

Issue 476

PS

July
1992

THE PREVENTIVE MAINTENANCE MONTHLY

TB 43-PS-476

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and pass it on!!



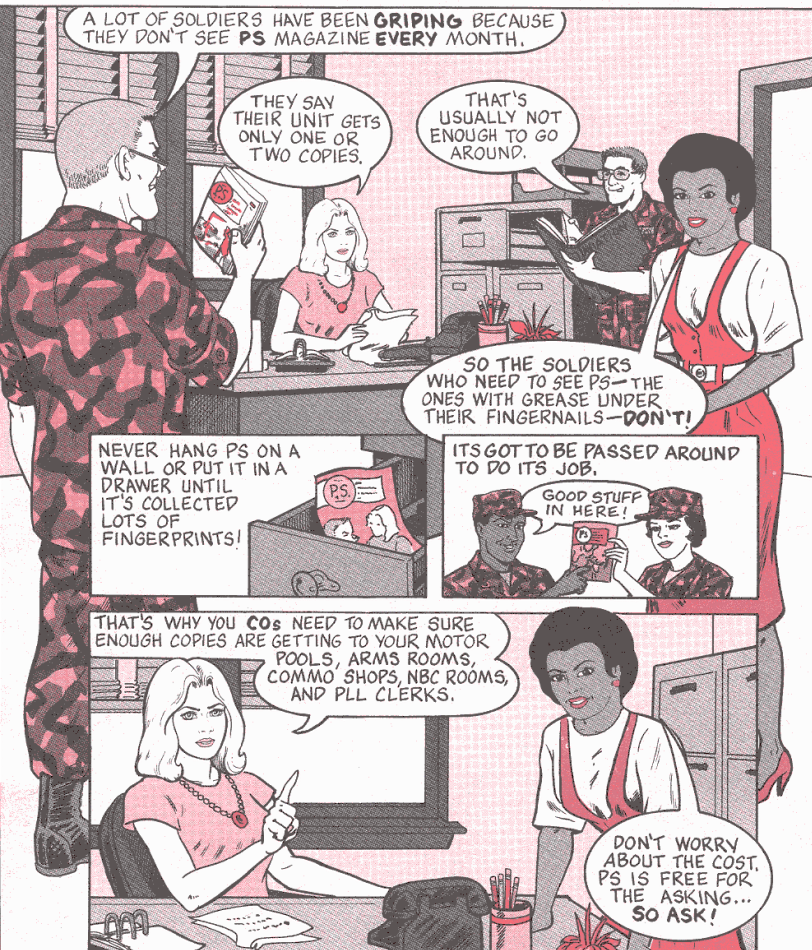
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Supply Sergeant	1
Commo Chief	1
Arms Room	1
NBC NCO	1
PLL Section	1
Maintenance Section	5
Operators/Crew	1 for every 5 soldiers

Total 'em up and that's what you put on your DA Form 12-99-R, using 12-34-C in the Form Number section and 312 in the Block Number section.

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Here're the issues that are available:

273, 324, 337, 346, 351, 357, 358, 363, 364, 366, 382, 392, 397, 398, 399, 400, 401, 403, 404, 405, 406, 407, 408, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, and 475. The December issue, 469, has the index for 1991.



THE
PREVENTIVE
MAINTENANCE
MONTHLY

TB 43-PS-476, The Preventive Maintenance Monthly, is an official publication of the Department of the Army, providing information for all soldiers assigned to combat and combat support units and all soldiers with unit maintenance and supply duties. All information published has been reviewed and approved by the agency responsible for the equipment, publication or policy discussed. Application of the information is optional with the user.

ISSUE 476 JULY 1992

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You are invited to send PS your ideas for improving maintenance procedures, questions on maintenance and supply problems, questions or comments on material published in PS. Just write to:

MSG Half-Mast
The Preventive Maintenance Monthly
Lexington, KY 40511-5101

By Order of the Secretary of the Army:

GORDON R. SULLIVAN
General, United States Army Chief of Staff

Official:

Milton H. Hamilton

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Administrative Assistant to the Secretary of the Army
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All You Need to Know About TOW

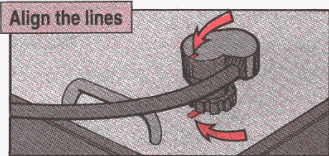


ATOW that is a no-show when it comes time to fire can be a real blow as the enemy is bearing down on you. Your TOW has got to be on its toes if you're going to survive. . . and that means you must be on your toes when it comes to PMCS. Here's what you need to know and do.

MGS

The No. 1 TOW killer is rough handling of the MGS 2W1P1 cable connector. If you jam the connector on, you bend connector pins and the TOW is out of business.

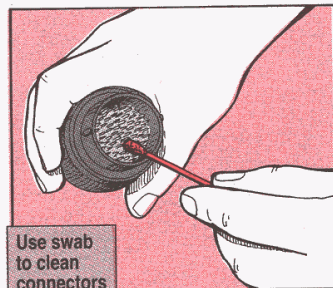
Look before you push. Line up the cable connector's yellow line with the MGS yellow line. That aligns the keys and keyways on the jack and connector. If you feel resistance when you push in the connector, jiggle it to the right or left. If you still feel resistance, STOP. It's time to call your repairman.



Never plug in the connector without the adapter, NSN 5935-01-117-3304. If the adapter's missing, get another from your repairman. Adapters are a snap to replace. But if the cable pins or jack pins are bent, your TOW's in for expensive repairs.

During BEFORE PMCS, eyeball the MGS jack and cable connectors for dirt and sand. They will clog the jack holes and cause bad connections and bent pins.

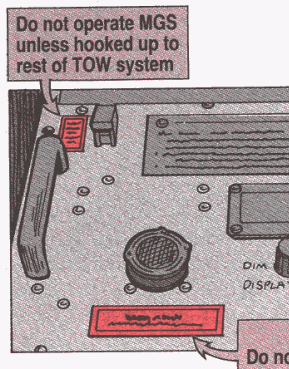
Your repairman can blow out clogged jack holes with compressed air from the air gun, NSN 4940-00-333-5541, in the No. 1 Common shop set. Hit the cable connector against the palm of your hand to knock out sand. Wrap a rag around a stick to make a swab. Wet the swab with alcohol. Clean out any remaining sand from the connector with the swab.



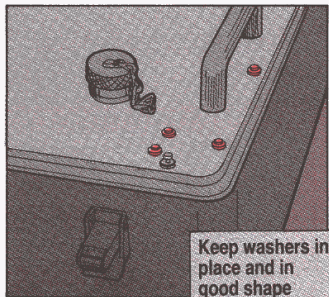
When you're not firing, keep the MGS cable connector wrapped in plastic and the MGS cover latched to seal out sand.

Be sure the MGS is hooked up to the traversing unit and day sight before you turn on the power. Otherwise, trapped voltage zaps MGS circuit cards. Same thing happens if you use the MGS with TOW MILES.

A good reminder is to tape signs — gummed labels work well for this — next to the TEST/OPERATE switch and J1 connector.



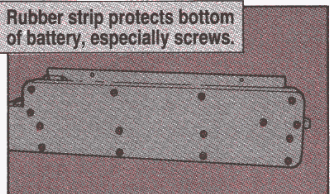
Make sure the washers on the top of the MGS are in place. Eyeball the bottoms of the washers for cracks and missing chunks. Even one bad washer can let water in components and cause electrical damage. Your repairman can replace missing washers.



Keep washers in place and in good shape

MGS Batteries

Setting the MGS battery on metal or concrete drains power out of it. Put it on rubber or cardboard.

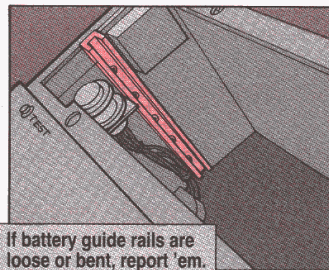


Rubber strip protects bottom of battery, especially screws.

Protect the battery by gluing a battery-sized strip of rubber on the truck floor below the spare battery rack. That prevents battery-to-metal contact and protects the bottom of the battery from getting banged up.

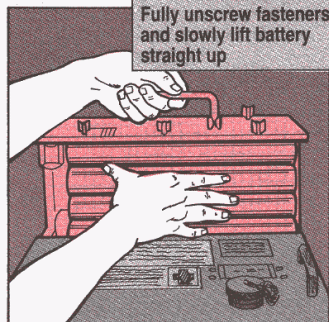
Before you install a battery, inspect the MGS battery guide rails for looseness and bends. Loose rails let the bat-

tery bounce around. Bent rails make it hard to install or remove the battery. Report real problems to your repairman.



If battery guide rails are loose or bent, report 'em.

When you change batteries, fully unscrew all wing fasteners. Slowly lift the battery straight up. Check the fasteners if you feel resistance. Jerking the battery out breaks fasteners. Without at least four fasteners, the MGS is NMC.



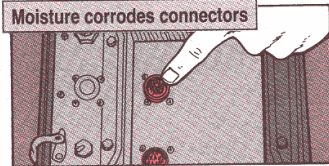
Fully unscrew fasteners and slowly lift battery straight up

Never stack batteries. A tumble destroys wing fasteners and batteries.

Before you charge, discharge a battery fully. And then charge it all the way. Otherwise, you can't fully charge it again. Just wait four hours for the charger's FULLY CHARGED light to come on.

Battery Conditioner

Water corrodes connectors and puts the night sight battery power conditioner down. Keep the conditioner's lid on. Never use high pressure water or steam cleaners around it.



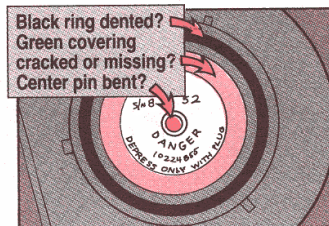
Moisture corrodes connectors

If the conditioner does get wet, pull its batteries and eyeball for moisture. Mop up moisture and let it air dry for 24 hours before you replace the batteries.

Round Reminders

Loading a TOW round — real, MILES, or simulated — with a bad tube will cause everything from a hang fire to a shorted-out MGS to a damaged umbilical connector. Look for these tube trouble signs:

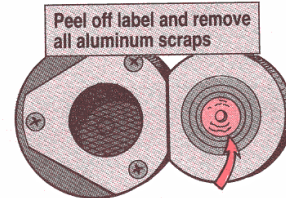
- If the electrical connector's black ring is dented or out-of-round, the center pin's bent, or the green covering's cracked or missing, the tube's no good.



Black ring dented? Green covering cracked or missing? Center pin bent?

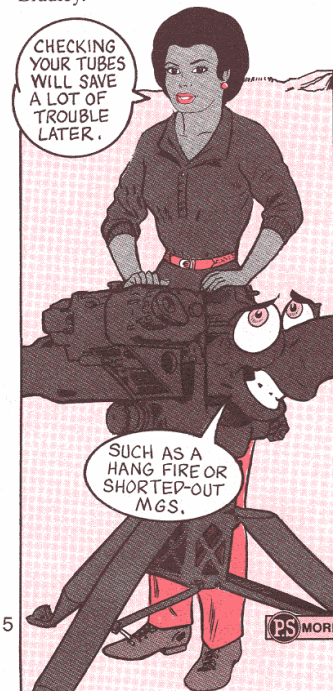
On training rounds, peel off every bit of aluminum label on the connector. Push down on the rubber detent cover to

make sure the detent spring and sheared plunger has been removed. If the cover doesn't spring back, they've been removed.



Peel off label and remove all aluminum scraps

Labels and sheared plungers prevent a good electrical connection and can damage the launcher, the MGS or TOW simulator, or the pillow blocks on the Bradley.

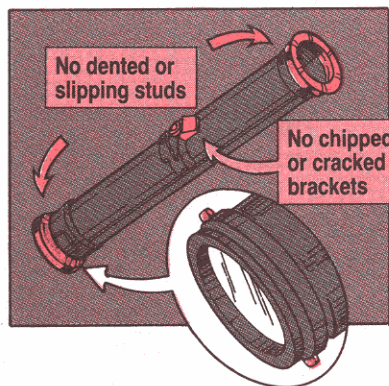


CHECKING YOUR TUBES WILL SAVE A LOT OF TROUBLE LATER.

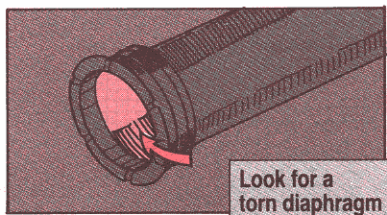
SUCH AS A HANG FIRE OR SHORTED-OUT MGS.

PS MORE

eyeball the mounting brackets in the middle of the tube for chipping and the alignment studs at the tube's ends for dents or slippage. If they're not right, the tube won't fit tight in the launcher and the missile and launcher electrical connections won't mate for firing.



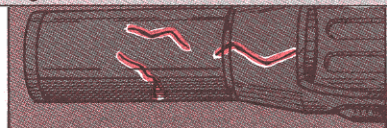
- Inspect the front and rear diaphragms on live round tubes for tears that will let in moisture.



On training rounds, look for the shorting wire on the front end. If it's missing or dangling, the round won't simulate firing.

- Make sure the humidity indicator is blue. If it's pink, moisture's already gotten in the tube.
- Look for cracks inside and outside the tube.

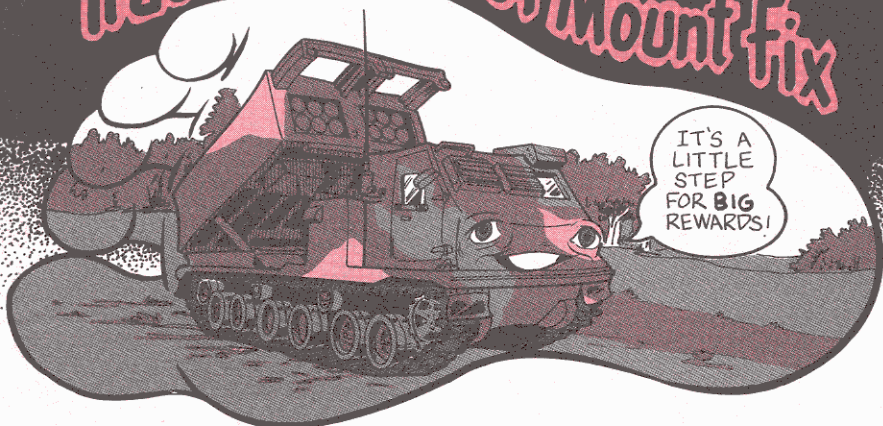
If you spot any cracks 1½ inches long or longer, turn in the launch tube. It's unsafe!



Until the tube is used, keep on its electrical connector protective cover, NSN 1440-00-444-0563.



Track Shoe Roof Mount Fix



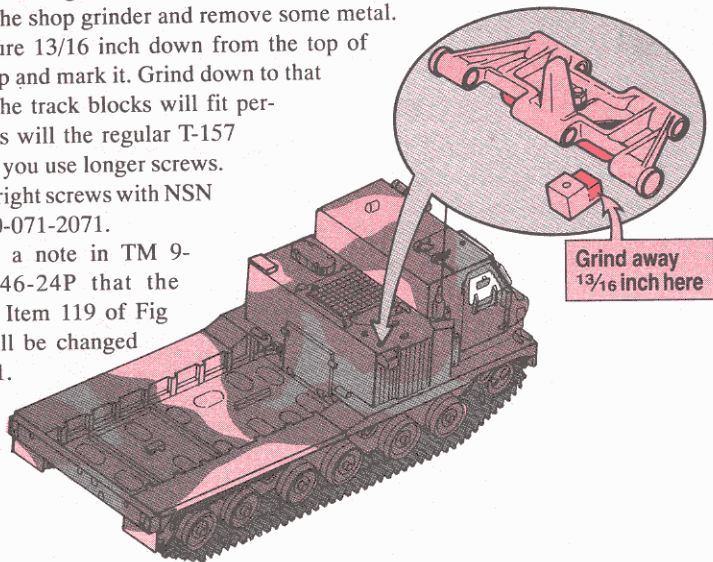
You mechanics will have to do a little grinding before you can stow T-157I "Bigfoot" track blocks on top of your MLRS cab.

The mounting block steps are too high for the larger track block to fit, so get out the shop grinder and remove some metal.

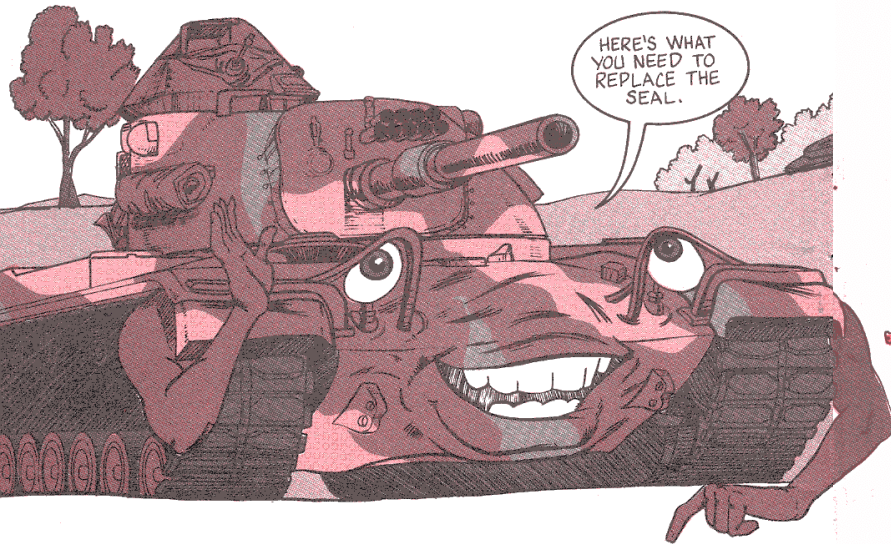
Measure $13/16$ inch down from the top of each step and mark it. Grind down to that mark. The track blocks will fit perfectly, as will the regular T-157 track, if you use longer screws.

Get the right screws with NSN 5305-00-071-2071.

Make a note in TM 9-1450-646-24P that the screws, Item 119 of Fig 189, will be changed to -2071.

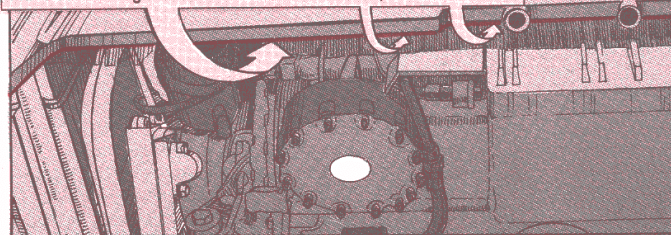


Replacing the



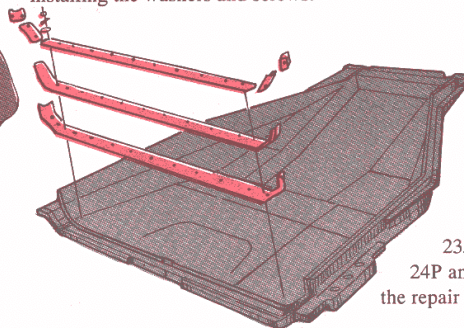
Rear Grille Seal

Make sure rear grille seals and brackets are in place under here:



3. To install the hardware, stack the mount bracket, seal and other plates and brackets on the top deck. Then use a drift pin to line up the screw holes before installing the washers and screws.

Stack brackets, seals and other plates and brackets on the deck



This information will be added to TM 9-2350-253-20P-1, TM 9-2350-222-24P, TM 5-5420-226-24P and TM 5-5420-202-24P, plus the repair -20s for all four vehicles.

Repair parts for the rear grille seal and mounting brackets are missing from the parts manuals for the M60A3 tank, M60A1/M48A5 AVLB and M728 CEV.

Removal and installation information is also missing from the repair manuals. Here's help for those chores:

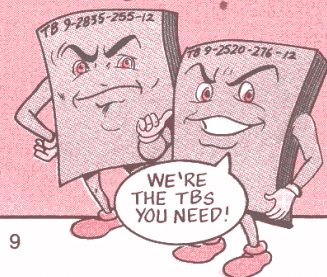
1 Use a 7/16-in socket to remove the 19 screws, lock washers and flat washers that hold in place the rest of the hardware and seal.

2 Before installation, make sure the threaded holes are free of dirt and rust, especially if the supports and brackets have been missing for a while. Use a 1/4-20-UNC thread tap if necessary.

Item	NSN	Qty
Spacer plate	5365-00-106-2202	2
Bracket	5340-00-105-6150	1
Flat washer	5310-00-809-3078	19
Lock washer	5310-00-582-5965	19
Screw	5305-00-225-3843	19
Mount plate	5340-00-105-6156	1
Bracket	5340-00-105-6151	1
Seal	5330-00-678-4183	1
Mount bracket	5340-00-105-6152	1

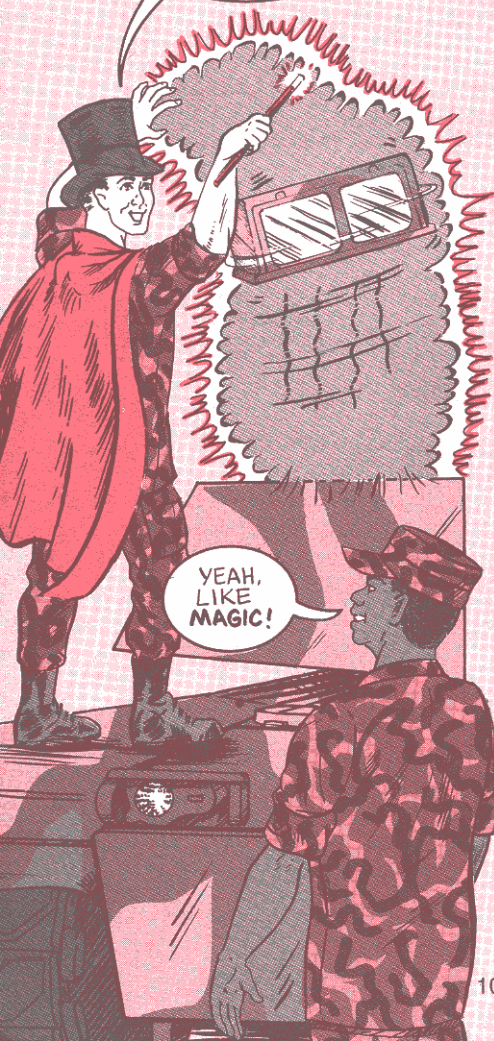
M1 Tank Warranty Info

TB 9-2350-264-14, which covered warranty info for M1-series tanks, has been rescinded. TB 9-2835-255-12 now covers the AGT 1500 engine warranty and TB 9-2520-276-12 covers the X1100-3B transmission warranty. Follow the instructions in DA PAM 738-750 for all other claims.



GPS HOCUS-POCUS

REMOVING THE **GPS** BODY ASSEMBLY IS EASY ONCE YOU KNOW HOW!



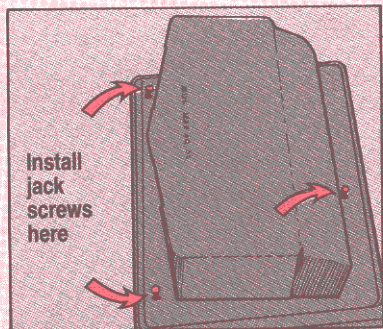
YEAH, LIKE MAGIC!

There's a trick to removing the gunner's primary sight body assembly on your M1-series tank. And you don't have to be a master magician to do it.

After removing the bolts, the assembly is still stuck in place with sealing compound. Prying with a crow bar may loosen the assembly, but it'll also crack and break the mounting flange.

Use the right tools and avoid the rough stuff to free the body assembly. Here's how:

1 Loosely install three new jack screws, NSN 5305-00-782-9489.



2 Alternately turn each screw $\frac{1}{2}$ turn until the assembly pulls free from the tank.

The complete scoop's on Page 9-9 of TM 9-2350-255-20-2-4 for the M1 and Page 9-9 of TM 9-2350-264-20-2-4 for the M1A1.

When reinstalling the assembly, be sure to protect it against leaks. Put new sealing compound, NSN 8030-00-275-8110, under the mounting flange before bolting down the assembly.

Latest Drift on NSGs



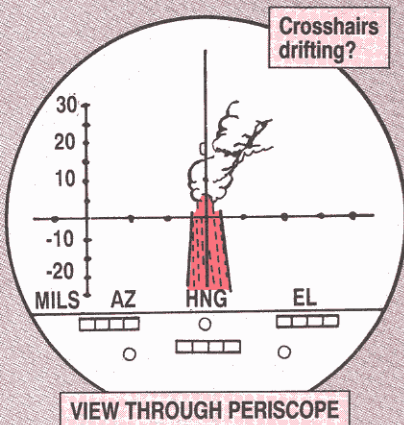
M981 north seeking gyrocompasses (NSG) are being mistakenly turned in because crewmen think the compasses are drifting too much. As a result, NSGs are in short supply.

NSGs can drift up to 8 mils per hour and be OK. Make a note of these steps until they're added to the NSG confidence test on Page 2-326 in TM 9-2350-266-10:

14. Look through the tank periscope eyepiece. Position the targeting head with the hand controls so that the crosshairs of the LD/R reticle are again centered on the target. The azimuth displayed on the TSCD should be roughly the same as it was in Step 7. Record the azimuth.

15. Leave the targeting head on the target for one hour. Make sure there is no movement of the crosshair on the target and that the azimuth number does not change more than 8 mils.

16. If the crosshairs moved, something may be wrong with the turret hydraulics. If the crosshairs stayed on target and the change in azimuth was more than 8 mils, the NSG is drifting too much. Report either problem to your mechanic.



Look at Lanyard

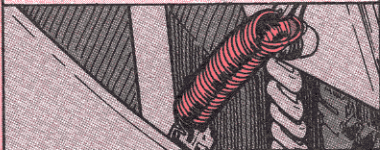
CONNIE,
EVERY WEEK I
GET A STACK OF
REPORTS ABOUT
VULCAN JAMMING
PROBLEMS.
WHAT CAN I DO?

HAVE YOUR
REPAIRMEN LOOK AT
THE LANYARD SPRING.

If your unit is reporting lots of jamming problems during weekly PMCS, you Vulcan repairmen may have lanyard spring problems. Here's a quick way to check:

Cycle a 30-round high-rate burst through with the ammo system empty. Inspect the element belts. Cycle another 30-round high-rate burst through. Eyeball the belts again.

If there is any change in the slack in the belts, replace the lanyard assembly, NSN 1005-00-830-4207, and spring, NSN 5360-01-174-0891.

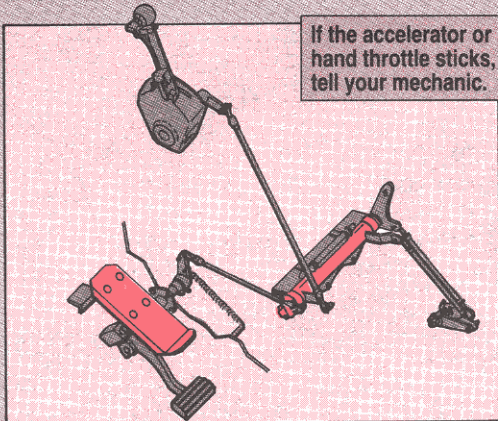


Check for Cross Shaft Corrosion

Corrosion on the accelerator cross shaft can keep the accelerator pedal and throttle system from returning to the idle position, which creates a real safety problem, drivers.

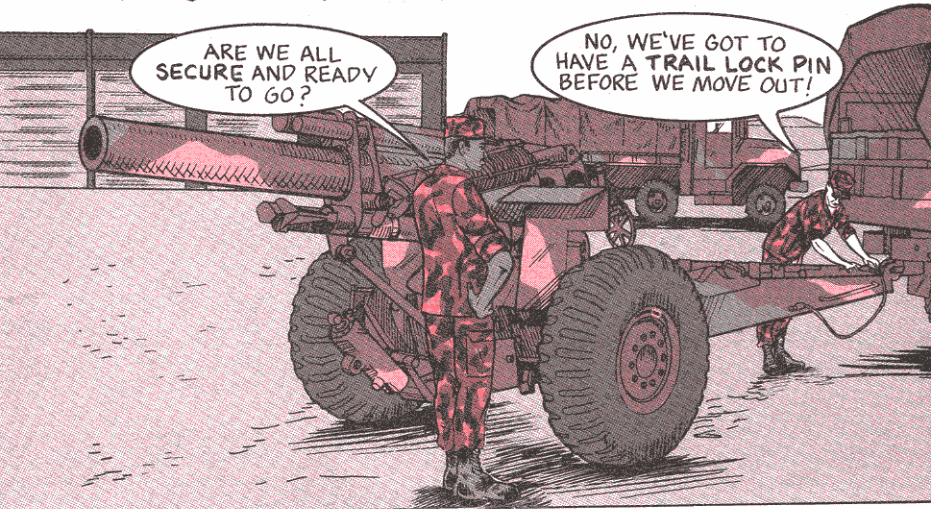
Check your vehicle for sticking accelerator pedals or unusual resistance before starting the engine. Depress the pedal all the way to the floor and then release it. If you notice any sticking, report it. Do not operate your vehicle until the problem is corrected. Your mechanic

If the accelerator or hand throttle sticks, tell your mechanic.



may have to replace the cross shaft transmission bell crank or rotating eye bracket if corrosion is the culprit.

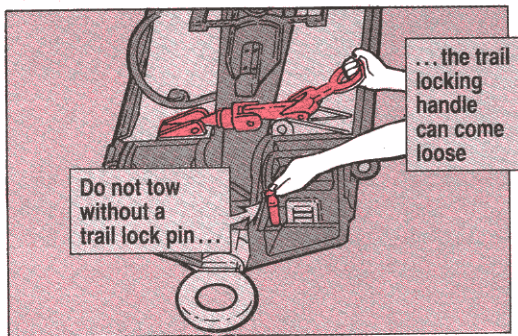
Trail Lock Pin's a Must



Never tow the M114-series howitzer without a trail lock pin securely in place. The key word here is "securely." If the pin you have will not fit the trail holes, and you tow without one, there's the chance that the locking handle will unlock and allow the left trail to swing out. And if the trail swings out into oncoming traffic—well, you don't want any part of that.

So here's the deal: Get your mechanic to order pin, NSN 5315-00-619-2997, or pin, NSN 5340-01-286-1810. The second NSN is not on the AMFD, so order it on a DD Form 1348-6 from S9I. In the Remarks block put "NSN not on AMFD."

Just make sure there's one of these pins in the trails before any towing. If no pin is available, a strap or something similar must be used to keep the trail locking handle from unlocking.



Drain Sandy Hydraulics

IF YOU SPENT ANYTIME AT ALL IN SOUTHWEST ASIA, YOU KNOW THAT SAND GOT INTO EVERYTHING. IT GOT INTO...



I DON'T UNDERSTAND IT. THE ELEVATION CYLINDER SUDDENLY STOPPED WORKING!

SOUNDS LIKE YOU'VE GOT SAND IN YOUR HYDRAULICS.

If your M109 saw action there, chances are your hydraulics are full of sand. And that means you're probably facing an elevation cylinder failure.

As a precaution, you mechanics should drain the hydraulic fluid and change the filter.

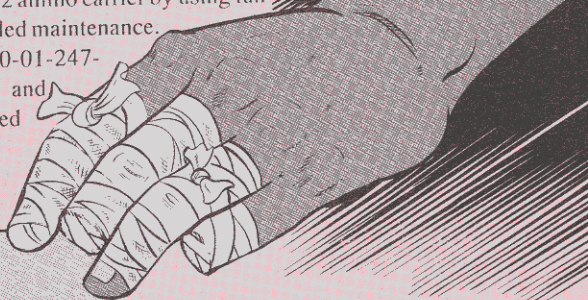
Before you start, though, make sure to elevate and depress the cannon tube several times, traverse the cab 360 degrees, and activate the rammer. That gets any settled sand flowing so that it can be drained along with the hydraulic fluid.

Fan Blades Love Fingers

Protect yourself against spinning cooling fan blades on your M109 howitzer or M992 ammo carrier by using fan blade screens during scheduled maintenance.

The screens, NSN 2510-01-247-2976, keep fingers, hands and anything else from being pulled into the blades as you check for leaks in hoses, pipes and fittings.

The screens protect you

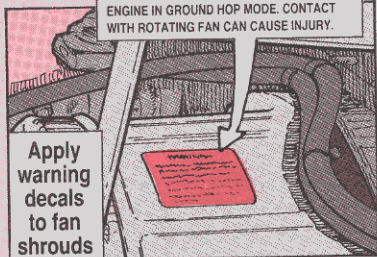


They have hooks and a thumbscrew with locknut to secure them to the fan shroud. Use the screens only during scheduled maintenance. Remove them before regular vehicle operation.

In addition, put a warning decal, NSN 7690-01-244-9849, on both fan tower shrouds as a reminder to use the screens.

WARNING
A PROTECTIVE FAN SCREEN MUST BE INSTALLED PRIOR TO DOING MAINTENANCE IN THE ENGINE COMPARTMENT WHEN ENGINE IS RUNNING OR WHEN RUNNING ENGINE IN GROUND HOP MODE. CONTACT WITH ROTATING FAN CAN CAUSE INJURY.

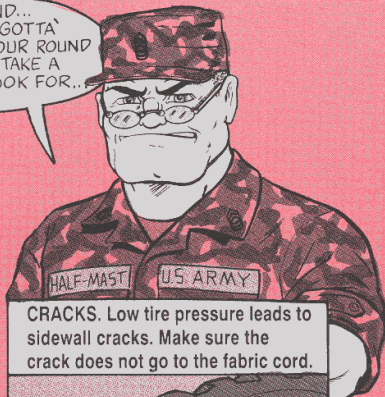
Apply warning decals to fan shrouds



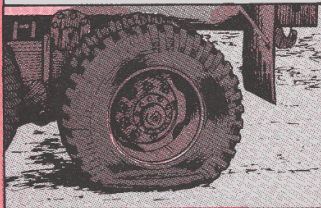
You'll need general purpose cleaner, NSN 7930-00-515-2477, to clean the shroud before you apply the decals.

Keep Those Tires Rollin'

TIRES MAKE THE WORLD GO ROUND... AND TO KEEP TIRES ROLLIN', YOU'VE GOTTA MAKE YOUR ROUNDS. WHEN MAKING YOUR ROUND DURING BEFORE OPERATIONS PMCS, TAKE A CLOSE LOOK AT THOSE TIRES. LOOK FOR...



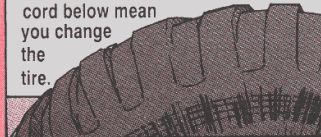
FLATS. Make sure all tires, including the spare, have plenty of air. If one looks low, borrow your favorite mechanic's tire gage and measure tire pressure.



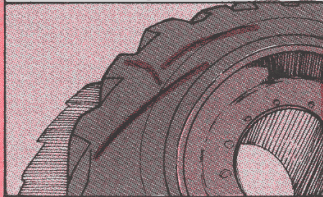
NAILS. Look between tread ridges. You don't want to see a nail, piece of metal or a stone dug into the rubber.



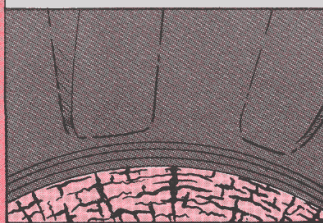
ABRASIONS. Tires rubbed raw are a sore sight for good eyes. Abrasions that go through the rubber to the cord below mean you change the tire.



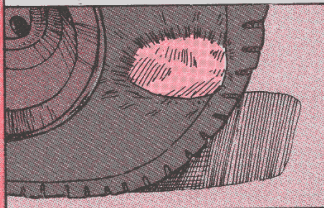
CRACKS. Low tire pressure leads to sidewall cracks. Make sure the crack does not go to the fabric cord.



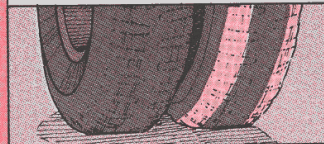
WEATHER CHECK. Ozone cracks weaken tires. If you find weather checking that covers large areas of a tire, report it.



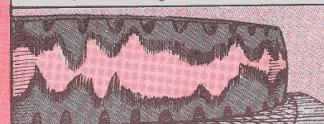
WALL SEPARATIONS. Any bulge in the sidewall or tread makes a tire unserviceable. Get it replaced before you head out.



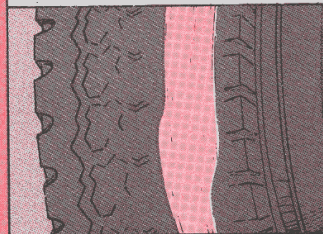
UNDER INFLATION. A sure sign of under inflation is a worn tread at each side of the tire. Under inflated tires flex more than properly inflated tires. Flexing causes heat, which will ruin tires.



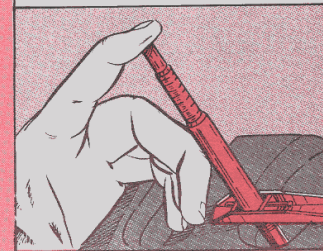
OVER INFLATION. Look for tires that are worn on the crown. Over inflated tires don't flex enough. The center of the tire takes all the weight, causing rapid wear. When an over inflated tire hits a large rock or a rut, the cords inside snap and break, weakening the tire.



WRONG CASTER-CAMBER ADJUSTMENT. A sure sign of misadjustment is wear on the edges. Tires worn on the inside or outside edge have caster-camber problems. Either way, report it so your mechanic can make adjustments.



TREAD DEPTH. When a tire begins to go bald, get your mechanic to measure the tread with a tread depth gage, NSN 5120-00-019-3050. It's in the No. 1 and 2 Common shop set. Tread depth for non-directional and rear tires is $\frac{2}{32}$ inch and $\frac{4}{32}$ inch for steering tires. For commercial tires, $\frac{4}{32}$ inch is about right.



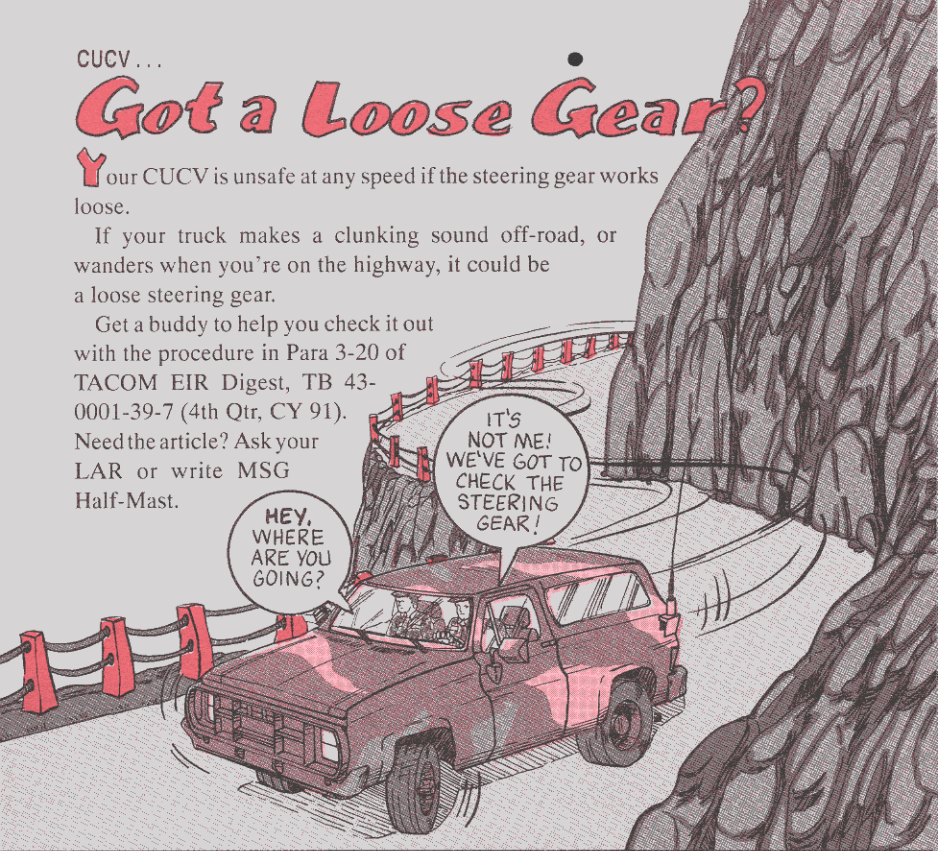
CUCV...

Got a Loose Gear?

Your CUCV is unsafe at any speed if the steering gear works loose.

If your truck makes a clunking sound off-road, or wanders when you're on the highway, it could be a loose steering gear.

Get a buddy to help you check it out with the procedure in Para 3-20 of TACOM EIR Digest, TB 43-0001-39-7 (4th Qtr, CY 91). Need the article? Ask your LAR or write MSG Half-Mast.



Braking in New Booster

THE BRAKE BOOSTER IN TM 9-2320-289-20P IS BEING REPLACED BY A READY-TO-INSTALL UNIT, COMPLETE WITH MOUNT BRACKET AND PEDAL.

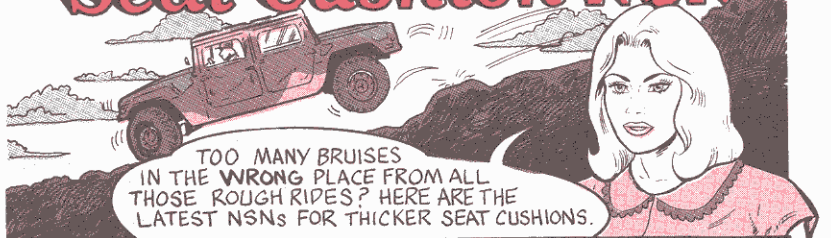
The booster, used on all models but the M1009, is Item 1 in Fig 84 of TM 9-2320-289-20P.

The booster has all new numbers, tho. Its new NSN is 2530-01-151-5967. The part number is now 2770209, the CAGE is 14892, and the SMR code is PAOZZ.

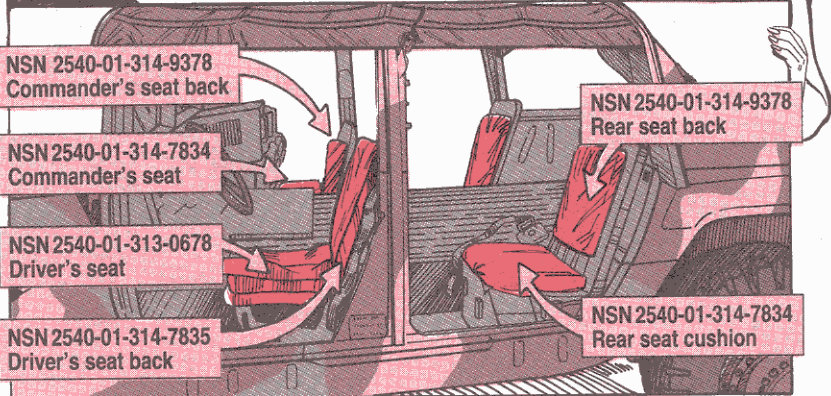


HMMWV ...

Seat Cushion NSNs



TOO MANY BRUISES
IN THE **WRONG** PLACE FROM ALL
THOSE ROUGH RIDES? HERE ARE THE
LATEST NSNs FOR THICKER SEAT CUSHIONS.

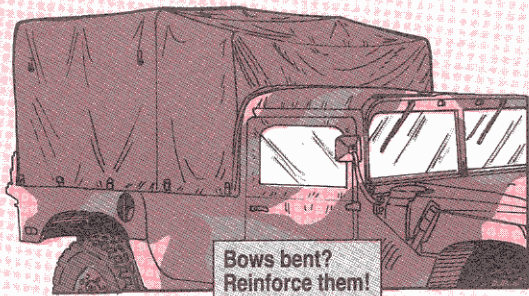


- NSN 2540-01-314-9378
Commander's seat back
- NSN 2540-01-314-7834
Commander's seat
- NSN 2540-01-313-0678
Driver's seat
- NSN 2540-01-314-7835
Driver's seat back
- NSN 2540-01-314-9378
Rear seat back
- NSN 2540-01-314-7834
Rear seat cushion

Beef Up HMMWV Bows

If the bows supporting your M998 or M1038 soft top bend or break in normal duty, add a steel rod for support. Early model bows weren't sturdy enough. You can change that by sliding a 24-in steel rod inside the bows. For $\frac{3}{64}$ -in thick bow walls, ask for steel rod, NSN 9510-00-596-2063. For $\frac{3}{32}$ -in bows, get rod, NSN 9510-00-596-2066.

Newer, $\frac{1}{8}$ -in thick bows need no additional support.



Drain Brake Reservoirs Daily

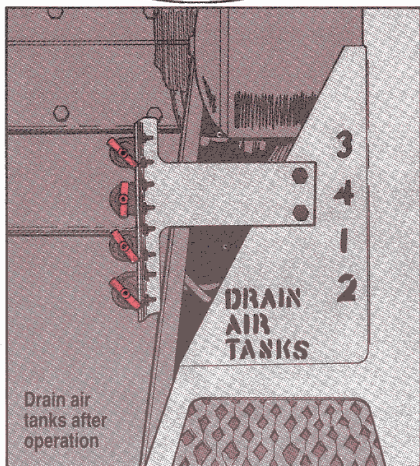


Water and air. You need both to live. Your truck's air brake system needs only air. Water is a killer.

It corrodes air lines, rusts relief valves, safety valves, even the air tank itself. In cold weather, water turns to ice, freezing valves or breaking air lines.

Either way, you lose. You lose brakes, you lose control, you could lose your life.

The answer? Drain water from air tanks after each day's use. (If you drive M915-series trucks with air-assisted transmissions, remember to drain that air tank, too.)



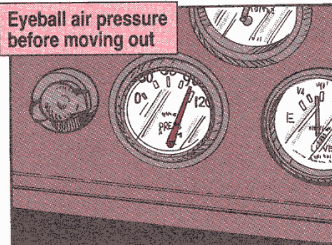
Make it a part of your end-of-the-day ritual. Park your truck, grab your log-book, drain the air tanks. After you've drained the tanks, close the valves.

If your vehicle is equipped with an air dryer—like the M915A1 truck—have your unit mech change the cartridge per the maintenance schedule. The dryer keeps air clean and free of moisture.

You still have to drain the air tanks, of course.

Make sure your brakes have enough air to do their job, too. You need at least 60 PSI before moving out.

Eyeball air pressure before moving out



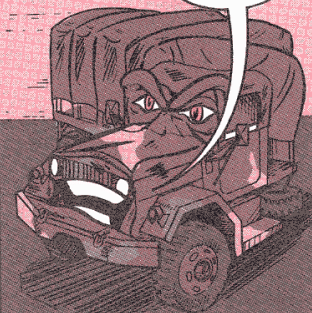
Watch for highs and lows. If your gage pegs out on the high end, or you end up with less than 60 PSI call your unit mech.

Too much air pressure can blow out a component, probably an actuator. That excess air has to go somewhere.

Too little air pressure and your vehicle is a time bomb. One hit on the brake and you've lost your stopping ability. Your spring brake won't release with less than 60 PSI, either.

Replace Both Sides?

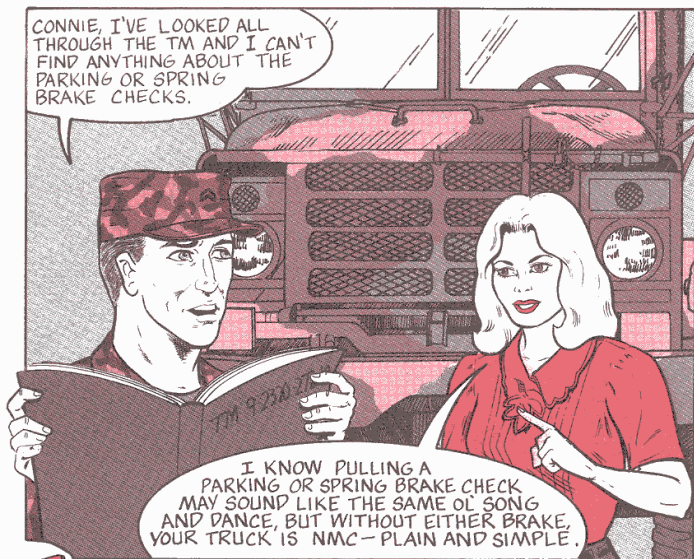
HEY, WHAT'S GOING ON? THIS BRAKING IS REALLY UNEVEN!



Dear Half-Mast,
When we inspect brake shoes, we sometimes find one side bad, while the other side is still good. Do we replace shoes on one side, or on both sides?
SGT R.M.

Dear Sergeant R.M.,
Think safety first. Replace all shoes on the same axle. Having equal shoes on both sides keeps your braking from becoming uneven or erratic.
Half Mast

For the Sake of the Parking Brake



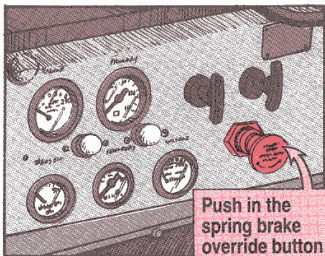
The info in TM 9-2320-272-10 does not tell you how to do your brake checks, so here's the low-down:

Parking Brake Check

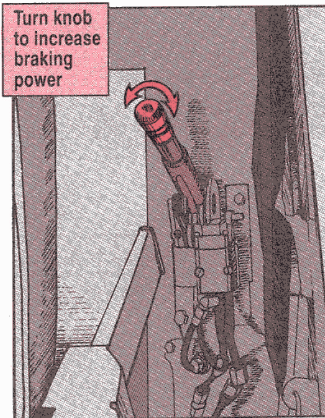
- Make sure no one or anything is in front of the truck.
- Shift the transfer to high range.
- Pull the transmission shift lever to neutral.
- Start the engine and let it idle to build up air pressure to 90 PSI.
- Place your foot on the service brake pedal. Push in on the spring brake override button on the instrument

panel, and then set the parking brake lever.

- Place the transmission in 1-5 (DRIVE).
- Release the service brake pedal.



Don't rev the engine. The vehicle shouldn't move. If the truck moves, shift to neutral. Turn the knob on top of the parking brake lever to the right. That increases braking power. Try the brake test again. If the brake doesn't hold after adjustment, report it.



Spring Brake Check

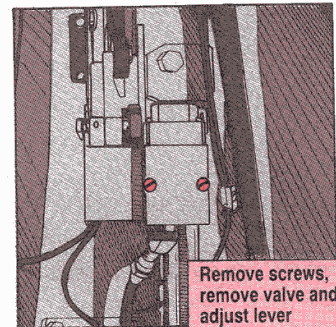
- To check the spring brakes, pull out the spring brake override button and shift the transmission to neutral. Raise the parking brake valve lever at the base of the parking brake handle for the spring brake. You should hear air hissing out of the air tanks as the spring brakes engage.
- Shift the transmission in 1-5 (DRIVE). Gradually rev the engine to 800-1,000 RPM, but don't exceed 1,000. The brake should hold.

If the truck moves, park the rig and call your mechanic.

Valve Lever Adjustment

Mechanics, if you get a report that the spring brakes do not hold, your first check is the spring brake valve at the base of the parking brake lever. The valve lever must be horizontal to the cab floor and valve body. TM 9-2320-272-20 does not say how to adjust the lever to the horizontal level, so here's how:

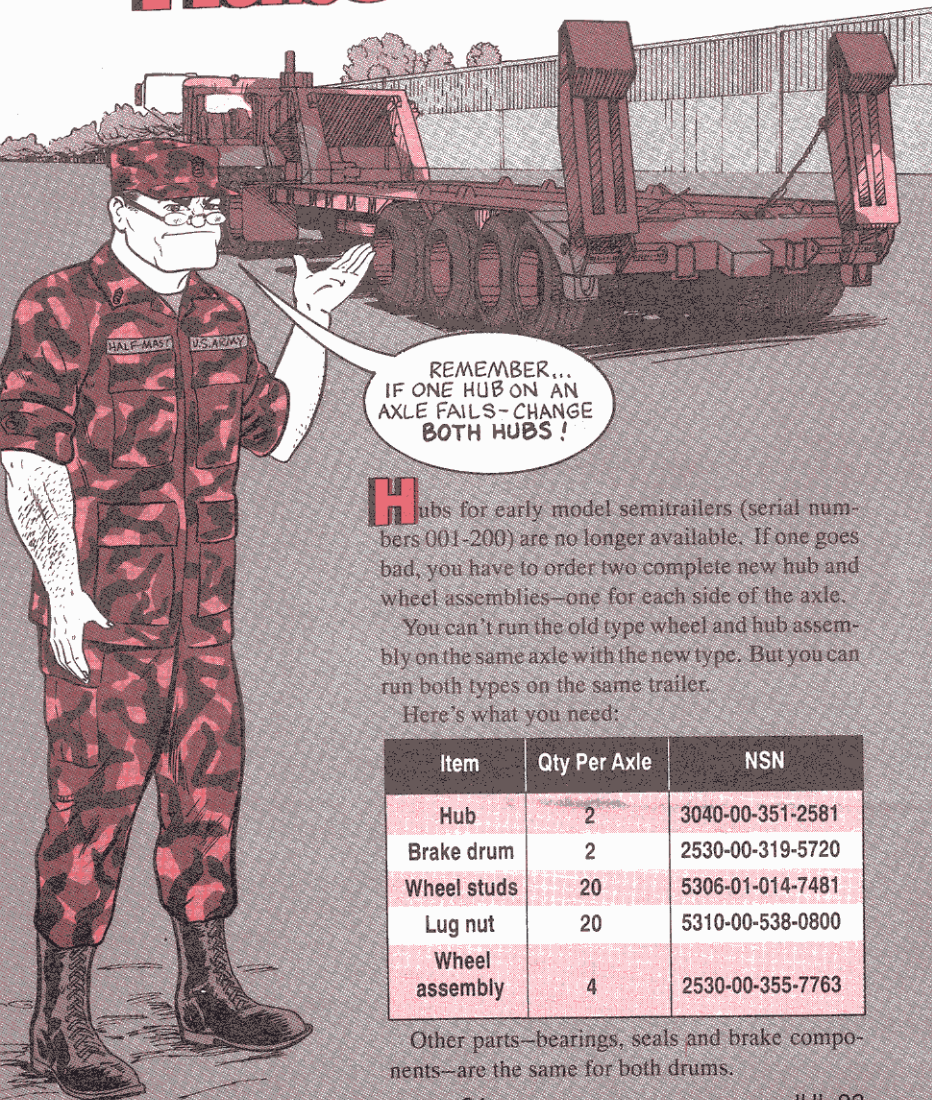
- Remove the screws that hold the valve.
- Turn the valve over and loosen the set screw.
- Adjust the lever arm until it is parallel to the valve body.



- Tighten the screw and put the valve back on.

Pull the hand parking brake on and then let it off a couple of times. If the valve lever doesn't go back to the horizontal position, replace the valve with NSN 4820-01-187-9542.

Hubs Have to Match



REMEMBER...
IF ONE HUB ON AN
AXLE FAILS—CHANGE
BOTH HUBS!

Hubs for early model semitrailers (serial numbers 001-200) are no longer available. If one goes bad, you have to order two complete new hub and wheel assemblies—one for each side of the axle.

You can't run the old type wheel and hub assembly on the same axle with the new type. But you can run both types on the same trailer.

Here's what you need:

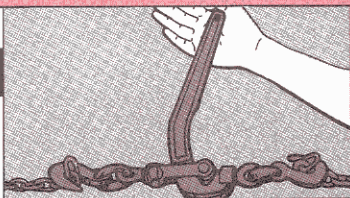
Item	Qty Per Axle	NSN
Hub	2	3040-00-351-2581
Brake drum	2	2530-00-319-5720
Wheel studs	20	5306-01-014-7481
Lug nut	20	5310-00-538-0800
Wheel assembly	4	2530-00-355-7763

Other parts—bearings, seals and brake components—are the same for both drums.

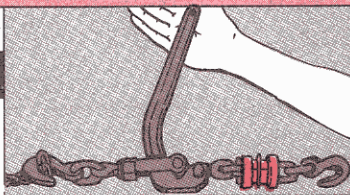
Load Binders NSNs

There are two kinds of double hook load binders available. They are:

Binders without compressor units		
Model	Chain Size	NSN 3990-01-232
R-30	1/4-,5/16-,3/8-in	-0880
R-40	3/8-,7/16-,1/2-in	-0881



Binders with compressor units		
Model	Chain Size	NSN 3990-01-213
R-35	1/4-,5/16-,3/8-in	-1239
R-45	3/8-in to 1/2-in	-1746



To help save the binder when strapping down rigid loads with a steel chain, the compressor unit acts as a shock absorber.

3/4-Ton Trailers...

NSNs for Drawbar Hardware

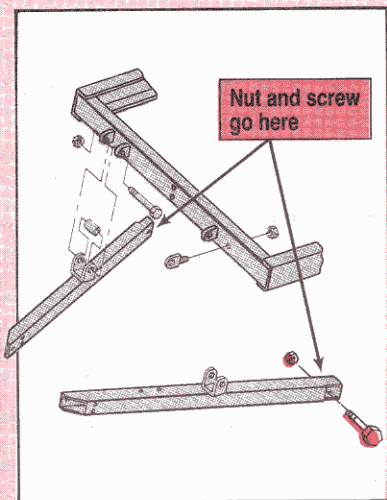
If you're planning to replace the drawbars on your M101- or M116-series trailer, listen up.

You won't find all the hardware NSNs listed in Fig 24 of TM 9-2330-202-14&P.

HERE ARE THE NSNs FOR THE MISSING PIECES...



Item	NSN
Screw	5305-00-724-5910
Self-locking nut	5310-00-269-4040



This is a selected list of recent pubs of interest to organizational maintenance personnel. This list was made from a computer printout produced by the Adjutant General's Office.

TM 1-4920-452-13&P Jan RPSTL shop set, sheet metal, air-mobile NSN 4920-00-166-5505

TM 3-4240-334-10 May M43A1 mask, chemist

TM 5-2010-205-24P Jan Propelling unit, outboard, 165 HP

TM 5-2420-206-20P Jun Tractor, industrial

TM 5-3810-302-24P May Crane, wheel-mounted, 4-ton; SCAMP

TM 5-3810-305-24 Dec 91 Model LRT 110 crane

TM 5-3825-221-24P Mar Distributor, water, tank; truck mounted

TM 5-4310-338-24P Mar Davey Model 1M600RPV 600 CFM air compressor

TM 9-1340-224-12 Feb M190 rocket launcher

TM 9-1425-429-12 Apr Stinger guided missile system

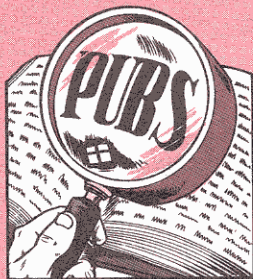
TM 9-1425-450-24P Jan TOW 2 weapon system

TM 9-1425-475-20 Feb Hellfire
TM 9-1425-600-12 Dec 91 Patriot missile system

TM 9-1430-601-24P-1 Mar AN/MPQ-53 radar set

TM 9-1430-602-24P-1 May AN/MSQ-116 information and coordination central guided missile system

TM 9-1440-600-20-3 Feb M901 launching station guided missile semitrailer mounted; (Patriot air defense guided missile system)



TM 9-1450-646-24P May M993 MLRS carrier

TM 9-2320-361-20 Oct 91 M44A2 series trucks

TM 9-2330-238-24P Dec 91 M295A1, M313, M447, M447C, M749 and M750 trailers

TM 9-2330-383-14&P Dec 91 M898A1 trailer

TM 9-2350-238-24P-2 Mar M578 recovery vehicle

TM 9-4935-454-24P Apr AN/TAM-6 night vision sight

TM 9-6920-429-12 Mar Training set (Stinger missile system)

TM 10-3930-618-24P Dec 91 Model MHE213 6,000-lb forklift

TM 10-4330-230-12&P Mar 15 GPM filter/separator

TM 10-7360-206-23P MKT-75; -75A; -82; -85; -85S kitchen, field

TM 11-1520-238-23-2 Mar AH-64A helicopter avionics

TM 11-5820-924-24P Jan Radio set AN/GRC-193A

TM 11-5855-263-23&P Jan Aviator's night vision imaging system

TM 11-5865-231-10-2-1 Jan Target acquisition subsystem

TM 11-5895-1390-23P Jan DSCS operational support system

TM 55-1520-240-10 Apr Operator's manual CH-47D

TM 55-1520-248-23-4 Mar Unit/intermediate maint OH-58D

TM 55-1520-248-23-8 Mar Unit/intermediate maint OH-58D

TB 11-5820-1028-12 May Warranty program for radio set AN/GRC-222

Maintenance Advisory and Safety-of-Use Messages

AMCCOM SOU Msg 92-07—Advisory, M825 projectile used with M198 155MM howitzer and M109 155MM howitzer, AMSMC-DSM 011716Z May 92.

AMCCOM SOU Msg 92-08—Operational, M142 gun mount used with M60 machine gun, AMSMC-MA 022130Z Apr 92.

AMCCOM SOU Msg 92-09—Technical, M1A1 tank, AMSMC-MA 171845Z Apr 92.

AMCCOM SOU Msg 92-10—Operational, M142 gun mount used with M60 machine gun, AMSMC-MA 212100Z Apr 92.

AMCCOM SOU Msg 92-11—Operational, M12A7S telescope used on M101A1 105MM howitzer, AMSMC-MA 042000Z May 92.

AMCCOM Maintenance Advisory Msg 92-16—M1, IPM1 and M1A1 tanks, AMSMC-MA 041200Z May 92.

CECOM SOU Msg 92-04-04—Mandatory, Operational, AN/TRC-170(V)3 radio terminal set, AMSEL-SF-SEP 211610Z Apr 92.

CECOM SOU Msg 92-04-03—Mandatory, Operational, AN/AVS-6(V)1/2 aviator's night vision imaging system, AMSEL-SF-SEC 291800Z Apr 92.

MICOMSOU Msg 92-04—Operational, MLRS, AMSMI-MMC-AM 031530Z Apr 92.

MICOMSOU Msg 92-05—Operational, MLRS, AMSMI-MMC-AM 061530Z Apr 92.

TACOM SOU Msg 92-05—Advisory, M915 tractor truck, AMSTA-M 031800Z Apr 92.

TACOM SOU Msg 92-06—Advisory, CUCV tires, AMSTA-M 161400Z Apr 92.

TACOM SOU Msg 92-07—Advisory, M2A2/M3A2 Bradley Fighting Vehicle System, AMSTA-M 211500Z Apr 92.

TROSCOM SOU Msg 92-05—Operational, Large area maintenance shelters, AMSTR-M 081430Z Apr 92.

TROSCOM SOU Msg 92-06—Emergency One-Time Inspection, M80 water heater, AMSTR-M 011500Z Apr 92.

TROSCOM SOU Msg 92-07—Limited One-Time Inspection, 18,000 BTUH air conditioner, AMSTR-M 101430Z Apr 92.

TROSCOM SOU Msg 92-08—Technical, Igniter used on PH-400-G portable heater, AMSTR-M 131830Z Apr 92.

TROSCOM SOU Msg 92-09—Operational, 2500L Fire Truck, AMSTR-M 171500Z Apr 92.

TROSCOM Maintenance Advisory Msg 92-08—M85-100 laundry unit, AMSTR-M 301500Z Mar 92.

TROSCOM Maintenance Advisory Msg 92-09—5- and 10-KW generator sets, AMSTR-ME 021600Z Apr 92.

TROSCOM Maintenance Advisory Msg 92-10—MC 4/MT1-XX RAM parachute system, AMSTR-ME 311500Z Mar 92.

Your Direct Support or Logistics Assistance Office (LAO) can provide you with more information.

SFDLR

INITIAL FAILURE

\$ CREDIT \$

THE STOCK FUNDED DEPOT
LEVEL REPARABLES (SFDLR) PROGRAM
IS HUMMING ALONG.

HERE'S A NOTE TO ADD TO THAT
TUNE ON HOW TO RETURN AN SFDLR
ITEM THAT FAILS THE FIRST TIME
YOU TURN IT ON OR PLUG IT
IN ...AN INITIAL FAILURE.

FIRST, BE
ASSURED YOU
WON'T EAT THE COST.
YOUR COMMAND
CAN GET 100%
CREDIT!

So What's Initial Failure?

You have an initial failure if the first time you test or use a DLR—it doesn't work—and you did not cause the failure through accident, misuse, improper installation, improper operation, unauthorized repair or alteration.

IF YOU HAVE AN INITIAL FAILURE ITEM—HERE'S WHAT TO DO.



1

Do not try to fix it. If you tamper with the item, **YOU WON'T GET INITIAL FAILURE CREDIT . . . PERIOD!**

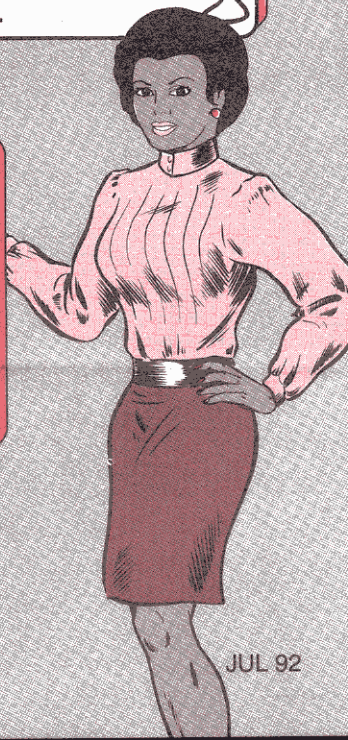
Call your Logistics Assistance Office (LAO) and tell your Logistics Assistance Representative (LAR) that you have an initial failure item that he needs to look at. You and the LAR work as a team to solve an initial failure problem.




2

After your LAR receives your call, he'll look up the NSN of your failed item on the AMDF to make sure it is a Depot Level Repairable (DLR).

A DLR will have a maintenance repair code of D or L, or an automatic return item code of C, E, R, or S.





WHILE YOU'RE
WAITING FOR THE LAR, THIS
IS WHAT TO DO NEXT.

3

Decide if the failed item is a Category I or II item. Check out DA Pam 738-750 or 738-751.

For CAT II, fill out a Quality Deficiency Report (QDR), SF 368. Explain completely what happened in Block 22. Also write the words, INITIAL FAILURE CLAIM, in block 22.

For CAT I, report immediately by phone and message. Complete an SF 368 just like you did for a CAT II failure, except you check the CAT I Block and write the date-time group of CAT I message in Block 22.

4

When the LAR arrives, he'll confirm that it is an initial failure based on what he sees, what you tell him and what your documentation shows.

If your LAR agrees that it's an initial failure, he'll write Initial Failure — Yes, in Block 22 and sign and date the QDR in the same block.

OR

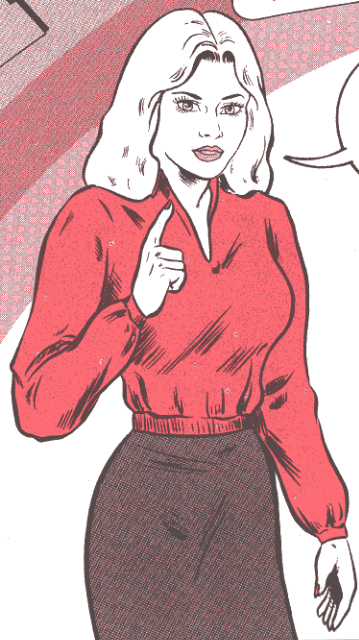
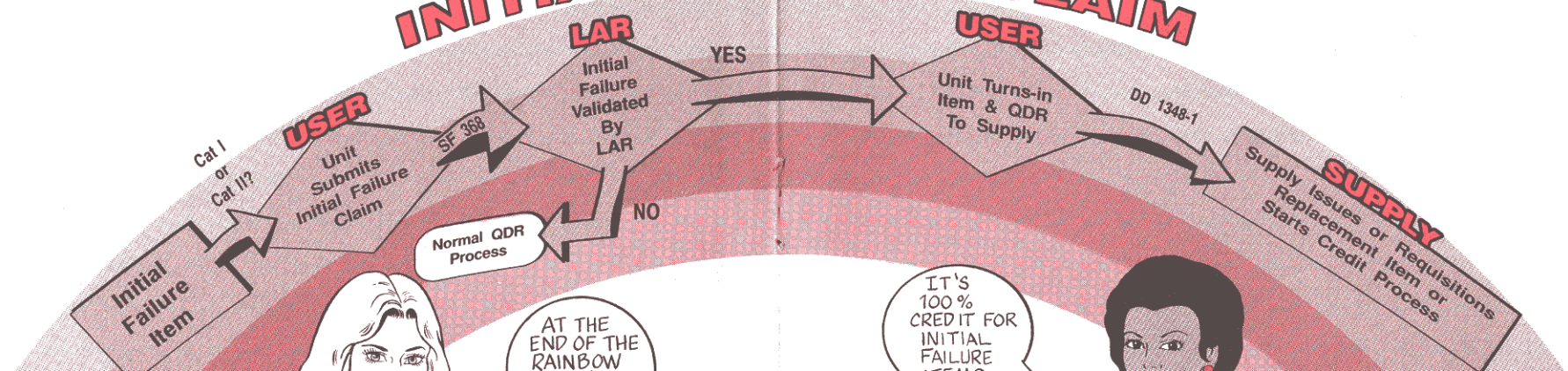
If the item doesn't meet the criteria for an initial failure, follow the normal QDR process, like it says in DA PAM 738-750 or 738-751.

22. Details

INITIAL FAILURE

YES John Smith 4/92

SFDLR INITIAL FAILURE CLAIM



AT THE END OF THE RAINBOW THERE'S A POT OF GOLD!

IT'S 100% CREDIT FOR INITIAL FAILURE ITEMS.

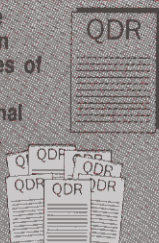


WE HAVE THE WORLD'S BEST EQUIPMENT ... *Take care of it*

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

5

Make seven copies of the original QDR.



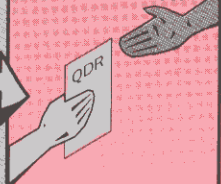
6

Put the original in your files.



7

Give a copy to the LAR for his files.



8

Send a copy to the appropriate AMC Source of Supply

AMC Source of Supply

Address

Phones

AMCCOM

ATTN: AMSMC-QAD
Rock Island, IL
61299-6000

DSN 793-6412
Comm 309-782-6412
Fax 793-6328

AVSCOM

ATTN: AMSAV-QVC
St. Louis, MO
63120-1798

DSN 693-1758
Comm 314-263-1758
Fax 693-1761/1762

CECOM

ATTN: AMSEL-ED-PH
FL Monmouth, NJ
07703-5000

DSN 992-3808
Comm 201-532-3808
Fax 992-4227

MICOM

ATTN: AMSMI-QA-TI-CF
Redstone Arsenal, AL
35898-5290

DSN 746-0447
Comm 205-876-0447
Fax 746-2284/5054

TACOM

ATTN: AMSTA-QRD
Warren, MI
48090-5000

DSN 786-5422
Comm 313-574-5422
Fax 786-8725

TROSCOM

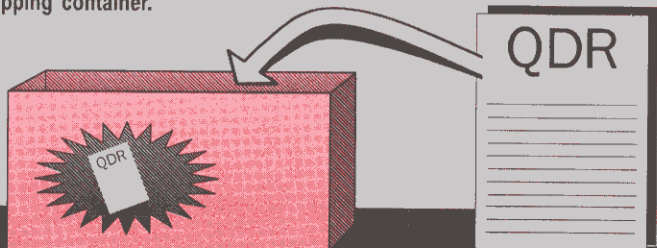
ATTN: AMSTR-MOF (CFC)
ST. Louis, MO
63120-1798

DSN 693-2249
Comm 314-263-2249
Fax 693-1836

9

Pack the failed item carefully. If possible, put it back in its own box or a reusable shipping container.

Place a copy of the QDR inside the box.



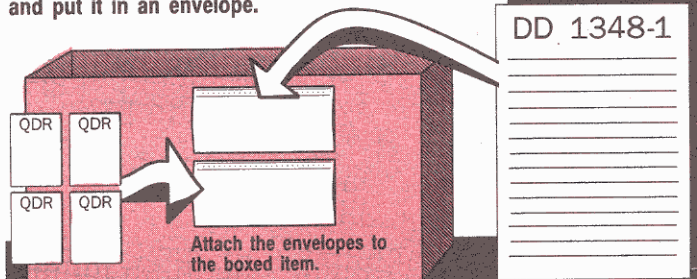
10

PUT THE REMAINING FOUR COPIES IN A PACKING ENVELOPE, NSN 8105-00-827-2247.

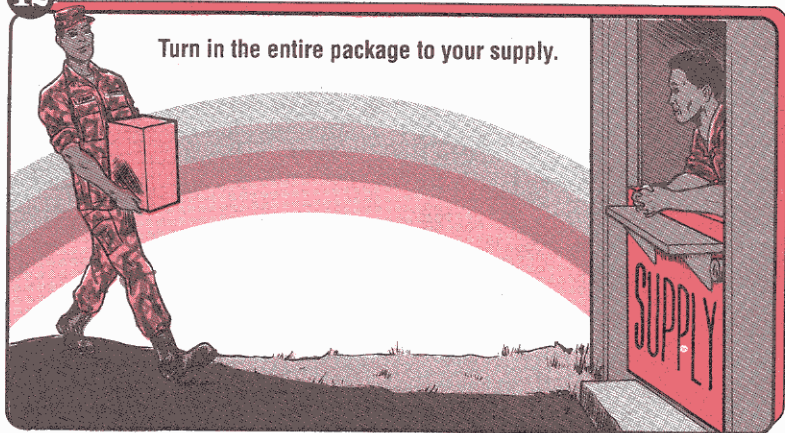


11

Fill out DD Form 1348-1, turn-in document, and put it in an envelope.



Turn in the entire package to your supply.



THEY WILL
GIVE YOU A FREE
REPLACEMENT, ORDER
A NEW ITEM ...

... OR GIVE YOU PARTIAL
CREDIT FOR THE FAILED ITEM,
ACCORDING TO THE POLICIES
YOUR COMMAND HAS
ESTABLISHED.

The remaining credit will be given to your command by the equipment proponent, based on the QDR, the LAR's verification, and the DD Form 1348-1 documentation. It may take a little time. That's because there may be more than one supply organization between your unit and the AMC source of supply. Remember, when the final 1348 is prepared to return the failed item to AMC, be sure to write the 1348-1 document number in block 22 of the remaining QDRs. This is the only way to assure 100% credit from AMC for the failed item.

Adjust for the Heat



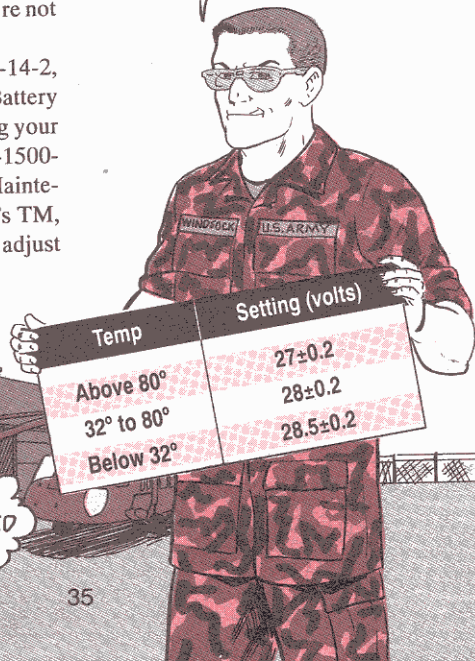
Ah-h-h-h, sweet summer, and a young mechanic's thoughts turn to voltage regulators.

"Are they adjusted right?" the young mech ponders, realizing that a poorly adjusted voltage regulator can destroy a battery.

Well, if it's been a really cold winter or a really hot one, chances are they're not adjusted right!

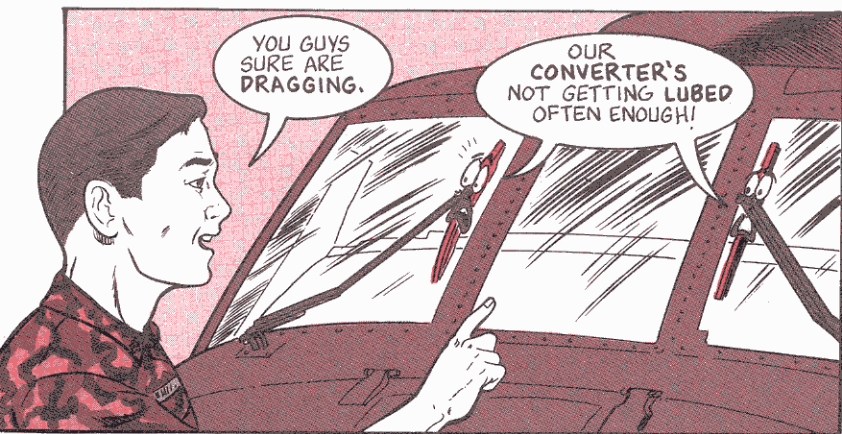
Para 3-4c of TM 11-6140-203-14-2, the Aircraft Nickel-Cadmium Battery manual, has the word on checking your regulators. Para 3-281 of TM 55-1500-204-25/1, the General Aircraft Maintenance manual, and your aircraft's TM, gives the specifics on how to adjust regulators.

AND HERE'S A HANDY TABLE FOR MAKING THE ADJUSTMENTS BASED ON AVERAGE WEEKLY GROUND LEVEL AMBIENT TEMPERATURE.



ARE THEY ADJUSTED RIGHT?

Use the Lube!

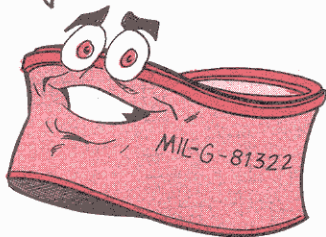


If it's been a season of little aircraft activity, or a stormy spring, you might want to alter the lube schedule.

causes drag which leads to wiper motor failure. A well-cleaned and fresh-packed converter might just be the ticket that gets your wipers through the rain.

So consider what the weather's been, what lies ahead and see what converters are close to their 500-hour requirement. Could be a little grease-packing PM now will keep a pilot's vision clear later.

NSN 9150-00-944-8953
GETS A 1-LB CAN OF THE
MIL-G-81322 GREASE
CALLED FOR IN THE TM.



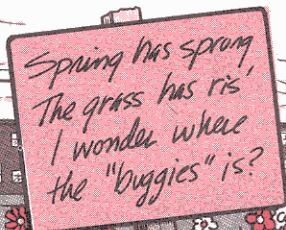
A lube schedule based on hours and days is a good system... most of the time

		LUBE SCHEDULE											
		JAN	FEB	MAR	APR	MAY	JUNE	JULY	AUG	SEP	OCT		
REPAIRS	10												
MAINTENANCE	10												
OPERATIONS	10												
REPAIRS	10												
MAINTENANCE	10												
OPERATIONS	10												

To cover those times when it's not, TM 55-1520-237-23 lets commanders and maintenance officers increase lube frequency as necessary.

A good candidate for the altered schedule is the windshield wiper converter. Grease congeals in the converter and

BUGGED?

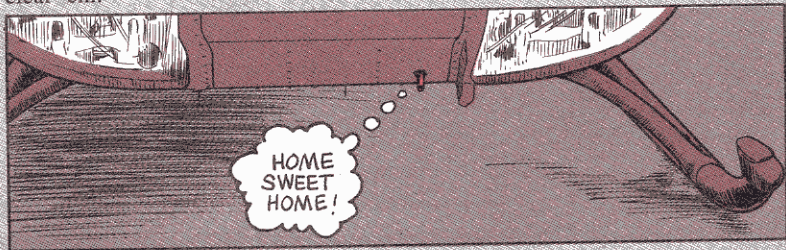
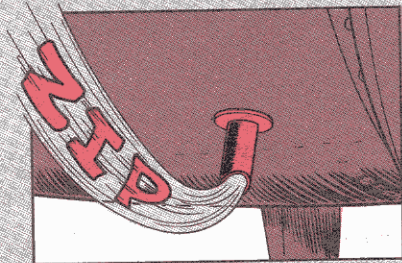
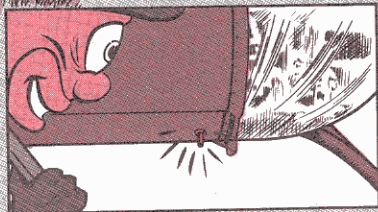


Well, wonder no more. The bugs are making homes and finding final resting places in your nickel-cadmium battery vent lines. And they're bringing their furniture — mud and trash — with them.

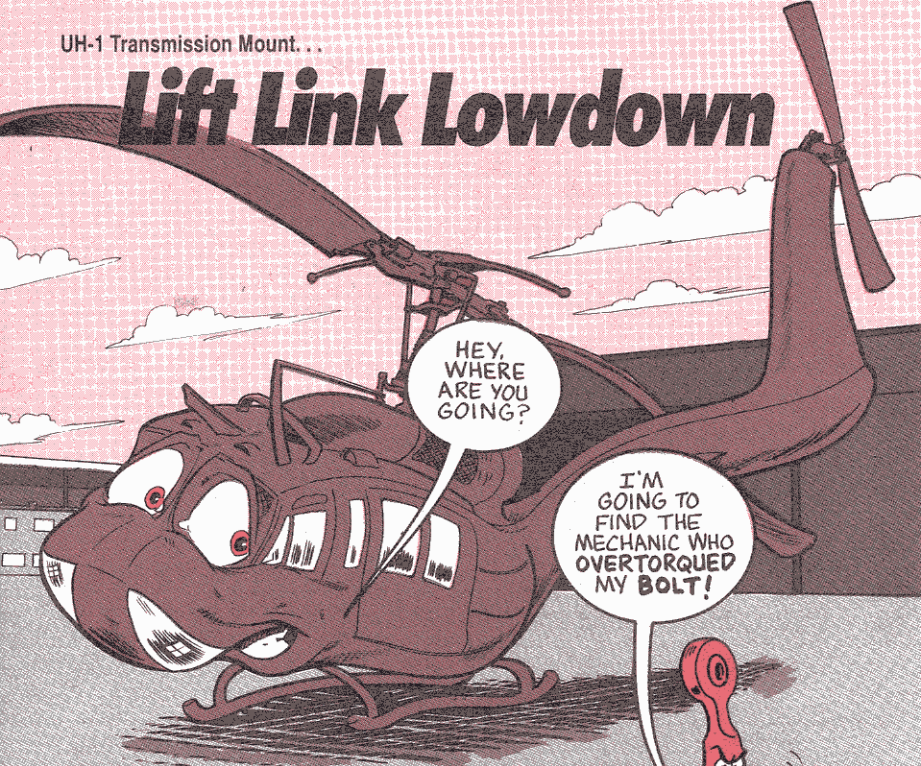
Some lucky bugs find vent lines already furnished with gunk from a battery boilover and dirt kicked up from rotor blades.

Bugs and gunk plug vent lines. Then battery fumes seep into the cockpit, or worse, get trapped in the battery compartment and cause an explosion.

Check the vent lines for obstructions during your daily PMCS. If you find plugged lines, use low pressure air to clear 'em.



Lift Link Lowdown



Overtorquing the transmission mount lift link bolt during installation of the lift link causes attaching points to crack.

Wrong alignment of the bushings causes them to wear out quickly and break.

Both problems mean a trip to the depot for your transmission.

And there really is no good reason for it. You simply must install the lift link by the book. That's Chapter 6 of TM 55-1520-210-23-1.

There is no fudge factor. Use the right torque. Use the right washer stack up. Take extra care.

UH-1H Elevator Removal

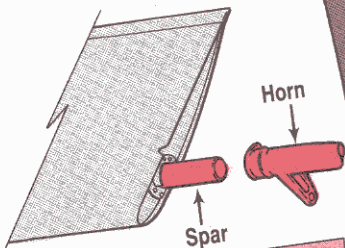
Dear Editor,

While doing phase maintenance on the UH-1H, it's almost impossible to remove the elevator assembly, Para 2-290 in TM 55-1520-210-23-1.

The problem is the corrosion preventive compound (CPC) has hardened and made pulling the spar from the horn a very tough job. Many mechanics try to pry them apart and then damage the horn and spar.

The solution is to soften the CPC. Just open the elevator horn access panel and apply heat to the horn with a heat gun. The CPC will soften and make removal of the elevator easy.

Clay L. Hodges
Topeka, KS



Apply heat to the horn with a heat gun to separate spar from horn

**FROM THE DESK
OF THE Editor**



*Good job, Clay!
You've taken the fight
out of the CPC and
made it an old softie.*

Aviation Messages

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

OH-58-92-04, and **OH-6-92-03**, SOF. Tech, all OH-58A/C and H-6 series with T63-A-720 engines with suspect fuel hoses installed, (TB 1-2840-241-20-11), 172300Z Apr 92.

GEN-92-ASAM-07, Informational, all aircraft, use of discrepant lots of syntech grease, P/N 3913-G1, 022030Z Apr 92.

UH-1-92-ASAM-07, Informational,

UH-1V/H, reporting of serial numbers of aircraft sent to Operation Desert Storm, 022300Z Apr 92.

OH-58-92-ASAM-12, Informational, OH-58A/C, nonconforming swashplate bearing pivot bolts, P/N 206-010-464-1, 211800Z Apr 92.

CH-47-92-ASAM-04, Maint Mand, CH-47D, MH-47D and MH-47E, inspection of cross shaft adapters,

CAT 1 EIR Phone:
DSN 693-2066
(24 HOURS)

(TB 1-1520-240-20-62), 222222Z Apr 92.

GEN-92-ASAM-08, Operational, all aircraft, use of portable computers on board aircraft, 291810Z Apr 92.

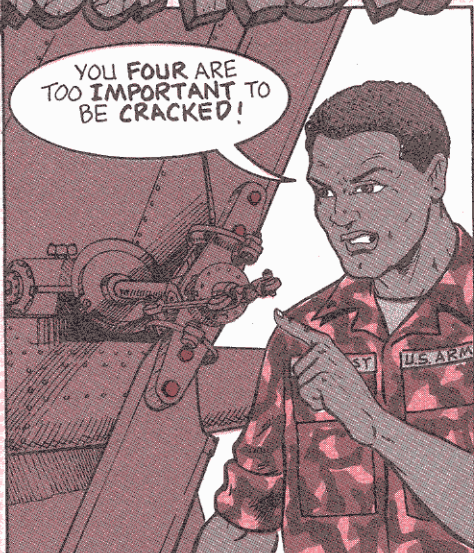
UH-1-92-ASAM-08, Informational, all UH-1 series, authorized substitute or reuse of tail rotor driveshaft clamp self-locking nuts, 301810Z Apr 92.

Cracked Nuts

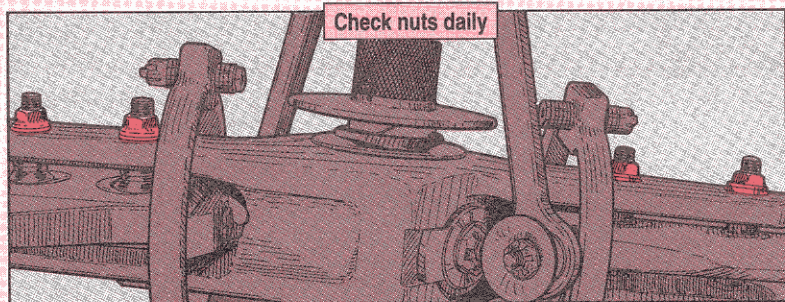
A whole bunch of self-locking nuts on Kiowas are cracking. There is no solution to the problem, so you've got to check the nuts often and replace cracked ones.

The suspect self-locking nuts are:

MS21042	NSN 5310-00-
L5	807-1476
L6	807-1477
-5	807-1469
-6	810-1786



The nuts are used in several locations. The most critical are the four nuts used on the tail rotor hub and blade assembly. These nuts should be checked daily.



Other critical areas are the 16 nuts on the pylon support; the six on the main rotor hub assembly; the eight on the transmission assembly securing the pylon; and the eight on the transmission and mast assembly. These should be checked everytime normal maintenance is done.

Read TM 55-1520-228-23P for other nut locations that need to be watched for cracked nuts.

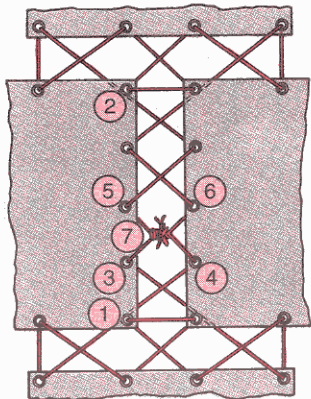
It's a Tight Fit, Folks!

Putting covers on Kiowa seats can be as tough as putting a corset on a pig. And just like the pig, you'll soon be squealing in frustration.

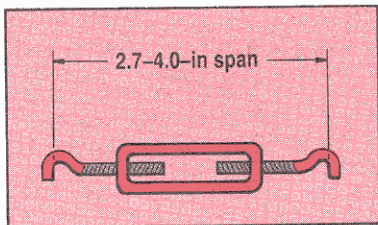


THERE'S NO WAY TO MAKE THIS SEAT COVERING JOB EASY, BUT THERE IS A WAY TO MAKE IT LESS DIFFICULT.

1. Start one lace at 1 and the other at 2.
2. Tie the ends of each lace together at 3 & 4 and 5 & 6.
3. Now tie the laces together at 7.

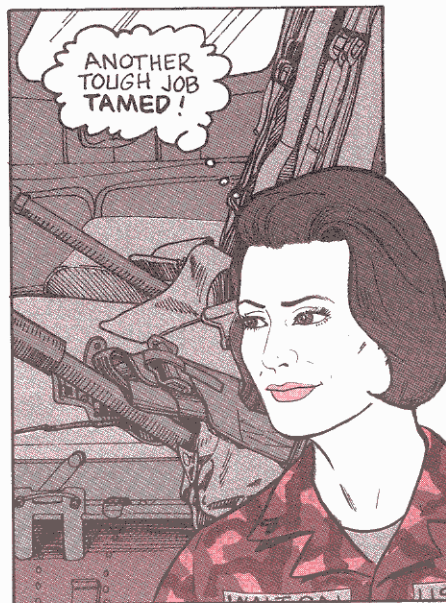


4. To make the job a little easier, local purchase a handful of turnbuckles that look like this:



Use 'em as you need 'em to keep the seat tight while you thread the laces.

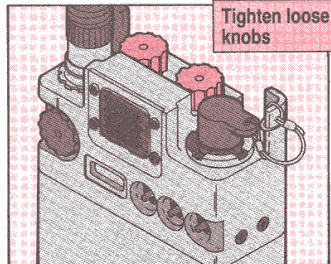
It's still like putting a corset on a pig, but at least the seat is a bit more cooperative—it can't move.



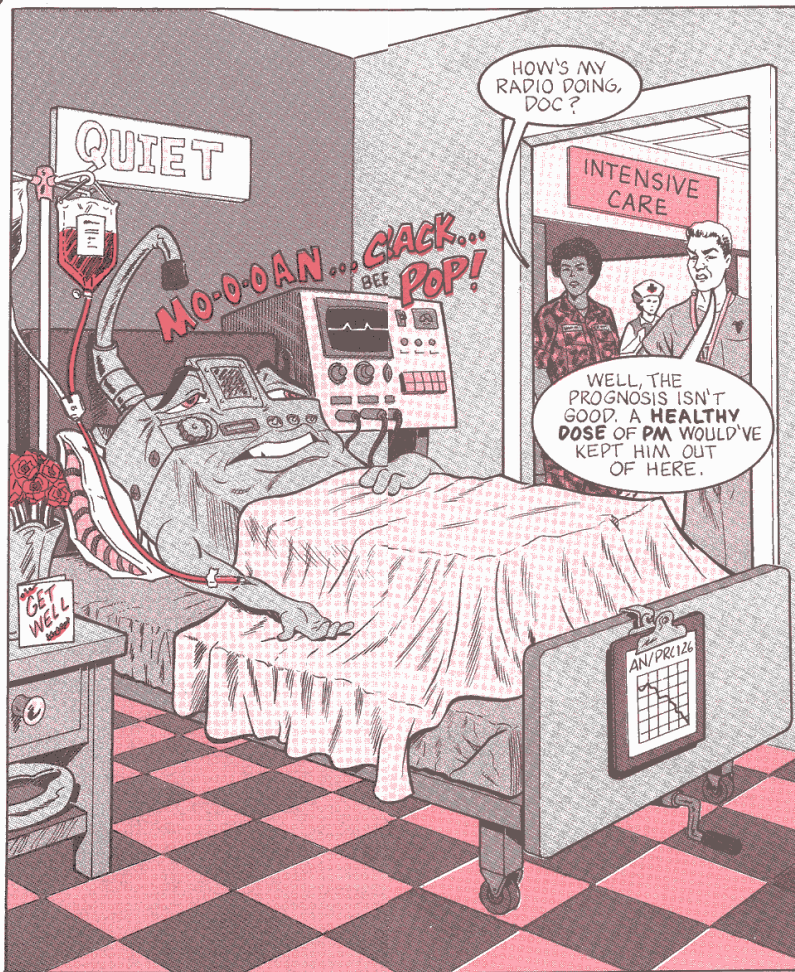
Keep Radios Out of Intensive Care

Your AN/PRC-126 radio set will stay fit as a fiddle with a little care and intensive PM. Here are a few helpful hints to keep it off the critical list:

- 1 Remove all ground-in dirt from the radio surface with a cloth dampened with cleaning solvent, NSN 6850-00-105-3084.
- 2 Keep the solvent away from the audio receptacles and antenna. A clean brush is what you need here.
- 3 Check the control knobs while cleaning the radio. Tighten loose knobs and replace missing ones. Fig C-2 of TM 11-5820-1025-24&P lists NSNs for all of them except the channel selector and volume knobs. Get the channel selector knob with NSN 5355-01-283-6567, and the volume knob with NSN 5355-01-283-6568.



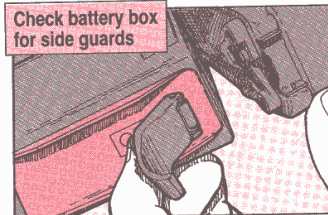
- 4 Brush loose dirt from the pouch with your hand. Then clean the pouch with a clean, damp cloth. Never soak the pouch in water or use abrasive cleaners. That removes the protective waterproofing. Thoroughly air dry the pouch to prevent mildew.



Battery Box PM

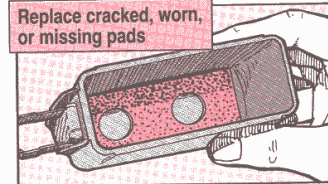
- 5 Protect the battery box. It's made of a thin metallic material, so dropping it or knocking it around will put it out of commission.
- 6 Check the battery box clips for the new side guards. Without them, the clips are easy to hit or snag. Broken clips leave the battery open to the elements. Get a new battery box with NSN 5820-01-255-4069.

Check battery box for side guards



- 7 Keep the battery snug against its contacts by replacing cracked, worn or missing rubber pads on the inside bottom of the battery box. NSN 5330-00-942-5120 gets a new one.

Replace cracked, worn, or missing pads



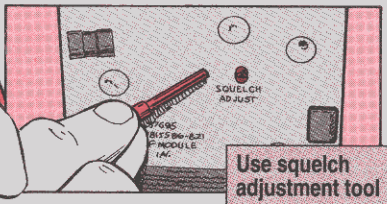
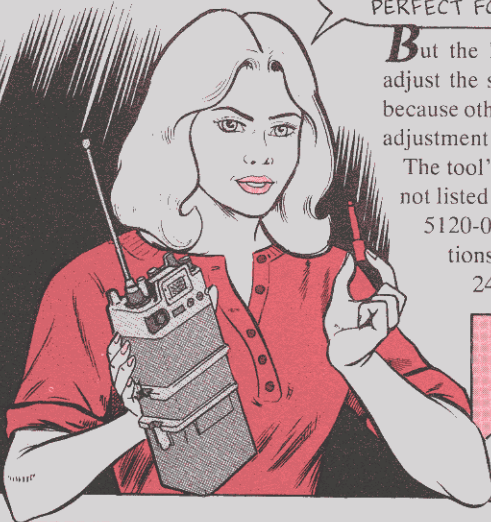
- 8 Smear a thin film of silicone, NSN 6850-00-177-5094, on the rubber seal at the bottom of the radio module before snapping the battery box in place. That keeps moisture out.

The Perfect Couple

THE PRC-126 AND ITS SQUELCH ADJUSTMENT TOOL ARE PERFECT FOR EACH OTHER!

But the honeymoon's over when you try to adjust the squelch with something else. That's because other tools will break the radio's squelch adjustment screw.

The tool's very small and easy to lose, but it's not listed in the TM. Get a new one with NSN 5120-01-096-9410. Then, follow the instructions in Para 5-5 of TM 11-5820-1025-24&P to adjust the squelch properly.



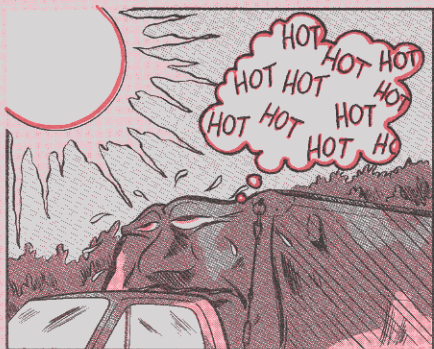
Commo Shelters . . .

Canopies Beat the Heat

You've heard the old saying, "It's so hot you could fry an egg on the sidewalk." That's how hot it gets inside your commo shelter when the summer sun beats down — only it's your commo gear that gets fried.

Canopy installation kits are available for the S-250/G and S-280()/G shelters. The canopy mounts over the roof of the shelter and keeps it from getting too hot and damaging the equipment inside.

Use NSN 4940-00-937-2553 to get a canopy to cover the S-280()/G shelter. An NSN hasn't been assigned for the S-250/G canopy kit yet, so order by CAGE 80063 and part number PPL 10481 on DD Form 1348-6 from RIC B16.



New Way to Clean Pins

There's a new kid on the block. It's the cleaner, NSN 6850-00-003-1194. Use it to clean off connector pin corrosion.

Until you get the cleaner, use brass cleaner. NSN 7930-00-266-7137 will get you a 1-pt can. A 1-qt can comes with NSN 7930-00-995-7572. Just make sure you remove all of it from the pins before using them again.

Better yet, keep the pins from getting corroded in the first place. When they're not in use, apply a small amount of cleaner to the pins. Then, fit a plastic bag around them and seal it with a string, rubber band or piece of tape. The lube inside the cleaner will keep the pins as good as new.

Make sure, though, that the tape doesn't come in contact with the cable's insulation. The adhesive combines with the insulation and makes a gooey mess when the tape is removed.



A LACK OF INFO CAN COST YOU TIME AND MONEY. USE ALL YOUR LOCAL RESOURCES FIRST, BUT REMEMBER THAT PS MAGAZINE IS READY TO HELP, TOO.

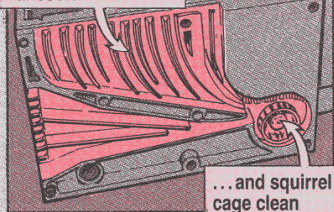
MSG Half-Mast
The Preventive
Maintenance Monthly
Lexington, KY 40511-5101

There's No Sub For Rub-a-Dub-Dub

Your RT-524 has to be clean to work smoothly. It only takes a little dirt in the wrong places to make your set go kaput.

Start cleaning from the inside. Take off the side and rear panels and brush away dirt on the heat exchanger vanes.

Keep heat exchanger vanes ...

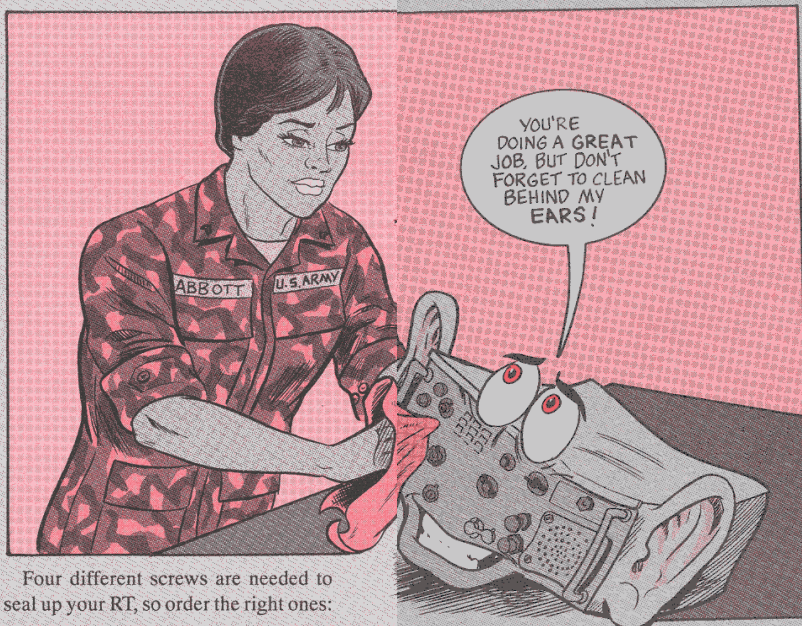
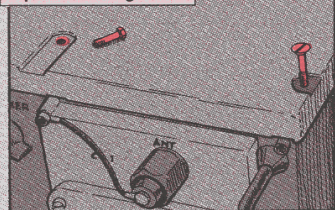


The blower motor's squirrel cage needs cleaning, too. For best results, use something small like a toothbrush.

When the outside of your RT needs a bath, clean it with a damp cloth and cleaning compound, NSN 6850-00-105-3084.

But first, make sure all panels are screwed on tight. A missing screw is just the opportunity moisture or dirt needs to get inside.

Keep screws tight and replace missing ones



Four different screws are needed to seal up your RT, so order the right ones:

Screw	NSN 5305-00
Top	234-6199
Side/rear	957-7033
MWO	764-0071
Front	137-7924

Watch that MWO screw, though. It's threaded all the way to the top. For a tight fit, file off 1/4 inch of the threads starting just under the head of the screw.

Never use a high-pressure water hose or a steam cleaner to scrub your set. No

matter how tight the panel seal is, water gets inside and you'll end up with a shorted-out RT.

Tight knobs on the front cover will keep moisture out, too. Hold the knob steady with one hand and tighten up the knob screws with the other. That'll keep you from busting the stop pins inside the set.

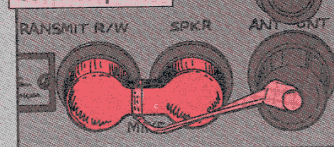
The same goes for the front panel connectors and switches. Hold the receptacle securely when tightening the nuts or you'll turn the whole assembly and break the inside wiring.

Next, eyeball the contact pins in the audio receptacles. If they appear dull or tarnished, shine 'em up with contact cleaner.

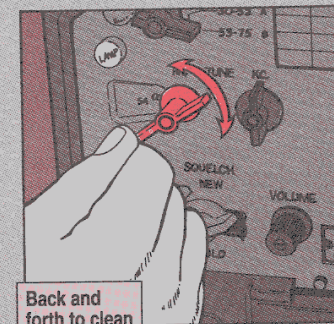


If you're not using the receptacles, use dumbbell covers, NSN 5340-00-973-1732.

Cover receptacles

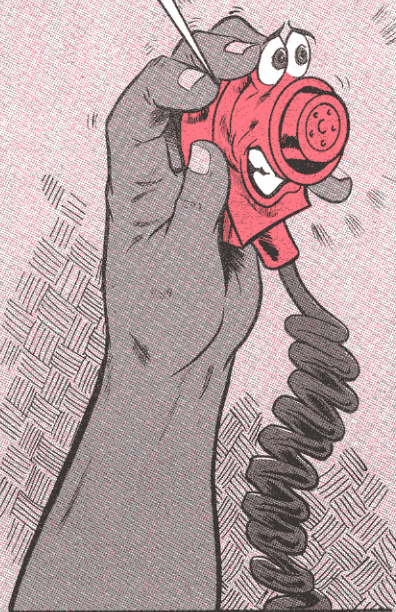


It's easy to shine internal contacts in switches that don't get used much. Just move the knobs back and forth a few times.



It's All in the Grip

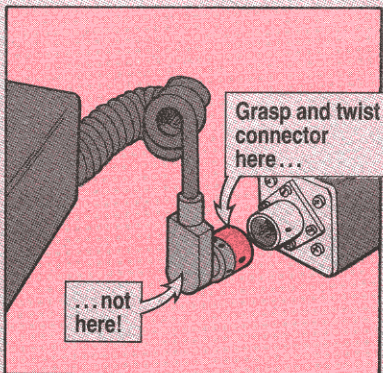
OH, NO!
NOT AGAIN!
I CAN'T TAKE
MUCH MORE
OF THIS!



A simple push and counter-clockwise twist of the ridged portion of the connector is all that's needed to disconnect the cable from the probe on your AN/VDR-2 radiac set.

If you twist any other part of the connector, the internal wiring breaks. Then the set won't detect anything.

If the radiac set doesn't work, or only works once in a while, the wiring inside the connector may already be damaged. Turn in the radiacmeter to support for repair.



Test Adapter NSN

Need the antenna adapter to test your AN/PRC-126 radio on the AN/PRM-34 test set? Order one with NSN 5985-01-097-7337.

Get BUCS Parts

Now you can order some individual parts for your backup computer system (BUCS). Here's what's available: fire control computer, NSN 1220-01-200-9267; case, NSN 6610-01-199-8664.

TACCS ...

Fix Fouled Filter



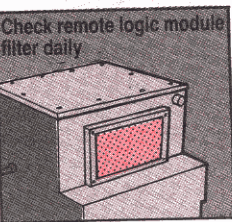
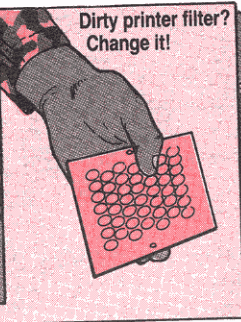
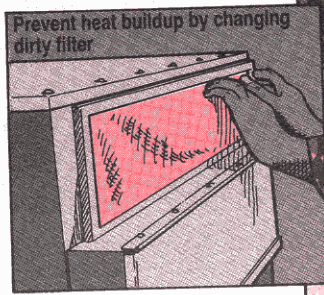
DO YOU HEAR A WHEEZING SOUND?

OH, NO! IT MUST BE THE TACCS FILTER!

A fresh, clean supply of air. That's what your AN/TYQ-33(V) Tactical Army Combat Service Support Computer System (TACCS) needs to do its job right.

And clean air's what you get when the foam filters located in the logic module, printer, and remote logic module are free of dirt and dust.

A dirty filter keeps cool air from circulating, causing heat buildup that makes your TACCS konk out.



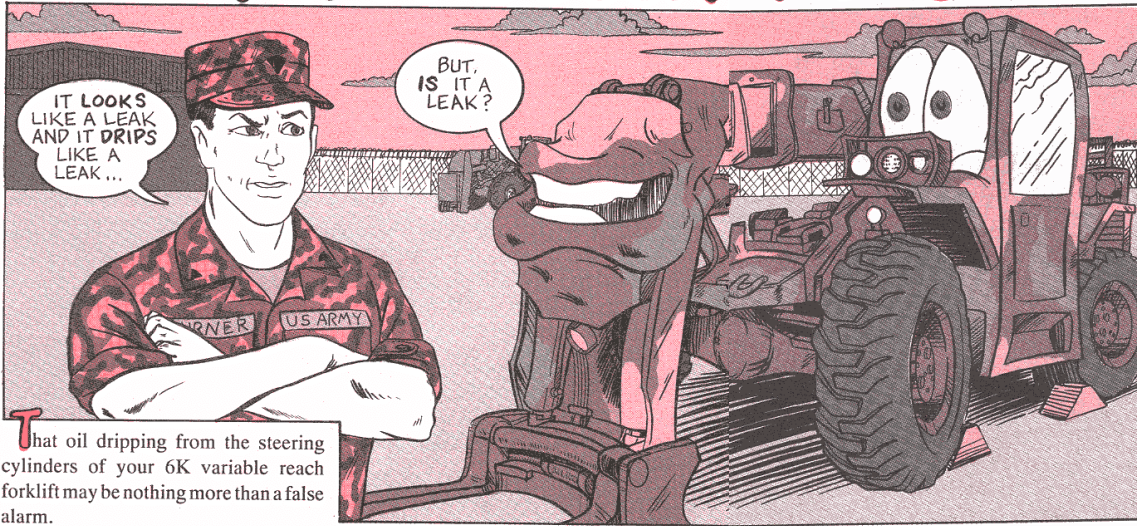
CHECK THE FILTERS DAILY FOR DIRT AND DAMAGE. CHANGE 'EM OR CLEAN 'EM!
 HERE ARE THE NSN'S FOR NEW FILTERS...



Filter for	NSN
Logic module	4130-01-271-2890
Printer	4460-01-264-4035
Remote logic module	4130-01-271-1966

If you don't have a new filter, rinse out the dirty one with water, dry it and reuse it. Make sure the filter is completely dry before using it again, though.

When Is a Leak Not a Leak?



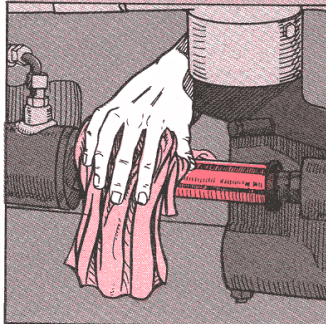
That oil dripping from the steering cylinders of your 6K variable reach forklift may be nothing more than a false alarm.

When turning, the steering cylinder leaves a light coat of oil on the rod. As the coated rod enters the cylinder, the wiper seal wipes off the oil. After a while, oil builds up around the seal and starts to drip, looking just like a Class III leak. But it's not.

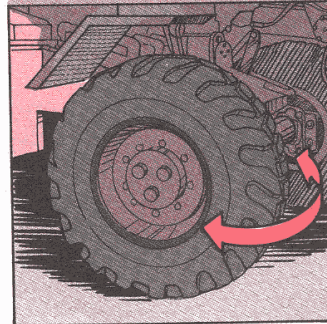
Some oil on the cylinder rod is normal. If you have to add more than a quart of oil a month to the hydraulic reservoir, you may have a real leak. Get your mechanic to look at it. But remember, a drip from the steering cylinder rods will not make your forklift NMC.

How can you tell a real leak from a false alarm? Here's one way to make sure:

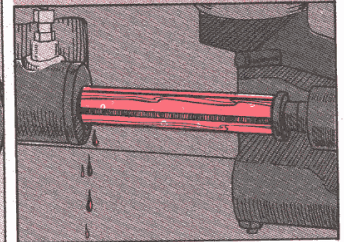
1. Before operation, wipe oil and grime off the cylinder rod and seal with a soft cloth. That's so you can get a good look at the seal.



2. Start up the engine. Turn the wheels to the far right, then to the far left. Now turn the wheels straight ahead.



3. With the engine still running, get out and look at the seals. A good seal will have a light buildup of oil around it. A damaged one will show telltale signs of leakage: oil drops or even a steady drip. That's because the hydraulic pump is still pumping oil.



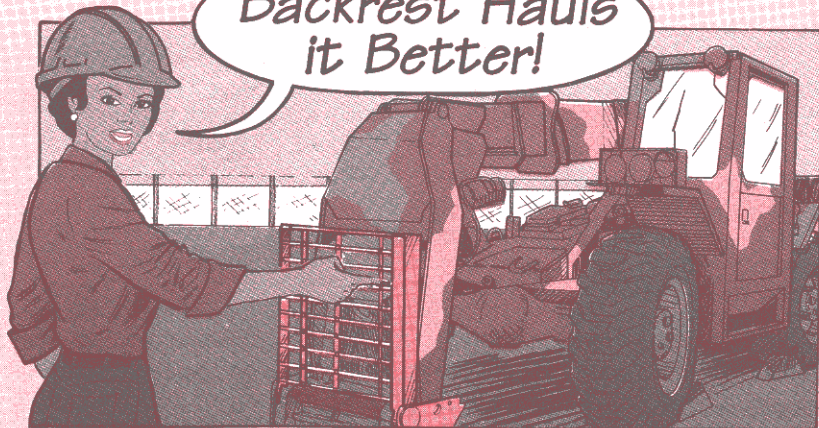
One more way to keep from being fooled:

Before operations, look at the oil level in the hydraulic tank, just like the PMCS says. Look through the upper sight gage on the side of the tank. The oil level should be visible.

NOW I GET IT! THAT'S WHEN A LEAK'S NOT A LEAK!

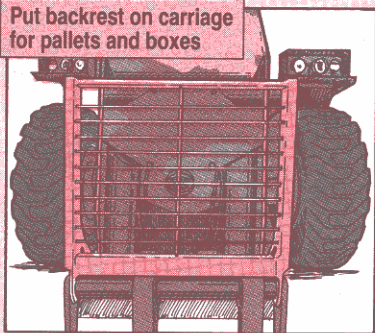


Backrest Hauls it Better!



Put the load backrest in the fork carriage position before you move cargo on pallets or in boxes. If you don't, the load could shift and slide back through the forks. Result: a smashed flood light, torn hydraulic hoses, or even a punctured cylinder.

Put backrest on carriage for pallets and boxes

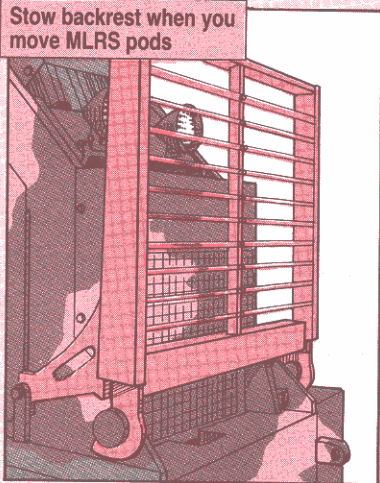


Installing the backrest up by the forks not only protects your forklift, it also holds the load upright and stable when you're lifting and hauling.

Pages 9-31 and 9-32 of TM 10-3930-660-24 show you how to remove and install the load backrest.

Just remember: You won't need the backrest when you move MLRS pods. Stow it in the storage position in front of the radiator.

Stow backrest when you move MLRS pods

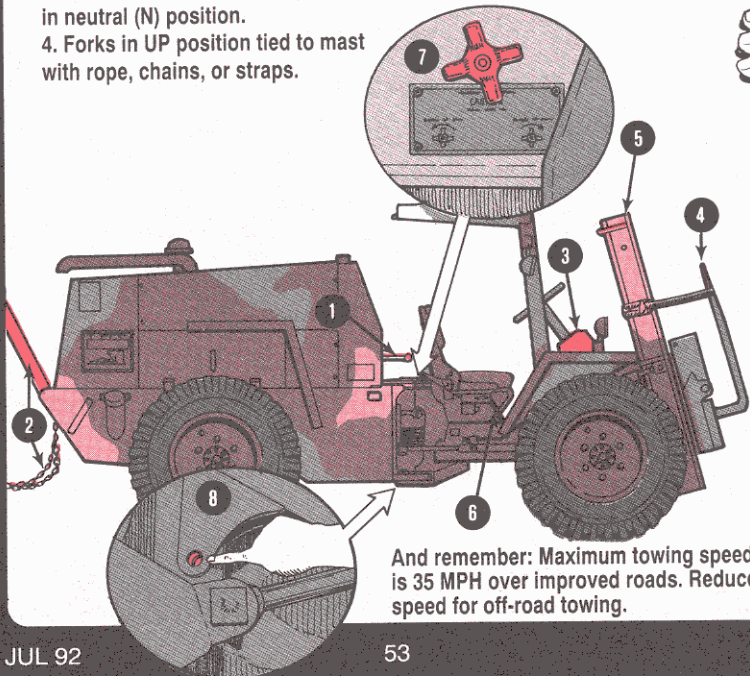


Tow in the Know

Before you tow, you better know. . . know how to prepare your forklift, that is. A few safeguards spell the difference between a forklift that's towed safely and one that lies overturned in a ditch.

HERE'S
AN M4K READY
TO TOW!

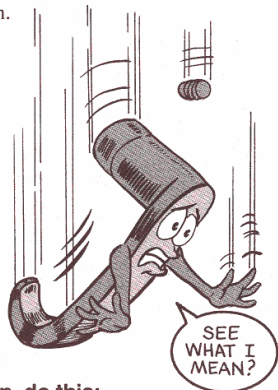
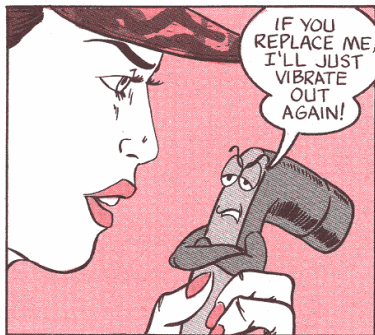
1. Axle disconnect lever pulled out.
2. Tow bar and chains hooked to towing vehicle.
3. Transmission direction selector in neutral (N) position.
4. Forks in UP position tied to mast with rope, chains, or straps.
5. Mast tilted back.
6. Parking brake released.
7. Steering bypass valve opened.
8. Shipping lock pin removed.



Handle Help

The setscrew that holds the inside door handle of your loader has a bad habit of coming loose and letting the handle drop off.

Just replacing the handle and tightening the setscrew won't solve the problem. Vibration will cause the screw to back out again.



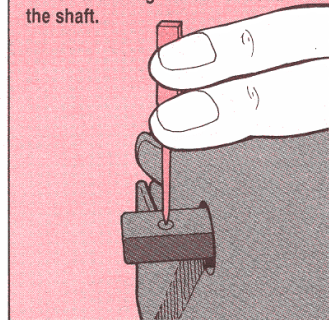
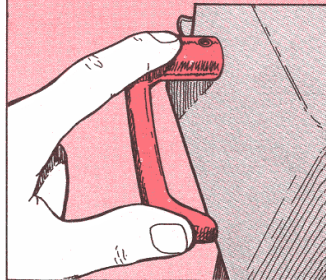
To keep the handle on, do this:

① Remove the setscrew from the handle and toss it.

③ Take the handle off.

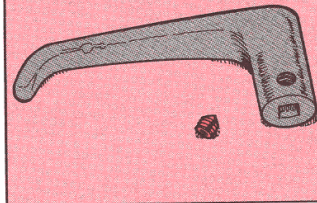
② Put the handle on the shaft and mark the shaft through the setscrew hole.

④ Mark the center of the hole with a center punch. Be careful. If you hit it too hard it might break or bend the shaft.



⑤ Drill a 7/32-in hole about 1/8-in deep.

⑥ Place the handle back on the shaft. Apply Loctite, NSN 8030-01-014-5869, to setscrew threads and screw in a cone point setscrew.



⑦ Tighten. Let the Loctite dry for 30 minutes and you're ready to go.

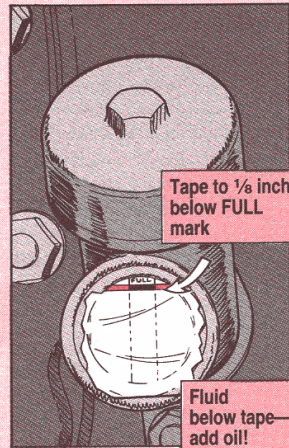


Differential Oil at FULL

Some 621B scrapers have round sight gages.

These round gages have an ADD mark that's supposed to tell you when to put in more oil.

But that mark should not be there. You need to keep the oil level at the FULL mark at all times. Less than full means oil is low. Low oil means the differential can overheat.



Get rid of the ADD mark. Cover it up.

Clean the gage with solvent. Then paint over the mark or cover it with nonreflective tape.

Handle DS2 With Care!

Lots of NBCNCOs are stuck with lots of DS2 because of Desert Storm and troop cutbacks. So what do you do with the excess? Here's the scoop:

If the DS2 is serviceable—its container is not leaking or corroded or unsealed--the DS2 should be turned in through the Material Returns Program. Chapter 7 in AR 725-50 gives the details.

Leaking DS2

But if the DS2 is leaking, it must be properly packed and turned in to your local DRMO. If it's not leaking, it can be turned in as is.

To pack it, first open all doors and windows. Make sure everyone stays away from the area where the DS2 is. Notify your local environmental control office that you have leakers.

Wear a protective mask, long rubber gloves, and a full-length rubber apron.

Never touch a leaking container or wet spot without protective equipment. If DS2 does get on your skin, blot it off and rinse with lots of water until the soapy feeling is gone. Seek medical help.

Repack leakers in one of the following drums:

SIZE	NSN 8110-00-
7 gallon	254-5714
27 gallon	082-2625
57 gallon	082-2626

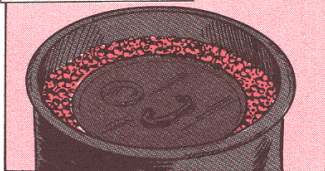


If you use an old drum, make sure it's clean, dry, and not rusting out.

One 1 1/3-qt container can be packed in any of these drums. Two 1 1/3-qt containers can be packed side-by-side in a 27-gal or larger drum. One or two 5-gal containers can go in a 57-gal drum.

Pack vermiculite insulation, NSN 5640-00-801-4176, around the containers. For the 1 1/3-qt ones, put at least two inches around the sides of the container and five inches on the top and bottom. For the 5-gal container, put a minimum of six inches around the sides and two inches on the top and bottom.

Insulate all containers



Seal the drum

Write HAZARDOUS WASTE DS2 on the drum and the number and size of the leakers inside.



If any DS2 has leaked, neutralize it with sodium bisulfate, NSN 6810-00-270-9984. Soak up the DS2 with vermiculite. Put the vermiculite in a drum and write DS2 SPILL WASTE HAZARDOUS WASTE on the outside. Seal the drum.

Store the drums in a cool, dry place until your local environmental officer can have them picked up.



Storing DS2

For the DS2 you keep, remember these rules:

Never store DS2 with STB, acids or oxidizers unless you can separate them by at least five feet and put a splash-proof barrier in between. Otherwise, you risk a fire.

As long as DS2 containers remain sealed, the DS2 is good. Once air hits DS2, though, it's good for only 48 hours. But even after it's lost its decon ability, it can still burn or make you sick. Handle all DS2 with care.

A good source of info on DS2 is TB CML 113. Order the TB on DA Form 4569. To get future changes to the TB, order it on DA Form 12-99, using form 12-34E and 4105.

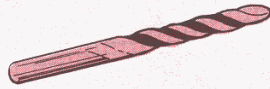
Components of Extractor Set

YOU WON'T FIND ALL THE COMPONENTS FOR...

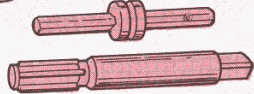
...THE SCREW AND PIPE EXTRACTOR SET, NSN 5120-00-305-2275...

...LISTED IN SC 4910-95-CL-A74.

HERE THEY ARE!



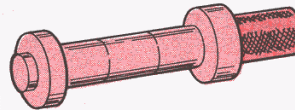
Drill	NSN 5133-00-
1/8 (DZ)	227-9650
3/16 (DZ)	227-9654
1/4 (DZ)	227-9658
1/4 (DZ)	236-4059
5/16 (DZ)	227-9662
11/32 (DZ)	227-9664
7/16 (PG of 6)	227-9670
1/2 (DZ)	227-9646
5/8 (EA)	266-9466



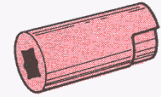
Screw Extractor and Sliding Nut	NSN 5120-
1/4	00-223-6940
5/16	00-223-6941
3/8	00-223-6942
7/16	00-223-6943
1/2	00-223-6944
5/8	01-143-5185
3/4	01-140-4497
1	01-140-4498

THE SIZES ARE IN INCHES AND THE UNIT OF ISSUE IS EACH UNLESS OTHERWISE STATED.

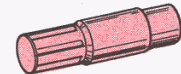
Sleeve Drill Guide	NSN
Sleeve	5120-01-225-6517
Knurled plain nut	5310-01-205-9184
Sleeve spacer (PG of 4)	5365-01-205-5133



Sleeve Bushing	NSN 3120-01-
21/32	214-4925
11/16	214-4924
23/32	214-4923
25/32	205-2686
13/16	215-5209
29/32	214-4926
15/16	214-1979
31/32	214-1978
1 1/32	214-1977
1 1/16	214-1976
1 3/32	214-1975



Solid Drill Guide		NSN 5120-00-223-
Drill	OD	
1/8	19/32	8868
1/8	5/16	8965
1/8	11/32	8966
1/8	3/8	8967
3/16	13/32	8968
3/16	7/16	8960
3/16	15/32	8961
3/16	1/2	8962
1/4	17/32	8963
1/4	9/16	8964



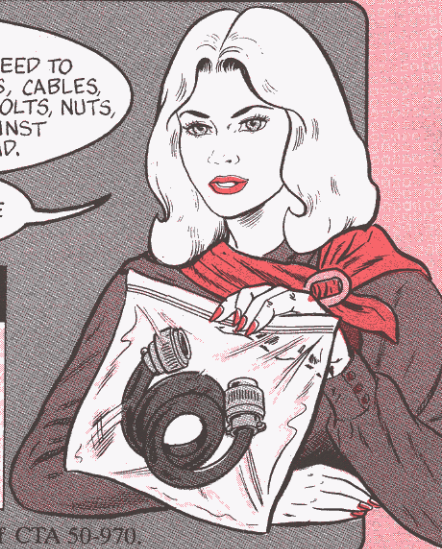
Pipe Plug Extractor	NSN 5120-01-
1/8	141-0030
1/4	141-0031
3/8	142-6950
1/2	141-0032
3/4	142-6951
1	141-0033

Bag It to Protect It

PLASTIC SELF-SEALING BAGS ARE JUST WHAT YOU NEED TO PROTECT SMALL COMMO PARTS, CABLES, CLEANING KITS, OIL SAMPLES, BOLTS, NUTS, SCREWS AND SUCH AGAINST DIRT, DUST AND SAND.

HERE'S A LIST OF AVAILABLE SIZES...

Size (inches)	Qty	NSN 8105-00-837-
4x4	1000	7753
6x6	1000	7754
8x8	1000	7755
10x10	500	7756
12x12	500	7757

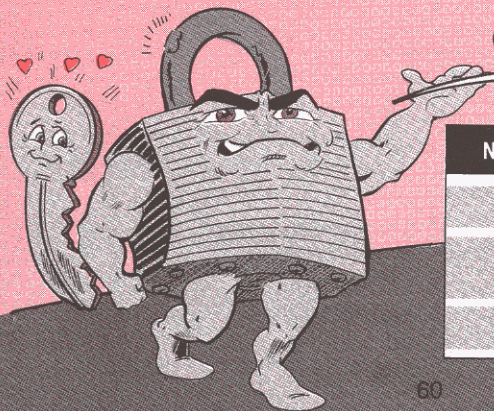


Your authority to order is Appendix A of CTA 50-970.

Padlock NSNs

The Army has added more padlocks to its supply system for you to choose from. These new key-operated, low-security padlocks are shaped the same and will perform the same job as the American Series 200/5200 padlocks.

ORDER NEW PADLOCKS LIKE ME WITH THESE NSNs...



NSN 5340-00-	Padlock
664-1322	1 1/8-in shackle
664-1324	1 1/8-in shackle w/chain
298-7153	1 1/8-in shackle



BDR Kits Correction

The Battle Damage Repair (BDR) kits listed on Page 24 of PS 473 are to be used by mechanics and technicians, not by crewmen and operators.

NSN for New Lube

WD40 lubricant is no longer available. As a substitute, get a 16-oz aerosol can of corrosion preventive and lubricant with NSN 8030-00-938-1947.

New CUCV Specs

TM 9-2320-289-20 is out of range when it comes to front end alignment. The new information for the CUCV is on Page 5-25 of TB 43-0001-39-8 (May 92).

Personal Insect Repellent

Order a 1-oz bottle of Deet insect repellent with NSN 6840-01-003-9589, or a 2-oz bottle with NSN 6840-00-753-4963.

IHC F-5070 Belt NSN

The water pump belt set you need for your CCE 20-ton dump truck is NSN 3030-00-740-3650. The number was left out of TM 5-3805-254-20P.

Armor Vest String

Use NSN 8305-00-262-3316 to get replacement side pull strings for body armor vests, NSN 8470-00-122-1299 through 1302. Or get a yard of elastic cord with NSN 8305-01-068-0348 and make the strings.

HEMTT Prop Shaft NSN

NSN 2520-01-281-4308 gets the HEMTT's transmission-to-transfer case propeller shaft. The NSN that's shown for Item 2, Fig 109, in TM 9-2320-279-20P is wrong.

2 1/2-Ton Power Strip NSN

NSN 5975-01-189-9983 gets the 2 1/2-ton truck van body electrical (race-way) power strip. Order the power strip covers with NSN 5975-01-195-7621. The parts info is missing from Fig 204 of TM 9-2320-209-20P.

Check CUCV Tires

If your M1008, M1010, M1028 or M1031 CUCV has 8-ply (Load Range D) tires, swap them for 10-ply (Load Range E) tires ASAP. The 8-ply tires are not up to the job. Get the tougher tires with NSN 2610-01-148-1635. TACOM Safety-of-Use Message 92-01 has the details.

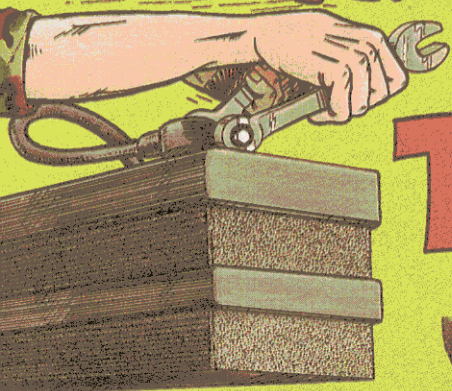
Distribution: To be distributed in accordance with DA Form 12-34-C-R, for TB-43-Series

**Would You Stake Your Life *right now* on
the Condition of Your Equipment?**

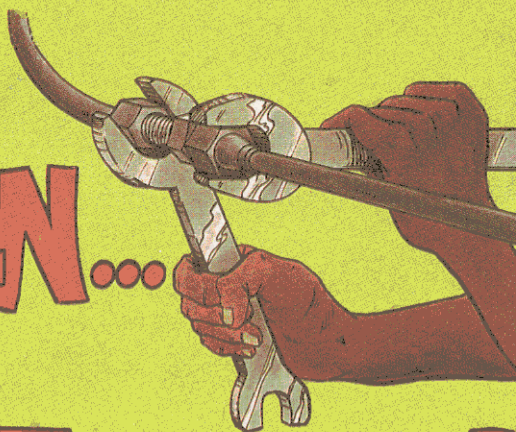
★ U.S. Government Printing Office: 1992/648-071/60006

For sale by the Superintendent of Documents, U.S. Government Printing Office Washington, DC

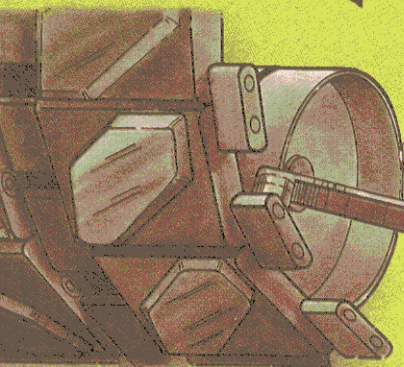
TIGHTEN...



TIGHTEN...



TIGHTEN...



TIGHTEN!

