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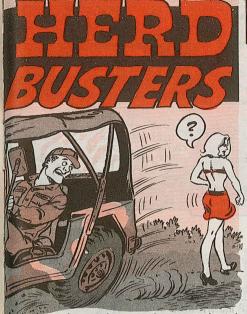
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a year?

Once

Not

STICKon Your comments Tell the Editor what you would like to see printed in PS Magazine.



The truck jumps to respond, and every time, that transmission takes a beating. The gear teeth get chipped or battered. Most often, tho, on the 1/4-ton trucks, the reverse pivot bolt will break off. The shifter fork will drop into the transmission and lock it up.

This means support has to tear down the transmission and put in new gears. Or replace the broken pivot bolt. The bolt costs only \$1.68, but it costs about \$50 for labor to get the broken pieces fished out of the transmission and get it ready for service again.

So, come to a dead stop—if only for a split second—before you shift from a forward gear to reverse or from reverse to first.



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zational maintenance and supply duties. Within limits of availability, older issues may be obtained direct from Editor, PS Magazine, c/o US Army Maintenance Management Center, Lexington,

ISSUE No. 299 OCTOBER 1977

FIREPOWER

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PS wants your ideas and contribu- MSG Half-Mast tions and is glad to answer you questions Name and address are kept in confidence Just write to Lexington, KY

PS Magazine

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You know the effect: you've set upfor firing, your eyeball's glued on the tracker, triggers are depressed . . . and you rack up a great score. Smiles and fine feelings.

Think on this: You owe that feeling to the troops who kept your Dragon Launch Effects Trainer maintained.

It doesn't take much to keep the LET purring, but what it does take is necessary.

STAR WARS OR FARTH BATTLES, PM IS ALWAYS THE WAY TO GO!

HERE'RE SOME CAUTIONS AND PM TIPS OPERATORS CAN HANDLE ...



SET

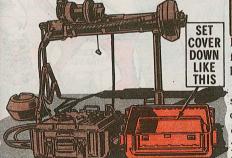
When you remove the monitoring set lid, set it down on the flat side

AH... GREAT,

K-100/

YOU'VE ACQUIRED

MORE SAMPLES FROM THE 20th CENTURY...



(top). If you put the grooved edges of the cover in the dirt, they'll clog ... and you'll have a tough time getting the cover to close when you put it back on. You can also just about kiss the seal goodbye.

Your boots are made for walking, and your hands are what you use on the reset button of the monitor. Bend a



SERGEANT

THIS DRAGON

IS PRECISELY

WHAT WE NEED

little . . . and keep your boots away from the button. Feet may work neat, but they damage the merchandise.

If you're not operating the LET, be sure the INTERNAL power switch is off BEFORE you charge the nickel cadmium batteries in the monitor. If you leave the switch on, the batteries won't charge fully.



hours or more to charge the batteries. Removing the charge source before that is just cheating the guys who'll be using the LET next.

And, like the TM says, it takes 8

When you set up the LET, keep the monitoring set on the gunner's right. TM 9-6920-480-12-1 says either side, but keeping it on the right prevents cutting the trainer/monitor interconnect cable. Like so:



If the monitoring set's on the left side, you cut or chaff the cable as you use the cleaning brush to reset the weight (dummy projectile) in the

LET. SO SET THE MONITOR UP ON THE RIGHT, TROOPER

TARGET COORDINATES ..

THANK YOU.

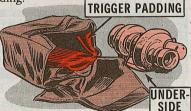
TRACKER

The padding (shock absorbers) on the tracker is not for grabbing . . . and that goes strongest for the padding beside the evepiece.

So, when you remove the tracker from its storage bag, reach for metal. Saves wear and tear and guarantees that you won't come out of the bag with a handful of padding . . . and nothing else.



When you store the tracker, get it in the bag right. The metal underside goes against the padded portion of the bag (the back of the bag, actually). The trigger and the underside of the tracker, which aren't padded, are protected by the bag's built-in padding.



So, get it in right and prevent damage to the tracker.

If you can get in the habit, remove those BA-30 batteries (16) from the LET at the end of each day. Do not leave them in for longer than 48 hours when the LET's not being used.

The batteries leak and corrode contacts in the launch tube.

Best bet: Take 'em out at the end of each day and put 'em back in just before the LET is to be used.

PRESENT

FUTURE.



REPLACEABLE

ITEMS

For unit armorers who haven't got the word, you can now replace the LET. sling, bi-pod and end caps, in addition to other parts.

Expended parts from used launchers are for the field handling trainer, not the LET.

Check out TM 9-6920-480-12-1 and -24P-1.

BOXES

The LET shipping and storage container is for continued use and comes with a package of hinges and other hardware so it can be used in the field. SAVE

Don't let it get away from you. They're great for storing the LET, shipping it off for maintenance and so on.

MISFIRES

Armorers, instructors or whatever should contact Direct Support if the LET comes up with a series of misfires.

The cause (if you want to lay down a few bets) almost surely is headspace. And, DS checks and adjusts headspace.

A note there: para 4-3 of TM 9-6920-480-34 will be changed to show desired headspace clearance of .000 (min.) to .003 (max). The TM now calls for .001 to .008.







HOWZAT K-TOO

TARGET,

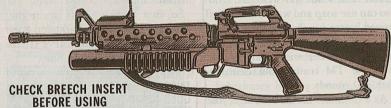




MZO3 BREEGI SCREECT

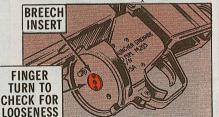


The breech insert on your M203 grenade launcher should be checked for looseness before you use the weapon. No argument there, since that's what TM 9-1010-221-10 tells you to do.



It's what comes next that gets hairy. First off, since you don't have a tool, you try to turn the breech insert with your fingers. If it's loose, and that's any kind of loose, you get it fixed.

That means the weapon has to be turned in to direct support. DS has the



tools and the sealer to get the breech insert as tight and as safe as it should be.

If the insert's loose, it does not mean that you or your armorer should take a punch or a screwdriver and stake it.

When you smash the metal of the

breech face down like that, you make permanent damage. What's more, you make it just about impossible for DS to check the reverse torque on the insert

YEH-BUT DON'T
FRET IT,
SARGE...

THE BREECH INSERT
WAS LOOSE, SO I STAKED
IT GOOD WITH MY TRUSTY
SCREWDRIVER!!...

WITHOUT GUYS LIKE SPECIALIST BACKER, PS WOULD GO OUT OF BUSINESS, CONNIE!

(60 lb-in) so they can tell whether the insert's safe. They've got to turn the insert to do that, but it can't turn with metal wedged in the indents.

What's more, getting the insert out is tough when the breech face is staked ... so you've made additional damage.

So, if you have any respect for your weapon, don't mash the breech face. If the insert's loose, let DS take care of it ... with a torque wrench that'll keep

it tight and a sealer (in Ch 1 of TM 9-1010-221-24) that'll help keep it from backing out.

Another thing with the M203: There's a new firing pin out which prevents primer puncture. Naturally, there's a new firing pin protrusion gage

to go with the new pin.

STAKE

BREECH

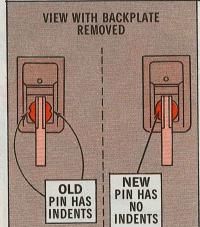
INSERT

Old pins and gages are being removed from the supply system. The new pin must be installed by your DS/GS, so you armorers can check with them to see whether the new pins and gages are on hand before turning in the launcher.

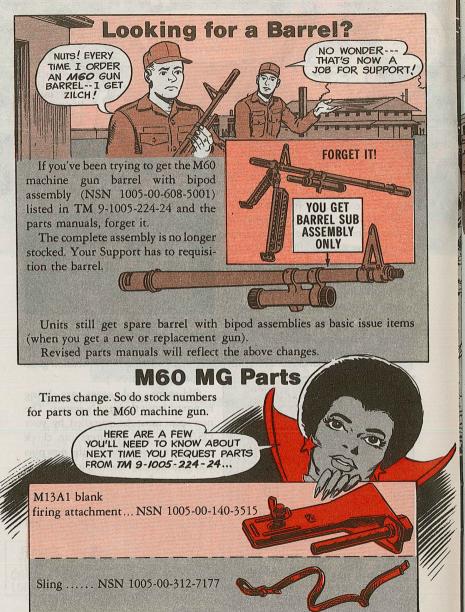
New pins go by NSN 1010-00-348-8433, PN 12002970. The protrusion gage is NSN 4933-00-348-8434, PN 12002976.

The old pin has 2 indents ... about half way round the face of the pin on each side.

The new pin has solid sides (no indents).



9





with oil during operation is positively one of those times.

lubrication during a firing operation. Too much lube won't help a thing. In when you clean and lube it.

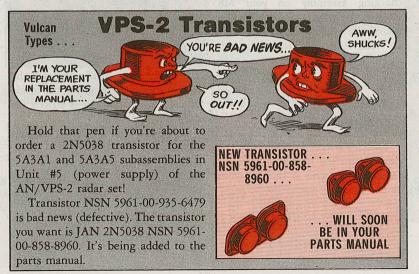
fact, it hurts.

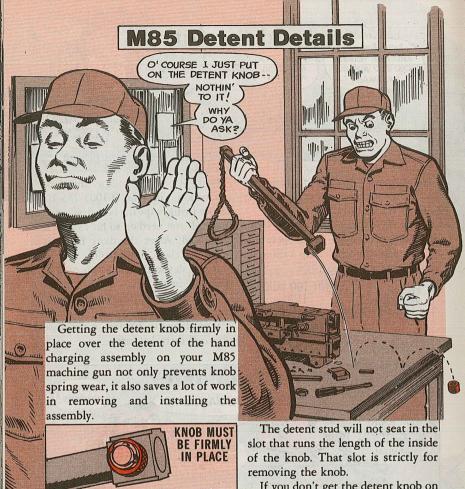


Before firing, wipe the bore dry ... and The M219 does not need much that's all you need do so far as lube is concerned. After the day's firing is

> If you douse the gun with oil and continue firing, the oil will smoke, burn, and cake. That means carbon and sluggish operation.

If you lube the chamber, it can cause ruptured cartridge cases.





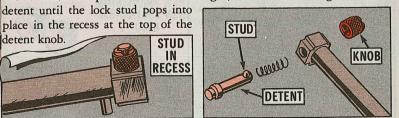
RECESS

12

detent until the lock stud pops into

letent knob.

If you don't get the detent knob on The idea is to slip the knob over the right, it can fall off the gun.



NOW, WHERE M85 Pin Check CAN THAT RETAINING PIN BE?

TOO LATE, FRED...

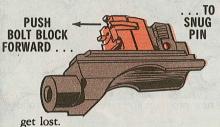
THE GUN

IS ALREADY

DAMAGED!

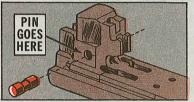
Next time you field strip your M85 machine gun for cleaning, be extra careful with the retaining pin in the bolt slide of the bolt assembly.

When you remove the bolt from the gun, the pin tends to slip out . . . and



bolt removal is to push the bolt block damage.

forward. That puts pressure on the pin. Then, when you get ready to install the bolt in the gun, give the pin another look to be sure it's still in



If the pin, NSN 5315-00-591-2082, gets lost and you assemble the gun, you'll get a round or so off . . . and the An easy way to prevent that after bolt will fall apart. That means gun

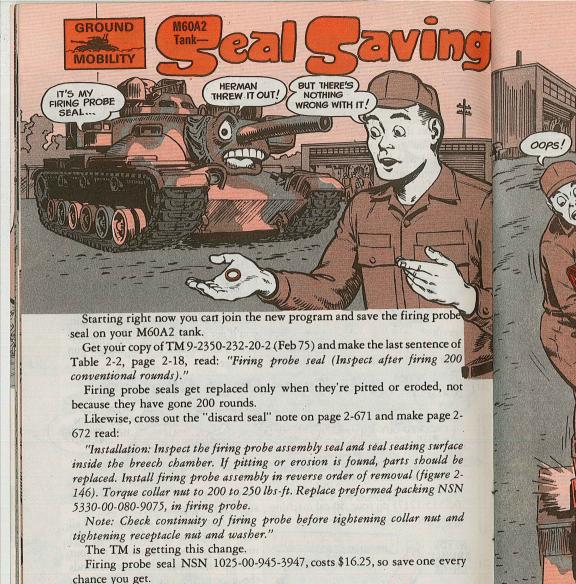


Been wondering when or how the headspace/timing gage (NSN 4933-00-535-1217) on your .50-cal machine guns gets inspected or certified?



TB 43-0196 (Sep 74) has the word... on your spitting fifties and on other small arms gages, too.

For instance, your M2 gage (and all others in paras 4c and 6 of the TB) must be inspected annually by your DS/GS unit. Your unit armorer sends the gage to DS/GS with a DA Form 2407 work request. He sends the DA Form 3023 gage record with the work request.



Top Loading Air Cleaner Tips

LOOK--OL'
BIG FOOT IS
SERVICING
HIS AIR
CLEANER!

YEAH -- AND HE'S JUST MADE A JOB FOR DS!

Got a top loading air cleaner on your M60-series or M48A5 tank?

Moving the filter in and out of the air cleaner box takes lots of tender loving care. Always go straight in or out of the box.

Be careful not to damage the filter element seal against the sharp edge of the air cleaner box. When you install



it, lower the element all the way to the bottom of the air cleaner box before sliding it toward the sealing surface.

When the door is open it should rest gently on the rear fender box.

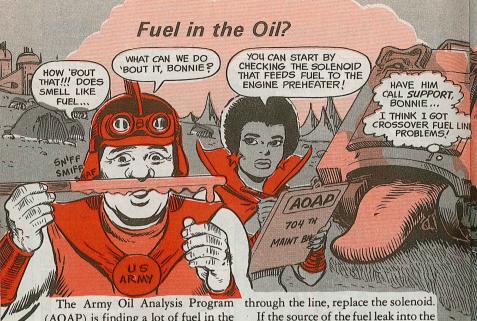
Never, but never stand on the door when it's open.

Standing on the door will break the hinge and when the hinge breaks, the element won't seal right. This lets dirt get sucked into the engine.

You'll have a tough job getting a broken hinge repaired. Hinges are aluminum and can be welded only by direct support or above. So, don't break them.

INSPECT PROBE SEAL AFTER 200 ROUNDS





(AOAP) is finding a lot of fuel in the oil in 6V53 diesel engines. That's the oil is still a mystery, you'll need help mill for your M113A1, M548, M106A1 and M125A1 vehicles.

Here's what to do if you suspect—or engine oil.

Check out the solenoid valve that breaks or leaks. feeds fuel into the engine preheater. solenoid to the preheater—and hit the vehicle starter. If any fuel comes

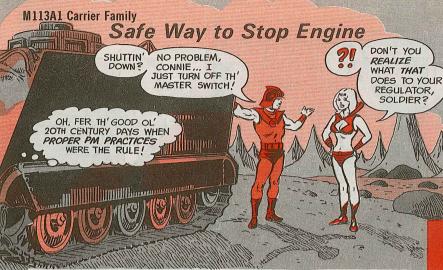


from your support to investigate further.

Have your support pull the engine if AOAP turns up-fuel in your rocker arm covers and check the crossover fuel lines for evidence of

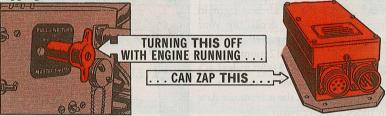
Dirt-free cylinder-head metal With the preheat switch in the off around the base of a cross line is a sure position, loosen the fuel line from the sign that the line or fitting is leaking.





The way TM 9-2300-257-10 (page 2-85) tells you how to stop your engine is kind of confusing.

So some M113A1 family drivers are stopping the "easy" way, just by flipping the master switch OFF.



If you turn the master switch OFF with the engine still running, you can whump up a batch of electricity (voltage spike) that could zap the life out of your generator regulator.

Generator regulators (NSN 2920-00-900-7993) for your dream machine cost \$60.29 according to the trusty Army Master Data File (AMDF). That ain't hay if it comes out of your

pay.

No chance of that happening, tho, if you stop this way: Pull fuel cutoff OUT, wait until engine is completely stopped, and then turn master switch OFF.



M880-Series 11/4-Ton Trucks

REPAIRS?

Why suffer the cost of time and parts to repair your M880-series 1 1/4ton vehicle?

You don't have to if the problem's covered by the manufacturer's warran-

TB 9-2300-295-15/14 (Dec 76) gives you the whole story on Warranty Procedures, M880 Series 11/4-Ton Cargo Truck and Ambulance. And some of this info is already right in front of you-the decal on your vehicle's instrument panel.

Until your truck is 12 months old or until it rolls up 12,000 miles, it's covered by the warranty. The 12 months start with the acceptance date in Block 23, DA Form 2408-9.

This warranty covers almost everything on the vehicle, including the battery and tires. And the ambulance body, too.

Not covered are such things as filter elements, drive belts, oil, antifreeze and parts normally replaced during a tuneup.

Get the dope on your truck's warranty coverage by ordering TB 9-2300-295-15/14 on a DA Form 17 from the St. Louis AG Pubs Center.



Kindly Keep Your Seats

LOST MY NUT



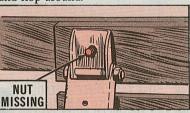
TRY A LOCKWASHER, BOOB!

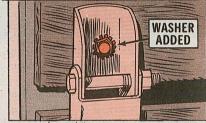
Those wooden slats on the troop seats and side racks of your M880 11/4ton cargo truck have a nasty habit of 911-5005, and nuts, NSN 5310-00vibrating loose. The nuts come loose, 880-7744, listed in TM maybe even fall off, and the slats flap 9-2320-266-20P (Feb 76).

and flop around.

209-0786, to the bolts, NSN 5306-00-

tooth lockwashers, NSN 5310-00-



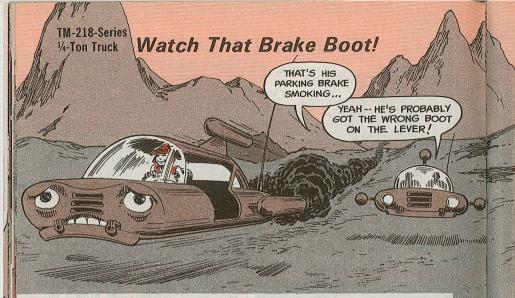


Flasher Light Parts

Need a part for your portable warning flasher light, NSN 6220-00-796-2657? Get the lamp with NSN 6240-00-044-5025.



NSN 6135-00-050-3280 gets the batteries. See TB 9- 2300-260-10 (May 65) for the many purposes of this light.



model 1/4-ton trucks.

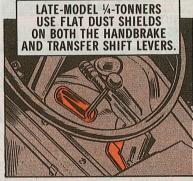
If you put the old type boot on a late model 1/4-tonner, you'll wind up wearing out your parking brake-

BOTH BOOTS ARE WRONG ON THIS 1/4-TONNER. BUT THE WRONG BOOT ON THE BRAKE LEVER IS WHAT CAUSES PROBLEMS.

because the boot keeps the lever raised and the brake partly ON.

When you need a new boot, take a good look at the pictures in TM 9-2320-218-20P (Jan 72), page 135, NSN 2530-00-470-1525.

No, you can't switch the parking Figure 12-2. This shows you that the brake lever dust boots on old and late accordian-type boot goes with the



push button lever. And the flat type shield goes with the twist-knob lever.

The old style accordian-type boot comes under NSN 2530-00-678-2971, which is going back on the AMDF.

You get the flat job as a part of a kit, NSN 2530-00-832-6053, or by itself,

Brake Cylinder Shuffle



Did you know that the wheel brake cylinders on a truck may not be the same size on the front as on the rear? vehicles?

For sure, some wrench-wrestlers MM recoilless rifle carrier. don't know this-'cause cylinders are winding up installed bassackwards and in other mix-matches. Just because the cylinder mounts OK doesn't make it right. You can set up some real hair-raising brake problems if you mix or interchange these different size cylinders.

GET IT STRAIGHT!!

For TM-211-series and TM-260series 5-tonners, use 134-in cylinders, NSN 2530-00-421-9687, on the front; 2-in cylinders, NSN 2530-00-353-3038, on the rear.

For the M151A2 1/4-tonner, use 1-in cylinder, NSN 2530-00-157-3344, on the front; 34-in, NSN 2530-00-918-Like on 5-ton and late-model 1/4-ton 0602, on the rear. This goes, too, for the M718A1 ambulance and M825 106

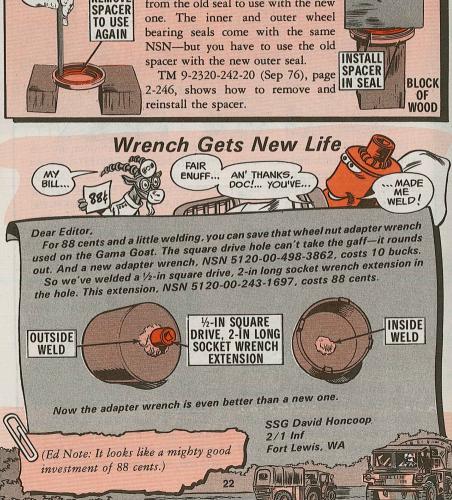
> IF YOU'RE NOT SURE OF THE SIZE. MEASURE IT. PULL THE RUBBER BOOT OFF ONE END-MEASURE

THE DIAMETER OF THE CYLINDER BORE OR THE PISTON.

1-INCH DIAMETER PISTON

Watch it now! That same 3/4-in cylinder goes on both the front and rear of older 1/4-ton vehicles-M151, M151A1, M151A1C and M718.





WHAT'S TH GOIN' TO PICK UP BIG RUSH ? MY NEW ACCELER-ATOR ROD KIT. Accelerator Rod Kit free man million That accelerator cable for the M561/M792 11/4-ton truck has been changed to a rod on newer vehicles. Neither the cable, nor any of the cable parts, are listed in your TM's. TM 9-2320-242-20 (Sep 76), Figs 2-67 thru 2-74, shows the rod installed. The parts are listed in TM 9-2320-242-20P (Mar 77) on page 36. To convert from the accelerator cable to the rod, use NSN 2590-00-109-3334. This kit brings all the parts you'll need to put the rod set-up on your truck. This's done only when the old cable set-up fails. ENGINE THROTTLE ROD **ACCELERATOR**

Too Much Tube

That steel wheel brake cylinder tube, NSN 4710-00-253-1373, listed in TM 9-2320-242-20P (Mar 77) is too long for the M561 /M792 1 1/4-ton truck. It has to be bent to fit. And bending a steel tube is hard to do.

FND

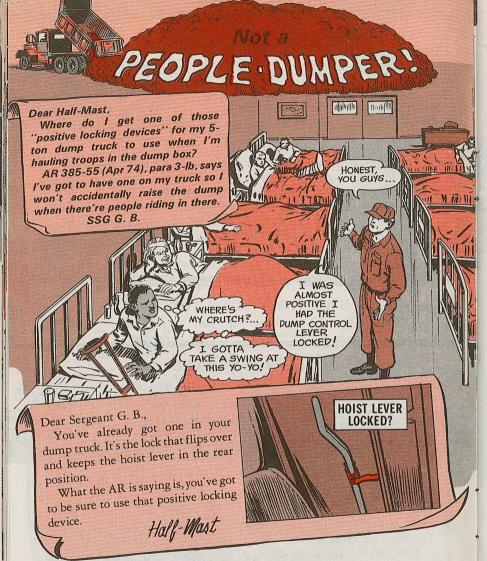
Tube, NSN 4710-00-081-0672, is the right one for the Goat. Jot it down till the TM is changed.



YOU'LL NEVER BEND THAT STEEL

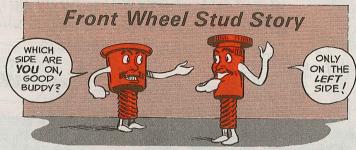
TUBE, OL' GOAT!

NSN 4710-00-081-0672



Save Those Cushions

Seat cushions for your M809 5-ton trucks are now repaired at direct support. TB 43-0001-39-2 (Jul 77) changes the SMR code from PAOZZ to PAOFF. So change your TM 9-2320-260-20P (Nov 72)—and turn those seats in for repair.



page 281, to carry the straight story on side gets NSN 5306-00-569-9018 front wheel studs.

bridge transporters and on the for the left.

You've gotta update your TM 9- M812A1 chassis. For the right 2320-211-20P (May 73), page 2-124, side, order NSN 5306-00-741-1183 or and TM 9-2320-260-20P (Nov 72), NSN 5306-00-151-5754. And the left

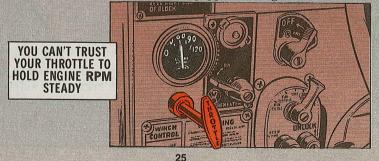
All other truck models use 2 13/16-These "shoulder bolts" are 6.06-in in studs-NSN 5306-00-740-9555 for long on the M328-series and M821 the right side, NSN 5306-00-797-9320

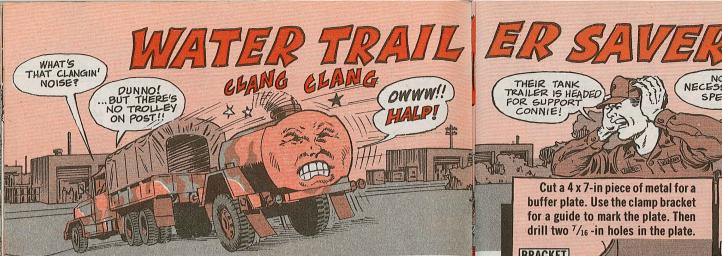


support about your M813 5-ton truck's para 2-6(1) in your TM 9-2320-260-10 failure to hold engine idle speed with (Jan 72). the hand throttle. It's normal for the RPM to creep up—even all the way to true for all of the TM-260-series 5maximum speed—when you've got tonners except the wrecker, which is the throttle out.

So you don't have the idle control There's no use in bugging your you think you do when you eyeball

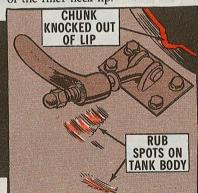
> This creep-away idle RPM holds equipped with a governor control kit.





Those fiberglass 400-gal water tank trailers are really taking a beating.

Some drivers don't move the cover hold-down clamp out of the way-and they slam the cover down on the clamp. That'll soon knock a chunk out of the filler neck lip.



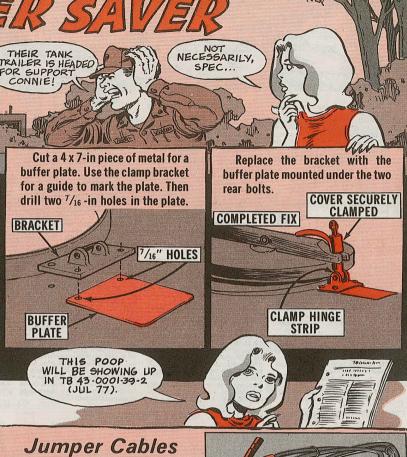
And some drivers don't clamp the cover down before taking off. A flopping lid will let dirt get into the tank. And that banging clamp will soon wear a hole in the body.

But here's a simple fix to head off tank damage:

Remove the cover clamp

bracket. WELD 1/4" x 1/4" x 1" STRIP OF METAL TO BRACKET

Weld a 1/4 x 1/4 x 1-in strip of metal to the bracket. This will keep the clamp from falling on the manhole lip.



in Supply

Now you can get a jumper cable set for emergency vehicle starting—like for your M880-series 11/4-ton truck, per TM 9-2320-266-10 (Jan 76); para NSN 2920-01-027-0125 2-16.

electrical, battery booster.



The set will be in upcoming NSN 2920-01-027-0125 brings revisions of SC 4910-95-CL-A74 (No. Cable Assembly, special purpose, 1 Common Tools) and SC 4910-95-CL-A72 (No. 2 Common).

HUH 2// DIDN'T NOW ... VEARS OUT... NOW ... LET'S SEE YOU BRING IT? TH' TM!

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 76) and Ch 3 (Mar 77) SC's and SM's and DA Pam (O) 310-9 (Aug 74), COMSEC pubs.

TECHNICAL MANUALS

Ch 1. TM 3-1040-219-12 Jun M4A2 Flame

Ch 2. TM 3-1040-257-14 May M9A1-7

Ch 3. TM 3-4240-224-14&P Jun M15 Breathing Apparatus
Ch 6. TM 5-2805-258-24P May Gasoline

Engine 10 HP Mil Std Ch 1, TM 5-5420-209-12 Jun Improved

Float Bridge Ch 6, TM 5-6115-434-12 May Power Unit, Litility Pack GFD TM 9-1005-286-ESC Mar Vulcan M167A1

TM 9-1290-357-10 Jun Aiming Circle MI TM 9-1425-480-L Apr Dragon TM 9-1430-529-24P Mar Improved

TM 9-1430-533-24P May Improved HAWK Ch 1, TM 9-2300-257-20P Mar M113A1

Carrier Family Ch 3, TM 9-2320-266-10 May M880-Series 11/4-Ton Trucks

Series 1%-10n Trucks
TM 9-2320-269-10 May Truck,
Telephone Maintenance XM876
Ch 1, TM 9-2350-230-10 Apr M551/M551A1 Sheridan

TM 9-2350-256-20P May M88A1 RPSTL TM 9-2350-300-20-1 Apr AN/VPS-2

TM 9-4940-336-14&P Mar AN/TSM-115 (Vads)

TM 9-6920-465-24P-2 Jun Shillelagh TM 9-6920-585-24P Jan Chaparral TM 10-1670-264-13&P Jun MC-3 Free-Fall Personnel Parachute

TM 11-1510-209-24P-5 May Electronic Eapt for RU-21H TM 11-5805-211-24P May AN/MTC-7

Manual Telephone for Central Office Ch 4. TM 11-5805-382-12 May TD-660()/G Multiplexers Ch 7, TM 11-5815-331-14 May AN/VSC-2

Radio Teletypewriter Set Ch 7, TM 11-5820-540-12 May AN/GRC-103 Radio Set 103 (V) 1, 2 and 3 Ch 1, TM 11-5855-214-10 Mar AN/TVS-5

Night Vision Sight TM 11-6625-289-24P May AN/USM-63() Battery Test Sets Ch 2, TM 11-6625-520-15 Jun MK-

673/MPQ-4A Maintenance Kit Ch 1, TM 43-0105 May Aircraft Corrosion Control

TM 55-1510-215-CL Apr U-21G TM 55-1510-216-23-3 May Inspect Requirements U-3A and U-3B TM 55-1510-216-23-4 May Weight and Load Data U-3A and U-3B

TM 55-1520-217-23-1-3 Mar CH-54A Heliconter TM 55-1520-217-23-2-3 Apr CH-54B Heliconter

Ch 2. TM 55-1520-228-PMS Jun OH-58A TM 55-1520-236-CL Apr AH-1S (PROD) Heliconter

TM 55-1520-236-23-1 Jun AH-1S (PROD) Helicopter
TM 55-1520-236-23-2 Jun AH-1S (PROD) Helicopter

TM 55-1520-236-23P Jun AH-1S (PROD) TM 55-1730-219-20P May Jack, Hydraulic, Aircraft 5-Ton Type A-5

MISCELLANEOUS

FM 9-41C4 May MOS41C Fire Control Instrument Repairman

FM 9-41C/CM May MOS 41C Fire Control Instru Repairman (Cdr's Manual) FM 9-44B/CM May MOS 44B Metal Worker (Cdr's Manual)

FM 9-44B4 May MOS 44B Metal Worker Skill I evel 4

FM 9-45Z4 May MOS 45Z, Armament Maint Foreman Skill Level 4 FM 9-55B4 Jul Ammunition Specialist

FM 9-55B/CM Jul Ammo Spec (Cdr's Manuall FM 9-55G4 May Nuclear Weapons Maint

Specialist .
FM 9-55G/CM May Nuclear Weapons Maint Spec (Cdr's Manual)
LO 5-5420-210-12 Apr Transporter,

MOFAR LO 9-2300-216-12 May M107/

M110/M110A1 Artillery LO 9-2320-266-12 Apr M880-Series 1½-Ton Truck

SB 11-6 Jun Dry Battery Supply Data SB 742-6135-92-002 May Improved HAWK

SC 5180-90-CL-N04 May Blacksmith's

Ch 2, SC 5180-90-CL-N45 Apr Telephone Electrician's TE-49 Tool Kit SC 5180-95-CL-A51 Apr Tool Kit, Turret Mechanic's

TB 3-4240-280-20 May M-24 and M25/25A1 Mask Canisters TB 43-0197 Jun Instructions for Radioac-

tive Items Managed by US Army Armament Materiel Readiness Command TB 55-1520-228-20-22 Jun One-Time Inspection of Oil Cooler Blowers, OH-58 TB 55-8115-202-24 May Maintenance Standards for Milvan Containers

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

TEC LESSONS 010-071-6632-F Carrier Mtd

81-MM Mortar 020-171-1131-F Clearing, Disassembly, Assembly of Coax Machinegun 041-061-6102-F Tube tillery: Tests of Gunner's Quadrant Part 2 201-113-4616-F Prep RTT

AN/VSC-2 for Op. Part II (Tuning and Stopping Procedure)

510-091-6454-F Prep, Maintaining DA Form 348 (Egpt Operator's Qualification Record)

510-091-6472-F Prep, Consolidating, Maintaining DA Form 2408-1 (Equipment Dai-

ly, Monthly Log) 510-091-6475-F Prep. Using DA Form 2408-9 (Egpt Con-

510-091-6477-F Prep, Maint, Use of DA Form 2408-10 (Egpt Component Register) 910-171-0008-F Preventive Maintenance for Personal

FILMS, GTA

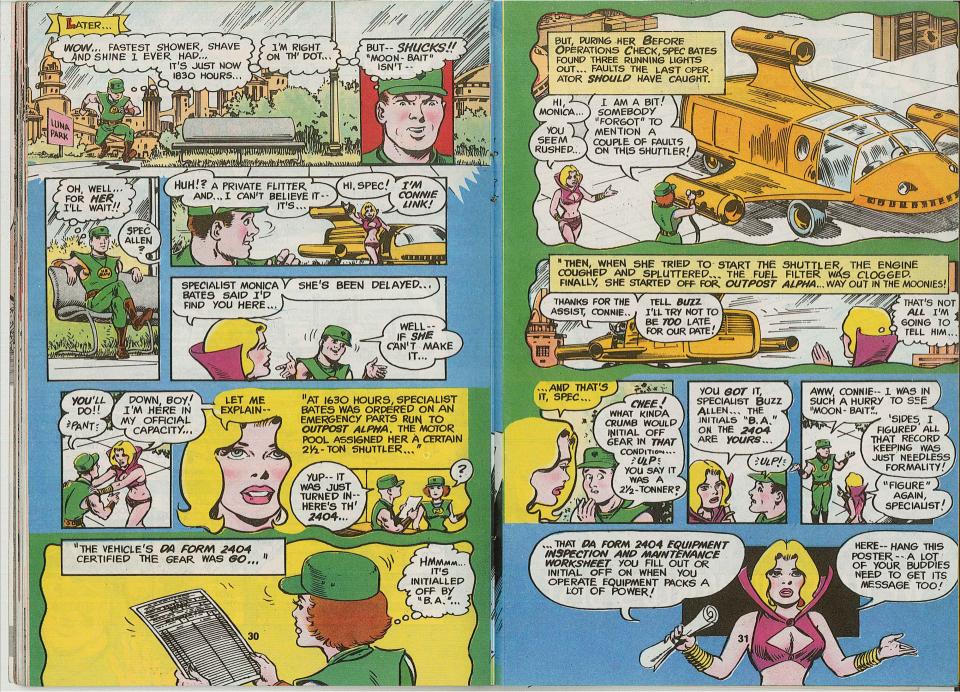
TF 3-6017 NBC Proficiency-Individual Standards GTA 3-4-9 Tank Gas Particulate Filter Unit M8A3 and GTA 5-6-5 Advanced Rigg-

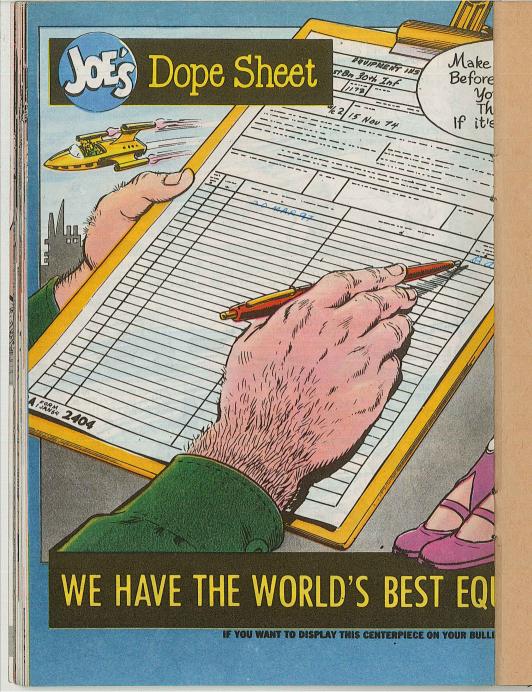
MIA2 Users, Attention! Goat Switch NSN

Get a new personnel emergency stop signal switch with NSN 2920-00-133-9629 for your M561/M792 11/4-ton truck, TM 9-2320-242-20P (Mar 77) Fig 36, Item 1 is being changed. salvage it.

Got an unserviceable M1A2 aiming post? Don't discard the beast. Pass it on to your direct support so they can decide whether to repair of







PEEL OFF — STICK ON

CAREFUL-YOUR COMMAND MAY HAVE RESTRICTIONS

SEND YOUR IDEAS FOR MORE STICK- ONS TO PS MAGAZINE, LEXINGTON, KY 40511













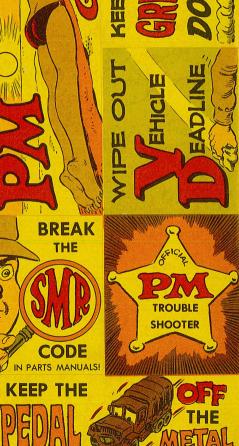




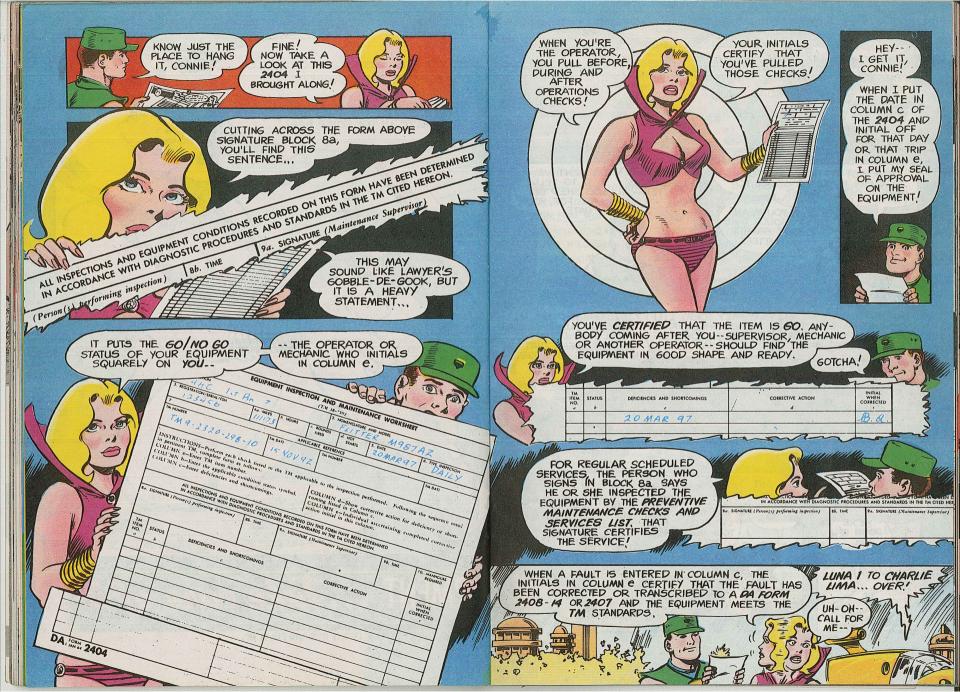


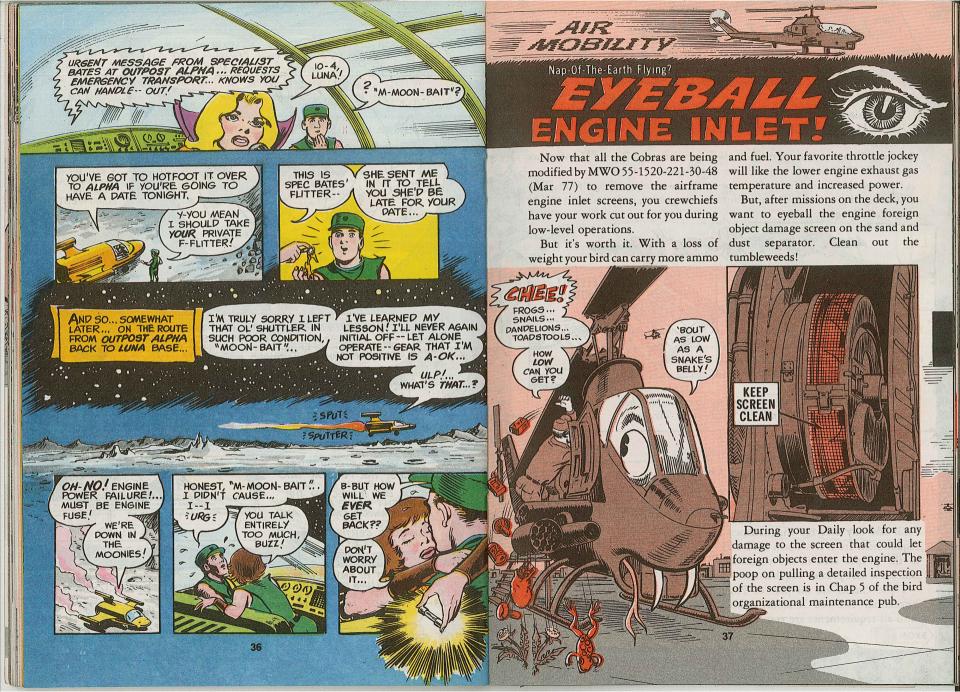












Now in Full Swing . . .

Phased Maintenance on the Huey and Chinook is in high gear, now that the UH-1 D/H and CH-47B/C checklists and TB-55-1500-337-24 (Dec 76) have hit the field.

As you change over from the Periodic inspection to the Phased Maintenance system the TB will help you over the rough spots.

Focus in on the checklists, tech inspectors, crew chiefs and bird mechs. With a little togetherness you'll breeze thru the changeover, and your birds will be operationally ready, PDQ.

Garage

The signal for the phased inspection is given when the TI enters a red X in block 16 and the words, "phased inspection due" in block 17 of the DA Form 2408-13.

He* eyeballs DA Form 2408-16 in the log book to determine which TBO items are due for replacement.



*Until Webster comes up with a non-sex word, "he" will mean "he/she" and "his" will mean "his/her".

The crew chief or maintenance supervisor makes sure all special and calendar inspections in the -20 manual, DA Form 2408-18 and Table 1-1 of the checklists are performed. He'll add any deferred maintenance requirement from DA Form 2408-14 to the proper area in the checklist below the last printed requirement.

These checks are all part of PM inspection. The red X status holds until all requirements are resolved.

2408-	2408-18)						
GNA	TURE Friest Smith	PAGE 1 of 1 PAGES					
	FREQUENCY	NEXT DUE					
)-20	Every 600 hours or 12 months whichever comes first.	1392.00 or Jul 18					
-20	Every 600 hours or 12 months whichever comes first.	1392.00 or Jul 78					
-20	Every 50 hours	842,00					

THE FUTURE

IS HERE!

BIRD

TYPES ..

The crew chief or maintenance supervisor lists the phase number, bird serial number and date on each sheet. The sheets are then passed out to the mechanics. Course, all maintenance types who inspect and repair the bird sign and initial the signature sheet on Table 1-3.

TM 55-1520-210-PM

Table 1-3. Signature Sheet

Susan Provint

Signature of Person Accomplishing Necessary Work

Heath Holland

Signature of Person Accomplishing Necessary Work

Signature of Person Accomplishing Necessary Work

Signature of Crew Chief

Signature of Technical Inspector

Signature of Maintenance Officer

Initial Initial Initial

FILL 'EM IN, BONNIE!

39





Follow the basic inspection info spelled out in TM 38-750. If you find no faults, put "OK" in the "Faults/Remarks" column and enter your initials in the last column.

			TM 55-1520-210-PM			
	SE NO / PH	IASED	MAINTENANCE CHECKLIST		Total Hrs. This Are	-
PHASE NO		Aircraft Serial No.		Date 10 MAN 77		
ENGINE AIR INDUCTION AREA - 9		Status	Faults and/or Remarks			Initial
Phase	1 Engine make litters (3 sections) for dam-		OK OK			20
15	age obstructions and loose of missing					60
	to exceed width of filler screen mass.	_	OK			
15	cracks dents lonse or missing lasteners and security					53
15	Airtrame FOI screen for foreign materials and damage which would permit passage.		UK			ATR
	of foreign material	-	PARTICLE SEPARATOR	0100	ONIED.	35
All	Particle separator disassembled and in- spected for clogging and damage. Gaskets and seals for cuts deterioration and sepa-		REMOVED	INSPECT	ED FOUND OK	
	ration from backing plates		NIA (SELE PURGING)			+ -
All	5 Particle separator air filter (non-self-purg-		- Commenter of the second		The same of the sa	

When you find a non-grounding fault, state it briefly in the "Faults/Remarks" column, insert the status symbol and your initial in the last column.

The person who corrects the fault—could be another mech—makes his entry in the "Action Taken" column. He puts his last initial over the status symbol and inserts his initials in the last column right under the initial of the mech who wrote up the fault. No TI check is required if the fault was not a red X or circled red X condition.

If the correction was a red X or circle red X tho, the TI does inspect the action taken. When he approves the action taken, he writes "Inspected Found OK" followed by his signature or stamp in the "Action Taken" column. He then places his initial in the last column under the initials of the mech who made the repair. Course, if the TI makes a repair, another maintenance type has to do the inspecting.

PHASE NO. PHASE MAIN
Arga Name and No.

Inspection Reparaments
Status
No.

Status

The new deal on initialing is to let the crew chief/maintenance supervisor know the status of any inspection requirement by looking at the initial column.

IF YOU NEED
MORE SPACE FOR
INSPECTION POOP,
REPRODUCE THE
BLANK FORMS AT
THE END OF
SECTION I,



Be sure you fill in all the headings, phase number, aircraft serial number and date. Attach the 2404's to the right area in the checklist. Write the number of 2404's attached in the upper right hand corner of the first page of that area of the checklist.

List any uncorrected or deferred faults on DA Form 2408-13 and -14. Component replacement info goes on DA Forms 2407, 2410 and 2408-16.



The crew chief/maintenance officer eyeballs the completed checklist forms to make sure everything is up to unit standards and the necessary work has been done or properly deferred. Course, the TI winds up the inspection with a serial number verification check per DA Form 2408-16. He makes a final records check of the forms listed in Table 1-2 of the checklists.

TM 55-1520-210-PM

Table 1-2 Final Records Checklist

This checklist is provided to insure the indicated forms and records have been inspected for presence, completeness, legibility, and accuracy prior to releasing the aircraft from a phase inspection. Verification of inspection will be indicated by placing the initials of the inspector in the appropriate initial block.

	AL HISTORICAL RECORDS	INITIAL
DA FORM 2408 DA FORM 2408-12 DA FORM 2408-13 DA FORM 2408-13 DA FORM 2408-14 DA FORM 2408-14 TM 55-1520-210-PMS TM 55-1520-210-ESC TM 55-1500-219-MTF LOCALLY REQUIRED FORMS	DA FORM 2408-5 DA FORM 2408-7 DA FORM 2408-8 DA FORM 2408-9 DA FORM 2408-15 DA FORM 2408-16 DA FORM 2408-17 DA FORM 2408-17 DA FORM 2408-17 DA FORM 2408-19 LOCALLY REQUIRED FORMS	





Any time you Kiowa mechs remove the main drive shaft to pull maintenance on another component, it's not necessary to repack the

Just make sure you only compress the couplings enough to release them from the mating adapter flange. If you compress them further, the shaft has to be disassembled, inspected and

To keep the couplings extended, cut some strips of wood or cardboard to fit between the couplings. Use masking tape to hold the strips in place on the

You could even make a small fixture from 1/2-in plywood to keep the couplings extended and provide a clean stand to hold the shaft.

Either way, you'll save yourself



You'll be pulling fewer preventive maintenance services checks on the U

The Intermediate inspection now goes from 25 to 75 hours, while the Periodic is extended from 100 to 300 hours.

You do not have to convert your Ute over to the new system right away, tho, if your scheduling will be locked-in. Continuing the old inspection sequence temporarily may allow you to more easily adjust to the extended inspections.

A change to TM 55-1500-328-25 on maintenance management is in the works. Meanwhile, AVSCOM's letter on the Ute preventive maintenance checksheets (14 Jan 77) has the details on the changeover. If you didn't get a copy check with your support unit.

CATARE A BARRARA BARARARA BARRARA TATARA BARRARA BARRARA BARRARA BARRARA BARRARA BARRARA BARRARA BARRARA BARRARA Measurement Requirement

Dear Editor.

21/RU-21 birds, Ute mechs.

It seems that mechs, supervisors and in some cases TI's are not aware of the requirement listed in TM 55-2840-229-24 (Apr 71), para 7-106Ad, on T-53 engines. This paragraph requires measuring the thickness of filter elements at the inner ring for a dimension of 0.122 to 0.138 inch every time the engine oil filter is disassembled.

Please pass the word. SFC Manfred Huber CO C 3rd Cbt Avn Bn 3rd Inf Div

(Ed Note: Sure will . . . and thanks.)

REPEAT AFTER ME "THICKNESS OF FILTER ELEMENT AT THE INNER RING MUST HAVE A DIMENSION OF 0,122 TO 0,138 INCH!" DIMENSIONS. ER I MEAN ...

SIMPLE ...

FEWER PM CHECKS ARE

NECESSARY!

Maintenance Operational Check . . .

GREAT! NOW YOU'LL FIND MY LEAKING

Saves Elbow Grease!

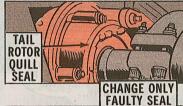
It's not uncommon for a Huey or Cobra mech to change a tail rotor drive quill seal, only to find out later that the faulty seal was really in the transmission input drive quill.

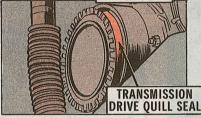
With rotating parts—and gravity in the bargain-oil can get slung around to a point where you're guessing which seal is the faulty one.

So, why replace 2 seals when 1 will do the trick?

Just clean up the area around both quills with a cloth. Then, ask your favorite throttle jockey to crank up the bird for a maintenance operational check.

You'll spot the seal that is leaking right away.





KLIKS SFARCH OF COMPUTER BANKS DOES NOT LOCATE PROPER TAPE --

Para 8-69 of TM 55-1500-204-Dear Windy, 25/1 (Apr 70), on general maintenance practices, says to use 4in wide strips of silver white reflective tape on ground support equipment on the flight line.

We've looked high and low, tho, and can't come up with the proper tape. What's the good word, Windy? PSG A. C. S.

Dear PSG A. C. S., You want Reflective Tape, Fed Spec L-S-300. NSN 9390-00-045-8793 will get you 50 yards at a cost of \$56.71.



Before you replace worn-out or damaged cables used with your FM radio set, make sure you're getting the right length cables for the right hookup.

HERE ARE SOME READY
REFERENCES FOR THE MOST
COMMONLY USED INSTALLATION
KIT CABLES AND CORPS WITH THE EQUIPMENT THEY ARE USED WITH ...



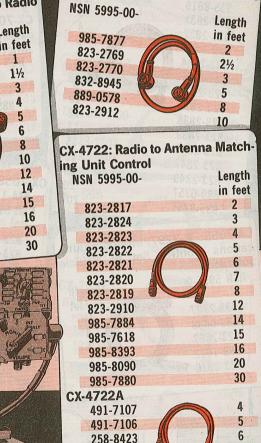
CG-1773A: Coaxial from Radio Antenna Connector to Antenna **Matching Unit** Length NSN 5995-00-

823-2986 889-1037 823-2990 985-8394

in feet

46

CX-4720: Vehicle Ba	attery to Radio
Mount NSN 5995-00-	Length in feet
889-0900	11/2
823-2855	3
169-6049	4
889-0708	5
823-2828	6
823-2827	8
889-1148	10
823-2726	12
889-1253	14
823-2854	15
823-2853	16
985-8395	20
889-0836	30
987-1299	1 1 1 1 2 1 5 1 H



408-2661

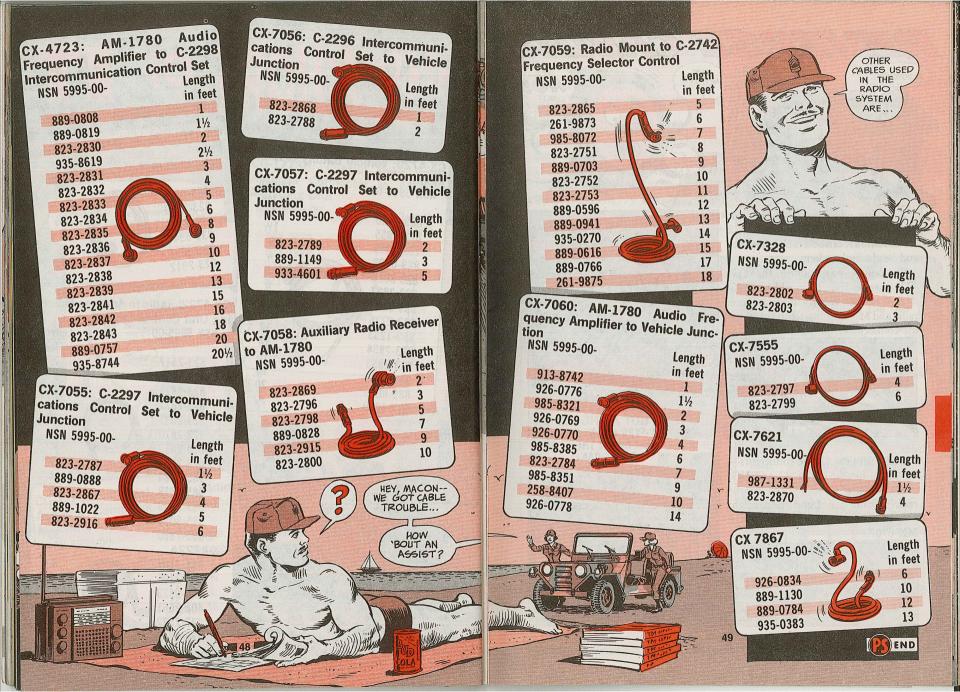
823-2872

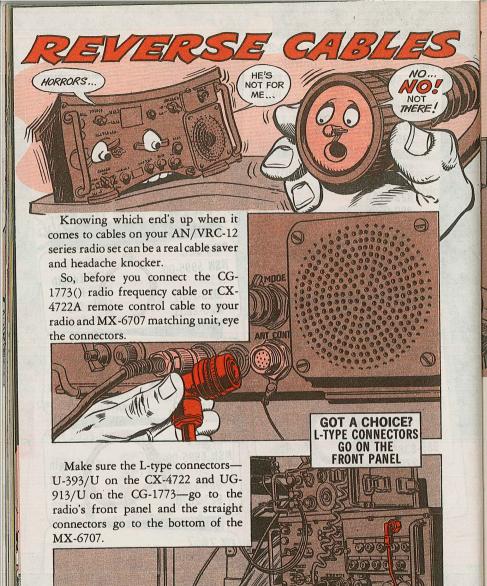
823-2818

CX-4721: Radio Mount to Radio



10

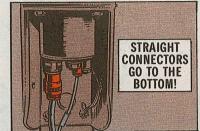




STRAIN and PAIN

When the connector hookup is reversed on the L-type connectors at the MX-6707 receptacles, the cable's wiring will pull loose from the cable connector.

And, remember when you're connecting the straight CG-1773's UG-88C/U connector and the CX-4722's U-290/U connector on the MX-6707, always connect the U-290 first. This'll keep the CG-1773 connector from bending the coax cable receptacle pins if you mismatch the cables and receptacles.





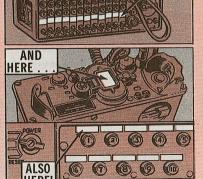
Broken or missing frequency or traffic designation strips for your commo gear can make for a missing link in your communication chain. Replace them.

For the SB-22 switchboard, get designation strip NSN 9905-00-639-1679.

The TA-312 telephone set's strip has NSN 9905-00-226-1742.

There are no stock numbers for designation markers on other commo gear. You can get your support to cut a piece of white plastic into strips, squares, rectangles or whatever shape your gear calls for.

For shelter-type installed HERE! switchboards, a handy material for making strips is heavy glossy paper. Or, you might make them from thin aluminum strips.



DESIGNATION

STRIPS

HERE . . .

10

50



There's a new and better way to adjust the track on your Caterpillar tractors.

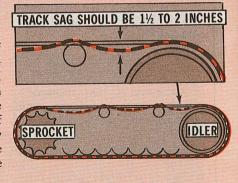
It's based on track slack rather than sag. It's simple . . . and works better than the sag measurement.

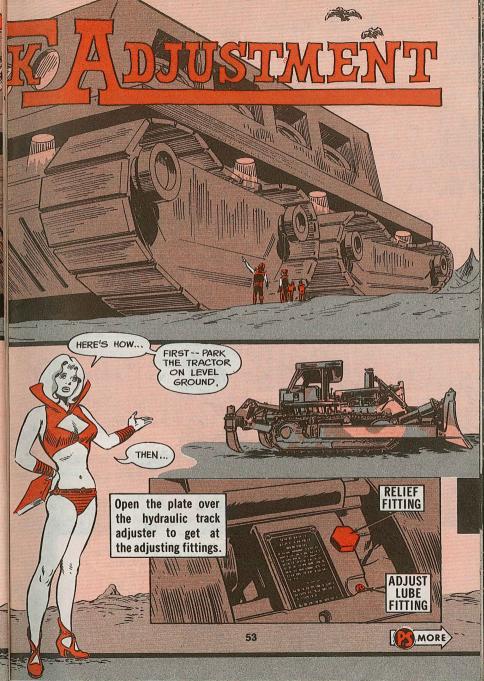
What's the difference between slack and sag?

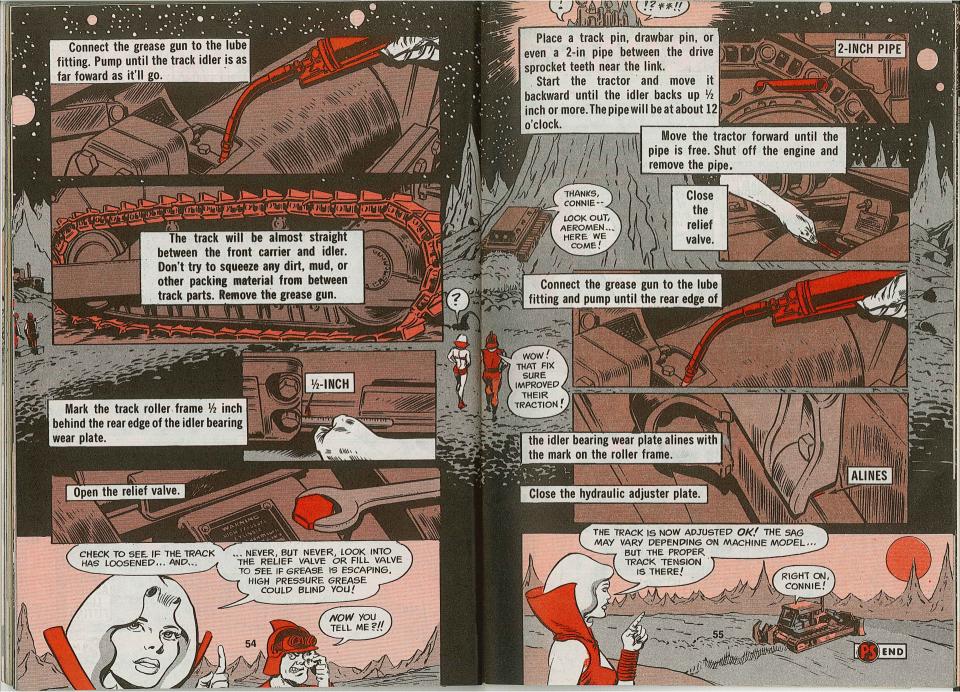
Sag is the distance between a straight line and the actual position of the track. It's measured between the front idler and the upper track roller.

Slack is the difference in length between the circumference of the track system and the actual length of the track. As the idler is moved away from the drive sprocket, you get little or no slack. As it's moved closer to the sprocket you get more slack.

You use sag measurement as a quick guide to tell when to adjust the track.









Those lift cylinder cross-over tubes on your D7F tractor need clearance.

the compared was a second

If the cross-over line connections, NSN 3830-00-251-6618, set too close to the lift cylinder support tube, they'll hit or rub on the support tube. Then, the metal lines welded to the manifold will break.

This happens when the tractor is twisted by the downward thrust of the dozer blade lift cylinders and the pull thrust of the blade tilt cylinder.

TUBES

BREAK

AT WELD

MANIFOLD

YOU WON'T FIND THIS CLEARANCE SPELLED OUT IN THE 7M BUT IT'S REAL IMPORTANT!

HERE'S HOW YOU GET IT...

Park the tractor on level ground with the blade down.

Check for 2¼ or more inches of clearance between the bottom manifold tube and the lift cylinder support tube.

LIFT CYLINDER SUPPORT TUBE

FRONT LEFT SIDE OF TRACTOR

STEEL TUBES WELDED TO MANIFOLD

LIFT CYLINDER SUPPORT TUBE MANIFOLD

MANIFOLD

TUBE

MANIFOLD RETAINING BOLTS

If you get less than 21/4 inches,

Move the entire assembly to get the

clearance.

loosen the manifold retaining bolts.

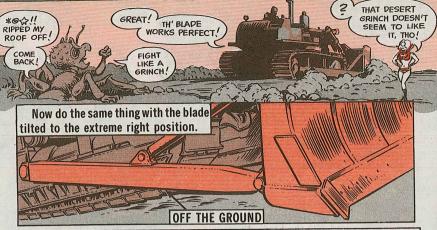
LIFT CYLINDER

RAISED OFF GROUND

Start the tractor and tilt the blade to the extreme left position. Lower the blade and raise the tractor off the ground. Watch the hoses during this operation.

5€

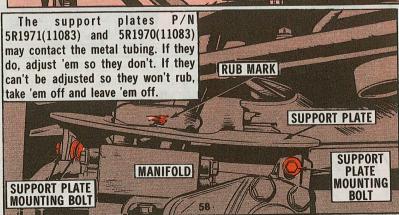
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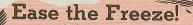


If you get contact between the lines and the lift cylinder support tube, loosen the hydraulic oil lines at the connections nearest the manifold.

Shift or rotate the hoses so that you get the clearance. Make sure bolt heads on the connections are toward the support tube. Tighten the connections and repeat the tilt-lift operation.







Here's a sticky reminder to drain 7965—on or near the control panel of shutdown.

the water from lines, filters, tanks, your equipment. It'll save you freezepumps and such after equipment ups, busted pipes, lines, hoses—and extra downtime and cold weather

Stick the decal—NSN 9905-01-008- work.

THINK WE SHOULDA DRAINED TH' WATER?

AFTER SHUT DOWN IN FREEZING TEMPERATURE DRAIN ALL WATER FROM FILTERS, TANKS, PUMPS. LINES, AND HOSES. LEAVE DRAIN VALVES OPEN INSPECT UNIT TO INSURE ALL WATER HAS BEEN DRAINED.

Camouflage Lingo Spoken Here

So the apples are ripening and the plums are in . . . and your vehicles and equipment are not camouflaged vet because you don't know how?

Find out from these pubs:

TB 746-95-1 (May 76) Armament **Command Equipment**

TB 43-0118 (Dec 75) Electronics **Command Equipment**

TB 43-0147 (Dec 75) Troop Support **Command Equipment**

TB 43-0209 (Oct 76) Vehicles, Construction Equipment, MHE

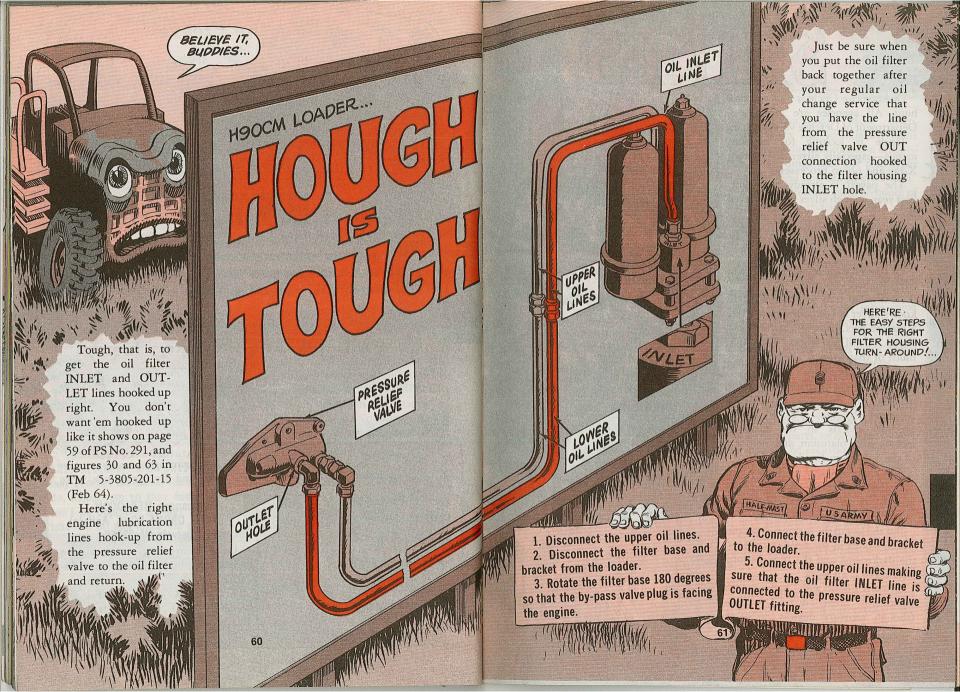


Pattern painting instructions are in TC 5-200, and if you get stuck, write

> Commander, MERADCOM ATTN: DRDME-RC (G. Anitole) Fort Belvoir, VA 22060

If you're in a big sweat, call the camouflage hotline, Autovon 354-2654.

'Course, AR 750-58 (25 Feb 76) w/Ch 1 (15 Oct 76) has the last word in case of conflict with these pubs.



Opportunity . . .

SHINES LIKE SILVER

Our favorite Uncle is on a treasure hunt. All agencies are in on it—Department of Defense very much so.

Uncle is looking for precious metals—especially silver, silver from X-ray and photo processes.

The payoff is already handsome. Last year, enough silver was recovered to—

Make 400 million dental fillings; Or turn out 150 million chest X-rays;

Or coat enough aerial recon film to circle the world 6 times.

As any lab tech or photo amateur knows, silver not actually used to make a picture gets dissolved in darkroom "hypo." Until just a short time back, much of that hypo . . . and silver . . . went down the drain.

Then Uncle started his hunt, naming it the Precious Metals Recovery Program (PMRP). Other precious metals in the program include gold, platinum, and members of the "platinum family."

The Defense Logistics Agency sent out silver recovery outfits to photo labs, X-ray crews, dental clinics, and movie groups the world around.

But the key to the fortune is people ... you troops in the finishing plants, the darkrooms and the film sections who make it all work.

Often it's done with "home-made" equipment. There are no DA TM's (though recovery devices do come

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to do YOUR part in the search for and recovery of PRECIOUS METALS.

with instructions). Most often, maintenance and installation come out of ingenuity and common sense—the same things that got tech types into that kind of work to start with.

It saves buckets of cash: an ounce of the "shiny" reclaimed this way averages costing 59 cents. But best of all, it recycles something that will never, never be replaced. There's no way of manufacturing more silver. Like good land to grow things, precious metals are limited. Without PMRP, the time might soon come when pictures and X-rays couldn't be made so well, just from lack of silver.

Gold in PMRP comes from dental gold scrap and electronics scrap.

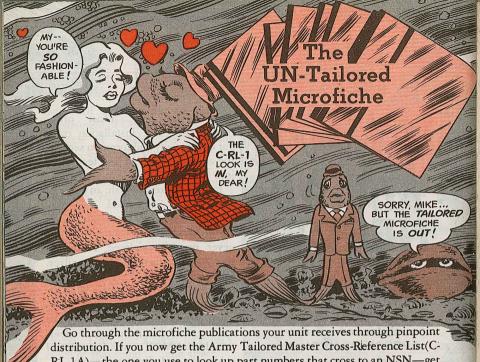
Platinum "family" metals—palladium, rhodium, iridium, ruthenium, and osmium—come from rare PDO scrap. They go into spaceage ignition parts, switches and relays. Savings can be enormous.

But PMRP is far from being a matter of money alone. Irreplaceable metals have a value beyond mere cost. For some of the jobs to be done, there is no substitute at any price.

It took a while. But in FY '76, 3.8 million troy ounces of good stuff came back. With a price running to \$5 an ounce, that's a fortune.

It's a tall hill, but with cooperation, it's not out of reach. Just takes having everybody do his part.

Apologies to the late, great J.M. Flagg who painted the famous poster of World War I.



RL-1A)—the one you use to look up part numbers that cross to an NSN—get ready for a change.

The 1 Ian 77 list was the final Army Tailored Master Cross-Reference List. The only version now available is the DOD-wide list of all part and reference numbers (except the classified ones!) that have NSN's.

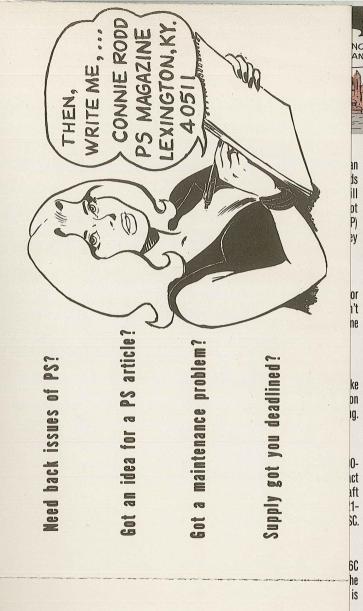
The DOD-wide Consolidated Master Cross-Reference List (RL) comes in 2 parts. Part 1 (C-RL-1) is similar to the one you've been receiving. Part 1 gives you the part or reference number, Federal Supply Code for the manufacturer (FSCM), variation code and NSN in part or reference number order.

Part 2 (C-RL-2) lists NSN's that cross to part or reference numbers. They go in National Item Identification Number (NIIN) order-all -00- NSN's first, -01-NSN's last. Part 2 pretty much applies to procurement organizations only.

Get with your pubs people and tell them that DA Circular 310-94 Notice to Users of the Fed Sup Cat, Army Tailored MCRL (C-RL-1A), Feb 77 has the word on the new set-up.

If you're getting just the Army Tailored RL—or both the Army Tailored and consolidated RL—put in a DA Form 12-21 for the consolidated RL only. Order just the number of copies you need.

Send the DA 12-21's to the AG Publications Center in St. Louis.





Eighth Army, Korea

esulted STICK-ONS from a suggestion by in this issue MAJ Rodney S. Syczylo and III. Issue 294





Fuel Janker NSN Switch

Your M131A4C or M131A5C 5,000-gal fuel servicing tank semitrailer does not use that hose adapter elbow packing, FSN 5330-763-2394, on page C-31, TM 9-2330-272-14 (Jun 72). Instead, order NSN 5330-00-029-9773.

Hold the Paint

Never, never paint any part of the radiator core on your vehicle. Paint clogs the core's air passages. A clogged core cuts into your radiator's cooling power. And that leads directly to engine overheating.

Wheels Only!

The only repair parts you can get for your aircraft tow bar are the solid rubber wheels, NSN 2530-00-288-0406. Make your own repairs, using cannibalized parts from a condemned tow bar, or ask for a new one with NSN 1730-00-967-9556.

Medical Aid

Looking for help with those complicated (and not so complicated) pieces of medical equipment vou use?

The Army Medical Department National Maintenance Point is ready to help you with your maintenance puzzlers. They'll also help you find the right person for your supply questions.

If you're in a hurry, dial AUTÓVON 343-7441. Get the rill fou can wait a bit, write to U.S. Army Medical semitrailer with Materiel Agency, ATTN: AMEDD National NSN listed of Maintenance Point, Frederick, MD 21701.

Goer Steer Alert!

Get your Goer up to support quick—for an inspection of the hitch and pivot arms. The welds may be cracked. Your steering could fail! DS will inspect the welds with a dye penetrant. They got the word in TARCOM Msg DRSTA-M(NMP) 121830Z Aug 77. If they need any more info, they can call Autovon 369-2869.

Back to Basics

If you've come up with an aircraft bolt—or any fastener for that matter—that you can't identify, eyeball FM 55-63 (Jan 74) on airframe fundamentals. Chap 8 has the good word.

Goat Bleeder Correction

Use NSN 5120-01-024-1029 to get the brake bleeding tool for your TM-242-series 11/4-ton trucks. The NSN on page 7 of PS 298 is wrong.

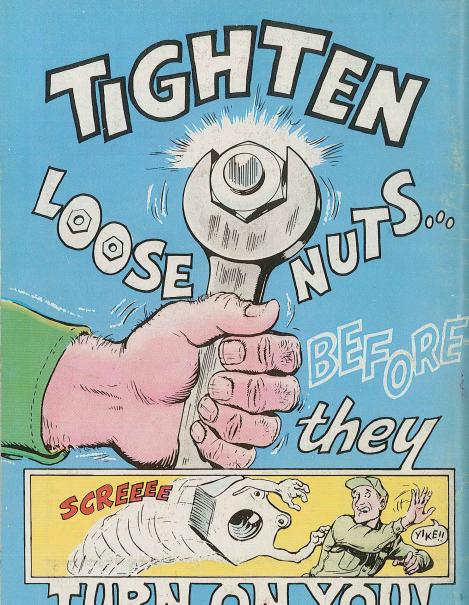
MK-693/A Jool Kit

Use NSN 5940-00-502-8806 → not NSN 5990-00-502-8816 — for the electric contact assemblies (terminals) for your aircraft electronic maintenance kit. The goof in SC 5821-91-CL-E04 (Aug 75) will be corrected in a new SC.

7187 M146 Trailer Cable

Get the right power cable for your M146C semitrailer with NSN 2590-00-104-4572. The NSN listed on page 63 of TM 9-2330-227-14 is wrong.

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



SINO)