



program are Training Film 55-3707. Operation of the M151 1/4-Ton Utility Truck and Training Film kept in confidence. Just write to: 55-4247, Truck, Utility, 1/4-Ton Characteristics and M151A2. Handling.

PREVENTIVE

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,

ISSUE NO. 353 APRIL 1982

GROUND MOBILITY

Tire Safety C	age :	2-3	Compressor Hookup	1
Fuel Tank Ch	eck .	4-5	Tire-Brand Mix	1
Brush Guard	Tip	6	Cylinder Leak?	1
Poppet Valve	Leak	6	Goat Tie-Rod	
			Hydraulic Coupling	(

FIREPOWER

10-12	M29A1 Mortar	20
13	M30 Mortar	20
14	Vulcan Battery	21
14	M224 Mortar	21
14	Stinger Battery	22
15	M190 Launcher	22
15	M175 Dragon Mou	nt 23
16-17	TOW/Dragon Lens	23
r 17	Pershing M790	24-25
18	Small Arms Lube	25
19	M60 MG	26-27
	.45 Cal Pistol	27
	13 14 14 14 15 15 16-17 17 18	13 M30 Mortar 14 Vulcan Battery 14 M224 Mortar 14 Stinger Battery 15 M190 Launcher 15 M175 Dragon Mou 16-17 TOW/Dragon Lens 17 Pershing M790 18 Small Arms Lube 19 M60 MG

AIR MOBILITY

CH-54 Rotor Brake	37	Flightline Safety	41
PM for APU's	38-40	QDR's	41
Safety Messages	40	T-53 Engines	42-43

COMMUNICATIONS

Switchboard Tips	44-47	Tiedown Clips	49
PP-1703 Fuse	47	Resistor Tip	50
RC-292 Antenna	47	Insulator Bowl	50
BA-5598 Battery	48	MK-1069 Mast Kit	51
		AN/VRC-12 Radio	51

TROOP SUPPORT

New Publications	28	Small Generators	58
Mil Std Engines	29-36	GP Tents	59
M43 Detector	52	ROPS Forklift	59
M11 Decon	53	Smoke Stack Rivets	59
M58A1 Decon	54	Microfiche Pubs	60
M17A1 Mask	54	DA Form 348	61
M2 Crimpers	55	New AMDF Codes	61
D8K Tractor	56-57	How to Get Pubs	62-63
		Pubs Indexes	64

PS wants your ideas and contribu- MSG Half-Mast tions, and is glad to answer your PS Magazine questions. Name and address are Lexington, KY

Headquarters, Department of the Army, 23 February 1979 in

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 \$12. per year to US and APO; \$15. to foreign address

Postmaster: Send address changes to Cdr, US Army AG Pubs Ctr. 2800 Eastern Blvd. Baltimore, MD 21220.

Headquarters, Department of the Army, Washington, DC

SAFE OPERATION OF TRUCK, UTILITY,

1/4-TON, 4 x 4, M151 SERIES

DEPARTMENT

OF THE ARMY TECHNICAL BULLETIN

- . xxrith inde.



Get inflator-gage, pneumatic tire, NSN 4910-00-441-8685. This is a gage and-hose about 10 feet long. It comes with a quick-disconnect coupler and 2 coupler adapters—regular size for most automotive tires and a larger size for some construction equipment | quick-disconnect... tires.

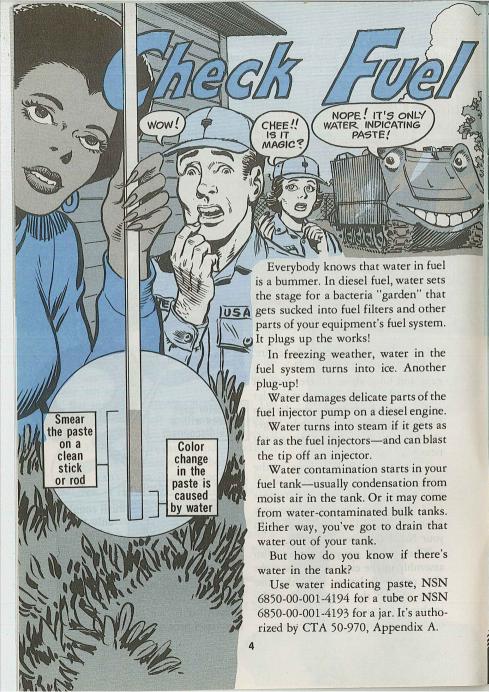
To connect the 25-ft hose to the gage, use adapter, straight, pipe-totube, NSN 4730-00-391-3771. You get 6 of these adapters in the tube-pipe fitting kit, NSN 4730-00-470-6625, in your No. 1 Common Shop Set.

When you've got your tire and rim assembly in the cage, screw the right size coupler adapter onto the tire valve. Attach the extension hose by pushing the quick-disconnect coupler onto the adapter.

Inflator-gage comes with a .+ 2 coupler adapters Push coupler onto the adapter

Use the adapter to connect the hose to the gage

Back off to the full length of the extension hose and inflate the tire.



Tems for A Corp.

Water changes the color of this paste. Fuel does not. You smear the paste on a clean stick. Insert the stick down into the fuel until you touch bottom. Pull it out and check the color of the paste. If the color has changed, you've got water in your fuel tank.

You may not need to drain the tank completely. Water settles to the bottom, so catch a sample in a clean glass jar as you drain. Check it. Water will show up as a clear or dirty gray layer under the fuel. When you get no more water, quit draining.

Now that you've got the water out, keep it out. Keep your fuel up to the full mark on the tank. This'll cut down on the air space—and the moist air that puts water in your fuel.

Multifuel Engine Trucks...

Get the Full Fuel Story!

Forget that Authorized Fuel data plate on the instrument panel of your 2½-ton or 5-ton multifuel engine truck. And forget any other old info you hear about different fuels for multifuels.



...and other old poop!!

The new word is in TM 9-2320-209-10-1, Pages 2-24 & 2-25, and in TM 9-2320-211-10-1, Pages 2-25 & 2-26—Table 2-6, Permissible Fuels.

There're some big changes! MOGAS (combat gasoline) is no longer authorized as an "alternate fuel". Low-lead and no-lead gasolines are now among "alternate fuels".

If there's some reason you've got to go directly to a commercial supplier, you may find diesel fuel offered especially for diesel engine automobiles. It's OK for your multifuel (or other diesel engine) truck. There's no difference between truck diesel fuel and automobile diesel fuel.



Do you need replacement wearstrips for the brush guard on your M809-series 5-ton truck?

Forget about the wearstrip in TM 9-2320-260-20P, Fig 18-1, Item 23. It's not stocked.



If you need a wearstrip for the older brush guard, NSN 2510-00-134-4639,

try your can point. Otherwise, make it from a piece of scrap heater hose about 4 inches long. Slit the hose down one side and put the hose over the brush guard. Use the nut and bolt from the old wearstrip to hold the new one in place.

If you have the new brush guard, NSN 2540-00-764-7979, there's no NSN assigned to its wearstrip, P/N 11665804. You can make one, tho, from the sidewall of an old tire. Cut a 1½-in by 5-in piece from the sidewall. Fasten it in place with the riveter from your No. 1 Common Tool Set.

TM-211/TM-260-Series...

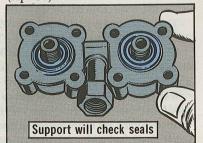
Poppet Valve Air Leak

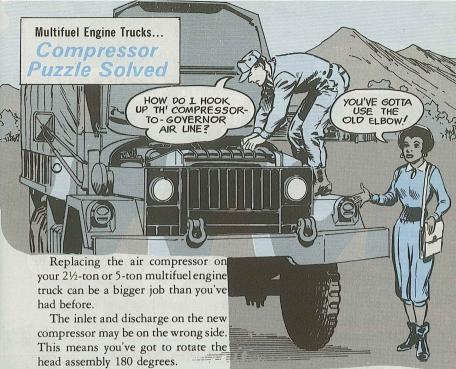
Got an air leak in your 5-ton truck that you can't track down? Could be there's a pair of seals installed backward in the twin poppet valve on your transmission.

This happened when some of the valves, NSN 2530-00-832-7013, were manufactured.

Your support can fix your valve by installing new seals the right way. They can check out the poppet valves for leaks using the procedure on Pages

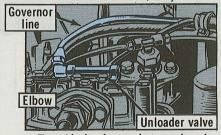
Got an air leak in your 5-ton truck 2-65 thru 2-69 of TB 43-0001-39-1 nat you can't track down? Could be (Apr 80).

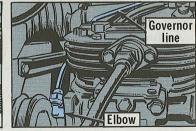




Instructions should be packed with the compressor. If they're not, you can get the same dope in TB 43-0001-39-4 (Jan 81), Para 3-8. If you don't have that TB, drop a line to PS and you'll get the info.

Those instructions do not tell you where to hook up the compressor-togovernor air line. Your old compressor may have the line going to a topmounted unloader valve, but your new compressor may call for side mounting.





For side hookup, take out the plug and use the elbow from the old compressor. You may need a longer governor line. This can be made up from ¼-in OD copper tubing.



No, you don't put 2 different brand tires on the same axle of your M880-series truck unless they are the same circumference. You'll have to measure to make sure.

Yes, you can put 2 tires of the same brand on the front axle and 2 tires of another brand on the rear axle.

The same brand tires on an axle would insure they're the same size and the same tread design. Tires of 2 brands may be labeled the same size, but not measure out the same circumference at all.



A crystal ball can't tell you if you've got a cylinder head leak on your M151A2 or other ¼-ton vehicle. Neither will bubbles or any other gimmicks.

A lot of time and parts are being wasted replacing head gaskets that don't need replacing.

There's only one way to be sure you've really got a leak—by checking engine compression and by pressure testing the cooling system.

Cylinder compression testing is covered by TM 9-2320-218-20, Para 2-28. Instructions for pressure testing the cooling system come with test kit, NSN 4910-01-018-4373. This's the kit you find as Item 2, Fig 2-1, TM 750-254, Cooling Systems: Tactical Vehicles.

TM-242-Series...

Goat Tie-Rod Ends

Fig 112 in TM 9-2320-242-20P lists 2 different tie-rod ends but doesn't say which is left-hand and which is right-hand. You gotta have one of each—2 lefts or 2 rights will make a wrong!

If you need a rod end with left-hand threads, you need Item 2 in Fig 112. It comes in parts kit, NSN 2530-00-088-4527. This rod end goes on the left side of the tractor.

If you need the right-hand-threaded rod end, that's Item 5. It comes in parts kit, NSN 2530-00-086-1945. This one's for the right side of your Goat.



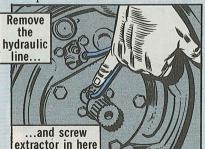
Hydraulic Coupling Seats

Dear Half-Mast,

Brake fluid leaks around the wheel spindles on our Gama Goats. So I've been drilling out the hydraulic coupling seats in the spindles to replace them. Removing this seat is not covered in TM 9-2320-242-20. Is there a better way?

Dear Sergeant S. K.,

If your drill slips, you can damage the spindle.



Instead, use the smallest screw extractor, NSN 5120-00-240-5223, from the No. 1 Common Tool Set. Lightly tap the extractor in the seat. Turn out the seat.

SGT S. K.

When you remove the spindle to replace a bushing, seal or ring wiper, you don't need to change the seat unless it's leaking. If you do remove the seat, tho, never reuse it. Get a new one.

9



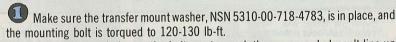
M113A1 FOV...

Get It

When you install the powerpack on your M113A1-type vehicles, there are several checks you must make so the job is done right the first time.

If you goof, you'll either have to pull it and install it again, or something will get broken or shorted out.

HERE'S WHAT TO CHECK...



If the washer is missing or the bolt overtorqued, the powerpack doesn't line up right. That leads to failure of the transmission, transfer case and driveshaft.





The quickest way to check is to eyeball the engine thermostat. If it's rubbing against the air cleaner, you've got trouble. Start over and do the job right.

Straightous

GOOD SHOW, MEN...
YOU, CAN CAUSE MORE NEW DAMAGE AT THIS STAGE
THAN WE'VE JUST
REPAIRED!

REPAIRED!

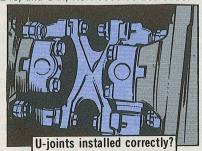
DO NOT THE THE STAGE THAN T

Make sure the control differential mounting bolts are tight and the mounting bushings are in place and in good condition.

If the bolts are loose or the bushings are missing or worn, the differential can flex and shift under power.

That causes transmission, transfer case and driveshaft failure.

Make sure the U-joints are installed correctly, with the right hardware. Use No. 8 hardened screws only. You need 2 lengths, 1¾-in, NSN 5305-00-269-3241, and 1-in, NSN 5305-00-269-3236.



Use only hardened washers, NSN 5310-00-000-0079, just one per screw. Torque the screws to 35-40 lb-ft.

Loose screws, wrong screws and wrong torque can cause broken U-joints, broken transfer and differential cases, worn-out cross shaft brackets and possible loss of steering and braking.

10

Make sure all clamps and brackets for wiring harnesses and pipes and tubing are in place and in



If the clamp and bracket for the radiator coolant pipe are missing or broken, the pipe can rub against the hull and wear a hole.



If the clamp for the transmission oil hose is broken or missing, the hose can be worn in half by the transmission output shaft.

If the wiring harnesses aren't secured and routed correctly, one can rub against the accelerator linkage and short out. Another can fall against the exhaust manifold and melt, causing a short.

ALL OF THESE THINGS CAN BRING YOUR VEHICLE TO A STANDSTILL, MAKE SURE POWER PLANT INSTALLATION IS DONE RIGHT THE FIRST TIME!





Next time you lube the track idler arm on your M113-series vehicle, check the location of the grease fitting.

If it's on the front of the arm it's hard to get to with a grease gun.

Switch that fitting with the relief valve on the rear of the arm. They have the same size thread.

Switching them will make your lube job much easier.



M107's, M110's and M578's) can be a whole lot easier if you don't pump the

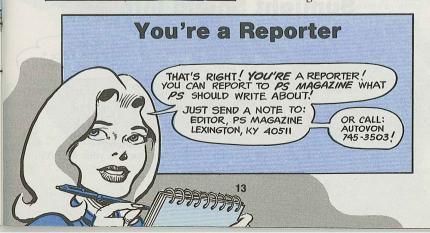
accelerator. Don't pump the accelerator!

Your TM's are not too clear on this point, so read on.

The engine's injector system is in its best working set-up for starting when the hand throttle and foot accelerator are left in the "idle" position.

If the engine won't start immediately, pull the engine shutdown or fuel shutoff and operate the starter for several seconds to dry out the excess fuel in the cylinders. Operate the starter less than 15 seconds at a time and allow plenty of time for the starter to cool between uses.

Then you can release the engine shutdown or fuel shutoff and try to start the engine.





High failure rate and poor voltage regulation have doomed the carbon pile regulator, NSN 2920-00-335-4264, used on most tanks and some other tracked vehicles.

It is no longer in supply and has been replaced by the 300-amp solid state regulator, NSN 2920-01-054-0479. The new regulator has reverse voltage protection, current protection and better voltage protection.

Para 2-5 in TB 43-0001-39-5 (Apr 81) has the word on how to make the switch.

Track Tension Change

HEY -- HAVE YOU HEARD THE LATEST. OL' BUDDY ?

ENLIGHTEN ME HUH?

You M60-series tankers running T-97 type track can now use the same 3/8 - 9/16-in tension measurement used with T-142 track.

Sunlight Shield Info



Need the sunlight shield for the M32 and M36 periscopes on your M48A5 and M60A1 tank? The NSN is 1240-00-406-1581.

For Gas-Particulate Filter...

GO TO IT,

YOU MECHANICS

CAN HEAD IT

OFF LIKE

M3 Heater Rust Beater

HOLD ON, PAL .. RUSTY!

THANKS!

Water seeping into the controller housing through the holes where the electrical wires enter can ruin your M3

Take off the outer plastic plate.

Put some sealant adhesive—NSN 8040-00-843-0802 for a 3-oz tube-over the 3 holes where the wires go in.

Then put the outer plastic plate



Make sure you hold the inner plastic plate in place during the whole job so you don't mess up the gasket's seating.

'Course, if the heater's already rusted out, turn it in for replacement.

Spare Lamps for Tracks

Chances are there's something missing on your combat vehiclespare lamps and fuses! Inspections prove it out. Check your TM's for what you should have. Then, get them. Save a gig, save a mission. '

GIMME A SPARE LAMP AND I'LL HAVE THIS SCOPE BACK IN ACTION, PRONTO!

SPARE WHAT

Vew Filter

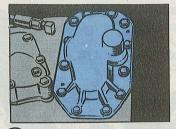
Stop servicing the transmission oil filters the way it says on Pages 2-289 to 2-290 in your TM 9-2350-256-20 because this method could give you an oil leak.

Naturally, you don't want oil leaks because they set the vehicle up for either a damaged transmission or a fire.

Use this new method, which will be published in C4 to your -20TM.

HERE'S NEWS FOR You MECHANICS WHO HANDLE THE M88AI MEDIUM RECOVERY YEHICLES.

Remove main oil filter head (cover). Never pry head off with screwdriver or other tool that could damage the mating surfaces. Using 2 cover screws as jackscrews, raise the cover off the assembly.



Remove gasket and clean off all surfaces of old gasket material.



Take out and check oil filter elements for damage.

NSN 2520-00-933-4433



Clean filter cavity and 12 bolt holes in housing...get out oil and gunk.

Replace oil filter elements if necessary. If they're serviceable, clean and reinstall them.

Install new gasket, NSN 5330-00-040-0915.



Replace cover. Make sure every bolt has a lockwasher. Torque 12 bolts to 26-32 lb-ft.



After you've done that, go back and recheck the torque. If any bolts move during recheck, wait a few minutes and then repeat the torque process.

After you've serviced the transmission oil filters, run the engine. Next do a complete check of both the transmission and engine to make sure there're no oil leaks.

Tank Fender Repair...

The Hole's Too Big



Wrong-sized washers are causing problems with fender fixes on tanks and combat engineer vehicles.

The washers, NSN 5310-00-809-5997 and NSN 5310-00-809-4061, have too large a hole, which lets the screw pull through.

The fix? Get a supply of washers, NSN 5310-00-080-6004, and stack one on top of the existing washer. You'll need a longer screw, NSN 5305-00-269-3215, to use the extra washer.

This will save replacing fenders that get bashed by the track when the screws don't hold.



M88A1 VTR...

Ground Hop Starter Cable

NOW, SPECIALIST... FOR THE GRAND PRIZE... WHAT CAN YOU DO WITH 3 LENGTHS OF 14-GAGE WIRE, SOLDER AND SOLDERING GUN?

THAT'S EASY... YOU CAN MODIFY AN MGOA! GROUND HOP STARTER CABLE SO ITLL WORK ON AN MBBA!, THAT'S WHAT!



All you need to do is cut three 18-ft lengths of 14-gage wire, NSN 6145-00-772-0853.

Unscrew the back cover on both of the cannon plugs and push out the pins and sockets in the receptacles lettered A, C and D.



Solder pin A to one end of a length of wire and socket A to the other end. Repeat the procedure for pins C and D and sockets C and D.

Be sure the correct pin and socket are installed in the lettered receptacles by doublechecking with a multimeter.

Reinstall the cannon plug back covers and tape the 3 new wires to the harness.

That'll do it, and you'll have one harness that'll work on both vehicles.

Fuel Pumps...

Service Oversight

There's an important item used on just about every piece of fuel-operated equipment that's often overlooked when it comes to service.

It's the electric fuel transfer pump, NSN 2910-00-930-9367.



The reason it's overlooked is there's not much mention of service for the pump in the TM's.

So, does that mean toss it out when it fails a troubleshooting test?

Not necessarily. That pump does more than just move fuel. It also contains the first filter for fuel and the filter can get clogged and dirty just like any other.



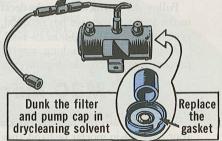
WHEN WAS THIS FUEL TRANSFER PUMP FILTER LAST CLEANED?

"And when it gets clogged, dirty fuel goes right on thru the line; causing a loss of power, maybe engine stoppage.

WELL

UH ...

Dunk the filter and the pump cap in drycleaning solvent (P-D-680). Keep that stuff off your skin and have good ventilation.



If the filter element's damaged, replace it. NSN 2910-00-679-9721 will get any 1 of 4 acceptable elements. Replace the gasket, NSN 5330-00-741-3774, too.

Just because it's not mentioned in the TM's is no reason to forget fuel pump maintenance. Take care of it. You can't operate without it.

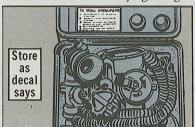
Sight Plight and Leg Lube

HERE'S A
REPLACEMENT
FOR YOUR M29AI,
GARRISON!



'S JUST AS EFFECTIVE,
H' WAY YOU'VE BEEN
DOIN' PM ON YOUR
SIGHT UNIT!

sight unit is about as good as a wet rag when it comes to destroying a target.



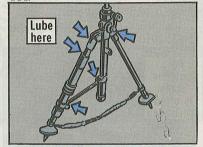
You can damage the M53A1 sight unit, elevation scale, eyeshield and other parts if you don't carefully position the unit in the M166 storage case.

Follow the instructions on the decal to the letter. If the case has no decal, get one with NSN 7690-00-239-3788.

A little lube goes a long way to prevent the adjustable leg on the thing.

An M29A1 mortar with a damaged M23A1 bipod from binding. If you forget it, the adjustment becomes a headache.

> Follow the instructions on schedules and kinds of lube in your TM.



Be a little generous with the lube when you do the shoulder bolts and the portion of the leg that slides into the lower bipod assembly.

A little lube on the hinge pins on which the legs pivot wouldn't hurt a

M30 Mortar Shocks

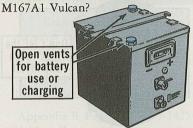
If you can turn the tube shocks on your M30 4.2-in mortar by hand, they







cadmium batteries on your M163A1 or



Those 2 vents on the tops of the batteries must stay open during system use or during charging. If you don't open them, the batteries may overheat and be damaged.

On the other hand, close the vents when there's a chance that water may get in the battery cells.

M224 Mortar Sight

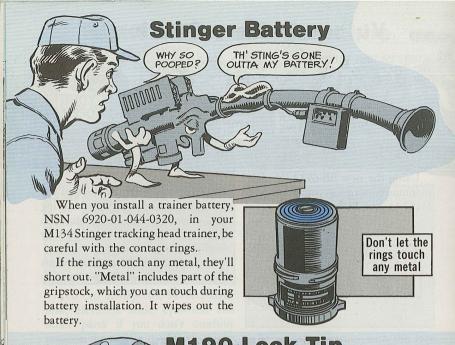


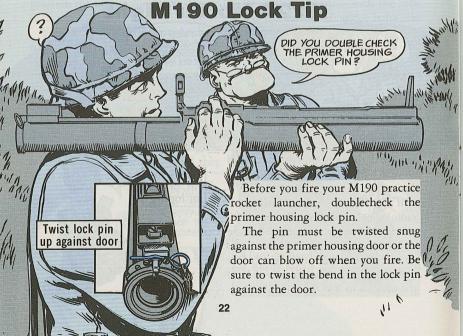
60-MM lightweight mortar before and during use.

If the lens is cracked, notify your radiological protection officer or NBC officer. Never try to repair it because the crack may allow a radiation leak.

The idea is, check the sight before and after firing. Also, know and heed the caution in TM 9-1010-223-10.







M175 Dragon Mount

KEEP THESE THOUGHTS IN MIND... "YOU'YE GOT TO KEEP THE BOX OR HAVE ACCESS TO IT... ... AND THE BOX PREVENTS DAMAGE TO MOUNT PARTS!

There are 2 things you've gotta do with your M175 Dragon guided missile launcher mount to prevent damage to critical mount parts.

- 1. Keep the mount and accessories in the shipping and storage container when they're not installed in an APC.
- 2. Send the mount to support in the same container.

Appendix B, Page B-9, TM 9-1425-484-10, tells you what components you should send.

TOW/Dragon Lens Cleaning

WHAT SAY
WE GIVE OUR
WEAPONS'
LENSES A
GOOD
CLEANING?

SPERICE

WHAT SAY
WE GIVE
GOOD
IDEA,

SOOD
CLEANING?

SPERICE

SPERICE

WHAT SAY
WE GIVE
OH, NO!

SPERICE

OH, NO!

OH, NO!

SPERICE

OH, NO!

OH,

WELL -- IT'S BEEN NICE SEEIN' YOU -- GULP!

Lens paper, NSN 6640-00-597-6745, is the key in cleaning TOW and Dragon system trackers, optical sights, night sights and day sights.

Never substitute rags, toilet paper, eyeglass tissues and such for the lens paper. If you do, you'll scratch the coating on the lenses and ruin them.

Fact is, you should stick with all the lens-cleaning materials in your TM's. Substitutes won't do the job right and they'll damage the lenses.

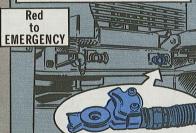
Cleaning materials you need for TOW sights are in App C of TM 9-1425-472-12. Dragon gear is in App B of TM 9-1425-484-10.

If you don't want your M757 tractor to lose its load when hauling the Pershing M790 erector/launcher, do this:

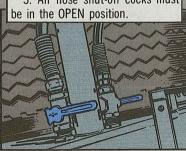
1. Before you start out, be sure the tractor cab air pressure gage reads at least 60 PSI. Underway, normal operating range for the air brake system is 105 to 120 PSI.



2. Emergency and service brake hoses between the M757 and M790 must be connected right.



3. Air hose shut-off cocks must



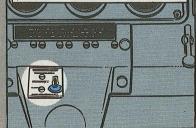


65 PSI,

WHAT'S

THE AIR PRESSURE GAGE READING

4. The tractor protection valve control lever must be in NORMAL position.





5. When moving on wet or hazardous roads, you can use the hand air brake control to stop if necessary.



6. Use the "all axle" position in rough terrain, low-speed use only. It's not for highway or high-speed driving.



7. Eyeball the air pressure gage while driving. If it drops below 60 PSI, stop immediately and get maintenance help. The air pressure warning buzzer should sound when pressure drops below 60 PSI. If it doesn't, your maintenance can check it out with Table 2-5 of TM 9-2320-230-20. Also, you should check it during start up procedure to make sure it buzzes.

Solid Film Lube Redo

Solid film lubricant, NSN 9150-00-168-2000, is good stuff for a temporary coating on exposed small arms metal, but it won't last indefinitely!

Armorers need to check weapons returned from the field or training to be sure the temporary coating's not chipped or scraped off.



Some people have their pins under them, over them, all around them.

The idea for M60 machine gun operators and armorers is to get the gun's pins back in it!



When you remove the bolt plug pin

The pin's a big loser, 2 ways. When it's out of the bolt, it disappears fast. If you forget to install it, the bolt will fail.

Keep it in sight. Be sure it's in place when you reassemble the bolt.

Stoning Chores

Reminders to armorers: Burrs on the operating rod may need stoning after the gun is fired. Check it out. Burrs will cause rough bolt action when the gun's next fired.



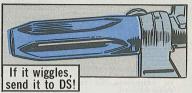
For the latest word on checking out the operating rod, bolt and barrel assemblies, a world-wide Army Armament Command letter is what you need.

If you don't have a copy, try your Command G-4, nearest Army Logistics Assistance Office or MAIT.

Ask for ARRCOM Command Letter DRSAR-MA, 26 Mar 80, SUBJECT: Machine Gun, 7.62MM, 2/1/6

Suppressor

PMCS reminder: If you can wiggle the flash suppressor (even a little), you're courting a gig. Best preventive maintenance is to have your Direct Support check and tighten the suppressor.



APC On the Move

A so-called easy way to stack an M60 during M113A1 transport is to hook the bipod legs over the troop hatch cable and then hook the trigger housing on the hatch.

Neat, but the bipod legs bend. The idea is, use the built-in gun mount on the APC.



11A1 Cleaning

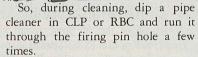


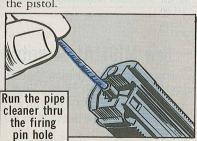
YEAH -- MAKES OUR 45 - CAL PM CHORES EASIER

Carbon and brass flakes build up around the firing pin hole of your M1911A1 .45-cal pistol during firing.

The stuff can screw up operation of

the pistol.







Same thing goes for the extractor, which builds up carbon on the flat side. Give it the CLP/RBC treatment.

(V) radar TM 11-5840-360-14-2 Nov AN/SPS-64

TM 11-5855-247-24P-1 Oct AN/TAS-4

(V) 5 radar

night vision sight

interest to organizational maintenance personnel. This list is compiled from recent AG Distribution Centers Bulletins. For complete details see DA Pam 310-4 and DA Pam (C) 310-9.

TECHNICAL MANUALS C 1. TM 5-2805-203-14 Dec Engine, GED,

TM 5-4120-342-24P Jul Air conditioner. 9 000-BTU/HB

TM 5-4120-356-24P Sep Air conditioner 18 000-BTU/HB

TM 5-4310-371-24P Sep Compressor recip elect, 25-CFM, 175-PSI

TM 9-1430-532-24P Nov I-HAWK

TM 9-4935-1546-24P Aug I-HAWK
TM 9-6140-200-14 Sep Lead-acid storage batteries

C 1. TM 10-3930-243-20P Nov Lift, fork, DED 10 000-lb BT TM 10-3930-645-14&P Oct Truck, fork

lift GED 6,000-lb C 2, TM 11-1510-209-20-5 Jan RU-21H (GR-V) aircraft

C 6. TM 11-1520-237-23-3 Oct Avionics TM 11-5805-729-12 Nov AN/GCC-21A

call director set TM 11-5826-251-24P Aug AN/PSN-6 (V)

TM 9-1375-213-12-3&P Nov Firing device

TM 11-5855-261-23 Oct AN/PAQ-4 infrared aiming light TM 11-5895-222-14 Jun AN/MGC-19 TM 11-5895-406-14-1 Dec OL-9/FYA-10 (\/\) processor unit

TM 11-5895-431-20P Nov AN/TSQ-43. -43A tactical imagery interpretation facility

C 3. TM 11-6130-236-12 Oct PP-1451/C hattery charge TM 11-6625-2414-24P Nov MK-1191/AR

test facilities kit C 1, TM 11-7440-251-10 Oct AN/GSQ-122 artillery battery data display
C 3. TM 55-1520-227-23-4 Sep CH-47B

and CH-47C C 18. TM 55-1520-228-23-1 Nov OH-58A and OH-58C

C 8. TM 55-1520-228-PM Nov OH-58A/C C 2, TM 55-1730-202-14 Nov Jack, Type

MISCELLANEOUS splicing, w/chest SC 5180-95-CL-B02 May Tool kit, elec-DA Form 2062 Jan Hand receipt/annex (Replaces DA Form 2062 dated Jan 58) DA Form 2064 Jan Document register for supply actions (Replaces DA Form 2064

DA Form 3318 Jan Record of demands-

DA Form 3328-1 Jan Serial/registration number record

DA Form 4949 Jan Administrative adjustment report (AAR) PAM 350-155-1 Sep Motor transport

PAM 350-155-3 Sep Aviation transport

PAM 710-2-3 Oct Army standardized combat PLL and combat ASL program

PAM 710-2-4 Oct Army standardized combat PLL and combat ASL program

SC 2090-97-CL-E06 Jul Repair kit, pneumatic ponton floats, bridge erection rollers assault/recon boats

SC 2090-97-CL-E06-HR Jul Repair kit, pneumatic ponton floats, bridge erection rollere accoult/recon hoats SC 4940-95-CL-B03 May Shop equip-

ment, organizational repair, light, truck

SC 5180-90-CL-N07 Jun Tool kit, canvas

SC 5180-90-CL-N17-HR Oct Tool kit, rigging, wire rope cutting, clamping and

tronic maintenance: Vulcan air defense. organizational support and contact team SC 7360-90-CL-N03 Jun Accessory outfit, gasoline field range

AUDIO-VISUAL STUFF

Available at battalion or post Learning Center

TV Tape

TVT 55-117 Ground handling - UH-60A Black Hawk TEC Lessons

041-061-6175-F howitzer M101A1 043-441-6007-F PM, troubleshooting OMTS (AN/MWM-

043-441-7913-F AN/DSM-79

600-011-6609-F Serviceability of swashplate, collective

sleeve assembly tail rotor 621-113-6089-A PM on central AN/TTC-7, AN/GTA-14

612-113-6454-A Switchboard

SB-3082 (V) 1/GT 621-113-6457-A PM switchboard SB-3082 (V)

621-113-6459-A Disassemble switchboard SB-3082 (V)

953-071-0268-F AN/PVS-4,

Stick with Schedule

Hold one on that bit about aircraft oil samples on Page 43 of PS 337! Schedule all your samples based on the intervals in TB 43-0106. The allowable range lets you schedule and take the samples during other scheduled inspections:

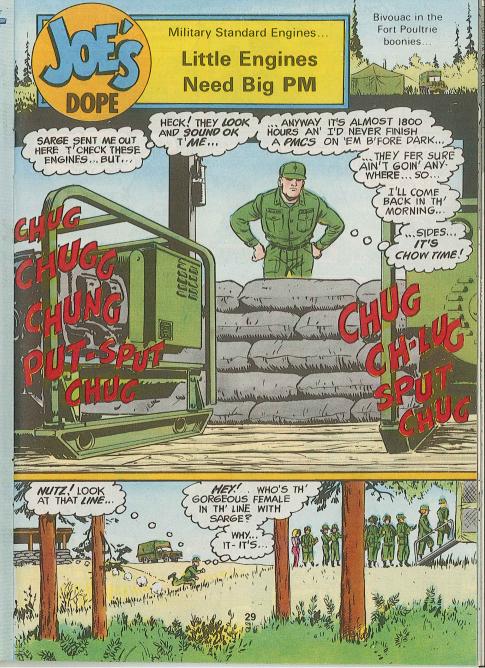
Sampling Hour Interval	Allowable Hour Range
5	4-6
10	8-12
121/2	10-15
25	22-28

Door Check

Some pilot and copilot jettisonable doors continue to depart the CH-47 in flight. For the correct installation poop, eyeball TB 55-1520-241-20-17.

New M1911A1 Security

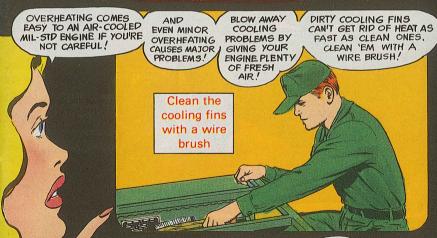
Remove the firing pin, spring and stop of your M1911A1 pistol to make it unuseable. Forget the link pin. Table 2-1 in AR 190-11 (Oct 81) will be changed (Ch 2) to require removal of the firing pin, spring and stop.











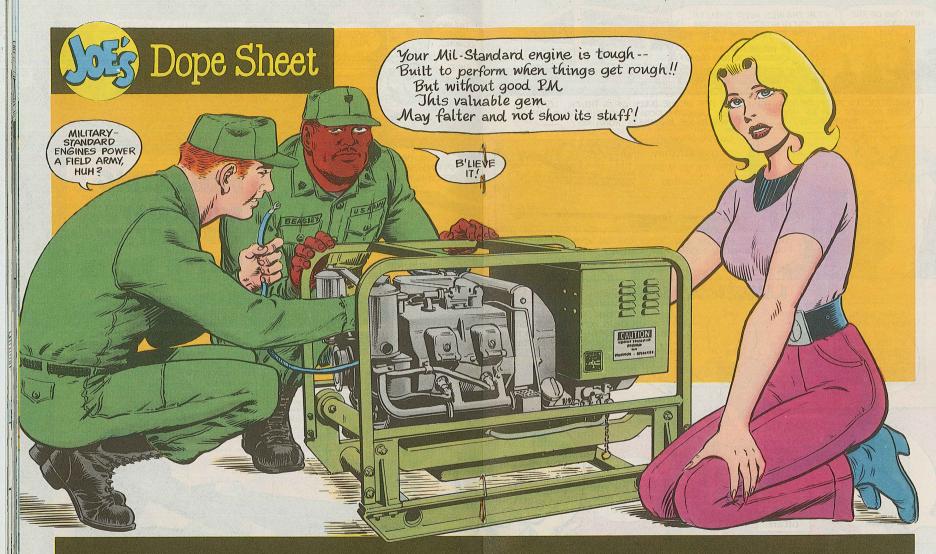


BEFORE WE GO, HERE'S A POSTER FOR EACH OF YOU ON THE SUBJECT



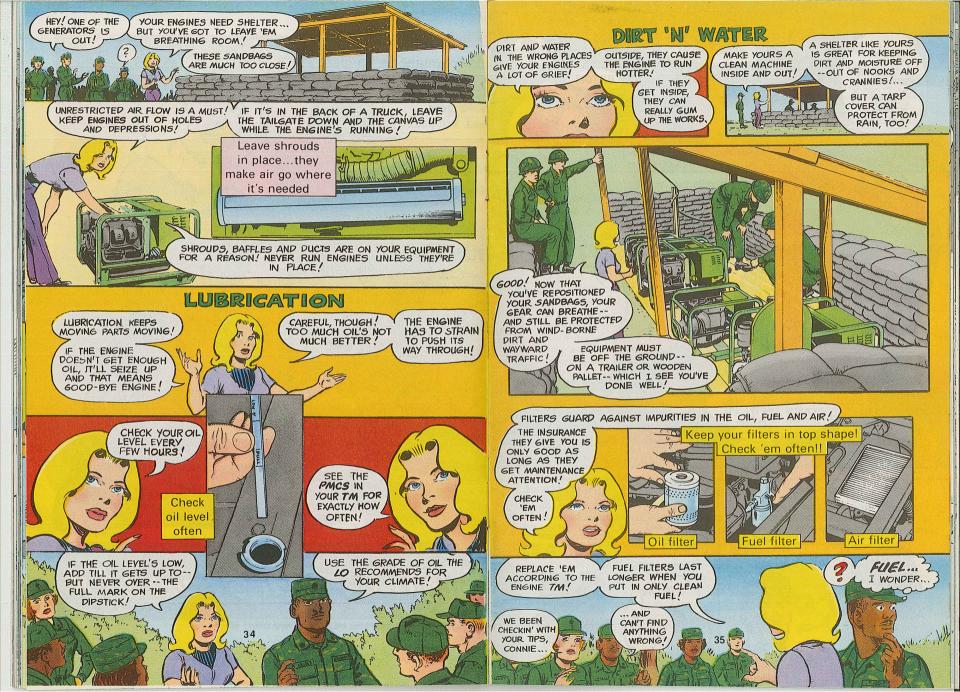
600D

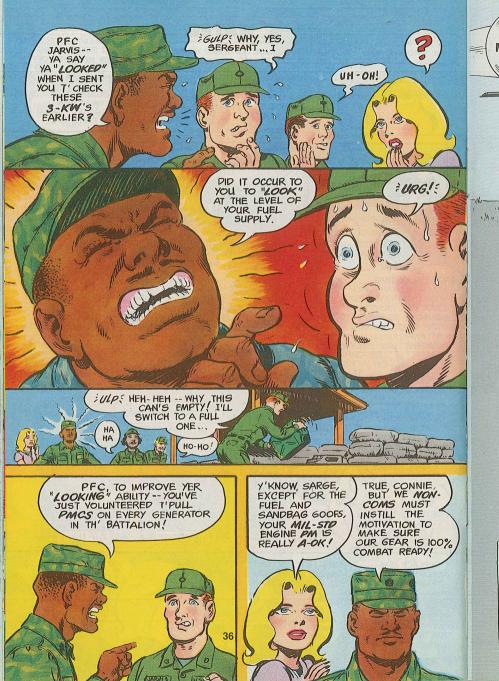
THINKING,

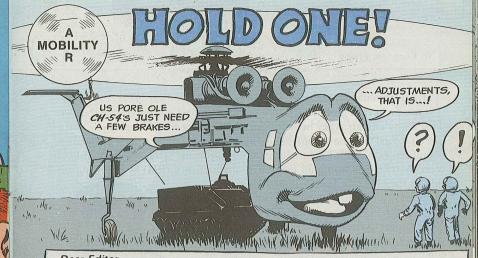


WE HAVE THE WORLD'S BEST EQUIPMENT ... Take care of it

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







Dear Editor.

Brake lining

Disc

Adjusting

Para 6-107 in TM 55-1520-217-23-1 has the word for adjustment of the rotor brake on the CH-54.

You have to adjust the pin nuts more than once, tho, to get the 0.030-0.045-in clearance between the brake lining and the brake disc.

Getting the clearance is easy if you use 2 suitable pieces of 0.040-in sheet metal like so:

between the brake lining and disc, 180 degrees apart. Tighten the adjusting pin nuts to a

Place the 2 pieces of sheet metal

snua fit.

 Actuate the rotor brake and torque the adjusting pin nuts to 20 lb-ft, as pressure is applied.

• Release the rotor brake and remove the sheet metal pieces.

Safety the adjusting pin nuts.

 Cycle the rotor brake thru 3 or 4 times.

 Using a feeler gage, measure the clearance between each brake lining and brake disc. If you don't have the required clearance, replace the rotor brake housing.

> SSG Vincent W. Smith AASF, Hunter Army Airfield Georgia Army National Guard

(Ed Note-Righto! The head bangar—TSARCOM—says you can use this alternate adjustment. With it, you'll get even contact of the brake lining and brake disc, decreasing wear on the parts.)



To Keep 'em Flying...

Hydraulic mules, tugs, air compressors, auxiliary power units....

It takes a heap of ground support equipment to keep your aircraft in the blue. That's why aircraft types need to keep the equipment serviceable.

You'll find all the maintenance info you need in the tech manual or manufacturer's manual for each piece of equipment. If the printed word has been shortstopped, tho, pull preventive maintenance (PM) by following the info in Para 8-22 of TM 55-1500-204-25/1.

Suppose, for example, you're in an outfit with OV-1's and RU-21's. You've just taken delivery of a commercial Hobart auxiliary power unit (APU).

THIS BABY WILL DELIVER THE JUICE WHEN YOU FOLLOW THESE PM POINTERS ..



Eyeball the unit inside and out to make sure it's clean and dry. If the equipment has not been in operation for some time, oil seals may dry up. If you get some seepage, it's OK. Change them if they begin to leak.

Engine Accessories Check

tension.

Focus on the battery for cracks. The



Check the generator and fan drive terminals and posts should be tight belts for cracks, breaks and proper and not corroded. The electrolyte level should be above the plates.

Check the carburetor for leakage.



The carburetor controls and linkage should not have excessive play.

Be sure you look at the ignition wires for weather cracks and burn spots.



Make sure there are no cracks in the distributor cap.



Wires to the coil and condenser have to be tight.

This APU has a safety feature that automatically shuts the engine off if the oil supply is dangerously low. Be sure oil and fuel levels are up to snuff.

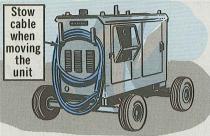


Check the tires for cracks and dry rot. Make sure they're inflated right. Course, the tires should have tread on them.

The generator part of this APU is under warranty...no repairs allowed. Just eyeball the generator for clean lines, tight connections and broken parts.

Operational Check

Always move your unit with the protective cover, secured with a plastic power cable securely stowed. The



cable drags on the ground.

When you crank 'er up, you will have one hand on the starter button for fuel or oil leaks. and the other one on the choke. If you're in a hurry and pull away fast, you could make contact with the bare positive terminal. When you're wearing a wrist watch for the mission at hand, you'll get more than ring around the collar—you'll get "burn around the wrist."

That's why some outfits have covered the positive terminal with a



tie. It's actually a Mohawk startergenerator terminal cover, Item 71, Fig 212 in TM 55-1510-204-23P. NSN rubber insulation takes a beating if the 6115-00-897-8809 will get you the cover.

Listen for unusual noises, and look



Safety-of-Flight Messages

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

AH-1-81-37 SOF msg, Concerning immediate grounding of all UH-1/AH-1 aircraft with specific T53-L-13BA/703 engine fuel control units DRSTS-MEA 141930Z Dec 81

UH-1-81-09 SOF Maint Notice, Internal T53-L-13B/BA engine wash procedures DRSTS-MEA 231930Z Jul 81 UH-1-81-10 SOF Maint Notice, Change

in repair procedures for UH-1 landing gear skid shoes DRSTS-MEA 031430Z Sep 81 UH-1-81-11 SOF Maint mandatory msg,

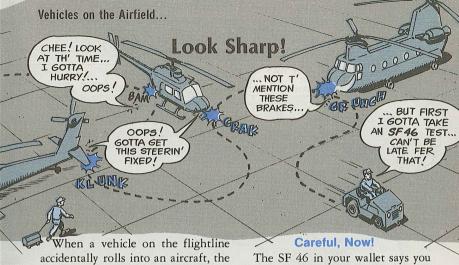
Re-torquing of main pressure regulator valve hold down screws DRSTS-MEA 041800Z Nov 81

UH-1-81-12 SOF Maint mandatory msg, T53 engine cleaning procedures DRSTS-MEA 241830Z Nov 81 UH-1-81-13 SOF msg, One time inspec-

tion of lever assembly, pylon DRSTS-MEA 102115Z Dec 81

UH-1-81-14 SOF msg, Concerning grounding of all UH-1-/AH-1 aircraft with specific T53-L-13BA/703 engine fuel controls installed DRSTS-MEA 141930Z

> Cat 1 EIR Phone: AUTOVON 693-2066 (24-hr



"ca-runch" sometimes echoes all the way to Washington.

fragile aircraft, and that's bad news for your unit's mission capability.

Equipment OK?

A vehicle with faulty brakes, steering, lights, windshield wipers, horns, warning signals, side- or rear-view mirrors is a hazard on the airfield—or anywhere else.

So, before you move out, always pull the operator checks and services spelled out in the manual on your vehicle.

have the ability to drive a fuel truck, commercial vehicle or tug. But when A lot of repairs are due on that you leave the roadway and enter the airfield, you're in a different environ-

Moving your vehicle between aircraft parked at a dozen different angles calls for all your driving skills.

Stay alert and drive carefully.

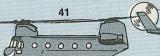




QDR's Pay Off

Got a gripe about crystallized activators in fiberglass repair kits and bad plexiglass polishing kits? You can stop now. Your QDR's have done the job. These kits are being assigned shorter shelf lives. The fiberglass repair kit, NSN 1560-00-856-9222, won't be kept on depot shelves for more than 1 year. The polishing kit, NSN 1560-00-624-0175, will have a new shelf life of 3 years.









When you get your next T-53 engine back from overhaul, it may come in a bag. The engines are being returned to the using units in reusable environmental bags, NSN 8145-01-068-2437.

The protective bag is used with the old clam-shell type engine container. The clam-shell, tho, no longer is special closure tool. The zip-lock hermetically sealed and it now takes closure provides an air-tight seal. only 10 bolts to secure its lid. Small gouges or other openings in the clampouch, along with instructions for the shell container are no longer a use of the bag.

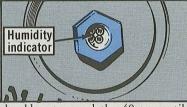


The bag is zipped shut with a

The closure tool is stored in its own

There's a special pouch also for the bag's desiccant, NSN 6850-00-264-6562, the unit's dehydrator agent.

The bag has its own humidity indicator. When the clam-shell is closed, the indicator is visible through an inspection port. The humidity level



should not exceed the 40 percentile mark.

All this is to protect the engine. But it will not get the job done if the bag is not sealed right or is torn or punctured.

Rips and punctures can be repaired, tho. Use the repair kit that comes with the bag. You'll find it and repair instructions in the pouch with the closure tool. Tape, NSN 7510-00-266-5016, can also be used to field fix the bag. Tape the hole from both sides.

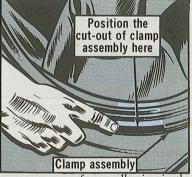
The clam-shell cover is bolted on with 2 bolts at each corner of the container and 1 bolt on each side. Make sure the lid is not pinching the bag.

So, for first class travel, put your T-53 engine in a bag.

Index Mark Helps



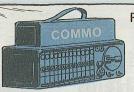
When you Huey and Cobra mechs install the particle separator on your T-53 engine, position the V-band clamp assembly with the cut-out at the 6 o'clock position. That location will



prevent water from collecting in the clamp and corroding the magnesium housing.

While you're at it, index the clamp assembly to the engine for easier installation next time.

Using yellow paint on the 3.25-in clamp cut-out-extended onto the engine housing—will do the trick.



PM's Up to You...

ou're Chair



When you sit down at your SB-22 switchboard, you're in charge.

Your unit's comin's 'n goin's come 'n go through you. A breakdown, slipup or bottleneck and you're still the one in trouble.

Luckily, to stay in charge just takes a little PM know-how.

Pamper Plugs

Know how to take care of your solvents, abrasives (steel wool for a clean-looking plug can be.



instance) or metal polish. Use a treated cotton polishing cloth, NSN 7920-00-985-6849.

Think plugs need cleaning? Never plugs. Keep 'em clean. Never use wait. You'll be surprised just how dirty

> Use the rubber sleeve when plugging and unplugging. Pulling on the cord can damage inside wiring.

Another plug killer is letting it fly back into its jack when you're done. Plugs bang off the case or a cateye, and can damage both.

PM the rubber cord sleeves. If yours are splitting, cut 'em back. A taper makes reseating easy.

n of the Boa

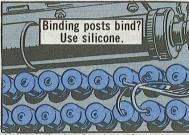
JUST APPLYING A LOCAL MWO TO THIS SIGN!

Maintain Contact

damage.

Removing the operator's pack is easier if you pull the nearest line pack first.

Good contact needs binding posts



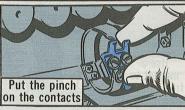
that really bind wire. If posts are sticking, loosen 'em with a little dab of silicone, NSN 9150-00-257-5358.

You can tell if a post sticks. Once you've seated the wire, tug on it. If it comes free, you've got trouble.

Keep those wires out of the way, don't.

Insert line and operator packs too. Run 'em all through the rubber carefully. Keep 'em straight to avoid gasket on the side of the case. Channel 'em down the center of the binding posts, too.





Battery case clips must grab firmly. Pinch yours together gently if they

The Word Is Plastic

If you've got one of those new Lexan-cased switchboards, you should be extra careful.

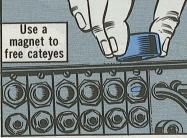
They'll crack under pressure your metal boxes withstand easily.

Especially vulnerable is the area around the battery clips. Those clips are only riveted into the plastic. Yanking the case out, or slamming it in, can mean a trip to support. 'Course, you should take it easy with metal cases, also.

Rough treatment can put a crack somewhere else, too. Go easy as you pack, install and ship the set.



If cateyes stick, banging 'em around won't help. It might break a lens, tho, and that means support again.



Your best bet to unstick an eye is a small magnet to move the eye back where it belongs.

No improvement? Substitute a good pack.

Use a damp cloth to clean the front panel. Be careful not to knock dirt or grit into jacks.

You're Grounded

A strip of WD-1 is your ground wire for aluminum cases. Cut it just long enough to reach the rod.

Strip ¾ inch of insulation away from both ends and twist conductors together. Fasten one end to the rod and the other to the set through the case gasket.

If you bypass the gasket that means you close the back cover over the wire. That springs the cover.

A 6-ft ground wire comes with the plastic sets. Leave it connected to the case's ground stud. The free end goes to the ground rod.

Battery Saver

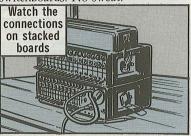
Audio weak? Lights dim? Flip your battery case. Two batteries power the SB, the other 2 are for your phone. The phone BA-30's will stay healthier longer 'cause they use less juice.

Another battery saver is to switch your headset off when a scheduled lull in traffic comes around. Leaving it on zaps batteries and can do in the transmitter's carbon element.



Stacking Switchboards

Getting more lines to your SB-22 position might mean stacking 2 switchboards. No sweat.



To get an audible alarm when you've got the added drops, you run a wire from the NA (night alarm) binding post on one SB to the NA binding post on the other.

You'll find that NA post just slightly above the ground connection.

When you're stacked up, be sure you're grounded. Run a wire from the ground of one set to the ground of the other. Then, attach the bottom set to your ground rod.

Stow It

There's just room in the SB cover for your headset. To get it in, use the guide in Fig 25 of TM 11-5805-262-12.

Cram it, and you have to force on the cover. That can break the headset or mangle plugs.

Likewise, be sure the back cover recessed latches are recessed. Sticking out, they can snap off if the switchboard slides around, like in the back of a vehicle.



PP-1703 Fuse

The fuse used to protect your PP-1703 vibrator invertor is now NSN 5920-00-056-6620. That's the $7\frac{1}{2}$ -amp, 32-V rated fuse called for in TM 11-6125-238-12.

RC-292 Pub Update

If you need an up-to-date parts pub for your RC-292 antenna group, get TM 11-5820-348-24P.

Among other things, it'll give you a good NSN for an AB-35 mast section, NSN 5985-00-240-3723.

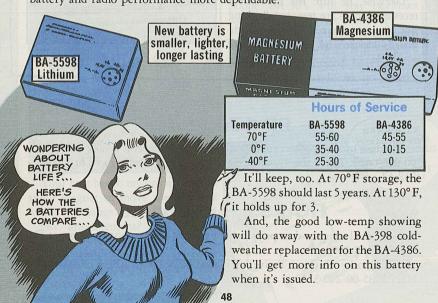


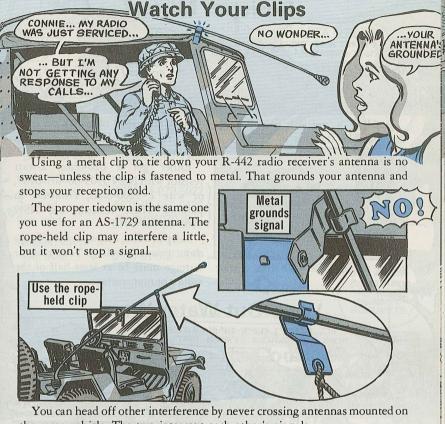
A new battery is on its way to power your AN/PRC-77 and -25 radio sets. It's littler, lighter, longer lasting and lithium.

You'll soon see a lithium BA-5598 replacing your magnesium BA-4386 power pack. It's been engineered to answer your complaints about the old battery.

It's half the weight and size of the old battery. So, you can carry 2 in the radio—one's a spare.

It delivers better punch more evenly over the life of the battery. That'll make battery and radio performance more dependable.





the same vehicle. The two intercept each other's signals.

Trying to gain distance on your receive antenna's reception by adding sections is another no-no. It just mismatches antenna and receiver and your

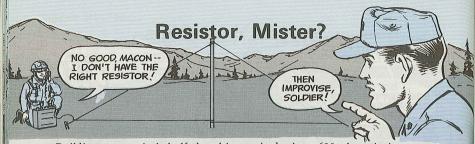
signal suffers again.

Protect your buddy as well as your signal. Like, use a tip on your whip. An untipped antenna is just a long spear.

Leaving that antenna untied while moving can rough it up. Tie it down before traveling. If you don't, it can bounce off trees or power lines. A power line can zap your gear—or you!

Never cross

antennas



Building a vertical half-rhombic antenna like the one in TC 11-5 is

Resistor
wattage
must be
at least
half of
radio's
output
wattage!

tough without the 600-ohm, 2-watt resistor.

And, since 600 ohms isn't a standard resistor value, you have to improvise.

Either get a 620-ohm, 2-watt resistor with NSN 5905-00-407-6167, or wire 2 1200-ohm, 1-watters in parallel. These resistors are NSN 0 5905-00-369-6916

Keep in mind, tho, what the TC says about power handling. Your resistor wattage must be at least half of the radio's output wattage.

Wipe Out Water Woes

NO, I DIDN'T CHECK TH' INSULATOR BOWL FER CRACKS... Y'MEAN THAT CAN PUT MY RADIO DOWN!

EVEN THAT
KID KNOWS CRACKS
CAN LET IN A FLOOD
OF WATER,

Be sure you're wiping the water out of your antenna's insulator bowls, or it'll be wiping you out.

X 1.14" 1"

"My " " " () " (

It doesn't take much moisture in the bowl of your AB-15, AB-652 or MP-68 antenna base bowl to weaken your commo, either.

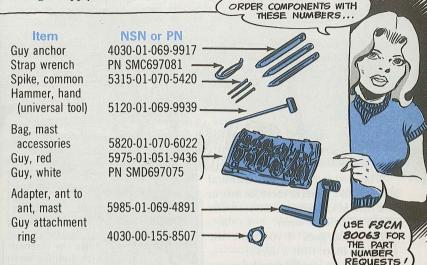
'Course, you always keep an eye out for cracks that let in a flood of water. Condensation's a killer, too.

So, remove the bowl periodically and wipe it out.



Get Your Kit Together

Keeping an MK-1069 mast accessory kit up to snuff is easy when you have the right supply info.





Think your AN/VRC-12 radio set's RT is keying itself 'cause the blower starts on its own?

Before you turn it in for repair, be sure it wasn't just staying cool.

A thermostat tells the blower when to start—like when the RT is getting too hot. 'Course, it also runs each time you transmit.

THE BLOWER CAN START ANYTIME.'





When you shut down your chemical alarms for 72 hours or more, be sure to give their M43 detector unit reservoirs a bath in distilled water.

The same goes if you store the alarm for more than 3 days.

Use only de-ionized distilled water, NSN 6810-00-682-6867 (1 gal) or NSN 6810-00-356-4936 (5 gal).

If you use tap or other water in the detector's reservoir, it won't flush right, and the alarm may not work.

New Cell?



When you install a new detector cell in you M43, run the unit for an hour to stabilize it.

Rinse the reservoir

with distilled water

If you don't run it, your alarm system may not detect chemical agents. Bad news. You also need a stabilized alarm to determine pump life.

M151A2 Truck Mount

Organizational maintenance types who install alarms on M151A2 ¼-ton trucks need TB 43-0001-39-4 (Jan 80).

TM instructions can't cut it for the M151A2. Strips must be cut from the fender support brackets. Holes must be drilled. Page 2-75 and Figs 2-26 and 2-27 of the TB show you how.

Your M11 decon can't do its thing if the nitrogen-filled cylinder leaks.

Eyeball the O-rings (preformed packing) to make sure they're not damaged or missing. A sharp edge on the nitrogen cylinder can damage the



rubber O-rings, so replace them when they go bad. For a good seal, make sure you seat the O-ring for the nitrogen cylinder in the groove of the sprayhead assembly.

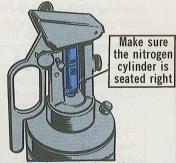


A damaged or missing O-ring lets sticky O-nitrogen leak from the cylinder. That cylinder.

keeps the M11 from getting a full charge. Result? Your decon effort fizzles.

Unguided Missile

When you put on a new cylinder, make sure it's seated straight with the M11's thumb lever. If it's not seated right, you could launch the cylinder when you raise the handle to decontaminate. It'll take off like a rocket!



Before you install the nitrogen cylinder, check it for rough edges that could cut the O-ring. File off any burrs. Then install the cylinder easy-like.

When you toss out a used nitrogen cylinder, make sure you don't throw out the O-ring with it. Sometimes a sticky O-ring clings to the neck of the cylinder.

53

BOY IS SUPPLY EVER FOULED UP! THEY SENT ME 2 PACKS OF WASH-AN'-DRY INSTEAD OF M58 REFILLS!



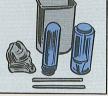
HEY -- I BET THOSE ARE SATURATED PADS THAT COME WITH THE MSRAI KIT.



It happens...kind of like the old cart before the horse bit.

When you order M58 decon training kit refills, you may get the new M58A1 version instead. It has saturated pads instead of the containers of liquid in the M58.

The M58 kit has containers of liquid...



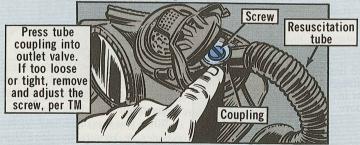


Trouble is, the M258A1 and new TM's won't be out in depth till later this year. So, you might be tempted to toss the saturated pads. Turn them back in to your supply clerk till the M258A1's and TM's are issued. Then, use your M58A1 refills with them.

Meanwhile, use only the M58 refills with your M258 kits. You can get any remaining refills with NSN 6910-01-021-0789. Mark 2B or 2J (No substitute) in the advice code block (22) of your request (DA Form 2765).

M17A1 Mask Adjustment

The word's on Page 2-18 of TM 3-4240-279-10, but some users just don't get around to adjusting their M17A1 protective mask resuscitation tubes.



The smart, required thing to do is adjust the tube before you use the mask. If air escapes from the mask, you can't use the tube. You can't give mask-tomouth resuscitation...and somebody's life may depend on that.

Defects Can Be M2 Blasting a Blast Cap Crimpers... THEY CAN'T, GRAG...
HE JUST USED A
BUM PAIR OF BLASTING
CAP CRIMPERS! AMAZING! I DIDN'T KNOW FARTHLINGS COULD FLY!

Some bum M2 blasting cap crimpers, NSN 5120-00-029-0683, have slipped into the supply system. They could be a real blast if you try to use 'em.

The defective tools have Lot No. KAL-294 stamped on the handle—but not all the tools in that lot are bad. Here's what to look for:

Egg-shaped

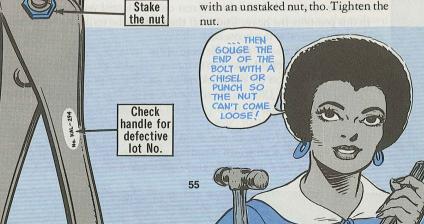
opening?

Turn it in!

-If the jaws form an elongated oval or egg-shaped opening when they're closed-instead of the usual round hole-turn in the crimper immediately. It could cause a misfire by squeezing the cap too tightly around the fuze. Likewise if the jaws have dull or jagged cutting edges.

-If the nut's not staked to the bolt that holds the crimper together, the crimper can come apart while you're working. That's a sure way to make a tough job tougher. Too short a bolt can cause the same thing to happen.

You don't have to turn in a crimper with an unstaked nut, tho. Tighten the





M870 low-bed semitrailer has a domino effect on maintenance downtime and parts replacement. It can raise tempers and get people hurt, too.

Once the heavy dozer starts sliding on the trailer bed, you can't do much to YOU CAN HEAD OFF

TROUBLE, THO! USE A MINIMUM OF 12 TIEDOWN CHAINS - 4 CHAINS ON EACH SIDE AND 2 EACH AT THE FRONT AND REAR OF THE TRACTOR!

Trailer Prep

Extend the outriggers and use extra timbers.

You can haul a D8K equipped with any blade and winch, or with any blade and ripper—with 1, 2, or 3 shanks teeth-with the M920 tractor truck and M870 trailer.

DALO-SML-Msg P051240Z May 81 has the word on truck/trailer/load combinations that weigh more than 130,000 pounds.

Loading the Tractor

Tractor equipped with ripper: Drive the tractor up the front ramp and toward the rear until the blade will rest on the slanted rear ramp.

In this position, the heavy load is off the front of the trailer and truck winch cable when you raise the gooseneck into place.

Never load the tractor from the rear of the trailer.

After the gooseneck is hooked up to the truck, back the tractor up so you have equal load distribution on the truck trailer and trailer axles.

Try to position the D8K on the trailer so that the 4 tiedown angles will be as close to 30° as possible. This 30° tiedown angle gives the tractor maximum holddown security.

Lower the ripper frame, so the shank(s) ride on the gooseneck.

Tractor equipped with winch: Load the tractor in the same manner. Leave the blade resting over the middle rear trailer axle.

Front tow hook to the 5th tiedown ring.

 Upper rear track carrier roller support assembly to the 2d tiedown

Clevis to

trailer

the 1st tiedown ring on the

• Upper rear carrier roller support assembly down behind the push beam to the 3d tiedown ring.

 Upper forward carrier roller support assembly down behind the push beam to the 4th tiedown ring.

Repeat the tiedowns on the opposite side of the trailer/tractor.

For a Cat w/ripper, use the same

Criss-cross tiedown chains

side and front tiedown arrangement, but use 2 tiedown chains crisscrossed from the ripper shanks to the tiedown rings on the trailer gooseneck.

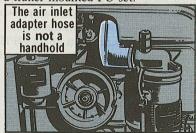
Keep speed between 18-20 MPH maximum...slower when weather and road conditions are less than ideal.

THAT'S THE WAY TO KEEP THAT CAT



Take it easy when you replace the air inlet adapter hose on 5- and 10-KW generator sets. Heavy-handed mechanics damage the hose by yanking and twisting it loose from the crankcase vent extension.

A damaged hose lets dirt and gunk bypass the air cleaner...right into the engine. Some troopers are even using the hose as a handhold to climb aboard a trailer-mounted PU set.



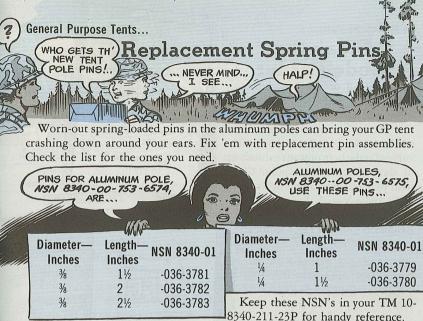
So many hoses have been damaged that they're in short supply.



 Use black electrical insulation tape to seal larger holes and cuts, and to hold split seams at the tube where the crankcase vent goes into the adapter hose.

NSN 5970-00-419-4291 gets a 36yd roll of 3/4-in wide tape for this job.

'Course, a bit of easy-does-it PM, and a hands-off deal when you're moving the set or climbing into a PU will ease the parts replacement problems.



8340-211-23P for handy reference.

-036-3779

-036-3780



The roll-over-protective-structure (ROPS) forklift is there to protect you. Maybe it's time you returned the favor.

Water-from rain, condensation, or hosing down the forklift-collects in the horizontal brace between the vertical legs of the ROPS. It can freeze and crack the metal. That weakens the whole structure, not to mention deadlining the forklift till the ROPS is replaced.

Head off ROPS troubles by drilling 2 water relief holes in the brace. The word's in Para 3-2 of TB 43-0001-42-4 (Jul 81).

Smoke Stack Rivets

NSN 5320-00-010-4448 gets the rivets that hold together the smoke stacks (pipes) used on space and immersion heaters.

On Microfiche Pubs...

Break the Code Barrier

Almost all of the Army's supply management info comes out on microfiche now.

If you don't know which ones to use and how, your job's almost impossible.

Need some help or want to brush up on those special supply pubs? Check with your léarning center or Training and Audio-Visual Support Center (TASC) for a series of Training Extension Course (TEC) lessons:

918-101-0005-A. Introduction to the AMDF Microform Retrieval System (ARMS)

918-101-0006-A. The Army Master Data File (AMDF) Part I

918-101-0007-A, The Army Master Data File (AMDF) Part II

918-101-0008-A, The Interchangeability and Substitute (I & S) File

918-101-0009-A, The ARMS History File

918-101-0010-A. The Master Cross Reference List (MCRL/RL)

918-101-0011-A, The Identification List (IL)



111111111 THE ARMS MONTHLY ARMY MASTER DATA FILE (AMDF) PARTI TEC LESSON 918-101-0006-A Administrative Instructions TEC Lesson No. 918-101-0006-a RAINING EXTENSION COURSE US ARMY QUARTERMASTER SCHOOL SUTTLE THIS LESSON IS FOR ALL SOLDIERS SUTTLE-BELLIED HOS, CLARE 24 and ANOTE THE ADMC HISTORY EILE TEC | ECCON 918-101-0009-4 TRAINING EXTENSION COURSE July Charles Child Control of the Co

Those TEC lessons offer step-bystep info on when and how to use the supply pubs on microfiche, plus a lot of help on breaking the code barrier!

... YOUR UNIT CAN ORDER THEM FROM ...

Commander **US Army Training Support Center** ATTN: ATIC-AET-TP Fort Eustis, VA 2360



Chapter 9 of FM 55-30, Army Motor Transport Units and Operations, has other good info on the driver's training program.

Training people initial training. CO or CO's rep initials all others.



Entries in Section III of DA Form 348, Equipment Operator's Qualification Record, call for initials in the Action Taken column.

Whose initials?

The officer or NCO in charge of formal training or testing initials those entries.

The unit CO or the person the CO delegates, in writing, to that job initials off on everything else.

New AMDF Codes

The Army Master Data File (AMDF) is adding some new codes.

The Maintenance Repair (MR) code gives the lowest maintenance level able to pull complete repair on the item.

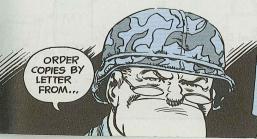
The Precious Metals Indicator (PMI) applies to items with recoverable amounts of precious metals.

EFFECTIVE DAYE B2001 NOMENCLATURE C PHRASE STATEMENT/RELATED NSN/MCN GEARING, ROLLER, NEED CAPACITOR, FIXED, PLA COMP RCP AIR 37 CFM

Codes on AMDF page

ADPE Identification (ADP) code covers automatic data processing components, supplies and support gear.

CDA Pam 18-1, Code Reference Guide for the ARMS Monthly AMDF (Aug 81), explains more about the new codes.



Commander USA DARCOM Catalog Data Activity ATTN: DRXCA-BTM. New Cumberland Army Depot New Cumberland, PA 17070



Your unit establishes an account by subscribing to publications using the DA Form 12-series. Once that is done you may receive publications in two ways:

Initial distribution: As new publications are printed, you get copies automatically through pinpoint distribution. See AR 310-2.

Resupply: To get more copies or to get replacement pubs, DA Form 4569 is used as an order form. See DA Pam 310-10-2 for details.

THIS CHART GIVES YOU THE STORY... • For pinpoint distribution

Make up a list of equipment
you need publications for.

• For replacement or additional pubs

List the manuals you need.

Publications are mailed directly to your unit.

Read DA Pamphlet 310-10-2 on resupply of pubs Battalion Headquarters

Bn HQ fills out your DA 12-series pinpoint subscription forms and sends them to the Baltimore Publications Center to either establish or update your account on the computer files.

For additional or replacement pubs, Bn HQ fills out DA Form 4569 and sends it to Baltimore. It goes either by your communications center over AUTODIN or by mail. Either way is fine, but AUTODIN is faster

DA Form

Baltimore

Baltimore processes your submissions on the computer. Then, depending on what you ordered, shipments are made either from Baltimore or St. Louis.

Baltimore Publications Center

- Administrative pubs
- Training pubs

St. Louis

St. Louis Publications Center

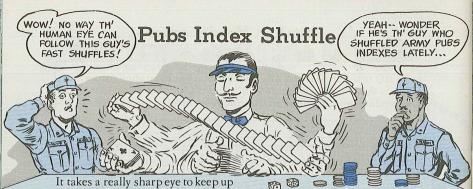
DA Form

12 (series)

- Equipment pubs
- Supply pubs

62

63



with an expert card shuffler. And if your eyes wandered from the DA pamphlet indexes of pubs lately, you missed an equally fast shuffle.

DA Pam 310-7, US Army Equipment Index of Modification Work Orders (MWO), bit the dust. It's kaput, finished, gone.

If you need info on an MWO, you needs. Both are on microfiche. now have a choice of pubs.

Pam 310-4. Index of Technical Publications. The list just covers the MWO's you can order from the pubs centers, tho.

info from DA Pam 310-7 in DA Pam the word on that.

750-10, US Army Equipment Index of MWO's. It indexes them by current, urgent, projected, suspended, deferred, cancelled and completed MWO's. DA Pam 750-10 also classes the MWO's by equipment category, urgency and status.

Use the index that best suits your

Need the new indexes? Tell your A list of current published MWO's pubs clerk to put you on initial in pub number order shows up in DA distribution: Block 26 of DA Form 12-4 covers DA Pam 310-4; Block 32, DA Pam 750-10.

You can get one-time, hurry-up copies with DA Form 4569 through You'll find complete lists and all the AUTODIN. DA Pam 310-10-2 has



40...Get 'em...40

Back issues of PS Magazine are yours for free. About 40 are still on the shelf. Jot a note to Connie, c/o PS Magazine, Lexington, KY 40511. Or call **AUTOVON 74**5-3478.



Supply Hotline

The answer to a problem in supply can be just a phone call away! If you have an NSN or manufacturer's number (FSCM) and part number. the experts at the Management Information Research Assistance Center (MIRAC) can help. They track substitutes, NSN's for part numbers. cost and coding info, packaging and handling you name it! Call 'em on AUTOVON 977-7431.

FARE System Kit

Use NSN 2990-01-032-0755 to get a spark arrestor parts kit for the 3-HP Mil Std engine used with the FARE system. The NSN will show up in a change or revision to TM 5-4930-229-12&P(FARE) or TM 5-2805-257-24P(engine). NSN 2990-00-176-9298 gets just a spark arrestor for the engine.

'The Late Co B'

Would you believe the Army has a classic film? Honest! 'The Late Company B' is a famous Army film from 1945. But its lessons on maintenance, supply and property accountability read right with today's concerns. Contact your local Training and Audiovisual Support Center (TASC) and ask for 'The Late Company B', MF 21-1152.

A Reel Correction

Wait one before getting the RL-207 reeling machine pulley we told you about on Page 47 of PS 347. It won't fit the shaft. Get a bigger belt instead. Ask for P/N 510L100 with Federal Supply Code for Manufacturer (FSCM) 73842.

M16A1 Cleaning Rod

You can now get parts for your M16A1 rifle cleaning rod, NSN 1005-00-089-3994, like so: handle, NSN 1005-01-113-0321; tip, NSN 1005-00-937-2250; sections (3), NSN 1005-00-050-6357. They're scheduled to be listed in the new TM 9-1005-249-24&P.

Fuel Tanker Strainer

Fuel tanker operators! Check inline fuel strainers quarterly to make sure they're not clogged with sediment. The special PMCS table in FM 10-71, Petroleum Tank Vehicle Operations. has the word. Use it with the PMCS table that's in vour tank vehicle TM.

AN/GRC-106 Chart

The tuning and loading chart for your AN/GRC-106 radio set has no NSN. Order it with P/N SMD508586. The FSCM is 80063.

* US GOVERNMENT PRINTING OFFICE: 1982-559-009/5

Would You Stake Your Life woon the Condition of Your Equipment?

