

Issue 308

PS

July
1978

THE PREVENTIVE MAINTENANCE MONTHLY

SORRY, FELLAS--
BUT NOBODY DID ANY
PM ON MY COOLING
SYSTEM!

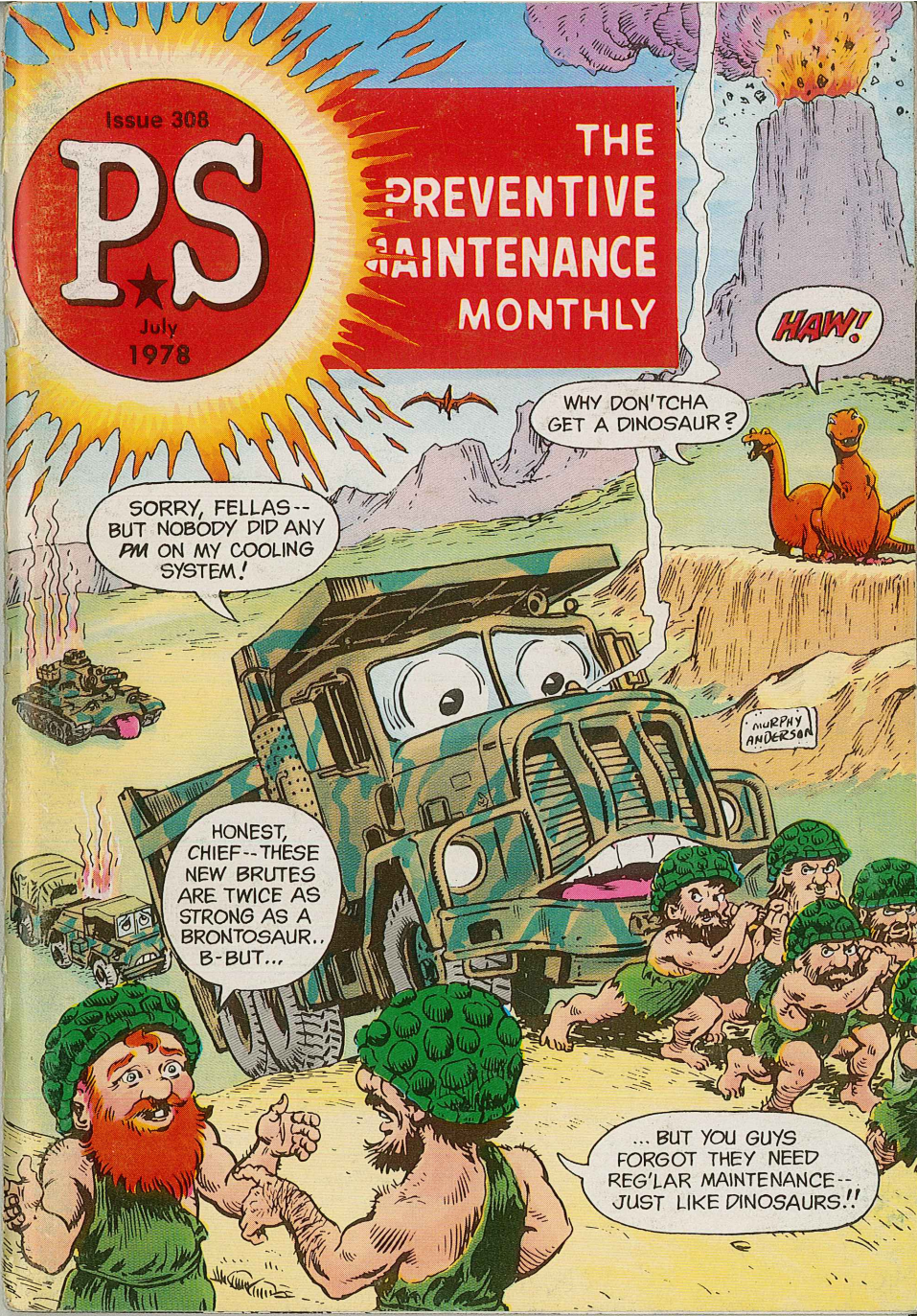
WHY DON'TCHA
GET A DINOSAUR?

HAW!

HONEST,
CHIEF-- THESE
NEW BRUTES
ARE TWICE AS
STRONG AS A
BRONTOSAUR...
B-BUT...

... BUT YOU GUYS
FORGOT THEY NEED
REG'LAR MAINTENANCE--
JUST LIKE DINOSAURS!!

MURPHY
ANDERSON



MWO WRAP-UP



Even though equipment headsheds (Army Readiness Commands) now have the responsibility of applying MWO's, they still need your help.

'Course, you still keep tabs on your equipment's needed or already applied MWO's on a DA Form 2408-5 Modification Record. This is important info. Keep the form up-to-date. Could be the headshed'll contact you with questions on your MWO's.

For other people, tho, the MWO program is still alive and well. When the headshed gets in a bind, they can ask any field command or DS/GS shops to apply an MWO. If the headshed needs your support unit's help, for example, they'll arrange it through a memorandum of understanding (MOU).

The MOU works like a contract—covering what needs to be done, how long it will take, parts or kits and, maybe, a way to bill the headshed for the work.

1. NOMENCLATURE				2. REGISTRATION NUMBER				3. SERIAL NUMBER			
CARRIER, PERSONNEL				M100A1				MC6789			
								F117			
MODIFICATIONS REQUIRED											
MWO NUMBER	DATE OF MWO (Day/Mo/Yr)	PRI-ORITY	ECH	MWO TITLE AND KIT NUMBER(S)	DATE MWO APPLIED (Day/Mo/Yr)	MAN HRS	ORGANIZATION APPLYING MWO	SIGNATURE (Certification of MWO Application)			
9-0000-000-30/3	15 JAN 01	N	F	FLINDER SUPPORT MODIFICATION							
Under the new MWO program, your job is to keep Column a thru e entries current and tell support when you have an overdue MWO											
EQUIPMENT MODIFICATION RECORD (TM 38-750)											

DA FORM 2408-5, 1 JAN 64

After your support applies the MWO, they'll report the job on a DA Form 2407. The hardcopy original (Copy 2) of the DA 2407 goes directly to the NMP at the Readiness Commands. The revised TM 38-750 (May 78) gives you the latest word on filling out and sending in a DA Form 2407 on MWO's.

A copy of the DA 2407 no longer goes to Lexington. They're getting out of the MWO business.

If your support gets the job of applying MWO's, they'll let you know.

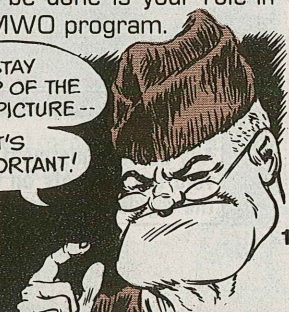
You talk with your maintenance supervisor and the support people to plan a convenient time for the MWO application. Make sure you know how long support will need for the job.

Look over all your DA 2408-5 forms for overdue but still current MWO's. Tell support about any you find. They should notify the headshed—through command channels—about your needed MWO's.

If the headshed doesn't know about your missing MWO's, they can't apply them. Letting support—and indirectly, the headshed—know what work needs to be done is your role in today's MWO program.

SO STAY ON TOP OF THE MWO PICTURE --

IT'S IMPORTANT!



PS THE PREVENTIVE MAINTENANCE MONTHLY

Published by the Department of the Army for the information of all soldiers assigned to combat and combat support units, and all soldiers with organizational maintenance and supply duties. Within limits of availability, older issues may be obtained direct from Editor, PS Magazine, c/o US Army Materiel Readiness Support Activity, Lexington, KY 40511.

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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: Or call: AUTOVON 745-3355.

MSG Half-Mast
PS Magazine
Lexington, KY
40511

Use of funds for printing of this publication has been approved by Headquarters, Department of the Army, 23 December 1975 in accordance with AR 310-1.
DISTRIBUTION: In accordance with requirements submitted on DA Form 12-5. Private subscriptions: Order from US Govt. Printing Office, Supt. of Documents, Washington, DC 20402. \$9.00 per year.

FIREPOWER

M60A1 (RISE)...

REGULATOR NEEDS ADJUSTMENT

ARRRGHH! MY ALTERNATOR'S KILLIN' ME!

All Bendix regulators, NSN 6110-00-467-4000, with serial numbers 1 thru 3879, need an immediate adjustment to head off damage to the alternator.

The present setting on the regulator fails to protect the alternator from voltage spikes, current surges, overloads and short circuits.

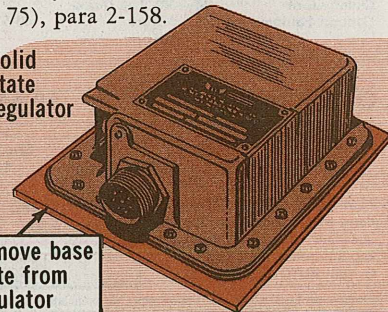
TB 43-0001-39-4 (Jan 78) has the story.

Whether the adjustment is made at unit level or by DS depends on your command's decision. But if you unit mechanics are given the OK to do the job, here's how:

Take the regulator off the tank like it says in TM 9-2350-257-20-1 (Dec 75), para 2-158.

Solid state regulator

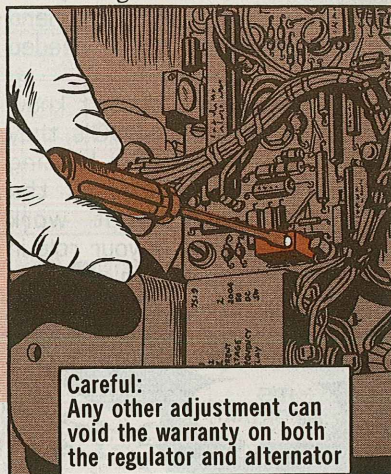
Remove base plate from regulator



Put it on a clean, well-lighted work bench and remove the base plate.

Carefully scrape away all the coating around the screw in the potentiometer.

Turn the screw clockwise 25 complete turns. Reseal the screw with a sealing compound. NSN 5970-00-181-0190 gets a kit.



Careful: Any other adjustment can void the warranty on both the regulator and alternator

2

YOU NEED TO GET YOUR REGULATOR ADJUSTED, OL' BUDDY!

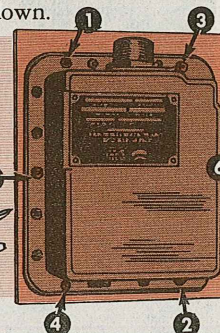
RIGHT ON! I FEEL GREAT SINCE MY MECH LOOKED AFTER MINE!

Coat both sides of the cover gasket with a thin coating of silicone compound. NSN 6850-00-880-7616 gets 8 ounces and 6850-00-295-7685 gets 10 pounds.

Put all the screws and nuts back thru the base plate and regulator housing and snug 'em down.

TORQUE THESE FIRST--

TORQUE THE REST IN ANY SEQUENCE.



Torque all the screws 10 to 12 lb-in torque—the 4 corner screws first, then the 2 center screws, then the remaining screws in any sequence.

Now you've got to mark the changed regulators.

Paint a yellow stripe about 1/4 inch wide and 3 inches long on the housing directly above the Bendix nameplate.

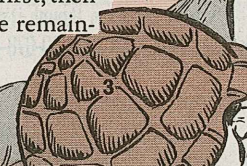
PAINT A YELLOW STRIPE HERE...

NSN 7510-00-145-0062 gets an ounce of epoxy base yellow marking ink and 7510-00-888-8526 gets a quart.

NOW, PUT THE REGULATOR BACK ON THE VEHICLE, AND IT'S READY TO GO.

AT'S MY GIRL!

?



Cooked Parking Brake Cables?



Now's the time for checking the parking brake cables on your M60 family tank. Zero in on that left-hand cable and its supporting brackets.

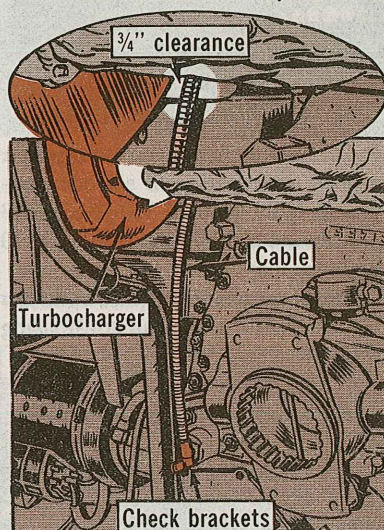
If they're bent, loose or misplaced, a section of the cable can come too close—or even contact—the turbocharger on the same side.

When that happens, the cable's vinyl coating does a fast disappearing act, and you're on your way to possible cable failure.

Fact is, that turbocharger often gets as hot as 1200°F—and that's hot enough to weaken the flexible sheath and the cable inside. Even if the cable doesn't fail right away, the heat can affect the metal surfaces so cable corrosion begins.



Tighten, straighten, replace or move those brackets until you have at



least 3/4-in clearance between the cable and turbocharger.

That'll keep your cable cooler—and your unit's OR rate hotter.

M63 Fuze Setter Confusing?

M109/M109A1 SP howitzer crewmen can get confused by the M63 fuze setter, NSN 1290-00-966-9318, listed in TM 9-2350-217-10N (Sep 74). Even though it's on the AMDF, it's not available. The M63 has been replaced by fuze setter M34, NSN 1290-00-078-4367. The new edition of TM 9-2350-217-10N will list the M34.

New Vehicle Weight Classes

The weight class of your tank may have changed since FM 5-36 came out. Here's the latest info:

THERE Y'ARE!
IN STONE...!!

VEHICLE	WEIGHT CLASS	
	EMPTY	LOADED
M60 tank	45	50
M60A1	52	54
M60A1 (RISE)	49	53
M60A2	52	55
M60A3	53	55
M48A5	48	54

WHICH ONE
IS DINO'S?

WOW-- NOW
THAT'S CLASS!

M109/M109A1 Finger Saver



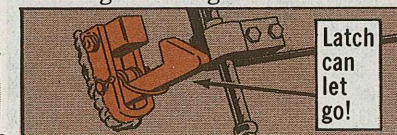
Sure it's nice to have all your fingers. Even if you never use them very much they look nice just hanging there.

But you can lose them real quick if you drape your hand over the side door of the cab.



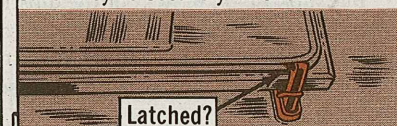
The cab side door latches have a nasty habit of letting go, 'specially

during firing or when the vehicle is bouncing over rough terrain.

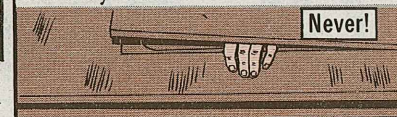


So, to keep your fingers in place, do these things:

1. After you open the doors make sure they're securely latched.



2. Even if you're sure the doors are latched, never put your fingers where they could get sliced off if the door suddenly closes.



M113 Transmission Troubles

OIL'S BLOWIN' OUT TH' DIPSTICK TUBE!!

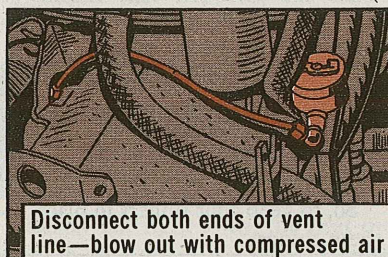
IT'S GOTTA BE A CLOGGED VENT LINE OR AN OLD FILTER ELEMENT!

THAT'S GOTTA BE YOUR PROBLEM, TORTY!

The transmission vent line clogging up on your M113-family vehicle? If oil has been blowing out of the dipstick tube, a clogged transmission vent line is the most likely reason.

Loosen the nut on each end of the vent line, blow out the line with an air hose, and put the line back again.

If the line is damaged, your mechanic can make you a new one from bulk plastic tubing, NSN 4710-00-805-4149. The securing nuts at each end are part of elbow, pipe to tube, NSN 4730-00-278-4496. These parts are listed on page 65 of Ch 1 to TM 9-2300-257-20P (Aug 75).



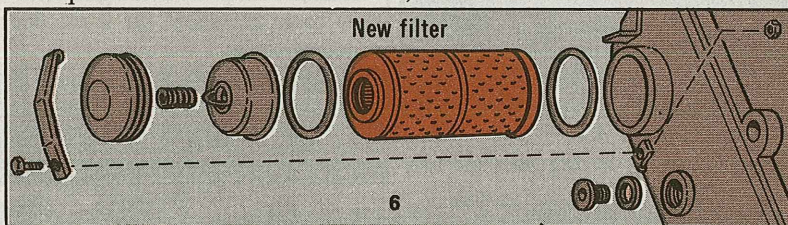
Plastic tubing
4710-00-805-4149
Nuts and elbow
4730-00-278-4496

Make your own vent line

But suppose oil blows out the dipstick tube and you know the transmission vent line is not clogged? What else could be wrong?

Get your mechanic to check your transmission oil filter element. The old "sock type" filter elements often cause oil blow-by, and there're still a lot of them around.

If you have one of the old filters your mechanic can get a transmission oil filter parts kit NSN 2910-00-860-7343, which has the new filter.



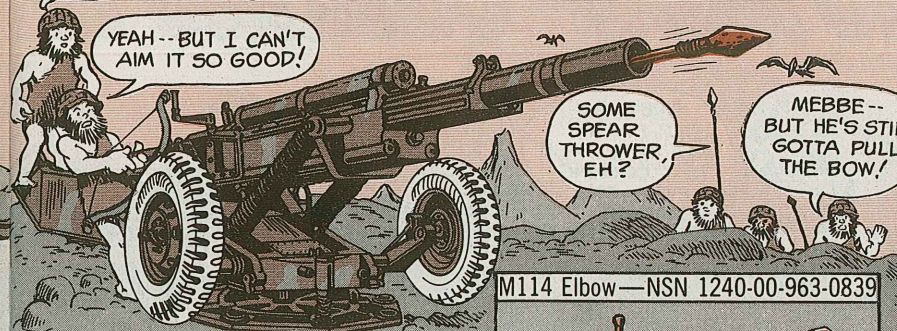
DROPPED FROM THE SKY, HUH?

M102 Howitzer Fire Control

YEAH--BUT I CAN'T AIM IT SO GOOD!

SOME SPEAR THROWER, EH?

MEBBE--BUT HE'S STILL GOTTA PULL THE BOW!



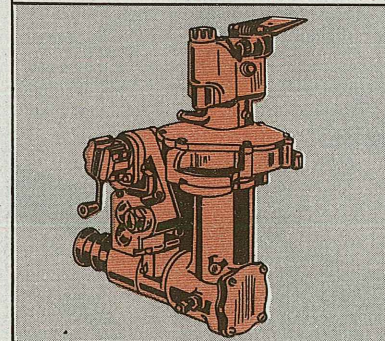
Lot's of fire control equipment gets busted up because it's left attached to the howitzer during air drops. Be sure to take off the fire control stuff—except for the bolted-on mounts—before you air-drop your howitzer.

If you're holding any busted or surplus fire control items, send 'em back to supply—right now. The old items are needed so they can be turned into the new radioactive models.

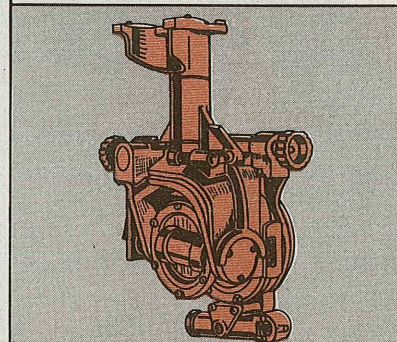
By the way, if you handle any radioactive items, get familiar with TB 43-0197 (Jun 77).

And, speed up the return to your supply support of these:

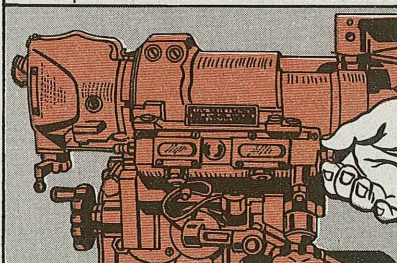
M113 Pan Tel—NSN 1240-00-076-0066



M134 mount—NSN 1240-00-065-5318



M14 quadrant—NSN 1290-00-066-4994



NO MORE COCKING LE VER BLUES

HERE'S A
STEP-BY-STEP
WAY TO RELEASE
THAT COCKING
LEVER ON
YOUR M2
MACHINE GUN!

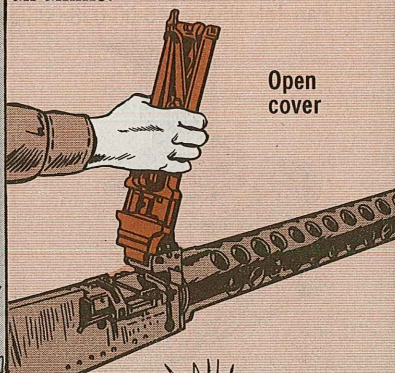
DIMWIT! YA
INSTALLED
TH' LEVER
TO TH' REAR!

?

Looking for a better way to remove
the bolt assembly of your M2 machine
gun after it was installed with the
cocking lever to the rear?

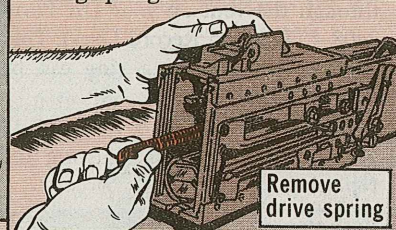
Read on.

1 Clear the weapon (open cover) of
all ammo.



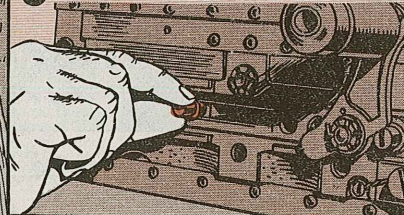
8

2 Remove the barrel, back plate and
driving spring rod assemblies.

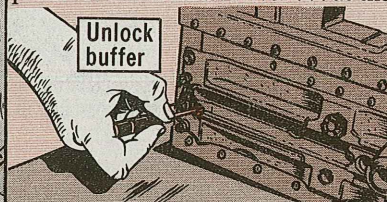


3 Pull the bolt back till the bolt stud
lines up with the rounded opening in
the receiver side plate.

4 Remove the bolt stud.

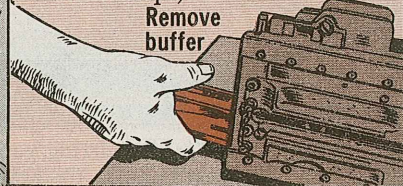


5 Push the buffer body lock in with a
punch or small screwdriver ... at the



same time as you remove the barrel
buffer group from the rear of the
receiver (pushing back on the barrel
extension helps).

Remove
buffer



6 Lift the front end of the barrel
extension and slide it to the rear.

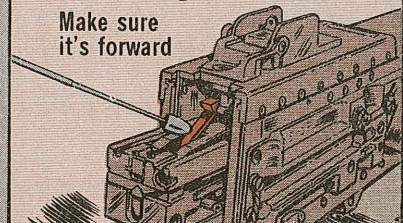


7 Slightly lift the rear of the barrel
extension shank and pull out the bolt
and barrel extension.



Naturally, nobody would need to do
this if the cocking lever were always
pushed forward before the bolt's
installed in the gun.

Make sure
it's forward



9

106-MM Barrel Life

"PHH—WOOO—OOOSH—"

HEY, GREAT!!
YER RANGE AND
YER ACCURACY
ARE IMPROVIN',
BRONTY!

In case you've been wondering, gun tube life on the M40-series 106-MM recoilless rifle, after extensive testing, has been upped to 3,000 rounds.

You'll find the word on page 3-154 of TM 9-1000-202-14 (Nov 76), Evaluation of Cannon Tubes.

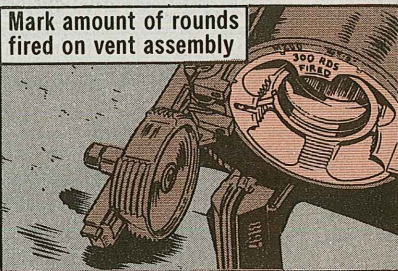
Maximum life of vent assemblies stays at 1,250 rounds, but with the new 3,000-round tube life, you can use 3 vent assemblies.

Which brings up a new hitch: when you condemn the tube, the vent assembly may have less than 500 rounds on it. In which case, mark the vent (metal stamp, stencil, etc.) with number of rounds fired . . . and use the vent on another rifle. If the last vent has been used for more than 500 rounds, discard it.

Be sure you mark the rounds fired through the vent on your DA Form 2408-4 (Weapon Record Data). That way the compensating ring can be adjusted right.

Change 2 of TM 9-1000-205-12 gives you the word on adjusting and replacing the vent.

Mark amount of rounds
fired on vent assembly



Pistol Grip Tip

Next time the grips on your .45 Cal. M1911A1 pistol become loose, get them and the bushings that hold them replaced.

There's no way you're gonna get those bushings through the grips without tearing up the bushing supports in the holes in the grip. The bushings get stripped, too. That only makes the bushings and the grips useless.

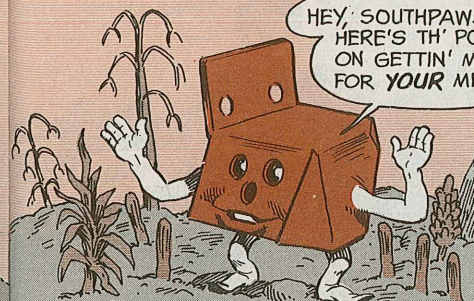
So, when the grip is loose, turn the pistol in and get it repaired right.

M16A1 Deflector for Leftys

HEY, SOUTHPAWS!
HERE'S TH' POOP
ON GETTIN' ME
FOR YOUR MIGAI!

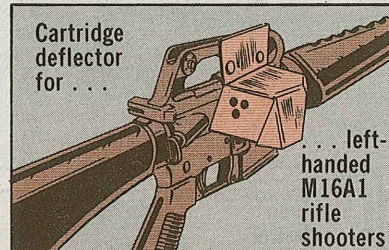
GOOD IDEA!

YEH--BUT HOW DO
WE ATTACH HIM
TO A SPEAR?



Need cartridge defectors for left-handed M16A1 rifle shooters?

Cartridge
deflector
for . . .



. . . left-
handed
M16A1
rifle
shooters

The method for getting them has changed, so forget the word in TM 9-1005-249-10 (Apr 77).

Regular Army, National Guard and Reserve units can get deflectors for their personnel free by contacting their nearest Training and Audio-Visual Support Center (TASC).

Marine Corps and other military units may obtain the deflectors with a command letter to:

Commander
US Army Training Support Center
ATTN: ATTSC-LO-L
Ft. Eustis, VA 23604

Non-Army units will be quoted a price and availability of the deflector.

M16A1 Lube

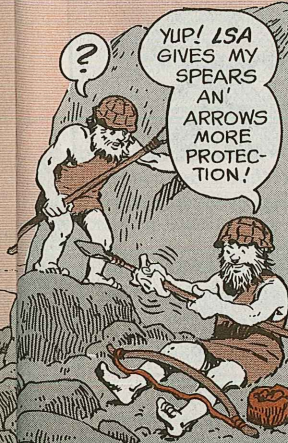
Don't be a Lube Rube and use any of kind of lube your "buddy" says is OK for your M16A1 rifle.

It's LSA all the way. LSA is the only lube authorized for your sweet 16's upper/lower receiver groups.

The one exception is when you're operating in a below zero climate. Then you use LAW.

LSA lasts longer and protects metal surfaces better than any other lubricant on the market or in the supply system.

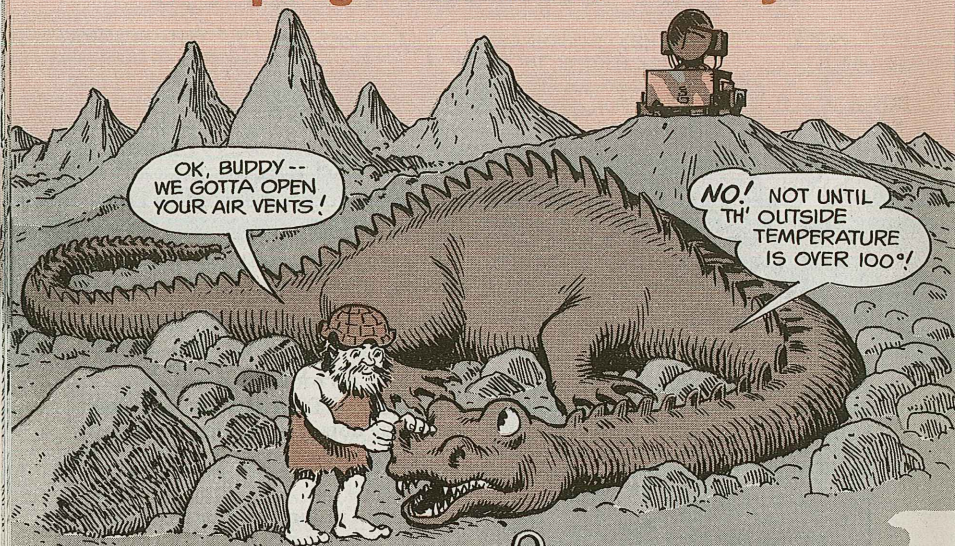
TM 9-1005-249-10 (Apr 77) and TM 9-1005-249-20 (Sep 71) have the LSA word.



YUP! LSA
GIVES MY
SPEARS
AN'
ARROWS
MORE
PROTEC-
TION!



Keeping Your MPQ-51 Dry



Dear Editor,

I'd like to call attention to an omission in TM 9-1430-529-12-1 on the Improved Hawk AN/MPQ-51 ROR.

Left out was the procedure to keep the modulator power supply air vent drawer closed . . . until the outside temperature is more than 100°F.

Table 3-7 and page 7-3, step (14), of the TM say open the modulator power supply drawer, but that's not right. The drawer stays closed until it gets to 100°F or higher. That way, moisture problems in the modulator power supply are avoided.

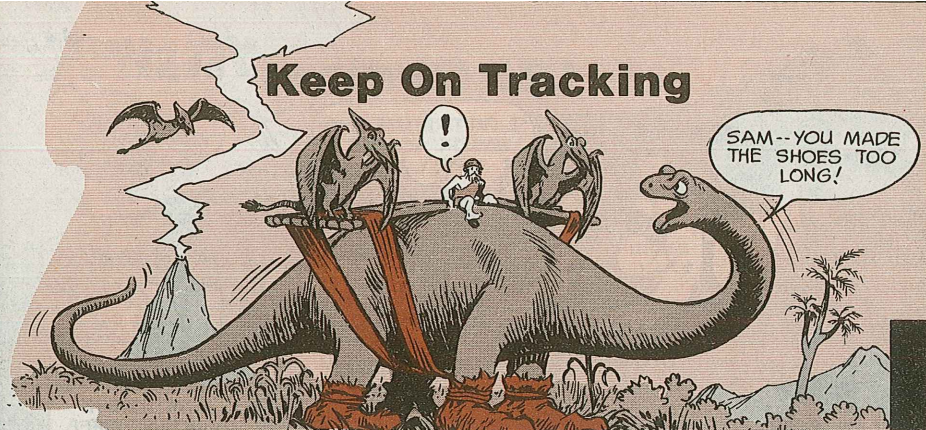
The vent drawer was modified for the AN/MPQ-37 (Basic Hawk) so that it could be closed, and TM 9-1430-510-12/1 noted that it would be kept closed.

Same thing goes with the drawer in the AN/MPQ-51. It stays closed.

SFC Robert G. Elsten
APO San Francisco 96570

(Ed Note: Thanks for letting us know about it. You'll be glad to know, too, that TM 9-1430-529-12-1 is being changed to say that the drawer stays closed).

Keep On Tracking



That's the way it can get with the track shoes on your Hawk XM501E2 or -E3 loader-transporter.

The solution is not to get yourself some new shoes. Rather, you can cure the problem by taking some off the track.

Hang in there while we take it a shoe at a time.

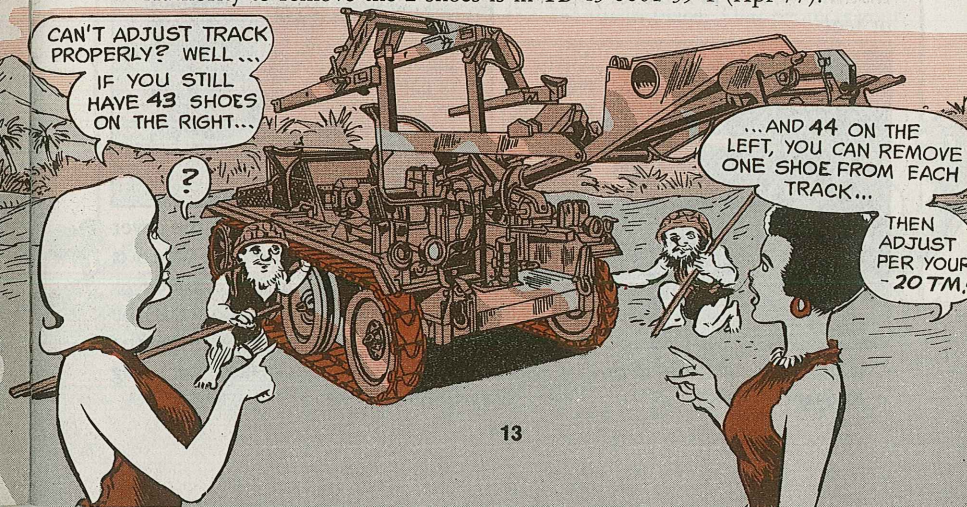
The problem starts when you can't properly adjust serviceable track. As you know, there are 43 shoes on the right track and 44 shoes on the left. The extra shoe is necessary because the suspension system on the left side is longer.

So what to do when you can't adjust the track like it says in TM 9-1450-500-20 (Nov 66)?

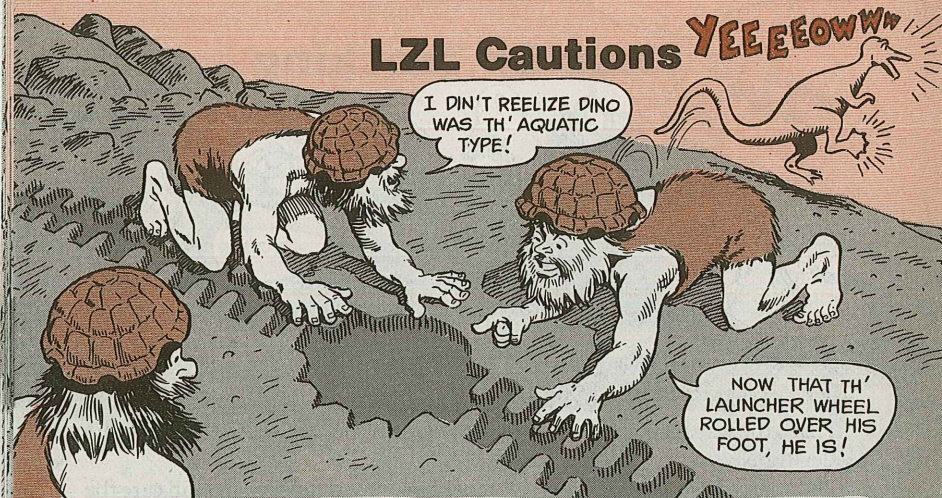
Providing you've got the right quantity of shoes on each track (43 and 44), you remove one shoe from each track (you can remove any shoe from either track).

Then adjust the track within the limits spelled out in the -20 TM.

Authority to remove the 2 shoes is in TB 43-0001-39-1 (Apr 77).



LZL Cautions YEEEEEOWWW



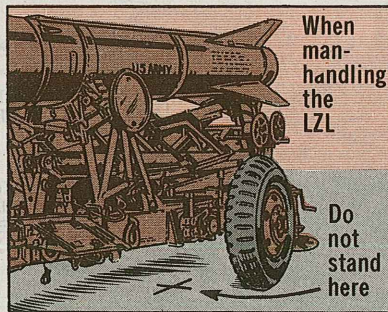
I DIN'T REELIZE DINO WAS TH' AQUATIC TYPE!

NOW THAT TH' LAUNCHER WHEEL ROLLED OVER HIS FOOT, HE IS!

Coupla' cautions when working with the M740 launcher zero length (LZL) of your Lance missile system can save you problems, including a possible webbed foot.

Like so:

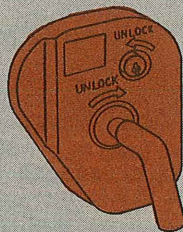
Never get between the forward jacks and the rear wheels when manhandling the LZL. If you do, and the LZL slips its position (it can, for a number of reasons), chances are good that the wheel will roll over your foot or feet.



It has happened, and in no case was it pleasant.

Another thing about the LZL: Install the cover lock assembly of the Safe and Arm igniter on the main missile assemblage (MMA) before you put the MMA on the LZL. The cover lock is used only with the nuclear configuration.

Install cover lock assembly on MMA before it goes on LZL



Reason: You can't install the cover lock on the MMA when the MMA is secure on the LZL in travel mode.

Another way you can install the cover lock (with the MMA on the LZL) is to lower the jacks to firing position.

DUM-DE-DUM
TH' TB IS RIGHT!...

Foggy Theodolite?



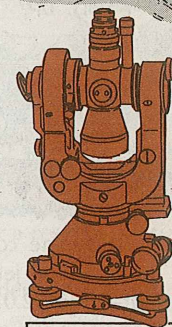
... NO MORE FOGGIN' UP WITH THIS UMBRELLA!
DE-DUM

DUM-DUM IS RIGHT!
THE UMBRELLA IS FOR A THEODOLITE...
NOT TROGLODYTE!



If wet weather is fogging the theodolite of your Lance azimuth laying set, wipe no more, my laddy ... and let a smile lead you to your umbrella.

Fogged-up theodolites make it hard or impossible to do your sighting and laying operations. So, TB 43-0001-27-1 (Apr 77) lists a surveyor's umbrella you can use to keep the wet off. You can get it with NSN 5340-00-292-2338, and it's listed in CTA 50-915 (Apr 76).



Get umbrella for theodolite

TOW Swinger?

Is the radio antenna on your modified M151 ¼-ton cramping your TOW swinging style?

Do this: Whenever you're in the firing mode, keep your antenna straight up. That way, you get a wide swing to right or left ... more than you would if the antenna were tied down at the approved angle.

When you travel, tie the antenna down to about a 45-degree angle. Use tie down kit NSN 5820-00-908-6416.

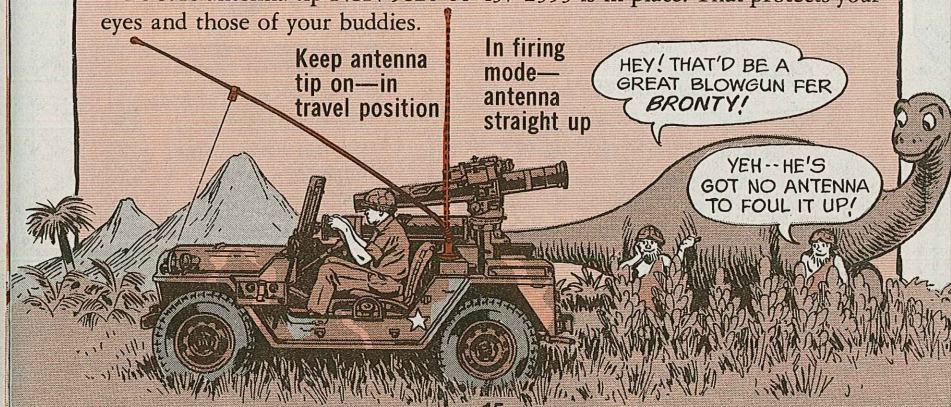
Be sure antenna tip NSN 5820-00-437-2353 is in place. That protects your eyes and those of your buddies.

Keep antenna tip on—in travel position

In firing mode—antenna straight up

HEY! THAT'D BE A GREAT BLOWGUN FER BRONTY!

YEH--HE'S GOT NO ANTENNA TO FOUL IT UP!





Aviation and Jet Fuel . . .

Cleaner Bird Fuel

HEY, YER FUEL IS ALMOST
READY, TERRY... COME AN'
FILL UP!

NO WAY--UNTIL
YOU TEST IT FOR
CONTAMINATION!



Particulate contamination allowed in avgas and jet fuel has been cut in half—from 2.0 mg/1 solids to 1.0 mg/1. That's the latest update to Quality Surveillance Handbook on Fuels and Lubricants—MIL-HDBK 200E (Nov 76).

So update the poop in Item 3, "Filter Change Facts" in PS 297 (August 1977), page 58.

'Course, this contamination test has to be made by a fuel testing lab like AR 703-1 says. Samples have to be taken downstream of the filter/separator—either from milipore monitors or a gallon of fuel.

HERE ARE THE **CONUS** ADDRESSES
FOR YOUR FUEL SAMPLES (UNLESS
OTHERWISE AUTHORIZED)...

U.S. Army General Materiel and
Petroleum Activity
Petroleum Field Office, East
New Cumberland Army Depot
ATTN: STSGP-PE, Bldg 85-3
New Cumberland, PA 17070
(For units east of the Mississippi
River)

U.S. Army General Materiel and
Petroleum Activity
Petroleum Field Office, West
Defense Depot Tracy
ATTN: STSGP-PW, Lab Bldg 247
Tracy, CA 95376
(For units west of the Mississippi
River)

OVERSEAS UNITS SEND SAMPLES
TO THE ACTIVITY DESIGNATED AS
YOUR SUPPORT LABORATORY!

Send the samples of avgas MIL-G-5572 or jet fuel MIL-T-5624 to the lab:

1. Every month;
2. Every time you put a new filter/separator in use;
3. Every time you change filter elements; or
4. When the fuel contains particulate contamination—sediment and water you can see.

Para 2-8b, FM 10-68 (Dec 75) has more poop about when to get fuel lab-tested.

Be sure you stencil or mark on the filter/separator the date you put it into service, and when you change the filter elements.

NOW--
ABOUT
YOUR
SAMPLES...

...IF YOU NEED
CONTAINERS AND
CARTONS FOR
SHIPPING THEM...

WRITE THE PETROLEUM
FIELD OFFICE SERVING
YOUR OUTFIT, OR CONTACT
THE ACTIVITY THAT DOES
YOUR FUEL TESTING.

A Reel Problem

... BUT I
WANTED A
STRAP...

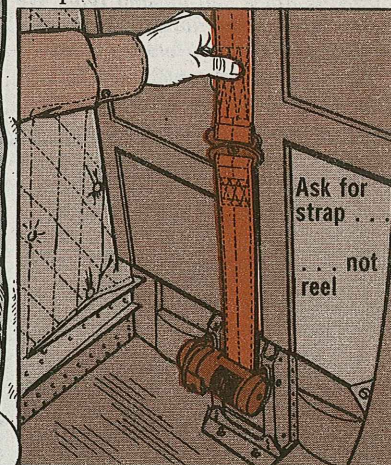
YOU GOT JUST
WHAT YOU ORDERED,
ROCKY...

A REEL!



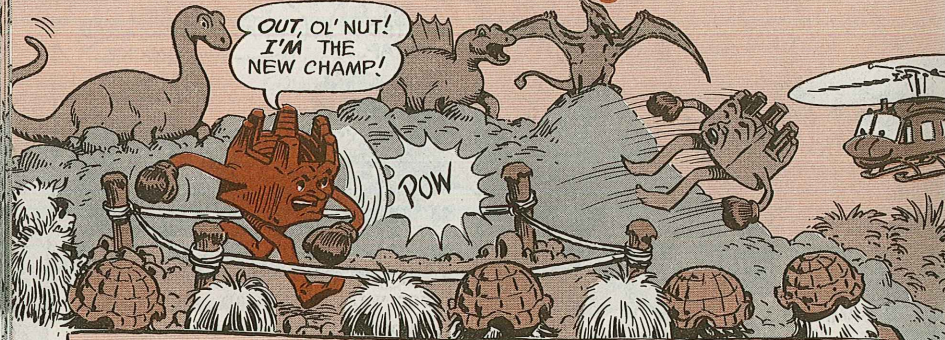
For want of a strap, some mechs have been asking for a reel . . . inertia reel, that is!

'Course, the shoulder harness fabric strap doesn't come with reel, NSN 1680-00-775-4182. This pulls reels out of the supply system and leaves units strap-less.



For your Huey, Cobra and Kiowa, ask for the strap listed in the parts pub. On the UH-1D/H, for example, you want: Strap, NSN 1680-00-632-9608, item 27, Fig 34 of TM 55-1520-210-23P/1 (Mar 77).

Hardware Changes

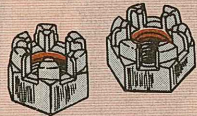


Dear Windy,
TM 55-1520-210-23P (Mar 77),
Fig 165, item 12, calls for a self-
locking nut at the Huey main rotor
pitch link on the pitch horn bolt.

But the nut, NSN 5310-00-582-
6058, is not a self-locking type. We
hesitate to use this nut because the old
parts pub listed a different nut which had the self-locking feature.

This is a critical application, Windy. Can we use a nut without the self-
locking feature?

SSG M.J.D.

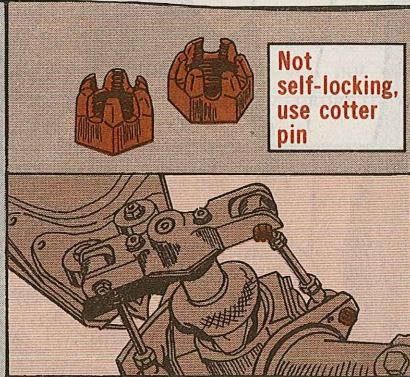


Self-
locking
nuts

Dear Sergeant M.J.D.,
Yes.

Even tho the nomenclature in the
parts pub is wrong, the new nut is
castellated, which allows for insertion
of a cotter pin.

The engineers at the head hangar
say some self-locking nuts are not
needed at other locations, also. For
example, the tail rotor pitch change
link nuts, NSN 5310-00-167-1285, are
no longer the self-locking type.

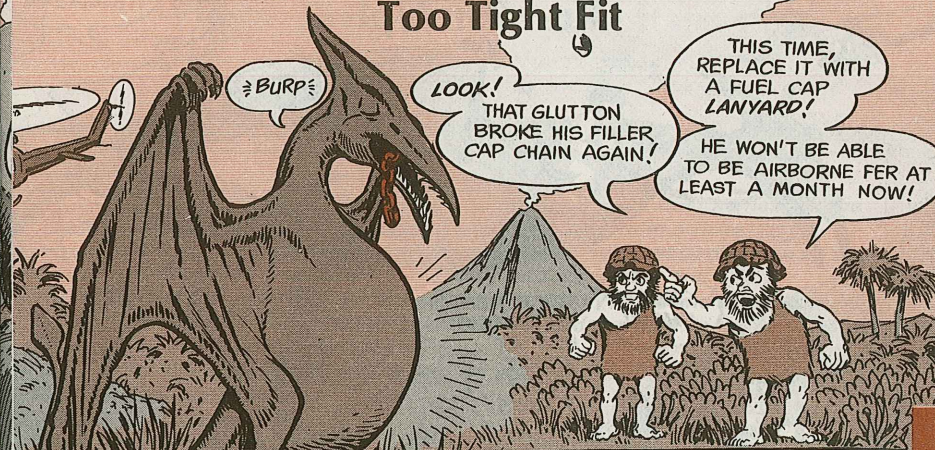


Not
self-
locking,
use cotter
pin

STICK WITH THE LATEST
STOCK NUMBER AND YOU
WON'T GO WRONG, SARGE!

18

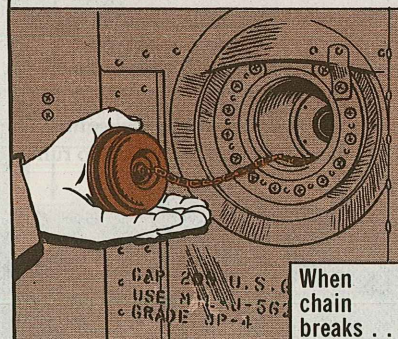
Too Tight Fit



Dear Windy,

We are using the closed circuit
refueling setup in our Huey.

When the fuel filler cap chain broke,
we tried to use the chain listed in Fig
316 of TM 55-1520-210-23P (Mar
77)—no luck! There wasn't enough
room to insert the fuel nozzle.



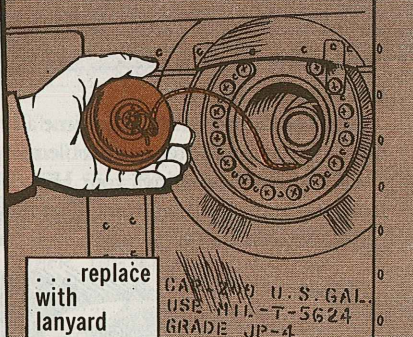
Do we have the right chain, Windy?

SP6 R.O.W.

Dear Specialist R.O.W.,

No. The parts for the closed circuit
system are listed separately, in Fig
320A of the parts pub.

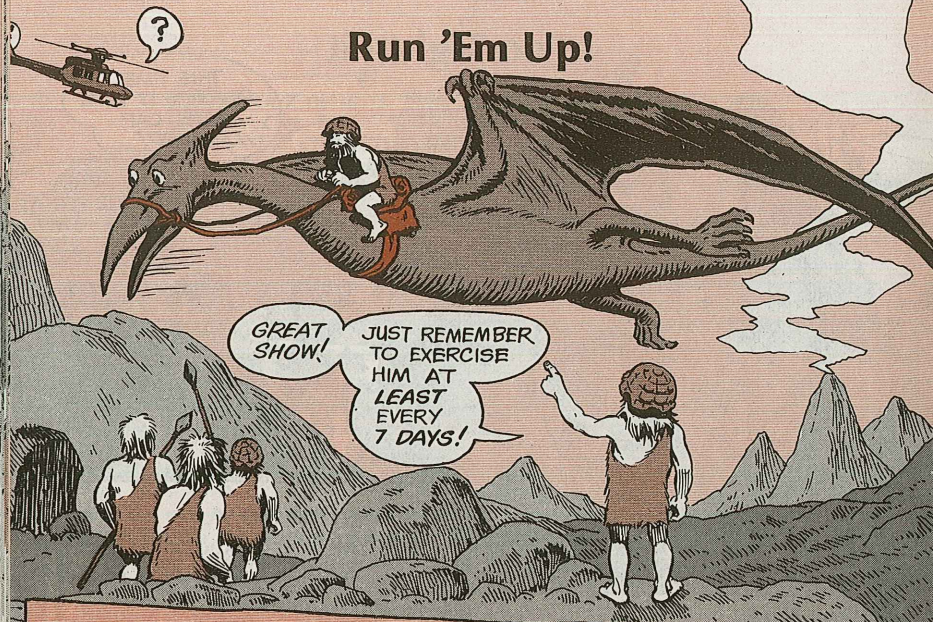
You want Lanyard, Fuel Cap. One
point, tho. The pub lists the part as
NSN 4010-00-482-6473 but it should
be NSN 1560-00-482-6473. When the



supply of this lanyard is exhausted it'll
be replaced by NSN 4010-00-475-
9058.

Windy

19



Run 'Em Up!

GREAT SHOW!

JUST REMEMBER TO EXERCISE HIM AT LEAST EVERY 7 DAYS!

Dear Windy,

Sometimes we have Hueys that are idle for a week or more but they're not placed in flyable storage. If they were in storage, they'd have to be run up every 7 days, according to Para 16-7b of TM 55-1520-210-20.

Does the engine runup apply if the bird's not in flyable storage, Windy?

SSG J.T.W.

Dear SSG J.T.W.,

You bet it does, Sarge! Any time a Huey's engine is inactive for more than 7 days it's open to potential problems.

One of the first things your Huey develops is corrosion in the fuel control from moisture condensation. That means a malfunction of the control. So run up the engine every 7th day.

THE RUN-UP SLOSHES OIL ON ENGINE, TRANSMISSION AND GEAR BOX PARTS BEFORE THEY CAN DRY OUT AND BEGIN CORRODING!

HEY! MY CHUTE IS CAUGHT!

Eyeball On Eyebolts

Dear Editor,

There is always a possibility of parachutists catching their harness on the protruding wheel attachment eyebolts when exiting from a Huey.

To remove the danger, some outfits tape the eyebolts, while others use a set of rubber guards. Both of these methods take some time and effort.

We prefer to insert a large screwdriver thru the eyebolts and unscrew them from the skids. We keep 'em on board with the tiedown gear. In just a couple of minutes the hazard is removed.

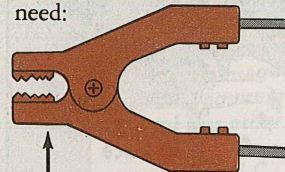
After these parachuting missions we put the eyebolts back without ever stripping the threads.

Render C. Gwinn
Ft. Rucker, AL

(Ed Note—Right! The headshed says it's OK to remove the eyebolts temporarily.)

Birds 'n' Alligator Clamps

Looking for the electrical hookup that grounds your bird in the field or hangar? It's a do-it-yourself job. You need:



Electrical connector clip,
NSN 5999-00-134-5844



Connector cap and plug,
NSN 5935-00-572-5174

Wire rope NSN 4010-00-630-4838

These items fill the bill for static ground hookup, per the note in para 1-52, TM 55-1500-204-25/1 (Apr 70).

WITH THIS SETUP YOU CAN USE EITHER THE FUEL CAP STATIC PORT...

...OR THE LANDING GEAR!

The Communication Gap

If you mechs want to keep the AN/ARC-134 in your big Chinook hummin', focus in on the AT-1108/ARC antenna.

A lot of oil from control system valves and actuators leaks down to the lowest point of the fuselage and into drain wells.

Any oil present seeps out of the well covers. The slipstream and rotor downwash then whips the oil into the antenna where it's mounted to the fuselage. The result is a shorted-out antenna.

Oil enters here and shorts out antenna . . .

. . . so open drain here . . .

. . . and here

So, how about it, crewchiefs?

Open up those drains and remove the oil build-up before a communication gap develops!

The Right Connection

When you Chinook types tie down the rotor blades be sure the anchor is secure. Otherwise, you could get beaned!

The idea is to make sure the spring-loaded pin moves freely so the interlock will do its job of holding the anchor in place.

Clean a dirty, sticky interlock and use a few drops of oil to keep it in the pink. If the spring is no longer strong

Clean, lube pin

enough to give you a positive connection, ask for a new interlock.

For added safety, always pull lightly on the installed anchor to make sure it's secure.

Pull to make sure!

Lock pin in place

DA Form 2408-13 . . .

One Day At A Time

JUST FINISHED TH' JOB, SIR... HERE ARE ALL OUR DA 2408-13's!!

TOOK A FEW DAYS, HUH?

Hung up over closing out DA Forms 2403-13 when your bird's under long-term maintenance?

The DA 2408-13 is a daily record. You close it out at the end of each day's operation that includes a flight—even during maintenance. Any open actions at the end of the day—faults, maintenance work or test flights—are carried over to the next day's DA 2408-13.

But you hold onto those forms until the work is finished. Para 4-12d(1) of TM 38-750 says all DA 2408-13's completed during maintenance will stay in the aircraft logbook until work is completed.

When the aircraft is released, take out all the completed DA 2408-13's and give them to your maintenance officer.

One For All!

Dear Windy,
Our Chinook manual says to check the holding power of magnetic plugs and chip detectors by placing a 1/4-in steel nut across the magnetic gap. How come this requirement is not in the manuals for our other aircraft?

CW2 H.C.

Dear CW2 H.C.,

The check doesn't have to be in each bird pub because it's in the general maintenance manual, TM 55-1500-204-25/1.

Ch 20 (Apr 75), para 3-270, says to test the plugs by using a steel paper clip, or equivalent. Replace a plug that has lost the power to hold steel.

'COURSE, INFO IN THE GENERAL PUB APPLIES TO ALL BIRDS... UNLESS THE INDIVIDUAL BIRD PUB HAS A DIFFERENT TEST.

WOTTA
MESS!

WE
NEED
A...

Formula for Files

AR 340-2

HERE
IT IS!

A place for everything and everything in its place. Sounds like something your grandmother—or drill sergeant—would say. But when it comes to forms, files and records in a motor pool or PLL shop, keeping that statement in mind saves you a lot of inspector-type grief.

When a pub like TM 38-750 or AR 710-2 tells you to hold onto a completed form—or you get letters or messages you want to keep—what do you do with 'em?

Get out AR 340-2, Maintenance and Disposition of Records in TOE Units (Nov 77). It tells you which records you keep, where and how.

*AR 340-2

ARMY REGULATION

No. 340-2

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, DC, 15 November 1977

OFFICE MANAGEMENT

MAINTENANCE AND DISPOSITION OF RECORDS IN TOE UNITS OF THE ACTIVE ARMY AND THE ARMY RESERVE

If you set up your files by AR 340-6, Maintenance and Disposition of Records in Organic Units of the Active Army (Sep 74), better start unsetting. That AR was rescinded. Now you go by AR 340-2—and the file numbers do not necessarily match!

Appendix A of AR 340-2 tells you the number, contents and how long you hold onto each file. 'Course, most of those files you'll never see. All you need are the files that apply to your operation—like section X of Appendix A for maintenance and supply shops.

Most of the files you keep are covered by ...

AR 340-2

15 November 1977

Section X. LOGISTICS FILES

The files described in this section relate to the ordering, receipt, issue, use, and accounting for property, supplies, and equipment; and to the maintenance of equipment.

After each file number you'll find what goes in that file and the disposition instructions. The disposition includes how often you clean out the file and what you do with the forms or paperwork you remove.

Watch your disposition instructions. Some files are cleaned out every 3 months or 6 months, or when no longer needed. Others, you may hold onto for several years.

Watch the disposition instructions

1420-10 Dispatcher organizational control record files. Documents used to reflect the dispatch of equipment. Normal information includes name of user, identification, and estimated life span. Destroy after 1 month.

1420-11 Equipment daily utility patcher and operator daily use of equipment. Note. This number is used. Destroy after required transfer of information to other records, unless required for accident investigation or State gasoline tax purposes.

1420-12 Maintenance request files. Documents used to request maintenance. Dispose of as provided by TM 38-750.

some you trashcan,
others go to a
holding area

But some files—like file number 1420-02 for logbook files or 1420-12 for maintenance request files—are covered by TM 38-750. TM 38-750 wants those files thrown out at the end of the required time—usually counting from the date you took the last action on the individual form. So you need to go through those files more often.

Get a copy of AR 340-2 and bone up on it. Higher level organizations use AR 340-18-14. Make sure you keep what you need—and only what you need—where you need it.

On DA Form 2406 ...

Keep Your Appendix

OK... I'LL
STAY... BUT
TH' NAME IS...

ARCHEOPTERYX

If you work with DA Cir 750-52, Equipment Operationally Ready (OR) Standards (Jul 77), watch it! Para 4c of the circular can lead you astray.

Read para 4c this way: "Prepare and send in a DA Form 2406 on all items you have that are listed in Appendix C of TM 38-750. For those Appendix C items also listed in DA Cir 750-52, you can measure your equipment performance by comparing your readiness status for each item with the standards in table 1."

DA Cir 750-52 does not overrule Appendix C of TM 38-750. It just gives you established DA-type OR standards so you can compare your readiness with the rest of the Army.

You still report all the items you have that are listed in Appendix C—whether or not they are covered in the circular.

Cracks Supply Codes

Supply codes can really mess you up if you don't know how to make 'em work for you.

'Course, the trick is to crack those codes. That's easy with FM 38-725-10 Logistic Codes Unit/Organization (Nov 76).



Perfect PLL

Need help putting together a PLL? Glance over para 2-37e of AR 710-2. You can get a PLL tailor-made for your unit.

Hold it, though! A copy of your MTOE is not enough for the PLL people to go on since one LIN can cover different pieces of equipment.

The supply types need to know what models you have, the NSN, the number of each actually on hand, days of supply you're OK'd for—15, 30, 45—and the level of maintenance work you're authorized to do.

For airplanes and helicopters with engines that work on more than one

The pocket-sized pub decodes all the codes you need for putting in your request. It also puts you on top of those item expendability codes and source, maintenance and recoverability (SMR) codes.

Besides that, it unravels the 2-character status code you get back from support on your status card. That's the code that tells you what's happening to your request.

To latch onto a copy, get your pubs people to submit a DA Form 17 to the AG Publications Center, Baltimore.

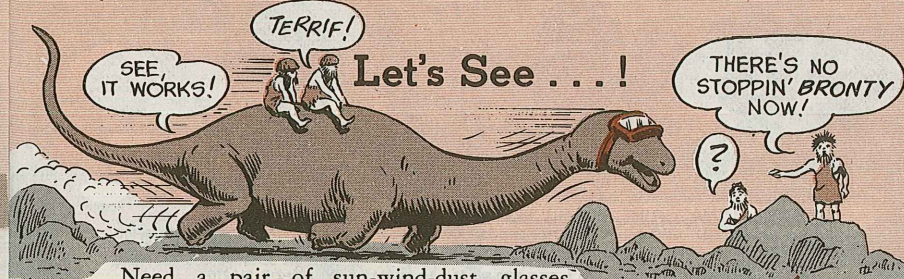
type, give the NSN for the aircraft and the engine.

Then, add a name and Autovon number—point of contact—in case the PLL people have a question about your request.

Send your PLL request to:

Commander
US Army DARCOM Materiel
Readiness Support Activity
ATTN: DRXMD-S
Lexington, KY 40511

Feed 'em the right info and they'll send you the perfect PLL printout.



Need a pair of sun-wind-dust goggles to wear over your prescription glasses?

They fit over your glasses



Then order NSN 8465-01-004-2893. Be sure to write in Block 22 of DA Form 2765, Advice code 2B—meaning Do Not Substitute. If you don't use this advice code when you order this -01 NSN item, you'll get a pair of goggles—NSN 8465-00-161-4068. These won't fit over your

The goggles are authorized by CTA 50-900. You can get replaceable lens for either pair of goggles like so:

Over-your-glasses goggles
NSN 8465-01-004-2893

clear lens 8465-01-004-2892

neutral gray 8465-01-004-2891

Regular goggles
NSN 8565-00-161-4068

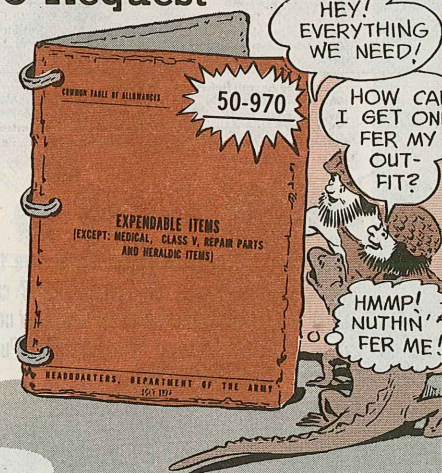
clear lens 8565-00-273-3625

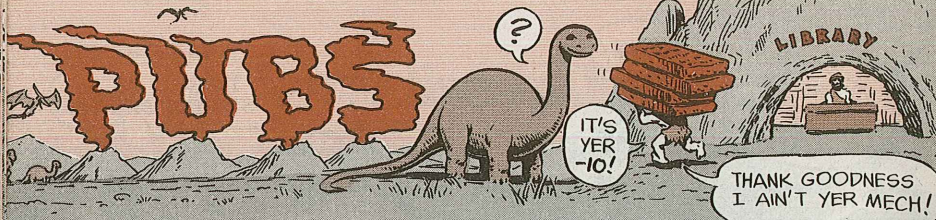
green/neutral 8465-00-273-3626

CTA 50-970 Request

CTA 50-970, Expendable Items, can solve a lot of your supply problems. You use that handy pub as the source for a ton of supplies and items—except repair parts, ammo, medical and heraldic items. But before you can use it, you need a copy.

Tell your pubs people to get you on pinpoint for CTA 50-970 with a DA Form 12-9A. To order a copy for now, send in a DA Form 17 to the AG Publications Center, 2800 Eastern Blvd., Baltimore, MD 21220.





This is a selected list of recent pubs of interest to organizational maintenance personnel. This list is compiled from recent AG Distribution Centers Bulletins. For complete details see DA Pam 310-4 (Oct 77), TM's, TB's, etc.; DA Pam 310-6 (Jul 77) and Ch 2 (Jan 78), SC's and SM's and DA Pam (C) 310-9 (Nov 76), COM-SEC pubs.

TECHNICAL MANUALS

TM 5-1940-273-10 Aug Boat, Landing, Infl Asst 15-Person Cap
TM 5-4120-352-14 Mar Air Conditioner, Horizontal, Compact, 9000-BTU Mod CH609-3
TM 5-4520-240-24P Dec Space Heater, Multifuel, 15000 BTU/HR, 28VDC
TM 5-6115-449-20P Dec Gen Set, DED, 30-KW
Ch 1, TM 9-1340-222-20 Mar 2.75-In FFAR, 66-MM LAW, 3.5-In Rockets, M3A2E1 Rocket Motor (JATO)
TM 9-1425-500-L Dec HAWK Pubs
TM 9-1425-525-L Dec Improved HAWK Pubs
TM 9-1425-586-10 Sep Chaparral M48 Intercept-Aerial GM Sys
TM 9-1430-382-20P Nov Launch Contr Gp Pershing 16
TM 9-1440-381-20P Nov Cable Mast Assy Pershing 1A
TM 9-2320-211-10 Nov M39 Series 5-Ton Trucks
TM 9-2320-260-10 Nov M809 Series 5-Ton Trucks
TM 9-2320-266-20P Feb M880-Series 1½-Ton Trucks
TM 9-2320-269-20P Apr Truck,

Telephone Maint XM876
Ch 2, TM 9-2350-230-24P/1 Feb M551 Cargo, M548
Ch 1, TM 9-2350-300-20-1 Jan M163A1 Vulcan
Ch 4, TM 10-7360-204-13 Jan Range Outfit, Field, M59 and related eqpt
TM 11-1510-213-20P Apr RV-1D Electronic Eqpt Config
TM 11-1510-213-20-1 Feb RV-1D Aircraft Electronic Eqpt Config
TM 11-1520-238-24P-1 Nov AH-1S Helicopter Stability-Control Aug Sys Electronic Eqpt Config
Ch 1, TM 11-5805-201-20P Mar TA-312/PT Telephone Set
TM 11-5815-334-20P Jan AN/GRC-122, 142 Radio Teletypewriter Sets
TM 11-5815-335-20P Jan C-7050/G Teletypewriter Control Unit
TM 11-5820-474-24P Jan AN/GRC-109 Radio Set
TM 11-5820-520-20P-1 Feb AN/GRC-106 Radio Set
TM 11-5820-806-24P Dec AN/GRT-21 and AN/GRT-22 Radio Transmitting Sets
TM 11-5826-257-24 Dec Radio Receiver R-1963/ARN
TM 11-5865-238-24P Dec AN/PVS-5 and AN/PVS-5A Night Vision Goggles
TM 11-6130-225-24P-2 Feb PP-2926/C/U Battery Charger
Ch 6, TM 11-6665-208-15 Mar AN/PDR-54 Radiac Set
TM 11-6665-226-12 Feb AN/TDQ-T1(V) Radiac Training Set
Ch 25, TM 55-1500-204-25/1 Nov General Aircraft Maintenance

TM 55-1500-340-PMS Feb U-21A, U-21G, RU-21A, RU-21B, RU-21C, RU-21D, RU-21E, RU-21H PM Services
Ch 2, TM 55-1510-214-23 Dec AVUM, AVIM RU-21B, RU-21C
Ch 2, TM 55-1510-215-CL Jan Checklist U-21G
Ch 6, TM 55-1520-221-10-1 Jan AH-1Q

MISCELLANEOUS

Cir 310-3 Apr Notice to Users of Supply Catalogs
DA Form 2408 Dec Equipment Log Assembly (Records)
DA Form 2408-4 Dec Weapon Record Data
DA Label 163 Dec Limited or Special Calibration
SB 710-1-2 Nov Maintenance Float Factors for Selected Components of Major End Items
SC 4910-95-CL-A73 Dec Shop Equipment, Auto Org Maint Supplemental No. 1
Ch 1, SC 4933-95-CL-A07 Feb Tool Kit, Small Arms Repairman
SC 5180-95-CL-A43 Jan Tool Kit, Artillery Mechanic
TB 11-5400-200-14 Mar Loading S-280Q/G Shell Into Container AN-SI/SO Type 1AA
TB 43-180 Jan Calibration Requirements for Army Material
Ch 1, TB 43-0147 Jul Color, Marking, and Camouflage Patterns (TROSCOM)
TC 44-16P-12-JB Aug Chaparral/Redeye Crewman Job Book
TC 55-61C1/2-JF Sep Watercraft Engineer Job Book

AUDIO-VISUAL STUFF

Available at battalion or post Learning Center

GTA, FILMS

GTA 9-2-137 Turret Electric Contact Ring M551
GTA 9-3-95 Aiming Circle M2
GTA 9-6-44 M16A1 Rifle Malfunction
TF 10-4936 Aircraft Refueling Part 1—Quality Surveil of Aviation Fuels
TF 46-6077 Mast Bumping—Causes and Prevention

TEC LESSONS
010-071-6642-F Prep to Fire II—Mounting and Pre-Firing Safety Checks, Carrier Mtd 81-MM Mortar
020-171-1313-F Percentage of Slope
030-051-6402-F Crew Maint Mobile Assault Bridge, Part I
043-441-5404-F Orientation and Alignment of IPAR, Part 2

043-441-5407-F Improved HAWK—Alignment of ICWAR, Part 2
043-441-5444-F Improved HAWK Decannelling, Assembly, Part 2
202-113-5201-A Install AN/TSC-76 (Part I), Power
202-113-5202-A Install AN/TSC-76 (Part II), Telephone Eqpt

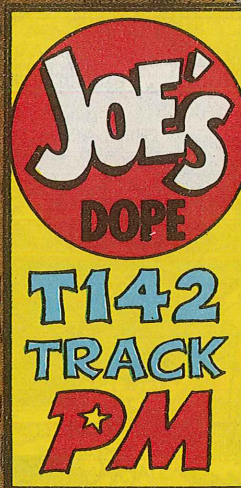
610-091-6057-F Troubleshooting the Starting System, Part II
611-091-6102-F Troubleshoot Air Cleaner Blower on M48 Series Tanks
645-093-7265-F Ammo Issue Operations
948-071-0021-F Prep TOW for Ground Op, Part 1
948-071-0028-F M70 Training Set (TOW)

Just a Little Lovin' . . .

Multifuel trucks need tender lovin' care for good performance, and DA Poster 750-17 can keep a TLC reminder tacked up for you. Your unit can get it with a DA Form 17 to Baltimore Pubs Center.

A Picture's Worth . . .

The printers blew it. They left all the pictures out of 3 new AN/TSC-54 satellite communications terminal pubs. Don't panic, tho. The pictures will be back in changes due out this Fall to TM 11-5895-833-series parts pubs.



YOU SURE THIS ARROYO GOES ALL TH' WAY THRU?...

AFFIRMATIVE! I BACK-PACKED UP HERE WHEN I WAS A KID, SARGE!

THEN... STEP ON IT, BUCKO!

RIGHT ON!
BOY!! TH' BLUE ARMY ARTILLERY IS IN FER SOME SHOCK... WHEN WE SHOW UP AT THEIR REAR!

MIDSUMMER WAR GAMES... SOMEWHERE IN SOUTHWESTERN CONUS...

YEH, LADS... TH' OL' MAN'S COUNTIN' ON US! IF THIS GAMBIT WORKS, OUR SIDE'S GOT THESE GAMES KNOCKED!!

HEY... WHAT'S THAT UP AHEAD?...

THIS *O*!! GULLY'S BLOCKED!

ULP! THERE'S BEEN A BIG ROCKSLIDE SINCE I WUZ HERE LAST!

RRR-RUMBLE!!
SPEAKIN' O' ROCKSLIDES-- LOOK BEHIND US!

OH, NO!

!KAFF! !KAFF!
TH' SLIDE'S RAISING A
LOTTA DUST-- RUN 'ER
UP INTO THIS SIDE PASS
A-WAYS 'TIL IT
SETTLES...

GOTCHA,
SARGE!

... FUNNY-- I
DON'T RECOLLECT
NO PASS THERE!

LOOK,
SARGE...

W-WHY TH' PASS
IS OPENING UP
INTO A...

V-V-VALLEY!

W-WOW! I
NEVER SAW
ANYTHIN' LIKE
THIS IN THESE
MOUNTAINS
B'FORE!

WELCOME...

WELCOME TO
TANKRI-LA,
GENTLEMEN!!

PULL UP OVER IN
THAT AREA, PLEASE...

? CONNIE...

YOU MIGHT SAY THAT...

BETTER YET,
JUST SAY I'M
A CLONE
FROM THAT
PM EXPERT--
CLONNIE RODD!

... RODD
?

TANKRI-LA?...

CLONES?...

YES-- TANKRI-LA IS
A PLACE SET ASIDE--
IN TIME AND SPACE--
WITH ME AS INSTRUCTOR...

... IN ORDER TO
EDUCATE TANK TYPES
WHO OBVIOUSLY NEED
TRACK PM
INSTRUCTION!...

WHICH IS
WHY YOU
ARE HERE!

HOP
DOWN!

AWW... WE'VE BEEN
MAINTAINING OUR
TRACKS BY TH' TM...

AND INSPECTIN'
'EM REGULARLY,
TOO...

OK, BUT WHEN DID ANY OF YOU LAST CRACK
YOUR TM 21-306 FOR DRIVING TECHNIQUES?
GOOD PM AND INSPECTION
PROCEDURES ARE WASTED
WHEN YOU DRIVE ROUGH--
LIKE YOU'VE JUST
BEEN DOING!

MY FRIENDS HAVE
PREPARED VISUALS FOR
MY CRASH COURSE IN
TRACK CARE... SO LET'S
GET YOUR INSTRUCTION
STARTED!!

DRIVING TIPS

DINO-
SAURS
?...

CAVE
MEN
?...

... PAINT-
ING ON
CLIFF
WALLS!

THIS FIRST
TIP IS 'SPECIALLY
IMPORTANT IN
HOT WEATHER!

Keep speed slow
and steady.

LIKE T'DAY
HUH?

High speeds build up heat that
weakens pad resistance
to tearing and chunking.

Start and stop
smoothly.

Jack rabbit starts
and panic stops
increase wear
on the pads.

Turn in
smooth,
long
curves.

Pivot steering at any speed
wears out more track rubber in
a few seconds than a whole day's
road march. Keep it to a minimum.

Remove debris
from track after
each operation

... such as mud—which can freeze—
rocks, wire, brush and tin cans.

HAMMER RING TEST

HERE'S A
HANDY USE
FOR YOUR
BALL PEEN
HAMMER...

Tap the end connector... A
ring tone means bolt and
wedge are tight and both track
pins are good. A dull tone
means you must tap pin ends
alternately.

Tap the track pins... A ring
means the pins are good, but
the wedge bolts are loose or
the end connector is cracked.
A dull tone means the track pin
is cracked or broken—a sure
sign of a dead track shoe. Replace it!

Tap the center guide...
A ring tone means guide
is tight... A dull tone
means guide is loose!

LOOK,
SARGE...

OUR TANK IS
SINKING INTO
TH' MUCK!

QUICK!!
GET IT
OUTTA
THERE!

RIGHT ON,
SARGE!

OH, NO!! WAIT... HOLD IT!!
TRACK'S APART!!

Joe's Dope Sheet

GET WITH IT,
TROOPS--WE CAN'T
MOVE 'TIL IT'S
FIXED!

URG!

There once was a tank crew from Fort Knacks
That learned to its sorrow the sad Facts:
No Track lasts FOREVER--
No, never but NEVER--
'Specially when PM has been LAX!!

A POINT to PONDER:

One T142 TRACK costs \$12,500

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.

TWO MUDDY, MISERABLE, BACK-BREAKING HOURS LATER...

WHEN! WELL, IT TOOK TWO NEW LINKS AND CONNECTORS, SARGE...

...BUT SHE'S OUT OF THE MUCK AN' READY TO GO!

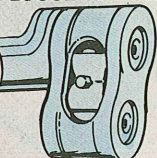
YOU'VE JUST LEARNED WHY TANKS MUST BE DRIVEN WITH CARE!

SO-O-O ON TO THE NEXT LESSON!

END CONNECTORS and WEDGES

AS YOU NOW KNOW, WEDGES MUST BE KEPT TIGHT—AND CRACKED, BROKEN OR WORN END CONNECTORS REPLACED!

LOOSE WEDGES



Look for shiny metal around the bolt head, or a gap between the pin and the end connector pin hole.

WEDGE NOT SEATED



A gap means the center guide was tightened before the end connector.

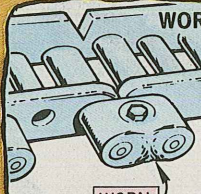
WEDGE HIGHER THAN OTHERS



The center guide may have been tightened before the end connector or the track pin is turning in the link.

Note: ALWAYS TIGHTEN BOTH END CONNECTORS ON EACH SHOE FIRST—THEN THE CENTER GUIDE. IF YOU DON'T, THE WEDGE WILL LOOSEN RIGHT UP AGAIN!

WORN END CONNECTOR



Your mech will check it with an end connector wear gage. Rotate the gage around both ends of the end connector and depress the gage pin at several positions. If the pin touches at each position, the end connector is OK. If the pin does not touch, the end connector is worn. Replace it.

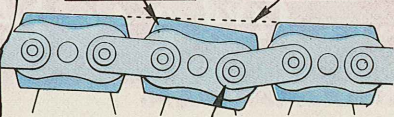
TRACK INSPECTION

CHECK TRACK AND TRACK COMPONENTS AFTER OPERATIONS AND DURING HALTS! TAKE YOUR TIME... GIVE 'EM A CAREFUL EYEBALLING!

DEAD TRACK SHOE

Distorted shoe

Normal Position



Track pin separated from bushing

Look for dead track shoes. They rate high on the track killer list, so replace 'em PDQ!!

NOW... SOME TIPS ON CHECKING AND ADJUSTING TRACK TENSION...

TRACK TENSION INSPECTION

Move the tank forward on a hard surface and coast to a stop without applying brakes.



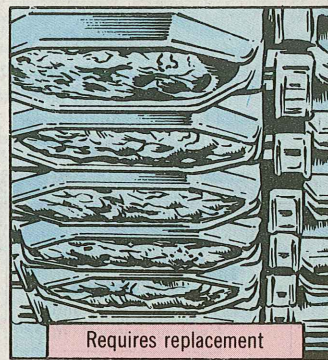
Remove dirt and crud from the outboard end connectors between the first and second support rollers on both sides of the tank.

TRACK PAD WEAR

Replace worn track pads when the grouser begins to mark a paved road.



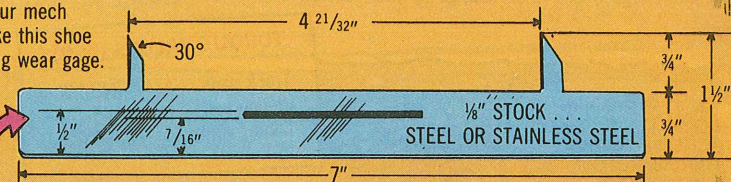
Normal wear



Requires replacement

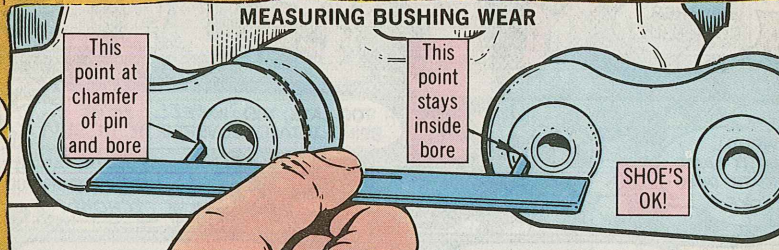
TRACK SHOE BUSHING WEAR GAGE

Get your mech to make this shoe bushing wear gage.



Scribe line on gage at 7/16 and 1/2-in from bottom edge for string measurement.

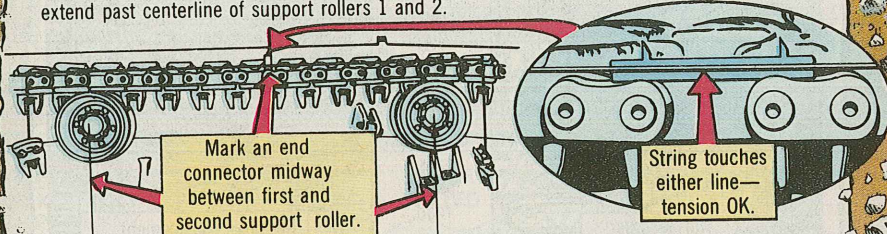
MEASURING BUSHING WEAR



Put the point of the gage on the chamfer on the end of the pin and the end of the end connector bore and the other point in the next end connector bore. The second tip should just go into the bore. If it won't, the bushings are shot and you need to replace the shoes.

MEASURING TRACK TENSION

Place a string with weights on both ends over the center of the end connectors. String must extend past centerline of support rollers 1 and 2.



Measurement between the end connector and the string should be $\frac{7}{16}$ to $\frac{1}{2}$ inch. If inspection shows adjustment is needed, go by your -10 TM.

TORQUE VALUES (lb-ft)

Track pads	240-270
Wedge bolts	140-160
Center guides	300-320

AFTER RUNNING 50 MILES, RETORQUE ALL CONNECTING HARDWARE ON NEW TRACK!

LOOKOUT-- ANOTHER ROCKSLIDE!

OH, NO!

BACK TO TH' TANK, MEN!

!GASP! WE ALL MADE IT BACK INTO TH' TANK-- !CHOKE!

TOO LATE, THO' WHEEZ!... WE'RE BEING TOTALLY COVERED BY TH' SLIDE!

B-BUT... WHAT ABOUT CONNIE?... POOR KID!... !CHOKE!

SOMEWHAT LATER... BLUE ARMY H.Q....

HA-HA!! THAT WAS A DIRTY TRICK TO PLAY ON THOSE GREEN ARMY TANKERS, SIR!

ALL'S FAIR IN LOVE AND WAR GAMES, SERGEANT... BUT WE ONLY ARRANGED THE FIRST ROCKSLIDE...

...THE SECOND WAS COURTESY OF MOTHER NATURE!

FINE, COLONEL... BUT WE PUG 'EM OUT NONE TOO SOON!!

HOW ARE TH' LADS, BY THE WAY?

THEY'RE RECOVERING WELL FROM HEAT DELIRIUM AND NEAR SUFFOCATION!

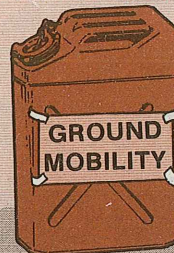
THEY KEEP RANTING ABOUT CONNIE RODD... A HIDDEN VALLEY... DINOSAURS... PM LESSONS... TRACK REPAIRS, ETC!!

...BUT IT'S WEIRD, SIR... THEIR TRACK IS NEWLY REPAIRED... AND BOTH THEY AND THEIR TANK WERE MUD-COVERED!

IMPOSSIBLE! IT HASN'T RAINED FOR YEARS IN THESE PARTS!

5-Gal Fuel Cans ...

Save Spouts, Save \$\$\$s



WHERE'S THE WIRE SCREEN FER HIS SPOUT?

SCREEN?

Dear Half-Mast,

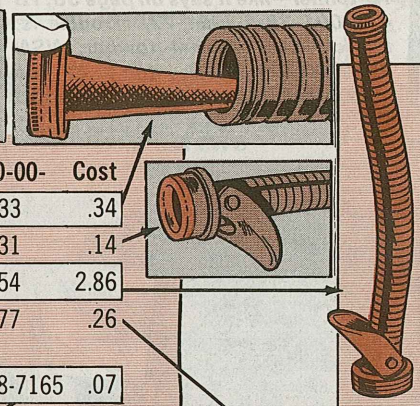
Some of our 5-gal fuel cans—NSN 7240-00-222-3088—are unserviceable because the wire screen is missing from the spout. We turn in the cans to escape the IG's gig.

Could we save ourselves a gaggle of gigs—and a bundle of bills—by ordering a screen for the spouts?

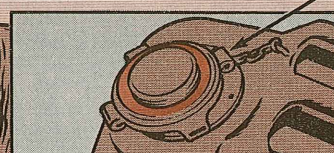
SFC R.W.N.

Dear Sergeant R.W.N.,

You betcha! Here're the repair parts breakdown for the can—including the spout screen:



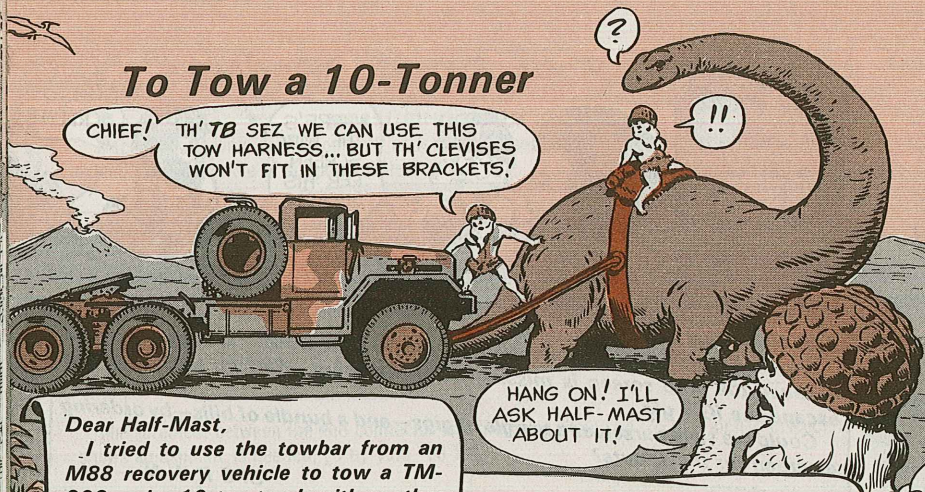
Nomenclature	NSN 7240-00-	Cost
Cap & screen assy	132-6433	.34
Bushing (bottom) syn rub	132-6431	.14
Spout, flex assy (complete)	177-6154	2.86
Closure assy (includes cotter pin, swivel wire, link chain)	025-3377	.26
Gasket, closure	5330-00-298-7165	.07



TM 10-7200-200-13 (Feb 74) HAS THE PM WORD ON THESE FUEL CANS--AND THE 5-GAL WATER CANS, TOO!

TM 10-7200-200-13

To Tow a 10-Tonner



Dear Half-Mast,

I tried to use the towbar from an M88 recovery vehicle to tow a TM-206-series 10-ton truck with another 10-tonner—like it says on page 38, TB 43-0001-39-4 (Jan 77). Trouble is, the clevises on that towbar, NSN 2540-00-378-2012, don't fit the lifting shackle brackets on the truck.

CW3 D.J.S.

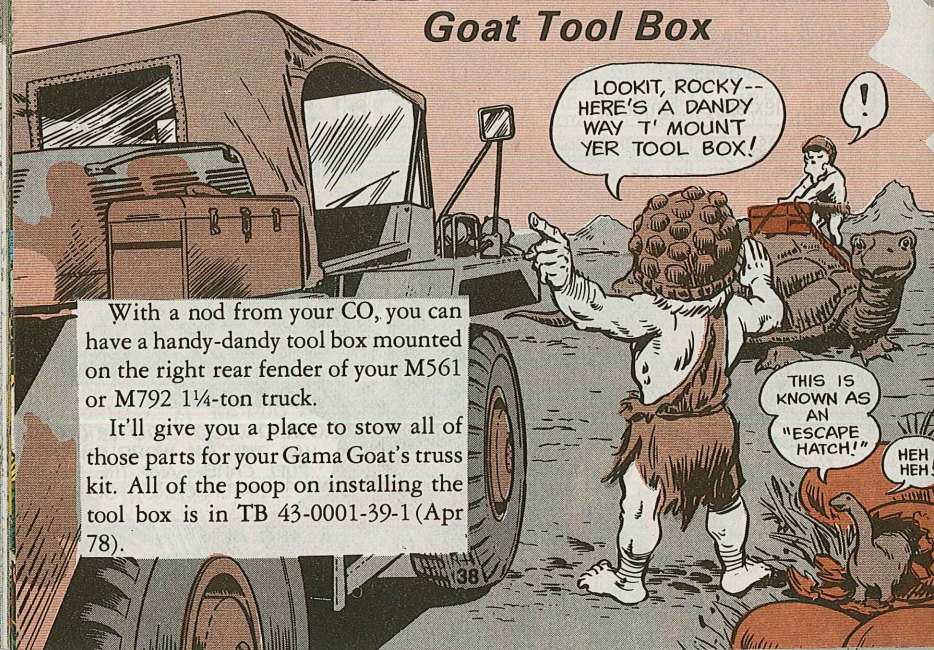
HANG ON! I'LL ASK HALF-MAST ABOUT IT!

Dear Mr. D.J.S.,

You need 2 clevises, NSN 2540-00-863-3153, to fit that towbar to a 10-tonner. Add this info to that EIR Digest article.

Half-Mast

Goat Tool Box



With a nod from your CO, you can have a handy-dandy tool box mounted on the right rear fender of your M561 or M792 1¼-ton truck.

It'll give you a place to stow all of those parts for your Gama Goat's truss kit. All of the poop on installing the tool box is in TB 43-0001-39-1 (Apr 78).

THIS IS KNOWN AS AN "ESCAPE HATCH!"

HEH HEH!

Ground Equipment ...

Weep, Seep, Leak or Drip

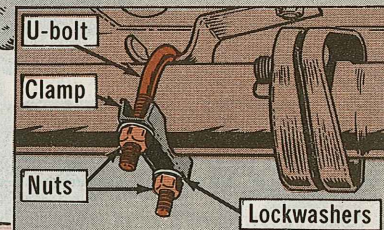
WEEP —Slight fluid loss which stains, or discolors, but stays dry to touch.	Leave alone—it's normal.
SEEP —Slight fluid loss, not enough to make a drop, but moist to touch.	Leave alone—it's normal.
LEAK —Fluid loss forming droplets.	Change seal only when 20% loss occurs between scheduled periodic services.
DRIP —Fluid loss forming drops to roll or drip away.	If fluid loss is more than 20% between scheduled periodic services, change seal.

—TB 43-0001-39-1 (Apr 77)
Article 2-16



M151 Exhaust Hardware

Some U-bolt hardware for the exhaust system was left out of TM 9-2320-218-20P. You can get a clamp kit with NSN 2990-01-047-2487. The kit includes a clamp, a U-bolt, 2 nuts and 2 lockwashers.



Truck Lock



HOW'S THIS FOR A SECURE ¼-TONNER?

NOT BAD... BUT, WHY DON'T YOU CHECK OUT THE NEW TB?

If you've already got a good way of securing the steering wheel on your tactical truck—you don't have to change it.

If you don't have a good way, check out TB 9-2300-422-20 (Oct 77), Security of Tactical Wheeled Vehicles. You'll find a way.

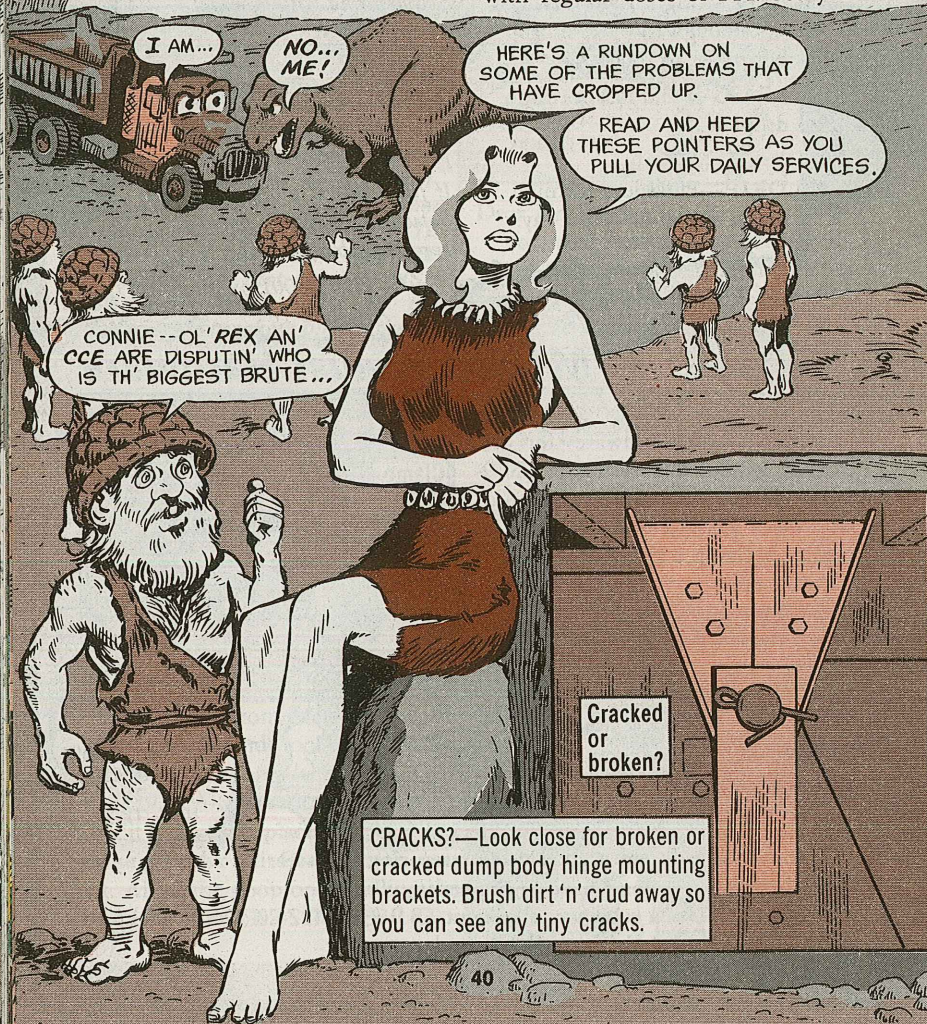
Four 20-Ton CCE Dump Trucks

Your IH model F-5070 dump truck gives you 20 tons of output for just about a wheelbarrow load of PM

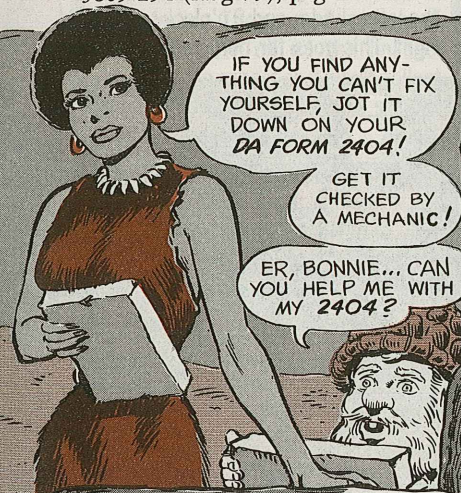
input. Now that's a real jackpot payoff!

You can keep this big brute happy with regular doses of PM. See your

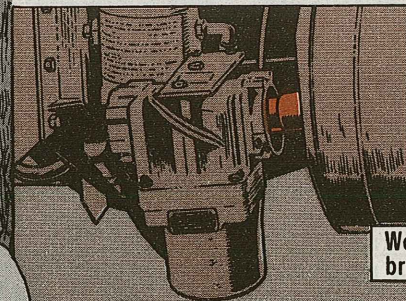
operator's manual and the User Maintenance Support Plan, MSP 5-3805-254 (Aug 75), page 81.



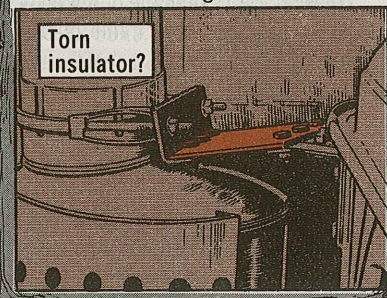
CRACKS?—Look close for broken or cracked dump body hinge mounting brackets. Brush dirt 'n' crud away so you can see any tiny cracks.



LOOSE?—Check the dump body hoist hydraulic oil reservoir where the pipe is welded to the reservoir. Grab the filter and shake it. If it's loose, report it.

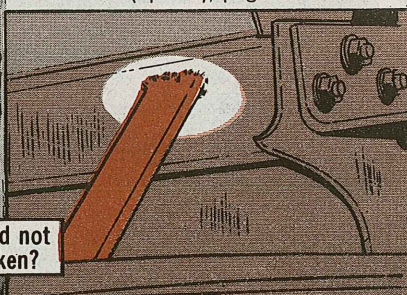


TORN?—That exhaust pipe bracket insulator could be torn. The dump body cab protector can hit the exhaust pipe on its way down and tear the insulator. If it's torn, your mech can replace the insulator with PN 31007403391C1. Or, he can replace the insulator with a piece of steel-webbed belting cut to size.

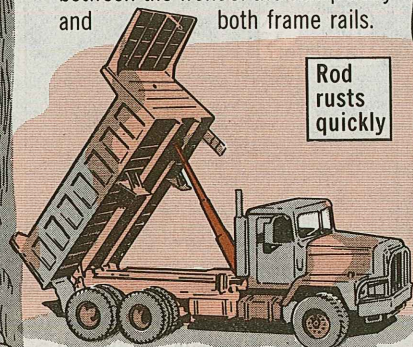


INTERFERENCE?—The vertical exhaust pipe can get hit by the cab protector, so get your mech to fix the pipe. TB 43-0001-41-1 (Apr 77), page 15, tells how.

While you're right there, check that lower exhaust pipe brace that's welded to the truck frame between the fuel tanks. If it's broken, get your support to fix it as shown in TB 43-0001-41-1 (Apr 77), pages 25-26.

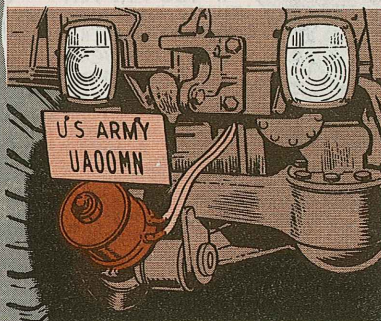


RUST?—The dump hoist cylinder rod is polished steel and will rust quickly if exposed to the weather. Always keep the dump body down when your truck's parked—even overnight. If water in the dump body gives you fits, raise the body slightly and put a 4-in x 4-in block of wood between the front of the dump body and both frame rails.



Rod
rusts
quickly

TURNAROUND—Air line fittings get broken off the dual axle brake chambers during off-the-road operations. So have your mech loosen the clamp around the brake chamber and rotate the chamber until the fittings are at 3 o'clock on the left cylinder and 9 o'clock on the right. This goes for both rear axles.



AIR DRIER—The air brake drier needs servicing when moisture and sludge come out of the automatic spitter valve on the air reservoir under the steps.



Moisture
here? . . .

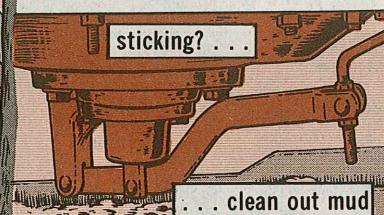


. . . Should have
been exhausted here

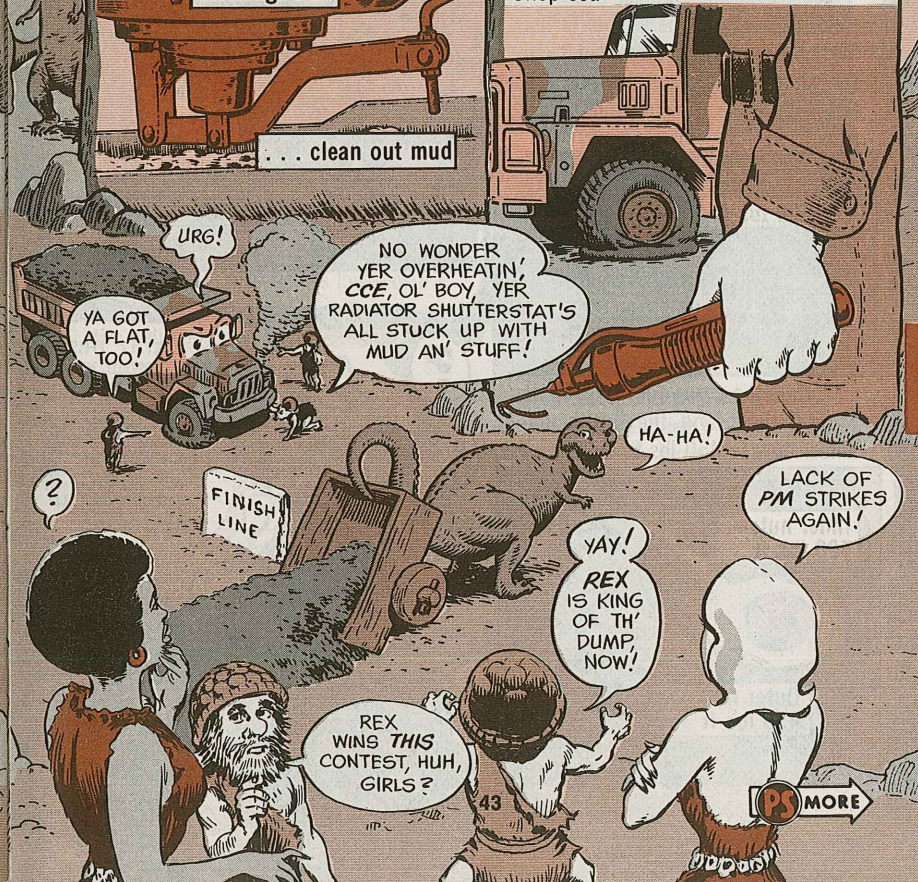
That stuff should have been exhausted by the air drier spitter valve.

To service the air drier, your mech will bleed the air system and use repair kit PN 31007430952C92 to replace the desiccant crystals inside the air drier canister.

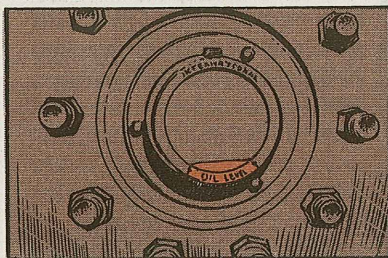
STUCK?—Your radiator shutter can get stuck up. Mud gets packed up on the shutterstat mounted in the bottom of the radiator. This keeps the shutterstat from opening. Clean out the mud. Make sure the linkage is not binding. Then put a few drops of OE/HDO 10W oil on the linkage. Wipe off the excess so it won't collect dust 'n' dirt. Do not oil the shutter vane nylon bearings.



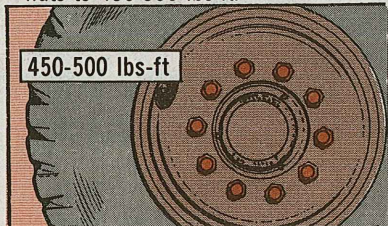
TIRES—Check tire pressure—with an accurate gage—only when tires are cool. Tire pressure should be 80 PSI all 'round. Keep the inner dual valve stem extensions tight. Careful not to strip or crossthread 'em. Keep the caps on the valve stems. You can patch the front tubeless tire with the Tubeless Tire Repair Kit, NSN 2640-00-922-6921. TM 9-2610-200-20 (Feb 77), para 4-18, tells how. The tubeless tire repair kit is an "as required" item in the No. 1 Common Shop set.



WHEELS—Lube level in the front wheel sight gage should be $\frac{3}{8}$ -in from the bottom. Fill with OE/HDO 30 oil.

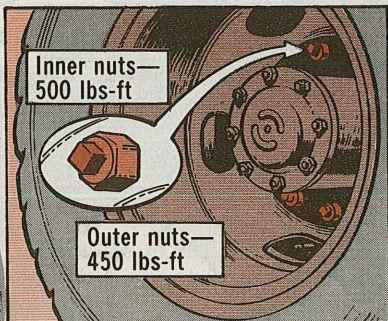


Look real close for loose wheel lug nuts. You may not be able to turn a loose nut with your fingers, but if you see shiny metal around a nut you know it's loose. Torque front wheel nuts to 450-500 lbs-ft.



450-500 lbs-ft

Torque the inner dual wheel nuts to 500 lbs-ft and the outer dual wheel nuts to 450 lbs-ft.



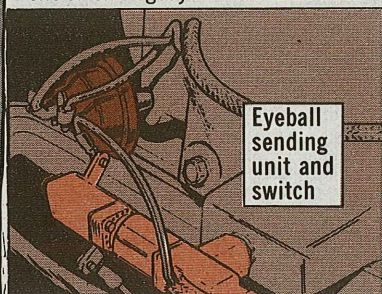
Inner nuts—
500 lbs-ft

Outer nuts—
450 lbs-ft

LEAKS AND DRIPS—Wet spots on the ground under your truck are signals to leaks. Same goes for wet places anywhere on your truck. Could be loose plugs... blown seals... cracked tubing... rotten hoses.

TB 43-0001-39-1 (Apr 77), para 2-16, gives you the rundown on weeps, seeps, leaks and drips.

Likely leakers are the sending unit and switch on the bottom of the transmission. If they're wet—either one of 'em—get your mechanic on it.



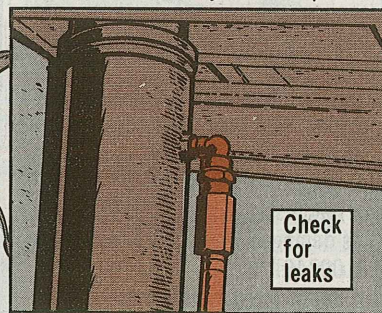
Eyeball
sending
unit and
switch



LOOK AT IT THIS
WAY, CONNIE--

A 100 MILLION
YEARS FROM NOW--
SOMEBODY'LL
BE HAPPY T'
FIND SOME
PETROLEUM IN
TH' GROUND...

Have your buddy check for leaking hydraulic cylinder oil lines while you run the dump body up. Get leaks fixed before you load up.



Check
for
leaks

Hold one! That hoist cylinder must have a thin film of oil on its polished surface.

While you're working with the dump body have your buddy watch the hydraulic reservoir sight gage. It should show full when the dump body is down... $1\frac{1}{2}$ to 2 inches of oil when the body is raised. Don't run low—you'll have to bleed the hydraulic system for sure.



$1\frac{1}{2}$ -2 inches
with body up

BLEEDING—Look for slow or unsteady hydraulic cylinder action. If the oil in the reservoir is low—or if air got into the hydraulic system—the cylinder may need bleeding.

Bleed here

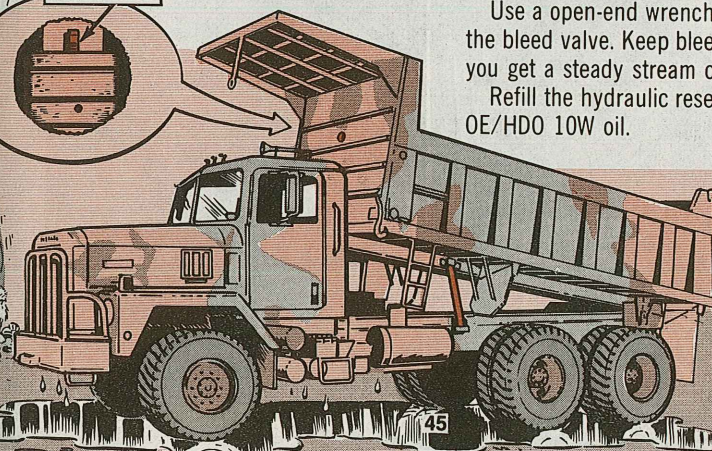


Here's how to bleed the cylinder without getting hurt.

Raise the dump body high enough to use the safety struts. Set the struts. Get up onto the cab roof to reach the bleed valve.

Use a open-end wrench to loosen the bleed valve. Keep bleeding until you get a steady stream of oil.

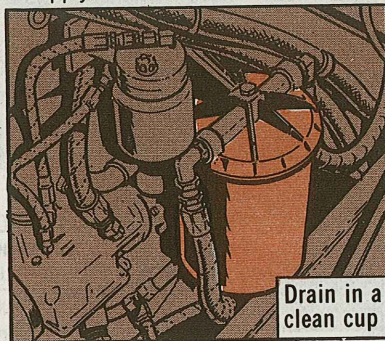
Refill the hydraulic reservoir with OE/HDO 10W oil.



Use struts

PS MORE

DRAIN OFF TROUBLE—You're after dirt 'n' water in your fuel. This stuff can make your engine snort and spit—even quit. In cold weather, water in your fuel filter can freeze solid and cut off your engine's fuel supply.



Drain in a clean cup

Use a clean cup, bottle, or can—anything—to catch the fuel you drain off. If there's a lot of crud or water in it, your shop people should check into it.

UNDER THE HOOD—Take a minute or so and just look around in your engine compartment.

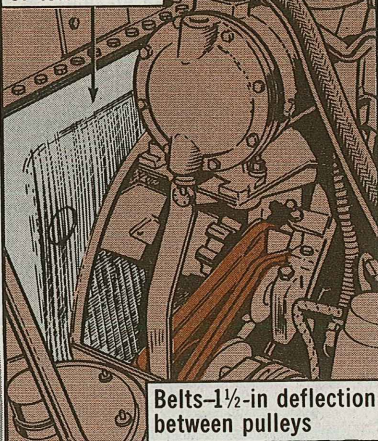
Hoses leaking or cracked? Tube connections leaking? Electrical wires bare, broken or burned? Parts missing?

A hot one! Look at the radiator shroud. Is it torn or are there other signs the fan blade has been hitting it? Get your mech to tighten it down or readjust it so the fan won't hit it. If it's damaged, get a new one with PN 31007467362C2.

See if the drive belts are in good shape—not frayed, cut, broken or missing.

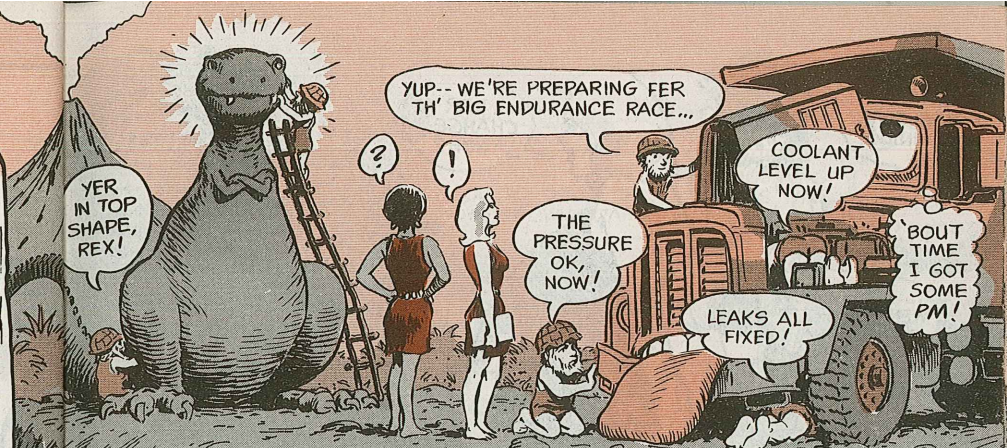
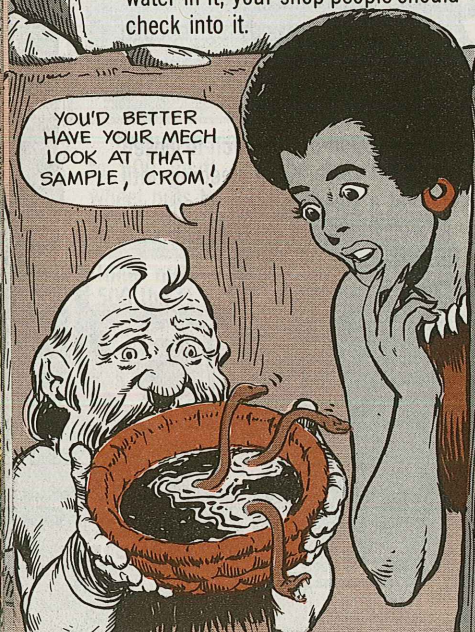
Are the belts tight enough? Press hard with your thumb about halfway between the pulleys. You should be able to press the belt in about a half-inch. If it's too loose or too tight, get it adjusted.

Shroud cracked or torn?



Belts—1½-in deflection between pulleys

YOU'D BETTER HAVE YOUR MECH LOOK AT THAT SAMPLE, CROM!



YER IN TOP SHAPE, REX!

YUP-- WE'RE PREPARING FER TH' BIG ENDURANCE RACE...

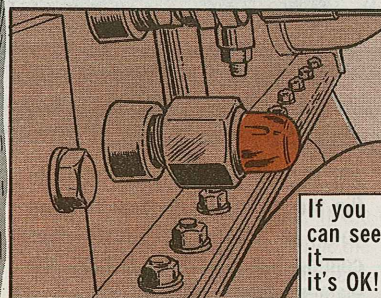
COOLANT LEVEL UP NOW!

THE PRESSURE OK, NOW!

LEAKS ALL FIXED!

'BOUT TIME I GOT SOME PM!

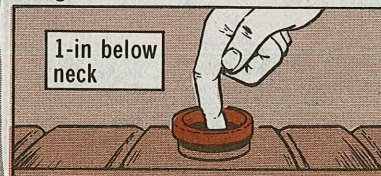
COOLANT—To check the coolant level, look at the sight gage on the rear of the radiator. If the coolant shows in the sight gage, you've got plenty.



If you can see it—it's OK!

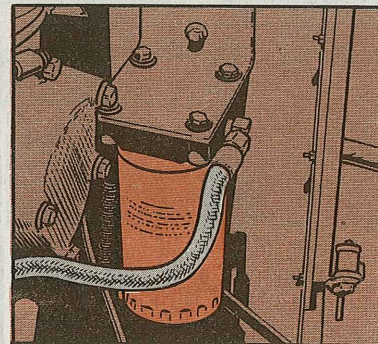
If you can't see coolant in the sight glass, open the cap and check the level. It should be about 1 inch below the bottom of the filler neck. That's about the first joint of your finger.

1-in below neck



Never open the radiator cap unless you have to and then never until the engine has cooled down.

Look for sludge, rust or specks of dirt in the coolant. There's a water filter on the right side of the radiator to keep the coolant clean. The operator's manual says to replace the filter every 10,000 miles, but watch it. It may need changing more often.



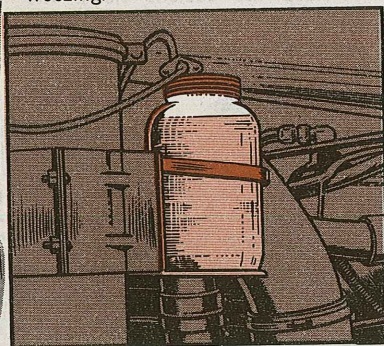
Two water filters are available:
PN 31007441365C1 for new coolant.
PN 31007442816C1 for old coolant.

IT'LL BE CLOSE THIS TIME, CONNIE...

... FOR A CHANGE, HUH?

... CCE'S CREW WENT ALL OUT ON HIS PM.

WINDSHIELD WASHER—Check the windshield washer container fluid. If the fluid's low, get cleaning compound NSN 6850-00-926-2275. There're different mixes to prevent freezing:



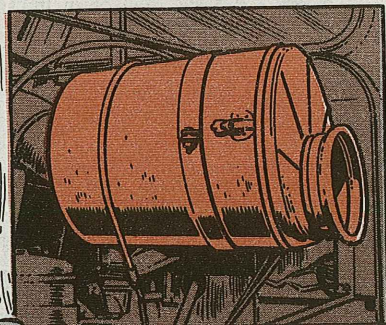
From +40°F to -10°F, use 1 part compound to 2 parts water.

From 0°F to -40°F, use 1 part compound to 1 part water.

From -30°F to -65°F, use 2 parts compound to 1 part water.

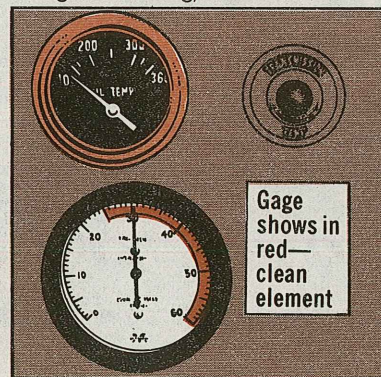
This's the same as you find in TM 9-2320-218-10 (Sep 71), page B-10, for the ¼-ton truck.

AIR CLEANER—Use your finger to flip the end of the ejection valve on your air cleaner. If dust keeps coming out after 4 or 5 flips, the element needs servicing.



Flip valve 4 or 5 times

And check that air cleaner restriction gage in the dash. If the gage reads in the RED area while the engine is running, clean the element.



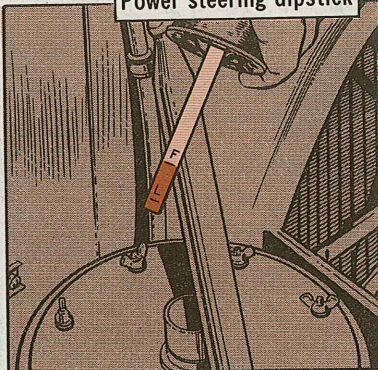
Gage shows in red—clean element

20-Ton Light Crossover

Watch it! When you move those rear lights up on your 20-ton CCE dump—like it says in TB 43-0001-41-4 (Jan 78) and PS 305, page 19—you've gotta cut the angle off the bracket and criss-cross the lights. The back-up part of the light goes down. This'll put the wire connector box toward the inside so you can reconnect the wiring.

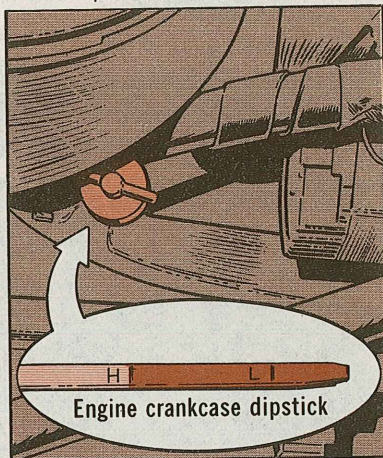
OIL—Your power steering reservoir fluid should be at the F mark on the dipstick. Use OE/HDO 10W oil to refill.

Power steering dipstick



There's no good reason for starting out with your engine oil level below the full (H) mark on the dipstick. A big diesel engine like this is bound to use some oil in a day's

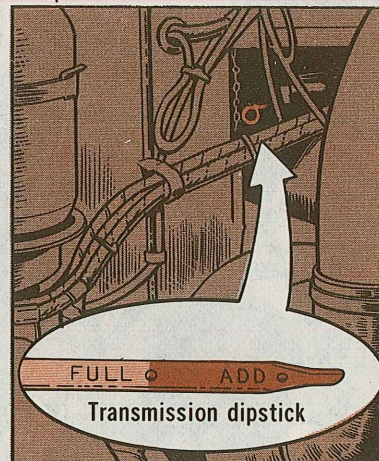
hard work—several quarts, maybe. If you start out below full, you could wind up low before you're done.



Engine crankcase dipstick

Check the transmission oil level with the engine running at operating temperature and the transmission in neutral. The oil must be between the

FULL and ADD oil marks on the dipstick.



Transmission dipstick

Always use ATF-DEXRON fluid in the transmission.

NSN 9150-00-698-2382 1 qt

NSN 9150-00-657-4959 5-gal can

LUBRICATION POINTS—The operator's manual calls for a special grease—IH251 or NLGI No.2—for most grease fittings.

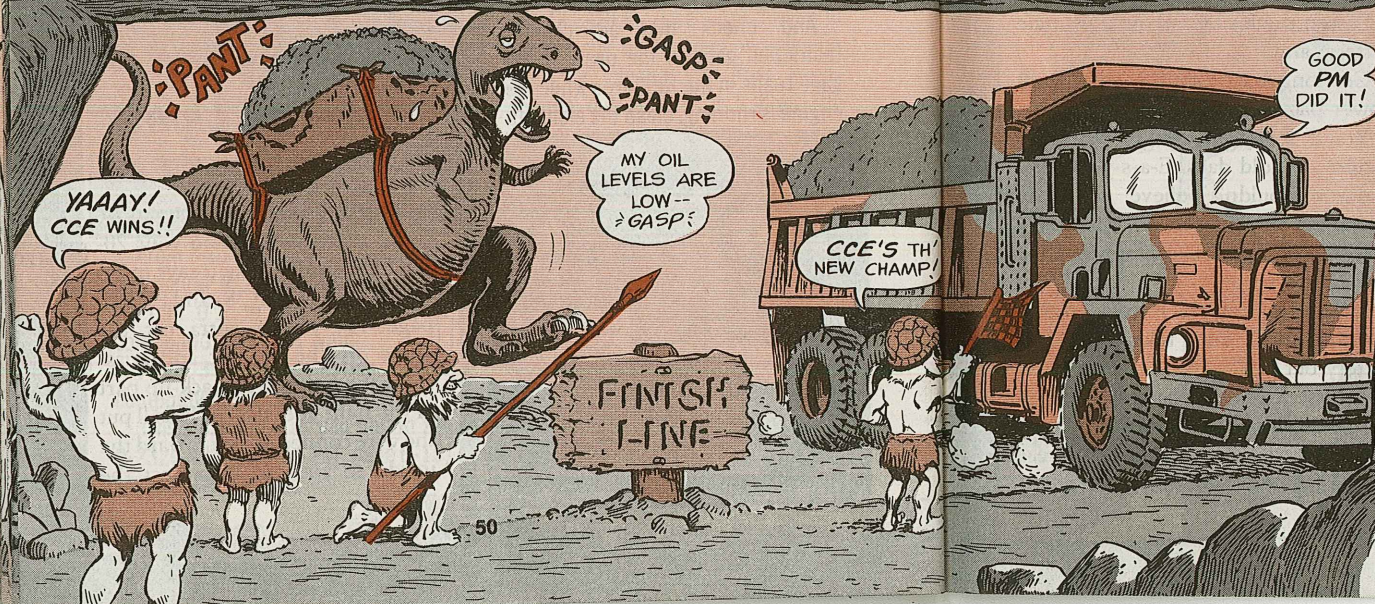
YOU CAN USE MIL-G10924C GREASE! GET IT WITH THESE NSN'S...

NSN 9150-00-190-0904 1-lb can
NSN 9150-00-190-0905 5-lb can
NSN 9150-00-190-0907 35-lb pail

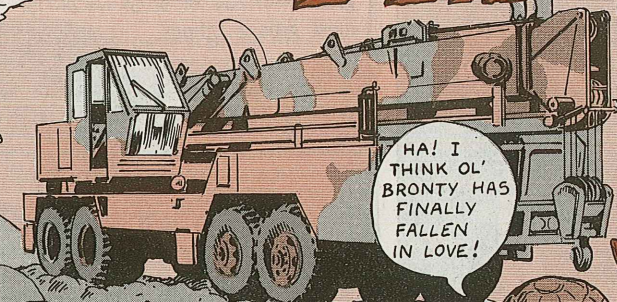
WEIGHT CLASSIFICATION—If you have a specific requirement for displaying the vehicle weight classification, your command can authorize the kit, NSN 9905-00-565-6267 mentioned in TB 43-0209 (Oct 76).

HERE IS YOUR WEIGHT CLASS...

EMPTY	LOADED	
	Cross-Country	Highway
14	40	40



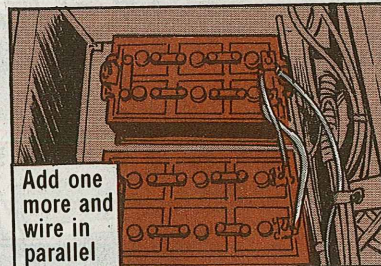
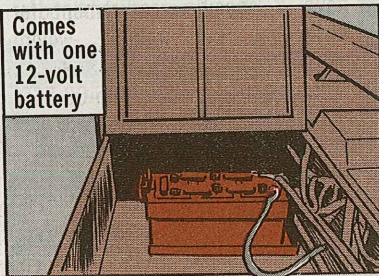
IPM COUNT DOWN



Here're some tips that'll make operating your MT250 hydraulic crane easier and reduce downtime and parts replacement.

1. Your 25-ton brute comes with a 200-amp electrical system. Add 1 more 12-volt battery—NSN 6140-00-191-8485—and wire in parallel.

Comes with one 12-volt battery



Add one more and wire in parallel

This doubles your amperage and helps:

Save the starter;

Lessen the load strain on the single battery; and

Get longer battery life from both power packages.

You'll really appreciate the extra battery on cold days. E-a-s-y starting like you wouldn't believe! All those hydraulic helpers can use the extra power, too. Your CO can approve the extra battery.

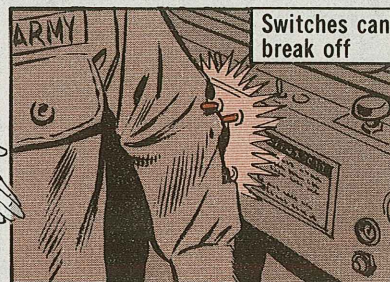
Hold one, though. If you have to turn in the crane, take the extra battery out.

'Course, the extra battery is called for when you use the winterization kit. But, keep 2 batteries in the crane year 'round for better service.

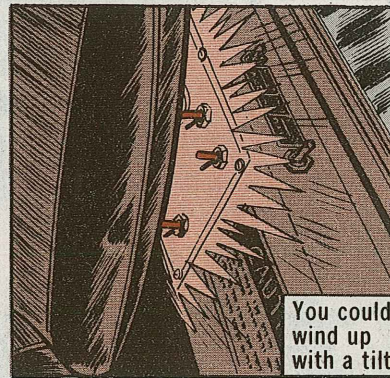
PM MAY BE WORK-- BUT YOU'LL HAVE EVEN MORE--IF YOU TRY TO DO WITH-OUT IT!

YOU AIN'T JUST A-WOOFIN', CONNIE!

2. Upper cab space is on the short side for sure. Fact is, it's real close quarters if you're not weightwatching! You can get pretty busy sitting in the swivel chair, so you want to pay attention to the remote outrigger control panel toggle switches. You can break 'em off quick-like with your left arm. Like maybe the left front (LF) UP/DOWN switch.



Or, with the master switch ON and either front outrigger extended, you could accidentally hit the RF or LF IN/OUT toggle and the outrigger will retract. You'd wind up with an unstable machine. TILT!



3. Never use force—especially when the temperatures are down—to engage/disengage the PTO (power take-off). Do exactly like para 21, Part II, Sect I says in your operator's manual. In cool weather when the pump disconnect lever (another name for the PTO) moves like a snail, rev up the engine to 650-700 RPM for a few minutes to warm the fluid. Then stop the engine and you can move the lever easier.

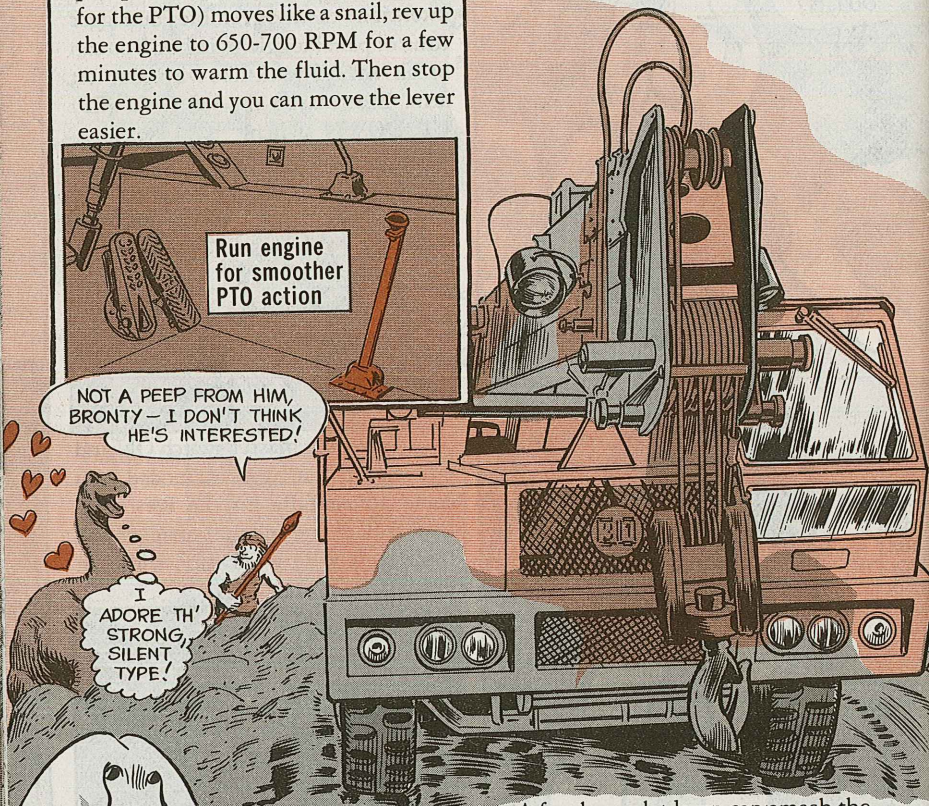


NOT A PEEP FROM HIM, BRONTY—I DON'T THINK HE'S INTERESTED!



LOWER THAT BOOM WITH THE TENDEREST OF CARE!

4. Never get in a hurry when you lower the boom onto the boom cradle. F'rinstance, when you get the word that high winds are expected. Or, you're getting the crane ready for convoy or cross-country driving.



A fast boom letdown can smash the boom rest base. That's an expensive way to learn that this fully hydraulic crane works best with some kind of special operator—like you—and eagle-eye PM.

Brake Mounting . . .



Loose Nut PM

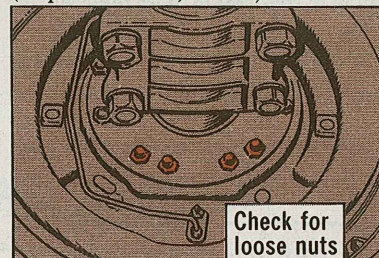
IT WUZ ONLY ONE LOOSE NUT, HE SEZ!

WOT'LL THEY SAY WHEN THEY FIND *THAT* IN TH' TAR PIT 100 MILLION YEARS FROM NOW?



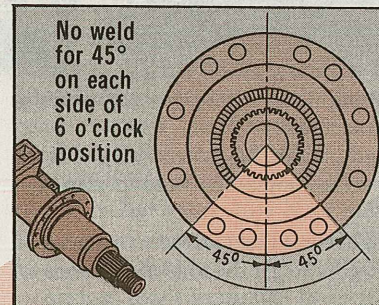
A loose nut is always trouble—and you could have a loose one inside the brake assembly of your MW24/MW24B scoop loader.

Check the brake mounting nuts for looseness now . . . and when you check the brake fluid level every month (Sequence No. 5, PMCS).



If you find a loose nut, call your DSU pronto. They'll torque each nut right.

While you're checking the nuts, see if the weld holding the axle flange to the axle housing is OK. Any broken or missing weld gets DSU attention, soonest. Page 5-3 of TM 43-0143 (Jun 77) has the poop.



Hold one, tho. There should not be any weld for 45 degrees on each side of the 6 o'clock position on the flange. This is a built-in safety feature. A weld around the whole flange could cause axle housing failure.

SO, CHECK THE NUTS AND WELD ON YOUR MONTHLY PMCS!!

Electric Motor-Driven Pump

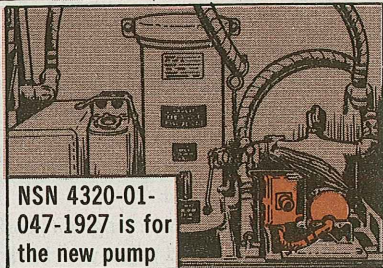
Dear Half-Mast,

In PS Magazine 257 you identified an electric motor-driven pump that was available to tank and pump units operating in cold climes.

We've had no luck finding the number on the AMDF. Can you clue us to a good one?

SSG J.K.R.

NSN 4320-01-047-1927 is for the new pump



Dear Sergeant J.K.R.,

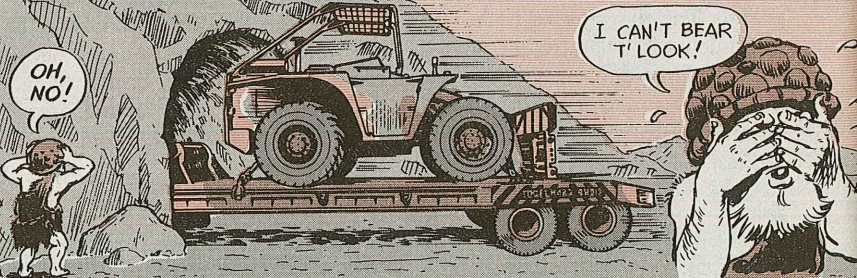
Sure thing! NSN 4320-01-047-1927 is now in the AMDF. It's a replacement for the old electric pump under LIN V12141. Use RIC A12. Cost is \$1,350.

This pump will help you deliver fuel in cold, cold temps. Army units that never operate in frigid temps should continue to use the gasoline engine-driven pumps now in the field.

Instructions for mounting the pump by organizational troops come with each pump.

Half-Mast

In-Transit Traps



Construction and materials handling equipment with roll over protective structures (ROPS) may be bigger than you think.

Make sure you figure in the extra length, width, height and weight of the equipment when you're transporting it on lowboys. You need to plan your route carefully.

You'll find the dimensions of each piece of equipment on the transportation data plate. Add 'em to the figures for the trailer to get the total dimensions for your transportation routing plan.

Dear Half-Mast,

We're getting gigged for missing nut retaining clips on our 3-, 5-, and 10-KW generator sets. We can't find an NSN for the clips.

Can you help?

SFC R.W.B.

Dear SFC R.W.B.,

Those safety clips are not in supply. You make 'em. Here're the NSN's for the bulk wire:

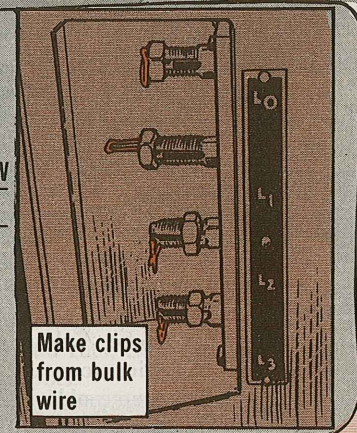
NSN 9509-00-	wire sz, in	generator size, KW
596-1668	0.041	3, 5, 10
596-1666	0.051	3

Use a clip from the terminal board for the pattern.

If you need safety clips for larger-size generators, use 0.090-in wire, NSN 9505-00-596-1662.

Half-Mast

Make clips from bulk wire



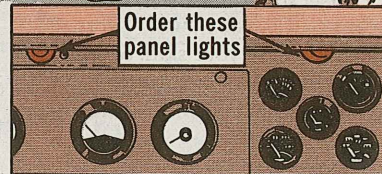
Once Over LIGHT-ly!



Been fumbling with knobs 'n' switches—and straining your peepers—at the instruments on your 30-KW Hol-Gar set's engine control panel because the parts manual doesn't tell you what to order?

Stumble 'n' fumble no more. Add this poop to Group 0607, page 20, TM 5-6115-321-20P (May 70): NSN 6210-00-299-6234, PN 20000-314 (73239); Light, panel (including shade); SMR code is PAOZZ. Reference item 34, fig 27 in the P-Manual.

Ah-h-h, that's more like it!



Keeping

Your Troubles Wired

CONGRATS, STONY! YOU'VE JUST INVENTED THE WHEEL!

YEH-- NOT T' MENTION FINDING A GREAT CORD FOR OUR BOWS AND LINE FOR FISHING!

A LITTLE TIMELY PM WILL KEEP YOU WIRE-TYPES FROM GETTING ALL STRUNG OUT!

Wire, wire, everywhere, and not a bit of commo!

That's not the way the famous poem goes, but maybe it was your line during that last field problem.

It didn't have to be. A closer eyeballin' and some electrical tape could cure your WD-1/TT wire woes.

But, your first step could be a little book learning. FM 24-20 Field Wire and Field Cable Techniques (Feb 70) is the little book (it's pocket-sized) to learn from. It has everything from field splices to underwater wire laying.

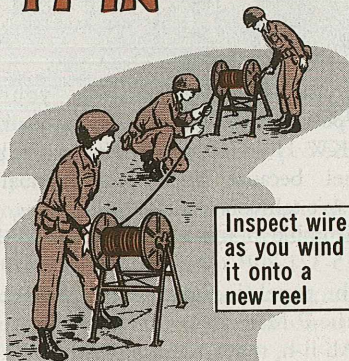
Still, the best way to insure good commo next time is to be extra careful this time. Get a splicer, some tape—and your glasses if you wear 'em—and give your wire a good going over when it's picked up after the field problem.

REELING IT IN

Two tips before you start the reeling-in work. First, wear some gloves to save your skin. Second, save the wire's skin by lifting it off the ground as you reel, instead of dragging it.

Once you've reeled in all your wire, take some time to inspect it.

Get a couple of friends, and an extra reel. Put a friend on each reel and station yourself in the middle. Inspect the wire as you wind it onto the new reel.



Inspect wire as you wind it onto a new reel



Clean the wire as it winds past. Look for obvious things—rough use and mishandling, jacket deterioration, nicks and cuts, excessive splices and worn spots.



Look for damage when cleaning

Next Month
In LS
M880 24-Volt System
★
M60 Machine Gun
★
Vulcan Cable Fix
★
High Security Padlock

US DINOSAURS WON'T BE AROUND TO SEE IT... >SOB<

CHECK, TEST

If these bad spots cover less than 3 inches of wire, tape them. If longer, cut them out and splice the wire.

To decide what wire you can keep and use again, and which you turn in for a trip to disposal, use these guidelines:

Using a multimeter, check for loop resistance. WD-1 should show 200-230 ohms per mile at 70°F.

Remember that cold weather reduces resistance. Also, wire length and resistance change proportionately—so, if you have a ½-mile loop, you should have 115 ohms resistance.

A considerably higher than normal reading shows bad splices or a break in the wire. Considerably lower and it's a leak or short circuit.

Check your splices

If it meets the resistance tests but has more than 4 splices each ½ mile,

DARN!
WE'LL HAVE
TO SPLICE
IT NOW!

it's only good for training. If it fails all tests, have it turned in.

Turn-in procedures have changed a little. You don't cut the wire into strips anymore. You wind it into 3-ft diameter rolls, tape or tie it together and have it inspected and tagged.



Tape bad wire into 3-ft diameter rolls

IF YOU HAVE TO RENEW YOUR SUPPLY OF WIRE, REELS OR TAPE, USE THESE NSN'S...

WD-1/TT	6145-00-161-0790
DR-8 (reel only)	8130-00-407-7859
DR-8 (with ¼ mile of wire)	6145-00-226-8812
RL-159 (reel only)	8130-00-174-0812
RL-159 (with 1 mile of wire)	6145-00-243-8466
MX-306 wire dispenser (½ mile wire)	6145-00-160-7795
TL-636 electrical tape (use in tropical or temperate zones)	5970-00-685-9059
TL-600 electrical tape (for arctic or cold weather)	5970-00-240-0620
TL-83 insulation tape	5970-00-644-3167

Handset Health Tips

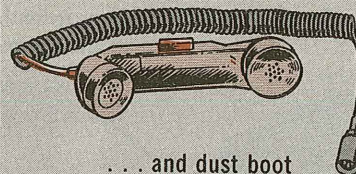


Age can stiffen the cable assembly on your H-189 handset and shorten its life.

To keep this stiffening from stifling the cable, give it a balm of silicone compound NSN 9150-00-257-5358. This will keep the cable from drying out, cracking and breaking.

Just put a dab on your index finger and thumb and gently rub the silicone compound on the cable. Too much compound will leave you with a gummy mess.

Rub silicone on cable ...



... and dust boot

Give the dust boot a once-over look. If it's dirty, clean it. You might put a dab of silicone compound on the boot to help lengthen its life, also.

If you're having trouble keying your radio set, it may be because of a dirty push-to-talk switch. Get your support to clean it or change it.

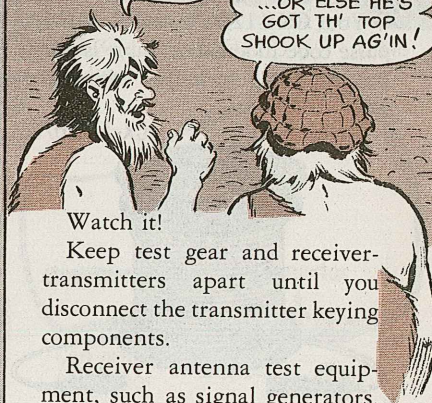
For Test Gear ...

Keyed T-Power Is Punch Out



LOOKS LIKE STONY FERGO TO DISCONNECT HIS KEYING DEVICE.

...OR ELSE HE'S GOT TH' TOP SHOOK UP AG'IN!



Watch it!

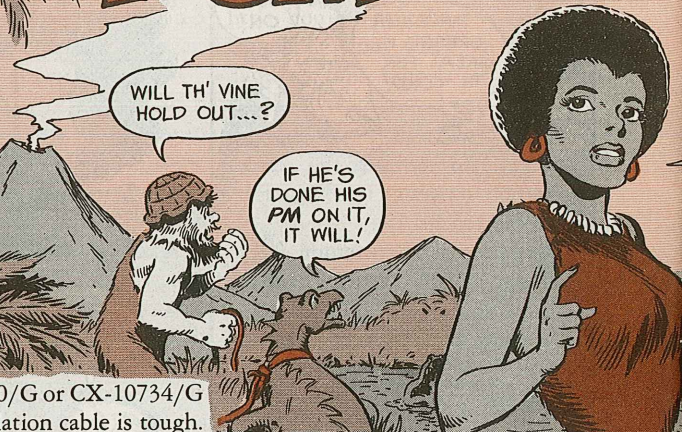
Keep test gear and receiver-transmitters apart until you disconnect the transmitter keying components.

Receiver antenna test equipment, such as signal generators, counters and the like, are not made to take the full blast of transmitter power.

If the transmitter is keyed accidentally, with the test gear hooked up to the antenna jack, it'll blow the test equipment.

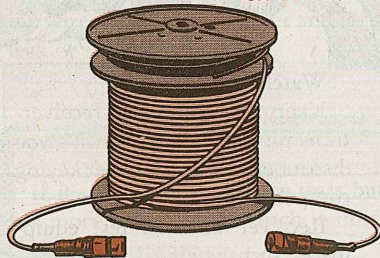
To avoid this, disconnect handsets, microphones or any other keying device while your test equipment is hooked up.

PCM CABLE



Your CX-11230/G or CX-10734/G pulse code modulation cable is tough. But it'll last a lot longer with a little PM.

CX-11230/G



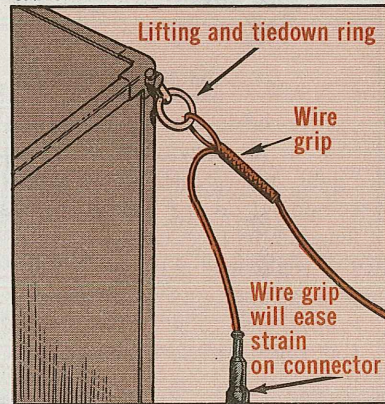
Covers on UG-1870 connectors

When you're paying out PCM cable, slow that reel down to a creep before the cable reaches the end. If you bring that cable connector to an abrupt halt you could jerk it off the cable.

To avoid stomping feet or crunching vehicle traffic, put the cable in a trench, through a culvert or hang it overhead.

Always use ND-0104 wire grips NSN 5975-00-400-2630 or a basket weave of WD-1 wire as strain relief when hanging cable. This will keep the cable from being damaged from too much strain.

Be sure you put the wire grip on the CX-11230/G and not on the adapter cable.



PM IS A PLUS



You also need to make sure the hanging cable is not under too much tension by giving the cable the right amount of sag in a span. These minimum sags per span are:

Span in feet	100	125	150	175	200
Sag in inches	16	24	36	48	72

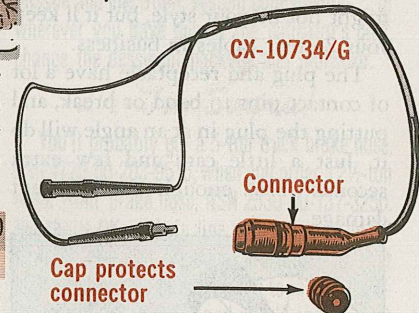
For spans of more than 200 feet, use a messenger cable.

When you're putting your PCM cable back on the reel, eye it for breaks or cracks. If it's damaged, turn it in for repair.

If the cable is caked with mud or dirt, clean it before you roll the cable on the reel.

Always put the cover on your cable assembly's connector when you're stowing that cable. That cover or cap

(NSN 5999-00-136-9040) will keep moisture, dust or dirt out of your CX-11230/G or CX-10734/G cable assembly's UG-1870 connector.



The cap will also protect the connector from damage when it gets dropped or knocked around.

So, if the cap itself gets bent or is missing, get it replaced, pronto.

On the CX-10734/G adapter cable, always keep the UG-1871/U and UG-1872/U connectors mated for protection . . . either to the mating connectors in the link, or to each other when the cable is not in use.

On 26-Pair Cables . . . Keep Straight

BONNIE--SNEAKY SNAKE HERE NEEDS SOME ADVICE ON HOW TO KEEP HIS PINS FROM DAMAGE!

Keeping to the straight and narrow might not be your style, but it'll keep your 26-pair cables in business.

The plug and receptacle have a lot of contact pins to bend or break, and putting the plug in at an angle will do it. Just a little care and few extra seconds are enough to prevent damage.



Put it in straight . . . never force it!

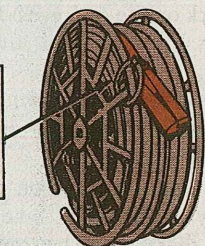
Line 'em up and squeeze 'em together.

Once you've got the two together and straight, fasten both connector locks at the same time. This'll insure even pressure on the contacts.

Disconnect the plugs the same way—straight. Once you're unplugged, be sure to use the receptacle covers. Dirt or moisture will wipe out a lot of straight and narrow.

One final tip. After reeling up your cable, you can protect the plug by tying it to the inner section of the reel rim with a piece of field wire or strong twine. This will keep it from being stepped on or kicked around.

Tie plug with field wire . . .



. . . to inside of reel rim

Connie's Mini Minis



A Better Strap

The chin strap on your SPH-4 flight helmet is not holding up. So, ask for a tougher strap now in supply. You want Chin Strap Assembly, NSN 8415-01-045-2622, at a cost of \$1.43.

Watch Your Head!!

All chopper main rotor blades are now painted black while tail rotor blades get an olive drab treatment, per TSARCOM Msg DRSTS-MEG 071410Z Mar 77. There is no second color (painted tips or rings around the blades) to alert you to the dangers of whirling blades. So, give 'em plenty of room.

Wanted: Busted TD-206's

Got some bad TD-206 pulse form restorers lying around? Turn 'em in! Uncle's running short of working TD-206's, so these turn-ins will be repaired and returned to the system. Don't hold back—even broken cables can be fixed with a new end-cap assembly.

M880-Series Tire Bulletin

Don't put inner tubes in the steel-belted radial tubeless tires on your M880-series 1½-ton truck. If you've already got tubes in the tires, get 'em out. Your life could depend on it. That's the word in TARCOM Msg DRSTA-MT 221457Z May 78.

Going Strapless?

Mounting straps for your AN/TCC-11 telephone repeater are now in the supply system. Order them with NSN 5805-00-393-2208.

Humidity Check

Warm weather brings high humidity . . . which soaks dessicant and damages moisture-sensitive equipment. Now's the time to check humidity indicators, especially in optical equipment, missile and electronic system components . . . or wherever you have one. If the indicator's pink, change the dessicant package and indicator.

2½-Ton Surprise!

You'll probably get a 5-ton truck brake hose, NSN 4720-00-203-9515, when you order a 2½-ton truck front brake hose, NSN 2530-00-737-3250. But that's OK—it's in line with the poop in TB 43-0001-39-3 (Oct 77), pages 2-5 thru 2-10. That EIR Digest article tells you how to install the 5-ton hose on your deuce-and-a-half and wind up with a safer brake system.

Battery Boxes Needed

If you've got some CY-6314A/PRC-74 battery boxes (NSN 5820-00-935-0382) just lying around—turn 'em in. That goes for unserviceable ones, too. They're in short supply. Your support will send your extras to Sacramento Army Depot, CA.

☆ U.S. GOVERNMENT PRINTING OFFICE: 1978—757-081/9

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



COOL IT!

PM
IS THE
ONLY
WAY!

MAKE SURE...
RADIATOR,
FAN BELTS,
WATER PUMP
AND HOSES
ARE OK!