


Issue 167

**PS**

1966 Series

# THE PREVENTIVE MAINTENANCE MONTHLY



NO, I  
DIDN'T CHECK THE  
DA FORM 2408-13  
TO SEE IF THE "DAILY"  
WAS PULLED...  
WHY DO YOU  
ASK?

Will Eisner

**SPECIAL FEATURE**  
**HANDLING REPAIR PARTS SUPPLY**  
SEE PAGES 24-28



# REGULAR PM PAYS!

Dear Half-Mast,

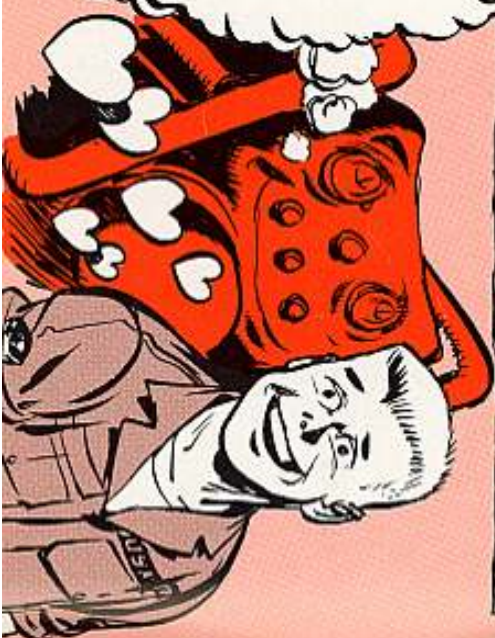
Normally I'd love to use a piece of equipment and find several ways to improve it. But, this time I want to brag - brag about my 15-KW generator. We were issued 2 just before we left for Viet Nam, and the care and feeding of them fell on me.

Now, over 5000 operating hours later, they are still running right along. We are "on the line" 23 hours a day, alternating the generators daily, and paralleling both of them in the evening, during peak hours. One hour daily has been allotted for maintenance.

Fuel replacement has been almost nil. The day tank and fuel filter bowls are drained daily. So I'd take my hat off to the army for buying such an excellent piece of equipment.

Electrically yours,  
"Russ," Sp.5

IF US GENERATORS COULD TALK... WE'D TELL YA THAT THE GUY WHO DOES THE DAY-TO-DAY PM REALLY DESERVES THE CREDIT FOR OUR PERFORMANCE.



Dear "Russ",  
A piece of equipment's no better than the man taking care of it. You are doing a fine job of caring for those generators.

When generators have to operate 23 hours daily, it doesn't give you much time for PM. So it does prove one thing. You're making the most of that one HOUR...

I want to take my hat off to you for taking such good care of those generators.

Half-Mast



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PS wants your ideas and contributions. Send them to: PS Magazine, Fort Knox, Ky. 40121





## MORE POINTERS TO PONDER

FOR YOU  
**XMI6E1**  
**ZAPSTERS!!**  
HERE ARE SOME  
NUMBAH ONE PM  
SUGGESTIONS TO  
KEEP YOU GO-GO!

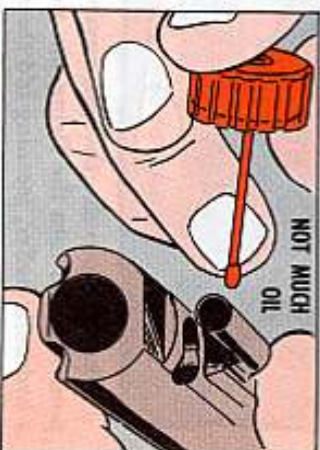
Combat types can't emphasize this enough: Clean the gas port in the bolt carrier group after every day of firing—and take it real easy with the lube. Dirt and powder-fouling—plus an overdose of lube oil—will give you a sluggish rifle. . . . Numbah 10 'Thou' in a combat situation!

So, when you get your baby stripped for cleaning, like it says in para 3-27 in Change 4 to your TM 9-1005-249-14 (Jun 64), take an extra 5 seconds to get at the port hole down there in the front end of the gas tube. Like so:

CLEAN ...  
... AFTER  
EVERY  
DAY OF  
FIRING



NOT MUCH  
OIL



1. Work a bore brushful of bore cleaner around inside the tube.



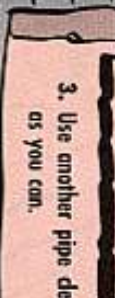
2. Then use a pipe cleaner or the like to poke the gook out of the port. In a pinch you could use a stripped green twig or stem of grass to do the job—as long as it won't peel in there! Don't use wire, though, or you might scratch the tube and set up worse trouble later on.



3. Use another pipe cleaner—or air-dry it by waving it around—to dry the tube as well as you can.

OK, so much for the cleaning.

MORE



PREVENTING LOSS OF THE  
FRONT SIGHT SWIVEL ...



KEEPING A HEALTHY  
BOLT ...



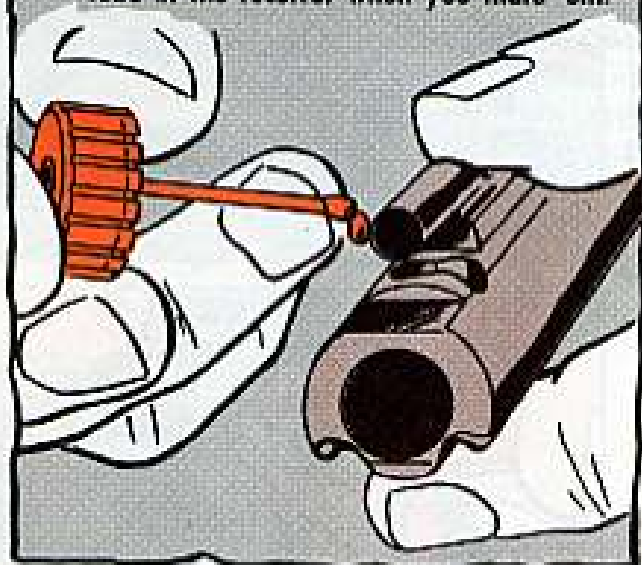
HOW TO FIGHT CARBON  
FREEZE ...



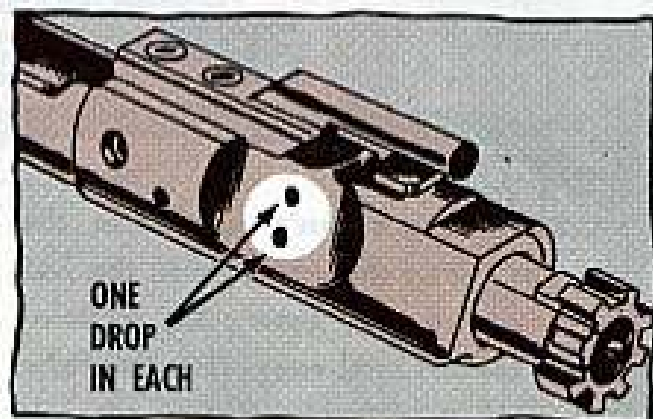


Now, when you come to lubing, do it like so:

1. Put one drop of oil (count it on your right thumb—one!) in the gas tube. This one drop'll also lube the outer surface of the tube in the receiver when you mate 'em.



2. Put one drop in each of the bolt ring holes (count 'em on each thumb!). This is the way to do it in a combat situation, say, but if time is plentiful you'd be better off taking the bolt apart and putting one drop on each side of the bolt rings — and then work it in good with your finger.



Whatever you do, though, never dunk your bolt in lube oil—and never pour lube oil into the firing pin well, like some guys do. This'd make it like a hydraulic buffer, meaning it'd slow down the forward movement of the firing pin and give it a light touch on the cartridge primer.

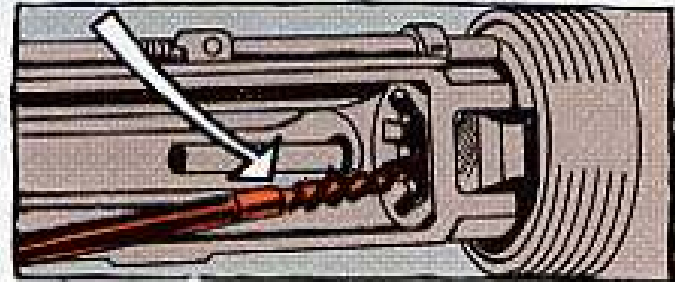
3. Add a light coat (brush 3 drops, say) on all surfaces of the bolt and bolt carrier. And that's all!





**TIP . . .**

Another couple places you won't want to forget when you're cleaning your weapon are the claw under the extractor in the bolt group and the locking lug recesses on the barrel extension down in the lower receiver. If dirt and crud



collect under the extractor, the claw won't be able to snap over the rim of a cartridge case. And if gook and brass chips from cases gather in the recesses, your bolt action will be stymied. So, bear down on your bore brush in both these places.

**TIP . . .** While you have the bolt group apart—and after you clean 'em—make a practice of eye-checking these parts:

**BOLT** — Cracks or fractures, especially in the cam pin hole area. This bolt has a great service record so far, but it pays to be on the lookout for that first sign of weakness. Don't worry about any discoloration you find there, though. It's harmless.

**CAM PIN** — Cracked, chipped, missing. Be sure it's in place when you put the parts back together. A rifle could explode if you fired it with the cam pin missing.

**FIRING PIN** — Bent, cracked, blunted.

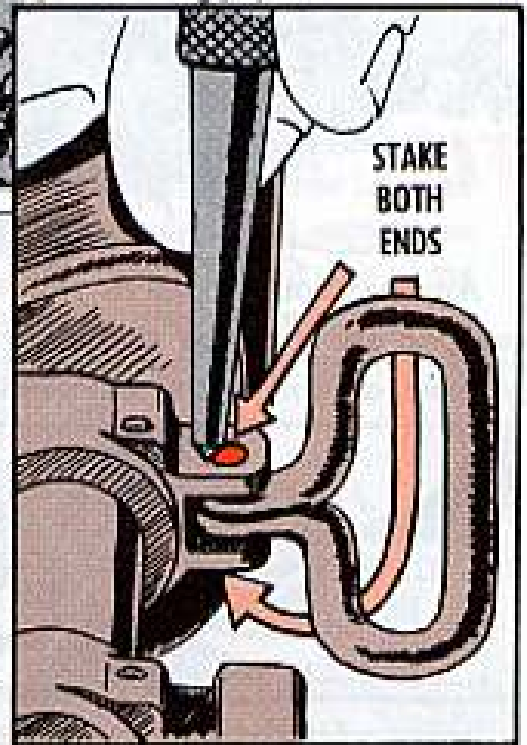
**FIRING PIN RETAINING PIN** — Bent, busted, badly worn. If one or both tangs are busted, there's no sweat as long as it'll hold the firing pin in place. But, be mighty careful you don't lose it when you're doing PM. A rifle fired with this pin missing may fire once—but that's all. The firing pin would then fall out and—no-fire!



**TIP** . . .

If you're having trouble with the front sling swivel falling out, it means the spring pin's getting weak . . . like it'll naturally do after a spell. No sweat, though. Get your armorer to stake it thisaway.

Stick the spring pin through the swivel, making sure both ends of the pin are about flush with the outside surfaces. Then take a center punch and tap the area about 1/16 inch from the swivel spring hole. Stake both ends for good measure.



Worry a little more about your rifle . . . like, baby it a bit. F'rinstance, when you're out in the boonies, be careful where you put it down and how you put it down. Never drop it in mud or water or sand. Lean it, muzzle-end up, against a tree or something. Just keep in mind that you may have to use it before you get a chance to clean it.



**TIP** . . .

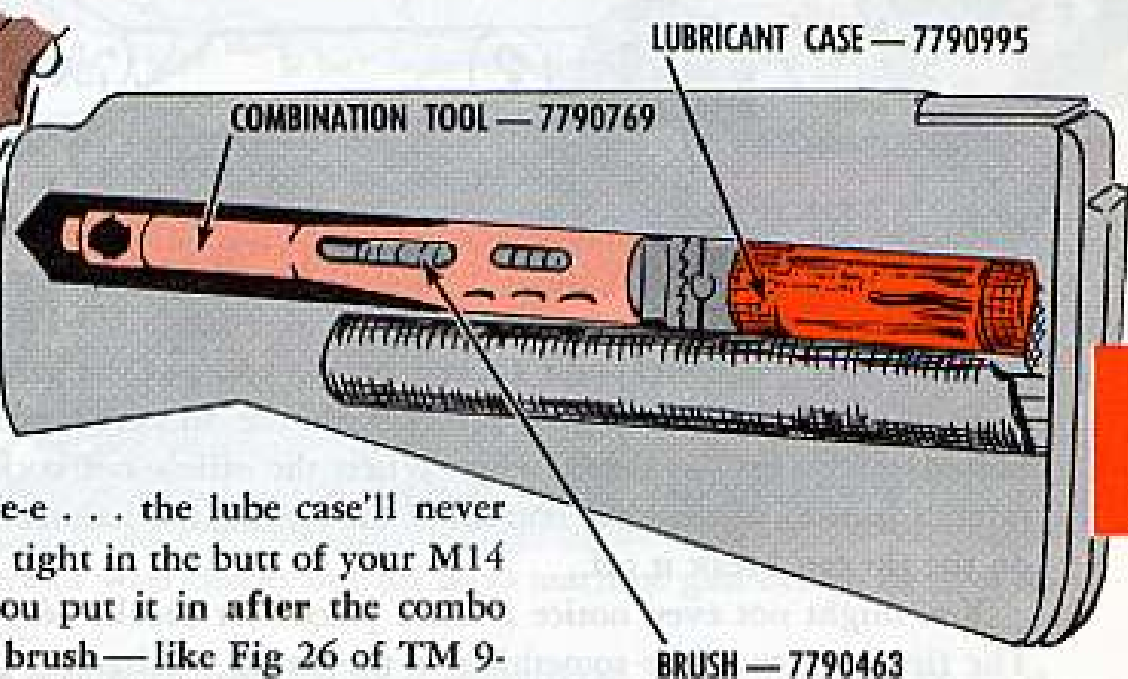
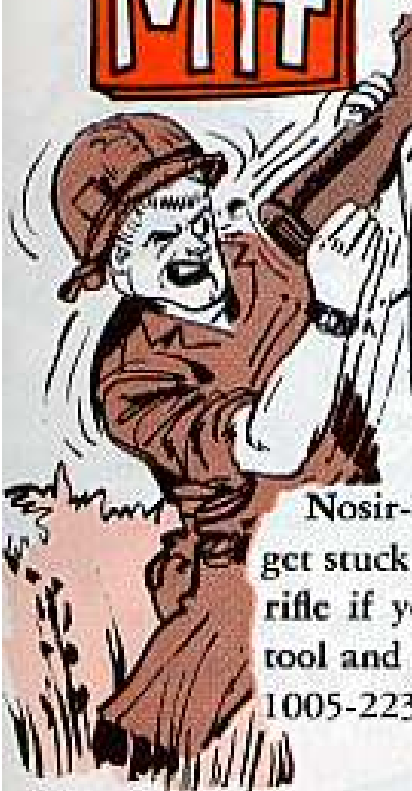
**TIP** . . .

Take care of your magazines — and hang on to 'em. Sure, there're plenty of 'em in supply — world-wide — but they could get mighty scarce in your own sector. So, protect 'em from dents (soft aluminum like that can't take rough treatment) — and especially, remember to bring those "empties" back. The one you save just might save you some day.



# M14

## STOW KNOW-HOW



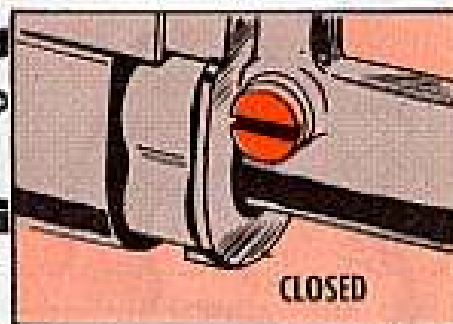
Nosir-e-e . . . the lube case'll never get stuck tight in the butt of your M14 rifle if you put it in after the combo tool and brush—like Fig 26 of TM 9-1005-223-12 (Feb 65) says.

## DRAWING BLANKS?

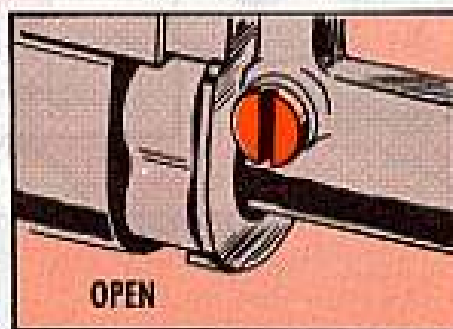


When you fire blank ammo in your M14 rifle without using your blank firing attachment you get a lot of carbon in the gas cylinder. You can head this off by turning the gas cylinder valve to the closed position.

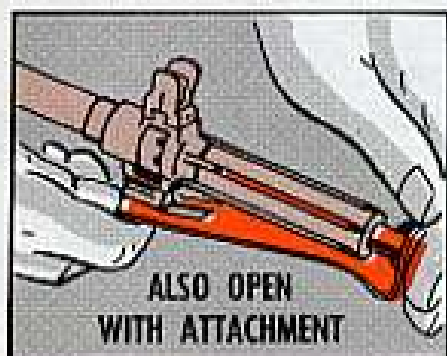
After you fire blanks, and before you fire ball ammo, you want to open the spindle valve.



CLOSED



OPEN



ALSO OPEN  
WITH ATTACHMENT

The valve can also be open when you fire blanks with the blank firing attachment on the end of the barrel. When you use the attachment, enough gas is kept in the bore to operate your rifle semi-automatically — or automatically if you have the selector lever on your rifle.



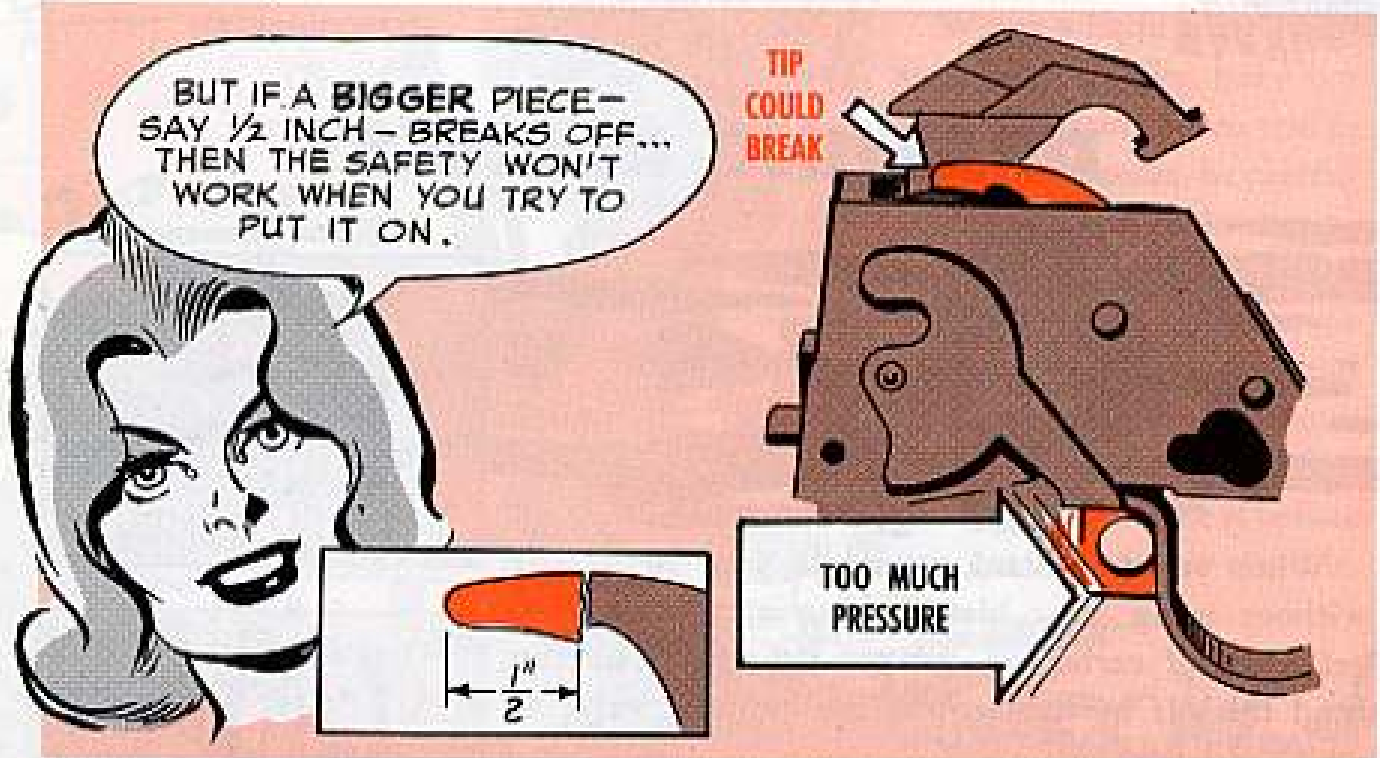
## PLAY IT SAFE



Pages 14 and 37 of your M14 rifle's TM 9-1005-223-12 (8 Feb 65) tell you to make sure your weapon's cocked before you put the safety on. Why?

Trying to pull back on the safety with the shooter uncocked can mean a busted safety tip — that's why. When the rifle's not cocked, the tip of the safety's leaning against the bottom of the slot in the hammer . . . and pressure on the tip can break it off.

You might not even notice a small piece that breaks off — not right away. The first sign could be something in the firing mechanism getting jammed by the broken tip.



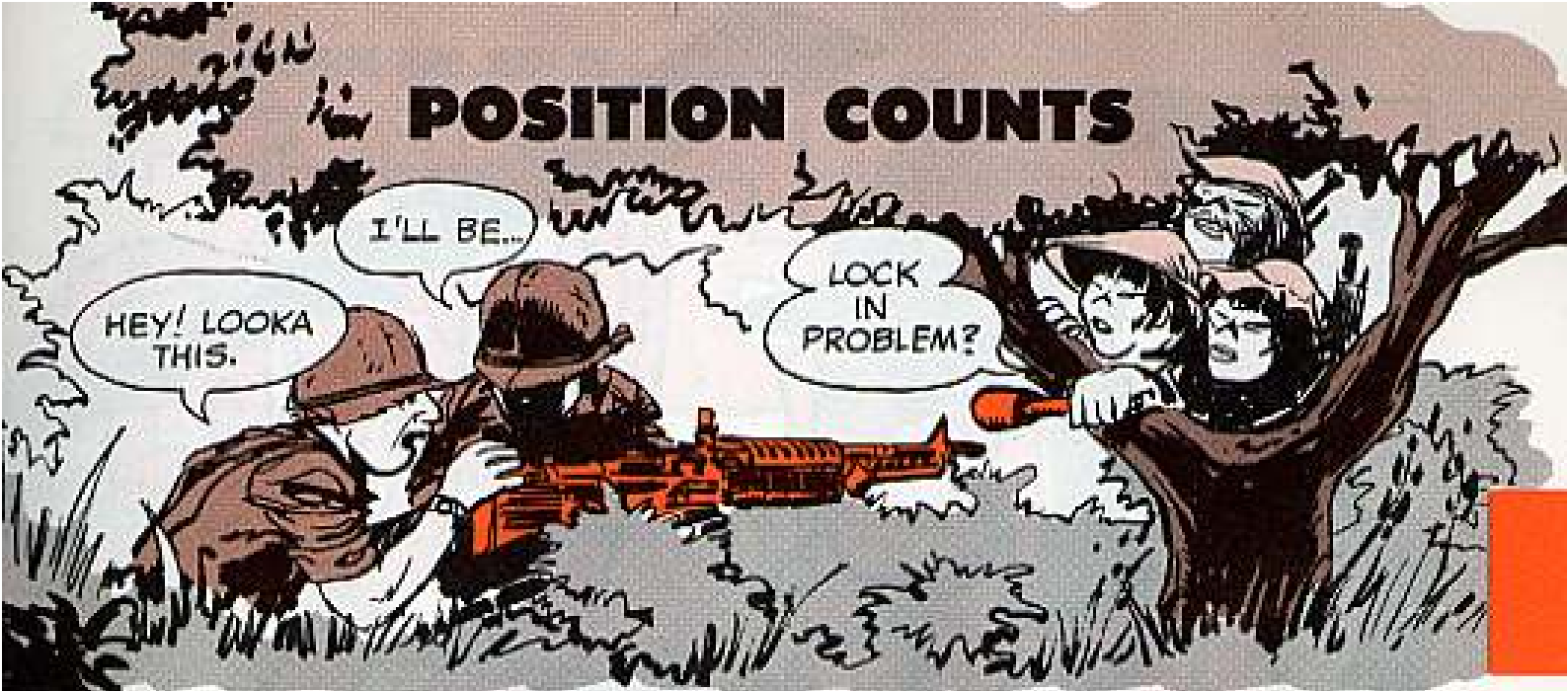
### PS IS FOR GUNNERS . . .

and Drivers, Vehicle and Weapons Crewmen, Riflemen, Mortarmen, Generator Operators, Radio and Radar Operators . . . and any other man who uses or maintains any Army equipment.

Is your outfit getting enough copies for everybody to read? No? Then, just crank up a new DA Form 12-4, tell how many copies of PS your outfit needs each month . . . and send it thru battalion to the Baltimore pubs center.



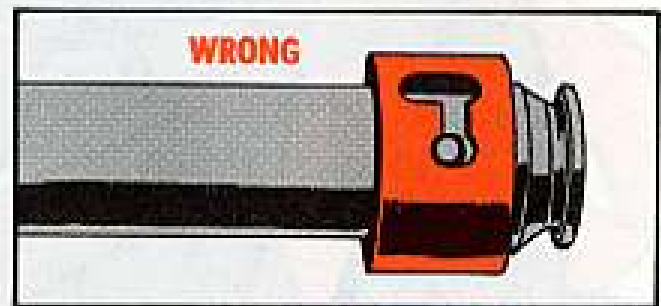
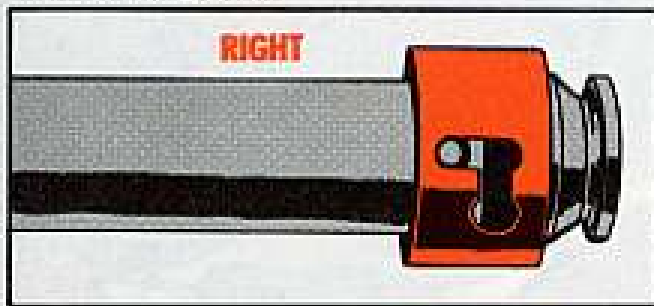
# POSITION COUNTS



It's a smart operator who checks out his M60 machine gun before he goes to play a tune with it.

And one of the things he looks at as if it mattered — because it does — is the cover for the buffer assembly. Could be he'll find that the lock pin is making its way out of the buffer because the cover has moved.

Not that a loose pin will make a lot of difference in the way the gun operates. But if it drops out, and you fire the gun, you'll need a box for the buffer assembly pieces.



In other words, make sure the cover is twisted around so that the pin is where it belongs.

And don't let itchy fingers get the best of you when you have the buffer in your hand. It's up to your support people to take it apart — not you.



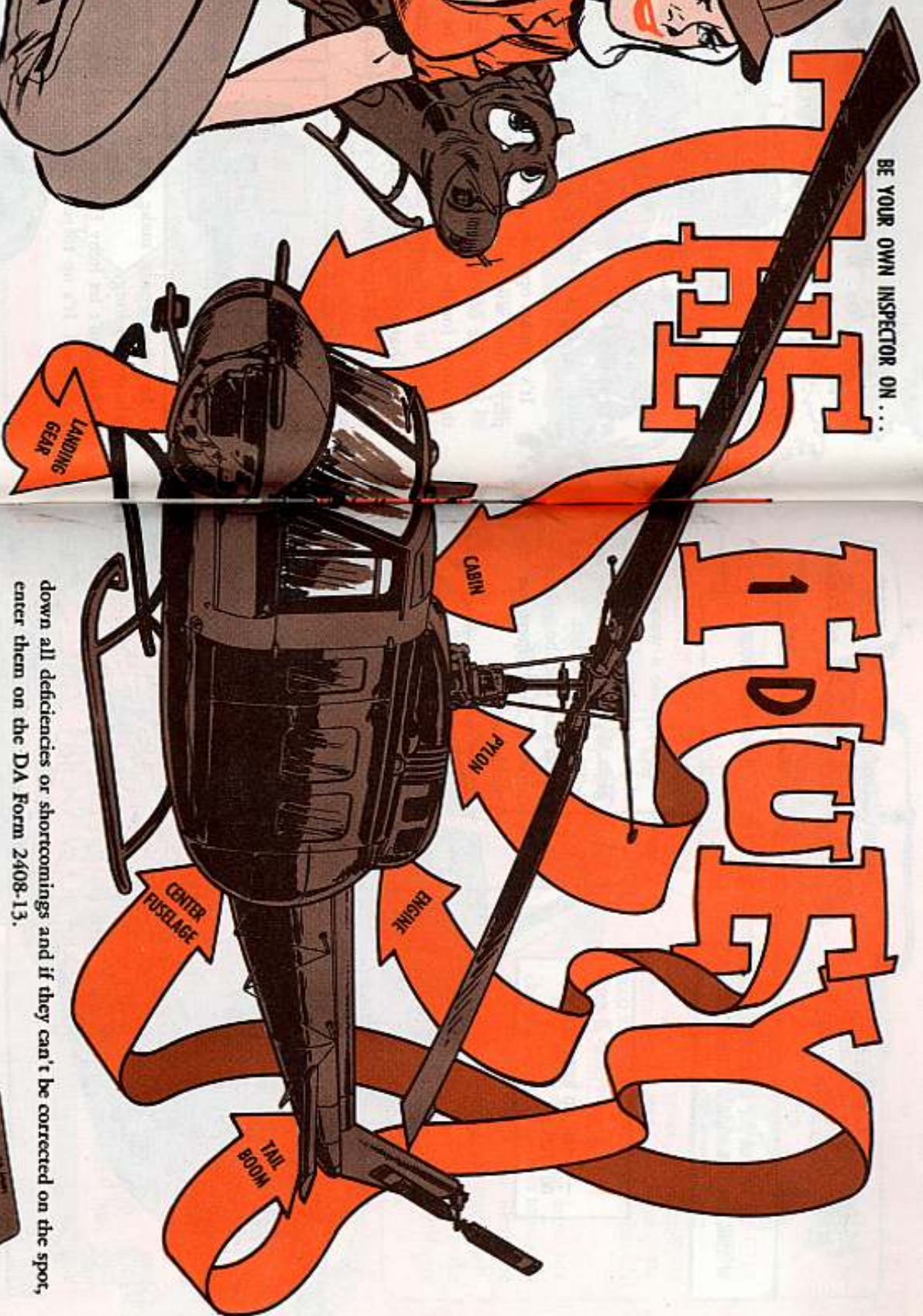


BE YOUR OWN INSPECTOR ON...



Pulling a complete aircraft inspection is a breeze these days with the check-sheets located right in the log book. It's a breeze — provided the mechanic has developed a "roving eye, feel technique" thru on-the-job training. Yessir-ee-e, when you're in the wild blue yonder there's no pulling to the side of the road for repairs . . . all of these preventive maintenance checks are equally important.

With a sharp pencil and a DA Form 2404 worksheet handy, here's how to pull the Preventive Maintenance Daily on your UH-1D model. Be sure to jot



down all deficiencies or shortcomings and if they can't be corrected on the spot, enter them on the DA Form 2408-13.

**CHECK LOG BOOK**

First off, rattle the log book to make sure it's up to snuff. A complete on-board log book should have Equipment Serviceability Criteria Sheets, Daily, Intermediate and Periodic PM Checklists and current DA Forms 2408, 2408-3, -12, -13, -14, -18 . . . per AR 750-1500-2 (13 Sep 65).





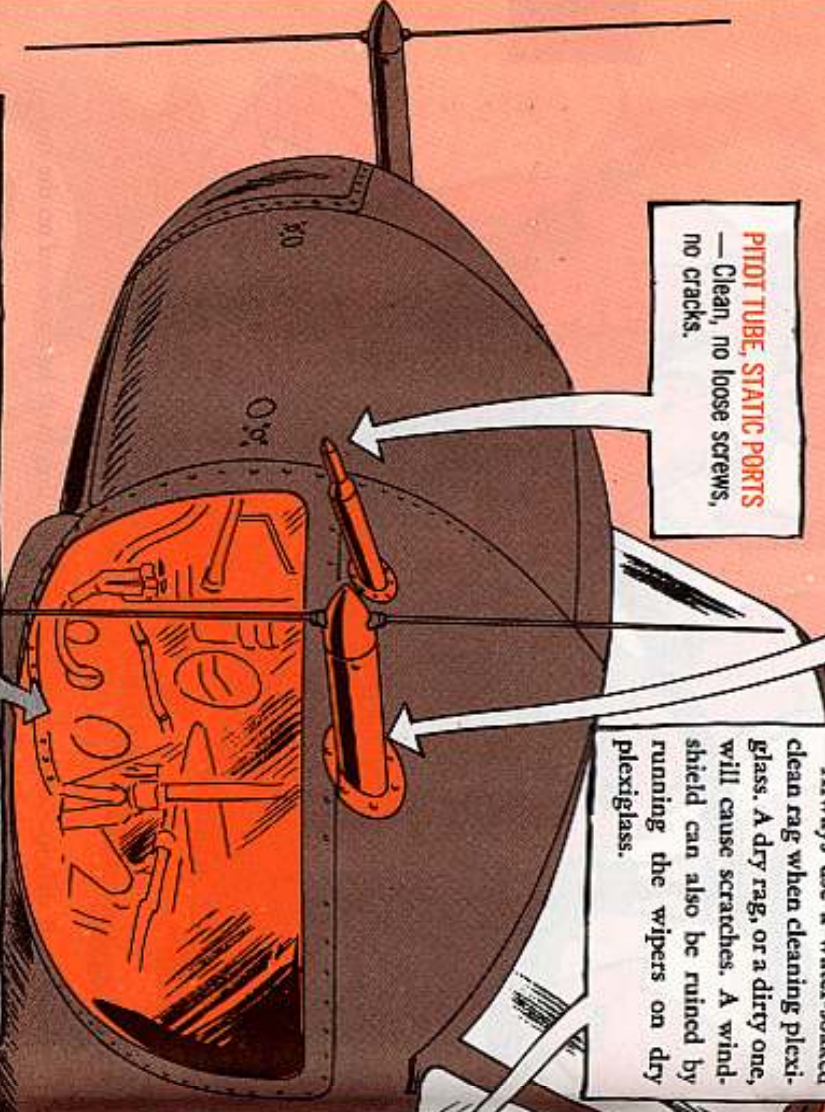
# THE NOSE



**EXTERIOR** — Look for damage, especially for weld cracks at the antenna mount, or split antenna ends and loose lock nuts.

**PITOT TUBE, STATIC PORTS** — Clean, no loose screws, no cracks.

**WINDSHIELDS, WINDOWS** — Clean. Always use a water-soaked clean rag when cleaning plexiglass. A dry rag, or a dirty one, will cause scratches. A windshield can also be ruined by running the wipers on dry plexiglass.



**NOSE COMPARTMENT** — Clean, no tools, rags or other foreign items. Check radios for loose connections, security and lock-wiring.

Be sure battery is clean, connected and secure. The cleaning poop is in TM 55-1520-210-20, Chap 12, Sect III.

IF WHAT'S UP FRONT COUNTS, WHY NOT GIVE IT **LOTS** OF ATTENTION?!

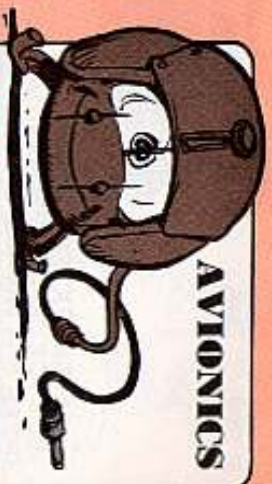


One way to avoid windshield wiper scratch on a wiper motor check is to wet the plexiglass with water.



Door latching secure? When you button up the compartment, or any access door for that matter, never flip these highly loaded latches closed with one finger . . . replace more broken latches that way!! It pays to be "all thumbs" here — one on each end of the latch.

## AVIONICS

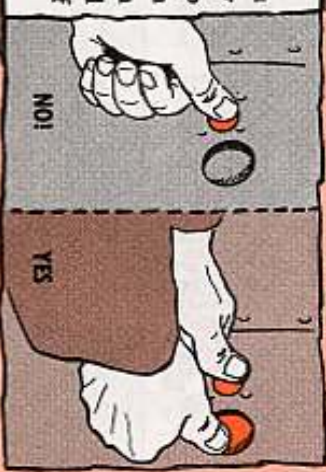


**RADIOS** — A "power on" operational check can be made by following the poop in TM 55-1520-210-10 (28 Dec 65) Chap 5, Sect VI.

If a radio is out, be sure you check all circuit breakers to be sure they're set before you alert the organizational signal repairman. He can replace shot fuses and make set changes, but only your direct support can make repairs.

## ARMAMENT INSTALLED?

**ARMAMENT SUBSYSTEM** — Inspection of the XM-23 weapons system can be made by following the info in Chapter 14 of TM 55-1520-210-20 and the armament pubs.

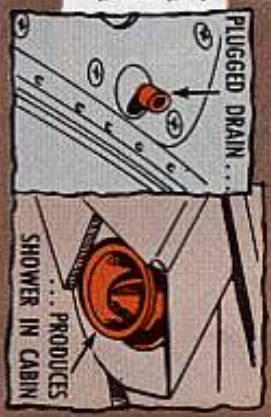






# CABIN

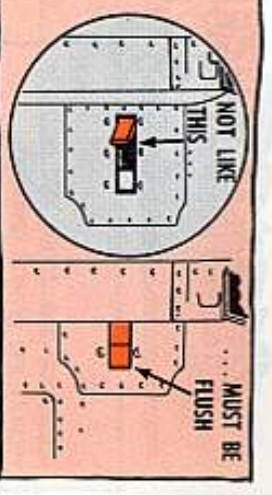
Be sure you don't overlook the ventilator drains. A plugged drain stores up water... produces a shower in the cabin when the ventilator is opened!!! A small amount of compressed air will clear a plugged drain, sure 'nuff.



**CREW, CARGO DOORS**—Open and close crew and cargo doors to check for positive latching. Check for cracks, and dents. Check rollers or sliders on cargo doors for damage, security, operation. Be sure the cargo door rear latch is flush before you slide it open. Otherwise, you'll be minus a latch when the door hooks the latch upon closing!!

Also, be sure all the door jettison pins are not corroded or rusted. All windows should be clean.

**CABIN INTERIOR**—Clean and clear of tools, baggage, loose objects.



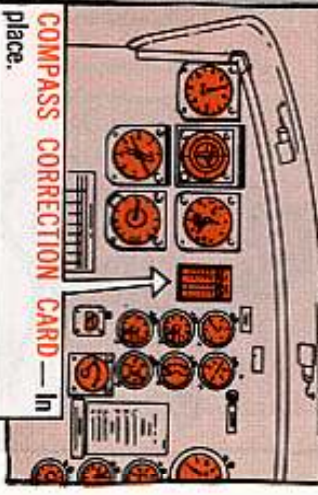
**FIRE EXTINGUISHER**—In place.



**FIRST AID KITS**—In place, secure, seal unbroken and inspection date tag attached. See TB AVN 10 (19 May 65) for details.



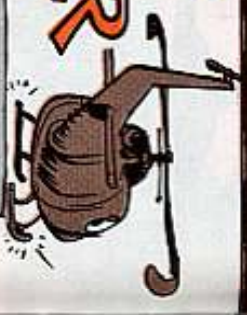
**INSTRUMENTS**—Glass clean, unbroken.



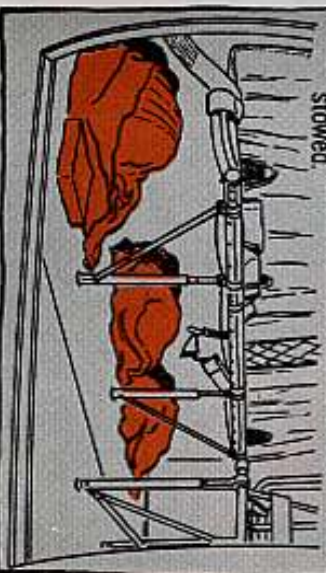
**COMPASS CORRECTION CARD**—In place.

# LANDING GEAR

**LANDING GEAR**—Check for damage and security. Eye cross tubes for middle-age spread and if in doubt you'll find inspection limits in Chap 4, Sect VI of the organizational maintenance pub.



**SEATS, MISSION EQUIPMENT**—Secure, stowed.



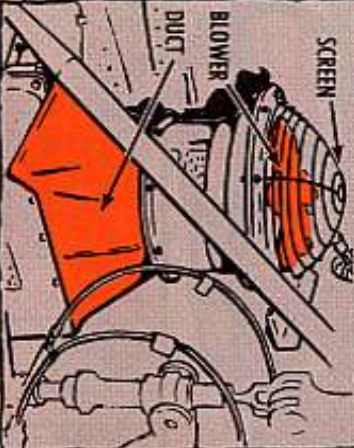


# CENTER FUSELAGE

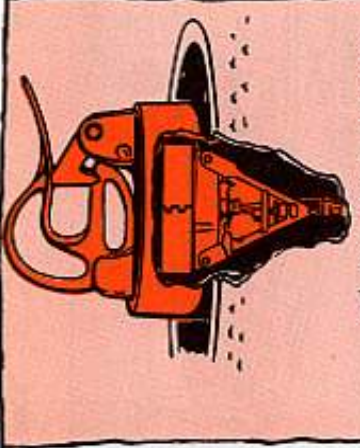
**EXTERNAL POWER RECEPTACLE**—Check access door and caution light switch for security and general condition.



**OIL COOLER, DUCT, BLOWER, SCREEN, BLEED AIR LINE, SUPPORT STRUCTURE**—Look for obstructions, damage, loose nuts, broken screen or other damage.



**CARGO SUSPENSION ASSEMBLY**—Secure. Eye manual release. Check non-swiveling type by hand—rotational play indicates a broken shear pin.



**DON'T TURN YOUR BACK ON ANY OF THESE!!**

**FUEL TANKS**—Test for water and dirt by taking a sample at the sump drains. Push in on draincocks and use a sampling jar and water detector kit, FSN 6640-892-2264. See TM 10-1101 (28 Jul 65) on reading your sample. Check fuel supply lines for loose connections and leakage.



**CONTROL LINKAGE, HYDRAULIC CYLINDERS** in fuselage below pylon—Secure, not damaged, no leaks from cylinders and connecting lines.



**EXTERNAL STORES**—Secure. (When installed).



yup!

# THE PYLON

**MAIN ROTOR HUB**—Pillow block reservoir oil level (half-full). Hub, blade grips, pitch horns, drag braces, main rotor blades—secure, undamaged.

**STABILIZER BAR**—Undamaged, connecting linkage secure.

**STABILIZER DAMPERS**—Fluid level (full). See para 8-33 of maintenance pub for filling poop.

**TRANSMISSION COWLING**—Cracks? Dents? Hinges and fittings worn, damaged?

**SWASHPLATE, SCISSORS, SLEEVE**—Check for damage. All connecting linkage should be secure.

**COLLECTIVE LEVER HALVES**—Secure connections.

**HYDRAULIC SYSTEM COMPONENTS**—Check lines for security, damage, leaks. Reservoir fluid level should read full.

**MAIN (input) DRIVE SHAFT COUPLINGS**—Grease leak? Clamps tight?

**TRANSMISSION CONNECTIONS**—Look for damage and oil leaks. Check the sump for water contamination and oil level (full).

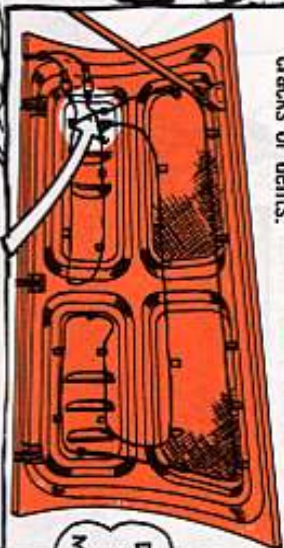




EYE THE FIRE DETECTOR WIRE TO BE SURE IT'S SECURE.

# THE ENGINE

**ENGINE COWLING, FAIRING** — Secure, no cracks or dents.



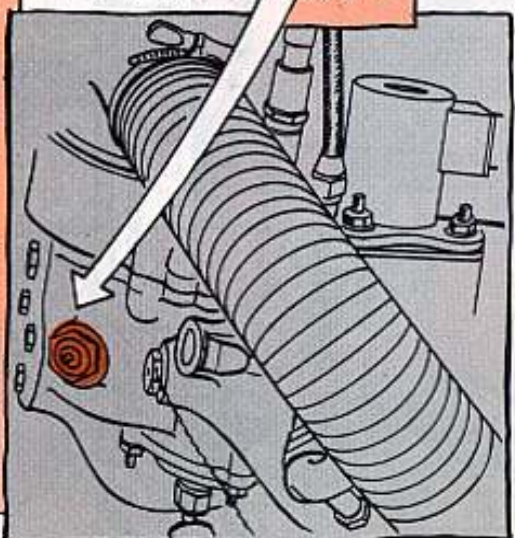
A loose wire could snag on the lineal actuator, or another engine part, and short out the fire warning system.

DON'T RACE V/R MOTOR!



**ENGINE ACCESSORY DRIVE GEAR BOX** — Check the chip detector plug with a continuity tester or take the plug out and have a look-see for metal chips.

Remember that the presence of particles may, or may not, mean that a gear box is shot. Para 7-3 and 7-4, plus Fig 7-2 of the maintenance pub will clue you on chip identification and the action you should take.



**ENGINE COMBUSTION CHAMBER HOUSING, EXHAUST DIFFUSER, SUPPORT CONE, FIRSHIELD, TAILPIPE** — Cracks, dents, burned and buckled metal.

Be sure you never circle any tailpipe defects with a lead pencil. If you do, the next time the engine is run up the carbon in the lead you left behind will act like a cutting torch and the circled piece will drop right out of the tailpipe... what a revolution!

...YOU COULD IDENTIFY A DAMAGED AREA (ON THE DA FORM 2408-15) LIKE THIS...

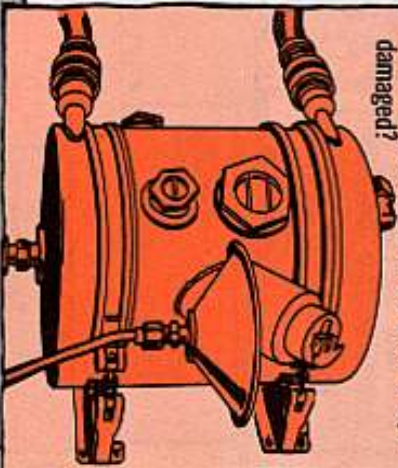
*tailpipe crack at 2 o'clock*

**ENGINE INTAKE SCREEN** — Should be clean, with no obstructions, no loose or missing fasteners. Gaps between screen sections should not be wider than the mesh width.



**ENGINE INLET HOUSING, AIR DUCTS, GUIDE VANES, COMPRESSOR BLADES, ANTI-ICING PROBE** — Eyeball all areas for oil streaks, foreign object damage.

**ENGINE OIL TANK** — Tank supporting straps and pads tight? Oil lines leaky, damaged?



**ENGINE ACCESSORIES, CONNECTIONS** — Eye for damage, security.



**ENGINE MOUNTS** — Eye for cracks and other damage, secure.



**ENGINE COMPRESSOR HOUSING** — Damaged?



# TAIL BOOM

DON'T OVERLOOK A THING!

**TAIL BOOM EXTERIOR** — Check for cracks, dents, corrosion.

**TAIL BOOM ATTACHING BOLTS** — Secure? Fittings cracked?

**ELEVATORS, TAIL SKID** — Use your mitts to check the elevator and the stinger for tightness.

**TAIL ROTOR (90°) GEAR-BOX** — Secure? No leaks? Oil level full?

**TAIL ROTOR HUB AND BLADE ASSEMBLY** — Secure? No visible damage?

**TAIL ROTOR CONTROL IN-STALLATION** — Secure, clean sprocket and chain, aft cables in good condition.

**TAIL ROTOR DRIVE SHAFT ASSEMBLY** — Check security of shafts, hangers, coupling clamps (installed 90° apart for proper balance) and covers.

INSPECTOR'S STAMP HERE?

**INTERMEDIATE (42°) GEARBOX** — Secure? No leaks? Oil level full?

When adding oil to the intermediate and tail rotor gear boxes be sure you don't switch filler caps, or you won't get the proper seal on one... the intermediate gear box will be pumped dry and you know what that means (ugh!!).

## SERVICE WITH A SMILE

**FUEL, OIL, HYDRAULIC FLUID** — Service your Huey at all the places shown in Fig 1-6 of your organizational maintenance manual. You will find the poop on these operations, beginning in para 1-67.

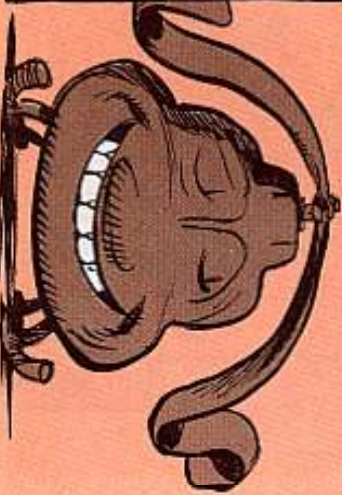
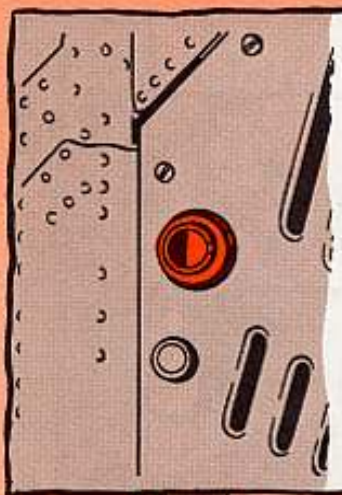
The slide-in handle is the baby to use for moving your bird, sure 'nuff.

USE THIS!

Be sure you never use the VHF navigation antenna as a handle (much as it looks like one) because it can't take rough treatment.

DANGER

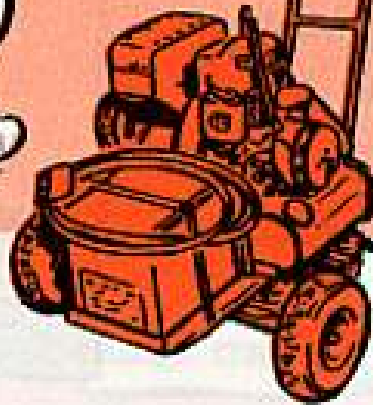
NOT THIS!



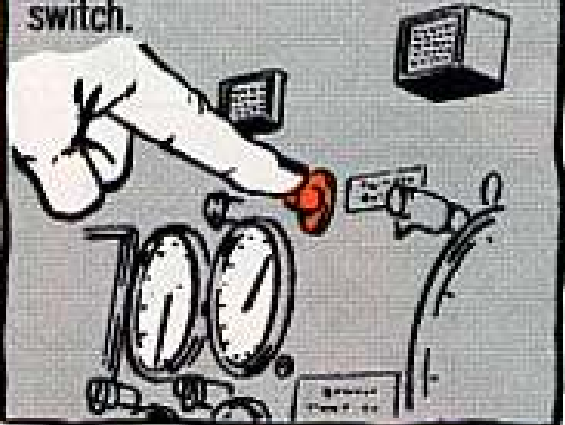


# SHOOT THE JUICE

THERE'RE SOME CHECKS ON THE DAILY THAT CAN ONLY BE MADE WITH "POWER ON." TO SAVE THE BATTERY YOU CAN PLUG IN AN AUXILIARY POWER UNIT.

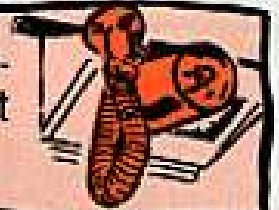


**FUEL QUANTITY INDICATOR**— Check for operation with the test switch.

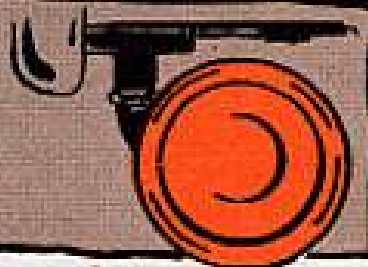


**CAUTION PANEL LIGHTS** — Check for illumination on TEST switch position.

**INTERIOR LIGHTS** — Dome, cockpit, console, pedestal, instrument lights operate.

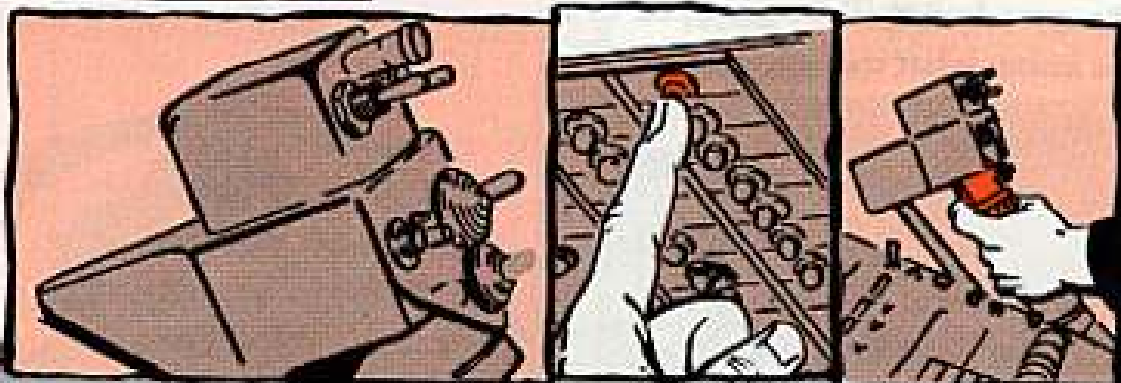


**EXTERIOR LIGHTS** — Navigation, anti-collision, search and landing lights operate.



**ENGINE CONTROLS** — Free action through full range, idle stop button release and governor RPM actuator functionally checked.

**PITOT HEATER** — Check for radiating heat.

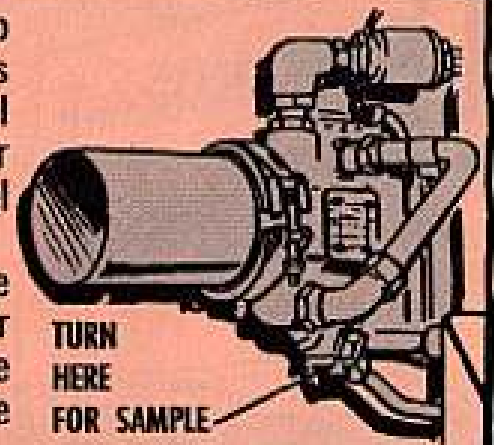


**ENGINE** — Check for freedom of rotation (with starter energized). Be sure the ignition system circuit breaker is "out" so the engine doesn't start when you trigger the starter. Rotate the engine for a maximum of 40 seconds. There should be no unusual noises during coastdown.

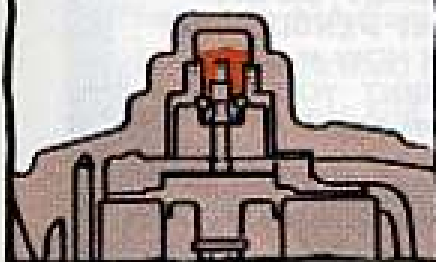


**MAIN FUEL FILTER** (electric type) — Turn the main fuel pump switch **ON** — this prevents air from getting into the fuel lines and gives you a good check for leaks. If you have the electrical bypass type filter and the element is clogged the fuel filter caution warning light will come on, which means unfiltered fuel is going thru the bypass valve to the engine.

If the light comes on replace the element according to the poop beginning in para 5-88 of the maintenance pub. Check for water and dirt by turning the filter drain valve and collecting the sample in a jar at the bottom of the fuselage just aft of the landing gear cross tubes.



**RED INDICATOR SHOULD BE DOWN**



**MAIN FUEL STRAINER** (Mechanical type) — With the fuel boost pump **ON**, check for fuel line leaks. Check the transparent dome of the fuel strainer and if the red warning indicator is up, the strainer element is clogged. In this case the strainer has to be cleaned and the indicator re-set according to the info beginning in para 5-75 of the maintenance pub. There isn't any drain valve on this strainer so be sure you sampled your fuel before by tapping the fuel tank sump drains.

FOR YOUR  
MODEL B ...

## NEW AIR SCREEN MESH KIT

When you're out where the tall grass grows, your engine air intake needs all the protection it can get. The air-inlet screen stops large objects from entering the axial compressor and centrifugal diffuser alright, but grass just sails thru the wire mesh and partially blocks the air intake.

Fire off a request now for an Air Screen Mesh Kit and rig the screens to head off any alas from grass:



For screen, P/N 204-060-217-1, FSN 1560-923-6027 (found on most FY 63 and later "B" models) you want — Engine Inlet Air Screen Mesh Kit, P/N 204-706-073-1, FSN 1560-921-6507.



For screen, P/N 204-060-210-101, FSN 1560-956-9920, (found on FY 62 and earlier "B" models) you want — Engine Inlet Air Screen Mesh Kit, P/N 204-706-074-1, FSN 1560-915-5964.

You won't find these kits in a technical bulletin or modification work order, so you requisition them thru regular channels. The installation poop is packed right with the kit, sure 'nuff.

But even with the improved screen, be sure to keep an eye on the air intake bellmouth area for grass and other stuff that'll choke off the air.





SO, YOU'RE  
REPAIR  
SUPPLY

THE NEW  
PARTS  
MAN



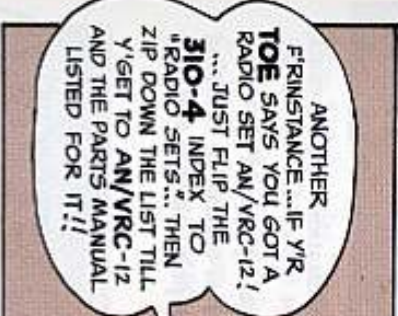
USE THE INDEX

No sweat. DA Pam 310-4 (with latest changes), (Index of Technical Manuals, Technical Bulletins, Supply Manuals, Supply Bulletins, IO's and MWO's) does the job real neat for you, both alphabetically and by publication number. Maybe you've got a Truck, Utility, 1/4-ton, M151. Check the 310-4 for "Trucks, Utility." You'll spot what you want in pubs in the 1/4-ton, M151 sub-listing.



\*TOE - TABLE OF ORGANIZATION AND EQUIPMENT.  
Don't let it complicate your life. By keeping these two main points in mind you get your parts and components faster, and . . . a lot more of them!!

KNOW YOUR EQUIPMENT - AND THEIR PARTS MANUALS





# ORDER VIA **PINPOINT, AUTOMATICALLY**

Another thing . . . if your unit didn't have the parts manual which identifies the parts you need, then it's likely your unit's order on the 12-Series DA Forms for automatic pin-point distribution is not up to snuff.

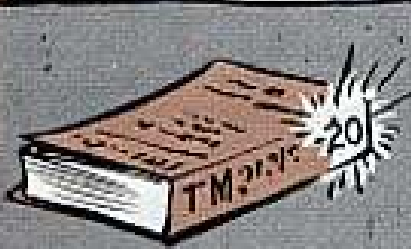
So, get out your unit's copy of all the 12-Series Forms and find out how many copies are on order for each type of equipment your unit has. If somebody didn't order enough, then you need to send new 12-Series Forms to the publication centers.

## OPERATOR'S MANUALS

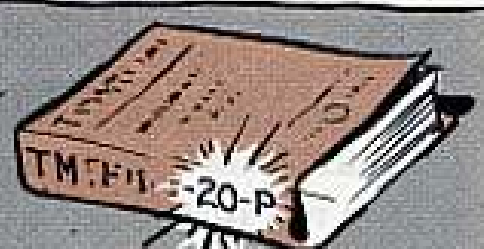


At least 1 for each item, plus enough for sergeants and lieutenants. (As a supply man, you'll have to have 1 copy, too, because the BILL — Basic Issue Items List — is in the -10.)

## ORGANIZATIONAL MANUALS



-20 TM (Unit maintenance) — Your mechanics and repairmen need these.



-20 TM (Parts Manual) — You and your mechanics need these.

Some TM's have consolidated operator's manual, organizational maintenance and repair parts. TM 10-1670-224-23 is an example.

Remember that it does you good to order manuals on equipment that your unit does not have and does not expect to get. So, be real careful in ordering your manuals. And, skip the higher level maintenance pubs; they're for your support unit.





# SUPPLY MANUALS



The DA Pam 310-6, Index of Supply Catalogs and Supply Manuals, breaks down three basic kinds of supply pubs aside from the parts manuals and gives you both an index of components and an index by the four-number class.

For instance, suppose you need one of the tools in Tool Kit, Electronic Equipment TK-105/G FSN 5180-610-8177. Check the component list index of the Pam 310-6 under "Tool Kit," and you'll see the TK-105 is listed in SC 5180-91-CL-R07 (Nov 64) supply manual, where you'll find all the FSN's you need.

The 310-6, in addition to listing supply manuals, also lists the Army Supply Catalogs (for instance, for the above, it would be SC5180-etc.), and Federal catalogs (FSC) (C5180-IL etc.).

## BE ACCURATE

There's some valuable dope for you in DA Circular 725-9 (15 Mar 66), Instructions for Stock Number Identification and Validation of MILSTRIP Requisitions.






# THE PLL


Since your duties as unit repair parts supply man almost surely will include prescribed load lists (PLL), you'll find the dope you need to set up your PLL in para 6-2, Section VI, AR 735-35.

In order to maintain your PLL, the pubs and procedures previously mentioned will make the job cut the mustard with considerably less sweat.



DON'T FORGET TO INCLUDE THE **TYPE, NUMBER AND YEAR** OF THE PUB WHEN KEEPING YOUR PLL DATA UP TO SNUFF.

Ideal listing for unit PLL includes the FSN, type of stockage, nomenclature, cost code, unit of issue, quantity . . . and the TM dope. Naturally, your initial PLL is determined by -15P, -20P and -25P manuals on the equipment you have. Naturally, too, it can increase, based on demand experience.

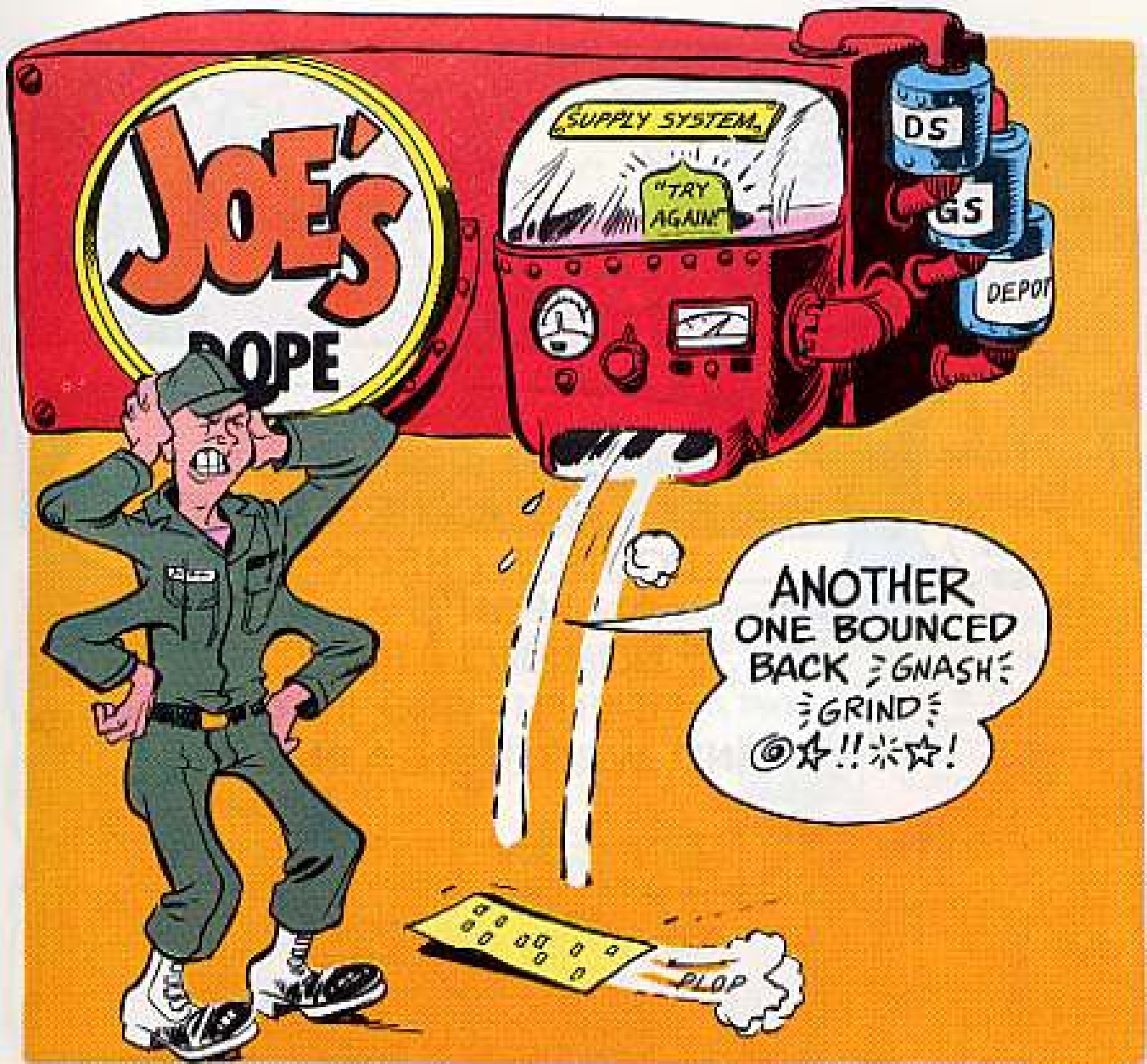


**YOU'RE THE KEY MAN!**  
A RECENT ARMY STUDY SHOWS THAT 4-OUT-OF-10 REQUISITIONING PROBLEMS IN IDENTIFYING PARTS ARE CAUSED BY HUMAN ERROR... LIKE FOULING UP FSN NUMBERS WHEN COPYING 'EM!



**SO!!!**  
BRING ON THAT DA FORM 2765 OR 2765-1 AND LET'S MAKE THE SCENE!







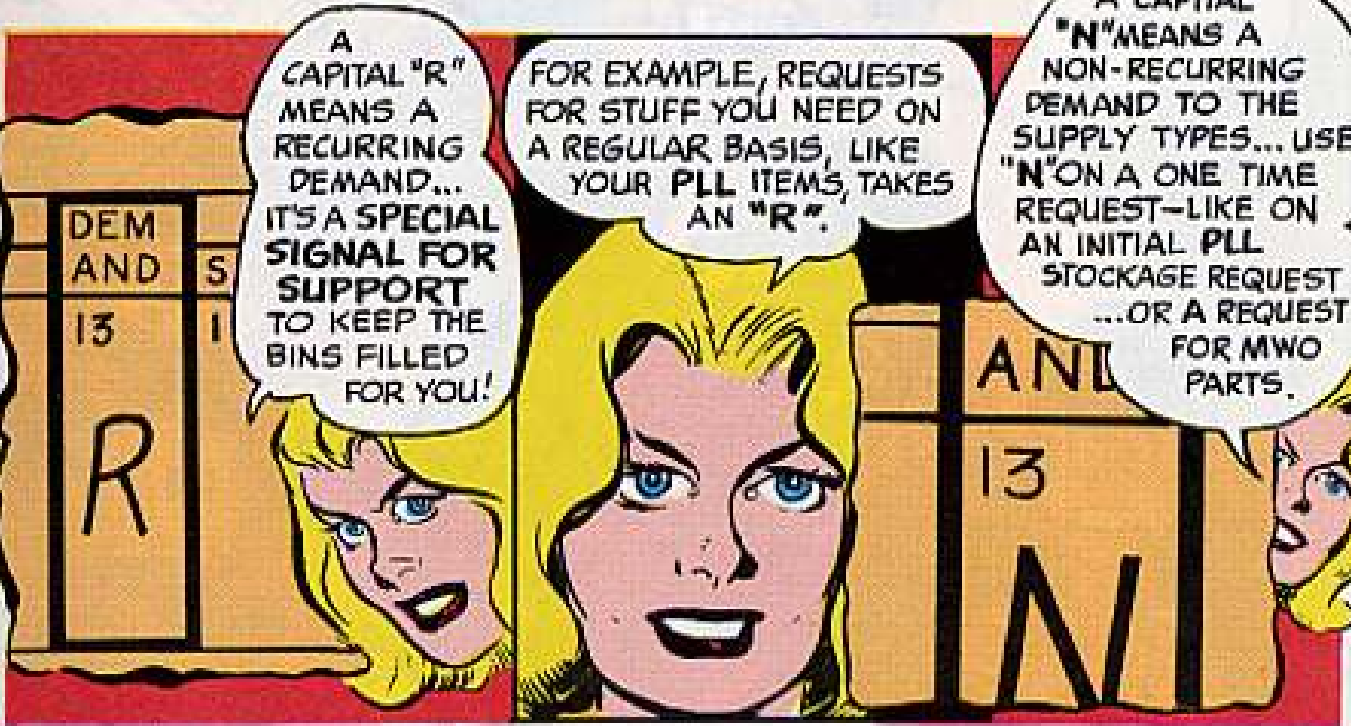






NEXT CLUE IS... FILL THE DEMAND CODE—  
BLOCK 13— THIS IS A MUST!

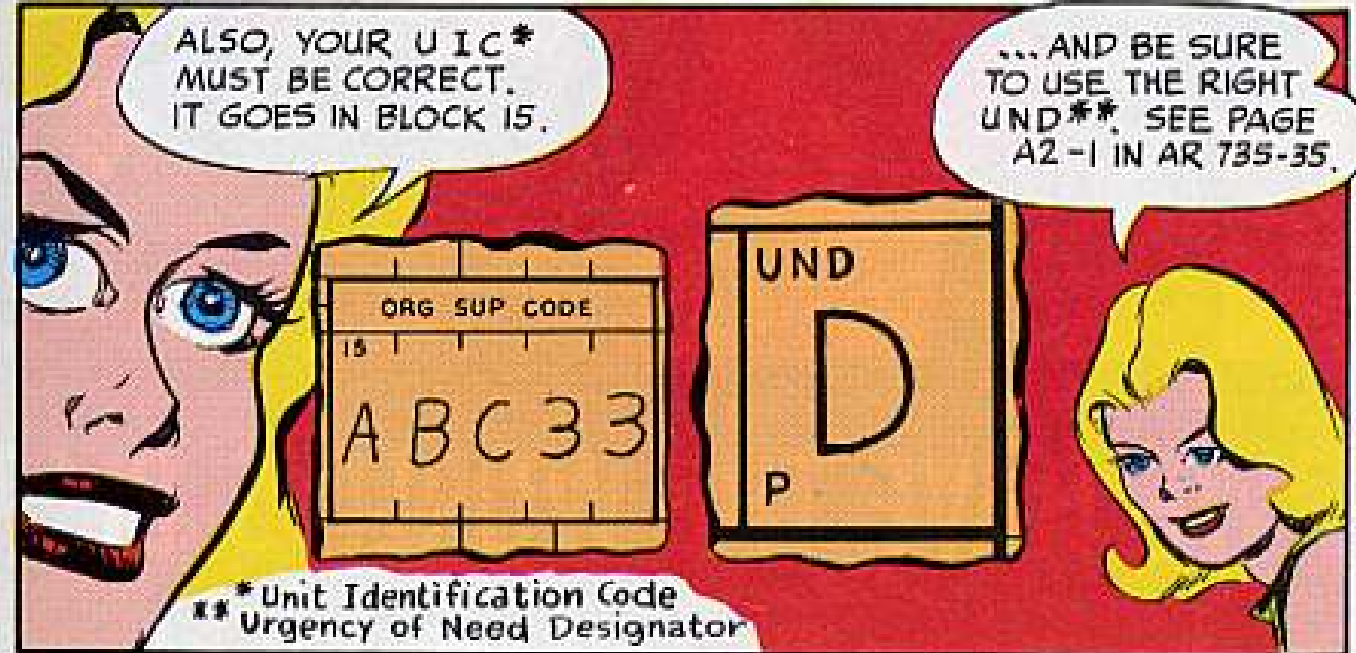
DEMAND	S
13	1



A CAPITAL "R" MEANS A RECURRING DEMAND... IT'S A SPECIAL SIGNAL FOR SUPPORT TO KEEP THE BINS FILLED FOR YOU!

FOR EXAMPLE, REQUESTS FOR STUFF YOU NEED ON A REGULAR BASIS, LIKE YOUR PLL ITEMS, TAKES AN "R".

A CAPITAL "N" MEANS A NON-RECURRING DEMAND TO THE SUPPLY TYPES... USE "N" ON A ONE TIME REQUEST—LIKE ON AN INITIAL PLL STOCKAGE REQUEST ...OR A REQUEST FOR MWO PARTS.



ALSO, YOUR UIC\* MUST BE CORRECT. IT GOES IN BLOCK 15.

... AND BE SURE TO USE THE RIGHT UND\*\*. SEE PAGE A2-1 IN AR 735-35.

ORG	SUP	CODE
15		
A	B	C33

UND
D
P

\* Unit Identification Code  
\*\* Urgency of Need Designator



# Joe's Dope Sheet

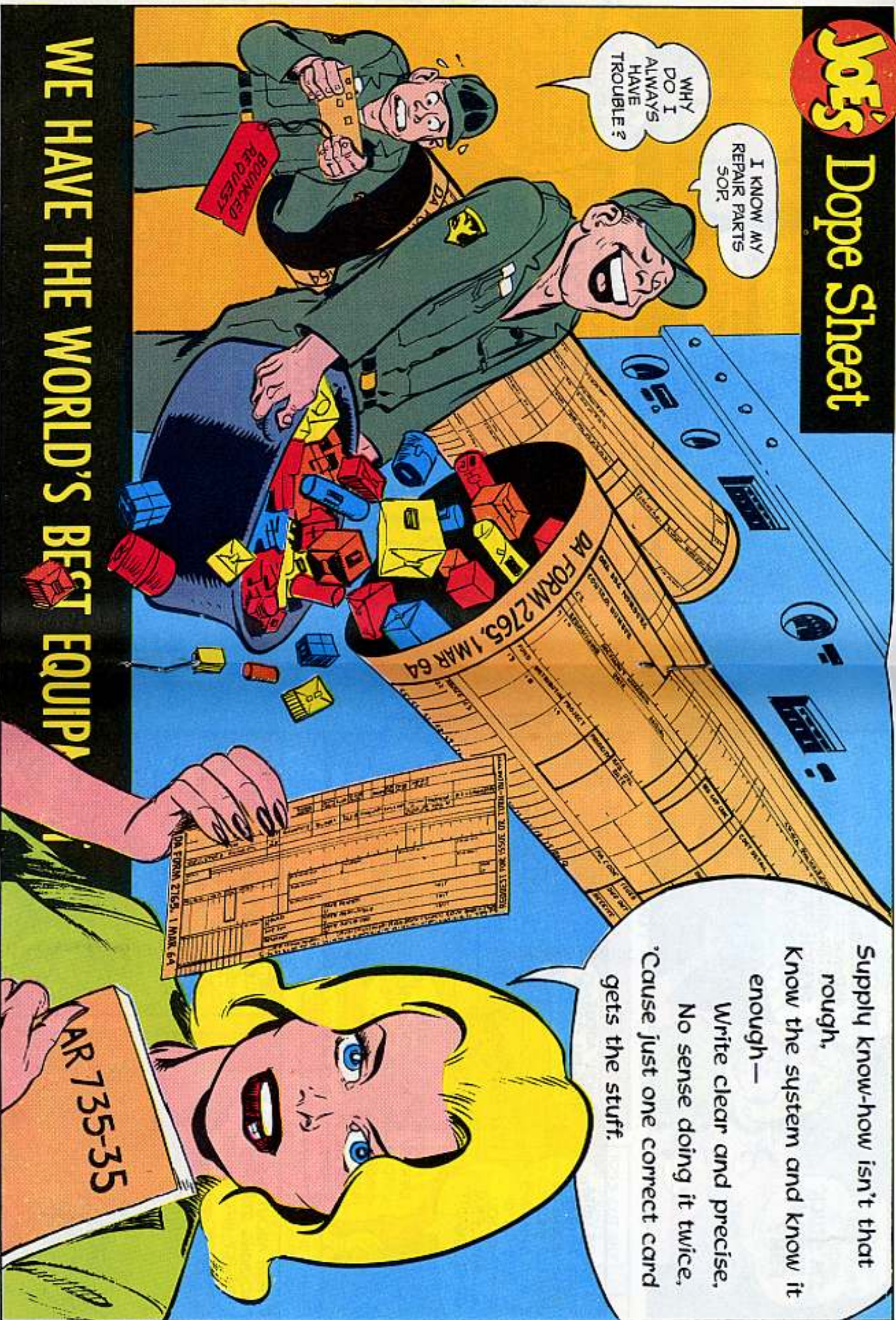
I KNOW MY REPAIR PARTS SOR.

WHY DO I ALWAYS HAVE TROUBLE?

Supply know-how isn't that rough,  
Know the system and know it enough—  
Write clear and precise,  
No sense doing it twice,  
'Cause just one correct card gets the stuff.

WE HAVE THE WORLD'S BEST EQUIPMENT!

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







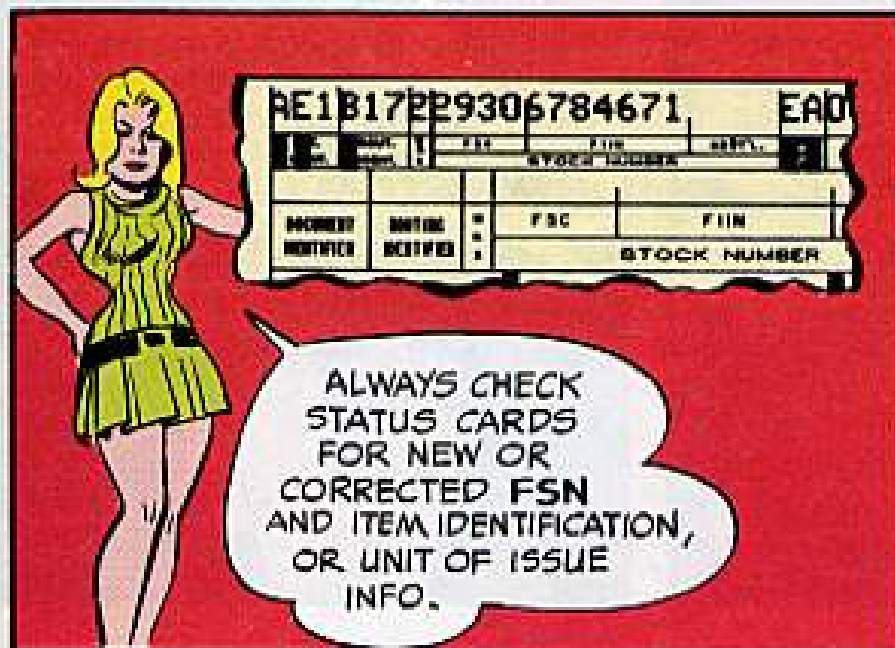




HOW ABOUT THE **NON-STOCKED** NON-FSN ITEMS IN THE SUPPLY MANUALS?

YOU **NUDGE** SUPPORT ON THE END ITEM, COMPONENT OR ASSEMBLY.... IF THEY **CAN'T** GET IT FOR YOU THROUGH THE SUPPLY SYSTEM OR BY GIVING YOU THE NEXT HIGHER ASSEMBLY OR KIT... THEY CAN CONTACT THE MANUFACTURER - OR EVEN HAVE IT MADE UP FOR YOU!

## NOW... ABOUT YOUR STATUS CARDS



RE1B17PP9306784671				EAD
GROUP	ITEM	UNIT	FIN	ASSEMBLY
STOCK NUMBER				
ISSUED	DATE	FSC	FIN	
REVISION	REVISION			STOCK NUMBER

ALWAYS CHECK STATUS CARDS FOR NEW OR CORRECTED FSN AND ITEM IDENTIFICATION, OR UNIT OF ISSUE INFO.



TOSS OUT ANY PRE-PRINTS WITH OUTDATED SUPPLY INFO AND BE **SURE** TO CORRECT YOUR REPAIR PARTS RECORDS.



BE SURE YOU **DIG** THE FOLLOW-UP ROUTINE... AND **ALWAYS** USE THE LATEST STATUS CARD ON FOLLOW-UPS. AR 735-35, PARA 4-7, HAS THE SCOOP.

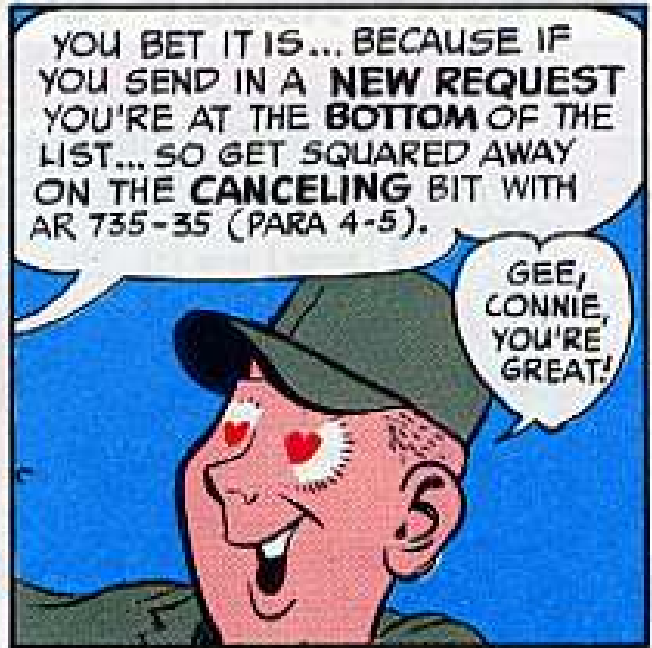
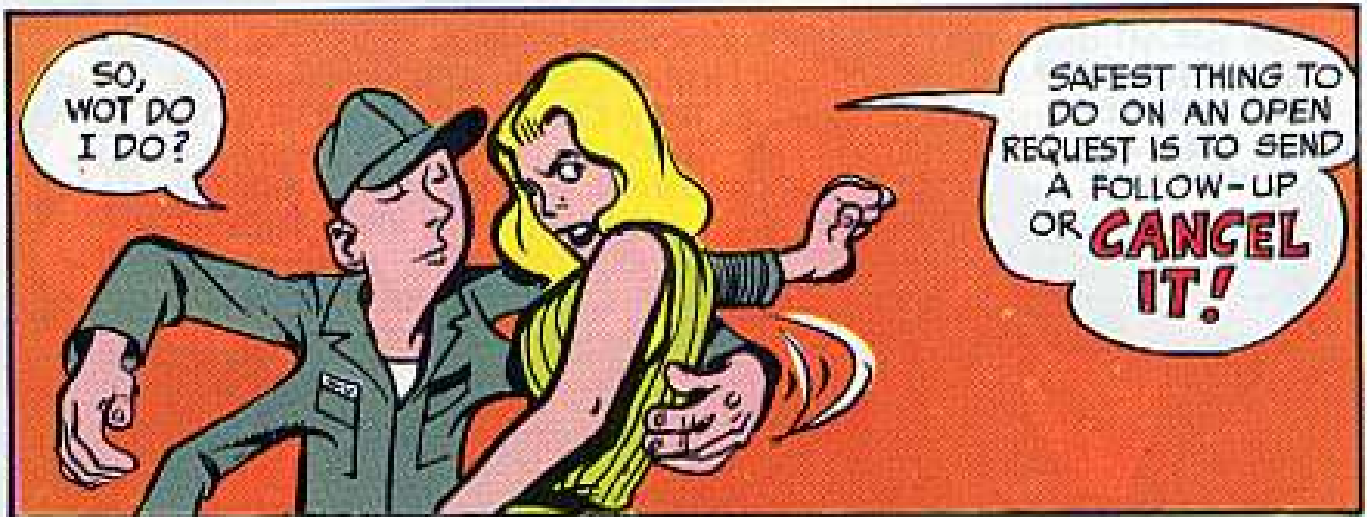


YEAH, WELL HOW ABOUT RE-ORDERS FOR THE ONES I'VE CANCELED, CONNIE?

GOOD QUESTION. FOR ONE... **NEVER** RE-ORDER ANY ITEM AS LONG AS THE ORIGINAL REQUEST IS OPEN, IT'S OPEN OF COURSE, UNTIL YOU RECEIVE THE CANCELA-TION STATUS CARD FROM SUPPORT.

8Q
SOUL ADV
THE STAT









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 5-3805-218-25P, Apr, Scraper, Earth Moving Towed; 18 Cu Yd Scoop, Le Tourneau Westinghouse CT-4.  
 TM 5-3805-232-25P, Apr, Loader, Scoop Type; DED, Four-Wheel Drive, Two Wheel Steer, SAE Street Bucket Cap 1 3/4 Cu Yd, SAE Rated Cap 1 3/4 Cu Yd, Hough H-60M.  
 TM 5-3895-259-12, Apr, Drier-Mixer, Bituminous-Concrete Materials, GED, 3 to 10 Ton Per Hour, Wylie PM-413-MIL.  
 TM 5-3895-259-25P, Apr, Drier-Mixer, Bituminous-Concrete Materials, GED, 3 to 10 Ton Per Hour, Wylie Mdl PM-413-MIL.  
 TM 5-4310-250-25P, Apr, Compressor, Rotary; DED, 250 CFM, 100 PSI; Davey M250 RPY.  
 TM 5-4310-256-15, May, Compressor, Recip, Air, GED, Hand Truck Mtd, Champion Pneumatic LP-332-ENG-3, LP-512-ENG-2.  
 TM 5-5420-202-10, Apr, Launcher, M60A1 Tank Chassis Transporting Bridge, Armored-Veh-Launched Scissoring Type, Class 60.  
 TM 5-6115-331-25P, Apr, Generator Set, GED, 18.9KW, DC, 84V, Hol-Gar CE-836-PM/WK.  
 TM 9-1025-200-12, C1, Apr, Howitzer, Towed, M114A1, Aux Propelled, M123A1.  
 TM 9-1055-201-14, C1, May, Launcher, Rocket, M20A1, M20A1B1.  
 TM 9-1090-201-12, C1, May, Armament Subsystem, XM16.  
 TM 9-1430-250-15P/5/1, Apr, Nike-Herc.

TM 9-1430-202-15P/2, C2, May, Hawk.  
 TM 9-1440-500-15P/1, C1, Apr, Hawk.  
 TM 9-2300-234-ESC/1, C1, May, Carrier, M113.  
 TM 9-2350-215-20, C1, Apr, Tanks, Combat, Gun, M60 & M60A1.  
 TM 9-4935-508-15P/2, C2, May, Hawk.  
 TM 11-5805-356-25P, May, AN/TCC-29, Terminal, Telegraph-Telephone.  
 TM 11-5815-305-15P, Apr, PP-3424 A/G, PP-3424 B/G Power Supply.  
 TM 11-5820-612-13, May, AT-880/U Antenna.  
 TM 11-5850-228-15, May, (QUO) Night Observation Device, Med Range.  
 TM 11-5895-223-25P, May, AN/MGC-19 Operations Central Teletypewriter.  
 TM 11-6125-210-12, May, PU-126/U, PU-126A/U, PU-126B/U Motor Generator.  
 TM 11-6125-226-12, May, PU-33A/C Motor Generator.  
 TM 11-6625-620-12, May, AN/UGM-1 Test Set, Teletypewriter.  
 TM 11-6650-273-15, May, (QUO) Binocular, Infrared.  
 TM 11-6730-208-25P, May, AN/PPP-1, Projector Set, Motion Picture Sound.  
 TM 38-600, May, Admin Use Veh Management.  
 TM 55-1510-202-10, May, O-1A.  
 TM 55-1510-202-20, May, O-1.  
 TM 55-1510-203-20PML, May, O-1A.  
 TM 55-1510-202-20PMP, May, O-1A.  
 TM 55-1520-204-20PMD, Jun, OH-13.  
 TM 55-1520-204-20PML, Jun, OH-13.  
 TM 55-1520-204-20PMP, Jun, OH-13.  
 TM 55-1520-206-10CL, C1, Apr, OH-23.  
 TM 55-1520-209-10, C11, Jun, CH-47.

TM 55-1520-209-20, C1, Jun, CH-47.  
 TM 55-1520-209-20PMD, Jun, CH-47.  
 TM 55-1520-209-20PML, C1, Jun, CH-47.  
 TM 55-1520-209-20PMP, C1, Jun, CH-47.

#### MISCELLANEOUS

LO 5-2420-206-15-2, May, DED, Tractor, Whld, Ind; DED, Med DBP, Clark 290M.  
 LO 5-3810-231-12-1, -2, -3, Apr, Cranes, Crawler, 60-Ton, DED, Hornschlager 1125 W/Eng Cummins NT-380-1, Winterized and Non-Winterized.  
 LO 5-3810-233-12-3, Apr, Crane, Wld Mtd, 20 Ton, 3/4 Cu Yd, Rough Terrain, American Hoist and Derrick Co, 2380, w/Engines Cummins Y8-265 Carrier and JN-6-1 Crane.  
 LO 9-1000-228-12, May, Guns, Moch, M1917A1, M1919A4; Mounts, Gun, Moch, M2 & Mounts.  
 LO 9-1025-200-10, Apr, Howitzers, Towed, M114A1, Aux Propelled, M123A1.  
 LO 9-1055-215-10, May, Launcher, Rocket, Multiple, M91.  
 LO 10-3930-243-12-1, Apr, Truck, Lift, Fork, DED, 10,000 lb Cap, 24-In Load Center, Pettibone Mulliken RTL10, Army MHE 199, W/Eng General Motors 6U53.  
 LO 10-3930-243-12-2, Apr, Truck, Lift, Fork, DED, Rough Terrain, 10,000 lb Cap, Pettibone Mulliken RTL10, Army MHE 199.  
 SB 700-20, Jun, Army Adopted Items of Material.  
 TB 9-2855-45, C1, May, Heater Kits, Trucks, 3/4 Ton, M56, M56B1, M43, M43B1, M37, M37B1, M201, M201B1.  
 TB 55-1520-206-20/6, Jul, OH-23.  
 TB 750-933-1/2, Apr, EIR and Maint Digest, Tank and Automotive Equip.

# HEY!

Got any buddies in the next outfit who don't get PS Magazine? Tell them to order 'em on a Form 12-4. Be sure it's the form dated 1 Dec 65. Their unit will get the number they order direct by mail every month.



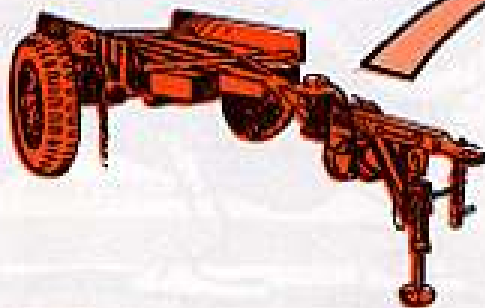




# HITCH-HIKER HITCH

Dear Editor,

These pictures show the trouble we had breaking cables and hoses on M296 2½-ton utility trailers. Underbrush and the support leg itself were always snagging lines.



Finally, we cannibalized a Hitch-Hiker from a junk truck-tractor and mounted it on a bracket like these pictures show. It solved our problem.

We have since found out the Hitch-Hiker is Part IHC-105820R91, and shows up in figs. 4, 33, and 34 of TM 9-2320-206-12.

Sgt. G. A. D.  
South Vietnam

HITCH-HIKER

CAN BE  
PUT UP  
OR REMOVED

THIS  
CAUSES . . .

. . . THIS.

BRACKET

(Ed Note—Fine field fix!)



## 2 WAYS TO TELL

Ever so often it becomes a problem deciding if an engine has had a modification applied to it. Particularly when the engine, or the entire vehicle, is a replacement item.

Well, there are two quick ways to tell . . . by data plate and log book.

First, TB ORD 1030 (Oct 63) shows the "Installation and Use of Overhaul and Overhaul/MWO Data Plates." So, in the case of a modified engine, a data plate like the one on page 2 of the TB should be staring back at you from the engine block.

For backup, your vehicle log book should contain a separate DA Form 2408-5 MWO Record for the engine only, showing a completed entry describing the same modification.

If both the data plate and MWO entry were overlooked, you can eyeball



the engine itself to hunt for an outside modification. But if it was an internal job, you'll just have to contact the engine shop that did the work to find out.

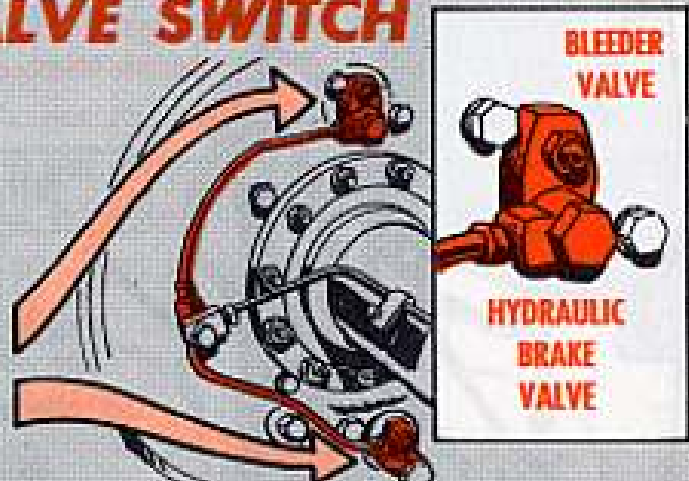
## BLEEDER VALVE SWITCH

Look on page 438 in TM 9-8024 (Oct 55) and you'll see a picture that may not be worth a thousand words but it's worth 20 real important words:

Wheel-cylinder-bleeder-valve-must-be-installed-in-top-hole . . . hydraulic-brake-line-must-be-connected-to-the-bottom-hole.

Some guys have been switching 'em around the other way.

What happens is, when the bleeder valve is on the bottom you'll do a bum



job of bleeding. The bleeder valve and the hydraulic line have got to be in the right place to do a good job of getting all the air from the line.





Dear Half-Mast,

So how do you check the oil level in the transmission of an M116 cargo carrier?

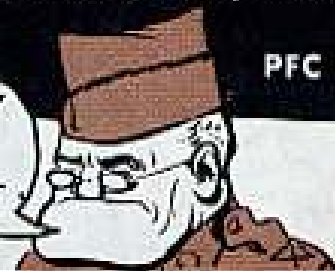
Page 59 of TM 9-2320-223-10 (Mar 65) says to run the engine in DRIVE position for 3 to 5 minutes, but page 8 of LO 9-2320-223-12 (May 65) says to run it in NEUTRAL. Which is right?

PFC J. A. B.

Dear Private J. A. B.,

Both. However, they need a little interpretation.

HERE'S THE CORRECT WAY TO MAKE Y'R DAILY TRANSMISSION OIL LEVEL CHECK!

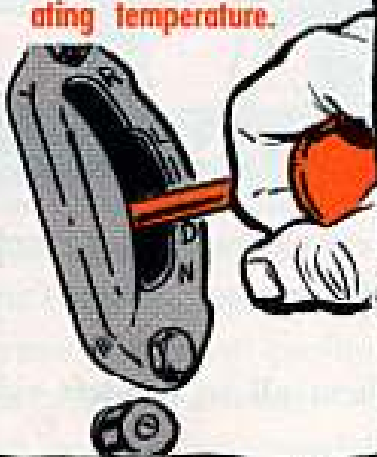


1. Before starting engine make sure oil level is not below COLD FULL mark on the gage.

COLD FULL

NOT BELOW

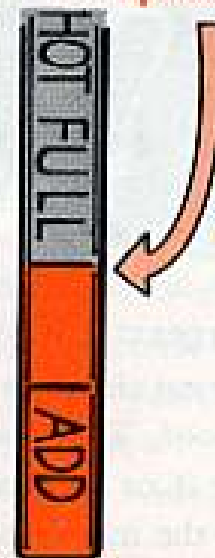
2. Start engine and run 3 to 5 minutes at idle speed (650 RPM) with brakes locked and transmission in D (drive) range to let the oil reach normal operating temperature.



3. After oil is at normal temperature, put the transmission in N (neutral) range.



4. Now check the oil level, and add oil if needed to bring level to HOT FULL mark on dipstick.



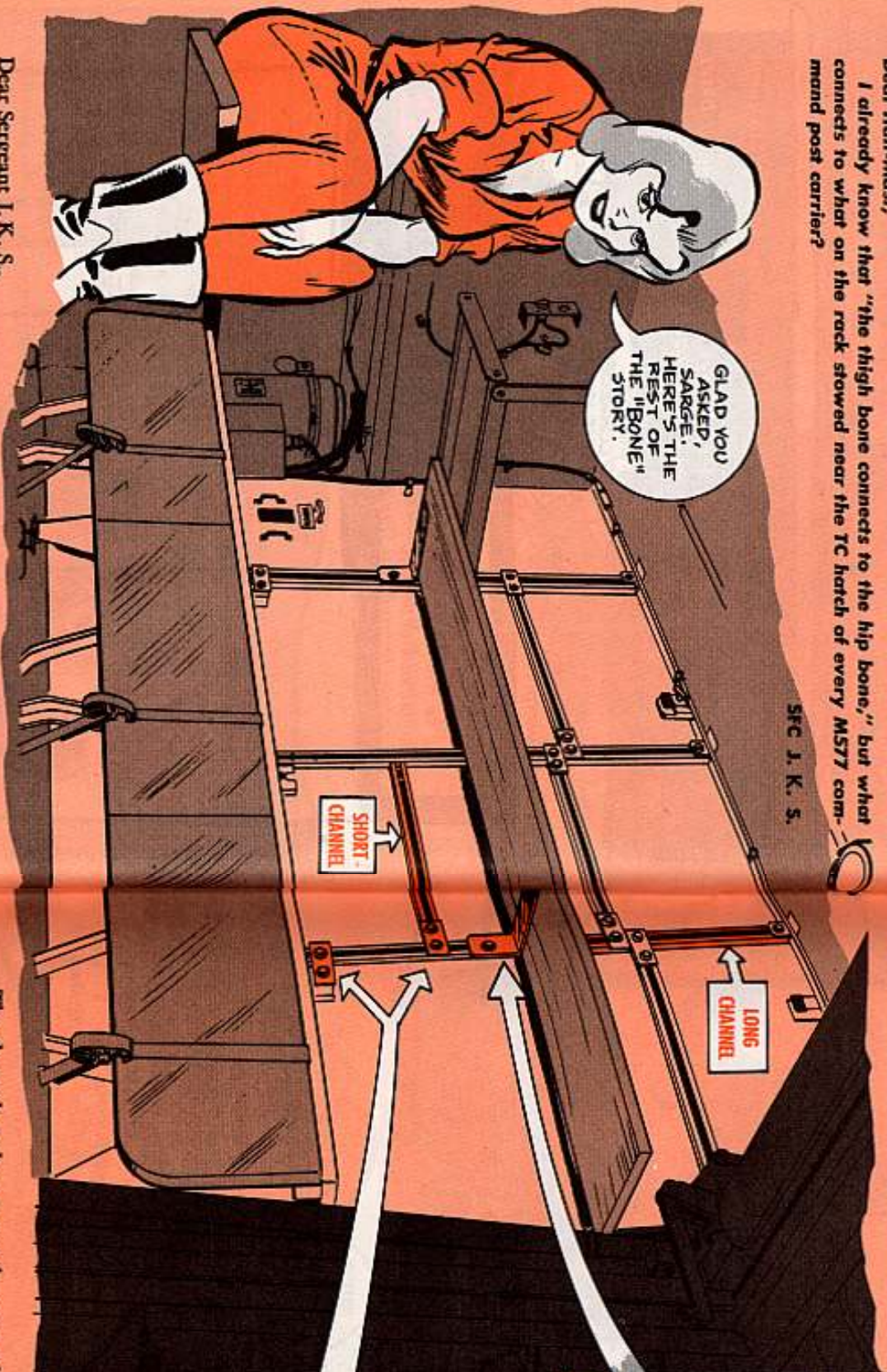
(Note: Be sure not to overfill because that could cause loss of power and overheating.)



# M577 WALL RACKS

Dear Half-Mast,  
I already know that "the thigh bone connects to the hip bone," but what connects to what on the rack stowed near the TC hatch of every M577 command post carrier?

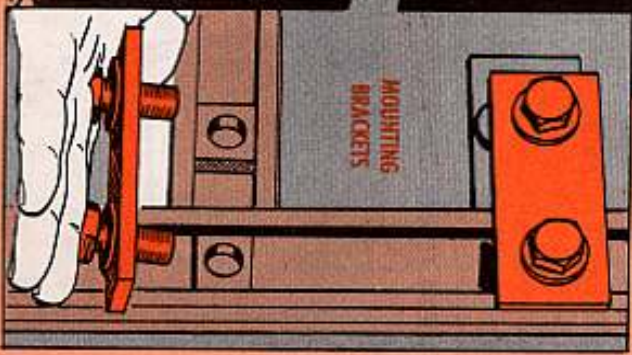
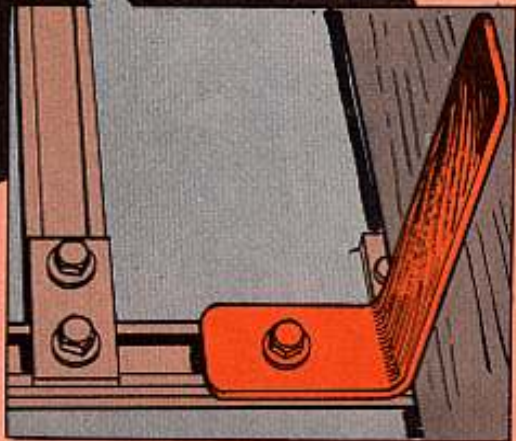
SFC J. K. S.



GLAD YOU ASKED, SARGE. HERE'S THE REST OF THE "BONE" STORY.

SHORT CHANNEL

LONG CHANNEL



Dear Sergeant J. K. S.,  
The long channels mount vertically inside the vehicle where lugs are welded to the roof. The 5 short pieces—2 of them make the stowage bracket—are attached if or as needed.

With the map board removed, you could attach them all to the left side if you wanted.

These channels can be put together in any combination you want depending on what else is in the way and what has to be stowed.

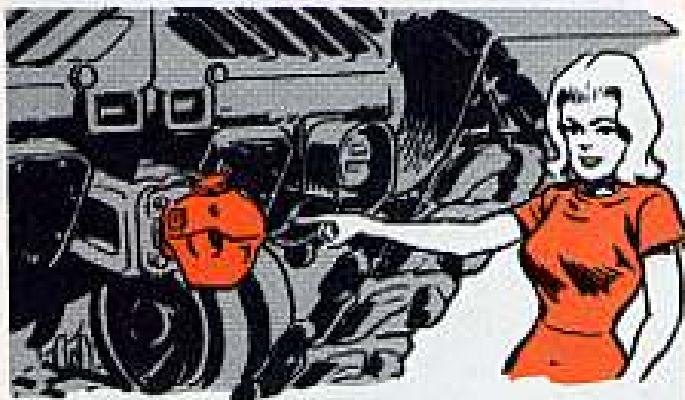
The channels make a strong base on which you can mount any kind of built-in you need. With a lot of brains and a little iron, surplus lumber, canvas straps (or whatever) you can have the kind of custom made built-in you need for your particular problems. If you want a shelf you can have a shelf at the exact height you want.

Get an OK from your CO and use any part of this rack for mounting and stowage. Keep the parts you don't use on the wall near the TC hatch. You never know when they'll come in handy.

Half-Mast

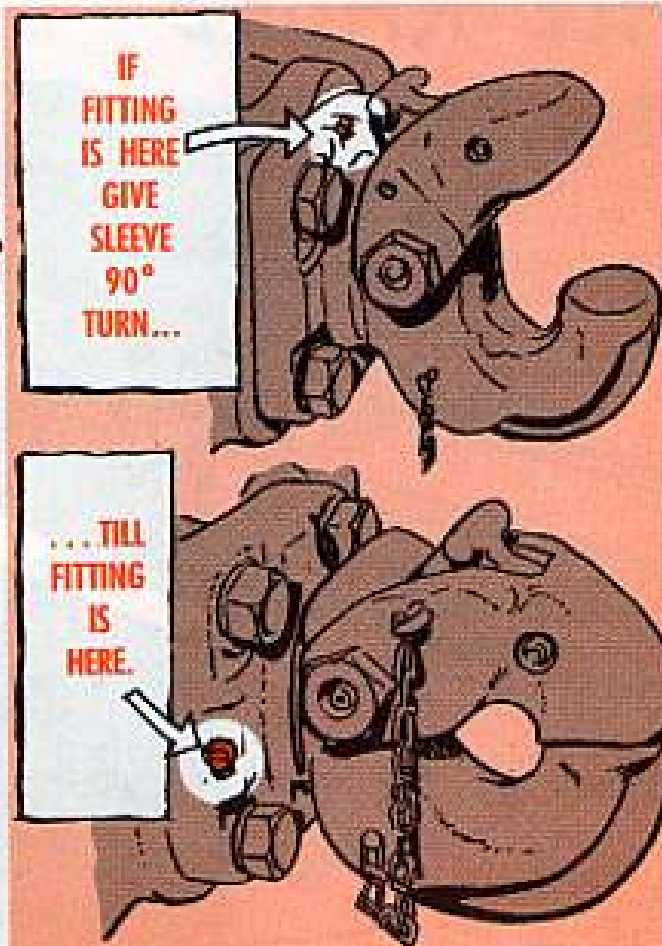


## M60 TANK PINTLE POOP



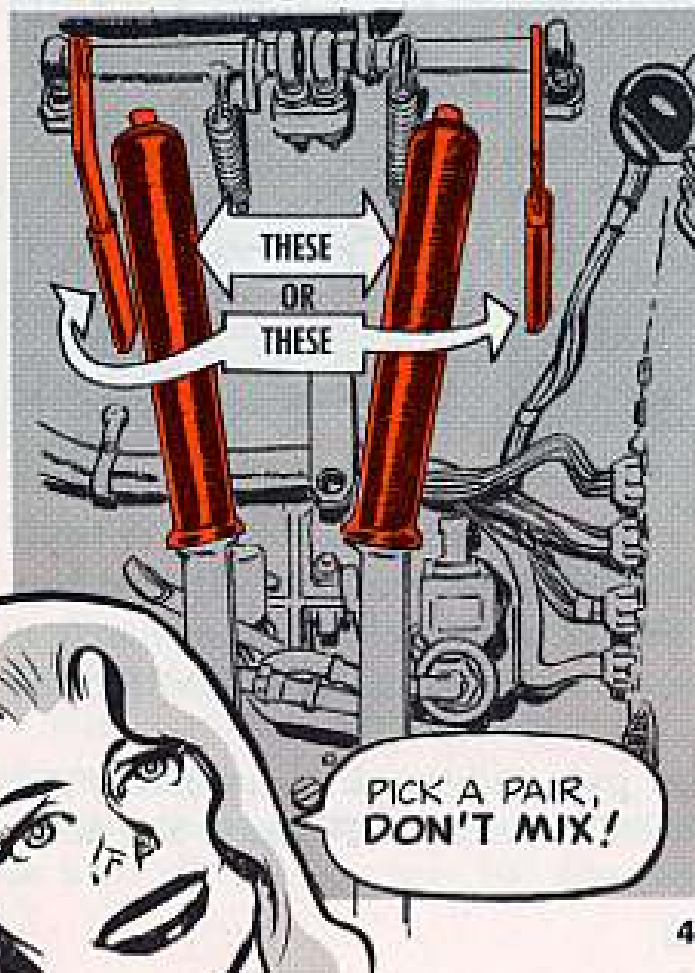
Take a look at the pintle on your M60-series tank or M728 (T118E1) combat engineer vehicle. Is the pintle sleeve lube fitting on top of the sleeve?

If it is, then take out the bolts and give the sleeve a 90° turn to the left, then install and tighten the bolts again. This'll give the lube fitting some protection from falling objects such as towbars.



M113A1 CARRIER FAMILY...

## STEER HANDLE HAZARDS



Double trouble!

That's what a double set of steer handles can give you if you try to use both sets at once.

Either the pivot or regular steer on your M106 mortar or M113A1 series vehicles will steer you right.

If you use both pivot and regular handles at the same time you can rip up some internal gears in your differential.

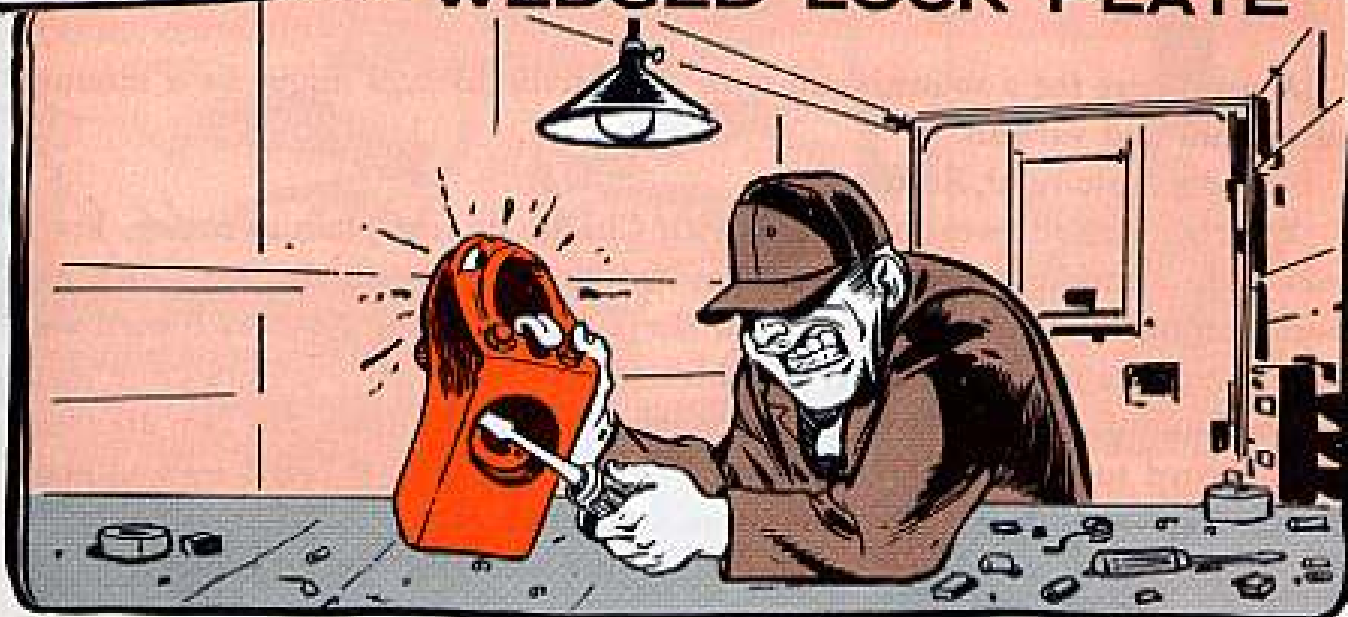
Remember it like this: Pick a pair (of steer handles) . . . never mix 'em.

You use pivot steer for sharp, short, turns on land, for water operation or for emergency stops, but never use pivot steer if you are going over 10 MPH or you'll damage your vehicle and prob'ly yourself as well.



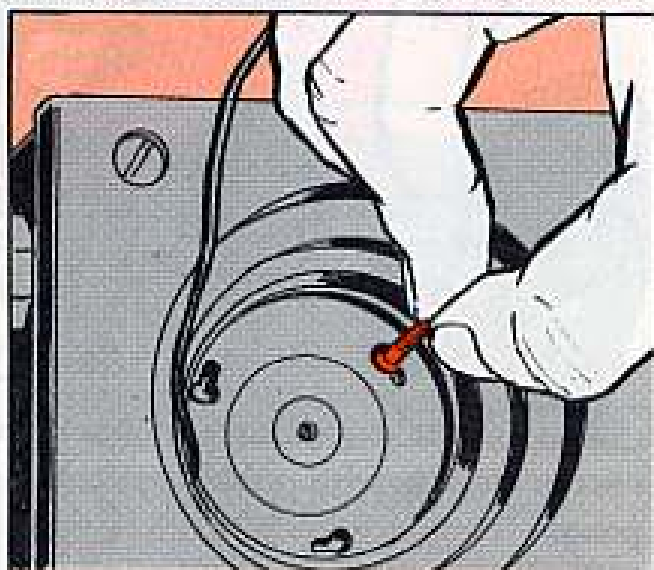


## THE CASE OF THE WEDGED LOCK PLATE



Is your IM-174/PD radiacmeter getting robbed of service 'cause the lock plate on the empty battery box is wedging in the case?

When the BA-1288/U and BA-1318/U batteries are out, the lock plate can jiggle off the lock plate screws and settle tight inside the case. Diggin' at it with a screwdriver or other pointed tool can damage the plate and radiacmeter case.



Free it with a No. 4, flathead screw. Fit the screw into one of the locking holes and gently pull out.

Your best bet is to put a piece of plastic insulating tape (FSN 5970-644-3169) on the lock plate, securing it to the side of the empty battery box. The tape's listed on Page 55 in the GSA catalog (Jan 66).



## CURE FOR AN ASIATIC SWITCHBOARD

A good cure for a switchboard with the Asiatic hiccups might be a mixture of alcohol and varnish.

Sound a little rich? Read on.

Whether you're sweating it out with Charlie or just plain sweating, bet a nickel the humidity's high. That soggy feeling breeds corrosion — which has been getting to the contact springs of the TA-208/P and TA-220/P cord and operator packs of the SB-86/P switchboard.

The kind of corrosion you get where the VC come calling can No. 10 your switchboard soonest. But, there's a PM cure that'll make it No. 1 — and keep it that way — with minimum sweat on your part.



Like, at the organizational level you can swab the contact springs at least once a month with rubbing alcohol (FSN 6505-299-8095) or cleaning compound, (FSN 7930-395-9542). A good dabber is a cotton swab, like Applicator, FSN 6515-303-8250.

After you've cleaned the springs, use a cotton swab to dab them with varnish (like moisture-fungusproof varnish FSN 8010-840-7494). Remember, a little varnish goes a long way, so try not to slop it on. Also, stop at the bend in the spring so's not to get it on the contacts. Varnish makes a good insulator — which you sure can do without on the contacts.

You'll find the varnish in SB 11-573 (Feb 64), Painting and Preservation Supplies Available for Field Use for ECOM Equipment.

Because of high humidity damage, the cord and operator packs should go to general support at least once a year for complete cleaning and re-varnishing.

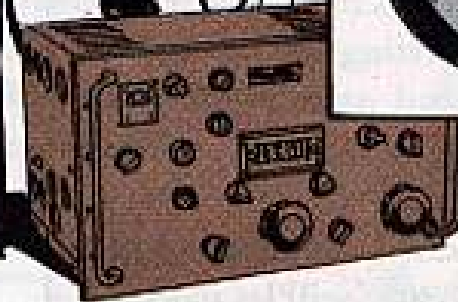


## SETSCREW SEEKING

THIS WHAT YOU'RE LOOKING FOR?

Dear Half-Mast,  
What's the word on setscrews for the bar-type knobs of the R-390( )/URR receiver?  
FSN, maybe . . . ?  
MSgt R. S. I.

FSN 5305-014-0861



Dear Sergeant R. S. I.,

FSN 5305-014-0861 will get you a setscrew for any R-390 knob on the front panel except for the big kilocycle and megacycle change control knobs. The stock number's listed on Page 805 in Fed Cat C5305-IL-A, Vol 3 (Jul 66).

## MOUNT CLAMP MOP UP

*Half-Mast*

EASY ON THESE CLAMPS... YOU'LL SWEAT GETTING NEW ONES!

Dear Half-Mast,  
We can't find the FSN for the clamps for the MT-851 mount with the AN/GRC-19 radio set. Any help?

SP5 H. L. G.



Dear Specialist H. L. G.,

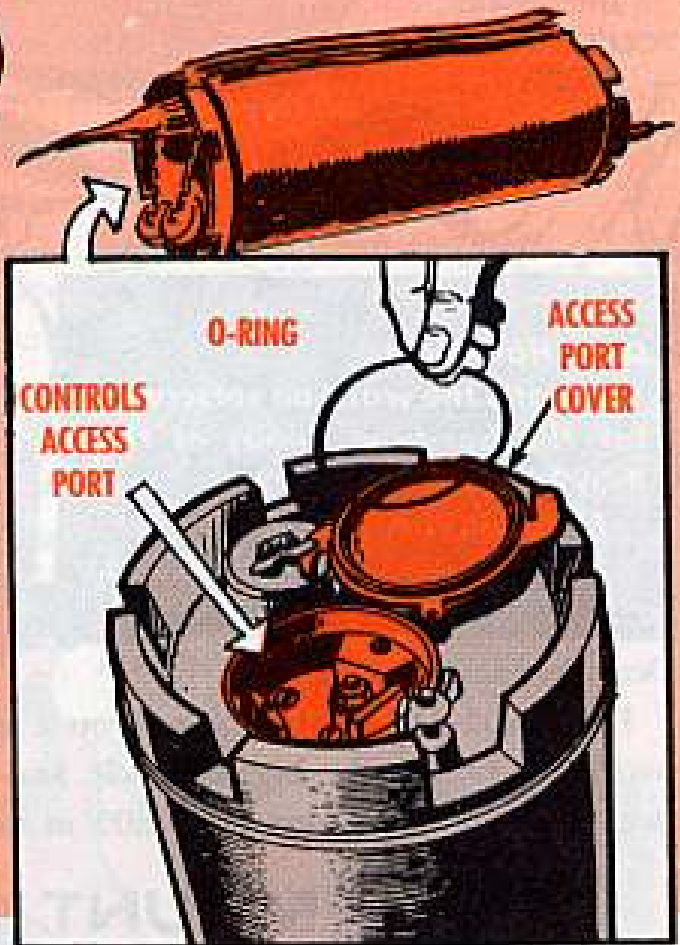
There's no FSN for the clamps. They're not maintenance items, so units have to be real careful about misplacing or abusing them. Replacement clamps have to be made by your support or depot. You might even get lucky and scrounge a matching clamp from your support's common hardware or by local purchase.

*Half-Mast*

## RING AROUND THE COVER

Are you about to boost the signal along the line with your AN/TCC-11 telephone repeater? That's fine.

While you're setting the controls in the J1 and J2 end assemblies, make certain the O-ring (preformed packing) is around the bottom of the controls access port cover. A missing O-ring (FSN 5330-290-8806) will let moisture in and corrosion'll be close behind. Then, whether the repeater's up a pole or on high ground, it'll make a bum booster.

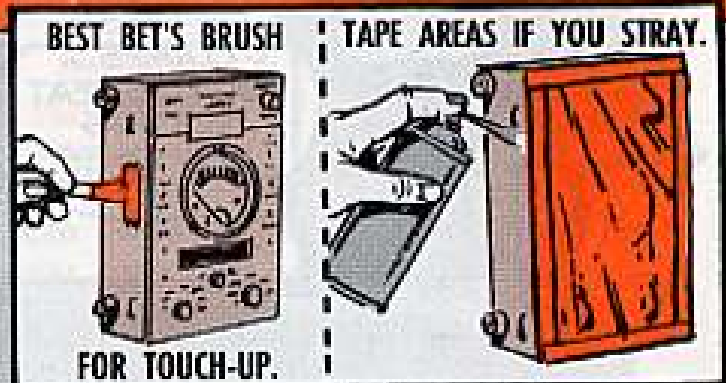


## SPOT YOUR SPOT, HOT SHOT!

When it comes to spot painting electronic test equipment, forget the Tom Sawyer method of whitewashing everything in sight.

F'rinstance, with a TS-352()/U multimeter or TV-7()/U tube tester, touching 'em up with paint where the sets need it is supposed to head off rust and corrosion, not create a salvage problem.

For touch up work your best bet's to use a brush and go sparingly with the paint.



If you have to use a spray can or gun make sure sensitive areas such as dials and air vents are taped. Same goes for nameplates, decals and other markings. Paint in the wrong place can damage a set beyond repair.

TB Sig 364 (Feb 64) with Change 1 has a lot of good tips on painting electronic equipment.



# YOUR DA FORM 2404

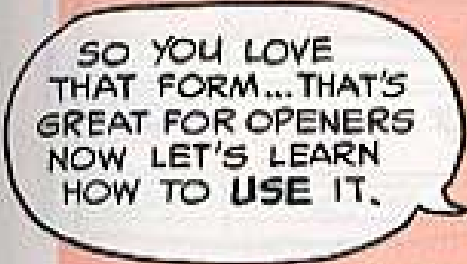


You've gotta live with it—day by day!

So, learn to get along with DA Form 2404—and to write its language.

DA Form 2404 has 2 operator/crew uses. (1) It's a worksheet for making Before-During-After-Operational checks—let's call 'em BDAOC. And it's for making Equipment Serviceability Criteria (ESC) ratings. As an operator or crewman, you'll be doing the BDAOC, and—if the equipment is required to be reported on DA Form 2406—you'll use DA 2404 along with the ESC TM to make the numerical rating for each point.

For both of these operator/crew uses of the DA 2404, you fill out blocks 1 thru 5 the same way. But entries in blocks 6 and 7 are different.



EQUIPMENT INSPECTION AND MAINTENANCE WORKSHEET (TM 38-750)							
1. ORGANIZATION <b>CO A. 21ST INF BN</b>				2. NOMENCLATURE AND MODEL <b>TRUCK, M151</b>			
3. REGISTRATION/SERIAL/PSN <b>6F8942</b>		4. MILES <b>1423</b>	5. HOURS	6. ROUNDS FIRED	7. HOT STARTS	8. DATE <b>6091</b>	9. TYPE INSPECTION <b>ESC</b>
7. APPLICABLE REFERENCE							
TM NUMBER <b>TM 9-2320-218-ESC</b>		TM DATE <b>16 FEB 66</b>		TM NUMBER		TM DATE	

When you're making the ESC rating, the block 6 entry is "ESC," and the block 7 entry is the ESC TM number and date.


DA FORM 2404  
1 JAN 64





Here's how to complete the operator/crew entries for the ESC use of DA 2404:

**USE**

ESC rating (as required).

**WHEN**

As required (rating will be needed for entry on DA 2408-3, submitted quarterly).

**OPERATOR ENTRIES**

Col a, ESC item No.  
Col b, ESC rating (numerical).  
Col c, ESC item nomenclature.  
Col e, Overall ESC rating. (GREEN, AMBER or RED).  
Block 10, signature and rank.

To maintenance supervisor for checking, but retain (preferably in log binder) till next ESC rating is completed.



TM ITEM NO.	STATUS	DEFICIENCIES AND SHORTCOMINGS	CORRECTIVE ACTION	INITIAL WHEN COMPLETED
1	10	TIRES		AMBER
2	10	BATTERIES		
3	10	INTEG. BODY AND FRAME		
4	1	INSTRUMENT ACCESSORIES		
5	10	ENGINE		

Here's how to complete the operator/crew entries for the BDAOC uses of the DA 2404 for different types of equipment:



For the Before-During-After checks (BDAOC, the block 6 entry is "Operator Daily" (or "Crew Daily" for aircraft), and the block 7 entry is the number and date of the equipment operator's TM (or -20PMD, PMI or PMP for aircraft).

TM NUMBER	TM DATE	APPLICABLE REFERENCE	TM NUMBER	TM DATE
TM 9-2320-218-10	17 OCT 62	OPERATOR DAILY	1 MAAB3	

**FOR EQUIPMENT WITH**

**LOG (EXCEPT AIRCRAFT)**

THIS ONE DON'T APPLY TO YOU AIRCRAFT!

**USE**

BDAOC on items that have a log (para 4-26, TM 38-750)—except aircraft.

**WHEN**

Each day of equipment use.

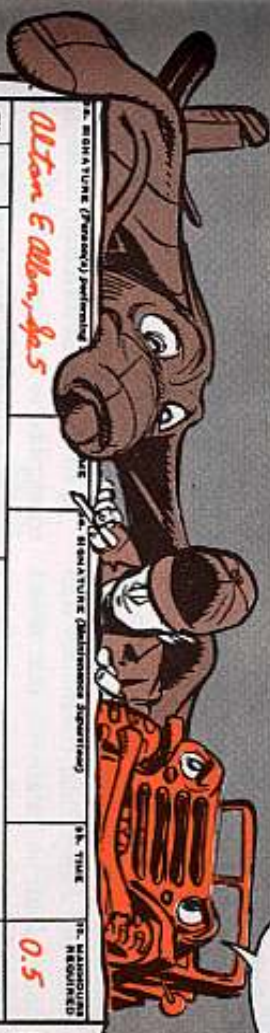
**OPERATOR ENTRIES**

Col c, date only (with initials in col e) if all faults found can be corrected without use of a part.  
After fault is found that requires use of a part (and entry on DA 2408-3) or that operator can't correct:  
Col a, operator's TM item No.  
Col b, status symbol (required by fault).  
Col c, brief description of fault.  
Col d, "DA Form 2408-3" if you correct fault by replacing part.  
Col e, initials (after correction of fault).  
Block 10, manhours required to correct fault.  
Block 8a, signature and rank.

**DISPOSITION**

After fault entry is made, to maintenance supervisor for checking (and further action if required).

TM ITEM NO.	STATUS	DEFICIENCIES AND SHORTCOMINGS	CORRECTIVE ACTION	INITIAL WHEN COMPLETED
		6122		0.5
		6123		0.5
		6124		0.5
22-1	✓	GASOLINE CAN MISSING.	DA FORM 2408-3	0.5
23-2	⊗	HANDRAKE WON'T HOLD ON INCLINE.		0.5





**USE**  
BDAOC on aircraft.

**DISPOSITION**  
Attach to DA 2408-13 for the day.

**WHEN**  
Each day of equipment use.

**MECHANIC (CREW) ENTRIES**  
Col a, Item No. from aircraft -20PMD, -20PMI or -20PMF.  
Col b, status symbol required by fault — in red.  
Col c, brief description of fault.  
Col d, "DA Form 2408-13" for any fault that affects flight status, "DA Form 2408-3" for correction that doesn't affect flight status; that organizational mechanic can correct.  
Col e, initials (when fault corrected or transcribed to DA 2407 or DA 2408-13).  
Block 10, manhours for inspection and correction of faults.  
Block 8a, signature and rank.

FOR EQUIPMENT WITHOUT LOG

1. THE NUMBER	2. THE DATE	3. THE NUMBER	4. THE DATE
TM 55-15220-210-20PMD	1 JAN 66		
INSTRUCTIONS - Enter the number of the equipment listed in the instructions with the correct member.			
1. THE NUMBER	2. THE DATE	3. THE NUMBER	4. THE DATE
16		DA FORM 2408-3	21 JAN 66
31		DA FORM 2408-13	21 JAN 66
5. THE NUMBER			
6. THE DATE			
7. THE NUMBER			
8. THE DATE			
9. THE NUMBER			
10. THE DATE			
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42. THE DATE			
43. THE NUMBER			
44. THE DATE			
45. THE NUMBER			
46. THE DATE			
47. THE NUMBER			
48. THE DATE			
49. THE NUMBER			
50. THE DATE			

**USE**  
BDAOC on item that does not have a log (para 4-26, TM 38-750).

**DISPOSITION**  
To maintenance supervisor for checking after fault found (or daily, if required by command).

**WHEN**  
When fault is found (or each day of use,) if command requires it.

**OPERATOR ENTRIES**  
When command permits use for more than 1 day:  
Col c, date only if no fault found that requires use of part (with initials in col e).  
After a fault is found:  
Col a, operator's TM Item No.  
Col b, status symbol required by fault.  
Col c, brief description of fault.  
Col d, actual corrective action (such as "Tightened," "Cleaned," or "Adjusted").  
Col e, initials (after correction).  
Block 10, manhours required to correct fault.  
Block 8a, signature and rank.

WATCH DA FORM 2408-14

1. THE NUMBER	2. THE DATE	3. THE NUMBER	4. THE DATE
TM 11-5820-498-10	5 NOV 62		
5. THE NUMBER			
6. THE DATE			
7. THE NUMBER			
8. THE DATE			
9. THE NUMBER			
10. THE DATE			
11. THE NUMBER			
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46. THE DATE			
47. THE NUMBER			
48. THE DATE			
49. THE NUMBER			
50. THE DATE			

Normally the operator or crewman who finds a fault makes entries in columns d and e only if he corrects the fault. But a crew chief (mechanic) who finds a fault on an aircraft that affects flight status enters "DA Form 2408-13" in column d to show that the fault was



SEE! IT AFFECTS THE FLIGHT STATUS! PUT IT ON DA FORM 2408-13!

transcribed there. Otherwise, column d and e entries are made by the maintenance supervisor.  
Even though uncorrected faults are transcribed to DA Form 2408-14 when this is permissible, the operator/crew should check DA 2408-14 before making entries on DA 2404. Uncorrected faults on DA 2408-14 don't need to be re-listed day by day on DA 2404. Of course the fault should be re-listed on DA 2404 if it gets more serious. And remember this: Besides keeping



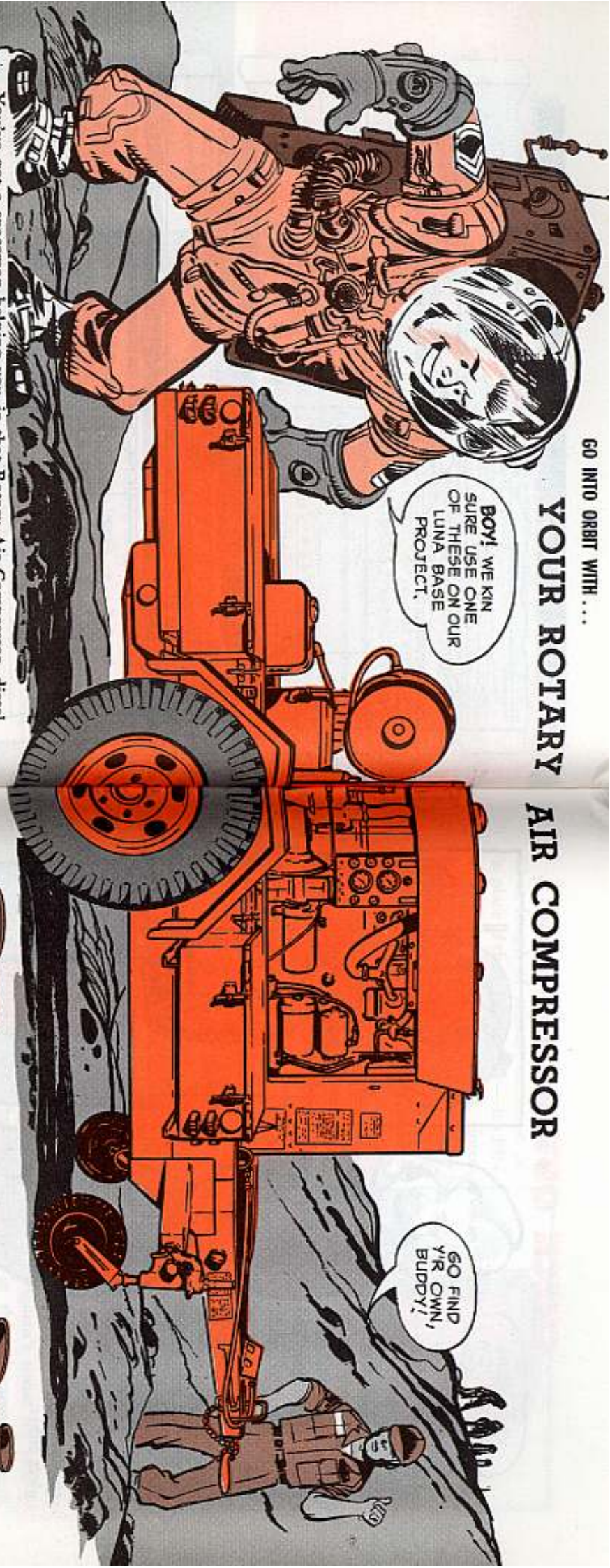
NOW HE TELLS ME ABOUT DA FORM 2408-14... AFTER I GET ALL THESE ON THE 2404.

an eye on the equipment and DA 2408-14, you want to watch the other log forms—especially DA 2408-1, 2408-2 and 2408-3. This 1-2-3 check will tell you how your equipment stands on periodic PM services. (The DA 2408-1, daily, has the dates these services are due, DA 2408-2 and DA 2408-3 show the last time the services were performed.) Also, DD 314 is the official schedule of periodic services due.



GO INTO ORBIT WITH...

# YOUR ROTARY AIR COMPRESSOR



BOY! WE KIN SURE USE ONE OF THESE ON OUR LUNA BASE PROJECT.

GO FIND Y'R OWN, BUDDY!

You've got a spaceman helping you in that Rotary Air Compressor, diesel drive. No astronaut's hid in the works, true, but the muscle under that hood will claw through mountains and put your Army right where it needs to go here on terra firma.



THERE ARE 4 MAIN THINGS YOU HAVE TO DO TO TAKE CARE OF YOUR GROUND-EATING FRIEND, LIKE —

The right **OIL.**

The right **CHECKOUT.**

The right **RUN.**

The right **SHUTDOWN.**

That's IO's gospel, and you'd better believe it. It tells the one and specific kind of oil you want in that air-shoving end. Some types you may have trouble finding arc:



MODEL	OIL TYPE	FSN	QUANTITY
Davey M-210-RP	2190T	9150-235-9061	5-gal drum
Joy RA210 series	2110	9150-223-4137	5-gal drum
Davey M250RPV and Joy 250 series	2110TH	9150-582-5480	55-gal drum

That 2110TH is popular stuff in the air-cramming business — Ingersoll-Rand DR315s and DR-600s use it too — and don't forget the TH part of the spec.

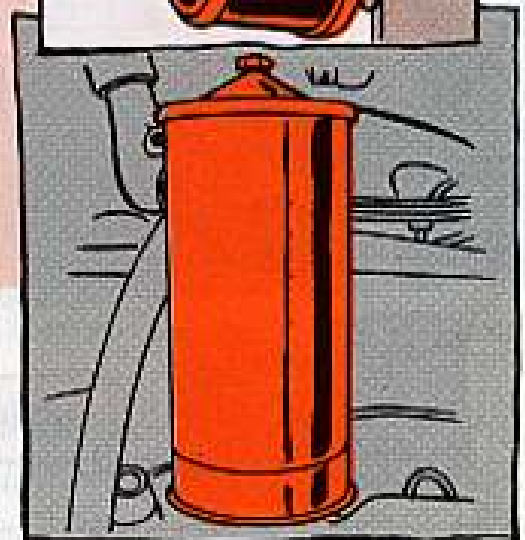
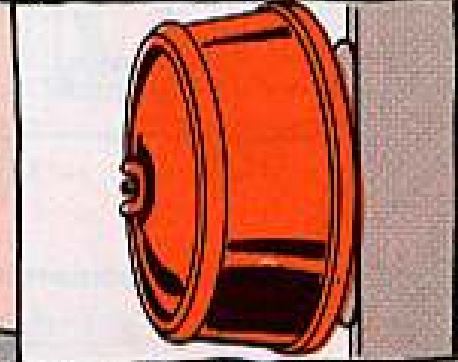
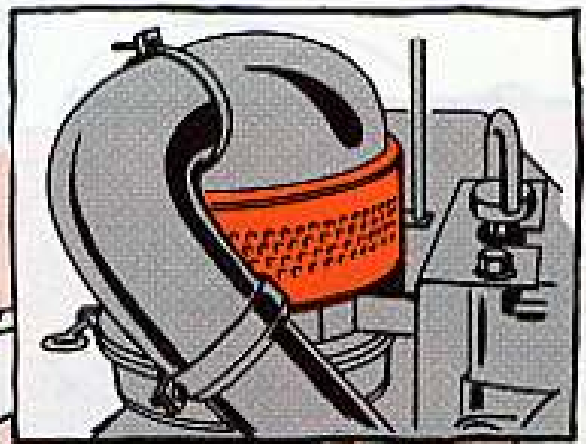




# CHECK OUT YOUR FILTERS

KEEP YOUR EYE ON 'EM.

You've got 4, and 3 of them can gang up on you any time. That is, intakes on engine air and compressor air can choke up within minutes of each other, and you'd better be ready with fresh underwear for both when it happens. Then you have to watch what goes on in that oil separator element—it's strictly not built for overtime work. The 4th one, on the engine oil, you can't neglect either.



Here is the word on the critical ones.

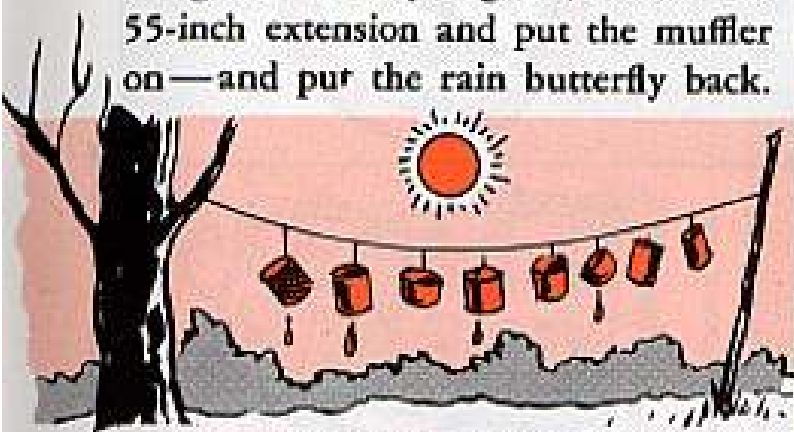
ITEM	MFR CODE	PART NUMBER
Engine Air, Davey 250's Engine Air and Compressor	18265	P10-5642
Air Intake, Joy 250's (FSN 2940-225-4832)	00736	200146-07
Compressor Air, Davey 250's	18265	P10-3055
Oil Separator, Davey 250's	00736	200508
Oil Separator, Joy 250's	00736	200658

What, only one FSN? Correct—but you can order 'em by part number. And there's a little trick that'll provide life insurance for those air intake insides, especially on your Davey, if you don't have a muffler.



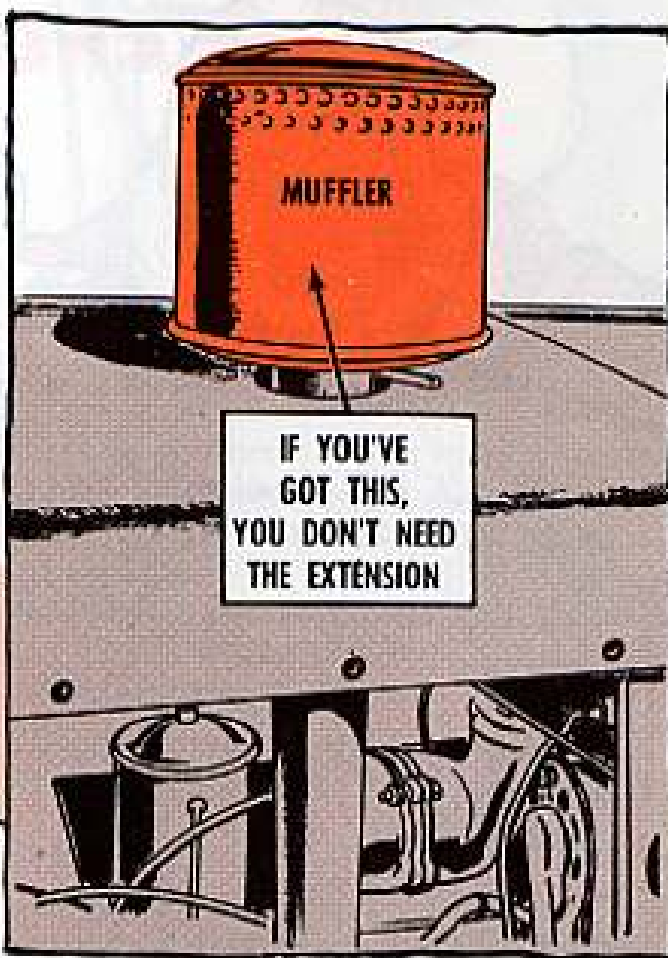
If that's the make you've got, put a 55-in length of exhaust extension on in place of the rain butterfly — it's FSN 4720-595-4146, hose, metal, interlocked, unpacked. And point it away from the air intakes.

FSN 2990-225-4838 gets you a muffler from Fed Cat C2990-IL-A-CB6 (Aug 66). When you get it, take off the 55-inch extension and put the muffler on — and put the rain butterfly back.



No matter what pedigree rig you've got, but especially if it's a Davey 250 CFM, you'll need a supply of spare innards if you're to work in the field. Washing the Davey's engine air filters in non-sudsy cleanser is fine — but they take 2 days to dry.

But wash, change or whatever, those filters are there to protect the insides



of your rig. Dirt in the air lines and exhaust soot in your carburetor will make a hangman's noose for sure — and dirt in that aircrammer equals stuck rotors, broken vanes, bent shafts, and an unhappy crew staring right straight at you.



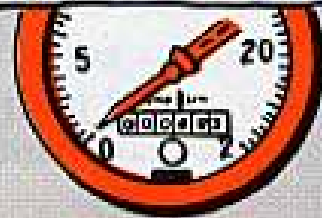


# CHECK OUT YOUR ENGINE... BEFORE YOU START

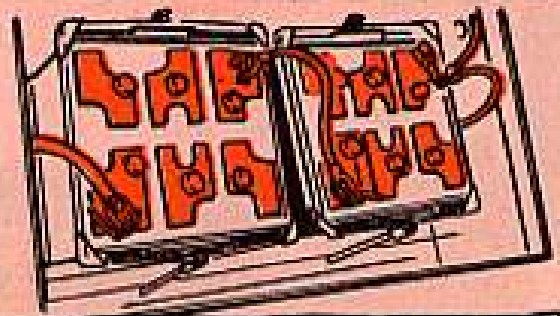


SO, YOU'VE BEEN WORKING FOR A HALF HOUR AN' YOU'RE **STILL NOT STARTED?** T-O-U-G-H. THE PRE-START CHECK-OUT IS THE MOST, AND TIGER, WE'VE GOT MORE TO DO!!

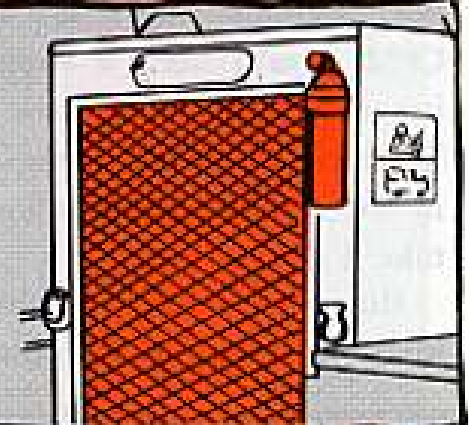
**CRANKCASE OIL**—Level right? Hour-meter say it's time to change?



**ELECTRICAL SYSTEM**—Terminals tight? Electrolyte over battery plates? No bare wires that need tape? Generator belt sound?

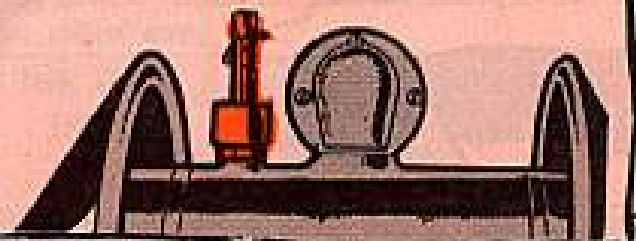


**RADIATOR**—Coolant within inch of top? Hoses tight, no drips or cracks?

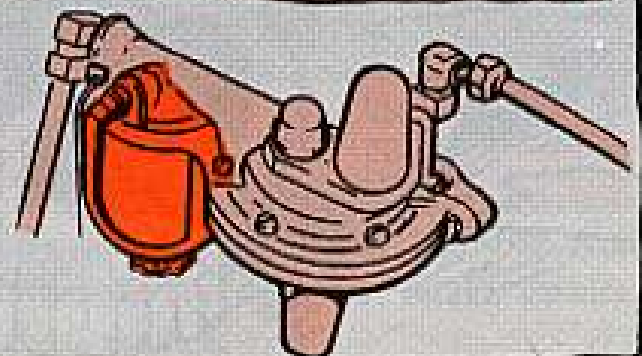


**ACCESSORIES**—Fire extinguisher charged? Tools, pubs and forms in order? Bolts and clips tight?

**SAFETY VALVE**—Free, ready and willing?



**FUEL SYSTEM**—Tank full? Sediment filter clean? Joints tight?





# CHECK OUT YOUR COMPRESSOR... BEFORE YOU START

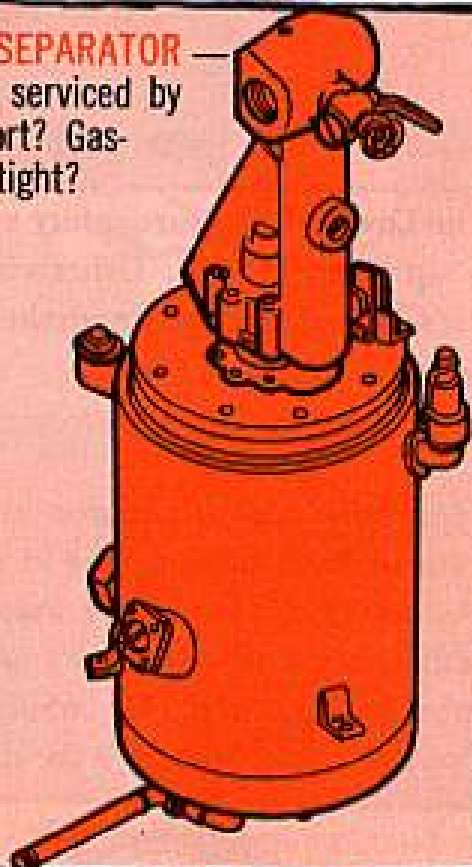
THAT'S JUST HALF OF YOUR ONCE OVER! NOW BEND A GAZE TO WHERE THE MUSIC COMES OUT, THE AIR-CROWDING END!!



If you're new on the job or if somebody else has been in the saddle before, or if you just plain prefer this work to diggin' foxholes, check 3 more things —

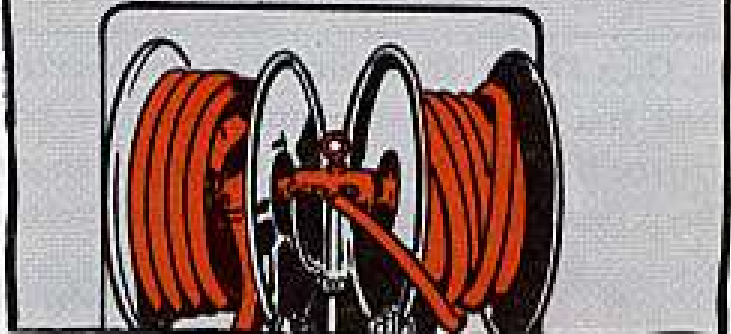
## OIL SEPARATOR —

Been serviced by support? Gas-kets tight?



**LINES** — Solid, no kinks or breaks?

**COUPLINGS** — Facings smooth, gaskets good?

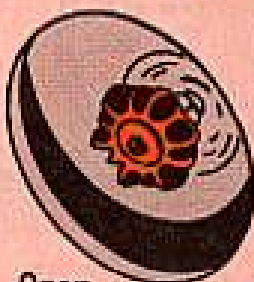


If support's not around, and the records are messed up so you can't be sure, you can feel that oil separator's pulse by taking the lid off. If it's smeared by tough varnish, not just normal sludge, that's a red flag and a sign for support cleanout and oil change.

# NOW - LET'S START

If everything checks out, the worst is over. Next, get —

## SERVICE VALVE —



Open.

## FUEL SHUTOFF —



Open.

## OIL PRESSURE GAGE —



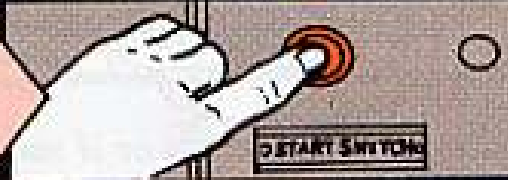
Reset Button Pushed (if you have one).

**CHOKE** — Lever Out, if any.  
On Daveys, stop cable out.



This brings on 5 critical minutes of a fine morning.

Tap **START BUTTON** to inch over a little at a time.



If she turns over OK — push **STOP CABLE** and **SAFETY CONTROL** in, if you're a Davey . . . flip **IGNITION SWITCH** on if you're a Joy . . . and start.



On a Davey, that Safety Control overrides the Low Oil Pressure safety switch, and you keep shoving until pressure builds up over 15 PSI. Otherwise the enjyne'll try to shut down on you even after it's kicked off. On Joy makes, just keep pushing the Start Button until pressure's built up.

### WARMUP

GET THOSE MOLECULES MOVING.

A fast idle does it. Engine and air compressor both have to get in shape. The oil molecules in those rotors have to limber up, and that radiator temperature has to bump 140-165°F to let your power loose. So here's the drill —

**CHOKE** — Closed soon's the kicker's running on its own.



**TACHOMETER** — Operating and steadying down.



**AMMETER** — Charge going to battery.





**AIR LINE COCKS** — Open to blow condensate until just clean air comes out.

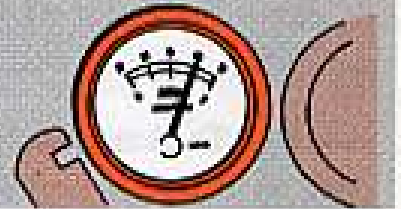
Maybe you've got a blow-thru unit or a moisture trap, but you'll wait until your engine temp gage says 140° to close the Compressor Unloader if you've made a cold-weather start. You can start coaxing in the Idle Control then too.



Now maybe you've got a lever air control, or maybe a globe valve. On a Davey, you can wreck your fuel line and fuel gage pickup wire by tromping on 'em reaching for the valve, so watch where you put those boots.



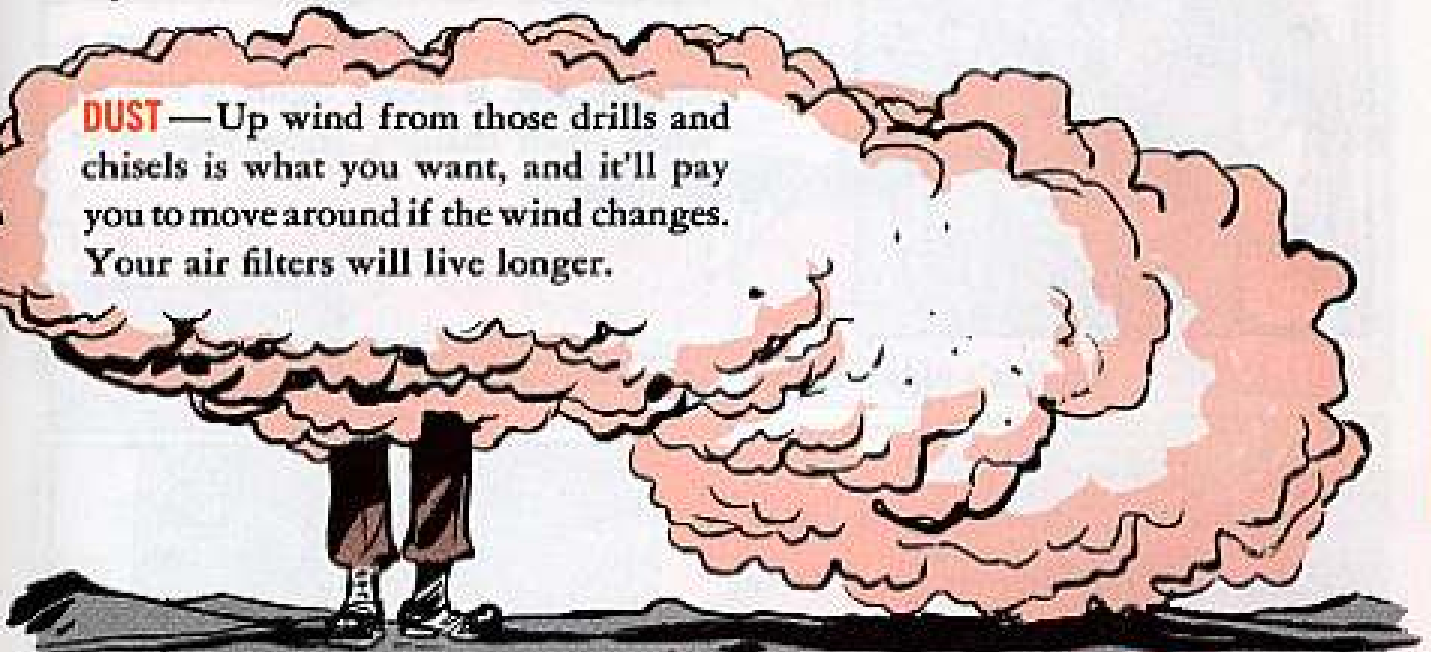
Hawkeye that Pressure Gage. When it hits 100 PSI, you're ready for customers. If you took good care of that pre-start routine, you got a head start on a good . . .



## DAY'S **RUN**

But there're things you've got to watch. That's what for you got issued a set of eyeballs and hands and brain cells. Be careful of:

**DUST** — Up wind from those drills and chisels is what you want, and it'll pay you to move around if the wind changes. Your air filters will live longer.



**OIL TEMPERATURE** — If it gets in the red, you know your rig needs more'n an APC.

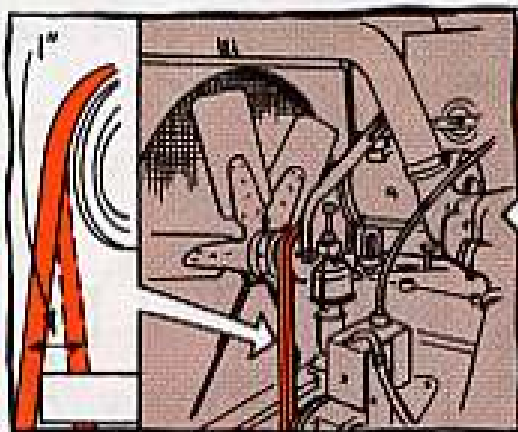


**TILT**— Avoid like a fat blind date with buck teeth. If you lean more than 15°, especially the long way, you'll get oil starvation and bearing burnouts. Maybe the hill slopes, but your rig needn't.



**HOSES**— Keep out of the way and kink-free. A busted high-pressure line can whip around and wham you right into the marble muster.

**NOISE**— Tanker's ear plugs will keep you from getting deaf to high-pitched sounds. That goes for the guy on the tools, too. Rifle cleaning patches or cotton wads help, but best get the medic to fit you with plugs.

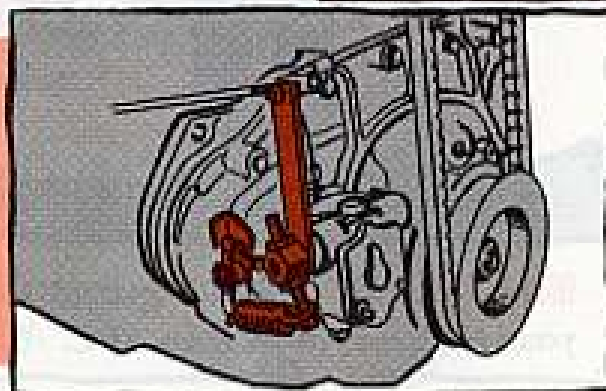


**BELT DRIVES**— An inch slack from a straight line is about right, otherwise when speed changes, those vee drives can snap.

**PANEL LIGHTS**— On if it's night, so you can watch those dials.



**GOVERNOR**— Your bypass and valves take care of output mostly, but if you hear a roar and the kicker overspeeds, chop that throttle fast.

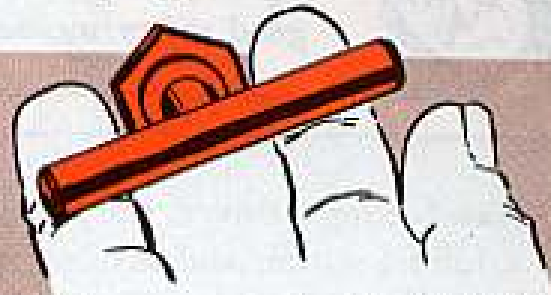




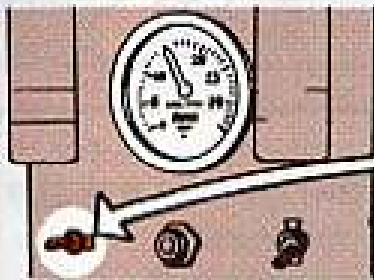
# SHUTDOWN

Closing up the store the right way is another big piece of insurance. Fact is, you can't start right the next day unless you stop right when shutdown time arrives.

With the load eased off, you cool at idle 10 minutes. If there's an Idle Control, use it. You can use up your excess air to clean out your tools, blowing out muck and water.



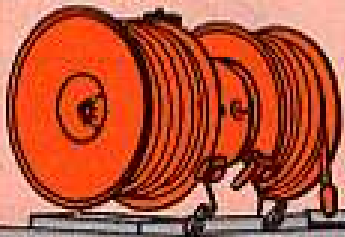
Idled long enough? Whoa, now — detail, Halt! Right now is time for a magic charm on that Joy 250, if yours is such —



Just before you chop that ignition, rev 'er up to 1500 RPM for a minute — then, Whammy! Off she goes, and just a few seconds does it.

This you do to avoid hydraulic lock when you fire up again. The Joy 250 has a small sump, and it's got a temperamental oil inlet valve on the older models. If those rotors get crammed with oil, oil that won't compress, that means sheared vanes when you kick 'er over again.

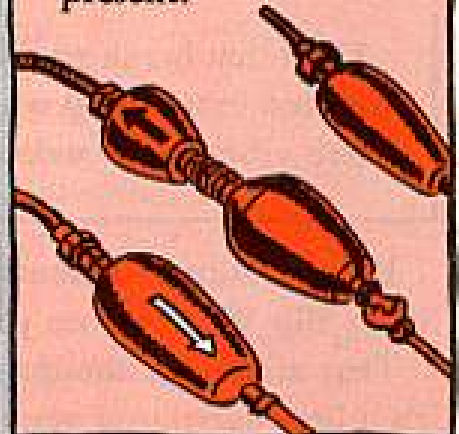
**HOSE REELS** — Make sure there're no kinks. That Davey will snap hoses if you let it, or unless you get support to put in a special 30° ell.



**LO's** — Look for dry bearings, drippy gaskets, hot spots. If you find metal chips in oil, call support.



**DILERS** — Service now and count noses; all present?



**FAN GUARDS AND SCREENS** — Welds and bolts holding?



**FUEL RETURN LINE** — Solid and undamaged?



**RECORD FORMS** — Got today's business entered in the right place?



**FUEL TANK** — Full so moisture won't collect during the night?



That fan guard is nothing to neglect. The sheetmetal screws can pull out and let the fan blades hit, which could mean a slice out of your skull. Bolts with lockwashers and double nuts are good safety measures.

When fueling a Davey, you can take out that X-faced screen, use a funnel screen, and save an hour, besides working with less drip.



That record bit you won't shrug off, either. It's the way you keep track of those fiber-core separators, for instance.

Those separators shred when guck-loaded, and fibers ball up everything. A take-apart cleanout by support, no less, is the only cure.



Lines that break you'd best get replaced by steel if available. And look extra sharp where they come thru the housing. That's where vibration is worst.



If your automatic shutdown cuts in and stops the rig, you've got to know **Why, Big Why**, before you think of trying to run again.

That automatic shutdown is a thermal-switch sentry deal — which means it's a heat-hater — in your oil and water supply. When it chops the gun, you can bet something's cooking too brown.

Could be a vane's gong's rung, an oil line's blocked, or a pump's gone — but the trouble you've got areddy will be as nothin' to what's ahead, unless you look for reasons.

But maybe you drove past Deadline Alley after all. While you wipe up any diesel juice that spilled, and pick up the tarp to put over your jewel for the night, take one last look —

Ignition Off? Fuel Valve Closed? Panels Shut? Attachments Stowed?  
Scram. Chow'll be all gone.



## Connie Rodd's BRIEFS



### *Recoil: From -3 to -2*

When you add recoil oil to your mechanism, make a note of the type and amount on the DA Form 2408-2 (Lubrication Record)—not on the 2408-3 (Maintenance Record) like it said on page 28 of PS 162. The rules are the same as those for lubricants in paras 4-6a and 4-6c(9) of Change 2 to TM 38-750.

### *Infrared Battery*

Your infrared metascope assembly (Polan Model P-141), FSN 1090-560-0110, may need new batteries, so ask for BA42 dry batteries, FSN 6135-120-1010 and not FSN 6135-120-1020. If you didn't get Change 1 (Jan 66) to TM 5-1090-201-15 then you'd better jot the number down so you can have it handy.

### *DA Form 12-31*

Your pubs which cover airdrop of equipment are now on pinpoint distribution and should be ordered on DA Form 12-31. It goes to CO, US Army AG Publications Center, 1655 Woodson Road, St. Louis, Mo. 63114.

### *2½ Ton Multifuel*

The choice is easy when you need a new oil-filter element for your M44A1 or M44A2 series 2½-ton multifuel truck. Parts kit, oil filter, FSN 2940-884-4801, includes the element and gaskets and is for either oil filter in either truck. The kit is listed in TM 9-2300-223-20P (Jul 65).

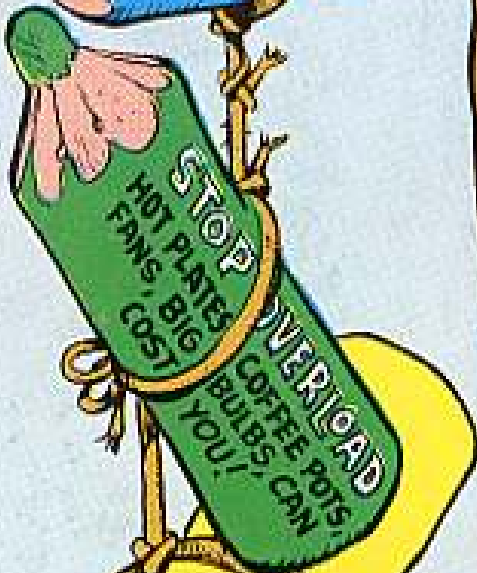
### *Water Bag Faucet*

Need a faucet or 2 for your water sterilizing bags, FSN 4610-268-9890? Then order 'em by FSN 4510-277-9569 from the Defense Construction Supply Center, Columbus, Ohio. Be sure to use their Routing Identifier S9C on your request. The cost of each faucet is 65¢.

### *Zenith Carb Kit*

If you're havin' a tough time gettin' DX action on carburetors for your M151 ¼-ton trucks, find out if your support has heard about the repair kit for the Zenith carb. It's Gasket Set, Carburetor, Zenith, FSN 2910-884-2172, listed in Ch 1 (May 66) to TM 9-2805-213-34P.

*Would You Stake Your Life <sup>right now</sup> on  
the Condition of Your Equipment?*



LET YOUR GENERATOR  
**COLOR**  
YOU HOME

REMEMBER!  
THIS IS A  
REMINDER ON  
GENERATOR  
MAINTENANCE