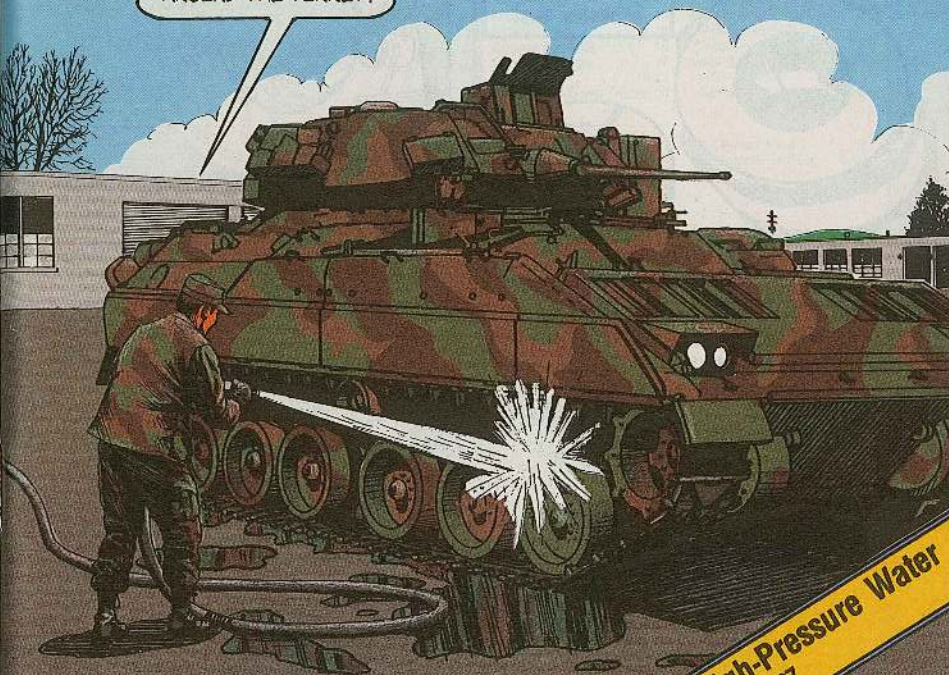


Issue 415

PS

June
1987THE
PREVENTIVE
MAINTENANCE
MONTHLY

HIGH PRESSURE WATER IS GREAT
FOR CLEANING TRACKS, BUT BAD NEWS
AROUND THE TURRET!



Cleaning With High-Pressure Water
See Page 27

Clean Brake Shoes With Care

Cleaning brake shoes and clutch plates can be dangerous to your health. If you breathe in asbestos dust from the brake shoe or clutch plate linings, you may end up with asbestosis or lung cancer.

All clutch parts are covered with asbestos dust

There's asbestos dust on—and around—brake parts

So, never use compressed air or a wire brush to clean brake shoes, brake drums, clutch plates or linings—no matter what it says in your TM's or anywhere else.

Even when you're pulling wheel bearing maintenance, asbestos dust is lying in wait for you

CLEAN BRAKE PARTS WITH WATER!

I'M READY FOR YOU THIS TIME!

PS

THE
PREVENTIVE
MAINTENANCE
MONTHLY

TB 43-PS-415, 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 415

JUNE 1987

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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:

JOHN A. WICKHAM, JR.
General, United States Army
Chief of Staff

Official:

R.L. DILWORTH
Brigadier General, United States Army
The Adjutant General

PS, The Preventive Maintenance Monthly (ISSN 0475-2953) is published monthly by the Department of the Army, Washington, DC. Second Class Postage is paid at the Lexington, KY post office and at additional mailing offices.
Postmaster: Send address changes to Cdr. US Army Pubs Ctr, 2800 Eastern Blvd, Baltimore, MD 21220-2896.

Added PMCS for Driver's Controls

SHOULD'A DONE
HIS PMCS.

Drivers, you wouldn't go into the ring to fight Mike Tyson with just one glove. You'd get as completely prepared as possible (and then leave town, right?).

So it is in arming yourself with all the info you need to check out the steering, braking, shifting and throttle controls on your M113-series carrier.

Your TM's are a whole lot short on before- and during-operation checks. Here's what to add to your PMCS to head off damage to your carrier and injury to yourself and others:

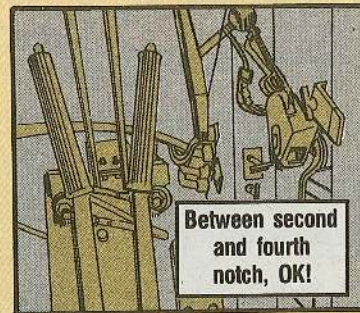
Before Operation

Make sure the steering lateral assemblies are installed right—securely mounted, with all cap screws, nuts and washers in place and tight.

If any cap screw, nut, washer or lateral quadrant is loose, missing or binding, your vehicle is NMC.

Make sure the steering laterals work right. Unlock them, depress the lock buttons and pull both laterals rearward toward you. If they're adjusted right, you'll feel resistance between the second and third notch of the lateral quadrant.

If either steering lateral won't move to at least the second notch—or moves past the fourth notch in the fully applied position—your vehicle is NMC.



During Operation

Check the steering, braking, shifting and throttle controls and be alert for binding, grabbing, looseness or malfunctions.

If you detect any problems, shut down and report it to your mechanics. Your vehicle is NMC.

If you notice more than a one-notch difference between the left and right laterals when both laterals are fully applied, your vehicle is NMC.

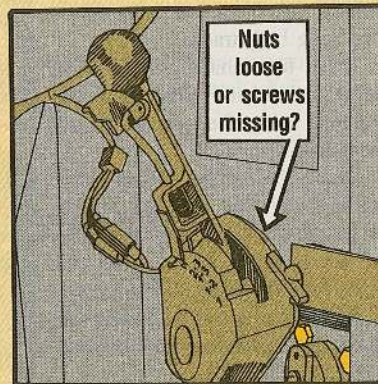
If either steering lateral won't move past the second notch—or moves past the fourth notch on the quadrant when fully applied—your vehicle's NMC.

Make sure the neutral start switch works right. The engine should start only with the range selector in the "N" position.

If the switch is missing—or if the engine will start in any forward or reverse range—your vehicle is NMC.

Eyeball the transmission range selector mounting cap screws.

If a cap screw is loose or missing, your vehicle is NMC.



Chock It!!

THESE GUYS
SURE KNOW HOW
TO WORK SAFELY

YEAH ... 'CHOCK'
IT UP TO A JOB
WELL DONE!

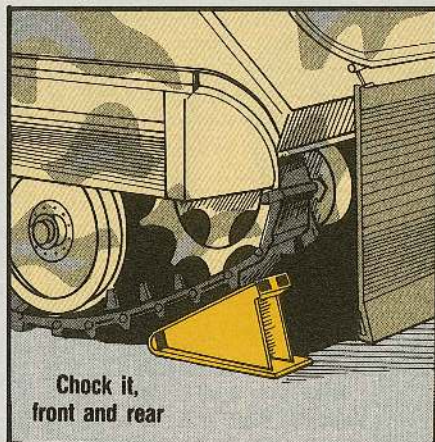
Mechs, chock those tracks when you remove the powerpack. Otherwise, you end up with an M113 on the loose. Once you disconnect the final drives, the vehicle is free to go where it wants.

Head off serious injury to yourself or damage to your vehicle by always chocking both tracks.

Drive the vehicle onto a hard, level surface and coast to a stop without using the brakes. Chock both tracks.

Doing the job on a hard, level surface will help keep the vehicle from rolling and it lessens the chance of damaging the hull or powerpack when you lift it out.

So chock the tracks. Better safe than sorry when it comes to working on the M113's.



Chock it,
front and rear

Stop Murdering Engines

YOU'RE SMART,
HAVING THE CRIME
FIGHTERS ON
YOUR TANK!

Fender and Guard aren't a prime-time TV police team—like Cagney and Lacey or Starsky and Hutch.

But they do fight crime—the crime of overheating tank engines.

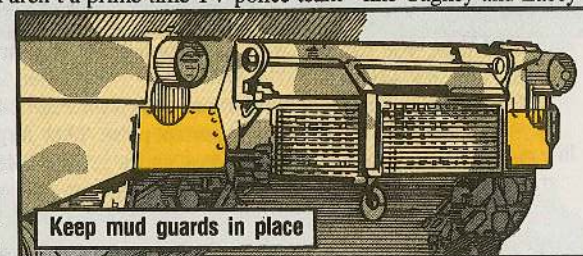
Protection against overheating includes rear fenders and mud guards. They keep mud, rocks and other debris from flying up on the rear deck.

If the fenders or guards are ripped or missing, the junk builds up on the air intake and stops air from circulating through the engine. That overheats the engine and leads to its murder.

Be a crime fighter, too. Make sure mud guards and rear fenders are in place and undamaged.

If you need replacements let your unit-level mechanic know, pronto.

Keep the engine cool by inspecting and cleaning the air intake before every operation, like your -10 PMCS says.

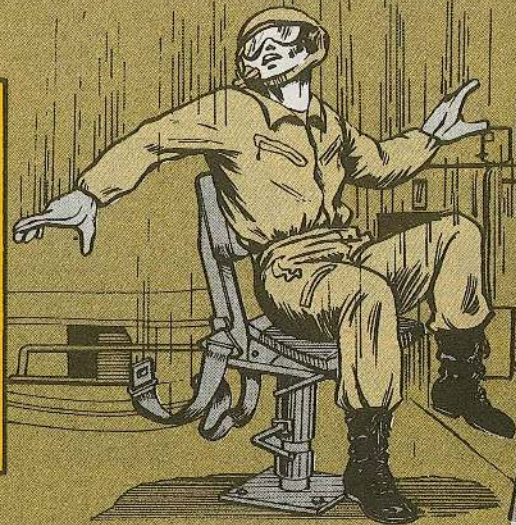


Keep mud guards in place

TOW 2 MGS NSN

The NSN for the TOW 2 Missile Guidance Set (MGS) on Page C-4.1 of TM 9-2350-259-10, the TM for the M901 Improved TOW Vehicle, is wrong. Order the MGS with NSN 1430-01-143-9408. The NSN will be corrected in a change to the TM.

Lock the Seat



Radiomen, you can take a bone-shattering ride if your seat isn't locked right every time it's adjusted!

The locking instructions for the seat shown on Page 2-85 of Change 1 to TM 9-2350-266-10 leave out a very important point. They forget to tell you the seat's LOCKED only when the handle goes into a groove hole.



NEXT TIME YOU ADJUST THE SEAT'S HEIGHT OR VIEWING ANGLE, FOLLOW THE INSTRUCTIONS IN YOUR -10.

THEN:

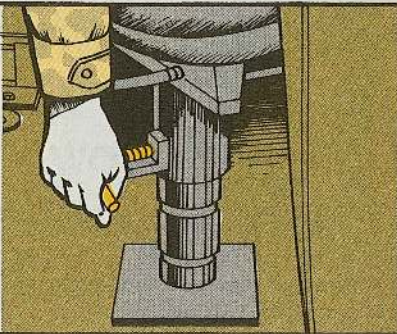
Gradually apply or relax pressure on the seat until the handle is in one of the pedestal grooves.

Let go of the spring-loaded handle.

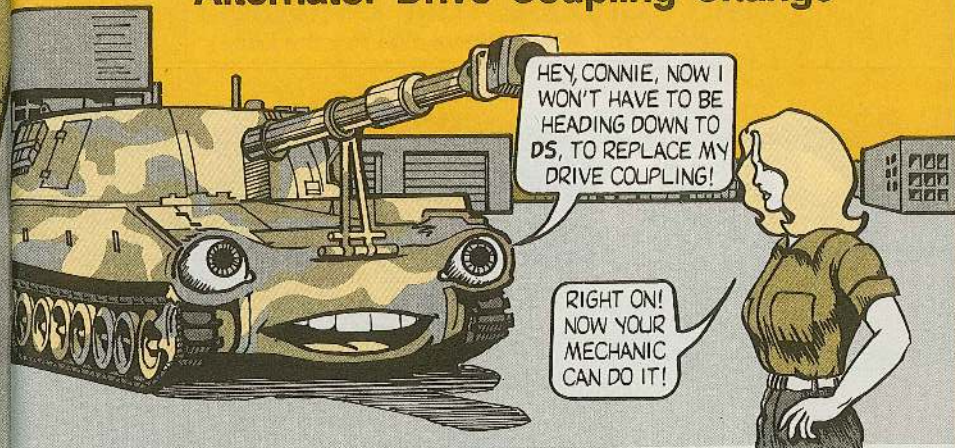
Swivel the seat left or right until the handle goes into a hole in the pedestal groove.

You can tell the handle's all the way in by making sure the seat won't rotate in either direction.

Then you're locked in for a smooth ride.



Alternator Drive Coupling Change



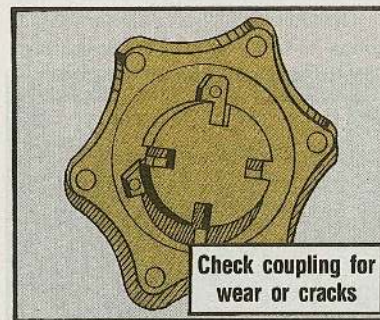
Good news for you unit mechanics. You no longer need to send an M109-series SP Howitzer or M992 field artillery ammunition supply vehicle back to DS to replace the drive coupling connecting the generator/alternator to the accessory drive.

This means no more down time waiting for the howitzer to come back.

Now you mechs can inspect and replace the drive coupling. Your TM's will be changed to allow unit maintenance to do the work and give you the parts.

Until then, here's how it works:

- ✓ Remove the 6 mounting bolts and lock washers that hold the accessory drive housing in place. Then remove the housing.
- ✓ Eyeball the drive coupling for wear and cracks. If you need another, use NSN 2815-00-246-3099.



- ✓ Reassemble and use a new gasket, NSN 5330-01-088-5984, between the flywheel housing and the accessory drive housing.

The coupling and gasket will be coded PAOZZ in both -20P's.

Choose Your Battlefield (or, Watch Where You Put the Lube)

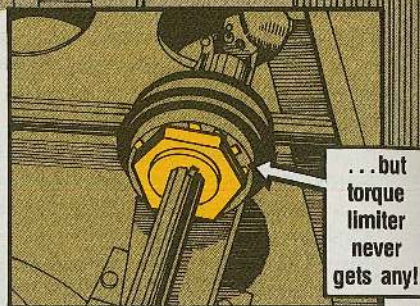
DON'T GET ME LUBED, IF YOU KNOW WHAT I'M TORQUING ABOUT!

Mechs, keep lube away from the torque limiter when you're doing your quarterly maintenance on the M198's traversing unit U-joints.

The torque limiter may look like it needs a little WTR or a squirt of oil, but it does not. In fact, lubing the limiter makes it so slippery, your favorite crew will think the traversing gearbox is shot.

The limiter allows a certain amount of torque to be transferred to the gearbox.

U-joint gets WTR quarterly...



That traverses your gun.

If there's grease or oil on the limiter pads, though, the torque on the limiter will be reduced or eliminated.

This could cause the top carriage to "run away" if the howitzer is traversed while on an incline. Personnel injury or equipment damage is possible.

If you can't control traverse, then you can't perform your mission...until DS cleans up the limiter.

Just do battle with the U-joints. You can't win with the limiter.

Rust Is Not Faddish

WELL, BOYS, IT LOOKS LIKE SOMEONE HASN'T BEEN KEEPING UP ON HIS LUBING!

YEAH, LET'S DIG IN!

A cannon that shows rust near the cradle assembly also shows something else—a crew that's not doing its lubing right.

Two fittings on the cradle assembly need lube every day when the cannon is fired and at least once a month if it's not fired. Too many crewmen fail to lube the fitting on top of the cradle assembly.

Note that the latest LO for the M198, LO 9-1025-211-13 (9 Sep 86), calls for general purpose aircraft grease, Wide Temperature Range (WTR) on these fittings. NSN 9150-00-145-0268 gets a 5-lb can and NSN 9150-00-935-5851 gets a 35-lb can.

If you crewmen lube by-the-book, you eliminate the biggest cause of cannon tube rust.

The rust prevention game is won only when you crews stay alert and play by the LO rules. Remember—rust never sleeps.

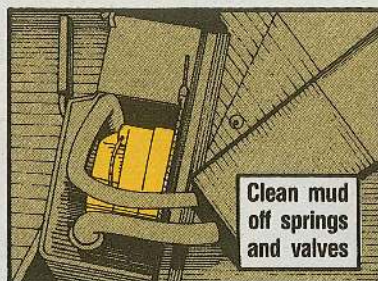
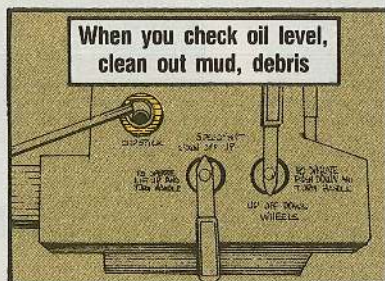
Lube fittings everyday when firing



What You See Is What You Get

Mud and debris crammed into the manifold assembly on your howitzer should tell you real quick...

Clean it out now—before rust and dirt cause the springs and valve shafts on the wheel and speedshift selector valves to seize up.



Most trouble you have with binding and hard-to-operate selector valves is caused by rust and junk jamming the controls.

Keep the manifold assembly clean all the time—but especially in the field. Look for mud and debris when you pull your daily hydraulic oil check.

Clean out as much as you can. If you don't it'll mean more work for your friendly mech to get the shafts and springs unstuck and working again.

M48A5/M60-Series Tanks, M88A1 RV's...

Rubbed the Wrong Way

Mechs, look for wear marks on the fuel tanks when the pack's out of your M48A5/M60-series tank or bridge launcher, M728 CEV or M88A1 recovery vehicle.

The hose clamps that connect the breather hose to the oil pan have screws that rub against the fuel tanks if the clamp screws are turned wrong. That continual metal-to-metal rubbing will cause fuel leaks.

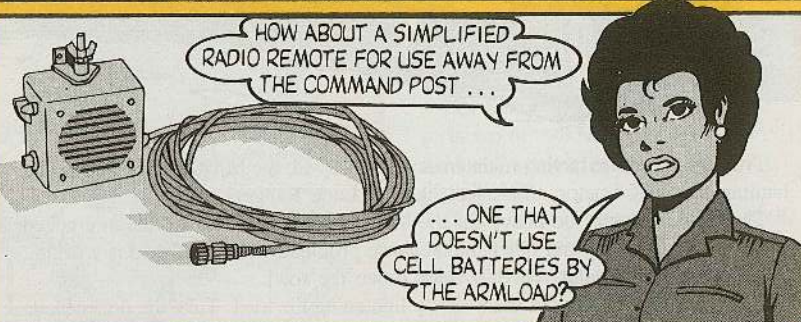
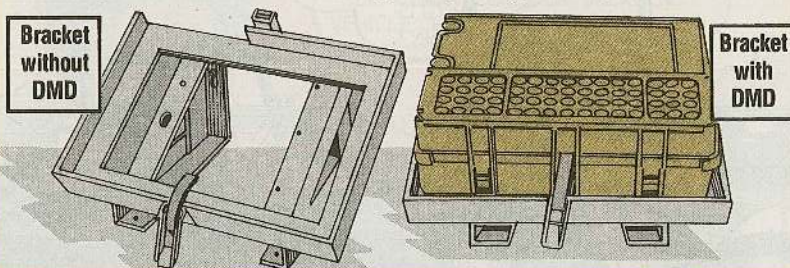


Next time the pack's out, loosen the screws and rotate the four clamps so the screws are pointing away from the fuel tanks. Then retighten the screws.

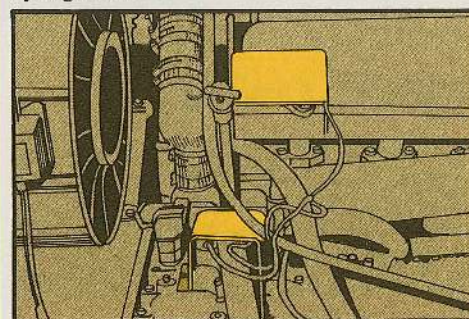
Be sure to eyeball the tanks and clamps every time the pack is out.

Yours for the Asking

Interested in a mounting bracket for your vehicle's Digital Message Device (DMD)—one that can be used inside a vehicle, near the radios or on top of an M113-series carrier without interfering with periscopes or sights?



Need some protective covers for M109-series SP howitzer transmission and engine sensors—ones that'll keep the sensors from being broken by big feet?



PLANS AND INFORMATION FOR THESE IMPROVEMENTS ARE AVAILABLE FOR THE ASKING FROM BATTLEKING

AT FT. SILL.
CALL AUTOVON
639/3717/4075
OR WRITE TO:

President
US Army Field Arty Bd
ATTN: BATTLEKING
Ft Sill, OK 73503-8100

Make-do Has to Do



Truckers, if you're having maintenance trouble with the M870 semitrailers when hauling the D8K tractor, don't feel like the Lone Ranger.

The D8K tractor is too heavy for the M870 semitrailer. This results in cracked frames, broken welds and other maintenance problems. The headshed is working on a replacement trailer, but it's years down the road.

In the meantime, you can make do by lightening the load. Take the dozer blade and rollover protective structure off the tractor and haul them separately. If your tractor has a ripper, haul it separately. Also, you can shed pounds by cleaning caked dirt off the tractor before loading.

Cross-country travel puts extra strain on an overloaded semitrailer. So keep the pedal off the metal after you pull off the road.

M2385, M320RT Cranes

Use PN CM3N01-R20CL-30AB-007 and FSCM 62983 to get the dozer control valve—Fig 170 in TM 5-3810-295-20P and Fig 228 in TM 5-3810-232-20P. Order on DD Form 1348-6 using RIC S9C. The new PN and FSCM will show up in changes to or revisions of those TM's.

Warning Light NSN's



NEED A ROTATING WARNING LIGHT FOR YOUR WRECKER OR EMERGENCY VEHICLE? HERE'S WHAT'S AVAILABLE:

Warning Light	NSN 6220-00-
12-volt, Amber	947-7535
12-volt, Blue	947-7572
12-volt, Red	892-4507
24-volt, Amber	947-7570

For sealed beam lights, get a 12-volt replacement with NSN 6240-01-133-4551; a 24-volt replacement with NSN 6240-00-635-4643.

If you have a non-sealed beam unit, take the part number off the old lamp and cross-reference it to an NSN on the MCRL-1.

M129A1 Window Screens

Need window brush screens for your M129A1 supply van? Use NSN 2510-01-128-5529. They are part of the sash assembly, NSN 2510-01-042-9692. No NSN is shown for the screens in TM 9-2330-207-24P.

Prevent PVC Pipe Freeze

AVOID FREEZE—
UP WITH A NEW
DRAIN VALVE!

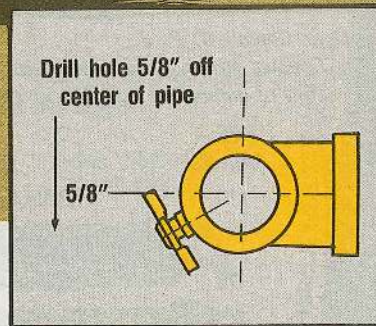
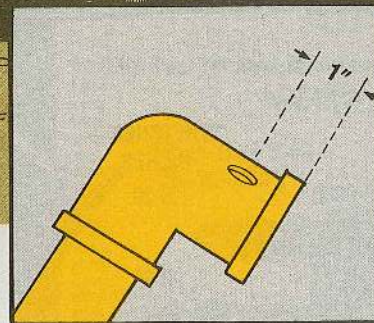
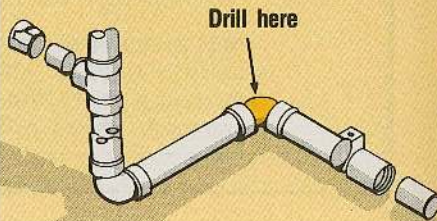


Trapped water will freeze in cold weather and crack the PVC pipe on the product water manifold of your water purification unit.

New units come with a drain valve on the PVC elbow to drain the standing water. For older units, have your mechs get your CO's OK to add a drain valve on the elbow.

Mechs, order drain cock, NSN 4820-00-752-9040, and antiseizing tape, NSN 8030-00-889-3534.

Mark a spot with a center punch 1-in from the end of the collar and 5/8-in down from the center of the elbow. Then drill a 3/8-in hole.



Incline the drill so the finished hole will drain.

Tape the drain valve's threaded end. Start one thread from the end of the fitting and wrap in the direction of the thread.

Screw the valve in the hole until all the threads are engaged in the pipe.

After operating the unit, open the valve to drain the standing water.

If the PVC elbow is cracked, order a new one with NSN 4730-01-142-5068.

L-Shaped Convoy Symbols

Dear Half-Mast,

Where do I find info on L-shaped symbols required for night convoy in CONUS—size, color, location? I've seen them red, yellow and white, all different sizes and in various locations.

CW4 J. B. K.

Dear Mr. J. B. K.,

Page 6 of AR 55-29 and Page 1-9 of FM 55-312 have the info. Use reflective red paint or reflective red tape, NSN 9390-00-949-7589. If your vehicle doesn't have a clear, flat area—like a tailgate—put the symbols on plywood or sheet metal attached to the rear of the vehicle with wire, rope, etc.

Half-Mast

Tiedown Update

Dear Half-Mast,

I need rubber tiedown straps with S-hooks to keep my gear on my combat vehicles. Can you help?

CPT J. P. S.

Dear Captain J. P. S.,

Tiedown straps come in four sizes, with an S-hook on each end. They're authorized by CTA 50-970, Appendix A.

SIZE— INCHES	NSN	STRETCHED— INCHES
10	4210-00-340-0980	15-20
15	5340-01-029-9084	20-30
21	5340-01-030-3098	26-42
31	5340-01-029-9085	36-42

16

Half-Mast

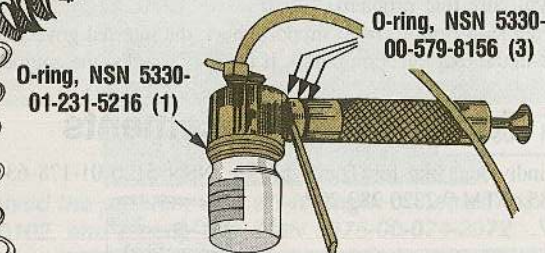
JUNE 87

AOAP Non-Aeronautical...

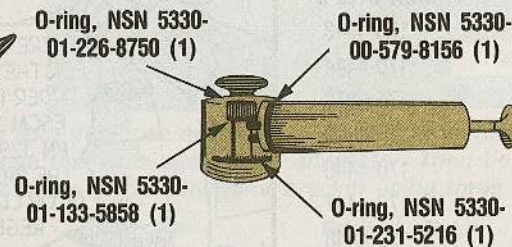
Vampire Pump Rings

HERE ARE THE
O-RINGS YOU NEED TO
KEEP YOUR VAMPIRE
PUMP NSN 4930-01-
119-4030,
SUCKING TRUE:

Old-style pump (with stand):



New-style pump (no stand):



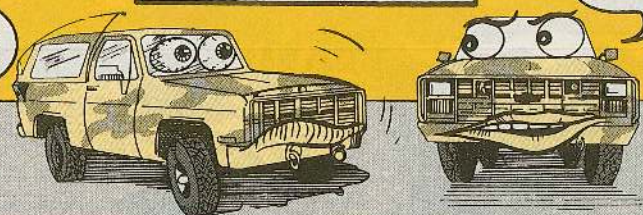
BOTH STYLES USE SAMPLING
BOTTLE, NSN 8125-01-082-9697.

JUNE 87

17

More on Run-on

MY ENGINE
WON'T STOP
RUNNING!



SORT OF
LIKE
HICCUPS, HUH?

Let's look at CUCV engine run-on again. Run-on is when the engine won't shut off.

In PS 402 it was suggested that run-on could be caused by loose electrical connections on the fuel shut-off solenoid. Not so!

The shut-off solenoid in the injection pump must be energized before fuel can flow. A loose connection will cause the engine to stall or misfire.

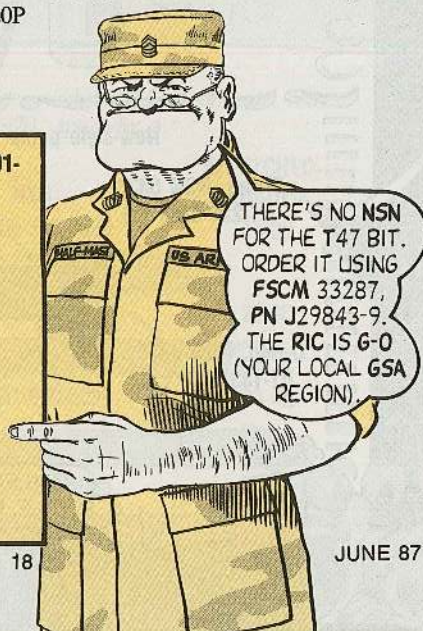
The likeliest cause of engine run-on is a faulty fuel shut-off solenoid. The solenoid plunger can bind when dirt is caught between the plunger and the solenoid. Replacing the solenoid will cure that problem.

If that does not stop run-on, have support check the internal governor linkage/metering valve in the fuel injection pump. If the valve sticks, the engine will keep running.

Torx® Bit Replacements

NSN's for individual bits for Torx® bit set, NSN 5120-01-178-6342, aren't listed in Fig 185 of TM 9-2320-289-20P for the CUCV.

Size	NSN 5120-01-
T10	170-4443
T15	170-4444
T20	171-2873
T25	170-4445
T30	170-4446
T40	170-4447
T45	170-4448
T47	*
T50	170-4449
T55	170-4442



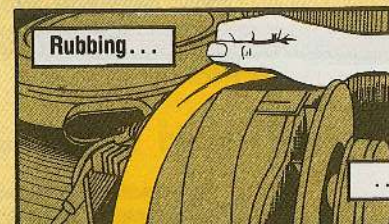
Heater Hose Field Fix

I'M KINDA LIKE A
RUBBER LIFE JACKET!



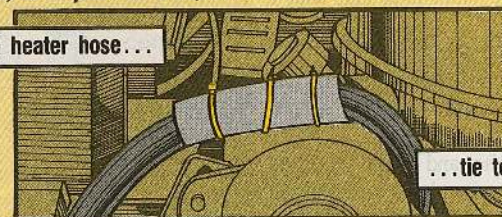
Dear Editor,

The heater hose on our CUCV ambulance rubs against the alternator and the adjuster lock bolt. Then the hose quickly develops a coolant leak that makes the ambulance NMC.



We solved the problem with a 1-ft length of heater hose, NSN 4720-00-491-0102, and plastic ties, NSN 5975-00-074-2072.

Wrap with heater hose...

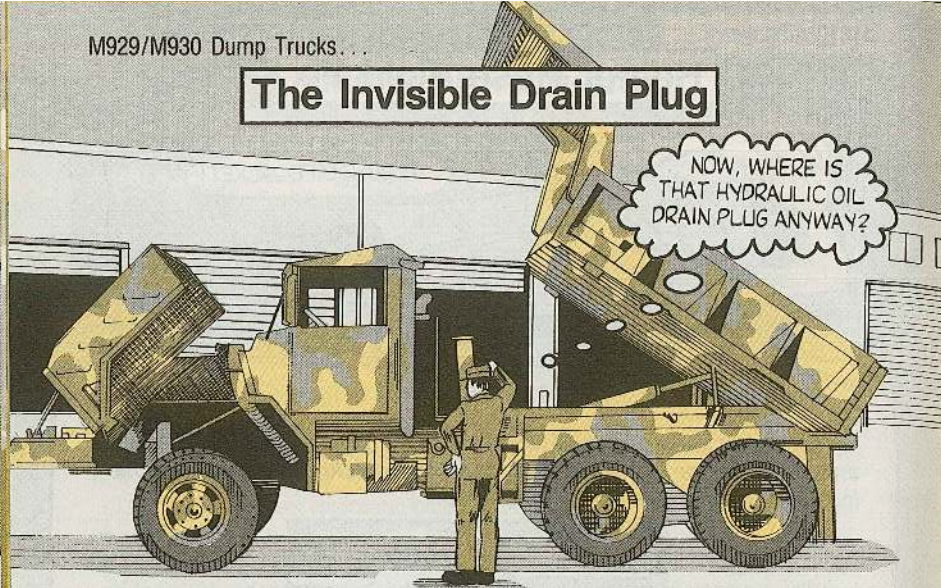


Simply split this hose and wrap it around the portion of the CUCV heater hose that rubs against the alternator. Then tie the protected section of hose to the alternator bracket using three plastic ties.

Eddie L. Baker
Ft Leonard Wood, MO

(Editor's note: A nifty way to wrap up a problem!)

The Invisible Drain Plug



LO 9-2320-272-12 says to drain the hydraulic oil reservoir on M929/M930 5-ton dump trucks every 12 months—just remove the drain plug and wait a few minutes.

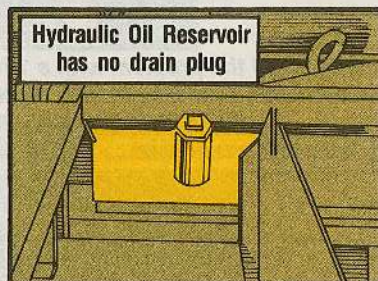
But there's no drain plug.

To drain the tank, disconnect the line at the bottom of the tank. No special tools are needed.

Play it safe, tho, and let the tank cool before disconnecting the line. Then you won't get a face full of hot oil.

When reconnecting the line, be careful not to cross-thread the fitting. If you strip the threads, your truck goes to support to get the hose replaced.

After refilling the tank, check the line for leaks. Leaking? Tighten the fitting 1/6 turn or 1 flat at a time until the leak stops.



Lube the Tach Drive

When you're lubing an M939-series 5-ton truck, give the STE/ICE tachometer pulse sending unit a dab of GAA grease.

The sending unit comes without lube. But if you run it that way, it'll freeze up.

To lube it, take the tach cable off the sending unit. Work a little grease in the end of the unit with your finger. Put the cable back on. As the engine runs, the grease will soften and run down into the unit and lube it.



Gama Goat...

Easy Brake Hub Reassembly

Dear Editor,

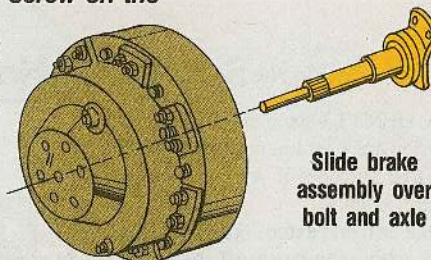
Here's a fast, easy way to get a Gama Goat's brake assembly back on the stub axle when the prop shaft spline is off center.

Take a 1/2-20 bolt 3 inches long and grind off the head. Screw it into the prop shaft a couple of turns.

Put the brake hub's center hole on the bolt and push the hub in until the hub reaches the hold-down bolts. Turn the hub slowly as you push. The hub will slide in place when the axle shaft splines line up. Screw on the 16 nuts with lock washers.

Remove the sawed-off bolt, and install the retaining bolt, lockplate and gaskets.

SP4 Gregory Hiatt
Ft Campbell, KY



(Editor's note: Good idea!)

Save the Lights

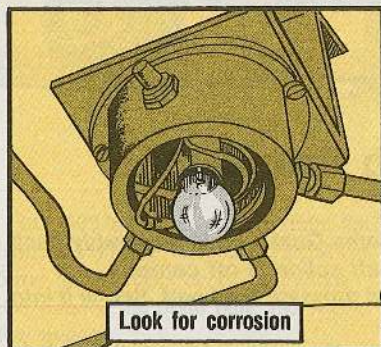


KEEP THOSE
PUMPER MODULE LIGHTS
DRY. CORROSION IS
YOUR ENEMY!

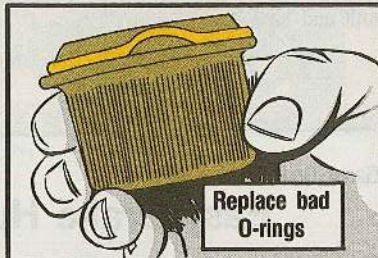


Water collecting inside the lights in the pumper module of your M978 HEMTT tanker corrodes the socket and wiring. Corrosion can short out the wiring.

If the O-ring that goes between the lens and the body isn't seated, there's no seal.



If you see water inside the globe, remove it and dry out the light.



Water gets in. Replace a torn or twisted O-ring with NSN 5330-00-897-5859.

Then keep the lights dry by keeping high pressure water hoses out of the compartment. Even a good seal will leak if you hit the light with a stream from the hose.

Precleaner No Step

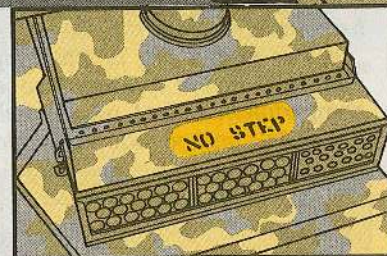


DON'T GIVE ME A BREAK, GUYS!
I'M NOT A STEP!

M911 operators and mechanics take note...

The precleaner part of the air filter assembly can't stand up to being stepped on. It's made of plastic and breaks easily.

As a reminder, stencil the words NO STEP across the top of the precleaner. Use the 2-in stencil set in the No. 1 Common shop set and black lusterless paint.



M915-Series/M915A1 Trucks...

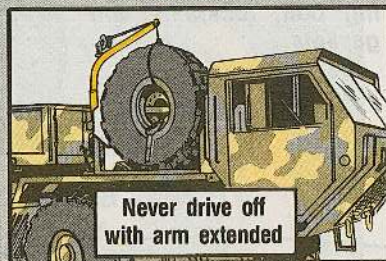
HEMTT...

Spare the Hoist!

The HEMTT's spare tire hoist arm and extension are a natural target for damage from tree branches if you drivers leave the arm extended.

If the arm and extension get bent, it's tough getting the spare off the truck.

The tire changing procedures starting on Page 3-41 of TM 9-2320-279-10-1 wind up telling you to stow the hoist!



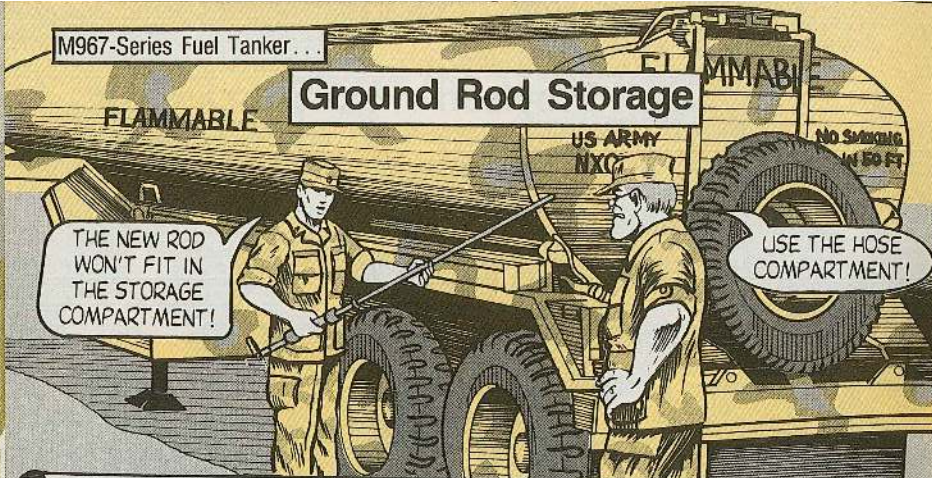
Need Replacement Keys?

So you've lost the keys to your M915-series truck?

There are no precut replacement keys in the supply system. And replacement lock cylinders listed in TM 9-2320-273-20P and TM 9-2320-283-20P use a different key.

So if you need a replacement key, order a blank key with NSN 5340-00-357-9269. Then use a key from another truck to get a copy made.

Ground Rod Storage



Dear Editor,

The redesigned ground rod with slide hammer won't fit in its storage compartment because the slide hammer is too large.

We've solved the problem by storing it in the left-hand hose compartment. In fact, we store all the M967's ground rods—both old

We put the hose in the compartment first, then slide the ground rod in alongside it.

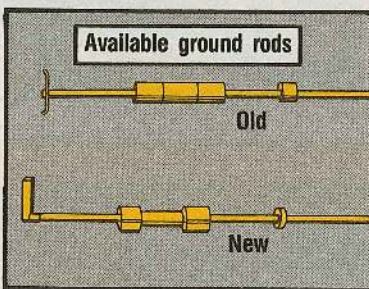
Store ground rod in hose compartment



Hook the ground rod's T-handle behind the hose coupling. If you don't, the 6-ft ground rod gets lost in the 12-ft compartment.

Stencil the compartment with GROUND ROD INSIDE and lock it.

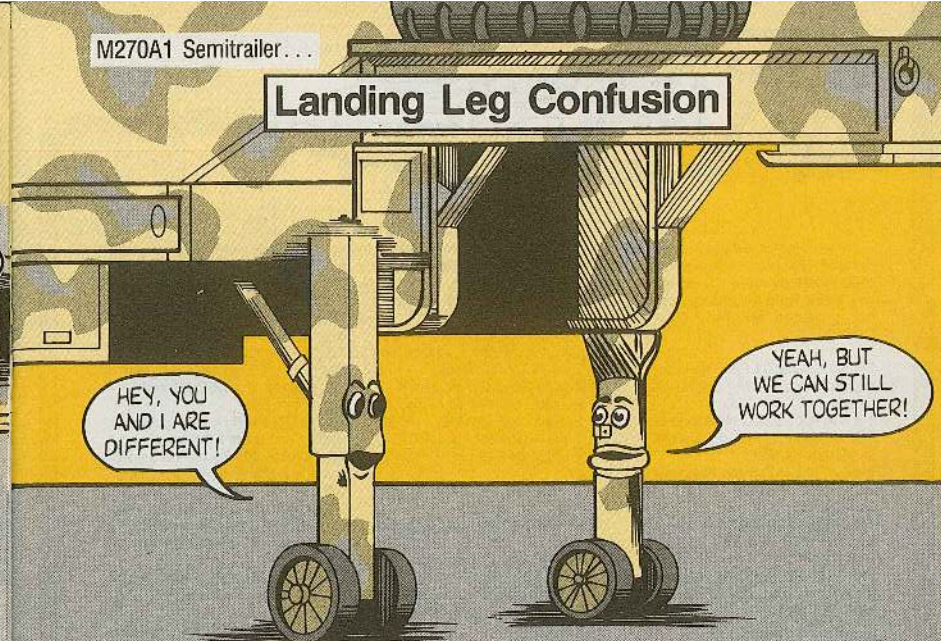
Jim Rader
Ft McCoy, WI



and new types—in the hose compartment so we can keep them under lock and key.

(Editor's note: Sounds like you have a secure fix to the rod's storage problem.)

Landing Leg Confusion



You may get a square landing leg for your M270A1 semitrailer instead of the round leg shown in TM 9-2330-371-14&P.

No sweat!

Replacement landing legs can be either square or round. They will work together.

Different Seal's OK

When you order an axle seal assembly, NSN 2520-00-933-4198—Item 19 of Fig 19 of TM 9-2330-211-14P—you get a one-part seal instead of the old four-part seal.

But you can use the one-part seal by replacing a ring that's tack-welded to the spindle.

Burn away the tack weld with a torch. Remove the old ring and put on a new ring, NSN 3040-00-933-4197. Use a drift pin to press it on the axle spindle.

Then follow the seal installation procedure beginning on Page 4-127 of TM 9-2330-211-14&P.

JUNE 87





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

TM 5-2330-305-14 Feb Topographic support system trailer (NSN 2330-01-076-4797)
 TM 5-4110-235-24P Feb Refrigeration unit, electric motor driven (NSN 4110-01-101-4202)
 TM 5-4110-239-24P Jan Refrigeration unit, 5,000 BTU/HR, NSN 4110-01-141-0626
 TM 5-4210-227-248P-1 Feb 85 Aerial ladder fire fighting truck (NSN 4210-00-965-1254)
 TM 5-4610-215-10-HR Jan Water purification unit, 600 GPM, NSN 4610-01-093-2380
 TM 5-4930-217-20P Feb 23 CFM compressor (NSN 4930-00-935-4451)
 TM 5-5420-226-20P Jan M48A5 AVLB chassis
 TM 5-6675-309-24P Feb Test set, power supply, AN/USM-428 (NSN 6675-01-075-4033)
 TM 9-1015-249-20P Jun 81-MM mortar M252
 TM 9-1090-208-23-2 Apr M139 automatic gun
 TM 9-1425-470-24P Apr TOW missile

TM 9-1425-600-12 Apr Patriot missile
 TM 9-1425-601-14 Apr Patriot missile support system equipment
 TM 9-1425-600-24P-1 Dec Patriot missile
 TM 9-1430-485-20P Jan Monitor-programmer, missile guidance set, AN/GJM-24 Lance Missile
 TM 9-1430-529-24P Apr HAWK
 TM 9-1430-1526-24P Apr HAWK
 TM 9-1430-1534-24P May HAWK
 TM 9-1440-485-20P Apr LANCE
 TM 9-1450-396-24P Mar Pershing II missile
 TM 9-2330-362-148P Apr XM971/XM971E1 van semitrailer
 TM 9-4935-395-24P Mar Pershing II missile
 TM 11-5821-318-20P Jan AN/ARC-166 radio set
 TM 11-5865-223-24P-1 May S-250/G shelter, used w/countermeasures set AN/GLQ-3B
 TM 11-5895-1095-12 Jun AN/GRA-114 radio data link
 TM 11-5965-286-23P May MK-1697/G headset-microphone kit
 TM 11-6125-257-24P May PP-7462/U power supply
 TM 11-6730-253-248P Jun KS-99C & 99C1 still picture camera set
 TM 11-6730-296-23P Jan AS-25C projection set
 TM 55-1520-236-23P-1 Apr Repair

Special helicopter, attack, AH-1P, AH-1E, AH-1F
 TM 55-2305-001-10 Apr LACV-30 (NSN 2305-01-061-6230)
 TB 43-0002-37 Apr 86 Maintenance expenditure limits for FSC class 4810
 TB 43-0106 Apr Aeronautical equipment Army Oil Analysis Program
 TB 43-0128 Jun CECOM test program set index
 TB 43-0211 Mar AOAP guide for leaders and users AOAP equipment
 TB 55-1510-209-30-17 Feb Inspection of elevator attachment points for U-21, RU-21
 TB 55-1520-237-20-82 Feb Contractor inspection of transmission oil cooler fan splines and tail rotor drive shaft, UH-60A
 TB 55-1520-237-20-84 Feb Inspection of tail rotor drive shaft spline couplings under crew seats
 TB 55-1520-241-20-42 Feb Inspection of engine cross shaft CH-47A, B, C, D
 LO 5-6115-585-12 Feb 10 KW generator set and ME-57A/U
 LO 5-6115-598-12 Feb 150 KW generator set
 AR 735-11-2 Oct 86 Reporting of item and packaging discrepancies
 SC 7360-90-CL-N02 May Range outfit field, gasoline (NSN 7360-00-082-2152)

AVIATION MESSAGES

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

AH-1-87-02, SOF, Maint Mandatory, K747 Blade Root Fittings, 102300Z Feb 87.
 AH-64A-87-02, SOF, Operational, Operation of Engine Chop Collar-Cautions, 092045Z Feb 87.
 AH-64A-87-03, SOF Maint Mandatory, One-Time Validation of Correct Torque of T700 Engine Fuel Differential Pressure Indicator, 122015Z Feb 87.
 AH-64A-87-04, SOF, Maint Mandatory, Revision to Message on T700 Engine Fuel Differential Pressure Indicator, 182200Z Feb 87.
 AH-64A-87-05, SOF, Operational,

Restriction on Laser Bore Sight, 240145Z Feb 87.
 C-12-87-01, SOF, Technical, Hose Assy Between Engine Exhaust Gas Duct and Engine Intake Anti-icing Device, 192030Z Feb 87.
 CH-47-87-03, SOF, Technical, CH-47D Helicopter, Pivoting and Swiveling Actuator Lower Structural Connections for Proper Hardware, 022030Z Feb 87.
 OV-1-87-01, SOF, Operational, Restricted Flight Maneuver, 032010Z Feb 87.
 U-21-87-01, SOF, Technical, Aircraft Elevator Attachment Points, 061615Z Feb 87.
 UH-1-87-04, SOF, Maint Mandatory, Revision, Swashplate Control Assy on UH-1H/V and EH-1H for Proper Serial-

ization and Identification, 201530Z Feb 87.
 UH-1-87-03, SOF, Maint Mandatory, Gearbox Assembly, 90 Degree for UH-1/EH-1, 101500Z Feb 87.
 OH-58-87-02, SOF, Maint Mandatory, Fuel Control, Bendix P/N 2524886-9 on a T703-AD-700, 101600Z Feb 87.
 UH-60A-87-01, SOF, Maint Mandatory, Validation of Correct Torque of T700 Engine Fuel Differential Pressure Indicator, 122015Z Feb 87.
 UH-60A-87-02, SOF, Maint Mandatory, Revision to Message on T700 Engine Fuel Differential Pressure Indicator, 182200Z Feb 87.
 MIM-OH-58-87-XSOF-01, Fuel Shut-off valve and Main Rotor Blade Tip Cap, 241900 Feb 87.

Cleaning with High-Pressure Water...

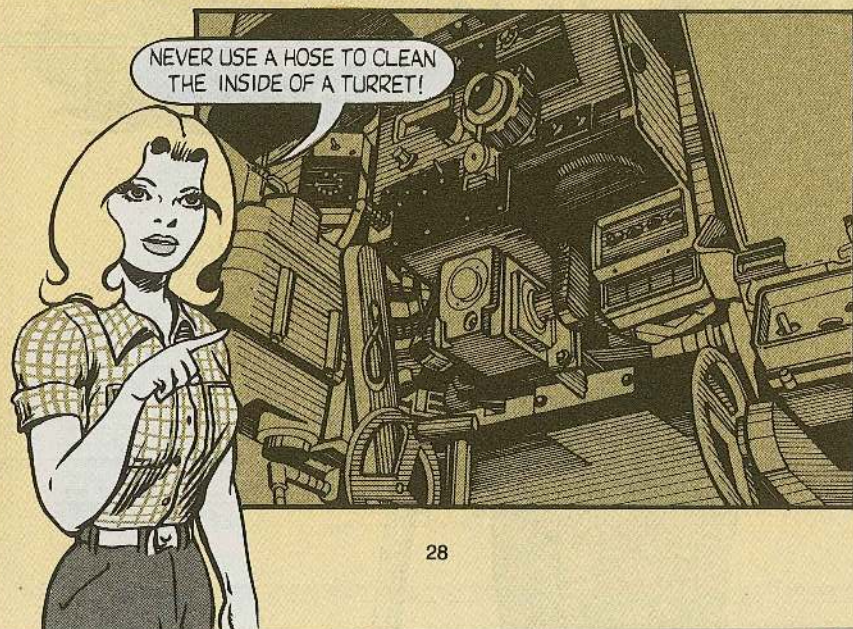
The Good, The Bad and The Wet



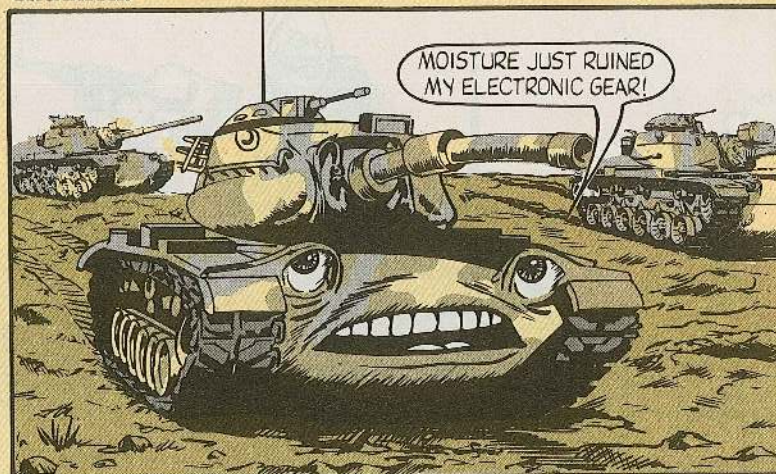
A high-pressure hose is the only practical way to clean mud and gunk from vehicle tracks and chassis.



But the temptation to go overboard is overwhelming. Everything gets hosed down—turrets, exhaust pipes, visual devices, radios and so on—all strict no-no's.

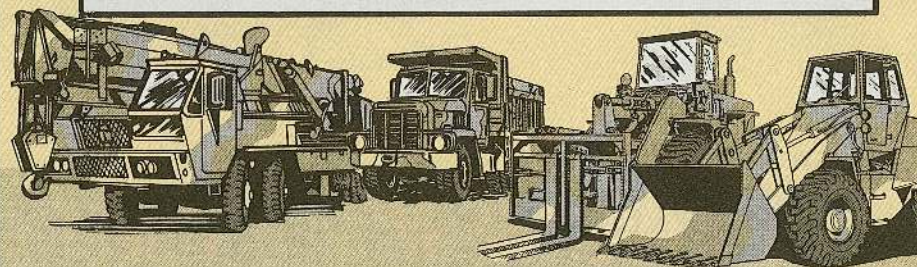


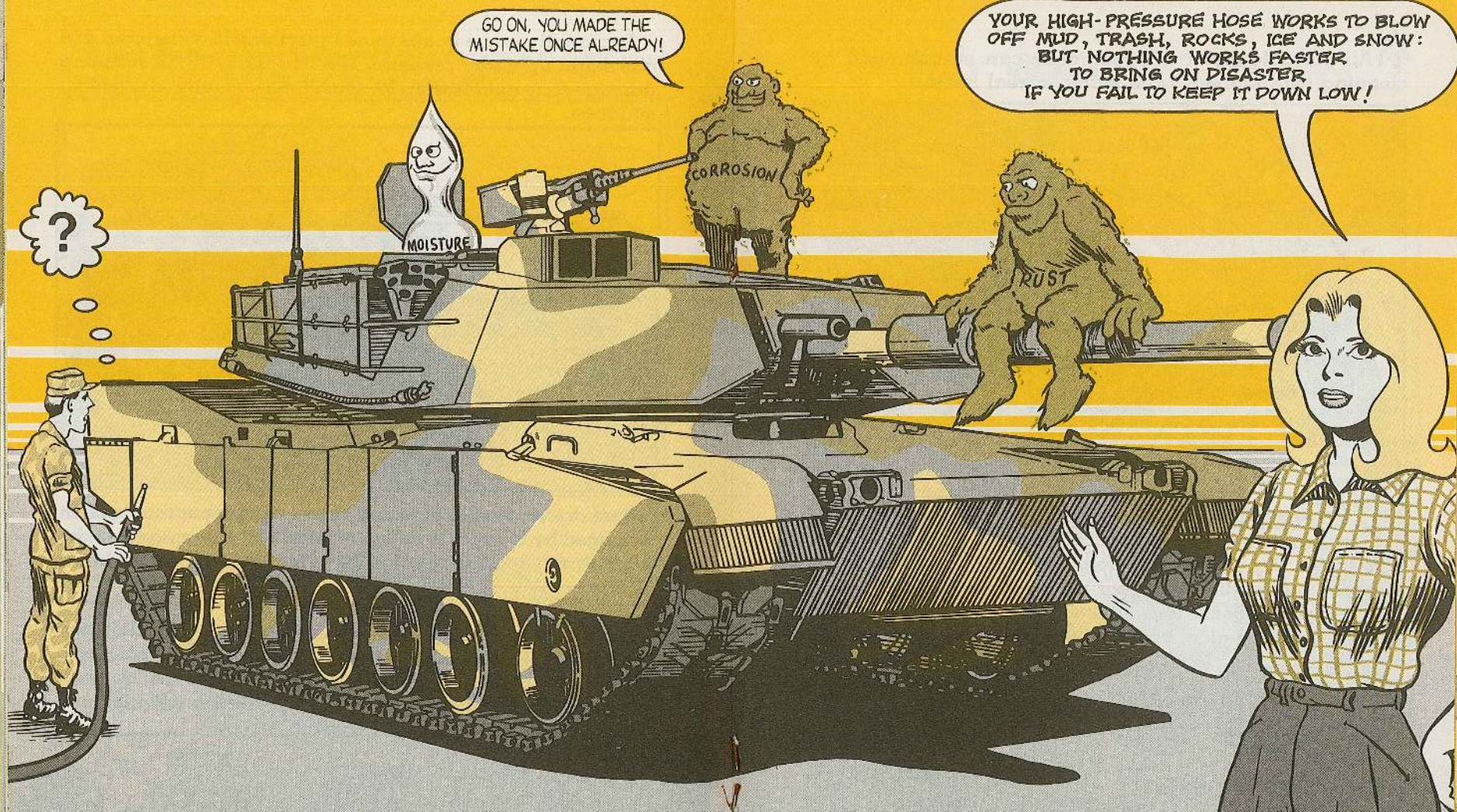
Apparently, some troops think everything is waterproof and can stand up under pressure. The bad thing is, the resulting damage may not show up for some time—usually in a critical situation.



Here are some specific examples of equipment that is often damaged by high-pressure water. Most of the damage is in the form of rust and electrical failure, but there are other kinds of damage:

★ Trucks, forklifts, scoop loaders, cranes, graders, bulldozers, generators—operators, never leave battery box and electrical connector covers off or open. High-pressure water used to clean the vehicle will get in and damage the electrical equipment.



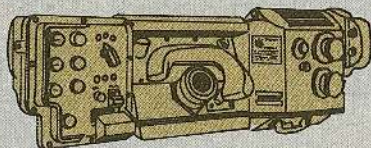


WE HAVE THE WORLD'S BEST EQUIPMENT ... *Take care of it*

★ All portable electrical generators can be damaged by cleaning with high-pressure water—a real no-no.



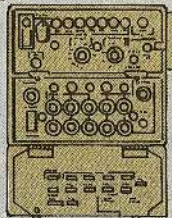
★ Fire control instruments, optical gear—high pressure water gets inside the instruments, fogs the lenses and cannot be removed by purging. The gear must be taken apart by support and dried. Some lens elements are glued together and water softens the glue, knocking the lenses out of alignment.



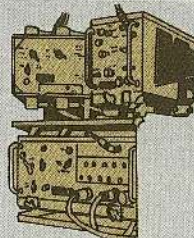
AN/VVG-2 LASER RANGEFINDER



M36E1 PERISCOPE



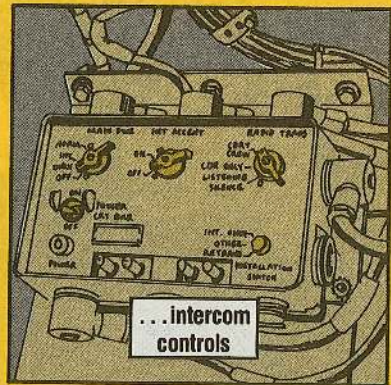
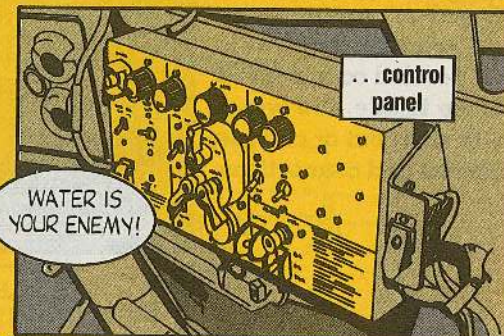
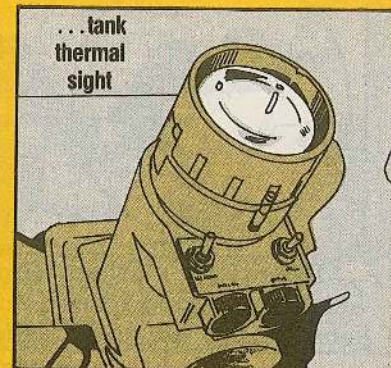
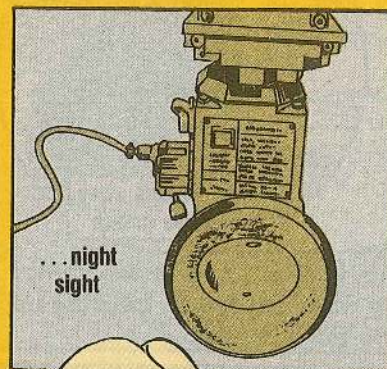
M21 SOLID STATE COMPUTER



AN/VRC-12
and AN/VIC-1
COMMUNICATIONS
SYSTEM

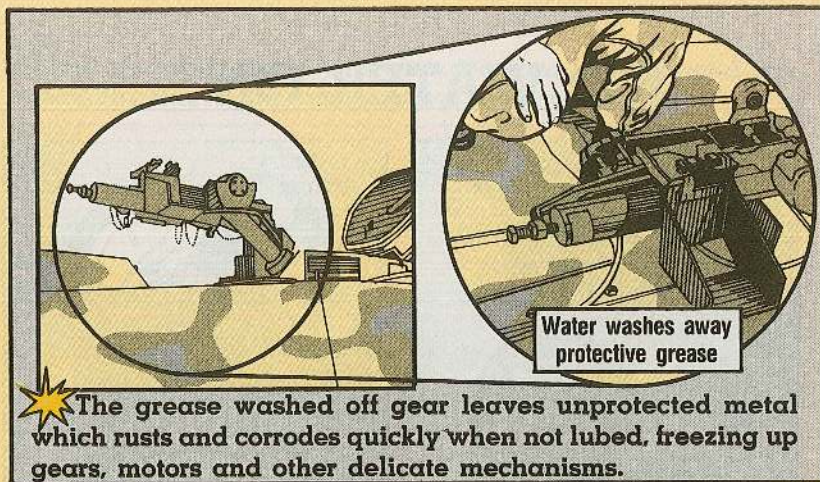
JUNE 87

NO WATER ON...



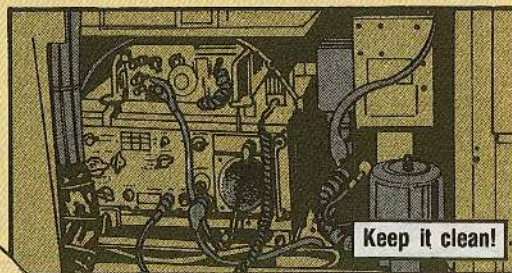
JUNE 87

33



★ The grease washed off gear leaves unprotected metal which rusts and corrodes quickly when not lubed, freezing up gears, motors and other delicate mechanisms.

★ High pressure water can work its way inside well-sealed commo gear. Once inside, the water will short out or corrode circuits and connections.



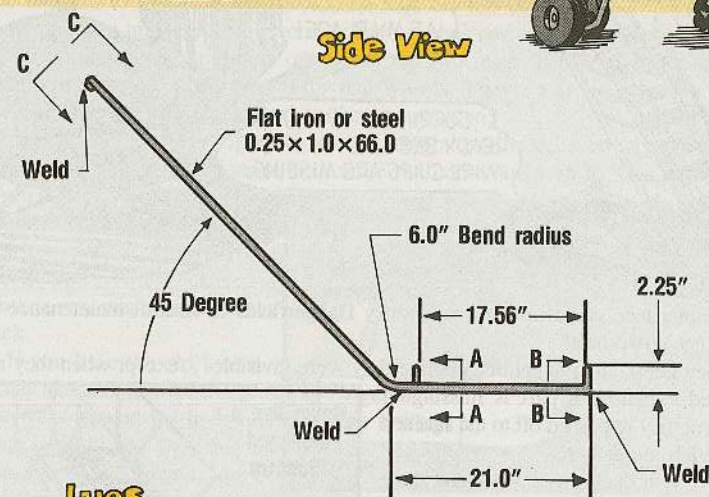
UH-1, AH-1...

Save Your Sacroiliac

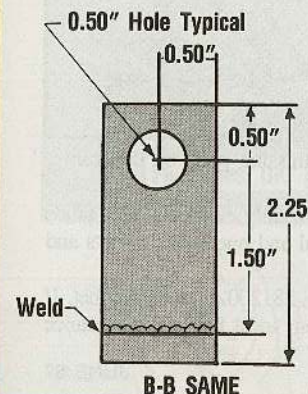
Bending over to push your Huey and Cobra ground handling wheels from Point A to Point B can be a real back-breaker.

But there's no need to strain your back or bust a gut if you can help it. And you can.

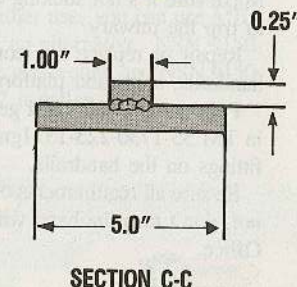
Get your sheet metal shop or support to make you a couple of handy-dandy work aids for towing those wheels. The device is just a small tow bar with lugs to fit on the mounting pins of your ground handling gear. Fig 1-7 of TM 55-1520-236-23-1 tells how to make it:



Lugs



Handle



To use the device, just attach the lugs to the mounting pins of the ground handling gear. With a snug fit, you can push or pull two pair of wheels without stooping and bending.

Give 'em Some



Maintenance platforms are the Rodney Dangerfields of aircraft maintenance—they get no respect!

They get so little attention, it's like they were invisible... except when they're needed. Then, if a part is missing or broken, they're pushed off to the side and forgotten altogether.

Give your platforms the care and attention they need, and they'll serve you well for years. Your B-1 stands, for example, need to be checked out at least once a month.

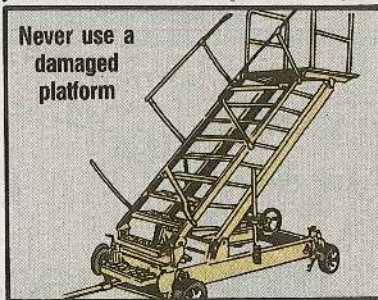
See if the tow bar is properly stowed. Make sure it's not sticking out, waiting to trip the unwary.

Repair or replace any corroded, cracked, bent or missing parts on the frame, handrails, steps and platform.

Follow the PMCS and general guidance for mechanically elevating B-1 stands in TM 55-1730-223-13. Ignore references to electrical and pneumatic outlets and fittings on the handrails.

Be sure all requirements of SOU-GEN-85-MEM-01, 281200Z Jan 85 are met. If not, don't turn the hand wheels. Get a copy from your local Logistic Assistance Office.

Never use a damaged platform



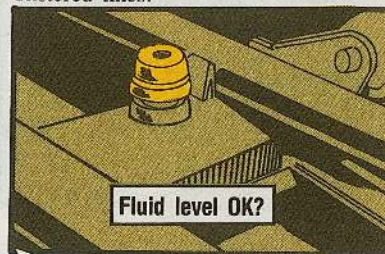
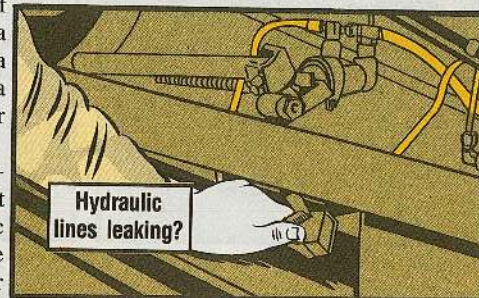
Respect!

Make sure wheel swivel lock pins, brakes, brake set levers and immobilizing jacks are working right. See that the rebent posts are offset inward to give you a narrow gap between bannisters. You can reinforce the platform railings by taping the end rail to the two side rails at two adjacent top corners.

Mount 1-in high blocks of wood or hard rubber cushions with silicone rubber adhesive or tape in the saddle of each of the two rests. These go on top of the side frame beams, inboard from the rear wheels. They act as stops for the staircase rails when they're lowered to the rest position.

Now, if the ratchet handle on either rear integral jack wheel assembly is pointing inboard, the raised cushions won't let the rail come down on it. That stops you from putting more than a ton of force on it, by applying just a few foot-pounds of torque on a handwheel, which causes a broken rear wheel immobilizer jack.

If you have the old hydraulically elevating platform, inspect for leaks around the hydraulic lines and fittings. They may be loose. Replace frayed, cut or blistered lines.



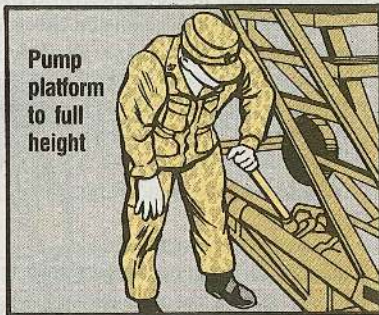
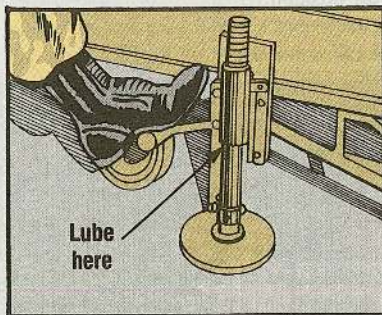
Eyeball the hydraulic fluid level. If it's more than 1 inch below the filler neck, add fluid MIL-H-5606. NSN 9150-00-252-6383 gets a quart, NSN 9150-00-223-4134 a gallon. If you can guarantee no cold weather use, you can use MIL-H-83282 as an alternative. NSN 9150-00-149-7431 gets a quart and NSN 9150-00-149-7432 a gallon.



**40 PSI
needed!**

Examine the tire tread for wear, cracks and cuts. Replace damaged tires. Keep them inflated to 40 PSI all the time.

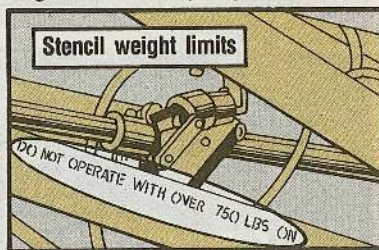
Set the foot pedals on the two immobilizing jacks to raise the two front casters off the deck. The platform shouldn't move when they're in place. If foot pressure doesn't set the jack pads, grease the pivot points.



Pump the platform and staircase to full height. Make sure you get the lift you need, with a smooth operation.

Be sure the hydraulic cylinder locking collar set and release work right. Always use it. Hydraulic failure can let the platform come crashing down. Unlock the cylinder and lower the platform for storage.

Change the platform weight limit stenciled on the sides of the platform. It should read 750-lbs for both B-1 models.



IF YOU HAVE THE OLDER B-1 PLATFORM, NSN 1730-00-390-5618, FOLLOW THE INSPECTION PROCEDURE IN TM 55-1730-201-12.

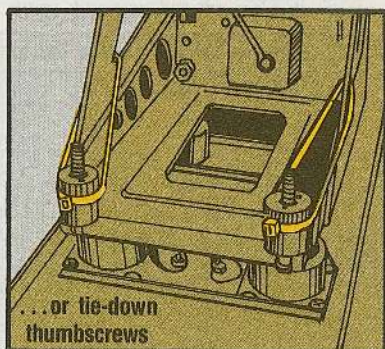
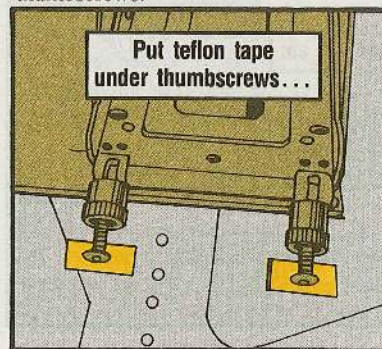
Protect Structural Panels



When a radio or other avionics equipment is removed from your bird, the mount thumbscrews hang down and rest on the mount's panels.

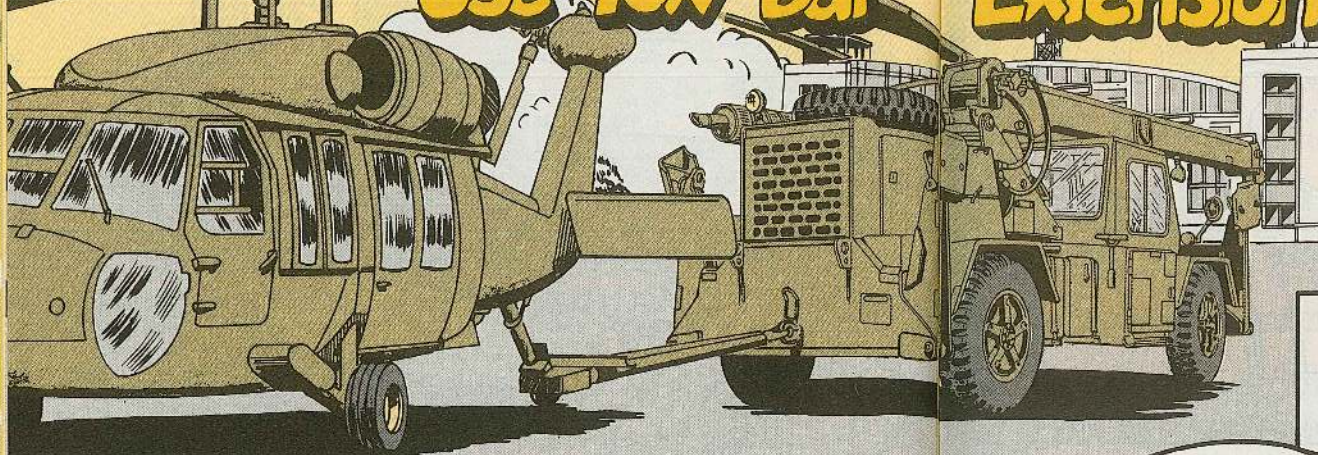
Then, when the bird flies or the engine is run up, the thumbscrews vibrate and bounce, damaging the panels.

To prevent damage, install tape self adhesive, NSN 8135-00-923-0591, directly on the structural panels under the thumbscrews.



Or tie down the thumbscrews with electrical tie-down straps. NSN 5975-00-570-9598 gets 100.

Use Tow Bar Extension With SCAMP



Towing your Black Hawk or Chinook with the new SCAMP vehicle can be costly if you're not mighty careful making turns.

Turn too sharp and the SCAMP's outriggers contact the Black Hawk's stabilator or the Chinook's fuselage. You know what happens when steel meets honeycomb paneling—high loss in dollars and in downtime for your aircraft.

But SFC Steven J. Murphy at Ft Campbell, KY, has come up with tow bar extensions that take the guesswork out of towing your birds with the SCAMP.

To make a pair of extensions for the tow bar legs, you need:

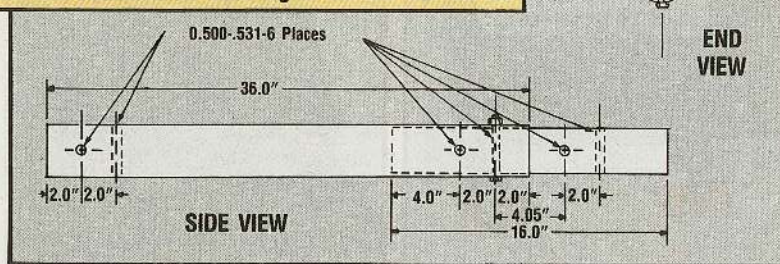
Two pieces of 2½-in O.D. tubing, 16 inches long. Order it by the foot, too, with NSN 4710-00-278-0478.

Four nuts, NSN 5310-00-062-4954.

Four washers, NSN 5310-00-515-8058.

Four bolts, NSN 5306-00-208-3649.

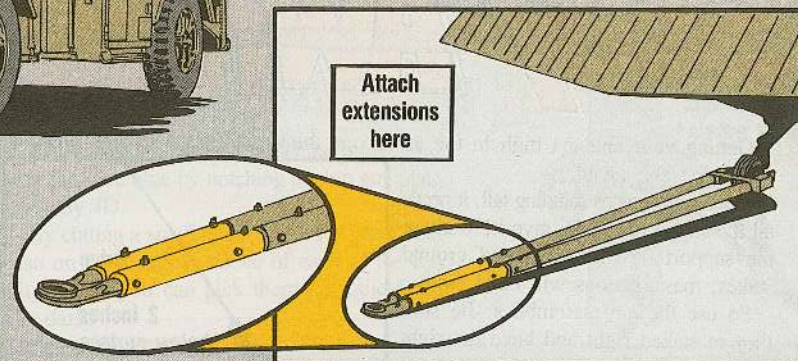
Make one extension for each leg of the tow bar like so:



Two pieces of 3-in OD aluminum alloy tubing, 3 feet long. Order it by the foot with NSN 4710-00-278-6417. The NSN is not on the AMDF so order it using DD Form 1348-6.

Disconnect the tow bar's legs from its lunette eye. Install a 36-in extension on each leg using the tow bar's hardware. Reconnect the extended legs to the lunette eye.

The extended tow bar will let you maneuver your birds with the SCAMP without any danger of damaging your aircraft.

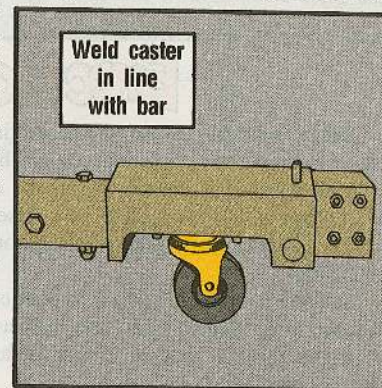


Tow Bar Tips

Moving a tow bar into position for towing aircraft can test a mech's skill and patience. The darn things want to go in every direction but the right direction.

To make those critters more manageable, weld one of the swivel casters in a straight line with the bar. It doesn't matter which caster you weld, right or left. 'Course, if the caster wheels are cracked, broken or worn out, replace 'em. Order on a DD Form 1348-6 using FSCM 06004, PN 35686-1 and RIC S9C.

If you need to replace the whole wheel assembly, use NSN 1730-01-111-4305. It's good for either the right or left side.



Put it up to Stay Awhile!

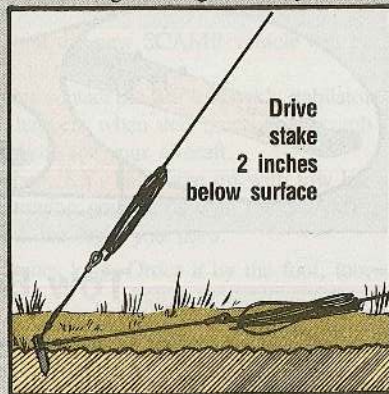
Getting your antenna high in the air is one thing. Getting it to stay there is something else again.

Once your mast is standing tall, it needs all the support you can give it. Without the support of guy wires and ground stakes, mast sections will bend easily.

So use the guy assemblies. Be sure they're staked right and have the right tension.

When putting a ground stake into soft or sandy soil, drive the top at least 2 inches below the surface. That leaves the anchor hook just above the ground.

In harder ground, drive stakes until only the cable connection hole is showing.



Erection Care

Safety comes first when you're erecting that antenna. Get too close to an overhead electric power line and you are history.

Pick a spot that's at least twice the mast's height away from power lines. It's best to use a friend to help raise your antenna.

The lightweight mast needs the support of an extra pair of hands to keep it from buckling.

Station your partner at the feed cone end. While you pull on the guys, he moves toward you, "walking up" the mast as he comes.

Move together, though. If he goes faster than you, you'll get a reverse buckle in the mast.

Section Care

Never throw around that feed cone on top or you'll damage or break it. It's tough, but it's not made to be handled rough.

Be sure you've cleaned all mast sections before slipping them together for storage. If they're dirty or have tape on them, they'll be hard to take apart later.

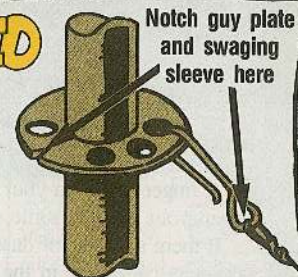
No tossing of feed cone



Notch for ID

If you do a lot of nighttime antenna erection, you can save time by notching the top guy plate for easy ID.

By cutting a small notch in the red plate, and also on the swaging sleeve of each of the red guy wires, you can pick them out quickly in the dark.



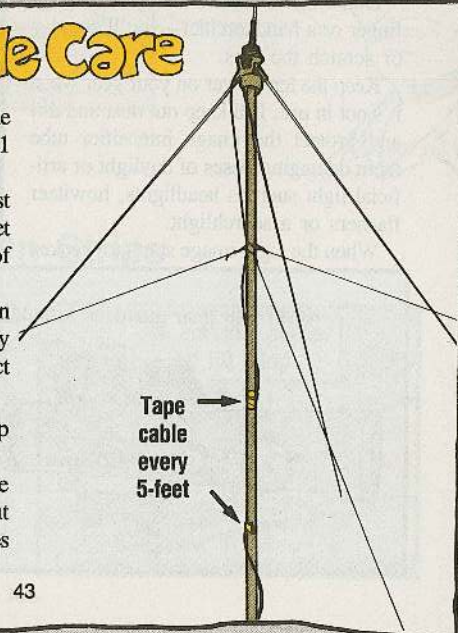
Cable Care

Also, take the strain off the coax cable and its connector by using the PF-211 strain relief.

Then tape the cable to the mast just below the feed cone. Tape it every 5 feet or so, like it says in Para 2-4/(6) of TM 11-5985-357-13.

Hatches, doors and vehicle wheels can grind your commo signal into silence by crunching your antenna cable, so protect against these cable killers:

- Put a block next to the cable to keep it out of tight places.
- Avoid running the cable along the ground in areas of heavy traffic. Put boards or limbs beside a cable that crosses a roadway.



Open Your Eyes to Night Sight PM

I CAN'T UNDERSTAND WHY I CAN'T SEE A THING?!

POOR PM, PAL!



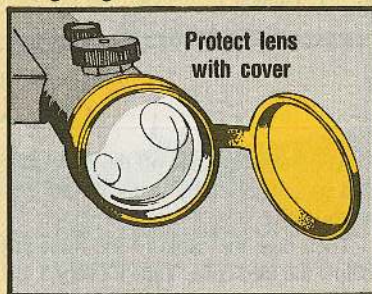
A finger poked in your "night eyes" can blind you to better PM practices. So open your eyes to some tips to take care of your night vision equipment.

If there's a flake of dust on a lens of your night sight, clean it off with the lens cleaners called for in the operator pubs.

Don't try to flick it away with your finger or a handkerchief—you'll smudge or scratch the lens.

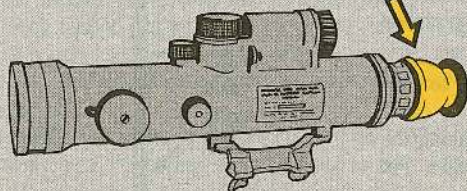
Keep the lens cover on your gear when it's not in use. It'll keep out dust and dirt and protect the image intensifier tube from damaging doses of daylight or artificial light such as headlights, howitzer flashers or a searchlight.

When the sight image starts to weaken



Protect lens with cover

Never use face guard as a handle



or disappear, it may be time to switch the battery.

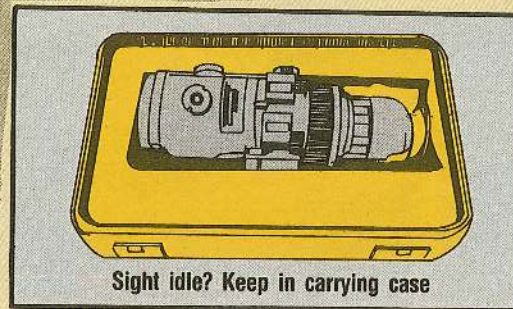
Turn the power OFF before you take out the battery to protect the image intensifier.

Never use the face guard as a handle. You'll damage it...and let in light that can mess up the image intensifier.

To pick up your night sight, use the straps or the body of the sight.

When your sight's idle, keep it clean and dry by putting it in the carrying case.

Remove battery before storing



Sight idle? Keep in carrying case

BEFORE YOU PUT IT IN THE CASE, THO, TAKE OUT THE BATTERY TO PROTECT YOUR NIGHT SIGHT FROM CORROSION.



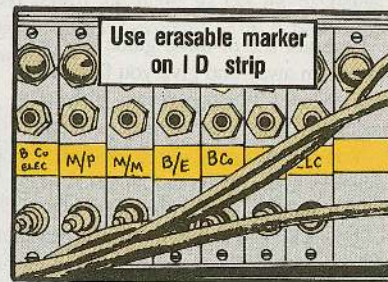
SB-22 Switchboard...

Tips On Strips

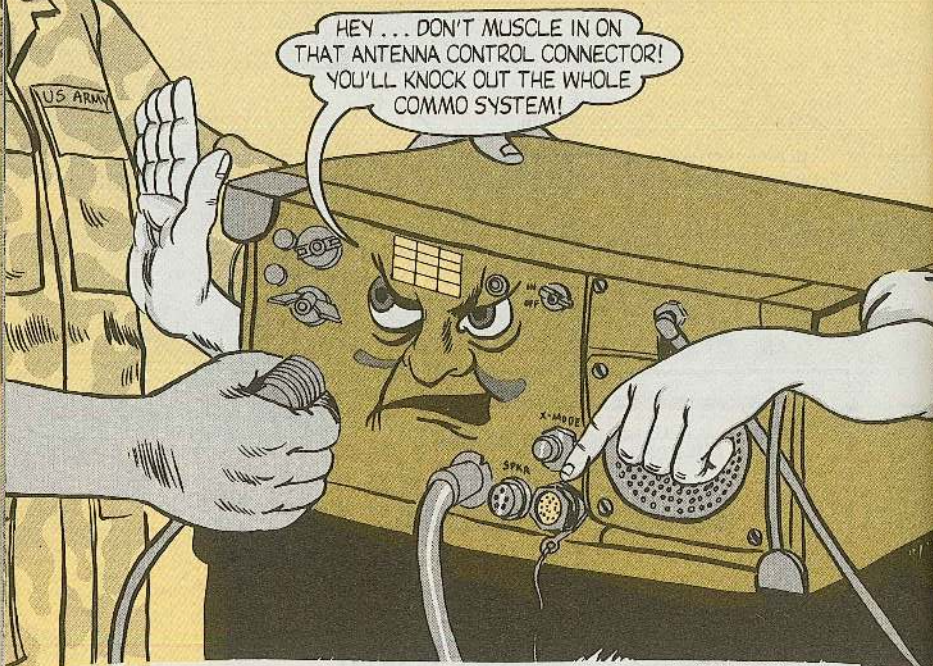
Using a ballpoint pen or some other sharp object to mark your SB-22 switchboard's designation strip ruins the strip.

Use a grease pencil, crayon or some other erasable marker. This way you can use the strip over and over again.

While your TA-222 line pack is on your mind, eye those strips. If they're ruined or missing, replace them with NSN 9905-00-639-1679.



Key Is Connector Protector



Too much muscle on the antenna control connector of your AN/VRC-12 series receiver-transmitter will knock you out of the commo network.

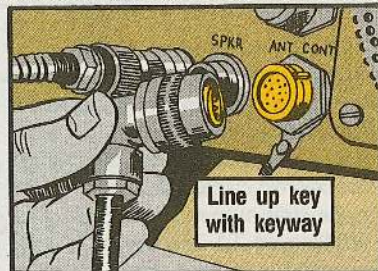
Your RT, cable or matching unit will suffer if you fail to use care connecting the CX-4722 cable.

To help you make a neat and clean connection, use the key and keyway. Forcing the cable onto the connector bends or breaks the pins, putting the RT off the air.

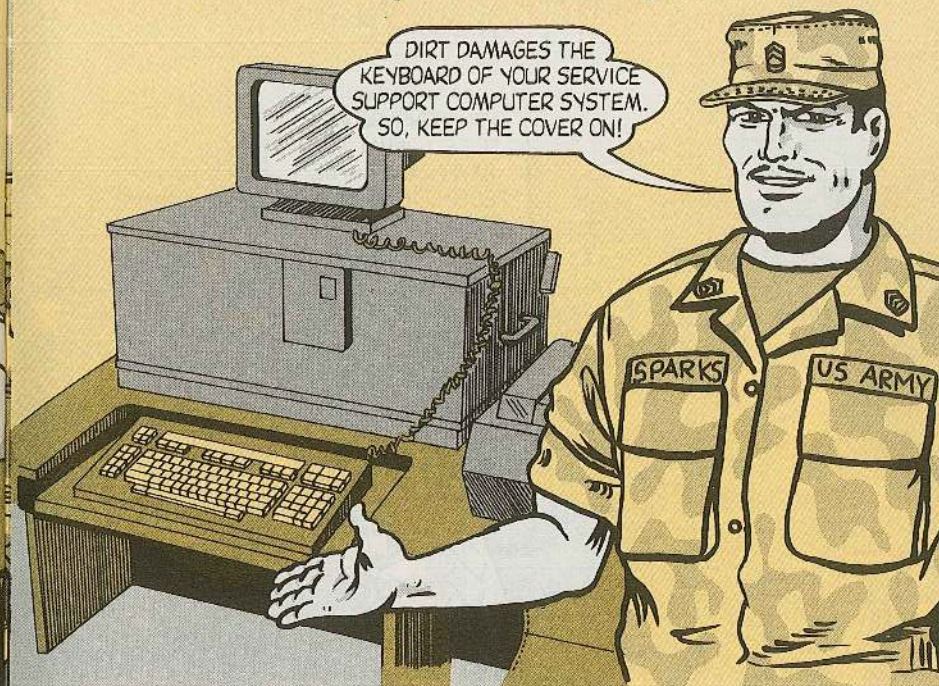
Constant use of those guide pins will wear 'em away and give you false clues that your RT's not operating. If the pins are worn, turn your set in for repair.

You can also zap your receiver-transmitter by applying too much muscle when you're tightening the connector nut.

Snug's all that's needed. Forcing the nut tight with pliers or a wrench and bearing down will twist inside wiring. That'll short the connection and shut down your set.



Handy's Not Dandy!



Do you think it's handier to take the dust cover off your AN/TYQ-33(V) tactical Army combat service support computer system's KY-903 keyboard? Better to get at the keys?

Bum idea! Get it back on, pronto!

Taking the cover off leaves your keyboard open to dust and dirt damage. Same goes if the cover's on but is tattered and worn out.

If the keyboard needs repair—including replacement of the cover—put the keyboard and its parts in its transit case and return the items to DS for exchange.

Never use a pencil or other sharp objects on the keyboard. You'll poke holes in the cover. That leads to moisture damage.

Screen Holder NSN

NSN 5340-01-139-6747 is for a clamping catch that holds the window screen spring clamp in place in your AN/TSW-7A air traffic control central. The item's authorized by Appendix A of CTA 50-970.

Block Radar Brush Block and

Connector Problems



Arcing, receiver noise, and too much AN/MPQ-55 radar downtime are the result of mechs forgetting brush block assembly maintenance and connector cautions.

Brush Block PM

If operators report receiver noise that you can't pinpoint, check the brushes. If you find any brushes badly worn, measure all 84 brushes, NSN 5977-00-811-7504, and replace any less than 3/8-in long.

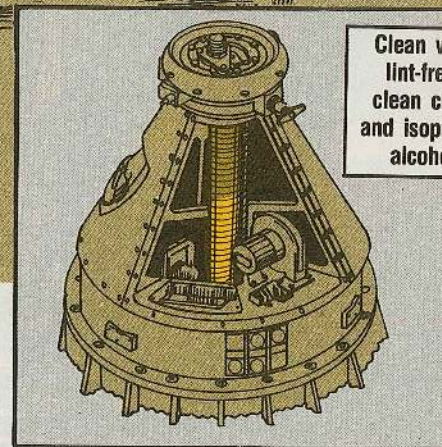
1/8" 1/4" 3/8"



Replace any brush less than 3/8" long. Install with dot on top

Lots of worn brushes mean the sliprings and brush block assembly need cleaning. The procedure's in Para 4-11 of the TM. Use a lint-free, clean cloth and isopropyl alcohol. As you wipe each slipring or brush block area, use a different clean part of the cloth. Otherwise, you'll just be putting dirt back on.

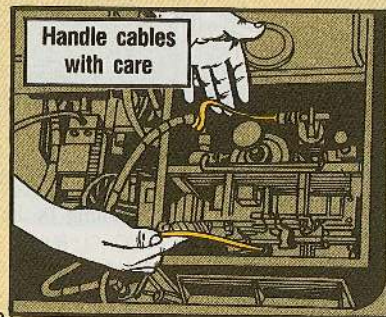
Keep wiping until your cloth quits picking up dirt and carbon. Let the sliprings dry completely before you install the brush block and the brushes. That prevents moisture problems. Remember to install the brushes with the dot on top.



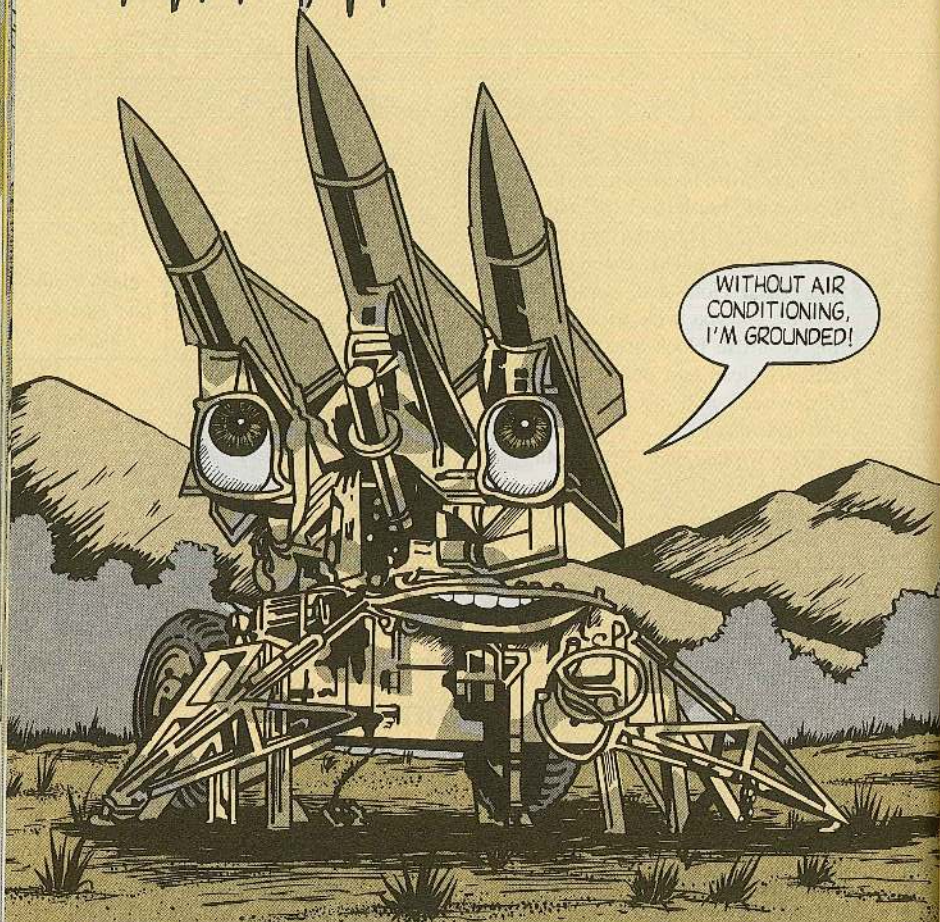
Clean with lint-free, clean cloth and isopropyl alcohol

Sensitive Connectors

The AN/MPQ-55 has several slender cables that break off at the connectors without much push. So, mechs, work carefully around those cables. Never grab one to get at another cable. Keep tools and elbows away from the cables as much as possible. Cables that are broken most are those running to the J4 jacks on the frequency converter and to the J2, J5, J7 and J8 jacks on the microwave test set.



Cool It With



HAWK systems are crashing because crews aren't pulling air conditioner maintenance.

Without regular PM, the air conditioner inlets get clogged. Then the compressor works too hard and gives out. No compressor means no air conditioning. AC failure

AC PM!

leads to major damage to components like the Platoon Command Post and the Simulator Station AN/TPQ-29.

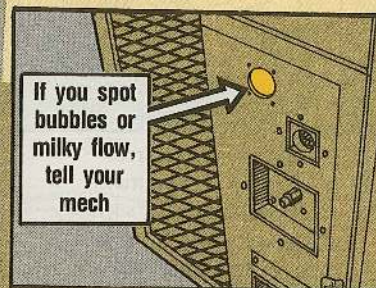
No air conditioning also knocks out HAWK shop equipment vans like the AN/TSM 104 Guided Missile Remote Control System. So, no maintenance support in the field.

Head off problems with PM.

TM 5-4120-232-14 tells you to clean air filters and evaporator filters weekly. In hot, dusty areas, clean more often. Check both filters before start-up.

A good cleaning with high-pressure water usually will do the job. For really dirty filters, wash with dry cleaning solvent P-D-680. Completely dry filters before reinstalling. A wet filter shuts out air.

While the filter's off, blow dirt away from the condenser and grille with an air hose. Wipe dirt away from the fresh air inlet door.



If you spot bubbles or milky flow, tell your mech

Keep condenser, grille and air filter clean



Don't forget evaporator filter and grille, either



Ten minutes after start-up, check the freon sight glass window. If you spot bubbles or a milky flow, tell maintenance the air conditioner needs recharging.

During operation, make sure nothing like leaves, bugs or boxes block the condenser grille.

Never run an air conditioner without filters. Dirt can quickly clog the evaporator and put the air conditioner out of business.

KEEP AIR CONDITIONING PM UP, OR YOUR HAWK SYSTEM WILL BE DOWN!



CABLE CAUTIONS



HAWK OPERATORS
ARE GETTING SHOCKING REMINDERS
TO FOLLOW THESE CABLE CAUTIONS!

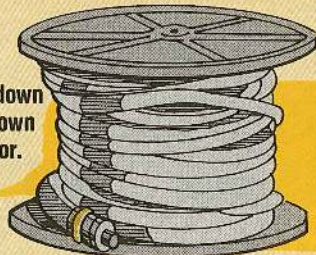
Tighten coaxial cables as tight as you can by hand... and stop. The cable's got to be tight enough to maintain good contact and not work loose.

But never tighten with a wrench—you'll make short work of a brass connector's threads. Or you'll break the cable's insulation. That could mean a shock for you if you grab the cable at the damaged point while you're touching metal.

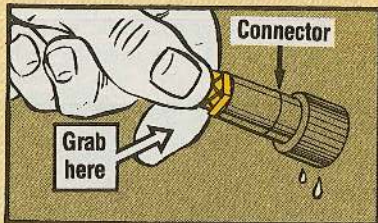
Never pick up a power cable by the connector unless you know the power's off. If a cable's still hooked up, you'll get a nasty shock.

Never plug in a wet power cable. You'll scorch pins and burn out control boxes. Dry it off, then plug it in.

Use tiedown
to tie down
connector.



Hand tight's just right!



Connector

Give cables "reel" protection during transport. If a connector's left flopping, it can be crushed by the cable reel or somebody's foot. Use the connector's tiedown to secure it inside the reel.

Look-Alike Lamps Don't Work Alike

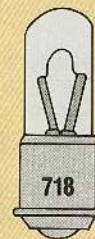
Unit maintenance people are wasting time troubleshooting the AN/TSQ-73 Missile Minder because of look-alike lamps.

Lamps for the panel buttons on the Display Console Assemblies' keyboards look like the lamps for panel buttons on the other AN/TSQ-73 components. But if you use Display Console lamps in Radar Interface Equipment Panels I and II and the ADP Status and Control Panel, you get false functional input and output readings when testing circuit cards with the Module Test Set (MTS). That results in false fault isolation codes.

So, if you've finished your troubleshooting procedure and you're still getting abnormal MTS readings, check the power status indicator lamps on all three panels and the memory fault indicator lamp on the ADP panel before you call DS. A wrong lamp may be the trouble.

It's simple to tell the lamps apart.
Look for the ID numbers stamped on their bases.

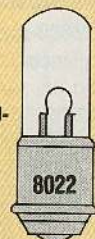
The ID number
for the Display
Console's lamp,
NSN 6240-00-
764-8237, begins
with 718.



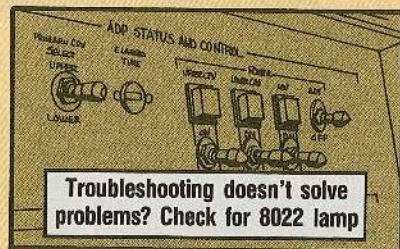
Use 718
lamps in
Display
Console
keyboard



The ID number
for the other
lamp, NSN 6240-00-
117-9957, starts
with 8022.



Troubleshooting doesn't solve
problems? Check for 8022 lamp



YOU'LL SAVE YOURSELF A LOT OF
TROUBLESHOOTING TIME, BY CHECKING A NEW
LAMP'S BASE ID NUMBER BEFORE YOU PLUG IT IN!





M11 Decon...

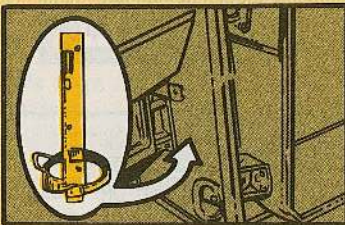
MOUNT IT WHERE?



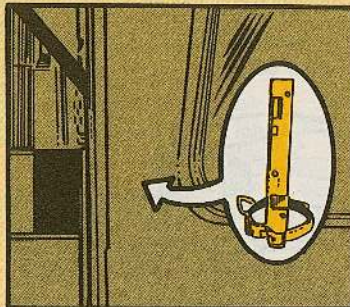
SOME TRUCK AND COMBAT VEHICLE TM'S DON'T SPELL OUT WHERE YOU MOUNT THE M11 DECON. HERE'S THE WORD.



M886 & M893 1¼-ton ambulances. Mount the bracket on the right kickshield just in front of the passenger door. The top of the bracket should be a ½ inch to the side and a ½ inch down from the heater bracket.



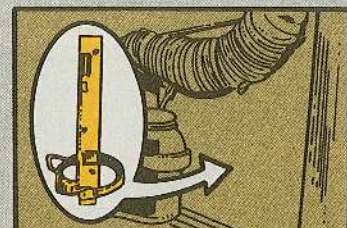
M880-series 1¼-ton (except ambulances)... on the rear cab wall behind the passenger seat.



M123 & M125 10-ton... top of the transmission cover, near the fire-wall. Get a mounting kit with NSN 4230-00-470-1536.

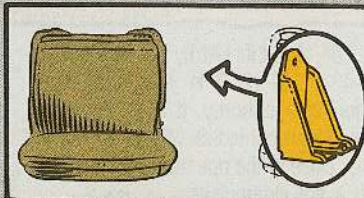
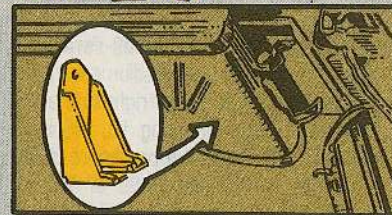


M915-series... firewall, between the windshield washer bottle and the heater hose.



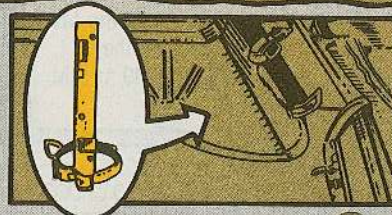
Info's in TM

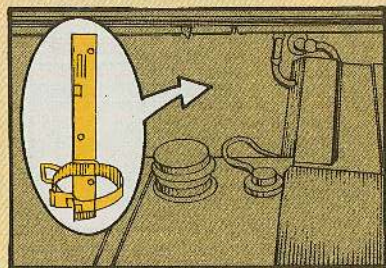
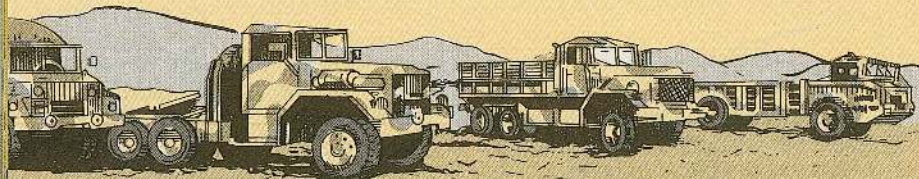
M151A2 & M718A1 ¼-ton... floor, backed up against the inside of the left rear fender. The procedure's in Para 11-89a of TM 9-2320-218-20-1-2 and the hardware needed is on Page C2 in TM 9-2320-218-10.



M825 & M151A1C ¼-ton... floor, between the front seats. See Para 11-89b in TM 9-2320-218-20-1-2 for the M825 and Page 48 of C5 in TM 9-2320-218-20 for the M151A1C.

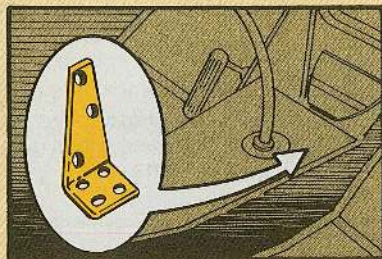
All other M151-series ¼-ton... inside panel of the left rear fender. Info's on Page 48 of C5 in TM 9-2320-218-20.





M561 & M792 1 1/4-ton Gama Goat...driver's side of the tractor, just above the fuel tank between the battery box and the fuel filler. The procedure's on Page 20-174 thru 20-175 of TM 9-2320-242-20-3-2.

M39-series and M809-series 5-ton...top of the transmission cover, just in front of and to the right of the shift lever. Use mounting kit, NSN 4230-00-470-1536. The procedure is on Pages 21-88 thru 21-89 of TM 9-2320-211-20-3-2 and Page 21-165 thru 21-166 of TM 9-2320-260-20-3-4.



M44-series 2 1/2-ton. Don't go by TM 9-2320-209-20-3-4. Pages 23-120 thru 23-125 are wrong. Mount the support bracket just like on the 5-tonners with the same mounting kit.

For all other Army vehicles, TM 3-4230-204-12&P is your only M11 mounting authority. It says the M11 must be mounted as vertical as possible, close to the operator, but not next to a fire extinguisher.

On combat vehicles, only the M1 tank has a specific place for the M11. The word's on Page 2-449 of TM 9-2350-255-10-2.

USE THOSE GUIDELINES AND COMMON SENSE TO CHOOSE A MOUNTING SPOT.

Flocking to PMCS



If the fuzzy stuff—flocking—is worn off or the wire mesh is torn on your M17 mask's inlet valves, your mask won't filter out rain, snow, and dust as well.

So eyeball the mesh and flocking during your BEFORE and AFTER PMCS. If the inlet valves are worn or torn, get new ones from your NBC NCO.

Keep the inlet valves clean by brushing with your M16A1 rifle toothbrush, NSN 1005-00-494-6602—not too hard, tho, or you'll rub the flocking off. Never bang the valves against something hard like a table or the floor to knock out dust. You'll damage the inlet valve cap.

Instead, remove the valve disks and tap the disk sides against a medium-hard flat surface like your canteen. Brush away gunk with your fingers.

Don't Be Bugged

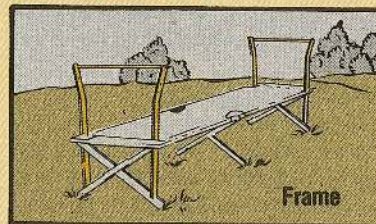
Dear Half-Mast,

Help! What's the NSN for the wooden insect bar frame on the collapsible canvas cot?

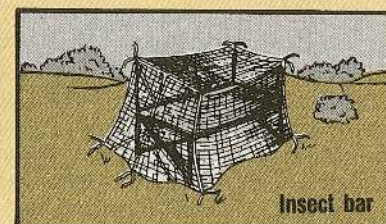
SSG C. H. L.

Dear Sergeant C. H. L.,

NSN 7210-00-267-5641 brings the frame. If you need the insect bar, use NSN 7210-00-266-9736.



Frame



Insect bar

Half-Mast

Consolidated

YOU'VE JUST BEEN TASKED TO ESTABLISH THE MPL PORTION OF YOUR UNIT'S COMBAT PLL. NOW WHERE DO YOU BEGIN?

YOUR FIRST STEP IS TO FIND YOUR UNIT'S CATEGORY FROM PARA 5 OF THE TOE MISSION STATEMENT.

SELECT THE APPROPRIATE MANDATORY PARTS LIST (MPL) PAMPHLET THAT MATCHES YOUR UNIT CATEGORY!

DA Pam	Units
710-2-3 (will be superseded by 710-2-117)	Category I
710-2-4 (will be superseded by 710-2-118)	Category II
710-2-6 (will be superseded by 710-2-120)	Aircraft MPLS
710-2-119	Category III

These DA Pam's are on microfiche. If you don't have a copy, your pubs clerk can order one on DA Form 4569. Future changes can be requested on DA Form 12-9A-R from DA Cir 310-86-2 (Nov 86).

Make sure you use the DA Pam that goes with your unit's category (either I, II or III for your ground equipment). If your unit has aircraft, you must also use the aircraft pamphlet. These pams contain end items critical to your unit mission and the essential PLL repair parts required to support your unit maintenance in combat.

You must always either have on-hand or on-order the stockage quantity called for in your MPL.

MPL'S

PUTTING IT ALL TOGETHER

YOU'VE SELECTED THE DA PAM THAT HAS YOUR UNIT'S MPL.

Now check to see if your on-hand end items have been selected for MPL development in Supply UPDATE 10, DA Pam 710-2-1, Appendix J, Mission Profile Development List (MPDL).

130547 Helicopter, Advanced Attack, AH-64A 1520-01-106-9519	136006 Generator Set Diesel Engine, 15KW, 400 Hz, MEP113A 6115-00-118-1244	143027 Generator Set Gas Engine, 0.5KW, MEP019A 6115-00-940-7862
130551 Helicopter, Medium Lift, CH-47D 1530-01-088-1669	136109 Generator Set Diesel Engine, 30KW, MEP-025A 6115-00-118-1240	143918 Generator Set Gas Engine, 1.5KW, MEP-015A 6115-00-889-1446
1330616 Helicopter, Electronic Intercept, EH-60A 1530-01-082-0686	136304 Generator Set Diesel Engine, 30KW, MEP-104A 6115-00-118-1247	144055 Generator Set Gas Engine, 1.5KW, DC, MEP-025A 6115-00-017-8236
1330829 Helicopter, Electronic Intercept, EH-1X 1520-01-042-9306	136383 Generator Set Diesel Engine, 30KW, PU-DA 6115-00-394-9576	145699 Generator Set Gas Engine, 3KW, MEP-016 6115-00-017-8237 6115-01-143-3311
1331110 Helicopter, Observation, OH-58C 1520-01-020-4216	1431872 Helicopter, Observation, OH-58C 1520-01-020-4216	145836 Generator Set Gas Engine, 3KW, 400 Hz, MEP021A 6115-00-017-8238
1335404 Helicopter, Observation, OH-58C 1520-01-020-4216	1431872 Helicopter, Observation, OH-58C 1520-01-020-4216	146110 Generator Set Gas Engine, 3KW, DC, MEP-026A 6115-00-017-8239
		146252 Generator Set Gas Engine, 3KW, PU-625 6115-00-873-3915
		146265 Generator Set Gas Engine, 3KW, DC, MEP-026A 6115-00-087-0873
		146384 Generator Set Gas Engine, 3KW, PU-617 6115-00-738-6335

If you have an end item that's not listed in the MPDL or an end item listed on the MPDL but not included in the MPL pamphlet, forget about setting up an MPL for that end item, at this time.

For your end items that match the MPDL, go to the MPL pamphlet index. The end items are listed by LIN and NSN. Locate the page that shows the MPL for that item.

THE NUMBERS AT THE TOP ARE THE END ITEMS ON-HAND QUANTITY WHILE THE NUMBERS IN THE COLUMNS ARE THE STOCKAGE LEVELS.

For support items that apply to 2 or more end items, stockage is based on the total number of all end items. For example, if the same spark plug is common to both the MEP016A and MEP021A generators and you have 5 MEP016A generators and 4 MEP021A generators on hand you would stock spark plugs for 9 generators.

So, instead of stocking 12 spark plugs—8 for MEP016A generators and 4 for MEP021A generators you would stock the higher of the two stockage quantities on either MPL for 9 generators—8 spark plugs.

END ITEM: GENERATOR SET GAS ENGINE 3KW MEP021A

SIMPLE, RIGHT?

SUPPORT ITEM NSN NOUN	U/I	END ITEM DENSITY AND STOCKAGE													
		1	2	3	4	5	6	7	8	9	10	11	12	14	
2920-00-225-4841 PARTS KIT, IGNITI	EA	1	1	1	1	1	1	1	1	1	1	1	1	1	
4720-00-540-1962 HOSE, RUBBER	FT	1	1	1	1	1	1	1	1	1	1	1	1	1	
2940-00-580-8302 FILTER ELEMENT, F	EA	3	3	4	5	5	6	7	7	8	9	9	10	11	
5930-00-655-1514 SWITCH	EA	0	0	0	0	0	0	1	1	1	1	1	1	1	
2930-00-810-7082 SPARK PLUG	EA	2	2	2	2	2	3	3	4	4	4	4	5	5	

END ITEM: GENERATOR SET GAS ENGINE 3KW MEP016A

END ITEM

SUPPORT ITEM NSN NOUN	U/I	END ITEM DENSITY AND STOCKAGE													
		1	2	3	4	5	6	7	8	9	10	11	12	14	
5920-00-163-4093 FUSE, CARTRIDGE	EA	1	2	2	2	2	2	3	3	3	3	3	3	4	
2920-00-225-4841 PARTS KIT, IGNITI	EA	1	1	1	1	1	1	1	1	1	1	1	1	1	
4720-00-540-1982 HOSE, RUBBER	FT	1	1	1	1	1	1	1	1	1	1	1	1	1	
2940-00-580-8302 FILTER ELEMENT, F	EA	3	3	4	5	5	6	7	7	8	9	10	11	12	
5930-00-655-1514 SWITCH	EA	0	0	1	1	1	1	1	1	1	1	1	1	1	
2920-00-810-7082 SPARK PLUG	EA	4	4	4	4	4	4	8	8	8	8	8	8	12	
2920-00-867-8741	EA	0	0	0	0	0	0	0	0	0	0	0	0	0	

If the stockage level is the same on the MPL and your PLL, just change the stockage code to CS (combat stockage) and go on to the next item.

When your PLL stockage is less than the MPL's, change the stockage code to CS and order the number you need to bring your stocks up to the MPL level.

Use Project Code "DNK" and Urgency of Need Designator "C" when ordering initial MPL stockage items.

If the stockage level on the PLL is more than on the MPL, change the stockage code to CS and leave the level alone. Since the item is demand supported, your stockage can be higher than the MPL level.

THE FINAL STEP IS TO UPDATE YOUR PLL RECORDS AS SHOWN IN PARA 8-8b OF DA PAM 710-2-1

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SCRIPTS

THE MONSTER IN THIS HOSE
CAN BE A REAL EQUIPMENT KILLER!

HMMWV NSN's Change

NSN's are wrong in TM 9-2320-280-20P for the lower control arm assemblies for the HMMWV's suspension system. Use NSN 2530-01-175-7212 to right-hand front/left-hand rear arms and NSN 2530-01-175-7213 to left-hand front/right-hand rear.

Guard M249 Handguard Pins

Remember this, armorers. When you order handguards, NSN 1005-01-128-5706, for the M249 machine gun, you won't get the clips and pins. So keep the retaining clips, NSN 5340-01-131-2056, and retaining pins, NSN 5315-01-131-2059, off the old handguard to use with the new one.

H-60 Switch Cover

Push-to-talk switch cover on your H-60 handset cracked or torn? Get a new one with NSN 5930-00-173-8358, using Appendix A of CTA 50-970 as authority.

M939 Dust Cover NSN

Looking for the rubber dust cover to keep dirt 'n' crud out of your M939-series 5-ton truck's spring brake chambers? Get 'em with NSN 2530-01-084-6975.

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

Distribution: To be distributed in accordance with DA Form 12-5-R, for TB 43-PS-Series.
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*Use valve caps on all
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—KEEP DIRT OUT
OF VALVE THAT
MIGHT KEEP THE
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