

Issue 301

PS

December
1977

THE
PREVENTIVE
MAINTENANCE
MONTH

Dear Santa:
Every year at about
this time, our outfit
has beaucoup cold
weather troubles.

This year our number
one problem is slave-
starting our tracks.
We need some good P.M.
advice and information
in this area.

If you can't come, can
you send Connie and/or
Bonnie?

SSG Williams

MURPHY
ANDERSON

COMMODORE ELECTRONICS STORY

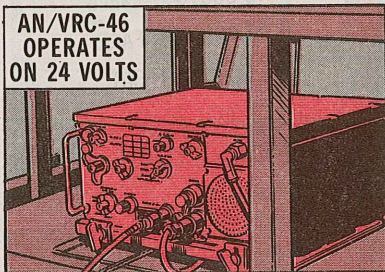
SPARKS... ARE YOU *SURE* YOU AND THE ELVES WILL BE ABLE TO GET THE ELECTRONIC GEAR SWITCHED IN TIME FOR OUR ANNUAL DELIVERIES?

AFFIRMATIVE, SANTA... EVEN THO' IT WON'T BE EASY!!

TO HELP YOU GET A CLEARER PICTURE OF THE PROBLEMS, HERE'RE SOME QUESTIONS AND ANSWERS ON VEHICLE-RADIO SET SYSTEMS...

Q. Is there a kit to make the M880 truck take the AN/VRC-46 radio set since the truck has a 12-volt electrical system and the radio is 24 volts?

AN/VRC-46 OPERATES ON 24 VOLTS

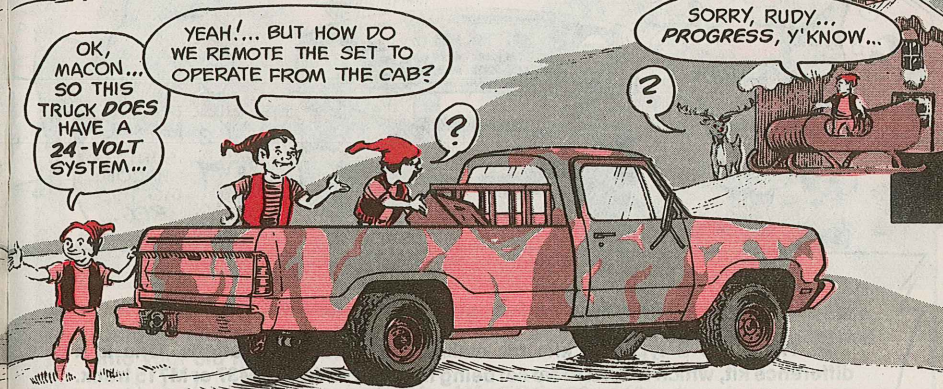


A. No. You need an M882 or M892 truck with a 60-amp system and communications kit already installed. These vehicles have a dual electrical system—a 12-volt for the vehicle's electrical needs and a 24-volt for the radio set and other electronic equipment needs.

OK, MACON... SO THIS TRUCK DOES HAVE A 24-VOLT SYSTEM...

YEAH!... BUT HOW DO WE REMOTE THE SET TO OPERATE FROM THE CAB?

SORRY, RUDY... PROGRESS, Y'KNOW...



Q. When installing the AN/VRC-46 radio set in a 24-volt truck, what do you need?

A. You need a difference kit —NSN 5820-01-022-6287—if you're using the AN/VRC-46 from your old M37 or M715 vehicle.

If you're putting a new VRC-46 in your M882 or M892, it takes a MK-1817/GRC installation kit, NSN 5820-01-022-3328.

Q. Since the radio set is installed in the truck's bed, how do we remote the set to operate from the cab?

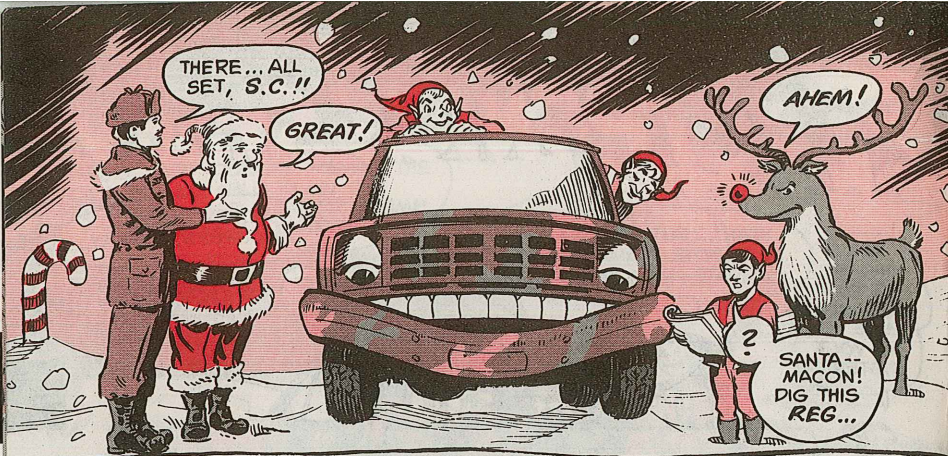
A. AN/VRC-12 and -43 radio sets have installation kits including the audio accessories and cables you need for remoting operations. Remote capabilities for other radio sets are being worked on.

Q. Where can we find the installation kits and parts for the kits listed if they are not in SB 11-131?

A. The kits are being added to the SB. In the meantime you can find the kit items and NSN's in the Preliminary Draft Equipment Publications, TM 11-2300-459-14-series:

Radio Set	PDEP TM-
AN/VRC-49	11-2300-459-14-1
AN/GRC-106	11-2300-459-14-2
AN/VRC-12	11-2300-459-14-3
AN/VRC-47	11-2300-459-14-4
AN/VRC-46	11-2300-459-14-5
AN/VRC-24	11-2300-459-14-6
AN/VRC-43	11-2300-459-14-7

These pubs, which also give installation instructions, are available through your local LAO (Logistics Assistance Office) and EER (Electronic Equipment Representative). Contact 'em thru your command's G-4.



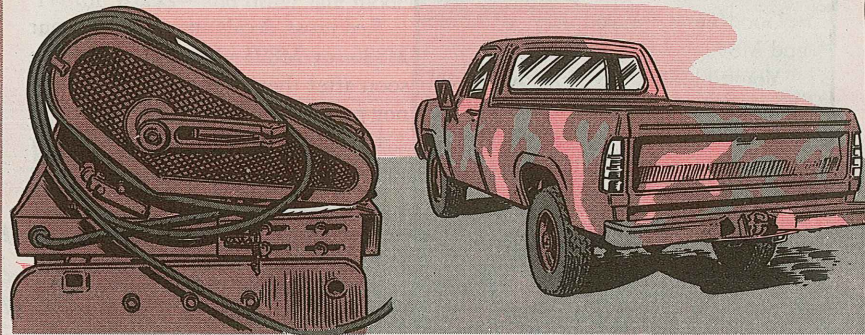
Q. What kits are available and what are the stock numbers?

A. There are 2 types of kits for making the truck installations. One is a difference kit, which is for a radio set being transferred from a M37 or M715 truck. The other is an installation kit, which is used in a new radio set-truck installation.



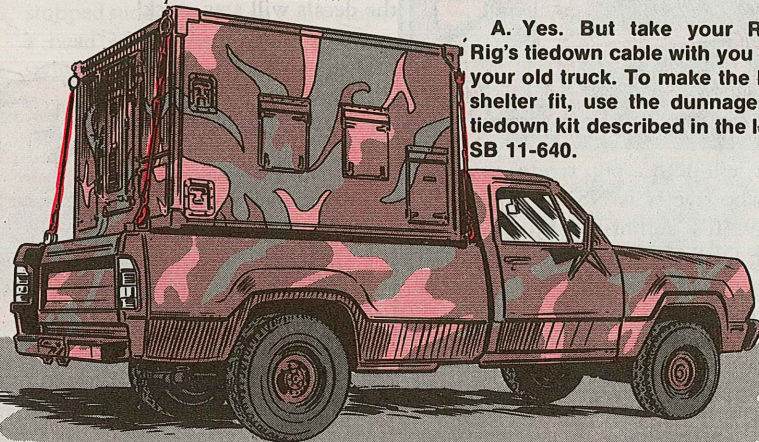
Radio Set	Installation Kit	Difference Kit	
		NSN 5820-01-022	NSN 5820-01-022
AN/GRC-106	MK-1815/GRC-106	-3329	-6291
AN/VRC-12	MK-1814/VRC-12	-6293	-6292
AN/VRC-24	MK-1812/VRC-24	-3331	-6289
AN/VRC-24 (with re-transmission setup)	MK-1816/VRC-24	-3318	-6289
AN/VRC-43	MK-1811/VRC-43	-3332	-6287
AN/GRC-125, -160,			
AN/VRC-46, -53, -64	MK-1817/GRC	-3328	-6287
AN/VRC-47	MK-1810/VRC-47	-3333	-6288
AN/VRC-49	MK-1813/VRC-49	-3330	-6290

Q. What about installation kits for reel equipment such as the RL-172()/G or RL-207A/G which requires a 24-volt system?

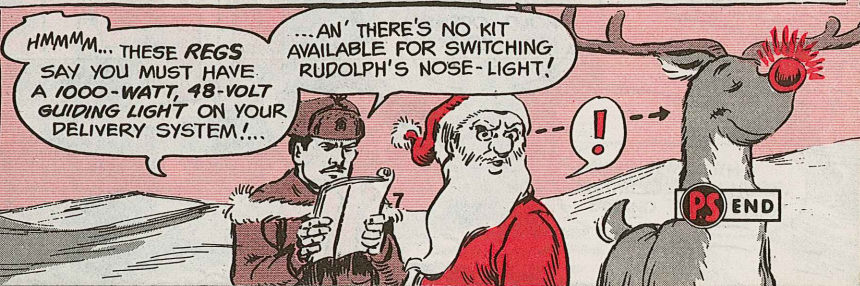


A. There is no kit now for installing the reel gear in the M880-series trucks. Until the kit and instruction pub come your way, keep your reel equipment tied into your old truck.

Q. Is there a tiedown kit for the AN/GRC-122, -142 radio teletypewriter set shelter to adapt it to the truck?



A. Yes. But take your RATT Rig's tiedown cable with you from your old truck. To make the Rig's shelter fit, use the dunnage and tiedown kit described in the latest SB 11-640.



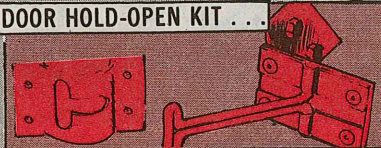
Ambulance Door Hold-Open

Good news for you users of M886 and M893 1¼-ton ambulances.

You no longer have to worry about that rear door swinging shut when it's supposed to stay open.

There's a door hold-open kit available to keep the rear doors

DOOR HOLD-OPEN KIT ...



open—even when the wind is blowing hard. Order NSN 2540-01-040-3172.

... INSTALLED



You'll need a pop riveter to install it. The riveter is NSN 5120-00-017-2849. It's authorized by ARRCOM Msg DRSAR-MAT 151305Z Mar 77 as a new tool in the No.1 Common Tool Kit.

ORDER NEW HOLD-OPENS FOR YOUR DOORS!

For No-Stick Decals

Red cross decals may peel off your M886 or M893 1¼-ton ambulance soon after they're put on if the body's not prepped right.

Use P/N 2502251-2300 to order the 4-piece decal kit on page 2-145, Ch 1 (Nov 76), TM 9-2320-266-20P.

Mark off the areas spelled out in para 15b, TB 43-0209 (Oct 76).

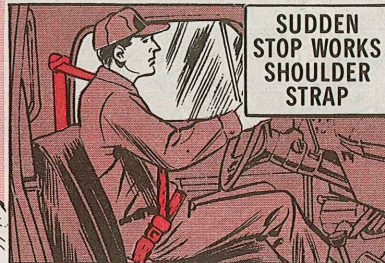
Sand the areas to bare shiny metal. Apply a primer. NSN 8010-00-515-2211 gets a 5-gal pail—page 54 TB 43-0209.

Let the primer dry to a hard finish, and apply the decals.

Mucho work ... but it's the only way the decals will stay stuck!

Shoulder Belt Check

Shoulder belts on the M880-series 1¼-ton trucks—and other late model commercial-type vehicles—won't lock up when you pull the shoulder strap by hand.

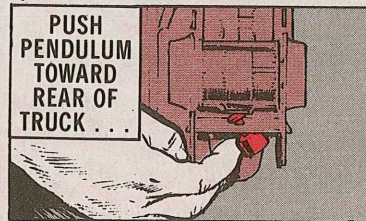


That's the way they're supposed to work.

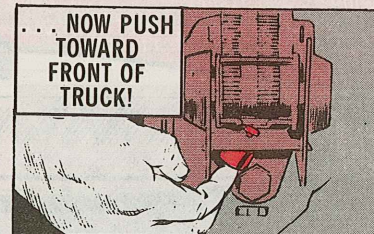
This's because there's a pendulum in the retractor. When the vehicle is stopped suddenly—like a panic stop or a head on collision—the pendulum swings forward and locks the belt.

To make sure the retractor's working, check it like so—

1. Remove the trim.
2. Push the pendulum toward the rear of the vehicle with your finger. Pull on the shoulder strap. It should lock up.



3. Now repeat the test—but push the pendulum toward the front of the vehicle. It should lock up again.

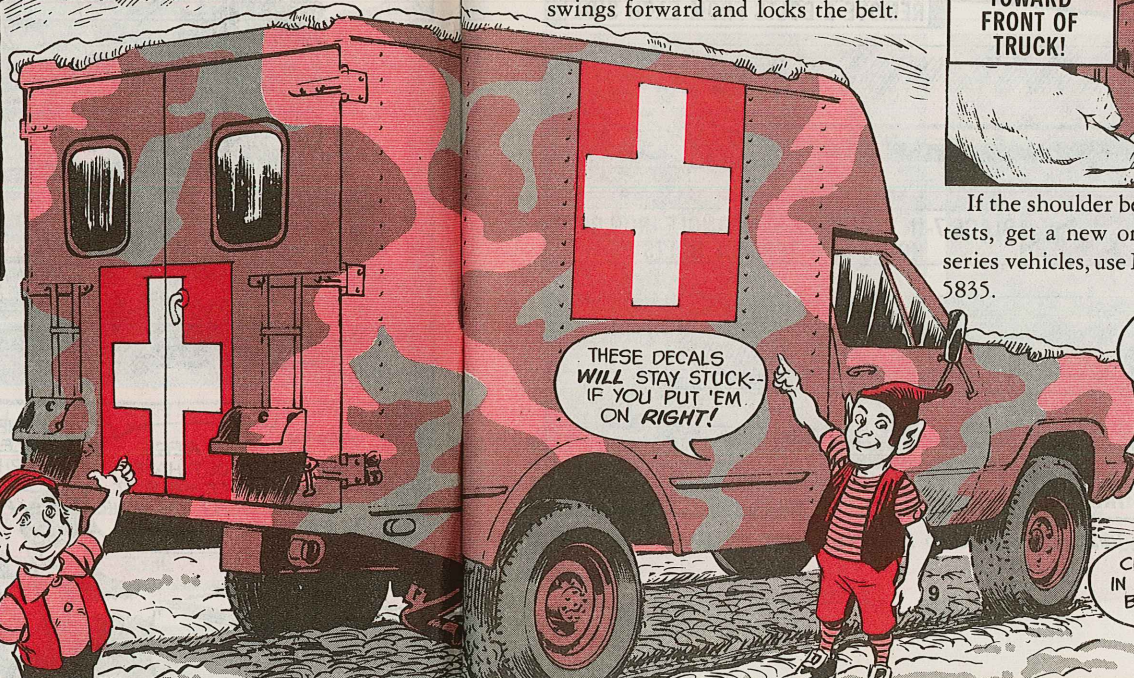


If the shoulder belt won't pass these tests, get a new one. For the M880-series vehicles, use NSN 2540-01-044-5835.

THESE DECALS WILL STAY STUCK- IF YOU PUT 'EM ON RIGHT!

THIS SHOWS CHECK OF RIGHT-SIDE RETRACTOR.

CHECK 'EM BOTH-- IN THE CAB CORNERS, BEHIND THE SEATS!



Windshield Storage Tip

LOOK OUT, CONNIE!

Dear Editor,
The Goat windshield can be a real pain in the neck if it slides out of the storage compartment when you hit the brakes.

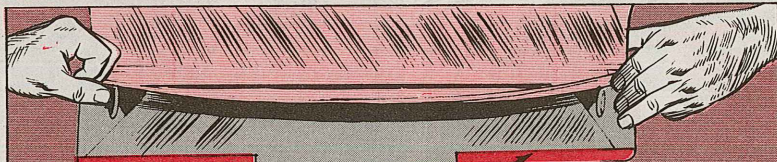
Here's how to keep that windshield stored:

Cut two 7-in long strips of 1/2-in angle iron. Remove 4 of the bolts that hold the windshield compartment floor cover. Use the holes as a guide to drill 2 holes in each piece of angle iron—use a No. 10 drill. Place the angle iron over the holes in the floor cover, and replace bolts. Insert the windshield.

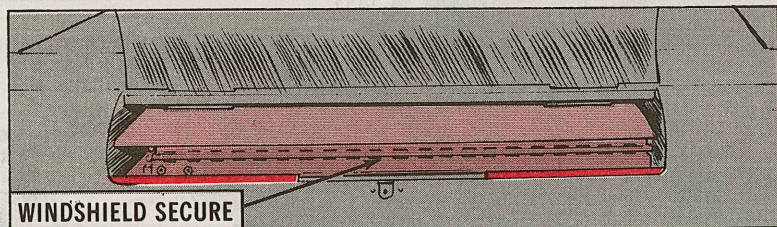
Quick pain relief!!

James W. Silva
Ft. Lewis, WA

REMOVE 2 BOLTS FROM EACH SIDE



PLACE 7-IN STRIPS OF 1/2-IN ANGLE IRON OVER HOLES AND REPLACE BOLTS



WINDSHIELD SECURE

(Ed Note: That ought to keep the windshield off the driver's back! Thanks!)

NEW Pedal Bracket

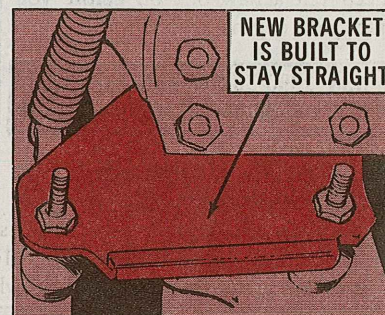
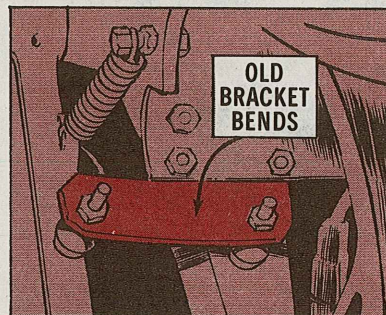
HANG IN THERE, LUKE!... THERE'S A NEW BRACKET FOR YOUR GOAT!

Dear Santa...
Could you bring me a NEW Pedal Bracket? I've straightened the old one... but it keeps bending again.
Thanks,
Luke

Clutch parts wear when your Goat's free travel bracket bends. And it does bend!

Means you can't adjust clutch pedal free travel right.

So, replace that clutch and brake pedal bracket with NSN 2530-01-039-8565. That's item 9, Fig 99, TM 9-2320-242-20P (Mar 77). It's built to stay straight... and it'll save those clutch parts. Put the NSN in your TM.



Next Month In LS

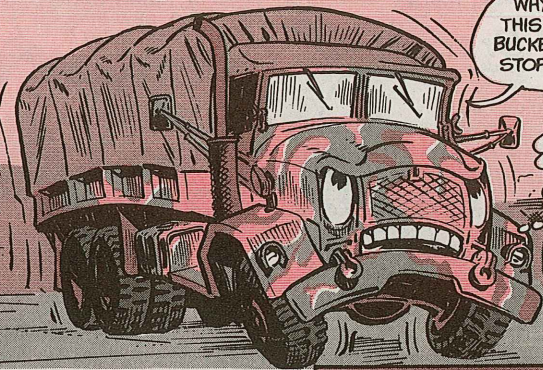
MAD Report

Cobra AH-1S BYOI

Fuel System PM

TOW Tips

Engine Won't Quit?



WHY WON'T THIS *@*!!! BUCKET O' BOLTS STOP RUNNING!

IF ONLY THIS DING-DONG WOULD DO A LITTLE PM ON MY ENGINE STOP CONTROL...

Having trouble getting your 2½- or 5-ton multifuel truck shut down?

You pull the engine stop control and the engine keeps on running?

Could be the engine stop control's disconnected or broken.

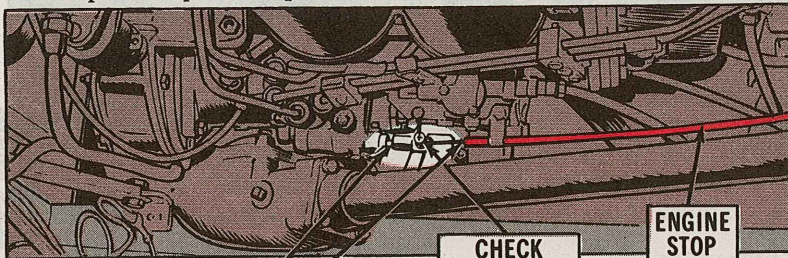
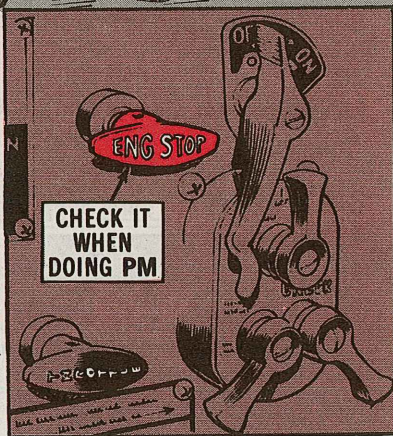
If the control's broken, have your mech put a new one on before you start your engine. The controls are:

NSN 2990-00-077-1940—2½-ton
NSN 2590-00-944-6210—5-ton truck

If the cable's disconnected, have your mech reconnect it.

It'll help, too, to lube the control so the inner wire will slide easier. Use silicone grease NSN 6850-00-880-7616.

And put a couple of drops of oil where the engine stop control ends up.



A FEW DROPS OF OIL HERE

12

CHECK CONNECTION OFTEN

ENGINE STOP CABLE

Multifuel Engine Trucks ...

Waste Not-Want Not



Idling your 2½-ton or 5-ton multifuel truck too long can waste a whole lot of oil.

During long idles, the truck's LD 465-series engine dumps oil through the exhaust. That, in short, makes for one large oily mess on the ground.

To end the waste, shut down the engine on any stop that you know is going to last more than 5 minutes. You'll save the engine from damage. And you'll also save the world around you from oily blobs—and a whole lot of costly oil and fuel.

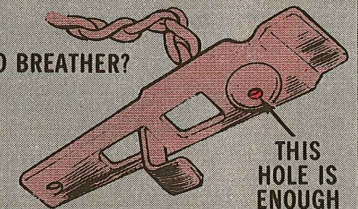
TM-260-Series 5-Ton Trucks ...

No Breather Needed

Dear Half-Mast,
I ordered coupling NSN 2530-00-740-9445, Item 8, Fig 12-16, TM 9-2320-260-20P (Nov 72) for the service valve on my 5-ton truck's brake system.
Trouble is, I received a coupling with no breather!
So, what gives?

SSG H.L.R.

NO BREATHER?



Dear SSG H.L.R.,
No sweat!
Sounds like you got NSN 2530-00-270-3878—that's the coupling in Fig 12-15, same manual.
The part's OK—the breather has been eliminated.

JUST KEEP THE SMALL HOLE CLEAN!



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TM-211-Series 5-Ton Truck . . .

Unlisted NSN's

I NEED AN UNLISTED NSN!

SEE YOUR TM.



Unlisted phone numbers may stop crank calls, but unlisted NSN's or PN's can start a switchboard burnout . . . and ulcers!

Fig 127 of TM 9-2320-211-20P (May 73) shows only 4 O-level repair parts.

Fact is, all items for the steering lever and bracket on your TM 9-2320-211-series 5-ton trucks are replaced by O-level mechanics. The rundown is already in your Support's TM 9-2320-211-34P (Apr 72).

TM-230 Series 5-Ton Truck . . .

Get With Filter Story

Hey, let's take it easy with those fuel/filter assemblies for your M656, M757 and M791 5-ton 8 x 8 trucks. Too many are being used!

A fuel filter element—not the whole filter assembly—is the "in" way to go when all that's needed is replacement of a dirty filter.

THIS'S THE SAME FILTER ELEMENT KIT USED IN OTHER MULTIFUEL-ENGINE TRUCKS... LIKE THE M3542 2½-TON AND M5442 5-TON!

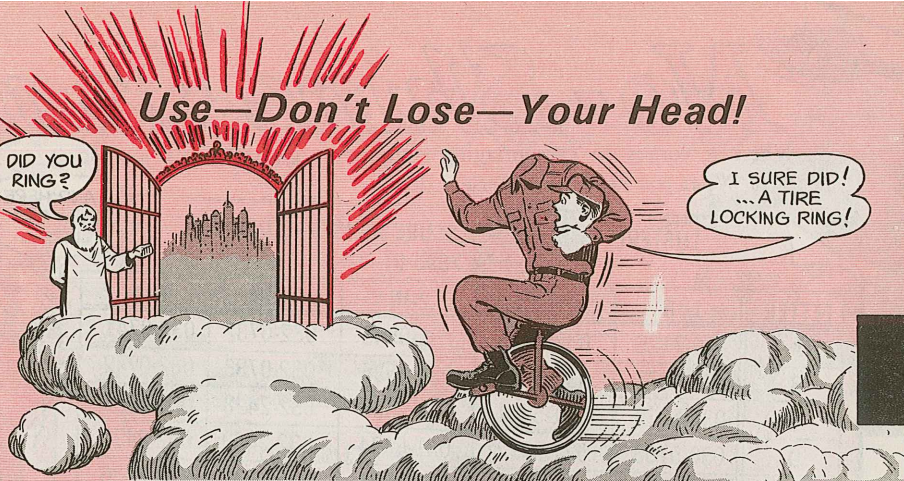


The element is a part of a kit listed on page 10 of Ch 1 (Jun 74) of TM 9-2320-230-20P—Kit, Repair, Fuel Filter, NSN 2910-00-134-7835.

Use—Don't Lose—Your Head!

DID YOU RING?

I SURE DID! ... A TIRE LOCKING RING!



You don't need 4 wheels to get to the Pearly Gates.

Just one tire can do the job—when the rim locking ring flies off and separates your head from your beautiful bod.

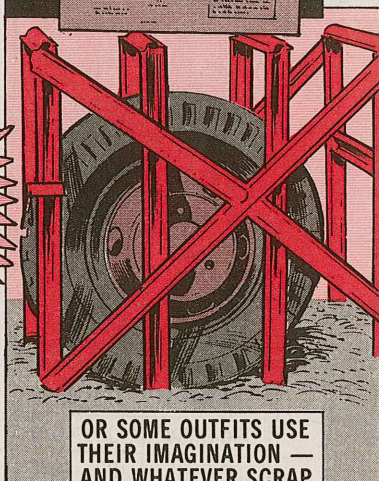
It can happen. It does happen! But there's no need for it to happen.

Always use a tire inflation safety rack to inflate the tire after you've put the tire, rim and locking ring together. Then, if the locking ring flies off, the worst you'll get is maybe a ringing noise in your ears—when the ring hits the safety rack.

Go by the book—TM 9-2610-200-20 (Feb 77), Organizational Care, Maintenance And Repair Of Pneumatic Tires, Inner Tubes and Radial Tires.

No, you can't get a tire inflation safety rack through the supply system. Each outfit that needs one has to make it. And that tire TM shows how. Look at page 2-28.

CHECK PAGE 2-28 OF TM 9-2610-200-20



OR SOME OUTFITS USE THEIR IMAGINATION — AND WHATEVER SCRAP METAL THAT'LL STAND UP TO THE JOB

No-Shine Camouflage Decals

When it comes to camouflaging equipment, glossy decals just don't hack it. What you need are lusterless decals—

LUSTERLESS BLACK PRESSURE-SENSITIVE DECALS

NSN 7690-01-

LETTER	1-IN	1½-IN	2-IN	3-IN	4-IN
A	030-7126	031-4660	031-9543	032-0732	032-0741
B	030-5778	031-4661	031-5535	032-0733	032-0742
C	030-5779	031-5521	031-5536	032-2428	032-0743
D	030-5780	031-5522	031-6394	032-2430	032-2434
E	030-5781	031-5523	031-9544	032-2432	032-2436
F	030-5782	031-5524	031-5537	032-0734	032-2437
G	030-5783	031-4662	031-5538	032-0735	032-0744
H	030-5784	031-4663	031-5539	032-0736	032-0745
I	030-8542	031-4664	031-5540	032-0737	032-1402
J	030-5785	031-4665	031-5541	032-0738	032-1403
K	030-5786	031-4666	031-5542	032-0739	032-1404
L	030-8543	031-4667	031-5543	032-0740	032-1405
M	030-7816	031-4668	031-5544	031-9545	032-2438
N	030-8544	031-4669	031-5545	031-9546	032-1406
O	030-8545	031-4670	031-5546	031-9547	032-3712
P	031-6395	031-5525	031-5547	031-9548	032-2439
Q	030-8542	031-5526	031-5548	031-9549	032-2441
R	030-8547	031-5527	031-5549	031-9550	032-1407
S	030-8548	031-5528	031-5550	031-9551	032-2443
T	030-8549	031-5529	031-5551	031-9552	032-2445
U	030-8550	031-5530	031-5552	031-9553	032-2447
V	030-8551	031-5531	031-5553	031-9554	032-2449
W	030-8552	031-5532	031-5554	031-9555	032-1408
X	030-8553	031-5533	031-5555	031-9556	032-2451
Y	030-8554	031-4671	032-1400	031-9557	032-4593
Z	030-8555	031-4672	032-0727	031-9558	032-4594

...AND HERE ARE THE LISTS...

ALSO ... YOU MIGHT WANT TO CHECK OUT PS 281 FOR A LIST OF GLOSSY DECALS!

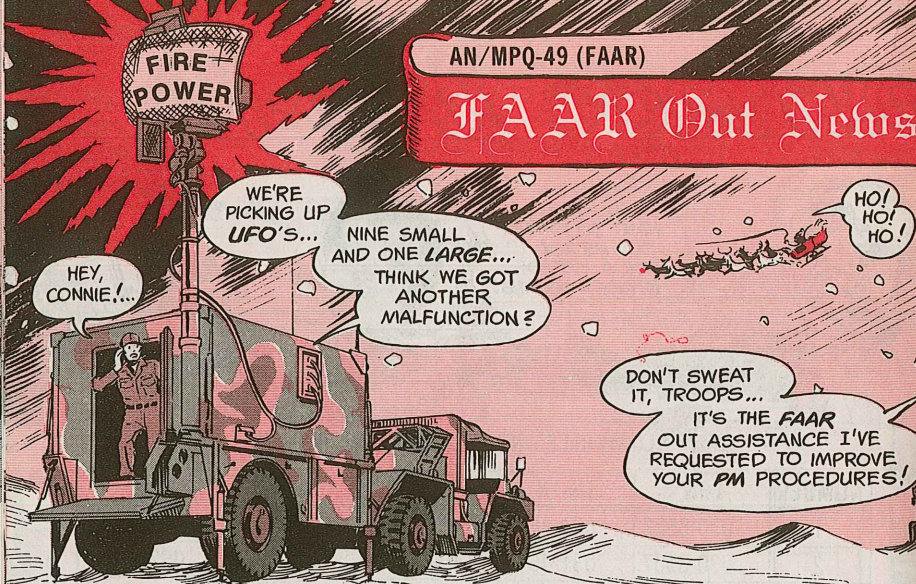
LUSTERLESS NUMERALS—NSN 7690-01-

NUMBER	1-IN	1½-IN	2-IN	3-IN	4-IN
1	030-8556	031-4673	032-0728	031-9559	032-4595
2	030-8557	031-4674	032-0729	031-9560	032-4596
3	030-8558	031-4675	032-2421	031-9561	032-4597
4	030-8559	031-4676	032-2422	031-9562	032-4598
5	030-8560	031-4677	032-1401	031-9563	032-4599
6	030-8561	031-5534	032-2423	031-9564	032-4600
7	030-8562	031-4678	032-2424	031-9565	032-4601
8	030-8563	031-4679	032-2425	031-9566	032-2452
9	030-8564	031-4680	032-0730	031-9567	032-2453
0	030-8565	031-4681	032-0731	031-9568	032-2454

MISCELLANEOUS DECALS—NSN 7690-01-

	1-IN	1½-IN	2-IN	3-IN	4-IN
★ (STAR)				042-0671	
Max SPEED	032-3713	032-3715			
NO SMOKING	032-3714	032-4602	032-4604	036-4777	
US ARMY		032-4603	032-4605	032-4607	032-4609
MIL POLICE			032-4606	032-4608	

FAAR Out News for Downtime Blues

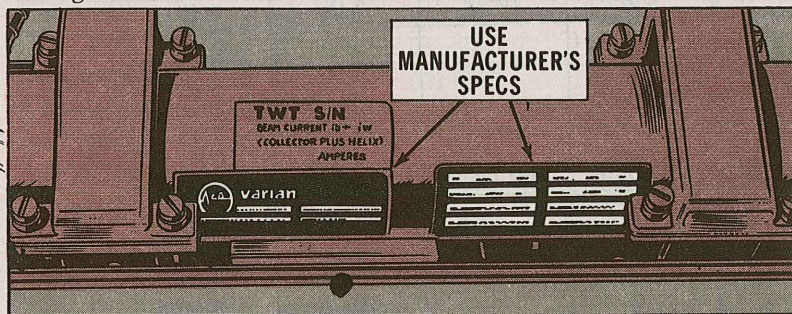


The downtime blues on your FAAR AN/MPQ-49 are a constant threat. You've got a complicated beast, and there are any number of ways you can put it down. You hardly even have to try.

But, prone as the MPQ-49 is to downtime, you can do much with minimum effort to keep it tracking the bad guys in the sky.

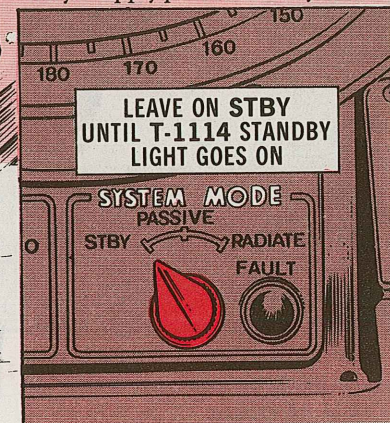
Here are some examples:

When you install a TWT tube, or when the TWT has been unused for a week or more, use the manufacturer's specs on the tube's ID plate to check it out. The Ib and Eb reading you're after must be the same as the Ib and Eb on the tube's data plate. Table 5-4 of TM 9-1430-588-20-1 (Sep 75) tells you how to check out the tube, but you need the information on the data plate. Otherwise, you'll damage the TWT.



Another "doing it the right way" method also prevents damage to the TWT ... as well as possible damage to the power supply.

Like so: When you operate the C-797 control indicator (system mode) and you apply power to the system ...

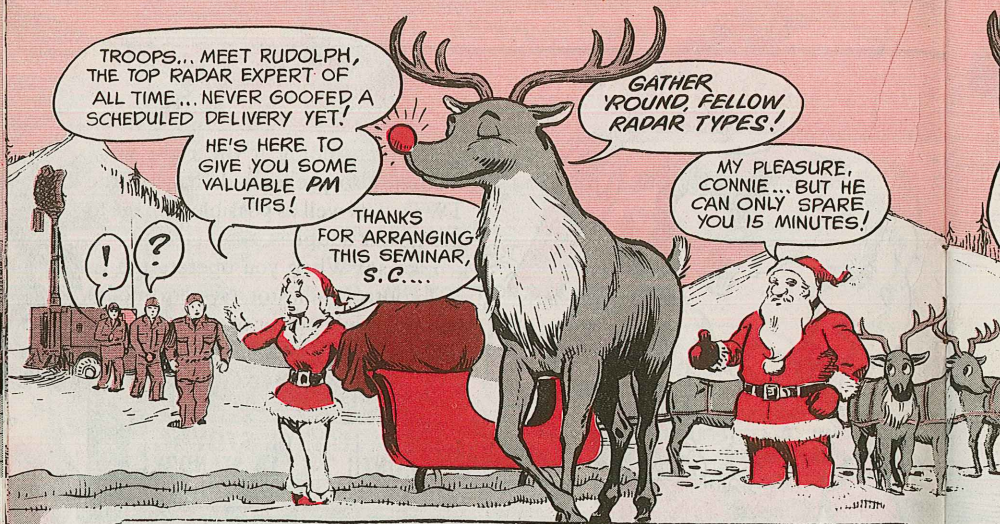


leave the system mode switch on STBY for 3 minutes.

If your watch is in hock, then leave it in standby until the standby light on the T-1114 transmitter comes on.

The point is, don't switch to RADIATE on the CI until the T-1114 standby light comes on.

If you jump the gun, the OVER V (overvoltage) light on the transmitter will come on ... and you've set yourself up for damage to components.



TROOPS... MEET RUDOLPH, THE TOP RADAR EXPERT OF ALL TIME... NEVER GOOFED A SCHEDULED DELIVERY YET!

HE'S HERE TO GIVE YOU SOME VALUABLE PM TIPS!

THANKS FOR ARRANGING THIS SEMINAR, S.C....

GATHER 'ROUND, FELLOW RADAR TYPES!

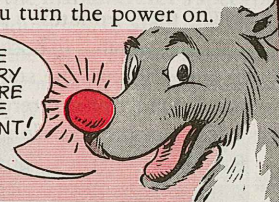
MY PLEASURE, CONNIE... BUT HE CAN ONLY SPARE YOU 15 MINUTES!

Moisture Damage

When you shut down overnight or longer, moisture can be a threat to the power transistors in your PP-6238 power static inverter. The moisture... from cold weather, rain, high humidity or whatever... settles in the bottom of the PP-6238, especially on the A3, A5 and A6 chassis.

And, it can short out the A3, A5 and A6 when you turn the power on.

SO-O-O, THE IDEA IS TO DRY IT OUT BEFORE YOU OPERATE THE EQUIPMENT!



MOISTURE COLLECTS HERE

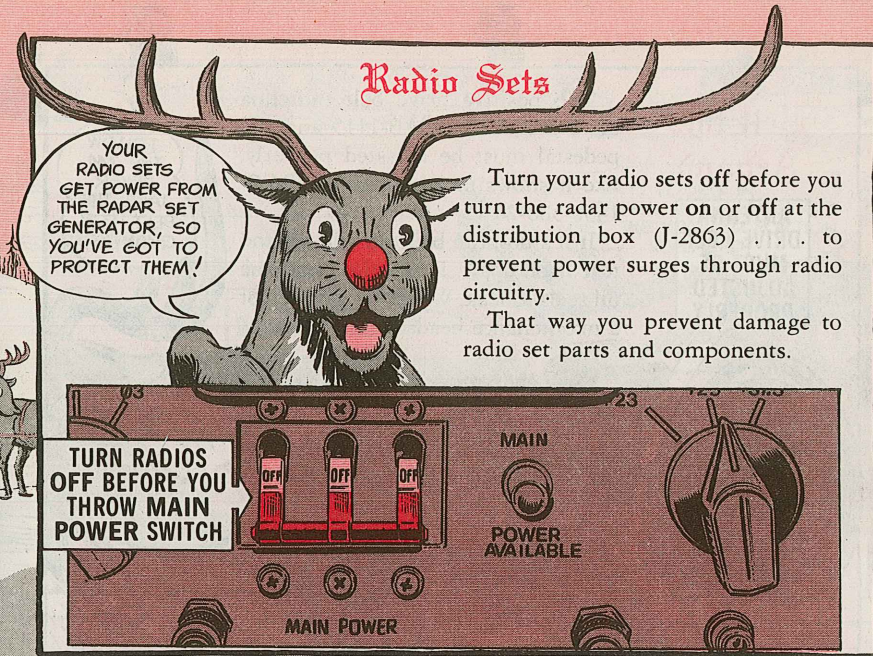
You can help by checking door gaskets for leaks and adjusting doors so's they're tight. Check roof and seams for punctures.

Also, keep the Gama Goat level so that water won't stand in the cargo area.

After operation, open the shelter door and allow the shelter fan to run until components are cool. Then, close the shelter.

Wipe moisture from components, including meter faces.

When you next operate the equipment, turn on system power and allow a 15-minute warm-up period before you go to radiate mode.



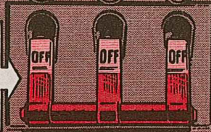
Radio Sets

YOUR RADIO SETS GET POWER FROM THE RADAR SET GENERATOR, SO YOU'VE GOT TO PROTECT THEM!

Turn your radio sets off before you turn the radar power on or off at the distribution box (J-2863) . . . to prevent power surges through radio circuitry.

That way you prevent damage to radio set parts and components.

TURN RADIOS OFF BEFORE YOU THROW MAIN POWER SWITCH



MAIN

POWER AVAILABLE

MAIN POWER

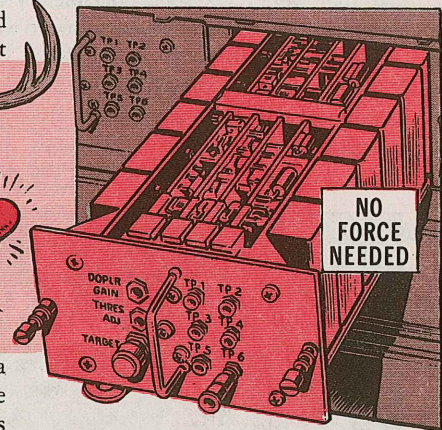
Watch your Drawers

Those range gate drawers on your R-1600 radar receiver slide in nice and easy, and the connectors mate without force.

SLAM OR SHOVE DRAWERS HOME, AND YOU'LL BREAK CONNECTORS!

THEN YOU'RE OUT OF BUSINESS!

If the drawers stick, back them off a little, work them from side to side easy-like, and push lightly. Beats downtime.



NO FORCE NEEDED

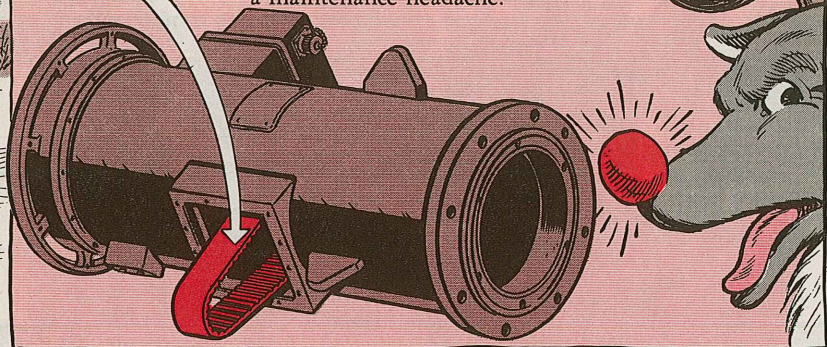
Belt this Around

ANTENNA DRIVE BELT MUST BE ADJUSTED PROPERLY

The positive drive belt (antenna drive belt) on the AB-1115 antenna pedestal must be adjusted properly, like it shows in para 4-16 of TM 9-1430-588-20-1.

If it's not, the belt can slip off and tear itself apart. It can also cause the oil seals to leak. Whatever, you've got a maintenance headache.

FOLLOW THE TM, NEVER TAKE THE BELT FOR GRANTED!



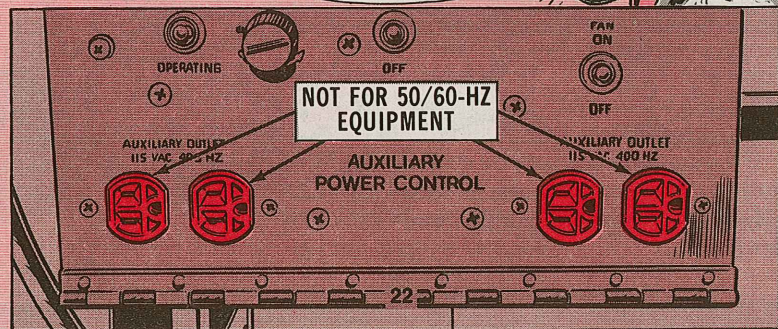
Plug It Not

The electrical outlets on the auxiliary power control (115V AC) may look like they were made for a portable TV or personal radio, but forget it, friend.

Those personal items were wired to work on 50 or 60-HZ (or cycles), but that auxiliary outlet is rated at 400-HZ.

Which means . . . you'll burn those good things up if you keep them plugged in.

TAKES THEM NO TIME AT ALL TO OVERHEAT!



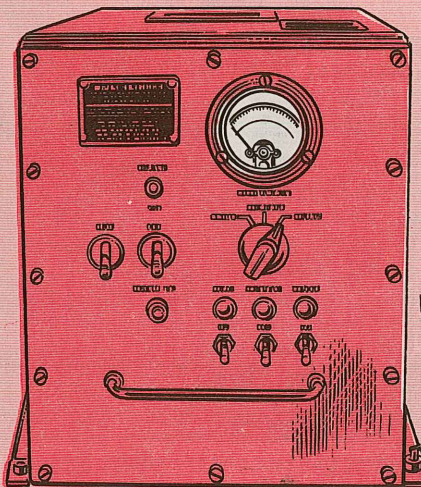
Grounding

Before you use the transmitter grounding rod, eyeball its braided cable for frays or breaks.

CHECK BRAIDED CABLE

IF IT LOOKS IN ANYTHING BUT GOOD SHAPE GET THE BRAIDED PORTION REPLACED!

Reason: If it's frayed or broken, it'll leave residual voltage in the components of the transmitter. That can shock you when you work in the transmitter or try to remove anything.

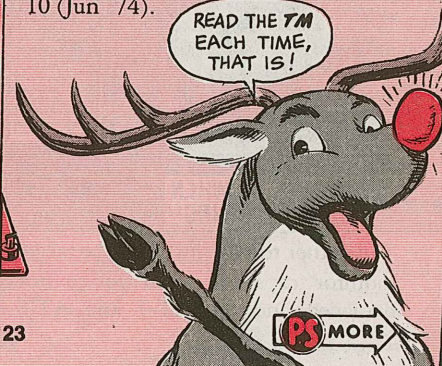


Power Inverter

Improper starting and stopping procedures with the power inverter burn out transistors . . . things like shortcuts, carelessness or just plain mistakes.

Best bet is to take it slow and easy, follow steps in order . . . and read Tables 2-3 and 3-4 of TM 9-1430-588-10 (Jun 74).

READ THE TM EACH TIME, THAT IS!



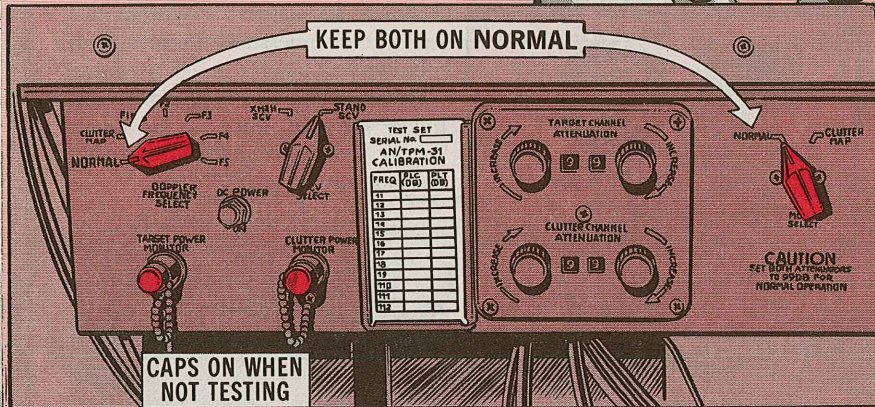
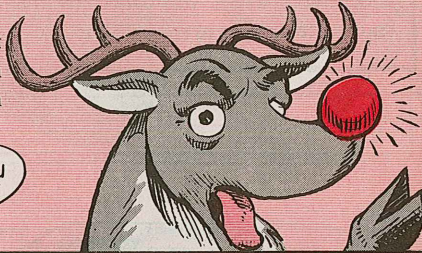


AN/TPM-31 Test Set

When you use the AN/TPM-31 radar test set in normal operation, remember this:

Both the Doppler frequency select switch and the Mode select switch must be set at NORMAL when operating.

IF YOU FORGET ONE OR THE OTHER, YOU CAN DAMAGE THE EQUIPMENT!



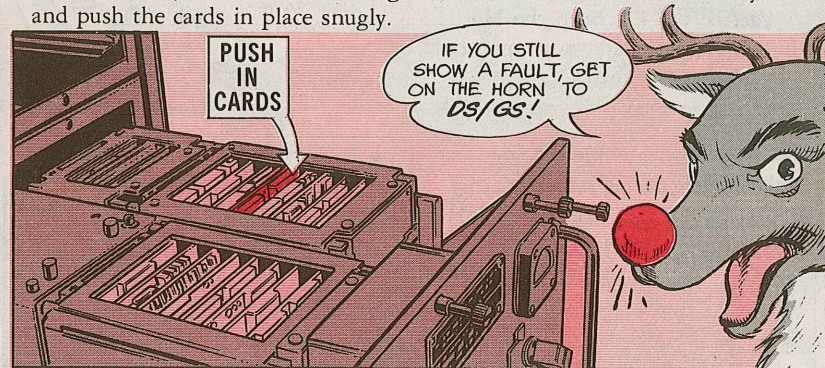
Another testy point: keep the target power monitor and the clutter power monitor caps on when you're not testing. If they're off, threads can be damaged and the AT-7 and AT-8 electrical loads can get lost.

AN/TPX-50

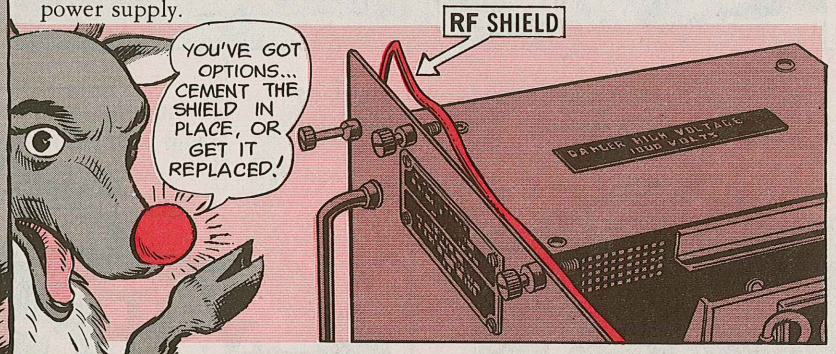
Components of the AN/TPX-50 IFF sometimes get a little loose, so here are a few helpful fixes:

RT-903—When the A3 card is loose, you can show an RT fault on the indicator. Push in the A3 card so's it's snug. If you still get an indicator fault, notify DS/GS.

Interrogator Group—If you show synchronizer, RT or processor faults, reach for the system that's indicating the fault. Go in the drawer of that system and push the cards in place snugly.



All 3 IFF drawers—The RF shield on all IFF drawers tends to come loose or to break . . . and if the shield falls or sags into the chassis, it can damage the power supply.



GASSING *the*

M501E3

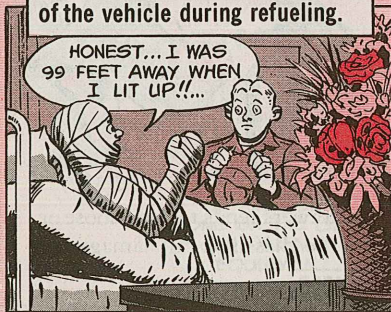
When you're hot you're hot, and you can get that way fast by being careless when refueling your Hawk M501E3 loader-transporter.

Fact is, you can burn the M501E3 into junk and blister your own hide, too. It has happened.

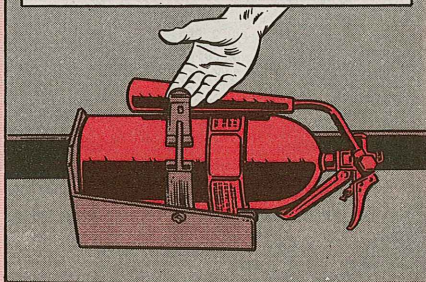


HERE ARE SOME WAYS TO AVOID ACCIDENTS AND SAVE EQUIPMENT...

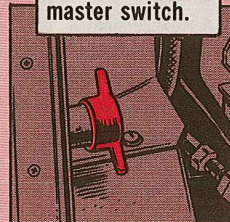
- Never smoke within 100 feet of the vehicle during refueling.



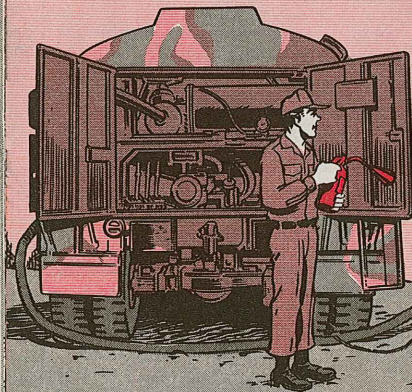
- Remove the fire extinguisher from the vehicle and keep it handy.



- Turn off the master switch.

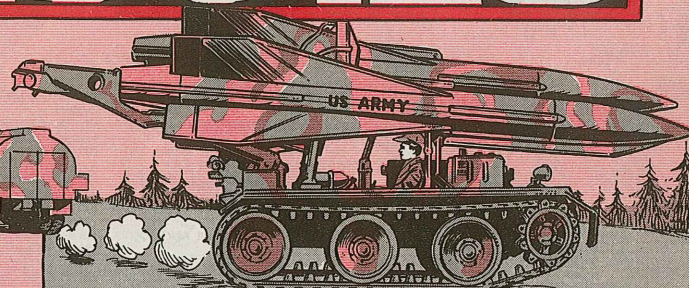
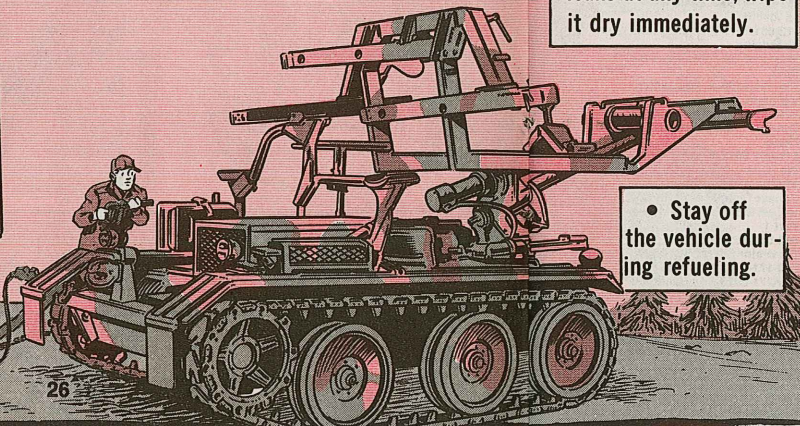


- If a fuel truck is used, attach its static discharge (ground) cable to the M501E3.



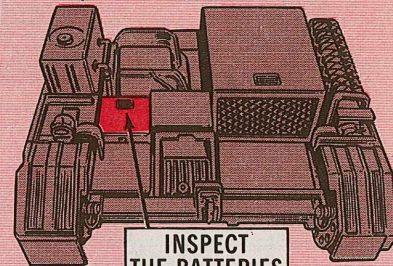
- If fuel spills or leaks at any time, wipe it dry immediately.

- Stay off the vehicle during refueling.



DO THESE TOO, BEFORE YOU REFUEL!

Inspect the batteries. Sparks ignite fuel, so eyeball the battery cables to be sure they're not grounded to the battery box or hold-down bracket. Be



sure the battery cables are snug on the terminal posts. And, be sure the battery box cover is on snug when you get through. The cover fasteners might work loose while the vehicle's in use, so check the cover fairly often.

Keep the vehicle floor clean. Collected grease, oil and other flammable stuff make for an accident waiting to happen. If you get a grease spill or whatever, clean it up when it happens.



This is a selected list of recent pubs of interest to organizational maintenance personnel. This list is compiled from recent AG Distribution Centers Bulletins. For complete details see DA Pam 310-4 (Nov 74), and Ch 3 (Oct 75), TM's, TB's, ETC.; DA Pam 310-6 (Jul 77), SC's and SM's and DA Pam (0) 310-9 (Aug 74), COMSEC pubs.

TECHNICAL MANUALS

TM 3-4310-100-20 & P Jun Compressor Unit, Recip, Power-Driven, Flamethrower, AN-M4, AN-M4B, AN-M4C, AN-M4D
Ch 5, TM 5-4520-208-25P Jul Heater, Duct-Type, Portable, 400,000 BTU-HR
TM 5-4930-230-23P Jul Tank and Pump Unit, Liquid Dispensing

AUDIO-VISUAL STUFF— Available at Your Local TASC (Training and Audiovisual Support Center)

TEC LESSONS

041-061-6160-F Tube Artillery (M114A1) Introduction to M12 Pantel
041-061-6167-F Tube Artillery (M114A1) Boreighting by Standard Angle Method
043-441-5406-F Improved HAWK, Alignment of ICWAR, Part 1
043-441-5412-F Alignment of Improved HAWK Launcher, Part 3
043-441-5414-F Improved HAWK, Alignment of IROR, Part 1
043-441-5415-F Improved HAWK, Alignment of IROR, Part 2
043-441-5416-F Improved HAWK, Alignment of IFF, Part 1
043-441-5417-F Improved HAWK, Alignment of IFF, Part 2

Part 2
102-906-6102-A Antenna System Testing, VSWR, TDR and DC Resistance
102-906-6103-A Antenna System Testing, VSWR, TDR and DC Resistance
102-906-6104-J Antenna System Testing, VSWR, TDR and DC Resistance
043-441-5406-F Improved HAWK, Alignment of ICWAR, Part 1
043-441-5412-F Alignment of Improved HAWK Launcher, Part 3
043-441-5414-F Improved HAWK, Alignment of IROR, Part 1
043-441-5415-F Improved HAWK, Alignment of IROR, Part 2
043-441-5416-F Improved HAWK, Alignment of IFF, Part 1
043-441-5417-F Improved HAWK, Alignment of IFF, Part 2

Stopping)
201-113-4627-F Prep Radio Teletypewriter AN/GRC-142(1) for Op Part IV (Modes of Op)
201-113-4627-J Prep Radio Teletypewriter AN/GRC-142(1) for Op Part IV (Modes of Op)
201-113-4628-F Prep Radio Teletypewriter AN/GRC-142(1) for Op Part V (Voice and CW)
201-113-4629-F Prep Radio Teletypewriter AN/GRC-142 for Op Part VI (Starting)
201-113-4629-J Prep Radio Teletypewriter AN/GRC-142 for Op Part I (Grounding, Installation)
201-113-4615-J Prep Radio Teletypewriter AN/GRC-142 for Op Part II (Starting)
201-113-4626-F Prep Radio Teletypewriter AN/GRC-142(1) for Op Part III (Tuning, Stopping)
201-113-4626-J Prep Radio Teletypewriter AN/GRC-142(1) for Op Part III (Tuning, Stopping)

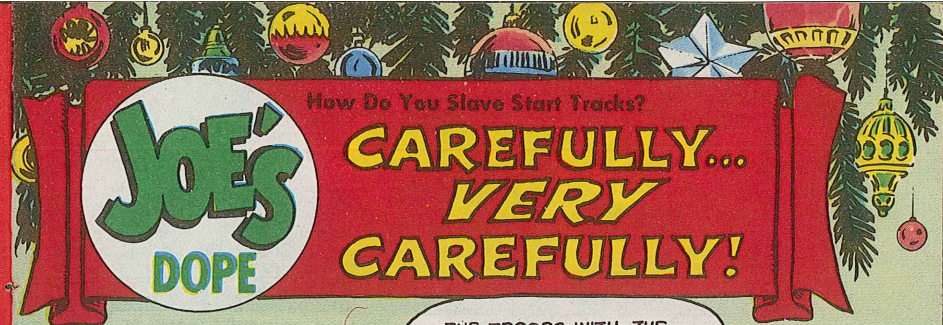
231-906-4450-A Basic Antenna Identifier
412-091-7975-F 0.002-MIL Theodolite
500-121-8126-F Posting Army Pubs
500-121-8129-A Requisitioning Blank Forms
610-091-6051-F Use, Care of Optical Antifreeze/Battery Tester
610-091-6052-F Use, Care of the Battery Hydrometer
610-091-6053-F Using Low-Voltage Circuit Tester (LVCT) to Test Batteries Under Load, Part 1
612-051-7806-F Prep GED Generator Set for Starting
910-171-0012-F Canvas PM
910-171-0013-F Handtools PM
944-091-6501-F Systematic Inspection the 1½-Ton Truck M715
948-071-0150-F Dragon Maintenance

TM 5-6115-275-14 Jun GED and Gen Set, 10-KW, AC, Less Engine, DOD MEP-018A, MEP-023A
TM 5-6115-276-24P Jun GED, Gen Set, 10-KW, Less Engine DOD MEP-018A, MEP-023A
Ch 3, TM 9-1005-213-10 Jun .50-Cal Machine Gun
Ch 1, TM 9-1005-224-10 Jul M60 Machine Gun
TM 9-1425-480-10 Jun Dragon
TM 9-1430-532-24P May Improved HAWK
Ch 1, TM 9-2320-233-10 Jun Goer Trucks
Ch 2, TM 9-2320-266-20 Jul M880-Series 1½-Ton Trucks
Ch 2, TM 9-2350-238-10 Jul M578 Recovery Vehicle
TM 10-7360-206-13 Jul Mobile Field Kitchen MKT-75
TM 11-5820-489-20P Jul AN/GRA-6 Control Group
Ch 7, TM 11-5820-520-12 Jul AN/GRC-106(1) Radio Set
TM 11-5820-602-24P Jul AN/TRC-121 Radio Terminal Set
TM 11-5820-610-24P Jul AN/TRC-133A Radio Terminal Set
TM 11-5820-847-12 Jul MD-1002/G Digital Data Modem
TM 11-5825-219-24P Jul AN/FRN-23 Radio Beacon
TM 11-5826-225-20P Aug AN/ARN-83 Direction Finder Set
TM 11-5826-258-24 Aug AN/ARN-123(V) 1 & 2 Radio Receiving Sets
TM 11-5855-217-12-2 Jun AN/VSS-3(1) Searchlight Set
TM 11-5855-238-10 Jul AN/PVS-5(1) Night Vision Goggles
Ch 1, TM 11-5855-249-10 Jun AN/VVS-2(V) Driver's Night Vision Viewer
Ch 2, TM 11-5915-223-12 May MX-7778 Suppressor, Electrical Transient
TM 11-6665-230-20P Aug Radiac Set AN/PDR-27R
TM 11-6625-475-24P Aug AN/PSM-6(1) Multimeters

TM 11-6720-250-20P Aug KS-113A Airborne Photo Surveillance Sys
TM 55-1730-222-20P Jul Jack, Hydraulic, Tripod 3-Ton
TM 55-2840-232-23P Jul Engine, Aircraft, Turboprop PT6A-20, T74-CP-700, T74-CP-702

MISCELLANEOUS

AR 700-1 Jun Conversion to Metric System
Ch 18, AR 708-1 Jun Cataloging of Supplies and Equipment
DA Cir 310-97 Jun Notice to Users of Fed Supply Catalog, IL's
DA Pam 310-3 Jun Index Doctrinal, Training, Organizational Pubs
FM 6-15D 1/2 Apr Lance Crewman
FM 6-17B3 Apr FA Radar Crewman
FM 6-17B4 Apr FA Radar Crewman
FM 6-69F3 Apr FA Meteorological Crewman
FM 55-57H4 Jul Terminal Operations Coordinator
FM 55-64C 1/2/3 Jul Motor Transport Operator
FM 55-64C4 Jul Motor Transport Operator
LO 5-2805-213-12 Mar Gasoline Engine 14-HP, Mil Std
LO 5-4320-237-12 Jun Pumping Assy 50-GPM, Frame Mounted
LO 5-4320-259-12 Jun Pumping Assy 100-GPM
LO 10-4320-202-12 Jun Pumping Assy 50-GPM
SC 5180-91-CL-R22 Aug Crimping Tool Kit TK-113/MSQ-28
TB 43-0149 Aug Lighting Sets for Army Airfield Runways, Heliports
TC 11-5 Apr What's Up? Know How to Repair and Fabricate Antennas
TC 21-5-9 Jun Battalion TEC Handbook



EARLY MORNING...
THE 25th Maint Bn,
NEAR BAD PFORZHEIM...

NO USE, SGT. WILLIAMS...
CAN'T GET IT TO TURN OVER!

FAULTY CABLE?

HEY!
DIG TH' CRAZY
AIRCRAFT!

WOW!
...AN' IT'S
LANDING!



FLIMSY
RIG!

WONDER
WHO DOES
ITS PM?

SGT.
WILLIAMS?

HI! SANTA
SENT US...

HE COULDN'T MAKE IT
HIMSELF, HUH?

OH, WELL...



GUESS YOU
TWO WILL
HAVE
TO DO!

YOU MIGHT AS WELL
START OVER HERE...
WE CAN'T GET THIS
A2 SLAVE - STARTED
--NO NOW!

MAYBE
YOU'RE LUCKY
YOU DIDN'T--



WHAT IF
EITHER OF
THESE TANKS
SUDDENLY
SURGED
FORWARD?

... AND
SMASHED
INTO THE
OTHER?

UHP!
WHY--ER
--UH--

Y' BETTER B' LIEVE IT!

EVERY YEAR, SOLDIERS
ARE INJURED OR KILLED
IN SLAVING ACCIDENTS!

LEARN TO
SLAVE
SAFELY
AND YOU'LL
BE 'ROUND
NEXT
YEAR!

... THAT'S
A GOOD
POINT,
CONNIE!

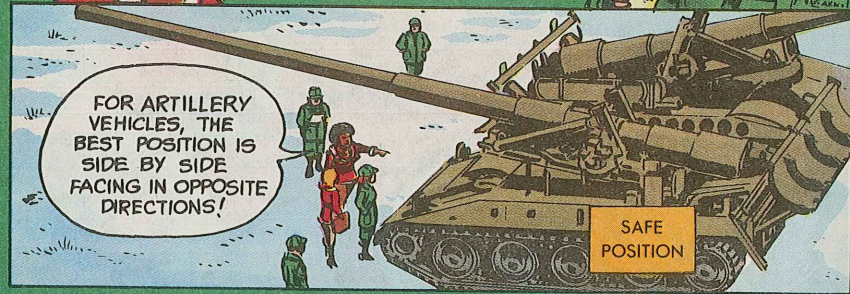


30

Positions

RIGHT
ON,
CONNIE!

SAFE SLAVING POSITIONS
DEPEND UPON THE TYPE OF
VEHICLES!



FOR ARTILLERY
VEHICLES, THE
BEST POSITION IS
SIDE BY SIDE
FACING IN OPPOSITE
DIRECTIONS!

WITH TANKS, THE EASIEST WAY
IS TO HAVE THEM SIDE BY SIDE,
FACING IN THE SAME DIRECTION...

GREAT, BONNIE -- BUT WHAT DO YOU DO
WHEN THE TANK YOU WANT IS SAND-
WICHED BETWEEN OTHER DEAD TANKS?



WELL, YOU
NEVER PUT
A LIVE TANK
HEAD-TO-HEAD
WITH A DEAD
TANK--
SOMEBODY
COULD GET HURT
IF EITHER TANK
JUMPED AHEAD!

PUT THE
LIVE TANK IN FRONT
OF AND AT RIGHT
ANGLES TO THE DEAD
VEHICLE!

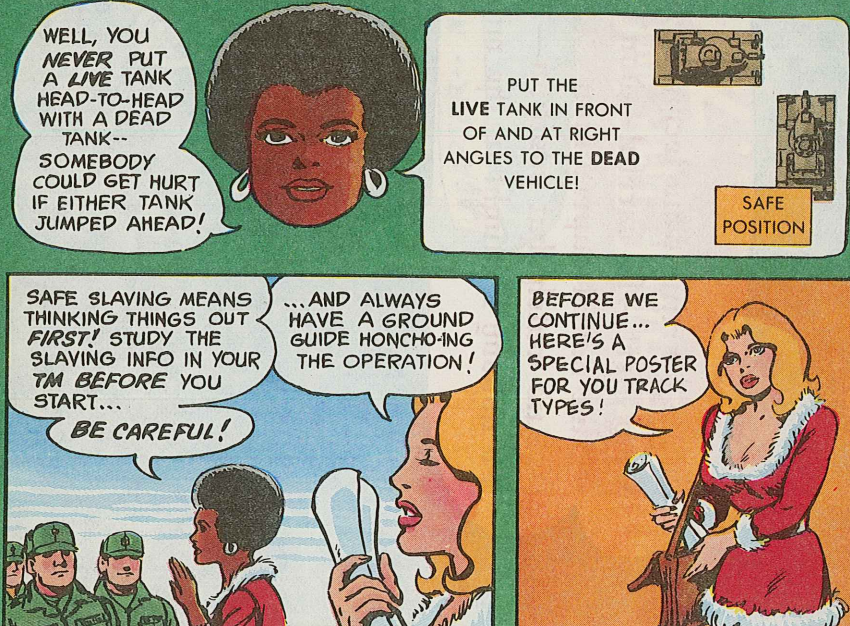
SAFE
POSITION

SAFE SLAVING MEANS
THINKING THINGS OUT
FIRST! STUDY THE
SLAVING INFO IN YOUR
TM BEFORE YOU
START...

BE CAREFUL!

... AND ALWAYS
HAVE A GROUND
GUIDE HONCHOING
THE OPERATION!

BEFORE WE
CONTINUE...
HERE'S A
SPECIAL POSTER
FOR YOU TRACK
TYPES!



Slave starting's no technical riddle—
 Stay alert—be careful—don't diddle!
 Use smart supervision
 And watch that position—
 So nobody's caught in the middle!



SLAVE CABLES

2-PRONG TYPE	NATO TYPE
NSN 4910-00- 474-9135	NSN-2590-00- 148-7961
ADAPTER-- NSN 5935-00-322-8959	

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

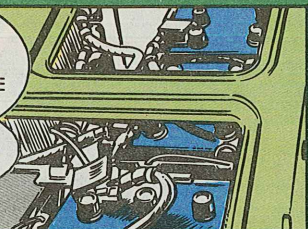
IF YOU WANT TO DISPLAY THIS CENTERPIECE ON YOUR BULLETIN BOARD, OPEN STAPLES, LIFT IT OUT AND PIN IT UP.

CARRY ON,
CONNIE!

Getting Ready

THERE ARE 3 THINGS
THAT MUST BE DONE BEFORE
ACTUAL CABLE HOOK UP...

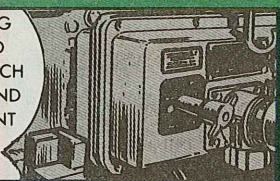
- 1 CHECK BATTERIES OF DEAD VEHICLE FOR DAMAGE . . . ELECTROLYTE LEVEL OK?
CABLES, LEADS, GROUND STRAPS TIGHT AND FIRM?



- 2 MAKE SURE BOTH VEHICLES ARE IN P (PARK) RANGE!



- 3 MAKE SURE PARKING BRAKES ARE SET, AND THAT THE MASTER SWITCH AND ALL ELECTRICAL AND ELECTRONIC EQUIPMENT SWITCHES IN BOTH VEHICLES ARE OFF!

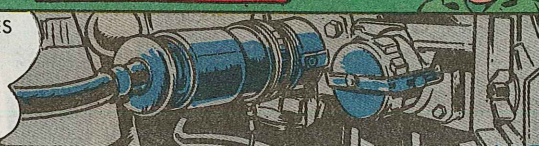


CAUTION:
BE SURE
THAT ALL
ELECTRICAL AND
ELECTRONIC SWITCHES
ARE OFF

Hook Up

WITH MASTER SWITCHES IN **BOTH** VEHICLES **OFF**, ATTACH SLAVE CABLE SECURELY IN BOTH. IF YOU HAVE TIME . . .

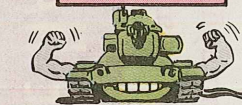
RECHARGE BATTERIES IN SLAVED VEHICLE FOR 15 MINUTES BEFORE YOU TRY TO START IT.



THIS WAY...

LIVE VEHICLE

DEAD VEHICLE



MASTER SWITCH **ON**
RUN ENGINE AT 1,000-1,200 RPM



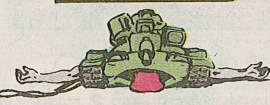
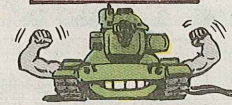
MASTER SWITCH **OFF**
ON LANCE VEHICLES, KEEP THE MASTER SWITCH ON!

ALL SET?
OK, LET'S...

Start

LIVE VEHICLE

DEAD VEHICLE



- 1 RUN ENGINE AT IDLE
- 2 MASTER SWITCH **OFF**

- 1 MASTER SWITCH **ON**
- 2 PRESS START BUTTON, PER TM

IF IT STARTS . . .

- 1 GET ENGINE RUNNING SMOOTHLY
- 2 TURN MASTER SWITCH **OFF**

IF IT DOES NOT START WITHIN 15 SECONDS

- 1 RELEASE START BUTTON
- 2 CHECK BATTERY-GENERATOR INDICATOR



RED?

- a-RECHARGE BATTERIES
- b-TRY TO START ENGINE



YELLOW OR GREEN?

- a-WAIT 3-5 MINUTES
- b-START ENGINE

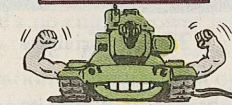
OK! BOTH RUNNING?
NOW YOU...

Disconnect

...AND FOLLOW THESE PROCEDURES!

LIVE VEHICLE

LIVE VEHICLE



MASTER SWITCH **OFF** ← 1 → MASTER SWITCH **OFF**

DISCONNECT CABLE

MASTER SWITCH **ON** ← 3 → MASTER SWITCH **ON**

RUN BOTH ENGINES AT 1,000 RPM TO STABILIZE GENERATORS AND BUILD UP RUN-DOWN BATTERIES.

NOW,
CONNIE HAS
A FEW...

Slave Cable Notes

USE ONLY THE SLAVE
CABLE ISSUED WITH
YOUR No 1 OR No 2
COMMON TOOL SET...

EITHER...

SPECIAL NOTE:
ONLY THE NATO CABLE
WILL WORK ON THE
M60A1 (RISE).

OR...

2-PRONG CABLE



NSN 4910-00-474-9135
WITH A 2-PRONG
SLAVE RECEPTACLE

NATO CABLE



NSN 2590-00-148-7961
WITH A NATO
SLAVE RECEPTACLE

IF YOUR SLAVE CABLE IS IN BAD SHAPE—GET A NEW
ONE BEFORE THE WINTER SLAVING SEASON STARTS.

NOW, THAT'S A TERRIFIC IDEA... BUT
WINTER'S ALREADY HERE AT **BAD
PFORZHEIM!!** OUR SUPPLY HAS A
SHORTAGE OF GOOD SLAVING
CABLES...

ONLY SANTA
CAN SOLVE THIS
SITUATION!

AHEM!

...FROM
SANTA!

RUDOLPH...
CABLES?...

SEE, SGT.
WILLIAMS,
SANTA
REMEMBERED!

HELP YOUR-
SELVES,
MECHS.

YAY!

RAY!

Merry Christmas
and a
Happy New Year

SLAVE CABLES
2-PRONG
TYPE NATO
TYPE

36

FIREPOWER

On New M60A1 Tanks . . .

The Indicator Clues You

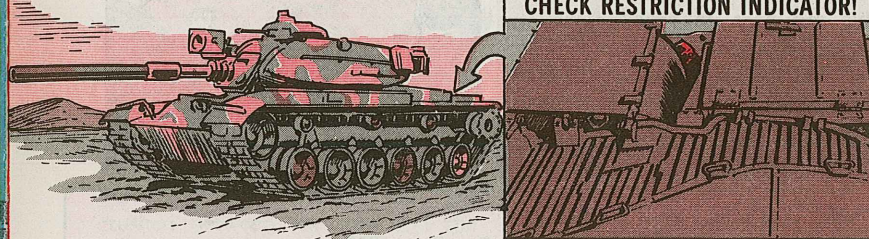


WHAT
KINDA
STORY YOU
GOT FOR
ME, OL'
MAN?

DIRTY,
PAL--
DIRTY!
GOOD THING
THIS AIN'T
A FAMILY
MAGAZINE!

The air restriction indicator on the new style armored air cleaner box can do a real job for you tankers if you pay attention to it. It tells you when the filters need cleaning to protect that expensive engine.

**DO AIR FILTERS NEED CLEANING?
CHECK RESTRICTION INDICATOR!**

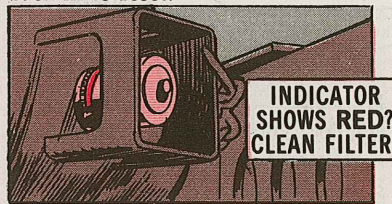


A couple of tips on how to read it:

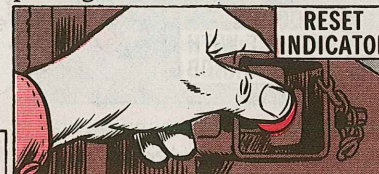
1. If the indicator shows red and you have an engine power loss, your filters need cleaning soonest!
2. If the indicator shows red but there's no engine power loss, you can reset the indicator and continue operations until your first opportunity for servicing. Just push the indicator back in to reset.

Engine power loss, erratic operation, or excessive black exhaust smoke usually means it's time to clean the air filter.

Let your mechanic know when the filters need cleaning. After the filters are cleaned, reset the indicator by pushing the red button.



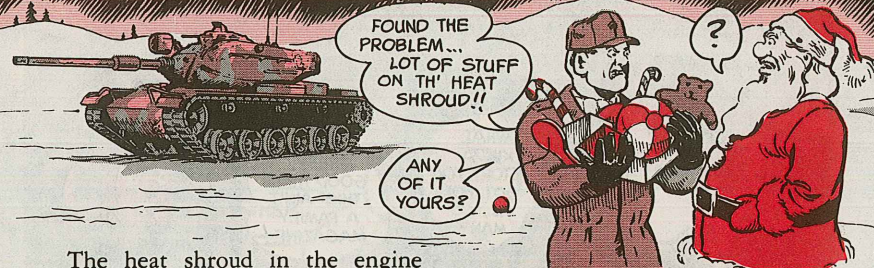
INDICATOR
SHOWS RED?
CLEAN FILTER!



RESET
INDICATOR

Remember, it's an indicator—and indicators tell you something! Be sure you're "reading" loud and clear!

Heat Shroud Not for Storage



The heat shroud in the engine compartment is strictly a no-goodnick place to store cables, clamps and chock blocks.

This heavy hardware takes up space where air should be circulating and this can heat up your engine and transmission and ruin them.

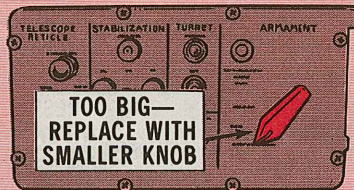
So stow stuff in the sponson boxes on each side of the hull and leave the heat shroud clear. It's the only way to travel.



M60A2 Tank . . .

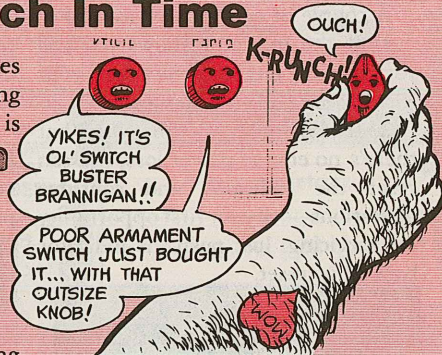
A Switch In Time

A lot of armament selector switches on the gunner's panel are being damaged because the control knob is



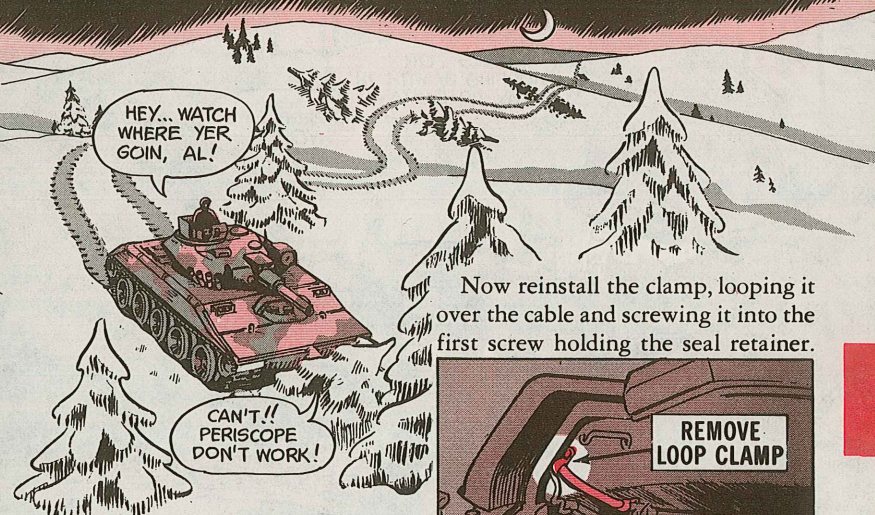
too big. Just a little too much twisting on that long knob and crunch . . . there goes the switch!

You can reduce the problem by getting a smaller control knob with

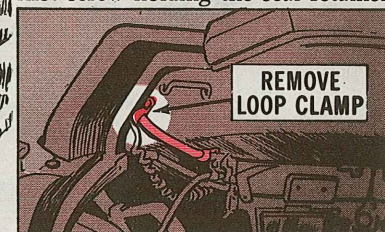


NSN 5355-00-846-1761. Since the smaller knob creates less torque, there's less chance of damaging the switch by too much force.

M551 Sheridan Wiring Fix



Now reinstall the clamp, looping it over the cable and screwing it into the first screw holding the seal retainer.



A section of the wiring for the periscope wipers on the M551/M551A1 Sheridan can get crushed between the hull and the driver's hatch.

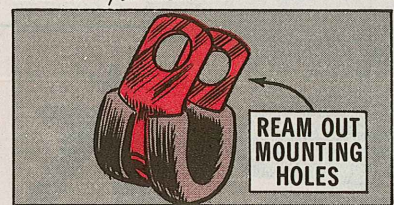
When this happens, the M48 (infrared) periscope and wiper won't work, or, you might even have an electrical fire in the circuit.

To prevent this, relocate wiring harness NSN 2590-00-939-5668 by unscrewing loop clamp NSN 5340-00-809-1492 and ream out the mounting hole to ¹³/₃₂-inch.

The screw is Item 33, Fig 121, page 210 of TM 9-2350-230-24P/1 and it lists as NSN 5305-00-269-3236 (MS90727-60-96906).



There's another way to do it that you might find more convenient. Instead of reaming out loop clamp NSN 5340-00-809-1492 (MS21333-100-96906), you can use loop clamp NSN 5340-00-954-6014 (MS21333-121-96906), which already has a ¹³/₃₂-inch mounting hole.



FEED TRAY



The feed tray on your M60 machine gun will break up on you unless you remember a simple little fix.

First, though, here's the problem. The feed tray breaks where it contacts the bolt roller (bolt cam actuator roller).



This happens because:

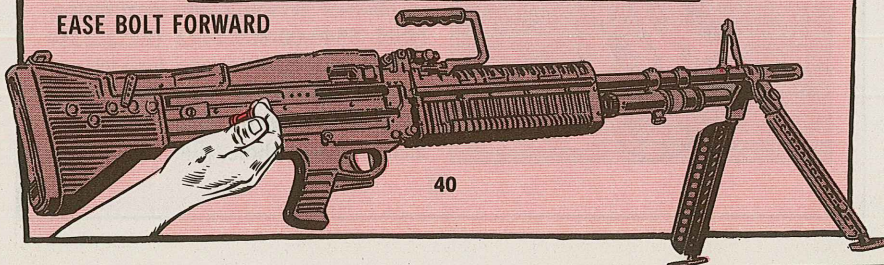
1. You allow the bolt to slam forward with no round in the chamber.

2. When the barrel's out of the gun, you let the bolt slam forward.

Simple fix in either case:

Ease the bolt forward with the cocking handle.

EASE BOLT FORWARD



BETTER WAY



To sum it up, never release the bolt from the sear position on its own unless the chamber has a blank, dummy or live round in it. With the barrel out, or no ammo in the gun, ease the bolt home with the cocking handle.

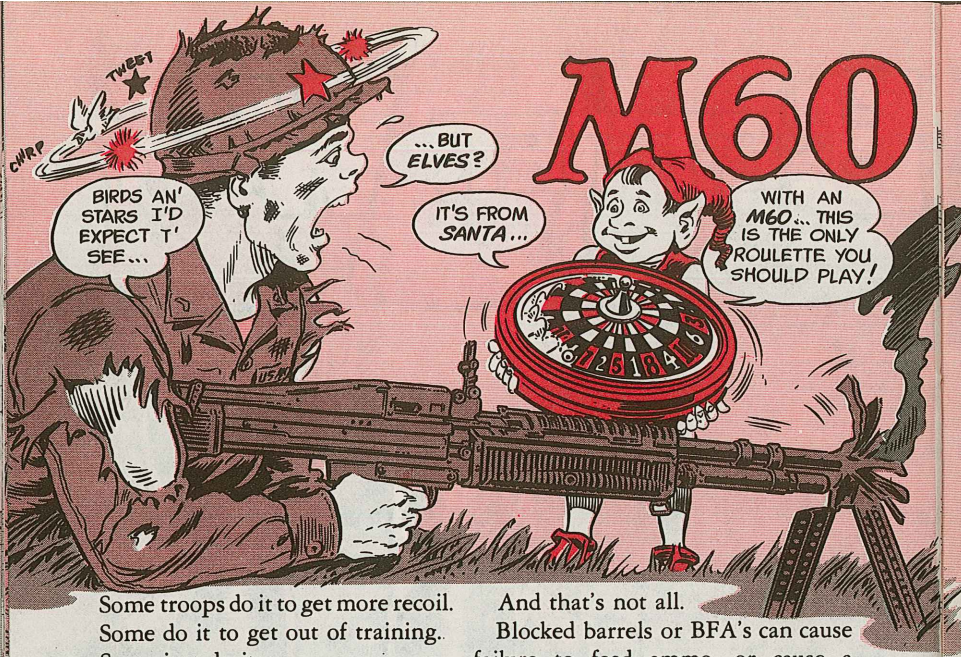
BIPOD

Another problem: The M60 bipod is not the strongest thing in the world. The legs or the base break and bend on occasion. Most "occasions" are when the gunner hits the dirt and comes down hard on the bipod. Sometimes it's hard to avoid.

But, the idea is to hit the dirt with the butt of the gun, and save the bipod.

The gun is heavy enough as it is—and it would just be heavier with a beefed-up bipod. So, if you've got a choice between butt or bipod—butt, butt, butt, butt.





M60

BLANK DON'TS

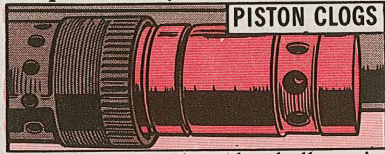
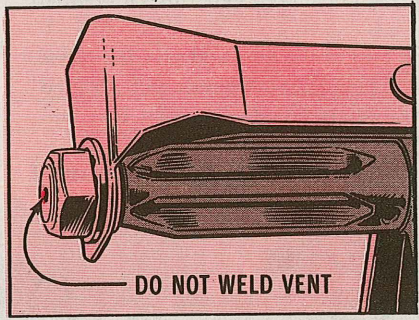
Some troops do it to get more recoil. Some do it to get out of training. Some just do it.

And that's not all. Blocked barrels or BFA's can cause failure to feed ammo, or cause a runaway weapon . . . or there just might be a live round or 2 among the blanks. It has happened; it'll happen again. Imagine the live round hitting the blocked area . . .

Whatever the reason, blocking the muzzle of your M60 machine gun barrel or the blank firing attachment (BFA) is bad news. For you. For the weapon.

What's more, blank ammo builds up more carbon than live stuff, and a blockage is gonna build up carbon in the gas system so fast that the recoil you're after is gonna be lost quickly . . . and permanently.

A partial or full weld over the muzzle or the BFA vent can blow you away. The barrel can burst. The BFA can blow off, putting dents in your buddies and/or the BFA.



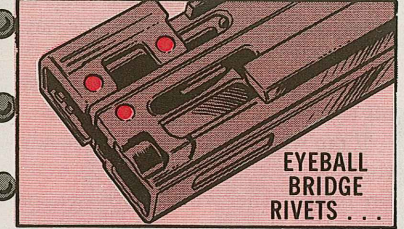
Not to mention the hell you're gonna get when somebody finds out what you did.

Then again, it's your game. If you like that kind of roulette . . .

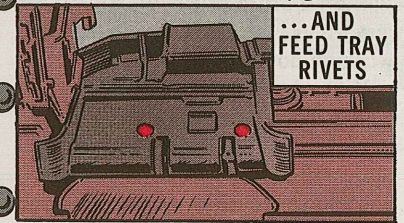
RIVETS

Here's a word on rivets for armorers:

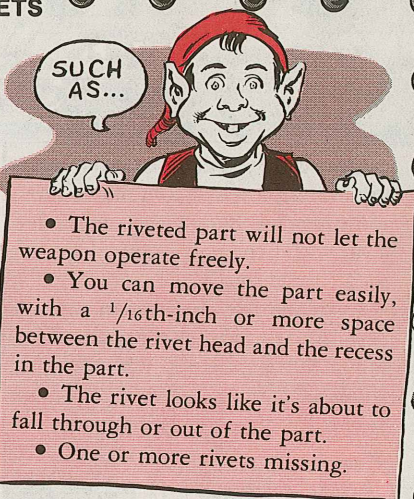
Rivets in the receiver group (especially the bridge) and in the feed tray need extra eyeballing. They seem to get hard wear.



There are 6 rivets in the bridge, plus 2 in the feed tray that really get loose.



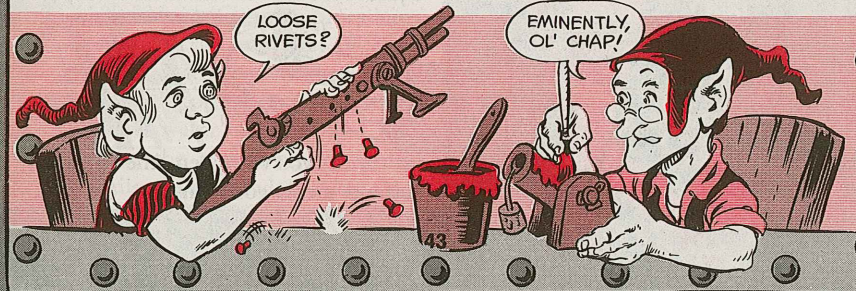
You can go 'round with the "How loose is loose?" bit here, but there are things which can clue you when the rivets are too loose to be serviceable.

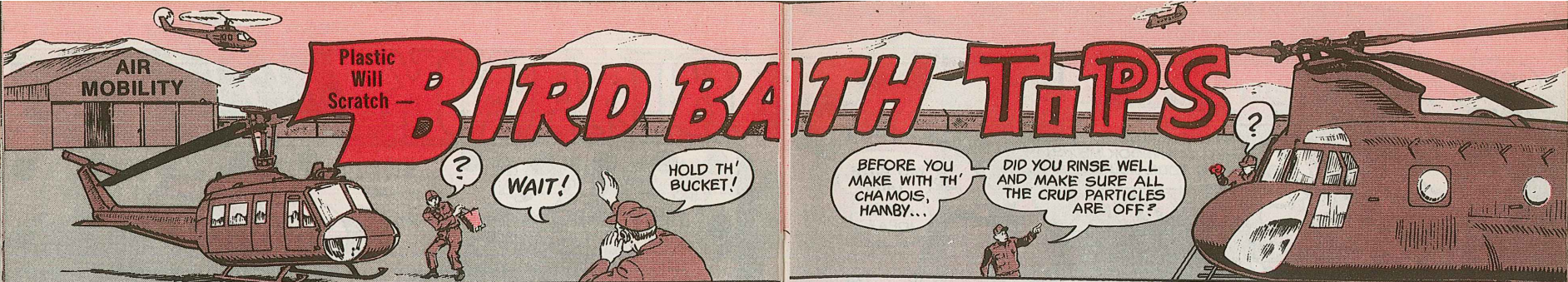


Your support repairs riveted parts. If you've got doubts about the rivets, get your support to check out the weapon.

A final note to armorers: Table 2-6, starting on page 2-12 of TM 9-1005-224-24 (May 71) was designed to keep the M60 combat ready.

If you follow the table, and use all of it, your job will be easier in the long run, and the weapons will be ready when troops in your unit need them.





Plastic Will Scratch — BIRD BATH TOPS

Of course, you don't use your bird's windshield wipers to remove early morning dew. But just wiping the dew away with a chamois or soft cloth isn't such a good idea, either.

Even a little dust mixed in with the dew drops can scratch the plastic. That can mean a polishin' job or even a windshield or window replacement after a lot of quickie wipedowns.



—First check static grounding lines and make sure they're connected.

—Remove wrist watches, rings or other hard stuff from hands and wrists.

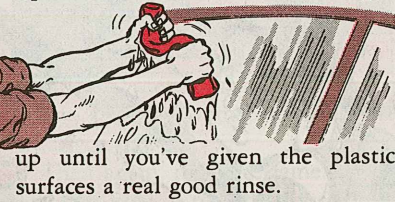
—Use plenty of clean water to flush off the dew.

If tap water or a hose is not handy, you can use a clean pump-type water fire extinguisher with no residues and filled with clean water. (Don't remove a serviceable one from its place.) Pump a stream of the ol' H₂O at the windshield, starting at the top and working down.

If you have to use a bucket to tote water, make sure it's a clean one.

Never use another bucket or container to slosh water onto the bird. If you swing too much or the container slips, you can bumper a window, antenna or the skin and red X your bird in a second.

Wet a clean cloth or sponge and squeeze it over the windshield. Keep it



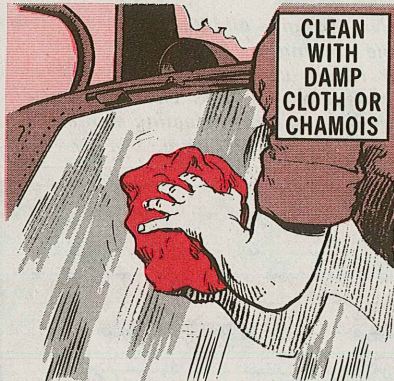
up until you've given the plastic surfaces a real good rinse.

BEFORE YOU MAKE WITH TH' CHAMOIS, HAMBY...

DID YOU RINSE WELL AND MAKE SURE ALL THE CRUP PARTICLES ARE OFF?

—Gently feel the windshield for any dirt, sand or grit.

—Once you're sure there are no crud particles left, use a clean damp chamois, soft cloth or soft tissue to dry the plastic.



If the sun's still low in the eastern sky, don't worry about doin' the rinsin' and dryin' in the shade like it says in TM 55-1500-204-25/1 (General Aircraft Maintenance, April, 1970) or TM 55-1500-333-24 (Cleaning procedures for Army Aircraft, October, 1974).

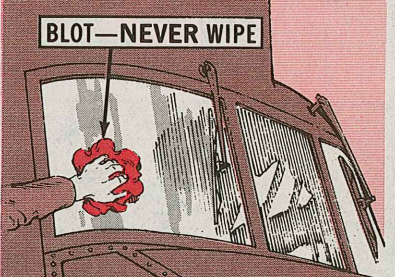
But don't stall around, either. If that tap water evaporates on the plastic, it could leave water marks behind.

—Once the plastic surface is dry, quit while you're ahead. Wiping a dry

windshield ups your chances for scratching and builds up a static charge—and that attracts more dust.



If you notice a static charge, gently pat or blot the plastic with a damp clean chamois—that'll knock it out.



It takes just a few minutes for your bird's morning shower. So do the job right. It can save you time in the long run by cutting down on polishing jobs and replacements.

HOLD ONE, S.C.!

Make the Boot

WOULD YE DELIVER THESE TO ALL TH' CHINOOK MECHS ON YOUR ROUTE?

WHY SURE, LADS! GREAT IDEA!

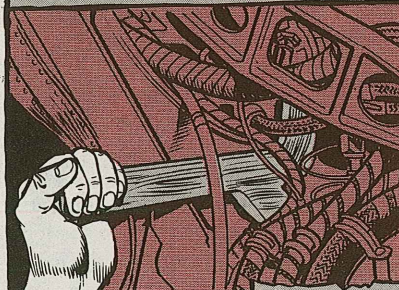
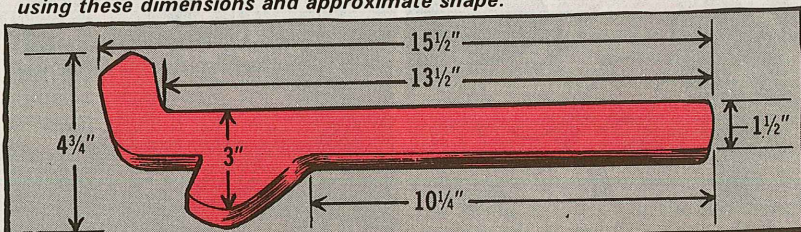


Dear Editor,

Removing and installing the Chinook No. 2 engine oil filter is a breeze. You have room to apply upward muscle while rotating the filter.

Not so with the No. 1 engine oil filter. Mechcs use hammers, screwdrivers, blocks of wood—you name it—because of the close quarters. The result is often damage to the oil filter cap, aircraft skin, lines or heat detecting element.

A simple way to deal with that filter is to make a tool from 3/4-in plywood, using these dimensions and approximate shape.



To use the tool, just place the toe on the filter and the heel on the airframe. Then, use a little downward pressure on the handle with one hand while rotating the filter with the other hand. The tool works like a charm.

Paul L. Paitsel
Ft. Eustis, VA

... A LITTLE DOWNWARD PRESSURE

(Ed Note: Righto! Looks like a real fine work aid.)

You Can Do It!

OH, NOW! THE MAIN ROTOR HUB WILL HAVE TO BE REPLACED... ARE WE AUTHORIZED?

DUNNO! LET'S ASK WINDY!

Dear Windy,

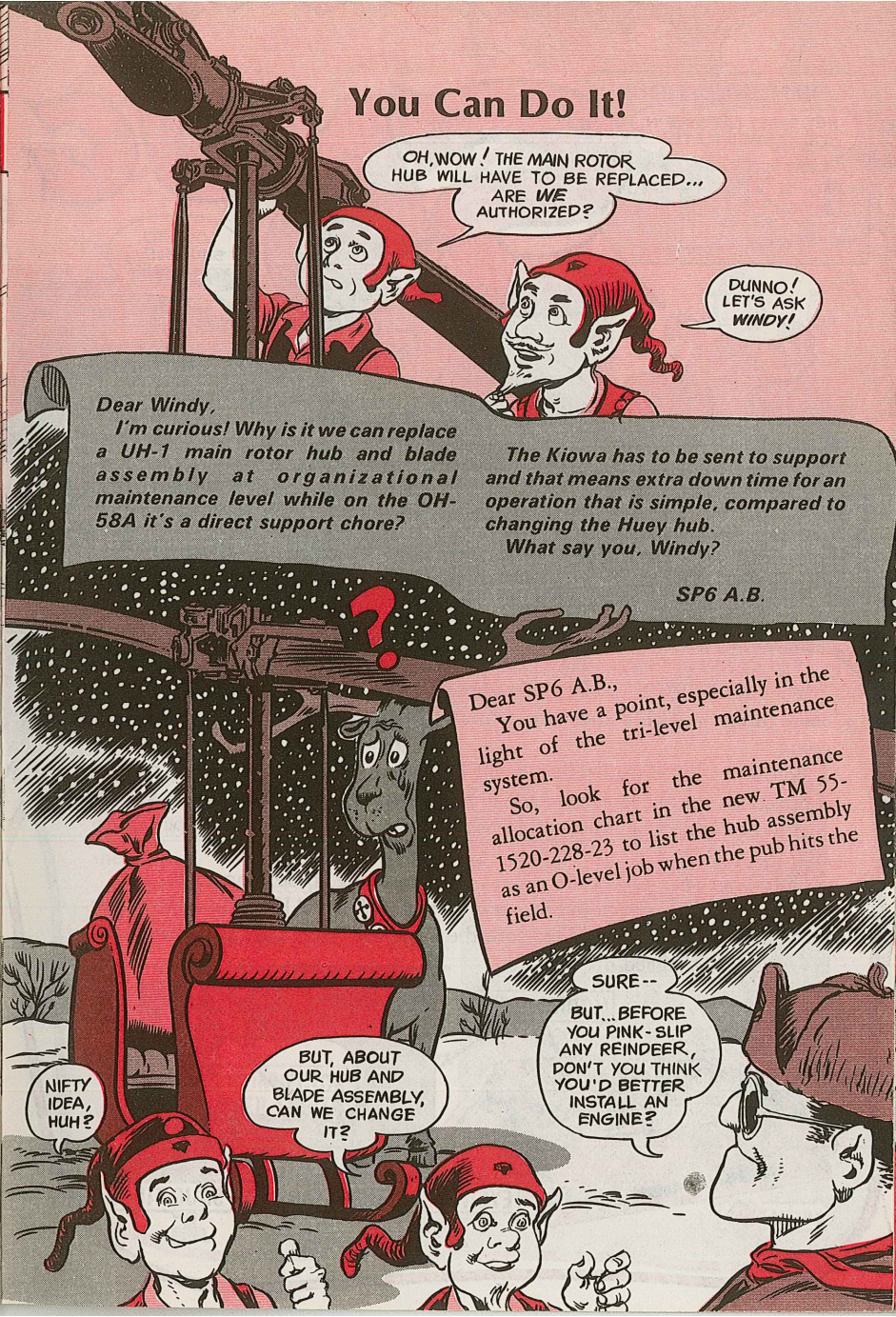
I'm curious. Why is it we can replace a UH-1 main rotor hub and blade assembly at organizational maintenance level while on the OH-58A it's a direct support chore?

The Kiowa has to be sent to support and that means extra down time for an operation that is simple, compared to changing the Huey hub.

What say you, Windy?

SP6 A.B.

Dear SP6 A.B.,
You have a point, especially in the light of the tri-level maintenance system.
So, look for the maintenance allocation chart in the new TM 55-1520-228-23 to list the hub assembly as an O-level job when the pub hits the field.



NIFTY IDEA, HUH?

BUT, ABOUT OUR HUB AND BLADE ASSEMBLY, CAN WE CHANGE IT?

SURE-- BUT... BEFORE YOU PINK-SLIP ANY REINDEER, DON'T YOU THINK YOU'D BETTER INSTALL AN ENGINE?



COMMUNICATIONS

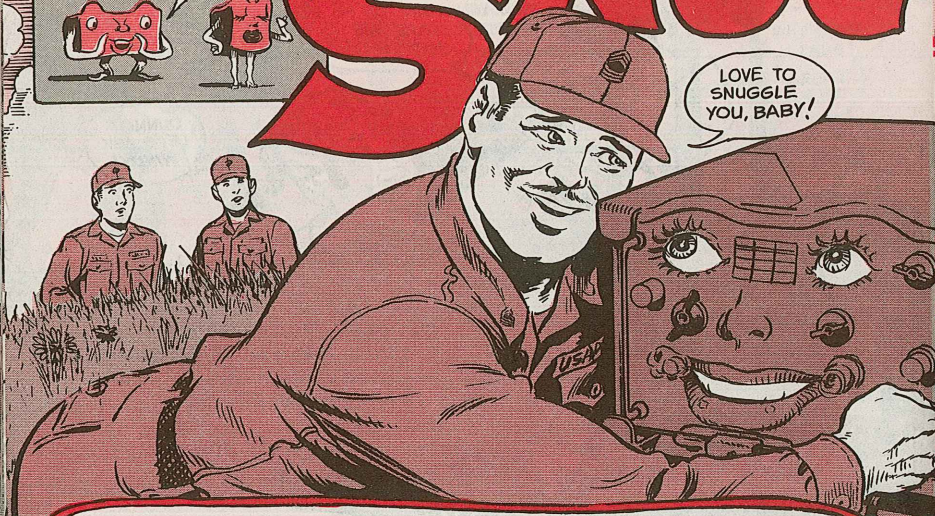
HEY, BABE! LET'S ME 'N' YOU COMMUNICATE!



For Radio Protection

SNUG

LOVE TO
SNUGGLE
YOU, BABY!



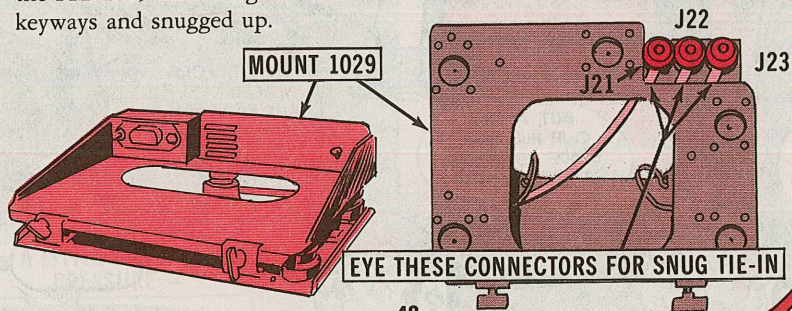
Your AN/VRC-12 series radio set does its best after a little snuggling has been going on. Cable and wire connector snuggling is what keeps your set going.

Before you head your radio set off for higher maintenance repair, eye the connections on the receiver-transmitter, mounting and on the antenna.

A loose connection causes all sorts of trouble, like intermittent operations, arcing and shorts.

Turn your set's power off when you're handling those connectors.

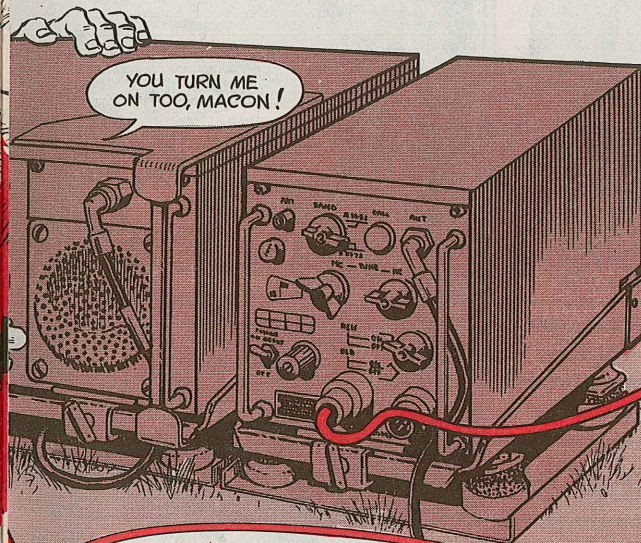
Eye the cable connectors that tie into the J21, J22 and J23 receptacles under the MT-1029 mounting. Make sure the cable connectors are aligned with the keyways and snugged up.



48

Cable Connections

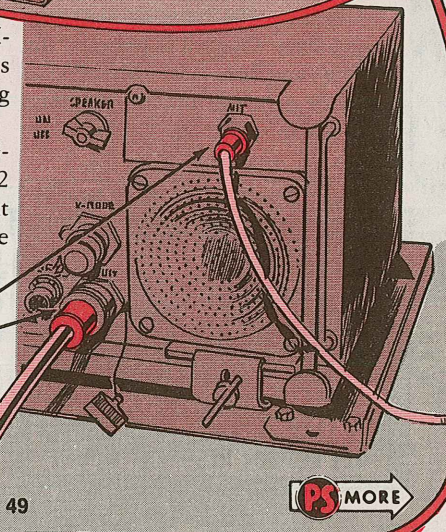
YOU TURN ME
ON TOO, MACON!



You might take a look at the CX-4720 cable hookup on your vehicle's battery to assure yourself that it's snug there.

Finger the connectors on the CG-1773/U RF coax cable and CX-4722 remote control cable at the RT's front panel receptacles to make sure they're snug.

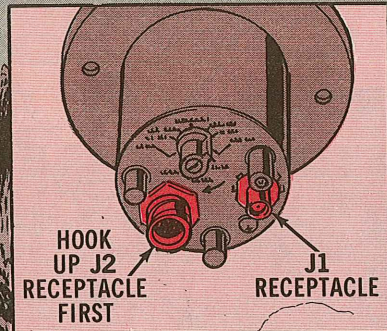
MAKE CONNECTORS
FINGER TIGHT



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PS MORE

Then, follow the cables to the antenna tie-in end. If the connectors are not connected to the J1 antenna cable receptacle and J2 control cable

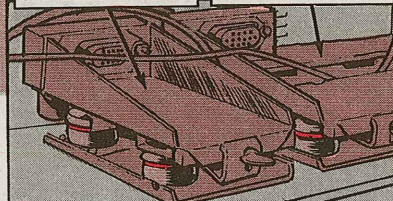


receptacles, always hook up the J2 receptacle first. This will keep you from accidentally bending or breaking pins with the smaller connector.

It's a good idea to eyeball those cables for frays or cracks. If a cable is in bad shape, replace it.

Make sure you have at least one ground strap snugged in between the top tray and base assembly of your MT-1029 or -1898 mounting. If the strap is missing, get it replaced, pronto.

MT-1898 MOUNT **MT-1029 MOUNT**



**ISOLATOR ASSEMBLIES DAMAGED?
GET RUBBER RESILIENT MOUNT**



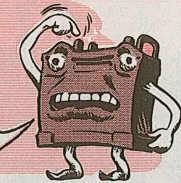
While you're looking between the mounting trays, eye those isolator assemblies. If they're damaged, tell your support to get you rubber resilient mount NSN 5340-01-012-3713 so you organizational types can replace it, like it says in para 2-5 of TM 11-5820-401-35-9 (Apr 74).

On AN/PRC-25, -77

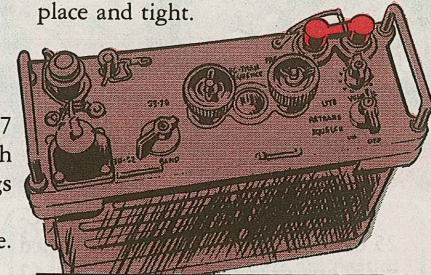
Protect Connectors

HEY, GOOD BUDDIES!... I NEED CARS ON MY CONNECTORS!

HOW 'BOUT IT?



Before you connect the handset cable connector to the AUDIO connector, make sure the locknuts are in place and tight.



That rugged AN/PRC-25 or -77 radio set is made to take rough treatment, but hard knocks and bangs can get to the best of them.

The front panel can stand up to use. Abuse it can do without.

Those 2 AUDIO connectors are more or less protected by the handle. But when you add a handset cable connector for the handset's cable, a bump or a knock can leave your set's front panel cracked or broken.

COVER BARE CONNECTORS

Also, when the connectors are not in use, keep the electrical connector cover on them. Besides keeping out dirt and moisture, it serves as a bumper to protect the connectors.

DA Form 2028 Address

Get a quick reply to your DA Form 2028 on electronics or communications tech pub errors by using the new Electronics Command address. Send your DA 2028 to:

Commander
US Army Electronics Command
ATTN: DRSEL-MA-Q
Fort Monmouth, NJ 07703

SOME OLDER TECH PUBS HAVE OUT-OF-DATE ATTENTION LINES!

Clock Battery NSN

Is time standing still 'cause the battery's dead in the clock on your electronic equipment shelter wall? Get your clock going again with BA-1090/U battery NSN 6135-00-835-1023.

No MWO Label Needed

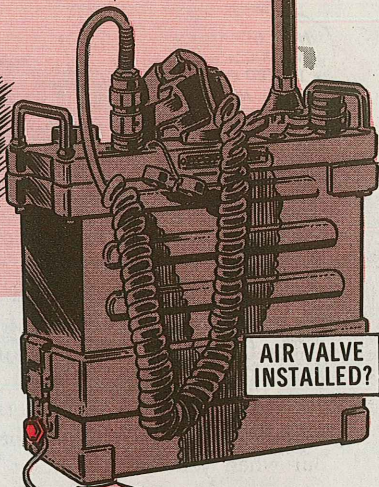
OK, OK--
YOU KNOW THE
AIR VALVE IS
INSTALLED.

I'M
PROUD
OF YA,
DOWD!



You say you know your AN/PRC-25 or -77 radio set has been modified with an air valve in the CY-2562 battery case, but there's no MWO 11-5800-211-30-1 label to show for it?

That's OK. As long as you can see the air valve is installed, you don't need an MWO label.



AIR VALVE

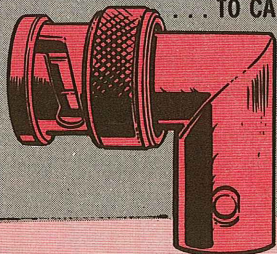
Protect Receptacle

Adapter Will Do It

Connecting and disconnecting that CG-1040B/U coax cable to your TD-353/U multiplexer can cause wear and tear to the front panel receptacles and shorten their lives.

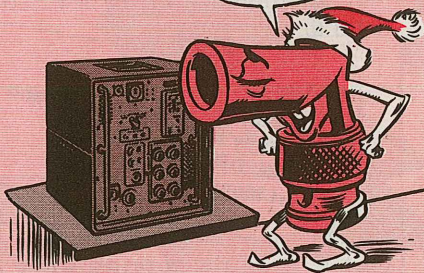
To make the receptacle last longer, connect a UG-306B/U adapter NSN 5935-00-847-2600 to the cable.

CONNECT ADAPTER ...
... TO CABLE



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YUP! SANTA
SENT ME!



The adapter will be the connector-to-panel go-between.

Then, any damage done from connecting and disconnecting will be to the adapter and not the panel receptacle. And, the adapter is easy to replace.

AT-912 Hardware's There

STRANGE... NORTH
POLE DOESN'T
ANSWER...



ER, S.C.... DID
THE ELVES REMEMBER
TO INSTALL THE MISSING
BOLTS ON YOUR ANTENNA
BASE SUPPORT?

Dear Half-Mast,

We're missing some bolts and washers on our AT-912 antenna's AB-719 antenna base support and MX-2799 matching unit. We need the bolts that hold the base support and matching unit together and those that hold the spring section and mounting clamp together. Can you give us stock numbers for this hardware?

SSG J. D. D.

Dear Sergeant J.D.D.,

Those bolts and washers are part of the mounting hardware, which is in Fig 1-12 of TM 11-5820-401-12 (Aug 72).

The bolts and washers that hold the AB-719 and MX-2799 together and their NSN's are:

NSN

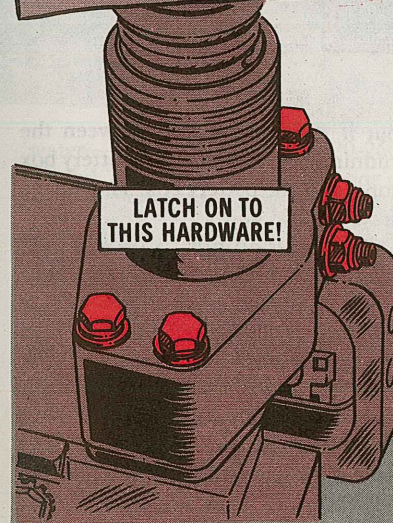
Machine bolt or screw	5306-00-225-9096
Flat washer	5310-00-809-3078
Lock washer	5310-00-974-6623

The bolts and washers that hold the AB-719's mounting clamp to the spring section and their NSN's are:

NSN

Machine bolt or screw	5306-00-889-2885
Flat washer	5310-00-625-5756
Self-locking nut	5310-00-857-4959

OK, SARGE...
HOP TO IT-- AND
GOOD COMMUNI-
CATING!



53



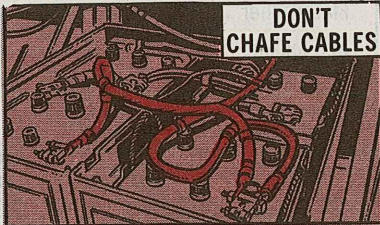


TROOP SUPPORT

RIBBON BRIDGE and M812 PM

Your improved float bridge—ribbon bridge—has to be in the water before it can do its bridge 'n' ferry job. It gets to the job site with a modified 5-ton M812 truck.

But the bridge is landlocked if the transporter can't go because of dead batteries. The battery cables can short



54

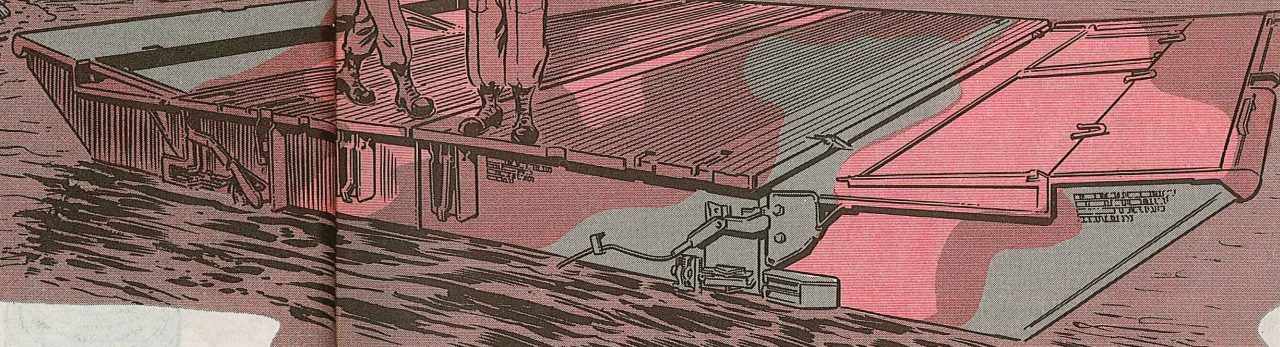
out if they are wedged between the running board assembly—battery box top—and the battery box. They chafe, fray, arc and burn.

There was an EIR fix back in 1973 for this bad battery cable scene—but a lot of units must have missed it. Para 2-14i in TB 43-0001-39-2 (Jul 77) has the latest info.

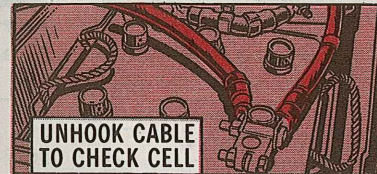
When you're checking the cells for electrolyte, don't pass up the one that's squeezed between the hot line and connector cable. You can't unscrew the filler cap to add distilled or clean

RIGHT ON, SARGE!

CHECK OUT THOSE CONNECTING PINS... THEY LOOK RUSTED AND CORRODED! COULD RESULT IN A "HANG-UP"!

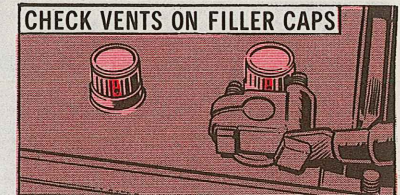


water—para 2-91 b, TM 9-2320-260-20 (Jul 72)—until you unhook one of



the cables. First, though, be sure the ground cable is unhooked. You don't want a handful of hot metal . . . and besides the fast burn, you may short the battery cables.

When you replace the filler caps, be sure their vents are unclogged. Heat builds up inside the battery box (they've been known to explode) even when everything's PM-perfect.



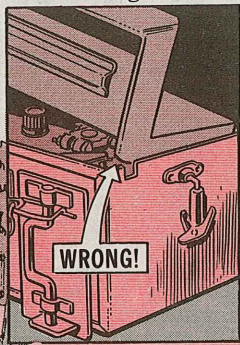
55



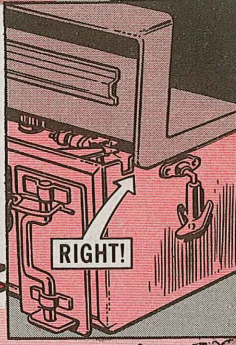
Be sure the filler plug threads are smooth and clean. Burred, dirty caps won't tighten like they're supposed to. Screw the caps in straight or they won't tighten.



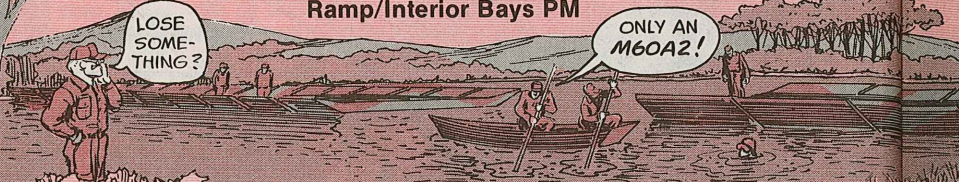
Take it slow 'n' easy when you put on the battery box cover. Be sure the sides of the cover are on the outside of the box. Don't let one side of the cover tilt downward and hit terminals or posts. That'll short—and smart—because you'll get arcing . . . and a handful of hot cover!



**AVOID SHORTS!
KEEP CASE COVER OUTSIDE
OF BATTERY BOX!**



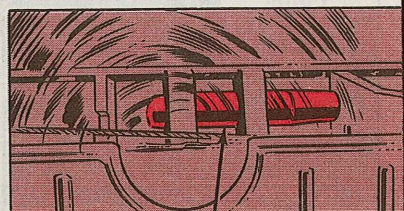
Ramp/Interior Bays PM



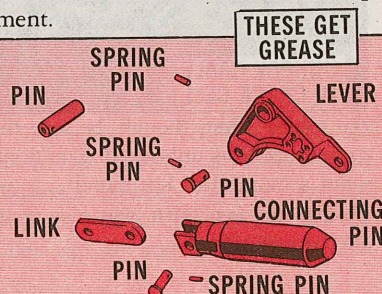
Pinning and holding the ramp/end bays and interior bays together is the whole scene for ferrying and bridging. If you don't do it right, you can dump a tank in the drink or a truck in the muck!

A COUPLE OF ITEMS NEED SPECIAL PM TO KEEP THE WHOLE 9 YARDS CONNECTED!

1 Lower Lock Drive—This connecting pin—along with the roadway connector—holds the bays together. Poor PM on these items can cause a heap of trouble, downtime and loss of equipment.

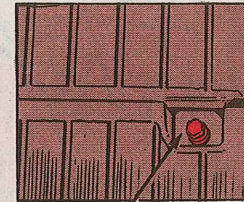
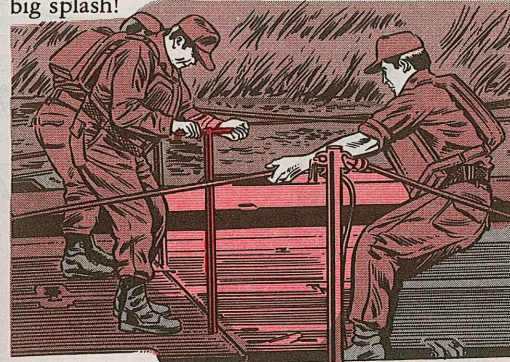


CONNECTING PIN



Be sure the lower lock drive works smooth and easy. Put plenty of molydnum disulphide grease—NSN 9150-00-754-2595, 1-lb can—on the connecting pin, 3 spring pins, 3 pins, position link and position lever after every operation.

A rusty, corroded connecting pin that "hangs up" in the eye on the mating bay when you use the T handle could make you think it was fully seated. In fact, it's just part of the way in. Any vehicle crossing or ferrying is guaranteed a big splash!

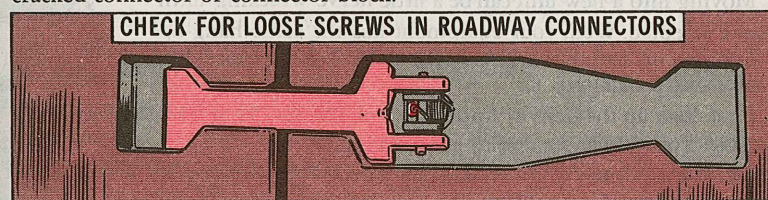


**BE SURE
LOWER LOCK PIN
DRIVE SHAFT
IS 3/4-INCH
BELOW DECK**

'Course, there's one way you can be sure the lower lock drive pin is all the way in: The top of the pin drive shaft should be $\frac{3}{4}$ inch below the deck when the connecting pin is fully seated—para 2-8e(5)(e), TM 5-5420-209-12 (Feb 76).

Change the Note in para 2-8e(3)(f)—about the pin drive shaft being flush with the deck—to match the PM poop above. This new info will be in a change to the -12 manual.

2 Roadway Connector—Check for loose screws (they get 120 to 132-lbs-in torque) a burred or missing pin; distorted, broken or missing spring; broken or cracked connector or connector block.



Gain in TIME Saves .9



GATHER 'ROUND,
LOGBOOK TYPES,
FOR SOME
HELPFUL INFO ON
REPLACEMENT
FORMS...

Moving into a new unit can be a little nerve-racking until you're accepted. Well, your equipment has the same hang-up. Equipment without a DA Form 2408-9 Acceptance Report may cause problems.

First, look up the item in Appendix E of TM 38-750. If it has an X under the DA Form 2408-9 column, get cracking.

Did the equipment arrive with an Acceptance Report, but it was lost or destroyed later? No problem.

Go with the directions in para 4-9b(2)(a) of TM 38-750. Fill out a permanent logbook copy of the Acceptance Report. Try to track down as much of the

U.S. GOVERNMENT PRINTING OFFICE: 1973 - 505-022

6. STOCK NO. 571934	1. ORGANIZATION UNK	2. LOCATION UNK	3. UNIT IDENT. CODE UNK	4. UTILIZATION CODE	5. VEHICLE USE CODE
7. NOMENCLATURE CARRIER, PERSONNEL	7. MODEL M113A1	8. FEDERAL STOCK NO. 2350-00-968-6321	9. SERIAL NO. F117	10. REGISTRATION NO. MC 1234	
11. YEAR OF MFG M75	12. MANUFACTURER (MFG Code) FOOD MACHINERY 80212	13. CONTRACT NO. UNK	14. PURCHASE ORDER NO. UNK	15. WARRANTY PERIOD UNK	
16. TYPE REPORT		17. REPORT CODE	18. USAGE	19. SHIPPED TO	
a. ACCEPTANCE AND REGISTRATION		A	g. HOURS 8	a. ORGANIZATION	
b. USAGE			h. MILES 96	b. ORGANIZATION	
c. TRANSFER			i. ROUNDS	c. ORGANIZATION	
d. LOSS				d. ORGANIZATION	
e. GAIN				e. ORGANIZATION	
f. OTHER				f. ORGANIZATION	
21. REMARKS New Form Initiated Permanent Logbook Copy 7276 J.B. Forrest, Capt.					
22. INSPECTOR'S SIGNATURE				23. JULIAN DATE	
EQUIPMENT CONTROL RECORD					
<small>For use of this form, see TM 38 750, the proponent agency is the Office of the Deputy Chief of Staff for Logistics.</small>					
DA FORM OCT 72 2408-9		REP. ACES DA FORMS 2408-7, 1 JAN 84, AND 2408 6, 1 JAN 84, WHICH ARE OBSOLETE.		REPORTS CONTROL SYMBOL CSG48 254	

IF YOUR EQUIPMENT ORIGINALLY HAD AN ACCEPTANCE REPORT—BUT IT WAS LOST OR DESTROYED—MAKE UP A REPLACEMENT. PUT UNK IN ANY BLOCKS YOU CANNOT FILL.

original information as possible. Put UNK in the blocks you cannot fill. The Julian date you fill out the form goes in the Remarks Block.

Write "New Form Initiated" and "Permanent Logbook Copy" in the Remarks Block. Trashcan the NMP and Rebuild/Overhaul copies.

But, if the equipment arrives without a DA 2408-9 Acceptance Report, you go a little different route.

Contact the people who sent you the item. They may still have the form and/or logbook.

If they do not have the form and/or logbook—or the information for them—you have no way of knowing whether a DA 2408-9 Acceptance was ever sent in.

Para 4-2d(2) of TM 38-750 tells you to contact the Maintenance Management Center (USAMMC) in Lexington for that info. Forget that. Lexington no longer keeps a complete history on your equipment.

They can supply you with the information from the equipment's last two Transfer or Usage Reports (if any were turned in).

Some info—like when the equipment joined the Army—may be permanently lost. But, keep this in mind: The absolute minimum info you need is what goes on a DA Form 2408-9 Transfer. If you've got that much, relax.



ALL YOU NEED NOW IS A
DA2408-9 TO COVER YOUR LOGBOOK
AND THE HEADSHED'S COMPUTERS!

U. S. GOVERNMENT PRINTING OFFICE: 1973 - 905-022

1. ORGANIZATION 2ND BN AND INFANTRY	2. LOCATION APO SEATTLE 98447	3. UNIT IDENT CODE WYDU77	4. UTILIZATION CODE ON	5. VEHICLE USE CODE
6. NOMENCLATURE CARRIER, PERSONNEL	7. MODEL M113 A1	8. FEDERAL STOCK NO. 2350-00-968-6321	9. SERIAL NO. F117	10. REGISTRATION NO. MC 3456
11. YEAR OF MFG	12. MANUFACTURER (MFG Code)	13. CONTRACT NO.	14. PURCHASE ORDER NO.	15. WARRANTY PERIOD
16. TYPE REPORT	17. REPORT CODE	18. USAGE 8	19. SHIPPED TO a. ORGANIZATION	5. SHIPPED TO UIC
a. ACCEPTANCE AND REGISTRATION		b. HOURS 96	20. RE	
b. USAGE		c. MILES		
c. TRANSFER		d. ROUNDS		
d. LOSS				
e. GAIN	✓			
f. OTHER	u			
21. REMARKS <i>New Form Initiated Permanent Logbook Copy</i>				
22. INSPECTOR'S SIGNATURE			23. JULIAN DATE 7216	
EQUIPMENT CONTROL RECORD <small>For use of this form, see TM 38-750; the proponent agency is the Office of the Deputy Chief of Staff for Logistics.</small>			REPORTS CONTROL SYMBOL <small>CSGLD 7604</small>	
DA FORM 2408-9 <small>REPLACES DA FORMS 2408-7, 1 JAN 64, AND 2408-8, 1 JAN 64, WHICH ARE OBSOLETE.</small>			Logbook Copy 3	

Fill out a DA Form 2408-9 Gain Report. Put your unit name, UIC and location in Blocks 1, 2 and 3. Put code U in Block 17. The Julian date you filled out the report goes in Block 23. Send out the copies as it says in para 4-9d of TM 38-750.

The Gain Report takes the place of an Acceptance Report. But it does so without duplicating any acceptance info that may be on file somewhere.

Put "New Form Initiated" and "Permanent Logbook Copy" in the Remarks Block of the DA 2408-9 Gain Report you keep in the logbook.

On Part-Number Requests



Manufacturer First



NO! YOU CAN'T ENTER WITHOUT AN FSCM FIRST!



When you're getting it together for a ticklish part numbered item supply request, take a good look at the information line-up.

No matter what type or how long the part number is, the manufacturer's code must go on the request as the first 5 numbers of the part number in the stock number block.

96906MS519383

FSCM FOR THAT PART NUMBER GOES FIRST

The Federal Supply Code for Manufacturer's (FSCM) ties your part number to a specific manufacturer. You need it because many items may have the same part number. (Manufacturers do not get together on assigning part numbers.) So the FSCM may be the only difference between part numbers—and the difference between getting a wing nut or an axle.

You may find that FSCM in one of several places in your parts manuals. Some pubs give the FSCM its own column after the part number column. Others list the FSCM in parentheses in the Description block. If the FSCM doesn't show up, check the index. Older pubs seem to almost hide the FSCM.

Either way, put the FSCM on your request form as the first 5 numbers of the part number in the stock number block.

The FSCM and part number become one. Do not leave a space or use a dash or parentheses to separate them.

If you can't track the FSCM at all, make sure you put the manufacturer's name on the DA 2765 in Block M.

Supply and Maintenance MERGER

The DA 2408-14 Uncorrected Fault Record puts your supply and maintenance operations together—if you follow-through! That means you—whether PLL clerk, maintenance supervisor or TAMMS clerk.

Any time a mechanic or operator discovers a part that needs replacing, you suggest the supply and maintenance systems behind you.

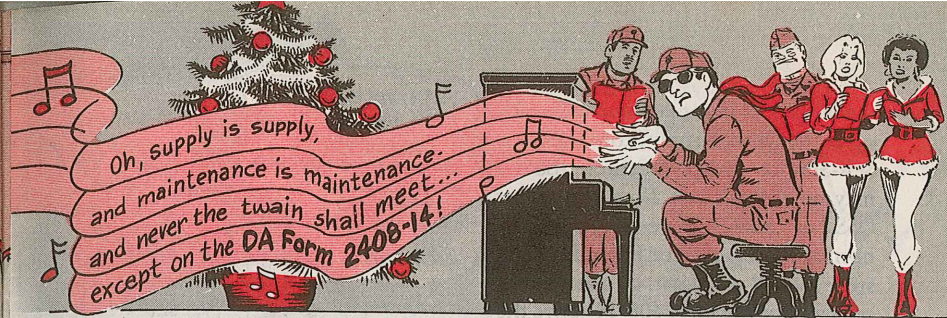
Get the NSN and part identification out of the pub on the item. Then take or call that info to the PLL clerk. If the part's there, somebody goes for the part. The fault's fixed and that's it.

But, if the part's not in stock, hold it! Unless the fault deadlines the vehicle (X status symbol or red X or circle red X on aircraft), that fault will be carried on the DA 2408-14 until the part arrives.

You'll need the document number the PLL clerk puts on the request for that part. That document number ties your maintenance work into the supply system.

DOCUMENT REGISTER FOR SUPPLY ACTIONS (AR 735-35)			ORGANIZATION ACTIVITY	UNIT IDENTIFICATION	DATES (Day, Month, Year)		PLC NO.
PRIORITY AND DATE	DOCUMENT SERIAL NO.	CONTROL NUMBER			FROM	TO	
			Co A 1st BN, 60th INF (MEG)	W3X EAA WA4 EEB	7214		33
13/7214	0006		3030-00-833-1336 BELTS, V	EEC	1	1	7217
03/7215	0001		5930-00-991-6173 T. Hughes, OPT. SWITCH, ASSY	EEC	1		
13/7215	0002		5935-00-900-6281 ADAPTER	EEC	2		
13/7216	0001		6270-00-489-6020 MIRROR	EEC	1		

YOU GET THE REQUEST DOCUMENT NUMBER FOR YOUR DA 2408-14 ENTRY FROM THE PLL CLERK. NEVER MAKE UP A NUMBER!!



Stay with the PLL clerk—or stay on the line—until you get a document number for that request. If you can't stick around that long, ask the PLL clerk to call you or the TAMMS clerk with the document number.

REMEMBER...
THIS ENTRY MUST MATCH THE ENTRY IN COLUMNS A AND B OF THE DA 2064!

1. NOMENCLATURE		2. MODEL		3. SERIAL NUMBER	
STATUS SYMBOL	FAULT	REASON FOR DELAY	DATE FROM DA FORM 2408-14	ENTER AUTHORITY	DATE TO DA FORM 2408-14
	TRUCK		M151A1	2B4678	
H	NEEDS SPOT PAINTING ON REAR VIEW MIRROR CRACKED	ACCOMPLISH NEXT SCHEDULED PM SERVICE	2 AUG 77	T. Hughes	11 AUG 77
		7216-00-1 6270-00-489-6020	9 AUG 77	T. Hughes	

PUT THE REQUEST DOCUMENT NUMBER THE PLL CLERK GIVES YOU IN COLUMN C OF THE DA FORM 2408-14.



Sometimes items you normally pick up at the Quick Supply Store (QSS) or Self-Service Supply Center (SSSC) may be out of stock. If so, put either QSS or SSSC (depending on the normal source) and the Julian Date the store turned you down on the item in column c of the DA 2408-14 above the part's NSN.

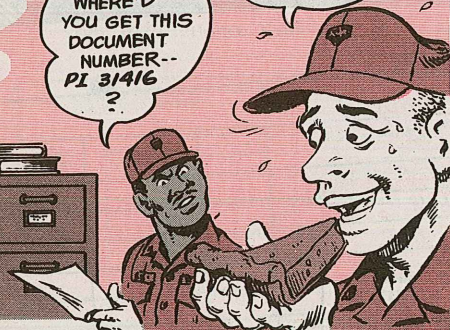
Your PLL clerk puts similar entries on supply forms.

If your records—document number or QSS/SSSC note—don't match the PLL clerk's, you lose.

Some turkeys just fake it. They make up their own document numbers on the DA 2408-14 and ignore the part number, QSS or SSSC note.

HEY, NED!
WHERE'D
YOU GET THIS
DOCUMENT
NUMBER--
PI 31416
?

ER... I--UH,
WELL...



But those entries on the -14 are the only way the maintenance and supply systems can get together so you get the part.

If your -14 document number or other entries do not match the PLL clerk's, there's nothing to prove that part belongs to you and your equipment.

YEAH, WE GOT THAT
PART IN...

NOBODY'S
DA 2408-14 MATCHED
MY DOCUMENT
NUMBER, SO I
GAVE THE PART
OUT THIS
MORNING!



Your part might come in, go on the shelf and be given to another mechanic while you and your equipment wait.

It's up to you to keep the DA 2408-14 entries up to date. How you do that is left pretty much up to SOP.

You can have the PLL clerk make a note in the margin of the document register to call you when DA 2408-14 parts come in or if the request is cancelled.

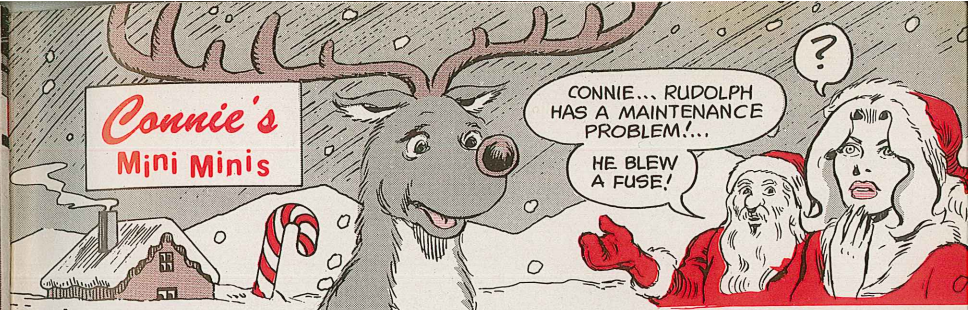
"Schedule" DA Form 2408-14 reviews by the TAMMS clerk or maintenance supervisor. Then call the PLL clerk for status on any parts still on order.

Whatever procedure for supply and maintenance mergers you choose, make it stick.



64

Connie's
Mini Minis



APO To Zip

Most units in Hawaii and Alaska now have CONUS-type zip codes instead of APO numbers. Line through the old APO number on your logbook forms and write the new address above it. That'll keep everybody straight on the address. Do not send out corrected copy DA 2408-9's. The change from APO number to zip code will not affect the computers or your current forms.

Towed Howitzer "System"

The new word: Forget what PS Magazine 298 (September) said on the inside back cover about the towed howitzer "system" on the DA Form 2406 Materiel Readiness Report. You still report the howitzer as you did in the past.

New EJR Address

Aircraft and troop support equipment are now under a single commander. So, send all your Equipment Improvement Recommendations (DA Form 2407) on that equipment to:

Commander
U.S. Army Troop Support and
Aviation Readiness Command
ATTN: DRSTS-MEM(2)
4300 Goodfellow Boulevard
St. Louis, MO 63120

Keep CJA 50-970 Change

Change 2 to CTA 50-970 Expendable Items says it supersedes Change 1. Not so! That was a goof. Change 1 is still good when used with Change 2.

Ease the Freeze Confusion

You've gotta watch when you stick that caution decal mentioned on page 59 of PS Magazine 299. It's not intended for fuel systems on diesel or multifuel vehicles. It's to be used on equipment like air compressors, fuel and water dispensing rigs, water pumps and fuel separators. Use it where water can freeze or bust something, but not on engine fuel systems.

Reading Rads? Get Decal

Put a warning decal on your radio set or other electronics gear meters that contain radioactive materials such as radium. If the meter is one listed in TB 43-0122 (Aug 74) or noted in your tech manual, put the caution type radioactive material decals on or near the meter face.

You can get a decal by listing the nomenclature and stock number of the meter and sending this info to:

Commander
US Army Electronics Command
ATTN: DRSEL-SF-H
Fort Monmouth, NJ 07703

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

KEEP



FILTERS

CLEAN

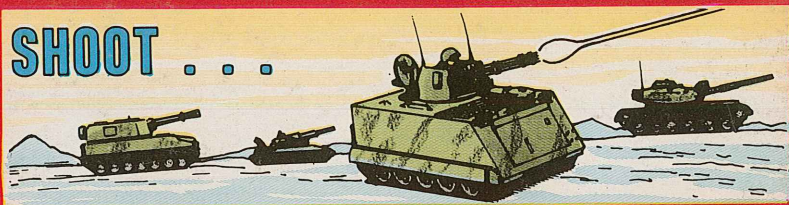


SO YOU CAN

MOVE . . .



SHOOT . . .



COMMUNICATE . . .

