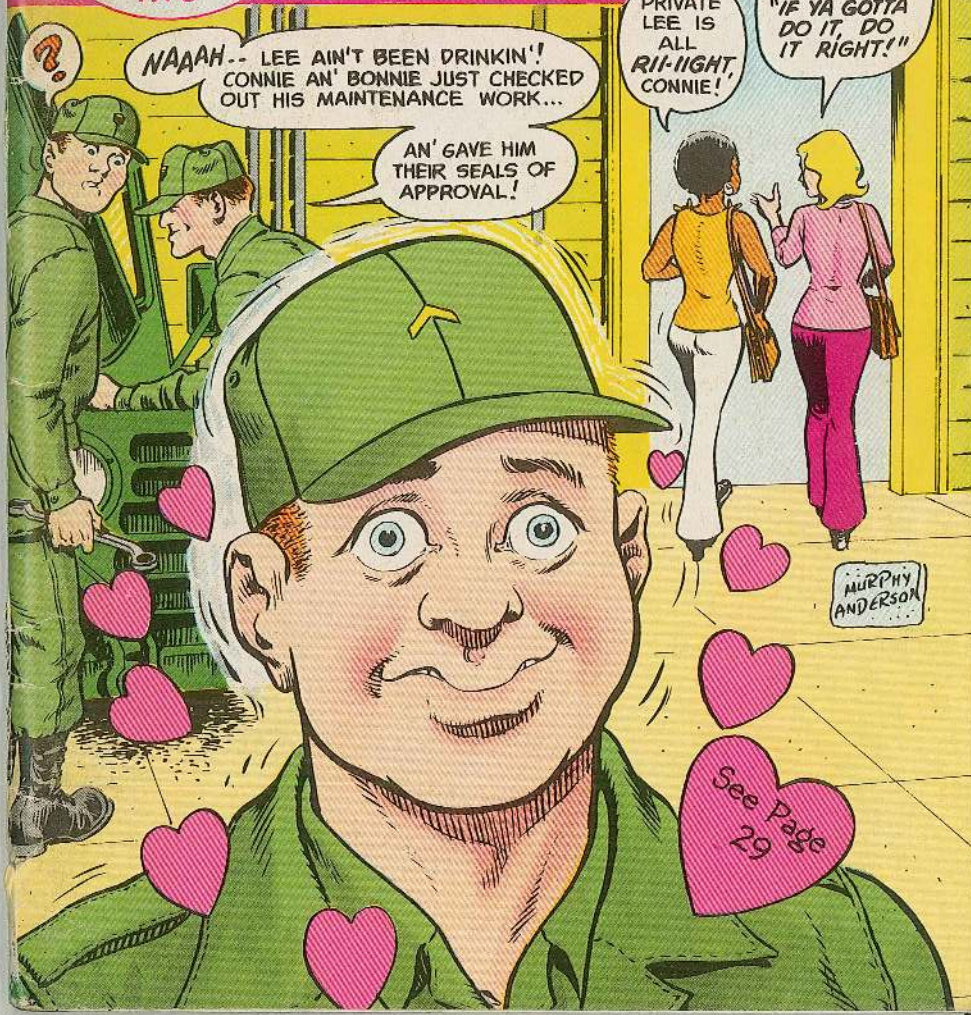


Issue 279

PS

February
1976

THE PREVENTIVE MAINTENANCE MONTHLY



NAAA-- LEE AIN'T BEEN DRINKIN'!
CONNIE AN' BONNIE JUST CHECKED
OUT HIS MAINTENANCE WORK...

AN' GAVE HIM
THEIR SEALS OF
APPROVAL!

PRIVATE
LEE IS
ALL
RII-IIGHT,
CONNIE!

YOU KNOW
IT, BONNIE!
HE PROVES:
"IF YA GOTTA
DO IT, DO
IT RIGHT!"

MURPHY
ANDERSON

See Page
29

THE

ABC'S OF UNDS

Some things are as simple as ABC . . . and then again, some things aren't.

Take urgency-of-need designators (UND's) for example. A headache, right? Wrong. Not if you keep straight on your ABC's.

UND'S COME IN 3 CATEGORIES...



You use UND A only when the world's rocking on the edge and there's no way you can save it without a certain item or part. Your mission is definitely no-go without the item.

You use UND B when you can haul the world back from the edge but you can't stop the rocking without the item you're requesting.

Everything else comes under UND C.

OK, now you're straight on the ABC's of UND's.

But there's more to the supply alphabet than ABC. You need to know FAD, Force/Activity Designators, and PD, Priority Designators. Then, filling in the details on a supply request becomes a snap.

WHEN THE SITUATION IS HAIRY ENOUGH TO NEED **UND A** USE THESE PRIORITIES...

- FAD I units—use 01
- FAD II units—use 02
- FAD III units—use 03
- FAD IV units—use 07
- FAD V units—use 08

AND FOR NORMAL, EVERY DAY SITUATIONS WHEN YOU USE **UND C**...

DA CIR 700-18 HAS THE WORD ON OTHER ASPECTS OF PREVENTIVE LOGISTICS.

HERE'S AN EASY REFERENCE CARD FOR **UND'S**, **FAD'S** AND PRIORITIES!

- FAD I units—use 01
- FAD II units—use 02
- FAD III units—use 03
- FAD IV units—use 07
- FAD V units—use 08

WHEN THE SITUATION IS JUST SLIGHTLY HAIRY AND YOU'RE USING **UND B**...

- FAD I units—use 11
- FAD II units—use 12
- FAD III units—use 13
- FAD IV units—use 14
- FAD V units—use 15

MILSTRIP PRIORITY			
URGENCY OF NEED DESIGNATOR			
	A	B	C
I	1	4	11
II	2	5	12
III	3	6	13
IV	7	9	14
V	8	10	15

PRIORITY 01 02 03 04 05 06 07 08 09 10 11 12 13 14 15

PS

THE PREVENTIVE MAINTENANCE MONTHLY

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PS wants your ideas and contributions, and is glad to answer your questions. Name and address are kept in confidence. Just write to: Dr. coll: AUTOVON 745-3503. M S G Half-Mast PS Magazine Lexington, KY 40507

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GROUND MOBILITY

YOUR M49A2C SUPERTANKER AND YOU . . .

WHO'S KNOCKING KING SUCCESS?

NO NEED
FOR YOU FUEL
TRUCK JACKS TO
FEEL OUT OF IT
ANY LONGER...

JUST
COME ALONG
WITH ME
NOW...

IT'S M49A2C
BE YOUR OWN
INSPECTOR TIME!!



For just having it wired together, you can't top the job of a 1200-gal tank truck operator.

Especially when you're in the business of fueling aircraft.

About that "wired-together" bit. You know you don't just go jump behind the wheel and tool off with a load of fuel.

No way. You gotta put a little self-propelled OJT with the reading

matter, books, that is . . . like TM 9- 2320-209-10 (Feb 65), TM 10-1113 (Jun 69), TM 5-4930-226-12 (Nov 74), or TM 10-1101 (May 72).

YOU CAN'T
KNOW TOO
MUCH ABOUT
YOUR TRUCK
OR TANK
VEHICLES
OR POL
HANDLING!

NOBODY IS
GOING TO
HACK IT
WITHOUT
LEANING
INTO THE
BOOKS!



PS MORE

So-o-o-o, OJT . . . homework . . . experience—and delivering clean fuel becomes a way of life for you.

Clean, in POL, means without water, without dirt, without algae . . . no foreign matter, period. Just a little water, grit, or green algae in aircraft fuel is too much.

And don't overlook dirty fuel-handling equipment.

F'rinstance, keep that nozzle clean enough that it'll look fairly new even after several months' use. Some people may kick their equipment

around . . . drop it . . . drag it . . . run over it . . . but not you.

You make a mental checklist of the items you use every day, and run thru them before you take your rig out. You'll know before you go that your rig and equipment's ready. Here's a list of every-session items to check:

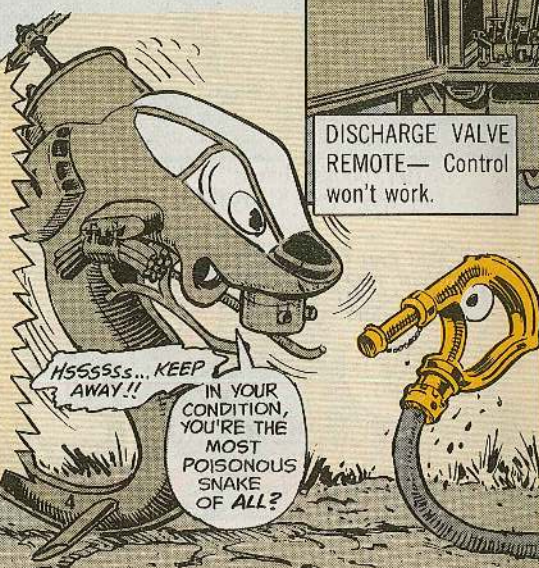


HALF SAFE-NO SAFE

There is no such thing as being "almost" grounded right.

Your ground plug, alligator clips, cables, in-place rods, and link straps are all there for one purpose—to help get rid of static electricity harmlessly.

One spark can ruin your whole day. Your bonding job, and your job of grounding what you bond, have to be R-r-right. Almost won't hack it.



HOSES—Cut, crushed, dirty, rusted (especially inside). Reinforcing wire broken thru inner wall.

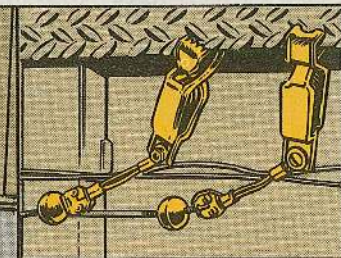
IF YOU FIND RUST OR DIRT INSIDE, USE A SUBSTITUTE HOSE UNTIL THAT ONE IS CLEANED UP!

VENTS, PLUGS—Dirty, missing, clogged.

FIRE EXTINGUISHERS—Not sealed, empty, missing (should be on both left rear and right front).

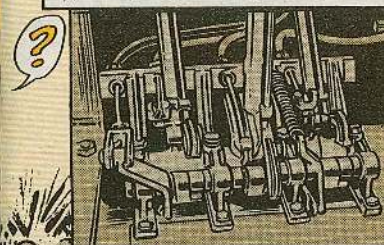


BONDING/GROUNDING CABLE—Clips gone, wires broken, return reel won't work.

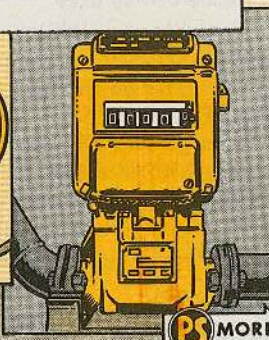
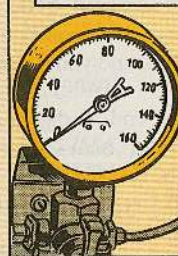


DISCHARGE VALVE REMOTE—Control won't work.

CONTROLS, LEVERS—Linkage rusty, bent; stops damaged.



METER, GAGES—Unreadable, not working.



THE WISER OWL

Here are some other hints that'll enhance your old pro image:

- ➔ Never use tools that can cause sparks. Use explosion-proof flashlights at night.
- ➔ Never work in fuel-wet clothes. Tip—keep spare coveralls handy.
- ➔ In wet or icy weather, use wing mats. Never let rain or snow drop into the filler well.
- ➔ Never carry paper clips, pencils, pens, note pads or anything in your pockets that could drop into tanks, openings or intakes on aircraft or wheeled vehicles.
- ➔ Always have a backup man on the fire extinguisher.



AFTER THE BALL

You can't relax and forget it just because you serviced your last customer.

For one thing, that's the best time for your vehicle to get its private PM inspection. A mishap to a POL vehicle can be a blazin' disaster, so don't slight the job.

It's also time for you to get onto your DA Form 2404 with any problems you ran into during the day. If fuel didn't flow quite right ... dogs on your closed-circuit system fit hard ... burrs bugged your nozzle handle ... dust caps wouldn't fit exactly ... indicator pin action seemed slow ... whatever it may have been, write it. And while you're looking at the power flow end, whoa up a minute and make a note—

You've still got a gravity-feed system, and that's to be checked over too. Then you eyeball three things for signs of trouble at the end of the day:

Naturally you don't panic and haul back to the rack if, early next morning, you see a small seep at a joint. But you do get it on the DA 2404, and you do tell your shop chief about it.

If you get back early enough, end-of-day is a good time to look in on your PLL desk man—once a week anyway—for the latest poop.

You can work with your PLL type to add stock numbers for your rig to his card files.



➔ Leave yourself a getaway route to use in emergency.

➔ Never, but never block a nozzle open: hold it in your hand. Item 5, inside the front cover of TM 10-1101, says you must not use a notched nozzle. If you have one use a hacksaw or file to remove the notches.

➔ If you do cause a spill, shut down and report it fastest.

➔ Double check filler caps. Loose caps can become lost caps; lost caps can mean aircraft damaged or destroyed.

➔ Never fuel aircraft within 300 feet of operating radar rigs ... within 50 feet of buildings ... nor indoors.

➔ Set brakes. When on an incline, use wheel chocks.

ACTUATING RING—
Any sign at all of trouble.

GRAVITY FILL ADAPTER—
Cracks in housing, caps, or elsewhere.

STRAINER—Any jams, or holes not put there when manufactured.



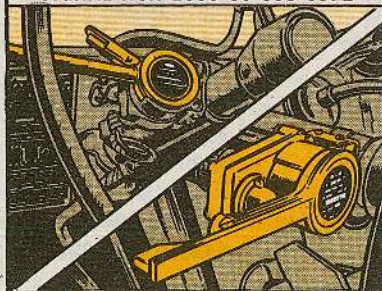
ITEM	P/N	NSN
Coupling ring, metal, 2-in for discharge hose	10871852	4320-00-825-0616
Seal, 2-in for above	10871869	5330-00-978-9575
Fuse assy		4930-00-872-1779
Clip, plug, and cable assy grounding, for M49-series	HC190WM	4930-00-842-5315
Alligator clips, grounding	25C(76545)	5999-00-204-8350
Cock, plug, 3-way threaded type	MS-35932-2	4820-00-639-9224
Hose and nozzle assy	10872250	4930-00-563-4917

TURN SIGNAL TIP

Whoa! Instead of tossin' out that turn signal control, take a crack at putting it back into operation.



NEW SOLID STATE TURN
SIGNAL NSN 2590-00-808-6072



MECHANICAL TYPE TURN SIGNAL

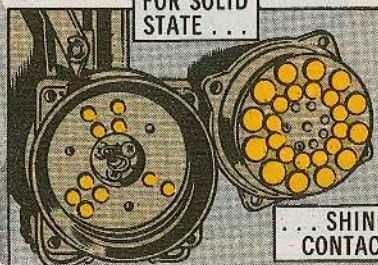
You've got nothing to lose by trying. The TM says this control can't be repaired when it quits. You're s'posed to get a new one—NSN 2590-00-808-6072—to the tune of about 10 bucks.

JUST TAKE IT APART AND CLEAN THE CONTACTS INSIDE! USE FINE EMERY CLOTH OR FINE SAND PAPER.



This works almost every time for the solid state turn signal control. Just shine up all those little button-like contacts—and the control works like new.

FOR SOLID
STATE ...

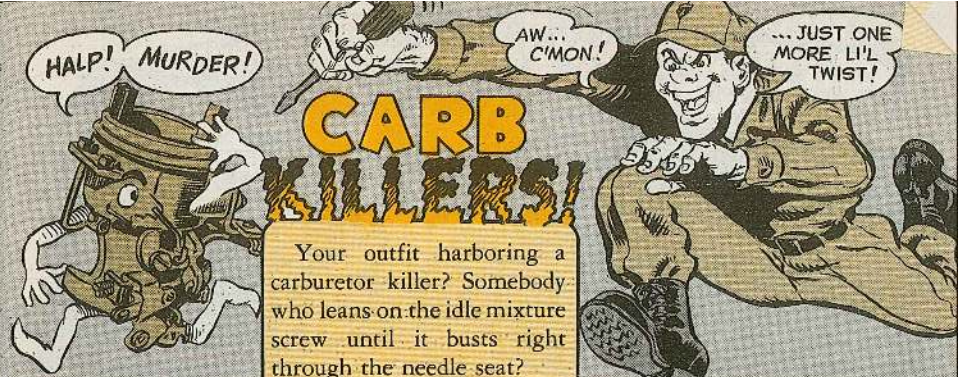


... SHINE UP
CONTACTS

It's not so easy with the old mechanical-type control—with the breaker point contacts.



BUT IT'S
WORTH A
TRY!



Your outfit harboring a carburetor killer? Somebody who leans on the idle mixture screw until it busts right through the needle seat?



DON'T LEAN
ON
IDLE
MIXTURE
SCREW



DAMAGED
NEEDLE
SEAT ...

... SHOT CARB

Just drop into your DSU shop and see the carbs that're headed for the junk pile only because the mixture screw needle seat is busted out. There's no repair of this damage—the carb's shot.



THIS SCREW IS FOR THE AIR-GAS MIXTURE ONLY AT IDLE AND VERY LOW SPEED. IF IDLING IS TOO FAST, SET THE IDLE SPEED LIKE YOUR TM SAYS— AND THEN ADJUST THE MIXING SCREW.

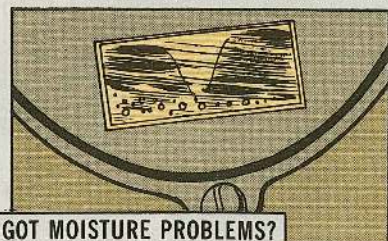
TURNING THE SCREW IN (CLOCKWISE) MAKES A LEANER MIXTURE. MORE AIR, LESS GAS. TURNING IT OUT MAKES A RICHER MIXTURE.



When you turn the mixture screw in all the way, it should only touch—repeat TOUCH—the needle seat. Metal at the needle seat hole is thin—and brittle. You can tell when the screw touches the end if you're careful. Easy does it. When the screw stops, you stop turning. Then you adjust the mixture screw like it says in your vehicle TM.



Troubled by moisture in your "waterproof" light assemblies? Have

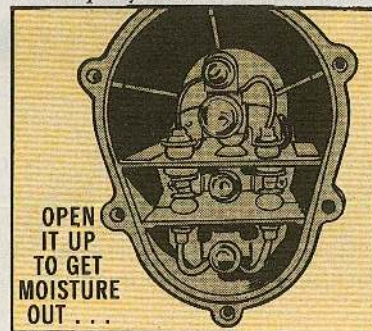


GOT MOISTURE PROBLEMS?

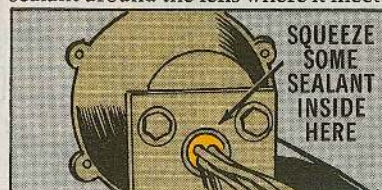
you just about given up trying to get them sealed? Here's help!

Use silicone adhesive sealant—NSN 8040-00-833-9563 for a 5-oz tube—to fill up the openings in the assembly.

Open up the light and mop up any moisture that's in there. A shot of air will help dry out some of the hard-to-

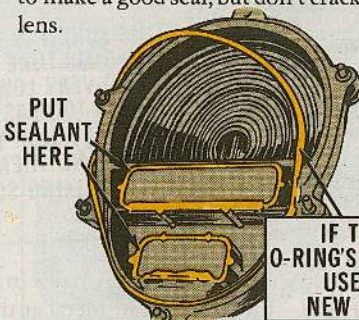


get-at places. Then squeeze some sealant into the opening where the electric wires come in. Put some sealant around the lens where it meets



SQUEEZE SOME SEALANT INSIDE HERE

the door. Then install the O-ring (use a new one if the old one's stretched or mashed). When you close the assembly, tighten the screws enough to make a good seal, but don't crack the lens.

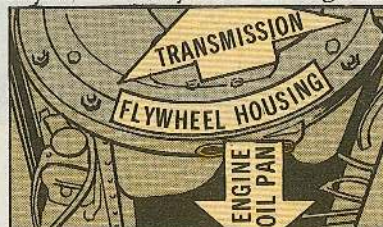


IF THE O-RING'S SHOT—USE A NEW ONE

If the light assembly's already rusty inside, sand and spot paint it to keep the rust from spreading.



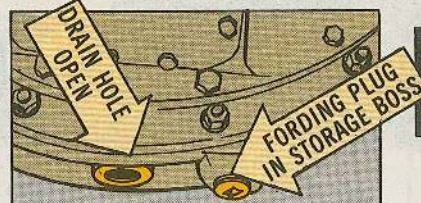
Take a look—right now. Is the fording plug in the drain hole of your truck's flywheel housing?



THE FLYWHEEL HOUSING IS BETWEEN THE BACK OF THE ENGINE AND THE FRONT OF THE TRANSMISSION. THE DRAIN HOLE IS AT THE BOTTOM OF THE FLYWHEEL HOUSING.

If so, you're begging for trouble—like a slipping clutch. Or even a ruined clutch.

Take that plug out—unless you'll be fording. Screw the plug into the



storage boss alongside the flywheel housing. Or, if there's no storage boss, keep the plug in your truck's glove box or tool box.

Why the big fuss? A little leakage of engine and transmission lube into the fly-wheel housing is normal. And it's no big problem if it can drain out. But it can't drain out if the hole's plugged. It can build up in there until it gets on the clutch.

DRILL DRAIN HOLES

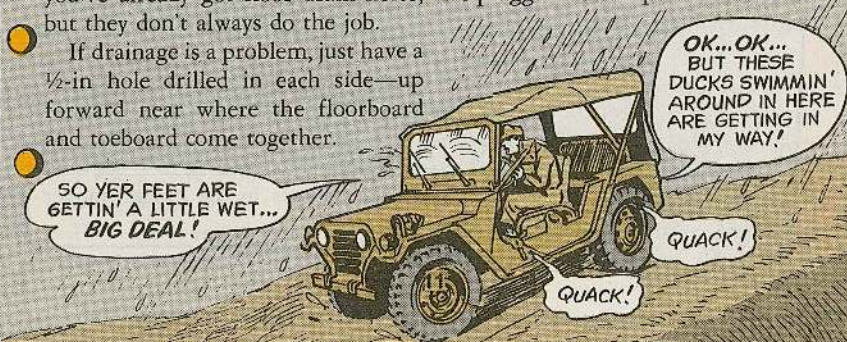
No need to park nose-uphill to drain water sittin' in your M151A2 or other TM-218-series ¼-tonner. Sure, you've already got floor drain holes, but they don't always do the job.

If drainage is a problem, just have a ½-in hole drilled in each side—up forward near where the floorboard and toeboard come together.

SO YER FEET ARE GETTIN' A LITTLE WET... BIG DEAL!

All of the details are in TB 43-0001-39-3 (Oct 75).

Natch, a drain hole won't drain if it's plugged—so keep 'em cleaned out.



SORRY'S NOT GOOD ENOUGH



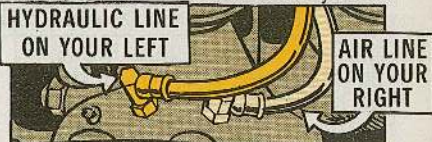
What can you, the mechanic, say when some guy piles up in his Gama Goat . . . because his brakes failed . . . because you switched the brake hydraulic line and air line to the wheel?

It can happen. It does happen!

You have both lines unhooked at the spindle. The hookups are threaded the same—so they get switched when you put 'em back on.

This means that air—instead of brake fluid—goes to the wheel brake cylinder. The brakes don't work on air.

And it means that brake fluid—instead of air—is pumped into the brake drum. That's a mess all by itself.



So always remember—as you face the wheel, the brake hydraulic line is on your left—and the air line is on your right. Tag them as such before you take 'em off.

You won't be sorry.

ADDRESSING THE CLASS

If you need to know your vehicle's load class, and it's not listed in FM 5-36, get the info from:

Commandant
US Army Engineer School
ATTN: ATSE-CTD-DT-TL
Fort Belvoir, VA 22060

POSTAGE AND FEES PAID
DEPARTMENT OF THE ARMY
DDO-314



The address in the FM no longer exists.

A PROPER TOOL FOR BLEEDING YOUR GAMA GOAT'S BRAKE LINE IS ON THE WAY!

BUT YOU DON'T HAVE TO WAIT!

YOU CAN MAKE A DANDY WITH STUFF EASY TO GET A HOLD OF!

AND TASTY TOO!



TM-242-SERIES 1¼-TON TRUCK . . .

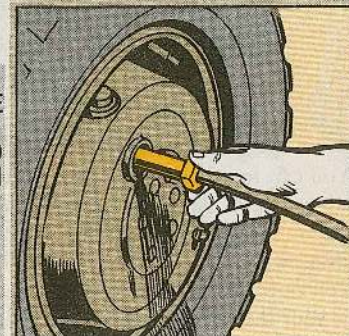
BRAKE BLEEDING TOOL

THIS ONE'S MADE FROM THE HEX END OF A ¼-IN DRIVE 7/16-IN SOCKET WRENCH BRAZED TO THE HANDLE PART OF A CROW'S FOOT WRENCH, OR ANY STRONG ROD BENT TO AN L-SHAPE WILL DO FOR A HANDLE.



HERE'S A T-HANDLE JOB MADE FROM A SOCKET WRENCH, ANGLE IRON AND A HUNK O'ROD—ALL BRAZED TOGETHER.

BOTH LOOSENING THE BLEED SCREW AND DOING THE BLEEDING IS POSSIBLE WITH THIS ONE—A SOCKET WRENCH, PIECE OF PIPE AND A BIG NUT BRAZED TOGETHER. IT TAKES ANOTHER WRENCH TO TURN IT. WITH THIS ONE, THERE'S LESS CHANCE OF THE TUBE FALLING OFF THE BLEED SCREW AND SPILLING FLUID INSIDE THE BRAKE DRUM.



Use your tool along with the poop in TM 9-2320-242-20 (Aug 70), pages 2-230 and 2-231, para 2-161b.

Use a ¾-in or ½-in drive 7/16-in socket to break loose the wheel cylinder bleed screw. Easy! Too much and you'll have brake fluid running into the brake drum.

Then use your special tool. Stick the bleeder tube through the hex hole. Put

the tool and tube through the brake drum hole and push the tube onto the bleed screw. Push the tool onto the bleed screw and loosen the screw to bleed the brake line.

When you're through bleeding, tighten the bleed screw back up with your tool—until brake fluid stops coming out of the bleeder tube.

Then use a torque wrench to give the bleed screw its final tightening—150-180 lb-in torque on the screw.

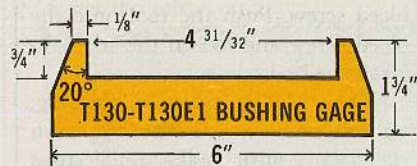
M113-SERIES

HOLD ONE, MEN...
HERE'S A HANDY
SOLUTION TO YOUR PROBLEM!



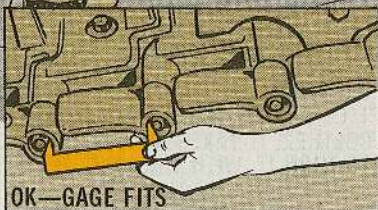
You can forget about all the recent messages and TM info on how to measure T130 and T130E1 track bushing wear.

You now can measure wear with a gage your mechanic can make out of a scrap of $\frac{1}{8}$ -in stock—plastic, aluminum, steel or whatever.



MAKE FROM $\frac{1}{8}$ " STOCK

If you can put the gage in the bushing bore from shoe to shoe, the



OK—GAGE FITS

bushings are OK. Replace shoes that won't pass this test.



NG—GAGE WON'T FIT,
REPLACE SHOE

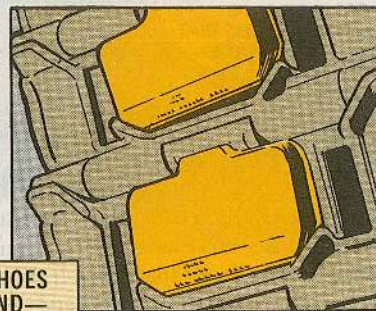
Use this test for both T130 and T130E1 bushings until a new gage, now being designed, comes out. The new gage will measure both sprocket and bushing wear.

VEHICLE TRACK

Now about track pads ...

When you use the new T130E1 track pads in old track blocks they make a loose fit and twist around quite a bit when the vehicle is in motion.

You don't have to replace these pads just because they twisted. Check 'em often to see if they're as tight as they should be.



NEW PADS IN OLD SHOES
MAY WRIGGLE AROUND—
NO SWEAT, JUST CHECK 'EM
FOR TIGHTNESS

NEW MUFFLER EXTENSION

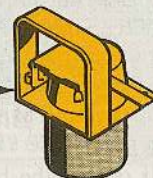
With winter here you'll need a new muffler extension. Not for yourself, for your vehicle.

The muffler exhaust extensions, NSN 2990-00-755-4854 and NSN 2990-00-930-2067 are being replaced.



OLD MUFFLER
EXHAUST
EXTENSION IS
BEING REPLACED

NEW EXTENSION
FLAPPER
VALVE WILL
KEEP WATER
OUT OF ENGINE



It'll be listed in a change to the -20P but you don't need to wait. It's already in the Army Master Data File.

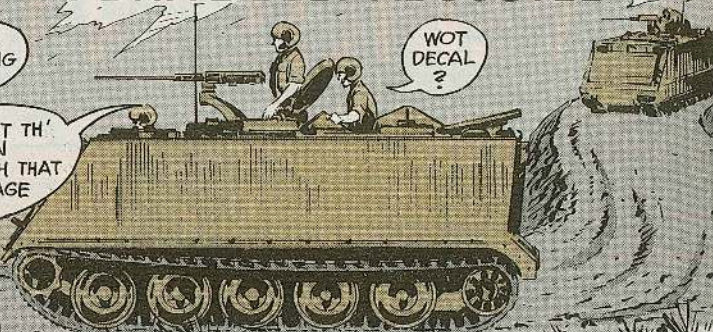
THE DECAL'S THE ANSWER...

KEEP FAN DRIVE BELT ADJUSTED

HEY, HARRY-- I SMELL SOMETHING BURNIN'...

DID YOU ADJUST TH' FAN DRIVE BELT IN ACCORDANCE WITH THAT DECAL ON THE GAGE SLEEVE?

WOT DECAL?



Having fan drive belt problems with your M113A1-series vehicles?

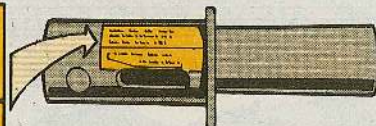
Those belts must have the right tension on the idler pulley. If they're too loose, they'll slip off the pulley. If they're too tight, they'll wear out in a hurry, damage bearings, and maybe bend the pulley arm.

First, see if there's a decal on the gage sleeve. If you need one, it's Decal, idler instructions, NSN 7690-00-403-0942 (P/N 10863404-19207). Put it on so that the operating range is centered between the ends of the slot.

READJUST PERIODICALLY TO KEEP END OF TUBE IN OPERATING RANGE

RESET POSITION

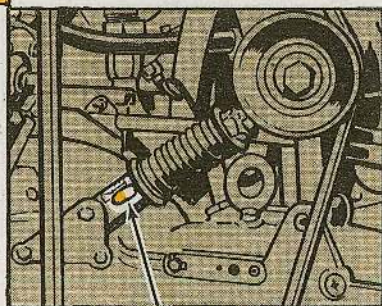
OPERATING RANGE



CENTER DECAL OVER SLOT

Check the window in the gage sleeve and see if the bottom edge of the gage nut falls somewhere in the OPERATING RANGE on the decal. Loosen or tighten the fan drive belts the way it says in para 2-94 on page 2-161 of your TM 9-2300-257-20 until you get a correct reading.

If one of the belts is cut or worn smooth, replace both belts. They come as a set, NSN 3030-00-684-1485, belts, V, matched set: 2 per set.



BOTTOM OF GAGE NUT IN OPERATING RANGE

CHANGE OIL TO GREASE—

M113A1-SERIES CARRIERS

Having problems with your track idler arm housing binding up?

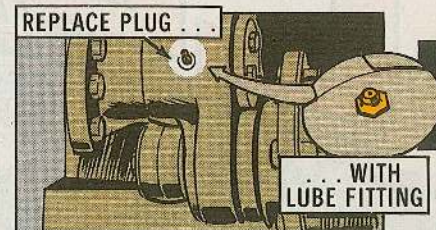
Change 4 (Aug 74) to TM 9-2300-257-20 (Feb 69) is your authority to change it to a different lube—GAA.

You'll find the word in para 2-224.1 on page 2-268 of the C 4.

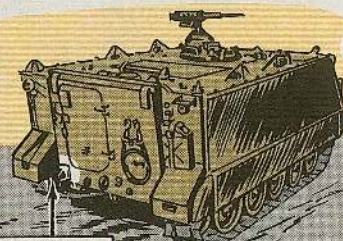
Take out the 2 pipe plugs from the 2 oil fill openings at the top of the arm assembly. Then replace one with a

lube fitting NSN 4730-00-172-0028, and the other with a relief valve NSN 4730-00-542-5683.

REPLACE PLUG...



WITH LUBE FITTING



TAKE OUT PIPE PLUGS

'Course, you'll need a reducer NSN 4730-00-186-3024 with each lube fitting and relief valve so they'll fit the holes.

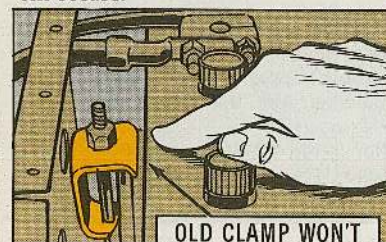
Fill the housing with GAA through the grease fitting until grease escapes through the relief valve.

You want to change the idler wheel hub to grease, too.

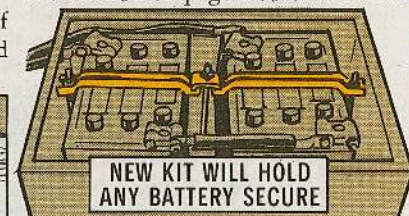
M113A1 BATTERY BUGABOO

A lot of rope-handled batteries have been getting busted because the old battery retainer clamp, NSN 2540-00-840-9555, (Item 17 on page 2-441 of your TM 9-2300-257-20P) won't hold 'em secure.

What you need is parts kit, battery retaining, NSN 2510-00-502-5503. It's Item 32 on page 2-73 of the -20P.



OLD CLAMP WON'T HOLD ALL BATTERIES



NEW KIT WILL HOLD ANY BATTERY SECURE

With this kit you can hold any NSN 6140-00-057-2554 batteries secure no matter whether they come with rope, plastic or metal handles.

CBS

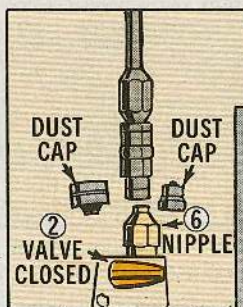


Try to crack a fitting on an air line with 3,000-PSI pressure in it and you could lose your face.

That's the dangerous way some people have been relieving trapped pressure in the air hose after slave charging the M551's closed breech scavenging system.

The right way to do it will be published in the next edition of TM 9-2350-230-10/2-1 (Mar 73), but you can start using the right way now.

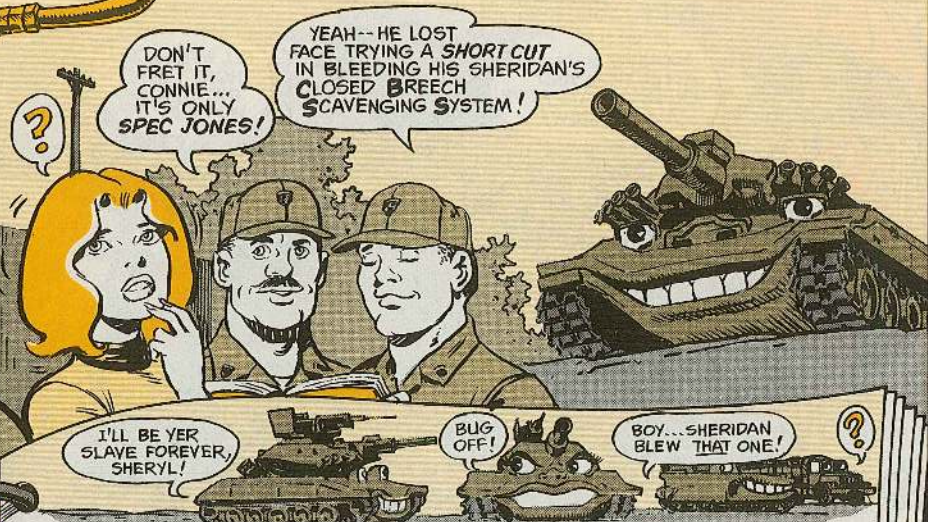
Turn to page 2, (Fig 2-10.1) of C 1 of your TM 9-2350-230-10/2-1 and write this between paragraphs 3 and 4—



NOTE: "Air can get trapped between valve (2) and Nipple (6). If this should happen, open valve (2) and bleed air from the system and then turn valve to the shut-off position." (Fig 4-17.1 on page 6 of C 2 to TM 9-2350-230-10-2-2 shows this.)

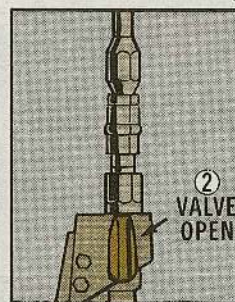
With this NOTE, everything will read right on page 2.

SLAVING DANGER



Now turn to the next page (page 3) and cross out the NOTE after para 8 and also all of para 9.

Write this in and use it in place of what you have crossed out . . .



"9. Finished? Turn off compressor. Turn the valve (2) to the shut-off position on the SLAVED vehicle. Bleed air pressure from slaving vehicle the way it shows on page 6 (Fig 4-17.1) of C 2 to TM 9-2350-230-10/2-2. Now turn valve (2) to shut off position on SLAVING vehicle. Disconnect slave hose. Put dust caps on slave hose and nipples. Stow the hose."

Follow this new way when you slave your CBSS, and you'll have no trouble. This change also applies to TM 9-2350-230-10-2-3.

M551 SHERIDAN

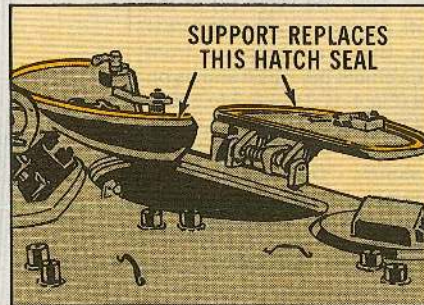


A LITTLE
REGULAR SEAL
ATTENTION, AND
YOU'LL ALWAYS HAVE
A DRY CREW!

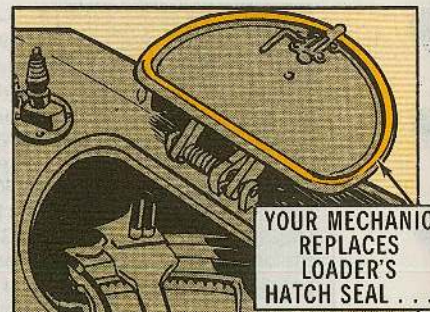
NO, WYNSOCK!
THOSE AREN'T
THE SEALS
WE NEED!

There are a lot of different seals on your M551 Sheridan but, the ones that can let the rain drain down your neck are the seals for the loader's hatch, commander's cupola and driver's hatch.

Replacing the seals on the cupola hatch is a job for direct support. But



SUPPORT REPLACES
THIS HATCH SEAL



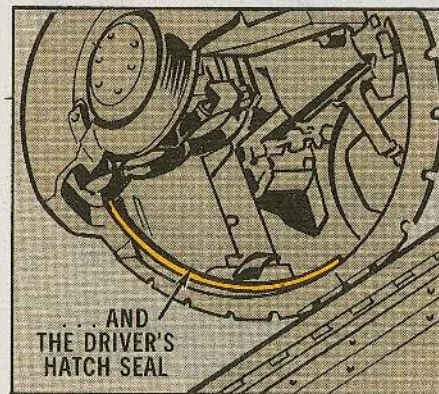
YOUR MECHANIC
REPLACES
LOADER'S
HATCH SEAL...

your organizational mechanic can replace loader's or driver's hatch seals

SEAL PROBLEMS



and keep the rain from leaking through your own personal roof.

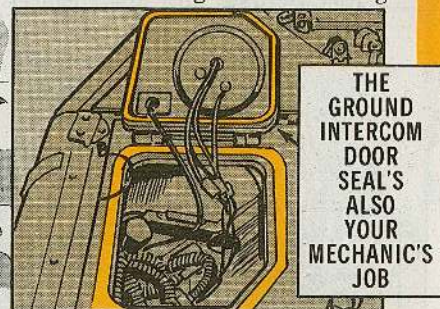


...AND
THE DRIVER'S
HATCH SEAL

The loader's seal, NSN 5330-00-907-9041, seal, rubber, special shaped section 10952316 (19207) is listed on page 263 of TM 9-2350-230-25P/2 (Sep 69). Fig 10-44 (page 10-44) of TM 9-2350-230-12 (Jun 66) warns the mechanic to adjust the latch shims when putting in a new seal.

The driver's seal fabricated from bulk seal rubber NSN 2540-00-945-7142, is item 35 in Fig 116 (page 107) of TM 9-2350-230-24P/1 (Jun 71).

Getting these seals fixed will keep the rain off the crew—but the ground intercom door might also be leaking.



THE
GROUND
INTERCOM
DOOR
SEAL'S
ALSO
YOUR
MECHANIC'S
JOB

Your unit mech can take this right in stride. The door needs a seal NSN 2590-00-945-8713, item 13 in Fig 127 of TM 9-2350-230-24P/1 (Jun 71).

Once you've got the seals, keep 'em in good shape. Massage GPS grease into the seals quarterly the way it says in your LO 9-2350-230-12. NSN 9150-00-273-8633 gets you 8 ounces of this good glop or you can order the economical one pound can for NSN 9150-00-269-8255.



DON'T BE SEAL-Y!
SEALS ARE NO
LAUGHIN' MATTER!

IT'LL SAVE Y' HEAD, TED!

One main pain of the Combat Vehicle Crewman's life is on the way out.

A better helmet—the DH-132—is on the scene.

It'll save your eardrums from unfair wear and tear. It'll let you listen to what goes on the radio and intercom. And it'll shield your skull far better than the older types.

The DH-132 is covered by Ch 3, Chapter 5 (Oct 73) to TM 10-8400-201-23 (Jun 70).

Electronics for it—Headset microphone kit MK-1697—are described in TM 11-5965-286-14 (Jan 74).

Give it an eyeball now and again for any of these conditions—and correct 'em soonest.

MIKE ADJUSTING KNOB—stuck, missing; snaps loose, stuck, rusted. Straps not tight in eyes.

BAIL-OUT CORD—Line pinched; connectors jammed or loose; wires broken (test it hooked to your vehicular system).

GUIDE BOOM—Bent, ball joint sticking/loose. Frame or cord twisted.

SARGE DIDN'T WANTA MISS TH' PARTY, AH...

...HE DOESN'T DIG ROCK MUSIC...

...SO THIS WAY HE "SAVES" HIS EARS!

HELMET SHELL—Cracked; binding loose, discolored, holed out.

CLOTHING CLIP—broken, won't hold, stuck.

CHIN STRAP, PAD—Dirty, snaps won't hold. Frayed, torn, broken.

VELCRO TAPE—Damaged, loose, won't hold.

SHOCK CUSHION—Holed, hard.

SWEATBAND—Missing, torn, dirty.

EARCUPS—Rubber dead, hard, brittle, cracked, torn. Dirt in crevices (Wash pads with warm suds, dry carefully).

HELMET LINER

SWITCH—(left earcup shell) Defective.

Don't monkey with parts that are higher-level maintenance.

And don't accept a helmet that doesn't fit. Adjust carefully, and if it still pinches or slops around, swap it.

SAVE YOUR HELMET AND IT'LL SAVE YOU HEADACHES!

CHA CHA!

M60 SERIES TANKS,
M48A3 and M728 ...

LUCKY 13 ENGINE STARTING

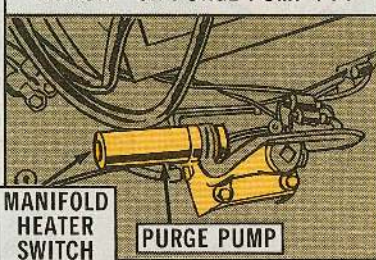
Yep! The lucky number is 13 for engine starting without hydrostatic lock or engine damage.

Change 13 to TM 9-2350-215-10 has the latest dope. Figs 2-15 and 2-16 in Change 13 clue you in.

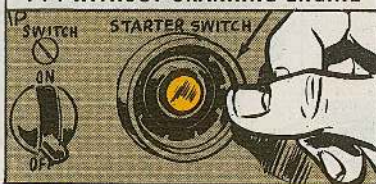
You'll notice it is "verboten" to operate the manifold heater switch when the engine is not being cranked. If you do this you'll burn up all the oxygen in the manifold.

Burning up all the oxygen is bad, but it's still worse if you also work the purge pump handle as well as the manifold heater switch without cranking the engine. In this case raw fuel will be pulled into the manifolds.

NEVER OPERATE MANIFOLD HEATER SWITCH—OR PURGE PUMP ...



... WITHOUT CRANKING ENGINE

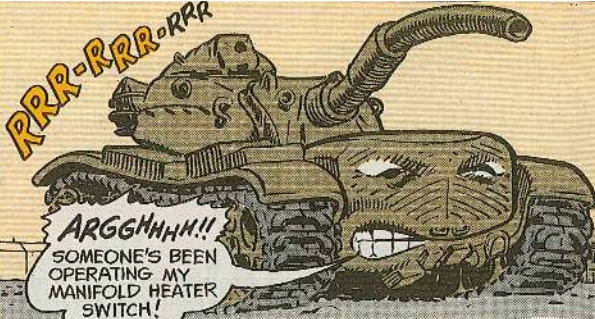


M60A2 Tank Compressor

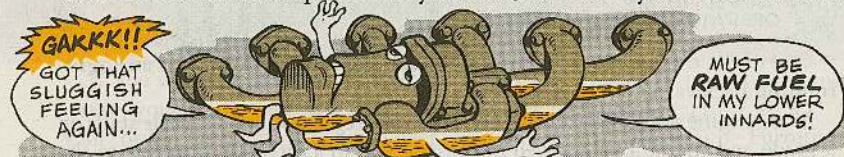
The \$748 compressor NSN 4310-00-4444-7572 for the closed breech scavenging system (CBSS) in your M60A2 tank is now a recoverable item. If it poops out on you, turn it over to your direct support.

Retro Fittings

Some of the early Sheridans have no grease fittings and relief valves in their idler arm housings. With this setup the arm sometimes seizes inside the housing. If your vehicle has no fittings, your direct support can drill, tap and install lubrication fitting, NSN 4730-00-050-4208 and pressure relief fitting NSN 4730-00-289-8261. The fittings are shown in TM 9-2350-230-24P/1 (Jun 71) on page 446, Fig 93.



When you turn the engine over the raw fuel which settles in the lowest part of the manifolds will be pulled into your No. 3 and No. 4 cylinders. You'll wind



up with either a hydrostatic lock or damaged engine (bent connecting rods or cracked pistons or cylinders) depending on the amount of raw fuel that gets

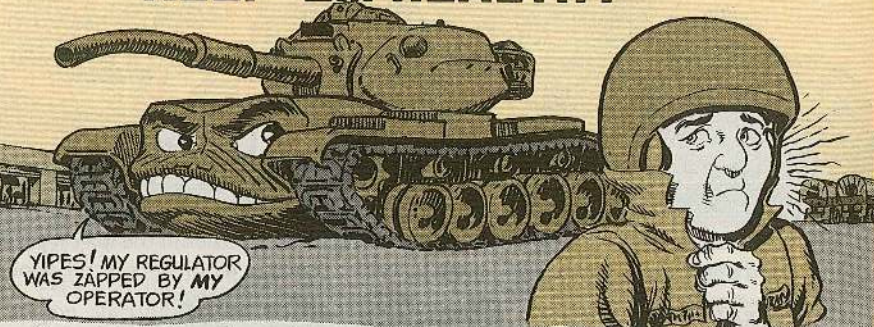


drawn in. You might even have both a hydrostatic lock and a damaged engine.

So, if you notice a knocking or any unusual noises coming from the engine while it's being cranked, or if the engine won't start after 2 complete attempt-to-start cycles, shut down and troubleshoot the engine. Page 3-15 of Change 13 to your TM 9-2350-215-10 will help you with this.



KEEP 'EM HEALTHY

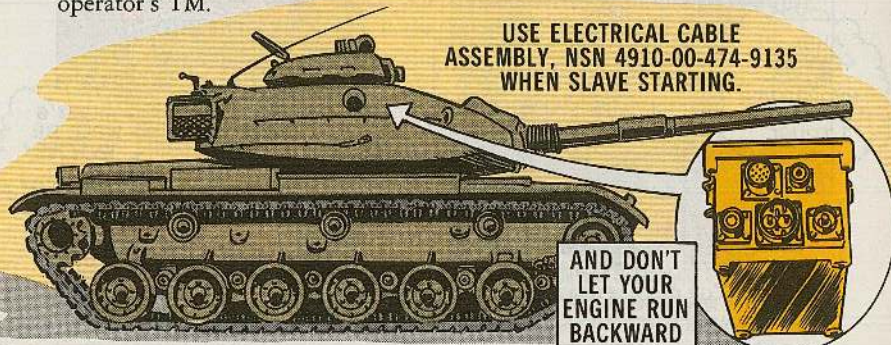


One of the things that makes the solid state regulator unhealthy is an engine running backward.

Your engine will run backward and ruin your regulator if the vehicle stalls on a grade and the tank is allowed to coast or roll in a direction opposite to the direction the transmission selector is set for.

Getting reverse polarity while you slave-start is another thing that makes your solid state regulator curl up and die. When you slave start your tank use only the special purpose electrical cable assembly NSN 4910-00-474-9135 from the No. 2 Common Tool Kit. Follow the slave starting method shown in your operator's TM.

USE ELECTRICAL CABLE
ASSEMBLY, NSN 4910-00-474-9135
WHEN SLAVE STARTING.



But if the harm is already done and your solid state job is shot, you may have to replace it with the old carbon pile regulator, NSN 2920-00-335-4264.

With the carbon pile, you'll need an external voltage regulating box, NSN 2920-00-907-9565, and two regulator brackets, NSN 2990-00-974-2052.

Remember to turn in the replaced solid state regulator, NSN 2920-00-088-3989, and its mounting bracket, NSN 2920-00-088-3981. They can be reconditioned and used again.

BAITING THE MICROFICHE HOOK



If you've been fiche-ing in vain—'cause your command said "No" to your order for a microfiche viewer, here's new bait for your hook!



REQUEST FOR
VIEWER OK'D?
NOW PUT IN
REQUEST FOR
AMDF AND THE
REFERENCE AND
HISTORY
MICROFICHE

AR 708-1, Cataloging and Supply Management Data (Dec 70), the reg that governs who's authorized the microfiche, opens the ol' fiche-ing hole to units.

Change 14 (Nov 75) OK's microfiche to company level.

There're some other changes planned for the future, so your best bet is to order Viewer, NSN 6730-00-116-1618.

This viewer has a dual lens for 24X or 48X (the number of times the info

has been reduced) microfiche and handles dual voltage, 115/230±5.

CTA 50-913 Office Type Furniture and Equipment (May 75) sets out allowance info and refers to AR 340-22 The Army Microforms Program (Nov 73). That AR requires a little extra work and the OK of your organization's chief honcho to get the viewer.

Once your request for the viewer is OK'd, put in another request for at least the monthly AMDF (Army Master Data File) and the reference and history microfiche.

Send your microfiche requests to:

Chief
US Army Catalog Data Agency
ATTN: AMXCA-CP
New Cumberland Army Depot
New Cumberland, PA 17070

You'll be put on pinpoint for the microfiche. Your viewer request goes through regular supply channels.

Get cracking on those requests. Microfiche info, particularly the AMDF, can save you a lot of supply hassle.



This is a selected list of recent pubs of interest to organizational maintenance personnel. This list is compiled from recent AG Distribution Centers Bulletins. For complete details see DA Pam 310-4 (Nov 74), and Ch 11 Feb 75, TM's, TB's, etc. DA Pam 310-8 (Jul 75), and Ch 1 (Oct 75), SC's and SM's; and DA Pam (C) 310-9 (Aug 74), COMSEC Pubs.

TECHNICAL MANUALS

C1, TM 3-1055-456-12 Sep M202A1 Rocket Launcher
TM 3-4240-279-10 Aug M17/M17A1 Mask
TM 3-0665-225-12 Aug M8-M18 Chemical Agent Alarms
TM 5-1080-208-10 & P Jul Camouflage Screen System, Woodland Lightweight, Radar Scattering
TM 5-2805-256-24P Sep Maint/PPSTL Engine, 1% HP MILSTD Mdl 1A08
TM 5-2805-257-24P Sep MILSTD Main Engine 3 HP 34-2A016
TM 5-4320-278-14 Oct Pumping Assembly 350 GPM (Gorman-Rupp)
C1, TM 5-4930-226-12 Oct Nozzle Assembly, Closed Circuit Refueling with Strainer Assembly
TM 9-5420-211-ESG Sep M60A1/M48A1 Bridge Launchers
TM 5-6145-271-24P Oct Maint PPSTL Generator Set 3 KW MEP-016A/MEP-021A and MEP-026A
TM 5-6145-272-24P Sep Maint PPSTL Generator Set 1.5 KW AC 120/240 Volts, 28 VDC MEP-16A, Hertz 60, MEP-25A, 28 VDC
TM 9-1340-416-12 Nov Ballistic Aerial Target System (BATS)
TM 9-1425-473-20 Sep TOW Airborne System
TM 9-1425-473-23P Sep TOW Airborne System
C8, TM 9-2350-215-20 Dec Org Maint M60/M60A1 Tanks
C2, TM 9-2350-230-20-1 Oct M551

Sheridan Hull Org Maint
TM 9-4920-499-209 Sep Training Set Guided Missile System M76 (REDEYE)
C5, TM 11-5090 Oct AN/PRM-15(1) Multimeter
TM 11-5410-213-14P Sep S-280A/G & B Electrical Equipment Shelter
TM 11-5915-334-ESG-1 Aug AN/GRC-142J Radio Teletypewriter Set
C1, TM 11-5920-501-12-1 Oct AN/FRA-53A Antenna Group
C3, TM 11-5820-595-12 Nov AN/GRC-143 Radio Set
C3, TM 11-5820-595-12 Nov AN/GRC-144 Radio Set
C8, TM 11-5940-293-12 Nov AN/PPS-5(1) Radar Set
C7, TM 11-5855-263-13 Sep AN/PVS-2(1) Night Vision Sight
TM 11-5895-225-ESG Oct SB-675/MSC Communication Patching Panel
C1, TM 11-5895-344-14 Oct Op/Org/D8/GS Maint AN/TRA-39A Antenna Group
C3, TM 11-5905-441-10 Oct AN/GLO-3 Countermeasures Set
TM 11-5995-441-25/1 Nov AN/GLO-3 Countermeasures Set
C1, TM 11-5915-222-12 Oct MX-7778 Electrical Transient Suppressor
C1, TM 11-5515-242-25P Nov Gyroscopic Compass System Type C-12
TM 11-6825-277-14 Nov TS-682J/GSM-1 Meter Test Set
C2, TM 11-6825-358-15 Oct SG-711J/FOG Signal Generator
C3, TM 11-6825-478-12 Oct AN/ASM-113 Navigation Signal Simulator
TM 11-6625-538-24P Nov Crystal Impedance Meters TS-330J/TSM
TM 11-6625-578-24P Oct Signal TS-452E/U Signal Generator
C1, TM 11-6825-2376-15 Oct AN/USM-262 Signal Generator
C1, TM 11-6825-2376-15 Oct AN/USM-266 Signal Generator

TM 11-6625-2644-24P Oct AN/USM-205A Signal Generator
C5, TM 11-6720-242-12 Oct KA-60C Still Picture Camera
C2, TM 11-6740-209-10 Nov PH-75-B Dryer
C7, TM 55-405-9 Oct Avn Weight and Balance
C13, TM 55-1510-201-20 Oct U-8D, U-8G, RU-8D and U-8F
TM 55-1510-204-20, PMD/1 Oct OV-10 PM Daily Checklist
TM 55-1510-204-20 PMP/1 Oct OV-10 PM Periodic Checklist
C7, TM 55-1510-209-20/1 Nov U-21A, RU-21A and RU-21D
C11, TM 55-1520-209-20-1 Nov CH-47A Helicopter
C10, TM 55-1520-209-20-1 Oct CH-47A Helicopter
C3, TM 55-1520-210-PMS Oct UH-1D/H PM Services
C3, TM 55-1520-219-PMS Oct UH-1B PM Services
C3, TM 55-1520-220-PMS Oct UH-1C/M PM Services
C5, TM 55-1520-221-PMD Nov AH-1G PM Daily
C6, TM 55-1520-221-PMI Nov AH-1G PM Intermediate
C16, TM 55-1520-227-20-1 Oct CH-47B and CH-47C Helicopters
C17, TM 55-1520-227-20-1 Nov CH-47B and CH-47C
C1, TM 55-6670-201-14 Sep Aircraft Weighing Kit
MISCELLANEOUS
C3 AR 710-2 Aug Supply Procedures
NEW MOVIES
TF 46-4811 CH-47 Cockpit Procedures-Part II
TF 46-4930 CH-47 Cockpit Procedures-Part I

Acting CO OK

Shook up over the acting commander cut in para 2-2c of Change 3 to AR 710-2 on approving high priority requests? Relax.

When a commander is absent, the delegated acting commander is legally the commander and qualifies.

Exercise AULB Launcher

Every 30 days, for sure, go thru 5 complete launch, retrieve cycles with the bridge attached. Para 2-4d(6) Note, page 2-36, TM 5-5420-202-10 (Dec 75) has the word.

Let Sleeping Bags Lie

You have a waterproof clothing bag to keep your sleeping bag clean and dry.

It's not meant to carry your tent pins, mess kit, chessboard or poker chips...

M5 Riot Dispenser

TM 3-1040-220-12 (May 63) doesn't call for calibrating the high and low pressure gages on your M5 riot control agent dispenser. They have to be, tho, like it says in TB 43-180 (May 74). Both gages—NSN 6685-00-087-4573 (0-200 PSI Model) and NSN 6685-00-087-6925 (0-3000 PSI Model)—get calibrated every 180 days.



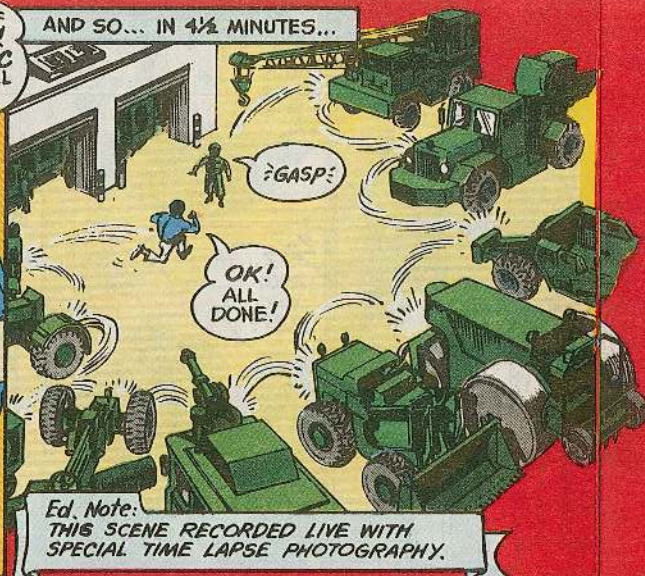
THEY'RE RIGHT
OUT BACK--
BUT WHAT
TOOLS CAN I
GET YA?

NONE, OF
COURSE!!
MY **TRIONIC**
ARM IS ALL
I NEED!

AND SO... IN 4½ MINUTES...



HEY--
WOW..
BUT,
NATCH!



!GASP!

OK!
ALL
DONE!

Ed. Note:
THIS SCENE RECORDED LIVE WITH
SPECIAL TIME LAPSE PHOTOGRAPHY.



YA STILL GOT 5½
MINUTES LEFT, LEE,
OLD CHAP! ANY
OTHER MAJOR
PROBLEMS?

GULP..
ER, NO..

HOLD
ONE!



CONNIE
RODD!

I'VE BEEN WATCHING
THIS LITTLE SCENARIO!
GOOD THING YOUR
SERGEANT SENT ME
OVER TO SEE YOU,
PRIVATE LEE!



ER, CONNIE,
MEET ZEKE
ALSTON, TH'
TRIONIC
MAN!

BEEN WANTING TO
MEET YOU, CONNIE!
WE'VE GOT A LOT IN
COMMON, DOLL!

?!

WHAT DID YOU THINK
OF THAT
FER FAST,
ON THE SPOT
PM?

WELL, IT WAS
FAST AND ON
THE SPOT--
BUT SURE NOT
MY KIND OF
MAINTENANCE!

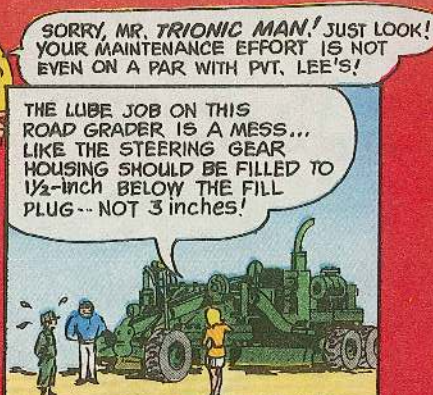


C'MON--LET'S
TAKE A CLOSE
LOOK AT YOUR--
ER--WHIZ BANG
PREVENTIVE
MAINTENANCE...



PRACTICALLY EVERY WHEEL LUG
NUT IS TIGHTENED WRONG ON
THIS 2½ CU YD SCOOP LOADER!
NONE ARE TORQUED.

FOLLOW THE
TM! NEVER
GUESS AT
PROPER
TORQUE!



THE LUBE JOB ON THIS
ROAD GRADER IS A MESS...
LIKE THE STEERING GEAR
HOUSING SHOULD BE FILLED TO
1½-INCH BELOW THE FILL
PLUG--NOT 3 inches!

PM WORK ON THIS 5-TON MULTI-FUEL
IS A DISGRACE! OIL, FLUIDS AND
FILTERS NEED CHANGING.

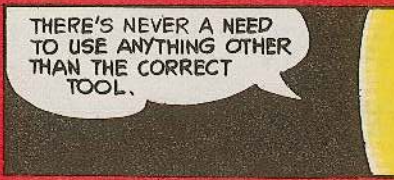


ON THIS RIG, YOU
MUST DRAIN THE
FUEL FILTERS
DAILY.

DRAIN
FILTERS



YOUR **TRIONIC** ARM IS A
GREAT TOOL, MR.
BILLION BUCKO,
BUT IT'S NOT
RIGHT FOR
EVERY JOB!



THERE'S NEVER A NEED
TO USE ANYTHING OTHER
THAN THE CORRECT
TOOL.



NEVER USE
A MONKEY
WRENCH WHEN
A TORQUE
WRENCH IS
CALLED
FOR!



TOO BAD, PRIVATE LEE,
BUT YOUR WELL-
MEANING FRIEND
HAS BATTERED
A LOT OF PARTS
BECAUSE HE
DIDN'T GET THE
RIGHT TOOL
FOR THE
JOB!

IN "SAVING TIME,"
HIS **TRIONIC**
POWERS HAVE
MADE BIGGER
JOBS NECESSARY!

!GULP:



THE MESSAGE IS:
A REAL PRO DOES IT
RIGHT THE FIRST TIME
AROUND!

HERE--HANG
THIS POSTER
AS A
REMINDER!



Joe's Dope Sheet

Connie Rodd's EQUIPMENT MAINTENANCE Bill of Rights

- ✓ RIGHT TM
- ✓ RIGHT LO
- ✓ RIGHT TOOLS
- ✓ RIGHT PARTS
- ✓ RIGHT CHECKS
- ✓ RIGHT ON

Right on is the way it'll be,
If you hack it this way, you'll see--
Be right the first time
With tool or with rhyme,
With PM a Pro you can be.

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.



SUPPLY IS A TRICKY AREA, FILLED WITH "GET IT RIGHT THE FIRST TIME" TRAPS.

THIS CHART MAY HELP!

AR 710-2

FM 10-14

GOOD ALL AROUND SUPPLY REFERENCES

UNDER DLOGS YOU NEED

TC 38-2-1

SAILS CALLS FOR

TM 38-711-18

DA PAM 310-10

GUIDE FOR PUBLICATIONS SUPPLY PERSONNEL

HELPS GET PUBS, BLANK FORMS YOU NEED.

SB 700-20

GETS END ITEMS AND TMDE

CTA 50-970

HELPS GET EXPENDABLE ITEMS

Important: up-to-date repair parts manuals on your specific equipment are a must.



TRY THESE SOURCES FOR STARTERS:

AND THERE'S PLENTY OF HELP AROUND FOR THE ASKING!

- **MAIT**—Maintenance Assistance and Instruction Teams. Always ready to help when you've got a problem you can't handle. MAIT is as near as your telephone.
- **LAO**—Logistic Assistance Offices of Army Materiel Command. LAO maintenance technicians on practically all army tactical equipment are all over the army. Check your phone book... or ask your support.
- **Field maintenance technicians** from AMC Commodity Commands.
- **Your NCOIC** or your shop supervisor. They're high up on your assist list.
- **YOURSELF**... most important!

OK, NOW JUST A FEW FINAL REMINDERS!

DOING IT RIGHT DOES NOT INCLUDE GOING BEYOND YOUR AUTHORIZED MAINTENANCE LEVEL!

IF IT'S A SUPPORT JOB, LET SUPPORT DO IT!

THAT SAVES TIME, MONEY AND GRIEF ALL AROUND.

RIGHT ON!

IT DOES INCLUDE CAREFUL, CORRECT REASSEMBLY ON ANY EQUIPMENT YOU LUBE, CLEAN, INSPECT OR REPAIR!

EARLY DISCOVERY OF MINOR FAULTS PREVENTS MAJOR COSTLY REPAIRS.

YOU CAN MISS A LOT OF THEM WITH SHORTCUTS.

PANTS

YOU CAN PREVENT MAJOR OVERHAULS BY PROTECTING FRAGILE ITEMS GOING FROM YOU TO SUPPORT.

...AND DO YOUR TROUBLESHOOTING STEPS IN ORDER! REMEMBER: SHORTCUTS ARE A PM NO-NO!

WHATEVER YOU DO, YOU GET QUALITY CONTROL WHEN YOU DO IT RIGHT THE FIRST TIME!

HOW ABOUT A KISS, DOLL?

HMMMM

YOU ASKED FOR IT, YOU BIG LUG!

BOING TILT!

GASP WHAT HAPPENED TO HIM, CONNIE?

LIKE I FIGURED! AN EMOTIONAL TRIONIC OVERLOAD!

... HE BLEW A FUSE!

COMMUNICATIONS

BEEFED-UP ANTENNA BASE

SORRY, CHIEF... WE CAN'T TOPPLE IT-- THEY'VE BEEFED-UP TH' BASE!

BULLY FER THEM!... BUT IT WON'T HELP OUR DAM.

Dear Editor,

There's no end to repairing—or replacing—the base plate for the AN/TRA-37 antenna group. The edge of the plate is thinner at the sides than it is at the corners, so it chips and cracks. This calls for repairs by welding.

So we beat the problem by having the side edges built up to the same thickness as the corner edges.

Besides adding strength, this makes for even ground contact all the way around the plate instead of just at the corners.

YOUR MONEY SAVING SIGNAL COMES IN LOUD 'N' CLEAR, SARGE!

SSG Paul Hunter
172d Infantry Bde
Alaska

EDGES CHIP—
CRACK...

... NEED
REPAIRS BY
WELDING...

... BUILD SIDE
EDGES TO
SAME THICKNESS
AS CORNER EDGES

YE
EDITOR
P&S
MAGAZINE

SEATING'S IN THE CARDS

Dear Half-Mast,
Quarterly PM checks and services in TM 11-5805-382-12 (Dec 67) for the TD-660(I)/G multiplexer say to inspect the seating of pluckout items. How do you check the seating of such items as the 11A5 or 11A26 channel

SP4 J.R.W.

I GUESS ONE COULD SAY I'M SEATED-- BUT I'LL NE'ER AGAIN BE ABLE TO GO STRAIGHT!



Dear Specialist J.R.W.,

Glad you asked.

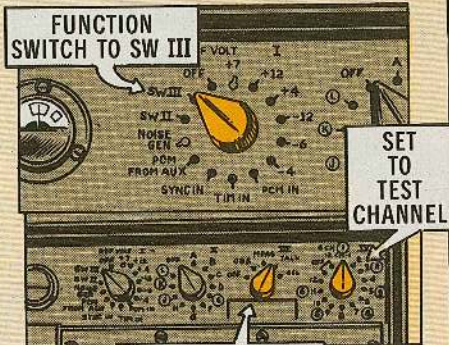
Set the function switch to SW III.

Set switch 3 to MEAS (measure).

Set channel switch to channel to be tested.

Then, attempt to vary channel gain of that channel. If you can adjust gain, you are seated. If you cannot, you may have a bent pin on the panel or card.

When you're plugging in the card, make sure the square key is lined up before pushing the card in slowly. If you try to muscle it in you'll bend the pins.

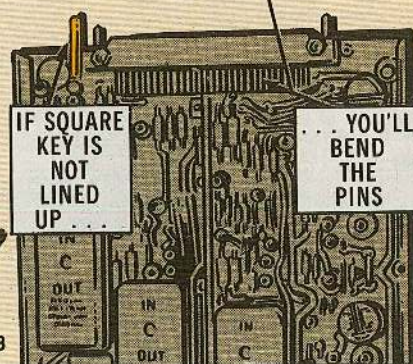


SWITCH 3 TO MEAS

SQUARE KEY LINED UP



IF A PIN DOES GET BENT, GENTLY STRAIGHTEN IT WITH A PAIR OF NEEDLE-NOSE PLIERS!



38

TA-312 TIE-IN CAUTION

HEY, GEORGE-- ASK BONNIE WHAT SHE'S GOT ON TONITE, WILL YA?

Tying in a TA-312 telephone set with your plain model AN/GRC-122 or -142 RATT rig?

Fine . . . but hold up and heed!

Before you hook up the TA-312, make sure the TEL/REMOTE-CW switch on your SA-1554 switch assembly is in the TEL position.

TEL



REMOTE-CW

PROTECT DIODES IN MD-522 WHEN RINGING WITH TA-312

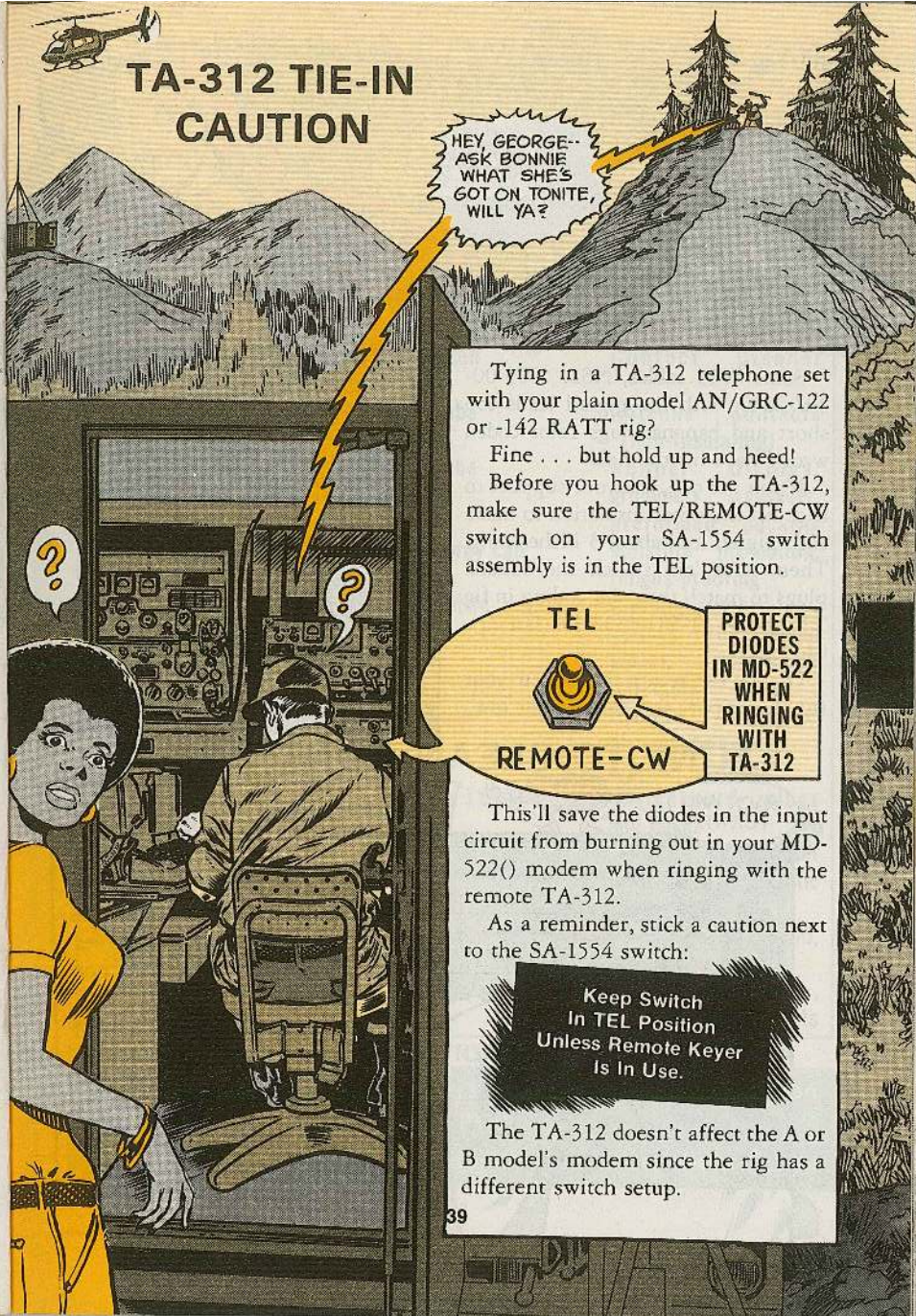
This'll save the diodes in the input circuit from burning out in your MD-522() modem when ringing with the remote TA-312.

As a reminder, stick a caution next to the SA-1554 switch:

Keep Switch In TEL Position Unless Remote Keyer Is In Use.

The TA-312 doesn't affect the A or B model's modem since the rig has a different switch setup.

39



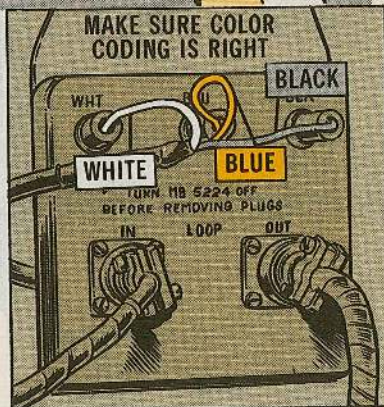
CABLE NOT ABLE?



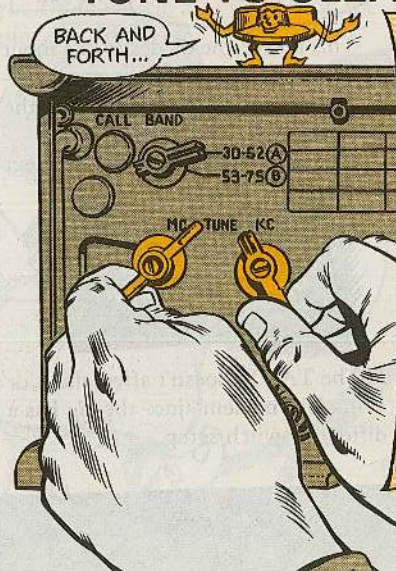
Some W15 cables, NSN 5995-00-407-2810, with the pigtail leads too short and banana plugs color coded wrong have hit the field.

If you get one, ask your support to back off the outer insulation to make each pigtail lead about 3 inches long. Then, have 'em switch the banana plugs to match the color coding in fig 7-5 of TM 11-5815-332-15 (Jan 71), Ch 2.

Or, you can return the cable to your supply support and get another one.



TUNE TO CLEAN CONTACTS



A twist of the wrist can help head off trouble on your AN/VRC-12 series radio set.

That's right. Tuning contacts get dirty if you don't change frequencies on your RT-246(), -524() receiver-transmitter or R-442() receiver now and then.

So, give your gear a helping hand by turning your tuning switches back and forth several times. This'll help clean the contacts.

And, you may try tuning past the operating frequency and then tuning back to it. This will clean contacts, too.

CLEANERS TO COMMUNICATE BY



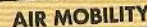
Cleaners, sealants, moisture-fighters and the like come in mighty handy when it comes to taking care of communications/electronics equipment.

Some of these wiper and dabber preventive maintenance aids for radios, telephones, radar, etc., are:

NOMENCLATURE (NSN)	QUANTITY	SOME USES
Trichloroethane (6810-00-930-6311)	12-oz can	Contact Cleaner
Silicone grease (9150-00-257-5358)	8-oz tube	Antenna Contacts (non-Insulating)
Silicone compound (6850-00-880-7616)	8-oz tube	Rubber O-rings, grommets, gaskets, preformed packing
Varnish (8010-00-515-2487)	1-pt spray can	Moisture protection, fungus-proofing
Denatured alcohol (6810-00-201-0906)	1-pt bottle	Cleaning plugs, springs (in humid areas), searchlight reflectors
Cleaning compound (6850-00-597-9765)	1-gal can	Grease, fungus, dirt remover, external surfaces
Polishing cloth (7920-00-985-6849)	13½ by 11-in	Switchboard plugs and packs
Freon type TF (6850-00-105-3084)	16-oz can	Cleaning recorder heads and electronic components
Silicone compound (6850-00-927-9461)	5-oz tube	Heatsink compound, heat protection
Isopropyl alcohol (6810-00-753-4993)	8-oz can	Cleaning boards, electronic components

CAUTIONS—

- Remember, use only cleaners, solvents and adhesives on equipment as directed by tech pubs.
- Heed hazards and warnings in the pubs and on labels.



FILLING
OUT FORMS
SOMETIMES GIVES
CREWCHIEFS A
FEELING OF FLYING
BLIND. SO
HERE'RE SOME
NAVIGATIONAL
TIPS!

Q: How do you indicate that a PMI or PMP is being pulled early? TM 38-750 doesn't really say.

A: Para 4-2c (1) (a) in TM 38-750 lists the conditions for status symbol X, and one of those is when PMI or PMP is due, meaning that the hours listed in block 9 of the DA Form 2408-13 have been reached or exceeded and the PMI or PMP has not been completed. However, when you schedule the inspection a few hours before it's due, put a red diagonal status symbol in block 16. In block 17 write, "PMP No. 10 in process" or "No. 10 PE in process". As soon as you find anything that requires red X'ing, change the status symbol on the form. 'Course you must complete the inspection and all maintenance work before or by the actual due time or the status changes automatically to a red X.

FLYING FORMATION



1. DATE 10 JUN 75		2. MODEL UH-1H		3. SERIAL NO. 66-16658		4. NAME OF CREW CHIEF/MECHANIC R. Styrme		5. STATION Fort Knox, KY		6. PAGE NO. 1		7. NO. OF PAGES 1									
8. STATUS TODAY				9. AIRCRAFT TIME		10. NEXT INSPECTION DUE		11. HOT STARTS		12. LANDINGS		13. OTHER									
AIRCRAFT		ELECTRONIC		ARMAMENT		OTHER		NO. 1 ENGINE		NO. 2 ENGINE		OTHER									
1		4				TIME TO DATE 3395		TIME INSPECTION DUE 1 3420		PREVIOUS 0		DER Check									
2		5				TIME TODAY :		P.E. NO. 10		TOTAL :		OAT-									
3		6				TOTAL TIME :		OTHER :		TOTAL :		NL-									
14. FUEL (Gals or Lbs)				15. OIL (Quarts)				16. OXYGEN (PSI)				17. ANTI-FREEZING FLUID (GAL)									
SERVICE NO.		GRADE		ADDED		TOTAL IN TANKS		GRADE		ADDED NO. 1 ENG		TOTAL IN TANKS		ADDED NO. 2 ENG		TOTAL IN TANKS		APU		STATION	
1		JP-4		209		2369						12								R. Styrme Ft. Knox, KY	
2																					
3																					
4																					
5																					
6																					
7																					
TOTAL																					
18. STATUS				19. FAULTS AND/OR REMARKS				20. ACTION TAKEN				21. SIGNATURE									
/				PE No. 10 IN PROCESS E. Simmons																	

DA FORM 2408-13, 1 DEC 66

REPLACES EDITION OF 1 JAN 64, WHICH WILL BE USED.

(TM 38-750) AIRCRAFT INSPECTION AND MAINTENANCE RECORD

Q: When our unit transcribes red X's from DA Form 2404 to DA Form 2408-13, we sign the red X's off on the DA Form 2408-13 after corrective action has been taken. Our inspectors say we must also complete the 2404's by placing an initial over the status symbol and having a TI sign off on that form, too. Who's right?

A: You're right! To clear a red X from the DA Form 2408-13, when the fault has been corrected, a TI's signature is required. However, after you transcribe a red X from the 2404 to a DA Form 2408-13, a tech inspector's signature is not required on the 2404 since no corrective action was taken.

ENTER
MWO INFO
ON A DA FORM
2408-14
FOLLOWING
INSTRUCTIONS
IN PARA 4-13c
OF TM
38-750.



1. NOMENCLATURE Helicopter	
2. STATUS SYMBOL a	3. FAULT b
4. REASON FOR DELAY c 5161-0017 No kits available	
5. DATE (From DA Form 2404 or 2408-13) 10 JUN 75	6. ENTRY APPROVED (Signature) A. Martin
7. DATE (To DA Form 2408-13) 10 JUN 75	

CHECK THE
INFO BELOW
ON FILLING OUT
BLOCK 7.



Q: Do you carry MWO's on DA Forms 2408-13 and -14?

A: Over due MWO's—yes. Any time an MWO is published on your equipment, it must be entered on a DA Form 2408-5 for that item but that's all until the MWO becomes overdue. Once the MWO becomes overdue, tho, it affects the status of the aircraft. Even an overdue normal MWO is considered a deferred maintenance action until it is completed. Put the appropriate status symbol in block 16, the explanation and your signature in block 17 of the DA Form 2408-13. Then, if required, enter the overdue MWO info on the DA 2408-14.

Q: What do you do when you enter a status symbol in the wrong column of block 7 on a DA Form 2408-13?

A: When a status symbol is entered incorrectly in block 7, put the entry in the next open space of the correct column, explain the double entry in blocks 17 and 18, and then sign in block 19.

1. DATE 10 JUN 75		2. MODEL UH-1H		3. SERIAL NO. 66-16658		4. NAME OF CREW CHIEF/MECHANIC R. Stymie		5. STATION Fort Knox, KY		6. PAGE NO. 1		7. NO. OF PAGES 1	
8. STATUS TODAY				9. AIRCRAFT TIME				10. NEXT INSPECTION DUE					
AIRCRAFT				TIME TO DATE				INTERED NO.					
1. ☒ X				3318:5				1 3325:5					
2. ☐				TIME DAY				P.E. NO.					
3. ☐				2:3				10 3395:5					
4. ☐				TOTAL TIME				OTHER					
5. ☐				3320:8									
11. FUEL (Gals or Lbs)				12. OIL (Quarts)				13. OXYGEN (PSI)					
SERV. NO.				GRADE				ADDED TOTAL					
1. JP-4				209 23699				12					
2.													
3.													
4.													
5.													
6.													
7.													
TOTAL													
14. FAULTS AND/OR REMARKS								15. ACTION TAKEN		16. SIGNATURE			
X Eng tach inoperative. E. Simmons								Entered status		E. Simmons			
Status placed erroneously in Electronics								in Aircraft col					
col. block 7													

WHEN YOU ENTER THE STATUS SYMBOL IN THE WRONG COLUMN IN BLOCK 7, PLACE THE STATUS IN THE CORRECT COLUMN AND EXPLAIN THE DUPLICATION IN BLOCKS 17 AND 18. SIGN IN BLOCK 19.

Q: When you fill up block 7 on a DA Form 2408-13 and go to a second page, what date goes on the new -13?

A: When you go from one page to another, enter the same date that appeared on page 1 on each following page.



PS END

**HOW LONG
IS 6 MONTHS?**

LAST 6
MONTHS OF
OPERATION!

YER
NUTZ!!
LAST 6
CALENDAR
MONTHS!

Dear MSG Half-Mast.
There seems to be a difference of
interpretation on TM 38-750, page 4-
23, para 4-12d(3): "DA Form 2408-
13 will be maintained for 6 months,
then destroyed."

Some people say that means the last
6 months of operation. Others say it's
the last 6 calendar months. And both
sides would rather fight than switch.
What's the scoop, Sarge?

SP6 C.L.R.

Dear Specialist C.L.R.,
DA Forms 2408-13 are to be kept
for 6 calendar months after the last
daily operation entry.

But TM 38-750 also requires a
current DA 2408-13 in the aircraft
logbook. So, even after six months,
one copy of the -13 should be on hand.

Usually when you put the aircraft
into storage, you take out some
components and unhook others,
grounding the aircraft.

That's why the bird is usually put
into storage with a red X status
symbol on the -13. Until that status
symbol is changed by replacing parts,
inspection and a test flight, the status
symbol stays on the form in the
logbook as an uncompleted action.

THAT WAY
THE DA 2408-13
SHOWING THAT
STATUS SYMBOL
IS CURRENT
UNTIL THE
STATUS IS
TRANSFERRED
TO ANOTHER
FORM OR
CLEARED.

DA FORM 2408-13

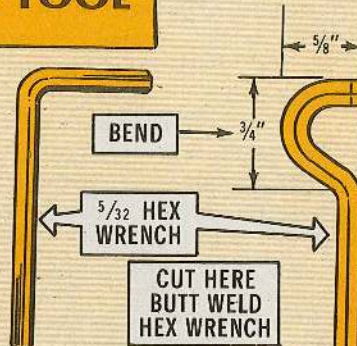
46

HOT END TOOL

Dear Editor,

I've been working for some time
with the T63-A-700 engine and pull-
ing the hot end, due to high operating
temperature, is a problem.

The rear lip of the heat shield is
directly under the area where the hot
section separates. You only have
about 1/4-in clearance between the
shield and combustion chamber. The 5
nuts are easy to reach but putting a
hexhead wrench in position to hold the



bolts is something else—impossible!

Well, we made a special tool which
saves time and elbow grease.

Just cut off a salvaged screwdriver
and weld a 5/32-in hex wrench to it, so
it's not over 8 1/2 inches long.

Bend the hex wrench as shown and
the tool is complete.

SSG Louis Adams
Louisiana ARNG

SCREWDRIVER
OVERALL LENGTH
NOT TO
EXCEED 8 1/2"

(Ed Note—Good show!
The head shed recommends
use of the tool. You should
also be able to use it in
other areas where you
have limited working space.)



47

GET IT RIGHT!

Sending a DA Form 2404 to the US Army Aviation Systems Command as per TB 750-99-15 on maintenance expenditure limitations?

Good . . . but be sure you send it to the right place. The wrong office symbol, for instance, can land your 2404 in the rock-bottom of an in-basket or cause it to get misplaced.

Submit your reports with a covering letter to:

Commander
US Army Aviation Systems Command
ATTN: AMSAV-F
PO Box 209
St. Louis, MO 63166

THE WORD'S IN
PARA 5.b(6) OF THE TB.



DEPARTMENT OF THE ARMY TECHNICAL BULLETIN MAINTENANCE EXPENDITURE LIMITATIONS FOR ARMY AIRCRAFT

Headquarters, Department of the Army, Washington, D.C.
6 June 1973

Paragraph Page

1	2
2	2
2	2

GENERAL

NEED AIR FORCE T.O.'S



If you're an aircraft handler using former Air Force ground support equipment, you could sprout collywobles trying to get Army TM's that don't exist. Go after Air Force technical orders on the equipment.

SEND YOUR
REQUEST TO:

Oklahoma City Air Logistic Center
ATTN: MMSUB
Tinker AFB, OK 73145

48

TAPE IS BETTER



Dear Windy,

Some of our Kiowas have zinc chromate on the flight control servos to prevent corrosion caused by contact between dissimilar metals.

Para 6-14d(1) of TM 55-1520-228-20 (Oct 72) says we should use dissimilar metal tape on the servo actuator support or on the trunnion plates.

Should we change over to the tape, Windy?

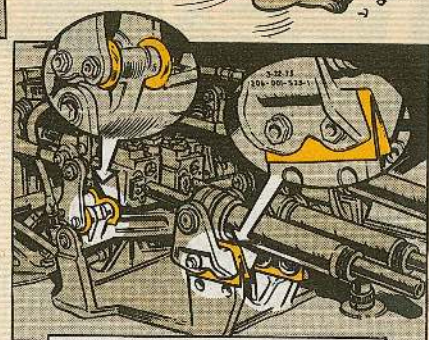
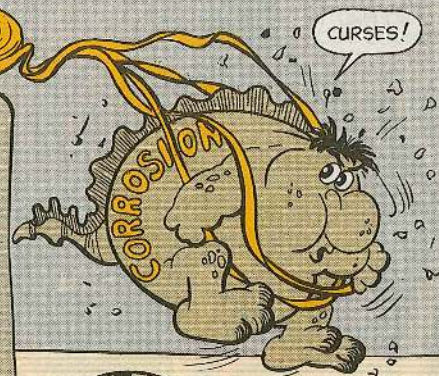
SP7 V.R.H.

Dear Specialist V.R.H.,

Yes—but only when the servo actuators or brackets are removed for normal maintenance. Zinc chromate has been used in the past but the tape gives you better protection and is easier to put on.

Ask for pressure sensitive tape, MIL-T-23142. NSN 7510-00-472-4021 will get you a 72-yd roll.

Windy



USE PRESSURE SENSITIVE TAPE

AVGAS SWITCH

The "word" from the aircraft head shed is that the Army is going to 100/130 AVGAS as the primary recip fuel, in place of 115/145. The info, in USAVSCOM Message AMSAV-FEG 051354Z Jun 75, means you'll be going from purple to green juice—maybe even a shade in between with a mixture of both during the changeover.

blue: low-lead 100/130

WONDER IF HE
WILL BE PURPLE
AFTER CHANGEOVER.



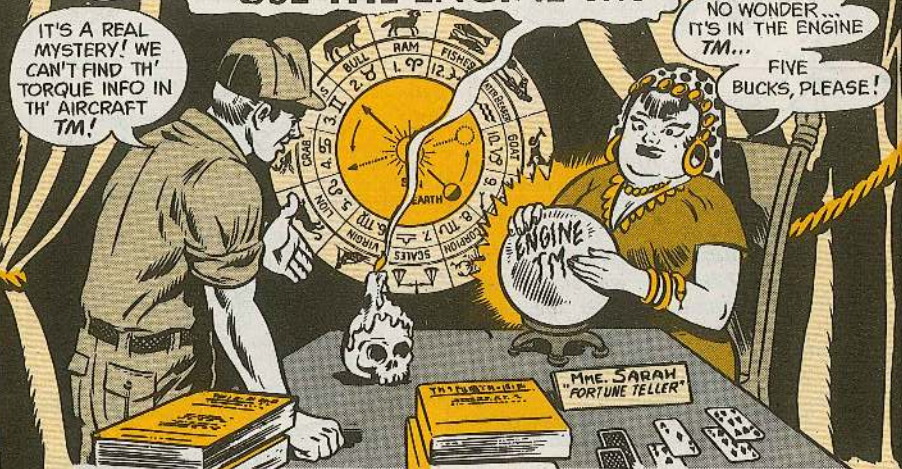
49

USE THE ENGINE TM

IT'S A REAL MYSTERY! WE CAN'T FIND TH' TORQUE INFO IN TH' AIRCRAFT TM!

NO WONDER... IT'S IN THE ENGINE TM...

FIVE BUCKS, PLEASE!



When you put a new fuel or oil line on a bird engine, use a torque wrench on the connections, knuckle-busters. Too much or too little torque can lead to leaks, so you've got to get it right.

Sure, it'll take some doing to fit a torque wrench into the close quarters of an engine compartment. But it's better than sweating out an autorotation when the fuel stops flowing!

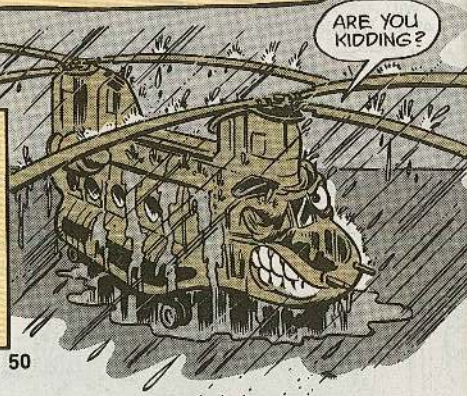
Eyeball the bird's engine TM to see how tight the line should be.

For example, Chap 11 of TM 55-2840-231-24 (Mar 72) has the torque values for bolts, screws, studs, flared tubing, tube fittings and flexible hose connections on the T-63 engine.

Even experienced mechs can't outguess a torque wrench!

OH, SAY, CAN YOU SEE?

Rain, sleet and snow reducing windshield visibility for your hot pilots? Try some rain repellent for removal of moisture—fast! Para 2-37 of TM 55-1500-333-24 (Oct 74), on cleaning aircraft, has the word on how to apply it. NSN 6850-00-139-5297 will get you an 8-oz bottle.



FOR A SECURE SAFETY

WHY DOESN'T THE BIG DODO READ HIS -20??

DROT! LOST ANOTHER WINDOW!



The problem with looping safety wire over the emergency release handles on your Huey's cargo door window is that the wire can come off.

Windows can be accidentally jettisoned.

To prevent such a revoltin' development, the head shed says to drill a 1/32-in hole at the end of the handle to accept the safety.

Use .020-in copper breakaway wire for your safety, as called for in para 4-34e(3) of TM 55-1520-210-20 (Sep 71). If you're fresh out, NSN 6145-00-236-9503 will get you a pound.



SURVIVAL KIT PM

Are you riding herd on aircraft survival kits? Eyeball a copy of TM 55-1680-317-23 & P (Aug 75) for the latest word on them.

Preventive maintenance checks and services are done prior to issue, every 90 or 180 days, before and after repair or modification... per Chap 2 of the TM.



WHEN PARTS IN THE KIT CAN'T BE REPAIRED, OR ARE MISSING, ASK FOR NEW ONES, CITING APPENDIX A OF CTA 50-910 (JUL 74).



BE YOUR OWN
INSPECTOR . . .

MALL ELECTRIC GENERATORS

No outfit runs very long if its electric power supply stops. And you can up your own stock as a generator operator with good once-over inspections.

SAVE YOURSELF
HOURS--OR DAYS--OF
BREAKDOWN, AND PARTS
REPLACEMENT, LIKE SO...

AROUND THE HORN

Give your kilowatt kicker a general scanning to begin with. See whether the frame is bent. Was the rig set up straight? No cowlings flapping loose or shrouds rattling around? Look for signs of leaks and drip spots on the ground or floor. Have an eye for rust, crushed or dented places, and heavy deposits of greasy dirt.

Then get after specific sections of your juice generating jewel.

HEY, WHO TURNED
OUT TH' LIGHTS?

*!!@☆#

GET JENNINGS--
ON THE DOUBLE!!

YEAH-- TH' OL' MAN'S
LIGHTS ARE OUT, TOO!

WHAT
TH'--

YESSIR!

SGT! RESTORE
THESE LIGHTS--
AT ONCE!!

CONTROLS

OFF-RUN SWITCH—Loose, broken; won't work.



AIR INTAKE SHUTTER—Set wrong for season. (Summer setting is used for weather above 32°F; Winter for below freezing.)

CHOKER CONTROL LEVER—Broken, spring missing, stuck open/closed.



GOVERNOR CONTROL—Stuck, broken, open; not in governor position; spring weak, missing, set.

FUEL SELECTOR
VALVE—Loose; handle
broken or bent; con-
nections loose, drippy.



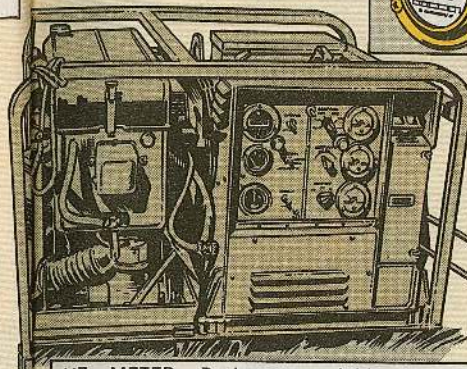
AND INSTRUMENTS

STARTING SWITCH—(unless yours is rope-start) Broken; toggle loose, base nut loose, missing; switch not working.



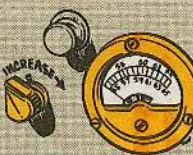
STOP BUTTON—
Damaged, sticking.

TIME TOTALIZING METER—
Broken, not working.



HZ METER—Broken, unreadable.

VARIABLE RESISTOR
KNOB—Loose on
shaft, not working
smoothly (Fixes are
DSU!)



CIRCUIT BREAKER—
Not set according to
safety SOP of post or
unit; not in tiptop
shape (this is one
switch you don't fool
around with).



LOAD METER—Red line indistinct,
glass or other parts broken.



CURRENT SELECTOR SWITCH—
Broken, loose, not working.

VOLTMETER—Glass cover broken;
meter out of order, unreadable.
Needle missing.



VOLTAGE SELECTOR SWITCH—
Broken, not consistent with voltage
output (when in use).

FIELD FLASH SWITCH—Not working
right; loose on shaft/panel; broken.

SHINE TH' LIGHT
A LITTLE MORE TO
TH' LEFT, PLEASE,
BONNIE!

RIGHT
ON!

THE OL' MAN WAS
WORKING ON
TOMORROW'S
FIELD PROBLEM!

YEH-- SOUNDS
LIKE HE'S A
MITE UPSET!

TELL
JENNINGS
T' HURRY!

WOW! I NEVER
EVEN HEARD
THOSE WORDS
BEFORE!

STICK
AROUND-- HE'S JUST
GETTIN' WARMED
UP!

PANELS, PLATES

DATA PLATES—Wrong NSN or model number shown; plates missing or painted over; rivets loose or missing.

DECALS, PLACARDS—Warning decals or instruction plates missing, covered with paint.

CARBURETOR—Linkage loose, bent, sticking.

OIL DRAIN PLUG—Loose, missing; pan leaking.

AIR CLEANER—Not serviced; hoses cut or cracked; hose clamps loose, missing. Air restriction indicator red; indicator spring weak.

SEDIMENT BOWL—Dirty, leaking (if you clean it, use a new gasket). Swing bail loose or broken; adjustment screw threads stripped, crossed.

ENGINE

IGNITION—Spark plugs not serviced; spark plug cables cut, loose; shielding frayed.

PREHEATER—Crushed, deformed; hoses cut, crushed.

CONTROL RODS—Ball joints jamming; nuts gone; unlubed; bent; adjustment jam nuts rusted, stuck, missing.

OIL FILL/LEVEL—Dipstick missing, broken; entire assembly missing, broken. Oil level low.

FULL | SAFE | ADD

CYLINDERS—Cooling fins broken, gook-loaded; baffles bent, missing; baffle springs gone.

FUEL TANK—Lines loose, crushed, leaky; tank dented, cap loose, missing; strainer damaged, missing.

STARTING PULLEY—Throat gashed. Nut on mount bolt loose; slots sharp-edged; flanges bent. (If coil cover is damaged, it's your unit mech's job to fix it.)

GOVERNOR OIL TUBE—Crushed, blocked, loose.

RADIO SUPPRESSORS—Connections lost, cut; damaged; nuts loose, missing.

OIL FILTER—(the very small rigs, under 3-KW, don't have 'em) Not serviced, gasket damaged.

BREATHING LINE—Crushed, missing, disconnected.

EXHAUST—Connections loose, leaking. (If your generator is in a closed space, doublecheck this item. Exhaust gas is deadly.)

MUFFLER—Rusted out, damaged.

FOUND
TH' TROUBLE!

'BOUT
TIME!

THERE--
THAT SHOULD
DO IT!!

YAY--
THE POWER'S
BACK ON!

SHOW SPEC
JENNINGS THIS
BYOI ARTICLE
IN PS-279!

OPERATOR SERVICE TIPS

When you change oil, keep grit out of the lube. Leave the innards of your fuel bowl Capital-C clean and change the gasket whenever it's dirty or damaged.

Canvas covers for generators which are part of PU's—power units—are optional. So, if you have canvas, keep a close watch for mildew, rips, tears.

Besides making sure of your ground rod and ground wire, lay an eye on your bonding strap.

Everywhere there's a brace or bracket, check by hand to see if the clamps or base nuts are tight.

Water is not an inspection point, but keep it out of voltage regulators, resistors, transformers, chokes, terminals, frequency converters and such. Otherwise, short-circuit burnouts are what you'll get. While you're inspecting, wipe up excess water.

Keep spare fuses. Never foil-wrap the cartridge type!



When you use an auxiliary tank, 5-gal fuel-can, or whatever for fueling, handle and eyeball it carefully. Water, rust, gunk, leaky lines, and sloppy handling can be a blast!

PUBLICATIONS

Some good word in print that you may need will be in pubs like:

TM 5-6115-271-14 (Jun 70) with Ch 1 and 2 for 3-KW Mil Design sets
TM 5-6115-323-15 (Sep 70) with Ch 3, for 1½-KW sets, MD type.
TM 5-6115-332-12 (Aug 70), for 5-KW MD generators.

TM 5-6115-365-15 (May 66) with Ch 1-4, for a whole host of PU-type rigs.

LO 5-2805-203-12 (May 72) for the engines of 3-KW sets, MD type (4A032-1 and -2 engines).

LO 5-2805-257-12 (Feb 72) for engines on 1½-KW Sets, MD (Models 2A016-1; -2, and -3).

LO 5-2805-258-12 (Feb 72), for engines on 5-KW MS sets (Models 2A042-2 and -3).

Your smaller power-producers usually don't need lubing, except for some oil-can points. See your -12 manual for exceptions... and be sure you do check out the lubrication order on sets 10-KW and over.



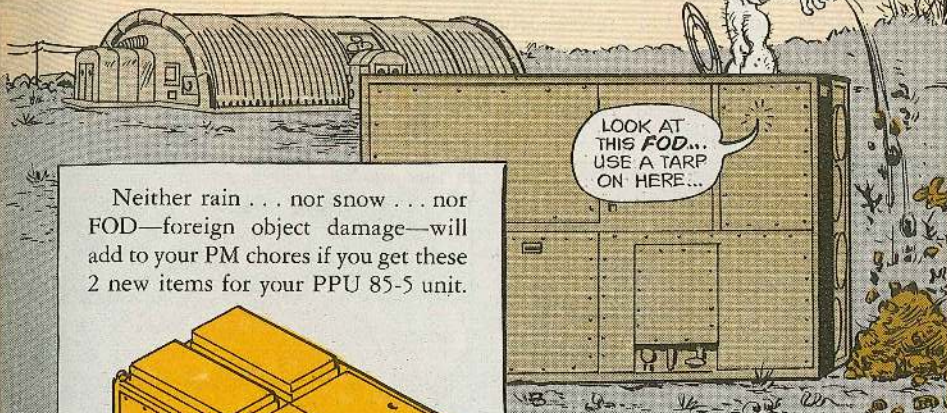
IF YOUR
GENERATOR IS
NOT A MIL DESIGN
OR MIL STANDARD,
THERE IS A
LUBRICATION
ORDER ON IT!

PS END

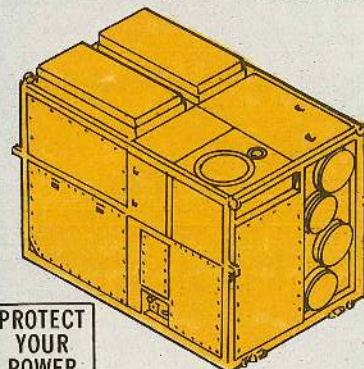
MUST—MEDICAL UNIT SELF CONTAINED

POWER PLANT PM

THIS IS
ABOMINABLE!



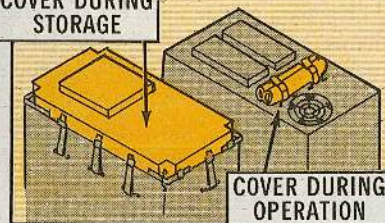
Neither rain... nor snow... nor FOD—foreign object damage—will add to your PM chores if you get these 2 new items for your PPU 85-5 unit.



PROTECT
YOUR
POWER
UNIT

Use NSN 6115-00-138-8127-P/N 13220E5242(97403)—to get a canvas tarp that covers the top of the power

COVER DURING
STORAGE



plant, and NSN 6116-00-149-3497, P/N 13220E5240(97403) to get a metal grill.

METAL GRILL PROTECTS ENGINE



Use the grill to cover the gas turbine engine's exhaust duct. It keeps sticks 'n' stones and other junk from giving the gas turbine engine a case of indigestion.

The canvas tarp keeps out rain, snow, sleet, dirt and such stuff from gumming up the power plant when it's idle—or when you're moving the unit to another site.

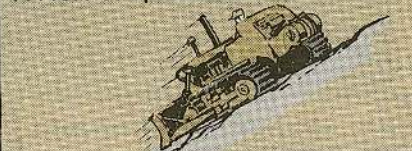
TRACK

Operating know-how is the meat 'n' 'taters on the PM menu when operating combat engineer track vehicles. Dessert is the savings in equipment parts wear 'n' tear, fewer parts replacement, and less downtime.

Side hill operations . . .



... reverse operations . . .



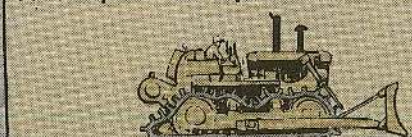
... high speeds . . .



... track spinning . . .



... and poor track adjustment . . .



... cause cruel and unusual punishment on some undercarriage components.

HOW ABOUT LINK WEAR?

BETTER WRITE IT UP!

All the undercarriage components—shoes, links, rollers, idlers, sprockets—work together. When one part begins to wear, all the other parts are affected.

Keeping a wide open eye on these items is a must. Here're some tips that'll help you be a better track man.

Abusing your loader or tractor—like spinning the tracks too much—causes faster shoe wear. It doesn't get the job done any faster, either. No way!

PM

LIKE TO BE
TOP TRACK
IN YOUR OUTFIT?

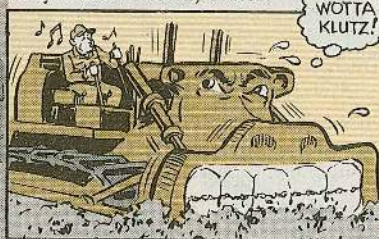
IT'S REALLY NOT TOO DIFFICULT... JUST WIDE OPEN EYES AND EARS WITH A PINCH OF CONSTANT **PM CONCERN** ARE ALL THAT'S NEEDED TO MAKE YOU TOPS IN ANYONE'S BOOK!

I'LL MAKE TRACKS WITH HER ANY TIME!

RIGHT ON!

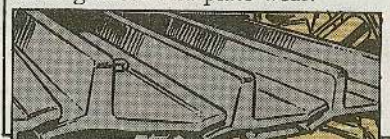
Working in abrasive material?

Keep your PM eyes open 'cause this kind of work is hard on shoe trailing edges. Trailing edge wear on shoes weakens their beam strength and they'll bend faster, easier.



WOTTA KLUTZ!

Slippage, impact, and abrasion cause grouser and plate wear.



Watch for loose bolts. They'll cause bolt holes to wallow out—get larger. You could lose your tracks.

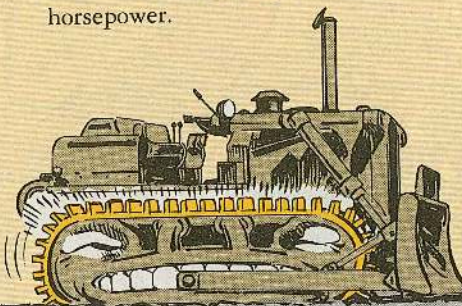


LOOSE BOLTS CAUSE WALLOWING



KEEP SHOE HARDWARE - NUTS 'N' BOLTS - TIGHT! THIS DOESN'T MEAN, THO, THAT YOU KEEP TRACK ADJUSTMENT TOO TIGHT - OR TOO LOOSE!

A track that's too tight can damage the final drive hubs, bearings, and gears. It adds stress, speeds up track wear and cuts down on drawbar horsepower.



Tracks that are too loose whip at high speeds—slam-banging against the carrier rollers. Your tractor'll ride up and out of the track. This adds more

HEY--I'M BAREFOOT--



--I FEEL LIKE A KID AGAIN!

wear on idler and roller flanges, and the sides of the sprockets.

This slam-bang deal spalls the track links, too, but spalled links won't decrease idler or roller life. 'Course, if you just have to finish a job with a loose track, slow down—and stop the

track whip biz.

Always adjust tracks for the environment and material you're working in. While you can't stop material buildup in the sprocket teeth in certain conditions, you can adjust the track to compensate for this buildup.

For instance, the D7F's normal operating track sag is 1½ to 1¾ inches—measured between idler and

CHECK FOR CORRECT TRACK TENSION



front carrier roller. On the D7E the proper sag is 1 to 1½ inches. So, adjust the D7F's tracks for a 2 inch sag and the D7E's to 1¾ inches in "heavy" stuff.

AND ALWAYS MEASURE THE SAG WHILE YOUR TRACTOR OR LOADER IS IN ACTUAL WORKING CONDITIONS!



Dirt or clay packed in the sprocket tooth causes tip wear because there's a mismatch between the sprocket and track pitch. This material buildup also increases wear on the reverse side of the bushing.



DIRT PACKED HERE CAUSES TIP WEAR

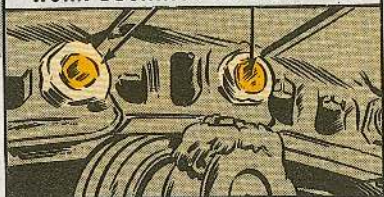
In some soils you'll get equal wear on the link pins, internal and external bushings. You can be sure these items are getting extra wear if the sprocket teeth are unevenly worn.

When you see internal bushing wear, expect to find an extended track pitch. Increased track pitch makes other components wear faster because of the mismatch between the sprocket and track. Sprocket wear will be all the way to the sprocket tips.



Operating your tractor or loader too long with worn link pins and bushings causes severe wear on bushing ends and link counter bores.

WORN BUSHINGS OR LINK PINS?



"Snakey" tracks are sure signs that you're getting some wear on bushings and links. Or, the wiggle-waggle tracks could be from links prying apart when you're operating in rocky soil.



Pins and bushing wear—'specially on the reverse drive side—is common if you operate your tractor at high speeds or in reverse under load. Like maybe push loading or backing up steep grades.

Take a good look at the link rail. Got any "dips" in it? They're caused by impact on the rollers and idler.

CHECK YOUR LINK RAIL FOR WEAR



Be wide awake when you look at the track roller guards. Keeping 'em in

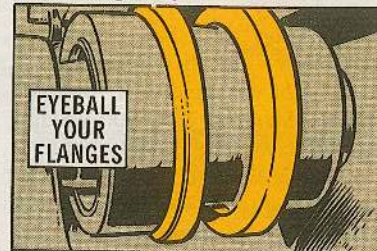
GUARDS IN GOOD SHAPE?



tip-top shape adds operating hours to pins, flanges, sprockets, and idlers. Changes that snakey driving pattern to a straight line, too.



Doing a lot of side hill work calls for extra under-carriage spying. Look for special wear patterns on the idler and roller flanges. If your track roller frame

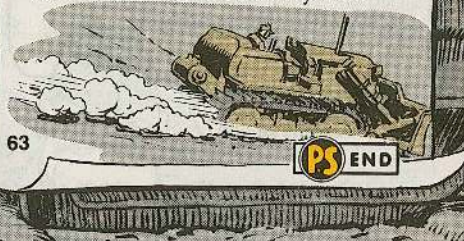


is misaligned or the wear strips or shims are worn out, you'll get extra idler flange wear.

Out-of-position idlers don't make for long life, either. If you're dozing, put them in the low position; if you're using the drawbar, use the high position.

Track guiding guards keep the track lined up with idlers, rollers, and sprockets. So-o-o-o, watch those guiding wear strips closely. They contact the pin ends as pins and internal bushing wear occur. If the guiding guard wear strips hit the links you've got another wear area to watch.

Making like an Indy driver . . . spinning your wheels, er tracks . . . cowboy around with a 16-ton tracked vehicle will get you a lot more belly aching extra maintenance. Know your track PM for loaders and tractors. Then operate those "tracks" with common sense and a steady foot.



WELDER'S WOE . . . WHEN SEAMS BREAK AND GO

Separation is bad news to matrimony—and disastrous when it hits a joint you welded. If you use a Military Standard LTO-300 welding rig, you have to be double careful.

You just have to have it adjusted exactly right for it to run right. Otherwise, you lose your arc . . . or your seam cracks.

So read and heed Para 2-11a(7) and (8) in Ch 2 as carefully as you do the rest of Para 2-11 in TM 5-3431-221-15 (Jan 70). That's where the vital word is.

CO2 FIRE EXTINGUISHER . . .

PLASTIC SEALS?

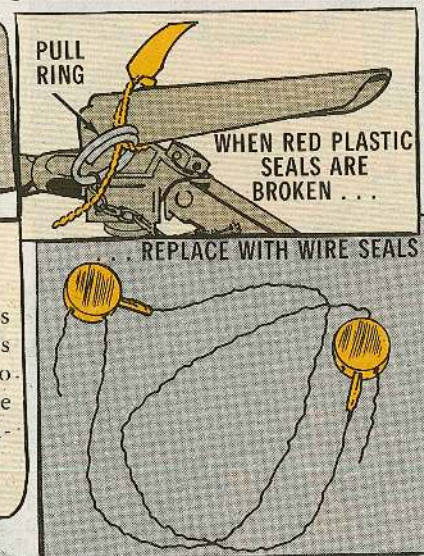
Dear Half-Mast,
We received some new CO2 fire extinguishers with a red plastic seal holding the pull pin in.
Do we replace these plastic seals with wire seals?
CW2 R.F.E.

Dear Mr. R.F.E.,

There's no real need to.

Those seals are manufacturers tamper seals. They do the same job as the wire ones. They're easier to install—no crimper needed. Replace 'em with wire seal, NSN 5340-00-391-4240, when they're broken.

THERE'S NO
NSN FOR THE
PLASTIC SEALS!



ADJUST YOUR
LTO-300 R16
ACCORDING TO YOUR TM

IT'S THE
OPERATOR'S FAULT!

YEH—HE SHOULD
READ TH' TM!

I'M SO
EMBARRASSED!

Connie's
Mini Mini's



IT'S THE TRIONIC MAN'S
HEART, CONNIE! HE SAYS
ONLY YOU CAN FIX IT!



Date a DA Form 2410

You aircraft and missile types working with DA Form 2410 Component Removal and Repair/Overhaul, beware! Take a look at the left-hand corner. The forms dated Oct 74 are no good. Tear 'em up. Go with the 1964 editions of the DA 2410. Also, check around. A new issue dated Aug 75 is out—and it's good. Before you start filling a DA 2410, eye that date. Rip up any Oct 74 forms and reach for a 1964 or Aug 75 form.

Property Book Change

If you received DA message DALO-SMS-R 021305Z in September on Chap 2 supply procedures in AR 710-2, trashcan it. That message has been rescinded.

DA message DALO-LES, 281300Z Nov 75 has new instructions.

It changes para 2-7d(9) of AR 710-2 to say: "File property book pages by LIN regardless of the authorization document. Put items with no assigned LIN in alphabetical order. Then, put the LIN and the no-LIN items together alphabetically."

When the first 2 letters of the LIN match the first 2 letters of a no-LIN item's name, you use the LIN item page first.

Keep your organization property book separate from the installation property book.

☆U.S. GOVERNMENT PRINTING OFFICE: 1976-657-631/7

GOER Caution

Careful, GOER Drivers! Use your accelerator pedal—not the governor lever—for all land and sea travel. That lever's only for fuel dispensing and wrecker lifting operations. Be safe, not sorry—stick to the pedal.

TM 38-750 Appendix Change

Getting ready to send out a TM 38-750 report or a DA Form 2407 EIR? Hold one!

There's a message change to Appendix B mailing addresses in TM 38-750.

DA message DALO-SMM-F R 0315267Z Dec 75 says take primary code N with secondary codes A thru H and J (under the equipment category code and line number column) and primary code P with secondary codes A thru G from:

Commander

U.S. Army Troop Support Command

and add them to:

Commander

U.S. Army Tank-Automotive Command
Warren, MI 48090

Both addresses appear on page B-2.

The change in addresses matches the change in equipment responsibility from one command to another.

Would You Stake Your Life ^{right now} on
the Condition of Your Equipment?

KNOW..

BEFORE YOU GO!

I HADDA HUNCH
THIS MIGHT HAPPEN
WHEN I HEARD THAT KLUNKING
NOISE JUST B'FORE I TOOK OFF!

MATTER O'
FACT, I ALMOST
PUT IT DOWN ON
MY 2404!...

OK...
COME ON,
LEND A HAND!

**SOMETHING
WRONG?
Report it
on your
DA Form
2404...
GET IT FIXED!**

DA FORM 2404