

Issue 358

PS

September
1982

THE PREVENTIVE MAINTENANCE MONTHLY

Has your
buddy read
this issue?

ONLY YOU CAN
STOP RUST AND
CORROSION!

HALP!

MMMM!

RUST

YUM!

CORROSION

MURPHY
ANDERSON

TM 38-750
Changes
Pages 58-63

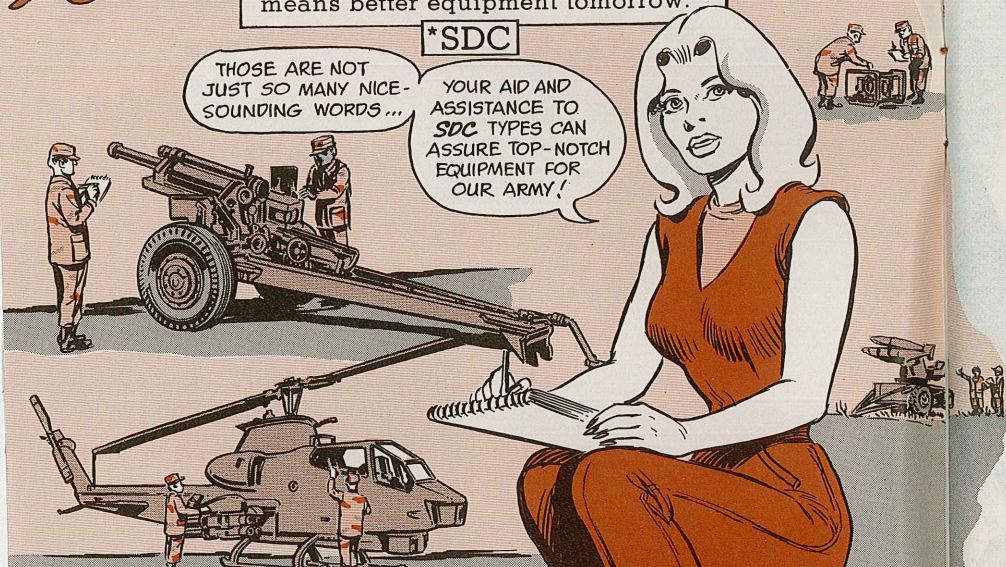
A Sample of Success

"Sample data collection* today means better equipment tomorrow."

*SDC

THOSE ARE NOT JUST SO MANY NICE-SOUNDING WORDS...

YOUR AID AND ASSISTANCE TO SDC TYPES CAN ASSURE TOP-NOTCH EQUIPMENT FOR OUR ARMY!



SDC has produced improvements on many types of equipment since the program began 10 years ago.

The Army's design engineers and technical wheels have used the equipment maintenance info to improve the M101A1 and M102 towed howitzers, M578 recovery vehicle, AN/PPS-5A radar set, AN/GRC-106 radio set, AN/GLQ-3 countermeasure set, KY-57 and KY-58/TSEC and the HAWK missile system.

Also improved through the SDC program are the M911 C-HET truck, 350-GPM pump, UH-1, CH-47, OH-58 and AH-1 helicopters and generators.

Future efforts are planned on these and other items, such as the

Patriot Missile System. Multiple Launch Rocket System, M2/M3 Fighting Vehicle System and AN/TLQ-17A (V) Countermeasure Set.

So you see that SDC has helped provide better equipment.

There are other benefits from SDC. These include improved data for technical manuals, scrapping of unnecessary PIP's (product improvement proposals), initiation of other PIP's, modification and redesign of equipment, changes in policies and procedures, identification of nonavailable repair parts, and many more.

With your help, SDC will continue to help.

Info on equipment maintenance that you make available to the people who compile the SDC reports—whether they be soldiers or civilian contractors—is vital to improved equipment.

You are depended on to report all the work you do on Army equipment being sampled.

If your unit is taking part in a sample data collection effort—and about 280 units are—welcome the SDC agent when he or she visits.



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: **MSG Half-Mast PS Magazine Lexington, KY 40511**

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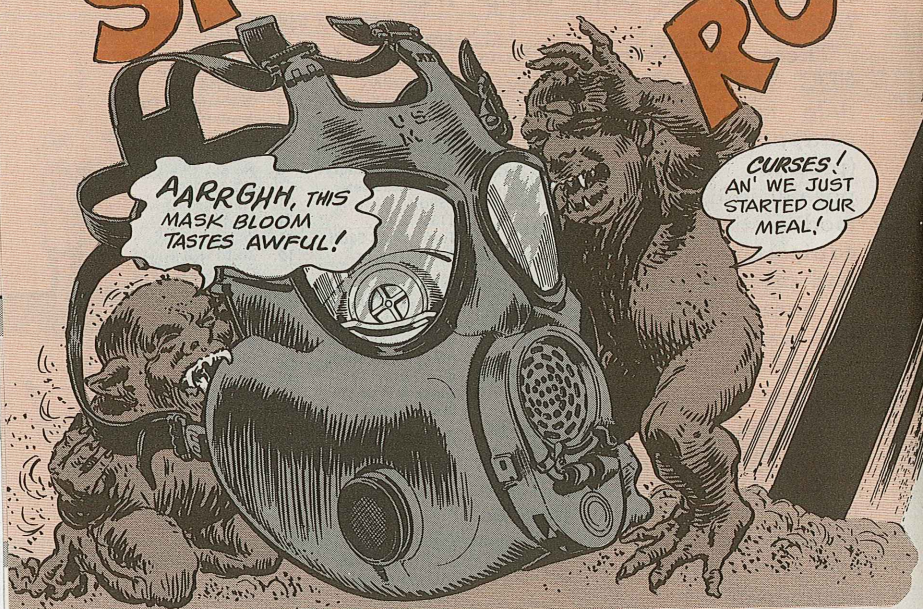
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NBC

Protective Masks...

SPOTLIGHT ON DRY ROT



Your M17/M17A1, M24 or M25/M25A1 protective mask can't guard you from chemical and biological agents when dry rot's got it by the faceblank. Dry rot eats the rubber and ruins the seal.

Learn how to spot dry rot before you get in a hot spot. Slightly stretch the faceblank and eyeball the rubber for signs of dry rot—2 or more fine cracks close together.

Never try to repair dry-rot damage. If you see signs of dry rot on the

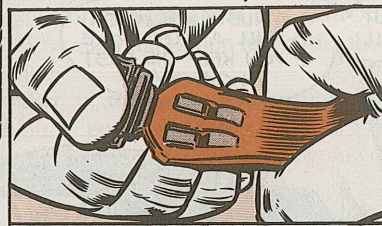
Stretch faceblank to search for signs of dry rot



faceblank, turn in the mask.

To check for dry-rot damage on the faceblank tabs, take hold of the metal

clip and buckle assembly and extend the tab 1/2 to 3/4 inch past its normal position. If the tab doesn't tear, it's OK—even if there's dry rot on it.



Check for dry rot on faceblank tabs

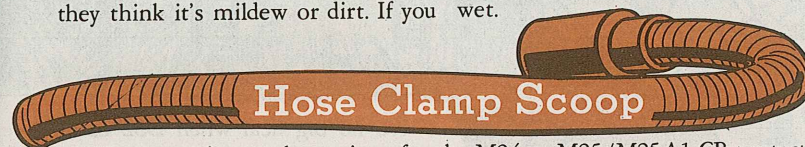
The best defense against dry rot is bloom—the white or rust-colored waxy coating on the mask. Some troops mess up and scrub it off 'cause they think it's mildew or dirt. If you

wash it off, you wash away your protection against dry rot.

Help the bloom guard your mask. Keep away from heavy-duty detergents, hard-bristled brushes and elbow grease when you clean the mask. Your best bet is just to wipe the mask clean. Use a cloth dipped in soapy water and wrung out almost dry. Rinse with a damp cloth and dry well.

Use talc, NSN 6505-00-147-0000, to dust the inside of the mask where it touches your face.

Dry rot really acts up in hot, humid, rainy weather. So keep an extra close lookout for those rotten little cracks when the weather's hot, steamy and wet.



Hose Clamp Scoop

When you change the canister for the M24 or M25/M25A1 CB protective mask, change the air hose clamp, too. Never re-use a clamp when you replace the canister.

The used clamp is already bent out of shape. It gets beat up more when you remove it from the hose to change the canister. Then it won't fit on the hose right or make a good seal with the new canister. Trash the old clamp, and put on a new one, NSN 4730-00-269-3760.

M51 CB Shelter Fan

When the poop hits the evaporator fan of your M51 CB collective protection shelter, replace the entire fan, NSN 4140-00-172-1804. No more parts or repair jobs are authorized for the fan. ARRCOM Msg DRSAR-MAD-AC 051458Z Aug 81 has the word.

No More M58 Refill Kits

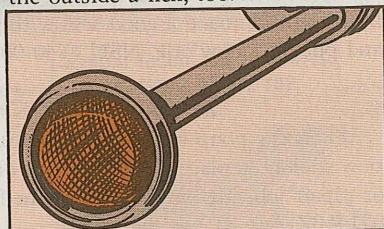
Forget about ordering the M58 refill kits for your M58 decon training kits. They're all gone. The new M58A1 refills with saturated pads are now available under NSN 6910-01-113-2434. You can use them only with the M58A1 decon training kit.

M11 Decon Doings



CONCERNED 'BOUT DECON RUST? WELL...
... A RUSTY M11 DECON IS STILL A TRUSTY ONE IF YOU KEEP THE RUST IN CHECK!

It's no big deal when DS2 decon agent or water puts a rust coating on the inside of the container. Small rust flakes in the container don't hurt either. Just wipe out the container. Hit the outside a lick, too.



You turn in your M11 as a rust-out only when rust flakes chip off and block the strainer screen

After training with water and anti-rust powder, flush out the M11 with soapy water. Rinse with hot water.

Then push in the thumb lever and blow compressed air at less than 30 PSI through the siphon tube to dry the valve.

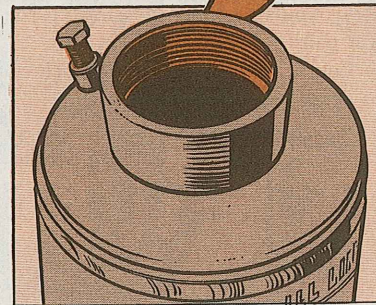
Put ¼ teaspoon of corrosion inhibitor powder, NSN 6850-00-753-4967, in the container to slow down the rust.

When the M11 has had DS2 in it, turn it over to organizational maintenance for cleaning.

You organizational maintenance types should never use water to clean out an M11 that's contained DS2. Water will make the rust worse.

Just wipe the container inside and out.

Press the thumb lever and shoot compressed air thru the siphon tube.



Lube the threads of the container neck, drain hole threads and bolt with antiseize compound, NSN 8030-00-087-8630

Add ¼ teaspoon of vapor corrosion inhibitor. NSN 6850-00-368-5233 gets a 1-lb can and NSN 6850-00-865-2916 brings a 2-oz can.

Decon Screen

Strainer screen damaged or missing? Replace the M11.

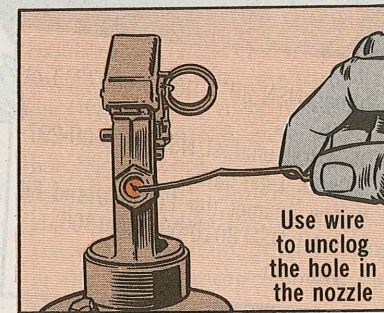
The screen filters out rust flakes and other stuff that could clog the spray head nozzle.

Whenever you remove the spray head to fill or clean the container, check out the screen on the bottom of the siphon tube.

Clogged Nozzle

A clogged hole in the spray head nozzle muzzles the M11. Unclog it with a piece of wire like a straightened paper clip, safety pin or a left-over piece from the copper safety seal wire.

Put some adhesive tape over the hole if you're going out where your vehicle might kick up some dirt or slosh through the mud. Remember to remove the tape before you use the M11.



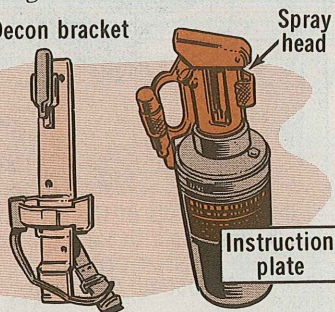
Use wire to unclog the hole in the nozzle

Painting the M11

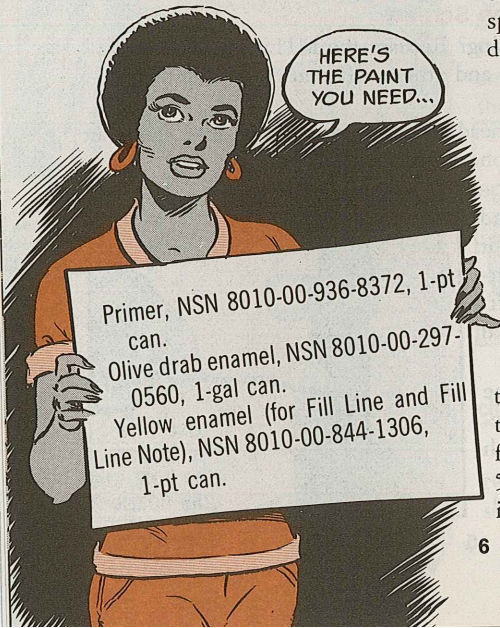
When it's time to paint your M11, empty it so you don't have to worry about spills or leaks messing up the wet paint.

Course, you can do minor touch-up painting when the M11's full.

M11 Decon bracket



Paint the container, the drain plug head and the bracket. Keep paint off the spray head assembly and the instruction plate. Mask the instruction plate



Instruction Plate

You NBC specialists don't have to turn in the M11 decon for just having a bum instructions plate anymore. Hang on to the M11 if it meets all of the other serviceability standards in TM 3-4230-204-12&P.

ARRCOM Msg DRSAR-MAO-MC 092003Z Jun 82 authorizes you to keep the M11's until the new stick-on instruction plates get into the system. An NSN for the plate is being assigned.

DS2 Decon Agent

Wondering about the storage life of the DS2 decon agent in your M11?

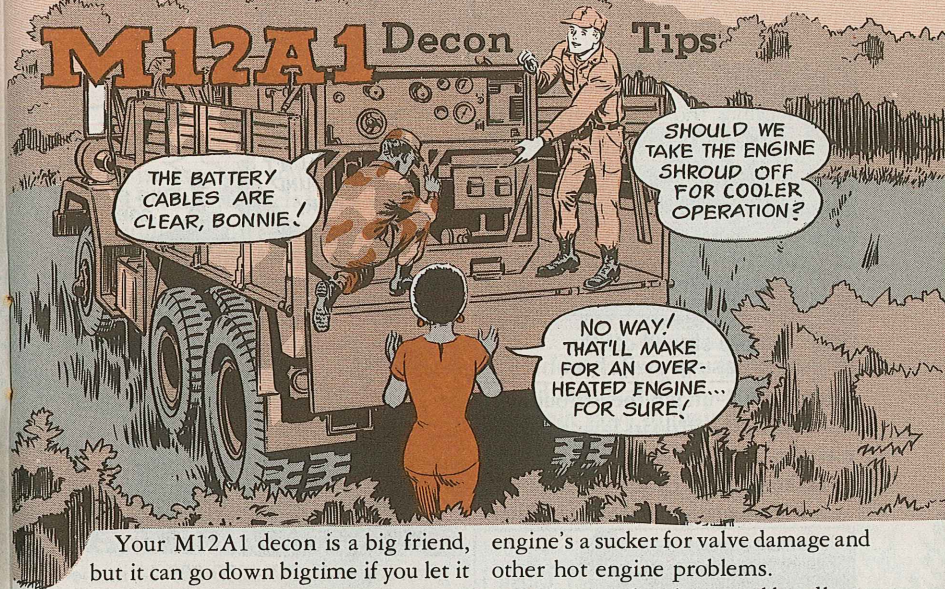
It'll keep if the containers don't leak. Air and moisture ruin the DS2. So, check the 1 1/3-qt can, NSN 6850-00-753-4827, and 5-gal drum, NSN 6850-00-753-4870, storage containers and the filled M11 for leaks. If you spot a leak, get your org shop to dispose of the DS2.



Check DS2 containers for leaks

The M11 is most likely to leak between the spray head and the container. That usually means the pre-formed packing (O-ring) is bad. NSN 5330-00-180-9903 gets you new packing.

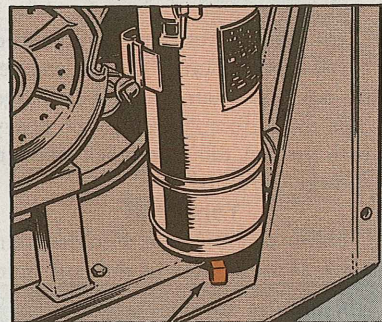
M12A1 Decon Tips



Your M12A1 decon is a big friend, but it can go down bigtime if you let it down with sloppy PM.

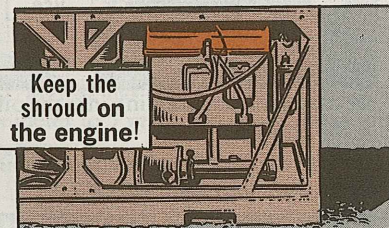
engine's a sucker for valve damage and other hot engine problems.

Make sure the air control handle on the rear engine mount is in the down position when the temperature is above 0°F. That air-cools the engine.



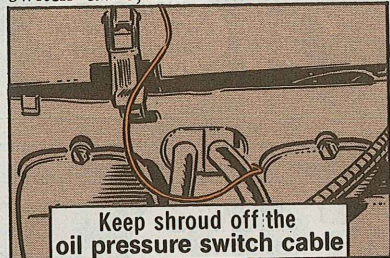
The air cleaner intake shutter stays in the summer position until the temperature dips below 25°F.

Take the air cleaner intake shutter, for example. It's easy to overlook because it's tucked away at the bottom of the air cleaner in the pump unit assembly. If you don't switch the shutter from the winter position to the summer position in mild weather, the



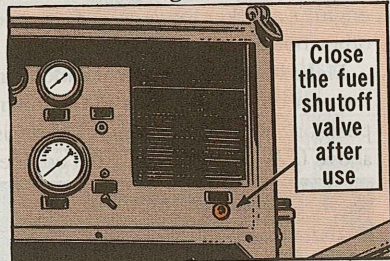
Another way to keep your engine cool is to keep it covered with the top engine shroud. With the shroud on, the engine's got it made in the shade. Without the shroud, the engine runs hot. Some troops mess up by taking the shroud off, thinking that the engine runs cooler that way. No way. Leave the shroud on. Be sure the vent in the fuel tank cap is in the open position.

Keep the shroud off the oil pressure switch cable, tho. Never thread the



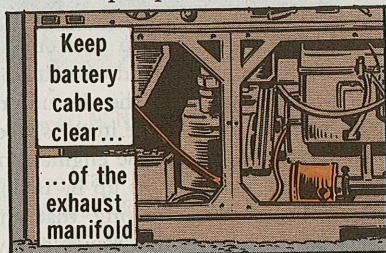
skinny cable under the shroud. The metal shroud will do its Jaws thing and bite the cable in two.

Make sure you close the fuel shutoff valve after using the M12A1. That'll



prevent gas from draining into the oil in the crankcase.

Keep the battery cable able on your M12A1's pump unit assembly.



Course, you gotta lube the M12A1 on schedule to keep it running right. Do it by the book. Make sure you've



got a copy of LO 3-4230-209-12 in the tool carrier of the pump unit assembly.

Lube the valves, nozzles, threaded parts, reel joints, pump, engine, fittings, gun assemblies and discharge pipe connectors. Never go too heavy with the goo, tho. Too much lube can damage the seals.

Tank Unit

Never play Big Foot with the drain valve at the bottom of the tank unit.



Sure, it looks tough, but it's hooked up to some parts that could get crunched.

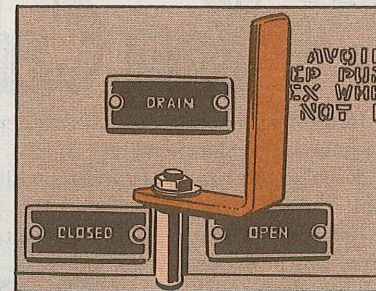
M2 Heater

Use diesel fuel when you can get it for the M12A1's M2 water heater. If you use gasoline, add 1 pint of No. 2 diesel fuel with each 5 gallons of gas. Running straight gas causes the fuel pump to freeze up.

Freezing Weather?

Temperatures going below 32°F? Water left standing in the M12A1 in icy weather will freeze and bust pipes, hoses and pump housing.

Install the side panels on the pump unit for freezing weather to keep out the cold air. Install the dust cover.



After using the M12A1 in cold temperature, open the pump drain valve to drain the water



Dosimeter Delay

Got an IM-93, IM-147 or IM-185 dosimeter ready for annual calibration? Forget it! DA Msg DRSMI-M 261435Z Mar 82 has extended the calibration period on the above "contingency" dosimeter to 5 years. TB 43-0121 has the word on service checks between calibration.

Banana Oil Ampules

You can now get easy-to-use ampules of banana oil for testing and fitting chemical-biological protective masks. NSN 6810-01-115-7792 gets a box of 100. For a pint bottle of banana oil, use NSN 6810-00-123-7047.

Radiacmeter Paint Job

Need some paint to touch up your IM-174A/PD radiacmeter? NSN 8010-00-081-0809 gets 1 quart of semigloss OD that'll do the job.

Zip! Zip! Mask Hood

If the zip goes out of the zipper on your protective mask hood, treat the sticking zipper with some zipper lube. NSN 9150-01-112-9412 gets a 5-oz tube. Rub in a drop of lube and run the zipper up and down. That'll speed up your masking time.

With Good Ammo Racks...

You Can Take It and *SHOVE* It!

In combat, a tank crew's success depends on how well it puts steel on target.

What would happen to your crew if your tank couldn't carry its ammo load?

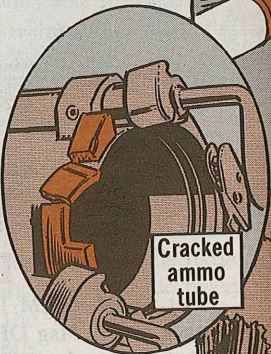
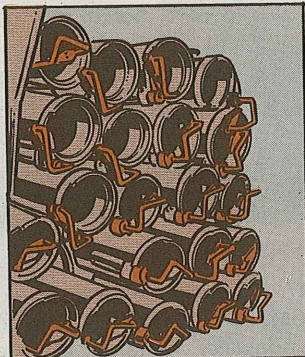
Ask yourself that question the next time you check out your ammo racks.

Then do these things...

- Make sure the ammo locking handles are closed. If they're left open and the turret is rotated, the handles will get broken or bent and the ammo tubes damaged.

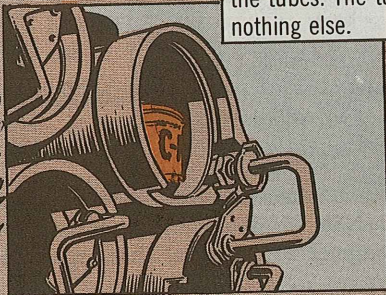
Locking handle closed!

Locking handle open!



If your mission doesn't require you to carry ammo, consider putting tape over the closed handles.

- Keep your personal gear out of the tubes. The tubes are for ammo, nothing else.



- Never use the rack handles as steps to get into or out of the tank. When ammo rack handles are broken or tubes are damaged, the tubes are useless for carrying ammo. If you can't carry the ammo, you can't deliver the steel.

SHOVE It!



WHEN YOU'RE SHOVING STEEL, YOUR LIFE DEPENDS ON THE LOAD YOU CAN CARRY!

NEVER SHORT-CHANGE YOURSELF!

Tanks...

Tachometer Shaft Replacement



Help is right between the covers of TB 43-0001-39-8 (Jan 82) for you M48 and M60-series tankers having fits replacing rear flexible tachometer shafts.

That pub lists the various tach shaft configurations with their cables.

It also gives the instructions for making and installing the assemblies.

T130 Track Update

HERE ARE NSN'S FOR T130 TRACK SHOES, PADS AND NUTS USED ON THE M113 FAMILY OF VEHICLES...



- Track shoe, NSN 2530-00-781-7793
- Pad, NSN 2530-00-690-2681
- Nut, NSN 5310-00-051-8627

The parts listed on Page 74, TM 9-2300-257-20P, for Fig 124 are for T130E1 track.

Tanks...

Roller Wheel Grease Seals

GREASE!
MUST BE A DEFECTIVE SEAL, CONNIE!

MAYBE NOT, SOLDIER...



You tank mechanics may be replacing grease seals on track support roller wheels when they're not defective.

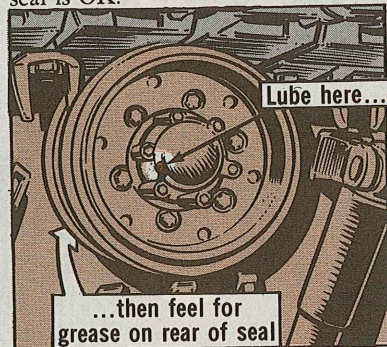
The PMCS in your tank's -20 TM says that if there's grease spattering on the inner rim of the roller, the seal is defective. That's not necessarily true.

When you lube the roller wheel according to your tank's LO, you put in enough grease to feel it on the rear of the seal. That grease may spatter on the inner rim and make it look like the seal is defective.

Wipe any excess lube from behind the roller wheel, seal and along the roller's inner rim.

Test operate the tank and inspect

again. If the spattering is still present, the seal is defective. Otherwise, the seal is OK.



You can make this inspection any time, not just after lubing. It could save you downtime and Uncle some bucks.

M110A2 Howitzer...

M4 Borescope Manual

You need instruction manual IM 9-6650-236-12&P if you've received the special purpose inspection device (M4 borescope), NSN 6650-01-102-7847.

The IM supersedes the advanced TM that was overpacked with the borescope.

IF YOU HAVEN'T RECEIVED THE NEW IM, WRITE TO...

HQ ARRCOM
ATTN: DR SAR-ASA
Rock Island, IL 61299

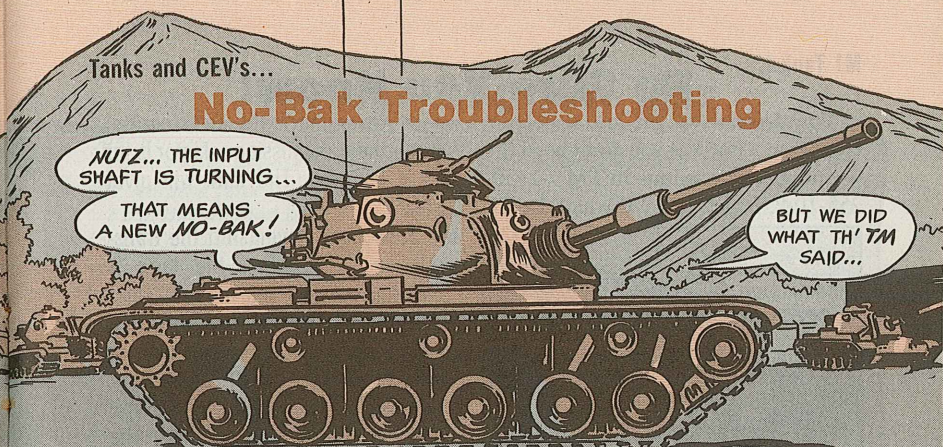
Tanks and CEV's...

No-Bak Troubleshooting

NUTZ... THE INPUT SHAFT IS TURNING...

THAT MEANS A NEW NO-BAK!

BUT WE DID WHAT TH' TM SAID...

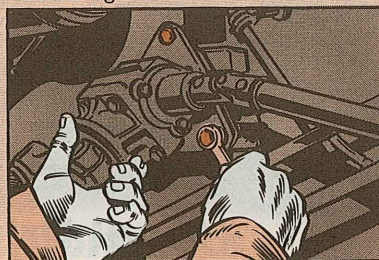


That no-bak troubleshooting in the M48A5, M60, M60A1 and M60A1 RISE tank and M728 CEV -20 TM's is not the best.

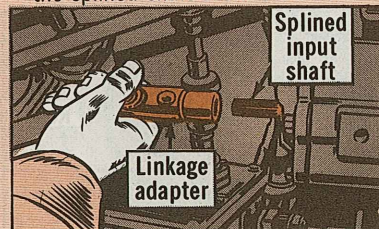
Using that info can result in damage to the no-bak or the magnetic brake, or both.

HERE'S HOW YOU TROUBLESHOOT THE NO-BAK IN YOUR VEHICLES...

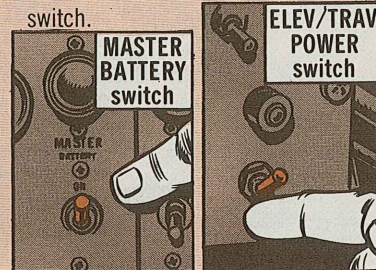
• Remove the 3 screws holding the manual traverse drive to its mounting bracket.



• Slide the linkage adapter off the splined shaft of the no-bak.



• Turn on the MASTER BATTERY switch and ELEV/TRAV POWER switch.



• Using the commander's control handle, traverse the turret at half-speed to the left and then to the right. Watch the no-bak splined shaft for movement.

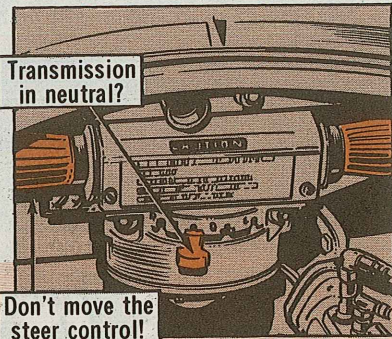
• If the input shaft rotates, replace the no-bak.

CAUTION: Never release the control handle palm switch while traversing the turret. If you do, you could cause wear or damage to the magnetic brake.

M1 Tank...

Be Sure You Know!

You drivers can get into a heap o' trouble in a hurry if you don't heed the warnings and cautions in TM 9-2350-255-10-2, Pages 2-119 through 2-122.



- Never move the steer control when the transmission selector is set to N (neutral). The tank will pivot steer.

Especially, never shift the transmission to N when the tank is moving. If you move the steer control, the tank will pivot steer. That can throw a track, flip the tank or hurt somebody—or all 3.

- Never try to pivot the tank with the transmission in neutral. The transmission must be set to PVT to pivot turn the tank. Otherwise, the drive train can be damaged and somebody could get hurt.



Final Drive

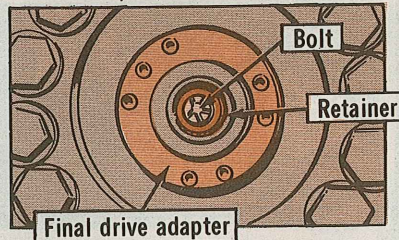
Disconnecting the final drives is important when you're getting ready to tow the M1.

If you do it wrong, or don't do it, you'll tear up some high-priced machinery.

Disconnect the final drives by the book, TM 9-2350-255-10-2, Pages 2-378 through 2-380.

Here're some added cautions:

- When you reverse the final drive adapter, be sure to put the



Fender Support Bar

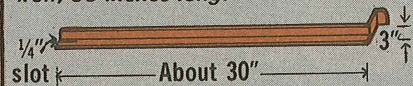
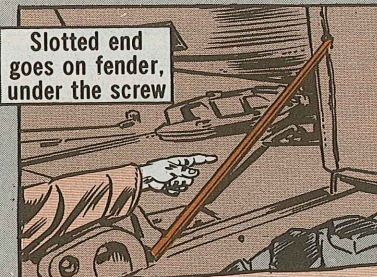
Dear Editor,

I made a bar to hold the front fenders open while I work on the track on the M1 Abrams tank.

I use this instead of the rope shown on Page 3-139 of TM 9-2350-255-10 (Sep 81). The bar keeps the fender from falling down.

I made it from a piece of 1-in angle iron, 33 inches long.

Slotted end goes on fender, under the screw



One end is slotted to fit on the fender. The other end fits in the hull lifting eye bracket on the hull.

The bar can be used on either front fender.

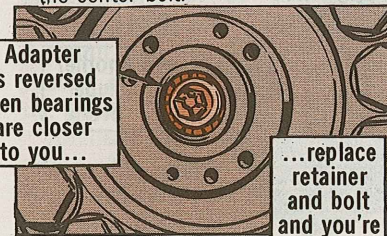
Sam Vuleta
1st Training Bde
Fort Knox, KY

(Ed Note—Good idea! Organizational Maintenance can make one of these easily.)

Disconnects

retainer between the adapter and the center bolt.

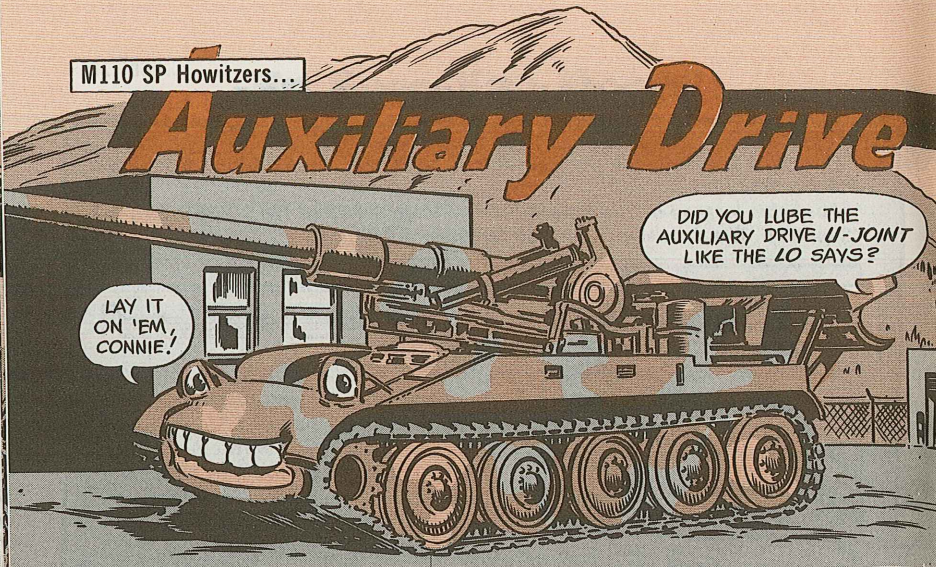
Adapter is reversed when bearings are closer to you...



- If the retainer is damaged or missing, never try to move the tank. Call your unit mechanic.

Moving the tank with a damaged or missing retainer will let the final drive gears move in and out at the point where they engage the transmission input shaft. That can cause major gear spline damage.

Auxiliary Drive Lubing



DID YOU LUBE THE AUXILIARY DRIVE U-JOINT LIKE THE LO SAYS?

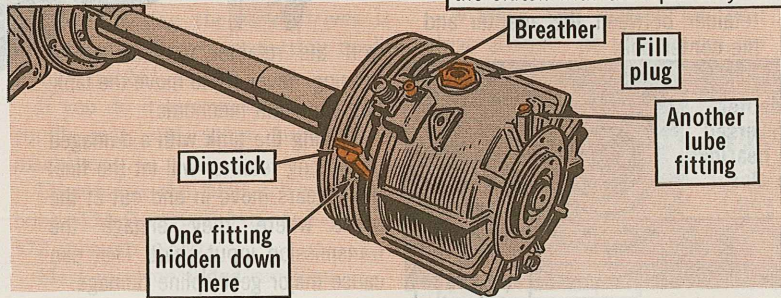


Lubrication is one thing your auxiliary drive must have to run the generator, engine cooling fan and hydraulic pump. Thing is, some lube services are being overlooked, and units are losing auxiliary drives. The good word on how to keep them going strong it in your LO: LO 9-2399-216-12 for M110 and M110A1, and LO 9-2350-304-12 for M110A2.

- Make sure the auxiliary drive clutch housing has enough oil in it. It's a quarterly check in the LO. Not enough oil causes a burned-out clutch, which leaves you with no hydraulics.

- Remove, clean and inspect the auxiliary drive clutch breather quarterly. Follow the LO's directions.

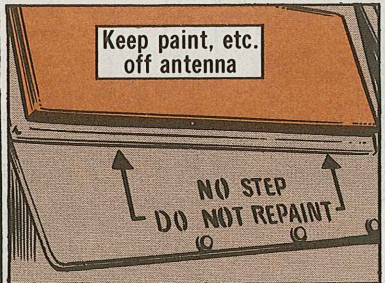
- Lube the 2 bearing fittings on the clutch with GAA quarterly.



Chaparral IFF Nix



The IFF antenna on your modified Chaparral M48A1 gets no paint, no camouflage, no coating of any kind. Leave it like it is!



Paint blocks the antenna signal... which means you can shoot down a friendly...or get blown up yourself. Or, waste a \$6,000 antenna.

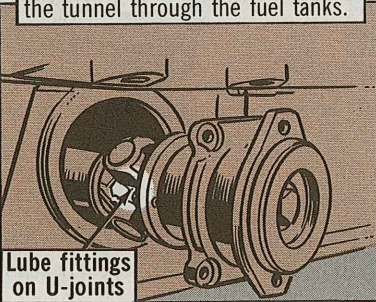
Interrogator

Another stay-away-from component is the IFF interrogator. Stay out. Remove no circuit cards. No ad-



justments are made by the unit. When the interrogator needs any work, it goes back to the manufacturer.

- Be sure to lube the auxiliary drive U-joint on the shaft located in the tunnel through the fuel tanks.



This is often not done because of its location. To get to the joints, the powerpack must be pulled. The driveshaft is disconnected at the bearing unit and then pulled just far enough into the turret well to get to the fitting.

Auxiliary drives that fail must be rebuilt. The supply system is really short of these items. Save yours and you keep operating.



Fresh Lube Needed? Yes!

Dear Half-Mast,
Even tho the LO requires periodic repacking of wheel bearings, is it really necessary when the equipment has had little or no use? Some of our trailers are rarely used.

The old grease in the bearings looks brand new, altho it's a little hard. Is it OK to skip the periodic lubrication in this case? Will leaving the old grease in there lead to any damage?
PFC R. A. B.

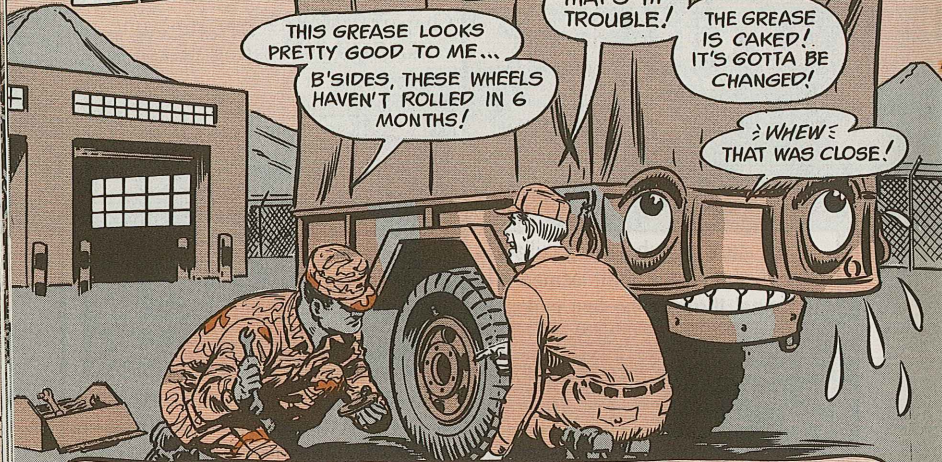
THIS GREASE LOOKS PRETTY GOOD TO ME...

B'SIDES, THESE WHEELS HAVEN'T ROLLED IN 6 MONTHS!

THAT'S TH' TROUBLE!

THE GREASE IS CAKED! IT'S GOTTA BE CHANGED!

WHEW! THAT WAS CLOSE!



Dear PFC R. A. B.,

Stick to the lube order!

Periodic lubing is necessary even if the equipment has not been used. This goes for many lube points on a lot of equipment as well as the wheel bearings on your trailers.

Some greases—including GAA—will cake with age and exposure to air. Hot weather makes the condition even worse. The grease settles to the lowest point in idle equipment, leaving the upper parts of bearing surfaces high and dry.

When your trailer finally does hit the road, that hardened grease can't circulate thru the bearing. Friction builds. Heat builds. Damage to the bearing—and maybe other parts too—is a sure bet.

Good cleaning—before repacking—is mighty important too. Even if there's no dirt and other contaminants in the grease, you flush out old, caked grease that would keep the fresh grease from reaching all parts of the bearing.

Half-Mast

TM-266-Series
1¼-Ton Truck...

Low-Down on Brakes

SO YA GOT GOOD BRAKES...

... I STILL SAY YER BRAKE PEDAL'S TOO LOW!



Dear Half-Mast,

Is there a limit to how low the pedal is allowed to go on the M880-series trucks?

Some say that a "low pedal" indicates bad brakes—even tho the brakes do just fine in stopping the truck. If that's true, what exactly is the measurement for a "low pedal"?

MSG J. F. M.

Dear Sergeant J. F. M.,

The PMCS in TM 9-2320-266-10 does not include inspection for "low pedal"—because it's not a necessary operator inspection.

HERE ARE 3 REQUIRED INSPECTION POINTS...



- Is the brake pedal free-travel right—about 1½ inches?
- Do the brakes stop the vehicle like they're supposed to?
- Does the brake system warning light come on? (This's not in the PMCS table, but it's explained in Para 2-2j.)

M880 Seals Too Small

There're some bad rear differential input pinion seals in the system. Seals, NSN 5330-00-239-8328, received under DLA contracts 500-80P-0625 or 500-80M-FN20, are too small. Return them to the source of supply with a Report of Discrepancy, SF 364.

M880 Tail Lamp J-Nut

The J-nut used on the tail lamps of some M880-series 1¼-ton trucks is PN 6031160, FSCM 86403. Make a note of this, because the nut is not shown in Fig 30 of TM 9-2320-266-20P.

Driver Needs to Head Off Fire



Y'BETTER TELL YER CO-DRIVER T' KNOCK OFF THAT SMOKIN' IN THE TRUCK!

BUT I GOT NO CO-DRIVER ...

WHA-A-A... HOLY SMOKES! IT'S ON FIRE!

A warning bell should go off in your head when you hook up your M915, M916 or M920 tractor truck to a semi-trailer. This goes 'specially if the trailer's an oldie, with old wiring.

If you're not on your toes, bum wiring on the trailer can cause a short circuit and start a fire in your truck's electrical compartment.

"But what about the circuit breakers?" you may ask. "Won't they open and head off overheating in the

circuits?"

Good question! But those are automatic recycling circuit breakers. Sure, the breaker opens when a short heats up the circuit. But it closes again—automatically—when it cools down. If this recycling goes on long enough, heat builds up in the electrical compartment. Wiring and other parts in there melt...and burn...and maybe start a fire!

M747 Gets New Tires

If you've already got retreaded tires on your M747 HET semitrailer, it's OK for now. But any future replacements must be brand new tires. That's the word in TACOM Msg DRSTA-M 252000Z Mar 82 and TACOM Msg DRSTA-M 202000Z Apr 82.

No Lights? Trouble!

You'd have no big problem if you knew when a circuit breaker was recycling. You'd report it to your mechanic. He'd find the trouble and fix it.

But with your engine running—and other noise around you—you can't hear the circuit breaker clicking as it recycles. And you sure don't hear the trouble getting worse—a hissing sound when the circuit breaker's open.

So what can you do to head off big trouble?

Simple.

WELL, I GOT THE BRAKES ON--

-- BUT THERE'S A FUNNY CLICKIN' SOUND IN HERE!

HEY, MIKE, SOMETHING'S WRONG ... THE STOP LIGHTS ARE NOT COMIN' ON!



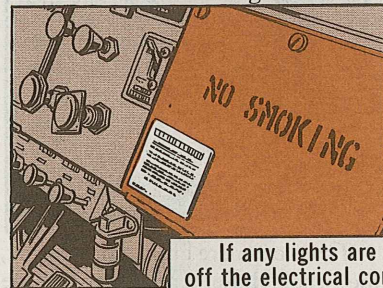
CLICK
HISS
CLICK

Get somebody to help you check

Hook up your tractor and trailer and turn on the lights.

With your engine off, check to see if all of the lights are working.

Remember the brake lights.



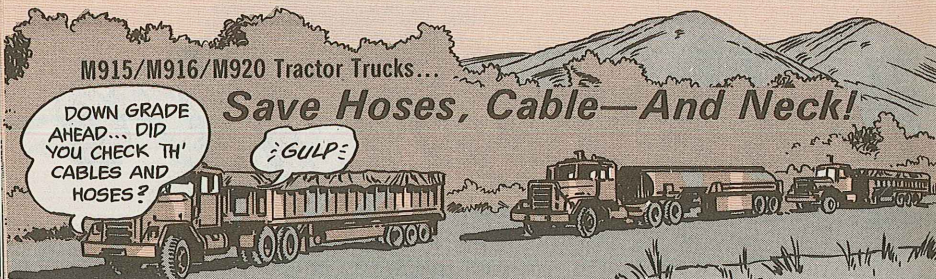
If any lights are not working, take off the electrical compartment cover and listen close for clicking or hissing. There'll be a couple of minutes between clicks.

If you hear either of those, turn off your lights quick. Report it to your mechanic for repair.

DOWN GRADE AHEAD... DID YOU CHECK TH' CABLES AND HOSES?

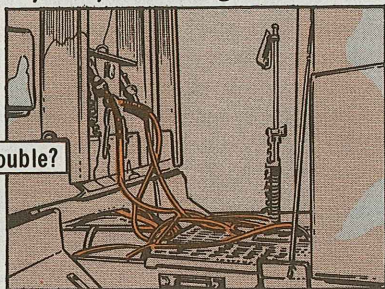
Save Hoses, Cable—And Neck!

GULP!



Those 2 support loops hanging on your tractor truck's air hose and cable tender (hitch-hiker) are not just decorations.

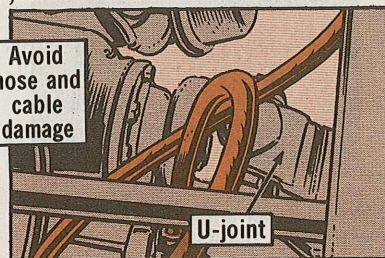
Some drivers learn this the hard way. They fail to hang their air hoses



Trouble?

and electrical cable in these loops. The hoses and cable droop onto the prop shaft. The prop shaft rubs against the hoses and cable. Or the hoses and cable get tangled up with the prop shaft U-joint.

Avoid hose and cable damage



U-joint

The damage may happen slowly or quickly—but it happens surely!

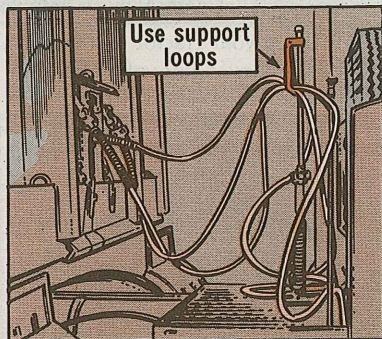
It's bad enough when you lose the

EMERGENCY air hose—your semi-trailer's brakes lock up.

But you can be in for a real hair-raiser if you lose the SERVICE air hose. You'll have no trailer brakes. With a heavy load pushing you, slowing or stopping your rig can give you enough thrills for a lifetime—maybe a short lifetime.

If you're lucky, you may get off with only paying for new hoses and a cable.

Make a note for yourself in your TM 9-2320-273-10, Page 2-65, Para 2-17e. Before you hook up the hoses and cable, run 'em through those support loops.



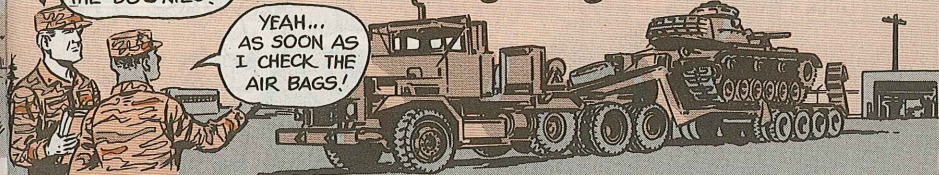
Use support loops

If the loops are broken or missing, the whole hose tender's got to be replaced—PN 58H-11AM-1, FSCM 79146. It can be ordered by NSN 2590-01-016-7227 when the NSN gets into the AMDF.

HEADIN' OUT TO THE BOONIES?

Treat Air Bags Right

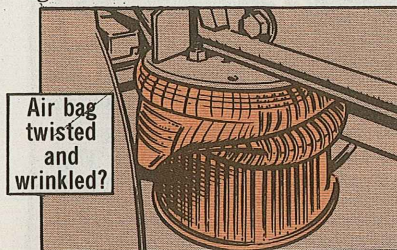
YEAH... AS SOON AS I CHECK THE AIR BAGS!



Life is tough enough for those pusher axle air bags on your M911 tractor truck. When your pusher axle is down for highway travel—to take some of the weight off the other axles—the air bags carry a big load.

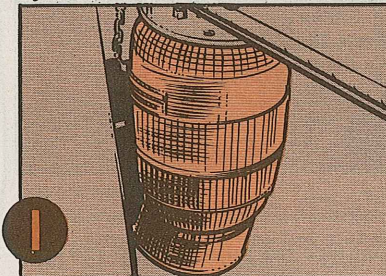
But the life of these air bags is being shortened by operators who don't go thru the right procedure for putting the pusher axle back up in the raised position.

The air bags wind up all twisted and wrinkled—and that doesn't do 'em any good at all.

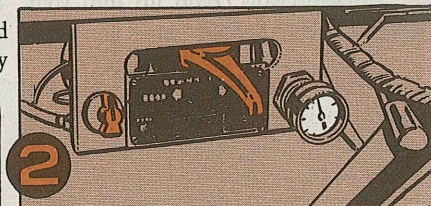


Air bag twisted and wrinkled?

So let's take it from scratch. Add this poop to the instructions under Using Pusher Axle, Page 2-58, TM 9-2320-270-10:

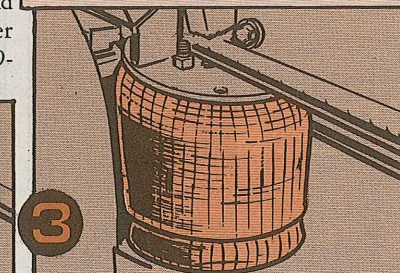


1 Start with the pusher axle down and the bags inflated.



2

Then turn the RAISE/LOWER control to the UP position—and, at the same time, let the air out of the bags by pushing the AIR PRESSURE LOAD CONTROL lever to the DEFLATE position. (See Page 2-18 in your -10 TM.)



3

The air bags will telescope neatly—the bottom part easing up into the upper part. It looks better, but—more important—your air bags will feel better.

M911
Tractor
Truck...

Grab Handle's
for Grabbin'

... NOT THE
DOOR
HANDLE!



How do you climb up into your M911 tractor truck?

Dumb question?

Nope—not when you see all of the door handles torn up by drivers who use 'em as grab handles.

That door handle is not a grab handle! If you use it to hoist your weight up onto the step, it'll soon poop out. It's intended only for unlatching and opening the door.

Besides, you've got another handle right there handy—just itchin' to be

grabbed. That's why it's called a grab handle. You grab that handle with your right hand and hoist yourself up. Then you use your left hand on the door handle to open the door.

That's why it's called a door handle.

If your left (driver's side) door handle is already ruined, your support may have a hard time getting a new one for you—the info in their TM 9-2320-270-34P is wrong. Tell 'em the handle comes under NSN 2540-01-118-2374.



Air Gage/Hose NSN

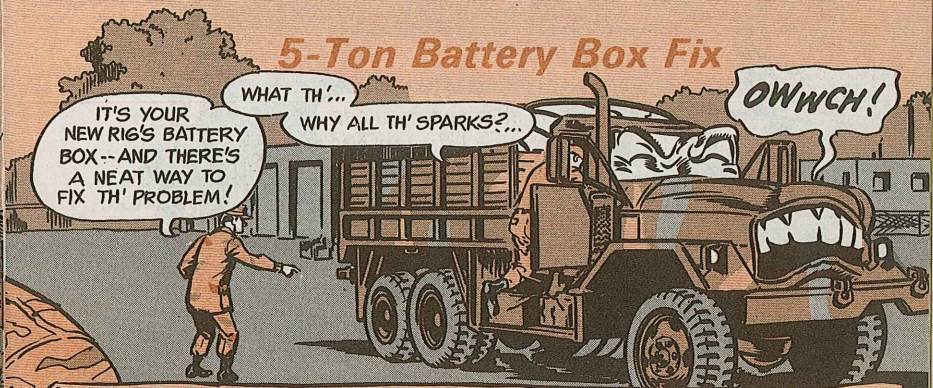
You can now get the complete gladhand-type tire inflation gage and hose assembly—shown on Page 37 of PS 349—with NSN 4910-01-038-2820. Use this setup for easier inflation of tires on your 2½-ton or 5-ton truck.

5-Ton Battery Box Fix

IT'S YOUR NEW RIG'S BATTERY BOX--AND THERE'S A NEAT WAY TO FIX TH' PROBLEM!

WHAT TH'... WHY ALL TH' SPARKS?..

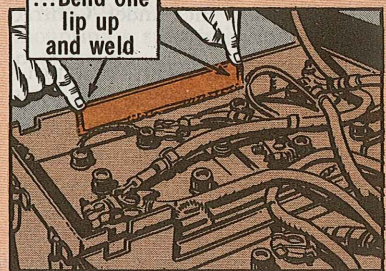
OWWCH!



Dear Editor,

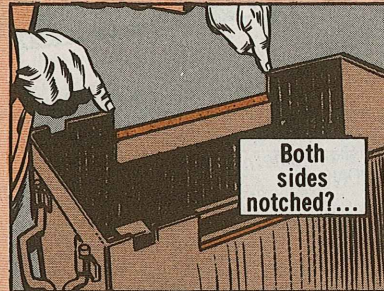
Some of our M809-series 5-ton trucks have the new battery boxes with both sides notched to clear the battery cables.

... Bend one lip up and weld



This gives the step support on both sides all the way back.

The mechanics of OMS 3, KYARNG Lexington, KY

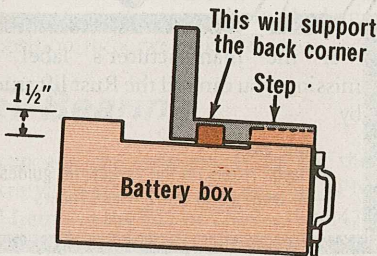


Problem is, this leaves the back of the step cover unsupported. When you put weight on the back half of the step, it falls down on the top of the battery cables.

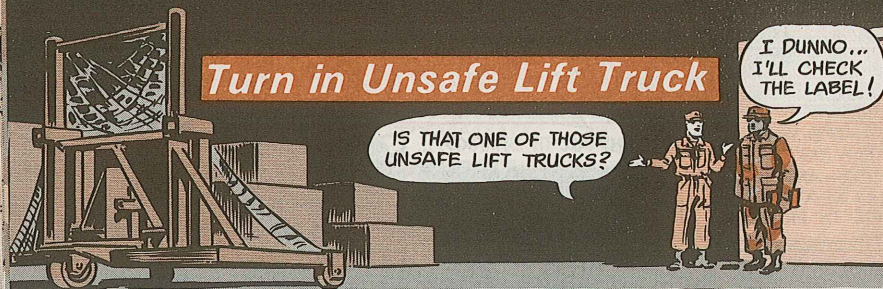
We checked the fix given in TB 43-0001-39-2 (Jul 77), but that didn't help. The bar stock welded on the bottom of the step raised the step ½ inch, but did not support the step when the outside edges of the boxes were cut away.

To stop this, we heated the notch on the outside edge of the box and bent the lip back up straight. Then, we welded it on both ends.

(Ed Note—Good idea! You could also weld on pieces of ½-in by ½-in bar stock to the bottom of the step.



Turn in Unsafe Lift Truck

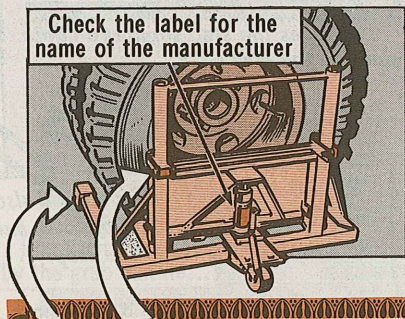


Now you can unload that "out-of-service" wheel lift truck that's been deadlined because of a possible safety hazard.

This is the lift truck made by Rust Manufacturing, Inc, under Contract DAAA09-79-C-4605.

Use a DA Form 2765-1 and turn it in as "unserviceable" thru your Property Book Officer. If you haven't already replaced it, order a new lift truck under NSN 4910-00-554-5983. You'll get one made by a different manufacturer.

Check the label for the name of the manufacturer



If the manufacturer's label is missing, you can tell the Rust lift truck by:

- Blue color
- Plastic rollers on the vertical lift guides
- No bearings in the 2 wheel rollers

THE UNSAFE LIFT TRUCKS WILL BE MARKED FOR "B14 ACCOUNT CONDITION CODE L" AND SENT TO ONE OF THESE DEPOTS...

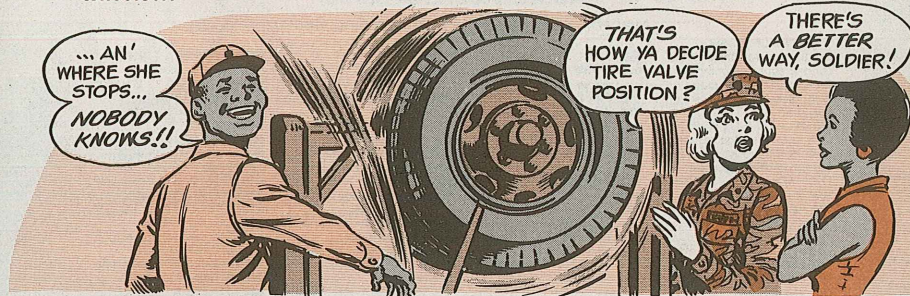
FROM	TO
Europe/Eastern CONUS	Letterkenny Army Depot Chambersburg, PA
Korea/Western CONUS	Sacramento Army Depot Sacramento, CA
Central CONUS	Pueblo Depot Activity Pueblo, CO

Additional info can be obtained by writing to HQ, ARRCOM, ATTN: DRSAR-MMT-T, Rock Island, IL 61299, or by phoning AUTOVON 793-5263 or -3644.

M172 Trailer Decking

Do you have trouble getting the decking replaced on your M172 semi-trailer? It's a DS job. The info is on Pages 2-108 and 2-109 of the EIR Digest, TB 43-0001-39-6 (Jul 81).

Tires & Wheels... 'Round 'n' 'Round She Goes...



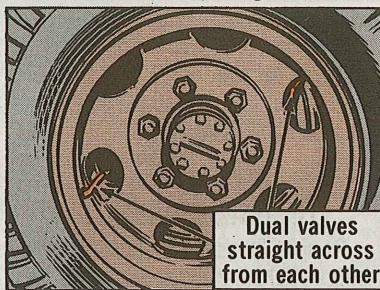
90°? 180°? 270°?

A Wheel of Fortune won't tell you where to position the tire valves on your wheeled vehicles. The tire TM tells you, and so does common sense.

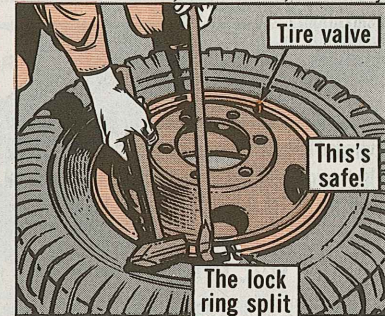
TM 9-2610-200-20 is clear on positioning tire valves on dual wheels. Like it says in Para 2-1d, the inside valve should be straight across—

other, get 'em as near to 180° as you can.

Use common sense when you're mounting a split lock ring on a rim. Position the split far enough from the tire valve so the valve won't be damaged next time the lock ring's removed. A tire iron can do a real number on that valve! Sure, 90° is OK, like it says



180°—from the outside valve. This's so you can find the inside valve easier 'n' quicker in the dark. If you can't get the valves straight across from each



in Para 2-19a(2) (a). Natch, 270° amounts to the same thing. And any position in between is OK, too.

M353 Trailer Bearing

You can now get both the bearing cup and the cone and roller for the swivel caster on your M353 3½-ton trailer with one part number. PN 703201, FSCM 21450 gets you Item 8 and Item 9 in Fig B22 of TM 9-2330-247-14. Order on a DD Form 1348-6.

AUDIO-VISUAL STUFF

Available at battalion or post Learning Center

TEC LESSONS

010-071-1210-A Camouflage/conceal eqpt (screening nets)
030-051-6423-F Op maint on 27-ft diesel bridge erection boat, Part I
030-051-6424-F Op maint on 27-ft diesel bridge erection boat, Part II
030-051-6425-F Op maint on 27-ft diesel bridge erection boat, Part III
030-051-6443-F Double-single Bailey bridge, Part I
030-051-6445-F Double-single Bailey bridge
030-051-6447-F Double-single Bailey bridge, Part I
030-051-6448-F Double-single Bailey bridge, Part II
030-051-6451-F Double-double Bailey bridge
030-051-6459-F Single-story med girder bridge up to 50 feet
030-051-6462-F Double-story med girder bridge up to 103

feet, Part I
030-051-6463-F Double-story med girder bridge up to 103 feet, Part II
030-051-6466-F Double-story med girder bridge up to 103 feet
030-051-6495-F Light tactical raft
043-441-5584-F I-HAWK alignment I
101-113-4821-A Basic soldering techniques for electronics
101-113-7147-A Trouble-shoot AN/VRC-12
101-113-7182-A Trouble-shoot RATT AN/VSC-3
121-093-6604-F Alignment, TOW
121-093-6620-F TOW special tools
140-093-6803-A Prepare DA Form 2417
140-093-6804-A Prepare DD Form 314
412-061-7221-A Intro to

FADAC
412-061-9016-A Op/corw cor-rective maint on PADS
551-101-8065-A DLOGS intro lesson
551-101-8066-A Store supplies, DLOGS
600-011-6616-F Remove, install main rotor blades
600-001-6617-F Install main rotor hub and blade assy and stabilizer bar assy
610-091-6001-A Leadership for motor sergeant
610-091-6005-A Priority, workload assignment in motor pool
610-091-6006-A Key control in motor pool
610-091-6007-A Tool control procedures in motor pool
610-091-6008-A Safety program for motor pool, Part I
610-091-6009-A Safety program for motor pool

610-091-6010-A Battery maintenance, Part I
610-091-6011-A Battery maintenance, Part II
610-091-6012-A Maintenance of tires
610-091-6013-A Recovery, evacuation in motor pool
610-091-6015-A Intro to inspect records and reports (TAMMS)
610-091-6016-A QDR (Category II) EIR
610-091-6164-F M578 recovery vehicle PMCS
611-091-6111-F Service brake linkage (M88A1)
902-011-5815-A Install/remove daylight training filter (AN/PVS-5)
902-011-5816-A Clean daylight training filter
902-011-5817-A Daylight training filter
941-071-1120-A AN/TVS-2 to cal .50 machine gun

Searchlight Balls

Need the NSN for the trailer hitch-type balls for your tank-mounted AN/VSS-1 or AN/VSS-3 searchlight? It's 5307-00-845-5729.

M373A2 Brake Hose

Use NSN 4720-01-050-3401 to get the master cylinder-to-axle tee brake hose on your M373A2 electronics semitrailer van. The hose listed on Page 93 of TM 9-2330-246-14 is too short.

1/4-Ton Brake Problem

You may have a tough time installing the bonded brake shoe kit, NSN 2530-01-060-7172, on your M151A2 or other TM 218-series 1/4-ton vehicle. Especially if you're putting on a new brake drum at the same time. There's a bum brake adjuster in the kit made under contract DAAE07-78C-7094. But your support can fix it. They may also have to turn down the new brake drum. The info's in upcoming TB 43-0001-39-8 (Jan 82). Support can get the poop by dropping a line to PS Magazine.

M172/M172A1 Trailer Bolts

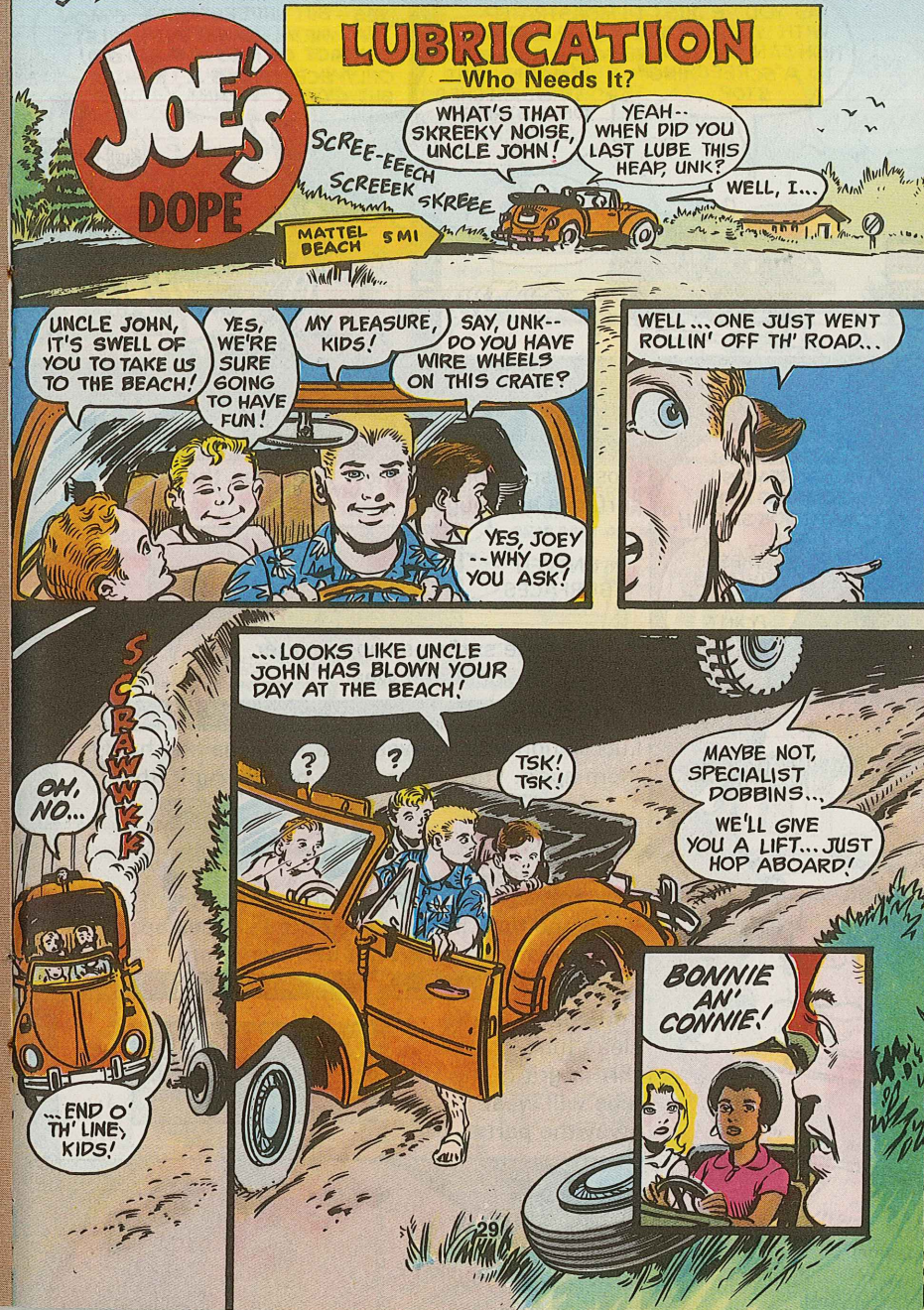
You won't find the tandem axle mounting hardware in TM 9-2330-211-14—except in the picture on Page 3-21. So grab your pencil and add these items to those on Page B-104, Fig B-11: Screw, cap, hex head, 5/8 x 2 3/4-in, NSN 5305-00-726-2554; Nut, NSN 5310-00-010-3030; Washer, lock, NSN 5310-00-518-7720.

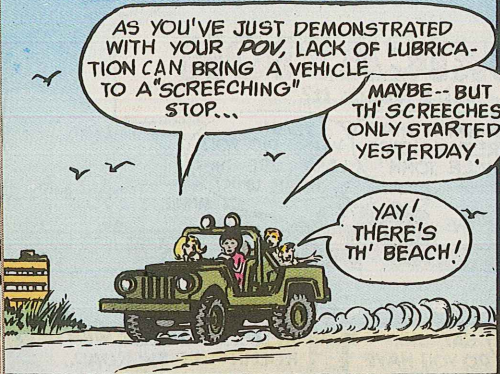
M915-Series Organizational Tools

The special tools lists for M915-series trucks in TM 9-2320-273-20P may confuse you. Fig 127 & 128 are labeled direct support tools, and Fig 129 is labeled general support. The tools listed, tho, are all organizational. The clue is the third letter of the SMR code—"O" for organizational.

Cable for Vans

Use NSN 2590-00-104-4572 to get the 110-volt power cable for your M129-series or M146 semitrailer. The number in TM 9-2330-227-14 is wrong. The cable's not listed in TM 9-2330-207-24P.





AS YOU'VE JUST DEMONSTRATED WITH YOUR **POV**, LACK OF LUBRICATION CAN BRING A VEHICLE TO A "SCREECHING" STOP...

MAYBE-- BUT TH' SCREECHES ONLY STARTED YESTERDAY.

YAY! THERE'S TH' BEACH!



YES-- BUT UNDERSTAND THAT METAL-TO-METAL CONTACT CAUSES NOT ONLY SCREECHING ... BUT **QUICK WEAR!**

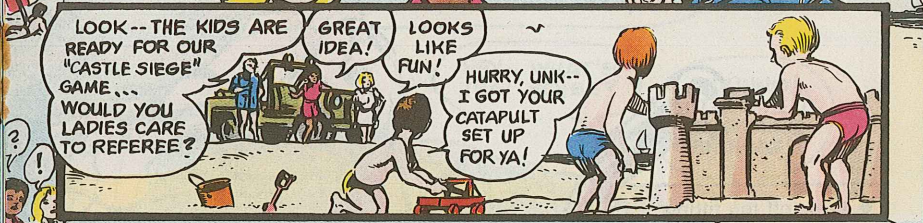
C'MON ... LET'S GO!



WHAT IT COMES DOWN TO, SPECIALIST DOBBINS, IS THAT WITHOUT LUBE CARE, ANY VEHICLE (ARMY OR POV) WILL SOON COME TO A SCREECHING HALT.

GEE-- THANKS FOR THE GOOD INFO-- I NEVER REALIZED LUBING WAS SO IMPORTANT.

HEY, UNK, C'MON!



LOOK-- THE KIDS ARE READY FOR OUR "CASTLE SIEGE" GAME... WOULD YOU LADIES CARE TO REFEREE?

GREAT IDEA!

LOOKS LIKE FUN!

HURRY, UNK-- I GOT YOUR CATAPULT SET UP FOR YA!

MOST METAL SURFACES REQUIRING LUBE MAY LOOK SMOOTH, BUT... THESE VISUALS MAKE THE POINT...

Close inspection will show that even the smoothest surfaces are rough.

When these surfaces rub together, you get friction, heat and wear.

Lubrication gets between the surfaces and holds them apart. The lube's got to be just right, tho.

TOO HEAVY TOO LIGHT CORRECT

If it is too thin, it won't keep the surfaces apart.
If it's too thick, it can't get between them.

You gotta have clean lube, tho. Dirt or grit in the lube will wear away the parts.



OK-- SOON'S I ROLL MY CATAPULT INTO POSITION, WE'LL START!

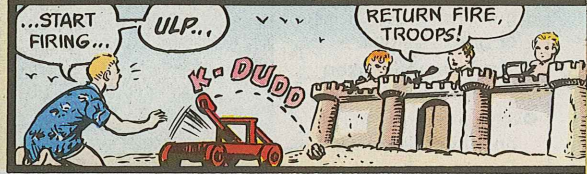
HEY-- WHAT TH'-- WHEELS WON'T TURN-- THEY'RE FULL O' WET SAND--

REMEMBER, UNK-- PICKING UP TOWED GEAR AIN'T ALLOWED!

YEH-- IT'S GOTTA ROLL ON ITS OWN!



WELL, THIS CATAPULT'S GOT A LONG RANGE ANYHOW, SO... I'LL LOAD A ROUND OF WET SAND AND...



...START FIRING...

UHP..

RETURN FIRE, TROOPS!

SPLAT!
SPLUD!
SPLUT!

HAH!... 3 HITS! YOU LOSE THIS ROUND, UNK!

OOF! UGH! UNNH!

YOU OUGHTA KNOW THAT YOU GOTTA LUBE YOUR GEAR OFTEN UNDER THESE CONDITIONS, UNCLE JOHN!

WE BORROWED CONNIE'S SUN TAN OIL!

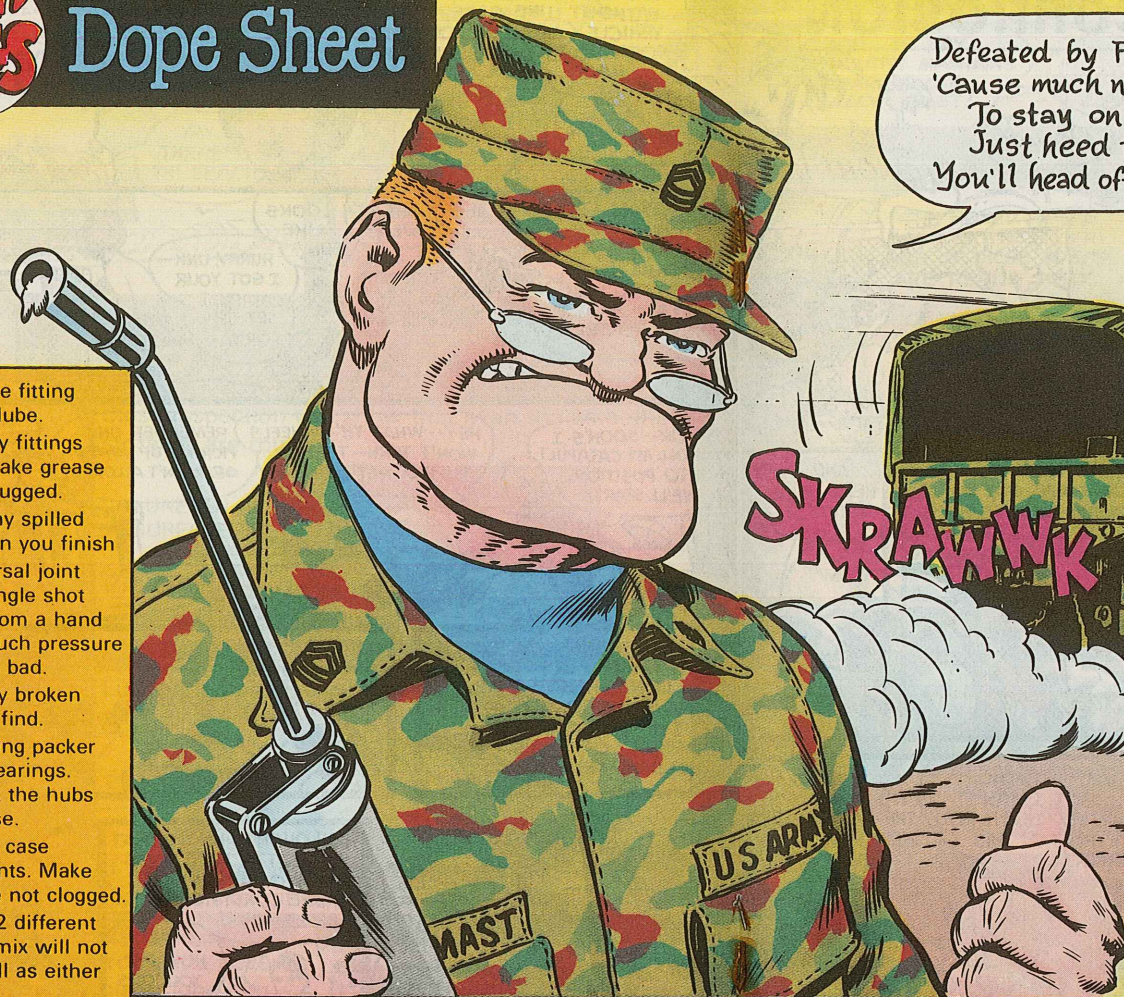
B-BUT... HOW DID YOU KIDS LUBE YOURS?

??!

JOE'S

Dope Sheet

- Wipe off the fitting before you lube.
- Replace any fittings that won't take grease ...they're plugged.
- Wipe off any spilled grease when you finish
- Give universal joint fittings a single shot of grease from a hand gun. Too much pressure or grease is bad.
- Replace any broken fittings you find.
- Use a bearing packer on wheel bearings. Do not pack the hubs full of grease.
- Check gear case breather vents. Make sure they're not clogged.
- Never mix 2 different lubes! The mix will not work as well as either one alone.



Defeated by Friction and Wear,
'Cause much needed lube wasn't there!
To stay on the go
Just heed the L.O--
You'll head off Repair--and Despair!

HEY-- WHAT'S
THAT NOISE?

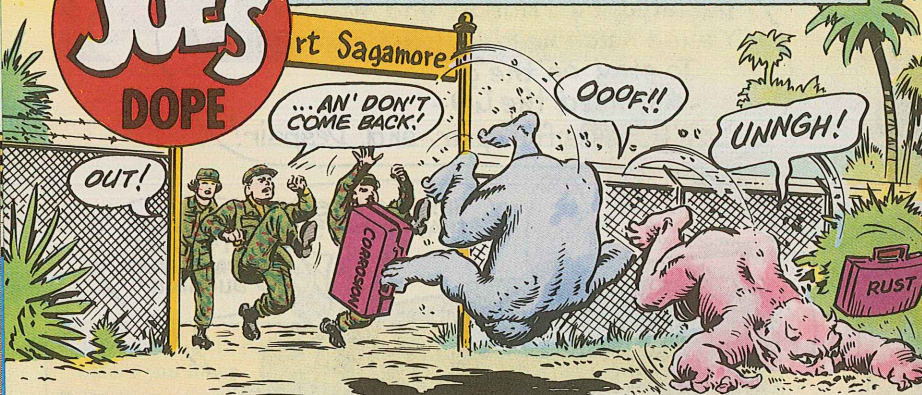
I DUNNO...
BUT I SMELL
SOMETHING
BURNING!

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.

JOE'S DOPE

Enemies that NEVER Surrender... RUST & CORROSION



OUT!

...AN' DON'T COME BACK!

OOF!!

UNNGH!



UNFRIENDLY OAFS, EH, RUSTY?

RIGHT, CRUDDY, BUT...

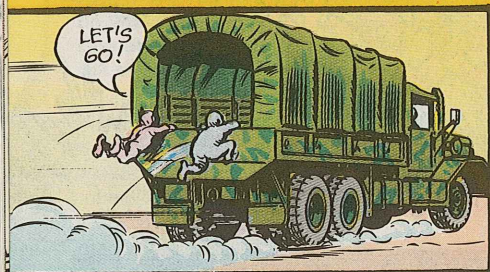


... THERE'S ALWAYS A WELCOME MAT OUT FOR US SOMEWHERE!

RIGHT...



... AND HERE COMES A RIDE...



LET'S GO!



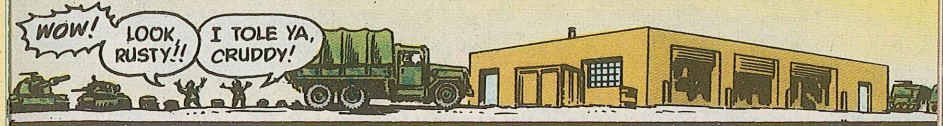
HMMM... I'D MUNCH A BIT... BUT I CAN'T SINK MY TEETH INTO ANY PART O' THIS TRUCK!

NO WONDER! IT'S PART OF THE GEAR OF THAT UNFRIENDLY BUNCH WE JUST LEFT! BUT...



...WAIT'LL THE STOP AHEAD...

BET WE FIND CONDITIONS RIPE FOR US THERE!



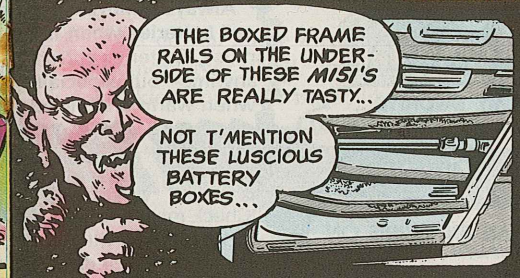
WOW! LOOK, RUSTY!! I TOLE YA, CRUDDY!

C'MON -- TH' WAY TH'S OUTFIT MAINTAINS GEAR, WE CAN REALLY FEAST!



LET'S START WITH...

VEHICLES



THE BOXED FRAME RAILS ON THE UNDER-SIDE OF THESE M151'S ARE REALLY TASTY...

NOT T'MENTION THESE LUSCIOUS BATTERY BOXES...

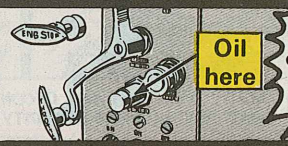


Spot paint and wash under-sides—call support if that doesn't work!

Clean battery boxes...read TM 9-6140-200-14 on battery PM!



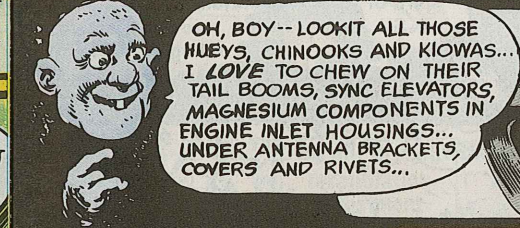
LOOK AT THESE YUMMY STARTER BUTTONS... GAMA GOAT AND OTHER SPRING TYPES ARE REALLY DELICIOUS!



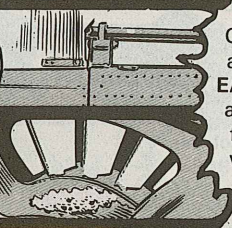
Oil here

A weekly drop of oil keeps 'em from jamming and saves starters!

AIRCRAFT



OH, BOY--LOOKIT ALL THOSE HUEYS, CHINOOKS AND KIOWAS... I LOVE TO CHEW ON THEIR TAIL BOOMS, SYNC ELEVATORS, MAGNESIUM COMPONENTS IN ENGINE INLET HOUSINGS... UNDER ANTENNA BRACKETS, COVERS AND RIVETS...



Good PM for aircraft after EACH flight is a spray mist, fresh water washdown!

WEAPONS



I LOVE WEAPONS WITH THE FINISH SCRAPED OR SANDED OFF... HIGH HUMIDITY MAKES 'EM DELICIOUS!

You gotta clean and lube frequently... backed up by your armorer and support!

SAY, RUSTY--WHO'S THE WISEACRE WITH TH' PM ADVICE?

BEATS ME, CRUDDY!

COMMO GEAR



COMMO GEAR'S MY PASSION! 'SPECIALLY WHEN IT'S MOISTURE COATED...



Wipe exterior surfaces dry. Cover them when it rains. Wipe off electrical contacts and use their covers on 'em!



RIGHT, RUSTY--AND MY FAVORITE... BATTERIES... ARE FINGER-LICKIN' GOOD!



Always remove dry cell batteries when not in use. Batteries corrode anytime—but especially when warm and moist!

NBC GEAR



NOTHING BETTER THAN SNACKING ON PROTECTIVE MASKS, VALVE DISKS AND FILTERS!



NOT T' MENTION M11 DECON TANKS! LOVE 'EM IN HIGH-HUMIDITY!

Check masks for dry rot! Replace brittle or discolored valve disks and mushy filters!

If normal PM can't hold down flakey rust, turn your M11's into support!

HEY, BIG MOUTH-- WHO ARE YOU ANYWAYS?

YEAH-- WHAT'S YOUR ANGLE?

Why, I'm the spirit of P+S!!

Bonnie, Connie, Macon, Half-Mast and Windy are busy, so I'm filling in for them!

OK, troops of the good ol' 999th... you've seen what these villains are up to... and I've told you what to do...

ARRGH!

OH-NO!

GET 'EM!

DON'T LET 'EM FIND A HOME WITH US!

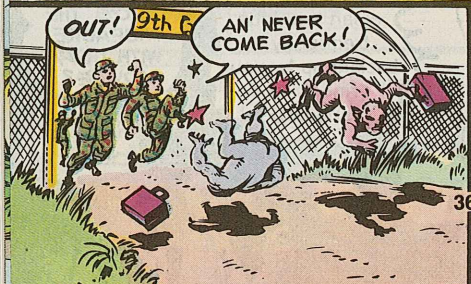


OUT! 9th B

AN' NEVER COME BACK!

WHERE DO WE GO NOW, RUSTY?

LET'S TRY TH' PRINTING PLANT THAT PRINTS THIS BLANKETY BLANK MAGAZINE!



Service with a Smile

DON'T WORRY! WE CHECKED TH' SPAR PRESSURE DURING TH' LAST SERVICE!

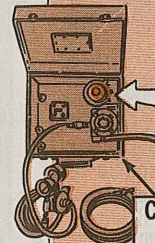


YEAH-- BUT DID YOU BREAK OUT TH' NITROGEN?

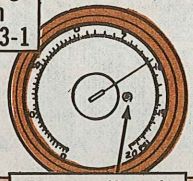
It's true that you have to check spar pressure on Black Hawk main rotor blades every 6 months. Yes, the word's in Task 9, Step 6 of TM 55-1520-237-23-4.

But do you know when to add nitrogen on the check so the blades go the distance? No? Well, Table 3-1 in TM 55-1520-237-23-7 can erase those wrinkles from your brow, like so:

- Get a fix on blade spar temperature and don't forget the info in notes 1 and 5 on Page 3-14 of TM 55-1520-237-23-7.
- The reading on your checking unit gage should be between the pressures listed under MINIMUM WHEN SERVICING BLADE and MAXIMUM.
- Now, when your checking unit gage reads below MINIMUM WHEN CHECKING INSTALLED BLADE, something is wrong. So get that particular Black Hawk wing to AVIM.
- Keep in mind that your BIM pressure indicator is only telling you that the spar pressure is enough to hold the yellow stripes in view. Checking your pressure indicator is just that—checking the indicator, not the spar.

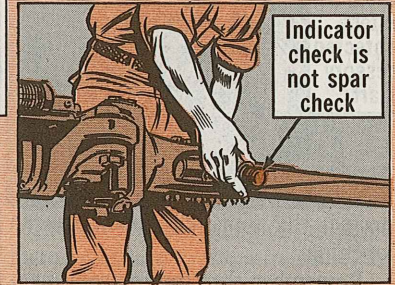


Compare reading with Table 3-1



Checking unit

Do not disturb recalibration adjustment



Indicator check is not spar check

- If your reading is below MINIMUM WHEN SERVICING BLADE, but above MINIMUM WHEN CHECKING INSTALLED BLADE, get out the nitrogen and simply bring the spar pressure to a reading between MINIMUM WHEN SERVICING BLADE and MAXIMUM.

SO KEEP 'EM FLYING WITH A SPAR CHECK EVERY 6 MONTHS!



The Best Surprise Is...

NO Surprise!?!

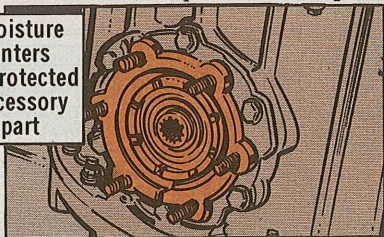
A lot of Huey and Cobra transmissions are showing up for overhaul without enough protection from moisture.

Course, that overhauled universal transmission you received as a replacement has the feature of allowing you to use it on all models. The old accessories just have to be switched to the new transmission.

Therein lies the problem: accessory drive ports in the removed transmission are not covered properly.

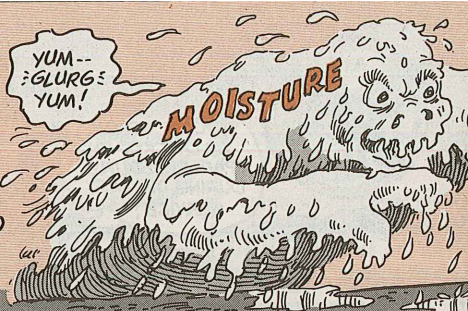
When openings for the generator drive quill and the hydraulic pump and tachometer drive quill are left unprotected,

Moisture enters unprotected accessory part



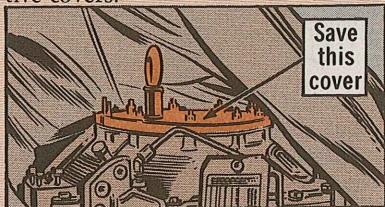
the moisture villain has an opening.

Remember that the internal magnesium is not protected by oil when the transmission is idle. Add the fact that it can be a long time before that baby is actually worked on at the depot and you have a candidate for the scrap heap.



Save

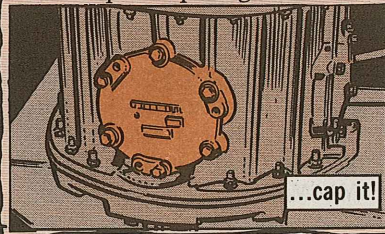
The new transmission is protected from the weather. Send the old one back the same way. Save the protective covers.



Then, when you remove the generator drive quill, for example, you'll be



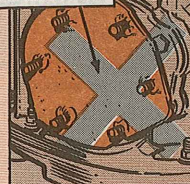
able to cap the opening.



the Covers

Some mechs are using cardboard or plastic. That won't hack it!

Cardboard...

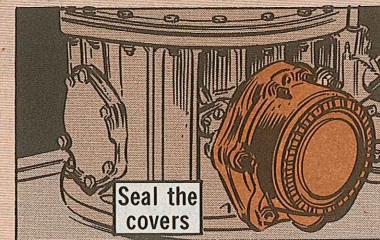


...plastic—no protection



Use the proper cover with a suitable gasket and smear sealing compound,

NSN 8030-00-252-3391, around the edges of the cover. That'll keep the moisture villain at bay!



Use New Liner

Reusable plastic liner—use it!



When you can the old transmission, use the new, reusable plastic liner, NSN 8145-01-092-1973, in the metal container. The container no longer has to be sealed.

All the instructions for using and maintaining the plastic are in a pocket of the liner.

Prepare the transmission for shipment according to the info in the -23 maintenance manuals.

Aviation Messages

If your unit has not received a message in which you have an interest, check with your next higher headquarters.

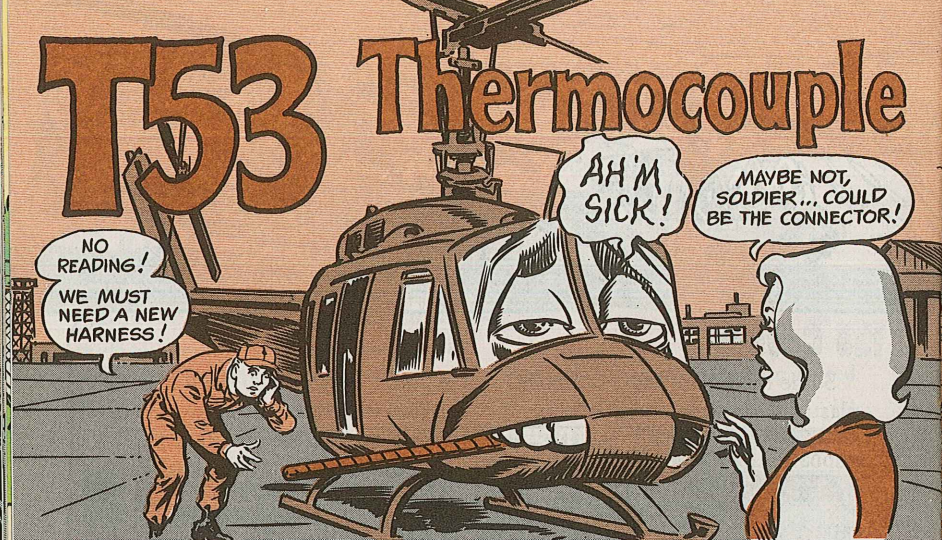
General 82-04 Maint Notice, Retrograde of engine and A/C components (msg clarification) DRSTS-MEA 141905Z May 82

General 82-05 Maint Advisory, Use of IR jammer DRSTS-MEA 112050Z May 82
AH-1-82-06 Maint Advisory, Pitch control tubes DRSTS-MEA 112045Z May 82
AH-1-82-07 Maint Advisory, Finite life on canopy removal detonation transfer sys DRSTS-MEA 202100Z May 82

Cat 1 EIR Phone: AUTOVON 693-2066 (24 hours)

CH-47-82-04 Technical, Inspect CH-47 B/C rotor blade caps DRSTS-MEG 111815Z May 82 (corrected by 261830Z May 82)

T53 Thermocouple



NO READING!
WE MUST NEED A NEW HARNESS!

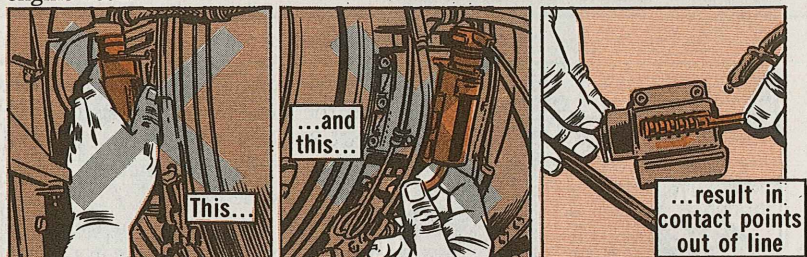
AH'M SICK!

MAYBE NOT, SOLDIER... COULD BE THE CONNECTOR!

When you don't get readings from the temperature-sensing probes on your Huey or Cobra engine, never rush to change the thermocouple harness. It may be OK.

Instead, focus on the connector.

Mechs sometimes use the connector for a handhold when mounting the engine deck.



This...

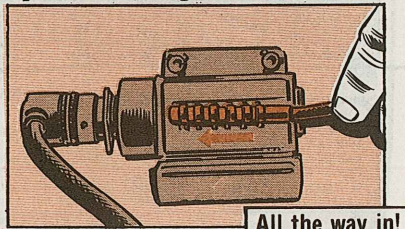
...and this...

...result in contact points out of line

The lead into the connector is then pulled partially out, contact with the probes is lost and you no longer get temperature readings.

So-o-o-o, open the connector and clean the connector and lead contacts. A pencil eraser may even do the trick.

Then, insert the lead all the way into the connector so that both sets of contacts are alined. That'll put the harness back in business.



All the way in!

Harness Shot?

“Easy, Now...”

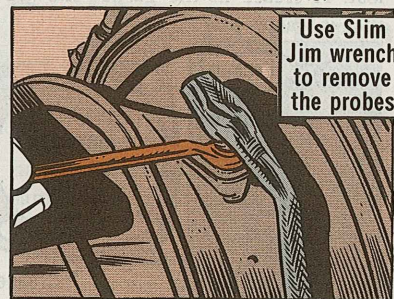
If you have to remove the harness, you'll find those probes are tough nuts to crack...engine heat seizes 'em.

As a result, a lot of harnesses have to be replaced at the depot because they're kinked and the internal wiring is broken. Take some extra time with the harness removal.

Soak the nuts with a suitable penetrating oil.

The nuts will still be tight, but you can't use an open-end wrench or you'll round off the nuts.

A regular box-end wrench won't fit between the harness and the thermocouple probe, either. So grind down a salvaged 5/16-in box-end wrench and use it on the nuts.

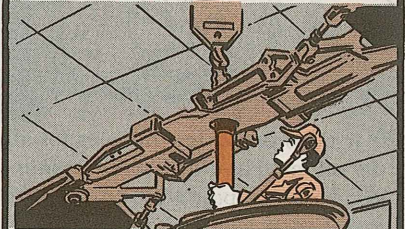


Use Slim Jim wrench to remove the probes

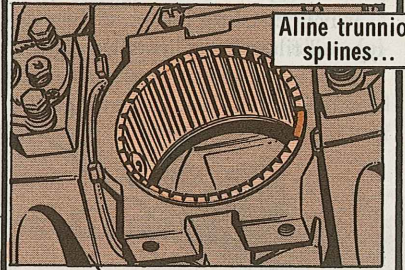


THEN YOU'LL BE ABLE TO REMOVE THE PROBES WITHOUT DAMAGING THE HARNESS!

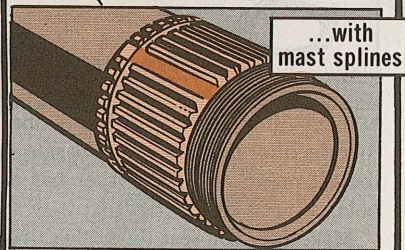
When you install the main rotor hub and blade assembly on an AH-1 and UH-1, position that baby directly over the mast.



Then, align the master splines on the hub trunnion with those on the



Align trunnion splines...



...with mast splines

mast and s-l-o-w-l-y lower the assembly until it seats on the split cones.

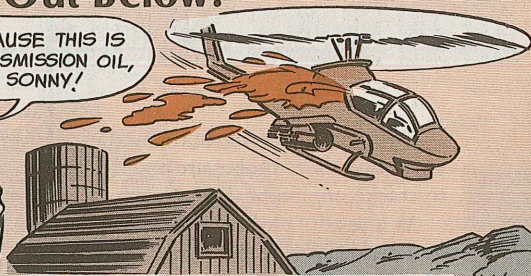
As the CAUTION in Para 5-13 of TM 55-1520-210-23 on the Huey says, you'll prevent damage to the mast threads.

Reworking gouged splines and threads runs up the tab at overhaul.

'Look Out Below!'

HOW CAN YA TELL THAT HELICOPTER IS GONNA SET DOWN, GRANPA?

'CAUSE THIS IS TRANSMISSION OIL, SONNY!



It takes only a few minutes for all the oil in a Huey or Cobra transmission to squirt past a blown oil filter gasket. And with a drop in oil pressure, the pilot has to set 'er down before the transmission seizes up.

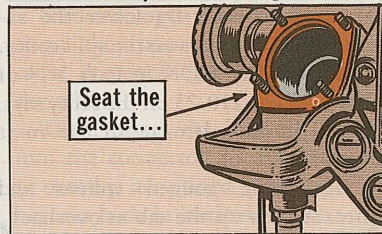
It happens, bird mechs, if the disk-type oil filter is not installed right!

So after you inspect the filter for contamination, use a new gasket,



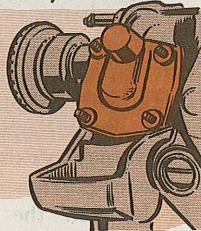
NSN 5330-00-107-5393. Remember that the filter is on the pressure side of the oil pump and the gasket has to hold.

Make sure you seat the gasket over

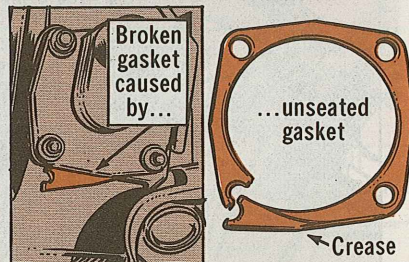


the 4 studs on the transmission sump housing, before you insert the filter.

...then add filter



On one transmission failure, for example, all the transmission oil was lost. A crease in the gasket showed that it wasn't seated.



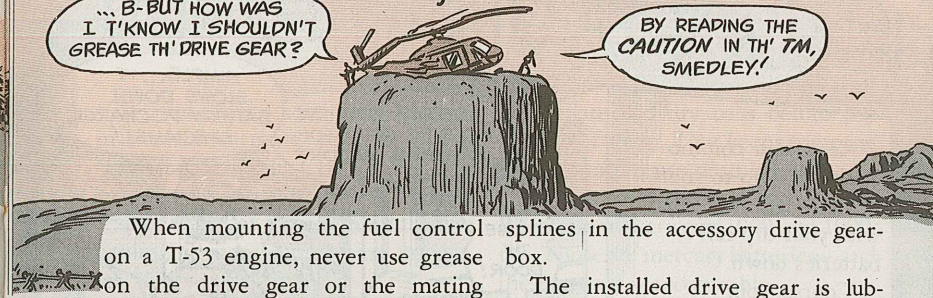
Also, check out a low-range torque wrench from the tool crib. Tighten the 4 filter retaining nuts to the torque value and sequence listed in Para 6-49 of TM 55-1520-210-23.

The special inspection of the oil filter every 25 flight-hours increases the chance of installing it wrong! Don't blow it!

Greasy Stuff 'Out'

...B-BUT HOW WAS I T'KNOW I SHOULDN'T GREASE TH' DRIVE GEAR?

BY READING THE CAUTION IN TH' TM, SMEDLEY!



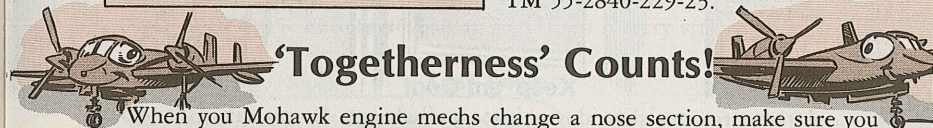
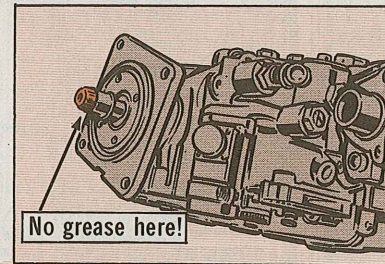
When mounting the fuel control on a T-53 engine, never use grease on the drive gear or the mating

splines in the accessory drive gearbox.

The installed drive gear is lubricated and cooled by engine oil. The oil flows thru an oil hole in the gear to lube the splines.

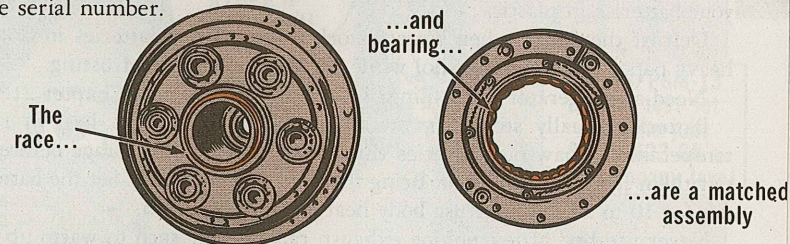
If the oil hole is plugged up by grease, tho, you'll get excessive wear. The result will be spline failure, followed by engine flameout.

So leave the gear dry, as indicated in the CAUTION on Page 6-17 of TM 55-2840-229-23.



When you Mohawk engine mechs change a nose section, make sure you also change the rear bearing support.

The reduction gear assembly contains the bearing race, while the support has the bearing. The race and bearing are a matched assembly, having the same serial number.



What happens if you don't keep the parts together? Plenty—all bad!!

The wear pattern is changed and clearance between an unmatched race and bearing may be beyond limits. You could get an early bearing failure.

Never change half a bearing. Keep the assembly together.

Dry-Cell Batteries...

Keep 'em

Keep your commo equipment up to snuff by never getting caught with your dry-cell batteries down.

Course, your batteries start discharging from the start. You can keep them juiced up for a full life, tho, with a few PM tricks.



BRRRR! HOW CAN COLD BE GOOD FOR BATTERIES, MACON?

SIMPLE... IT SLOWS DOWN BATTERY DISCHARGE, SPECIALIST!

HEY-- CLOSE TH' DOOR!

YEAH-- YOU'RE BLOWIN' OUR COOL!

Keep 'em Cool

Cool temperatures slow down battery discharge. If you can, store your batteries in a refrigerator until you use them. The cooler the better, but keep 'em below 35°F.

If you're worried about moisture damage from refrigeration, bag or wrap your batteries in plastic.

Defrost the fridge when battery stock is low. Wrap batteries in cloth or heavy paper to keep them cool while the refrigerator is defrosting.

Need a refrigerator for cooling? CTA 50-909 OK's it in Chapter 21.

Batteries usually store best in the cold, but they work best at room temperature. Thaw out batteries that have been in cold storage before you put them in your equipment. Bring them up to about 70°F. Set the batteries out for 10 to 24 hours or use body heat to help thaw 'em.

Never use hot plates, engine exhaust, radiators or such to warm up batteries. The heat will zap 'em, and hot gases from the batteries could hurt you.

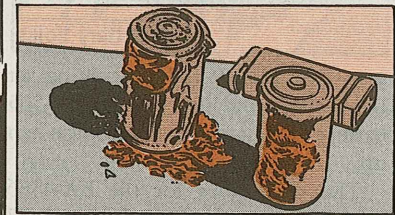
If you don't have a refrigerator for your batteries, store them in a well-vented area. Gas from discharging batteries shouldn't be locked up in a closed area.

Juiced Up

Heat's a Killer

It's not cool to keep your batteries in sheds with metal roofs or out in direct sunlight. Heat kills them!

Never store bad batteries. The corrosive action of the chemicals makes health and storage problems. Besides, you'll never use them.



Some bad batteries are easy to spot. They've got bulges, dents, leaks or corroded terminals. Any of those problems makes the battery unusable.

Mutilate bad dry cells before you dispose of them. That keeps someone from trying to use dead batteries.

Turn in unusable batteries that have BA numbers between 1000 and 1999, tho. Those are mercury batteries—and the mercury is recoverable.

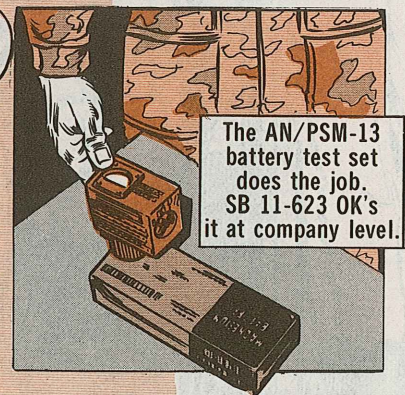
Leaking battery electrolyte won't always knock out batteries. You may be able to dust that white powdery stuff off your batteries with a nylon brush or a paper towel or cloth. A tooth brush works fine. Lay off wire brushes, tho.

Check often for leaking battery electrolyte. If it's not cleaned off pronto, it'll corrode the terminals and drain battery strength.

Test Them

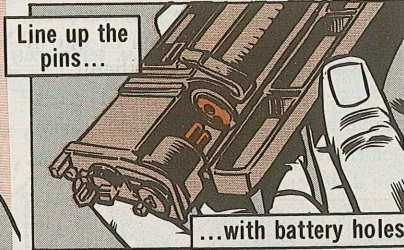
HAS YOUR STOCK OF DRY-CELL BATTERIES BEEN STORED FOR A WHILE?

USE A BATTERY TESTER TO SEE IF THEY'RE STILL GOOD?





Handle Carefully
When you put batteries in your equipment, take it easy. Rough stuff messes up your gear. For instance,



your AN/PRR-9 radio receiving set has both big and little pins. Its BA-505 battery has matching holes. Line 'em up.

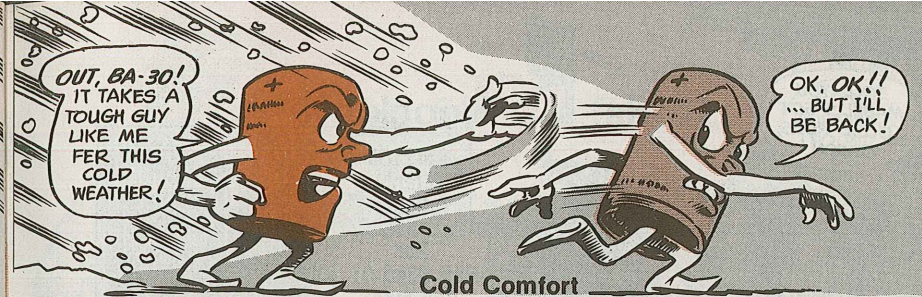
The same goes for the BA-4386 battery for your AN/PRC-25 and -77 radio sets. Lower it carefully onto the connector pins. A cracked receptacle can cause shorts—which could ignite leaking gas.

A battery's got to fit in the battery box. Too tight or loose fits can damage connectors, pins or battery receptacles.

Never overtighten the nuts on terminal-style dry-cells. Snug 'em only.

Pull the Plug
Are you through communicating? Pull the battery from your equipment. Pop it in the refrigerator. That'll save your battery and protect your gear. When the 2 mate for long periods, corrosion sets in.

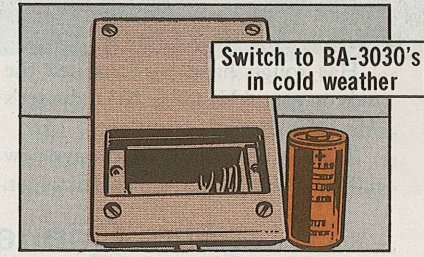
Pull the battery when you're hooking to another power source, like switching your man-pack radio to a vehicle.



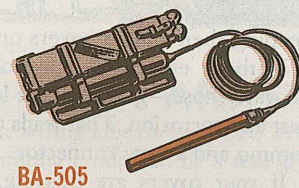
Cold Comfort

Come cold weather, some equipment takes different batteries. For example, your gear that uses BA-30's switches to cold-lovin' BA-3030's.

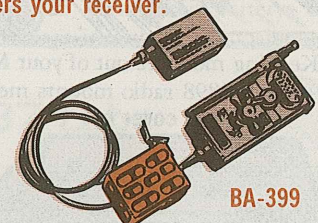
AN/PRC-25 and -77 radio sets use a vest-carried BA-398 battery. It stays inside your clothing for protection. To hook it up to your radio set, use CX-8808/G special purpose electrical cable assembly, NSN 5995-00-901-3647.



Your AN/PRT-4's BA-399 and AN/PRR-9's BA-505 pull cold-weather duty, so keep them warm inside your clothes. To keep operating, you need connecting cables. CX-11991/PRT-4 (NSN 5995-00-179-8257) gives you transmitting power. CX-11990/PRR-9 (NSN 5995-00-179-8256) powers your receiver.

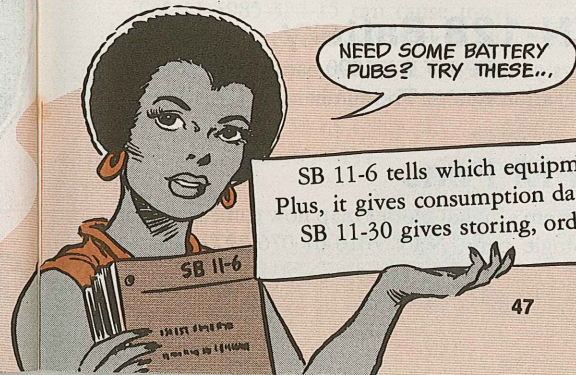


BA-505

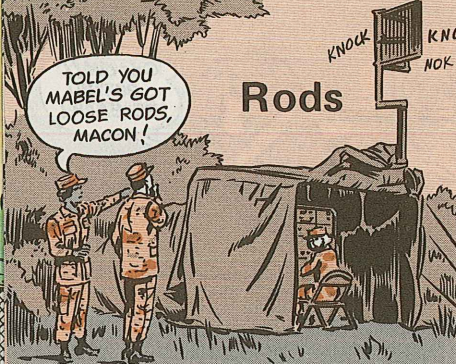


BA-399

Never just throw out your partially used cold-weather batteries when the weather warms up. Replace 'em only when they've lost their power.



SB 11-6 tells which equipment gets which batteries. Plus, it gives consumption data to help you plan your stock. SB 11-30 gives storing, ordering, shelf-life and technical info.



Rods Knockin'?

AS-2150 antenna reflector

Rod NSN 5340-01-069-4900 (DSU item)

Sleeve bushing SM-B-697050, FSCM 80063

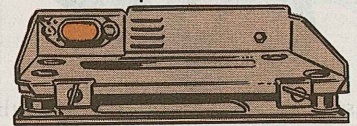
Retaining clip NSN 5340-01-069-4843

Has rough handling loosened the rods on your AN/ GRC-103 radio set's AS-2150 antenna reflector? Tighten up! All the parts have new numbers that make 'em easier to get.

Use Connector Covers



Keeping moisture out of your MT-1029 and -1898 radio mounts means **Keep cover on!**



keeping their rubber covers on. Without 'em, moisture—from rain or water hose—gets in. That leads to rust and corrosion. That leads to poor comms and a new connector. If your covers are missing, order new ones with NSN 5935-00-911-2323.

AN/ASN-128 Battery

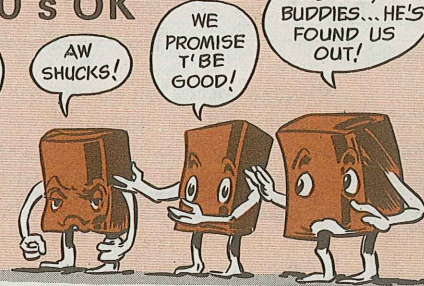
NSN 6135-00-835-1023 brings you the 9-V BA-1090 battery you need for your AN/ASN-128 doppler navigation system. The number is in C2 to TM 11-5841-281-12.

DPM Pens

Pens to ink your TACFIRE system's digital plotter map now come in kits of 24, NSN 7010-01-112-0127. Single pens, NSN 7010-01-076-2972, are no longer issued.



BA-5590's OK



The BA-5590 battery (NSN 6135-01-036-3495) you need for your comms/surveillance equipment now has a clean bill of health.

The bad batteries were made under contract numbers DAAB07-77-C-0464 and DAAB07-78-D-6353. Batteries made before Oct 81 (1081 on the battery) on DAAB07-80-D-6504 are also bad.

Bad battery? Turn it in!



Eyeball the contract number

Those made under other contracts and on the -6504 after Sep 81 are OK. The letter "A" was added to the serial number of the 6504 product to further ID good power packs.

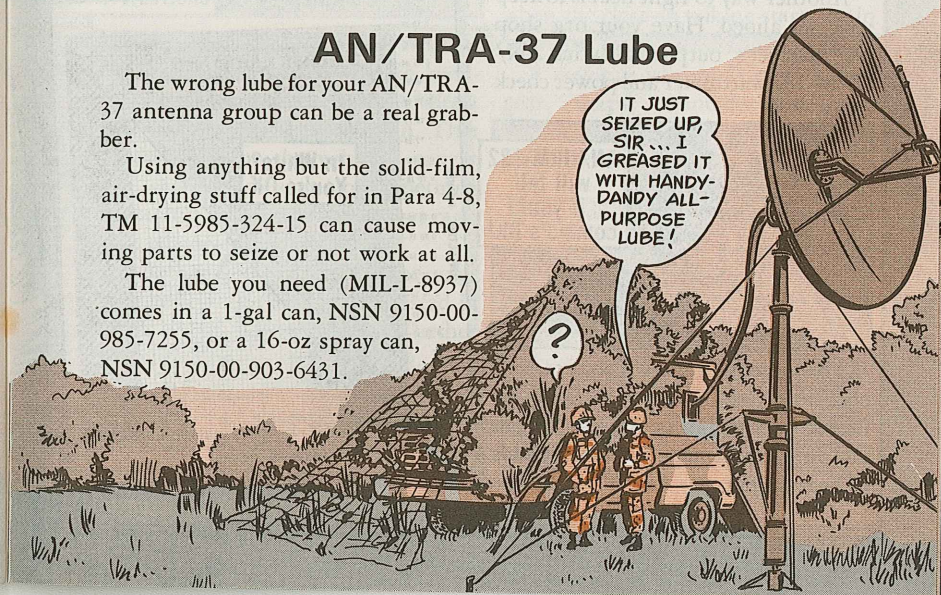
If you find a bad battery, don't discharge it. Turn it in to support.

AN/TRA-37 Lube

The wrong lube for your AN/TRA-37 antenna group can be a real grabber.

Using anything but the solid-film, air-drying stuff called for in Para 4-8, TM 11-5985-324-15 can cause moving parts to seize or not work at all.

The lube you need (MIL-L-8937) comes in a 1-gal can, NSN 9150-00-985-7255, or a 16-oz spray can, NSN 9150-00-903-6431.



KEEP the

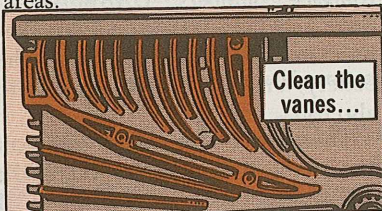
When the heat's on, keeping your radio set cool is your No. 1 common job.

Without a little cooling help, those sets'll shut themselves—and you—down.

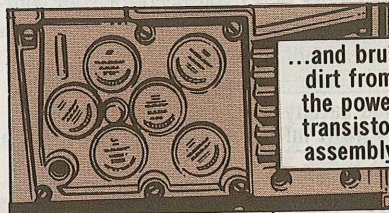
HERE'RE A FEW THINGS YOU CAN DO TO STAY ON THE AIR!...

Clean It Up

Keep the set's heat exchanger vanes free of dirt and dust. Remove the side and rear panels and give your set a good going-over. Do it at least monthly as your TM says. You'll need to do it more often in hot, dusty areas.



Clean the vanes...

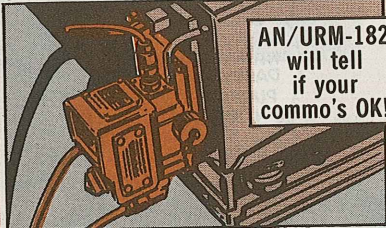


...and brush dirt from the power transistor assembly

Clean both the vanes and the power transistor assembly on the side. When you're done, always replace the panels. They funnel air from the fan to the vanes where it's needed.

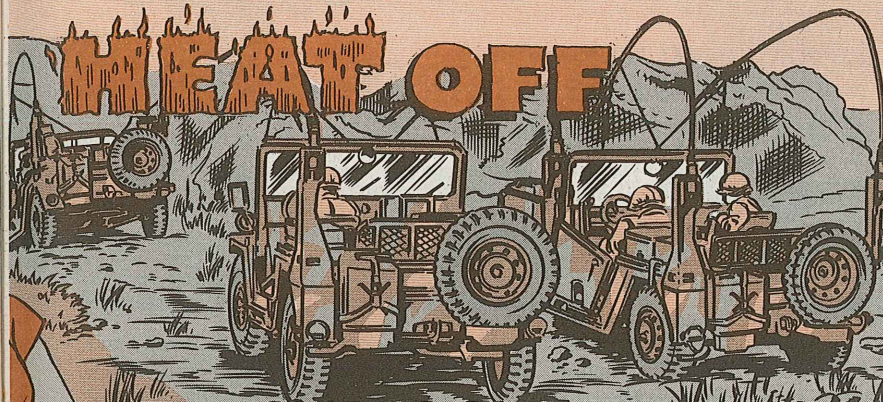
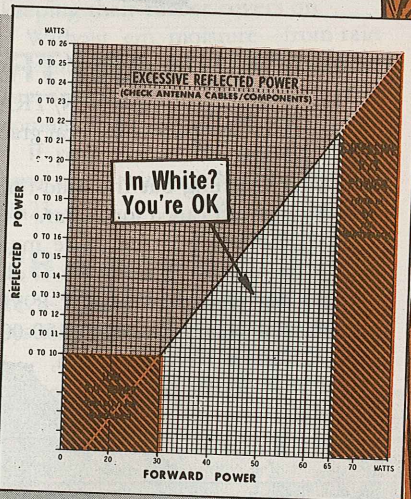
Get in Shape

Another way to fight heat is to keep your set alined. Have your org shop test the set's output with its AN/URM-182 wattmeter and power check chart.



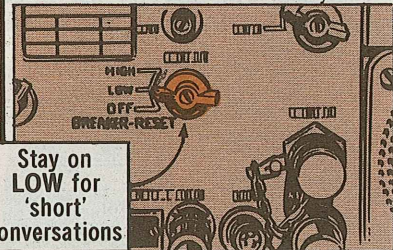
AN/URM-182 will tell if your commo's OK!

The meter will show if your radio is operating within forward and reflected power limits. Excess output not only can damage your set; it adds to heat output.



No Overworking

Next, never overwork your set. Keep those heat-building transmissions to a minimum. When you do



Stay on LOW for short conversations

transmit, keep conversations short.

Likewise, use only as much power as you need. If you're transmitting no more than 15 miles, use the LOW setting on your POWER switch. That draws less current—and generates less heat—than HIGH.

'Course, if you're shooting a signal more than 15 miles, use the higher setting. Turn back to LOW when you're done. That's in case you forget when the close-in talking starts again.

Watch Coversups

Some coversups are good. Like, keeping your set sheltered from direct sunlight as much as you can. That cover might be the vehicle's canvas top, shade from a tree or something makeshift like cardboard or wet rags. Use whatever's handy.

Another good coverup is the solar heat reflecting (SHR) paint listed in Table 7 of TB 43-0118. Whether camouflaging or spot painting, have your support add this protection to your set. Right now, only the green and sand shades are SHR. The others will be in the future.

A coverup you don't need is field gear, maps, manuals and other "debris" sitting on top of your radio. Keep the area clear to keep your cool.

Need SHR paint?

Table 7. Standard Camouflage Colors by NSN's

Color	National Stock Number	
	5 Gallons	1 Gallon
Desert sand	8010-00-111-8353	8010-00-111-8004
Sand	8010-00-111-8336	8010-00-111-7988
Earth yellow	8010-00-111-8330	8010-00-111-7988
Earth red	8010-00-111-8345	8010-00-111-8008
Field drab	8010-00-111-8129	8010-00-111-7943
Earth brown	8010-00-111-8358	8010-00-111-7988
Olive drab	8010-00-111-8069	8010-00-111-7940
Light green	8010-00-111-8007	8010-00-111-7980
Dark green	8010-00-111-8042	8010-00-111-7988
Forest green	8010-00-111-8010	8010-00-111-7987
Black	8010-00-111-8356	8010-00-111-8006

Check Table 7 of TB 43-0118

TROOP SUPPORT

MKT-75 Kitchen Trailer...

Trailer Towing Tricks

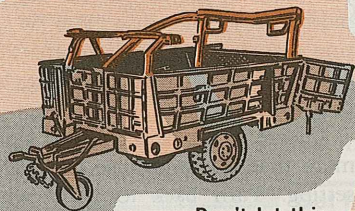
HMMM ... TH' 78th INF. IS HAVIN' PEA SOUP TODAY!

... IF THERE'S ANY LEFT, Y'MEAN...

...OR IF THEY HAVE ANYTHING TO EAT IT IN... OR WITH!

You can cook up a heap of hot meals with your MKT-75 mobile field kitchen trailer, but you have to get it to the field first...and in one piece.

Take it real slow and easy when



Don't let this happen to you!

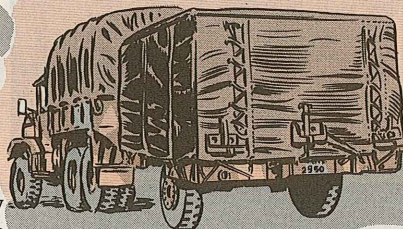
you're hauling the trailer, especially cross-country or on rough roads. The trailer's top-heavy when it's fully loaded with kitchen equipment. It'll be belly up if you take a corner too fast or hit a bump too hard.

Never tow the MKT-75 behind anything but a deuce-and-a-half. Bigger trucks bang up the corners of the trailer when you turn.

Crank up the leveling jacks all the

way before you move out. If you don't get 'em up all the way, the feet will rub against the trailer's tires like a brake.

If you move the trailer without first breaking it down to travel mode, you're asking for trouble...and a big repair bill. The MKT-75 has to be packed up and buttoned down before it's ready to roll.



MKT-75 in travel mode

Everything has to be packed in its proper place to fit—you've got no room to spare. Para 2-6 of TM 10-7360-206-13 has the storage info.

Before you start packing, close and secure the roof air vents. You can't get to 'em once the trailer's packed.

M1945 Mobile Bakery Plant

Use only light mineral oil, NSN 6505-00-240-6328, in the dough mixing machine divider oil pump reservoir on your M1945 mobile bakery plant. Anything else—like salad oil—gums up the works.

OFF WE GO INTO THE WILD J BLUE YONDER

CVC Tote Bag

YEAH -- THAT'S SMEDLEY'S THEME SONG SINCE HE GOT HIS NEW CVC TOTE BAG!

Want to give your DH-132 combat vehicle crewman's helmet a fighting chance against dirt, moisture and abuse?

Bag your CVC...



...with the flight helmet bag!

Bag it! NSN 8415-00-782-2989 brings you a padded, zippered and water-repellant bag that'll protect your headgear.

The bag is the same one used for the flight helmet. The OD bag has a carrying handle and extra pockets inside and outside for accessories.

Your post or installation commander can OK one bag for each CVC helmet, per CTA 50-900.

CVC Helmet Fix

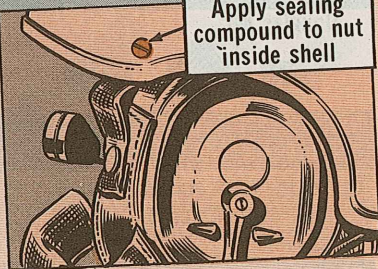


Dear Editor,

The nuts holding the attaching tabs to the DH-132 CVC helmet shell work loose. The tabs usually get lost when the nuts fall off. By putting just a little sealing compound on the nuts we keep them from coming loose. Saves having to replace lost attaching tabs 'n' nuts.

SGT Harvey Ames
WAARNG

Apply sealing compound to nut inside shell



(Ed Note—Sounds like a gripping solution. NSN 8030-00-891-8358 gets an 8-oz bottle of the sealing compound.)

Diamonds

HERE'S A LIST OF HIGH-USE ITEMS JUST ABOUT ANY MAINTENANCE SHOP NEEDS!



Chamois leather

NSN 8330-00-965-1722

Cotter pin assortment



NSN 5315-00-598-5916

Electrical waterproof connectors (for electrical tool kit, No. 1 Common)

Bendix Kit



NSN 5935-00-570-1380

Douglas Kit



NSN 5935-00-570-1060

(Authority: SM 9-4-5935-501)

Gasket material, animal or plant fiber, WOG (Water, oil, grease) resistant

NSN 5330-00-467-3615 1/32-in thk

NSN 5330-00-270-8470 1/16-in thk

NSN 5330-00-233-5845 1/64-in thk

Gasket, cork

NSN 5330-00-233-5844 1/2-in thk

NSN 5330-00-291-1685 1/32-in thk

NSN 5330-00-171-9134 3/16-in thk

Gasket shellac

NSN 8040-00-664-4134

Nut assortment

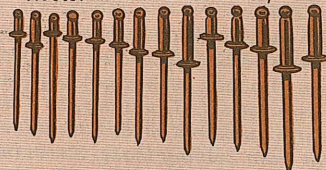


NSN 5310-00-297-3751

O-ring assortment

NSN 5330-00-159-3130

Rivets (replacement for blind hand riveter in No. 1 Common)



NSN 5320-01-004-0238 PN SB4-2

NSN 5320-01-028-6621 PN SB4-4

NSN 5320-01-053-2932 PN SC4-2

NSN 5320-00-510-7823 PN AB4-2A

NSN 5320-01-091-9180* PN AB6-2A

in the Rough

THEY'RE REAL GEMS!



Lock washer assortment



NSN 5310-00-209-2312

Flat washer assortment



NSN 5310-00-275-4290*

Heat Shrinkable tubing (for electrical wire repairs)

NSN 5970-00-812-2968 1/16-in dia

NSN 5970-00-812-2969 1/8-in dia

NSN 5970-00-815-1295 1/4-in dia

NSN 5970-00-812-2967 1/2-in dia

Woodruff key assortment



NSN 5315-00-271-4251

Set Screw assortment

NSN 5305-00-275-4073

Gasket sealing compound
Hardening type

NSN 8030-00-247-2524

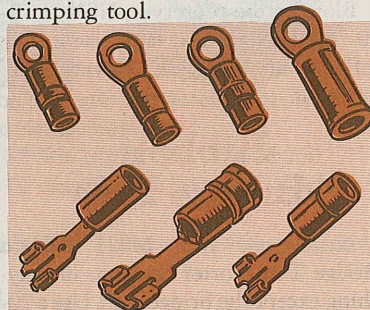
Nonhardening type

NSN 8030-00-656-1426

Insulating varnish, elect

NSN 5970-00-284-5448

SC 5821-91-CL-E04 has electrical ferrules, terminal lugs, and quick disconnect terminals that are used with a crimping tool.



Items marked * are not on the AMDF. Order them on DD Form 1348-6. In the Remarks Column write "NSN not on AMDF."

Use Appendix A, CTA 50-970 to get the other expendable consumable "as required" maintenance supplies.

Keep Afloat!



The 7-person inflatable lifeboat, NSN 1940-00-368-2896, and the 15-person boat, NSN 1940-00-529-7277, have been replaced by a new 15-person inflatable lifeboat, NSN 1940-00-204-3894. When you order the new boat, also order an installation kit, NSN 2090-01-024-1745. When the new lifeboat is unserviceable, replace it, but not the kit. The kit stays attached to your freighter, lighter, or LCU.

Life Preserver Tip

Always wear your yoke-type life preserver inflated while on board a liferaft, boat, or vessel.

Blow up the preserver, NSN 4220-00-783-6609, until it feels like a fully inflated air mattress. Never over-inflate it.

Ribbon Bridge Info

Never use your M821 Ribbon Bridge Transporter boom to lift anything except the bridge bays. Use a 20-ton crane to lift loaded cargo pallets or other items of equipment.

FM 5-25 Explosives and Demolitions is good reading if you have to set up unit SOP for moving explosives and ammunition with the transporter.

FARE System Parts

Jot down these NSN's for the Forward Area Refueling Equipment suction hose kit, Fig C-1 of Change 4 to TM 5-4930-229-12&P: Suction hose container (Item 1), NSN 4930-01-069-9054; suction hose assembly (Item 2), NSN 4720-01-068-8273; hose clamp (Item 5), NSN 4730-00-106-5545; and ground rod (Item 10), NSN 5975-01-050-5707.

Sleep in a Drier Bag

M1949 sleeping bags need a water repellant sleeping bag case to protect 'em from moisture. Attach the case—NSN 8465-00-237-8719—to the bag with spun nylon lace, NSN 8315-00-252-3004. You can find more about sleeping bag parts and maintenance in TM 10-8400-201-23, General Repair for Clothing and Individual Equipment.

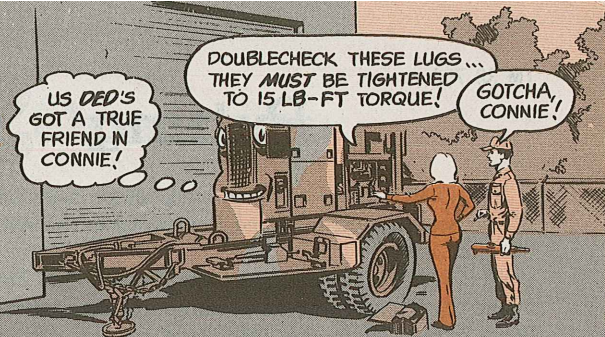
Tool Check



Looking for metal tags to help identify tools, masks and other gear? NSN 9905-00-473-6336 gets you a 1-in diameter brass tag. Use the electric etcher from your No. 2 Common to engrave the tags.

DED Generators...

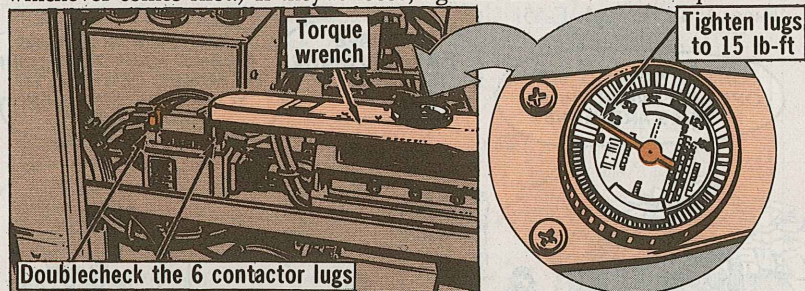
Loose Load Contactor Lugs



Load contactors on the 15-KW thru 100-KW DOD family of DED generators are burning out.

Suspicion points to loose lugs that hold the big cables to the load contactor. (Detail A, Fig 3-18, TM 5-6115-457-12, f' rinstance).

Doublecheck the 6 contactor lugs now to be sure they're tight. (Make a note to check the lugs again after 6 months or 500 hours operation, whichever comes first.) If they're loose, tighten 'em to 15 lb-ft torque.



While you're checking the lugs, don't forget the lockwashers and flat washers. Make sure they're present and doing their job.

If you find any loose lugs, send in a SF 368 (QDR) per TM 38-750.

If you find the lugs still tight after 12 months or 1,000 hours operation, scratch the lug inspection bit.

Pull this lug check on sets supported by TM 5-6115-457; -464; -465; and -545-series manuals.

This applies to generators with these stock numbers:

NSN 6115-00-118-1241	15-KW	NSN 6115-00-118-1243	60-KW
NSN 6115-00-118-1245	15-KW	NSN 6115-00-118-1252	60-KW
NSN 6115-00-118-1244	15-KW	NSN 6115-00-118-1253	60-KW
NSN 6115-00-118-1240	30-KW	NSN 6115-01-036-6374	100-KW
NSN 6115-00-118-1247	30-KW	NSN 6115-00-133-9101	100-KW
NSN 6115-00-118-1248	30-KW		

Putting SMART!

If you had your ear to the ground, you probably heard that the Supply and Maintenance Assessment and Review Team (SMART!) was planning to kill off some forms.

Well, it's official. An Interim Change 2 (I02) to TM 38-750 picked up some of the changes. Among other things, the interim change wiped out the DA Form 2408-1, Equipment Daily Log.

Trashcan your DA 2408-1's. Mark out Para 5-4 and Figs 5-3 and 5-4. Ignore the X's under the DA Form 2408-1 column on Pages E-2 through E-55.

For some other gear, the DA Form 2408-10, Equipment Component Record, and the DA Form 2408-14, Uncorrected Fault Record, got the boot.

Line out the X's under the DA Form 2408-10 column for tactical vehicles on Pages E-21 through E-28.

Scratch the X's under the DA Form 2408-14 column for all the equipment on Pages E-48 through E-55.



Records Folder

With the DA Form 2408-1 gone, other forms take on the job of keeping up with status, operational limits, fuel and oil use, service reminders and so on.

So start with your Equipment Records Folders. The Equipment Records Folder carries all the forms and records an operator needs during the dispatch. Normally, you tuck the DA Form 2404, DD Form 1970 and the 2 accident forms in the folder. If the weapon's to be fired, add the DA Form 2408-4.

The DA Form 2408-14 showing deferred maintenance can go in as well—when one's required. But that's a local option.

Into Your Operation

Now you need a little more. Sure, you slip an index card or something in the pocket on the outside of the folder to marry folder and gear.

But now you add another bit of info to that card: Next scheduled service and lube due—to pick up what Block 3 of the DA 2408-1 told you. Remember, the operator never sees the DD Form 314.

ADMIN NO.	H-16	MODEL	M151A2	ERC	A
NOUN	Tak '4-Ton	NSN	2320-00-177-9258		
SERIAL NO.	A236741				
NEXT SVC AT	27,989 miles / 13 Sep	NEXT LUBE AT	27,412 miles / 26 Aug		
OPERATOR	Pfc Saavick	SUPERVISOR	SSG Chkwa		

The Trip Ticket

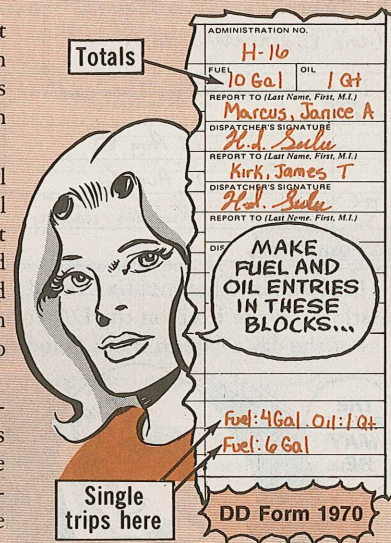
DD Form 1970, Motor Equipment Utilization Record, is your dispatch form or trip ticket. 'Course, outfits that dispatch by ADP cards stick with their cards.

Need to keep tabs on the fuel and oil added? Put the amount of fuel and oil added in the Remarks Block for that trip or part of the dispatch. At the end of the dispatch, put the total fuel and oil added at the top of the DD Form 1970 under the Administration No Block.

Sending the equipment on an extended dispatch? Give the operator as many DD Forms 1970 as may be needed. But remember, you can continue using the DD 1970 for more than 1 day.

Some commands put out the word that the DD 1970 will be kept until the next dispatch or until the next fuel and oil summary is due. Check your SOP on that.

The DA Form 2401, Organization Control Record for Equipment, stays pretty much the same. But your CO or command may want you to put the total fuel and oil added during a dispatch in the Remarks Block or on a separate sheet.



DA Form 2404

The heavyweight for the operator is the DA Form 2404, Equipment Inspection and Maintenance Worksheet. That form carries the brunt of the new system. (Aircraft use of the DA 2404 is not changed!)

If you dispatch with ADP cards, forget about the DA Form 2404—unless you need it as an uncorrected fault record.

But for everybody else, the DA Form 2404 now gives you status, and operational limits as well as maintenance and inspection info.

When the dispatcher hands you—the operator—the DA Form 2404, you've got the action. Use it and the operator's manual to pull the Before Operations Check in the Preventive Maintenance Checks and Services (PMCS) list. No faults? Put the date in Column c.

Go back to the dispatcher. You'll get the Equipment Records Folder in return and the dispatcher will release the gear to you.

Tuck the DA Form 2404 in the folder and go on your way.

8a. SIGNATURE (Person performing inspection)		8b. TIME		9a. SIGNATURE (Maintenance Supervisor)		9b. TIME		10. MANHOURS REQUIRED	
Gene Rodenberry PFC									
TM ITEM NO.	STATUS	DEFICIENCIES AND SHORTCOMINGS	CORRECTIVE ACTION		INITIAL WHEN CORRECTED				
		15 Aug 82			G.R.				
		19 Aug 82							
	<input checked="" type="checkbox"/>	Radiator leaking							

DA Form 2404

Find a fault you cannot fix or need a part to fix it—before, during or after operations? Write it up on the DA Form 2404.

Put the day's date in Block 5 and sign in Block 8a.

THE FAULT MAY BE...

- Fixed
- Put on DA Form 2407
- Deferred
- Downgraded

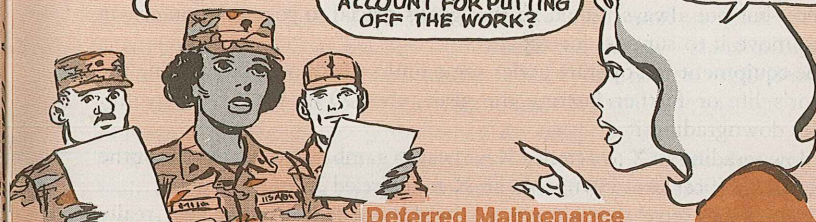
If the fault is fixed, the mechanic closes out the form. The dispatcher and/or TAMMS clerk makes any special notes or entries needed on other forms and tosses the DA 2404.

If the fault is put on a job order to support, close out the entry with the DA Form 2407 information. Unless the fault makes the gear not mission capable (NMC), toss the DA 2404.

CONNIE... WE'VE GOT TO DELAY REPAIRS...

...DO WE USE THE DA 2404 OR THE DA 2408-14 TO ACCOUNT FOR PUTTING OFF THE WORK?

DEPENDS ON WHAT THE GEAR IS!



Deferred Maintenance

Could be maintenance wants the problem deferred—put off until: A part comes in; the next scheduled service; support has the time; or whatever reason. If the CO's designated representative agrees, you can defer that work.

Transcribe the information to the DA Form 2408-14. Close out the DA Form 2404.

But not all gear requires a DA Form 2408-14. What do you do then?

TM NO.	STATUS	DEFICIENCIES AND SHORTCOMINGS	CORRECTIVE ACTION	INITIAL WHEN CORRECTED
29	<input checked="" type="checkbox"/>	Left door panel needs spot painting	Schedule for next PM Service	JTK

DA Form 2404

Treat the DA Form 2404 like a DA Form 2408-14. That is, explain in Column d the reason you're putting off the work. The CO's rep initials Column e.

Note this: Faults that carry an X status symbol and all NMC faults—no matter what status symbol you use—must be fixed as soon as possible. You cannot defer them.

Faults you can defer, though, may be around for a day or a while—depending on the situation. So when you need to dispatch that equipment again, start a new DA Form 2404.

The dispatcher puts all the info on the deferred fault—TM item number, status symbol, fault and reason for delay in Columns a through d. The person authorized to OK the delay initials in Column e.

The dispatcher hands the form out to the operator. No before-operation faults—except the 1 already covered? The operator puts the date in Column c.

Any new faults found during the day go on the form as usual.

If no new faults come up, the operator initials in Column e at the end of the dispatch. Continue to use that form until another fault occurs or the deferred fault can be cleared.

Limited Ops

Mostly when you find a fault that carries an X status symbol, you're stopped—but not always! Could be that gear's crucial to your mission or you need to move it to support for repair.

If the equipment can operate under some limits—without endangering the operator's life or further hurting the gear—the CO or the CO's rep may consider downgrading it.

But downgrading an X to a circled X is always a gamble. So only the CO or the maintenance officer can downgrade an X to a circled X status symbol.

And even they give that situation a hard, hard look. Is that gear really needed—and right now? Can it be operated safely? Will the limitations work—safely?

If so, circle the X in Column b of the DA Form 2404. Write "cleared for limited operations" in Column d and add the specific limits. Use 2 lines if you need them so everybody fully understands. Initial in Column e and sign in Block 9a.

8		(X) Windshield wipers inoperative	Cleared for limited operations	J.T.K.
			Restricted to daytime use	
DA Form 2404		21 Aug 82		GR

When the limited operations are finished, put the gear back on the X status symbol on the next open line.

Start a new DA Form 2404 for the next dispatch. But just like with deferred entries—when no DA Form 2408-14 is kept—the circled X fault with its limited operations will be the first entry on the new form.

The operator pulls a PMCS as usual. If no new faults are found, he or she puts the date in Column c under the limited operations entry and goes on.

You keep that form going until a new fault occurs or the limited operations come to an end.

Status Symbol Change

Sometimes a CO or the CO's rep may disagree with a status symbol given to a fault.

That's a gamble, too. So you handle that situation much like a downgrade.

8a. SIGNATURE (Person (s) performing inspection)		9a. SIGNATURE (Maintenance Supervisor)		9b. TIME	10. MANHOURS REQUIRED
Gene Rodenberry PFC		James T. Kirk CPT			
TM ITEM NO.	STATUS	DEFICIENCIES AND SHORTCOMINGS	CORRECTIVE ACTION	INITIAL WHEN CORRECTED	
12	X	Widget mounting bolt missing	Status symbol change	JTK	
12	X	Widget mounting bolt missing			

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The CO or the maintenance officer puts "status symbol change" in Column d of the original entry and initials Column e. He or she enters the new status symbol in Column b and the fault in Column c on the next open line of the DA Form 2404. The CO or the rep—who made the change—signs in Block 9a.

If the original—or the new status symbol—is an X, the CO designates someone to inspect the work when the fault is fixed. The inspector initials Column e and the status symbol when the work is OKed.

Why do you go to a new DA Form 2404 for the next dispatch after you: Find a fault; or, downgrade or change a status symbol? Those signatures in Block 8a and 9a call a halt to the form. When you sign in those blocks, you're accepting personal responsibility for the entry you made on the form.

Something important or unusual's on the form and it needs special attention.

If you just kept on with the same form, those entries might get lost in the shuffle. Your signature says "Whoa!"

DD 314

Tie a string around your finger or a bell around your neck—whatever works to remind you to look at your DD Forms 314, Preventive Maintenance Schedule and Record often!

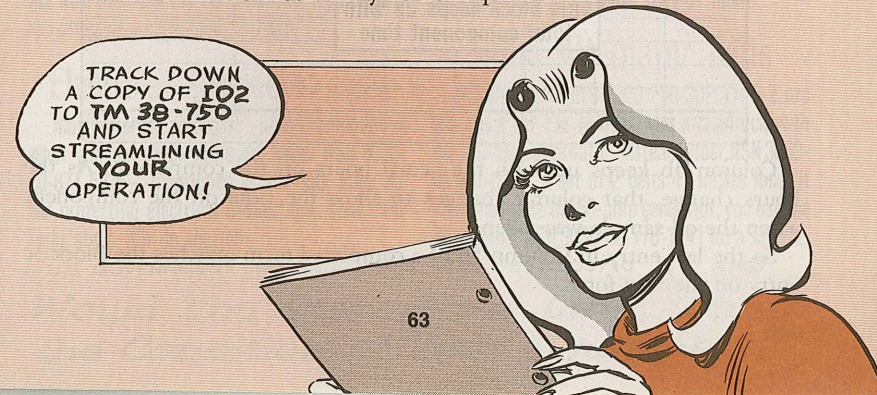
With no reminder on the DA Form 2408-1, a once-a-month glance won't hack it. Focus your sharpest eagle eye directly on the services and lubes that may be scheduled by miles/hours.

DD FORM 314	DEC	REMARKS
		Odometer replaced at 28,011 miles, New reading 114 miles

DD Form 314

For gear losing the DA Form 2408-10, the DD 314 keeps up with total miles or hours on the end item. When you change an odometer or hourmeter on that equipment, write it in the Remarks Block of your DD Form 314.

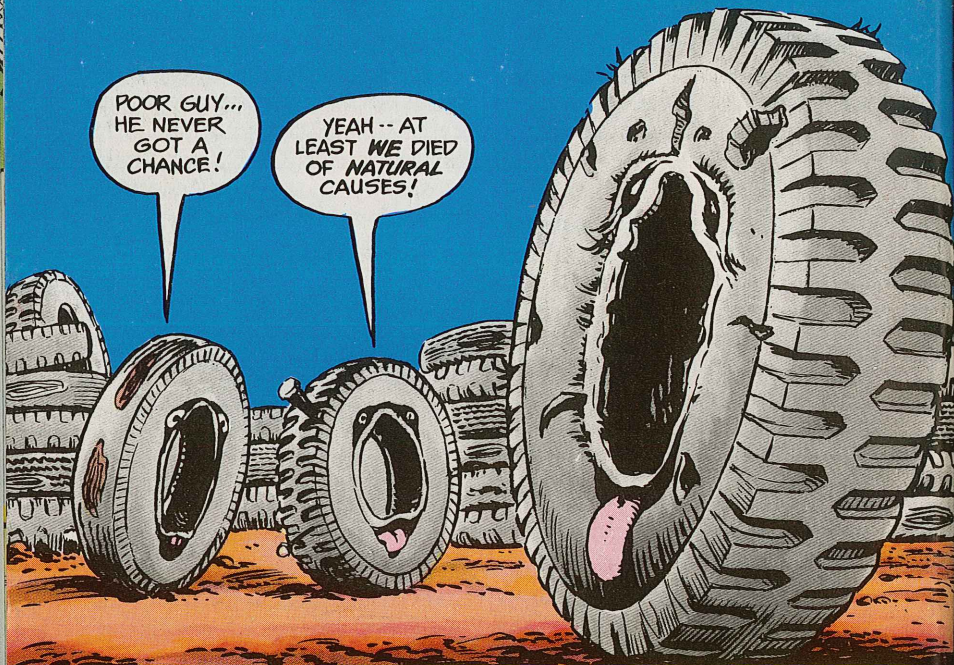
Carry the meter change info over to each new form. Later meter changes are added to the Remarks Block. They do not replace earlier info.



WRONG Tools Ruin 1 of 3 Tires

POOR GUY...
HE NEVER
GOT A
CHANCE!

YEAH -- AT
LEAST WE DIED
OF NATURAL
CAUSES!



Use **ONLY** Tools
Designed + Authorized
for Tire Maintenance!