

Issue 187

PS

1968 Series

# THE PREVENTIVE MAINTENANCE MONTH

WADDYA MEAN  
THE SYSTEM'S **SHORT**  
ON GENERATORS... WHY  
DON'T THEY GET SOME  
OF THE GOOF-OFFS  
OUT THERE TO TURN-IN  
THEIR UNSERVICABLE  
ONES FOR REPAIR  
AND REISSUE!

I'M  
GLAD YOU  
MENTIONED  
THAT... AHEM!

HELP KILL "DUE OUT-ITIS"  
TURN-IN SOONEST YOUR  
UNSERVICABLE  
RECOVERABLE  
REPARABLE ITEMS

WILL EISNER

Without lube, a modern army would grind to a halt, screaming halt real quick.

That's why lube—all the oil and grease you use—is so important. It keeps your equipment's parts that rub or slide or turn against one another from grinding each other to bits.

In the big rush of things to keep the fight going, some guys let lube go. "Ah... it can wait," they say. It can (maybe) but not for long.

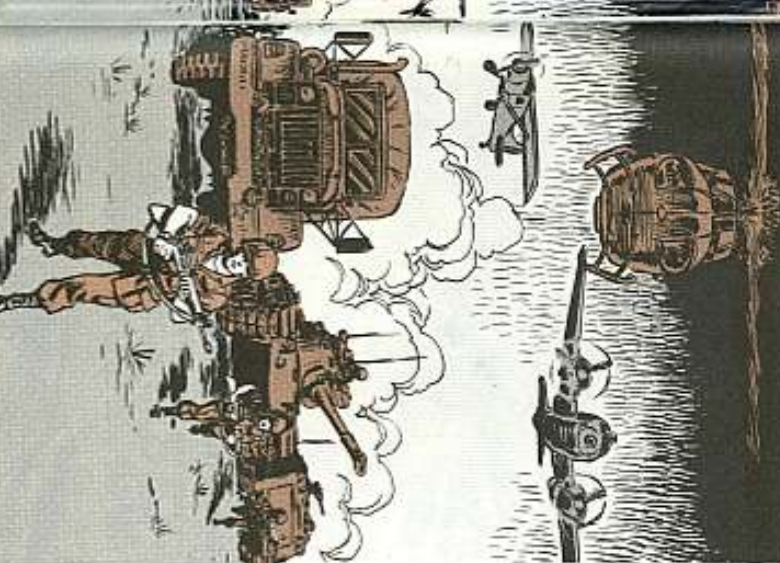
Oil levels in gear and crank cases must be kept up or you'll burn out some real important piece of equipment. And that oil has got to be changed when it

gets loused up with dirt and glop. Dirt in oil works like a grinder. Put in clean, fresh stuff. The lubrication order is your guide.



Grease in bearings and such places has to be cleaned out when it gets dirty, and then you put new grease in. Leave that old dirty grease in there and your bearings will grind up. Your LO and your -10 TM will tell you how often you should lube and the kind to use.

Keep moving, shooting and communicating... with the right lube in the right places at the right time.



**PS**

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PS wants your ideas and suggestions. Send in Star to answer your questions. Name and address on top of envelope, just with it.

Sgt. Jack Mack,  
PS Magazine,  
Fort Knox, Ky.  
40121



BE YOUR OWN INSPECTOR...

# CHECK YOUR 3 TON TRUCK

Sliced thick or thin, equipment inspection is seeing if it's up to par.

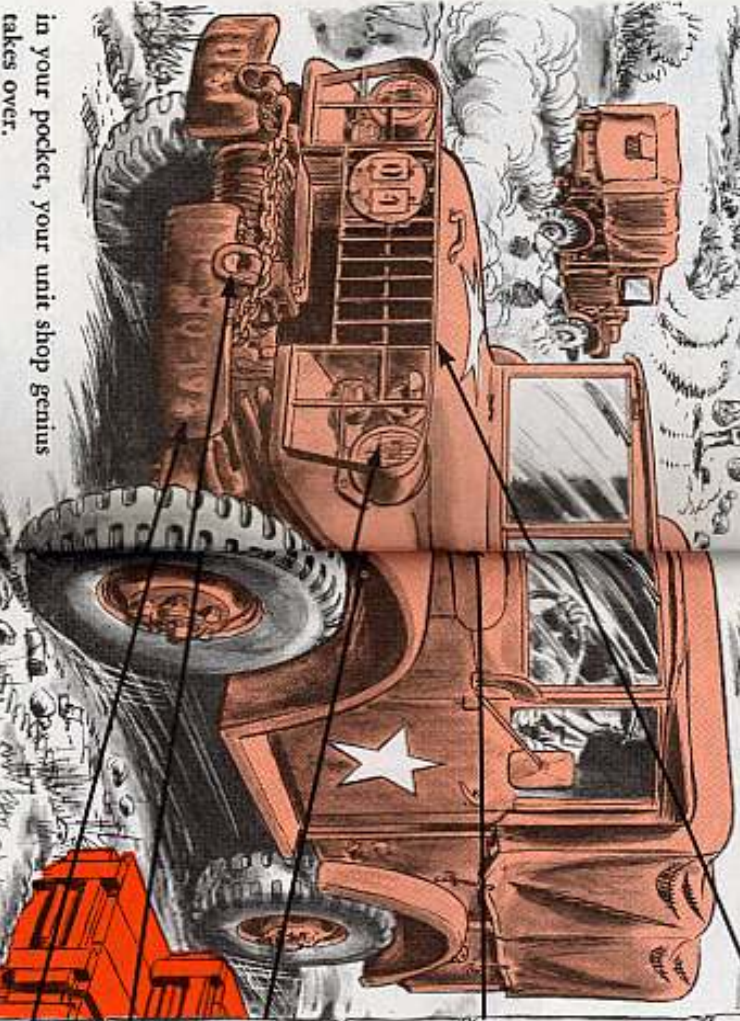
On an item as big as your G741-series 3/4-ton truck, it takes time. Luckily, you can do it by pieces—a bit each day. It's real PM (Preventive Maintenance) too, because it helps you see things you might miss otherwise.

The only tools you need are pliers, screwdriver, crescent wrench, tire pressure gage and ruler or steel pocket tape.

You may be tempted as you go along to borrow a torque wrench or such and make a fix on the spot. That's bunn dope—because the fault you find may be a sign of another fault you can't see. If you make a fix that doesn't do the whole job, you're just covering up evidence... and maybe heading for a good-sized breakdown.

It's right to huddle with your unit mechanic, though. He'll know the details, and he'll tell you right when you're in doubt. He'll expect your DA Form 2404 from you when you're through, too—which of course you'll fill out accordin' to your TM 9-8030 and LO.

Just put down the faults you do find, nothing fancy. They call it Inspect, Detect, Correct. The first two you do; the third one, unless it's something minor you can handle with the tools



in your pocket, your unit shop genius takes over.

When you get to the underside, use a rack or ramp. Some stuff you have to look at from both ways, top and bottom—steering gear, *frin*stance.

Start where? Anywhere... like say you just walk up to where your truck's

## FRONT

**GENERAL APPEARANCE**—Rusty, dirty, dented; leaning to one side (could be a broken spring or U-clamp).

**HEATER**—(if present) Won't work, loose; clamps or hose cut, loose; screen missing.

**BRUSH GUARD**—Loose, bent, rusty; weight classification missing (FM 5-36, Ch 1), wrong.

**HOOD SUPPORT LATCH** (over top right of windshield)—Missing, won't work, bent, rusty.

**HOOD**—Hinge pins bent, broken; support latch socket missing, loose; holdowns missing, won't work; registration unreadable, missing (AR 746-5 and TB 746-93-1).

**HEADLIGHTS, BLACKOUT LIGHTS, TURN SIGNALS**—Not working, not adjusted; lenses cracked, painted over, clouded, dirty, waterlogged; blackout shield missing, not in place; bare wires, insulation frayed.

**LIFTING SHACKLES**—Stuck, missing; base cracked; cotter pin out.

**BUMPERS**—Badly bent, cracked; unit markings (AR 746-5 & TB 746-93-1) wrong, missing; bolts out, loose; clevis pin rusty.

parked right now.

The bold type is for those real serious things. Get 'em fixed, but quick.

# In the CAB

**WINDSHIELD WIPERS** — Jammed, broken; motor not working; manual handles missing; wiper rubber hard, streaking, cracked, gone; mount loose; won't work.



**WINDSHIELD** — Glass loose, crazed, or clouded enough to obstruct vision (driver's side); adjusting arm or lock rusty, stuck; seal torn; frame bent. Glass crack longer than 2 inches.

**REAR VIEW MIRROR** — Glass clouded, broken; supports bent, broken; won't adjust and stay put.



**DATA PLATES** — Missing, loose, painted over.



**DOORS** — Latches loose, driver's latch sticking; panels torn, loose; hinges bent, unlubed; handles missing; glass won't roll up or down; stops won't hold in all positions; drain holes clogged.

**FOREIGN OBJECT DAMAGE (F.O.D.) IS A HAZARD IN TRUCKS AS WELL AS AIRCRAFT... KEEP TRASH AND SUCH OUT OF THE CAB.**

**FIRE EXTINGUISHER** — Seal missing, charge gone; handle broken.



**SEATS** — Regulator lever stuck, loose, missing; cushions torn, dirty.



**FLOOR BOARDS** — Dented, loose, unfastened, muddy, rusty, trashy.

**STEERING COLUMN** — Clamp broken, loose.



**COVER** — Cut, mildewed; straps sagging; seams ripped; canvas mounted with open side of seam toward front; eyelets missing; ropes frayed, missing; tarp hooks missing, badly bent, rusted, loose.



## BATTERY COMPARTMENT

**TOP** — Hold-downs corroded, loose; cover rod, latch, or bolts bent or missing.

**CASE** — Trashy, dirty, corrosion-loaded.

**CABLES** — Clamps loose; posts loose; live cable hitting cover.

**BATTERIES** — Caps missing, vents clogged, loose; electrolyte not covering plates; wrong specific gravity for climate (1,200 to 1,225 in tropics; 1,280 in temperate zones); tops punctured, cracked; cells dead, dirty, corroded.



## OPERATIONS

**LIGHT SWITCHES** — Cracked, painted over; handles missing, loose, stuck, won't work; dash lights won't work.



**TURN SIGNALS** (if present)—Mounted loose; indicator lenses broken, painted over; control sticking, loose, wires exposed. (See Paras 166-172, Ch 8 TM 9-8030).



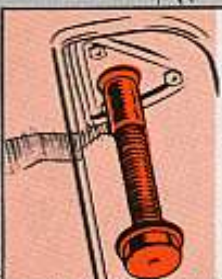
SOME THINGS HAVE TO BE CHECKED WHILE ON THE RUN... SO, TO BE SURE DO A WORK-OUT TEST!

## CHECK

**GAGES** — Ammeter not showing charge; oil pressure below 40 PSI or not reading; water temperature over 180° or not working; fuel level not showing; speedometer jerking, unsteady, not working; odometer not totaling distance; dials painted over; covers cracked, missing.



**STARTER PEDAL** — Jamming, loose, broken.



**HEATER CONTROLS** (if present) — Switches not working, loose; wires exposed.

**ACCELERATOR** — Bent, sticking; fastening loose; boot torn, missing.

**HORN BUTTON** — Sticking, loose; horn won't work.

**STEERING WHEEL** — Loose, excess play; rust-corroded from inside, core broken; so badly bent it's unsafe to use.



CAN'T UNDERSTAND... IT DIDN'T LOOK LOOSE!

**DIMMER SWITCH** — Won't work, sticks.

**BRAKE PEDAL** — Soft, loose, grabs, adjusted wrong (1/4-in to 3/8-in free travel is right); brake won't hold.

**CLUTCH PEDAL** — Won't return, free travel wrong (should be about 1 inch); draft pad missing.

**COWL VENT HANDLE** — Bent, vent sticking.

**HAND BRAKE LEVER** — Bent; release sticking; won't hold.

**ENGINE PRIMER** (if any) — Handle stuck, won't work.

# UNDER THE HOOD

MAKE SURE YOUR HOOD SUPPORTS HOLDING GOOD 'N' SOLID BEFORE CLIMBING UNDER THE HOOD. IF IN DOUBT, USE A ROPE OR PIECE OF WIRE TO TIE IT BACK--ANYTHING THAT'LL SAVE YOU FROM MEAT CLEAVER TREATMENT!

**APPEARANCE** — Engine greasy, dirty; braces loose, broken.

**CAREFUL—**  
KEEP HANDS AWAY FROM MOVING FANS!

**FAN** — Blades bent; rivets missing; belt frayed, loose, over-tight (½-in deflection is right); hitting radiator or shroud.

**WATER PUMP** — Shaft wobbly; leaking; unlubed.

**CRANKCASE VENT** — Loose, pinched, dirty; clips missing.

**CARBURETOR** — Base loose; choke or throttle controls sticking; linkage worn, not working easily, leaking.

**DISTRIBUTOR** — Dirty, loose in mount; spark plug cable connectors loose; primary wire lead connection loose; cracked.

**CRANKCASE** — Oil level low (below ADD mark) on dipstick; pressure sending unit (behind oil filler pipe) loose, broken, wire loose or frayed.

**OIL FILTER** — Mount loose; dirty, leaking; cover loose.

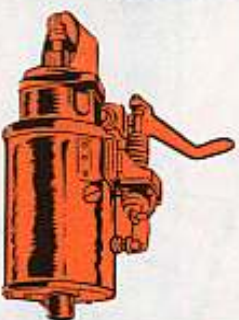
**REGULATOR** — Cover loose, damaged; mounts loose; cable connections loose; bare wires.

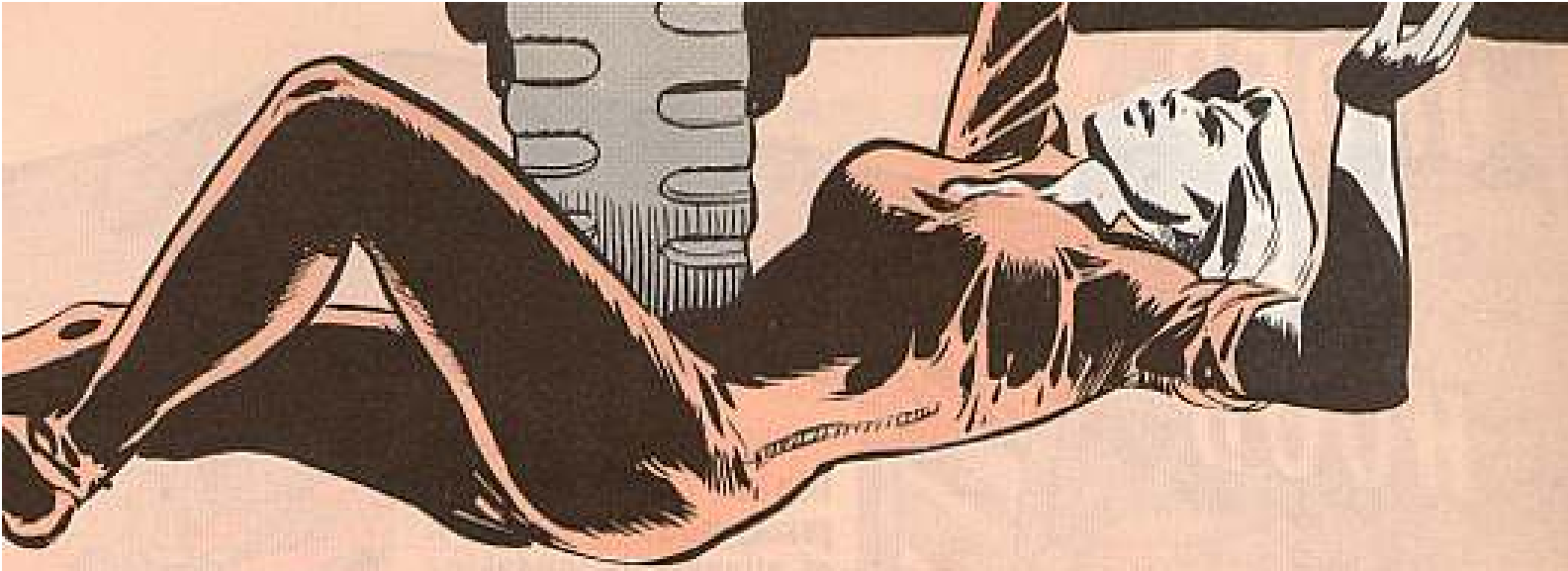
**GENERATOR** — Cable insulation cut, cracked, wires exposed; mounting loose, out of alignment; squeaking (don't try to lube—it's sealed!).

**STARTER** — Wire lead cracked, frayed; bolts or nuts loose; dirty.

**FUEL PUMP** — Leaking; dripping oil; loose on mount; case or base cracked.

**FUEL LINES** — Leaking; bent, pinched; loose. Fuel bowl dirty.



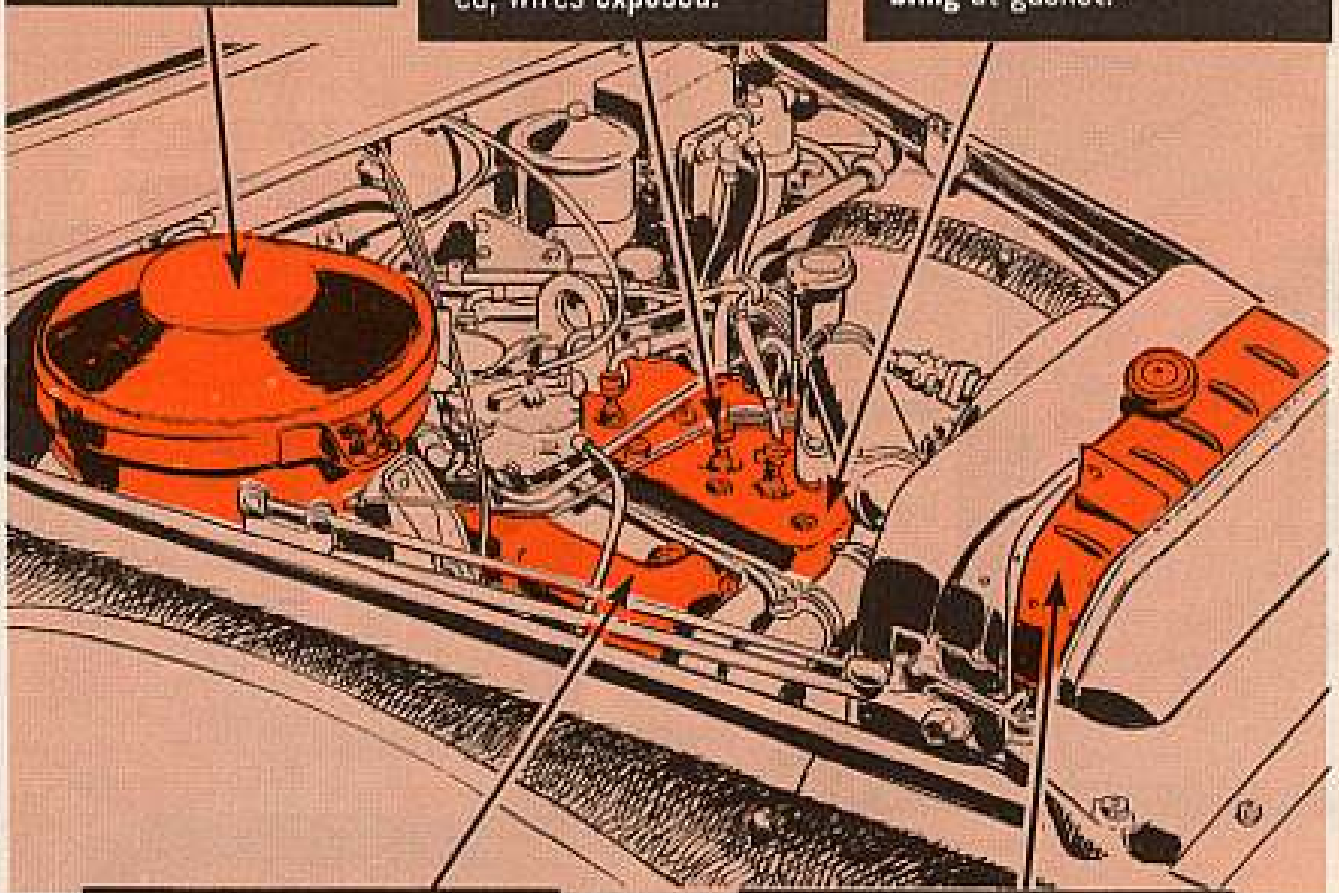


## UNDER THE HOOD

**AIR CLEANER** — Nuts, cover loose; oil dirty; gaskets cracked.

**SPARK PLUGS** — Cracked, loose, dirty; connectors loose; cables frayed, wires exposed.

**HEAD & BLOCK** — Cracked, coolant or oil leaking; bolts, nuts loose; hissing or bubbling at gasket.



**MANIFOLDS** — Gaskets cracked; flanges or body cracked, leaking; loose; heat control valve not working.

**RADIATOR** — Leaking; hoses rotten, soft in spots, pinched; drain cock stuck; coolant below top of core; cap missing.

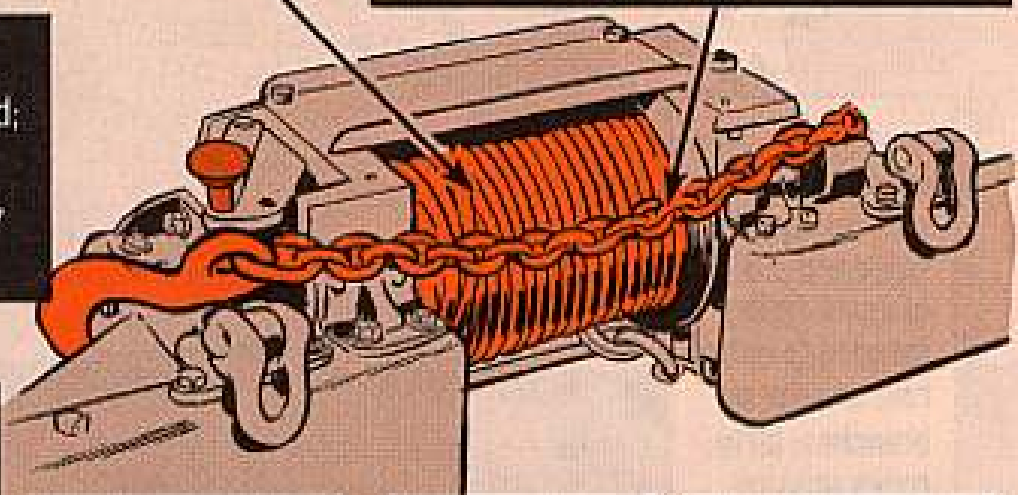
# WINCH

If you have one, it's your sub that comes offa the bench to get you out of tight places . . . the extra-kicker that may not play much, but oboy. So scan—

**CABLE** — Unlubed, corroded (use fresh lubricant only); kinked, frayed; loose on drum; improperly wound; mud-clogged.

**CHAIN** — Hook loose; fastened wrong (Fig 27, Ch 8, TM 9-8030); links cracked, broken; hook spread, cracked.

**DRIVE SHAFT** — Dry, dirty, unlubed; cotter pin gone; shear pin missing, wrong.



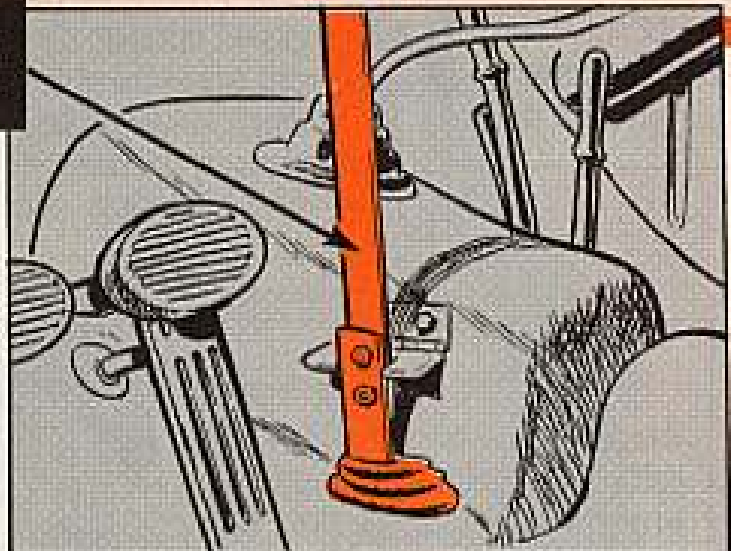
**GEAR CASES** — Seals leaking; lube level low.

**SHIFT HANDLE** — Jammed, not in engaged (hold-tight) position.

**BRAKE** — Jam nuts too tight; spring broken, missing.

**BOLTS** — Frame or bumper bolts loose, cracked, missing.

**POWER TAKEOFF SHIFT LEVER** — Stuck, loose; boot gone; lock not working; bent.



You can get your favorite organizational mechanic to hold the hook while you try the winch out . . . see if it winds OK, stops good, and shapes up. But no use winding too much cable offa that drum and fouling sand into that lube — why carry dirt around?

OK NOW PULL!





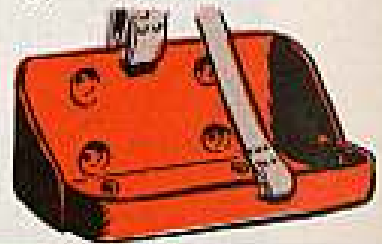
# LEFT AND RIGHT SIDE



YOU DON'T HAVE TO WAIT UNTIL THE CANVAS ROTS OFF THE BOWS TO DETECT POOR CANVAS-CARE!

**CANVAS** — Torn, mildewed; paint-stained; eyelets out; open side of seam facing forward to catch rain or snag on branches; dirty; ropes missing.

**FUEL CAN BRACKET** — Rusty; loose; webbing cut, mildewed, frayed; container (if present) leaky, dented.



**REFLECTORS** — Broken, missing; painted over, dirty.

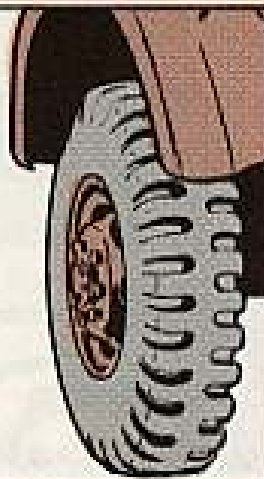
**GAS TANK FILLER** — Cap loose; gasket missing, damaged; vent closed (used only for fording); flange or neck bent; strainer, missing or dirty; chain missing; fuel fill stencils missing.

**SIDE PANELS** — Rusty, big dents or gashes.

**TARP HOOKS** — Loose, twisted, missing.

**BOWS AND BRACKETS** — Loose, cracked, broken.

**WHEELS & TIRES** — Lug nuts or flange bolts loose, missing; tread pattern mismatched, tire pressure wrong (40 lb is right); tires badly or unevenly worn, cut to fabric; rear wheel puller screws bent, jammed; fluid stain on rear hub; valve stems bent, valve caps missing; wheel bent.



**SPARE & RACK** — Bracket, locking stud, or nut bent, rusty; carrier bent, rusty; tire flat or pressure wrong (Some models carry spare on left door).

# REAR

**TAILGATE**—Chains broken, missing; retaining hook or hinge pins missing, bent, jamming; gate bent, rusty.

**PIONEER TOOLS**— Loose, straps torn or missing; tools rusty, missing, handles broken. (Local SOP may not require these tools on post).

**LIGHTS**— Lenses cracked, waterlogged; painted over; broken; won't work.

**BUMPERETTES**— Bent, broken, rusty, loose; markings wrong, missing.

**COUPLING RECEPTACLE**— Cover bent, muddy; contacts loose, burned; spring broken, rusty.

**PINTLE & SHACKLES**— Jammed; unlubed; won't hold.

**SEATS**— Broken, rotting, unpainted; brackets bent; pins missing.

**SIDE RACKS**— Rotting; missing; loose; slats, hooks or bolts broken, missing.

**FLOOR PLATES**— Bent, mud-caked, rusting.

## UNDERNEATH

**BRAKE & CLUTCH LINKAGE** — Loose, binding, cracked; springs missing; unlubed.

**FUEL TANK** — Supports loose, damaged; leaking.

**TIE RODS** — Clamp bolts, nuts, or washers missing, loose, unlubed; lube fitting missing; ball stud loose in flange; turn stop missing; broken; ends loose, bent.

**BACK PLATE ATTACHMENTS** — Fittings loose, missing, leaking; anchor bolts loose, missing.

**BRAKE LINES** — Broken, leaking, pinched; spring clips loose, missing.

**SHOCK ABSORBERS** — Cylinders stuck, dented; bolts, nuts missing; clip plate bent; broken; rubber shock bumpers (over axles) missing, cracked.

**EXHAUST PIPE, MUFFLER, TAILPIPE** — Holes, soft spots, flange connections loose.

**FRAME** — Bent, twisted, cracked; cross-members loose, bent badly; rivets or bolts missing, loose.

**SPRINGS** — Main leaf broken; pins or U-bolts cracked, missing, loose.

**CRANKCASE PAN** — Leaking 5 drops or more per minute.

**STEERING KNUCKLES and BALL JOINTS** — Worn, rusty, unlubed, loose, dented, leaking; bolts missing, loose.

**ENGINE MOUNTS** — Cracked, broken; bolts, nuts, or washers loose, missing.

**DRIVE SHAFTS** — Bent; U-joints unlubed, loose, bolts missing.

**CLUTCH HOUSING** — Pan gasket leaky; plate seal or plug gasket leaky; drain plug loose, missing.

**TRANSMISSION CASE** — Leaking 5 drops or more per minute; loose in mount; bolts broken, missing.

**BRAKE MASTER CYLINDER** — Push rod bent or safety nut loose; lines loose; fluid leaking; cotter pin gone on pedal rod end; boot torn or missing; return spring missing; fluid low.

**SHIFT LEVER ENDS** — Nuts or bolts missing, loose; rod ends bent, broken.

**DIFFERENTIAL** — Leaking; vent plug cap plugged with dirt or paint.

## WEATHER WISDOM

Depending on local SOP, a change o' season brings more to check. Your checkup switches a bit — so like in winter, look after —

**CHAINS** — Links or cross-chains broken; wrong sizes for wheels; too few chains to go around.

**ANTIFREEZE** — Installed before frost-fall (TM 9-207 tells all); have your favorite mech check.

**BATTERIES** — Winter specific gravity standard is 1.280. Have your shop make sure.

Then come spring, you drain that anti-freeze and the rust and gunk suspended in it (TB Ord 651), make with warm-weather LO specs . . . and you're in.

## FOR PUBS

YOU'LL NEED TM 9-8030 (INCLUDING CHANGE 8) AND A PARTS MANUAL TM 9-2320-212-20P (CHANGE 1 AND CHANGE 2). YOUR YARDSTICK BOOK IS TM 9-2320-212-ESC!



AIR  
MOBILITY

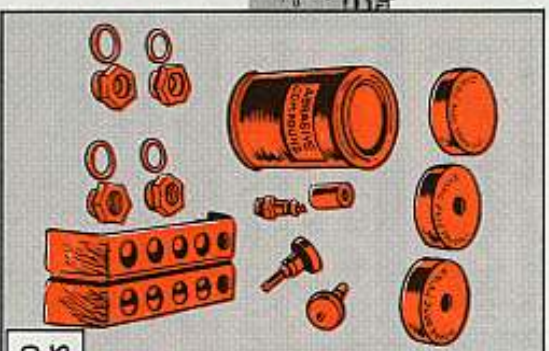
AIRCRAFT SPARK PLUGS

## CLEANING KIT GETS OUT THE BUGS

A spark plug bin with nothing in it is starvation for sure.

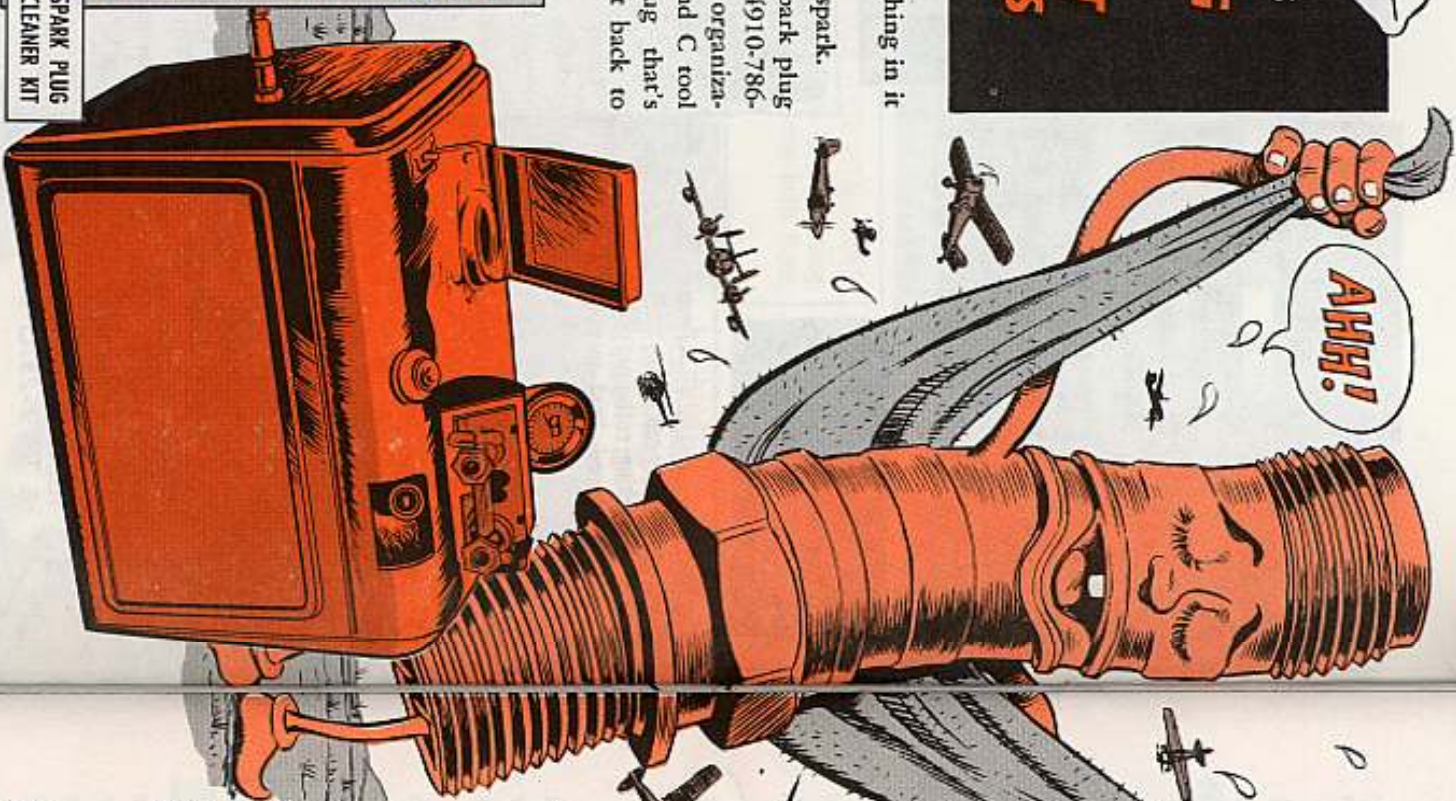
Aircraft don't fly without spark.

But there's help in that spark plug cleaning kit like your FSN 4910-786-9271, Type TK-2, in your organizational maintenance A, B and C tool sets. With a kit, any plug that's basically healthy can be put back to work.



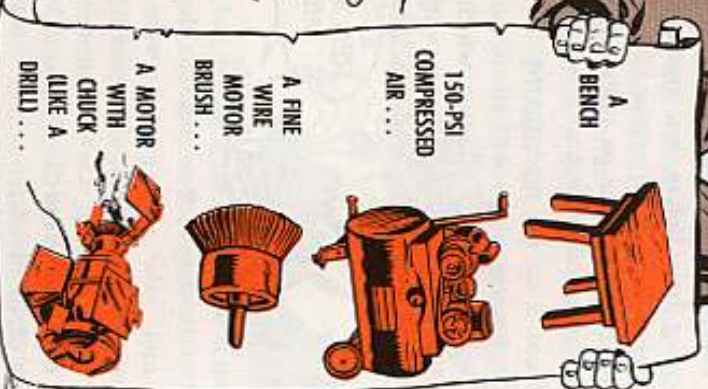
SPARK PLUG  
CLEANER KIT

16



AHH!

ALONG WITH  
THE CLEANER,  
HERE'S ALL YOU  
NEED TO KEEP  
THOSE PLUGS  
SPARKIN'...



A BENCH

150-PSI  
COMPRESSED  
AIR...

A FINE  
WIRE  
MOTOR  
BRUSH...

A MOTOR  
WITH  
CHUCK  
(LIKE A  
DRILL)...

To save wasted work, hold a muster on your used plugs. Toss out the hopeless cases with cross-threaded bases, rounded hexes, chipped or broken insulation (in barrel or base), mashed barrels, or electrodes chewed halfway off.

### BEFORE YOU BLAST

Prior cleaning with a fairly inflammable solvent (low toxic type), such as Stoddard's, will wash excess oil

and gunk from plug bases and make your pressure-cleaning compound last longer. Smeer clear of carbon tet and gasoline and use lots of ventilation. Whenever you use solvents, you want no fires, smokes or matches around.

You can put plugs in a metal tray (fabricate one as you like it), and give 'em a bottom-end bath in solvent.

About 15 minutes should do the trick. Then turn the plugs over in the tray and dry 'em with compressed air. Before applying that pressure, protect yourself with safety goggles and gloves. Don't be tempted to hold the plugs in your bare hand while drying 'em. Compressed air is dangerous when shot at your skin.

### DUNK 'EM IN SOLVENT



Trichloroethylene vapor is toxic, which sort of rhymes with sick, a kind of sick you prevent with ventilation. You want no fires, smokes, or matches in the area.

### ON THE BUSINESS END

Now check out your cleaner kit, make sure your water trap on the air supply line is good, your cleaning compound is dry, plentiful, and not over-age... and you're going good. If your compound is shy, take off the door and take out the container. Pour in pure AC type CL-3 Aircraft Spark Plug Cleaning Compound... about half a

17

fresh package is right. Never use sand or gypsum powder. Replace your cleaning nozzle with a fresh one (part CL-73) every time you replace compound. Then put door and container back snug.

On this outfit, you have to make sure you're grounded. If your electric supply isn't 3-wire with ground, then hook the whole case to a standard ground rod or water pipe.

Now sort out your plugs. . . . Put the right adapter for the bunch you'll work on first into the pressure-cleaning rig, lock it in . . . and here you go, first plug in place.

You push down the compound blast lever with one hand, and wobble the plug with the other (holding the plug

the cavity, set the plug aside for a trip through your vibrator tool—AV19-3 by name.

If the firing end isn't badly leaded or carboned, another short compound blast and air cleanup could be enough . . . but not a long grind. That just chews up electrodes and porcelains.

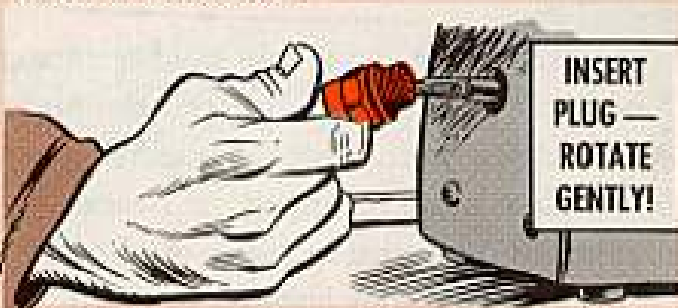
Whatever you do, that compound, every speck of it, has to come out of that plug base before you even think of reinstalling in an engine. Nothing on earth is deadlier on polished aircraft cylinders than that abrasive.

### USE THE VIBRATOR

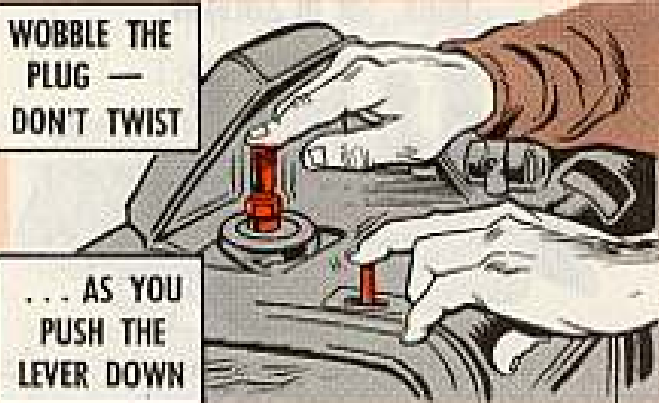
Several plugs will likely be black up inside. Your vibrator, which looks like a small smiling alligator with buck teeth, fits right up in the shell.



It's simple. You pick out the right tool, take each plug between your thumb and fingers, and rotate it gently while running. On 3-electrode plugs, use paired tools CL-273 and CL-274 in a CL-272 holder.



Soon's the tough ones are thru the vibrator, run them back for a compound and air cleanup. Then all you have left is barrel run-out and re-gapping.



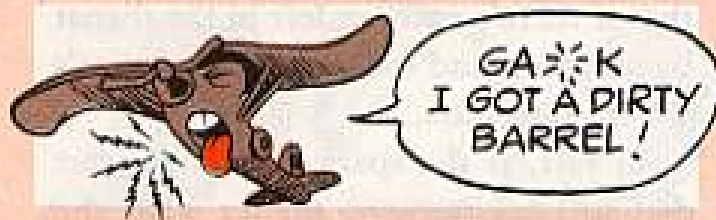
in, natch) for about 5 seconds. Then take a 5-second plain air blast cleanup to blow out compound particles.

Then's when you hold another small CMMI of your own — get the firing end of the plug under the AV24-1 inspection light and scan sharp-eyed. If you see carbon or anti-knock deposits up in



## THE OUTSIDE END

Barrel cleanup is an item you can't be slack about. Electrical leaks there can



be disastrous . . . and a dirty barrel is a leaky barrel.

So put the sleeve cleaner in your bench grinder chuck, use AV7-1 cleaner compound like creamy soap, and make with a gentle ream-out. Then comes dishwashing; all that soap has to come out in plain old good 'n' warm water.

GIVE IT  
A FINAL  
INSPECTION.



Air blast drying is the finale. And right then is a good time for another short inspection.

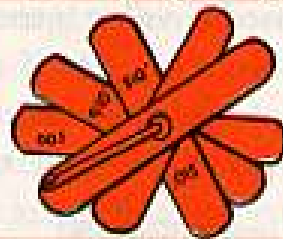
The thing is, breaks you couldn't see for dirt may show up when you get barrel insulation nicely cleaned. That's one reason you do that barrel shine job in the first place — so you can see what's what.

## GET THE GAP RIGHT

You have a set of spacer gage leaves to take everything up to 21 thousandths. Follow your TB 55-2925-200-25 (Feb 66), and be sure you have not left any wire brush bristles inside. Then check the gap. For flight engines, the gap is .016, that is, 16 thousandths. You can have a thousandth over or

under, but two thousandths over is NO-GO.

For AC 172, AC 272, SR47P and REL38B plugs, a gap of .019 is right.



CORRECT GAGE  
LEAF WILL  
GIVE YOU  
CORRECT GAP

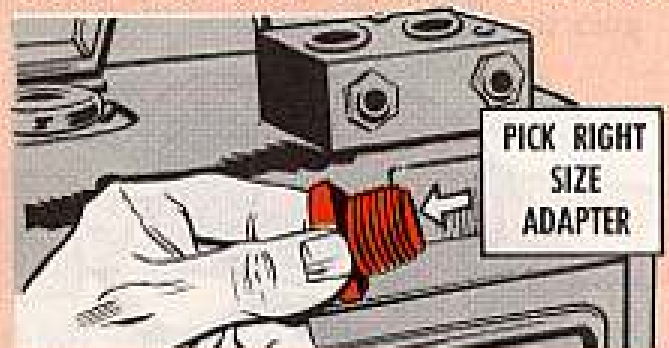
That's all there is to it . . . but do be sure you gap all the plugs you clean. Looking at them and deciding they don't need gapping could conk an engine.



## FINAL INSPECTION

You need to make sure of your work, of course, and this kit even includes a little giant handy checkup, otherwise called the indicator portion.

Pick the right size adapter for the plug to be tested, run the plugs in just finger tight (you have to have a little bit of air leak for the tester to work best), and hook on your connector.

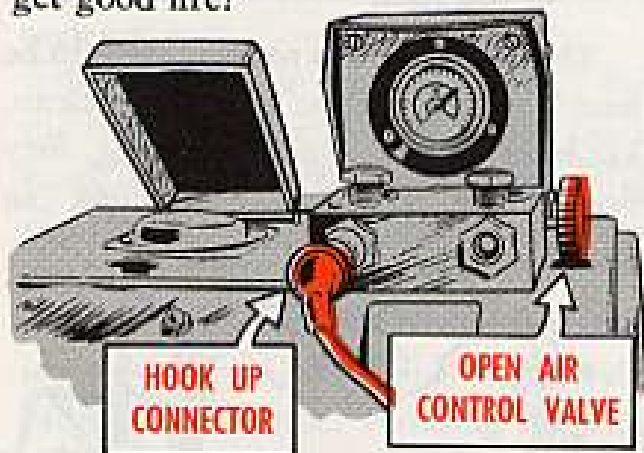


Next, get the high-voltage contact arm onto the exposed terminal, and take your hand offa the works.

Reach over by the indicator gage and push the high-voltage button. If your

plug is healthy at all, it'll flash fire, and you can see it reflected in the gage mirror.

Now put the air pressure to it . . . open air control needle valve gently, and let pressure build a bit. See if the plug still sparks; as the gage needle goes from red to green, do you still get good fire?



Several things could happen. You might see sparks run all up and down the center porcelain, but unless one gets "stuck" in one spot, mox nix—that high voltage current wanders around like thunderstorm lightning. What you want to be sure of is, the spark on the plug tip doesn't dim out and an arc doesn't develop in one single spot away up inside the throat . . . if it does, you've found a break in the porcelain, and out goes the plug.



You could get a spark at first, then it could stop before your needle ever gets out of the red—and you'll know that if there's nothing left in the throat by accident, and the gap is right, that's a bum plug, too.

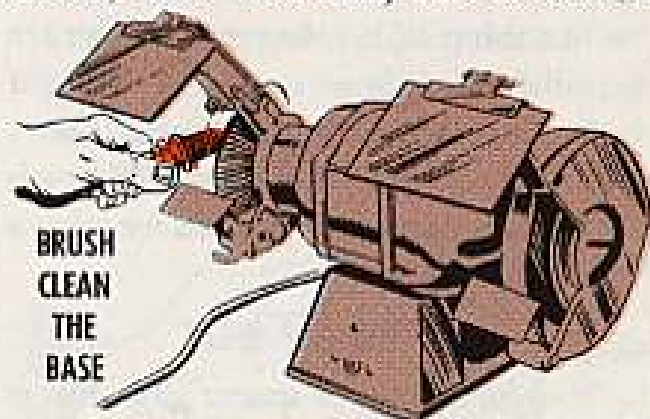
In fact, if the spark stops but your dial still registers, no matter what the air pressure is, you've probably got an invisible insulation crack some place—so take no chances with that plug either.

The same troubles could be in the barrel insulation. A fine crack there could be draining your current. So believe your gage pointer, and the rule is—

**If you can't prove a plug is healthy, with a good live spark at all pressures, chuck it out.**

### SPARK PLUG HEALTH HINTS

You won't be doing anybody's engine a favor if you reinstall plugs that haven't been brush-cleaned at the base. Those threads take on a lot of carbon and lead gunk. A rotary brush in your chuck, .005 wire size, and a careful



hand-held run-through, will do the job. If you've got a slow-turning motor, 1000 to 1725 RPM, that's good.

Checking gaps before you give plugs a thumbs-up is another good rule. That's what your GO-NO-GO round-wire gages are for.

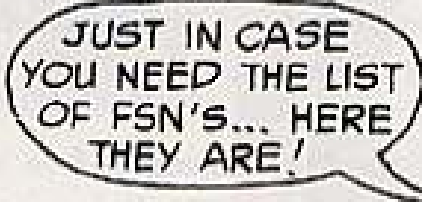
Your magnifying glass will help you see whether any fine breaks in sleeve or tip porcelains might have sneaked past you.



And before you store plugs for later use, best pickle those barrel and shell threads in an oxidation inhibitor, MIL-C-6529-A, Type III. While you do that, scan the threads real well to see that none of them are roughed up and likely to damage your engine; if in doubt, get your support to check 'em with a thread gage. Damaged engine cylinder head bushings is one item you can do without.

### BY THE NUMBERS

You should have received a TM 9-4910-422-12 (Jun 64) with your kit; if not, get one ordered on a DA Form 17. It has all the factory part numbers and FSN's you could dream about.



NOMENCLATURE	FEDERAL STOCK NUMBER
Adapter, Indicator, Spark Plug Cleaner, 14-MM	4910-069-9348
Adapter, Indicator, Spark Plug Cleaner, 18-MM	4910-069-9351
Adapter, Spark Plug Cleaner, rubber, 14-MM	4910-356-8768
Adapter, Spark Plug Cleaner, rubber, 18-MM	4910-356-8769
Cleaning Compound, Insulator Sleeve	4910-787-4333
Cleaning Compound, Spark Plug	4910-787-4330

## PROPS 'N' PITCH

Basic Beaver (U-6A) props P/N 2D30-301 and 2D30-237-6101A18 have the same diameter — 8 feet, 6 inches — and a pitch range of 10.5 to 24 degrees at the 42-in station. You may have prop, P/N 2D30-237-6101A20, which is 2 inches shorter in diameter and gets a pitch range of 11.5 to 24 degrees at the 42-in spot. Better check your props and pitch ranges 'cause a wrong pitch setting could put your Beaver-bird in a bind.



DISTRESS LIGHT MARKER

# FLYWEIGHT



Mayday! Mayday! from pilot or troops gets faster action than Cong from Mini-the-gun. Successful rescue from Cong or crash may depend on how well you've pulled PM on your distress marker light—FSN 6230-067-5200, P/N SDU5/E.

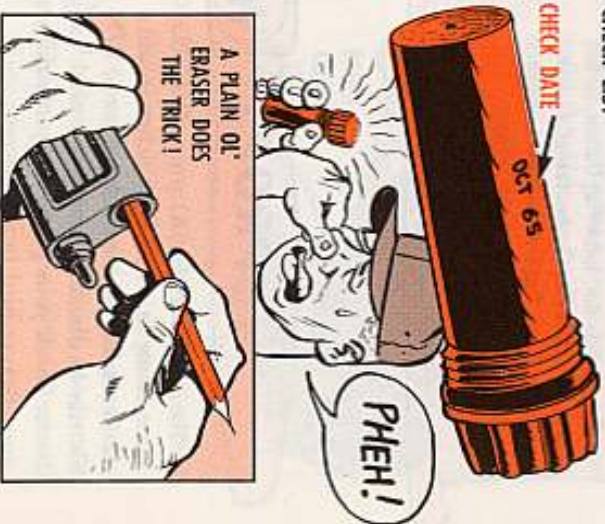
This 8-oz strobe light is about as caretaker-free as can be. Usually the only upkeep is replacing the battery when the light needs a shot of adrenalin. But giving the light a PM check-out once in a while is playing the game according to Hoyle.

## PM CHECK LIST

Check the date of manufacture of the battery. If you think a battery has been in your light two years or longer, replace it with FSN 6135-073-8939, P/N MSS6135-1C. Cost: \$2.50.

Take a look-see at the battery for cracks, dents, leakage. You'll know a leaky battery by the strong pungent odor that smells like vomit. UGH! Bum batteries get the heave-ho.

Peek inside the case at the battery contact for rust, dirt, corrosion. A pencil eraser does a bang-up Mr. Clean-type job here.



A PLAIN OL' ERASER DOES THE TRICK!



# LIFE SAVER



If you find corrosion or rust, a wire brush treatment is in order. Add a dab of silicone grease to stop crud build-up.



Notice the glued-on O-ring? Is it cracked, broken, loose? If so, you may not have a watertight light. Replace battery if you can't find new O-ring.



Lens on this light come like field grade weather—clear. Security from Cong while waiting rescue is nil. But

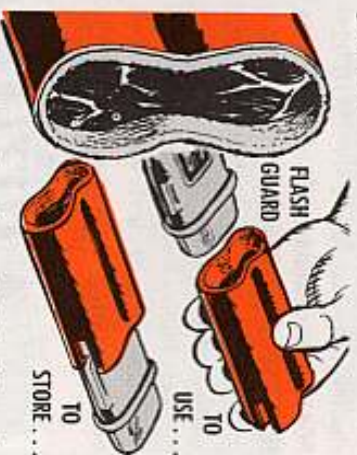
Play peep-eye regularly with the:

### LENS AND FLASHTUBE

—for cracks, distortion. No monkeying around with these 2 items. Anything wrong with 'em and you order a new light. Cost: \$12.00 for light, battery, carrying case.



with FSN 6230-917-6692 and \$1.25 you can get a slip on-off blue filtered flashlight. This adapter requires mini-PM needs and doesn't give away your position.



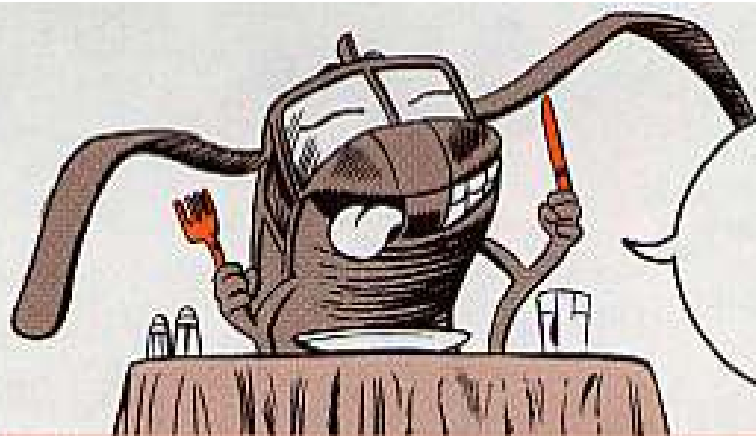
So-o-o-o, if you're an OV-1 pilot who has punched out or a crew member of a bashed rotorbird, your fast rescue may depend on how well you've maintained your emergency equipment. How's your light?

**CASE**—looking for cracks, excessive abrasions.

**NYLON LANYARD AND CANVAS CARRYING CASE**—for rips, tears, fraying, lost snaps.

**RUBBER SWITCH BOOT**—for cracks, looseness.

CHECK THIS LIFESAVER OFTEN!



**"PASS THE WASHERS, PLEASE!"**

Checking for wear on Huey (UH-1C) parts is a natural when you're pulling a preventive maintenance inspection—and washers are no exception.

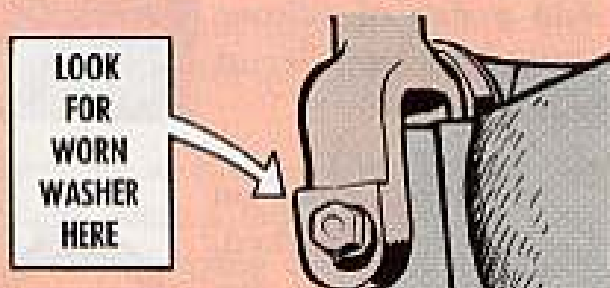
For one, be sure you focus on the chamfered washers, FSN 5310-925-8641, at both clevis ends of connecting link, FSN 1615-986-6160. One washer goes on each side of the bearing in the scissors and sleeve assembly.

These babies wear out at around 400 hours and then the clevis wears a groove into the mating surfaces of the scissors

... means an expensive part replacement.

If the clevis doesn't appear to be centered on the mixing arm the washer is shot.

Keep the washer wear pattern in mind, say, every 4th periodic. You can replace worn washers for peanuts.



## A LITTLE DAB'LL DO YA

Ever notice how a doll needs a touch-up here and there to stay at her best? Sure you have!

The same deal goes for the stabilizer bar dampers on your Huey (UH-1). Give the damper shaft splines a little extra care or they'll go to pot on you.

the lever shaft splines.

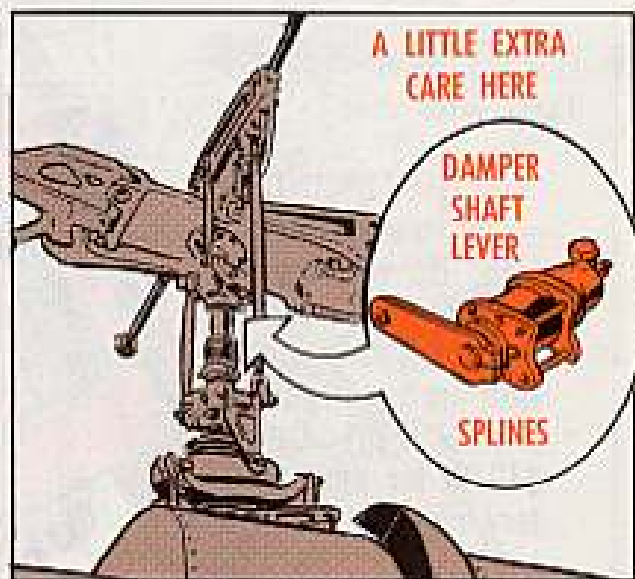
Read all about how it's done in Ch 7 (19 Dec 67) to your Equipment Improvement Report and Maintenance Digest... TB 750-992-3.



UGH!



Like—to guard against cracking, chipping or breaking of the damper splines make with Adhesive Metal Set A-4 on the damper shaft splines and



AN/ARC-54 ...  
**DIRTY**

## WORD FROM A DIRTY BIRD



Commo equipment caretakers can squelch a squawk box by not keeping the innards of the RT-348 receiver-transmitter kitchen-clean. A dust-dirt jammed switch or coil that keeps Pickled Pilot from maydaying will get you a bonnet-ful of dirty words!

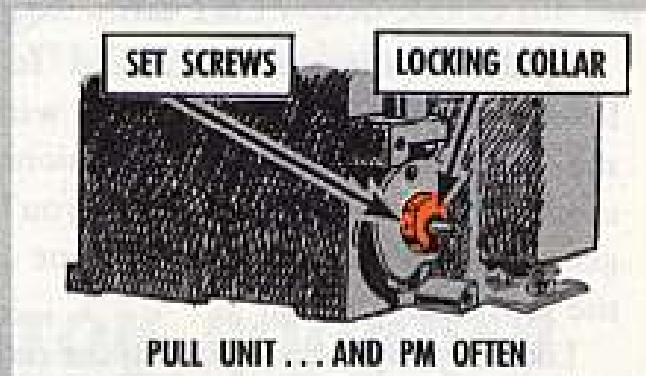
It's not a big cleaning job—except when your unit's operating where you get more'n your fair share of dirt, dust, FOD and smog. Normally, you'd spit 'n' polish the unit every 300 hours, but it makes a heap of PM sense to pull out the unit more often for cleaning—say every 100 or 200 hours—if necessary. Para 26, TM 11-5821-244-12 (Mar 64) gives you the stepped-up cleaning deal.

Most dirt build-up is on the power amplifier mechanical linkage and between the coil core, P/N 805C L803,

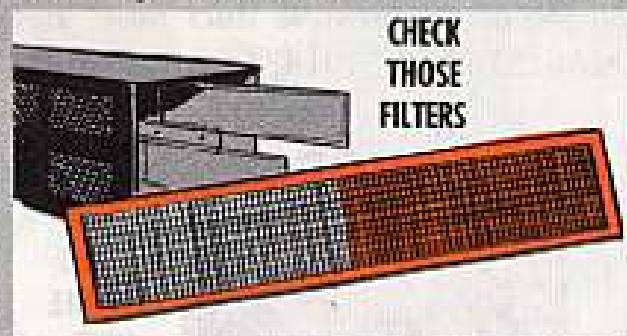


and its sleeve. If you get a dirtnik dust-in here, the set screws in the locking collar on the right hand cam will break

and you'll get an off-frequency that keeps the pilot from yow-hooing on his FM set.



Every time the unit is pulled out of its cover, take a long look at the 4 air conditioning filters. If the 2 top filters are dirty—toss 'em.



But hold one before you deep-six the 2 on the bottom. You can reverse these 2 filter pads 'cause only one-half gets dirty while installed. Just be sure the blue sides face each other when you stick 'em in. This blue bit goes for all 4 filters.

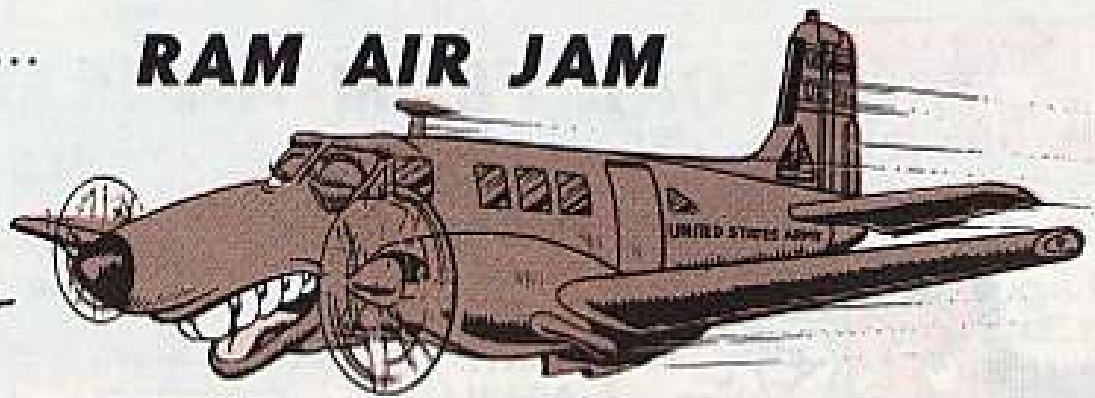
Equipment kept in a standby status collects dust faster'n Bob Hope ad libs. So-o-o-o, keep this gear protected and remember, it gets intermediate maintenance PM at least once a month.

Electrical leaks and short circuits caused by dust and dirt in avionics gear can be reduced to zero-zero with by-the-book PM.

U-8F...

# RAM AIR JAM

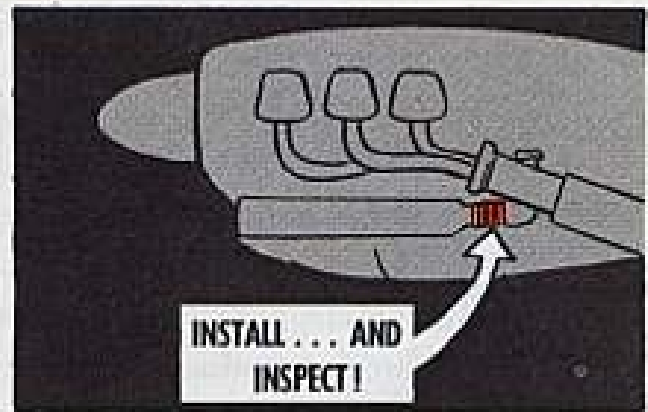
I'M LOSING POWER



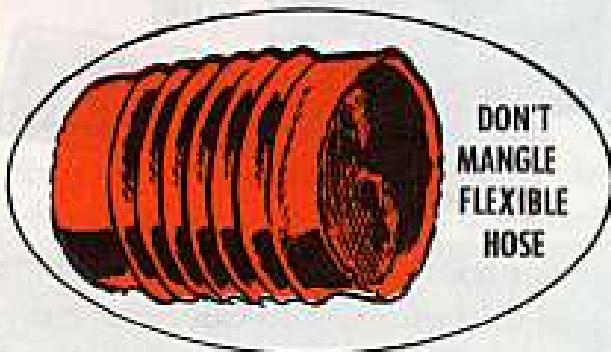
By-the-book maintenance and follow-up inspection will put you with the in proud-crowd of professional mechanics. A mental goof-up and you'll get a piece of the action — in front of the top kick!

Like maybe you're replacing the ram air scoop — duct assembly — after putting a new 0-480-3 engine on your Seminole. The scoop end, P/N 50-910235-149, catches and crimps the inside of the flexible duct hose, P/N NAS1374A12CA016, as you seat it.

You forget the follow-up inspection, spelled out in para 5-319, TM 55-1510-201-20, to see if the air scoop hook-up is OK.



You guessed it. On the maintenance test flight the pilot has loss of power on climbout and at 6000 feet with new engine full bore his manifold pressure was on the minus side by 2 inches. Took much downtime finding the trouble 'cause ground checks were OK.

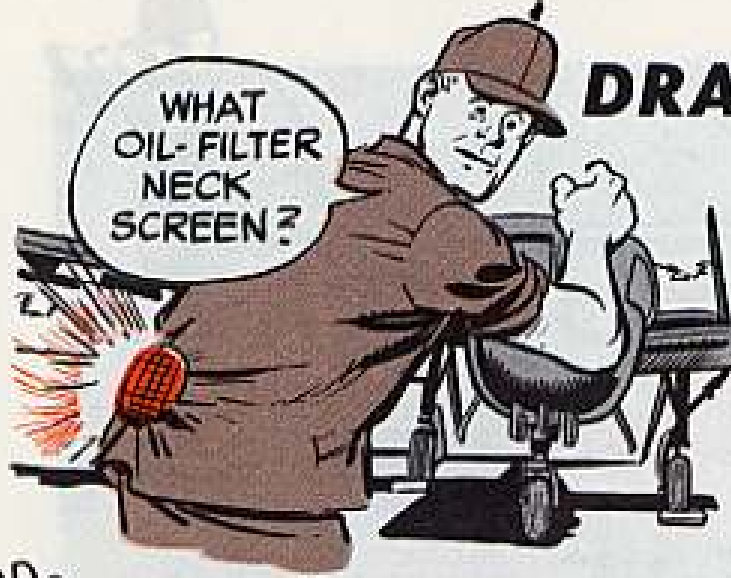


# CF3Br TAG BAGGED



That's right, aviation types. You can remove DA Form 253 from all CF3Br fire extinguishers mounted in Army aircraft. Use this monthly inspection tag only on extinguishers located in buildings. You still weight-test the CF3Br every 6 months and make action entry on DA Form 2408-18.

## DRAIN OIL SAMPLE



When you Mohawk (OV-1) types sample the engine oil don't remove the oil-filler-neck screen and poke a drain tube in there . . . more screens get lost that way!! TB 55-6650-300-15 (26 Jun 67) allows you to drain the sample.

O-470-11B ENGINE...

## A GOLD PISTON POUNDER

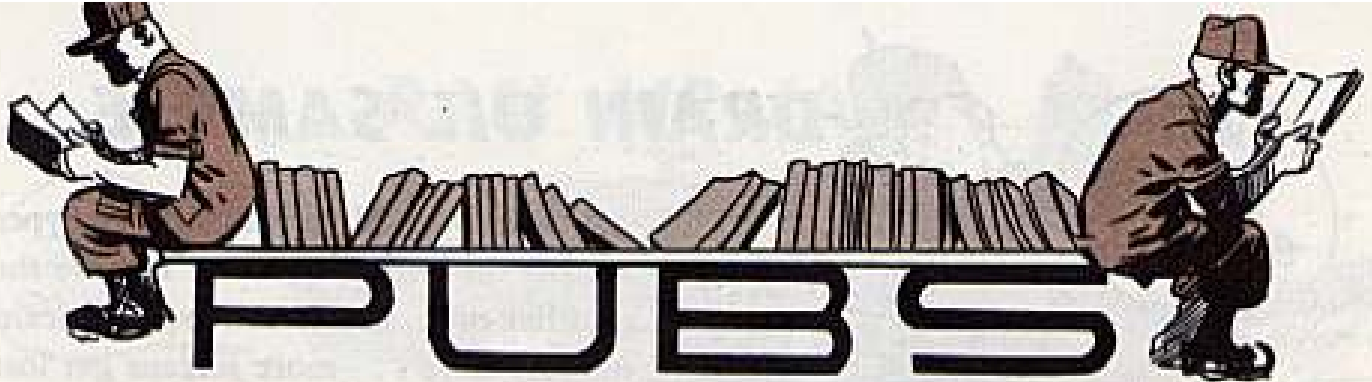


If your Bird Dog (O-1) comes back from depot with a new engine, don't panic if you see a gold one under the hood!

Now hold one, Goldfinger O-level type. Don't start chipping nuggets from that hunk of metal. It's only an O-470-11A engine updated with the O-470-15 cylinder, piston, and ring assemblies — and branded O-470-11B.

You're looking at a power plant virtually identical — maintenance-wise — with every other Bird Dog piston pounder O-470-15 type.

So-o-o-o, pull scheduled inspections, special inspections, troubleshooting bits, and repairs by the maintenance pub, TM 55-1510-202-20 (May 66). Remember . . . the gold is only paint skin deep!



This is a selected list of recent pubs of interest to organizational maintenance personnel. The list is compiled from recent AG Distribution Centers Bulletins. For complete details see DA Pam 310-4, Ch 3 (Oct 67), TM's, TB's, etc.; DA Pam 310-6 (Jul 67) and Ch 3 (Jan 68), 3C's and 3M's; DA Pam 310-7 (Jul 67), HWO's.

#### TECHNICAL MANUALS

TM 1-10H-23C-24F, Feb, OH-23.  
 TM 5-2010-200-10 C4, Mar, 165 HP Outboard.  
 TM 5-2420-200-15 C3, Feb, Tractors, Wild, Med Drawbar Pull.  
 TM 5-3431-204-20P C1, Feb, Welding Equip.  
 TM 5-3805-218-25P C2, Mar, Earth Moving Scrapers.  
 TM 5-3805-229-20P C2, Mar, Earth Moving Loaders.  
 TM 5-3805-229-35P C2, Mar, Earth Moving Loaders.  
 TM 5-3805-235-15, Feb, Earth Moving Scrapers.  
 TM 5-4120-223-15 C1, Mar, 18,000 BTU Compact Air Cond.  
 TM 5-4310-222-10 C2, Feb, 100 CFM Air Compressor.  
 TM 5-5420-204-ESC, Mar, Bridges.  
 TM 5-6115-213-10 C5, Feb, 45 KW Gen Sets 60 Cy.  
 TM 5-6115-213-35P C2, Feb, 45 KW Gen Sets 60 Cy.  
 TM 5-6115-248-10 C2, Mar, 30 KW Gen Sets 60 Cy.  
 TM 5-6115-294-12 C2, Mar, 30 KW Elec Gen Equip 400 Cy.  
 TM 5-6115-400-12, Jan, 200 KW Gen Set, DED 60 Cy AC 120/208V 240/416V 3 Ph Convertible.  
 TM 5-6115-405-15 C1, Feb, .125 KW Gen Sets.  
 TM 9-1005-224-25, Dec, M60 7.62-MM Machine Gun, M122 Mount.  
 TM 9-1005-257-20P, Dec, XM18, XM18E1 Aircraft Armament POD.  
 TM 9-1005-262-ESC, Feb, M33, M24, XM41 Armament Subsystems.  
 TM 9-1015-221-ESC C1, Jan, M40A1, M79 Grenade Launcher.  
 TM 9-1400-375-10/2/1, Feb, Pershing.  
 TM 9-1410-250-12/1, Nov, Nike-Herc, Nike-Herc Imp.  
 TM 9-1430-377-12P/1, Jan, Pershing.  
 TM 9-2300-224-10/2/7 C1, Mar, M548 Cargo Carrier.  
 TM 9-2300-224-20/3/7 C1, Mar, M548 Cargo Carrier.  
 TM 9-2300-224-20/2/1 C4, Feb, M113A1, M577A1, M106A1, M125A1, M548 Carrier and M132A1 Flame Thrower.  
 TM 9-2300-224-20/3/2 C2, Feb, M106 Recoilless Rifle.  
 TM 9-2320-218-ESC/1, Jan, M151 1/2 Ton Truck.  
 TM 9-2320-218-ESC/2, Jan, M170 Ambulance.  
 TM 9-2320-222-20 C2, Feb, M88 Recovery Veh.  
 TM 9-4935-305-15P/1, Jan, Sergeant, TM 9-4935-425-15P, Feb, Bedays.  
 TM 9-4935-509-15P/1, Dec, Hawk.  
 TM 9-4935-516-14, Feb, Hawk.  
 TM 9-4940-251-15P/1/2, Jan, Nike-Herc, Nike-Herc Imp.  
 TM 10-4520-201-10 C2, Mar, 250,000 BTU Environmental Equip Heater.  
 TM 11-1520-206-20P, Feb, OH-23B, OH-23C, OH-23D, OH-23F, OH-23G.  
 TM 11-2300-261-15-4, Jan, Installation of Radio Set AN/YRC-12 AN/YRC-46 AN/YRC-47 AN/YRC-53 or AN/GRC-125 and Intercom Set AN/VIC-1(Y) in M60 Tank.  
 TM 11-2821-204-20P, Mar, O-1A, O-1E, OV-1A, OV-1B, OV-1C, U-1A, U-6A, U-8D, U-8F, U-10A, OH-21C, OH-34A, OH-34C, OH-37A, OH-37B, OH-47A, OH-13E, OH-13G, OH-13H, OH-13I, OH-23B, OH-23C, OH-23D, OH-23F, OH-23G, UH-1A, UH-1B, UH-1D, UH-19C, UH-19D.  
 TM 11-5895-490-20, Jun, RT-859/APX-72 Radio, MT-3809/APX-72 and MT-3948/APX-72 Mountings.  
 TM 11-5895-585-15, Jan, AN/MRC-115(Y) Radio Terminal Set.  
 TM 11-5965-283-15, Mar, H-183/PT Headset-Microphones.  
 TM 11-5985-293-15, Feb, AS-2169/G Antenna, AB-1078/G Base Antenna Support.  
 TM 11-6130-250-25P, Feb, PP-4127/U Battery Charger.  
 TM 11-6625-1653-15, Jan, MK-986/ASN-72 Electronic Equip Maint Kit.  
 TM 55-1100-226-12-8 C1, Mar, CH-21, CH-34, CH-47, UH-1A-1B-1C-1D.  
 TM 55-1510-202-20PMD, Feb, O-1.  
 TM 55-1510-202-20PMI, Feb, O-1.  
 TM 55-1510-202-20PMP, Feb, O-1.  
 TM 55-1510-204-20 C2, Dec, OV-1.  
 TM 55-1520-204-10 C5, Mar, OH-13.  
 TM 55-1520-206-10 C3, Feb, OH-23.  
 TM 55-1520-206-20PMP, Jan, OH-23.  
 TM 55-1520-209-10 C10, Mar, CH-47.  
 TM 55-1520-209-20 C20, Mar, CH-47.  
 TM 55-1520-209-20PMD C1, Jan, CH-47.  
 TM 55-1520-209-20PMI C1, Feb, CH-47.  
 TM 55-1520-209-20PMP C2, Mar, CH-47.  
 TM 55-1520-210-20P-1, Feb, UH-1A-1B-1C-1D.  
 TM 55-1520-210-20P-2 C2, Feb, UH-1A-1B-1C-1D.  
 TM 55-1520-214-10 C2, Mar, OH-6.  
 TM 55-1520-214-20 C4, Mar, OH-6.  
 TM 55-1520-214-20PMP C1, Feb, OH-6A.  
 TM 55-1520-217-10 C5, Mar, CH-54.  
 TM 55-1520-217-20 C3, Mar, CH-54.  
 TM 55-1520-217-35P-2 C1, Mar, CH-54A.  
 TM 55-1520-218-10, Jan, UH-1A-1B.  
 TM 55-1520-218-10CL, Jan, UH-1A-1B.  
 TM 55-1520-218-20, Jan, UH-1A-1B.  
 TM 55-1520-218-20PMP, Jan, UH-1A-1B.  
 TM 55-1520-219-20, Jan, UH-1A-1B.  
 TM 55-1520-219-20PMP, Jan, UH-1A-1B.  
 TM 55-1520-220-20PMI, Jan, UH-1C.  
 TM 55-1520-221-10 C6, Mar, AH-1G.  
 TM 55-1520-221-20P C3, Feb, AH-1G.  
 TM 55-1520-227-25C, Feb, CH-47.  
 TM 55-1520-227-10, Feb, CH-47.  
 TM 55-1520-227-10CL, Feb, CH-47.  
 TM 55-1520-227-20PMD, Feb, CH-47.  
 TM 55-1520-227-20PMI, Feb, CH-47.  
 TM 55-1520-227-20PMP, Feb, CH-47.  
 TM 55-1680-255-24 C2, Mar, OV-1.  
 TM 750-134 C1, Jan, All rotor wing.

#### MODIFICATION WORK ORDERS

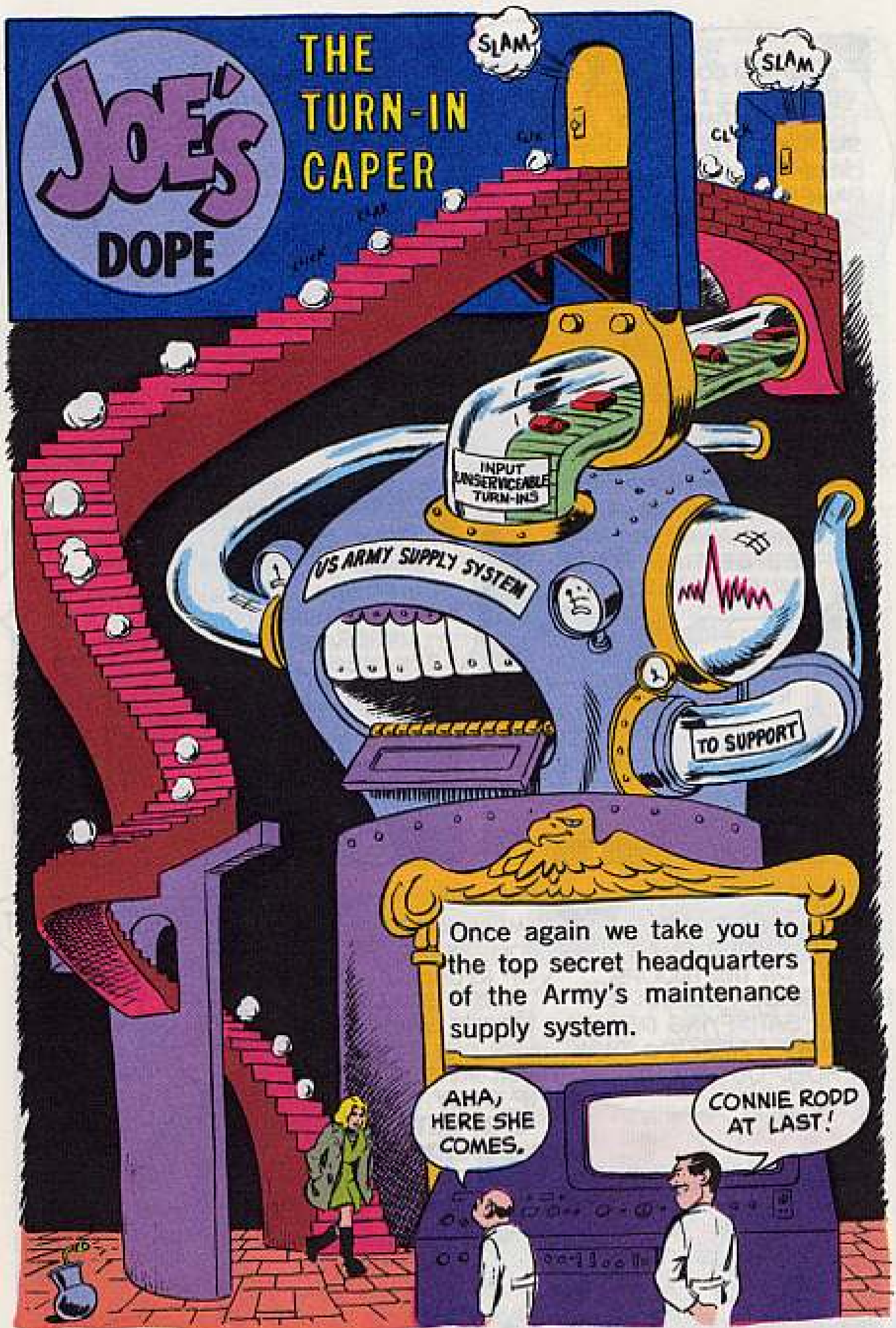
9-2320-224-20/9, Feb, M114/M114A1 Command and Recon Pers Carrier.  
 10-8240-211-30/1, Mar, Tents.  
 55-1500-202-20/2, Feb, UH-1A-1B, UH-1D.  
 55-1510-201-30/1, Mar, U-8.  
 55-1510-202-40/2 C2, Mar, O-1.  
 55-1510-203-30/5, Mar, U-6.  
 55-1510-204-34/78, Feb, OV-1.  
 55-1510-209-20/3, Mar, U-21.  
 55-1520-204-20/9, Mar, OH-13.  
 55-1520-209-20/37, Feb, CH-47.  
 55-1520-209-30/5, Feb, CH-47.  
 55-1520-209-30/20 C1, Feb, CH-47.  
 55-1520-209-30/54 C1, Mar, CH-47.  
 55-1520-209-30/58, Jan, CH-47.  
 55-1520-210-30/18, Mar, UH-1D.  
 55-1520-211-30/5, Mar, UH-1A-1B.  
 55-1520-211-30/32, Feb, UH-1A-1B-1C.  
 55-1520-211-30/35 C2, Mar, UH-1A-1B-1C.  
 9-2320-222-20/1, Mar, M48A3, M60, M103A2 Tanks, M67A2 Flame Thrower Tank.

#### MISCELLANEOUS

FM 19-15, Mar, Civil Disturbances and Disasters.  
 LO 5-2805-256-12, Dec, 1 1/2 HP MII Sid Gas Engine.  
 LO 5-2805-257-12, Dec, 3 HP MII Sid Gas Engine.  
 LO 5-3805-246-12-1, -2, -3 and -4, Feb, Cat 112F Motorized Road Grader DED 12 Ft Blade.  
 LO 5-3895-227-12, Feb, Distributor Bit Mat GED Tr-Mid 800 Gal Emyre MIL-D37, MIL-D40.  
 LO 9-1005-262-15, Feb, M33/M24, XM41 Subsystems.

# JOE'S DOPE

## THE TURN-IN CAPER



Once again we take you to the top secret headquarters of the Army's maintenance supply system.

AHA,  
HERE SHE  
COMES.

CONNIE RODD  
AT LAST!

GLAD YOU COULD GET HERE... I HOPE YOU'RE IN TIME!! THE SUPPLY SYSTEM IS ONCE AGAIN IN GRAVE DANGER... HUNDREDS OF UNSERVICABLE, RECOVERABLE, REPARABLE ITEMS.

HMM, EXACTLY WHERE IS THE PROBLEM???

TURN ON THE VIDEO HIGH FREQUENCY-CONTROLLED BEAM SINGLE CHANNELLED TROOP OBSERVER, MR. KRANNIS.

YES SIR.

NOTICE, TONS OF SUPPLIES STASHED AWAY IN SMALL PILES GETTING RUSTY OR DAMAGED!

IN STORAGE ROOMS...

... DARK SHOP CORNERS, SUPPLY ROOMS — UNDER BENCHES.

EVEN IN DESK DRAWERS.

**SOB** WE DON'T HOLD OUT ON THE TROOPS... WE KNOCK OURSELVES OUT SATISFYING DEMANDS ... WHY? SOB? DO THEY HOLD OUT ON US?!!

MILLIONS OF DOLLARS WORTH OF REUSABLE STUFF IS OUT THERE WHICH WE CAN FIX AND REISSUE... IF ONLY WE CAN GET OUR HANDS ON IT!

I KNOW JUST WHAT TO DO!!



**AND SO...**

... SURE, CONNIE, WE WANT TO KEEP THE SUPPLY SYSTEM WORKIN' FOR US!! WHAT DO WE DO?

FIRST, LET'S TALK **TURN-IN!**

STICK TO YOUR SUPPLY TURN-IN SOP. AR 735-35 CLUES YOU. PRE-PRINT FORMS DA 2765 AND 2765-1 MAKE TURN-IN EASY!

GEE... COME TO THINK OF IT, WE'VE GOT **FREE TURN-IN!**



**FINE**, USE IT! THE BIG THING TO REMEMBER IS **TURN-IN PRONTO** ALL UNSERVICEABLE, RECOVERABLE AND REPARABLE ITEMS. ALSO, ANY **UNAUTHORIZED ITEMS!**

NEXT, STOCK ONLY ACCORDING TO YOUR DEMAND RECORDS!! TURN IN ITEMS NOT SUPPORTED BY DEMAND AND ITEMS FOR EQUIPMENT YOU NO LONGER HAVE.

AWW, I HATE TO GIVE THIS GADGET UP... I DON'T **NEED** IT, BUT IT'S NICE TO HAVE. TSK! TSK!



ER, MAYBE I'LL NEED THIS SUB-ZERO ARCTIC BATTERY WARMER IF WE SHOULD GET SHIPPED THERE SOME DAY.

**TURN IT IN** ... MEANWHILE SOME ARCTIC-BASED OUTFIT CAN USE IT!!

HEY, CONNIE! WHAT'S WITH THESE EXCHANGE TAGS?

DA FORM 2402... WHAT ELSE? USE 'EM TO TAG UNSERVICEABLE DX ITEMS... AND CHECK YOUR DX SOP OFTEN.



# Joe's Dope Sheet



Our system of Army supply waits for you and "that other guy": Pull "bad" stuff from the bin For repair... turn it in. It will help you roll, shoot or fly!

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.



POLICE YOUR STORE ROOMS, BINS, LOCKERS AND UNUSED CORNERS OF YOUR SHOPS... **DON'T** LET REPARABLE ITEMS PILE UP... THIS TYPE OF HOARDING CREATES A **SHORTAGE** THAT WILL HURT YOU IN THE END!

SO, WHY DON'T THOSE SUPPLY TYPES **ORDER ENOUGH STUFF?**



**BUT THEY DO!!**... AND THEY HAVE A WORKABLE SYSTEM, **BUT** IT IS BASED, NATURALLY, ON EXPERIENCE - LIKE, HOW MANY OF AN ITEM GETS USED UP IN A GIVEN TIME.



THE STOCKAGE FACTOR ALSO IS FIGURED BY COUNTING ON A CERTAIN AMOUNT BEING RETURNED, REPAIRED AND **REUSED!!**



SO, IF A BUNCH OF SHORT-SIGHTED TYPES GET LAZY, OR GREEDY AND DRAIN OFF AN UNUSUAL AMOUNT BY HOARDING OR FAILING TO **TURN-IN** REPARABLES... THIS BLOWS THE WHOLE BIT!

I SEE... SO THEIR ORDERING PLANS GET SCREWED UP AND **WE** GET THE DUE-OUT NOTICE... WHEN REALLY, THERE'S PLENTY AROUND NEEDING JUST A NUT OR WIRE TO MAKE 'EM SERVICEABLE!

THAT'S RIGHT, SO MEMORIZE THE **CODES** FOR RECOVERABLE ITEMS... YOU'LL FIND THEM IN SUPPLY MANUALS AND **TM'S**... LIKE THIS AND SEE YOUR LOCAL SOP ON RECOVERABLES.

(1) SOURCE, MAINT AND RECOVERABILITY CODE				(2) FEDERAL STOCK NO
(a) MATERIAL CODE	(b) SOURCE	(c) MAINTENANCE LEVEL	(d) RECOVERABILITY	
P	O	RF		2920-737-4750
P	O	RF		6115-629-1149

*Code "R"*—applies to assemblies which are normally recoverable at DSU and normally are furnished on an exchange basis.  
*Code "T"*—applies to recoverable repairable parts normally are hauled at depot maintenance.  
*Code "U"*—applies to specifically selected maintenance units because of their content, critical nature, or high value reusable cases.

IDENTIFY YOUR RECOVERABLE **PLL** ITEMS ON YOUR SUPPLY RECORD SO YOU WON'T FORGET TO TURN-IN UNSERVICEABLE ITEMS WHEN YOU HIT SUPPORT FOR SERVICEABLE REPLACEMENTS!



IF YOU HAVE FREE TURN-INS, BE SURE TO TAG AND IDENTIFY WITH **FSN**, NOMENCLATURE, PART NO. ETC. EVERY ITEM YOU TURN IN. IT HELPS TO GET THE ITEMS BACK IN THE BIN FASTER.



AND... WHEN YOU SHIP RECOVERABLE PARTS... PACK THEM CAREFULLY SO THEY WON'T GET DAMAGED IN TRANSIT!



SAVE BATTING WE USE IT TO PROTECT OUR TURN-INS

SAVE REUSABLE SHIPPING CONTAINERS

L  
A  
T  
E  
R

CONGRATULATIONS  
CONNIE... YOU  
DID IT AGAIN!

YES, EVER  
SINCE YOU DID  
THAT EDUCATING  
BIT IN THE FIELD  
THE SYSTEM'S  
SMOOTHED OUT  
AGAIN!

DON'T WORRY, CHIEF!!  
WE'LL BE BACK SOON  
AS THEY RELAX  
AGAIN. HEH, HEH.

**\*K.V.E.T.C.H. H.Q.**  
Special Subversive  
Anti-Maintenance  
Division

\*KVETCH (Killers, Villians, Enemies, Terrible Collection of Humans)

**FIRE  
POWER**

# M16A1 RIFLE: ADDED LSA INSURANCE

PARDON  
ME, SIR!!  
ABOUT YOUR  
RIFLE  
POLICY, I...

Oops, hold one there, you sure-shootin' M16A1 zapman.  
Before you head out on patrol or even to the firing range, add this one bit of LSA-type insurance to your weapon.

Put a very light film of LSA inside the bore, the chamber and on the locking lugs . . . after you clean 'em good and get through with the other before-firing cleaning and lubing chores outlined in paras 3-7 and 3-8 of TM 9-1005-249-14 (1 Aug 66) w/4 changes.

THIS IS WHAT WE MEAN  
BY VERY  
LIGHT!

Put some LSA on a swab,  
squeeze the swab out till  
it's just moist . . .

. . . then run the swab  
back and forth once or  
twice on these  
parts with your  
cleaning rod.

A LIGHT  
FILM WILL DO

The film of LSA it leaves won't interfere one bit with your shooting, but it will protect the parts against corrosion—especially, if for some reason you don't get to fire off.

The next change to your good book will have a word on this.

Meantime, remember: Cleaning and lubing before firing go together like a go-go girl and a cage.

BUT SARGE, MY RIFLE'S GOT "RNC" STAMPED ON IT!!

CLEAN AS USUAL



**Dear Half-Mast,**  
Some of the M16A1 rifles in our outfit have letters stamped on 'em to show that they've been chrome-plated. Does this mean they don't need as much cleaning as those not chrome-plated, or what?

SP4 F. C. E.

Dear Specialist F. C. E.,  
Kill that idea quick, Man! Every weapon ever made needs the best cleaning job you can give it.

If your M16A1 has a C, or RNC or RUC stamped 1 inch from the flash suppressor shoulder, it means the chamber has been chrome-plated . . . and that's all. Not the bore, or any other part.

This chrome job helps keep the chamber area from getting pitted or corroded . . . a real good deal. It will not keep the chamber from getting powder-fouled or otherwise gunked up.

The dirt'll get in there same as

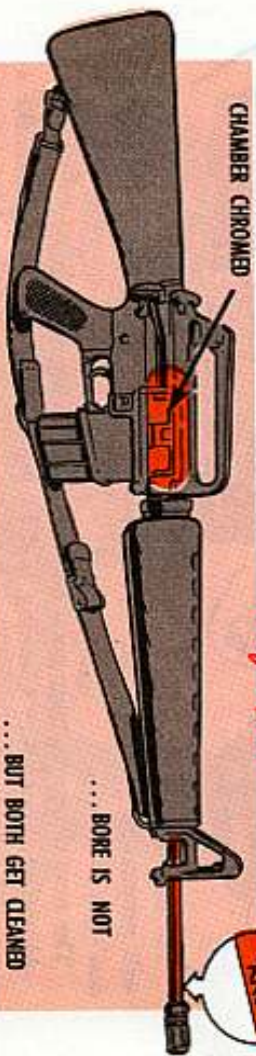
always, and it will still foul up your firing if you don't get rid of it real often.

Matter of fact, after a weapon's been fired for some time, you can't tell by looking whether its chamber's been plated or not. Either way, give the chamber the cleaning job the TM calls for. And keep the habit of eyeballing the chamber area after you clean it for any kind of damage.

**BORE NOT CHROMED**

Once more, the bore is not chrome-plated. Clean it extra carefully—and keep a sharp eye peeled for pitting.

*Half-Mast*



**NEVER SWITCH BOLTS**



Sure, the bolt for one M16A rifle looks the same as the bolt for another. Same goes for one M14 rifle bolt looking like another. But, as the man says, looks can be deceiving.

IDENTICAL —  
DON'T GET  
ON IT!



What your eye can't see is the hair-width difference between bolts for the same weapon—the kind of difference **BUT OUT!**

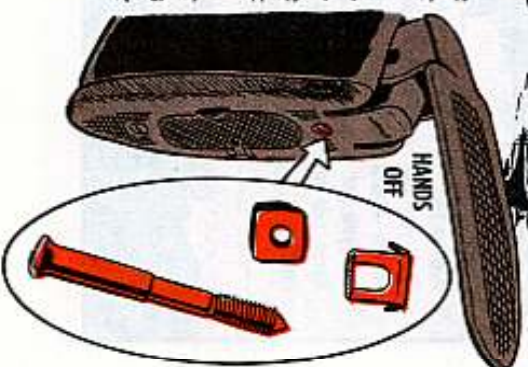
**BUT OUT!**



You know it . . . you leave the job of removing the butt plate from your M14 rifle to the man in your support unit.

And now that the M14 is getting a plastic stock, it's even more of a must for you to keep a screw-driver, knife blade or what-have-you clear of the screws—especially the top one—that hold the butt plate fast.

Seems the top screw goes into a nut and retainer nut in the plastic stock. With the screw out, the nuts can get lost. And when this happens, it's a job for your DSU to replace them.



# M60 SAVASIGHT HINTS

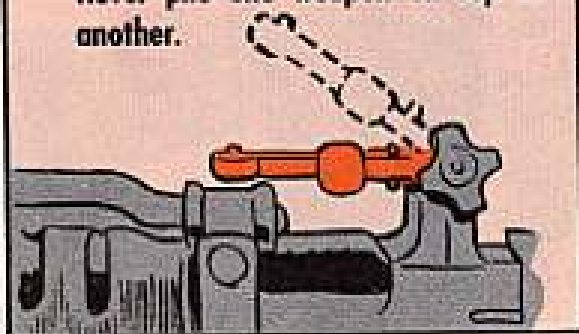
NEED SOME  
SIGHT ADVICE  
??

Even a seeing-eye mutt can't help you if you let the elevation sight scale on your M60 machine gun get bent or busted. And this aluminum part is the No. 1 patsy when you're careless with your weapon. So-o-o-o...

1. Always loosen the range-plate screw before you move the scale up or down. And tighten it real snug after you've found your setting.

2. If the tactical situation permits, always fold the sight down flat when you carry or haul the M60, and any time you lift the cover. You don't have to change the setting to do this, either.

3. Always fold the sight down flat before you put your weapon in a vehicle—and be mighty careful how you put it in the vehicle, too. Never pile one weapon on top of another.



Incidentally, if your rear sight assembly does get banged up, get DS on it, pronto. They're now authorized to replace busted parts.



# TIGHT IS RIGHT



Are the socket-head cap screws (retaining bolts) loose?

Those would be the ones that hold the elevating and traversing assembly to the tripod on the M79 mount for your M40A1 106-MM recoilless rifle.

Your support people can take care of 'em by latching onto a 10-CC plastic bottle of sealing compound—the kind that comes under FSN 8030-081-2339 on page 73 of Fed Cat C8000-1L-A (Jan 68).



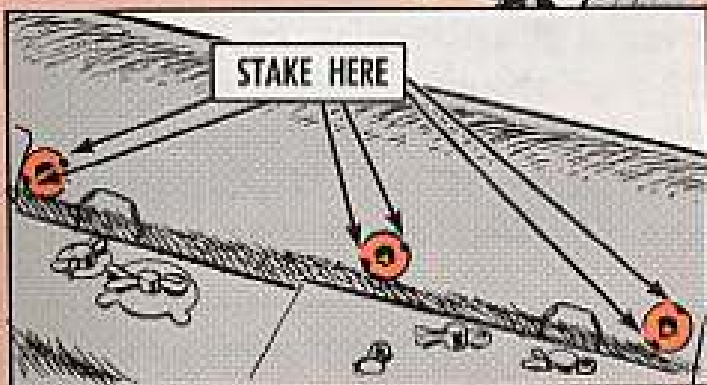
They'll remove the screws and lock washer ... clean the screw and hole threads with dry cleaning solvent. Put new lock washers on the screws ... and then coat the screw threads with the sealing compound. After the screws are put back and tightened, you're in business.

TAKE A MINUTE TO CHECK THE 6 SCREWS IN THE SPOTTING GUN RECEIVER!

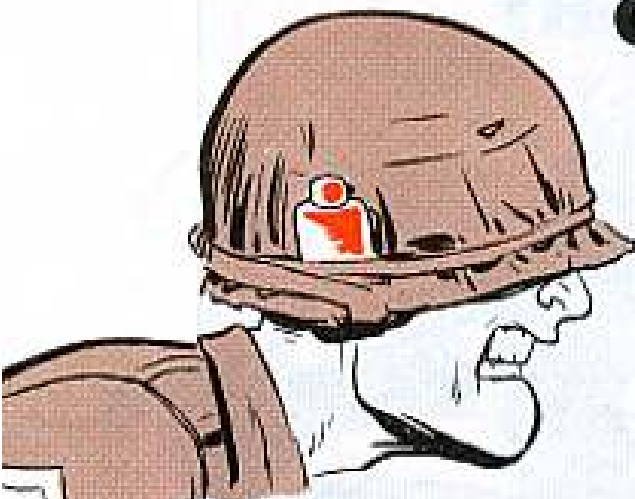


## GET 'EM STAKED

Hey, reckless rifleman, take a minute right now to eye-check these 6 screws in the receiver of your M8C spotting gun. Loose? Missing? Not staked? They're apt to work loose after a lot of firing if the wrong screws are in there and if they're not staked. Get your DS to replace any loose screws with socket-head cap screws (FSN 5305-389-8133) and to stake each of the 6 screws in 2 places.



## ON GUARD



I TOLE  
YA NOT TO  
HAVE IT  
WELDED  
!



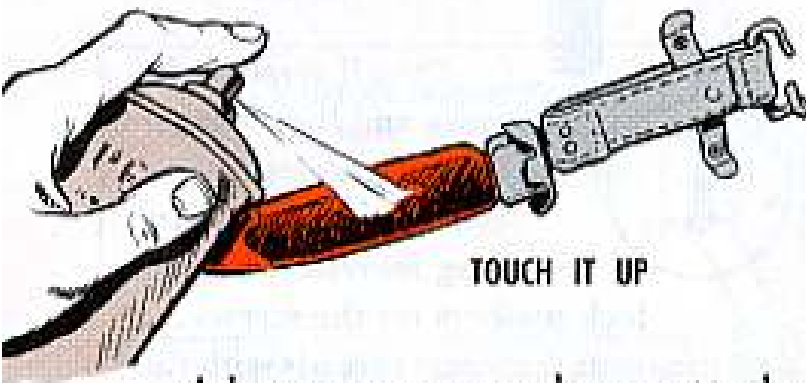
You say the phosphate finish on your M8A1 bayonet-knife scabbard has worn off in places and you'd like it better if the shiny spots were dulled? Tell you what to do.

a 16-oz pressurized can of flat black lacquer that's just the ticket. It comes under FSN 8010-582-5382.

There's also something worth knowing about the M6 bayonet knife—the one that goes in the M8A1 scabbard.

Don't sweat it if the guard loosens. If it becomes so loose that the plastic handle cracks, then it's time for a new bayonet. But the chances of this happening are on the slim side.

One thing you don't want is for anyone to try to weld the guard to the blade. This could foul up the hardness of the blade.



TOUCH IT UP

Ask your armorer to do some touch-up painting. GSA catalog (Oct 67) lists

## HANDLE WITH CARE

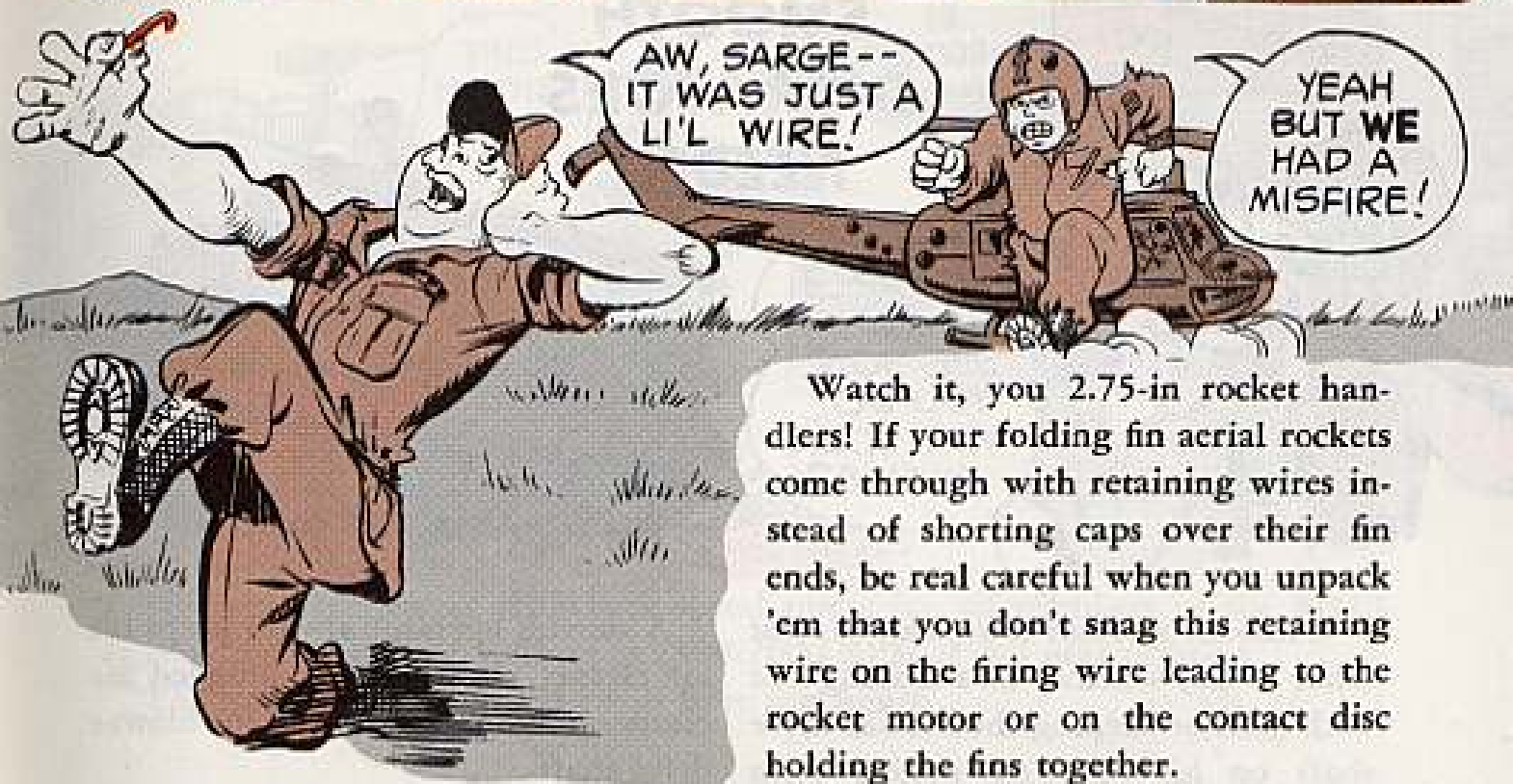


WATCH  
THAT  
TRIGGER  
GUARD  
HOUSING,  
GRAMP.



Die-cast aluminum is not the sort of stuff that takes a beating. And the trigger guard housing on the M77E 12-gage shotgun is made of die-cast aluminum. So, go easy when you handle or move the M77E to keep the trigger guard housing from busting.

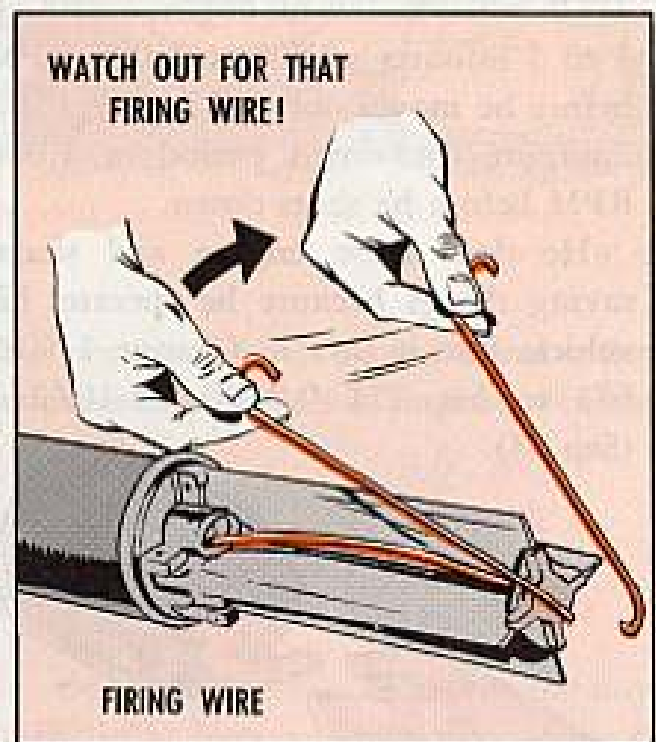
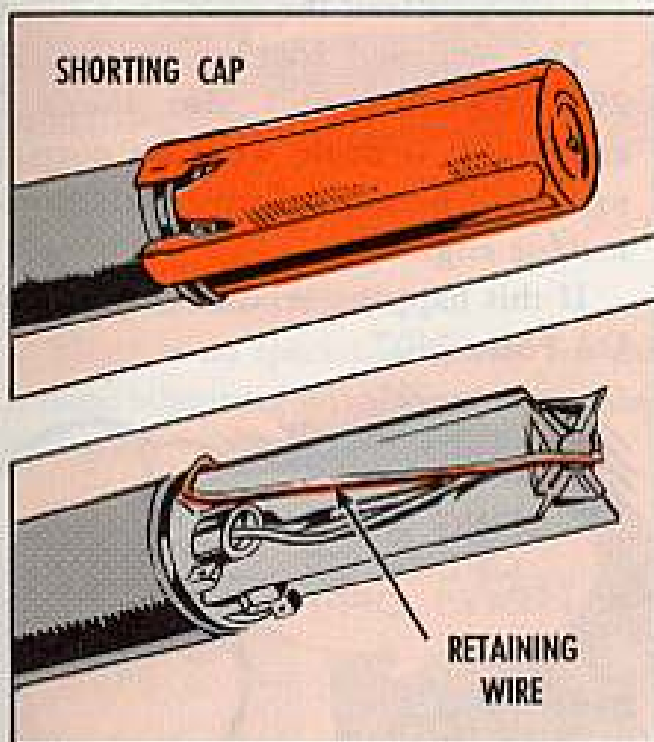
# DON'T HOOK A MISFIRE



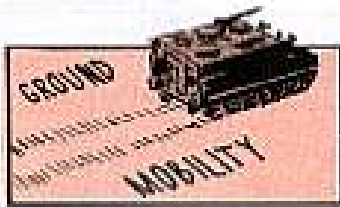
Watch it, you 2.75-in rocket handlers! If your folding fin aerial rockets come through with retaining wires instead of shorting caps over their fin ends, be real careful when you unpack 'em that you don't snag this retaining wire on the firing wire leading to the rocket motor or on the contact disc holding the fins together.

You could cause a misfire if you hooked up a rocket in the launcher with a damaged firing wire or a disconnected disc on it.

Here's the safe way to do it: Lift up the looped end of the retaining wire, then push it forward and away to unhook the other end — making sure neither end catches on that firing wire or the contact disc.



Then, never forget to check the condition of the firing wire and disc as you load the rocket in the launcher.



## M113A1 CARRIER **SMOOTH OPERATORS NEEDED**



YOU ARE?  
SO LET'S  
SEE HOW  
YOU DO  
WITH YOUR  
ENGINE?



A smooth operator always knows just what to do, whether he's making out with girls or keeping the blower drive shaft on his M113A1 engine from breaking.

The smooth operator sees to it that his M113A1 engine is adjusted so it has a gentle idle. A rough idle puts too much strain on the shaft.

Likewise, he lets his engine warm up 3 to 5 minutes at 800 to 1,000 RPM before he moves out and he gives it a 2-minute cool-down period at 1,000 RPM before he shuts down.

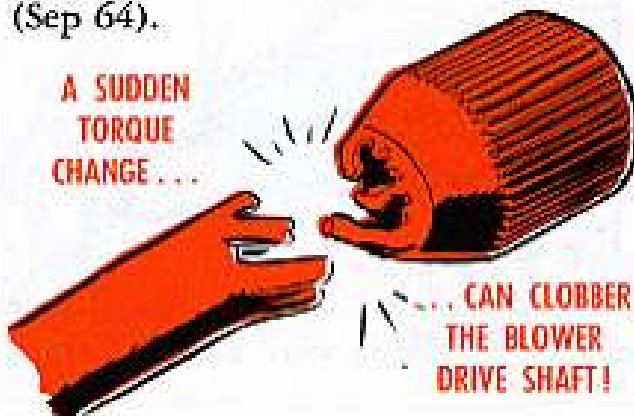
He does these engine and shaft-saving things because he operates his vehicle like it says in Change 1 (Oct 65) to his TM 9-2300-224-10/2/1 (Sep 64).

A smooth operator always keeps his air cleaner clean, since a plugged air cleaner puts a fatal strain on the blower drive shaft.

One thing a smooth operator will never do—he will never, but never, stop the vehicle engine by pulling the fuel cutoff out and letting the vehicle coast to a stop. This sudden change in torque can break the shaft.

The new and tougher shaft, FSN 2990-903-0908, will also break if abused. (It is made weak on purpose so it will break and save the blower and/or engine.)

If this happens, send out an EIR on DA Form 2407.



## M113 STALL CHECK FIGURE



Dear Half-Mast,

What are the right stall-check figures for the M113 and M577 carriers? The ESC says one thing and the TM's another. Which is right?

CW4 J. M.

Dear Mr. J. M.,

Neither. The correct stall-check speed range for all members of the M113 (gas engine) family of vehicles is 2300-2600 RPM in 3-6 gear position.

The newest ESC's and TM's will have this figure.

*Half-Mast*

## TRACK PAD TIP



Dear Half-Mast,

What is the authority for removing track pads on the M113 personnel carrier?

SP5 J. R. B.

Dear Specialist J. R. B.,

There is no special authority for this but none is needed. Your CO can order it done whenever he thinks that running without track pads will improve vehicle operation.

*Half-Mast*

## SHOE BLUES

FSN 2530-930-2011 is the number for one complete shoe assembly for any member of the M113/M113A1 family of vehicles. However, the shoes come 8 to a package, so if possible, order in multiples of 8 and supply won't have to open packages.

M114A1  
CARRIER

# POWER CUPOLA CAPERS

The M26 cupola on your M114A1 carrier can put your gun on target in a flash. But unless you know how to use it right you can bang your buddy in the head or shoot .50 caliber holes in your own vehicle.

The 2 things that can mess you up are:

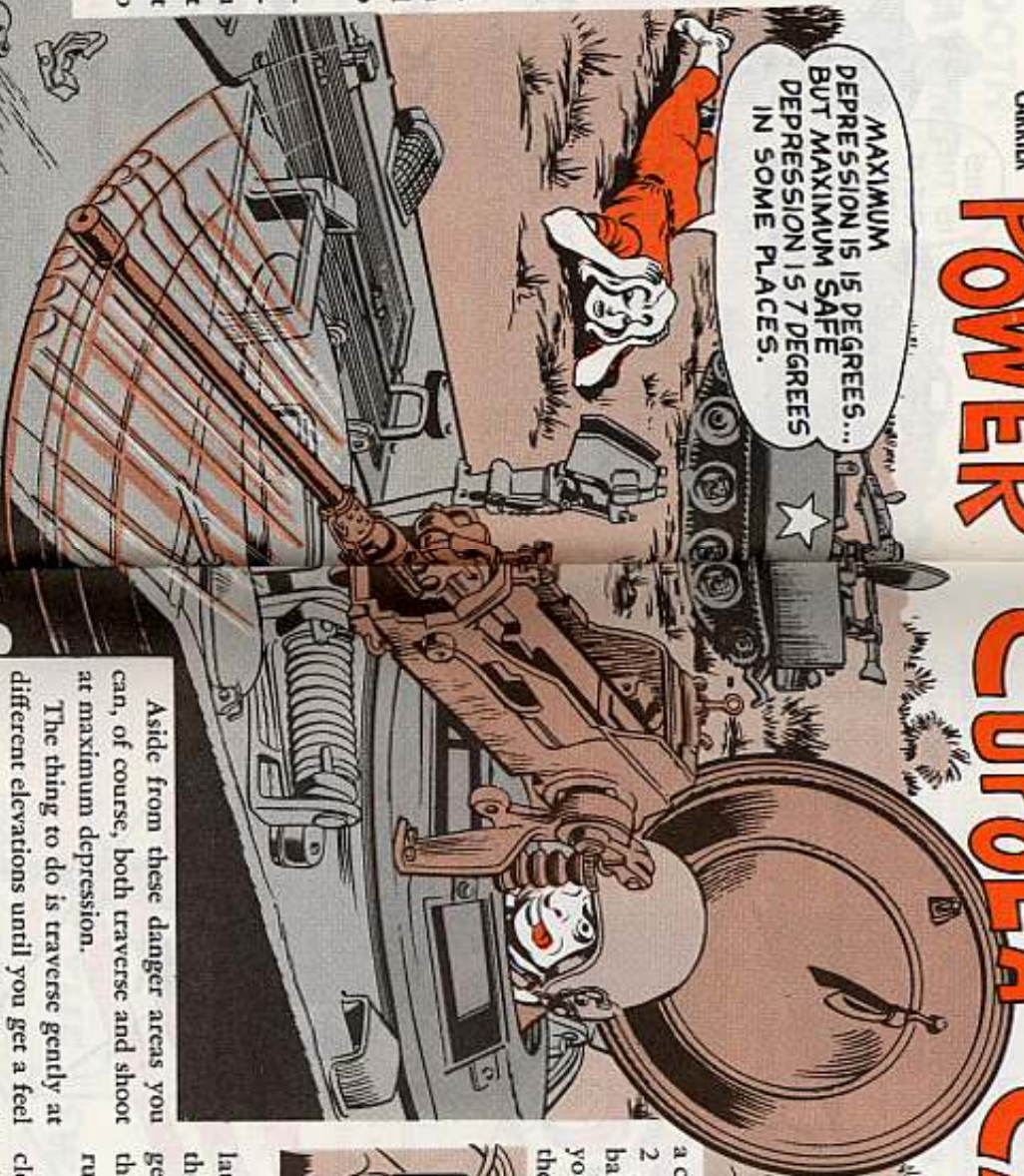
1. Trying to operate with the gun depressed too low.
2. Not understanding how the interrupters work.

Maximum depression for the gun is 15 degrees (265 mils) but it's not safe to traverse with the gun lower than 7 degrees (124 mils) even outside of the zone protected by the interrupters.

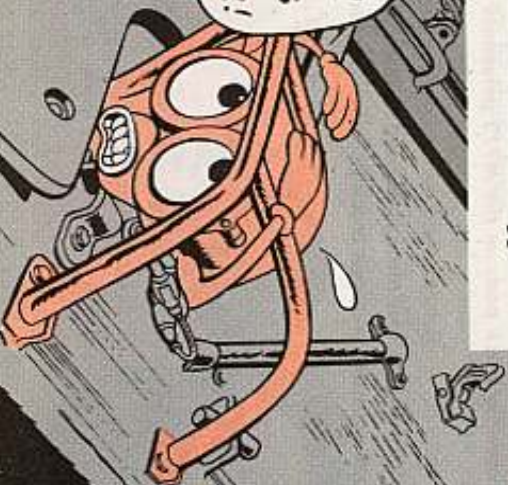
Under 7 degrees the gun barrel will hit the observer's hatch cover hold-open catch mount. If you lowered the barrel to 12 degrees (213 mils) you would also hit the driver's hatch cover hinge.

If you tried to fire at or near maximum depression with your gun positioned to the front of the vehicle, you could shoot out your headlights, hit the right corner of the vehicle, and put holes in the surfboard if it happened to be up.

MAXIMUM DEPRESSION IS 15 DEGREES... BUT MAXIMUM SAFE DEPRESSION IS 7 DEGREES IN SOME PLACES.



DUCK!  
GEORGE!  
THE  
GUNNERS  
AN  
AMATEUR!



U.S.  
13B

Aside from these danger areas you can, of course, both traverse and shoot at maximum depression.

The thing to do is traverse gently at different elevations until you get a feel for how low you can go in various positions before you hit something. Sort of file that away in your memory like you have already done with the location of the interrupters.

Not understanding how the interrupters work is the other thing that can foul you up.

As you already know, when you traverse in a complete circle to the left and

a complete circle to the right, there are 2 places where the gun stops like a balky mule and will not go ahead until you press the red override button near the power control handle.



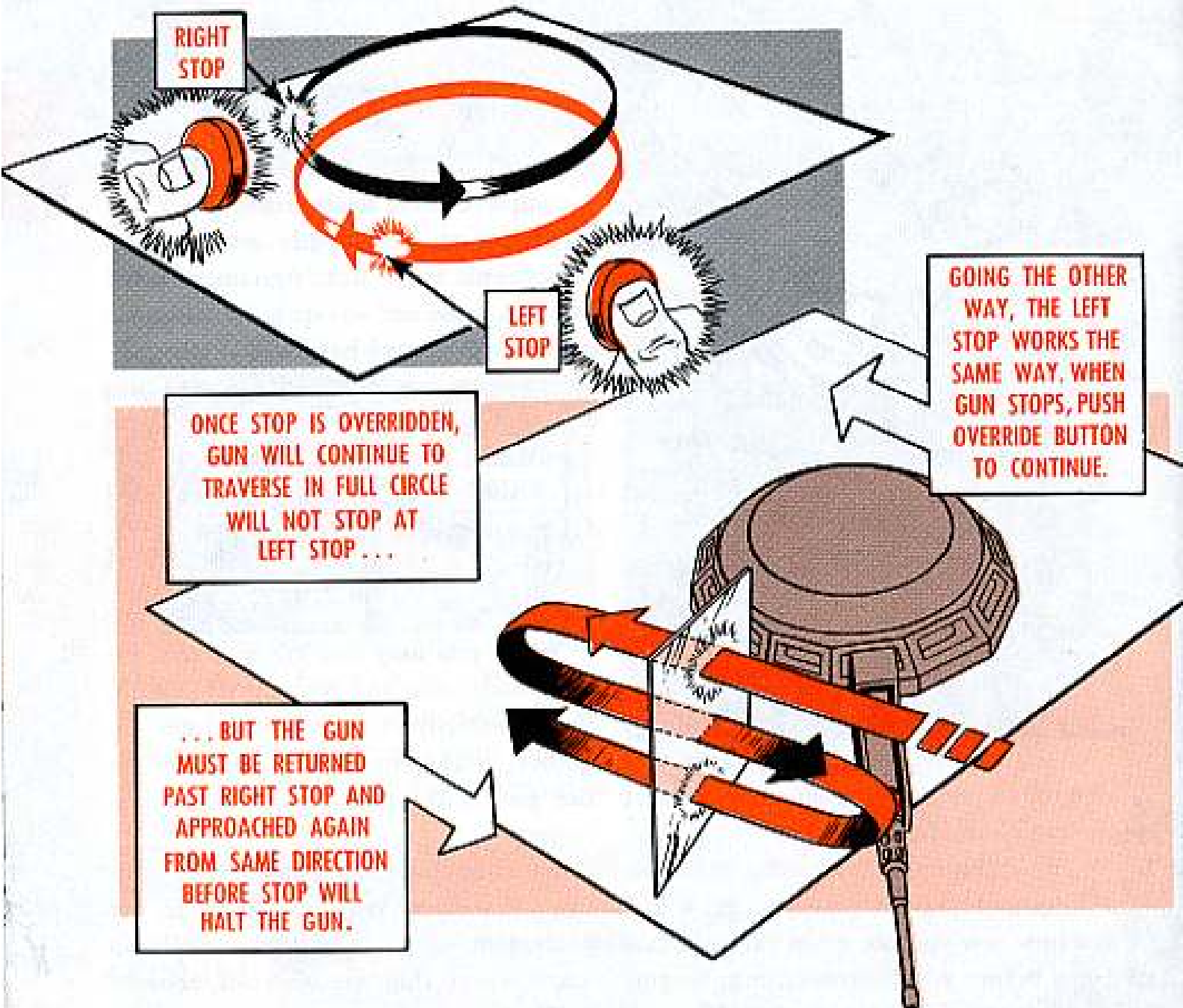
What you may not know is that on late production and retrofit M114A1's, the 2 interrupter points are closer together, giving you a wider area to move the gun without hitting either interrupter.

Another thing, each individual vehicle, old or new, varies slightly in the placement of its interrupter stops, so learn where they are on your vehicle.

These stops are a warning to the track commander that his observer might be in danger of getting clobbered. The TC should not press on the override button until he is sure the gun barrel is riding high enough to clear both the observer and the observer's machine gun.

This system will work OK if everybody remembers that each stop gives protection from only one direction.

After the override button is pressed and you continue traversing the gun in the same direction, you will pass through the opposite stop without knowing it. This stop will work only if your gun barrel "hits" it while moving in the opposite direction.



This is the way to remember it. . . . Once you have pressed the override for either stop, neither stop will work again until it is hit by a gun barrel traveling in the direction it protects for. A gun barrel going in the opposite direction would pass right through the position without being stopped.

'Course, actually the stop action is done by a cam but the position of the gun is what you have to think about so you can clobber the Bad Guys instead of your buddies or your own vehicle.

NEW OIL FILTER  
ELEMENT FOR

CD 850

# TRANSMISSION



**OLD** FSN 4330-770-7862  
(P/N 7707862)



**NEW** FSN 2520-761-1983  
(P/N 8356163)  
(Reusable)

Supply will no longer issue the old filter for CD 850 series transmissions. However, they will still be used for the CD 500 series transmissions.

## SAFER SAFETY PINS



Dear Editor,

We know what you mean when you say an armored vehicle launched bridge can collapse when the lock pin safety pins drop out of place. (Page 42, PS 177)

The safety pins stay in place on the AVL bridges here—now that we've wrapped them with a few turns of plain old safety wire.

Ralph Barbari,  
Fort Carson, Colo.



No! No!  
**STOP!**



## THE SWINGER

Hey, now . . . hear this. Your combat vehicle crewman's helmet's not made for tossing around in circles by holding the end of the upper cord assembly. That's plumb rough on the cord.

Instead . . . carry the helmet in your hand or under your arm.





*By the author of "The Pipsy-5"*

**THIS  
BABY SURE  
DOES THE  
JOB,  
CONNIE!**

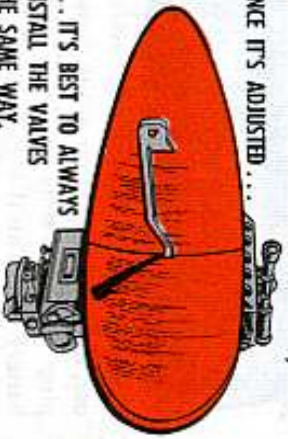
**YES,  
PROVIDING  
YOU KEEP UP  
WITH HER PM.**



# PIPSY-5

## PM POINTERS

Here's a little tip on the halves of the AS-2023 antenna reflector... Even though they're interchangeable your best bet's to install 'em the same way each time. 'Cause once the set's adjusted **ONCE IT'S ADJUSTED...**



**... IT'S BEST TO ALWAYS  
INSTALL THE VALVES  
THE SAME WAY.**

with the reflector in place, the setting can be a little off when the reflector is reversed.

To keep 'em the same, put a small piece of tape on the back and at the top of each half so's you can see or feel which side is which when you're re-installing 'em.

On the CX-8666 remoting cable, you should never put it on the ground unless



the dust cover is on the connector. Without the cover dirt or sand can get inside and short 'er out.

Also, in hooking up the CX-8666 to the remote cable connector plug take a

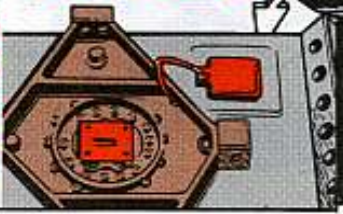
**NEVER GET  
DIRECTLY IN  
FRONT OF  
ANTENNA**

**BEAM  
WIDTH  
CONTROL**



Always push the beam-width control in the MAR position when installing the AS-2024 waveguide horn. Otherwise, the flange will scrape against the waterproof rubber protector and it could get a hole in it.

When the horn's not installed, be sure the protective cover is slipped over the feedhorn coupling to keep it free of dust and dirt.



Coming to the front of the quiet ones with the big ears is the AN/PPS-5 radar set.

Taking over the duties of the AN/PPS-4() and AN/TPS-21, and -33() radar sets, it scans more territory than the Pipsy-4 and it's not as big as the Tipsy-21.

Yep, the Pipsy-5 covers a lotta ground, but it still takes preventative maintenance... with capital PM... to keep 'er scanning job up to snuff.

**Take the RT-692 radar receiver-transmitter...**

One thing that'll bugga up your set is trying to make elevation adjustments without releasing the lock.

It's simple, though. Just pull the elevation slow lock out and push the lock lever down.



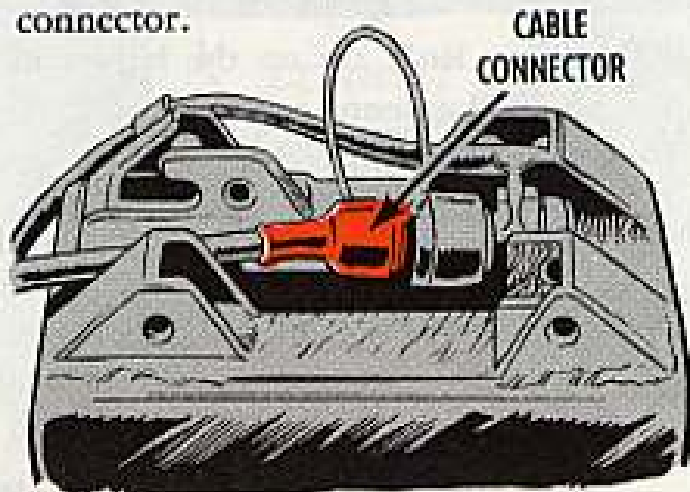
**After setting elevation adjust  
handwheel, push the lock lever up  
and the slow lock in.**



O' course, remember to have the handwheel at 0 elevation when you're on the move with your set or it'll get damaged.

look-see at the color coded (orange) ring. If it's showing you know the connector is in place and the pressure lock has a good grip on the plug.

Then there's the battery cable. It too has the color-coded pressure lock to insure it's secured to the RT's battery connector.



But, when the battery cable isn't in use, keep it snugged up to the dummy plug on the bottom of the CY-3871 battery box. This'll help keep the connector clean and dry.

And, you say you have to pull the end cap and storage bracket out of the MX-7565 tripod column assembly and lay it down every time you set up the MT-2958 radar tripod.

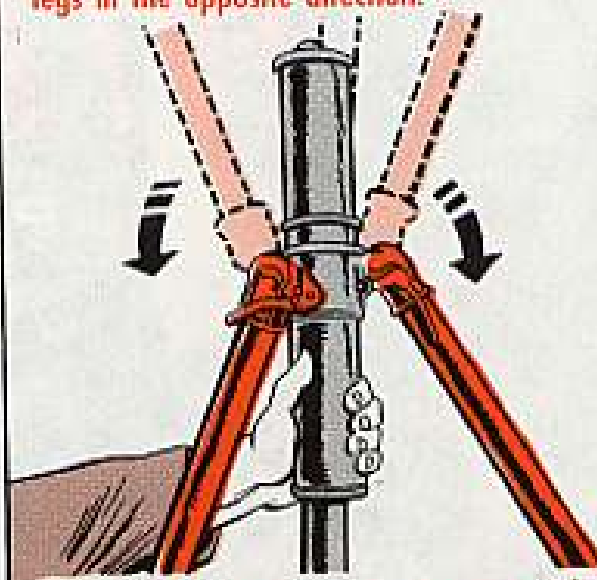


Don't sweat it. Here's a cute trick that should tickle your fancy.

When you're taking the set down from operation, leave the flanged end of the column in the upward position.

Secure the bracket with the AS-2024 horn, telescope and ground pins in the column.

Then, loosen the leg locks and swing the legs in the opposite direction.



This'll let you leave the bracket with its components shoved up the column, safe and sound out of the way of big-booted feet.

Oh yes! Wipe the dirt or other such off those ground pins before stowing 'em. Besides protecting the telescope lens, you might save yourself from having to carry an extra ounce or two.

Incidentally, there's always an electronic mathematician around who wants to make 6, 12 and 24 the same when it comes to the use of an outside power source.

Forget it!

PP-4450  
POWER  
SUPPLY



USE WITH 6 OR 24-VOLT BATTERY ONLY

Dressing up the Pipsy-5 with a PP-4450 power supply for auxiliary power ties into a 24-volt external battery only.

One last tip . . .

Keep dust caps and covers on connectors and plugs. A dirty connector can short out your Pipsy.

# LUBE IT LIGHTLY

More'n likely you won't need more than 15 to 20 CC's to bring the oil level even with the bottom of the front hole.

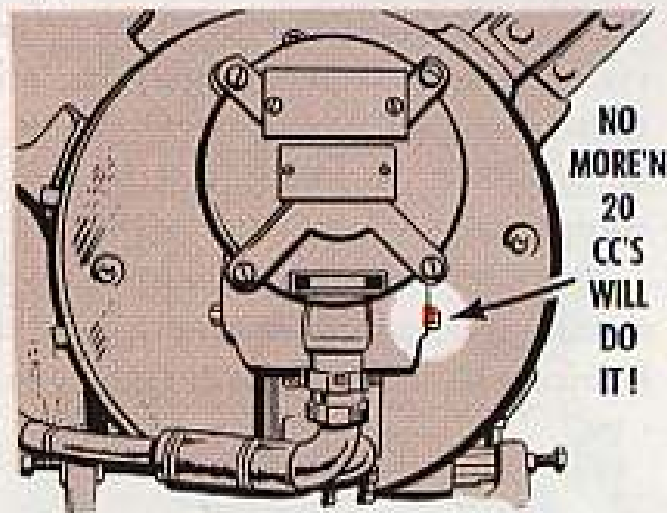
That's what it takes for proper lubing.



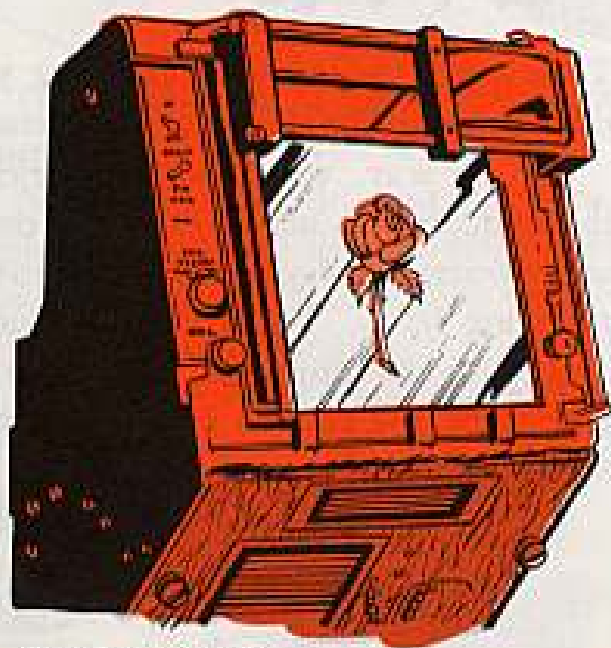
When you lube . . . be careful.

In refilling your drained AN/MPQ-4A radar set's scanner gear motor gearcase, watch it. Better guard against putting in too much oil.

Too much'll cause leakage and damage to your oil seals.



# COMING UP ROSY



Don't sweat it.

When this blooming occurs in your set's IP-795 radar target indicator, pull the plug.

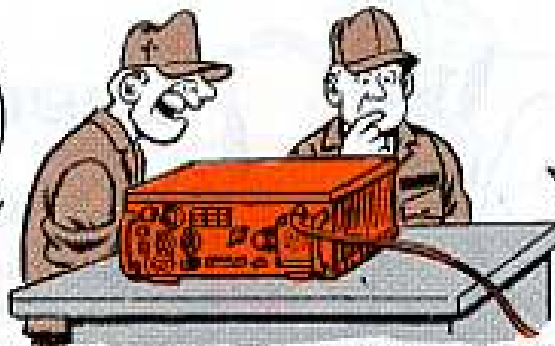
That is . . . disconnect the 5W6 cable's P2 plug on the CV-2093 signal data converter-restorer from the 9A2J3 video jack of the R-1335/G or radio receiver. Leave it off until you're sure a data signal is coming in, then reconnect 'em.

This is in the very latest change to TM 11-5840-294-12 (Sep 66).



# CPS ARE NOW HERTZ

CYCLES  
SHMYCLES!  
THEY'RE  
HERTZ  
NOW!



MY  
PUBS  
DON'T SAY  
NUTHIN'  
ABOUT  
THAT.

You'll be in the driver's seat when you get this cycle per second changeover to hertz down pat. 'Cause in electrical, electronic and communication circles hertz (hz) is replacing cycles per second(cps). So . . . instead of words like kilocycles, megacycles and gigacycles, you'll be seeing kilohertz (khz), megahertz (mhz) and gigahertz (ghz). O' course, it'll be some time for the cycle system to be scrubbed, so you'll still be seeing it around for awhile in pubs and on equipment.

This hertz term has nothing to do with the car rental business. It is only the naming of common electromagnetic terms for an early radio wave discoverer, Heinrich Hertz. No. 1 radio guy, you might say.

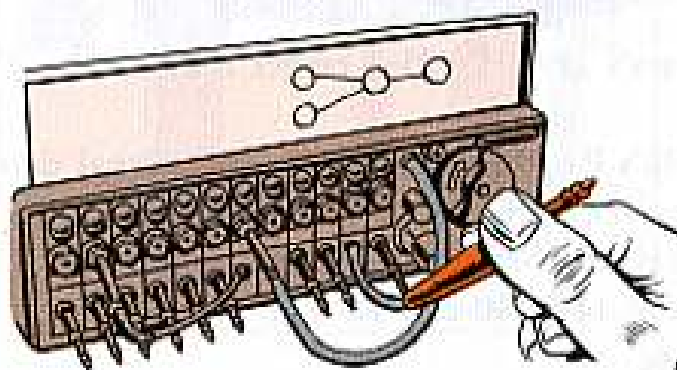
## THOSE SPLITS CAN HURT

OWGH!

Is that rubber protector on your electrical cord assembly for the SB-22()/PT switchboard doing the splits?

That sleeve—the one that shields a portion of the cord assembly—can turn up split. This doesn't do your TA-222/PT line jack or TA-326/PT trunk jack cord assembly any good at all.

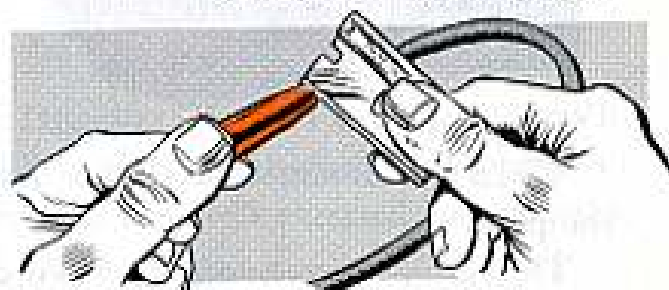
To remedy this splitting, take a single-edged razor blade or a sharp knife and—cutting around the cord—trim off the split portion of the sleeve.



Then taper the edge. Watch out you don't whittle the cord, or your hands.

By the way, when you're working the switchboard, never let any of those self-retractable plugs slam back into the entrance holes. This'll cause mucho damage to the plugs and, maybe, fly up and crack the catseye covers or your own eyes.

CUT SLEEVE—NOT THE CORD



So-o-o-o . . . make it gentle when you handle those plugs . . . they'll last longer . . . and they'll do better, too.

FOR PORTABLES  
MORE  
PER  
PACK

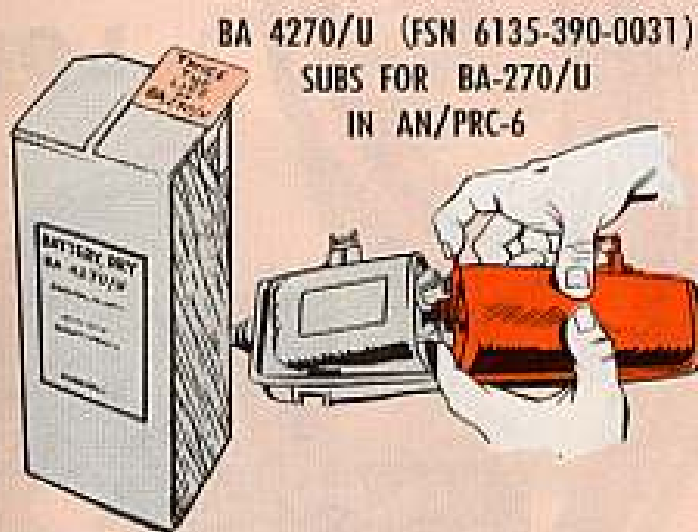
# POWER

HERE I  
COME, COACH!

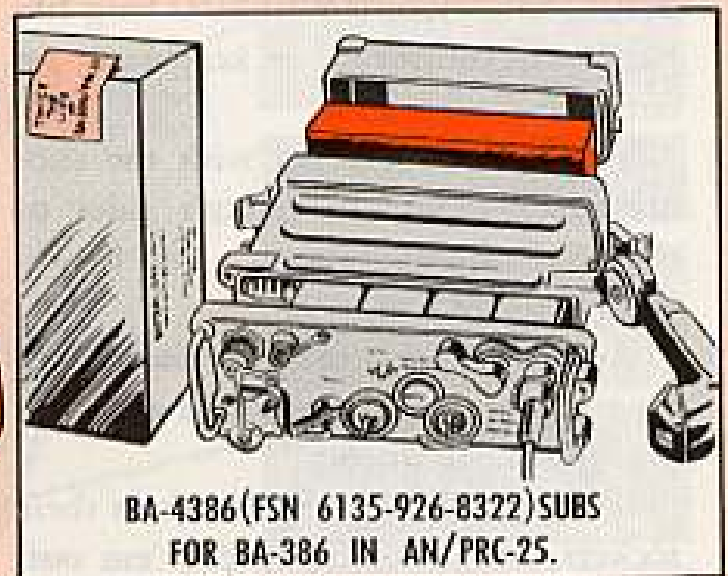


Like a fresh, power-packed football team coming in the game at half-time a couple of high-powered magnesium dry batteries are field-bound for portable radio sets.

They're fresher, ready for longer periods of workout and can really take the heat.



BA 4270/U (FSN 6135-390-0031)  
SUBS FOR BA-270/U  
IN AN/PRC-6



BA-4386 (FSN 6135-926-8322) SUBS  
FOR BA-386 IN AN/PRC-25.

These Perk power cuties will come through for you without much sweat at temperatures up to 160 degrees F.

When you have your mitts on one of these longlife batteries go easy about replacin' it. 'Cause the BA-4000 series magnesium types have longer transportation and storage life, and do not need to be kept in the cool, anytime.

While they're not in use, they sleep — pretty much holding their rated hours of service life. This being 40 hours for the BA-4270 as compared to its teammate, the BA-270, with 24 hours at best, and 55 hours for the BA-4386, compared to 30 hours for the BA-386.

To make sure you know you have a magnesium battery, the shipping, intermediate and unit container are stenciled, stamped or labeled in orange or red letters:

### LONG LIFE MAGNESIUM BATTERY

Also, an orange pressure, sensitized tape with bold, black type . . . **TWICE THE LIFE OF BA-270 . . . or . . . BA-386 . . .** is over the battery socket. Take it off when you're ready to put 'er in the Perk-6 or -25.

To keep you gettin' better batteries, fill out the log (card) that's with each battery. It furnishes feedback info on the battery's performance.

You might latch onto a clairvoyant, an astrologer, or a Gypsy fortune-teller—but preliminary PM by the old personal inspection route pays off big with the AN/PRC-6 radio set.

To keep your Perk-6 full of personality and at the ready, you'd certainly never stretch that new looped handset cord, just to see how far it'll go. The curly-cord could lose its snap.

You'd remember to remove your BA-270/U battery, or BA-4270/U long-life battery if you meant to keep your set out of use for a time.

You're extra careful with the sub-miniature tubes along both sides of the receiver-transmitter . . . no breakage likely for you.

And you'd never turn the discriminator-transformer . . . one half-turn can put you off-frequency.

If the small tube pins break in their sockets, you'd not try to pry 'em out, that's for sure. That's a job for support.

You always give the air valve a half-turn to the left to open it, a half-turn to the right to close it. Too much turning will twist out the knob. If this gets lost, moisture has an Open Sesame to your set.

(Incidentally, the air valve should be open when the Perk-6 is operating, to avoid damage from battery pressure.)

You're always careful about handling the cover . . . rough removals can sabotage the Y-spring.

But, guess it wouldn't hurt, would it—even as careful as you are—to check over some of the potential danger areas on your Perk-6.

BE YOUR OWN INSPECTOR . . .

**HAVE A**

**PERK-6**

**LOOK - SEE**

THE SERIOUS THINGS ARE IN BOLD TYPE.

**RADIO RECEIVER/TRANSMITTER  
RT-196 (1)/PRC-6**

**WHIP ANTENNA**—Dirty, damp, kinked, corroded.

**NYLON CORD**—Missing, frayed.

**ANTENNA CONNECTORS**—Dirty, damp.

**CHASSIS**—Damp, dirty.

**CONTROLS**—Too loose, binding, scraping.

**LOCK LATCHES**—Bent, broken, won't hold.

**CASE**—Corroded, damp, dirty.

**ADJUSTABLE STRAP**—Torn, frayed, attachment clamp loose.

**METAL PLATES**—Scratched, dirty, obscure printing.

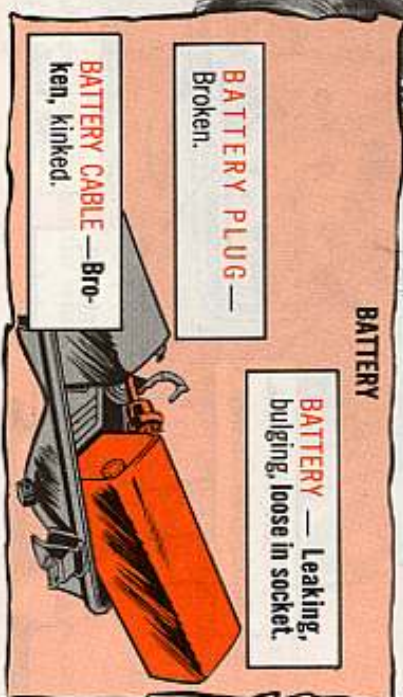
**AIR VALVE**—Dirty, clogged, missing.

**BATTERY**

**BATTERY PLUG**—Broken.

**BATTERY**—Leaking, bulging, loose in socket.

**BATTERY CABLE**—Broken, kinked.



HANDSET H-33 ( )/PT

THE BEST RX IS PM!



Rx  
P.M.  
Dr. Hilly  
Hess



**HANDSET** — Damaged, clogged holes.

**HANDSET CONNECTOR** — Damp, dirty.

**HANDSET CORD** — Kinked, frayed, cut.

**CRYSTAL UNIT** — Excessive discoloration.

**DISCRIMINATOR-TRANSFORMER** — Keep unturned.

**TUBES** — Broken, glass cracked, not snug, guards missing.

**ELECTRICAL CONTACTS** — Dirty, corroded.

**FILAMENT SWITCH** — Not down all the way.

**SUB-MINIATURE TUBES** — Broken.

**JUMPER PLUG 7-1** — Plugged wrong into test socket.

**WATERPROOF GASKETS** — Leaky.

**OPERATING CRYSTAL** — Not snug.

# SAFETY PUB CAN SAVE YOUR LIFE



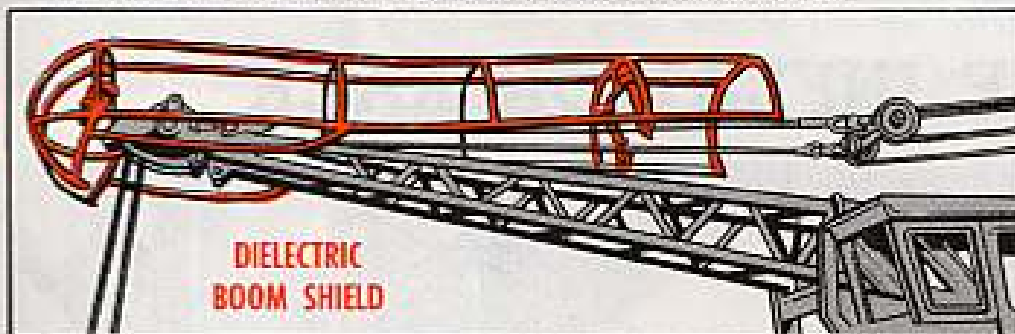
NEW  
WORD  
OUT  
ON  
MOBILE  
CRANES

NO SWEAT  
SARGE. I'M WEARING  
INSULATORS.

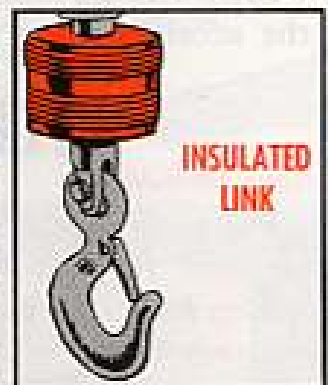


Electrocution hazards in crane operation near high-voltage lines is the target of TB 385-101 (Jan 67). The pub gives commanders 8 recipes to cut down accidents, and new equipment just made available backs up the bulletin.

First listed in the safeguards is provision of a dielectric boom shield and insulated link for lift lines. The dielectric shield can be placed above the boom and end sheaves to fend off charged wires. The link can fit between the hook block and the load, protecting assistants on the ground.



DIELECTRIC  
BOOM SHIELD



INSULATED  
LINK

That's where the new equipment comes in. U.S. Army Mobility Equipment Command has two kits, both of which include entire Boom Shield and Link outfits. For cranes under 20-ton size, FSN 3815-065-8609 gets a Shield. Safety, Electrical, crane boom, insulated, plastic-coated, and a Link, Insulating, Crane load line, with hook and swivel. Cranes 20-ton size and over take the same-name outfit, but under FSN 3815-799-0654.

But just putting the new stuff on isn't the whole story. Training, caution, and respect for the rest of the rules are also needed.



ON YOUR MHE-202...

## SOMETHING NEW'S BEEN ADDED



You may do a doubletake when you look at the control panel of your Chrysler Model 6,000-lb rough terrain fork lift. That emergency stop control seems to have moved to the right.

You're not seeing things, it has been moved so that a "T" handle could be put there for the new "Normal Engine Shutoff". This new handle is easy to use... DOWN to start, and UP to stop. (You can remember by comparing it to the accelerator of your vehicle — push

down to go and let up to stop.)

Always shut the engine off with the shutoff control before you turn the ignition switch off.

The fuel shutoff solenoid, FSN 2920-924-8773, which was wired to the ignition switch, has been done away with. You no longer need it.

**WARNING:** Do not use the emergency stop control for anything but an emergency.

## TIRE INFLATION RACK

*Dear Half-Mast,*

*Our outfit's required to use a tire inflation rack for inflating tires with a split locking ring. I agree that this rack should be used.*

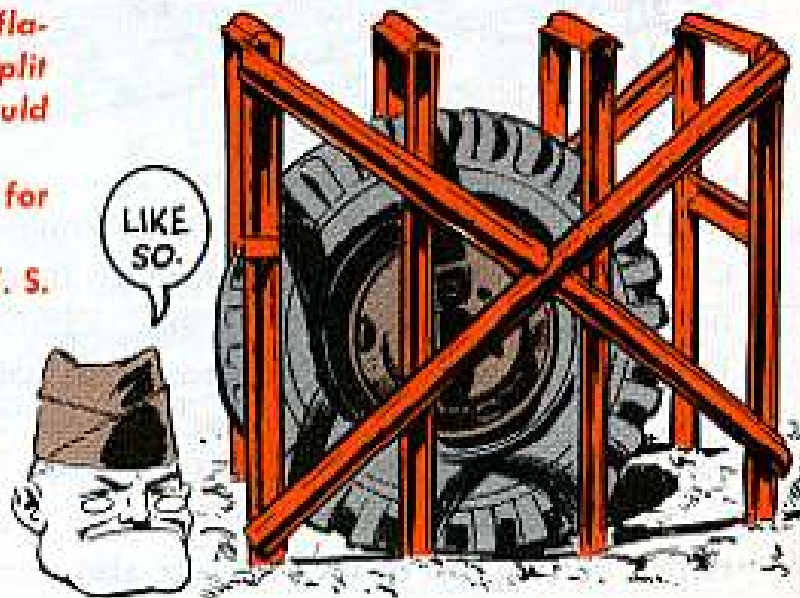
*My question is—is there an FSN for such a cage or rack?*

CW2 J. W. S.

Dear Mr. J. W. S.,

There's no tire inflation rack in the supply system. Most outfits I've run into just make a rack out of pipe or angle stock. The metal used is welded together.

*Half-Mast*



# ALLOW FOR EXPANSION



When you fill those 500-gallon collapsible drums (FSN 8110-753-4892 and 8110-824-1444) without using the pressure filling control (FSN 4930-855-8739), be sure that you don't overfill them. Leave a slight bow in the top of the drum a minimum of 3/4-in to 1-1/2-in deep to allow for expansion of fuel in hot weather and at high altitudes.

You have to be real careful when transporting these drums at high altitude; you don't want internal pressure to go over 5 PSI. Use the pressure control device for drum filling operations any time you're going to be hauling the drums at high altitude.

# FILL THE FORM



Fill out that DA Form 2407 Equipment Improvement Report (EIR) and send it in today to the commodity command that made your equipment. That's the way to tell the engineer types what goes wrong on the gear they design. Don't wait; do it today.

COMMODITY  
COMMAND

SEE ADDRESSES IN  
TM 38-750

# HYDRAULIC SCOOP

For some know-how on the construction and operation of hydraulic systems see Training Film 9-2995. It's 19 minutes long and in color.

Round and round they fit . . . and that's the "X" or the "L" of it. Some unwanted and unneeded duplicate reports are plugging pipelines and stacking up at NMP's.

Appendix II of TM 38-750 tells where most "feedback" type forms should go. But a note there tells you that—once the data is transferred to punch cards



and sent on its way—the filled in "hard copy" forms will be held at the local level.  
What's more, paras 9 and 13 of DA Cir 700-15 (11 Oct 67) have some special word on disposition of the 4 copies of DA 2408-7.  
For both inventory actions and other transactions (transfers, gains, losses and FSN changes):

Keep in mind, too, that any time the rules permit you to report a transfer of several items on one DA-2408-7, the Logbook copy is retained in the unit voucher files for 6 months and then destroyed.  
Wherever the rules in DA Circular 700-15 conflict with rules in TM 38-750, they superseded the rules in the TM—unless there's a change to the TM with a later date.



a. For inventory actions, goes to the equipment log where it stays as a permanent record. If there is no logbook, retain log copy in unit files until 1 Jun 1969.

b. For other transactions (except losses), goes to the equipment log where it stays until the next transfer and is then destroyed. For equipment disposal actions and other losses, destroy as spelled out in para 4-21d(3)(d) of TM 38-750.

a. For inventory action, goes to your command data center.

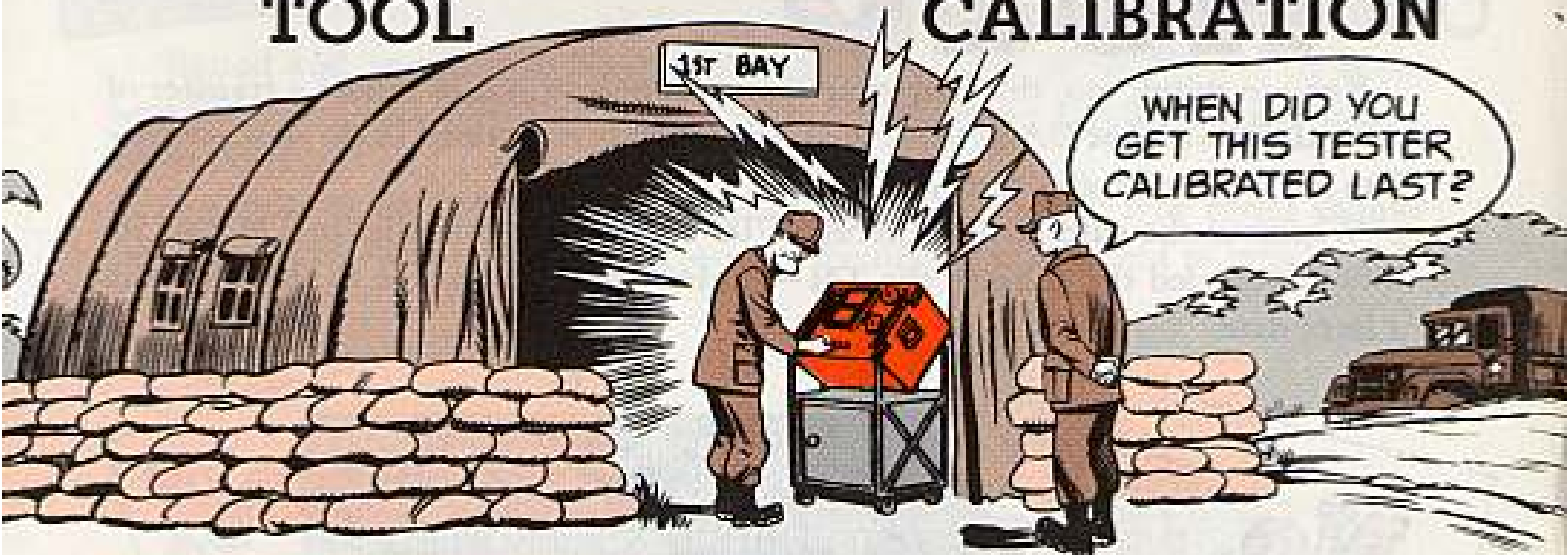
b. For all other transactions goes either to your command data center where the data is transferred to punch cards for forwarding or the filled-in "hard copy" itself goes airmail to Lexington-Blue Grass Army Depot. Repeat: Punch card or filled-in copy—never both.

### PLL ONLY FOR MII

You're the only one who's authorized to maintain the MII portable decou, FSN 4230-720-1618. But, all you've got to work with are 5 items listed in Sect II, Ch 3 (Sep 66), TM 3-4230-204-15. So, when anything you can't fix goes wrong, the only thing you can do is get the MII replaced with a new one.  
A new one, in fact, is the only answer you have to the maintenance shortcomings (DA Pam 750-10) that are beyond your control.

# TOOL

# CALIBRATION



Sure, you've been trying to take care of those tools in your No. 2 Common Tool Kit, but you may have overlooked TB 750-113 (Sep 67), which lists those tools that need calibrating. Here they are:

Item	FSN	Calib. Procedure Technical Bulletin	Calib. Frequency (Days)
Multimeter	6625-543-1438	9-6625-794-50	180
Scale, Dial Indicating	6670-254-4634	9-6670-248-50	180
Tester, Cylinder Compression	4910-250-2423	9-6685-210-50	*SCAN
Tester, Internal Combustion Engine	4910-255-8673	9-4910-508-50	180
Tester, Spring Resiliency	6635-449-3750	9-6670-251-50	180
Test Set, Generator & Voltage Regulator Automotive	4910-092-9136	TM 9-4910-401-12	180
Test Set, Tachometer-Dwell	4910-395-1996		180
Wrench, Torque	5120-640-6364	9-5120-202-50	90

\*Scheduled for Calibration As Necessary

You don't have to do the calibrating, because your support calibration people do it. But be sure to check those tools listed above to see if they have the DA Label 80 on them to show when they're due for calibration. If there's no label, better send your DA Form 2407 request to support to have it done. TM 38-750 gives the dope on how to fill out the 2407.

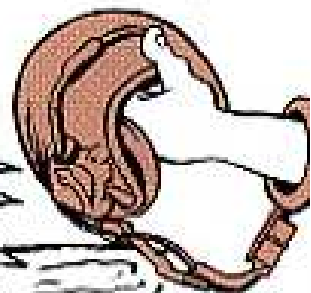
## GENERATOR BREATHING RIGHT?

When you're doing those PM services on your 5- and 10-KW generators, don't forget the crankcase breather should be cleaned at least quarterly. More often is even better, especially if you're in a sandy and dusty area.

# Connie Rodd's BRIEFS



LAZY FOX  
CALLING  
CONNIE RODD...  
WE GOT A  
MAINTENANCE  
PROBLEM!



## *New ESC Rule*

A change on ESC ratings is in the mill for Combat and Tactical Vehicles plus other equipment rated on **age** or **accumulated miles**. Watch for changes to ESC TM's before making the next ESC rating. **Age alone** should no longer give your rig an Amber rating. The word went out to major commands in DA Msg 849833 (1 Feb 68.)

## *Multifuel MWO*

Your starter gets MWO 9-2920-248-30/1 (Dec 67) — if you've got a 2-1/2-ton truck with the LD 465-1 engine or a 5-ton truck with either the LDS 465-1 or LDS 465-1A engine. Your support will fix up the solenoid to save you starter troubles. (Catch the slip in the MWO — it should be Starter Assy, FSN 2920-999-6216.)

## *Timing Lights*

Been having ignition timing light trouble with your FSN 4910-500-2135 model? Replace it with 4910-937-5724, which will get you a Sun-Electric No. X47 or equal. The timing light is a part of your No. 1 and No. 2 common tool kits. You'll find this new one listed in SC 4910-95-CL-A72 (Apr 67) (No. 2 Common) and SC 4910-95-CLA74 (May 67) (No. 1 Common).

## *Your Mask Fit?*

Your M17 field protective mask must be a good fit... and it's especially risky to wear one that's too large. Could be you've been issued a medium (FSN 4240-542-4451) or a large (FSN 4240-542-4452) M17, when you need a small (FSN 4240-542-4450) mask. So test yours out for the right fit like page 22 of TM 3-4240-202-15 says.

## *Solder, Soldier?*

Having trouble finding an FSN for Solder, Resin Core, Alloy 60/40, 1/32-in diameter, Code 81348 No. QQS571, for use with your Pershing and Sergeant guided missile test sets? Ask for FSN 3439-555-4629. You'll find it listed in SC 3432/70-IL (Jul 67).

## *One'll Do*

No need to repeat your DA Form 17 order for the same pub to the AG Publications Centers unless you get the word from them that they can't identify the pub you want. They keep your order on file and will ship it to you when they get it. Take a look at DA Pamphlet 310-10 (May 64), para 18 d.

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

**PLEASE  
GIVE  
THIS  
MAN  
AN  
EVEN  
BREAK!**



If you've got free turn-in, please tag the parts properly giving all the dope (like FSN, part numbers, nomenclature, etc) . . . and pack parts you send support for repair and reissue carefully to avoid damage in transit.

**BECAUSE-  
MAY BE**

**THIS MAN  
YOU**



Get your reparable items back into the supply system **NOW**, so you can help yourself later . . .