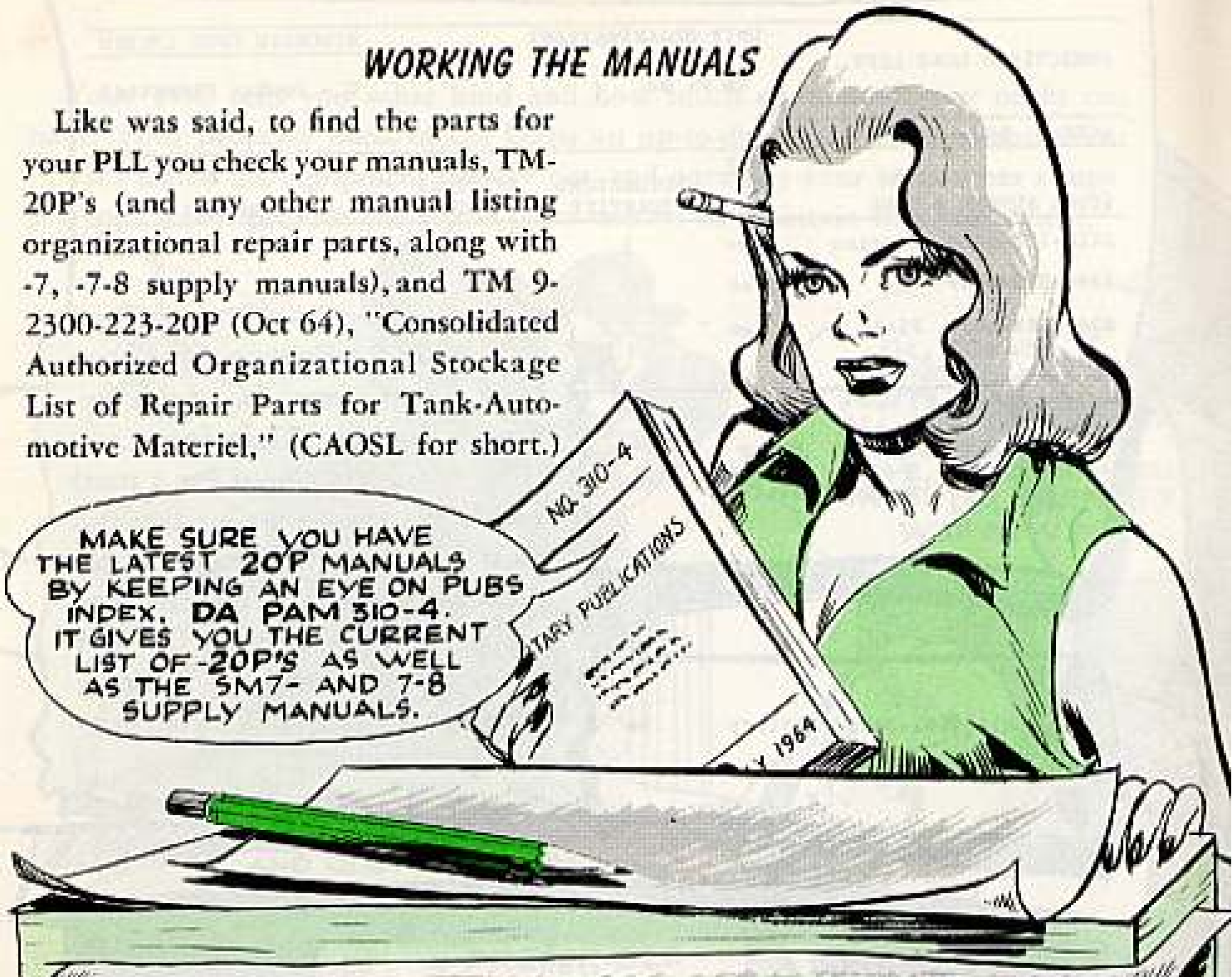
The repair parts and repair parts records are normally kept at the unit level where the organizational maintenance chores are done.

And, the records and parts (if possible), natch, must always be easy to reach from your swivel chair.

MORE

WORKING THE MANUALS

Like was said, to find the parts for your PLL you check your manuals, TM-20P's (and any other manual listing organizational repair parts, along with -7, -7-8 supply manuals), and TM 9-2300-223-20P (Oct 64), "Consolidated Authorized Organizational Stockage List of Repair Parts for Tank-Automotive Materiel," (CAOSL for short.)



Here're some points to keep in mind when you go to tote-up your repair parts allowances for your initial PLL:

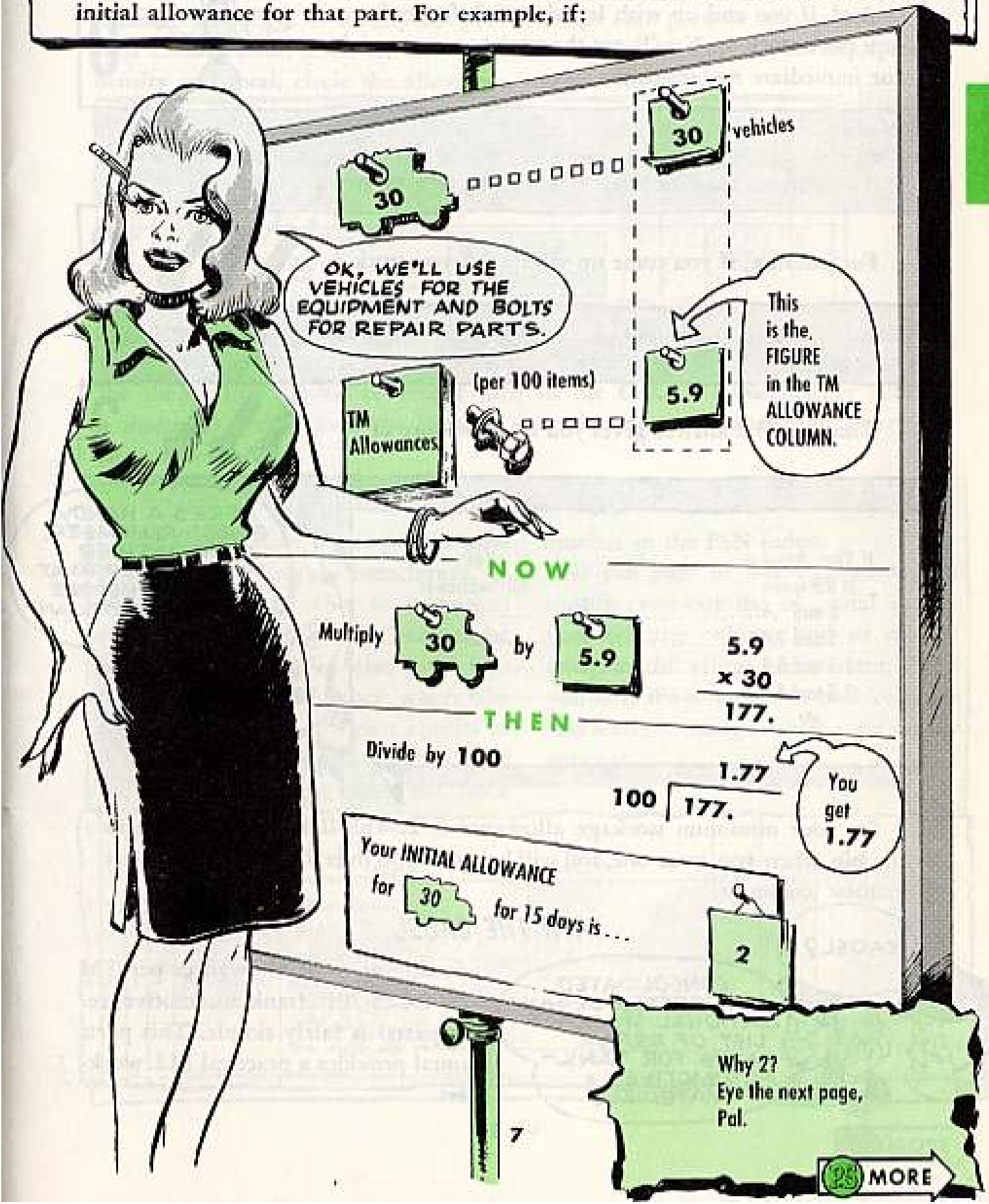
1. Review the allowance note in the introduction section of your parts manuals—and check for any recent changes. (If a manual doesn't quote allowances, look for a note in that section telling you where to go for your authorized allowances.)

2. On repair parts common to two or more different types of equipment, you base your initial allowance on the overall total of equipment you have that will use the part. Also, in figuring up allowances for common parts you make your selection from the parts manual covering the type of equipment having the greatest density.

3. In the case of tank-auto equipment you use the CAOSL instead of the equipment's individual parts manual if most (the greatest number) of the different kinds of equipment you have are authorized parts in the CAOSL.

THE TM-TYPE PARTS MANUALS

In some TM-type parts manuals for specific equipment you find the initial 15-day allowances quoted per 100 items. To find your allowance, you multiply the total number of equipments that will use the part, times the figure shown in the allowance column, and then divide by 100. The answer is your 15-day initial allowance for that part. For example, if:

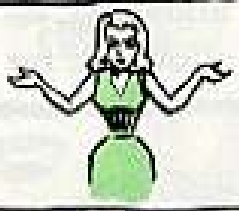


FORMULA NOTES

If your answer sits anywhere between **0.5** and **2.4**, you're authorized to stock **2.**

2

And, if you end up with less than 0.5, forget it . . . you can't stock it. You'll get the part as you need it for immediate replacement.



0

When the formula gives you an answer consisting of a whole number plus a fractional value of .5 or higher you round the answer to the next higher whole number.

For instance, if you come up with a 2.5 you stock 3.

3

When your answer gives you fractional values of less than .5, you round the total to the next lower whole number.

That is, a 3.2 answer gives you an allowance of 3.

3

If Your Answer Is Between	Your Allowance Is
0 and .4	0
.5 and 2.4	2
2.5 and 3.4	3
3.5 and 4.4	4
etc.	

So, your minimum stockage allowance is 2. This'll leave something in the bin when you issue one, and will help tide you over till your replacement request comes in.

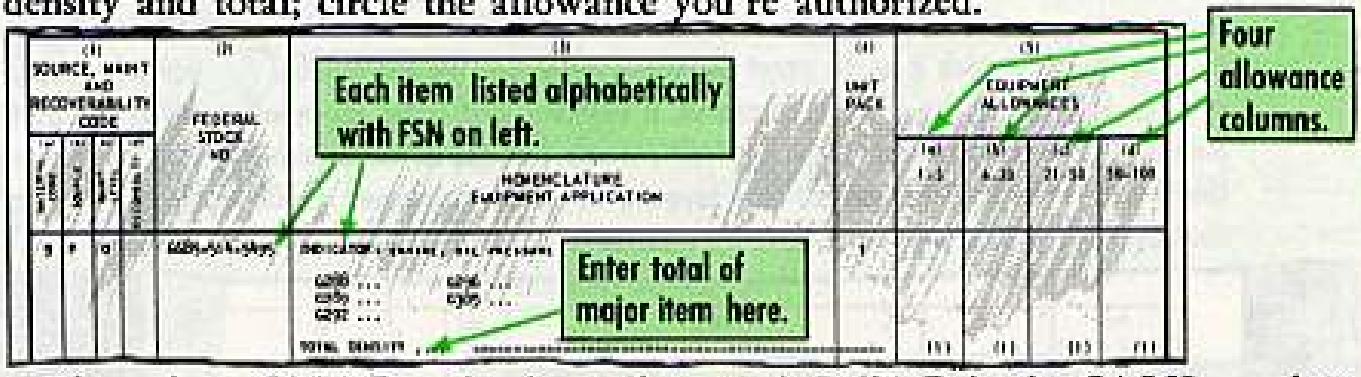
WITH THE CAOSL

Setting-up your allowances per TM 9-2300-223-20P (tank-automotive repair parts) is fairly simple. This parts manual provides a practical PLL worksheet.

CAOSL WORKSHEET

Along with each part listed it identifies the specific equipment (by SNL or model identification), the part is authorized for. And, its four allowance columns (headed a, b, c, d) list the number of parts authorized for density totals of equipment supported, like this: 1-5, 6-20, 21-50, and 51-100.

You simply enter how many of each major item you have in the equipment nomenclature (SNL or model) slot provided (for each part) in column 3; add up your density total; select the allowance column which covers your equipment density and total; circle the allowance you're authorized.

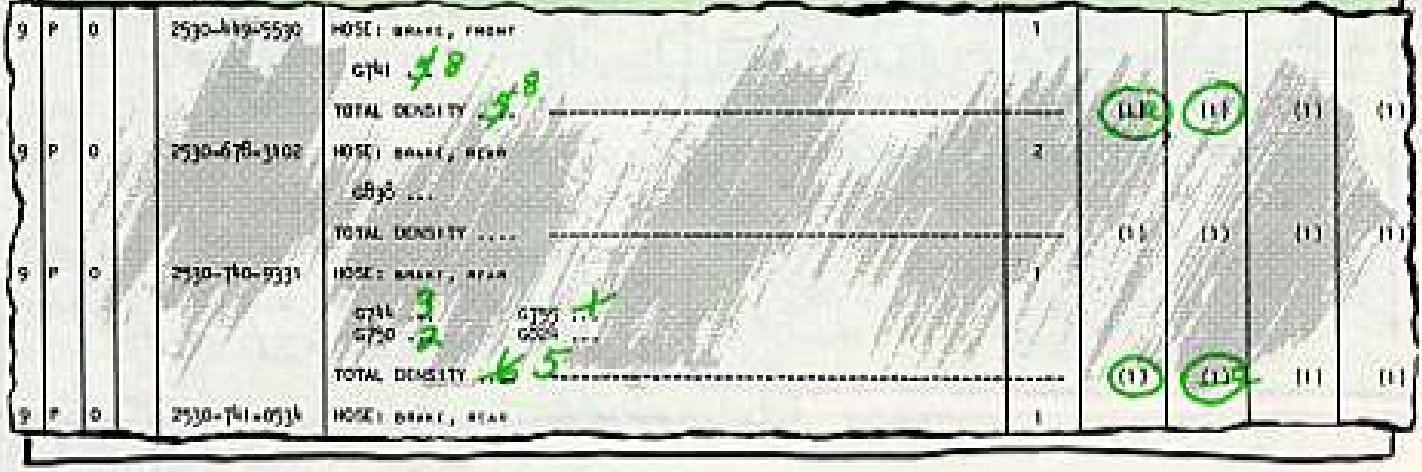


If you have OTHER major items that aren't LISTED in the CAOSL . . . but their maintenance requires parts which are listed in the CAOSL . . . you can add the major item's SNL or model info in the CAOSL nomenclature column (column 3) and include the item in your density total when you figure up your allowance.

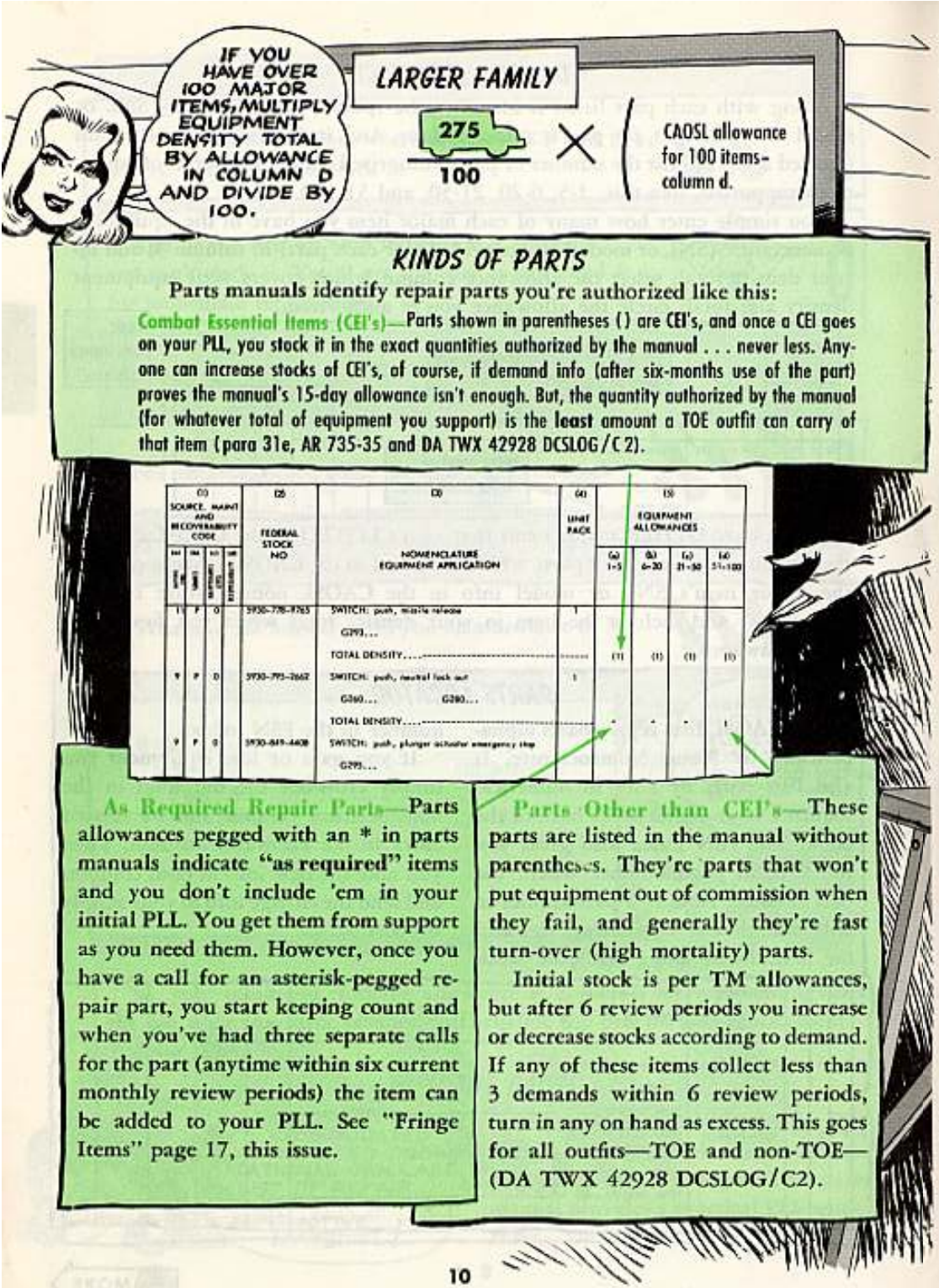
PARTS LOCATOR

The CAOSL lists repair parts alphabetically by Noun Nomenclature. It also lists parts by FSN in numerical sequence in an index in the back of the book. The FSN index also gives you the CAOSL page number where the part is listed. And, if a part applies to only one kind of equipment, you find the SNL listed along with the stock number in the FSN index.

If you gain or lose equipment you simply cross-out the old total in the nomenclature column and its related entry in the allowance column. Then you note the new info in both columns and send the change info to your supply support.



MORE



KINDS OF PARTS

Parts manuals identify repair parts you're authorized like this:

Combat Essential Items (CEI's)—Parts shown in parentheses ( ) are CEI's, and once a CEI goes on your PLL, you stock it in the exact quantities authorized by the manual . . . never less. Anyone can increase stocks of CEI's, of course, if demand info (after six-months use of the part) proves the manual's 15-day allowance isn't enough. But, the quantity authorized by the manual (for whatever total of equipment you support) is the **least** amount a TOE outfit can carry of that item (para 31e, AR 735-35 and DA TWX 42928 DCSLOG/C 2).

(1) SOURCE, MAINT AND RECOVERABILITY CODE	(2) FEDERAL STOCK NO	(3) NOMENCLATURE EQUIPMENT APPLICATION	(4) UNIT PACK	(5) EQUIPMENT ALLOWANCES (a) 1-5	(b) 6-20	(c) 21-50	(d) 51-100
1 P O	5930-778-9765	SWITCH: push, missile release G293...	1				
		TOTAL DENSITY.....	.....	(1)	(1)	(1)	(1)
9 P O	5930-795-2662	SWITCH: push, neutral lock out G360... G280...	1				
		TOTAL DENSITY.....	.....	-	-	-	1
9 P O	5930-869-4408	SWITCH: push, plunger actuator emergency stop G295...					

As Required Repair Parts—Parts allowances pegged with an * in parts manuals indicate **"as required"** items and you don't include 'em in your initial PLL. You get them from support as you need them. However, once you have a call for an asterisk-pegged repair part, you start keeping count and when you've had three separate calls for the part (anytime within six current monthly review periods) the item can be added to your PLL. See "Fringe Items" page 17, this issue.

Parts Other than CEI's—These parts are listed in the manual without parentheses. They're parts that won't put equipment out of commission when they fail, and generally they're fast turn-over (high mortality) parts.

Initial stock is per TM allowances, but after 6 review periods you increase or decrease stocks according to demand. If any of these items collect less than 3 demands within 6 review periods, turn in any on hand as excess. This goes for all outfits—TOE and non-TOE—(DA TWX 42928 DCSLOG/C2).

TO RECAP

Your initial PL isn't an iron-clad contract with your repair part support outfit. Your unit's demand for repair parts is your authority to increase your allowances for any part that's been on your PL for six review periods (180-days).

You can even reduce your allowances of **other-than-CEI's** to zero, and you can also change your range of stocked items by proving your need for **"as required"** items (See Change 4, para 29c, AR 735-35).

You can do all this with your PL. All it takes, like was said at the beginning, is complete, accurate demand records.

HERE'S THE DEAL

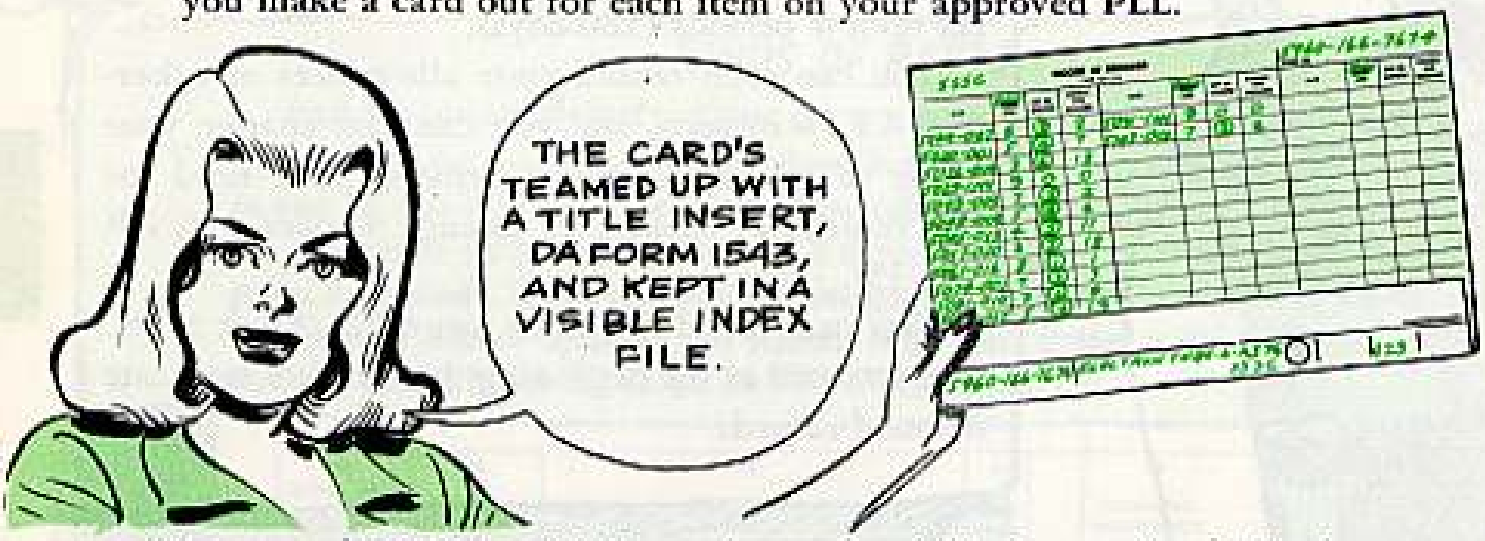
This stock-according-to-demand deal keeps you from totin' around, tying-up, and bottle-necking stuff you don't need . . . and should keep you from hurting for things you do need.

MORE

DEMAND RECORDS BACK YOU UP

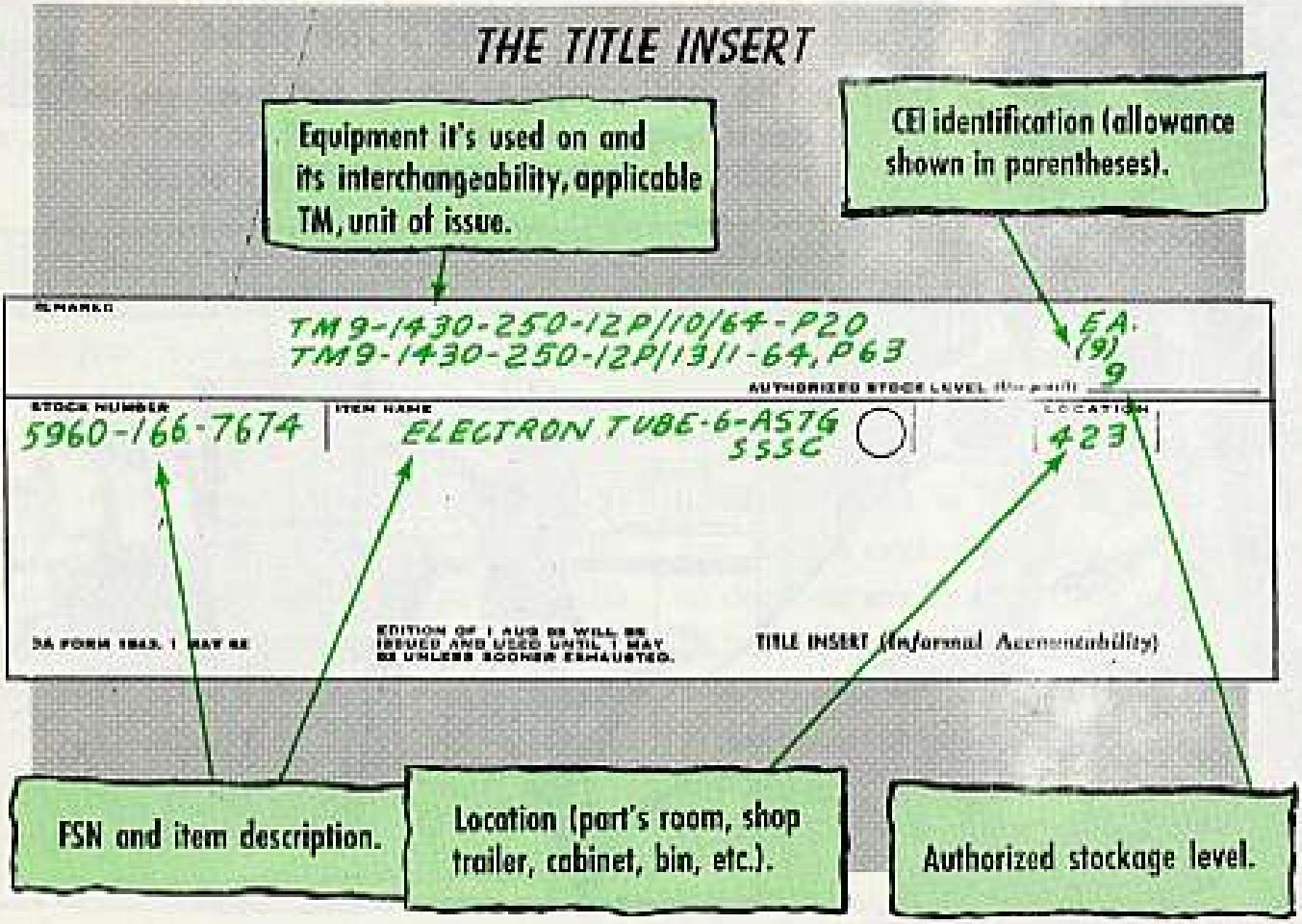
To keep tabs on what parts are fast movers and which parts are slow, or just plain dead-wood, you use DA Form 2527, "Record of Demands" card.

It's a simple form, easy to keep and best of all it tells all at a glance... you make a card out for each item on your approved PLL.



You record all demand info on the card so it'll give you (and all others concerned—like inspectors) complete, up-to-date info on repair parts usage.

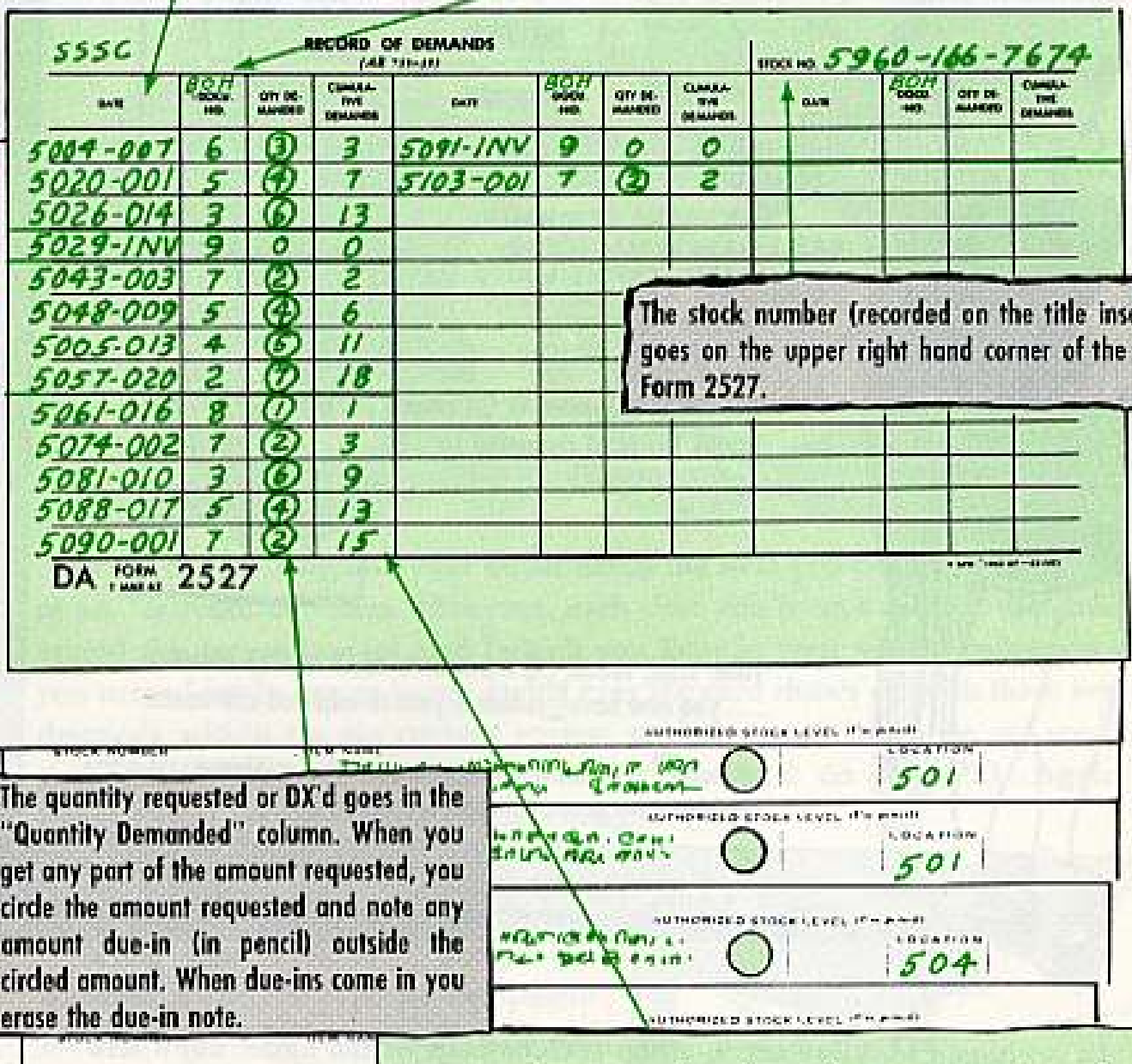
For convenience, easy handling, etc., the card's teamed up with a title insert, DA Form 1543, and kept in a visible index file which gives you a finger-tip index of your PLL. On this record combination you record parts info as follows:



THE ROD CARD (RECORD OF DEMAND)

The organization document number (from block C1 of DA Form 2765, or from whatever supply form you use) goes in the date column. Or you use the date and the abbreviation SSSC (self-service supply center), SALTI (low-cost turnover items), or DX (Direct Exchange) in the date column. (Dates of receipts and issues aren't recorded in the card's date column.)

The column reading "document number" gets changed to read "Balance on-hand" (BOH, for short). You make entries in the BOH column in pencil so you can change them to show receipts and issues.



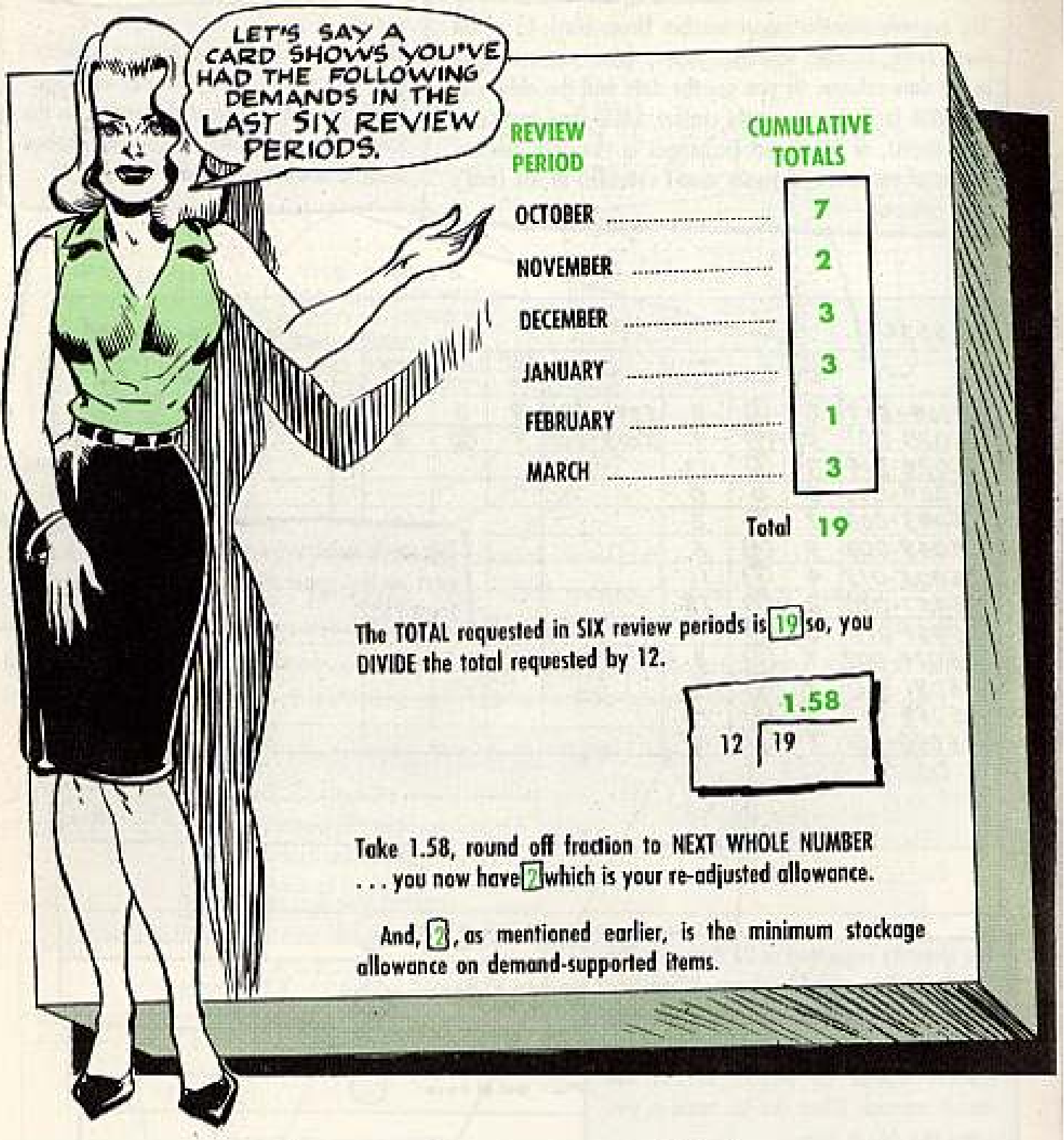
The stock number (recorded on the title insert) goes on the upper right hand corner of the DA Form 2527.

The quantity requested or DX'd goes in the "Quantity Demanded" column. When you get any part of the amount requested, you circle the amount requested and note any amount due-in (in pencil) outside the circled amount. When due-ins come in you erase the due-in note.

The "Cumulative Demands" column shows your running totals. You keep it correctly totaled up all the time. At the end of each month you draw a line under the last cumulative entry for the month. If you've recorded three separate demands, or more, within the last six monthly review periods (180-days) you readjust your authorized allowance. All you do is total-up the (last six) separate cumulative totals and divide the amount by 12.

MORE

REVISING PLL STOCKS



In revising PLL allowances, when you come up with a figure anywhere from 0.25 to 2.4 your allowance is 2. (DA TWX 42928 DCSLOG/C2).

NOTE: When you're reviewing cards which record CEI's, you don't decrease the allowance if the re-adjusted total you come up with is less than the TM authorized quantity. It stays as recorded on the title insert, and, you continue to stock per the TM allowance. If the re-adjusted allowance is larger than the CEI figure noted on the insert, you are authorized to increase it, though.

DIVIDING LINE

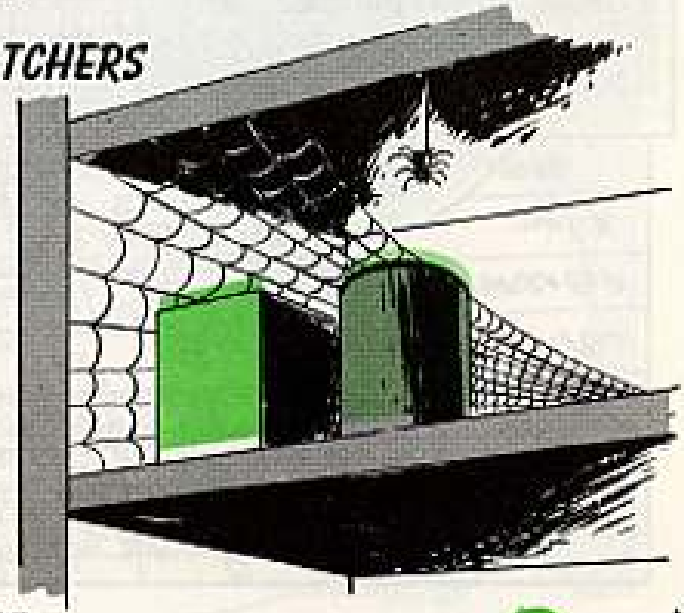
At the monthly review, after you draw a line under the last cumulative total, you don't carry anything over to the following month.

You start counting demands anew when you make the next entry on the card.

When a card has no action during the month, just enter date, balance on-hand and 0 in the other two columns and draw your review line.

In the future, anytime your outfit needs the item you can get it from support as an "as required" item. However, each time you have a call for the item, you record the demand on its card (which you kept in your visible index file when you turned-in the excess parts) and if ever the card shows up with three separate demands within the six current review periods, you can figure up your new authorized allowance for the part and it goes back on your PLL. Again you give support written notice on the change.

DUST CATCHERS

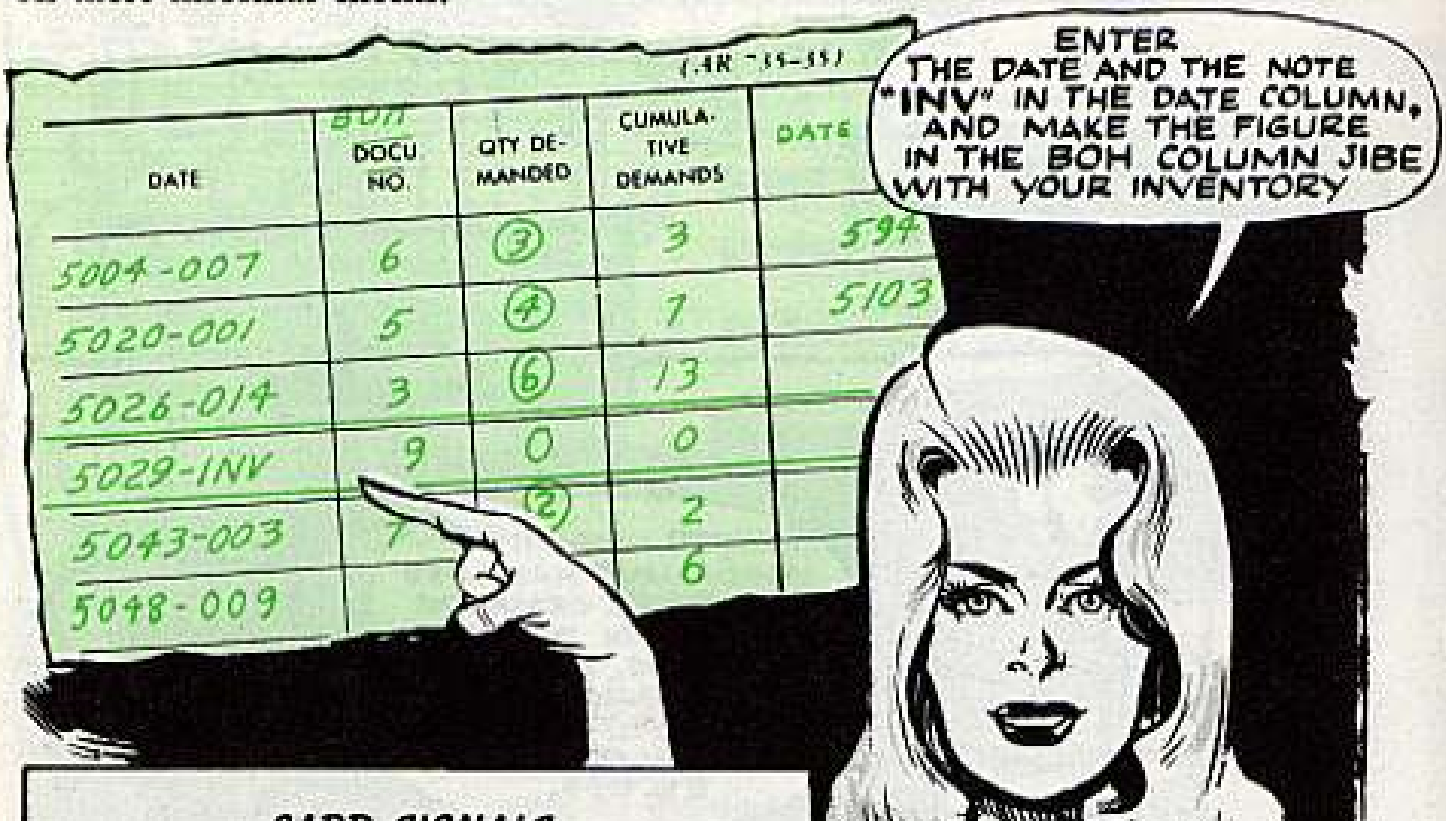


When your outfit is no longer authorized a specific type of equipment and it's turned-in, any repair parts you have (which are used only with that equipment) you turn-in also. In this case you can toss out the cards on the parts and just cross the parts off your PLL. And, of course, you write support a note on the change, so they'll correct their list.

MORE

ROD CARD INVENTORY

Your record of demand cards are due a periodic inventory—informal, and as called for by the Old Man. Count slips and adjustment reports aren't needed on these informal checks.



CARD SIGNALS

You can use colored signals behind the title insert windows as a visual check on the status of your parts. For example, one color to show due-in's, another to show zero balance, another to flag CEI's, etc.

FRINGE (*-PEGGED) ITEMS

You set-up a DA Form 2527 for each "as required" item you request. You fill the cards out just like a ROD card for your PLL parts, but you don't make a title insert for 'em, and you file the cards separately (in a file folder, box, cabinet, etc., just so's they're safe and handy), and you keep 'em in FSN sequence.

You review each card each time you make an entry, and anytime you've accumulated three separate demands on a card, the repair part can go on your PLL immediately . . . with the Old Man's OK, of course . . . and support's knowledge.

NOTE: With "as required" parts you don't have to accumulate 6-months usage experience before you add 'em to your PL . . . you can set-up your initial authorized allowances as soon as your card shows 3 separate demands. The demands can all come within a week, a month, or spaced anyway at all within six monthly (current) review periods. Your only limit is the six review periods.

MORE

BUT..., if you record two separate demands during 5 monthly review periods, and none on the next review period (which closes out the 6th current review period) the part does not qualify for your PL.

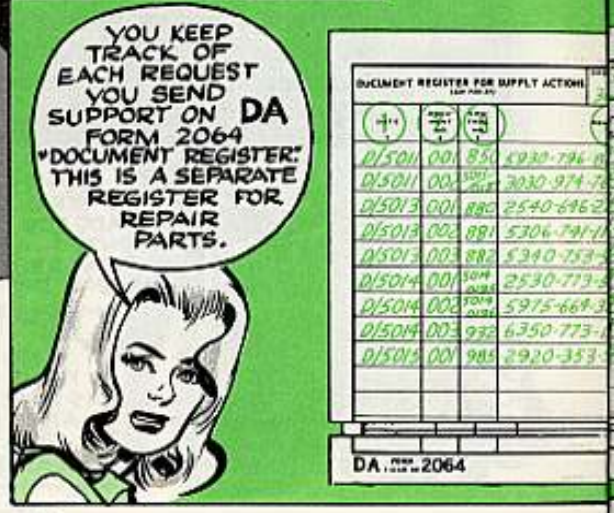
You keep an "as required" item card on file, though, until it:

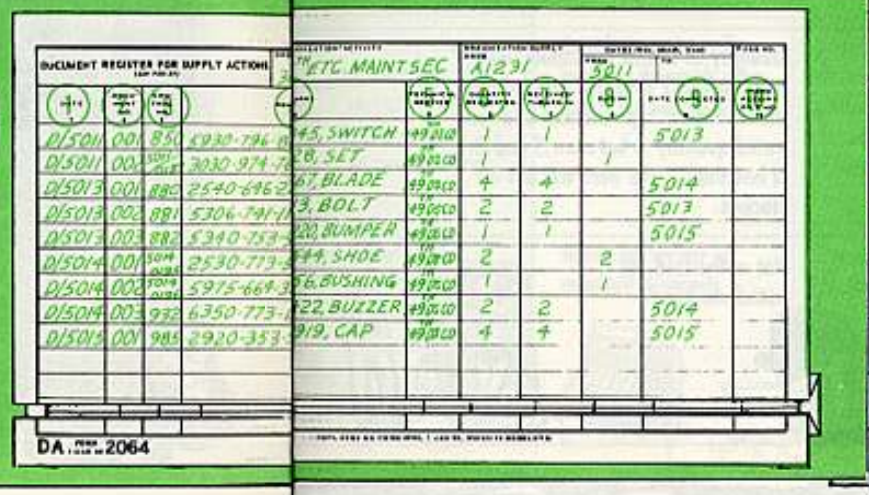
1. Gathers 3 separate demands—and then you transfer it over to your visible file (if the part has been okayed for stockage) or
2. Until it shows no action at all for 180-days in which case you toss it in file 13.

DISCARDING CARDS

You have to review your cards in the fringe item file every 90-days, and toss out any cards that show no demands for the most recent six review periods. You also get rid of any cards on items that no longer apply to your unit's equipment, and turn-in any parts you may have on-hand under those cards.

KEEPING TABS ON REQUESTS





1. Urgency of need designator, or priority code, date.
2. Document number (of supply form)
3. Control number (assigned by your support outfit)
4. Remarks (FSN and item name, etc.)
5. Technical service (your support's identification)
6. Quantity requested
7. Quantity received or turned-in
8. Due-in info
9. Date transaction completed
10. Hand-receipt file number (if needed).

INITIAL ALLOWANCE ON *-PART

Multiply the total of the three separate demands by 15 (your days of supply) and divide the total by the number of days in which the demand occurred. But first you round off this number of days to the nearest 15-day increment.

EXAMPLE: 3 separate demands for: 27 parts, in 52 days

MULTIPLY 27 X 15 ←··· (15 days supply) — 27 X 15 = 405

THEN

DIVIDE by (45) ←---- (45 is a multiple of three 15 day supply periods)* — 45 | 405 = 9

SO . . . Your INITIAL ALLOWANCE IS: 9 which goes on the title insert (which you make-up for the card when you transfer it from your fringe item file to your visible index file.

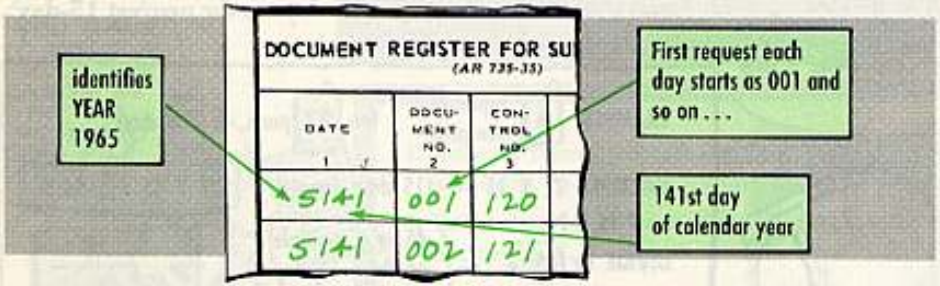
* **NOTE:** (45) is closer to 52, than say 30 or 60 . . . days total must be to the nearest 15 day increment . . .

Like with your PLL allowances, fractional values of .5 or higher get rounded to the next higher whole number. For example, an answer of 4.8 will give you an allowance of 5. And, fractional values below .5, you round to the next lower whole number (i.e., with a 2.3 answer your allowance is only 2). And remember, minimum stockage for demand supported items is two.

MORE

ORGANIZATION DOCUMENT NUMBERS

The document register records the document serial number you assign to your supply request. Your outfit will provide a separate block of serial numbers for your repair parts register—see Para 8, AR 711-17.

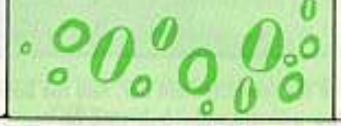


Your first request on 21 May 65 would have document serial number 5141-001 and so on to document serial number **5141-050,** if you put out 50 requests on that day.

HERE'S THE PLL SCOOP

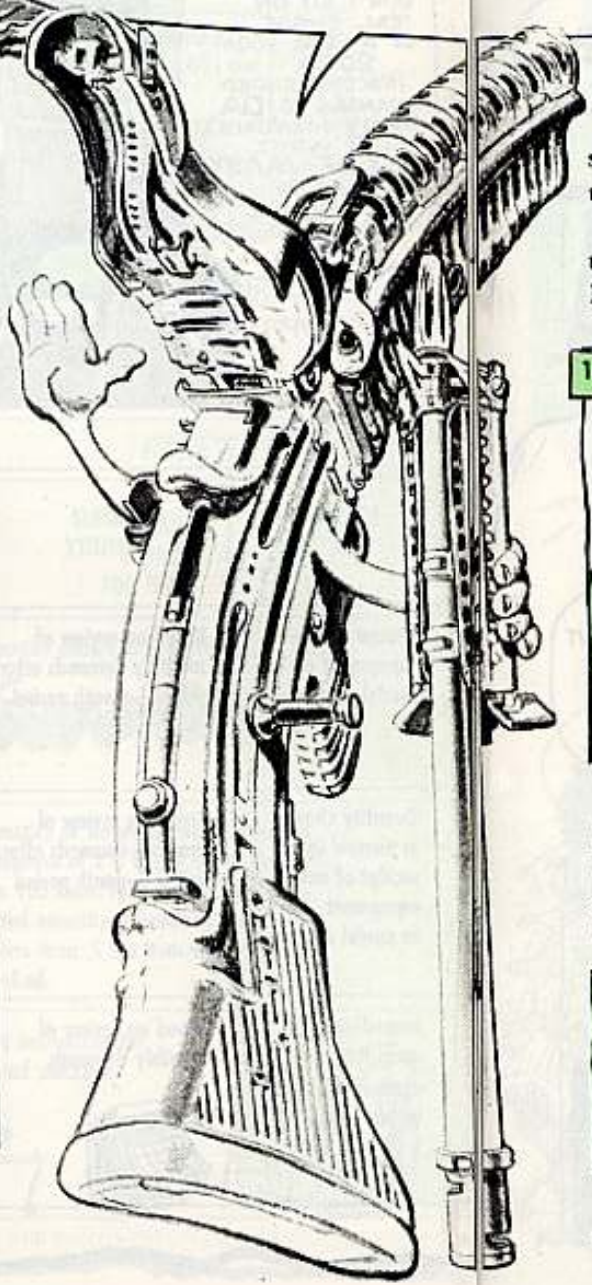
CATEGORY OF REPAIR PART	IDENTITY IN MANUAL	QUANTITY AUTHORIZED FOR INITIAL PLL
Combat-Essential Repair Part 	Quantities shown in parentheses in allowance column	Quantity shown in parentheses [1] 
High-Mortality Repair Part 	Quantities shown in allowance column without parentheses	Quantity as shown in manual, with a minimum of 2 if based on 15 days per 100 items type manual and computed quantity is between .5 and 2.4. If less than .5 the item will not be stocked.
As-Required Repair Part 	Quantities shown in allowance column identified by an *	Not authorized for initial stockage  

AT A GLANCE . . .

ADD TO PLL	INCREASE QUANTITY	DECREASE QUANTITY	DELETE FROM PLL
Receipt of new equipment or model change	Based on review of monthly demands after initial 6-month period	Based on review of monthly demands after initial 6-month period, but **not below** quantity shown in parenthesis	Upon loss of end item
Quantity shown in manual upon receipt of new equipment or model change	Based on review of monthly demands after initial 6-month period	Based on review of monthly demands after initial 6-month period. If less than 3 demands in most recent 180 days, item is turned in as excess	Upon loss of end item or less than 3 demands in 180 days
Immediately upon the third demand anytime within 180 days	Based on review of monthly demands 	Based on review of monthly demands to zero balance 	Upon loss of demand experience for 180-day period

END

WHEN THE BARREL'S OUT— HOLD YOUR DRY FIRE!

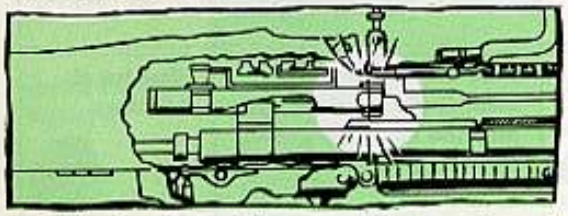


Any time you get a hankering to let the bolt on your M60 machine gun fly forward (with the barrel out)—DON'T! You could be asking for a pack of trouble.

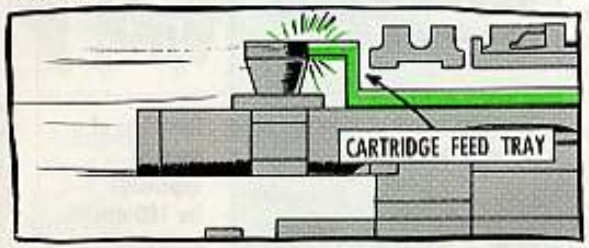
Why, even with the barrel in there you could have problems.

Figure it this way. With the barrel in, you have a forward moving bolt entering the barrel socket like it ought to, right?

But, when you're dry firing, you won't have a live round or dummy cartridge in there to soften the blow as steel meets steel. As a result, wear on the bolt locking lugs and the barrel socket locking recesses will be increased.



With the barrel out of the receiver, the situation's much worse. Then if the bolt's released and goes forward under force, the actuator cam roller'll hit the rear of the cartridge feed tray.



This'll damage or break the reinforcement bar. And the base of the actuator cam roller will strike the bolt stop on top of the receiver.

Too much battering of the bolt stops like this will bang up the recesses or stops. This, in turn, will let the actuator cam roller strike the cartridge feed tray during firing.

Howsomever, if you get in a bind with the barrel removed and the bolt in the forward position, and you can't retract it by the operating handle, here's how you can straighten it out without sweat or damage:

If this system won't work for you, get your support to lend a hand. Whatever you do, DON'T try to force the bolt. Forcing the bolt back agin the receiver guideways can cut a piece off the bolt lug.

So, in future, whenever you have to remove the barrel, do it this way: Retract the bolt till it's seared. Then move the safety to the safe position and raise the barrel lock lever to the vertical position. Then remove the barrel.

But don't stop there. Next, put the barrel lock lever in the horizontal position, retract the operating handle fully to the rear. Place the safety in the fire position. Pull the trigger and then E-A-S-E the bolt forward.

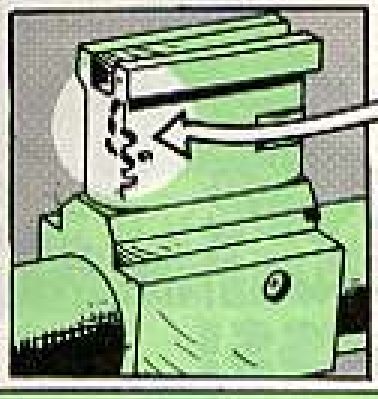
Doing it this way will lessen your chances of dry firing and prevent damage to your M60.

So these guys come knocking on your arms room door, carrying an M60 machine gun that's suffering with a chipped bolt and a burred operating rod yoke. And they want to know can they keep on using this weapon.

Well, before you snap an opinion—best take a good look at the patient. Depends on what surgery's possible.

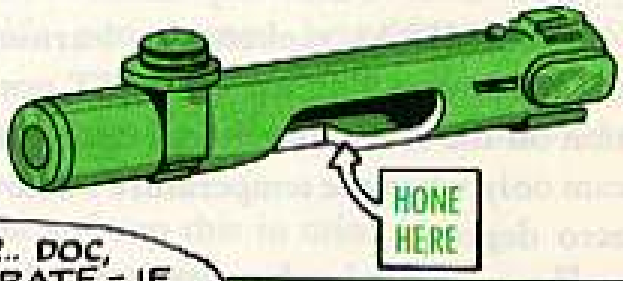
For instance, if the bolt's only chipped at the left front corner of the upper locking lug, chances are you can cure it by smoothing out the rough surfaces with a fine sharpening stone. This treatment will work every time—as long as you have at least half of the cam surface of the radius left when you're through honing. Once half of the radius is gone, of course, the bolt's unserviceable.

But, if the rear surface of one or both lugs gets chipped, the bolt's automatically beyond help. Replace it.

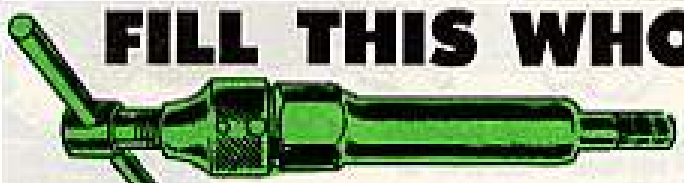


On the other hand, if you find a rough surface in the yoke cam area of the bolt, you can heal it by honing away the roughness with that same fine stone. But be careful you don't alter the critical dimensions.

Same treatment goes if you find the operating rod assembly yoke burred. Smooth the burrs away with the fine stone, but, again, don't overdo it. You don't want to spoil the cam's handsome features.



FILL THIS WHOLE



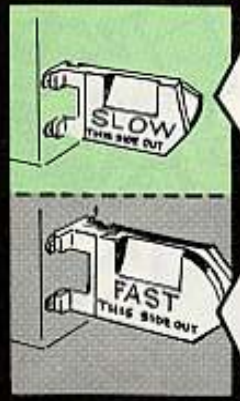
Don't be surprised if you can't get repair parts for your 105-mm towed howitzer's recoil oil gun, even though it's listed in TM 9-1015-203-20P (20 Mar 61). Under a new deal, if any of these parts give out, you requisition the whole item. Uncle's found it's cheaper to replace the gun than to stock its parts. So, if you need any repair parts listed in the -20P, ask for this instead: Gun, Fluid, FSN 4933-550-6661.

WATCH YOUR BRASS!

Ow! Ooh! Ouch! My achin' . . . !

Some M60A1 tankers are learning the hard way: You use the FAST position on the reversible breech operating cam only when the temperature's below zero degrees.

If you use it in above-zero weather, somebody or something's gonna get hit by a flying object. The brass comes spitting out and bounces off the ballistic shield and into anybody or anything that's in the way. Man and breech mechanism parts can get hurt.



SLOW SIDE OUT . . . ABOVE ZERO.

FAST SIDE OUT . . . BELOW ZERO.

Here's the scoop: The breech mechanism normally extracts and ejects empty brass in step with the mercury. If it's above zero, the empties come out faster. If it's colder, the action gets sluggish and they come out slower.

That's why you have a two-faced cam. The SLOW side's curved to slow down ejection. The FAST side's straight to speed it up.

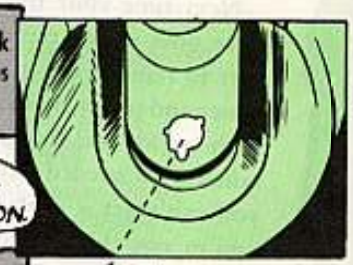
DRY - DRY - DRY

Sure, Joe, you know about keeping grease, oil and moisture off the firing contacts and insulators in your M60 tank's gun cannon breechblock. Could short-circuit the electrical system, right?

Well, the same deal goes double for the firing pin. The firing pin MUST be dry—or else!

Here're two special times when you want to keep this in mind:

1 When you're replacing or doing PM on any of the breechblock group parts—take an extra second to see that the firing pin has no oil or grease on it.



2 After a rain or fog or a sudden change from warm to cold weather —take out the firing pin and wipe it dry with a clean rag. Moisture, y'know, can sneak in the openings in the retaining plate.

SOFTEN THE BLOW

Not all bore evacuators'll go on and off your M60-series tank cannon real easy.

But, if you have to use extra force to do the job, for goshsakes, Sam, get a block of wood between the evacuator and whatever you're using as a persuader. Don't just bang away with metal on metal. Uncle loses more bore evacuators this way!

WANNA SAVE A GIG?

Next time your towed artillery piece goes in for repairs, get support to remove the gun book container and pretty up the screw holes with weld and paint. The container's not needed any more—and you can't get a replacement—but you're not the guy authorized to take it off. So . . . !

KEEP ON USING IT

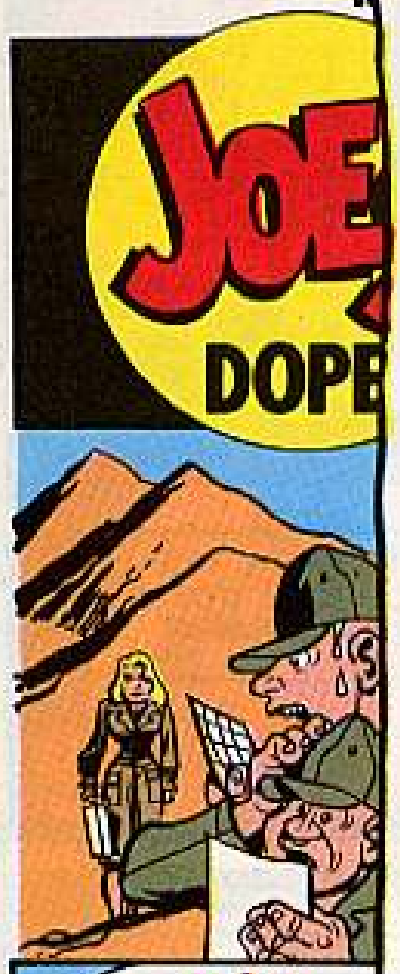
Just because the fixed base on your M37 machine gun's rear sight gets damaged is no reason to declare the weapon unserviceable. Straighten out the bent parts and smooth out the sharp edges if a piece gets broken off—and then keep on firing.

PLL — PLUS!

Goody, goody! Now you're authorized more lines on your prescribed load list for repairs on the .45-cal M1911A1 pistol and the M60 machine gun. You'll find these PLL additions in the weapon's parts manual—TM 9-1005-211-12P/2 (29 Apr 64) for the pistol and TM 9-1005-224-20P (7 Jul 64) for the M60.

THIS SPRING'LL DO IT

The percussion firing spring issued with the M108 SP howitzer cannon's been strictly no-fire, right? So, no sweat. Till they figure out what gives, go ahead and use the percussion spring for 90-mm guns on these babies: the M56 antitank SP shooter, the M47 tank, or any of the M48-series tanks. In other words, instead of spring, helical, compression . . . FSN 1015-886-3024 . . . use spring, helical, compression . . . FSN 1015-723-7784. OK?



'Twas spring along the Imjin
And the moose were out in force
From Naha up to Moonsani
Troops swore they "had the course!"

Oh, the **TAERS** forms—The logbook cards
No **DA** form was right!
Yet, no one blamed the system, see...
'Twas the work that gave 'em fright!

Now, 'way up high where such things count
them **Vital Facts** grew short!
No **Answers** to..."How ready, Sir??"
or..."where do you need support??"

So, up the good ol' **MSR**
They deployed our Connie Rodd
To whip-it-to some men she knew
With heads of monkey pod!!

FIRST OF ALL LET'S AGREE ... YOU'RE AN **OPERATOR** ... YOU'RE UP TO YOUR ARMPITS IN **DRIVING, SHOOTING, COMMUNICATING, DIGGING** OR WHATEVER ... YOU'VE GOT TO HAVE A LITTLE TIME TO GET USED TO A NEW SYSTEM ... OKAY, SO, YOU'VE HAD A LITTLE TIME ... NOW GIVE ME A LITTLE TIME AND I'LL SHOW YOU.

OOPS!

YOU **OPERATORS** NEED SOME PLACE TO POST THE RESULTS OF YOUR **PM** CHECKS ... WHERE YOU CAN JOT DOWN ANY SHORTCOMINGS OR DEFICIENCIES YOUR EQUIPMENT MIGHT HAVE, RIGHT?! ... WELL, THAT'S YOUR **2404**.

LIKE IT'S A WORK SHEET ALONG-SIDE MY TM ...EH?

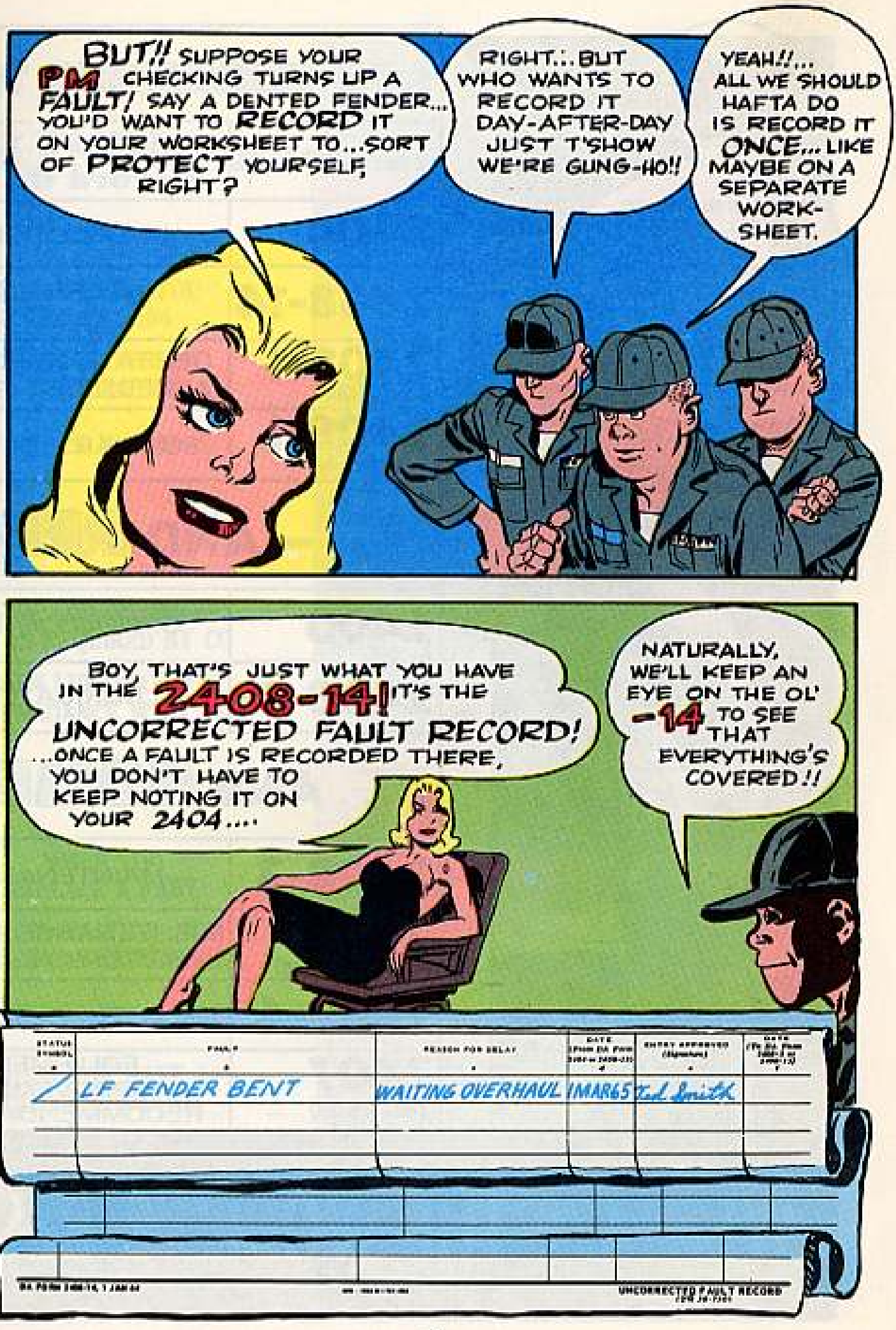
D.A. FORM 2404

THE INSPECTION PART OF THE **2404** IS BLANK FOR **TWO** REASONS—

1. YOU CAN USE IT FOR ANY PIECE OF EQUIPMENT, AND
2. AS LONG AS YOUR EQUIPMENT IS OKAY-

YOU DON'T HAVE TO WRITE A **COTTON-PICKIN'** THING!

NOW. THAT GRABS ME RIGHT HERE!


BUT!! SUPPOSE YOUR PM CHECKING TURNS UP A FAULT! SAY A DENTED FENDER... YOU'D WANT TO RECORD IT ON YOUR WORKSHEET TO...SORT OF PROTECT YOURSELF, RIGHT?
RIGHT... BUT WHO WANTS TO RECORD IT DAY-AFTER-DAY JUST T'SHOW WE'RE GUNG-HO!!
YEAH!!... ALL WE SHOULD HAFTA DO IS RECORD IT ONCE... LIKE MAYBE ON A SEPARATE WORK-SHEET.
BOY, THAT'S JUST WHAT YOU HAVE IN THE 2408-14! IT'S THE UNCORRECTED FAULT RECORD! ...ONCE A FAULT IS RECORDED THERE, YOU DON'T HAVE TO KEEP NOTING IT ON YOUR 2404....
NATURALLY, WE'LL KEEP AN EYE ON THE OL' -14 TO SEE THAT EVERYTHING'S COVERED!!
LF FENDER BENT
WAITING OVERHAUL
MAR65
T.J. Smith
UNCORRECTED FAULT RECORD

JOE'S Dop

OPERATORS USE THESE FOUR REGULARLY

The FORM	WHAT You Record On It...	WHEN Y' Use 'Er
2404	INSPECTIONS	DAILY
2408-14	UNCORRECTED FAULTS	CHECK WHEN YOU USE DA 2404
2408-1 (Daily)	OPERATION, FUEL, OIL ADDED, LUBE STATUS	WHEN EQUIPMENT IS OPERATED
2408-1 (Monthly)	SUMMARY OF DAILY	EACH MONTH

– AND PERHAPS THESE...

2400	OPERATION/USE	FOR ADM. VEHICLES OR AS REQUIRED BY CO
2408-2	LUBRICATION	WHEN LUBRICATED IN ACCORDANCE WITH LO

...AND SOMETIMES – THESE!!

2408-3	MAINTENANCE	WHEN YOU REPLACE A PART
2409 (Consolidated Log)	MAINTENANCE & OTHER HISTORICAL DATA	WHEN MAINTENANCE OR SERVICE IS REQUIRED
2408-4	GUN TUBE RECORD	WHEN WEAPON IS FIRED
2407 (EIR portion)	EQUIPMENT IMPROVEMENT RECOMMENDATIONS	WHEN YOU HAVE A RECOMMENDATION

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

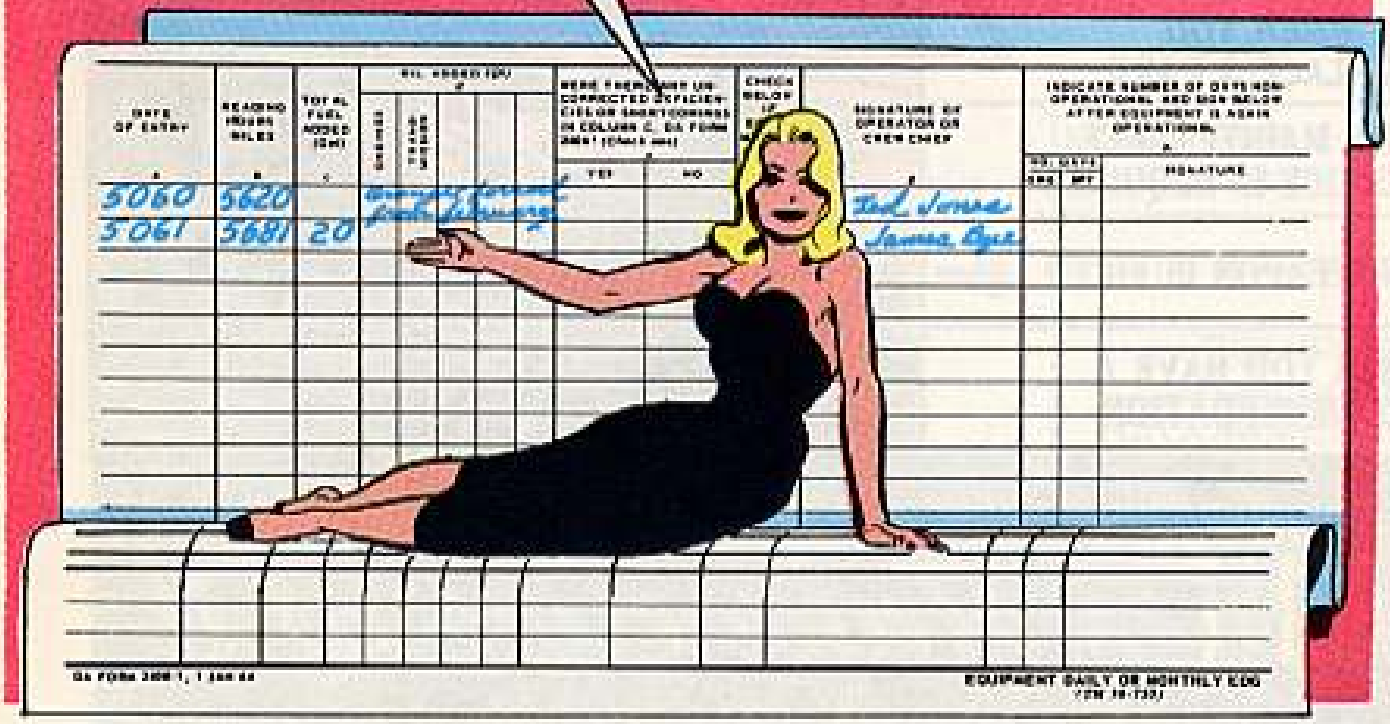
IF YOU WANT TO DISPLAY THIS CENTERPIECE ON YOUR BULLETIN BOARD, OPEN STAPLES, LIFT IT OUT AND PIN IT UP.

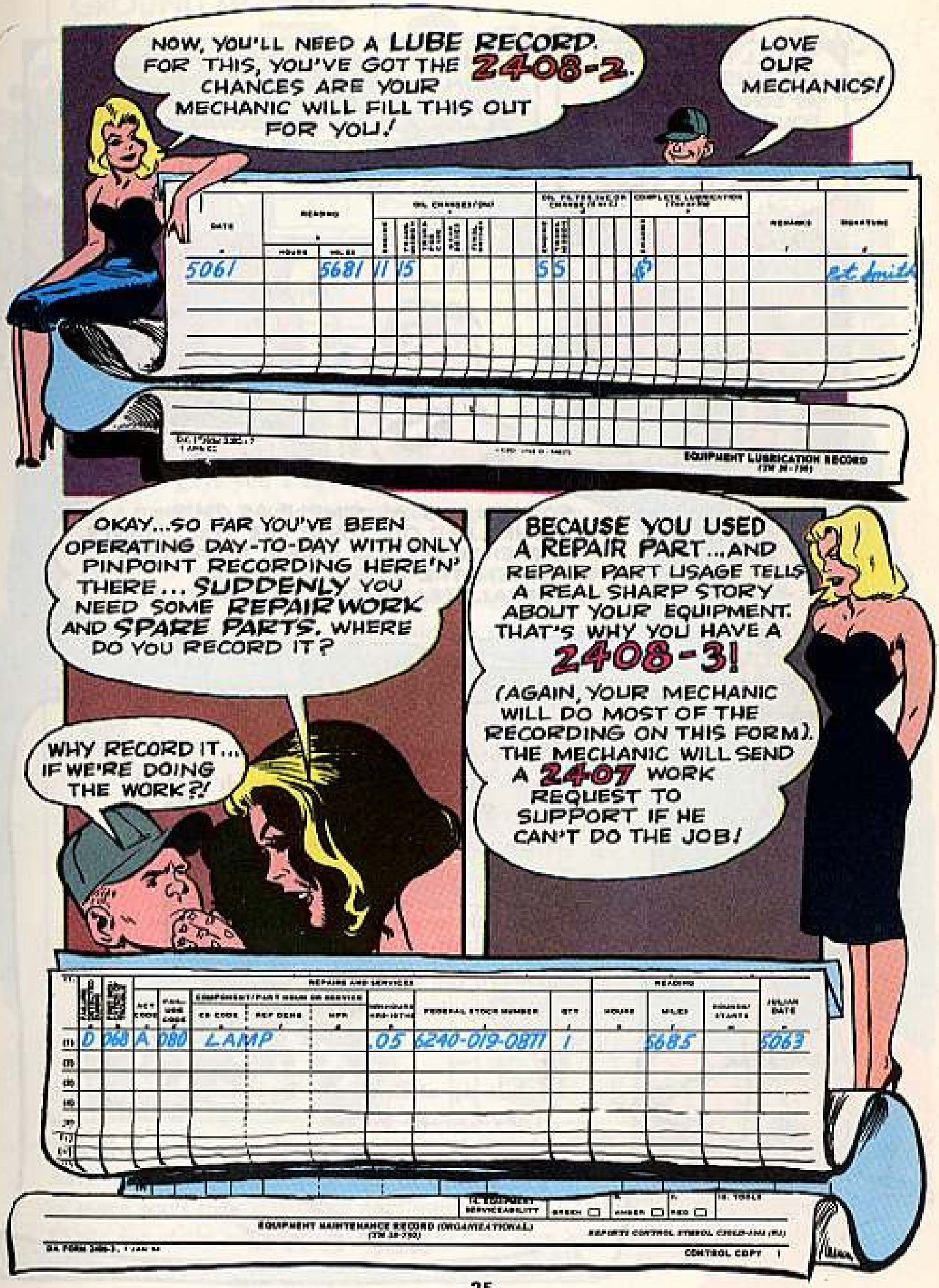
NOW, YOU NEED TO KEEP TRACK OF MILES, ROUNDS FIRED, FUEL USED, ETC... RIGHT?... SO WHERE ARE YOU GOING TO JOT THIS DOWN??

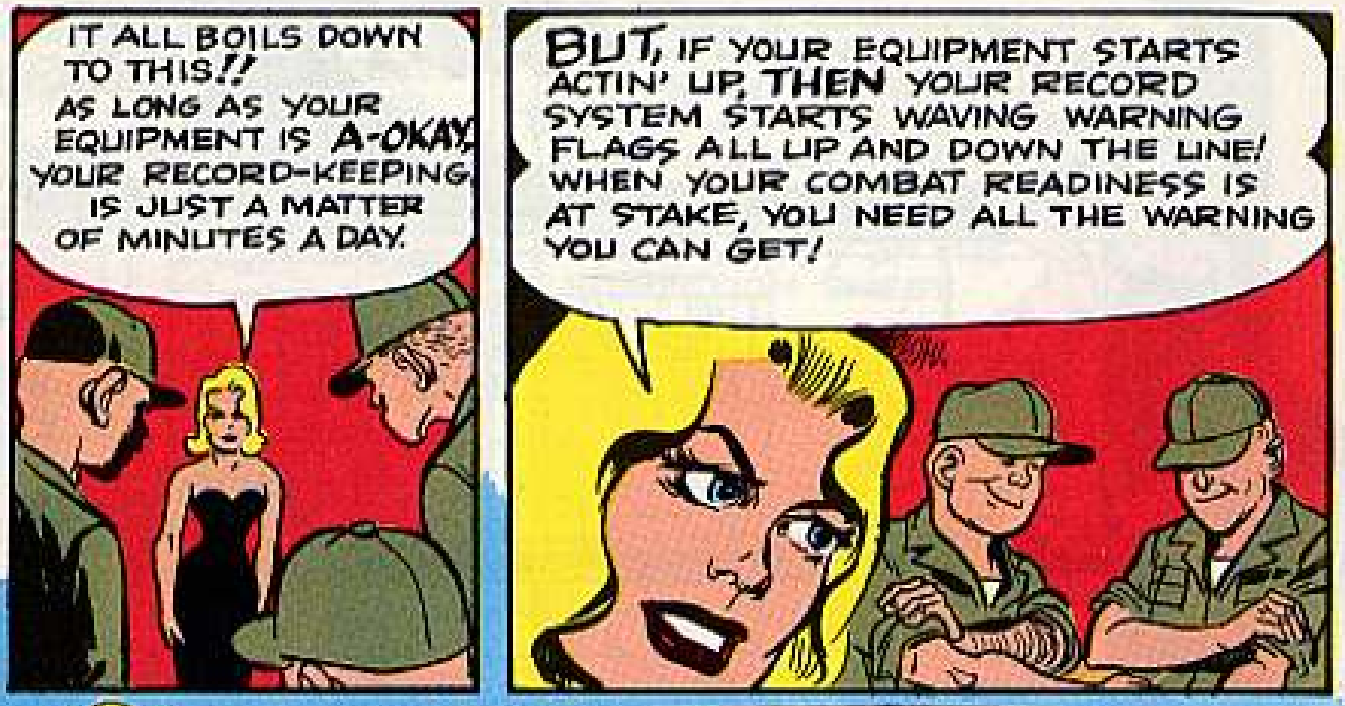
ON THE WORKSHEET! WHERE ELSE?

NEGATIVE!... PUTTING THIS TYPE OF PERMANENT INFO ON THE WORKSHEETS WILL MEAN KEEPING THEM FOREVER (OR ELSE COPYING IT ONTO A MORE PERMANENT FORM)... WHICH DESTROYS THE SIMPLICITY OF THE INSPECTION SHEET.

SO, YOU NEED A SIMPLE PERMANENT SHEET TO RECORD THIS OPERATION DOPE ON... WHICH IS WHY YOU HAVE THE 2408-1 (THE DAILY AND MONTHLY LOG)... THE DOPE FROM THE DAILY GOES ON TO THE MONTHLY AND BECOMES A VERY IMPORTANT RECORD ON YOUR EQUIPMENT.




NOW, YOU'LL NEED A LUBE RECORD. FOR THIS, YOU'VE GOT THE 2408-2. CHANCES ARE YOUR MECHANIC WILL FILL THIS OUT FOR YOU!
LOVE OUR MECHANICS!
DATE
READING
HOURS
MILES
5061
5681
EQUIPMENT LUBRICATION RECORD
OKAY...SO FAR YOU'VE BEEN OPERATING DAY-TO-DAY WITH ONLY PINPOINT RECORDING HERE'N' THERE... SUDDENLY YOU NEED SOME REPAIR WORK AND SPARE PARTS. WHERE DO YOU RECORD IT?
WHY RECORD IT... IF WE'RE DOING THE WORK?!
BECAUSE YOU USED A REPAIR PART...AND REPAIR PART USAGE TELLS A REAL SHARP STORY ABOUT YOUR EQUIPMENT. THAT'S WHY YOU HAVE A 2408-3!
(AGAIN, YOUR MECHANIC WILL DO MOST OF THE RECORDING ON THIS FORM). THE MECHANIC WILL SEND A 2407 WORK REQUEST TO SUPPORT IF HE CAN'T DO THE JOB!
REPAIRS AND SERVICES
READING
FEDERAL STOCK NUMBER
QTY
HOURS
MILES
JULIAN DATE
D
A
LAMP
.05
6240-019-0811
1
5685
5063
EQUIPMENT MAINTENANCE RECORD (ORGANIZATIONAL)
CONTROL COPY



So those along the **MSR**
who faked and fought the bit
Now make the scene and know that forms
Are not a pail of grits.

In fact those sly **Shorttimers** who
Drive daily Yongsan Pass—
Put down the facts in proper slots
To save their sweet ol' gas.

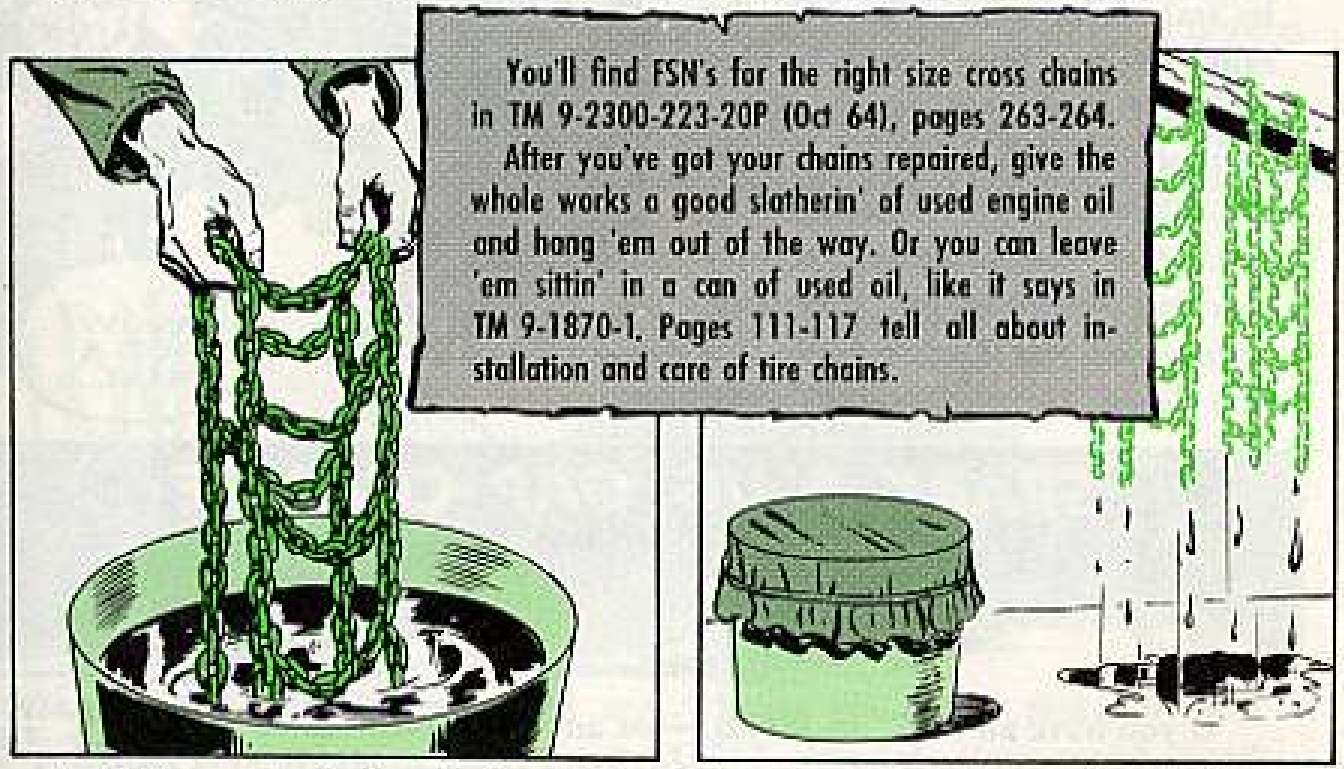
While up at Brassville in D.C.
They use the **EIRs**
And thus back down comes improved stuff
From guns to new staff cars.

the End

'MOTHBALLS' AND TIRE CHAINS

Winter's gone and might as well be forgotten—but don't forget those tire chains that gave you a fightin' chance with ice and snow. They'll be rarin' to go at a moment's notice next winter if you put 'em in good shape before storing 'em away.

Busted or worn-thin cross chains are no reason for chuckin' out the whole chain assembly. Too many guys have been takin' the easy—and expensive—way out, so supply's got cross chains in stock clear up to the ears.

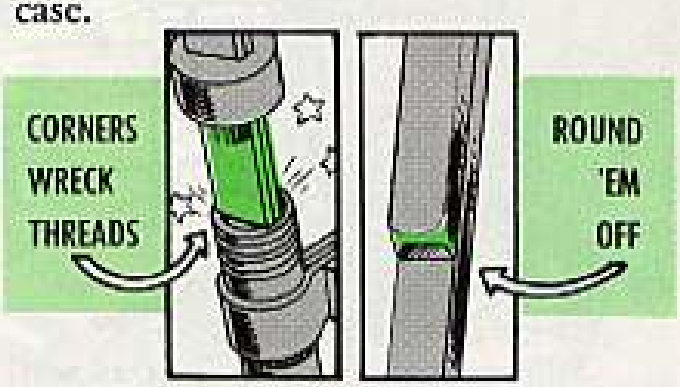


And if you don't already have tire chains, now's the time to be thinking—AND DOING—something about that, too, or you'll be sittin' out in the cold in more ways than one come next winter. TM 9-2300-223-20P also gives the FSN's for chain assemblies—and tells who gets 'em and how (see pages 260-263).

ROUNDIN' THE CORNERS

When you're slippin' the dipstick to your M35A1 2½-ton truck, be mighty careful or you'll chew up the threaded top of the dipstick tube. The sharp corners where the double layer of the stick ends can play hob with the threads so the cap won't screw on.

Better yet, get rid of those sharp corners by rounding 'em off with a file or grinder. Do it careful-like, tho, so you don't cut into the part of the dipstick that goes on down into the crankcase.

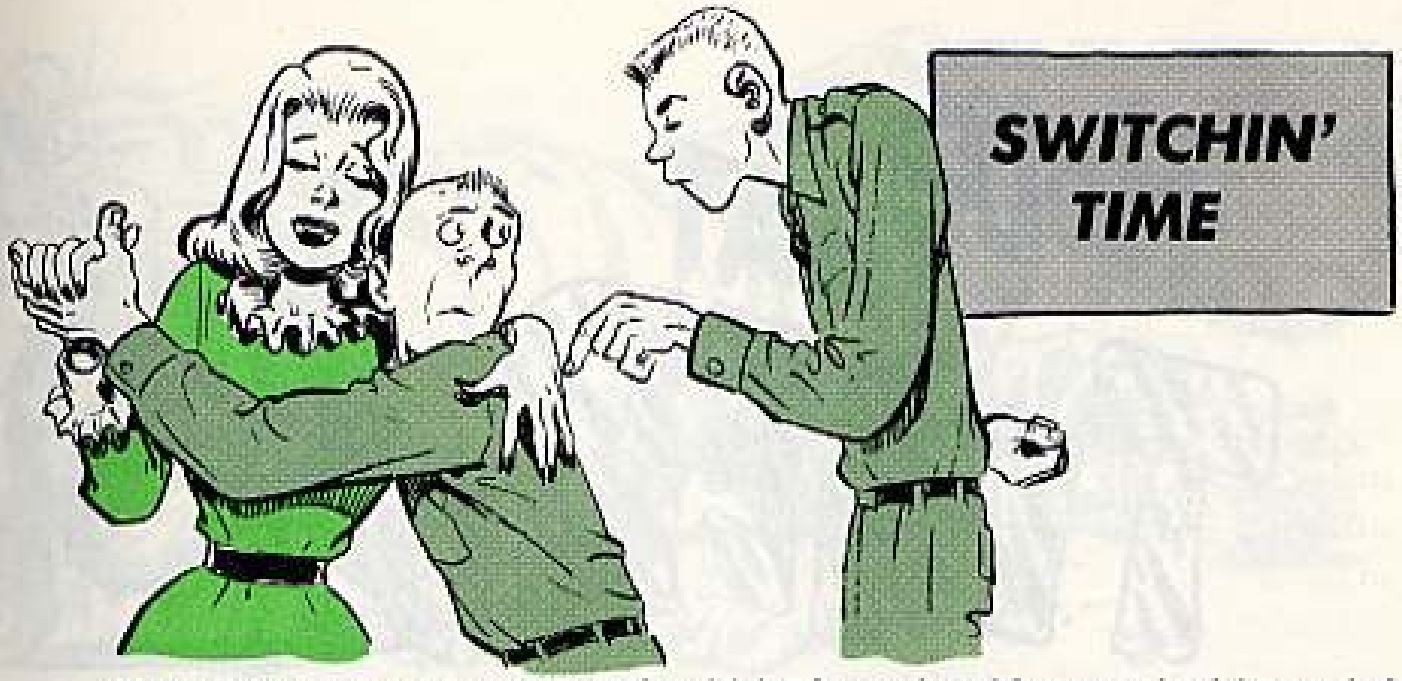


START BY BLEEDING

The secret's in the bleeding when your M35A1 2½-ton truck runs out of fuel and—doesn't want to start with a new load in the tank. The fuel lines have to be bled BEFORE starting is attempted. It's a simple job with a crescent wrench, but it's strictly for organizational mechanics—not drivers. If you try starting without the bleeding, chances are you'll just run the battery down.

SPARK PLUG GAP CHANGE

If you have an M37, an M37B1—or any other member of the G741 ¾-ton truck family—you'll want to know that the correct spark plug gap is 0.028 to 0.033 inch like it says on page 181 of TM 9-8030. If there's any question on this, check with your Support. They've been given the latest word from the national maintenance point.



If any of your tactical wheeled vehicles have the older type ignition switch —the one with a resin potting material around the wire leads—you've gotta keep an eye on 'em. TB Ord 634 (Oct 61), says to inspect the old switch (FSN 5930-776-0409) at every periodic maintenance ("S") service for cracks and scorched insulation.

When the potting metal cracks, moisture seeps thru and shorts the unit—makes for a fire hazard.

Replace all cracked switches with a new Switch, Rotary, Ignition, FSN 5930-699-9438. This is the ignition switch that's listed in your copy of TM 9-2300-223-20P.

To put this metal encased switch in your truck for the first time, you'll need Kit, FSN 2920-796-2655 to make the installation. The TB gives the hook-up dope.

NEW HORN NOTE

Do any of your ¼-ton G758 or 2½-ton G742-series trucks need a new horn?

If so, requisition Horn, Electrical, FSN 2590-678-6140. This horn supersedes the one given in both vehicles' -20P's.

When you mount this new horn on G742 vehicles after serial numbers 121098 and M31098 that have the old type horn, you'll need additional electrical connectors. You can get 'em in a kit under FSN 2590-766-7722.

ON PRESSURIZED FUEL SYSTEMS . . .

HOLD THAT TIGER

You'll have a mean ole' tiger lyin' in wait for you if you don't keep tabs on the filler cap of your vehicle's pressurized fuel system.

That ornery cat's apt to come tearin' out of the filler pipe right into your face. Or, if he can't wait for you to let 'im out, he may reach down into the engine and raise hob.

This terror of the fuel tank is pressure—too much pressure, that is. He can drench you with fuel (bad stuff in the wrong place) when you take the filler cap off. He's a double threat when he shoves gas right through the engine into the crankcase, diluting the oil and making a perfect set-up for an explosion.

To keep that temp'r'mental tabby dozin' peacefully in the tank:

CHECK THE CAP

There're three different filler caps:

The best one (FSN 2910-141-9758) has an adjustment on the bottom side for setting the vent valve on OPEN or CLOSED.

You turn it to CLOSED before fording or if operating in a hot area where vapor lock may sneak in.

Under normal conditions, be sure to have the vent on OPEN. Like it says in Change 2 (Jun64) to TM 9-2320-211-10 for 5-ton trucks, follow the instructions on the cap for fording operations.

Then there's the cap that has what's supposed to be an automatic relief valve—but, because rust and corrosion have a way of upsetting the best laid plans, never trust it. Keep this type cap turned on full-tight for fording or operating in high temperatures. Back it off to the semilocked position for normal operations.

FULL-ON FOR FORDING AND HOT OPERATING CONDITIONS

SEMI-LOCKED FOR NORMAL CONDITIONS

And some of your trucks and other tactical wheeled vehicles may have an automatic relief valve built into the tank—never trust that either. The cap intended for this tank is air tight, so the right adjustments are: Full-on for fording and hot operating conditions, and semi-locked for normal operating conditions.

FULL-ON FOR FORDING AND HOT OPERATING CONDITIONS

SEMI-LOCKED FOR NORMAL CONDITIONS

MORE

DON'T CROWD HIM

Another way to keep from annoying that cat-under-the-cap is to leave room for some expansion and pressure build-up when you're filling your tank.

A good reminder is a line painted across two inches from the top of the tank, with this warning—"CAUTION: DO NOT FILL ABOVE THIS LINE."

Leave a coupla inches for expansion. This is for fuel tanks that are in full view. If your gas tank can't be seen, stencil near the fill pipe—"CAUTION: DO NOT OVERFILL—ALLOW FOR EXPANSION." TB 746-93-1 (26 Oct 64), Color and Marking of Military Vehicles, Construction Equipment and Materials Handling Equipment, has the full scoop on this. These warnings are required no matter which of the three gas caps you have.

Another good habit is always wiping dirt and other stuff away from the filler opening and cap before taking the cap off to refuel. A speck of dirt you can hardly see can stop a big truck dead until things are torn apart to get it out.

THE END OF A TALE

If these timely tips sound like you won't know you "done wrong" until it's done, here're some steps that'll help keep you from hurtin' yourself and your equipment:

If so, there's a good chance pressure has forced fuel, or at least fumes, into the crankcase. This could start a fire or even set off an explosion. DON'T START THE ENGINE. Have the maintenance unit check on whether there's too much pressure or some other trouble. If pressure is the problem, the crankcase has to be drained and refilled before starting the engine.

WINGS CLIPPED

The wing nut for mounting your M151 truck's spare wheel was made for hand tightening. But hand tightening's not enough, so the wing nut loosens and backs off. So get a wheel lug nut (FSN 2530-678-2974) to do the job. Put 30 to 40 foot pounds torque on that nut and it'll hold!

TRUCK-ISH BATH

Dear Half-Mast,

What's with this story that we're not supposed to steam-clean our equipment, like trucks and tractors?

The steam does it faster and easier than solvents, but we are told that we might damage the seals and wiring. We can't find anywhere in the TM's that we can use steam, but they don't say we can't, either.

SP5 J. C. N.

Dear Specialist J. C. N.,

Maybe you're better than most guys in running that steam outfit, but the truth is, there's an awful lot of damage done by men who don't know how to operate the steam cleaner right. The guys in direct support do a lot of cleaning with steam and know what to watch out for.

Since the various truck TM's don't say you can do steam cleaning, the best and safest bet is to stick with the tools your outfit has. As you know, only support units have steam cleaners authorized.

TM 9-8024 says to:

If you're interested in your own safety (speaking of that green stuff in your billfold), you're not going to have the TM to back you up on steam cleaning when your CO hands you a statement of charges for damage to equipment—and, believe me, it has happened.

Half-Mast

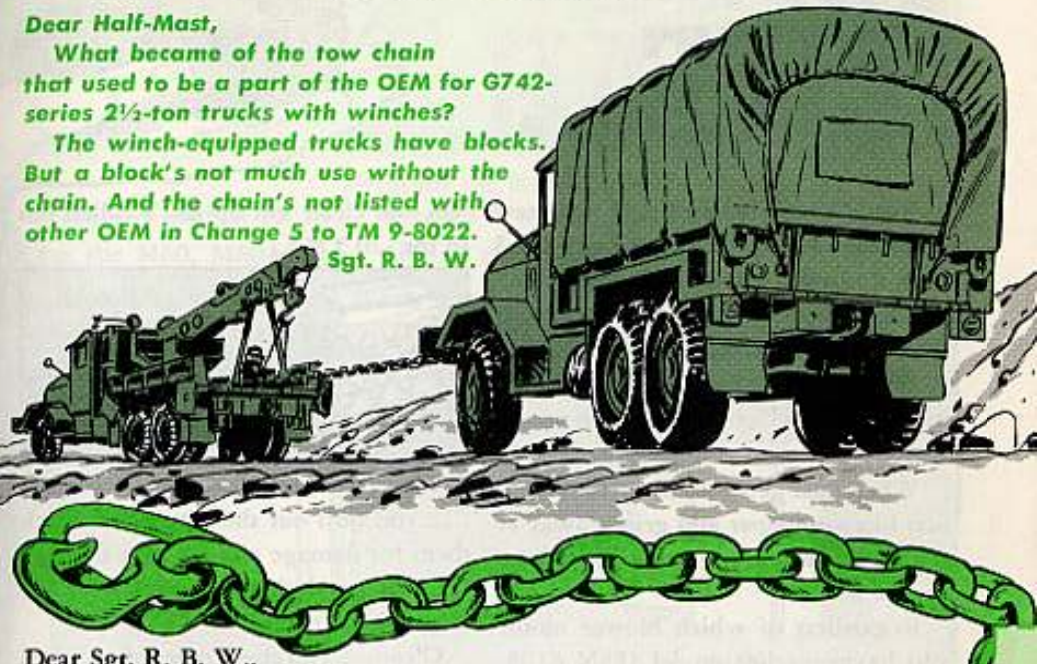
TOW CHAIN

Dear Half-Mast,

What became of the tow chain that used to be a part of the OEM for G742-series 2½-ton trucks with winches?

The winch-equipped trucks have blocks. But a block's not much use without the chain. And the chain's not listed with other OEM in Change 5 to TM 9-8022.

Sgt. R. B. W.



Dear Sgt. R. B. W.,

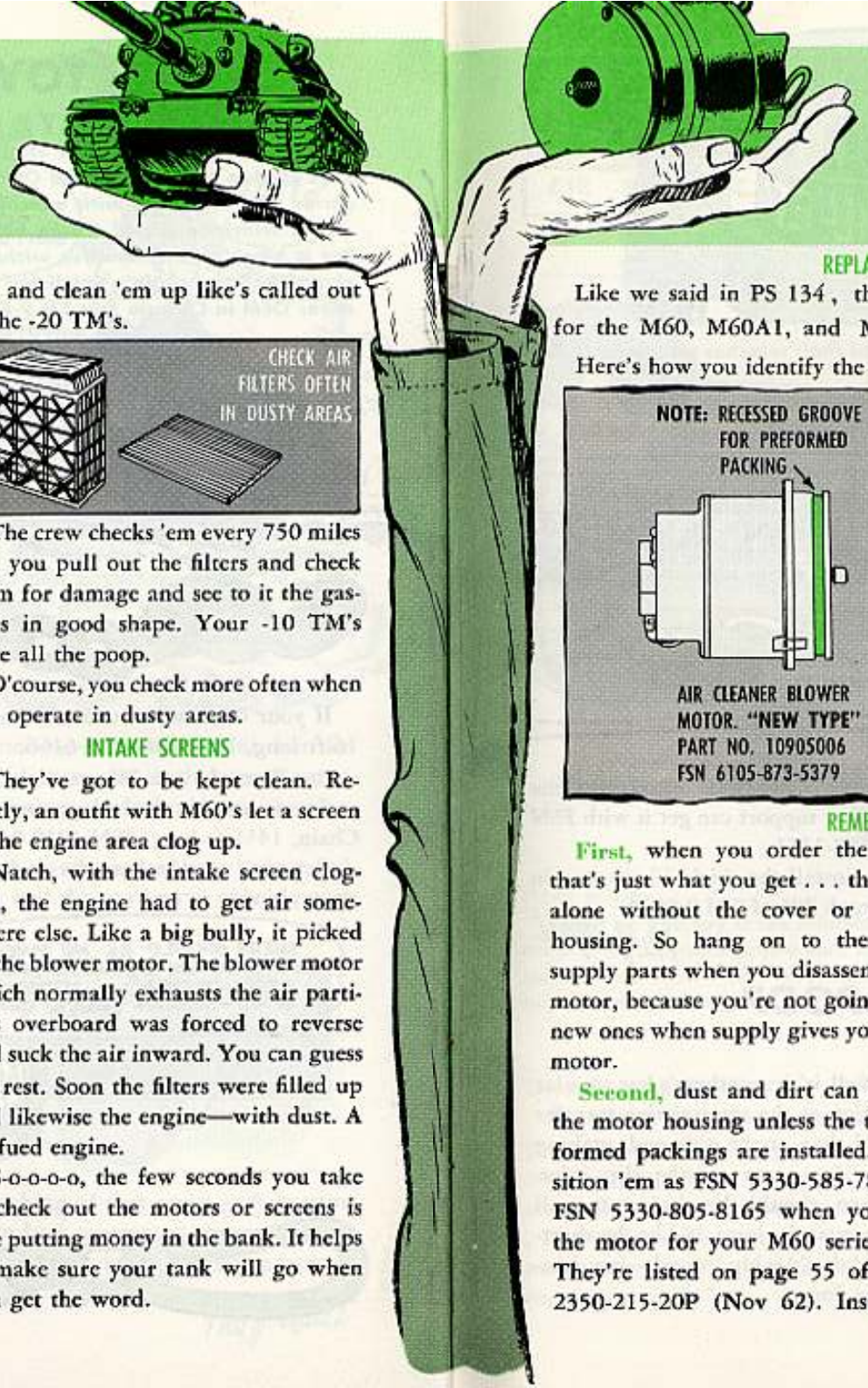
If your G742-series truck has only a front winch, you need Chain, utility, 16-ft long, FSN 4010-473-6166.

But if you have a 2½-ton light wrecker which has two winches, one in front and one on the boom bed, you need the 16-ft chain (FSN 4010-473-6166) plus Chain, 14½-ft long, FSN 4010-047-3902.

Get your supply wrangler to buck a requisition to depot where the chains are waiting.

Half-Mast

YOUR TANK'S LIFE...



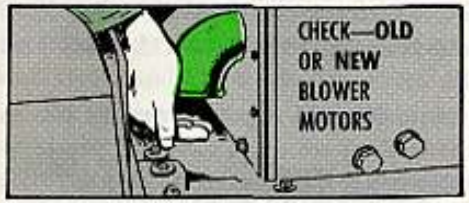
IS IN YOUR HANDS!

You'd better believe it! If you crew members on an M60-series or M48A3 tank fluff off on that "after operation" check of the air cleaner blower motors you're asking for big troubles.

A dead blower motor causes clogged up air filters, which means loss in power and lets dust into your engine.

When dust gets into the cylinders, it acts like sandpaper and grinds away at the rings, pistons and walls . . . shorter engine life.

Regardless of which blower motor you have—earlier model (FSN 6105-801-8716) or later ones (FSN 6105-873-5379) the check gets made.



Find a "dead" motor? OK, let your sergeant know so he can get a mechanic to look at it.

Your mechanic can make a check for loose connections. If it's not in the connections, then he'll hafta replace the dead motor with a good one.

FILTER POOP

Your dry-type filters (made of dacron felt) will do a good filtering job for 1500 miles under normal operation. After this the mechanic should inspect 'em and clean 'em up like's called out in the -20 TM's.

The crew checks 'em every 750 miles . . . you pull out the filters and check them for damage and see to it the gasket's in good shape. Your -10 TM's have all the poop.

O'course, you check more often when you operate in dusty areas.

INTAKE SCREENS

They've got to be kept clean. Recently, an outfit with M60's let a screen in the engine area clog up.

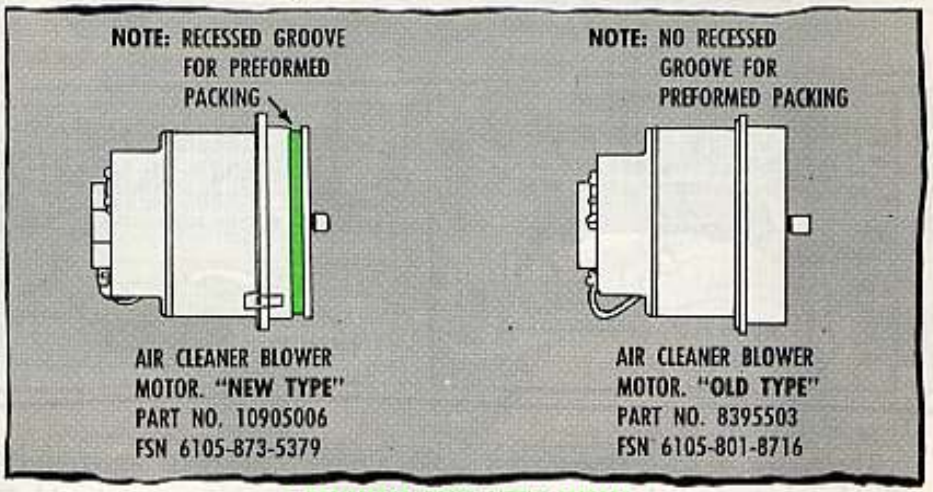
Natch, with the intake screen clogged, the engine had to get air somewhere else. Like a big bully, it picked on the blower motor. The blower motor which normally exhausts the air particles overboard was forced to reverse and suck the air inward. You can guess the rest. Soon the filters were filled up and likewise the engine—with dust. A snafued engine.

S-o-o-o-o, the few seconds you take to check out the motors or screens is like putting money in the bank. It helps to make sure your tank will go when you get the word.

REPLACING THE BLOWER MOTOR

Like we said in PS 134, there's a new improved blower motor in supply for the M60, M60A1, and M48A3 tanks. Ask for it as FSN 6105-873-5379.

Here's how you identify the new and old blower motors:



REMEMBER FOUR LITTLE THINGS

First, when you order the motor, that's just what you get . . . the motor alone without the cover or the fan housing. So hang on to these non-supply parts when you disassemble the motor, because you're not going to get new ones when supply gives you a new motor.

Second, dust and dirt can get into the motor housing unless the two preformed packings are installed. Requisition 'em as FSN 5330-585-7864 and FSN 5330-805-8165 when you order the motor for your M60 series tanks. They're listed on page 55 of TM 9-2350-215-20P (Nov 62). Install 'em when you put in the motor and you won't have to worry about gook in the housing.

Third, if you have an M48A3 tank, you need the same two preformed packings. So order 'em by the same FSN's like above. That way you won't get the wrong ones.

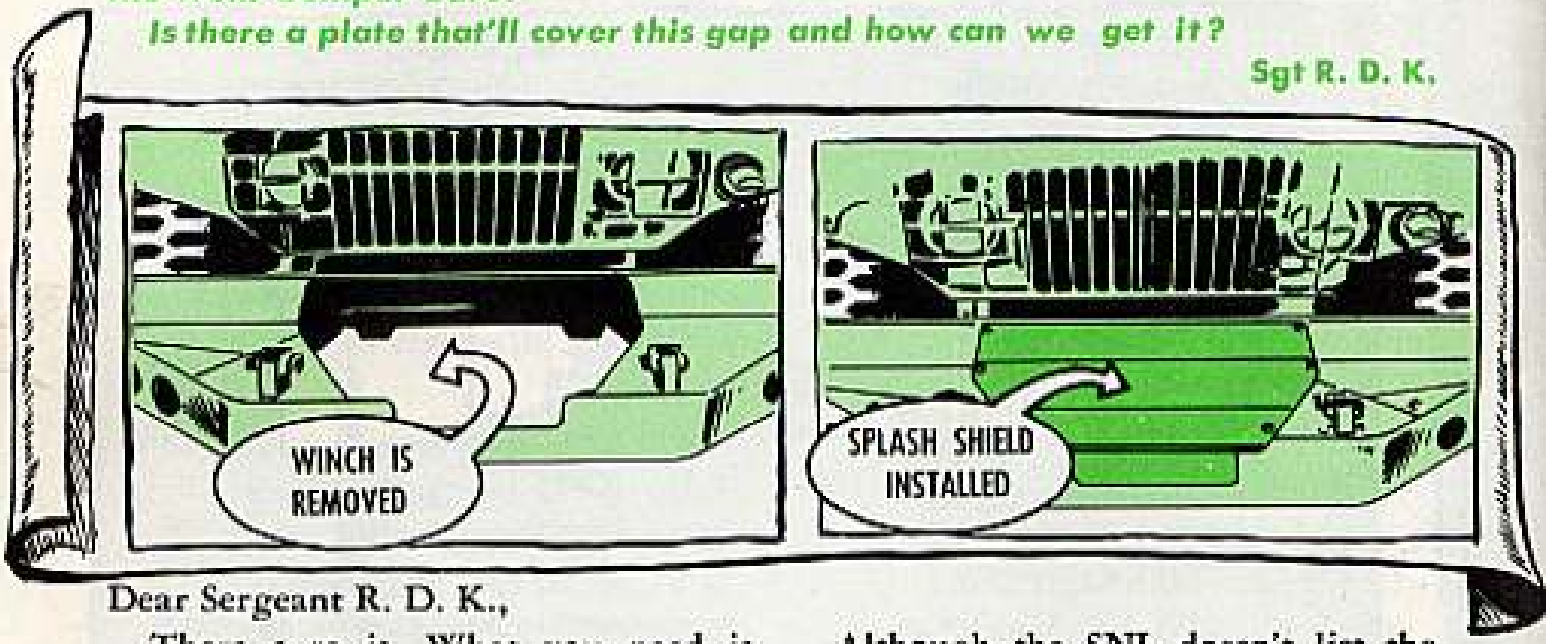
Fourth, if you have the impulse to save, put some money in the bank or buy some bonds but don't try to save the blower motor cover or the fan housing when you have to evacuate your tank to support for repair. If you do, they'll deadline your tank until you turn in the missing parts.

Dear Half-Mast,

Our M211 2½-ton cargo trucks w/winch had their winches yanked, leaving the front bumper bare.

Is there a plate that'll cover this gap and how can we get it?

Sgt R. D. K.



Dear Sergeant R. D. K.,

There sure is. What you need is Shield, splash, front bumper, center.

The shield is a support item and it's listed in Ord 8 SNL G749 (Apr 57). It's identified with manufacturer's number 2289169.

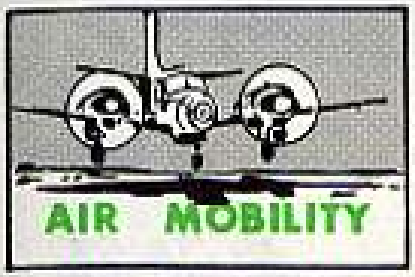
Although the SNL doesn't list the FSN, your support can get it with FSN 2540-567-3251.

You install the shield like it says in paragraph 285 of TM 9-8024.

Half-Mast

PROP SHAFT POOP

Well, it's 'cause there's less angular action at the transmission-transfer end than at the axle end, making for less wear on the slip joint. Then, should the shaft ever pull apart at the joint, it'd be the short-end that'd whip 'round—less damage done.



USE YOUR OWN TIMES

Dear Windy,

What do you say is the minimum time allotted to pull a periodic inspection on a U-8F? I would appreciate any information you can give me as to any publication where this information can be found, or the general time most organizations are given to perform this inspection.

SFC D. D. C.

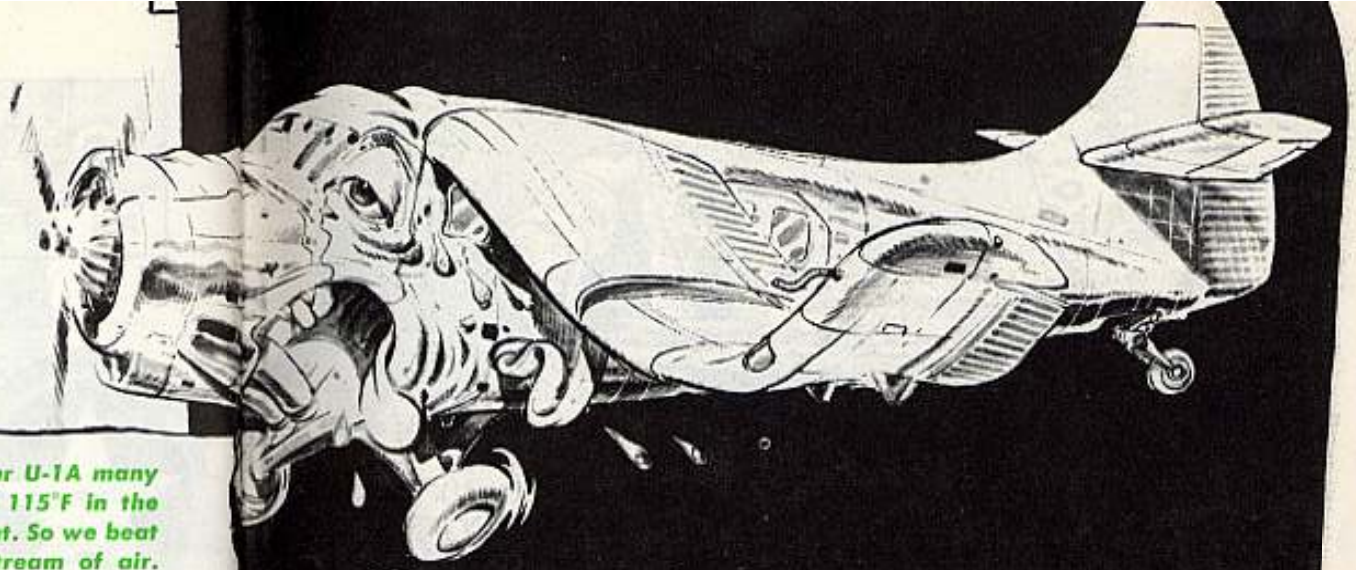
Dear Sergeant D. D. C.,

Your own past experience is the best judge on how long it takes to pull a periodic inspection, Sarge. There is no published manhour guide right now on average periodic inspection times for any aircraft. Besides, there are too many differences that have to be taken into account from aircraft to aircraft . . . and from inspection to inspection. So your only way to find a guide is to make your own . . . by keeping manhour records on the most recent periodics for each ship.

Windy

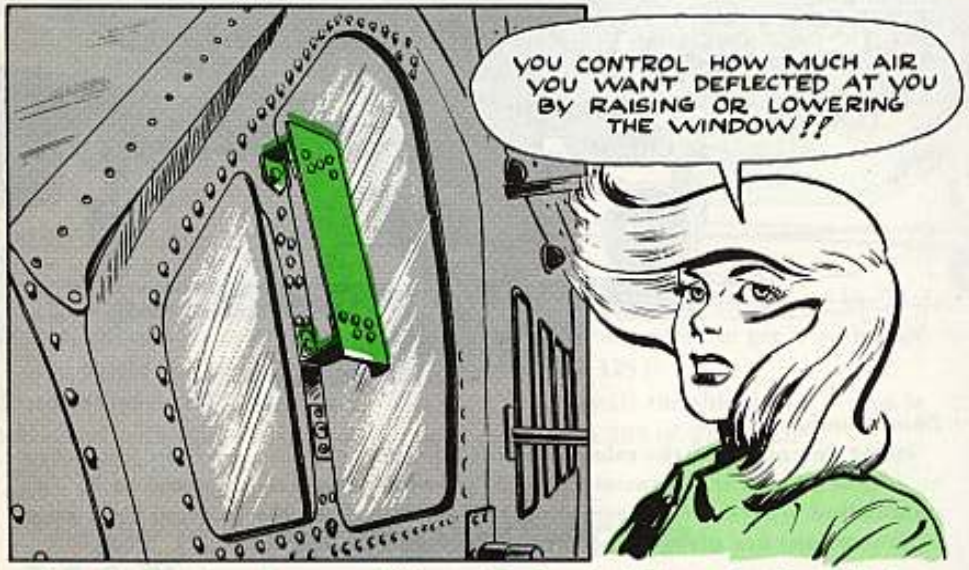
HOT WEATHER OTTER FIX ...

COOL THE COCKPIT



Dear Windy,

Here at White Sands Missile Range we're required to fly our U-1A many hours during summer with ambient temperatures as high as 115°F in the cockpit. The two small vents near the footwell are not sufficient. So we beat this heat problem by making a wind deflector to direct a stream of air.



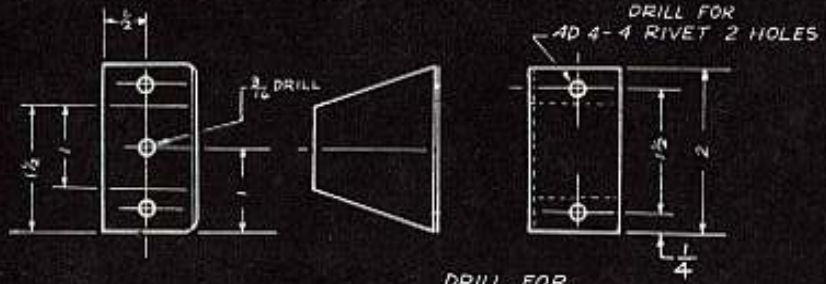
It took about two hours and $4 worth of material to make the deflector. No drilling or cutting of the aircraft's necessary since the deflectors are attached to existing rivets.

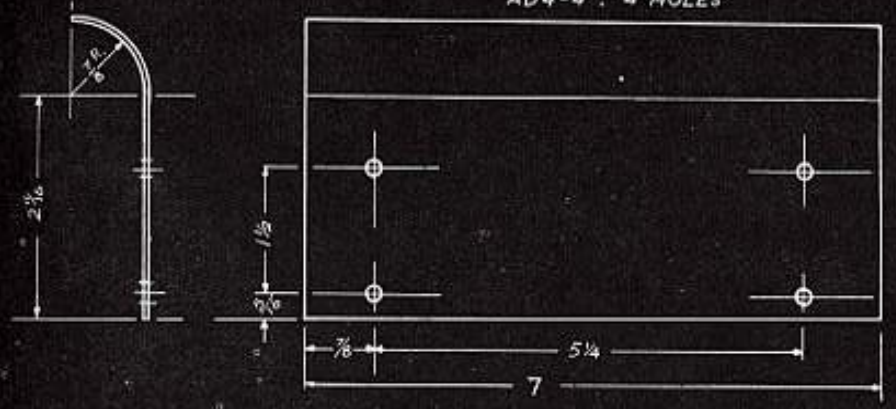
These deflectors have reduced the fatigue caused by cockpit heat for us. Perhaps other units would like to install a set.

ERDA Aviation Section
Holloman AFB, New Mexico

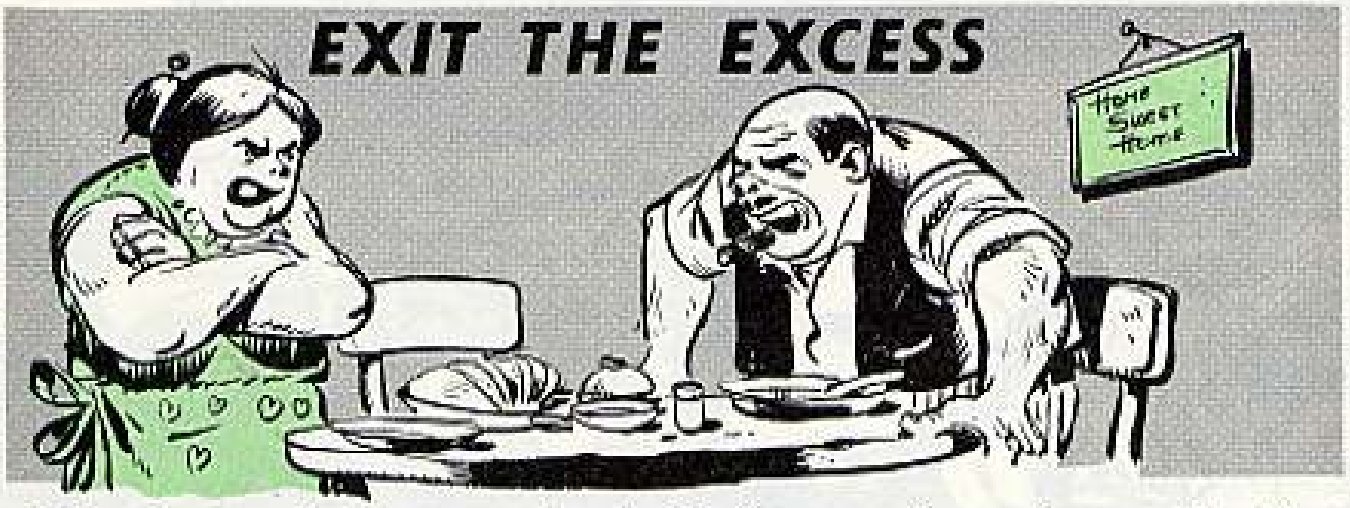
(Amen! Reducing flight fatigue automatically increases the flight safety factor:)

Windy





EXIT THE EXCESS



There's no such thing as an irresistible force meeting an immovable object—something has to give!

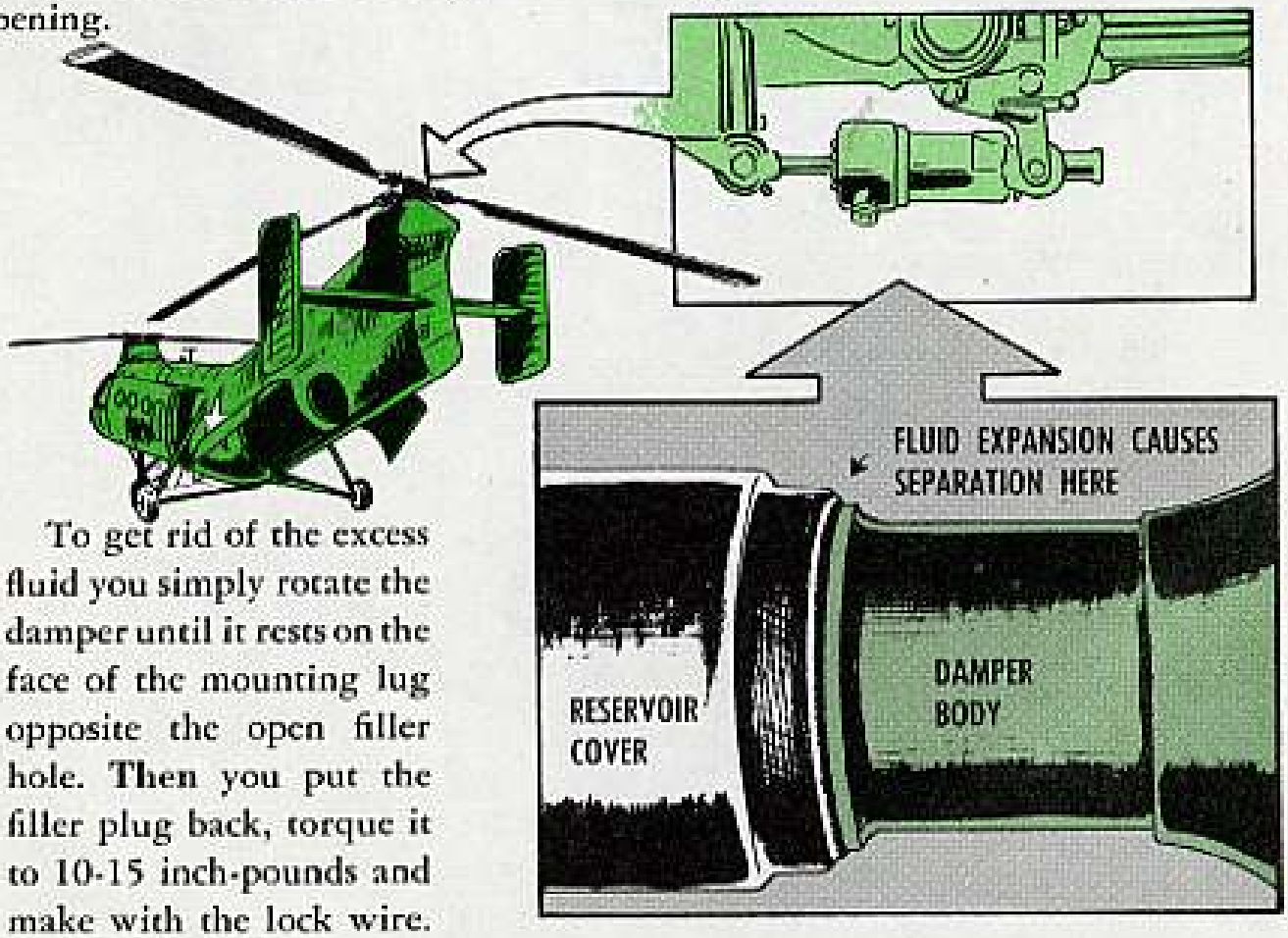
Take the lag dampers on the rotor hub of your Shawnee (CH-21).

Suppose you fill the old-style dampers, FSN 1560-092-3382 (P/N 22R2013-2) or FSN 1650-313-5767 (P/N 5517188), to the brim. These are the types that don't have a sight gage to fill by, or a relief valve to vent excess fluid.

During operation the fluid heats up and expands. Then that irresistible force (hydraulic pressure) partially separates the damper body from the reservoir cover . . . 'tain't a healthy situation.

That's why you want to follow the poop in TM 55-1520-205-20, Chapter II, Section I, Paragraph 1-97 when you fill those oldies.

The action to focus on is just after the hydraulic fluid overflows the filler opening.



To get rid of the excess fluid you simply rotate the damper until it rests on the face of the mounting lug opposite the open filler hole. Then you put the filler plug back, torque it to 10-15 inch-pounds and make with the lock wire.

EIR THE MESSAGE

Dear Windy,

One of our birds came to rest in a not-so-normal position so we fired off a message to AVCOM according to the accident reporting rules spelled out in AR 385-40 (23 Sep 63).

Included in the message was info about suspected materiel failure, as required in paragraph 23d(9) of AR 385-40. Does this mean that we do not have to follow-up with an EIR?

Lt R. O. W.

Dear Lieutenant R. O. W.,

Negative! The engineer-types at the head hangar are looking for a follow-up EIR. Small wonder, when Paragraph 12f of AR 750-5 (3 Aug 64) on maintenance policies says to make with a DA Form 2407 (Part III) when bird equipment fails.

Processing of the EIR, which could result in AVCOM alerting other users of similar equipment, is covered in TM 38-750 (15 Jan 64).

Windy

THERE'S NO HOOD NUMBER

Dear Windy,

We've been having trouble ordering the hoods for the instrument panel lights for our U-8D aircraft. When we order this part from TM 55-1510-201-20P we get the whole assembly. All we want is the hood for the light.

Sgt C. R. A.

Dear Sergeant C. R. A.,

Sorry. The only way to order that hood is to ask for the entire light assembly. There've not been enough demands from the field to justify stocking the hood as a separate supply item with its own FSN.

Windy

MORE TRAFFIC LIGHT PUBS

Here's the latest list of available Equipment Serviceability Criteria TM's. Check it out—if you need any—get the word to your Pubs section for prompt action.

TM 3-1040-202-ESC, Nov, Generator, Smoke, Mech, Pulse Jet, ADC-MJAJ.
TM 3-1040-203-ESC, Nov, Compres, Recip, Pwr Drvn, 7CFM, M1A1.
TM 3-1040-204-ESC, Nov, Flame Thrower, Portable, M2A1-7.
TM 5-2104-ESC, Nov, Water Purification Equip Diatomite, Set No. 4 Port, 50-GPM.
TM 5-2400-201-ESC, Nov, Tractor, Full Trkd, Low Speed, Dsl Drvn, Cat Mdl D-8, IHC Mdl TD 24-(241).
TM 5-2400-203-ESC, Nov, Tractor, Whld, Case DI, Massey-Harris-Ferguson 1-244G, Minneapolis-Moline ZAS1, Oliver 77, Oliver 770.
TM 5-3800-202-ESC, Nov, Crane-Shovel, Crawler MDT, 40 Ton, 2 Cu YD, DED; Baldwin-Lima-Hamilton Mdl 802, Bucyrus-Erie Mdl 51 B, Harnischfeger Mdls 855 BG, 855 BG2 and 855 BG3,, Manitowoc Mdl 30008.
TM 5-3800-208-ESC, Nov, Distrib, Water, Tank Type, Gas: 1,000 Gal, Mtd on Ord M61 Chassis.
TM 5-3800-213-ESC, Nov, Intrenching Mach; DED; Wheel Mtd, Pneum Tires, Barber-Greene Mdl 750, Unit Rig Mdl 4262.
TM 5-3800-223-ESC, Nov, Rock Drilling Equip.
TM 5-3800-209-ESC, Nov, Distrib, Liq Bitum Material, Tankless Type: Eng Driven; Trailer Mtd, 4 to 24 Ft Spraybar, 375 GPM Pump Seaman-Gunnison, Mdl MTD.
TM 5-3895-208-ESC, Nov, Mixer, Bitum Mail, Non-Self Loading, Barber-Greene Mdl 848.
TM 5-4300-210-ESC, Nov, Comp, Rot, 600 CFM, Ingersoll-Rand DR-600, Joeger ENG 600.
TM 5-4310-228-ESC, Nov, Comp, Rot Wheelbarrow Frame Mtd; 2 Pneum Tires: Gas Engine; 60 CFM; 6.5 PSI, Harris Mdl 3MV.
TM 5-6100-204-ESC, Nov, Gen Set, Allen BC-200; Atlantic 60-AM; General Equip 58-JR; Hollingsworth JHGV2A & JHGV2B; Leland Elec 10E-660; Onan OTC-33, OTC-33DH & 28H-212E, Winterized; US Motors C-9E, 2US-17421, 2US-18086; Keco EG-2 & Pioneer Gen BC201.
TM 5-6100-208-ESC, Nov, Gen Set, Skid Mtd, Dsl Eng Drvn, 15 KW, AC, 120/208, and 240/416 V, 3 Ph, 4 Wire Svc, 60 Cyc, Convertible to 12.5 KW, 240/416 V, 3 Ph, 4 Wire Svc, 50 Cyc, Liq Cooled.
TM 5-6100-209-ESC, Nov, Gen Set, Atlantic Diesel 20AM & 20AM-A; Buda DT30A3-CE; Con Diesel Elec 1905; Elec Svc Engine 4820; Hill Dsl 6K; Jeta MD-301815-W; O'Brien Dieselectric DID-3060-1; Ready Pwr RD14A12; R. H. Sheppard 1200; US Mtrs 30-US-16936; Kurz & Root Cleo I & Cleo II, Jeta MD-301815-WA, Holgar CA-201-AC-WKL.
TM 5-6100-212-ESC, Nov, Gen Set, US Mtrs 5-EBDL-30-R-MOD-3.
TM 5-6100-214-ESC, Nov, Gen Set, Buda DA-60AC-CE; Con Dsl Elec 1607, 4002; Detroit Dsl 4907-A, 6903, 6905; Int'l Fermont M60DA6-W; Jeta MD 601815-W; Stewart & Stevenson 15800, 17600 and 18200.
TM 5-6100-215-ESC, Nov, Gen Set, Con Dsl 4115, Buda DC100A3-CE, Con Dsl 1877, Jeta MD1001815-W, Stewart & Stevenson 55-100-W, 15700, 19100.
TM 5-6100-216-ESC, Nov, Gen Set; PU-422/U and PU-532/PPS; Port Gas Eng Drvn, Air Cooled, 115 V, Single Ph, 400 Cyc, AC; and 28V, DC; Texas Instr Co Mdl PU-422A/U, Admiral Mdls 40005A, G2633, G31391.
TM 5-6100-217-ESC, Nov, Gen Set, GED, Homelite 20-5028-23A, PE 210-A-B-C.
TM 5-6100-219-ESC, Nov, Gen Set, PU322/G Trlr Mtd (Power Unit PE 95-G-H-I-K).
TM 5-6115-210-ESC, Nov, Gen Set, Port, Skid Mtd, Gas Eng Drvn, 3 KW, AC, D. W. Onan Mdl 3 ABG-4E-240A.
TM 5-6200-200-ESC, Nov, Searchlight Set, Carbon Arc, 60 In Diam Reflector; DC, 70V, Trk Mtd, GE Mdl 1942A, Sperry Gyroscope Mdl 1942.
TM 10-1671B-ESC, Nov, Tractor, Whld, Wheel, Gas, 4 Pneum-Tired Wheels, 7500 Lb Drawbar Pull (Clark Clarktor 750).
TM 10-3900-203-ESC, Nov, Truck Lift, Fork, Gas, Pneum Tired, Rough Terrain 10,000 Lb Cap Clark Mdl MR-100 Army Mdls MHE 165 and MHE 173, 6,000 Lb Cap Baker Mdl RJF-060.
TM 11-1520-206-ESC, Nov, OH-23.
TM 11-1520-207-ESC, Nov, UH-1.
TM 11-6115-231-ESC, Nov, Gen Set, Port, Trk Mtd PU-408/M.
TM 55-1550-200-ESC, Nov, Dresser.
TM 55-1930-203-ESC, Nov, BARC.

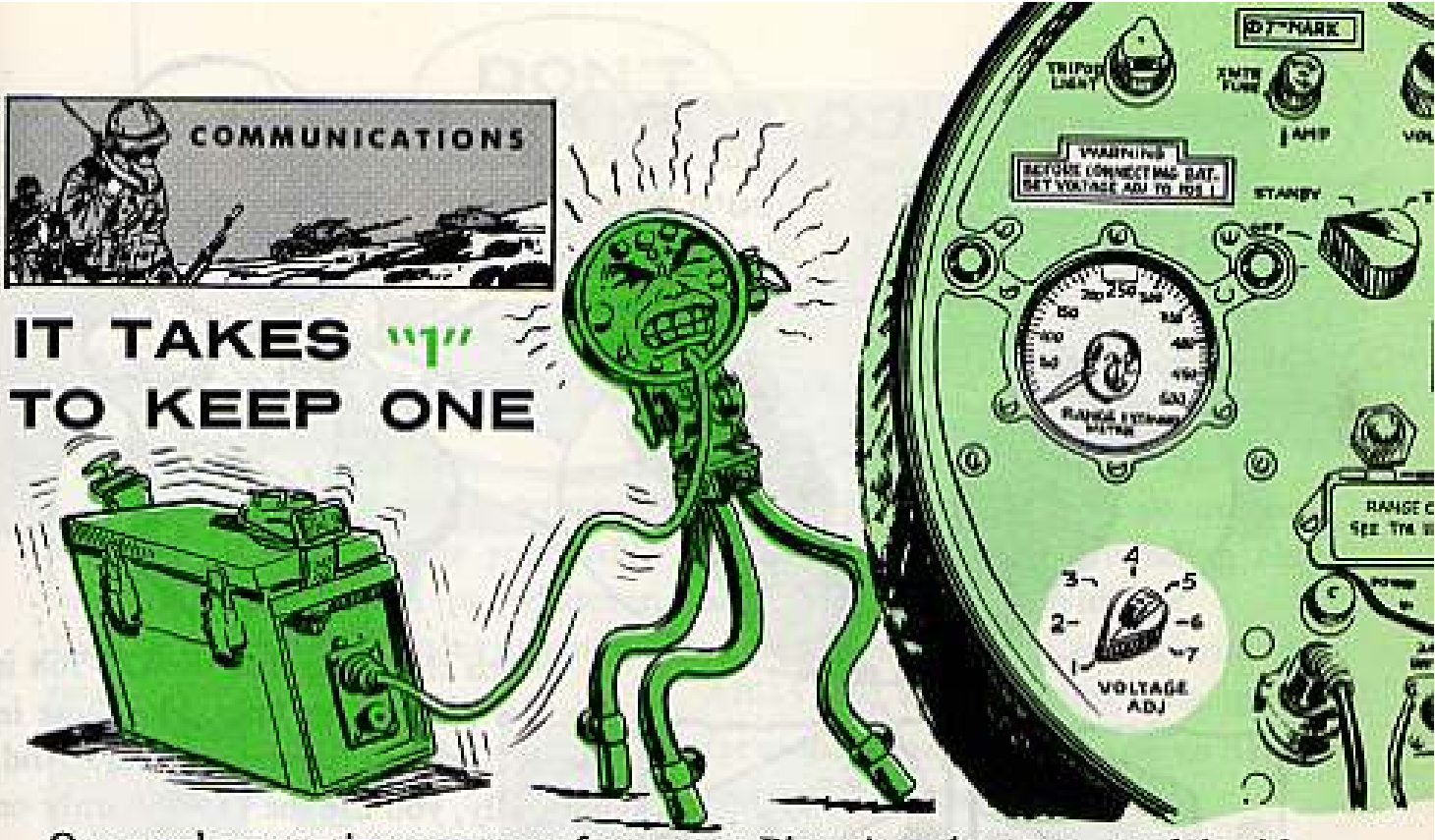
A selected list of recent publications of interest to Organizational Maintenance Personnel. This is a list compiled from recent Adjutant General's Distribution Center Bulletins. For complete details see DA Pam 310-4 with latest changes.

TECHNICAL MANUALS

TM 1-1H-23C-3, C2, Nov, OH-23
TM 5-3810-220-20P, Oct, Crane-Shovel, 7-Ton, Garwood Mdl GW7; Koehring Mdl 155-1A.
TM 5-3825-221-20P, Oct, Distrib, Water, Tank Type: Gas Driven; Trk Mtd (McLeod Mdl W15A).
TM 5-4110-208-20P, Oct, Refrig Unit, Mech: Panel Type Elec Mtr; 10,000 BTU; Thermo King Mdl QLE10, Army Mdl SPE 34; Elliott Mdl QAU-18E, Army Mdl SPE 34A; Elliott Mdl QAC-18E-2, Army Mdl SPE 34A; Elliott Mdl QAC-18E-3, Army Mdl SPE 34A.
TM 9-1185-113, Dec, EOD.
TM 9-1300-206, Nov, Care, Hdlg, Preserv and Destr of Ammo.
TM 9-1430-253-12P/1/2, Nov, Nike-Herc (Imp), TMP, Ground Con Equip.
TM 9-1430-512-12P/2, Nov, Hawk, Trng Devices (All).
TM 9-2300-224-20/2/1, Nov, Carrier, Pers, Full Trkd: Armd M113A1 (Diesel) 2320-968-6321.
TM 9-2320-224-34, Nov, Carrier, Cmd and Recon: Armd, M114 and M114A1.
TM 9-2330-212-14, Sep, Nike-Herc, Nike-Herc (Imp), Vehicles.
TM 9-3441-200-10, Nov, Sergeant, Msl Oper & Maint.
TM 9-4935-455-15, Oct, ENTAC, Test Equip (Ord).
TM 10-3930-235-20P, Nov, Truck, Lift, Fork, Gas, 4,000 Lbs Cap, Towmotor Mdl 4625G4024-100, Army Mdl MHE-191; Towmotor 4625G4024-144, Army MHE-191; Towmotor 502PG4024-144 (Pneum Tire) Army MHE-190.
TM 11-3610-201-20P, Nov, Prtg and Dry Developing Mach ES-30A.
TM 11-5410-206-12P, Nov, Shelter, Elec Equip S-141/G.
TM 11-5805-317-20P, Nov, TA-291 Telephone Set.
TM 11-5805-330-20P, Nov, AN/FGA Telegr Repeater-Monitor.
TM 11-5840-282-24/6, Dec, Hert, Hawk Radar.
TM 11-5895-225-25P, Nov, Patching Panel SB-675/MSC.
TM 11-6110-210-20P, Dec, CN-236/G and CN-236A/G Voltage Regulators.
TM 11-6125-241-15P, Dec, Hawk Radar.
TM 11-6130-211-20P, Dec, PP-1646 Power Supply.
TM 11-6625-502-10/7, Oct, Herc, Hawk Radar.
TM 11-6625-559-20P, Dec, Gen, Signal SG-400/U.
TM 11-6730-216-12P, Nov, Viewer, Still Pic AR-14(1).
TM 11-6740-249-20P, Nov, Press Kit-125A and Dry Mig Press, Photographic FM-144A.
TM 11-6780-204-10, Oct, Camera Set, Still Picture KS-6(1) and Film Loader LM-17(1).
TM 55-1510-201-20, C6 & C7, Oct & Nov, U-8.
TM 55-1510-204-10, C2, Sep, OV-1.
TM 55-1520-204-20P, C1, Dec, OH-13.
TM 55-1520-205-10, Sep, CH-21.
TM 55-1520-210-20, Oct, UH-1.
TM 55-1520-211-10, C2, Nov, UH-1.
TM 55-1520-211-20, C1, Oct, UH-1.
TM 55-1730-206-15, Sep, Eng Starter Energizer, Mdl MG100-1.
TM 55-1925-202-12, Nov, Dsl Harbor Tug.
TM 55-2330-203-10-1, Oct, Transporter, Liquid, Rolling Wheel Type, M6.
TM 55-2330-203-25P, Nov, M6 LRT.

TECHNICAL BULLETINS

TB 9-1400-299-10/1, Oct, Nike-Ajax, Nike-Herc, Nike-Herc (Imp), Msl Oper & Maint.
TB 10-1600-200-20/1, Dec, Routine Insp of Parachutes.
TB 34-9-185, Nov, Measurement and Marking Aircraft Gaseous Sys and Ord Trans Cylinders.
TB 34-9-186, Dec, Position of Zero Pts on Airspeed Indicators.

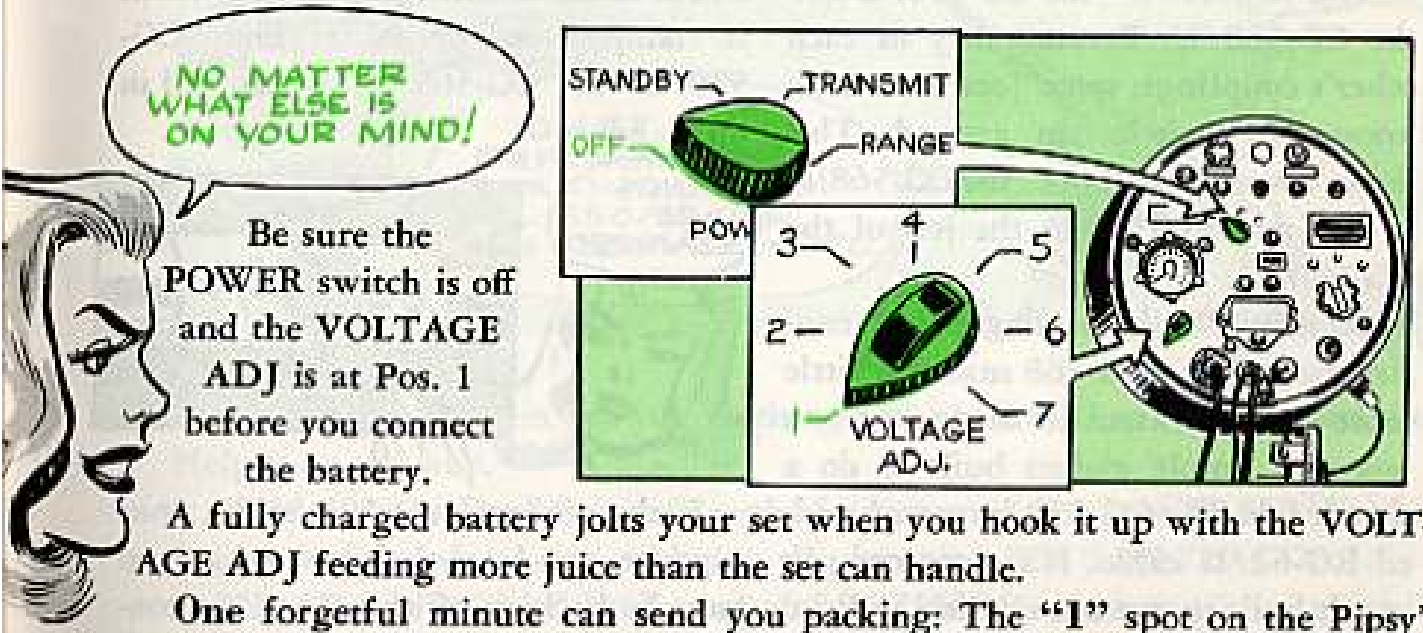


One good way to insure a peep from your Pipsy is to be extra careful with the VOLTAGE ADJ switch. That's "1" to remember.

Although there's a big, fat decal on the control panel of the AN/PPS-4 radar set warning not to connect the battery unless the VOLTAGE ADJ switch is in Pos. 1, some Joes do it. Naturally, pffftt!! goes the set and you cart it off to the shop.

Maybe they're bleary from the one they tied on the night before, or maybe dream dust from last weekend's babe is still in their eyes. But, maybe again they're gonna need that set real bad . . . and they won't have it because of a coupla' blown power converter transistors.

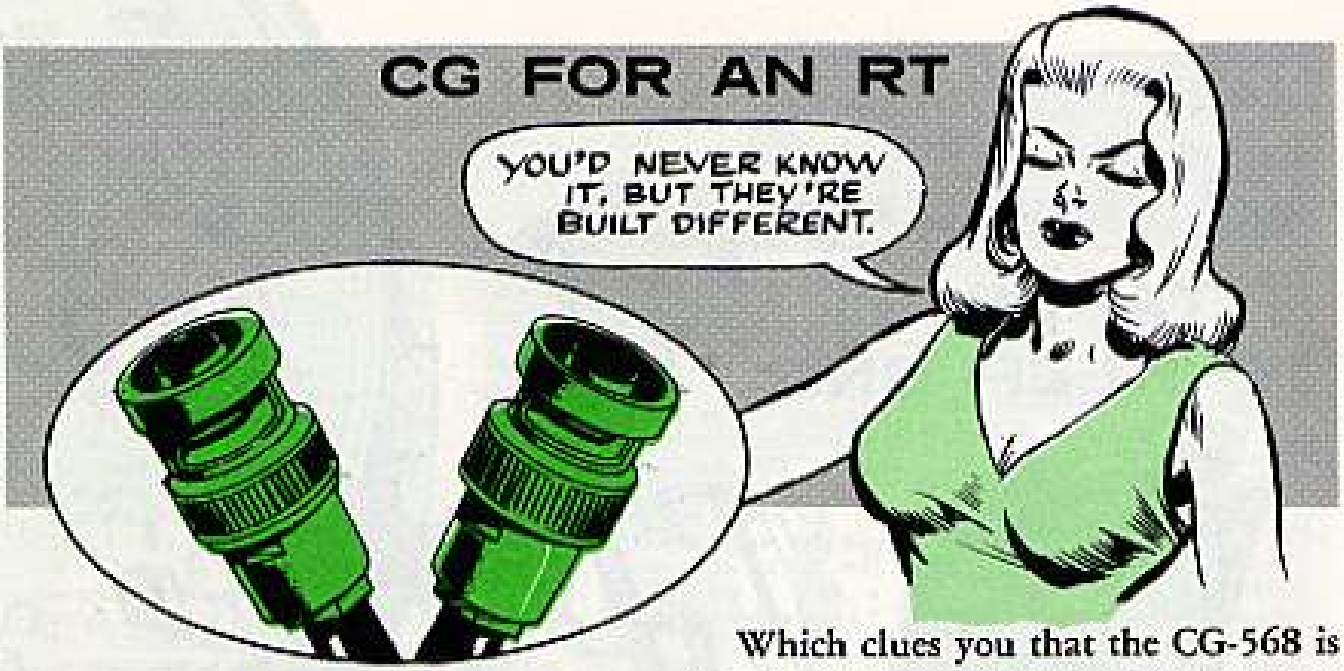
Maybe it woulda been better if they'd forced their eyeballs open and concentrated on the job at hand.

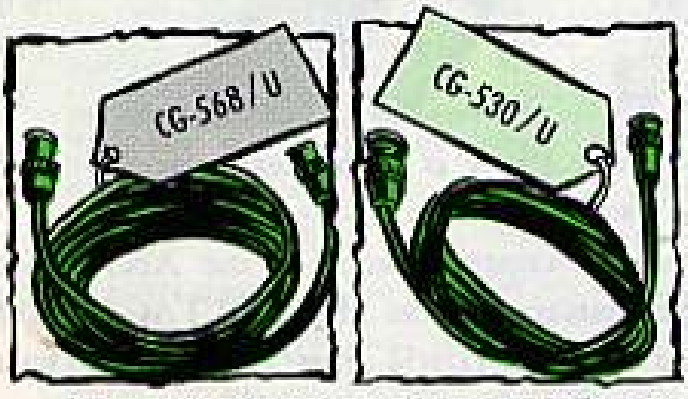


Be sure the POWER switch is off and the VOLTAGE ADJ is at Pos. 1 before you connect the battery.

A fully charged battery jolts your set when you hook it up with the VOLTAGE ADJ feeding more juice than the set can handle.

One forgetful minute can send you packing: The "1" spot on the Pipsy's panel can keep you cracking.





Not only that, but they act different . . . even though they look as much alike on the outside as identical twins.

You're with it. They're the antenna cables (RF cable assemblies) used in the AN/GRC-3 thru -8 series radio sets.

You've got two—the CG-530/U and the CG-568/U. Because they fit each other's couplings, some Joes have been known to switch 'em around. This doesn't work so hot, since the CG-568/U is just not built to do the job of the CG-530/U.

So why? Well, the single wire construction of the CG-568 makes it little more than an extension of the antenna —a real simple gadget built to do a simple job. The CG-530 features braided RG-62/U cable. It's more complicated; built to put out on, and pull in, the higher frequencies.

Which clues you that the CG-568 is for low frequencies only, like those in the RT-66 receiver-transmitter. And, naturally, you use the CG-568 only on the RT-66.

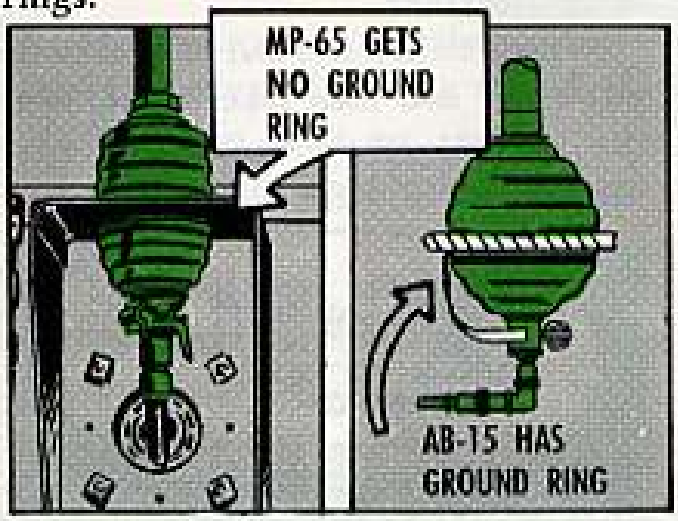
So wot's with the CG-530?

Is easy. The CG-530 is always used on the RT-70. And, since the RT-67 and RT-68 have the higher frequencies, it's always used with those two receiver-transmitters. Which means, too, that you never use the CG-568 with those three RT's.

Telling the cables apart is no sweat. Before you attach 'em to the RT, grab a look at the nomenclature band which is clamped on the cable. The "CG-530/U" or "CG-568/U" is stamped in the band.

If the nomenclature's missing, your support can let you know what you have by backing off the nut of the connector jack.

Next time you're puttin' together the MP-65( ) mast base for your AN/GRC-19, AN/GRC-46 or whatever, don't be a groundhog about grounding rings.



Like, just because it's an antenna base, don't assume a grounding ring automatically comes with it.

Some Joes, used to living with the AB-15 and its grounding ring, go so far as to scrounge the ring off an AB-15 and put it on the MP-65.

Well-intentioned as that may be, they're not doing anybody any favors. The MP-65 doesn't get the ring. Give it one and ground it, and the antenna won't load.

What's more, a coupla' parts in the equipment may do a slow burn just long enough to burn out.

SOLDERING GUN SWITCH

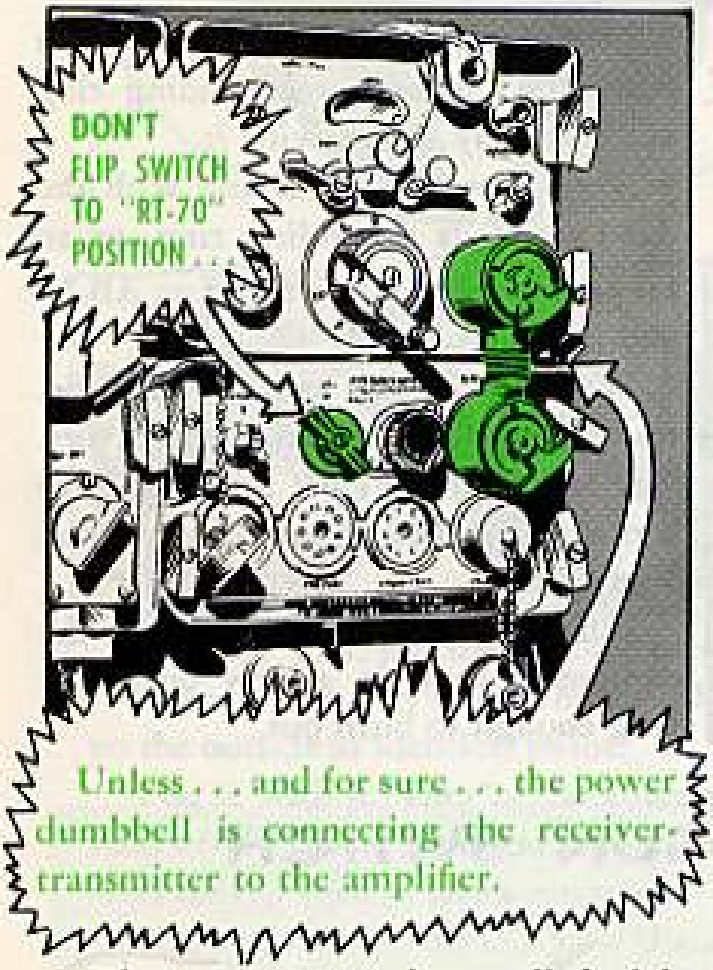
A fizzled fusing gun got you frothing at the mouth? Lay off the rabies shots. Help is on the way.

SB 11-593 (14 Oct 64) is your authority to turn in that beat TL-650/U soldering gun and ask for a new soldering gun by using FSN 3439-729-6770.

This SB applies to all field users of the TL-650/U soldering gun, providing the gun is defective.

THIS'LL MAKE YOU FLIP

Nosireee, and no indeedy! Don't flip that AM-65 selector switch!!!



That ol' message is stenciled right over your AM-65 switch. Unfortunately for the amplifier, familiarity can blind a guy to a message like that. Even though it's under your nose, you don't see it . . . and you forget it.

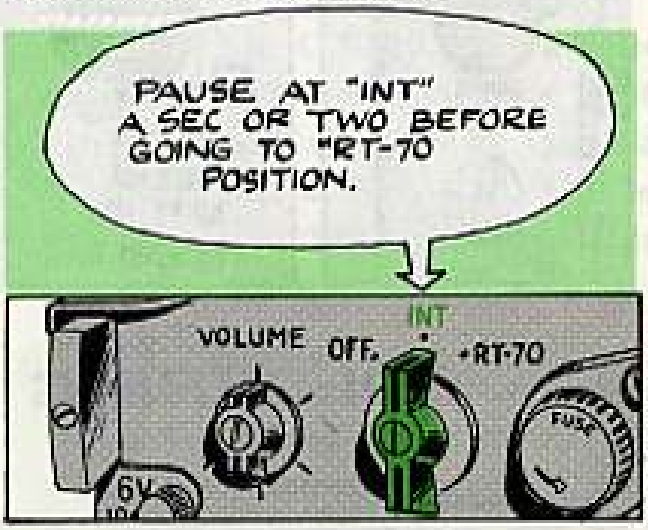
That kinda' forgetfulness leads to all kinds of interesting damage to the amplifier parts. That's why the reminder.

Do like the stencil says: "DON'T SWITCH TO RT-70 WITHOUT RT-70 CONNECTED."

It'll pay to remember.

'Nother power point on the amplifier: Turn the juice off before you replace any tubes.

When you locate a bad tube, turn the power off and then take it out. With the juice on, you can burn out the tubes that remain in the AM-65.



When it comes to switching on your AM-65 amplifier, you can stay one jump ahead by pausing one jump behind.

In other words, when operating the OFF-INT-RT-70 switch, slow down for a couple-three seconds at INT before jumping over to the RT-70 position. When you go from OFF to RT-70 in one quick switch, a sudden shot of voltage is applied to the filaments of the tubes in your RT-70. And this can burn 'em out in short order.

PUT THE SCREWS TO IT... GENTLE-LIKE

Next time you're about to put the screws to the front panel of your AN/URM-105 multimeter, remember this:

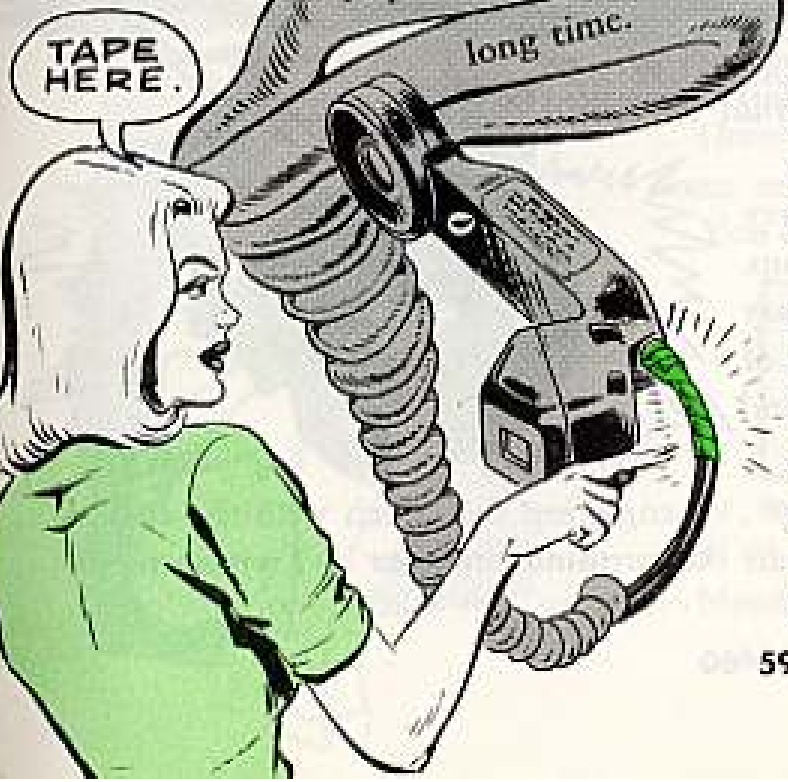
If you forget the washers, or overtighten the mounting screws, you stand a good chance of breaking the edges of the panel at the mounting holes.

Since you can't get another front panel, you either cannibalize one or rig up some over-sized washers that may be able to hold down what's left of the edges.

To avoid those kinda problems, make sure the original washer's on, and just snug up the screw finger-tight. You don't have to exercise your arm muscles.

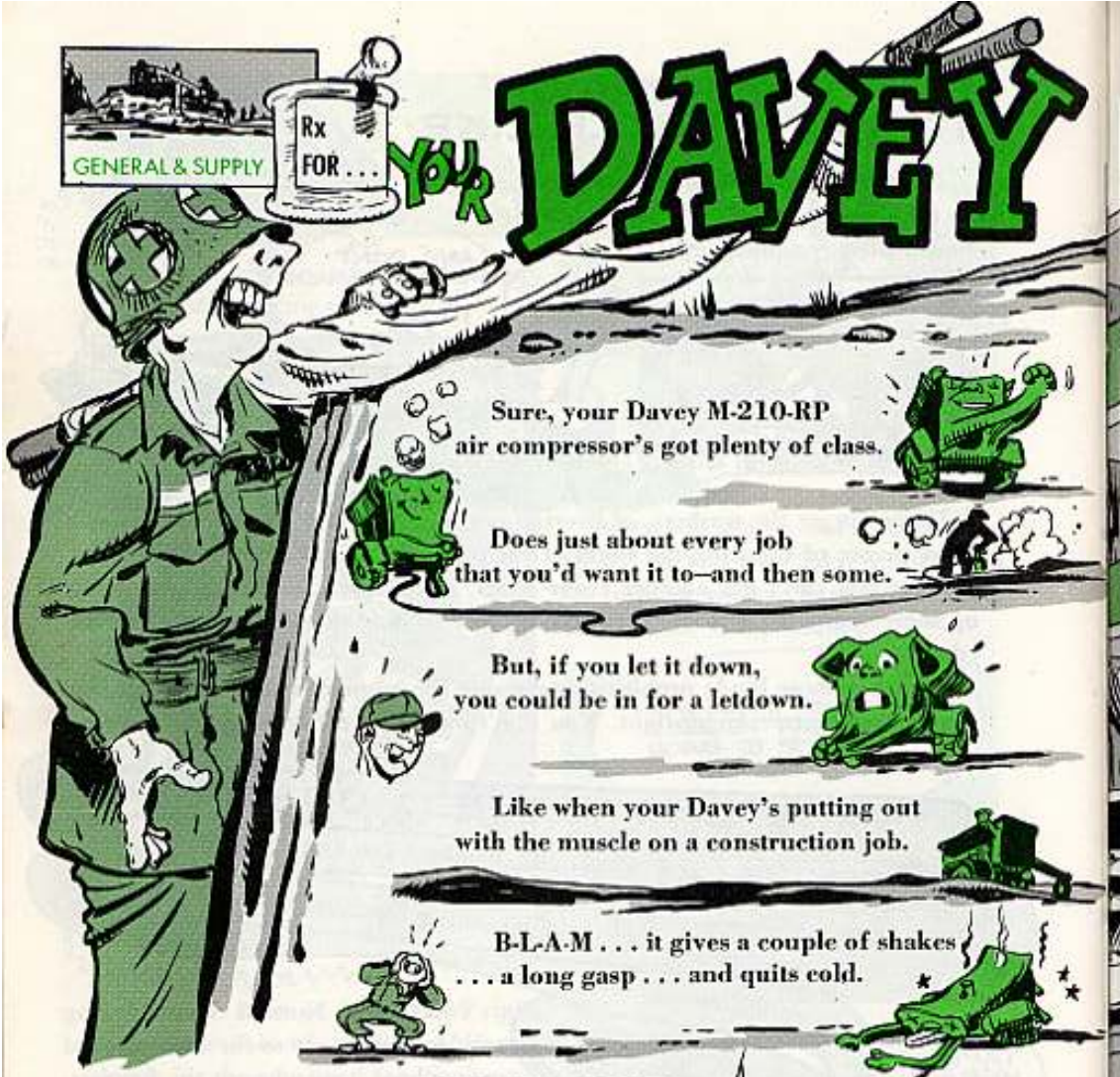
TAPE FOR A TIRED CORD

A tired cord on your H-138 or H-207 handsets can fail a lot quicker'n you want it to. But a coupla' layers of insulating tape can keep you out of the requisition line for a long time.



To clarify: Normal wear, flexing and unflexing gets to the handset cord near where it attaches to the handset. The cord conductors usually break at the edge of the strain relief boot that feeds into the handset.

A layer of tape (FSN 5970-644-2636) over the strain relief boot, plus two layers continued for about two inches up the cord, can eliminate much of the flexing and really add life to the cord. Run the tape up from the strain relief, and back to it . . . after you've covered the strain relief boot itself.



HOW? WHAT HAPPENED?

In the shop, you find your Davey with its innards pretty badly torn up. Second stage rotor's busted . . . rotary vanes're cracked, broken . . . a hunk of vane's jammed between the rotor and stator.

Could be caused by several things . . . engaging the clutch with the engine running . . . metal particles in the air compression chamber . . . wrong lubricating oil.

M-210-RP

THE CURE

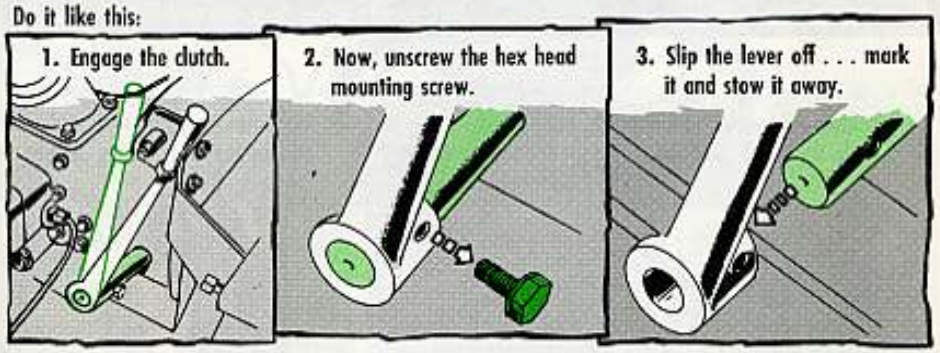
Here's the best way to keep your Davey healthy. Give it the cure:

℞ Engage the clutch permanently.

This will prevent accidental movement of the clutch when the engine's running.

It's a minor operation and won't affect the performance of the M-210-RP in any way. Fact is, all you're doing is coupling the compressor directly to the engine. 'Course, there'll be some new starting info for you to follow, but otherwise your set will operate the same . . . or better . . . than ever.

Do it like this:



NEW INSTRUCTION PLATES

Once you've removed the lever, you'll need some new operating instruction plates. You can come by them by contacting the

U. S. Army Mobility Equipment Center
Post Office Drawer 58
Attention: SMOME-MML-C
St. Louis, Missouri 63166

Be sure to include the serial number of each of the rigs for which you need plates. Meantime, here's the word.

MORE

OPERATING INSTRUCTIONS

Follow the Before Starting info in TM 5-4310-229-10. Then:

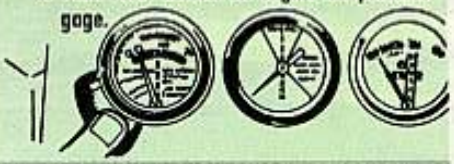
STARTING

1. Turn the fuel tank shutoff valve counter-clockwise to the "OPEN" position.

2. Pull out the choke control, being careful not to overchoke.

3. Turn the ignition switch to "ON" position.

4. Push reset button on engine oil pressure gage.



5. Open one service valve.

6. Push starter button.

When engine is warm—close both the choke, and the service valve. Now, the unit is ready for use.

STOPPING

1. Turn the ignition switch to the "OFF" position.

2. Close the fuel shutoff valve by turning it clockwise.

3. Coil hoses neatly on reels and engage the reel locking clamps.

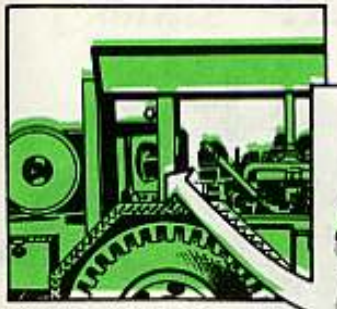
GO WITH THE LO

Another item in the "stay healthy" prescription for your Davey is:

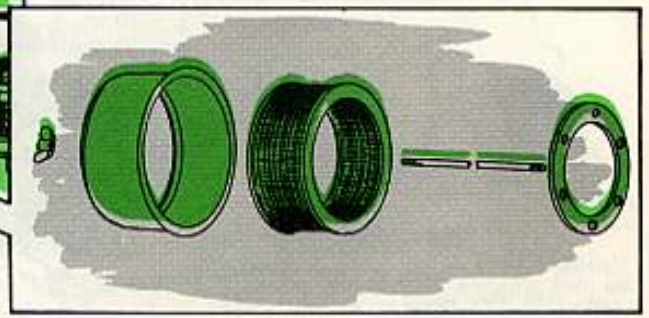
Follow LO 5-4310-229-15 all the way.

This means that the only lubricating oil you'll use in the compressor oil chamber is 2190 T (FSN 9150-235-9061) or 2110 T-H (FSN 9150-985-7234). Nothing else will do.

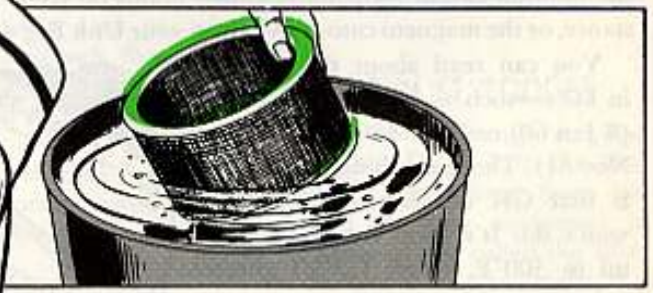
A CLEAN FILTER



Remove the cover gasket and filter element.



Clean the element with an approved solvent and give 'em both a look-see for damage before you replace 'em.



Either of these solvents will do:

Mineral Spirits (Paint Thinner)	FSN 8010-290-6113	1 gal
	FSN 8010-558-7026	5 gal
	FSN 8010-246-6115	55 gal
Dry-Cleaning Solvent	FSN 6850-281-1985	1 gal
	FSN 6850-264-9038	5 gal
	FSN 6850-264-9037	55 gal

BE CAREFUL

A word of warning—don't try any disassembly until you've relieved all the air pressure in the system.

END

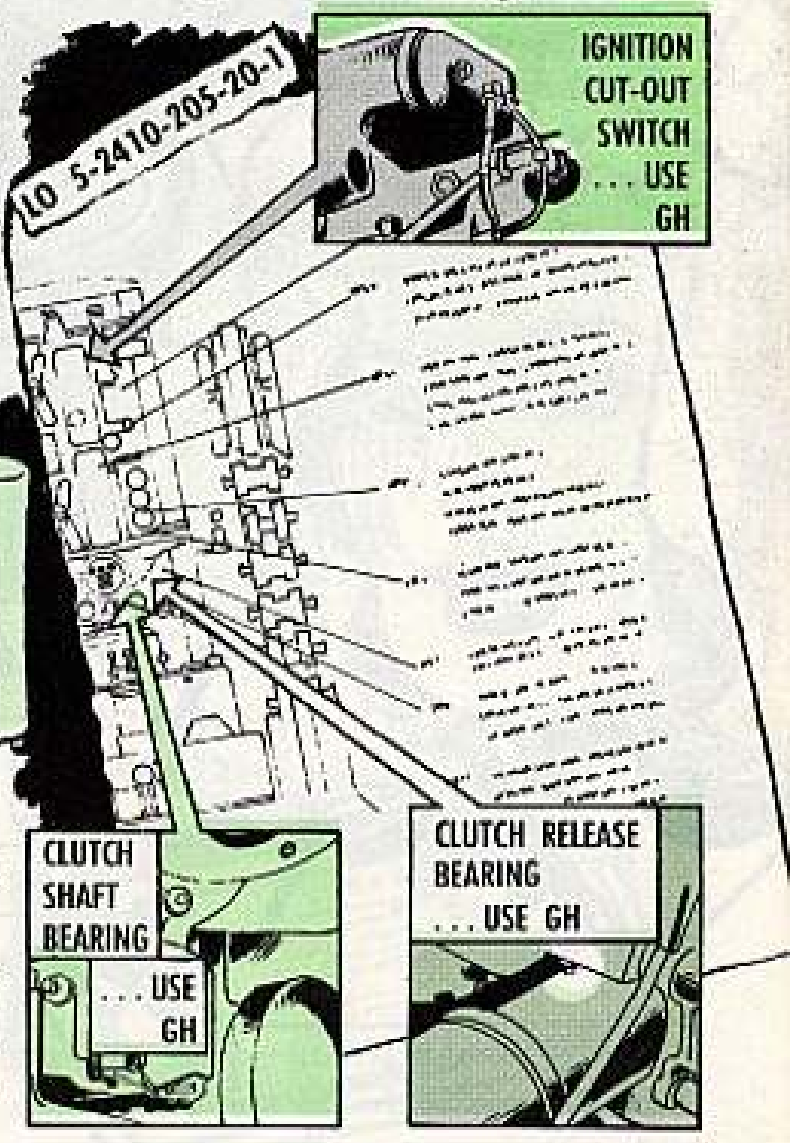
WHEN THERE'S A HEAT-WAVE HULA . . .

CALL FOR GH

When summer heat waves start doing a hula dance at your construction site, you may need to call for GH—and those letters don't stand for "get hot."

GH is the Grease, aircraft, high temperature, Mil-G-3545, that's specified for the ignition cutout switch and clutch points on your IHC TD-24 tractors, f'rinstance, or the magneto cutout switch on your Unit Rig 4262 intrenching machine.

You can read about the use of it in LO's—such as LO 5-2410-205-20-1 (8 Jan 60) or LO 5-3805-212-20-2 (13 Nov 61). The main thing to remember is that GH is effective where GAA won't do. It's good for temperatures up to 300°F, where GAA's effective only up to about 175°F.

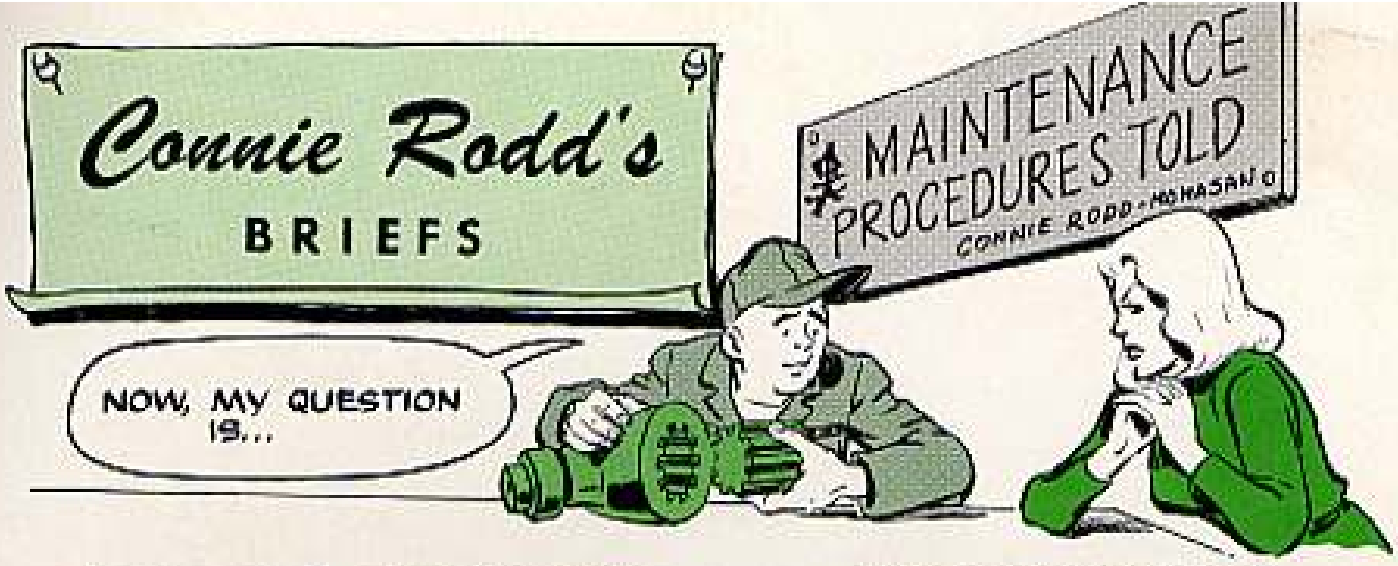


To get your GH, use one of these FSN's:

9150-223-4003, 1-lb can.
9150-235-5546, 5-lb can.
9150-276-9213, 35-lb pail.

But if you figure it's hot enough to use this much, maybe you'd better head for the shade till the heat-wave hula's over.

You'll find these FSN's listed in Federal Supply Catalogs C9100-ML and C9100-IL, both dated 1 Dec 64, and their changes.



GENERATORS, COMPRESSORS

Grab a copy of Change 1 (5 Oct 64) to DA Cir 725-5, "Removal of Components from Assemblages and Sets of Equipment." It's got some important poop on recording separate components in your property book.

These are the components, such as compressors, generators, and such, that used to be issued with sets, kits and the like. They are now issued as separate items.

Change 1 to the circular also tells you how to report the separate components on your AR 711-5 report.

UPSNUFFED DATEWISE?

If you need to up-date your periodic maintenance services, you need DA Cir 750-6 (16 Dec 64) to get the latest list of TM changes covering services for your equipment. This circular supersedes DA Cir 750-3 mentioned in PS 148.

KEEP OUT THE FOGGY DEW

Is your equipment log book getting damp from the foggy dew? Then try this for protection: Envelope, transparent, visible thru both sides, side opening, 17-in lg, 11-in w, FSN 7510-272-3172, price 17¢ each. It's listed on page 4.6 of C7510-IL-A (1 Dec 64).

BATTERIES BITE, TOO

Like the flesh-eating piranha fish, any unleashed and unwanted battery juice'll chew and devour your battery-operated electronics equipment during storage or lay over for repairs. So, remember, take that bitin' battery out of your idle equipment.

MEET MEC IN ST. LOOOEE

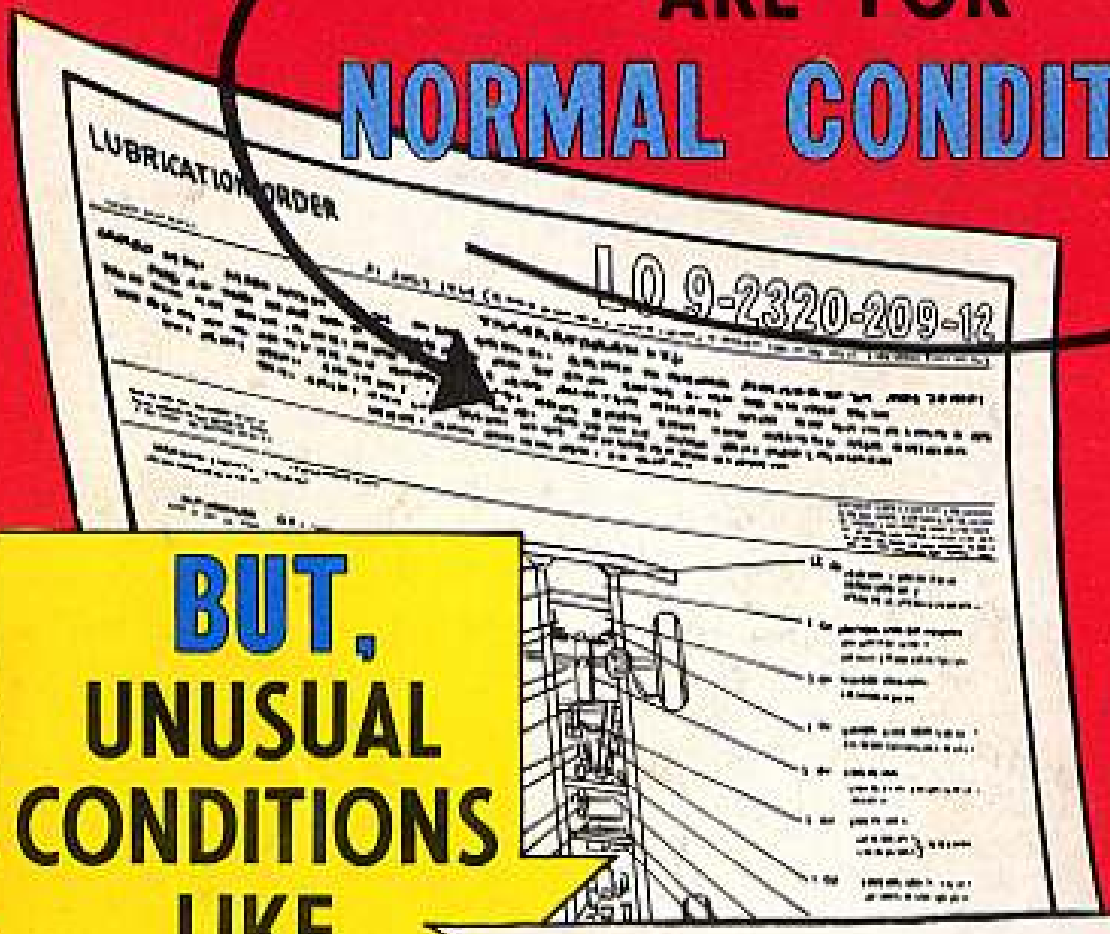
Here's an address change for Appendix II of your TM 38-750. The Mobility Support Center listed there for Engineer and QM-type equipment is now in St. Louis and is called the USA Mobility Equipment Center. Make the address: Commanding General, US Army Mobility Equipment Center, ATTN: SMOME-MML, P.O. Drawer 58, St. Louis, Missouri, 63166.

MASK SPECS

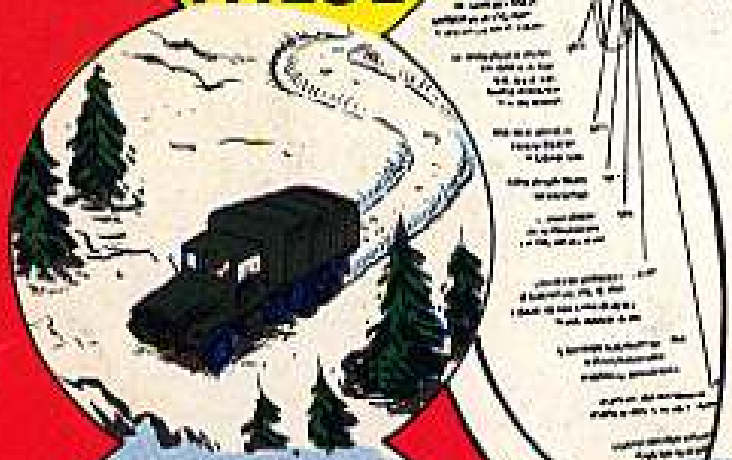
When you swap your M9A1 protective mask for an M17 protective mask don't try to force your old prescription glasses on the new mask. They won't fit the new mask, and you could harm it. Specs for the M17 are specially designed to fit the contour of the mask's eyepiece. AR 40-3 (26 Mar 62) "Medical, Dental and Veterinary Care," covers the scoop on special specs.

Would You Stake Your Life right now on

THESE INTERVALS ARE FOR NORMAL CONDITIONS



BUT, UNUSUAL CONDITIONS LIKE THESE



CALL FOR MORE FREQUENT LUBING, CLEANING AND CARE.

SEE YOUR TM FOR THE WORD.