

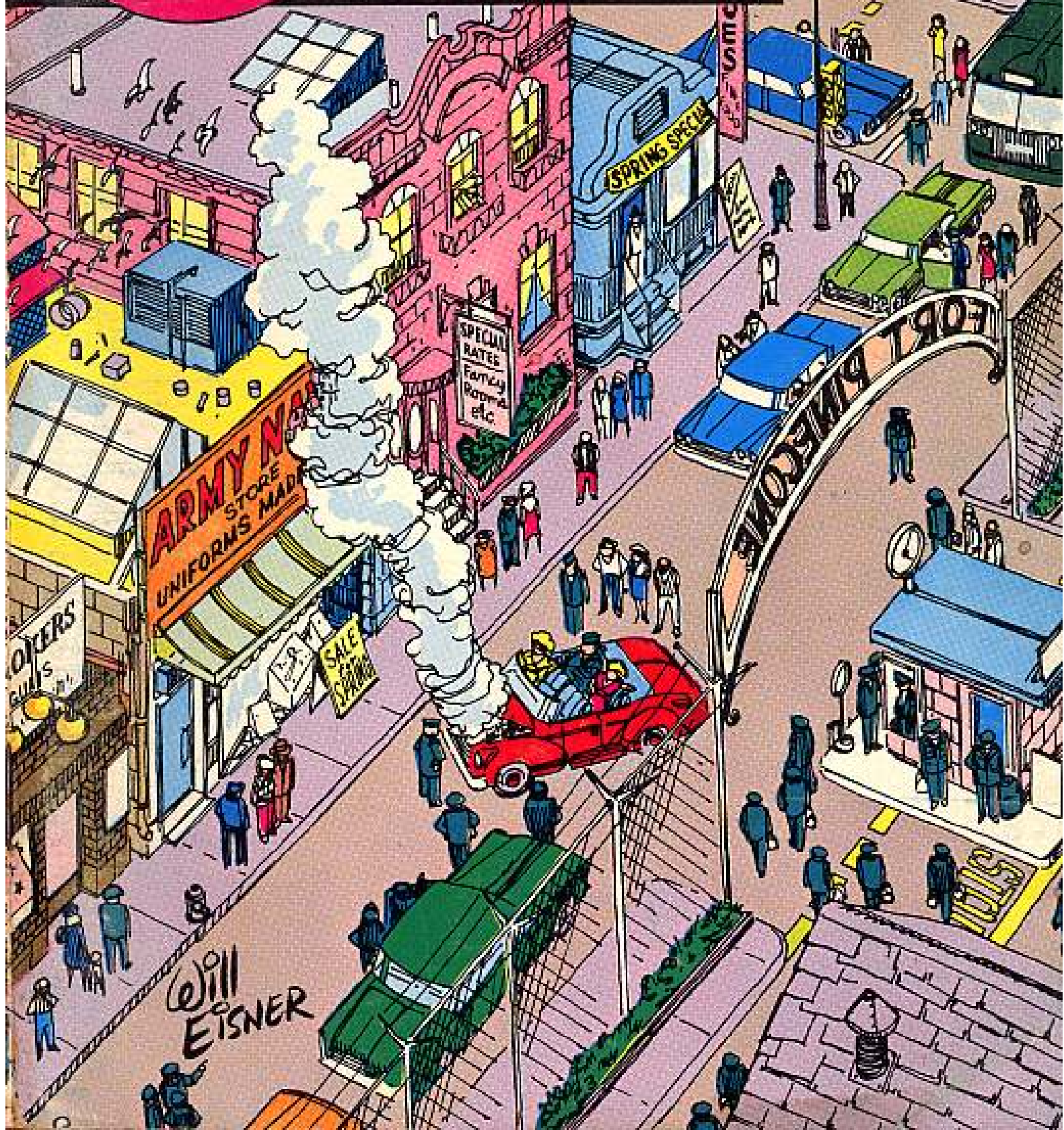
Issue 125

PS

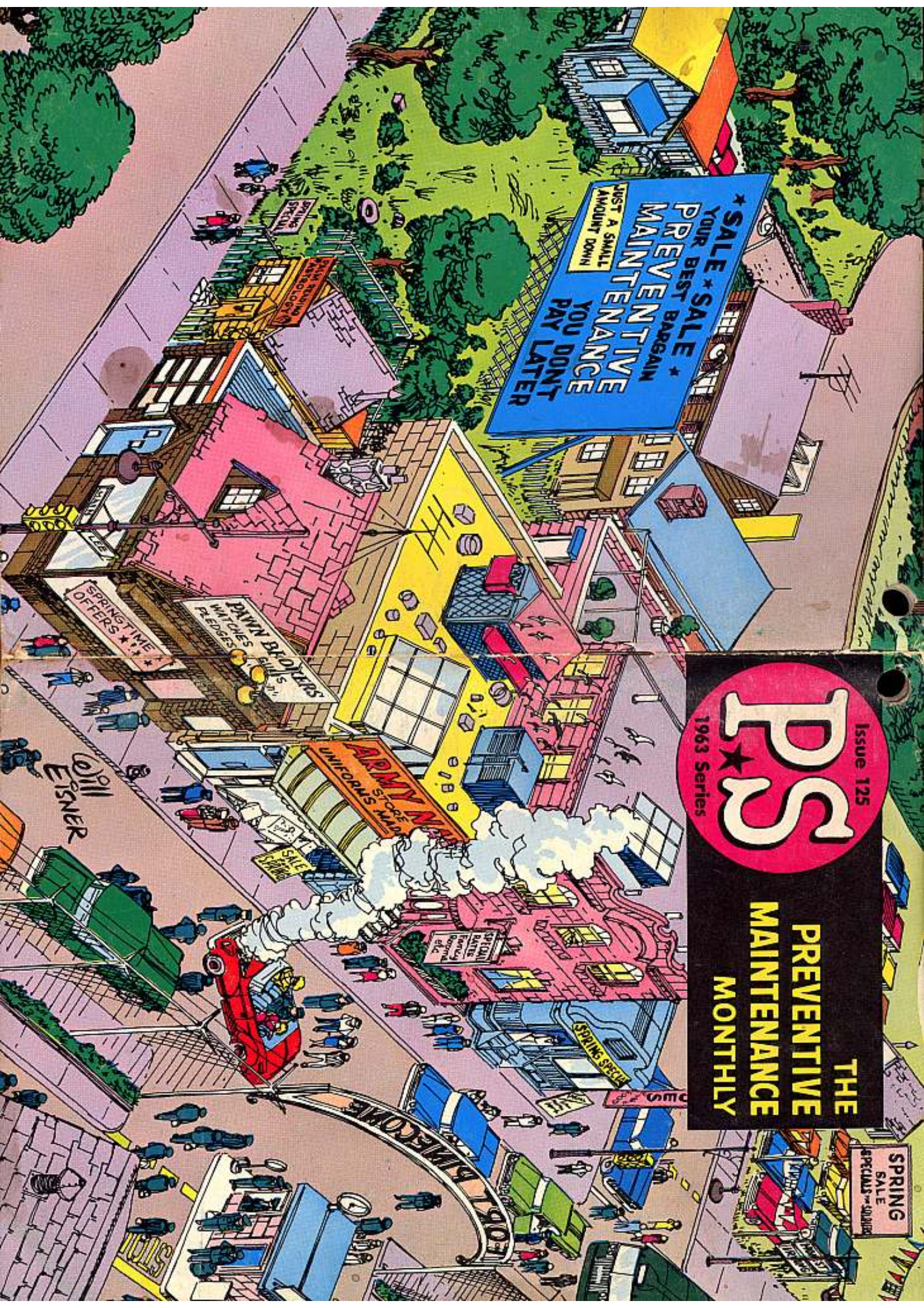
1963 Series

# THE PREVENTIVE MAINTENANCE MONTHLY

SPRING  
SALE  
SPECIALS FOR SOLDIERS







Issue 125  
**PS**  
1963 Series

**THE  
PREVENTIVE  
MAINTENANCE  
MONTHLY**

**SPRING  
SALE  
SPECIALS**

**SALE \* SALE \*  
YOUR BEST BARGAIN \*  
PREVENTIVE  
MAINTENANCE \*  
JUST A SMALL  
AMOUNT DOWN \*  
YOU DONT  
PAY LATER**

**DAVIN BLOWERS  
WITCHES BILLS**

**DAVIN BLOWERS  
WITCHES BILLS**

**ARMY NUNIFORMS  
ST-100**

*Bill  
Eisner*

**SPRING LIVE \*  
OFFERS \* 1-1**

**SPRING SPECIALS**

**WELCOME**



# MAINTENANCE

# IS TRAINING

Everything you have done since you were sworn into the Army has been aimed at one thing—getting you ready to be a combat soldier.

This everything includes things like your physical training, drill, weapons care and firing, guard, K. P., map reading and all the other training and work you do.

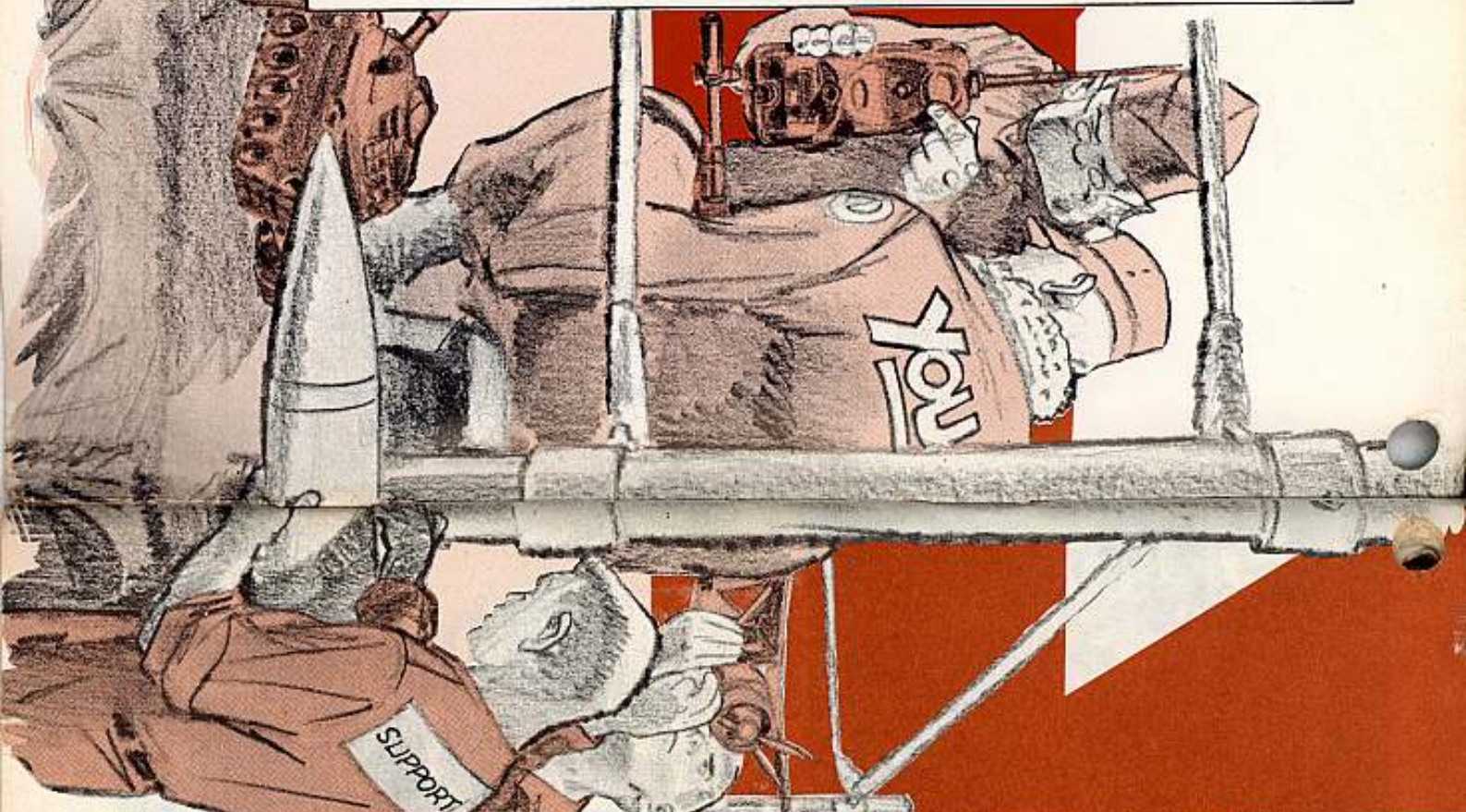
It's all training. And maintenance is a part of it—a real important part.

## Why?

It makes your equipment combat-ready . . . so the equipment you have today will do the fighting job tomorrow. (Remember—you go with what you've got.)

It makes you combat-ready. You'll have the know-how to keep your equipment maintained and in operation once you're in combat . . . when the chips are down.

That's when real maintenance (training) pays off—for you, for your outfit, for your country.



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THE PREVENTIVE MAINTENANCE MONTHLY ISSUE No. 125 1983 5 PAGES

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

Sgt. Andy Mead,  
PS Magazine,  
Fort Knox, Ky.



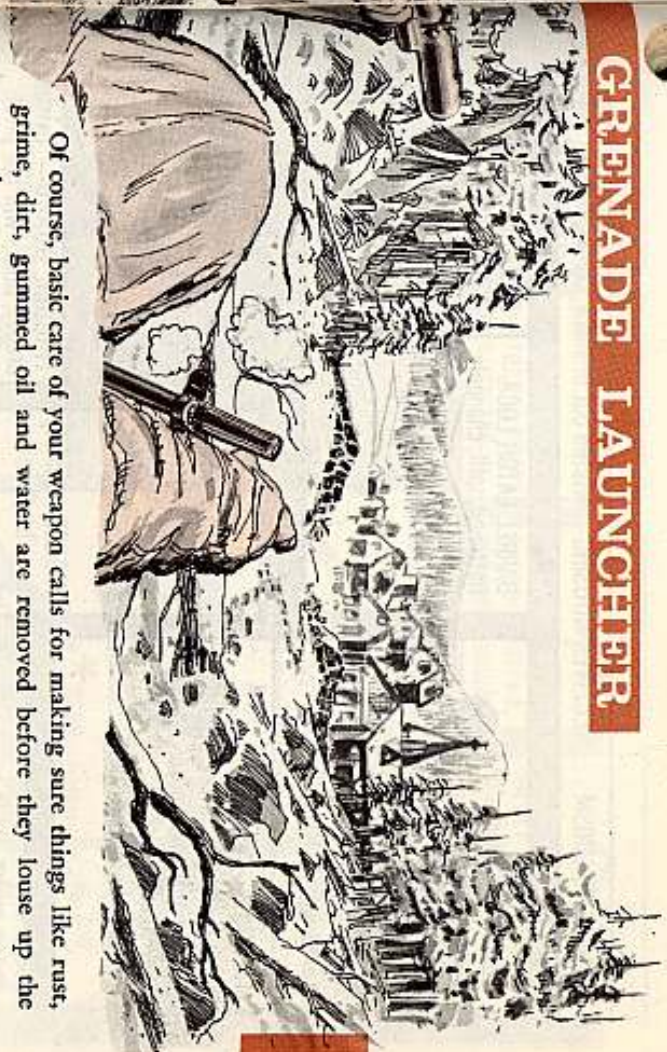


BE YOUR OWN INSPECTOR...

## THE M79



## GRENADE LAUNCHER



One thing sure—the M79 grenade launcher is nobody's kid brother.

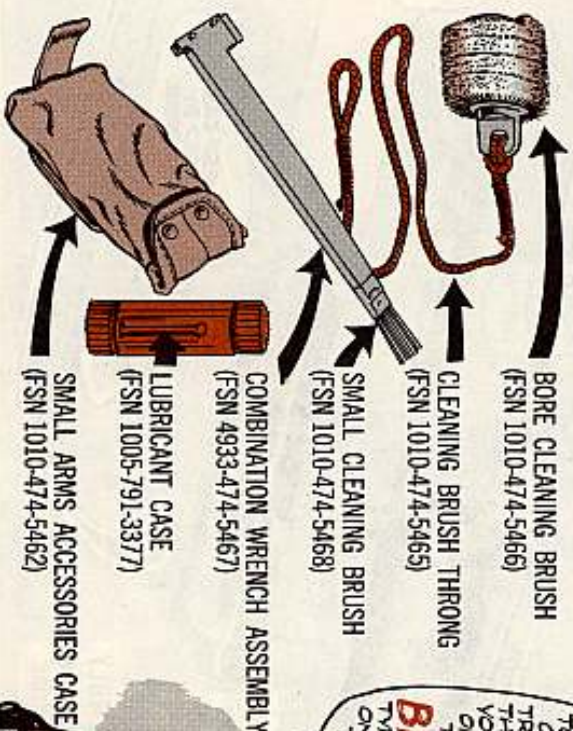
This light (5.96 lb) anti-personnel weapon goes where the front-runners go and can lob a 40-mm grenade from between 54 to 410 yards (50 to 375 meters). It joins the M14 rifle and the M60 machine gun to give you gravel agitators instant support fire on the hoof.

The break-open shotgun type launcher is built to stand plenty of gaff, but—like all equipment—needs regular doses of PM medicine to remain combat ready. TM9-1010-205-12 and TM9-1010-205-20P are the pubs that give you all the scoop on the M79. The -20P manual also spells out that your company armorer can only replace seven parts—the firing pin, retainer, and spring, two machine screws and two washers—after that, it's up to your support unit.

Of course, basic care of your weapon calls for making sure things like rust, grime, dirt, gummed oil and water are removed before they louse up the operation.

So clean and lube the launcher according to the word in TM9-1010-205-12 and remember not to use anything rougher'n a crocus cloth to get rid of rust.

Here's your equipment for maintenance. Check 'em and see if anything's busted or missing.



OK, NOW LET'S TAKE A CONDUCTED TOUR OF SOME OF THE MAIN TROUBLE SPOTS THAT CAN PUT YOUR LAUNCHER ON THE BUNK. THOSE IN **BROWN** TYPE ARE THE ONES TO GET TO FIRST.



JUST TO JOGGLE THAT MEMORY BOX, THESE ARE THE SEVEN ITEMS, WITH THEIR FEDERAL STOCK NUMBERS.

SCREWS (2)—5305-042-0522

WASHER, FLAT—5310-543-5868

RETAINER—1010-704-6623

SPRING—1010-704-6606

PIN, FIRING—1010-704-6621

WASHER, LOCK—5310-011-6120



FIRING MECHANISM . . . RECEIVER HOUSING—twisted out of shape, cracked, worn.

**FIRING PIN**—bent, broken, tip burred, worn, missing.



**HELICAL SPRING**—kinked, weak, ends burred, worn, missing.



**RETAINER**—threads burred, stripped, holes plugged; missing, loose (use your wrench assembly to keep it tight).



**BARREL LATCH LOCK**—flattened, split, channels burred, split, missing.



**BARREL LATCH PIVOT**—cracked, chipped, worn, broken, missing.



**TRIGGER**—busted, worn, bent, missing.



**TRIGGER GUARD**—twisted, broken, worn, will not pivot; detent assembly busted, will not release or lock, missing.

**BARREL LOCKING LATCH**—edges chafed, cracked, split, bent.



**SAFETY ACTUATOR**—broken, edges worn, cracked.



**SAFETY**—split, broken, burred, channels fouled.



**SAFETY SPRING**—weak, out of shape, missing.



**SAFETY BAR**—cracked, chipped, worn.



**HAMMER**—cracked, chipped, burred, broken, missing.



**SEAR**—battered, burred, chipped, worn, missing.



CAREFUL ABOUT SWAPPING OLD WORN PARTS FOR NEW... MAKE SURE THEY FIT!!

**FRONT SIGHT**—bent, cracked, busted off, loose, not blackened; cap screw loose, burred, missing; dovetail mount split, worn.

**REAR SIGHT**—bent, missing, loose.



SEE PAGE 6 FOR BREAK-DOWN.

**BARREL**—bulges, bends, dents; bore powder-fouled, pitted, eroded.

**FORE END ASSEMBLY**—dry, splintered, screw loose, sheared, missing.

THESE CAN BE REPLACED BY THE ARMORER.



**SLING**—broken, frayed, worn; clamps weak, won't hold, missing.

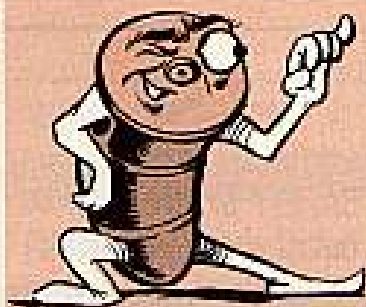
**SWIVELS**—stick, worn, twisted, do not move freely, missing; screws loose, sheared, worn, missing.

**RUBBER RECOIL PAD**—frayed, battered, loose, missing; screws stripped, loose, busted, missing.

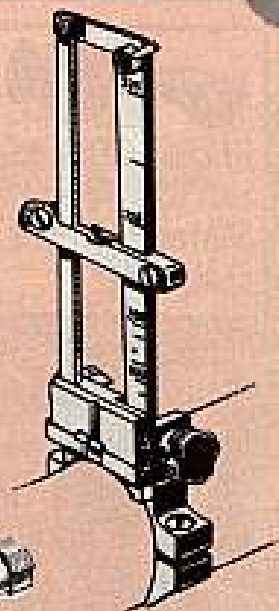
**STOCK**—dry, (rub in light coat of raw linseed oil) splintered, cracked; stock-receiver retaining screw hole split, stripped, worn; retaining screw sheared, loose, missing; burred; washers worn, busted, missing.







# REAR SIGHT



ELEVATING SCREW WHEEL—binds, **busted**, stripped.

RETAINER LOCK NUT—**stripped**, will not lock, worn.

APERTURE—plugged, cracked, worn, not blackened.

ELEVATION AND WINDAGE SCALES—worn, not clear, hard to see.

WINDAGE SCREW—stripped, burred, worn, hard to turn.

SIGHT LOCK—sticks, binds, burred, will not release, split, **broken**.

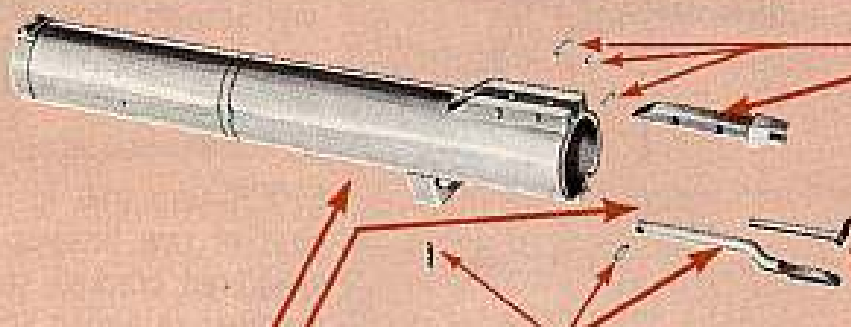
BATTLE SIGHT NOTCH—**busted**, worn smooth, cracked.

FRAME BASE—split, busted, channels clogged, burred.

SIGHT BASE—loose, worn, twisted, **broken**; screw burred, loose, **missing**.

WINDAGE SCREW KEY—**chipped**, cracked, worn.

SIGHT BASE SCREW—loose, stripped, worn, **missing**.



BARREL LOCKING LUG—**cracked**, broken, burred, worn; spring pins sheared, loose, **missing**.

HELICAL SPRINGS—weak, worn, kinked, **missing**.

COCKING ARM—twisted, **broken**, bent, cracked; pin and screw loose, **sheared**, broken, **missing**.

EXTRACTOR—shaft cracked, worn, **broken**; lip burred, beatup, worn, **missing**.

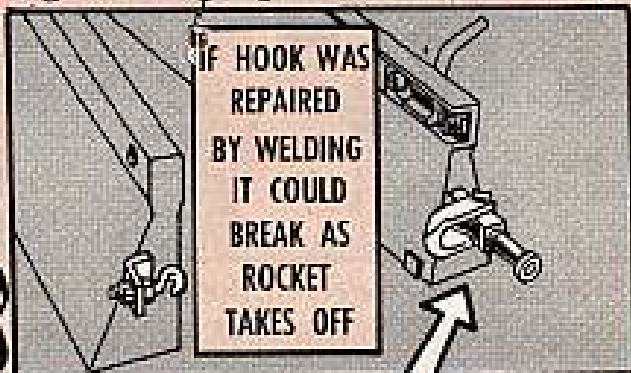
BEFORE YOU UNFOLD YOUR  
**HONEST JOHN**  
LAUNCHER BEAM AND...

# SHOOT AWAY



It doesn't happen very often, but when it does—the M386 Honest John rocket launcher is put out of the launching business.

That's when one or more of the components of the lock for the folding beams poops out as you let go



with a round. And when this happens, the folding beams go to pot mighty soon—like suddenly.

The big troublemaker is usually a part that's been repaired by welding. For instance . . . if the lock hook has been fixed this way, the hook could

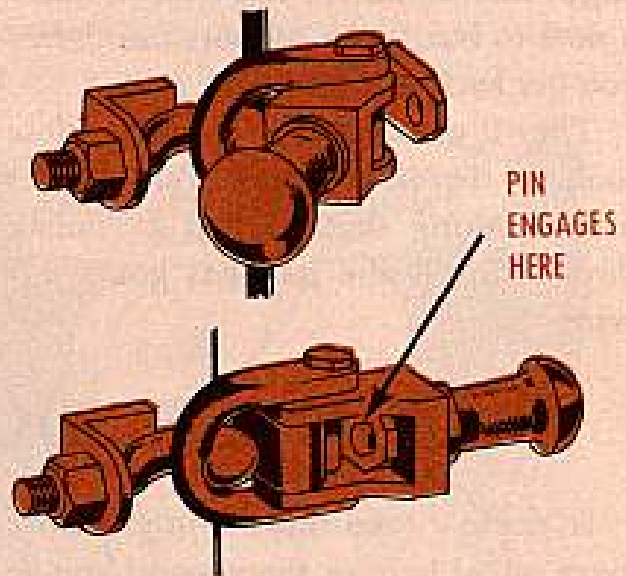


HURRY UP WITH THAT FIX! I CAN'T HOLD THIS FOREVER...

break as the rocket takes off. And this'd send the folding beams into a real flap.

When you come right down to it, any component of the lock group that's been welded makes for a bad deal. And don't let anyone tell you that you can take care of any cracks you spot in the components by calling in the man with his welding equipment. Not on your life. The best place for bad parts is the scrap heap.

You're also buying possible headaches when the locking pin—the one that's part of the knob assembly—doesn't engage all the way when you lock the folding beams for firing.



One more thing . . . try to shake the folding beams before you do any firing. If they move, even a little bit, you need to have more tension worked into the lock. It's a job that your support unit can do in no time flat.

# WATCH IT, JACK

I KNOW,  
I KNOW,  
AND REMIND  
ME TO BUZZ  
SUPPORT  
WHEN I GET  
BACK!!



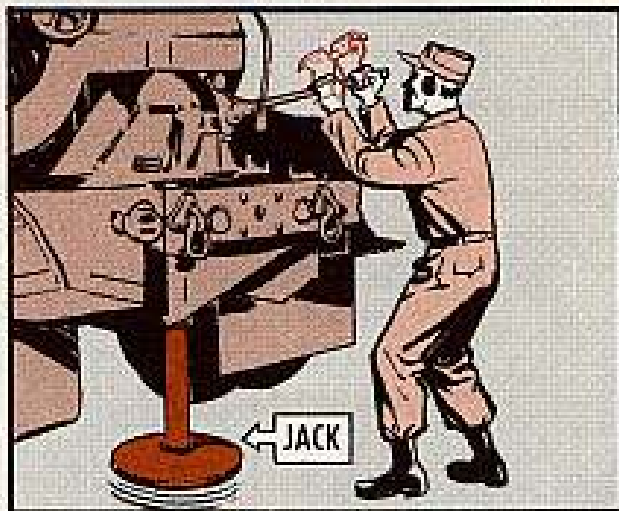
# HONEST JOHN LAUNCHER



OK... so you've finished your firing mission. And you're getting ready to pack up the place with your Honest John equipment.

You start raising one of the stabilizer jacks on your M386 launcher and suddenly it pops up about two inches. Right then and there you want to make a note to buzz your support unit when you get back to the battery area.

They'll want to take a long and close look at the jack—'cause the chances are the thing that's called a "nobak device" inside the jack has gone haywire.

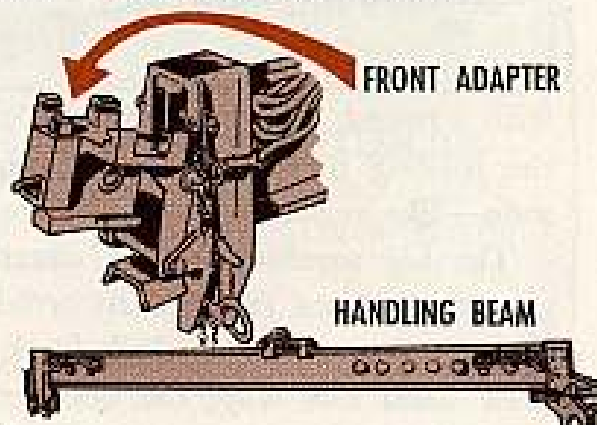


It seems the parts of the device have a way of getting galled and scored. And when this happens, the jack gets the jumps. Even worse, you can't depend on it to do its job of stabilizing.

## CAN'T BE DONE - UNLESS

It doesn't take much—just a little extra metal here or there—and you've got yourself an impossible job of trying to move an Honest John XM50 rocket with the handling beam for your M386 rocket launcher.

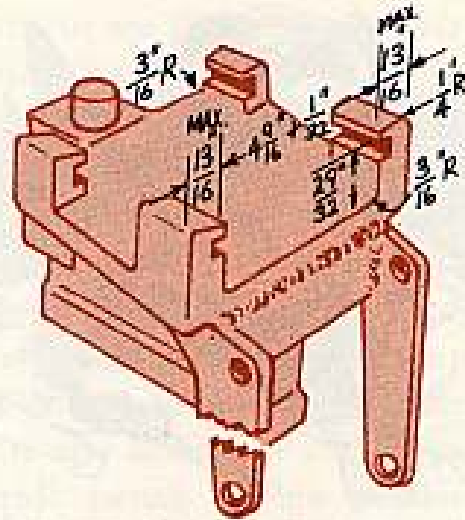
The troublemaker is the adapter assembly on the handling beam. Some





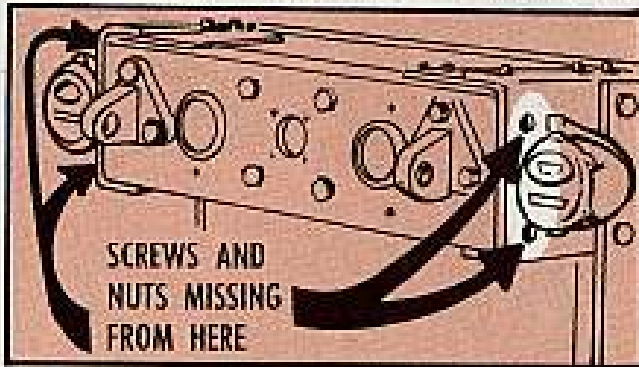
of the assemblies have dimensions that're slightly off—but enough to keep you from putting the beam on the rocket.

If you're up this creek without a paddle, tell your support unit to look over your adapter assembly. If it doesn't measure up to these dimensions, they'll do some machining so that it does.



## MISSING HARDWARE?

Somewhere . . . there're some M386 Honest John launchers that're minus some mighty important hunks of iron—eight hunks—to be exact.



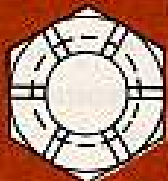
Those'd be the four cap screws and four nuts that go through the truck frame and cross member at the rear of the vehicle—two of each on each side. And with those screws and nuts missing, you could be heading for a heap of troubles—the bent and twisted frame and cross member kind.

It takes only a quick look to tell if you're missing the hardware. As a clue, the launchers that slipped through without the screws and nuts are serial numbered 113 through 158.

SCREW, CAP: 1/2-20 UNF 1 1/2-in lg, MS  
35298-113, FSN 5305-543-2266.



NUT, SELF-LOCKING, HEX: 1/2-20 UNF-3B  
BBSX4-503323, FSN 5310-050-3323.



IF YOU NEED THE SCREWS  
AND NUTS, HERE'S WHAT  
YOU ASK FOR:



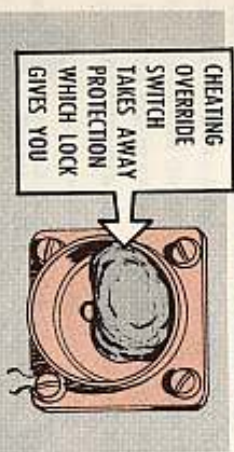
If you're missing the screws and nuts, check the frame and rear cross member before you install 'em. Your support unit may have some straightening out to do first.





Any guy who works around electronic equipment cheats now and again. And it's as legal as 52 cards in a poker deck.

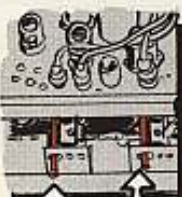
Trouble is . . . you can carry things a little far when you cheat the interlock override switches that're put in things like radar sets to keep you from brushing against parts carrying high voltage. And that means fixing the override



switch—like with a stone—so it stays permanently cheated. When you take advantage of the override like this, the protection the interlock is supposed to give is taken away—for as long as you have the "fx" going for you.

It figures. After all, they're tied in with the interlock switches that you have inside different covers, doors or cabinets. When you open a cover, say, the interlock switch takes over and shuts off the current so's you don't get roasted, roasted and then ghosted in case you touch a "juicy" part.

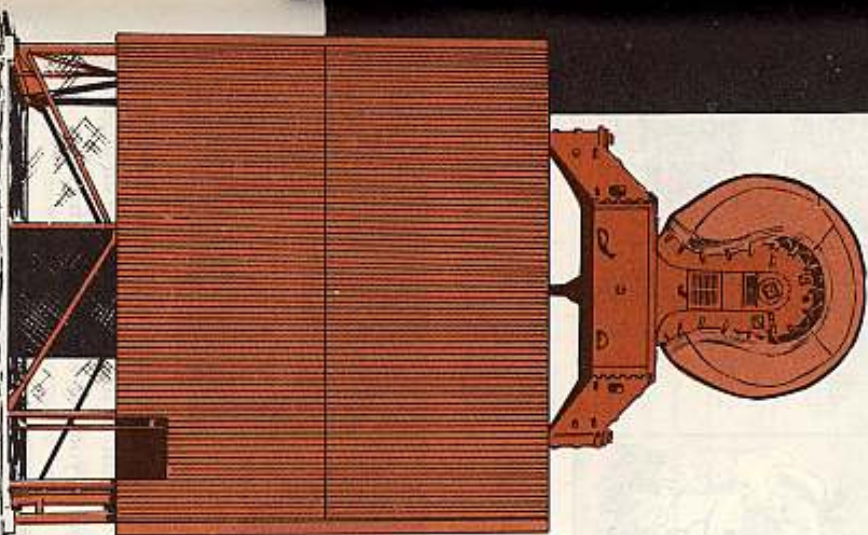
# IF YOU'RE GONNA CHEAT



If you want current flowing while you're working, all's you have to do, as you know, is pull out the plunger on the switch. And if you happen to forget to push in the plunger when you're done, it'll go in when you close the cover.

The joker in the 53-card deck is that interlock override switch. When you override it, the ones inside the equipment are taken out of the picture.

This is all right as long as you override for time needed. But it's something else again when you use a stone to do your cheating for you . . . and then leave the stone in place.

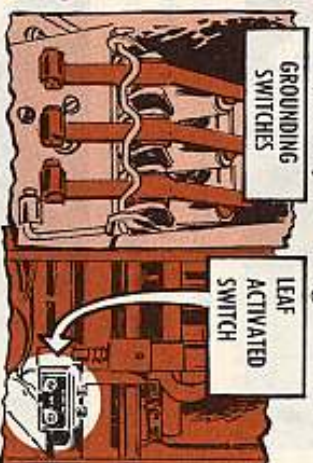


battery to see if he can find out who got stone-happy.

No . . . there's only one way to treat the override—with respect. And you do it by overriding long enough for you to get at the interlock switch inside the equipment and pull the plunger—if you happen to need to have the power on. Then you release the override.

You also save wear-and-tear on the override switch by not permanently cheating it. It's a fact. You louse up the tension the switch is under by keeping it closed with something like a stone.

What about those leaf-actuated interlock switches or interlock-type grounding switches (ground bars) that're inside some equipment . . . and there's no way of closing 'em?



IN A COULD-A WORDS...  
HANDS OFF WHY LOOK  
FOR TROUBLE?

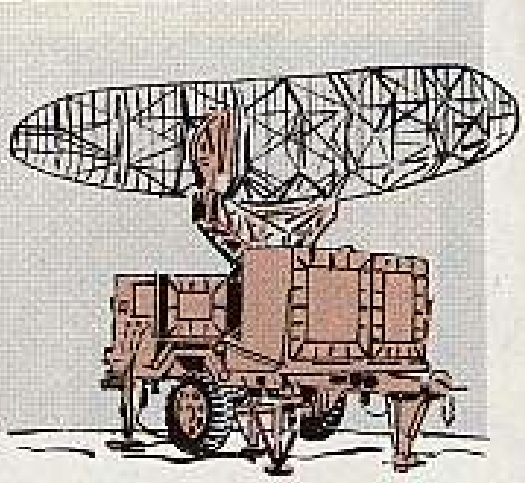
So . . . a guy with other things on his mind comes along. He doesn't bother with the interlock override switch. He opens the cover just to look at a chassis . . . and doesn't bother to pull the plunger on the switch inside the cover.

Why should he? He's not going to touch anything. (The poor guy—he doesn't know the override switch's been cheated and so there's no stopping the current, plunger or not.)

Then it happens. He rubs against a "hot" part. If he's lucky, he'll get around the







You have good connections? Not the "I'll take care of you" kind. But the cable variety—the kind you find in any missile and rocket system.

It sure doesn't take much doing to have good connections. F'rinstance . . .

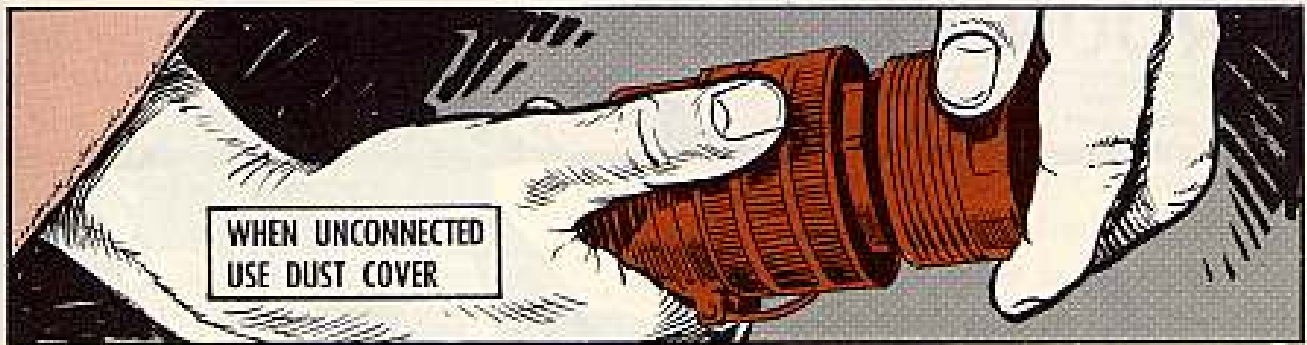


Shove in the connector to make sure you get a good fit—after you've checked the pins close-like to spot any that might be bent. If the connector's on an angle, you could be headed for the brand of trouble you get with crossed threads.



When you remove the connector, take hold of the knurled part—not the shielding, which you might bust. It's also a good idea to lift up on the cable to take its weight off the connector. This lets you remove the connector as straight as possible to keep the pins from getting bent. And it takes pressure off the last few threads of the knurled piece and receptacle as you get ready to remove the connector. Supporting the weight of the cable is also a good deal when you go to connect it.





When the cables're not connected, keep dust covers on their connectors to keep out dust and protect the pins. Use a cover on the receptacle, too.

It also pays to check the connectors after traveling 'cause they can work loose.

And watch yourself when you have more'n one cable to connect on a panel. It doesn't take much to get 'em mixed up.

Another thing . . . if you're supposed to use an insulating compound in the connectors, do it. But use only what you're authorized. And if the word is that the connectors are to be left dry, keep 'em dry.

What about tightening the connectors? How tight do you make 'em?

Well . . . they want to be tight enough to satisfy the man who comes around to make an inspection . . . and also to do a job for you. It works out

that when you do one, the other happens at the same time.

Anyway . . . here're the things to remember.

When the man with the clipboard, inspection sheets and pencils hits your battery, he's going to check to see that all cable connectors in or on a major piece of equipment, like a trailer, antenna or missile, are fully seated and hand tight.

And he's going to see if he can break loose by hand the cable connectors that're supposed to be tightened with a wrench. Those'd be the ones between major items and from one area to another.

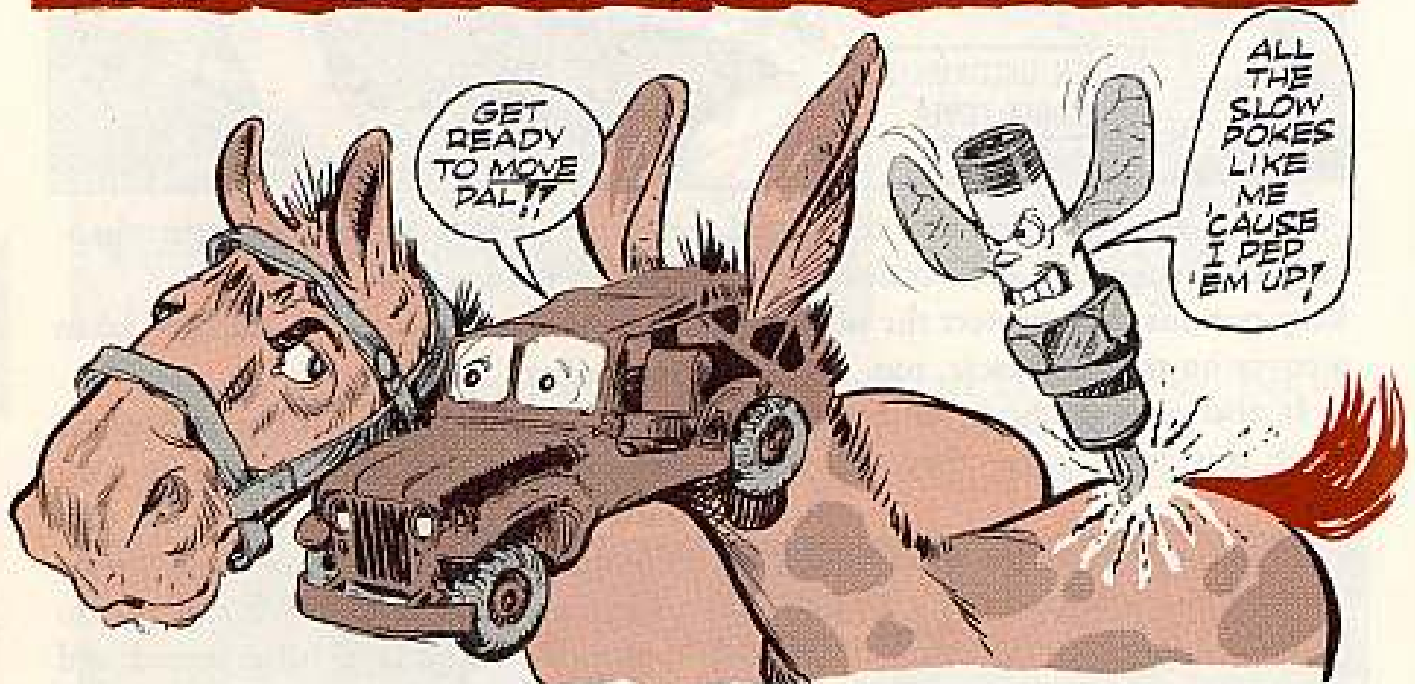
If he can tighten 'em 1/8-in or more with his mitts, you can figure you've earned yourself a gig. Your best bet, then, is to give the wrench a final tug so the connection is a little better'n hand tight.



Whether those connectors're supposed to be hand tight or wrench tight, just keep hoping that the inspector who comes around to try 'em out didn't grow up on a farm where one of his chores was milking cows.



# GROUND MOBILITY



## HOT ONE

Before ordering the spark plugs for your G758-series vehicles, first you want to figure out what use they'll be getting.

Take a glance at TM 9-2300-223-20P (Mar 62), your Consolidated Authorized Organizational Stockage List of Repair Parts for Tank-Automotive Materiel (alias MPLL), and you'll find two plugs listed for these vehicles.

One of 'em, FSN 2920-835-7724, is for normal use. The other, FSN 2920-726-9545, is a much hotter plug. And this one's not yet listed in TM 9-2320-208-20P (Feb 59).

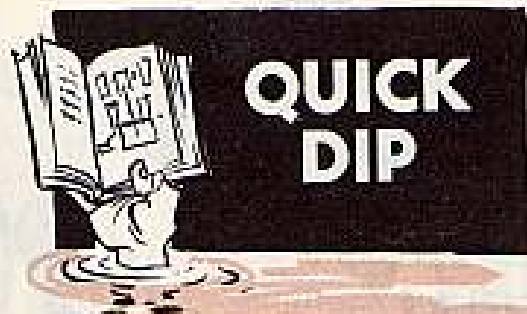
(This hotter plug also is the same one now listed for normal use in the M274 Army Mule.)

So-o-o, if your M38A1 or M38A1C truck or M170 ambulance is seeing a lot of idle operation or is doing beaucoup slow-speed, light-load hauling, the hotter plug is the one you want. But don't forget to switch back when the vehicle returns to normal use.

For more info on spark plugs, check out TM 9-8638 (Dec 56).







# QUICK DIP

Dear Half-Mast,

The lubrication chart in TM9-8024 and LO9-2320-210-10, both on the 2½-ton G749-series truck, says to check the brake master cylinder fluid level every 1,000 miles. What is the right level and how do you check it?

SFC K. L. M.

Dear Sergeant K. L. M.,

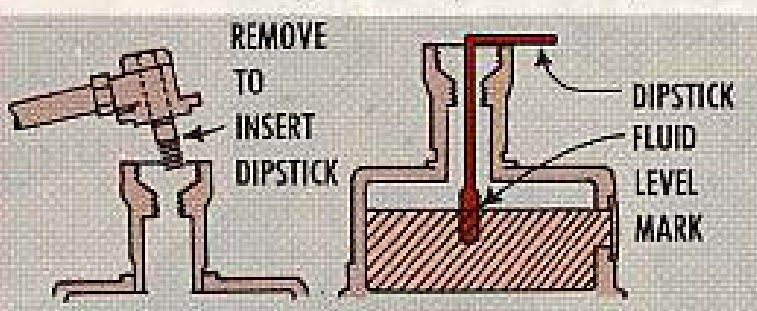
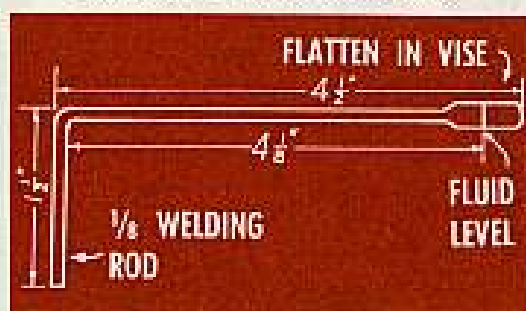


The correct fluid level is ½ inch below the pipe-stand.

To check it some outfits have made themselves a dipstick like this:

*Half-Mast*

Then they use the dipstick this way:



## BRAKE SCREWS NEWS

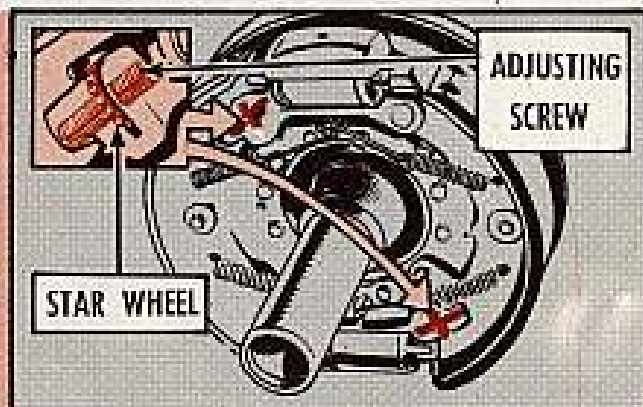
Sharp-eyed checking and on-time replacement of those brake adjusting screws on your G-749-series 2½-ton vehicles will keep you in business and help you work your way out of a hole, too.

You see, those parts you have in there right now are probably zinc- or cadmium-plated. So, it's best you keep an eye on 'em for rust and replace 'em before they freeze-up on you.

By keeping them replaced before you have to drill 'em out, you'll save trouble and you'll be working your way up to the new stainless steel parts that're being phased into the parts pipeline. Newer brake-adjusting parts will be stainless steel and should help reduce the problem.

### HERE'S HOW THEY'LL COME:

- Screw, adjusting, left-hand thread.....FSN 2530-770-9150
- Screw, adjusting, right-hand thread.....FSN 2530-770-9151
- Wheel, star.....FSN 2530-770-9149



These are currently authorized for some of your G754 trailers.



HAVING TROUBLES WITH YOUR NEW **M113 PC??**  
DO THE ROCKER ARM COVERS BLOW OFF?? THE SPARK PLUGS FOUL UP OR THE IGNITION COIL BURN OUT?? WELL CHEER UP WITH A LITTLE BRAIN AND STRAIN YOU CAN MAKE HER RUN AS SMOOTH AS A CAT LICKIN' CREAM. THIS INFO ADDS UP TO AN ENGINE THAT PURRS LIKE A PUSSY CAT!!

Connie Feld presents...  
Secrets from her private diary...  
**M113 PC tips**



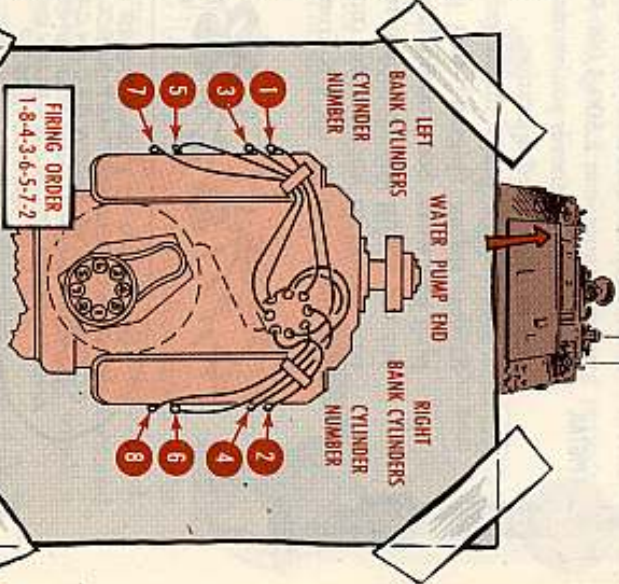
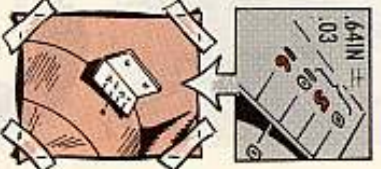
## Ignition Timing

Set the ignition timing like it says in TM9-2300-224-20 (Dec 61) on pages 130-131. Make sure the ignition timing arrow lines up with the 10° mark on the timing plate. A lot of the older M113's were issued with the setting at 16° BTDC. In fact, there may not even be a 10° mark on the ignition timing plate. If there is no 10° mark, have your support scribe a mark .64 inch down from the 0 mark. Once the mark is scribed—it'll be about half-way between the 5° and the 16° marks—get your timing arrow set on it. This'll stop a lot of trouble.

## Spark Plug Cables

Do the spark plug cables on your M113 PC cross you up?

If they get hooked to the wrong spark plugs, your engine will make with a lot of backfiring when you start up. You'll also get crankcase explosions that can knock off the rocker-arm covers. To be sure each cable is where it belongs, check its identification tag number on the cable and connect it to the right spark plug like you see in Fig 117, page 130, and Fig 120B, page 132 of TM 9-2300-224-20 (Dec 61).



BE SPECIALLY CAREFUL WITH CABLES NO.5 AND NO.7 BECAUSE THEY'RE EASY TO MIX UP.



## Spark Plugs

The worst trouble you can have with spark plugs is getting the wrong kind. You need FSN 2920-679-9728.

With each plug you also need a gasket, FSN 2920-314-1130. The plugs have been coming through without the gaskets. So, every time you order spark plugs, be sure you order an equal number of spark plug gaskets. If you're short a gasket, use one from an old plug until you can get a new one. Don't leave off the gasket because it will make your spark plug run too hot and you won't get a tight enough seal. If a new FSN comes through for a plug and gasket combination you can order that way, but for now you order 'em separately.

To keep the carbon from fouling your plugs, run your engine at 2,500-3,000 RPM for two to five minutes whenever you've raked up 30 minutes of slow speed operation.

Your spark plugs might miss because the harness spring (pigtail) that goes inside the plug gets weak. Some outfits have been pulling out the spring and stretching it or putting in two springs to improve the contact. Don't do this unless you get the OK from your support unit.



PIGTAIL



YOU MEAN TO STAND THERE IN A HIGH WIND AND TELL ME THAT GASOLINE WITH AN OCTANE RATING BELOW 83 CAN CAUSE PRE-IGNITION WHICH MAKES YOUR ENGINE RUN ROUGH AND TH' DETONATION CAN BLOW OFF THE ROCKER ARM COVERS??

## Fuel

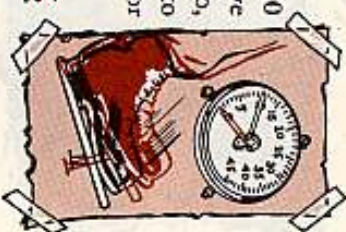
Gasoline with an octane rating under 83 can also burn out your piston crowns, so if you suspect something is wrong, have your supply people check it out. The fuel you are getting should be covered under Mil Spec MIL-

G-3056B or Federal Spec VV-G-76.



## Idle Speed

The normal idle speed of 650-700 RPM is too slow to give the cylinder bores and valve train all the oil they need for long-time operation. Also, the plugs foul up because they don't get hot enough to burn off the carbon. So-o-o, if the driver has to idle for a long period, he had best step it up to 1,000 RPM.



## Ignition Switch

Leaving the ignition switch on long periods without the engine running causes trouble. It heats up your ignition coil, shortens its life and may burn it out. It also puts a strain on the fuel interlock switch. If this switch conks out, your engine might flood. Another result of leaving your ignition switch on for long periods can be arcing which pits the distributor points.



## Voltage Regulator

Check out the voltage regulator to be sure it doesn't deliver more than 28 volts. The ignition coil might burn out at 29 volts or over.

Voltage too high.

## Distributor

Distributor vent lines should not be pinched, plugged, or leaking. The waterproof, sealed, distributor is vented by lines to the engine air horn and if these lines are not working right, your coil, which is in the distributor, can burn out.



The vent lines from the distributor to the air horn end in a pair of tubes inside the air horn. The tips of these tubes must be pointed in opposite directions or you get no air flow. You need one tip pointing in the direction of air flow in the horn and one against the direction of flow. If they both point the same way you are likely to get a burned out coil.

So, like the poet says, make your check by the numbers and your M113 will work fine.

TOO HIGH MIGHT BE TOO BAD







# TO BE SURE

Asking for a tool by the right nomenclature and FSN will help you get the tool you need.

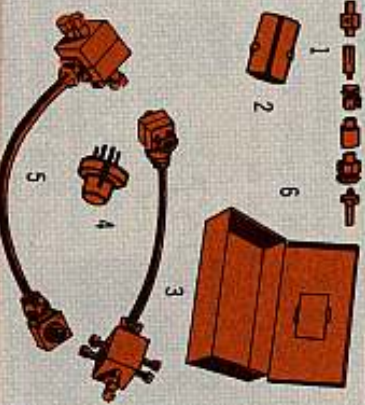
For instance, if you want to order a No. 2 supplemental tool kit you ask for **TOOL KIT, AUTOMOTIVE MAINTENANCE, ORGANIZATIONAL: (2d ECHELON) SET NO. 2, SUPPLEMENTAL, FSN 4940-754-0743.**

The line item number is 453910. The SM 9-4-4940-A08 (18 Sep 61) lists the items in the kit.

If you want the whole kit you order it from your Ordnance support unit, but if you just need some items in the kit you have to order from the support service responsible for the item. Say you need the blacksmith's apron (FSN 8415-234-9254), you would order it from your Quartermaster support unit.

To help you with the FSN's, nomenclatures, and support service responsible for the items in the kit, here's a list for you to go by.

<b>ADAPTER SET, ENGINE ELECTRICAL TEST: 24 v sealed elec system, for tracked vehicles; five adapters in mtl bx.</b> FSN 4910-378-2020	1	ORD
<b>1-ADAPTER, ENGINE ELECTRICAL TEST, ARMATURE AND OUTPUT CIRCUIT; sigle, size 0 pin.</b> FSN 4910-378-2015		
<b>2-ADAPTER, ENGINE ELECTRICAL TEST, REVERSING; no. 1, 3-pin.</b> FSN 4910-378-2016		
<b>3-ADAPTER, ENGINE ELECTRICAL TEST, GENERATOR CONTROL CIRCUIT; no. 1, 3-pin, six cond. cable to term. block, six terminals.</b> FSN 4910-378-2017		
<b>4-ADAPTER, ENGINE ELECTRICAL TEST, REVERSING; no. 1, 3-pin.</b> FSN 4910-378-2018		
<b>5-ADAPTER, ENGINE ELECTRICAL TEST, GENERATOR CONTROL CIRCUIT; no. 2, 3-pin, four cond. cable to term. block, four terminals.</b> FSN 4910-378-2019		
<b>6-BOX, ADAPTER SET; tracked vehicle.</b> FSN 4910-604-4149		



**APRON, BLACKSMITH'S**  
lthr bib type.



FSN 8415-234-9254 2 QM

**ARGON, TECHNICAL:**  
water pumped,  
243 cu ft cyl.



FSN 8120-282-8077 (empty)

**BRUSH, WIRE, ROTARY WHEEL:** crimped S wire 0.014-in dia, 1 1/8-in w thru center onrg, 6-in od, 2-in dia of center onrg.



FSN 6830-290-4291 (full)

**BRUSH, WIRE, SCRATCH:** stls S, lg hdl, 3 x 19 rows, wire.



FSN 7920-682-8847 1 QM

**BRUSH, WIRE, SCRATCH:** S wire, curved hdl, rocker rectangular face, 1 1/8-in to 1 1/4-in lg clear of block, four rows w, 18 rows lg, 6-in to 6 1/4-in lg brush part, 14-in lg overall.



FSN 7920-291-8815 3 QM

**CABLE ASSEMBLY, POWER, ELECTRICAL:** three cond w/three no. 12 AWG rubber-insulated wires, 600 v working voltage, wire type SO 50 ft lg incl terminations, for general purpose use, w/accessories.



FSN 6150-682-3460 2 ENG

**CHISEL, HALF ROUND NOSE, HAND:** 3/8-in w cut.



FSN 5110-271-9943 1 QM

**DRILL, ELECTRIC, PORTABLE:** 3/8-in size, hv-duty, ac/dc, 115 v, w/vert stand.



FSN 5130-473-6228 1 QM



**BRISTLES CAN GET RUSTY, SO KEEP 'EM CLEAN!**



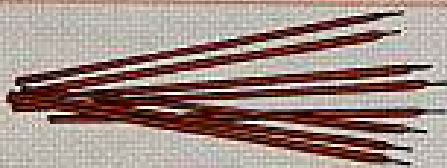


DRILL, TWIST: HSS, stght rd shk, fractional series, two flutes, rh cut. QM



FSN	DIA.	FLUTE LGTH.	O'ALL LGTH.	AMT.
5133-266-9461	33/64-in	4 3/4-in	8-in	1
5133-266-9462	17/32-in	4 3/4-in	8-in	1
5133-266-9463	35/64-in	4 7/8-in	8 1/4-in	1
5133-266-9464	7/16-in	4 7/8-in	8 1/4-in	2
5133-232-2867	37/64-in	4 7/8-in	8 3/4-in	1
5133-233-6455	1 9/32-in	4 7/8-in	8 3/4-in	1
5133-266-9465	2 1/64-in	4 7/8-in	8 3/4-in	1
5133-266-9466	5/8-in	4 7/8-in	8 3/4-in	2
5133-233-6395	4 1/64-in	5 1/8-in	9-in	1
5133-266-9467	2 1/32-in	5 1/8-in	9-in	1
5133-232-2868	4 3/64-in	5 3/8-in	9 1/4-in	1
5133-266-9468	1 1/16-in	5 3/8-in	9 1/4-in	1
5133-266-9469	4 5/64-in	5 5/8-in	9 1/2-in	1
5133-266-9470	2 3/32-in	5 5/8-in	9 1/2-in	1
5133-233-6461	4 7/64-in	5 7/8-in	9 3/4-in	1
5133-266-9471	3/4-in	5 7/8-in	9 3/4-in	2

ELECTRODE, CUTTING AND WELDING: for 1/4-in to 1 1/2-in mtl thk, ac/dc, elec arc.

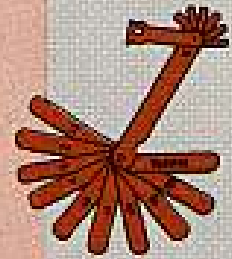


FSN 3439-766-7749

10 ORD



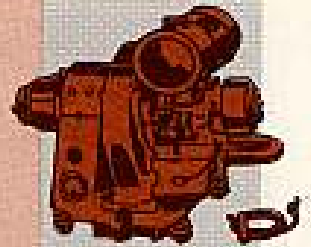
GAGE, GAP SETTING: six blades 0.015-in, 0.018-in, 0.022-in, 0.025-in, 0.030-in, 0.033-in thk, stght folding type feelers, w/o lkg tension device, w/gap adj tool, mtl holder, nine blades, thk ga & 2-in rule grad in 1/32-in.



FSN 5210-221-2017

1 QM

GENERATOR SET, GASOLINE ENGINE: ac, 60 c, 1.5 kw rating, 120 v line to line, air cooled, manually cranked by rope, skid mtd, 30-in lg x 19-in w x 26-in h, winterized.



FSN 6115-245-2522

1 ENG

GLOVES, LEATHER: men's cowhide work type w/ gauntlet cuff, cotton & wool knit lnd, cream or light gray, large size.



FSN 8415-268-7859

1 QM

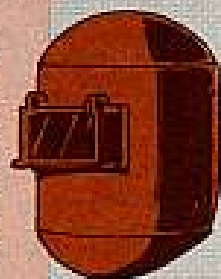
GOGGLES, INDUSTRIAL: ventilated plastic, w/eye cups, adj nose bridge, one clear glass lens ea aperture, not polarized, hardened, rd, 50-mm dia, head-band supported, worn over personal spectacles, w/o carrying case.



FSN 4240-269-7912

1 CML

HELMET, WELDER'S: fbr body, one pc molded or riveted seamed, hinged glass holder, tilting head-gear, one unhardened GO-bs shade 10 filter glass, one hardened & unhardened clear cover glass, 2-in w x 4 1/2-in lg.



FSN 4240-540-0623

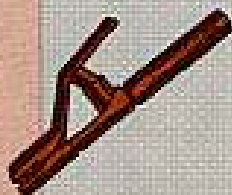
2 CML





THERE IS NOTHING "SISSY" ABOUT SAFETY GEAR!

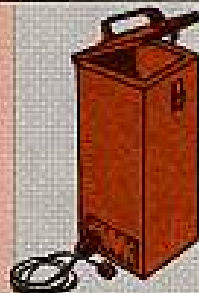
**HOLDER, ELECTRODE WELDING:** fully ins, hv-duty, 1/16-in to 1/4-in electrode cap., 300 amp cap. comb soldered & mechanical cable connections.



**FSN 3430-238-1638**

**2 ORD**

**HOTBOX, WELDING ELECTRODE:** moisture stabilizer, ac/dc, 200 w, 117 v, 1.7 amp. thermostat controlled, w/10 ft supply cord.



**FSN 3439-440-0090**

**1 ORD**

**JACK, HYDRAULIC, HAND:** self-contained 30-ton cap., 11-in closed h, 17-in extended h, sgle pump.



**FSN 5120-188-1790**

**2 QM**

**LENS, HELMET, WELDER'S:** cover lens, glass, 4 1/4-in lg x 2-in w.



**FSN 4240-276-8938**

**2 CML**

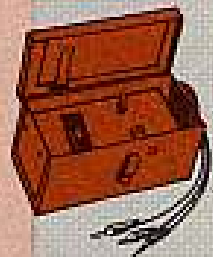
**LENS, HELMET, WELDER'S:** filter shade no. 10.



**FSN 4240-276-8940**

**2 CML**

**LIGHT, IGNITION TIMING:** three lead type, 4 1/2-v btry reqd, neon bulb element, rect sh-ntl case, 8 1/2-in lg x 3 1/2-in w x 4-in h overall excl wire leads, 48-in lg pos, neg, & h tension leads, spg clip type term.



**FSN 6625-255-1449**

**1 ORD**

**MEASURE, LIQUID:** 8-qt cap., w/flex spout & flow control valve, S, fin. to be water, acid, alcohol, oil, & gasoline resistant.



**FSN 7240-255-5996**

**1 QM**

**MITTENS, CLOTH:** men's asb work type w/gauntlet cuff, one sheath excl thumb, one, two, three, & four sheathed fingers, napped natural wool, knit lnd.



**FSN 8415-266-8843**

**2 QM**

**MULTIMETER:** range 0 to 5000 v ac/dc in steps, 0 to 500 ma dc in three steps, 0 to 400000 ohms in two steps, 3% accuracy on dc range, 5% accuracy on ac range, 1000 ohms per v ac/dc range sensitivity, 3 1/8-in w x 2 9/16-in thk x 5 7/8-in h overall, plastic case, for general purpose use, w/e.



**FSN 6625-543-1438**

**1 TC**

**OILER, HAND:** 1 pt cap, force feed by int pump, S body 3-in to 4-in dia, 9-in lg flex S spout.



**FSN 4930-262-8868**

**1 QM**



PLIERS, RETAINING RING: ext'r fl jaws, 0.087-in to 1-in ring size, 0.038-in dia sight tips, w/adj stop & spg, w/bracket.



FSN 5120-288-9717 1 QM

PLIERS, RETAINING RING: ext'r fl jaws, 1.430-in to 2-in ring size, 0.070-in dia sight tips, w/adj stop & spg.

FSN 5120-293-0049 1 QM

PLIERS, RETAINING RING: int fl jaws, 0.031-in ring size, 0.022-in dia sight tips, w/adj stop & spg.



FSN 5120-598-0665 1 QM

PLIERS, RETAINING RING: int fl jaws, 1.020-in to 1.370-in ring size, 0.038-in dia sight tips, w/adj stop & spg, w/bracket.

FSN 5120-293-0048 1 QM

PLIERS, RETAINING RING: int fl jaws, 1.750-in to 2-in ring size, 0.070-in dia sight tips, w/adj stop & spg.

FSN 5120-293-0045 1 QM

PLIERS, RETAINING RING: int fl jaws, 3-in to 3.500-in ring size, 0.090-in dia sight tips, w/adj stop & spg.

FSN 5120-293-0046 1 QM

PLIERS, SLIP JOINT: sight nose, comb. w/cutter, 6-in size.



FSN 5120-223-7396 1 QM

PULLER KIT, MECHANICAL: gear & brg, type 7 size 3 w/4 1/2-in, 9 1/2-in, & 16 1/2-in legs; type 11, size 2 & type 12, size 3 attachment; type 17, class 2, style A, sizes 2, 3, 6, 8, 9, 10 & 12 adapters, in mt. bx.

FSN 5120-423-1596 1 QM

Consisting of:  
Puller, Mechanical, with 9 1/2-in legs.

FSN 5120-833-5095 1 QM

Adapter, Puller: female; 5/8-18 NF-2 & 3/8-18 NF-2, 1 1/4-in o/a lg.

FSN 5120-357-5180 2 QM

Adapter, Puller: female; 5/8-18 NF-2 & 3/8-16 NF-2, 1 1/4-in o/a lg.

FSN 5120-357-5181 2 QM

Adapter, Puller: female; 5/8-18 NF-2 & 3/8-14 NF-2, 1 1/4-in o/a lg.

FSN 5120-357-5182 2 QM

Adapter, Puller: female; 5/8-18 NF-2 & 1-14 NF-2, 1 1/4-in o/a lg.

FSN 5120-357-5183 2 QM

Adapter, Puller: female; 5/8-18 NF-2 & 1 1/4-12 NF-2, 1 1/4-in o/a lg.

FSN 5120-357-5184 2 QM

Box, Puller Set: sheet steel, hinged cover, hasp & staple, leather suitcase handle, 27 1/2-in lg, 11 3/4-in width, 2 1/2-in high.

FSN 5120-357-5463 1 QM



PLIERS, RETAINING RING: int fl jaws, 1.020-in to 1.370-in ring size, 0.038-in dia sight tips, w/adj stop & spg, w/bracket.

FSN 5120-293-0048 1 QM

PLIERS, RETAINING RING: int fl jaws, 1.750-in to 2-in ring size, 0.070-in dia sight tips, w/adj stop & spg.

FSN 5120-293-0045 1 QM

PLIERS, RETAINING RING: int fl jaws, 3-in to 3.500-in ring size, 0.090-in dia sight tips, w/adj stop & spg.

FSN 5120-293-0046 1 QM

PLIERS, SLIP JOINT: sight nose, comb. w/cutter, 6-in size.



FSN 5120-223-7396 1 QM

PULLER KIT, MECHANICAL: gear & brg, type 7 size 3 w/4 1/2-in, 9 1/2-in, & 16 1/2-in legs; type 11, size 2 & type 12, size 3 attachment; type 17, class 2, style A, sizes 2, 3, 6, 8, 9, 10 & 12 adapters, in mt. bx.

FSN 5120-423-1596 1 QM

Consisting of:  
Puller, Mechanical, with 9 1/2-in legs.

FSN 5120-833-5095 1 QM

Adapter, Puller: female; 5/8-18 NF-2 & 3/8-18 NF-2, 1 1/4-in o/a lg.

FSN 5120-357-5180 2 QM

Adapter, Puller: female; 5/8-18 NF-2 & 3/8-16 NF-2, 1 1/4-in o/a lg.

FSN 5120-357-5181 2 QM

Adapter, Puller: female; 5/8-18 NF-2 & 3/8-14 NF-2, 1 1/4-in o/a lg.

FSN 5120-357-5182 2 QM

Adapter, Puller: female; 5/8-18 NF-2 & 1-14 NF-2, 1 1/4-in o/a lg.

FSN 5120-357-5183 2 QM

Adapter, Puller: female; 5/8-18 NF-2 & 1 1/4-12 NF-2, 1 1/4-in o/a lg.

FSN 5120-357-5184 2 QM

Box, Puller Set: sheet steel, hinged cover, hasp & staple, leather suitcase handle, 27 1/2-in lg, 11 3/4-in width, 2 1/2-in high.

FSN 5120-357-5463 1 QM



24 grit Disk —  
FSN 5345-196-1689

60 grit Disk —  
FSN 5345-196-1697

36 grit Disk —  
FSN 5345-196-1691

SANDER, DISK, ELECTRIC, PORTABLE: 7-in pad dia, hv-duty, ac/dc, 115 v, w/three prong attachment plug, w/adpt for two prong connection, w/grnd lead, w/three 7-in abrasive disks, 24 grit, 36 grit, & 60 grit.

FSN 5130-293-0872 1 QM

SCREEN, WELDING: collapsible.



FSN 3431-357-7111 1 ENG

SCREWDRIVER, FLAT TIP: plastic hdl, w/wrench grip, holster, forged, hv-duty, 5/16-in w flared tip, 6-in lg blade.



FSN 5120-218-1283 1 QM

SOCKET, SOCKET WRENCH: 1-in sq-drive, 6 pt opng.



FSN 5120-189-8615 1

FSN 5120-473-6525 1

FSN 5120-180-1013 1

FSN 5120-234-7651 1

OPNG

AMT

SOCKET, SOCKET WRENCH: u/o power tools, 1-in sq-drive, hex opng.



FSN 5130-293-1411 1

FSN 5130-221-8017 1

FSN 5130-221-8019 1

FSN 5130-221-8020 1

FSN 5130-221-8021 1

FSN 5130-221-8022 1

FSN 5130-221-8023 1

FSN 5130-221-8024 1

FSN 5130-618-7786 1

HEX OPNG DRIVE AMT



IT MAY BE A GREAT TOOL BUT IS IT RIGHT FOR THE JOB?

SPRAY GUN, PAINT: hand operated, non-bleeder type, ext'r mix air cap, 8cfm air consumption at 50 to 60 lb pressure, al body, 3/4-18NPSH air, 60 deg incl bev taper seat, 3/4-18NPSH fluid, 60 deg incl bev taper seat.



FSN 4940-201-8415 1 ORD

TEST SET, IGNITION COIL: capacitor-resistor.



FSN 4910-300-1305 1 ORD



MORE



TESTER, INTERNAL COMBUSTION ENGINE: unmounted, for testing manifold vacuum & fuel pump pressure, compression & vacuum ga-0 to 8 lb pressure, 0 to 27-in vacuum, w/e carrying case.



FSN 4910-255-8673\*

1 ORD

\*Component parts are not stocked for issue.



WELDING MACHINE, ARC: Generator; gasoline engine driven single operator; remote control; 300 amp, dc arc; skid mtd; 60 amp at 20 v min, 375 amp at 40 v max current; ac, 115 v, single phase, 60 cycle, 3 kw auxiliary power.

FSN 3431-542-1072

ENG

WELDING SET, ARC, INERT GAS SHIELDED: plastic or mtl lnd gun, eqped for 3/64-in wire, 115 v, dc, w/accessories.

FSN 3431-691-1415

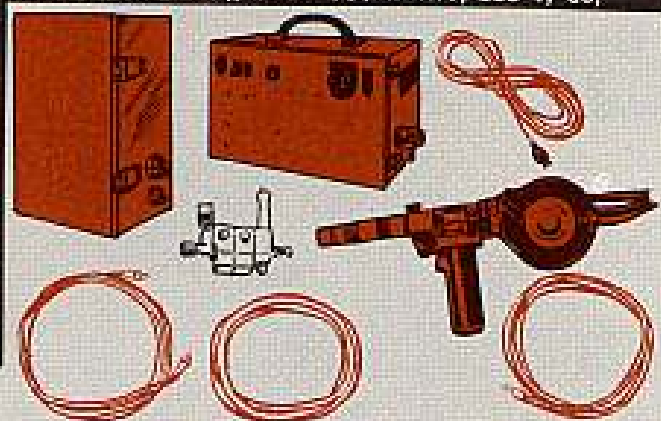
ENG

This welding set listed under the family FSN 3431-691-1415 has the following specific makes and models of Engineer equipment:

Wesco Model SA-111-AC/DC FSN 3431-837-5573

Wesco Model SA-135 FSN 3431-879-9709

Linde Co. Model "Sigarette" FSN 3431-837-5574



The following high mortality parts or accessories show mfrs code, part number and FSN.

Wire, AL., Type 5356, 3/64-in dia, 1 lb spool.

FSN 3439-775-6476

Nozzle, Linde Co (36346) 105220

FSN 3431-893-3140

Nozzle, Wesco (88725) 311B703H02

FSN 3431-446-2542

Adapter (88725) 419A003H01

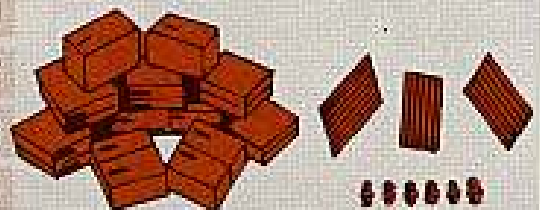
FSN 3431-875-7930

Roll, drive (36346) 48 V 35

FSN 3431-893-3126

Roll, drive (88725) 419A009G-01

FSN 3431-875-7633



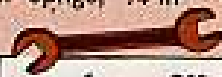
WRENCH, OPEN END, BOX: flare nut type, sgle-end, 1 3/8-in 12 pt opng.



FSN 5120-277-2697

1 QM

WRENCH, OPEN END, FIXED: dble-hd type, 15 deg angle, 1 5/16-in & 1 1/16-in opngs, 3/4-in thk hd, 15 5/8-in lg overall.



FSN 5120-449-8141

1 QM

WRENCH, OPEN END, FIXED: dble-hd type, 45 & 90 deg angles, 5/16-in opng, 1 3/64-in thk hd, 6 1/2-in lg overall.



FSN 5120-449-8138

1 QM

WRENCH, OPEN END, FIXED: dble-hd type, 15 deg angle, 1 3/8-in & 1 1/2-in opngs, 5/16-in thk hd, 15 1/2-in lg overall.



FSN 5120-277-2325

1 QM

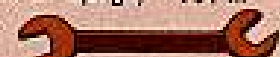
WRENCH, OPEN END, FIXED: dble-hd type, 15 deg angle, 1 1/2-in & 1 3/4-in opngs, 3/4-in thk hd, 16 1/2-in lg overall.



FSN 5120-277-9818

1 QM

WRENCH, OPEN END, FIXED: dble-hd type, 15 deg angle, 1 7/16-in & 1 5/8-in opngs, 4 1/64-in thk hd, 17-in lg overall.



FSN 5120-277-2326

1 QM



**WRENCH, IMPACT, ELECTRIC:** 1-in sq-drive, 1¼-in bolt dia cap, ac/dc, 115 v, 60 c, sgle-ph, rvrs.  
**FSN 5130-317-8058** 1 QM

Consisting of:

**EXTENSION, SOCKET WRENCH:** designed for power tools; sq end 1-in, 7-in lg.

**FSN 5130-449-6656**



1 QM

**PIN, SOCKET RETAINER.**

**FSN 5130-390-5187**

1 QM

**CONNECTOR, PLUG, ELECTRIC.**

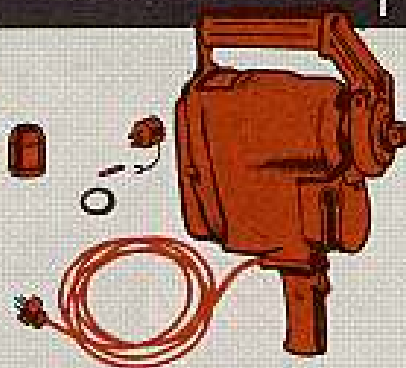
**FSN 5935-054-3802**

1 SIG

**PACKING, PREFORMED, "O" ring,** 1¾-in ID, 2½-in OD, ¾-in o/a height.

**FSN 5330-505-6211**

1 ORD

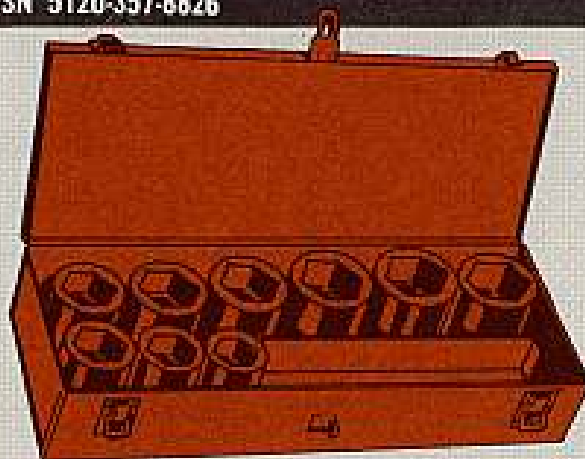


**SOCKET SOCKET WRENCH:** 1-in sq-drive.

FSN	OPN'G	AMT.
<b>FSN 5130-293-1416</b>	13/16-in	1 QM
<b>FSN 5130-293-1414</b>	15/16-in	1 QM
<b>FSN 5130-596-1155</b>	1 1/16-in	1 QM
<b>FSN 5130-293-1415</b>	1 1/4-in	1 QM
<b>FSN 5120-235-5837</b>	1 1/2-in	1 QM

**WRENCH SET, SOCKET:** 1-in sq-drive, hex, 17/8-in to 2¾-in 6 pt opngs, w/handles and attachments, w/case.

**FSN 5120-357-8826**



1 QM

Consisting of:

**CASE, SOCKET WRENCH SET:** mtl, hinged cover, approx 20½-in x 5¼-in x 4¼-in.

**FSN 5140-322-5968**

1 QM

**EXTENSION, SOCKET WRENCH:** 1-in sq-drive, 8-in nom lg.

**FSN 5120-242-3139**

1 QM

**EXTENSION, SOCKET WRENCH:** 1-in sq-drive, 17-in nom lg.

**FSN 5120-240-8704**

1 QM

**HANDLE, SOCKET WRENCH:** rtc, rvrs, 1-in sq-drive end, 20½-in nom lg overall.

**FSN 5120-221-7968**

1 QM

**HANDLE, SOCKET WRENCH:** sliding T-type, 1-in sq-drive end, 22½-in nom lg overall.

**FSN 5120-230-6373**

1 QM

**SOCKET, SOCKET WRENCH:** 1-in sq-drive, hex,

FSN	OPN'G	AMT.
<b>FSN 5120-237-0951</b>	17/8-in	1
<b>FSN 5120-180-1007</b>	2-in	1
<b>FSN 5120-227-6706</b>	2 1/8-in	1
<b>FSN 5120-234-7647</b>	2 3/16-in	1
<b>FSN 5120-235-5840</b>	2 1/4-in	1
<b>FSN 5120-234-7648</b>	2 3/8-in	1
<b>FSN 5120-227-6707</b>	2 1/2-in	1
<b>FSN 5120-180-1011</b>	2 5/8-in	1
<b>FSN 5120-234-7650</b>	2 3/4-in	1

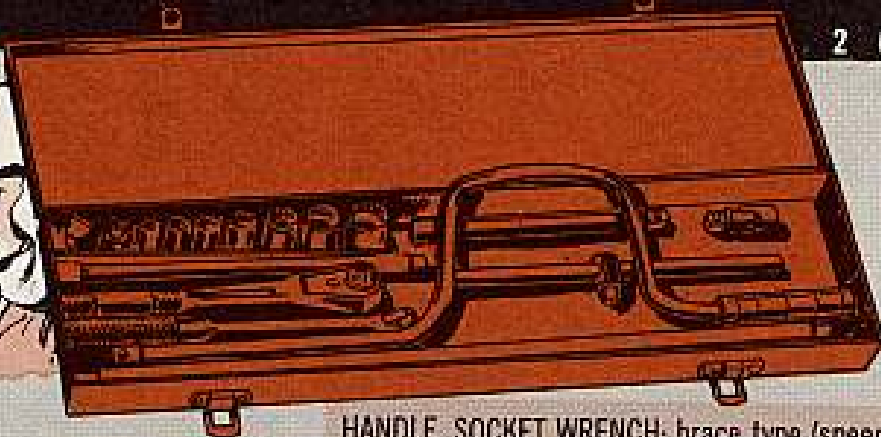


WRENCH SET, SOCKET:  $\frac{3}{8}$ -in sq-drive,  $\frac{5}{16}$ -in to  $\frac{3}{4}$ -in 12 pt opngs, w/handles and attachments, w/case.

FSN 5120-449-8200

2 QM

WHY NOT TAKE AN INVENTORY AT REGULAR INTERVALS... IT'S A GOOD WAY TO KEEP ON TOP OF WHAT Y'GOTT!



Consisting of:

BIT, SCREWDRIVER: fl tip,  $1\frac{1}{16}$ -in w,  $\frac{3}{8}$ -in female sq-drive shk, 1 $\frac{1}{4}$ -in lg overall.

FSN 5120-243-7332 1 QM

BOX, SOCKET WRENCH:

FSN 5120-449-8200 1 QM

CROWFOOT ATTACHMENT, SOCKET WRENCH: nonratcheting open end type,  $\frac{3}{8}$ -in sq-drive,  $\frac{1}{2}$ -in opng.

FSN 5120-184-8384 1 QM

CROWFOOT ATTACHMENT, SOCKET WRENCH: nonratcheting open-end type,  $\frac{3}{8}$ -in sq-drive,  $\frac{7}{16}$ -in opng.

FSN 5120-184-8397 1 QM

EXTENSION, SOCKET WRENCH:  $\frac{3}{8}$ -in sq-drive, 6-in nom lg overall.

FSN 5120-227-8107 1 QM

EXTENSION, SOCKET WRENCH:  $\frac{3}{8}$ -in sq-drive, 9-in nom lg overall.

FSN 5120-243-1693 1 QM

EXTENSION, SOCKET WRENCH: solid,  $\frac{3}{8}$ -in sq-drive, 18-in nom lg overall.

FSN 5120-273-9205 1 QM

HANDLE, SOCKET WRENCH: brace type (speeder),  $\frac{3}{8}$ -in sq-drive, 16-in nom lg overall.

FSN 5120-237-4969 1 QM

HANDLE, SOCKET WRENCH: hinged type,  $\frac{3}{8}$ -in sq-drive, 8 $\frac{1}{2}$ -in nom lg overall.

FSN 5120-240-5396 1 QM

HANDLE, SOCKET WRENCH: rtc type, rvrs,  $\frac{3}{8}$ -in sq-drive, 6-in nom lg overall.

FSN 5120-240-5364 1 QM

HANDLE, SOCKET WRENCH: sliding T-type,  $\frac{3}{8}$ -in sq-drive, 7-in nom lg overall.

FSN 5120-241-3143 1 QM

SOCKET, SOCKET WRENCH:  $\frac{3}{8}$ -in sq-drive, 12 pt

FSN	OPN'G	AMT.
FSN 5120-232-5711	$\frac{5}{16}$ -in	1
FSN 5120-227-6702	$\frac{3}{8}$ -in	1
FSN 5120-227-6703	$\frac{7}{16}$ -in	1
FSN 5120-237-0977	$\frac{1}{2}$ -in	1
FSN 5120-227-6704	$\frac{9}{16}$ -in	1
FSN 5120-237-4973	$\frac{5}{8}$ -in	1
FSN 5120-232-5706	$1\frac{1}{16}$ -in	1
FSN 5120-227-6705	$\frac{3}{4}$ -in	1

UNIVERSAL JOINT, SOCKET WRENCH:  $\frac{3}{8}$ -in sq-drive.

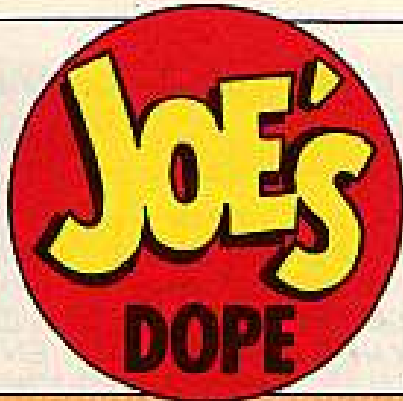
FSN-5120-224-9215 1 QM



WRENCH, TORQUE: rigid frame end drive style, w/visual dial indicating tor mech,  $\frac{3}{4}$ -in male sq-drive, 600 ft-lb cap, w/case.

FSN 5120-221-7983 1 QM





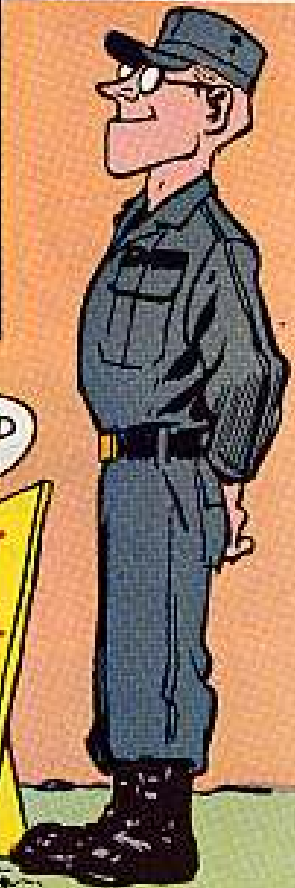
THERE IS AN EASIER WAY

GIVE A CHEER FOR GARFIELD SLOTH

THE HOTTEST MAINTENANCE TYPE IN OUR OUTFIT!

WE'RE PROUD TO SERVE WITH HIM!

BEST MAINTENANCE RECORD IN THE ARMY



Before you cheer, and while you watch enviously as he basks in the glory of his maintenance achievements . . . remember that Garfield Sloth learned the hard way . . .

It probably started 'way back—but for our purposes, let's pick it up at the start of his military career . . .

LATE? . . . SO WHAT!? I'M ONLY A LITTLE LATE...GEE, WOT'S SO AWFUL ABOUT THAT??

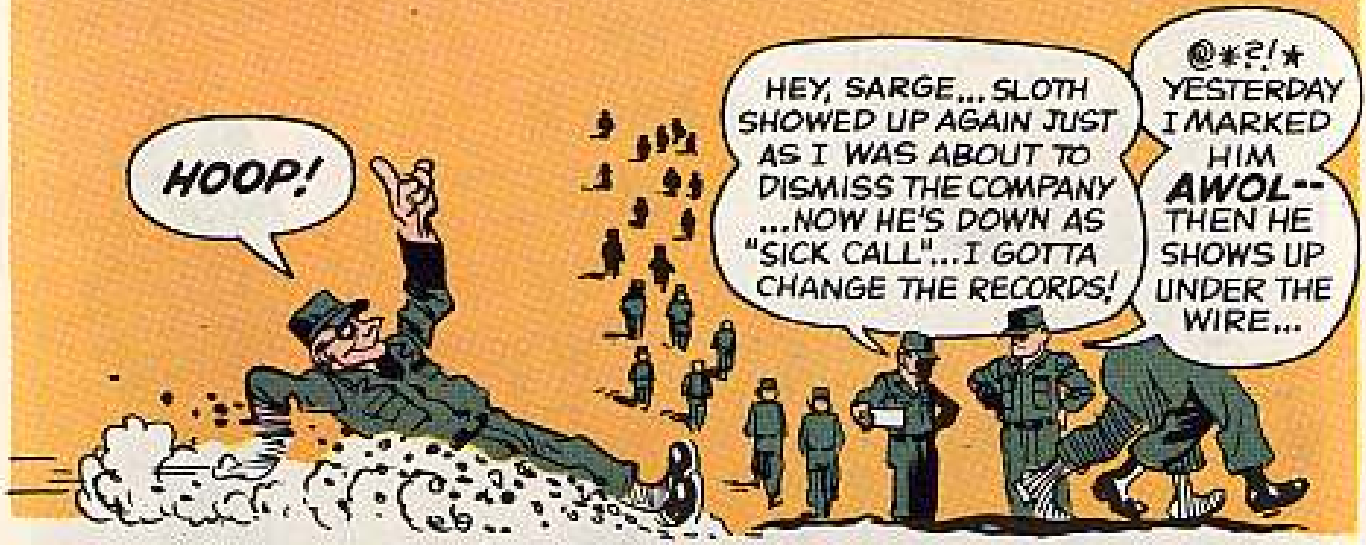
LOCAL CITY DRAFT BOARD

@#!!\*+?! STRAGGLER! ...NOW I GOTTA RESHUFFLE ALL MY PAPERWORK @!!\*?★★?!!





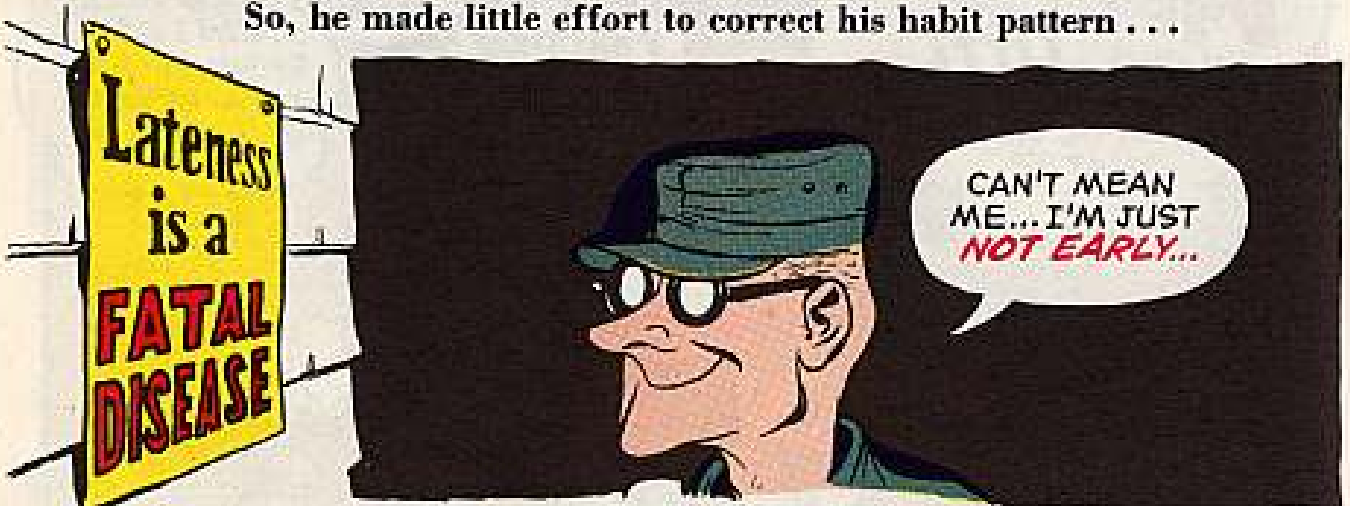
"After all," figured Sloth, "as long as I get there eventually, what's the flap??"



He saw no reason why his buddies were so unreasonable about such a little thing...



So, he made little effort to correct his habit pattern...





Sloth's first duty station after graduation from technical school was just what he hoped for—a quiet post.

**YOU'RE LATE,**  
THE OTHER  
REPLACEMENTS  
ARRIVED TWO  
HOURS AGO!!

SHUCKS, SARGE...  
I MISSED THE TRAIN  
BY TWO MINUTES...  
NO SWEAT THO--  
THERE WAS ANOTHER  
TRAIN ALONG IN  
TWO HOURS...

NO SWEAT, HE SEZ!!  
NOW I GOTTA RETYPE  
ALL MY RECORDS...  
AND ASSIGNMENTS!!

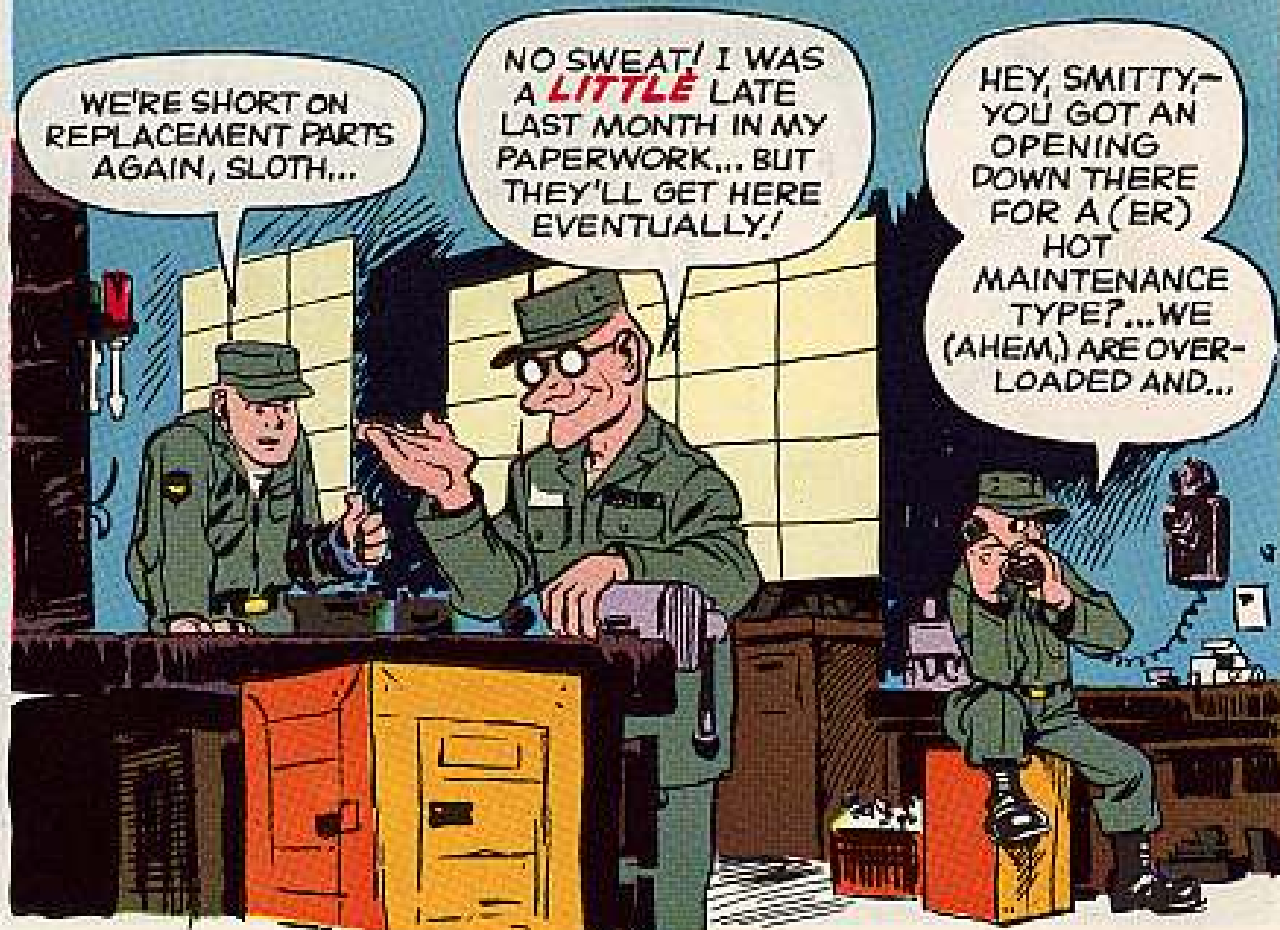


It was a quiet post . . . until he was there for a while . . .

WE'RE SHORT ON  
REPLACEMENT PARTS  
AGAIN, SLOTH...

NO SWEAT! I WAS  
A **LITTLE** LATE  
LAST MONTH IN MY  
PAPERWORK... BUT  
THEY'LL GET HERE  
EVENTUALLY!

HEY, SMITTY,—  
YOU GOT AN  
OPENING  
DOWN THERE  
FOR A (ER)  
HOT  
MAINTENANCE  
TYPE?... WE  
(AHEM,) ARE OVER-  
LOADED AND...





**Joe's** Dope Sheet

EVERYBODY WHO HANDLES  
EQUIPMENT TAKES

**YOUR LIFE**  
IN HIS HANDS!!

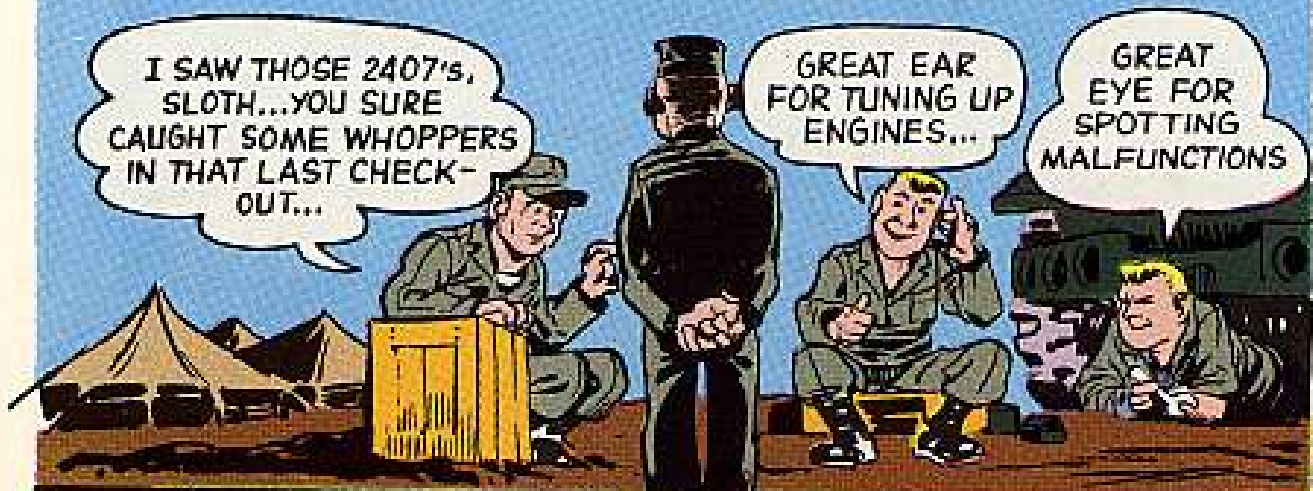


WE HAVE THE WORLD'S BEST EQUIPMENT ... *Take care of it*

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



Now, understand, it is no one's intention to infer that Garfield Sloth is stupid . . . no sir, this man's a good mechanic . . . an able soldier . . .



A short time ago Sloth's outfit got hot and shipped out . . .





... To support an action ...

THEY'RE MASSING  
BEHIND THE RIDGE FOR A  
COUNTER ATTACK...WE  
CAN HOLD THIS HILL  
UNTIL RELIEVED ONLY  
IF YOU GET THEM  
SUPPLIES UP HERE  
PRONTO.

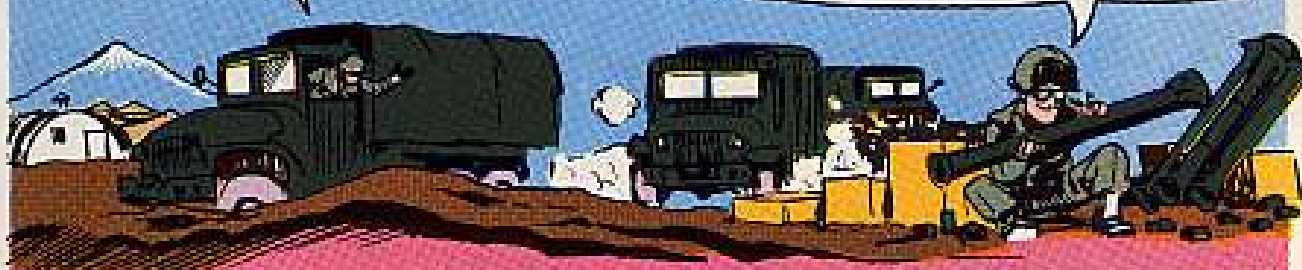
LOOKS LIKE WE  
GOT TO ABOUT 0500  
...IF WE GET THEM  
SUPPLIES IN TIME WE  
CAN HOLD OUT A MONTH!



No sweat ... Plenty of stuff at the port ...

C'MON, SLOTH  
SADDLE UP!

NOT QUITE READY,  
SARGE, I GOT A FEW  
**LITTLE** THINGS TO DO  
ON SOME OF THESE WEAPONS!



Just needed a little maintenance ...

MAN, YOU SHOULDA DONE  
THOSE A WEEK AGO!

NO SWEAT... ONLY TAKE  
ME AN AFTERNOON TO  
BRING 'EM UP TO SNUFF!  
WE'LL GET THERE,  
DON'T WORRY!





Yep... They got there... **A LITTLE LATE!**

TURN BACK,  
SOLDIER...THEY BEEN  
OVERRUN...



CAN'T UNDERSTAND  
IT... I'M PRACTICALLY  
ON TIME...



NOT GOOD ENOUGH...  
COUNTER ATTACK CAME  
AT 0500 JUST LIKE OUR  
INTELLIGENCE REPORTED!



Garfield Sloth was never the same again . . .

Oh yes, they're cheering ol' Sloth now . . . but more than anyone he knows that he could have made it easier . . . and a lot earlier.

TAKE A TIP  
FROM ME, BUDDY, START  
**GOOD MAINTENANCE HABITS**  
NOW!





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 5-2230-202-25P, Nav Adzing Machine, Railway Tie, Nordberg Model BZ.  
 TM 5-2410-208-10, Nav Tractor, Fall Tracked.  
 TM 5-3810-202-20P, Nav Carrier, Cross-Shovel.  
 TM 5-4120-202-20P, Nav Msl, Air Cond and Heaters.  
 TM 5-6115-211-20P, Jan LaCrosse, Gen Equip.  
 TM 5-6125-202-20, Nav Nike Power Gen Equip.  
 TM 9-1055-201-12P, Dec 3.5 In Rocket Launchers M20A1 and M20A1B1.  
 TM 9-1190-249-20P, Dec Supply Literature, Redstone XM58.  
 TM 9-1430-301-20P/1, Nav Hawk, Ground Con Equip.  
 TM 9-1430-302-20P/1, Nav Hawk, Ground Con Equip.  
 TM 9-1430-302-20P/2, Dec Hawk, Ground Equip.  
 TM 9-1430-303-20P/2, Dec Hawk, Ground Equip.  
 TM 9-1430-311-20P/2, Nav Hawk, Ground Equip.  
 TM 9-1440-250-20P/6, Nav Nike-Hercules, Hercules (Imp).

TM 9-1440-300-20P/2, Dec Hawk, Ground Handling.  
 TM 9-1550-200-20P/2, Nav Target Msl.  
 TM 9-2330-235-14-24P, Dec Hawk, Oper & Maint.  
 TM 10-1670-209-20, Nav Tiedown Assy, Cargo, Air Delivery.  
 TM 10-1670-220-23P, Nav Basket Delivery, Rucker Equip XM1.  
 TM 11-3895-202-20P, Nav Reel Units RL-31 -31-B -31-C -31-D & -31-E.  
 TM 11-3815-283-20P, Nav Teletypewriter Set AN/FGC-70X.  
 TM 11-5820-214-20P, -25P, Dec Converter Spl Sideband CV-157/URR.  
 TM 11-5820-398-20, -20P, Dec Radio Set AN/PRC-25.  
 TM 11-5820-500-20P, Dec Radio Set AN/URC-53.  
 TM 11-5841-239-24, Sep Radar Set AN/APN-117.  
 TM 11-5841-240-15P, Dec Recorder Processor Viewer MK-662/UP.  
 TM 11-6115-231-20P, Nav Gen Set, PU-404/M, PU-407/M.  
 TM 11-6625-447-20P, Nav Test Set, Radio AN/ARM-68.  
 TM 11-6625-466-15, Nav Oscilloscope AN/USM-151.  
 TM 11-6625-489-12, Nav Test Set, Actuator and Arming Switch AN/USM-155.  
 TM 11-6625-498-20P, Nav Test Set, Radio Free Power AN/USM-161.  
 TM 11-6625-504-20P, Nav Indicator, Standing Wave Radio IM-146/URT.

TM 11-6665-214-10, Nav Radiometers IM-93/UD, IM-93A/UD and IM-147/PD.

#### MODIFICATION WORK ORDERS

MWO 9-1000-209-30/6, Nov 120MM Recoilless Gun Veh Mt Assy XM131.  
 MWO 9-1320-203-30/6, Nov (Ballistic Computers M13) (T31) M13A1 (T31E1) Install Input Shaft Boot.  
 MWO 9-2300-224-20/2, Nav APC M113; Inst Saf Lock on Eng Disc Control Lever.  
 MWO 9-2350-214-20/2, Nav Tank, M103A1, Add CAM (Heat) T153E14 and TAB to Ballistic Computer M14 (T33).  
 MWO 10-1670-237-20/1, Dec Pilot Chute Cargo Type.

#### MISCELLANEOUS

AR 245-210, Oct Records.  
 DA Cir 40-15, Oct Prevention of Cold Injury.  
 FM 6-121, Oct Fld Arty Target Acq.  
 LO 9-2330-251-12, Oct Trailer, N Ton, M587.  
 SB 8-42, Nav Army Med Serv Adopted Items.  
 SM 5-4-4610-502, -511, Nov Water Purification Set.  
 SM 10-1-6670, Nov FSC Class 6670 Scales and Balances.  
 TB MED 78, Nov Use of Needles and Syringes.  
 TB 34-9-123, Nav Infra-Red Scopes.  
 TB 34-9-125, Nav Rope, Wire, General Purpose.

## HALT BEFORE SALT!

ON FINAL DRIVE COVERS BE SURE TO FOLLOW MWO 9-2300-224-20/10 (27 NOV 62) FOR HOW TO PROTECT THEM.

Before you do any salt-water fording with your M113 PC, you want to call a halt and coat its unpainted magnesium-alloy components with corrosion preventive compound (FSN 8030-526-1605). You'll need to coat the differential, transfer case and cooling fan housing. TB 9-2300-224-20/1 (30 Oct 62) tells you how and when, and there are masking precautions you need to watch closely.

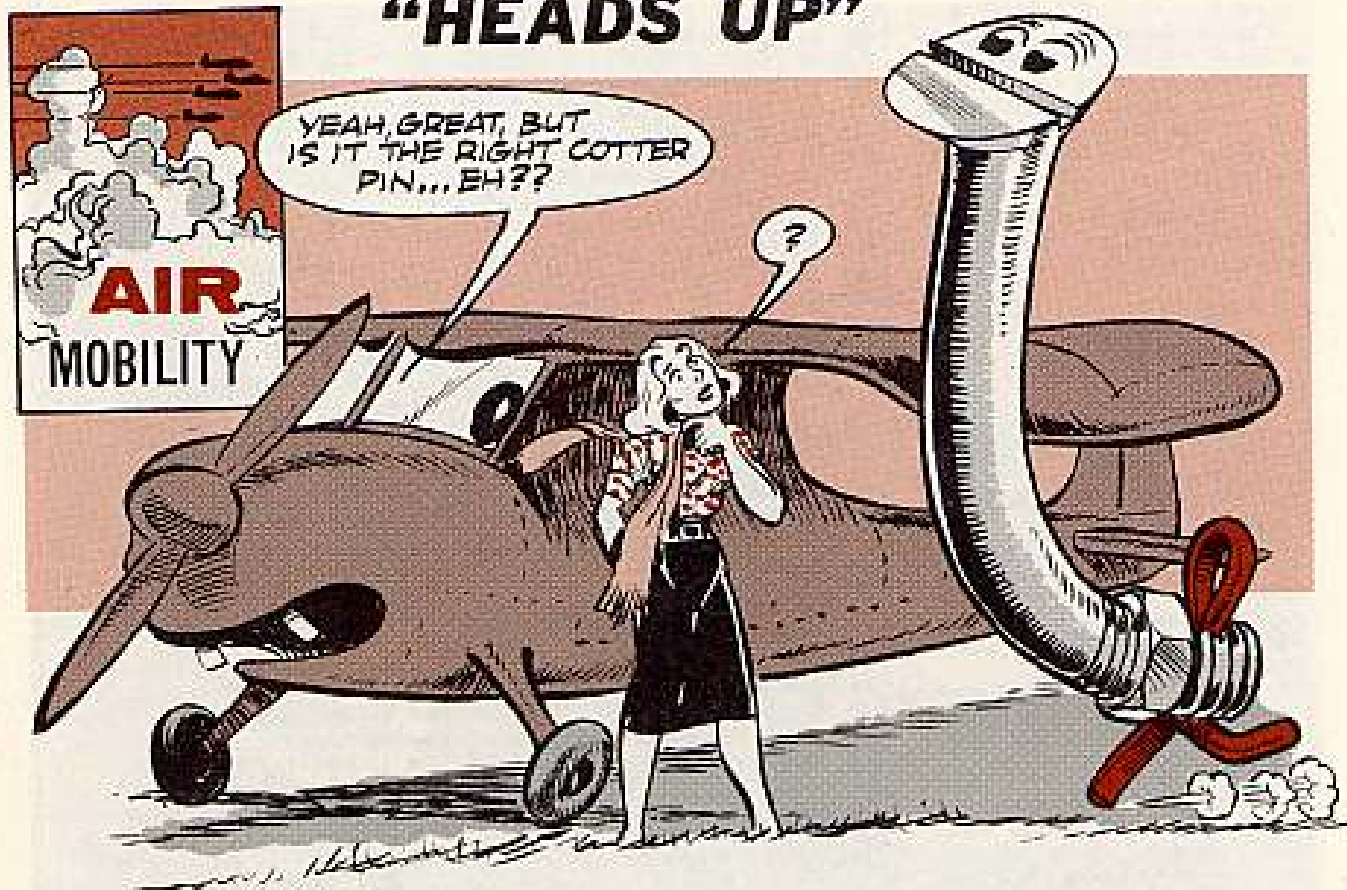
You've gotta clean the components thoroughly first with dry cleaning solvent (FSN 6850-336-8170). Be careful to brush the corrosion preventive compound on lightly. (The TB says not over a 0.002-in thick coating, so you'll have to figure some sort of eyeball judgment for the deal.)

## THE NEW PB PAGE

DA Form 14-110, Organization (Installation) Property Record, dated 1 Sept 57, went out the window as of 1 March 63. The new form goes by the same name and number, but it's dated 1 March 62. You're not to change your property record over to the new form in one full swoop, tho . . . the new one'll be used as you add new pages to your property book . . . or, as you get the word to swap forms from your supply support outfit.



# "HEADS UP"



You see it in photos!

You see it in drawings!

You can even read about it in Section VI, Chapter 2 of your TM 55-405-2 (30 Aug 62), "Aircraft Hardware and Materials".

What is it? Why, it's the general shop practice of putting in a pin or bolt in the head up . . . head forward . . . or head in direction of rotation position.

Take one of those flathead (clevis) bolts—the kind you find along a bird's control cable rigging. This baby is held by a nut and cotter pin.

But is it the right pin? And is it put in the way it should be? That's the rub.

For example, suppose a careless type comes up with a cotter pin that wasn't long enough. And, to top it off, he puts it in the wrong way with the head at the bottom!

For sure he isn't going to get much of a bend on the cotter pin end that's bent around the clevis bolt nut. Add a little vibration, which can straighten



this pin, and she'll drop-out . . . followed by the nut which is now free to work loose. Needless to say, if a control cable loses a nut in flight the resultant "crunch" would likely be heard clear back to St. Louis.

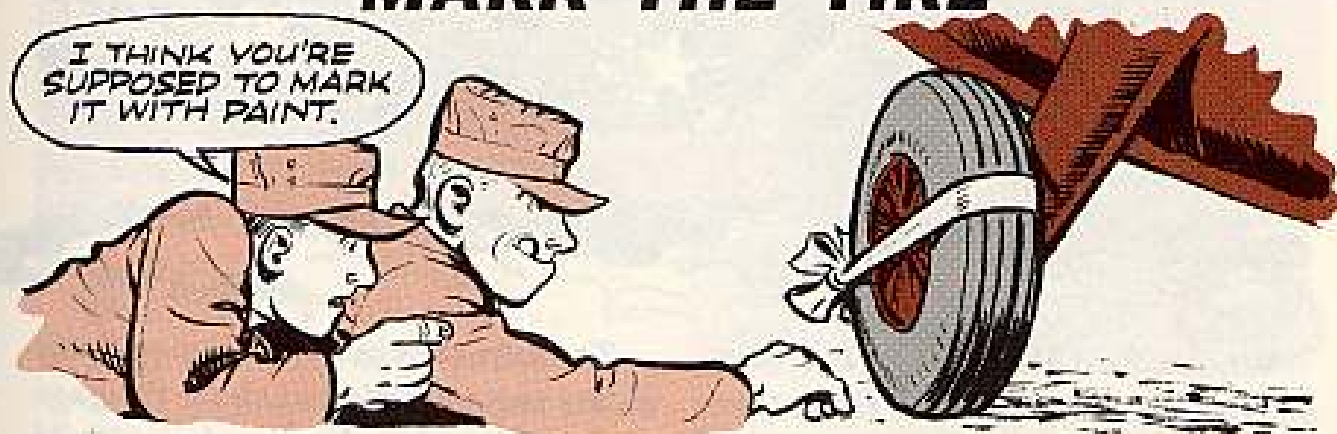
'Course a missing pin wouldn't happen to you. Not with the -20P manual handy to give you the right cotter pin so you can bend the end proper-like.



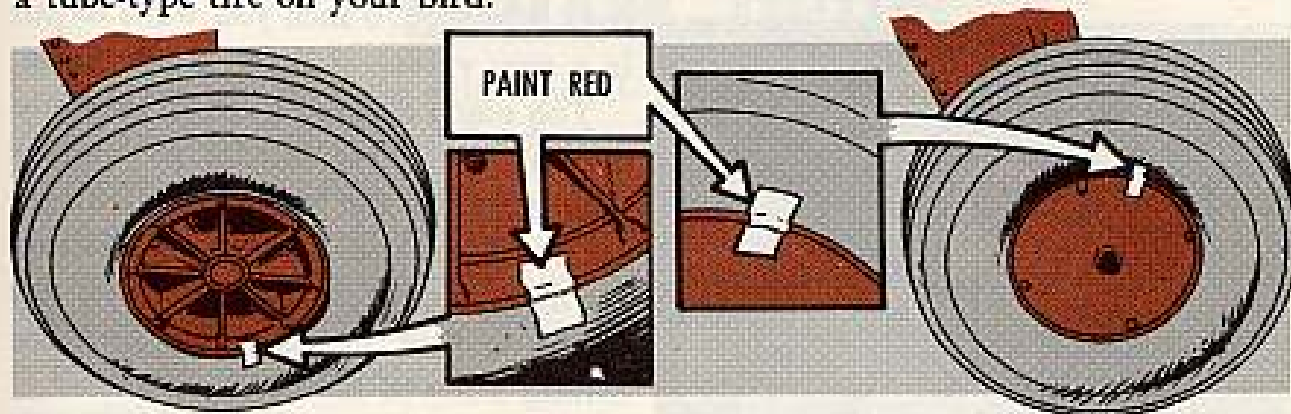
TM 55-405-3 (10 May 62), "Maintenance of Aircraft Systems", has some poop on bending the pin . . . Chapter 2, Section XI, page 59. And with you puttin' the pin in head up—head facing forward—or head in direction of rotation, it won't fall out, even if the end gets broken off.

Just one point on this heads up for hardware business, though. There are exceptions on a bird because of special clearances, design, and such. But no sweat in these cases. They're called out right in the text of your maintenance manual, which, of course, rules for a specific bird.

## MARK THE TIRE



Can't read a slippin' tire without a guide. That's why you want to red-index the sidewall with the wheel rim and dust cover next time you change a tube-type tire on your bird.



If your bird doesn't have a dust cover—they have a unique way of losing themselves—you might miss spotting a crooked valve stem on your walkaround. And with a dust cover on the wheel, you'd need X-ray vision to spot a damaged valve stem.

But if you miss seeing a big, juicy 1 x 2-in red index mark (one inch long on the tire sidewall and one inch long on the wheel rim or dust cover), you've got eye doctor problems.

If you're interested, the authority is paragraph 124e, page 79, Chapter 3 of TM 55-405-3 (10 May 62) "Maintenance of Aircraft Systems" . . . and the paint is red gloss enamel, Spec MIL-E-7729. A one-pint can should be in your hangar supply room under FSN 8010-821-1484—natch.



# STOP THE SPUTTER



When a Bird Dog's (0-1) fuel selector valve handle is turned from a low fuel tank to a full tank the engine needs fuel pronto, without any sputtering around.



She'll get fuel every time as long as the valve is working right. But, like any part that gets a lot of use, the valve comes in for its share of wear as the hours are piled up on the bird.

That's why you make with the feeler gage every third periodic, like TM 55-1510-202-20 says in Chapter 3, on page 4-2 of Change 2 (9 Mar 62).

To make the check you just pull out on the valve handle and shove the gage in between the detent plate (P/N 0616116) and the face of the valve handle (P/N 0616118). If the clearance is over .070 inch you want to put in a new valve—and for good reason.

Too much clearance could have you moving the valve handle to another tank mark on the valve face, with no results. Then you'd have to go fishing for the full tank position until you felt the valve lock in place. No time for fishing allowed here.





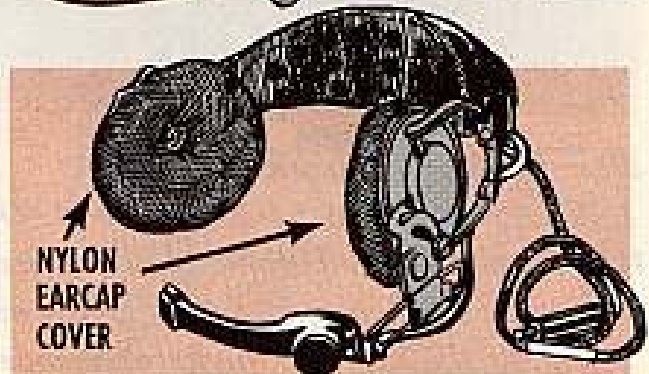
# NO EARRINGS NOW



If you birdmen have been having a little trouble keeping the padded cushions of your H-101 ( )/U or H-75 ( )/AIC headsets clean and dry, no more sweat.

Well, maybe a little sweat . . . but no more sweat marks around the ears.

What you need is a coupla nylon earcap covers, FSN 5965-564-1079 (Sig). Some of your H-101's may al-



ready have 'em—or been issued with 'em—but they're also being authorized for the H-75's.

## “SCRAM, DRIP”

Hear about the little drip who almost started a full-fledged flood when he escaped from a bird hose?

He was joined by other drips, 'cause no matter how many times the AN 737 TW retaining clamps were tightened, a few more drops managed to squeeze out of the system.

You see, these AN 737 TW clamps can only be tightened so much—after which they can become stripped, giving you a leaky hose.



**SAVE AN 737 TW CLAMPS  
FOR AIR, VACUUM AND VENT LINES**

But just as suddenly as the drips started, they were stopped in their tracks, by a sharp-eyed mech who read TWX TCMAC-ED 07-02059.



**STOP DRIP  
WITH AN 737 TM  
OR AN 737 RM  
CLAMP (USED ON  
FLUID LINES)**

He stopped 'em with one of those reliable AN 737 TM or AN 737 RM clamps you use on fluid lines. And he saved the AN 737 TW clamps for use on air, vacuum, and vent lines—even on ground support equipment.

What happened to that hose should happen to all hoses that carry fluid . . . no drip!





Dear Windy Windsock,

Para 5-11 in TM 55-1520-208-20 (Oct 61) says be sure all tools used on the UH-1B engine are chrome plated, since cadmium plating can contaminate the oil system with chips and wear down magnesium parts.

What's the FSN for this recommended tool kit for UH-1 type helicopters and in what SM is it listed?

SFC E. J. C.

Dear Sergeant E. J. C.,

Might appear to be a crosswind condition the way the TM reads—but that's because you haven't seen the new TM 55-1520-211-20. The paragraph number has been changed to 4-17-F and now says:

"Be sure tools used on engine are not cadmium plated."

The TM no longer says all tools have to be chrome plated. The reason for the change is simple . . . there ain't none! And there's no such chrome tool set on the way, either!

So you're officially authorized to use the unplated tools you do have. That's all she wrote, Sarge.

*Windy Windsock*

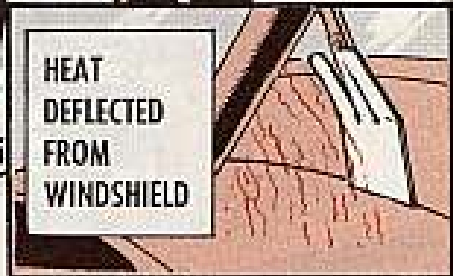
## OP CHECK REPLACEMENTS



You can't take anything for granted around aircraft—not even new or replacement parts. Give any replacement part the ol' operational check before you sign off the job. After all, there have been cases of bum parts getting into the system.



# HEAT DEFLECTOR

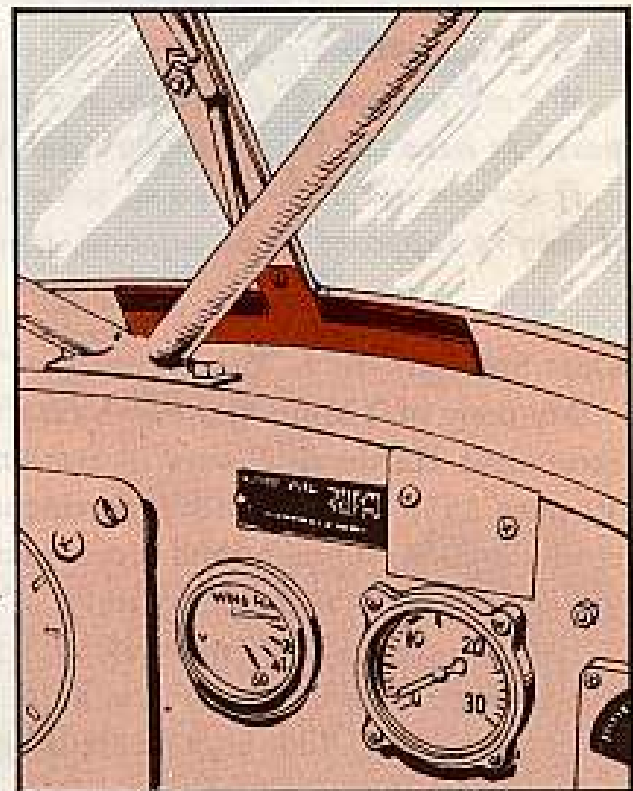
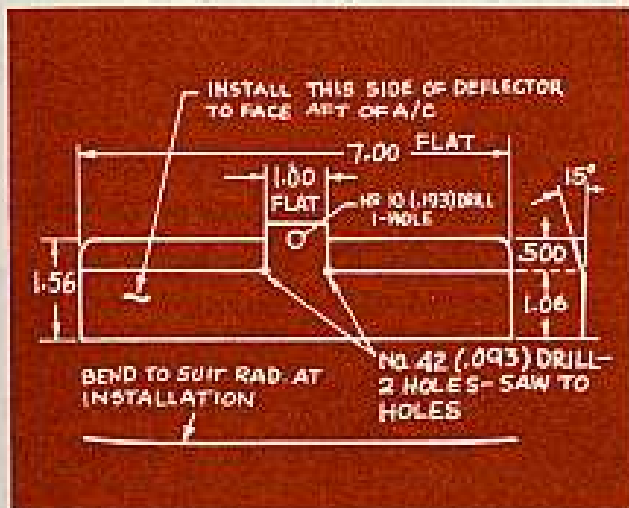


Dear Editor,

Here's a nickel's worth of aluminum that'll keep Bird Dog (O-1) windshields from cracking and crazing.

The plate will deflect the defroster heat away from the windshield just enough to keep the windshield from being cracked by the cold air blast outside and the hot air blast inside. The plate won't interfere with the defroster action, either.

You make the plate from 0.035 inch 24S-T 3 aluminum sheet to these dimensions and finish up with a coat of non-reflective black paint.



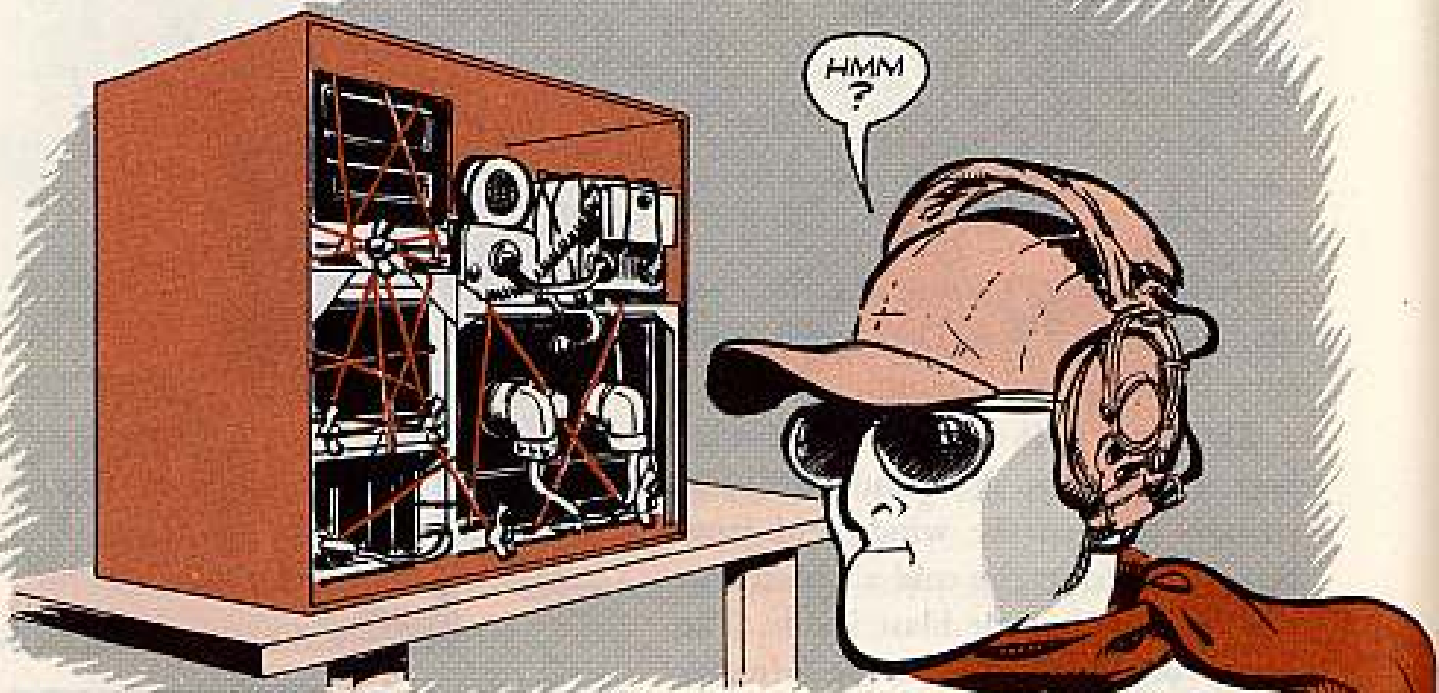
Then you just install the plate using the existing nut and bolt at the bottom center of your windshield

SFC Karl R. Herdenstein, Jr  
8th Army, Korea

(Ed Note—Good deal for use in cold climates. Bytheway, a similar fix is now in your UR Digest, TB AVN 23-5-1 (14 May 62), project 61-723(0104), for the Seminole (U-8).

LOOSE RADIO EQUIPMENT? . . .

## SAFETY IT



*Dear Windy Windsock,*

*We are not sure if the radio and control units in our Army aircraft are supposed to have the snap fasteners and hold-down bolts or screws safetied or not.*

*If they're not to be safetied, what's the reason for the safety wire holes? And if they're supposed to be safetied, what's the publication requiring it?*

**SP5 R. L. T.**

Dear Specialist R. L. T.,

My copy of TM 55-405-3, "Aircraft Structural Hardware," says in section V, para 155, that "all items pertinent to electronic equipment and accessories are safety wired with lock wire. . . ."

Being a general type manual, the -3 can be used as authority unless a specific equipment TM says something different.

The way it stands now, most of the aircraft TM 55's don't have any instructions on lockwiring radio equipment. But some of the TM 11's on the individual radio and navigation sets do include these instructions. So, in

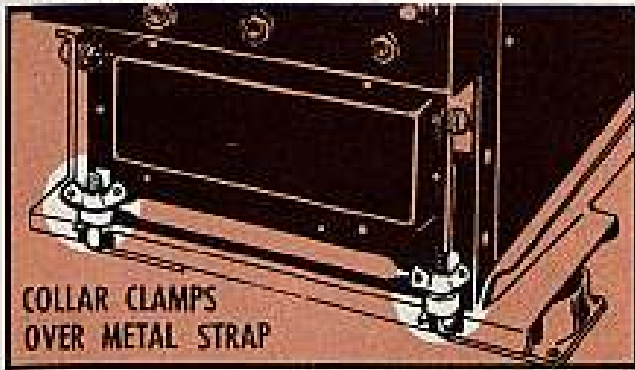
these cases, the specific TM 11 is the authority. And since none of the pubs tell you not to lockwire radio equipment, TM 55-405-3 is the across-the-board authority in all other cases.

Besides, the fact that you've got drilled holes ready and waiting for some safety wire is a hint that's what was intended by the Army, even though a lot of TM writers thought the idea was so obvious they didn't bother to write the requirement down in black and white.

But whether or not the holes are there—or whether a pub says so in



writing—the final authority to safety your electronic equipment is your maintenance officer.



COLLAR CLAMPS  
OVER METAL STRAP

One of the reasons to make him decide in favor of lockwiring that

equipment is the known fact that every unit mounted in an aircraft is subject to shocks and vibrations in flight. This makes it possible for any type of fastener to back off and fall out—or cock at an angle of stress causing it to shear.

Another reason is that loose mountings can put a strain on cables and their connections, leading to bent connector pins—or pulling cables into positions where they chaff against the component or some part of the aircraft structure.

*Windy Windrock*

## SPEAKING OF SAFETY WIRE...

... latch on to a copy of SB 11-543 (26 Nov 62).

It gives you the authority to requisition from Signal the following wire to safety electronic equipment in aircraft:

A cartoon character with a large, round, pinkish head, large eyes, and a worried expression. She has a small, dark, pointed hat or antenna on top of her head. She is wearing a brown, textured garment. A speech bubble is coming from her mouth.

HURRY,  
THIS CAN BE  
VERY EMBARRASSIN'!

Safety wire, annealed corrosion resistant, steel, spool;

0.032 in. FSN 9505-554-1421

0.047 in. FSN 9505-242-7527

0.063 in. FSN 9505-554-1420

Wire, electrical: copper, bare, No. 25 AWG (for use as breakaway wire) one pound;

0.020 in. FSN 6145-500-0986

Wire, electrical: copper, bare, (for use as breakaway wire) one pound;

0.020 in. FSN 6145-129-9314

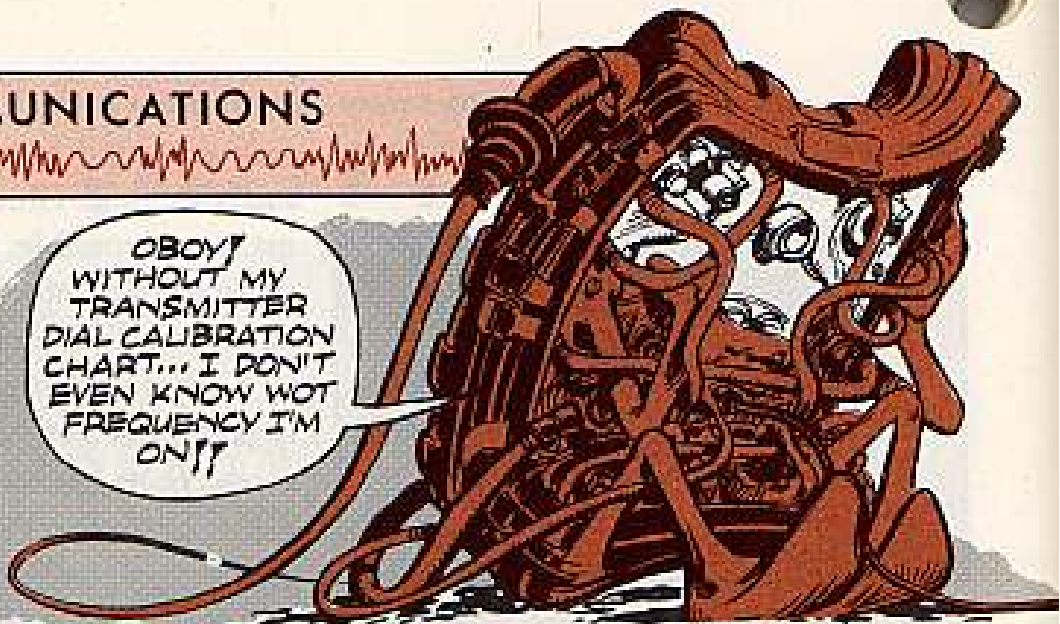


## COMMUNICATIONS

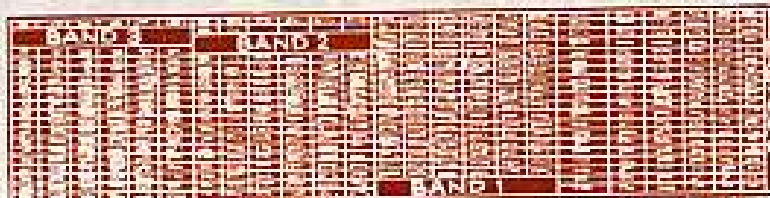
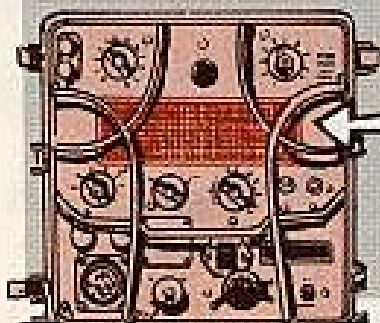
AN/GRC-9 CHARTS...

# TO EACH ITS OWN

OBOY!  
WITHOUT MY  
TRANSMITTER  
DIAL CALIBRATION  
CHART... I DON'T  
EVEN KNOW WOT  
FREQUENCY I'M  
ON!!



You can tack a "Going Out of Business" sign on your AN/GRC-9 radio set the minute you lift its transmitter dial calibration chart just to give the set a presentable face.



TRANSMITTER CALIBRATION CHART

That chart's as vital to the radio set as the guts that make it run. Without it you have about as much chance of getting the right transmitting frequency as a rabbit has of killing a hawk.

There're no substitutes for the chart designed for your set, so lay off the moonlight requisitioning. An inspector needs only one look to see that the serial number on the chart doesn't match that on the set. Besides, he might ask you to operate on a certain frequency.

The serial number business is a good way for you to check that you have the right chart. And for your good and the good of the set, don't take the chart out unless you're going to replace it the right way.

Otherwise, you'll deadline the set almost every time.

Best deal is that as soon as your chart gets torn or discolored, turn it in to higher echelon so that the frequency calibration numbers can be copied onto a new chart. If you can't read the numbers, don't operate on guesswork. Turn it in to higher echelon so the set can be properly recalibrated and charted.

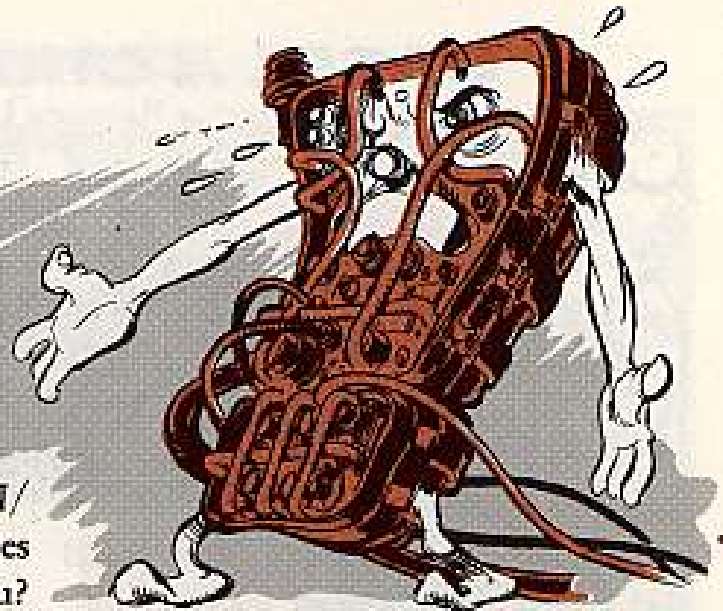
No matter what kind of shape the chart's in don't throw it away until higher echelon can get a look at it.

Do that and you won't have to worry about the inspecting officer when he comes to check the chart's presence, readability and serial number. More important, you'll be able to transmit when you have to.



# SHIFTY FREQUENCIES

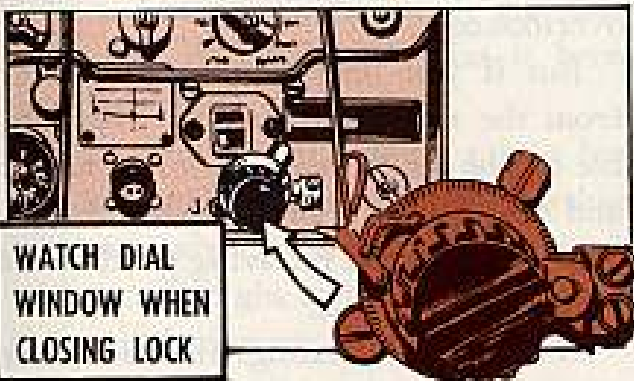
SOB, SOB!  
AT LEAST YOU'RE ON  
A FREQUENCY! I CAN'T  
EVEN STAY ON ANY  
FREQUENCY... I'M DRIFTING  
ALONG WITH THE TUMBLIN'  
TUMBLE YOU-KNOW-WOTS??



Thinking about trading your AN/GRC-9 radio set because she changes frequency without any help from you?

You say she won't hold the frequency you selected even when you locked it?

Relax, friend, cause that's the nature of the beast when you're working with the **FREQ CONTROL** knob—on the transmitter section.



Most of the time a quirk of the switch lock on the knob is causin' your trouble—not you. Fact is you might get the same deal from the **TUNING** control knob on the receiver section.



The locks are alike, and it's hard to close 'em without turning the knobs. And it's mighty hard to lock the

**FREQ CONTROL** without changing the frequency setting. 'Bout the only thing you can do is be extra careful with the lock and watch the dial window for any change.

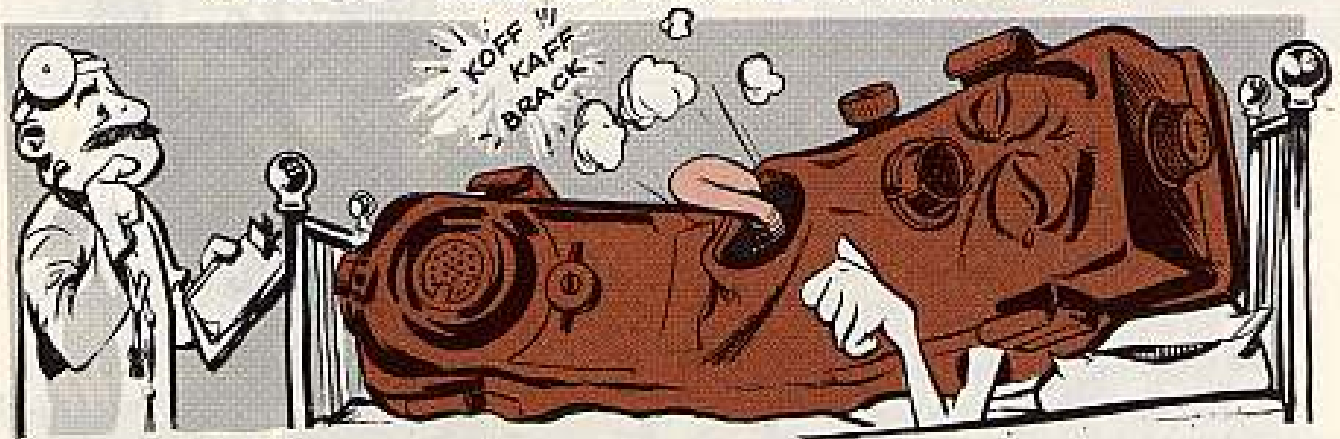
Otherwise, your first clue on a frequency change might come when you pick up a soap opera instead of your net control station.



There's another frequency quirk on the Angry 9 which might get you wondering about the condition of the set, too. Namely, the frequency shift fade when you're using CW.

Again, it's the nature of the beast and nothing to worry about. All she needs is a little patience and she'll put out for you.

## GASP . . . CHOKE . . . SOB



Imagine for a minute how you'd feel if you were shoved into a small, hot room without air. Whew!

Now take another minute and put yourself in the place of the guts of your AN/PRC-6 radio set. There you're wrapped up tight in the hot little case—without air to breathe or a place to allow the heat to escape. Double whew!!

All right. Now open the door to the room to let air circulate, or open the AIR VALVE ½-turn counterclockwise on the PERK-6. Everything's 1,000

per cent better, right?

Now that that little lesson in horrors and how to avoid them is over, let's talk about the AIR VALVE. Even though there's a caution decal on the radio case, that little valve is tucked down away from everything and is mighty easy to overlook. Fact is, sometimes it's not even on the case it's so overlooked.

But if you forget to open it, heat from the tubes and battery will bubble up the moisture covers over the ear and mouth pieces, among other things. Transmitting and receiving get difficult—if not impossible.

If the valve's missing, dirt and water can get in the set real easy. No need to mention the damage that stuff can do.

Best way to avoid it is to form a real good habit. Each time you pick up your PERK-6 to operate it, give that valve a



flick first thing. When you're through, turn it off.

Make it a reflex action and you'll be on the air a lot longer.

If your set has no valve, you'd better have MWO 11-5820-290-20/1 applied.



## EASY DOES IT

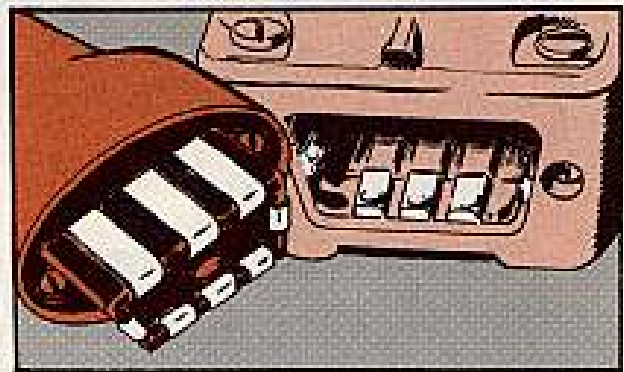
"Quick Disconnect Receptacle" is the way the TM describes one end of Switchbox SA-142 ( ) in Chest Set Group AN/GSA-6 . . . and so be it.

But hold it a second when you're hittin' the other end of the cycle. When makin' the connection, don't jam the

connector plug in the receptacle. Force it and you'll break the side pins . . . which means you're minus one chest set for your Angry 3-8 radios.

Take a second, line up the plug and receptacle, and she'll slip in nice 'n easy.

DON'T JAM THE CONNECTOR PLUG IN THE RECEPTACLE. FORCE IT AND YOU'LL BREAK THE SIDE PINS.



## ROLL CALL

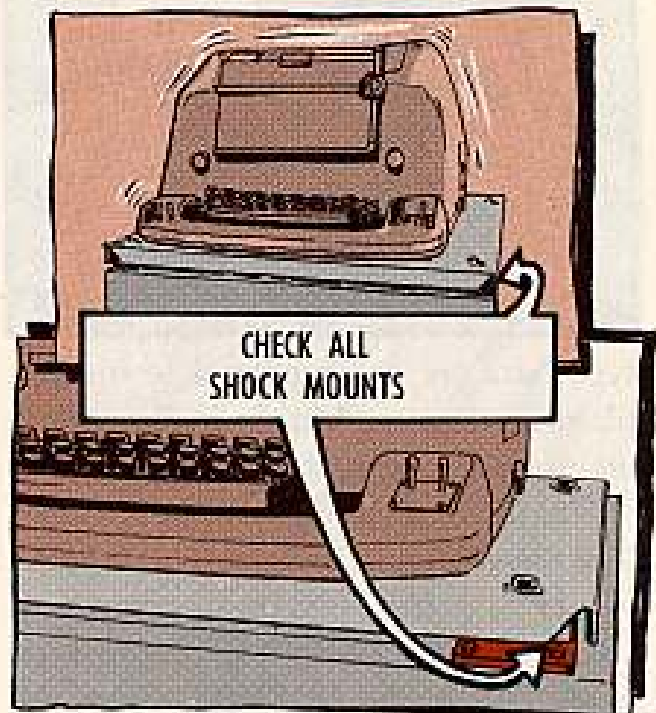
Been having trouble with the teletype equipment of your radio teletypewriter set AN/VRC-29? Has it been slipping out of adjustment more often than it should?

If so, maybe you'd better take a look-see under the teletypewriter mounting plates. While you're rolling your eyeballs there, count the shock mounts.

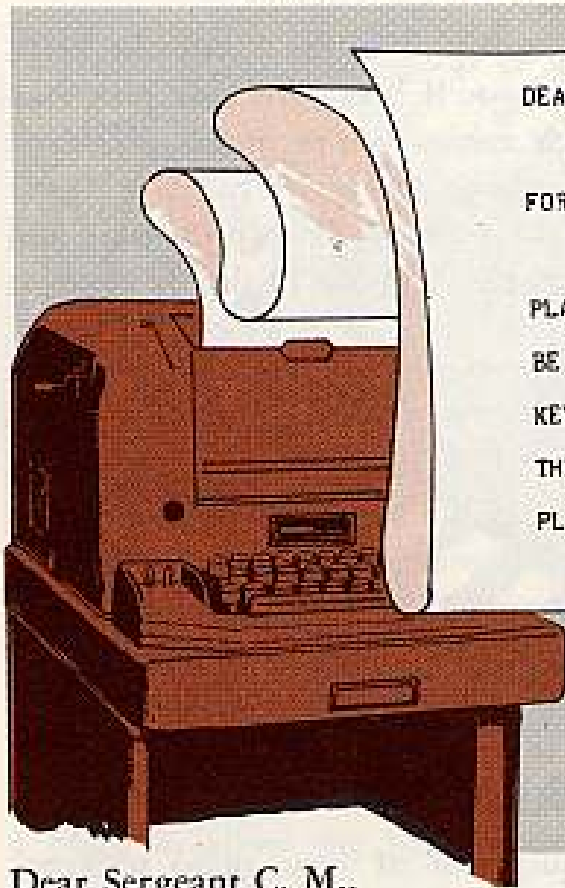
Sometimes the sets come through without all eight mounts. Fewer than that could give you troubles . . . especially after you've driven your three-quarter-tonner over rough ground.

The mounts are not standard supply items so your support unit will have to get them directly from the manufacturer. Have them order Robinson Technical Parts Inc. part number 1202-3A, or equal. (The address is Vibra-Shock Division Robinson Technical Parts Inc., Teterboro Air Terminal, Teterboro, New Jersey.)

The story of how to install 'em is told—with illustrations—in Installation Instructions, FSN 7610-633-9747, for radio set AN/VRC-29.



# NOT FOR STOPPING



DEAR HALF-MAST,

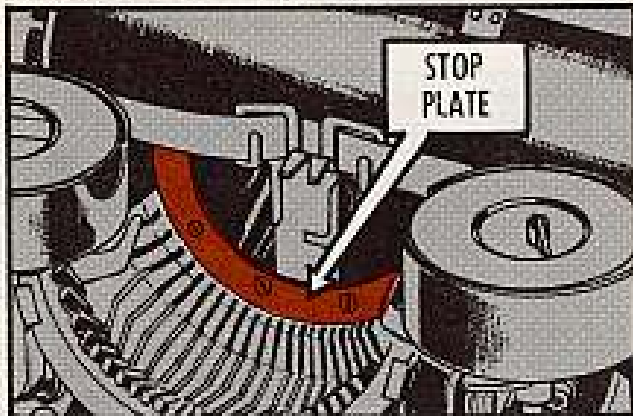
HOW ABOUT SETTLING A LITTLE ARGUMENT FOR US ON THESE TELETYPEWRITERS.

SOME PEOPLE SAY THE U-SHAPED "STOP" PLATE BENEATH THE RIBBON IS SUPPOSED TO BE SKINNED SO THAT IT HELPS STOP THE KEYS WHEN THEY'RE PRINTING. OTHERS SAY THE TYPE BARS SHOULD NOT TOUCH THE PLATE AT ANY TIME. WHAT GIVES

SFC C. M.

Dear Sergeant C. M.,

With one exception, the stop plate on all models of teletypewriters is really not a "stop" plate at all. The



type bars are not supposed to hit this plate. If they are hitting it, have your maintenance support correct it for you.

The only exception is on the TT-4A/TG. On this model the stop plate has a . . . er . . . ahem . . . slight protrusion which acts as a stop for certain type bars. This is the only case where the stop plate actually stops anything.

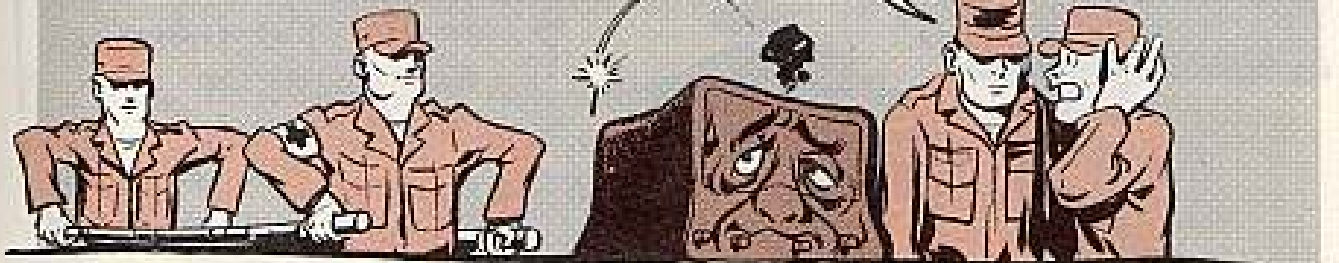


As a matter of fact, all models except the TT-4A/TG could get along very well without that plate at all. Which is mighty convenient because there're none in the supply system for replacements.

*Half-Mast*



# AC AIN'T CONNECTED TO THE DC



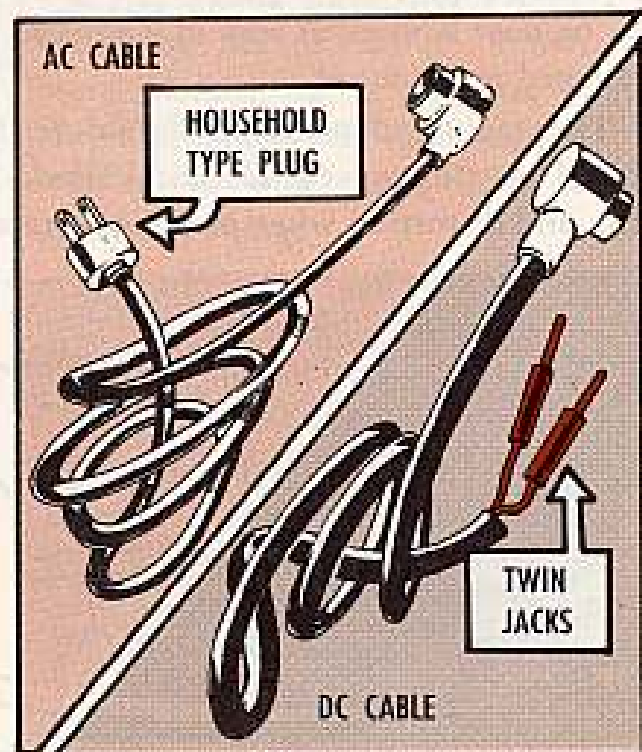
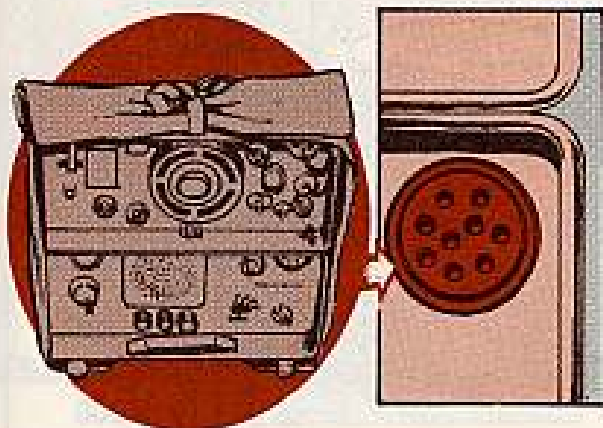
Your AN/GRR-5 radio receiving set works easy on AC or DC juice, but only when you use the right cable for the right juice. Otherwise . . . PSFT!!! Real gone fuse.

F'rinstance — never, never rig the set's DC cable with a standard male plug—so's you can use said cable with AC current. It'll pop a fuse every time—and put your set out of business every time.

Best thing to do when your AC cable (power cable assembly CX1358/U) gets lost or otherwise messed up is order a new one. Snipping those lugs off a DC cable to give it a try at AC won't work, even tho the connectors for the AC and DC cables fit the same POWER INPUT receptacle (J103) of the PP-308/URR power supply.

The reason the fuse blows so fast and regular is that the connector pins are wired for either DC or AC . . . not both. And as anybody knows, you'd have a hard time mistaking one cable for the other, since the DC's a lot thicker.

Change 1 (Aug 54) to TM 11-295 (Aug 52) calls for power cable assembly CX1359A/U for the GRR-5's with serial numbers from 1 thru 4928 of Order No. 15166-Phila-52-01. Sets with other serial numbers get the CX 1359/U cables.





Dear Private J. M. M.,

Electrical detonator caps used in blasting operations can be set off by RF (radio-frequency) energy—the kind of energy that comes from radio

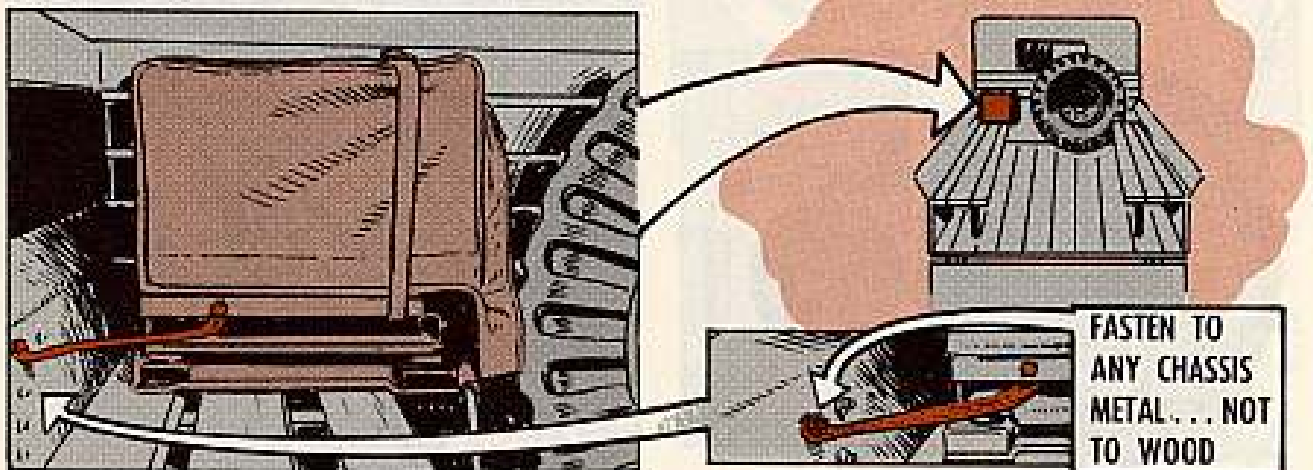
transmitters. So it makes good sense to turn off the transmitters when you're in an area where they're being used.

*Half-Mast*

## GROUND IT RIGHT

There's one little item you should pay heed to when you've got a radio set on or near a wooden seat in a vehicle. Make sure the radio's ground is not fastened to the wood.

The radio ground strap should be fastened to the vehicle's metal body—that'll help to prevent electrical shock, static, low volume, intermittent operation and distortion when sending or receiving.



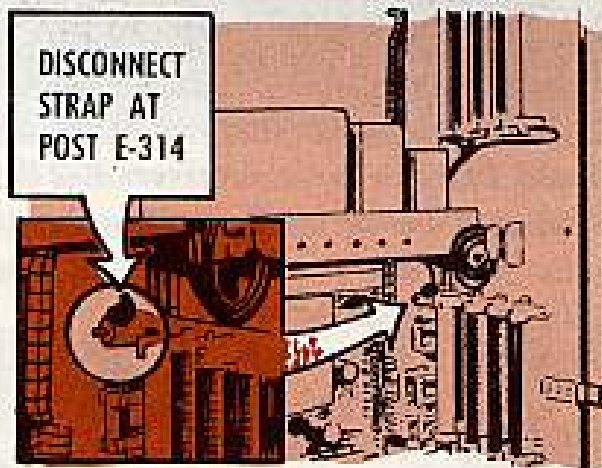


# OFF FOR SSB — ON FOR CW



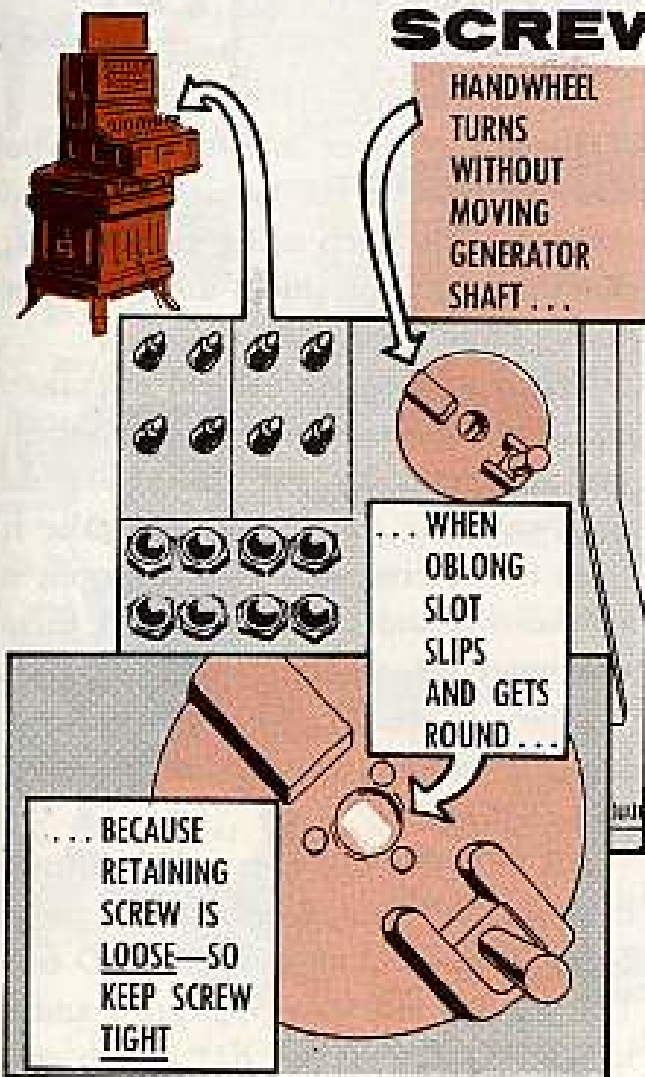
The chances are your AN/FRT-22 or -26 transmitting set has been modified by MWO 11-5800-200-30/3 (14 Nov 60). That's the one that provided for single sideband operations and did away with the need for the RF Amplifier AM-1366/G.

Well, there's a little something you've got to do before you operate on SSB. You disconnect the strap at terminal post E-314 on the power supply assembly PP-1088/FRT-26. This will keep the resistors in the filter network from shorting out.



BUT, YOU WANT TO RECONNECT THE STRAP BEFORE YOU OPERATE ON CW.

## SCREW IT UP



It can't be loose if you wanna' have juice.

Nutshell fashion, that sums up the handwheel retaining screw on the G-42/PT Hand Ringing Generator Set.

If you wanna' have your TA-43/PT Telephone Set or SB-86/P Switchboard workin' up to par, you gotta' have that handwheel screw tight.

Ol' G-42 won't zing if ya' don't screw that thing.

When the screw gets loose that oblong slot in the center of the handwheel is gonna' slip, and get round . . . and the handwheel starts turning without moving the generator shaft.

Result: Your set heads back to the shop for a replacement hand-crank assembly . . . and you're out of business.

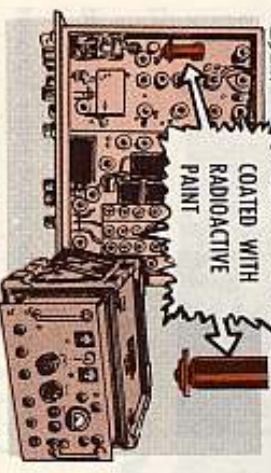
All because of a little ol' loose screw. . . .





IT'S RABBIT

That's the latest word on the Tube Shield E325 in radio receivers R-220/URR and R-644/URR, components of radio receiving sets AN/URR-29 and -29X.



"Handle with extreme care" is the watchword!

The shield, coated with radioactive paint, got through without an appropriate warning. There is no serious hazard when it's left mounted in the receiver, but caution is the order of the day when the set is being serviced.

During servicing, the painted shield and the type OB2 tube should be replaced with an ordinary shield, FSN 5960-295-7652, and improved tube, type OB2WA, FSN 5960-262-3763. The OB2WA also is radioactive but not dangerous when handled like TB-ORD 648 and TB SIG 225 tell you to. Be sure to use rubber gloves when taking out the tube and shield. After handling the tube and shield the gloves



If your receiver is located so you don't sit close to the lower right-hand side, you can keep using the set. But don't take off the shield until you get orders from your CO.

When the tube and shield are taken out, don't get careless and leave them just anywhere. Be real careful and do not break the tube when you take it from the receiver—or when you put it in the disposal container. Store them in a marked container with as little handling as possible. Safeguard the container to prevent unauthorized removal or handling.

AR 755-380 will give you details on disposing of them. Get to know paras 5 and 7, pages 2 to 5 of TB ORD 648 (27 Jul 56) and para 5, pages 1 and 2 of TB SIG 225 (6 Apr 62) just in case you break a tube.



YOU'RE TELLING ME ACTIVE

Another important point—identify the removed shields and tubes like so: "Tubes, FSN 5960-166-7648, and Tube Shields, FSN 5960-280-4711, removed from radio receivers R-220/URR and/or R-644/URR."

List the quantity and, depending on your location, report them to:

<p><b>IN CONUS TO:</b></p> <p>Commanding General U. S. Army Chemical-Biological Agency Army Chemical Center, Maryland</p>	<p><b>IN OKINAWA TO:</b></p> <p>Commanding Officer U. S. Army Ryukyu Islands ATTN: Chemical Officer APO 331 San Francisco, California</p>
<p><b>IN ALASKA TO:</b></p> <p>Commanding General Headquarters USARPAL Command ATTN: ARCSF-CO APO 949 Seattle, Washington</p>	<p><b>IN EUROPE TO:</b></p> <p>Commanding Officer U. S. Army General Depot, Kaiserslautern APO 69 New York, N. Y.</p>
<p><b>IN KOREA TO:</b></p> <p>Commanding Officer U. S. Army Chemical Depot Korea APO 76 San Francisco, California</p>	<p><b>IN HAWAII, GUAM AND EAST OF GUAM TO:</b></p> <p>Commanding Officer U. S. Army Hawaii ATTN: Chemical Officer APO 957 San Francisco, California</p>
<p><b>IN JAPAN TO:</b></p> <p>Commanding Officer U. S. Army Japan ATTN: Chemical Officer APO 343 San Francisco, California</p>	

Chemical will advise you what to do after that. The shield (E325) covers the OB2 voltage regulator tube (V323), illustrated in Fig 15, TM 11-882.



## GOT ANY... **MX-1083 OR MX-1083B** (RADIOACTIVE TEST SAMPLES)

All MX-1083 and MX-1083B radioactive test samples which have the metal identification tags need a quick check. Some of 'em have been losing their ID tags 'cause the tag's D-rings weren't put on proper-like.



USE BRASS OR  
COPPER WIRE...

LOOP WIRE  
THROUGH HOLE IN  
INERT END OF ROD.

... TO REPLACE  
FAULTY D-RING.

wire ends will either be soldered or twisted together.

If the wire ends are twisted together, all excess wire has to be clipped off and the twisted end should be bent parallel with the loop.

**NOTE:** If you have any of these test samples which have lost their metal identification tags, be sure to do like it says in TB Cml 54 (Mar 60) and let your Chemical officer know about 'em so he can get rid of 'em through proper radioactive waste disposal procedures.

Later production MX-1083 and MX-1083B won't come with identification tags... their identification will be either stamped or engraved right on the inert end of the rod.

## WHAT GOES WHERE?

There are gas-particulate filter units and then there are gas-particulate filter units. Some are designed for hospitals, some are for shelter, and then you have the ones that go into combat vehicles.

One filter unit is not designed to fit all combat vehicles. So, before you ask for one, better be sure it's the right one.

YOU'VE GOT YOUR FILTER UNITS ALREADY INSTALLED!

TO HELP YOU, HERE'S WHAT GOES WHERE,

FILTER UNIT, GAS PARTICULATE, TANK, 3-man, 12 CFM, ABC-M8A2

FSN 4240-691-1505 { M48 tank  
M48A1 tank  
M48A2 tank  
M41-series tanks  
M67A1 tank flame thrower

FILTER UNIT, GAS PARTICULATE, TANK, 4-man, 12 CFM, M8A3

FSN 4240-853-3201 { M48A3 tank  
M88 recovery vehicle

FILTER UNIT, GAS PARTICULATE, TANK, 5-man, 20 CFM, M13

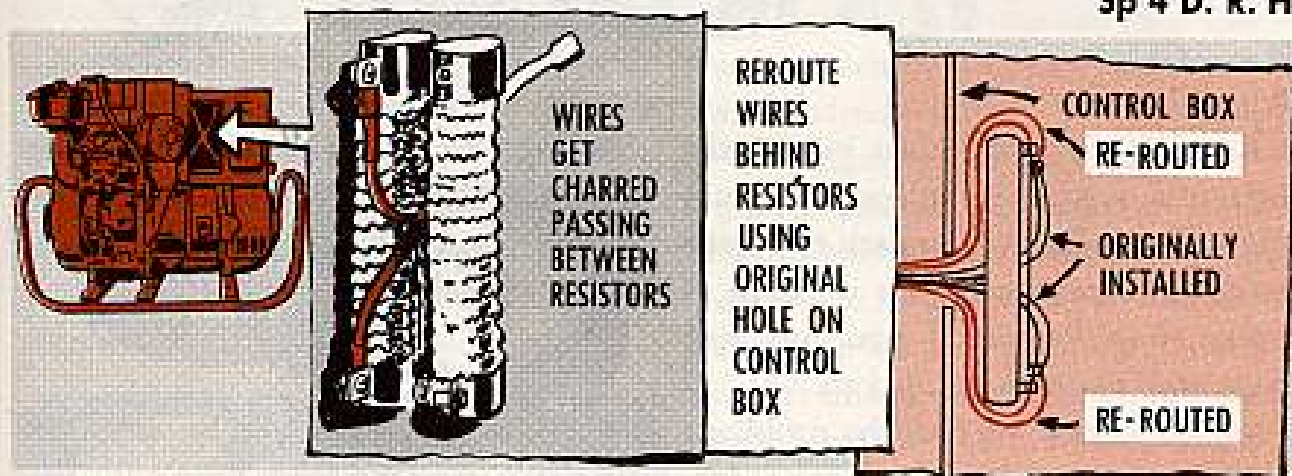
FSN 4240-601-8372 { M60 tank  
M60A1 tank

## FRIED WIRE

Dear Sgt Half-Mast,

We have one of those new Leland Model LOE-660 2 KW 12-volt DC generators, and it works fine except for one problem. The lead wires from the resistors into the control box get charred where they pass between the resistors. Would we be open for a gig if we re-route those lead wires away from the heat?

Sp 4 D. R. H.



Dear Specialist D. R. H.,

As long as you don't modify the equipment in some way like making more holes in the control box, nobody can gig you for re-routing those lead wires.

Looking at that Leland generator from this side of the street, it looks as though the coolest route for those lead wires would be (1) up, back, and down from the top connections and (2) down, back and up from the bottom connections.

This way you can still pass all four leads into the control box through the original hole.



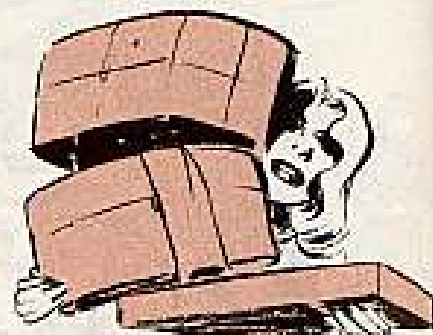
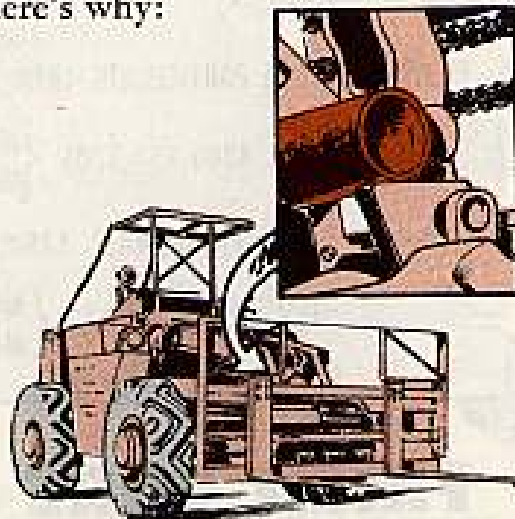
# NIX ON RIDIN' HIGH!

Hear tell some guys think it's best to rest the stiff leg mounting points on the boom assembly when they're toting big loads with their MR-100 rough terrain forklift. They think this takes the strain off the hydraulic system.

But not good a-tall! Here's why:

1. The jarring of the load'll damage the mounting points so bad you'll have trouble assembling the stiff legs when you go to change over to crane operation.

2. If you lose the load, it'll fall that much further.



3. The load could block your vision—depending on what you're carrying.

So, always play this load-carrying bit by the book. Never lift the forks more'n necessary . . . say, 12 to 18 inches off the ground.

And let the accumulator do its job of taking the shock off'n the hydraulic system, like it says in Para 86 of TM 10-3930-223-20 (Feb 61).

## IT'S IN THE BAG



Dear Editor,

Keeping sand and dust out of the hydraulic system of a rough terrain MHE when you have to park the crane attachment practically on a beach is pretty rough—even if you use dust plugs like you're supposed to.

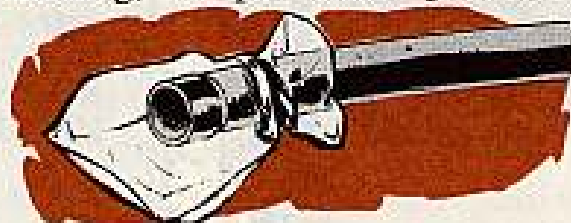
So, here's how we lick the problem:

After we remove the five quick-disconnect couplers, we dip the hose ends and dust covers in a can of clean hydraulic oil to rinse off the sand and dust. Then we get rid of this oil.

Next, we wipe all five good and dry with a clean rag and install the dust plugs, like it says in Para 15r of TM 10-3930-218-10 (Jun 61).

Lastly, to make the cheese more

binding, we put small plastic bags



(the kind you can get in any food market) over the three hose ends that stay with the crane attachment and seal 'em with masking tape.

SP4 J. D. Pepin  
Fort Hancock, N. J.

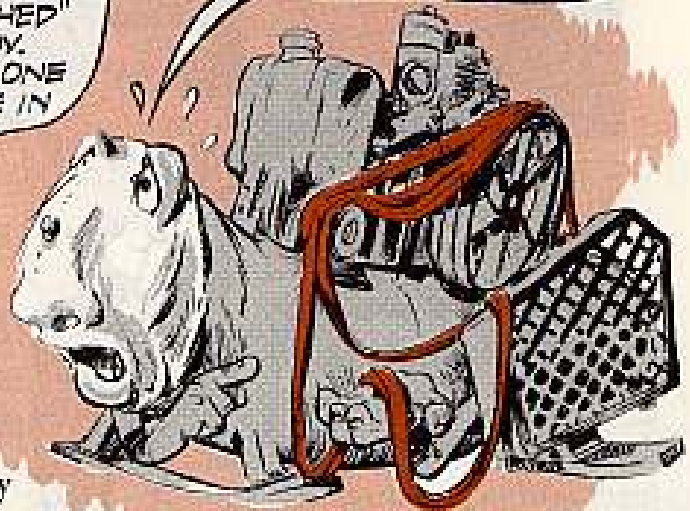
(ED NOTE: Good. I'm sure other outfits operating in beach, desert or dust-blown areas will latch onto this idea quick.)



BEFORE ANYBODY BREAKS OUT IN A SWEAT REPLACING MATCHED V-BELTS ON COMPRESSORS, OR OTHER BELT-DRIVEN EQUIPMENT, IT'S ALWAYS SMART TO MAKE SURE YOUR "MATCHED" SET IS THE REAL McCoy. FIRST, YOU WANT ONLY ONE MAKE, OR BRAND NAME IN A SET.



**GOT A MATCH?**



Each manufacturer has his own way of making the V-belt. Mixing different brands—even if there's only a hair-line of difference—is like borrowing trouble.



NEXT, YOU WANT ONLY ONE STOCK NUMBER IN A SET!

A manufacturer may put out two V-belts that look alike—but sometimes they're built for different purposes. Check the numbers on the belts on your rig against the numbers in the -P manual and on the new belts to make sure they're right. Never accept substitutes, and always replace the complete set.

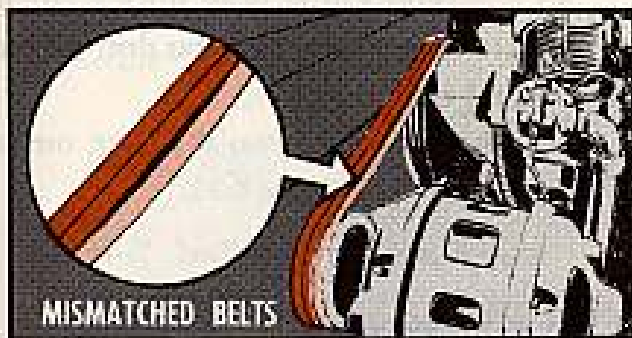
Finally, you want only one "matching number" in a set.

51, for instance—stamped on the belt. And your V-belt set should all wear the same matching number and come from the same manufacturer.

The spread between numbers may be only 1/32-in for one manufacturer, or as much as 1/8-in for another. That's why your V-belts should all be of the same matching number and from the same manufacturer.

In longer sets, 8 feet and over, you could get satisfactory performance from a combination of almost-matching numbers—like 50 and 51, or 48 and 49. But never use belts with different numbers in a set unless they come from the same manufacturer, and even then you'd put 'em together in a set only in an emergency.

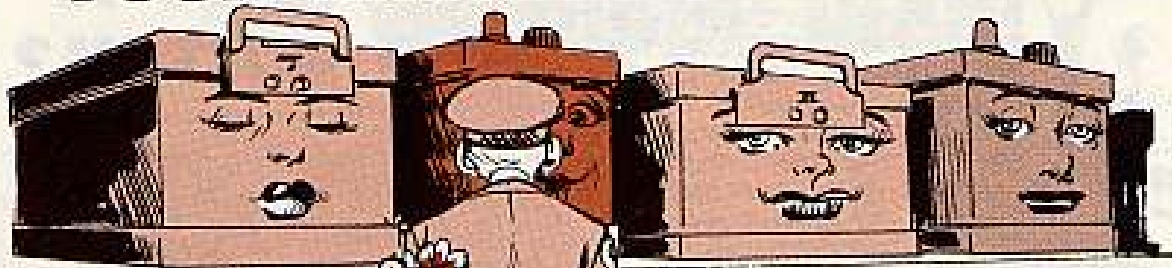
If you use the right FSN from your supply manual, but get a belt set that's not matched or doesn't fit, send in an EIR. Include the FSN of the belt set, the number and date of the supply pub, the equipment the set was ordered for, and details on what's wrong with the belts.



The manufacturer checks each V-belt for finished length. You'll find the matching number—50 or maybe 49 or



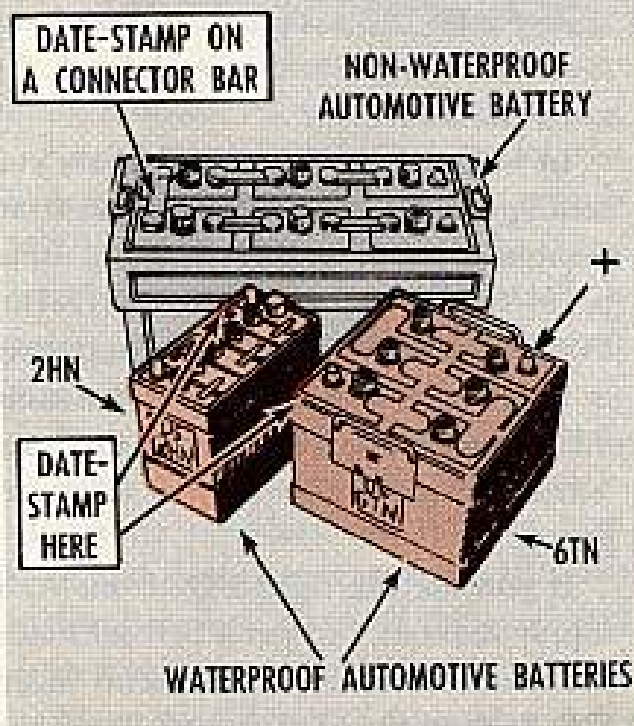
# YOUR BATTERY'S DATE LINE



Keep dating them.

Not one of those beautiful dolls you may have in the palm of your hand, but the dating is done onto the lead-acid type batteries before they're put into actual use in your Army equipment.

In the case of a dry-charged battery, the minute you give the battery life by adding electrolyte, you need to date-stamp it. Stands to reason that unless



you're going to put it into actual use, it'd be kept in a dry-charged state . . . right on the shelf.

Wanta know what started all this date-stamping business?

The poop's all spelled out in TM9-6140-200-15 (Jul 58), with Change 1, (15 Jan 62) adding its two-cents' worth. Just flip the pages over to para 34D, on page 36.

Mebbee it's SOP to your unit right now for you issuers (or installers) to date 'em when they go out. Makes for a lotta sense 'cause it's the only way for your CO to possibly tell if the battery lived a normal life . . . or not.

Any time a battery's been handled gently, kept clean, and the electrolyte level's been kept above the plates, and yet it goes to pot real soon (say 18 months), then it's time to get an EIR (DA Form 2407) on its way.

Once the EIR reaches the design guys—with the date-stamp facts—it really means something. It may even be the makings of a new and better battery.

So now you know how important it is to date-stamp 'em, but you don't have the metal die stamps.

OK, here's what you'll order outta FSC C6-4-SL (31 May 62):

Die Set Metal Stamping, Hand; 1/4-in size, 0-8 digits (reverse the 6 digit for the 9), FSN 5110-289-0003.

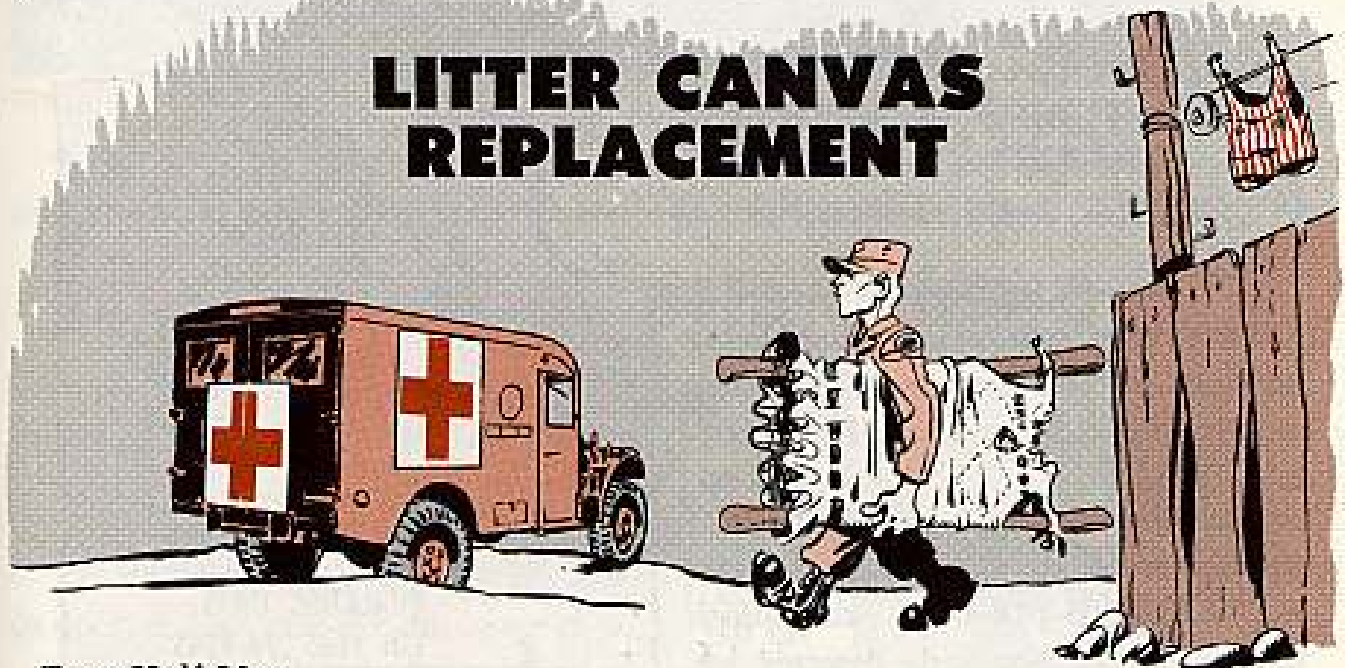
To order the letter "S" just cite . . . Die Set, Metal Stamping, Hand; 1/4-in size, FSN 5110-289-0007.

By having a date-stamp on your batteries, it's easier to establish an average life expectancy. Once you know this, it can become a good guide on whether a battery should be put on a line to be charged—or not. If it doesn't read good and the age is against it, it's useless to waste the time and energy to try charging it.

Just one more thought. If you feel an EIR is justified, be sure to jot down all the info you can that may give the designers a good clue on why the battery poops out so soon.

Remember, your battery is the heart of your equipment, and the tender loving care you give her will make it stay young longer.

## LITTER CANVAS REPLACEMENT



Dear Half-Mast,

*Our M43 and M43B1 ¾-ton ambulance trucks have litters FSN 6530-783-8010 (Medic) but the canvas on some of the litters is in bad shape. Can we get just the canvas for the litter as a separate item?*

*We tried to repair one litter with bulk tent canvas but the canvas was too heavy and besides it stunk so bad from the fungus repellent that the smell alone would probably kill the patient so we had to give up on that.*

*Can you give us the FSN so we can order the canvas for the litters as a separate item?*

S Sgt D. T.



Dear Sergeant D. T.,  
Order cover, litter, FSN 6530-784-1250.



CHECK THE DATES ON ...

## YOUR C-3 CO INDICATING TUBES



DARLING, I AM GROWING OLD...

That's the sentimental tune being hummed to you by your C-3 carbon monoxide indicating tubes, FSN 6665-276-7545.

You know they're a part of the M23 colorimetric carbon monoxide detector kit, FSN 6665-618-1482, or colorimetric carbon monoxide detector kit, FSN 6665-283-0654, or maybe the one that's used on the M3 mobile chemical laboratory—the colorimetric carbon monoxide detector kit, FSN 6665-368-6789.

You have to get rid of the C-3 carbon monoxide indicating tubes in these kits in two years. That's two years from date of manufacture and not two years from the date they're issued to you.

The latest mil spec on the tubes says the packages and outside shipping containers will have the expiration date on them. Just in case you might have some of the tubes that were manufactured under the old mil spec, then you go by the date of manufacture.



C-3 CARBON MONOXIDE INDICATING TUBES, FSN 6665-276-7545



COLORIMETRIC CARBON MONOXIDE DETECTOR KIT, FSN 6665-283-0654

In case you have indicating tubes that are more than two years old, turn 'em in and get newer ones that still have some of their two-year life left.

# GAGE THE TENSION



When it's time to test brush tension on your Nike tac power generators and

converters—where would you find a proper tension gage?

On page 25 of your TM 5-1450-201-20P (Sep 61), you'll find a gage of the proper description. If it's already on hand, there's no sweat.

But hear this—you have to requisition it. It's not an initial-issue item.

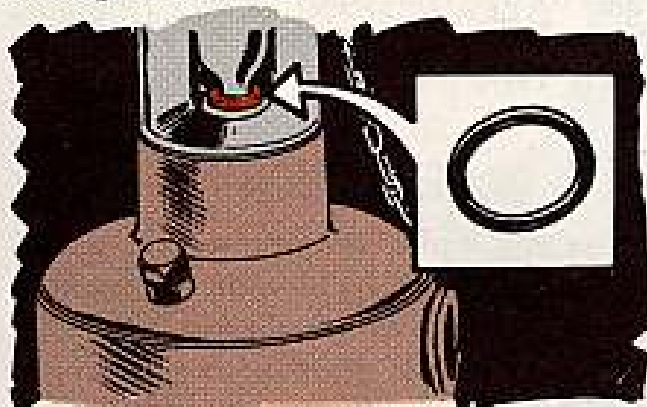
The FSN is now 6635-449-3750. And it's QM, so your requisition should be submitted to your support who'll bring it down from Columbus General Depot, Columbus, Ohio.

## POP GOES THE O-RING



Your new M11 portable decon's easy to operate once you get the hang of it.

There's one thing to keep in mind and that is to lift the handle slowly. Why? So you won't pop an O-ring. You see, there's a little O-ring that fits around the neck of the cartridge. It's to stop any leaks.



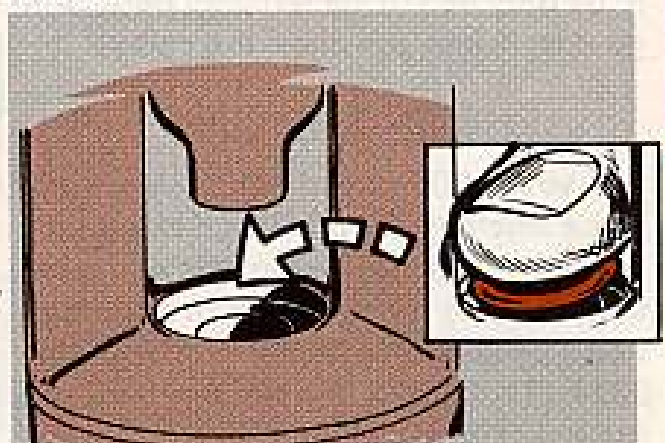
Naturally, if that O-ring isn't there, then the bottle's going to leak.

So—easy does it when you lift the handle.

EASY WHEN YOU LIFT



But, if that O-ring does pop out, put it back in place with your finger. Don't use anything sharp on it or you'll ruin it.





# Cammie Podd's BRIEFS



## ONE AND THE SAME

You say you're straining the old eye-balls looking for a pub on the Jeta, 10 KW, Model MG-1018 gas generator, FSN 6115-768-52991. Put away that eye dropper and latch on to the TM 5-6115-204-series pubs. Although they're listed for the John Reiner model you also use them for the Jeta job. Revised "P" manuals are in process and should show that the only difference between the two is the name plate.

## STOP THOSE SHORTS

You been having Honest John rocket firing failures because of firing cable shorts between the launcher beam receptacle panel housing and the cover? It's been happening on the M289, M386 and M33 launchers. The reason: The firing cable insulation is stripped too far or the insulation is battered when the panel cover is closed. The answer: Strip the insulation just enough for the cable to be attached to the terminal posts. And go easy when you close the cover.

## RING THIS BULL

If your 4000-pound Minnie-Mo war-house tractor's like a bull in a china shop 'cause it can be started up while in gear, shackle it by using the switch kit provided by URGENT MWO 10-3930-407-20/1 (11 Jul 62). The kit rigs it so you can only start it in neutral.

## USE OHA

Hold the phone. The latest scoop is that you use OHA (Mil-H-5606) instead of OHC (Mil-H-6083) in the hydraulic system of your Hawk loader. OHA is the same stuff that's used in the missile... so now there won't be any chance of a mixup.

## PS POOP

PS Magazine can help you in lots of ways. It can even give you some points on your Command Maintenance Management Inspections. AR750-8 (21 Aug 62) on CMMI's pinpoints this on Page 21. Under Suggested Improvements it has, "PS Magazine not readily available to operators and maintenance personnel." Remember the old saying, a suggested improvement today will keep tomorrow's gigs away. 'Nuff said? Be sure your outfit orders enough copies of PS on DA Form 12-4.

## REAL STUCK-UP

As you know, Change 4 (2 Oct 61) to AR746-2300-1 (11 Mar 60) authorized the use of vinyl-type pressure-sensitive decals that you can apply direct to your vehicles and equipment. Now comes TB Ord 1044 (8 Oct 62) to spell out the whole works—FSN's, how to apply and remove, etc. Get hold of a copy on the double.

## DE CODE IT

Could be you've caught it. The action and failure code charts on back of DA Forms 2407, 2407-1 and 2408-3-1, and in Appendix 1 of TM 38-750, list term under code 647, and also under 947. The duplication is a misprint... the right code for torn is 947.

## HONEST JOHN CHANGE

MWO 9-1055-209-30/2 (21 May 59) puts a rectifier in the electrical starting circuit of the M25 engine generator on a couple pieces of Honest John equipment. Tell your support unit there's been some changes. The rectifier wants to go on other H-J equipment—like the M405 handling unit, the M386 rocket launcher and the M78A1 heading and tie-down kit. The rectifier is needed on all the M25's to prevent damage to your test equipment if the battery polarity is accidentally reversed.

## INFORMATION? CHEEZ!

You say you don't know your reamer from a prick punch? Man, get the broad view! Read TM 9-243 (Sep 60). With fingertip poop it's loaded... the use and care of hand and measuring tools... conversion charts to fit every problem... a regular book of knowledge!

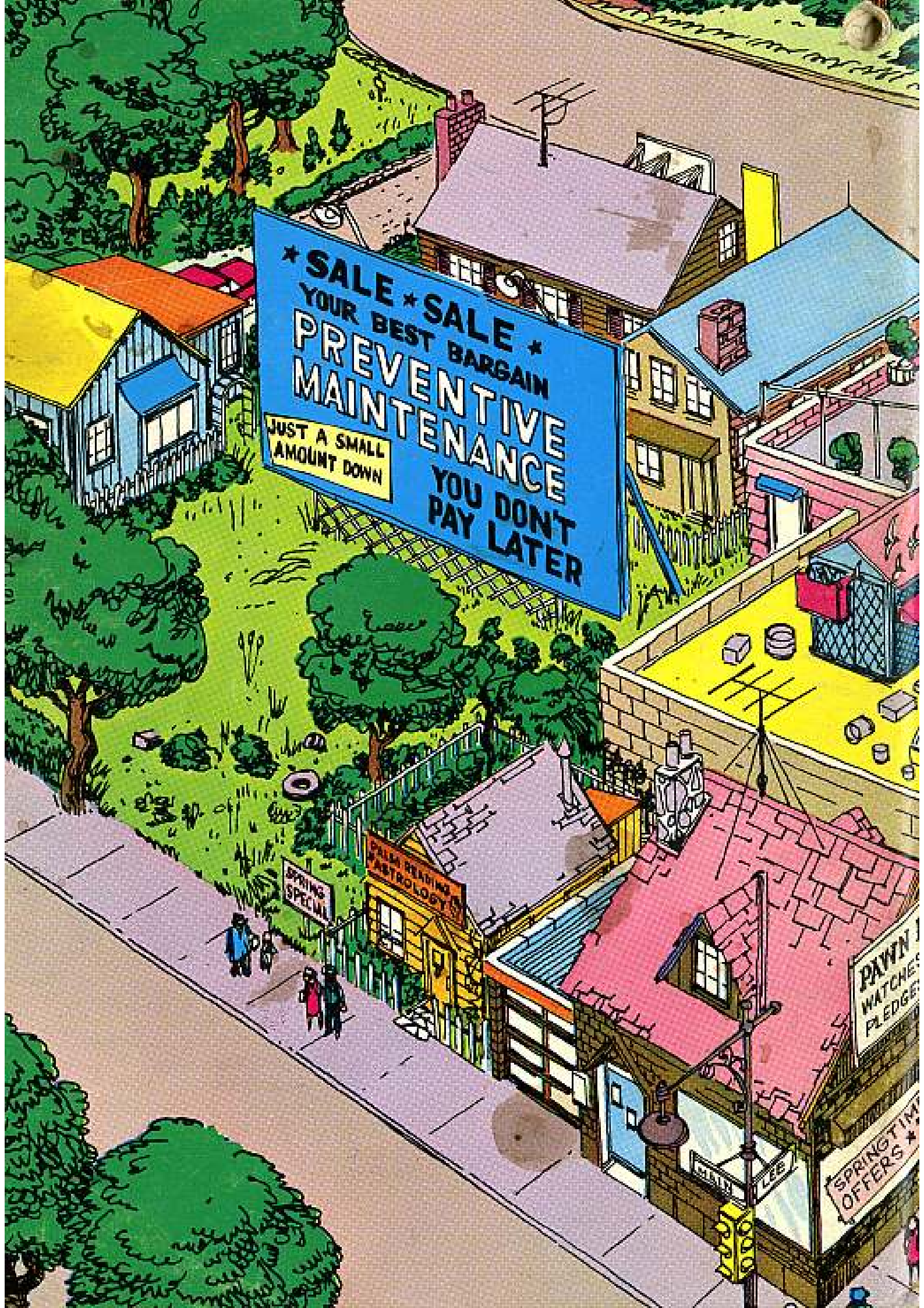


DECIMAL EQUIVALENTS OF FRACTIONS		1.00	
1/2	1/4	1/8	1/16
.0156	.0312	.0469	.0625
.0312	.0625	.0938	.1250
.0469	.0938	.1406	.1875
.0625	.1250	.1875	.2500
.0781	.1562	.2188	.2812
.0938	.1875	.2500	.3125
.1094	.2188	.2812	.3438
.1250	.2500	.3125	.3750
.1406	.2812	.3438	.4062
.1562	.3125	.3750	.4375
.1719	.3438	.4062	.4688
.1875	.3750	.4375	.5000
.2031	.4062	.4688	.5312
.2188	.4375	.5000	.5625
.2344	.4688	.5312	.5938
.2500	.5000	.5625	.6250
.2656	.5312	.5938	.6562
.2812	.5625	.6250	.6875
.2969	.5938	.6562	.7188
.3125	.6250	.6875	.7500
.3281	.6562	.7188	.7812
.3438	.6875	.7500	.8125
.3594	.7188	.7812	.8438
.3750	.7500	.8125	.8750
.3906	.7812	.8438	.9062
.4062	.8125	.8750	.9375
.4219	.8438	.9062	.9688
.4375	.8750	.9375	.1.00
.4531	.9062	.9688	
.4688	.9375		
.4844			
.5000			

Would You Stake Your Life on

the Condition of Your Equipment?





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**PREVENTIVE MAINTENANCE**  
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