TB 43-PS-427

Issue 427

PS

June 1988

THE PREVENTIVE MAINTENANCE MONTHLY

. . . Without Firing a Shot! See Page 27

T'ain't No Bull . . .

Don't Gripe—Write!

Got a bum steer?

Nobody listening to your beef?

Don't feel like an utter failure, and don't let it get you down. Jump the fence! Grab the bull by the horns, and prod the system into doing its job.

All you've gotta do is round up your ideas and corral 'em on the right form.

"But nobody will listen to me," you say. Bull! More than one soldier has roped and branded a good idea into the SOP. Many have picked up cash awards along the trail.

Here's what you need to head 'em up and move 'em out!

Publication change—DA Form 2028, and 2028-2

Equipment Improvement Recommendation—SF 368

Suggestion—DA Form 1045

SMART—DA Form 5533, letterhead or a plain piece of paper will do.

TIPS—TIPS Form, letterhead or a plain piece of paper will do here, too.

Supply & Maintenance Assessment & Review Team (SMART)
US Army Logistics Center
ATTN: ATCL-CFI-S
Ft Lee, VA 23801-6000

Tool Improvement Program Suggestions (TIPS)
USAMC Materiel Readiness Support Activity
ATTN: AMXMD-MD
Lexington, KY 40511-5101

Nobody gives a chip if all you do is beef. Write, and you've got a stake in how the outfit's run. You've nothin' to lose and everything to gain. And that's no bull!

PS THE PREVENTIVE MAINTENANCE MONTHLY

TB 43-PS-427, 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 427 JUNE 1988

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:

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General, United States Army
Chief of Staff

Official:

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Brigadier General, United States Army
The Adjutant General

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FIREPOWER

M2/M3 Bradleys. . .

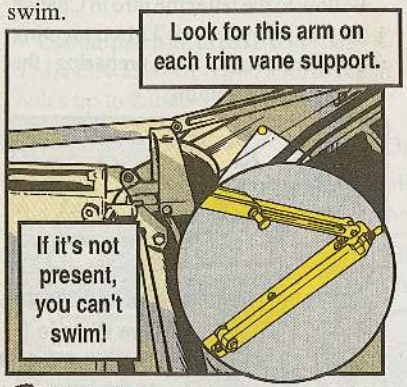
You Can Swim, But Take Care!

The commander and the driver must make quick, coordinated decisions when entering the water and during swimming.

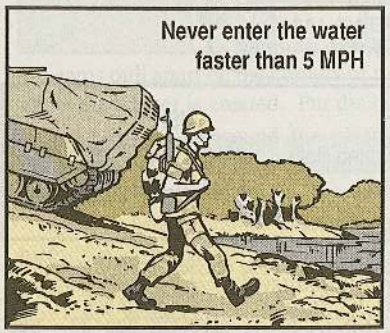
And if that's not enough, the entire swimming effort hinges on the condition of the water barrier/swim curtain and its mounting hardware.

Swim It Right

TACOM Safety of Use Msg AMSTA-MPS 171600Z Jul 87 has the word on getting your Bradley back in the water. If your vehicle has not had MWO 9-2350-252-50-6 applied to the trim vane support arms, you can't swim.



Take it easy when you enter the water. Water could spill over the trim vane if you enter the water faster than 5 MPH—a fast walking pace.



Follow the good words on Page 2-324 of Change 1 to TM 9-2350-252-10-1. Enter the water as slowly as current speed and bank conditions allow. Avoid an entry slope steeper than 30 percent (17 degrees).

While swimming, one squad member must be an observer. Most

times, this is the commander. Regardless, the observer must watch the rear of the water barrier curtain. If the observer is not the commander, he must stay in intercom contact with the commander. If water splashes over the curtain, the driver must reduce vehicle speed to increase rear freeboard.

For safety's sake, never try to swim across a river or stream flowing at more than 2 MPH.

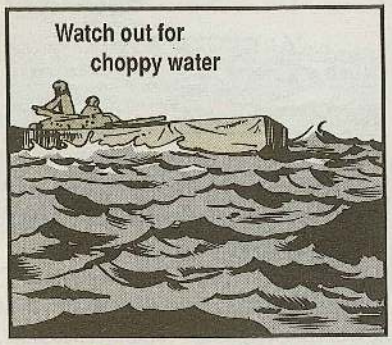
PS MORE

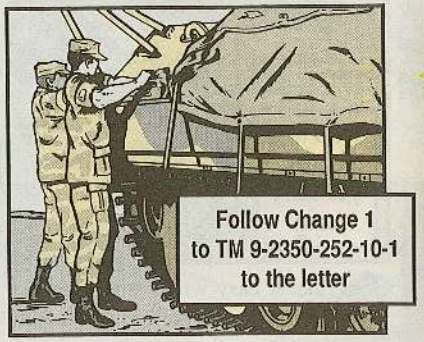
Since the Bradley's top calm water speed is about 4.5 MPH, you'll still have some maneuvering capability. If the current speed is more than 2 MPH, you lose that edge.

Watch out for choppy water. One-foot-high waves are the limit for the M2/M3. Higher waves may splash over the water barrier.

Details on estimating river current speeds and slope percentage, plus other swimming info, are found on Pages 76-85 of FM 21-306, Manual for the Track Combat Vehicle Driver, and on Pages C-7 through C-9 of FM 90-13, River Crossing Operations.

Follow to the letter the info in Change 1 (Sep 87) of your -10 TM on erecting the swim barrier and preparing the Bradley for swimming.

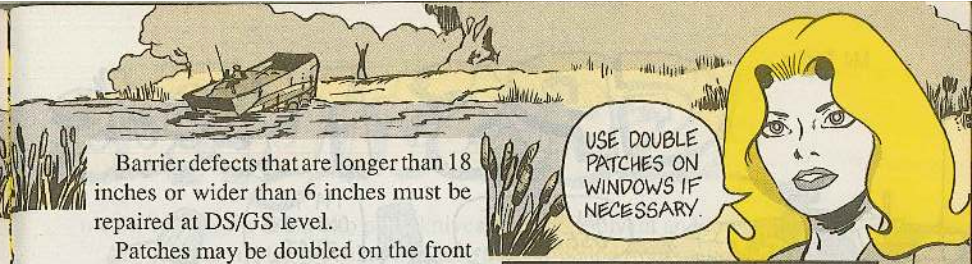




Maintain It Better

Item	NSN
Vinyl coated cloth	2590-01-245-2428
Adhesive	8040-01-036-3487 (1 gal)

You can patch tears in the barrier cloth up to 18-in long and 6-in wide. Repair procedures are in TACOM Msg AMSTA-MCA 111600Z Sep 86. See your TACOM Logistic Assistance Representative for a copy, or write Half-Mast.



Barrier defects that are longer than 18 inches or wider than 6 inches must be repaired at DS/GS level.

Patches may be doubled on the front of the barrier when covering a tear in the plastic "windows," but nowhere else. Doubled patches work on the front because the trim vane supports the barrier.

Use the patch kit in the BII in your -10 TM, NSN 2590-01-114-7396, to repair holes up to 2 inches in diameter.

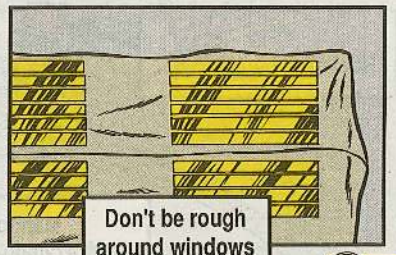
Prevent Damage, Too

Make sure you stow the barrier according to the TM, using a hammer handle and the rubber flaps. Protect the front corners as well as you can.

Seams pull apart on the corners of the water barrier if they're stretched too tight when the barrier is erected. Put the barrier up right and the seams will hold.

Don't be rough around the plastic "windows." They crack, tear and puncture real easy.

Your biggest preventive measure is making sure the barrier is dry when it's stowed. If it's wet and warm, mildew eats holes in the barrier. If it's wet and cold, the water can freeze and damage the barrier.



PS END

M1 Tanks. . .

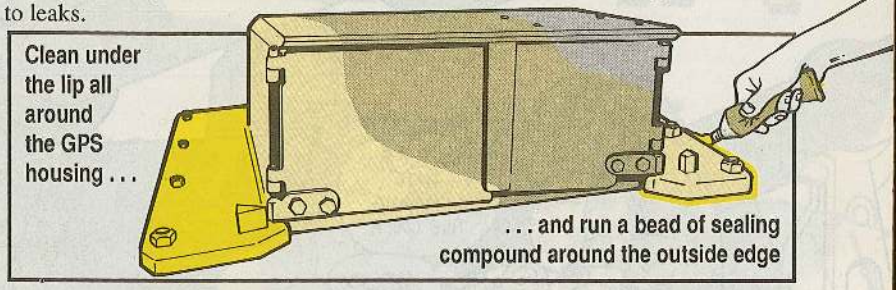
GPS Needs a Tight Seal

Mistakes you make when installing the gunner's primary sight body assembly into the turret will come back to haunt you as leaks.

Two mistakes you want to avoid are sloppy cleanup before installing the GPS and use of the wrong sealant.

You must clean the turret access lip completely before you install the GPS. That means two mechs using two putty knives, P-D-680 solvent and lots of rags.

Any residue you leave behind will keep the compound from scaling, which leads to leaks.



Once the cleaning job's done right, install the GPS. After it's in place and tightened down, run a bead of sealing compound, NSN 8030-00-275-8110, around the lip of the sight body and the turret. The sealing compound is Item 50 in Appendix A of TM 9-2350-255-20-2-3-3.

Do not use any other sealer for this job. Silicone sealer, adhesive, gasket cement or gasket sealer will not work.

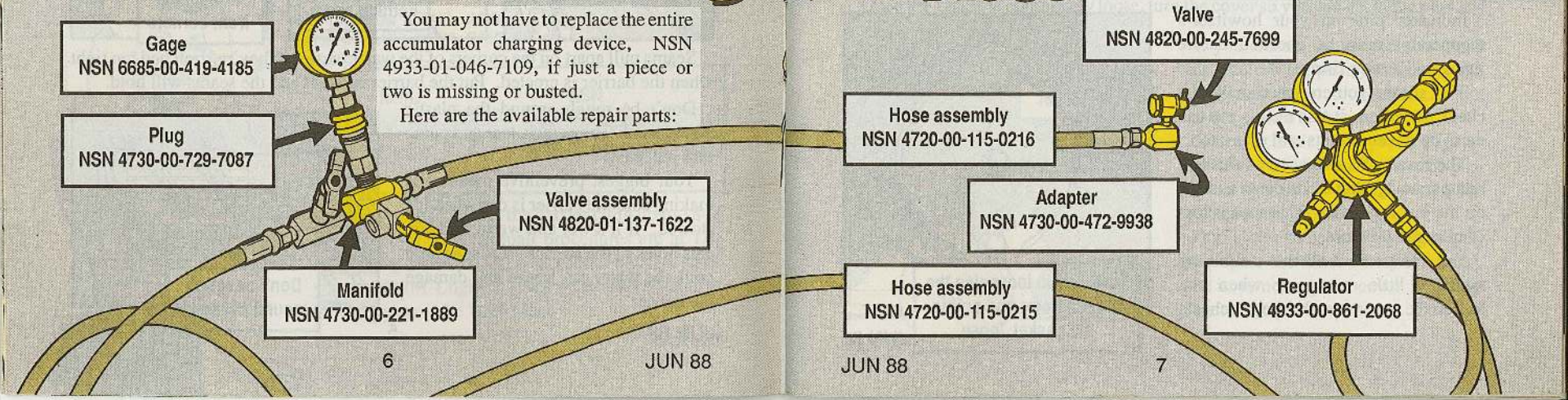
The word on how to install the GPS is found on Pages 7-25 through 7-32 of TM 9-2350-255-20-2-3-3. Take no shortcuts and there'll be no leaks.

Accumulator Charging Device. . .

Get It By the Piece

You may not have to replace the entire accumulator charging device, NSN 4933-01-046-7109, if just a piece or two is missing or busted.

Here are the available repair parts:



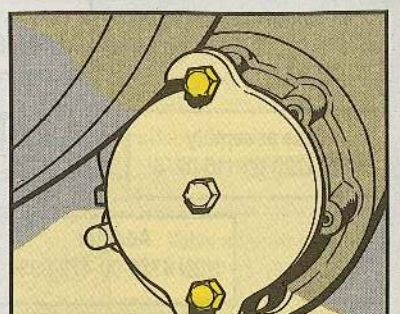
Recuperator Cover Gasket Needs Help

Indicator pins on your howitzer's recuperator must be checked before firing and during firing.

That means you crewmen make the check real often. It also means you can mess up cover gaskets real often, too.

The result of a damaged or missing recuperator gasket is corrosion and dirt on the inner cylinder. That means loss of nitrogen pressure.

You can prevent all this trouble by taking a little more care when you loosen the cover to make the pin check.



Take care in loosening the cover screws and prying the gasket loose

Neither of the two screws holding the cover in place has to be removed to open the cover. Loosen them to the stop pin and gently pry the cover away from the recuperator. Make sure the gasket is not torn loose.

Once the gasket is completely loose, turn the cover so you can get to the pins and fluid valve.

Once loose, turn cover for access

If you loosen just the top screw and twist the cover open, you tear up the gasket—and you don't need that action.

If the gasket is shot, report it!

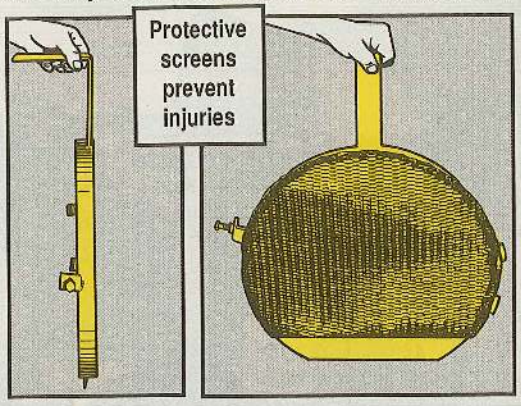
Your mechanic will eyeball Page 6-39 of TM 9-2350-311-20-2 for the procedures. NSN 5330-00-034-4448 is the right gasket to make the fix.

Don't let it go because you think you can't spare the time. Once it's fixed, care in removing the cover will stop gasket damage.

Fan Blades and Fingers Don't Mix

It should come as no surprise that parts of your body don't fare well when they come in contact with spinning cooling fan blades.

To prevent injury, stay as far away from them as possible. During ground hopping or after you've installed a pack, you have to look closely at the hoses, pipes and fittings to make sure there are no leaks. But those parts are close to those turning fans!

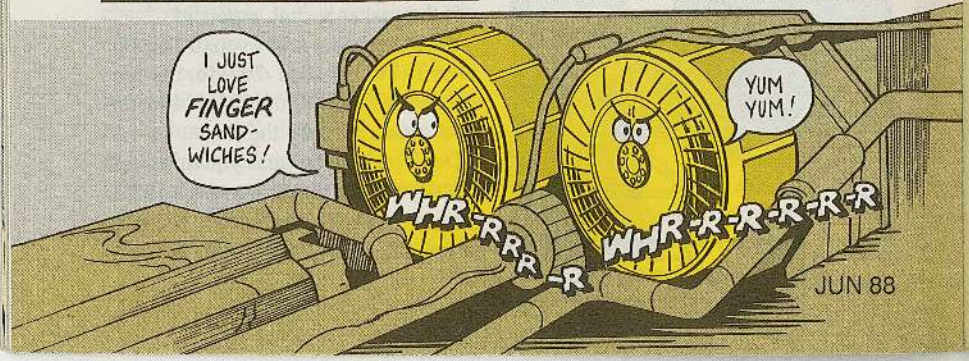


Solve all the problems by making a couple of protective screens to cover the blades. Use them only when you're making checks or pulling maintenance.

The screens have hooks and a thumbscrew with locknut to secure them around the fans.

For information on how to make the screens, eyeball Pages 2-13 through 2-16 in TB 43-0001-39-2 (Apr 87). If you don't have the TB, write to PS, the Preventive Maintenance Monthly, Lexington, KY 40511-5101. We'll send you a copy.

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



Fitting Relief

Dear Editor,

Out here in the desert, sand, heat, and rough country make it important to keep APC wheel bearings greased. That can mean lubing as often as weekly. But sand causes more problems when you're pumping grease.

Sand can plug the relief fittings. If a relief fitting's plugged, it's real easy to pump in too much grease if you're using a pneumatic grease gun instead of the manual grease gun that's part of your BII. Too much grease blows the hub seal.

That's why you should only pump grease by hand.

If pumping gets hard after 6 to 8 shots of lube, you know something's wrong. It's probably a plugged relief fitting. Here's how to cure it:

Take off the relief fitting with a 7/16-in socket wrench.

Work the fitting's valve bearing with a paperclip until the bearing moves freely. Screw the fitting back on. Pump again. Grease should come out of the fitting. If it doesn't, your mechanic needs to take a look.

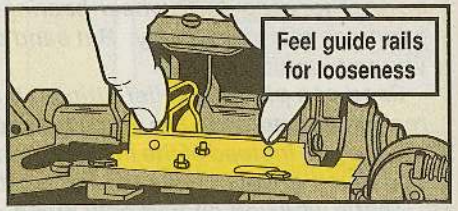
Bob Bradley
Ft. Irwin, CA

(Editor's note: It's a relief that you've come up with such a fitting solution. Thanks.)

Head Off Common Problems

You can keep your Vulcan out of jams with these PM tips:

FEEL THE DC FEEDER guide rails for looseness before you load ammo. Vibration shakes the guide rail screws loose. The screws fall out and jam your Vulcan. Your mech can tighten loose screws.



LUBE THE MOUNT BEARINGS at least every six months, like your LO says. The mount bearings often get forgotten during lubing and freeze up. A 4-oz bottle of LSA gets at the bearings best. It's part of your expendable supplies.

AZIMUTH LIGHT BULB: TM 9-2350-300-10 and TM 9-1005-286-10 tell you how to replace the azimuth indicator lamps, but not with what. NSN 6240-00-051-4843 gets you the lamp.

Self-Propelled Only

PICK UP BEFORE YOU MOVE OUT. Loose objects, like screwdrivers, fall beneath the ammo drum and radar rack and catch in the slipring. The mount has no power. . . and your Vulcan's in for big repairs.

Latch the safety gate in the mount, too. That prevents things from falling under the ammo drum and radar rack.

MILES Causes Real Problems

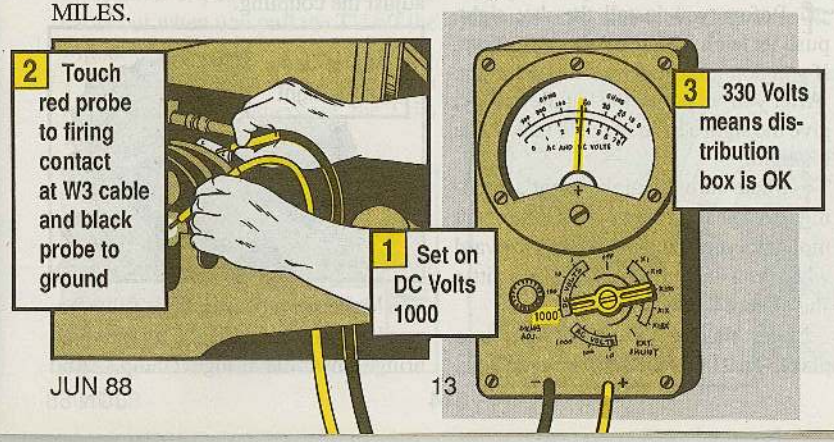
The Multiple Integrated Laser Engagement System (MILES) only simulates action, but it can cause real problems for the Vulcan—like no accuracy or power.

The weight of MILES can bend—and even break—the boresight telescope mounting bracket on the radar antenna. Then you can't boresight the Vulcan and you can't be sure of accuracy.

After training with MILES, eyeball the bracket, mechs. If it's bent or broken, report it to DS.

MILES can also short out the distribution box. Then when you go to the field to do real firing, Vulcans won't fire.

Make sure that doesn't happen; use your multimeter to check for 330 volts at the firing contact at the W3 cable. Check it every time after your unit's trained with MILES.



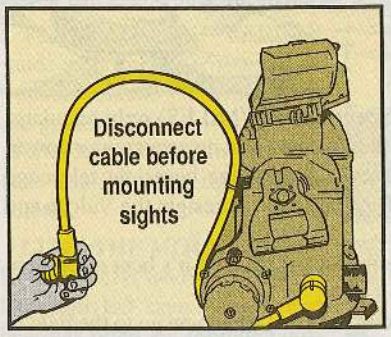
Putting It All Together

You've faithfully cleaned your TOW.

You've carefully done your PMCS.

But all your good intentions will be wasted if you don't stay off your TOW's toes when you put it all together to fire.

- Before you put the day and night sights on the traversing unit (TU), remove the postamplifier cable from the storage cup. You can't pull out the



post-amplifier cable from the TU without crimping it if the sights are mounted.

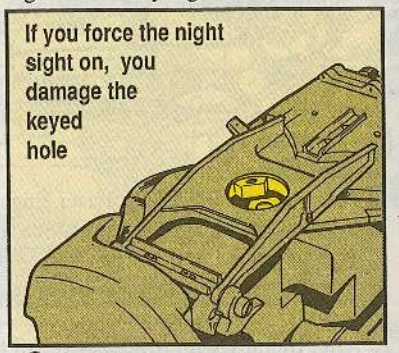
- Before you install the day sight, push its latch handle all the way down. If you don't, the sight won't latch tight.

After you've pulled the handle to lock, give the sight a little shake to make sure it's tight.

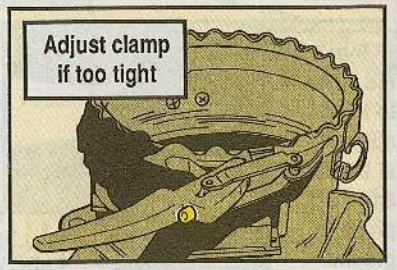
- Make sure the night sight's latching lever is all the way back when you mount the sight and all the way forward when you lock it in. Give it a little shake, too.

Never muscle the night sight into place. That busts the sight's keyed hole.

Instead, gently position the night sight on the day sight until it fits.

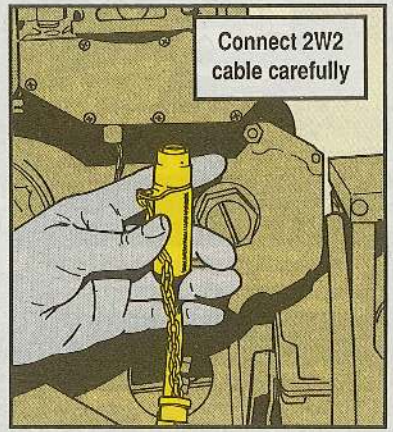


- Careful when locking the tripod's coupling clamp handle. If the coupling's too tight, you'll break the coupling pins. If you have to strain to lock the handle, have your repairman adjust the coupling.



- Make sure the missile is fully forward in the launch tube before you bring down the bridge clamp. And bring the clamp down easy. Otherwise, you break electrical connector pins.

- Always unlock the TU's elevation lock before you begin to sight. Just one tug will break the lock
- Carefully connect the 2W2 cable from the power conditioner to the night sight. If you don't align it just right, you bend connector pins when you plug it in.

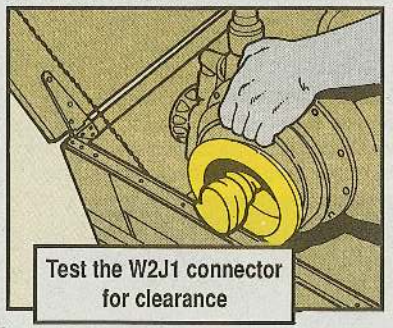


Taking It Apart

When you disassemble the TOW, disconnect the W2J1 cable from the MGS first. If you forget it, you rip the cable out when you pull the TU off the tripod.

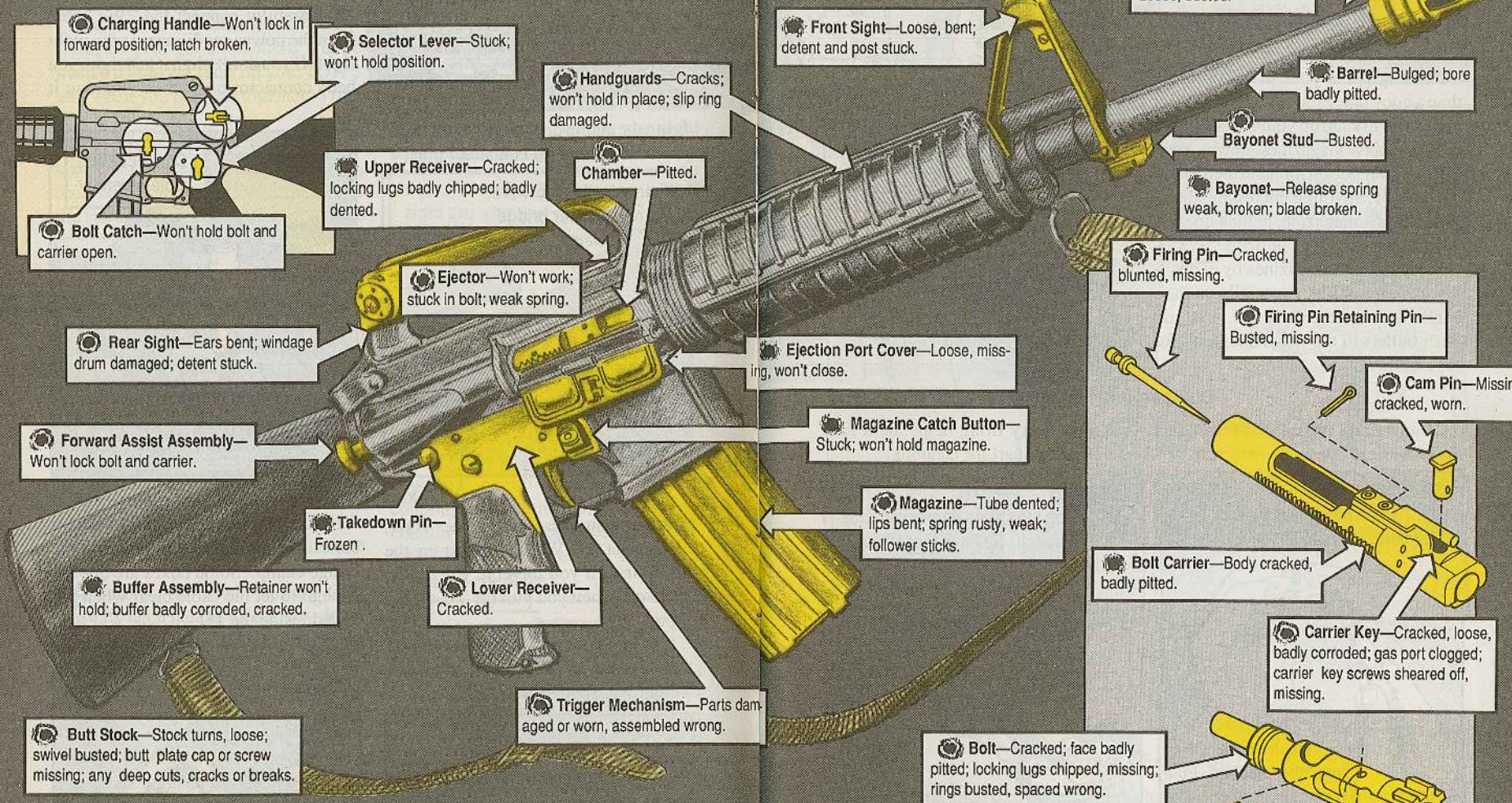
Lay the TU down with the azimuth lock sticking up. Otherwise, the TU's weight will snap off the lock.

If your TU's are stored in wooden boxes, put the W2J1 connector by the bridge clamp. Some boxes are not big enough to let the cable clear when it's coiled inside the TU.

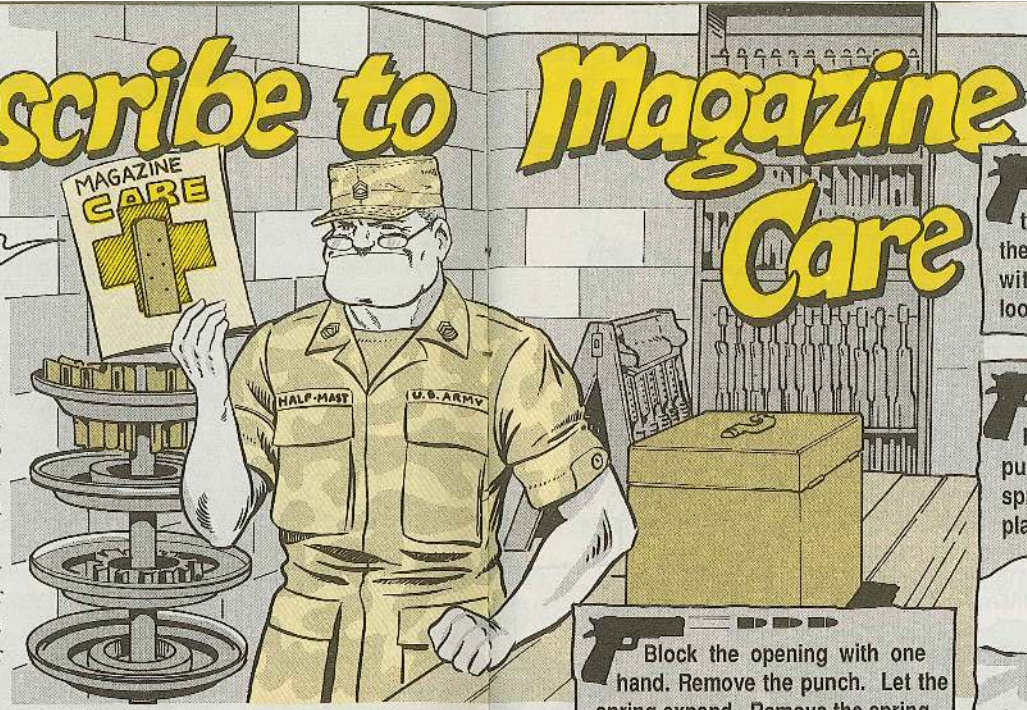


Use this chart, along with your -10 TM's PMCS, to make sure your rifle is hot to trot. Report any problems to your armorer.

Check It All Out



Subscribe to Magazine Care



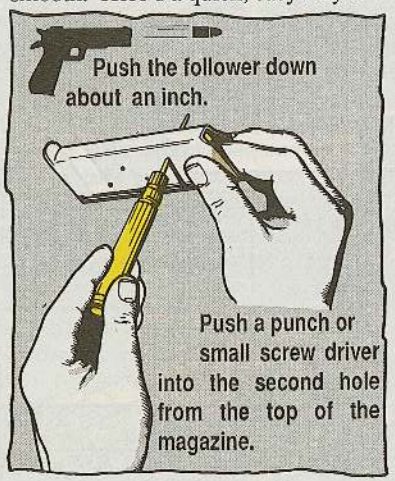
Nothing perks your pistol up more than a good magazine. Here's what you need to do to keep up your subscription.

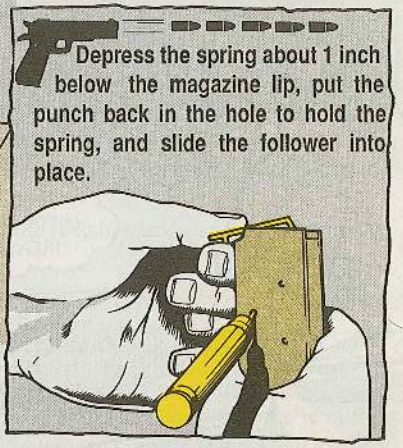
Lay empty magazines down, stick them in your pocket, or hand them off to a buddy . . . anything but tossing them. If you toss a magazine, it ends up with a bent lip, split seam, or dents.

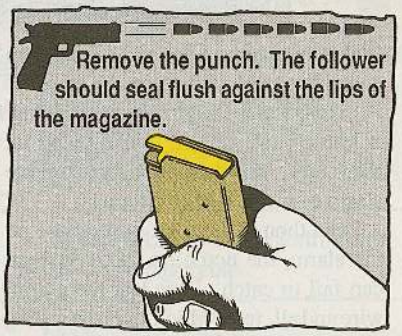
Weed out bad magazines by eyeballing them for cracks, especially on their back edge and the feed lips. As you push bullets in the magazine, look for separation at the seams.

Disassembly Help

Cleaning and lubing magazines with CLP after every firing helps them feed smooth. Here's a quick, easy way to take a magazine apart for cleaning:





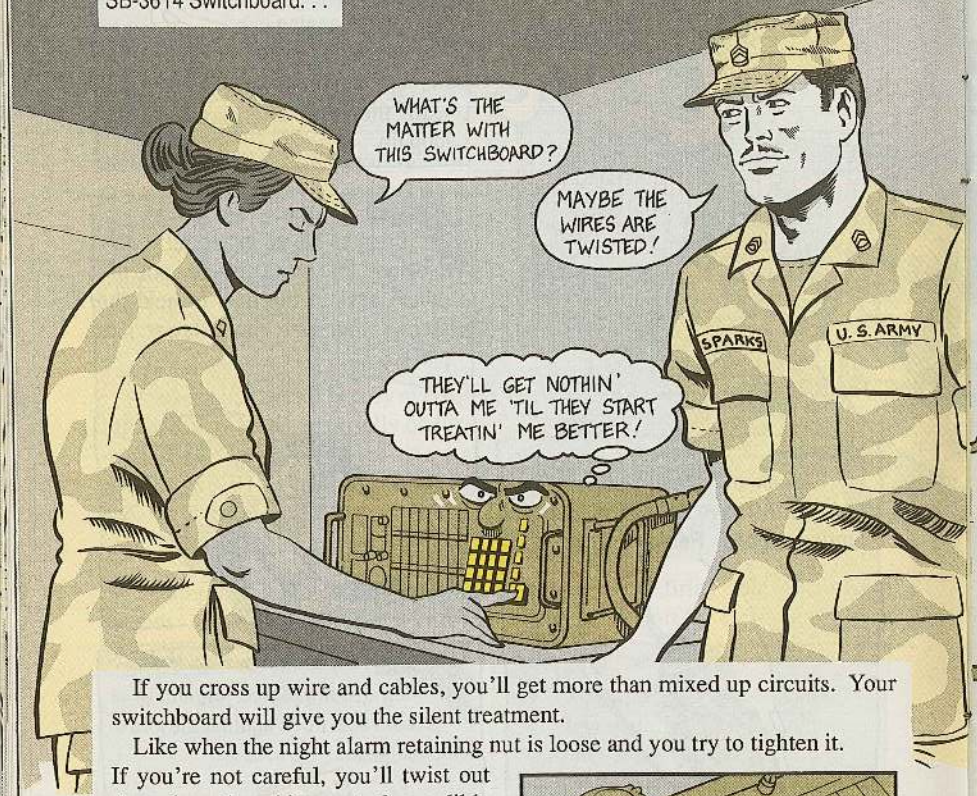


Protect Extractor

If you let the slide drop on an empty chamber, the extractor hits the side of the barrel. That can throw the extractor out of position and cause firing problems. Prevent that by riding the slide back into position with your hand.

PM Tips

SB-3614 Switchboard. . .

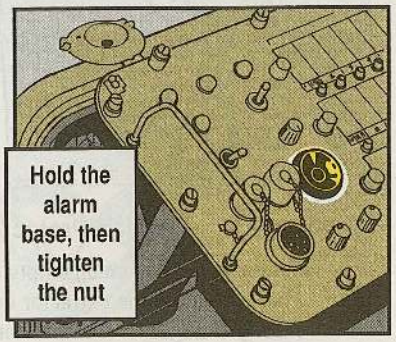


If you cross up wire and cables, you'll get more than mixed up circuits. Your switchboard will give you the silent treatment.

Like when the night alarm retaining nut is loose and you try to tighten it. If you're not careful, you'll twist out the wires, knocking out the audible alarm as well as other circuits.

Even though there's a keyed base on the alarm, the notch on some of them can fail to catch. This lets the alarm, wire and all, turn, which tears the wiring apart.

To make sure the alarm won't turn while tightening, open the switchboard and hold the alarm base in place, then tighten the nut.



Save Wire, Cables

Then when you close the switchboard's front panel, tuck in the flexible cable assemblies.

If you don't, cables will get pinched between the case and the panel. A few pinches and they're goners.

Before fastening the case, tuck the belt-like cables inside.

You might give the cable assemblies added strength by putting a wrap of tape, NSN 5970-00-419-4291, on them. The tape's in your unit repairman's TK-101 tool kit.

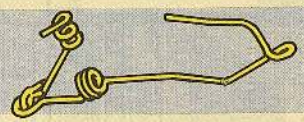
Even with tape, the cables will fit inside the switchboard to head off an accidental pinch.

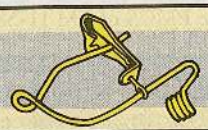
Wire, Cable. . .

Hold 'Em Up With Hangers

Nothing beats a sky hook for stringing wire and cable, but since they're in short supply right now, you'll have to settle for overhead hangers. One about every 50 feet of wire is needed.

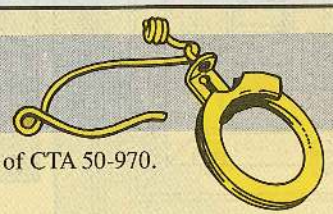
NSN 5975-12-120-0691 is for the hook that'll handle up to six strands of WD-1 field wire.





NSN 5975-12-120-5288 will string one spiral-4 or 26-pair cable.

NSN 5975-12-120-5289 will hold one spiral-4 or 26-pair cable and serve as a strain relief.



The hooks are authorized by Appendix B of CTA 50-970.

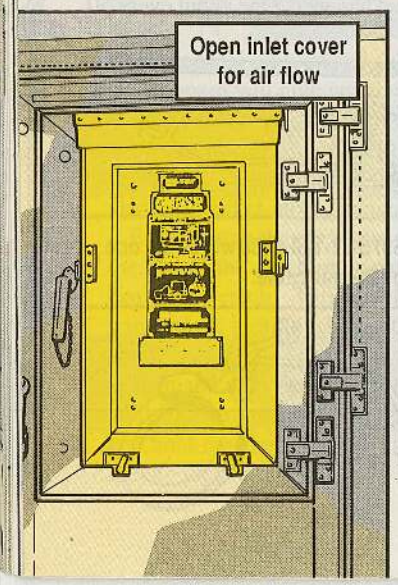
AN/GRC-122, -142 RATT Rig. . .

Keep Air Flowing

Your radio teletypewriter set needs a steady flow of air to keep inside temperatures down.

No matter what the weather's like outside, your radio will put out enough heat to do damage.

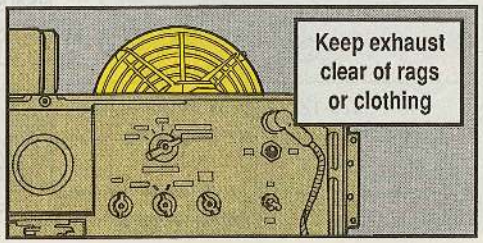
High internal temperatures burn up your AN/GRC-106 radio set or a PP-4763 power supply.



Keep the temperature down by leaving the shelter door's inlet cover open. Open the cover wider in the hot season.

Also, make sure exhaust vents behind the radio or power supply are open and free of rags or clothing. Those vents allow the hot air to escape.

Keep the radio set's heat exchanger clean, like it says in the PMCS of TM 11-5820-520-10.



AN/PRC-77 Radio Set. . .

Hole Clogged? Clean it !

If you haven't done it lately, take time right now to clean the hole in the radio set's antenna base. Clean it with a match stick or toothpick.

That hole is the only way out for moisture that can build up and ruin your set.

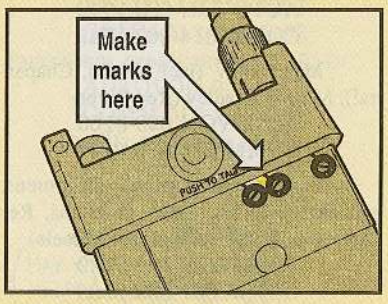
AN/PRC-68 Radio Set. . .

Etching Makes Freqs Stand Out

If you're not making your mark now, you may have trouble presetting frequencies later.

Switch numbers on your Perk-68 radio wear away with use, leaving you guessing where to set a switch.

You can make etch marks on the frequency, antenna coupler and transmitter switches before the numbers wear off.



Make an etch mark on each module opposite the "O" on the dial.

By marking your radio, you'll always have a reference point for presetting freqs after the paint has long gone.

Hotline Help

Ready to scream 'cause you've reached the end of your problem-solving rope? Call these numbers for hotline help after you've checked out your problem with local MAIT, DS and LAO personnel. They may be able to help, too.

Tanks, small arms, missile guidance/control systems for LCSS, ground and air TOW, Dragon, LANCE, Shillelagh (Anniston)
AUTOVON 571-6582
COMM 205-235-6582

Aircraft engines (Corpus Christi)
AUTOVON 861-2651
COMM 512-939-2651

All howitzers, M578, FAAR, FADAC, ground guidance and shop/test equipment for I-HAWK, and Nike-Hercules (Letterkenny)
AUTOVON 570-9693
COMM 717-267-9693

Aircraft Vibrex balancing kit (AVSCOM)
AUTOVON 693-1742
COMM 314-263-1742

M113 FOV (incl Vulcan, Chaparral), M2/M3 Bradley (Red River)
AUTOVON 829-3100
COMM 214-838-3147

Power generation equipment, wheeled vehicles, brake problems, Redeye, topographic equipment (Tooele)
AUTOVON 790-2129
COMM 801-833-2129

Commo/Electronics (Sacramento)
AUTOVON 839-2839
COMM 916-388-2839

Commo/Electronics (Tobyhanna)
AUTOVON 795-7900
COMM 717-894-7900

Commo/Electronics (Ft Monmouth-CECOM)
AUTOVON 992-3266
COMM 201-532-3266

Computer software (Ft Monmouth-CECOM)
AUTOVON 995-2980
COMM 201-544-2980

Belvoir R&D Combat Engr Dir (Ft Belvoir)
AUTOVON 354-2654
COMM 703-664-2654

Supply, maintenance policy guidance for AR's 750-1, 710-2, 735-5, DA Pam 710-4, 710-5 (New Cumberland)
AUTOVON 977-6842
COMM 717-770-6842

Fuels/lubricants (Ft Belvoir)
AUTOVON 354-3576/4594
COMM 703-664-3576/4594

Warranty (TACOM)
AUTOVON 786-7889
COMM 313-574-7889
FTS 973-7889

Defense Construction Supply Center (for ROD's)
AUTOVON 850-3413
COMM 614-238-3413

(For non-NSN requisitions)
AUTOVON 850-2841
COMM 614-238-2841

Food service equipment, individual equipment (clothing), aerial delivery, tentage and shelter (Natick)
AUTOVON 256-5341
COMM 617-651-5341

on the Way

CARC (Chemical Agent Resistant Coating) General (TROSCOM)
AUTOVON 693-2361
COMM 314-263-2361

Supply Source (GMPA)
AUTOVON 977-7741/7031
COMM 717-782-7741

AMCCOM maintenance, supply of managed items, location of nearest LAR, NICP, NMP
AUTOVON 793-6440
COMM 309-782-6440
FTS 367-6440

TAMMS-DA Pam 738-750 (USALC)
AUTOVON 687-1559
COMM 804-734-1559

Substitute NSN's,part number cross reference to NSN, item ID, price questions and AMDF code problems (MIRAC)
AUTOVON 977-7431
COMM 717-782-7431

AMDF Code Guide (USAMC Catalog Data Activity) (mailing info)
AUTOVON 977-6608/6741
COMM 717-782-6608/6741

Packaging problems, SF 364 ROD (AMCPSCC)
AUTOVON 795-7142
COMM 717-894-7142
FTS 590-7142

Equipment Historical Records—DA Form 2408-9, etc.—missing info (MRSA)
AUTOVON 745-3957
COMM 606-293-3957

Federal Supply Service tools, paper items and industrial products (GSA)
COMM 703-557-1368
FTS 557-1368

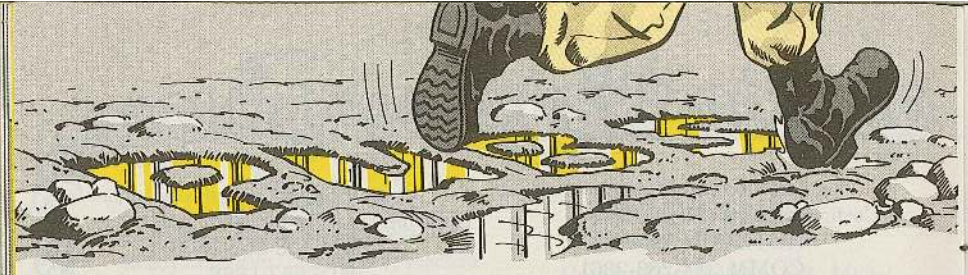
TMDE, training, calibration, maintenance, management assistance, MTOE or TDA authorizations, pubs, turn-in of obsolete/unneeded equipment and management (USACTA)
AUTOVON 745-4104
Toll-free 1-800-451-3428

MRSA field assistance programs (TIPS, Reverse SLAC, Peacetime PLL/ASL End Item Application, Combat PLL/Mandatory Parts List, EOPDB, AOAP, warranties, SAMS WOLF, TAMMS equipment data base, Army vehicle registration program, MWO status, SDC, Army readiness reporting, Force Mod Lessons Learned, NTC Lessons Learned, Total Package Fielding)
AUTOVON 745-3082
COMM 606-293-3082

Defense Electronics Supply Center (DLA managed items) Technical questions, substitutions
AUTOVON 986-5196
COMM 513-296-5196

Emergency supply problems (ESDC)
AUTOVON 986-6161
COMM 513-296-6161

Quality assurance problems
AUTOVON 986-6593
COMM 513-296-6593



This is a selected list of recent pubs of interest to organizational maintenance personnel. This list was made from a computer printout provided to the Adjutant General.

TM 5-4120-388-24P Jan 88 Air conditioner, vertical compact, 18,000 BTU/HR, NSN 4120-01-214-3692

TM 5-4320-304-14 Aug 87 125 GPM DED pump unit

TM 9-1000-258-BD Jan 88 Battlefield damage assessment and repair for 155mm howitzer

TM 9-1005-318-10-HR Jul 87 M167A2 Air defense artillery gun

TM 9-1010-223-10 Dec 87 M224 mortar

TM 9-1440-600-24P Mar 88 PATRIOT missile

TM 9-2320-356-BD Dec 87 BDAR for wheeled vehicles

TM 9-2350-264-20-1-3 Jan 88 M1A1 tank

TM 9-2350-264-20-1-4 Jan 88 M1A1 tank

TM 9-2350-264-20-1-5 Jan 88 M1A1 tank

TM 9-4935-778-13&P-3 Oct 87 Hank pump assembly part (mast mounted sight)

TM 9-4940-551-14&P Oct 87 Shop equipment, electrical repair. Part number 85236

TM 11-2300-475-13&P-3 Sep 87 MK-2461/GRC-193A electronic equipment installation kit

TM 11-5800-218-10-3 Jan 88 AN/TRC-138 (modified) radio termainal/repeater set

TM 11-5805-482-15-27 Aug 86 490L network data control system (NDCS) interface/par/modems

TM 11-5805-482-15-29 Apr 86 Rapid access maintenance moniter (RAMM) console commands and model 6761 on-line trouble monitor

TM 11-5815-615-23 Sep 87 AN/UXC-7 lightweight digital facsimile

TM 11-5826-302-20P Dec 88 AN/ASN-132 (V) integrated inertial navigation system

TM 11-5895-1160-10-2-HR June 87 AN/TSC-99 communication central or -218/TSC-99 receiver group

FM 17-15 Oct 87 Tank platoon

FM 100-10 Feb 88 Combat service support

FM 101-60-27 Jul 85 Handbook of small caliber weapons systems (U)

Maintenance & Safety-Of-Use Messages

AMCCOM SOU-MSG—Advisory, Operational, Identifies a potential safety hazard with the MK19 Grenade Machine Gun (GMG), AMSMC-DS 251430Z Feb 88.

AMCCOM SOU-MSG—Advisory, Operational, Reports slide breakage on the M9 pistol, AMSMC-MA 011515Z Mar 88.

AMCCOM SOU-MSG—Advisory, Operational, Reports problems with M1A1 tank ammo loading tray, NSN 1015-01-250-6056, AMSMC-MA 281945Z Mar 88.

AMCCOM Maintenance Advisory—Improved M1A1 tank loader's seat pin, AMSMC-MAW 211530Z Mar 88.

AMCCOM Maintenance Advisory—Gives correct NSN for M8 Detector Paper, AMSMC-MAR-BO(A) 311400Z Mar 88.

AVSCOM MSG—Clarifies authorized IR searchlight cover used for night vision goggle operations and unaided night flights, AMSAV-G 231815Z Mar 88.

CECOM SOU-MSG—Advisory, Operational, Releases lithium-sulfur dioxide (LI-S02) BA-5590/U batteries made by Duracell, contract No. DAAB07-85-C-H335 with date codes 0987C and 1087A from deadline, AMSEL-SF-REE 151600Z Mar 88.

TACOM SOU-MSG-88-11—Advisory, Operational, Reports premature wear of non-tactical vehicles aerial platform manufactured by Reach All, Inc., AMSTA-M 111700Z Mar 88.

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

AUDIO-VISUAL STUFF

Available at battalion or Post Learning Center

Films, TV Tapes

TVT 9-124 Troubleshooting the hydraulic system of the M984E1 crane

TVT 9-127 Troubleshooting the starting and charging systems on the HMMWV

TVT 6-17 Start/stop procedures for AN/TPS-25 radar

TVT 6-18 March order of AN-TPQ-36 radar

TVT 6-19 Emplacement of AN-TPQ-36 radar

TVT 55-3 UH-60 main rotor vibration analysis and correction

TVT 9-133 M9 pistol, organizational and intermediate maintenance

TVT 9-134 M9 pistol, operator maintenance and use

TVT 11-194 Night vision goggle AN/PVS-7A

TEC Lessons

600-551-8894-F How to use hoist assembly kit for AH-1

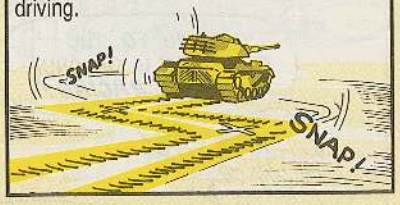
600-552-8896-F How to use micrometers and the dial indicator

984-071-0260-F Load Dragon round-install/remove Dragon tracker on the M175 mount

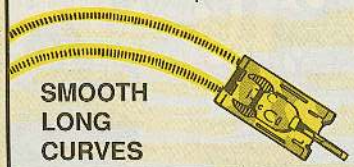
953-071-0278-F Dragon night tracker

YOU CAN MAKE YOUR TRACK GO AS FAR AS POSSIBLE BY ALWAYS FOLLOWING THESE DRIVING TIPS...

Don't make unnecessary pivot steer turns. You'll chew off more rubber in a pivot steer turn than in miles of normal driving.

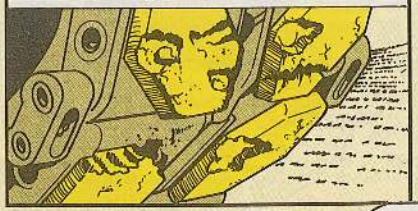


Turn in smooth, long curves. Sharp turns also wear off rubber and put a lot of stress on end connectors and other track components.

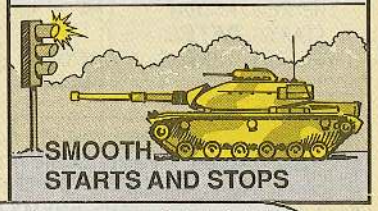


Keep your speed steady. If you're in a hurry, plan turns and stops well ahead. But a constant, slower speed will often get you there quicker than fast driving that throws track, breaks torsion bars, etc.

High speeds on hard surfaces also build up heat that weakens rubber resistance to tearing and chunking.



Start and stop your tank smoothly, too. Quick starts and jerky stops increase rubber wear.



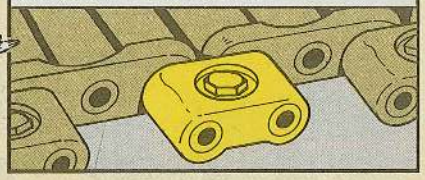
THE FINAL WORD ON BEING A GOOD TRACK DRIVER IS IN FM 21-306!

KEEP YOUR TRACK MAINTAINED OR IT WON'T BE READY TO GO WHEN YOU ARE. YOUR -10 TM IS FULL OF INFO ON TRACK MAINTENANCE... *READ IT... LEARN IT...* AND *LIVE IT!*

FM 21-306 MANUAL FOR THE TRACK COMBAT VEHICLE DRIVER

KEEP AN EYE ON TRACK AT ALL TIMES, ESPECIALLY AT HALTS. HERE'S A QUICK WALK-AROUND CHECK...

Look for broken, missing or loose end connectors, bolts and wedges. Shiny metal where the bolt touches the end connector means a loose wedge bolt.



Remove all metal, rocks, wire, tin cans and mud, if possible. A gunked-up track won't run smoothly.

Watch for bent, missing, cracked, broken or loose center guides. Shiny metal at the nut means it's loose.

Eyeball your track for dead shoes. If you see a sagger—a drooping shoe—replace it now. It could cause a thrown track.

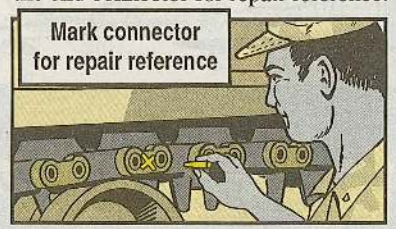
GETTING THERE WITH THE MOST YOUR TANK HAS TO OFFER IN THE BATTLE IS YOUR MOST IMPORTANT JOB, DRIVERS. KEEP YOUR TRACK IN GOOD SHAPE WITH ALL THE CARE AND MAINTENANCE YOU CAN GIVE IT!

...AND HERE ARE THREE DAY'S-END CHECKS THAT'LL HELP YOU RUN SMOOTHLY TOMORROW, TOO...

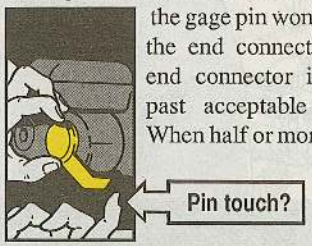
WE HAVE THE WORLD'S BEST EQUIPMENT . . . *Take care of it*

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

- Place the four men like so: The driver starts the engine and warms it up. One crewmember stands in front of the tank to serve as a ground guide for the driver. Number three man is the rear ground guide. Number four— the inspector—does the work.
- The inspector watches the track as it passes over the compensating idler, while the driver moves the tank backward. Check the right side first, then the left. If something looks wrong, signal the front ground guide to have the driver stop the tank. Mark the outboard side of the end connector for repair reference.

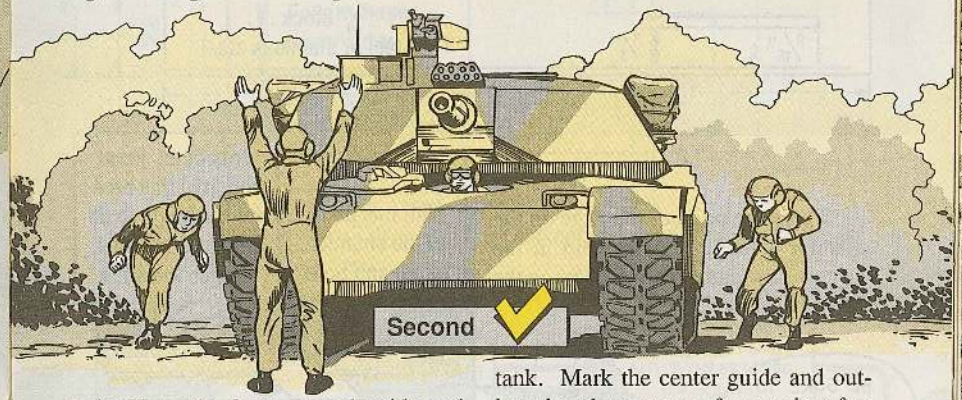


- Look for missing wedges, wedges not seated right, and loose, broken, worn or missing end connectors.
- If you're checking out an M60-series tank, you can borrow your mechanic's end connector wear gage, NSN 4910-00-795-7960. (The gage is part of the special tools shown in the tank's -20P TM.)
- To use it, measure the driven—trailing—end of the end connector. If the gage pin won't touch the end connector, that end connector is worn past acceptable limits. When half or more of the end connectors are worn on one end—but within wear limits on the other end—the entire track must be reversed.

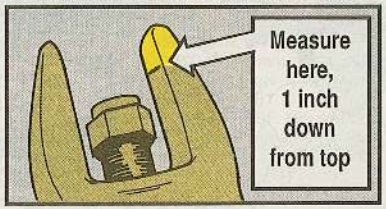


- On M1 tanks, you can't reverse track, because chevron-type track only runs one way. To get the most from your end connectors, use them on the opposite track when they're worn on one edge.
- Check for missing or worn track pads if you're driving an M60-series tank. No need to replace pads or shoes for chunking. Replace 'em only when the grouser begins to mark a paved road.

For M1 track, there are no pads to worry about. Replace a shoe when the grouser begins to mark a paved road.

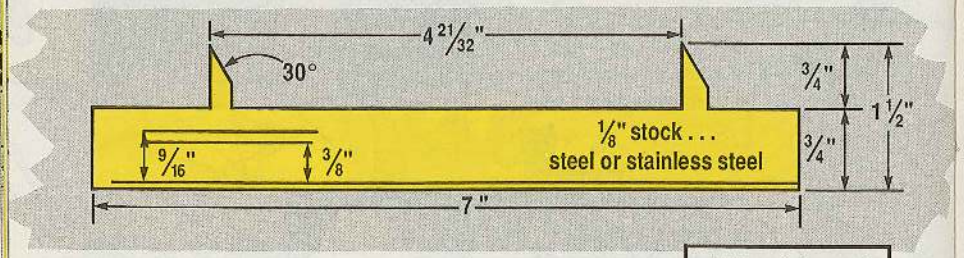


- Keep the front ground guide and driver in the same positions as in the first check.
- The No. 3 and 4 men each observe a front idler. They both watch the center guides as they pass between the compensating idler and the No. 1 roadwheel while the driver moves the tank forward.
- Check for missing, bent, broken, cracked, worn or loose center guides. If either inspector finds any, signal the ground guide to have the driver stop the tank. Mark the center guide and outboard end connector for repair reference.
- After you've finished up, check the worn center guides again. Replace any guide worn less than one-half inch thick (measure 1 inch from the top).

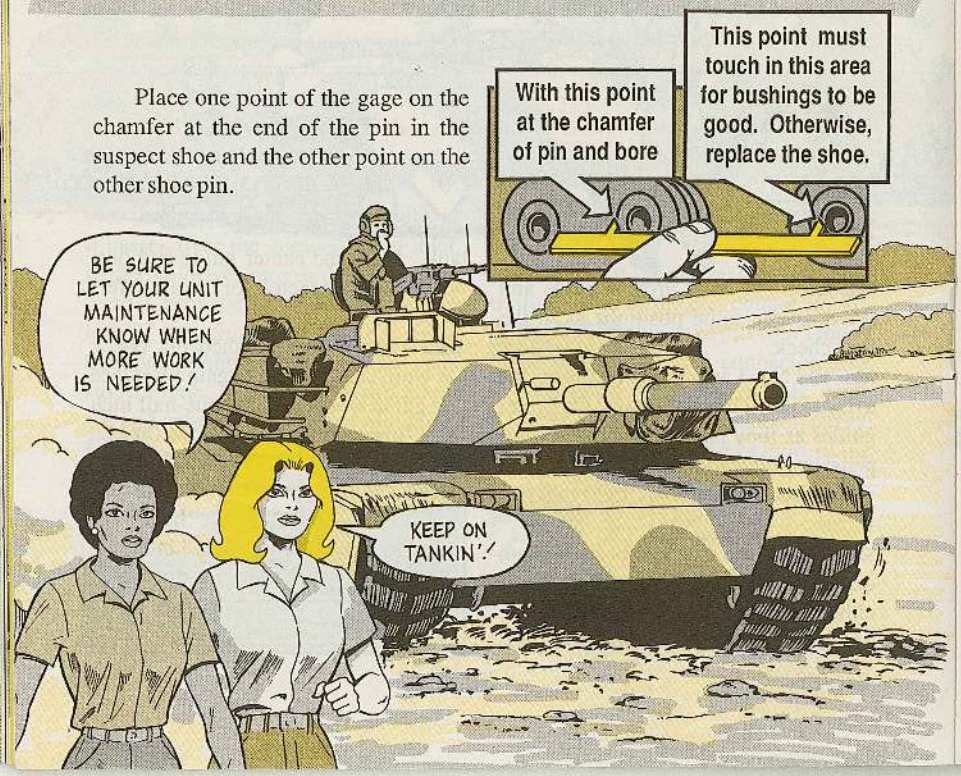


Third ✓

- The driver and the front ground guide keep their same positions for this check. The inspectors move to the rear of the tank near the drive sprockets. They both watch the track as it passes over the support rollers. Check for dead shoes as the driver moves the tank forward. A dead shoe rides unevenly—one end or both ends are lower than the shoes next to it. Dead shoes are caused by worn bushings or broken shoe pins.
- If you find shoes that look dead but you're not sure, get the track bushing wear gage your mechanic made for you.



Place one point of the gage on the chamfer at the end of the pin in the suspect shoe and the other point on the other shoe pin.

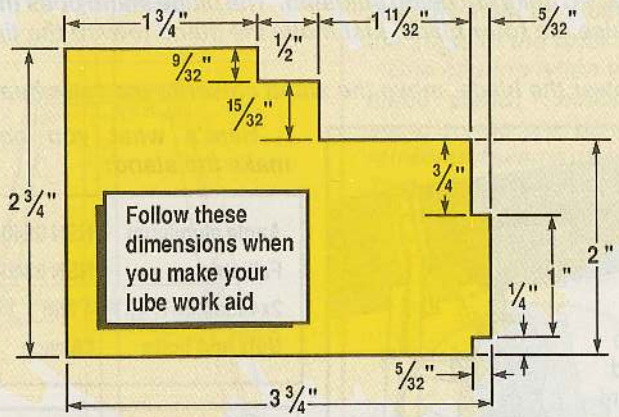


OH-58. . .

The Same, but Different

Kiowa mechs, don't use Fig 6-4B of TM 55-1520-228-23-1 as a pattern for your bird's main driveshaft coupling lube work aid. It's not drawn full scale.

The numbers are right but most of the lines don't match the numbers in length.



If your work aid is too small, you'll pack the couplings with too much grease. That will cause early seal failure.

So do it by the numbers—not by the length of the lines—when you make the work aid. You can't go wrong that way.

Aviation Messages

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

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

C-12-88-01, SOF, Technical, C-12, RC-12, U-21, and RU-21, Inspection of flight control cable tensions, 022000Z Feb 88.

U-21-88-01, SOF, Technical, C-12, RC-12, U-21 and RU-21, Inspection of flight control cable tensions, 022000Z Feb 88.

AH-64-88-02, SOF, Maint Mandatory, AH-64A, Generator cable chafing inspection, 022200Z Feb 88.

AH-64-88-03, SOF, Technical, AH-64A, Inspection of main rotor swashplate, 031500Z Feb 88.

GEN-88-01, SOF, Operational, All aircraft, temporary suspension of flight operations using the night vision goggles, 111500Z Feb 88.

UH-60-88-01, SOF, Technical, H-60 series, Inspection for certain serial number tail rotor blade assemblies, 151800Z Feb 88.

AH-64-88-04, SOF, Main Mandatory, AH-64A, Inspection of aft engine mount pins and bushings, 151900Z Feb 88.

UH-21-88-02, SOF, Technical, U-21, RU-21 A-90 and VC-6, Inspection and selective replacement of wingbolt hardware, 231930Z Feb 88.

AH-1-88-03, SOF, Technical, UH-1/EH-1AH-1, Inspection and removal of governor with possible missing cotter pin, 232030Z Feb 88.

UH-1-88-02, SOF, Technical, UH-1/EH-1, AH-1, Inspection and removal of governor with possible missing cotter pin, 232030Z Feb 88.

CH-47-88-02, SOF, Operational, CH-47D engine transmission clutch failure-to-engage procedures, 242000Z Feb 88.

AH-64-88-05, SOF, Maint Mandatory, AH-64A, Inspection of main rotor blade pins, 291900Z Feb 88.

Work Aid for Rotor Hub PM

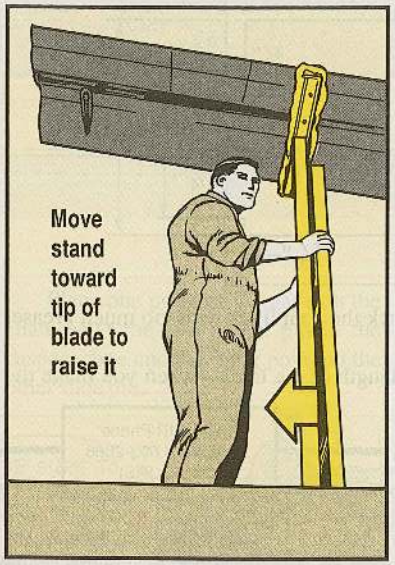
Dear Editor,

Here's a blade stand we made with 2x2-in angle aluminum to use whenever we raise or lower the blades to adjust the pitch change links.

Now we don't need 2 or 3 people to lift and hold the blade in place while the PC links are being adjusted. The blade stand does the work.

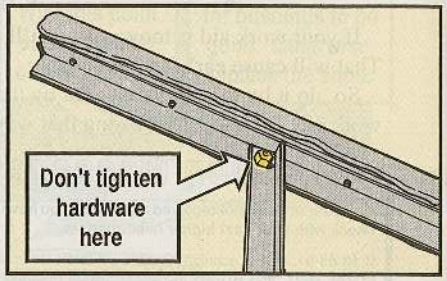
To raise the rotor blade, just move the stand toward the tip of the blade.

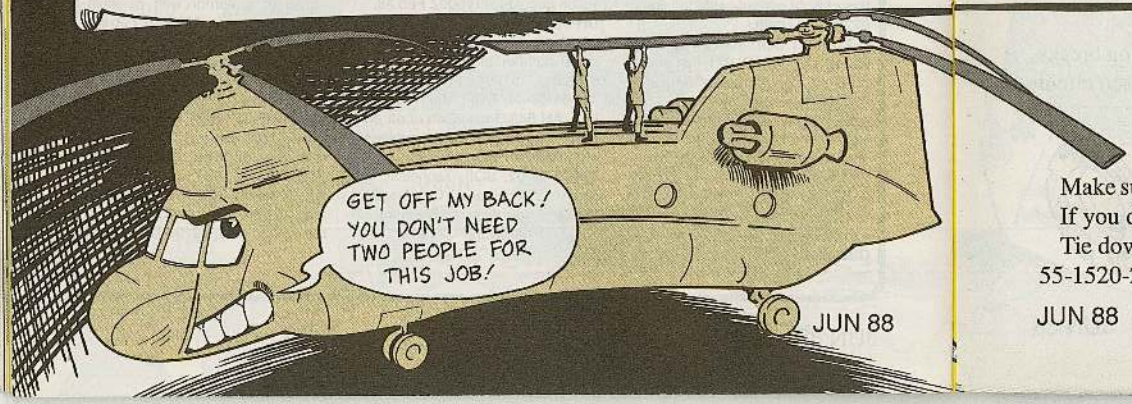
To lower the blade, move the stand closer to the rotor head.



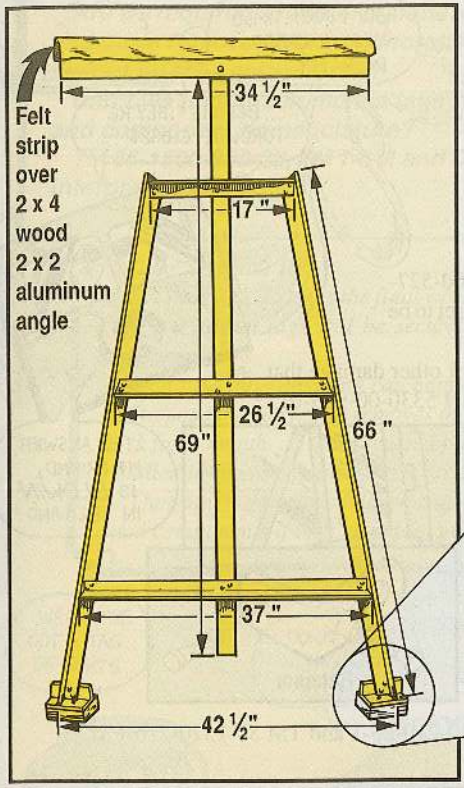
Here's what you need to make the stand:

Angle aluminum	NSN 9540-00-231-9911
Felt strip	NSN 8305-00-812-2360
2x4 lumber	4 feet
Nuts and bolts	28 each





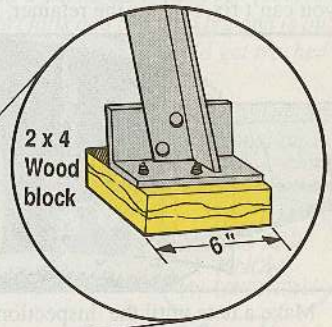
Here are the blade stand's dimensions:



Be sure not to tighten the hardware attaching the blade support to the vertical beam. The blade support must be able to tilt to fit the angle of the rotor blade.

One caution when you use the blade stand: make sure the stand's legs are placed on the reinforced seams of the fuselage. That way, you won't dent or tear the outer skin.

SSG Wilbert Coleman
Ft Bragg, NC



(Editor's note: Easier, quicker, safer, cheaper—that's the name of the game. Good idea!)

Safe Blade Removal

Make sure your bird's rotor blades are tied down before you remove one of them. If you don't, the other blades will rotate and maybe hurt someone.

Tie down at least one forward and one aft blade like it says in Para 1-26 of TM 55-1520-240-23-1.

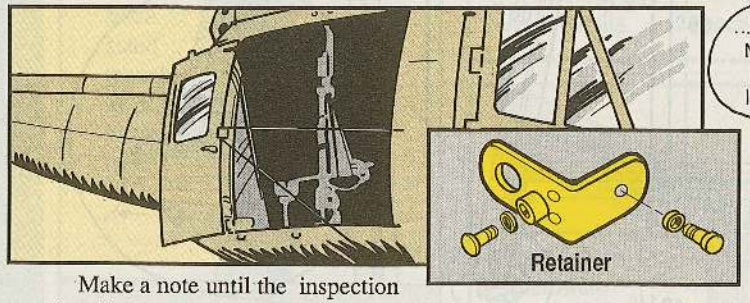
UH-1...

Never fly with your bird's cargo doors open, crew chiefs, without inspecting the door retainers before you leave the ground.

You could be minus one cargo door if a retainer fails in flight.

Use the magnifier, NSN 6650-00-527-7451, that's in your AVUM No. 2 tool set to be sure you don't miss anything.

If you find cracks, excessive wear or other damage that you can't fix, replace the retainer, NSN 5330-00-983-0122.



Make a note until the inspection is added to Para 2-117 of TM 55-1520-210-23-1 and TM 55-1520-210-PM.

AH-1, UH-1...

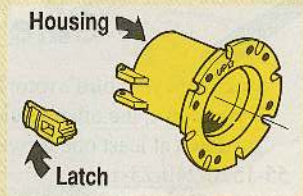
Refueling Port Repairs

You can now repair your bird's refueling receiver if the latch or housing breaks.

This will save you the trouble and expense of replacing the entire closed circuit receiver port every time a latch or housing breaks.

You can get the latch for the Huey and Cobra with NSN 1560-01-070-5669. But the housings are different. Get the Cobra's receiver housing with NSN 1680-01-242-7267 and the Huey's with NSN 1680-01-222-8827.

Make a note in your TM's until they're updated.



You Remove it, You Tag It!

Dear Windy,

Are we required to attach materiel condition tags to components and parts removed from an aircraft which are intended to be reinstalled on the same aircraft?

Can't we just attach manila tags with the aircraft serial number and component nomenclature?

TM 55-1500-328-25, FM 1-511 and DA Pam 738-751 leave room for interpretation.

SSG J.S.

Dear Sergeant J.S.,

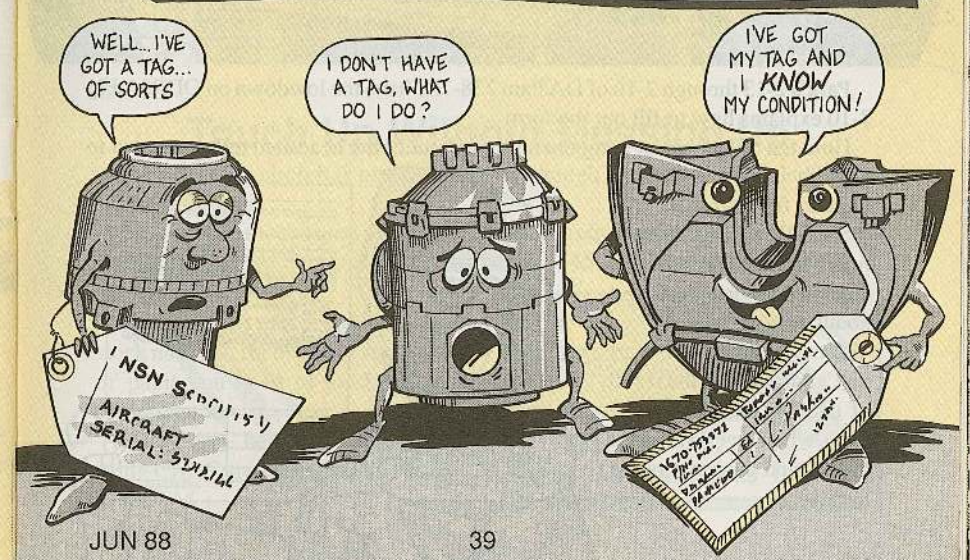
DA Pam 738-751 has the final word on materiel condition tags. It states in Para 2-25b that tags will be securely attached to all uninstalled or stored components.

That's because anything can happen to a part once it has been removed.

Suppose the mech who removes the part falls and breaks a leg and is out of work for a month. If that removed part is not tagged, it could get trashed or installed in the wrong aircraft or anything!

The point is that you could wind up repairing and replacing a lot of perfectly good components if they're not tagged when they're removed from a bird.

Windy



Report Early Failures Early

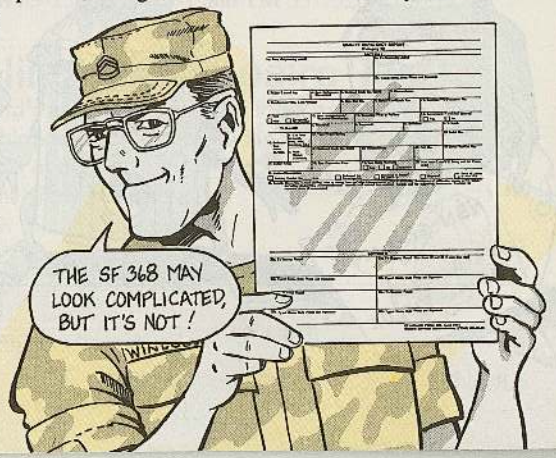
When a part or component fails before its time, be sure to submit an SF 368, Quality Deficiency Report (QDR). And when you fill out a 368, be sure to include every bit of info that might be useful to the investigators, like: troubleshooting performed; rigging checks performed; phone conversations with persons you've contacted about the part failure.

Para's 2-13 through 2-16 of DA Pam 738-751 have the lowdown on QDR's. Fig 2-10 explains how to fill out the form

Hold the failed part or component, though, until the headshed tells you what to do with it. They may need the part for analysis.

If a failed part or component has already reached its expected service life, forget about sending in a 368.

Same goes for a part that's damaged as the result of another part's failure—like when a fluid line breaks and causes a pump to fail.



Play It Safe!

Dear Editor,

We've had inspection mirrors crack, break and drop pieces of glass into our birds. The results were FOD and cut fingers trying to pick up the pieces.

My solution is to put a layer of clear tape over the mirror glass. You can still see the reflected image in the mirror, and if the glass breaks while you're using it, the tape will keep pieces of glass from falling into the equipment.

When the tape gets old or dirty, just peel it off and replace it.

SGT Allen L. Truesdale
Ft Lewis, WA

(Editor's note: Sounds like you've solved a shattering problem!)

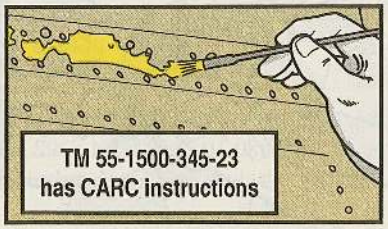
Touch Up Without Messing Up

Spot painting aircraft is no mystery, even though some crew chiefs and mechs seem to think so.

The word on touching up your birds and support equipment with Chemical Agent Resistant Coating (CARC) is in TM 55-1500-345-23, Painting and Marking of Army Aircraft.

See Table 8-3 of the TM for a list of stock numbers for the color and amount of paint you need to touch up your equipment.

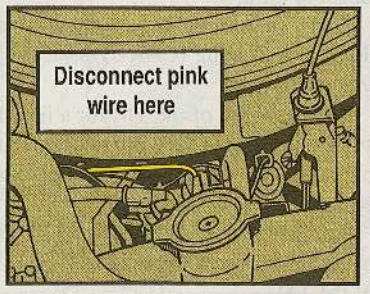
Safety and health precautions for using CARC are spelled out in Para 3-2 of the TM.



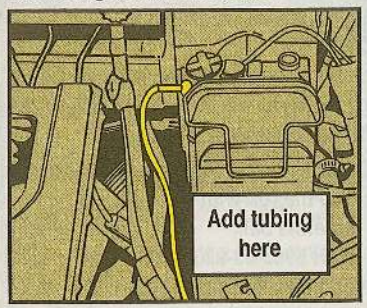
Filter Bleeding Tips

Remove the fuel tank cap.

Disconnect the fuel injection pump shutoff solenoid wire (pink wire).

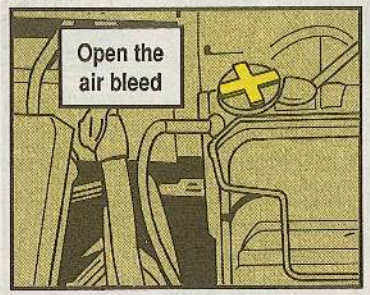


Slip a 36-in piece of 1/4-in OD plastic tubing (AOAP tubing), NSN 4720-00-964-1433, over the bleed drain. This keeps fuel off the electrical wiring around the filter.



Run the tubing along side the fuel filter drain hose and fasten it with a tiedown strap, NSN 5975-00-074-2072. The tubing is clear so you can see when fuel flows from the filter.

Open the air bleed on the fuel filter. Crank the engine in 10 to 15 second intervals until fuel flows steadily from the air bleed drain.



Close the air bleed.

Reconnect the injection pump solenoid wire.

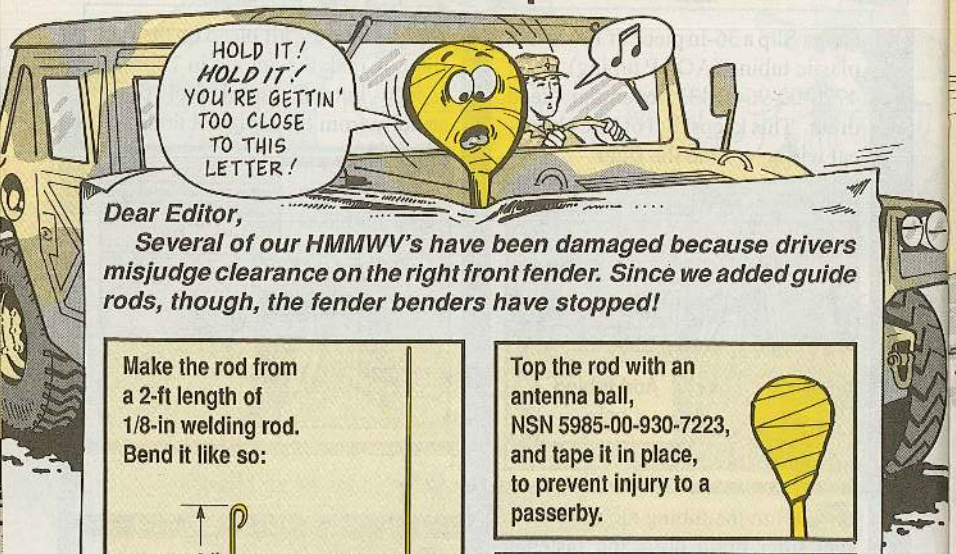
Crank the engine in 10 to 15 second intervals until it starts. Let it idle about five minutes. While the engine's idling, make sure there are no leaks at the filter.

Replace the fuel tank cap. . . and the truck's ready to roll.

CUCV Door Lock Knob

Get a black plastic knob for the door lock in your CUCV with CAGE 11682, PN 7591126. Order on a DD Form 1348-6 from S9C. NSN 5355-01-085-0992 listed in TM 9-2320-289-34P gets a chrome knob that doesn't go with the vehicle's camouflage.

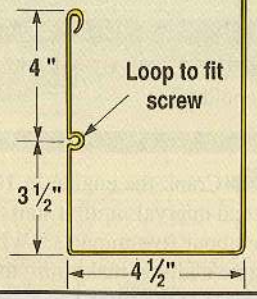
Guide Rod Helps Drivers



Dear Editor,

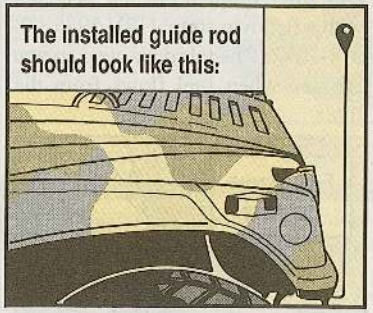
Several of our HMMWV's have been damaged because drivers misjudge clearance on the right front fender. Since we added guide rods, though, the fender benders have stopped!

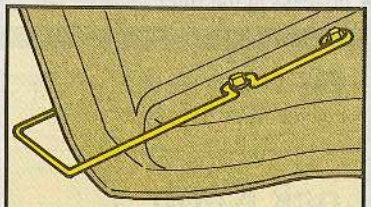
Make the rod from a 2-ft length of 1/8-in welding rod. Bend it like so:



Top the rod with an antenna ball, NSN 5985-00-930-7223, and tape it in place, to prevent injury to a passerby.

The installed guide rod should look like this:





Take the nuts off the inside of the right fender reflector. Put the small loops over the screws and replace the nuts.

That's all there is to it.

SFC Manuel F. Torres
Ft Bragg, NC

(Editor's Note: Thanks to you and Capt. P.B. Beachem who had a similar SMART idea. Your fix should stop some of those fender benders.)

Air Filter Facts

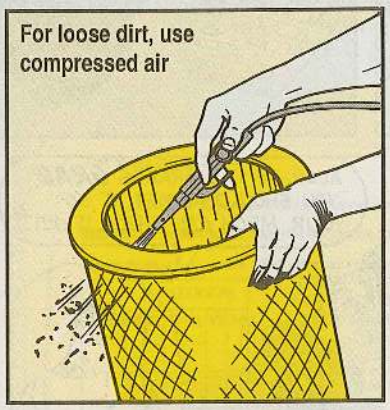
Hey, what's with all the HMMWV air filters being ordered out there?

You don't need to replace the element every time the air restriction indicator moves into the red.

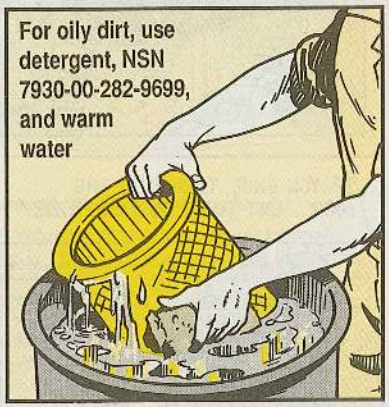
Instead, clean the element with low pressure compressed air—30 PSI or less—or detergent and warm water.

When you use compressed air, blow air from the inside out. Then hold the nozzle at an angle and blow loose dirt off the outside.

For loose dirt, use compressed air



For oily dirt, use detergent, NSN 7930-00-282-9699, and warm water

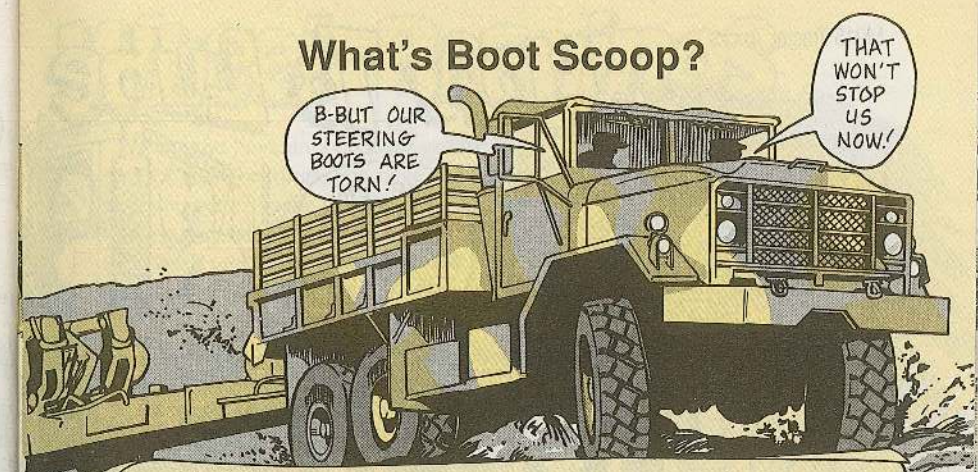


You'll need to wash the filter element to get rid of oily dirt. Gently wash it with detergent, NSN 7930-00-282-9699, and warm water. Rinse in warm water and let the element dry before you put it back in.

Replace the element only if it is ripped, torn, or you can't get it clean.

Break Brake Lock-up

What's Boot Scoop?



Dear Half-Mast,

A torn steering knuckle boot makes a M939-series 5-ton truck NMC, but not a 2 1/2- ton. What's the story?

SSG F. A.

Dear Staff Sergeant F.A.,

The TM for the M939-series trucks is being changed so a torn or missing CV joint boot will not make them NMC.

Eyeball the boot during the weekly PMCS. If it's torn or damaged, write it up on the DA Form-2404 so the boot can be replaced during the next scheduled maintenance.

Half-Mast

TM 9-2320-272-10

Table 2-2. Operator/Crew Preventive Maintenance Checks and Services (Cont'd)

NOTE: These checks are to be made in the order listed, within designated interval.

B-Before operation D-During operation A-After operation W-Weekly M-Monthly

ITEM NO.	INTERVAL B	D	A	W	M	ITEM TO BE INSPECTED PROCEDURE: Check for and have repaired, filled, or adjusted as needed	EQUIPMENT IS NOT READY/ AVAILABLE IF:
				•		(8) Check steering boots (1) for tears.	

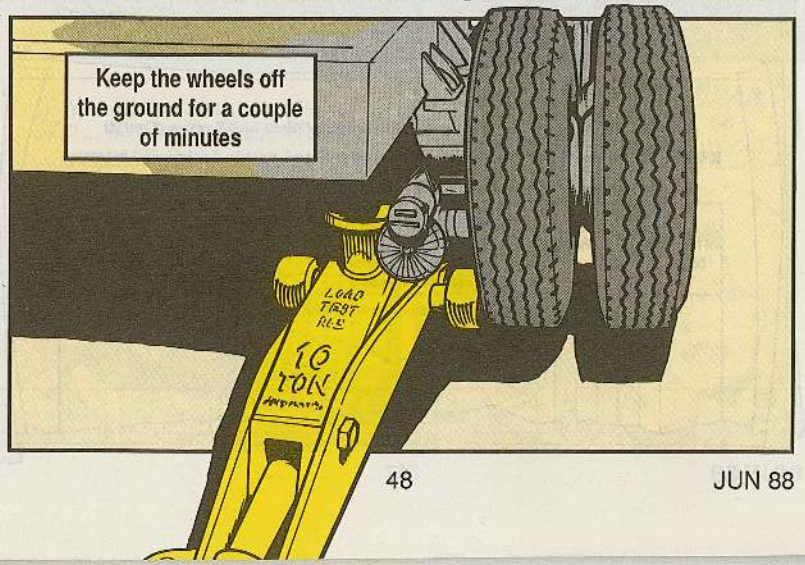
How To Lube Wheel Bearings

There are two types of axles used on M915 tractor trucks. And wheel bearings on them use different lubes!

On older axles, the wheel bearings get grease. The newer axles—the same ones used on M915A1's—have oil lubed bearings.

The only way to tell which axle you have is when an axle shaft is out. The new axle doesn't have an outer grease seal.

The new axle uses a new inner wheel bearing, NSN 3110-00-227-3719.



When you have an axle shaft out to replace these bearings, you have to be sure you get oil to the bearings.

To do that, raise one end of the axle so the wheels are about four inches off the ground. Hold it there for a couple of minutes. That lets oil from the differential fill the bearing cavity and lube the bearings. Lower it and raise the other end.

With the vehicle level again, add more gear lube through the differential filler hole until it's full.

For more info, see Para 2-14 of TB 43-0001-39-2 (Apr 87).

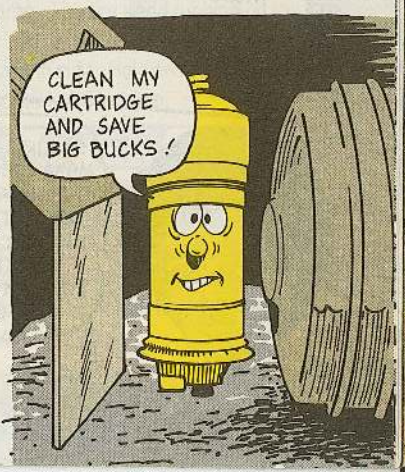
If you don't have that TB, get a copy of the info from your local TACOM Logistic Assistance Representative.

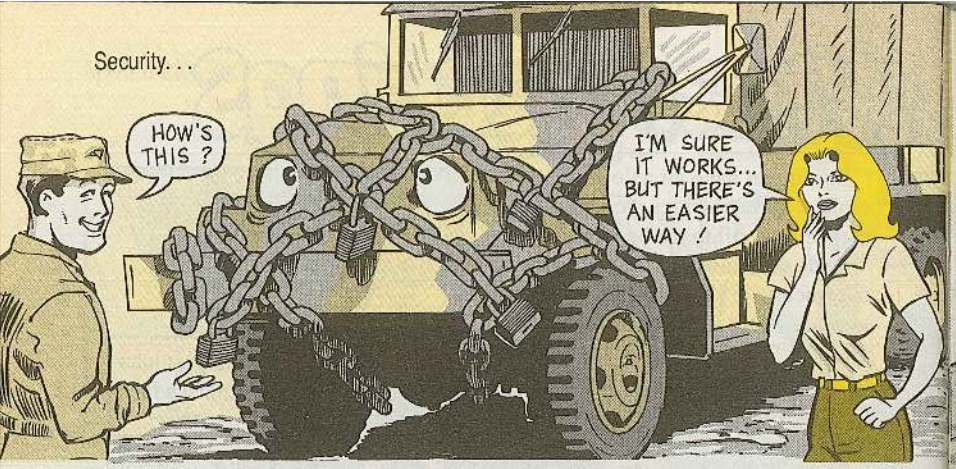
Air Dryer Repair Kit Saves Bucks

The TM's are fuzzy on how to service the Bendix AD-2 air dryer on M915-series, M915A1's, and HEMTT trucks. As a result, some mechs just pull out the old dehydrate cartridge and replace it with a new one.

That's the expensive way! Replacing the cartridge, NSN 4440-01-087-7216, costs $107.46.

The best way is to clean and repair the cartridge with desiccant parts kit, NSN 2940-01-081-1391. The kit has everything you need, including the instructions, to make the cartridge good as new. It costs only $42.60.





Steering Wheel Lockup

If you already have a good way to secure the steering wheel on your tactical truck, stick with it.

M151 1/4-Ton Truck
M561 1 1/4-Ton Truck
M880 1 1/4-Ton Truck
M35 2 1/2-Ton Truck
M39/M809 5-Ton Truck
M656 5-Ton Truck
M746 HET
M915 thru M920 Series
M911 C-HET

If you don't have a good way, get your mechanic to eyeball TB 9-2300-422-20 (Feb 80), Security of Tactical Wheeled Vehicles.

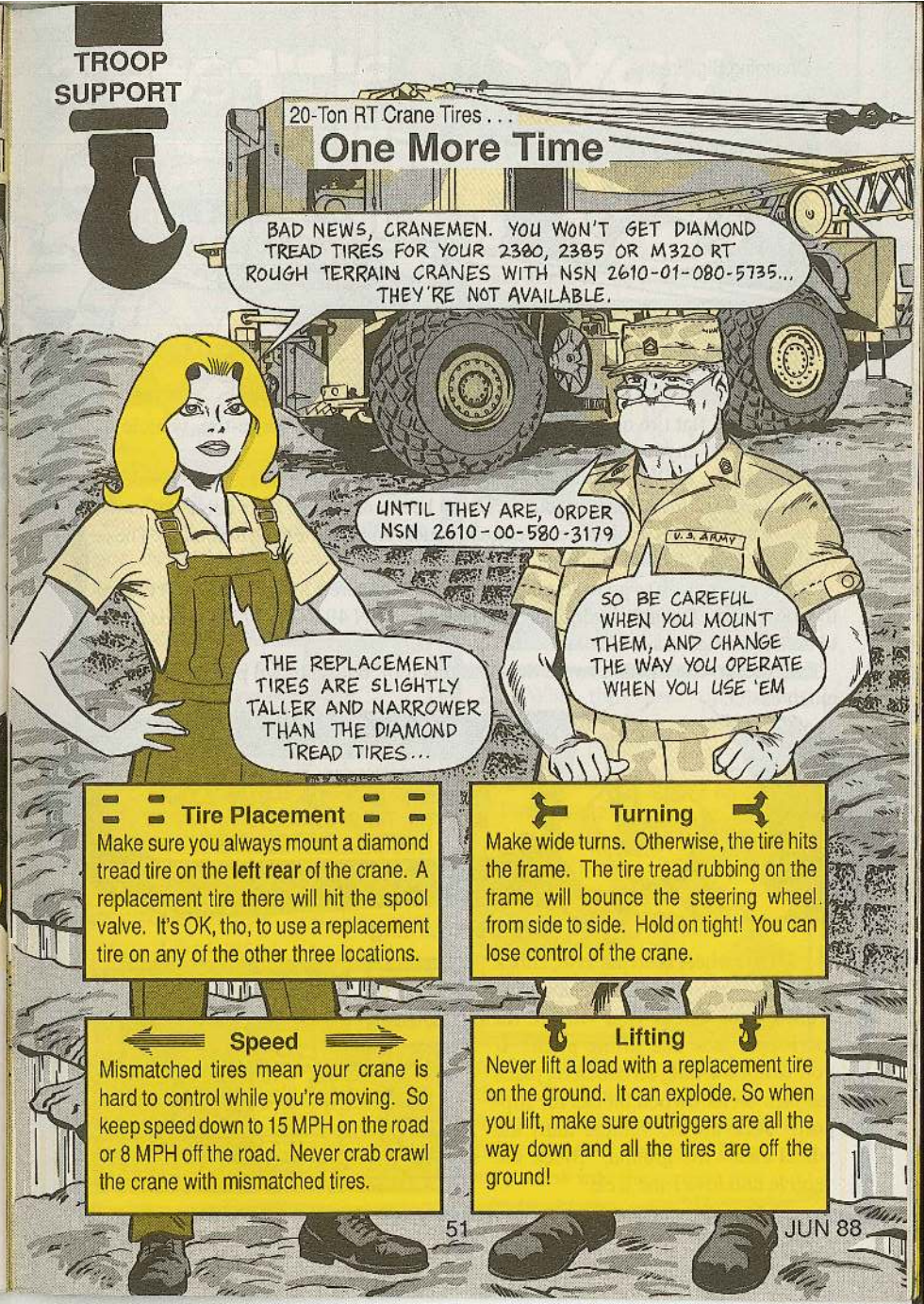
Lockup instructions for CUCV's are in Para 2-11 of TB 43-0001-39-7 (Oct 83).

If you don't have either TB, get a copy of the info you need from your local TACOM Logistic Assistance Representative. Or write MSG Half-Mast for a copy.

TROOP SUPPORT

20-Ton RT Crane Tires . . .

One More Time



Tire Placement

Make sure you always mount a diamond tread tire on the **left rear** of the crane. A replacement tire there will hit the spool valve. It's OK, tho, to use a replacement tire on any of the other three locations.

Turning

Make wide turns. Otherwise, the tire hits the frame. The tire tread rubbing on the frame will bounce the steering wheel from side to side. Hold on tight! You can lose control of the crane.

Speed

Mismatched tires mean your crane is hard to control while you're moving. So keep speed down to 15 MPH on the road or 8 MPH off the road. Never crab crawl the crane with mismatched tires.

Lifting

Never lift a load with a replacement tire on the ground. It can explode. So when you lift, make sure outriggers are all the way down and all the tires are off the ground!

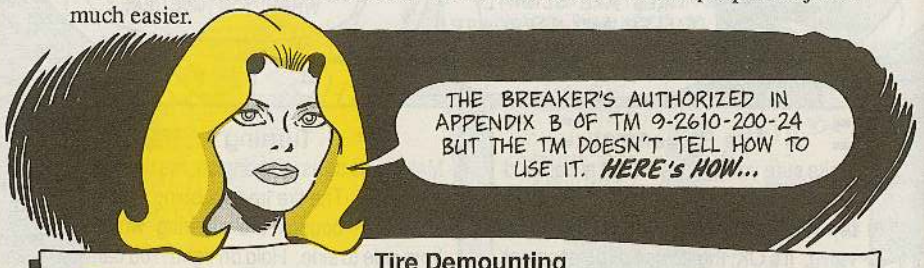
There's a Better Way

Repairing a flat tire on an RT forklift, crane, or similar large-tire vehicle is enough to ruin any mechanic's day.

Breaking the bead is the hard part. Without the right tools, it's a back-breakin', knuckle-bustin' job. Some mechanics have been creative in their choice of tools. They've used forklifts, pickaxes, sledgehammers and assorted big hammers. These work, but often damage the tire.

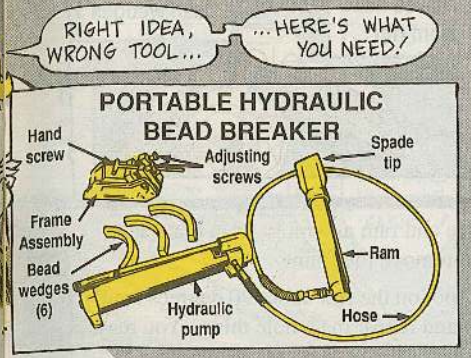
There's no reason to go to so much trouble when there's a dandy tool that makes the job a snap. Portable hydraulic bead breaker, NSN 4910-00-773-9341, is made to demount big tires.

One person can break down a tire with this tool, but with two people the job is much easier.

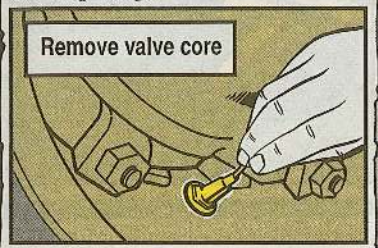


Tire Demounting

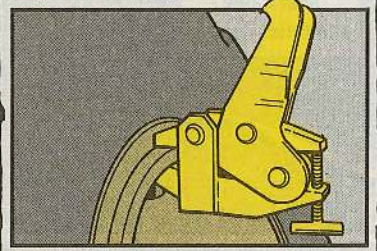
1. If the wheel is on the axle, chock all wheels except the one you're working on. Check your -10 TM for the proper jack and lifting point. If you're not working on concrete, place the jack on hardwood blocks for support. Jack up the vehicle until the wheel clears the ground. Block the vehicle and lower the jack.



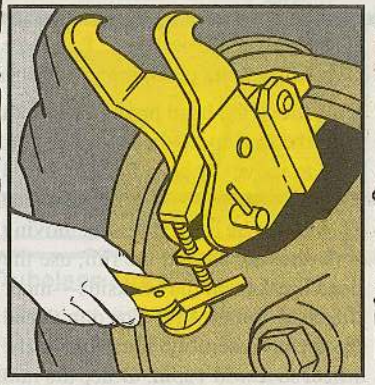
2. Let all air out of the tire. Take out the valve core. If the tire goes down slowly, the stem could be clogged. Use a piece of wire to clear the air passage.



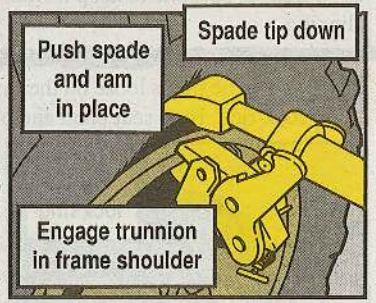
3. Slip the clamping jaws of the bead breaker over the outer edge of the flange.



4. Tighten the adjusting screws at the bottom of the jaws. Set the hand lever so the jaw assembly is at a right angle to the flange's plane.



5. With the spade tip pointing down and the hydraulic ram retracted, put the spade and ram in the frame. Place the spade tip between the tire bead and the rim flange. Lift the ram until the trunnion engages the frame shoulder support. Move the stop screw into the support ram.



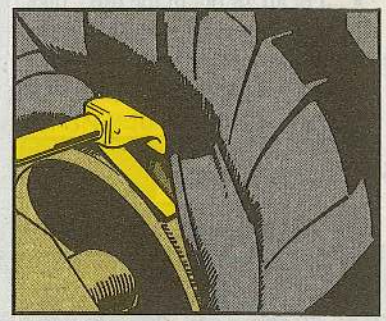
PS MORE

6. Pump the hydraulic hand pump until the spade moves the tire bead away from the rim. Push the bead back far enough so you'll have room to put a bead wedge—banana—between the bead and the flange on each side of the spade tip.

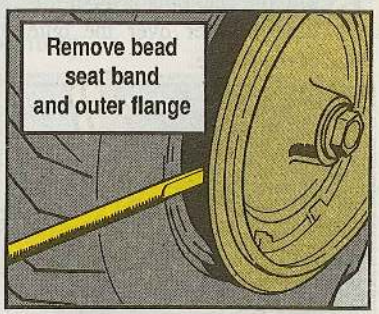
7. Release the pressure. Pull the spade and ram assembly from the frame. Loosen the clamping jaw bolts and remove the frame.

8. Move the bead breaker to another spot on the rim about 90 degrees from the first spot—in either direction—and repeat the whole thing. You may have to move the bead breaker 2 or 3 times.

9. If the tire is not free after moving the tool around the rim, use the bead breaker on the backside—inner tire bead—of the tire. You don't need the frame assembly. Just block the wheel so it won't spin. Brace the ram against the vehicle frame and let the spade tip do its thing against the inner tire bead and rim flange. Keep the ram as straight as possible to keep it from slipping.

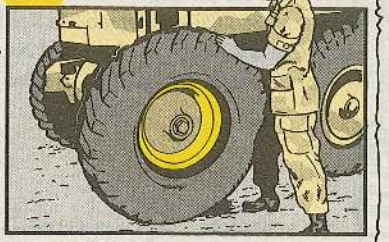


10. When the tire is loose on the rim, use a couple of tire irons to pry off the lock ring, bead seat band and outer rim flange.



11. Before you take the tire off, put the valve cap back on to protect the threads. Make sure the valve is pried out enough to clear the rim gutter.

12. Work the tire off the rim.

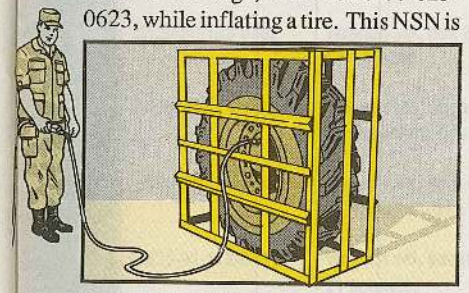


Mounting Tips for Tubeless Tires

One tool that'll take some sweat out of mounting big tubeless tires is the bead expanding constrictor, NSN 4910-00-138- 1819. It's authorized by Appendix B of TM 9-2610-200-24.

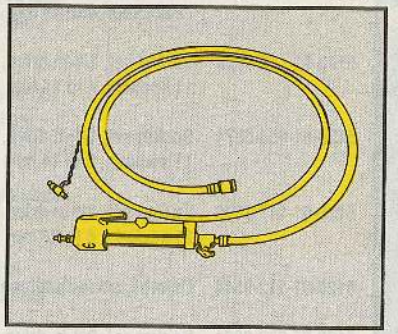
Play it safe. Once the tire is on the rim, make sure all parts—lock ring, bead seat and flanges—are where they're supposed to be.

Use a tire cage, NSN 4910-00-025-0623, while inflating a tire. This NSN is



not on the AMDF, so order on a DD Form 1348-6 using RIC FPZ. It costs $2,147.55.

Snap on tire pressure gage, NSN 4910- 00-441-8685. Stay at least 10 feet away and off to the side as you inflate the tire. The tire pressure gage



comes with a 10-ft hose, quick-disconnect coupling and an adapter for large valve stems. You'll also need a straight pipe-to-tube adapter, NSN 4730-00-391-3771, to connect the air supply hose to the gage. It's in the brass fitting kit in the No. 1 Common shop set.

PS END

Metric Wrenches Available

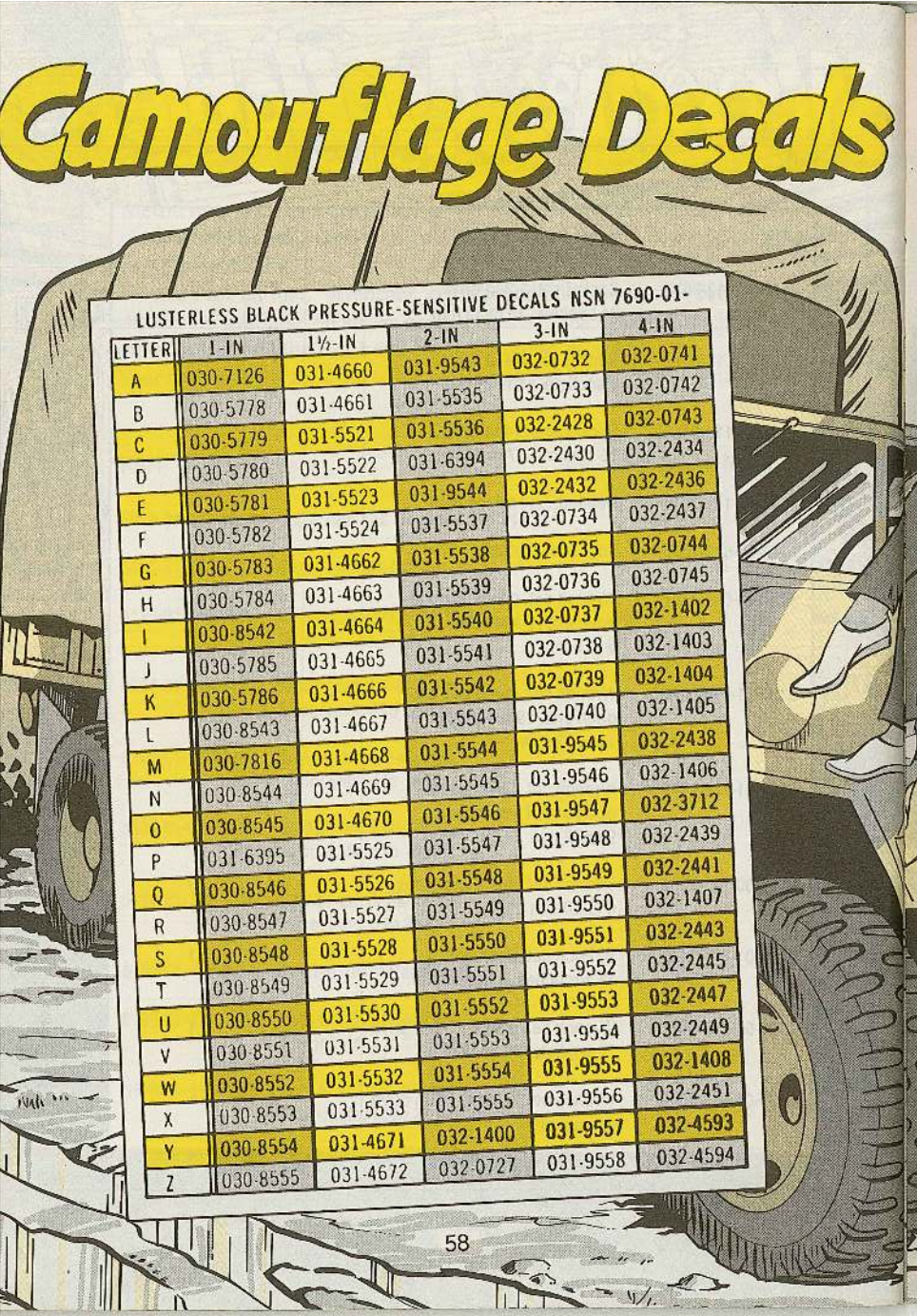
Metric nuts and bolts are showing up more and more. Regular wrenches and sockets won't fit 'em. You round off the corners of the fastener when you use a regular wrench on it.

No need for all that. Wrenches, sockets and Allen wrenches for metric-sized fasteners are available on an "as needed" basis in the General Mechanics Automotive tool kit and the No. 1 and No. 2 Common shop sets.

Your CO can authorize you to have the tools you need. Here's what's available:

NSN	Item	No. 1	No. 2	Gen Mech
5210-01-053-0083	Gage, bolt and thread, 2.3 to 24 mm		1	1
5210-01-114-2296	Gage, ignition gap			1
5120-01-046-5079	Key set, socket head screw, 14 keys, 2 to 19 mm	1	1	1
5120-01-115-1151	Socket set, 1/4-in drive, 12 sockets, 4 to 14 mm	1	1	
5120-01-115-9169	Socket set, 1/4-in drive, 11 sockets, 4 to 14 mm		1	
5120-01-056-0871	Socket set, 1/4-in drive, 11 sockets, 5 to 14 mm			1
5120-01-117-3876	Socket set, 3/8-in drive 21 sockets, 6 to 26 mm		1	
5120-01-112-9544	Deleted, no replacement			
5120-01-073-2821	Socket set, 3/8-in drive 17 sockets, 8 to 26 mm		1	
5120-01-113-8078	Socket set, 1/2-in drive 18 sockets, 10 to 27 mm		1	
5120-01-115-1149	Socket set, 1/2-in drive 14 sockets, 10 to 27 mm	1	1	
5120-01-113-8076	Socket set, 1/2-in drive, 24 sockets, 10 to 32 mm		1	
5120-01-113-8077	Socket set, 3/4-in drive, 8 sockets, 19 to 38 mm		1	
5120-01-117-0466	Socket set, 3/4-in drive, 15 sockets, 17 to 46 mm	1		
5140-01-119-2516	Deleted, no replacement			
5140-00-651-7676	Tool box, portable		1	
5120-01-041-1585	Wrench set, comb box and open end, 6 wrenches, 5 to 9 mm		1	
5120-01-119-0010	Wrench set, comb box and open end, 19 wrenches, 10 to 32 mm	1	1	
5120-01-176-1819	Wrench set, comb box and open end, 21 wrenches, 9 to 32 mm			1
5120-00-103-9782	Wrench set, box 8 wrenches, 6 to 20 mm			1
5120-01-115-1148	Wrench set, open end 11 wrenches, 6 to 32 mm	1	1	1
5120-01-116-6047	Wrench set, socket, 1/2-in drive 23 sockets, 10 to 32 mm			1
5120-01-112-9541	Wrench set, socket, 1/2-in drive 21 sockets,		1	

Camouflage Decals Revisited



YOU CAN SAVE YOURSELF LOTS OF TIME AND ENERGY BY MARKING YOUR CAMOUFLAGED EQUIPMENT WITH LUSTERLESS BLACK DECALS INSTEAD OF PAINT. ***IN MOST CASES, THESE NSN's GET YOU PACKS OF 10 OR 20 DECALS.*** EYEBALL THE AMDF BEFORE YOU ORDER, THO. IT TELLS YOU EXACTLY HOW MANY DECALS YOU'LL GET!

LUSTERLESS BLACK PRESSURE-SENSITIVE DECALS NSN 7690-01-

LETTER	1-IN	1½-IN	2-IN	3-IN	4-IN
A	030-7126	031-4660	031-9543	032-0732	032-0741
B	030-5778	031-4661	031-5535	032-0733	032-0742
C	030-5779	031-5521	031-5536	032-2428	032-0743
D	030-5780	031-5522	031-6394	032-2430	032-2434
E	030-5781	031-5523	031-9544	032-2432	032-2436
F	030-5782	031-5524	031-5537	032-0734	032-2437
G	030-5783	031-4662	031-5538	032-0735	032-0744
H	030-5784	031-4663	031-5539	032-0736	032-0745
I	030-8542	031-4664	031-5540	032-0737	032-1402
J	030-5785	031-4665	031-5541	032-0738	032-1403
K	030-5786	031-4666	031-5542	032-0739	032-1404
L	030-8543	031-4667	031-5543	032-0740	032-1405
M	030-7816	031-4668	031-5544	031-9545	032-2438
N	030-8544	031-4669	031-5545	031-9546	032-1406
O	030-8545	031-4670	031-5546	031-9547	032-3712
P	031-6395	031-5525	031-5547	031-9548	032-2439
Q	030-8546	031-5526	031-5548	031-9549	032-2441
R	030-8547	031-5527	031-5549	031-9550	032-1407
S	030-8548	031-5528	031-5550	031-9551	032-2443
T	030-8549	031-5529	031-5551	031-9552	032-2445
U	030-8550	031-5530	031-5552	031-9553	032-2447
V	030-8551	031-5531	031-5553	031-9554	032-2449
W	030-8552	031-5532	031-5554	031-9555	032-1408
X	030-8553	031-5533	031-5555	031-9556	032-2451
Y	030-8554	031-4671	032-1400	031-9557	032-4593
Z	030-8555	031-4672	032-0727	031-9558	032-4594

LUSTERLESS NUMERALS—NSN 7690-01-

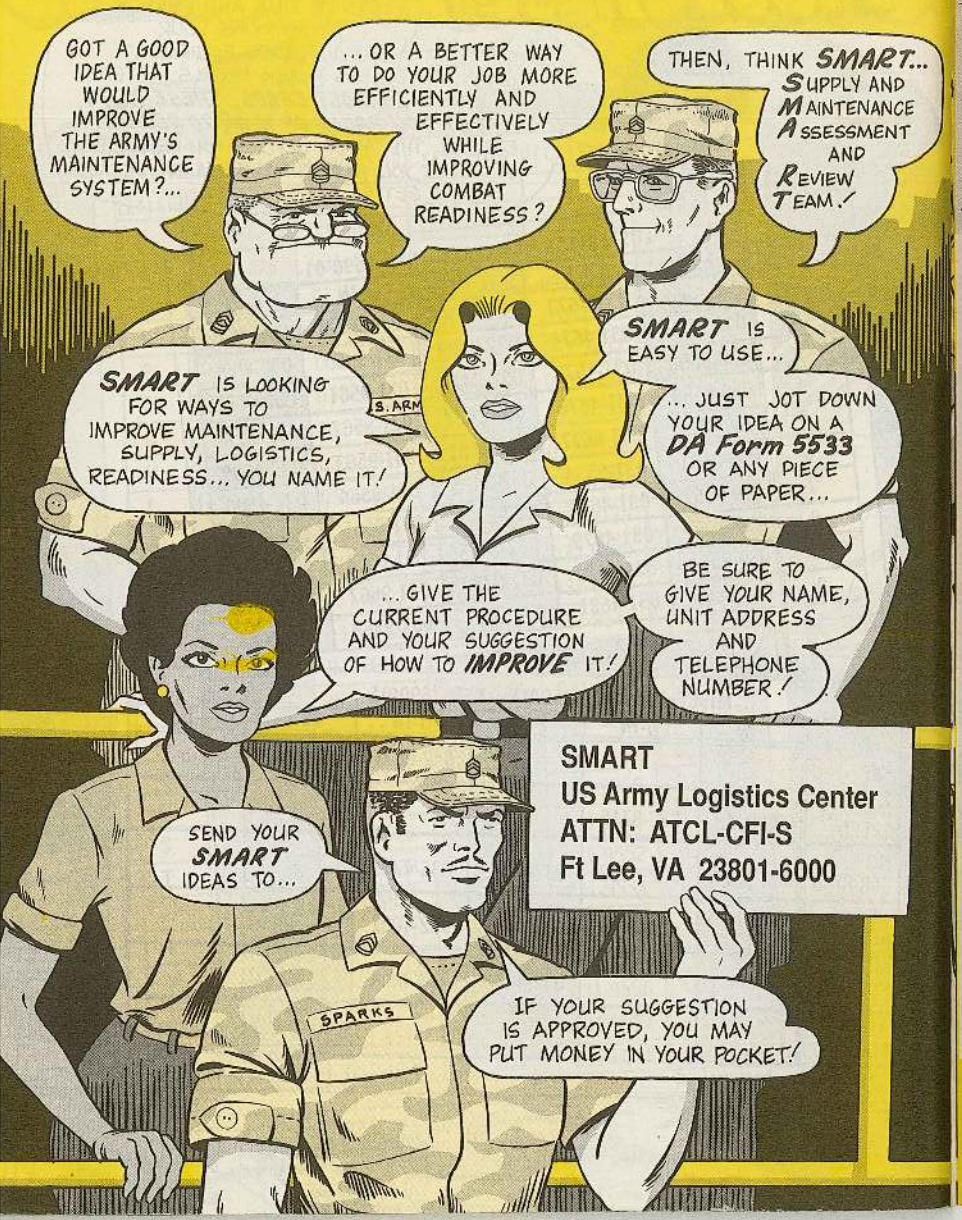
NUMBER	1-IN	1½-IN	2-IN	3-IN	4-IN
1	030-8556	031-4673	032-0728	031-9559	032-4595
2	030-8557	031-4674	032-0729	031-9560	032-4596
3	030-8558	031-4675	032-2421	031-9561	032-4597
4	030-8559	031-4676	032-2422	031-9562	032-4598
5	030-8560	031-4677	032-1401	031-9563	032-4599
6	030-8561	031-5534	032-2423	031-9564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

MISCELLANEOUS DECALS—NSN 7690-01-

	1-IN	1½-IN	2-IN	3-IN	4-IN	6-IN
★				042-0671		
MAX SPEED	032-3713	032-3715				
NO SMOKING	032-3714	032-4602	032-4604	036-4777		
US ARMY		032-4603	032-4605	032-4607	032-4609	
MIL POLICE			032-4606	032-4608		
FLAM-MABLE						047-6457*

*With white background

Get Smart—Think SMART



M39-Series Truck LO Update

When you add oil to your 5-tonner's steering gearcase, use heavyweight GO 80/90 oil instead of the OE/HDO 10 listed in LO 9-2320-211-12. The lightweight engine oil can't make it to the first bell in the slugfest against friction. Make a note until this change is added to the LO.

Water, M992 Interior Don't Mix

Leave the high pressure water and the steam cleaner off when you clean the interior of the M992 ammo carrier. Electronic controls and devices, especially the Automatic Fire Extinguisher System (AFES), are ruined when sprayed with water or steam. Since AFES is short on parts right now, you not only kill it, you put your carrier down, too.

M256 Kit's Life Extended

All M256 chemical agent detector kits with expiration dates from June 1, 1987 through December 31, 1988 are now good one year past their expiration dates. The word's in AMCCOM Msg AMSMC-QAW-C 131800Z Jan 88. See your AMCCOM Logistic Assistance Representative for a copy.

AN/PVS-4 Mounting Screw

The NSN for the M60 machine gun screw lever assembly on Page 12 of PS 417 is wrong. NSN 5855-01-039-2838 gets the screw lever assembly for the AN/PVS-4 night vision sight.

Life Preserver Test Waived

The 5 percent functional test requirement on LPU-2/P, -3/P and -10/P life preservers has been waived due to a severe shortage of carbon dioxide cartridges, NSN 4220-00-543-6693. The waiver is not to exceed July 88. See AVSCOM Message AMCPM-ALSE-L 251330Z Feb 88 for details.

Spindle Bearing Lube Change

TM 5-3805-261-14&P-3 for your 130G grader gives you a bum steer on the lube to use on the front wheel spindle bearings. For temperatures 32° F and above, use OE/HDO 30. For temperatures below 32° F, use OE/HDO 10. This info will be included in a new LO 5-3805-261-12.

☆ U.S. GOVERNMENT PRINTING OFFICE: 1988 — 548-004/80005
Distribution: To be distributed in accordance with DA Form 12-34C-R, for TB-43-series.

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123-3152
55 GAL
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