

Issue 396

PS

November  
1985

THE  
PREVENTIVE  
MAINTENANCE  
MONTHLY

SPOT PAINTING  
FIGHTS THE CANCER  
OF RUST AND  
CORROSION!

JUST  
MAKE SURE  
SAFETY  
IS PART OF  
YOUR  
PAINT JOB!

See page 28  
CARC Spot Painting

# Chaparral

# MPU

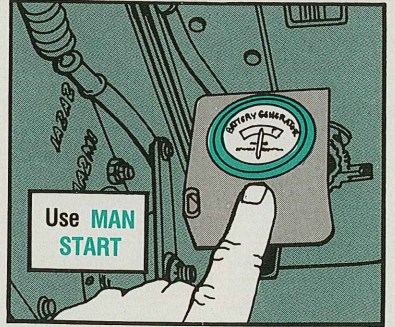
HERE HE COMES, LET'S GET ROLLIN'!



Protect the generator set control box of your Chaparral launch station by using the right starting procedure.

Trying to start the MPU with low launch station batteries can burn out components of the GSCB (generator set control box).

Before you crank up the MPU, look at the BATTERY GENERATOR voltage indicator on the inside of the rear electrical compartment door. If the needle is in the green or high in the yellow, use the MAN START button on



the main control panel to start the MPU. If the needle is in the red or low in the yellow, slave start the MPU.

## Dust Buster

Sand and dust can clog up your MPU's DC starter/generator quick-like, but you can head off the problem with a visit to the nearest latrine.

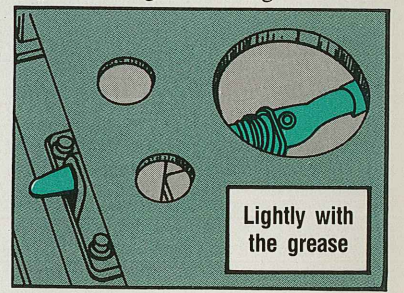
Latch on to several sheets of toilet paper... and fold them over the screen. The paper keeps out the sand and dust, but it doesn't restrict airflow.



Paper keeps sand/dust out!

## Latch on to This

When you lube hatch and compartment latches on your launch platform, stay with a light coat of grease.



Lightly with the grease

# Savers



OUR DUST PROBLEMS ARE OVER!

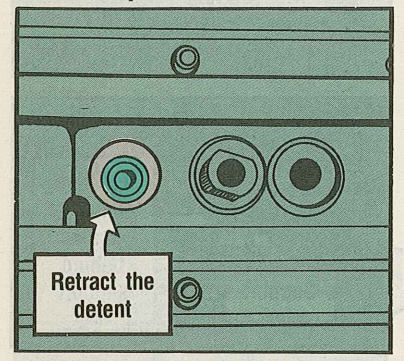


Heavy grease traps grit. The grit in turn wears out bushings and jams latches. Latches bite the dust, so to speak, when troops try to force them closed... or open.

## Remember This...

- Jack screws are now lubed at unit level.
- Retract the rail detent pin before you load missiles.

The pin must be retracted to let the missile slide home. Retract it before you load the missile by rotating the detent lever to RETRACT and then back to NORMAL position.



Retract the detent

Published by the Department of the Army for the information of all soldiers assigned to combat and combat support units, and all soldiers with organizational maintenance and supply duties. Within limits of availability, older issues may be obtained direct from Editor, PS Magazine, c/o US Army Materiel Readiness Support Activity, Lexington, KY 40511-5101.

ISSUE 396 NOVEMBER 1985

## FIREPOWER

Vulcan	2-4	New Heater TM	14
MILES/TOW	5	M1 Tank	14
IHAWK	6	M60-Series	
Stinger	6	Track Wrench	14
M16A1 Rifle	7	Periscope Bulbs	15
M2/M3 Bradley	8-13	M25/M25A1	
M548 Carrier	13	Masks	15

## GROUND MOBILITY

Tachometers	16	M919 Concrete-Mobile	19
Alternator		Winch Safety	20-21
Protection	17	Wheel Chocks	22
M915-Series	17	M916/M920	
CUCV Glow Plugs	18	Trucks	23
M939-Series	19	Briefs	24-25

## TROOP SUPPORT

Cat Graders	26-27	M8 Alarm	52-53
Ribbon Bridge		DS2 Chemicals	54-55
Bays	26-27	BA-3030	
D7E Dozer	27	Batteries	55
CARC Spot Painting	28-36	M51 CB Shelter	56-57
New Pubs	37	M258A1 PMCS	58
Generators	50	Chlorination Kit	58
Three-Prong Plug	50	Mask Chart	59
Grounding Info	51	Protective Masks	60-61
1 1/2-HP Mil Std Eng	51	Ice Chest Parts	62-63
		Aluminum Cot Parts	62-63
		Kevlar Helmet	64

## AIR MOBILITY

AH-1S Cobra	38,39	Maintenance Stand	41
Aviation Messages	39	AVUM No. 2	
UH-1	40	Tool Set	41
OH-58A/C	40	FM 1-506	41

## COMMUNICATIONS

AN/GRA-39	42-43	Pair-26 Cable	48-49
AN/UGC-74	44-45	PU-724	49
Radiation Labels	46-47		

MSG Half-Mast PS Magazine Lexington, KY 40511-5101

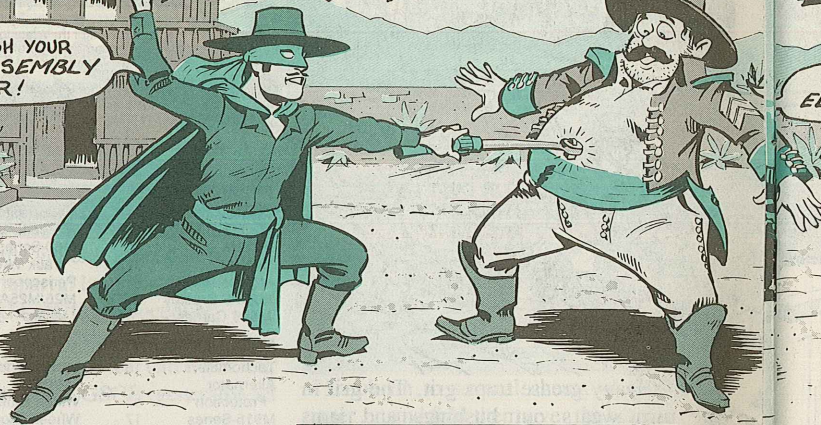
PS wants your ideas and contributions, and is glad to answer your questions. Name and address are kept in confidence. Just write to:

Use of funds for printing of this publication was approved by the Secretary of the Army on 19 February 1985 in accordance with the provisions of AR 310-1. DISTRIBUTION: In accordance with requirements submitted on DA Form 12-5-R. Private subscriptions: Order from US Govt Printing Office, Supt of Documents, Washington, DC 20402. PS Magazine 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.

# Vulcan Az and El Torque

DON'T PUSH YOUR DRIVE ASSEMBLY TOO FAR!



Over-torquing the adjusting bolt of the azimuth drive assembly on your M163A1 Vulcan will not cure gun mount travel.

It can lead to unnecessary wear and damage of the drive assembly.

The idea is, if you can't limit gun mount travel to four mils or less when you torque to a maximum 25 lb-in, replace the drive assembly. As Para 2-40c(8) of TM 9-2350-300-20-1 advises, try to correct excess travel in five lb-in adjustments... until you reach 25 lb-in.

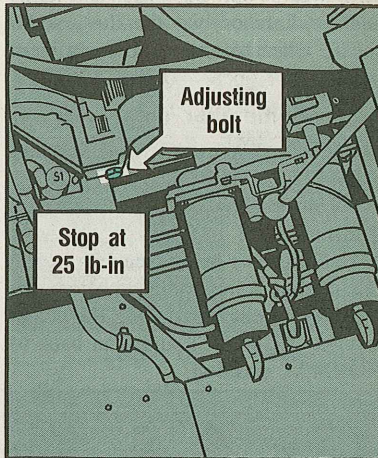
Among other things, over-torquing will limit your ability to boresight.

## El Drive Adjustment

The elevation drive assembly also must be limited to four mils or less travel. See Para 2-41c(13) and (14).

If travel is more than four mils, tighten the adjusting screw until you need force to move the equilibrator guides up or down.

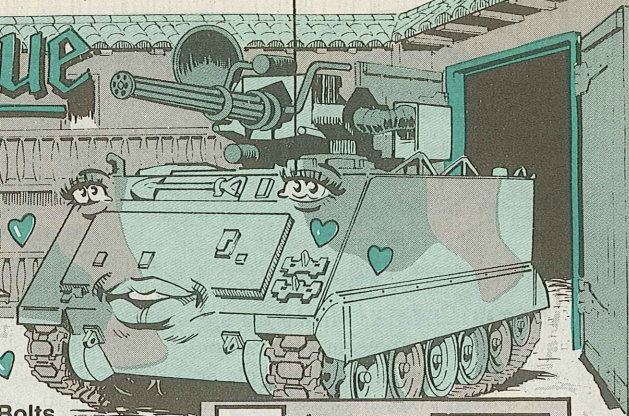
If there's still too much travel, replace the elevation drive assembly.



# El Torque

SI, EL TORQUE!

OH... EL TORQUE, MY HERO!

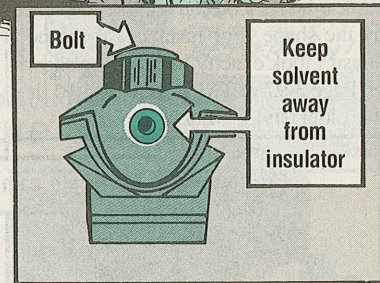


## Breach Bolts

Breach bolts have insulators around the firing pin that are sensitive to solvents. Fact is, solvents will eat at the insulators and make them useless.

That leads to an exposed firing pin and malfunctions.

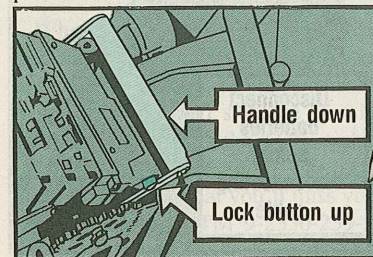
Use drycleaning solvent (SD-2) to clean the bolts... but keep it away from all nylon parts.



## Turret Tips

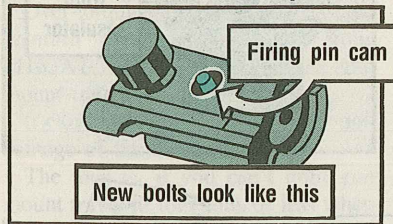
"DOWN" IS THE WORD IF YOU'RE GOING TO TURN THE TURRET OF YOUR M163A1 VULCAN!

The conveyor unit must be down and locked. If it's not, when you turn the turret, the conveyor will catch on benches or anything else in its path... and break. The conveyor handle lockbutton should be over the handle in locked position.





**NIX BOLT MIX:** Mixing old and new style breech bolts in your cannon will cause malfunctions. Use all old or all new bolts. You can tell the difference by the shape. For instance, if the bolt doesn't look exactly like the one shown on Page 3-97 of TM 9-2350-300-10, it's the older style. Match 'em up.

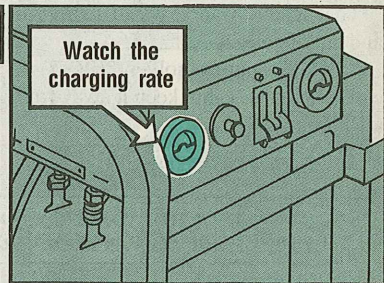


**OOPS!** A few seconds' pre-swimming, pre-operations check on your track can keep you and your crew from getting wet. Before you hit the road, eyeball the water seals around the ramp, personnel door and access covers.

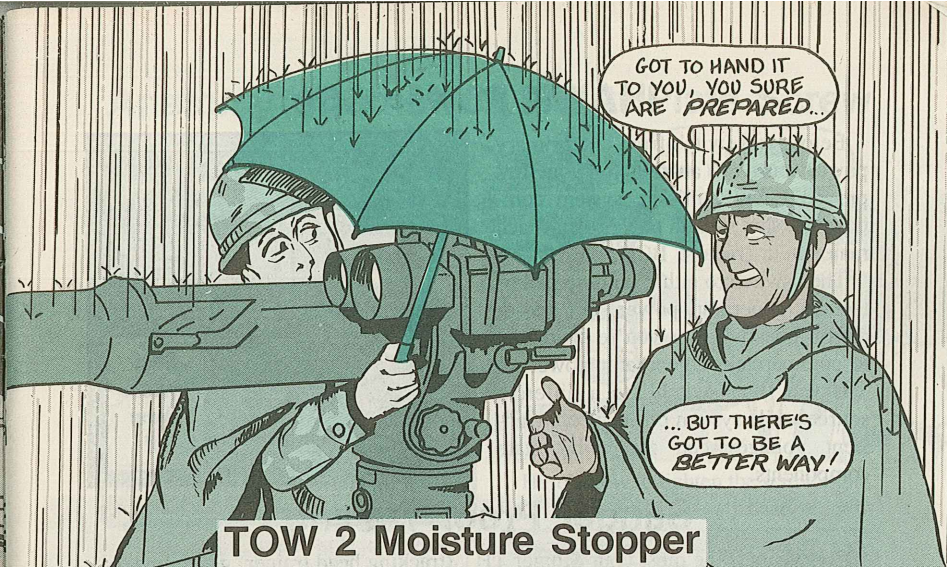
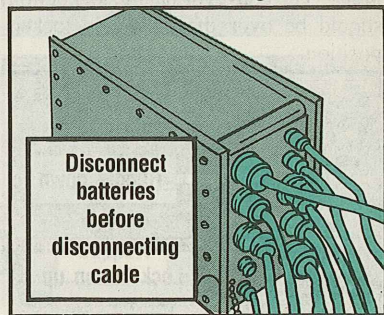


If they're damaged, get them fixed. That way you'll stay high and dry when you hit the pond or river. Other pre-swim checks are on Pages 2-59 thru 2-63 of TM 9-2350-300-10.

**RIGHT ON 28V:** Twenty-eight volts (28V) is the maximum charging rate when you charge your nickel cadmium batteries with your 1.5-KW generator sets, using the short charging cable. If you use the 50-foot cable, don't go over 30 volts. If you go for a higher charge... or faster charging... voltage over 28V will overcharge the batteries and even blow up the cells. Keep your eye on the meter needle. Don't let it go over 28V.



**FIRST THINGS FIRST:** Before you disconnect cables at the D-Box, disconnect system batteries. That'll save D-Box and connector damage.

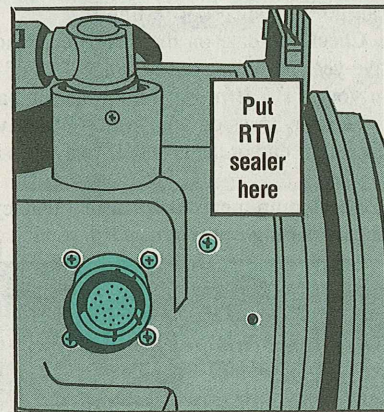


## TOW 2 Moisture Stopper

Got a problem with moisture seeping through the screw holes and housing of your TOW 2's traversing unit 2A2W1J2 connector seal?

Dab RTV (room temperature vulcanizing), NSN 8040-00-851-0211, on the four screws that hold the interface harness connector (2A2W1J2) through the case of the TU.

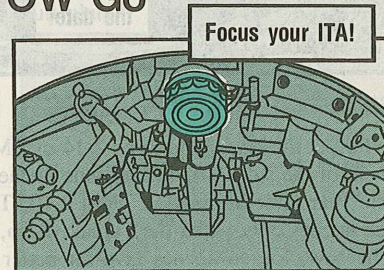
Also dab RTV around the edges of the connector gasket. A shot of RTV on the screw head just to the right of the connector will help, too. The screw holds the interface harness to the inside of the TU case.



## MILES/TOW Go

When you match up a MILES transmitter with a TOW missile system on an M901-series ITV, be sure to match up the M901's image transfer assembly (ITA) with the TOW sights.

If you forget to focus the ITA, chances are good that you'll miss your target. Chap 2 of TM 9-2350-259-10 gives you the word on focusing the ITA.

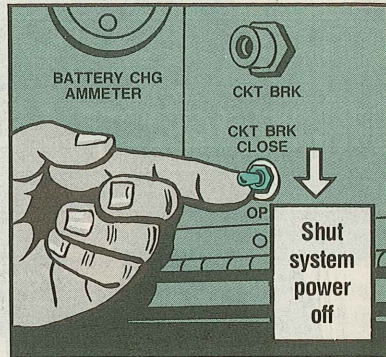


## IHAWK Power Off!

Before you switch from one primary power source to another for your Improved HAWK missile system components, shut system power off at each major item (radars, BCC, etc.).

Then switch to either commercial or tactical (generator) power. The power off bit goes whether you're switching to commercial or generator power.

If you "hot switch" to a different source while system power is on, transient voltages can zap solid state components.



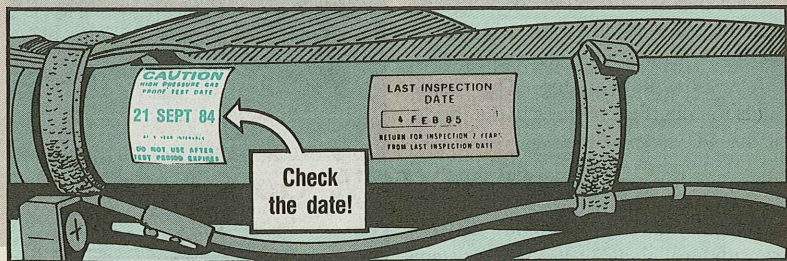
## Stinger Proof Testing

Five years is the most your Stinger THT (tracking head trainer) gas cylinders can go without proof testing.

Check the date on the THT decal monthly to be sure you don't exceed the five-year proof test period. Page 3-11 of TM 9-6920-429-12 has the details. Turn in your THT if proof testing date is past due.

Flexible hoses on your M80 GPU have proof test dates stamped into a metal tag on the end of the hoses. If five years have passed since the test dates, replace the hoses.

The requirements help insure that cylinders and hoses will not leak with dangerous high pressure.

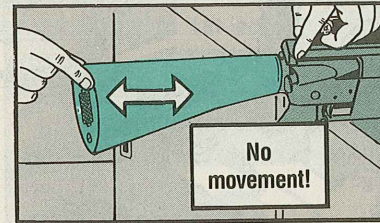


## HAWK Latch Replacement

Forget the NOTE on Page 2-14 of TM 9-1450-500-20 that requires replacement of the superstructure missile latches after each 200 hours of operation or one year after installation. Para 2-10, TB 43-0001-39-4 (Jan 83) says replace the latches only when they break. Also, replace them if you can see damage. The new, forged latches give far better service than the original cast ones.

## Anatomy of an M16A1 Butt Plate Screw

Once you tighten the butt cap screw, the butt stock on your M16A1 rifle is not supposed to have any movement front to rear (muzzle to butt direction).

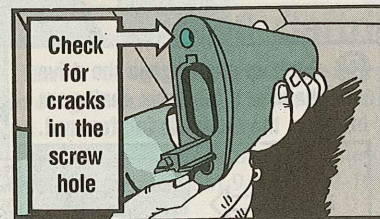


Some slight circular side to side or up and down movement of the stock is OK.

If there is forward to rear movement look for a damaged butt plate or loose lower extension.

If the lower receiver extension is loose, notify Direct Support.

If you can see cracks in the cap screw hole when the screw's installed, replace the butt plate.

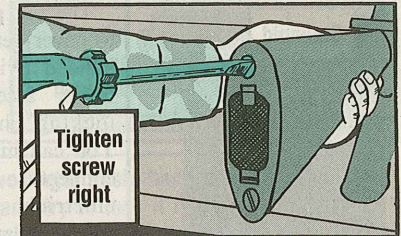


The cap screw is the key to a secure stock. If you overtighten it, you damage the liner of the plastic butt plate. The liner forces the forward part of the stock against the lower receiver and holds it in place.

If you overtighten the cap screw, it collapses the liner. You have no spring tension, and the shoulder stock moves.



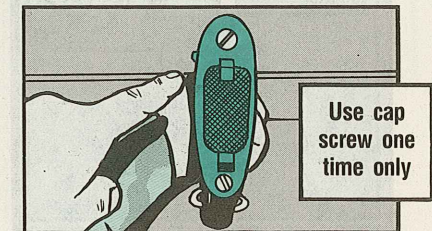
Here's how to tighten the screw right: Turn it until the tapered head seats in



the butt plate and you feel resistance. Then, make one more quarter turn. Stop.

If the screw loosens in use, replace it.

Cap screws should be used **one time only** and replaced with a new one, NSN 5305-00-463-3893. Screws have self-locking nylon inserts which lose their locking feature when removed from the butt plate.



Bradley FV's...

THE FEEDER'S NOT LINED UP!

# M242

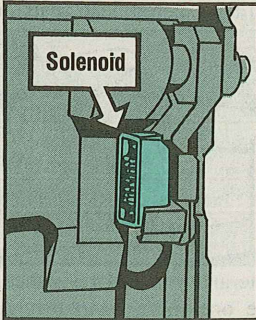
THAT'S NOT HOW YOU DO IT!



Lining up the feeder with the receiver takes precise, delicate handling to prevent damage to electrical parts.

The big point is to never get heavy handed with the feeder assembly's locking handle. You can mash the connector of the electrical sear's solenoid and the connection on the motor.

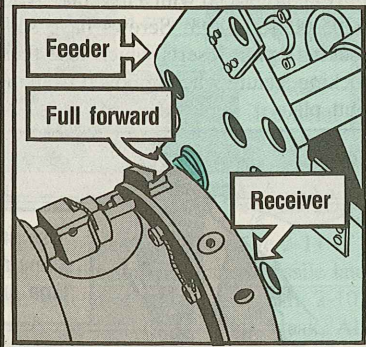
Solenoid



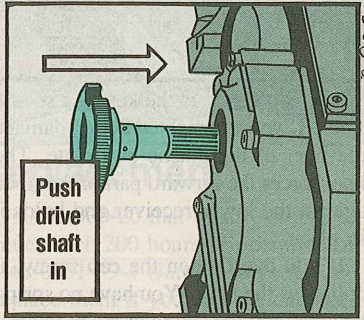
DO THIS...



**1** Make sure the feeder is full forward on the receiver.

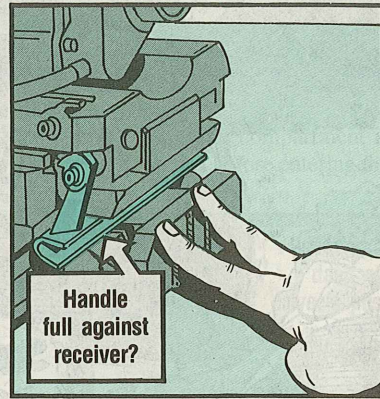
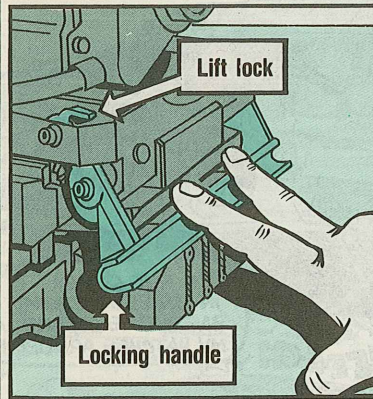


**2** Push up and engage the drive shaft handle. If the drive shaft goes in place, the feeder is full forward.



# Cannon Lineup

**3** Lift the lock of the feeder's locking handle out of the way. Push the locking handle down with two fingers. If the handle swings down fully against the receiver, you're home free. Lock it and go.



**4** If you get resistance during your two-finger push, back off. Reposition the feeder full forward on the receiver and try to lock it in again. No full-fisted force is necessary, so try it a couple of times by moving the feeder. If it won't lock, get your armorer to check it out.

## M240 Cartridge Jam Fix

Here's an alternate procedure for handling a stuck cartridge in your M240 and M240C machine guns.

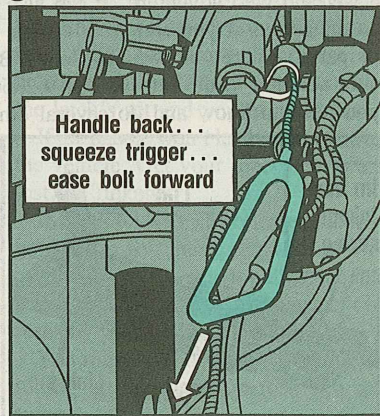
Instead of pulling the trigger as Step 3 on Page 2-18 of TM 9-1005-313-10 tells you, do this:

Pull and hold the charging handle to the rear. Squeeze the trigger and then e-a-s-e the bolt forward.

The replacement Step 3 makes it safer for you, your buddies and the gun. You can't fire a live round.

After you ease the bolt forward, remove the stuck casing or live round like Step 4, Page 2-19, tells you.

Handle back... squeeze trigger... ease bolt forward



M2/M3 Bradley...

WHY ARE YOU STOPPIN'? IT LOOKS SHALLOW!

# SAFE

# to GO in the Water?

I'M NOT GOING IN UNLESS MY SWIM BARRIER IS UP, AND MY HATCHES ARE OPEN!

SCREEECH

Swimming a 20-ton M2/M3 Bradley vehicle can be a wet and wild adventure. It can also be dangerous if you and your vehicle aren't completely prepared. There's no way to float a Bradley if you take shortcuts.

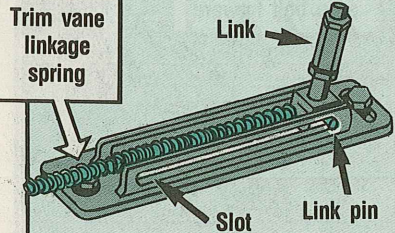
In addition to the info in TM 9-2350-252-10-1 (Aug 84) on swimming, you need to know and do several other safety critical things that are in C1 (6 Jun 85) to the -10-1 TM.

Read and heed so you can stay high and dry.

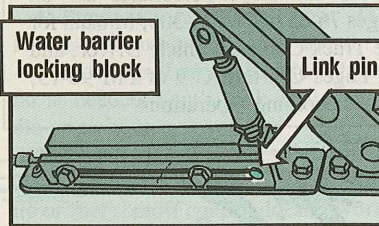
### Install Hardware Right!

- Eyeball the trim vane linkage springs or lock blocks. Some Bradleys have the lock blocks—others have the springs.

If you have springs, make sure turn-buckle link pins are seated all the way



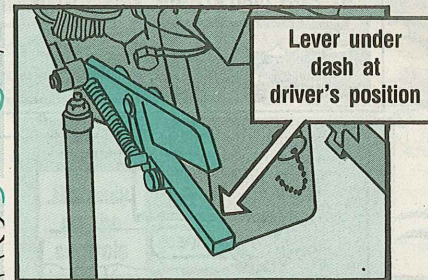
to the rear of the slot. If the pins don't go into place with hand force, get your



mechanic to adjust the linkage. Never swim a Bradley if the trim vane link pins won't seat completely.

Bradleys with lock blocks get the same eyeballing. Make sure the linkage pins seat to the rear completely. Lock blocks must be installed as shown in your -10 TM everytime you enter the water.

- Make sure the water barrier release handle in the driver's compartment is forward and latched before entering the water.



If the handle isn't latched, the barrier can collapse when water pushes against it.

Push the handle forward until you hear and feel it latch. Now, try to pull the handle backward without releasing the latch. If the handle doesn't move, the latch's set and you're good to go.

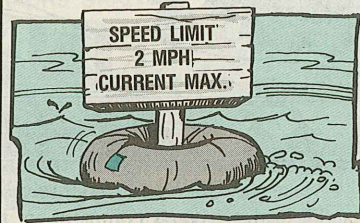
If the handle won't latch, **do not** swim the vehicle. Get your mechanic to adjust the linkage.

**IMPORTANT!** The release handle is hooked up to the barrier with a wire cable. Once the handle is pulled, the link pins have been moved and they can't be reset by pushing on the handle.

You must start over at square one in setting up the barrier before you can swim.

# GLUB

## Swimming Limits

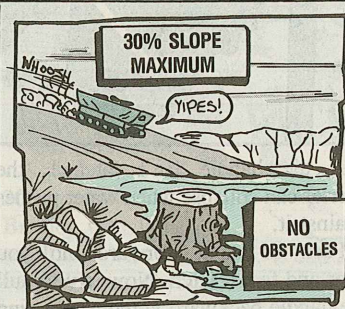


—For safety reasons, never try to swim across a river or stream flowing at more than 2 MPH.

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.



—Pay attention to choppy water. One-foot-high waves are the limit for the M2/M3. Higher waves may sink the vehicle.



—Look for a water entry and exit point that has a slope of 30 percent or less.

Do not use an entry or exit that has underwater obstacles or sharp drop-offs.

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



M2/M3 Bradley, MLRS...

## Yanked + Twisted = Broken

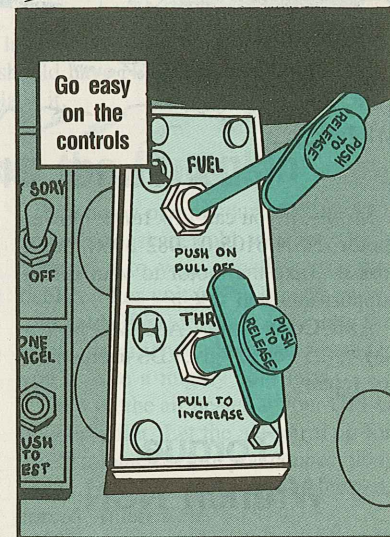


Throttle and fuel shutoff controls aren't made to be yanked out or twisted around and around.

The cables break, leaving you no hand throttle or fuel shutoff until your mech can fix them.

Use the controls the way they're made to be used:

- Press and hold the PUSH TO RELEASE button with your thumb.
- Push or pull on the handle only as far as needed. Don't yank on the handle or twist it.
- Release the button after the handle is in the position you want. If the throttle or fuel shutoff control doesn't work smoothly or right, don't play gorilla with it. Report it so your mech can make repairs.



## M548 Grease Gun

Use NSN 4930-01-022-4876 to get Item 18 of your M548's BII, the hand grease gun. The stock number given in TM 9-2350-247-10 is wrong.

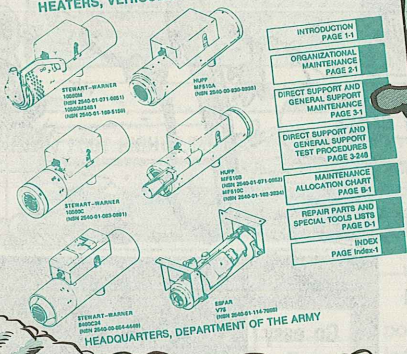


## Warm Up with New Heater TM

With winter just a gust of cold wind away, you want the best from your combat vehicle's personnel heater, right? Do yourself a good turn and get warm with TM 9-2540-205-24&P. The

TM has the troubleshooting, repair and parts info needed to keep your heaters operating.

**TM 9-2540-205-24&P**  
**TECHNICAL MANUAL**  
**ORGANIZATIONAL, DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE MANUAL (INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS)**  
**FOR HEATERS, VEHICULAR COMPARTMENT:**



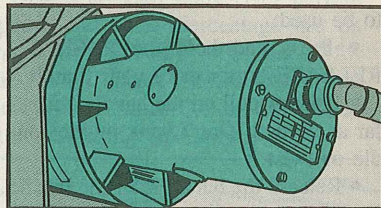
BEHIND ON YOUR READING? CATCH UP BEFORE THE COLD CATCHES UP WITH YOU!

M1 Tanks...

## DX Turret Blower Motor

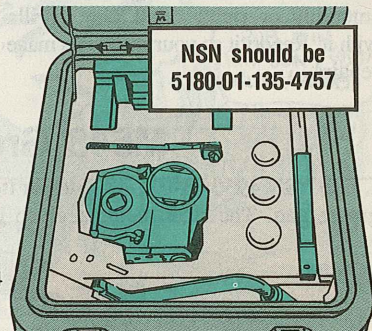
Mechs, if you can't fix turret blower motor, NSN 6105-01-082-8960, don't toss it. Take the motor to your direct support unit and DX it.

AMCCOM letter AMSMC-MAL-SMA, (25 Feb 85) gives DS instructions for repair.



## Torque Wrench NSN

The NSN for your M60-series tank track torque wrench shown in Table 1-1, Item 41.1, of TM 9-2350-253-20-1 is wrong. It should be NSN 5180-01-135-4757. That NSN's shown in Fig 213, Item 25, TM 9-2350-253-20P-1.



14

## Size Up Periscope Bulbs

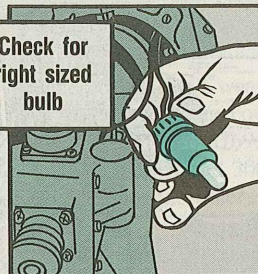
When that new lamp you put in your M32E1, M35E1 or M36E1 periscope's reticle turns out to be a "dim bulb," hold one before calling on maintenance.

Could be you used a look-alike—but higher-rated—lamp.

The reticle uses a No. 43, 2.5-volt lamp, NSN 1240-01-016-2271. Other bigger lamps, like the 28-volt No. 313, also fit the holder. The regulator circuit can't power the bigger lamp. No damage is done, tho, unless you leave the reticle on. Then the regulator tries to supply the demand put on it and can burn itself out.

If the new lamp doesn't light or burn bright, check the base. It should have No. 43 stamped on it. If it doesn't, replace it.

Check for right sized bulb



M25/M25A1 Tanker's Masks...

## Keep the Frost on the Pumpkin

When you put on your M25/M25A1 tanker's mask in cold weather, don't connect it to your vehicle's gas particulate filter unit (GPFU) right away.

A cold GPFU forces cold air into the mask. Even if you don't get frostbite, you'll have a mighty cold face.

Turn on the air heater at your GPFU hookup point. Let the air warm up for 15-20 minutes before you connect your mask. That way you'll have preheated, forced, filtered air.

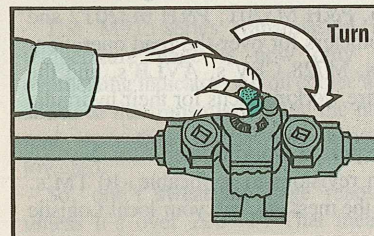
If your vehicle doesn't have the M3 heater, use the mask only until the interior of the vehicle is fairly warm.

Until you hook up to the GPFU, it'll be a little tougher to breathe, but you won't have frost on your face.

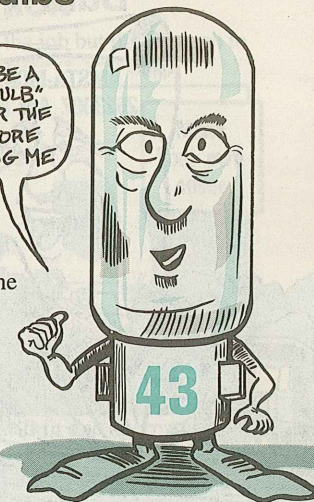
Warm up air before connecting the mask to the particulate filter unit



Turn



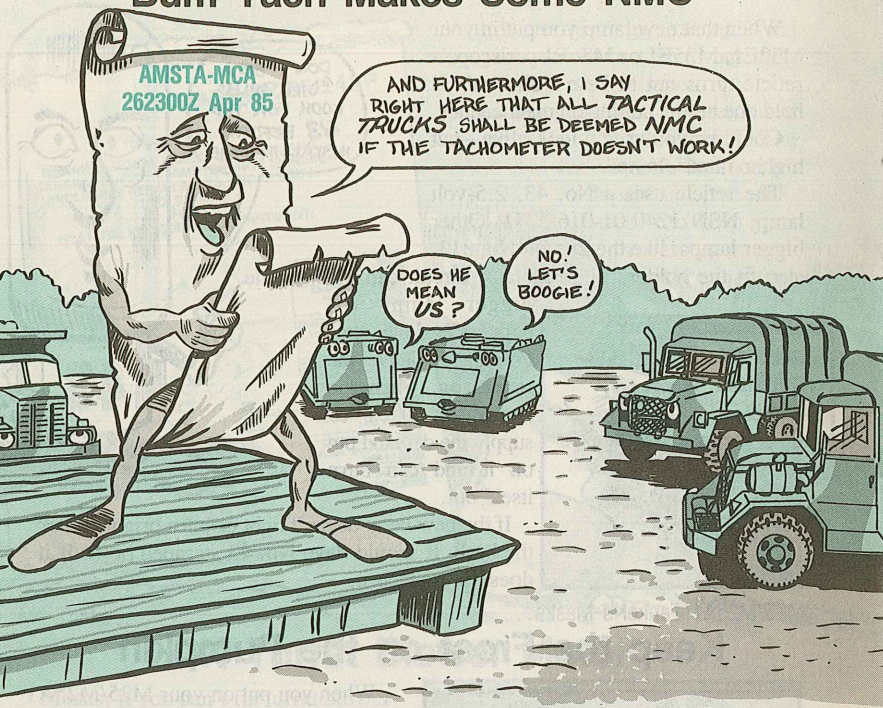
DON'T BE A "DIM BULB." LOOK FOR THE 43 BEFORE INSTALLING ME



NOV 85

15

## Bum Tach Makes Some NMC



Does a busted tachometer make your equipment NMC? Some TM's say yes—some say no—and some say nothing at all.

TACOM Msg AMSTA-MCA 262300Z Apr 85 gives you the straight skinny, like so:

Any tactical truck equipped with a tachometer is NMC if the tach doesn't work. Some combat and construction equipment require a working tach, but most do not.

For instance, the M919 concrete mobile mixer needs a working tachometer for mixing concrete. The Grove TMS300-5, P&H M320T, P&H M320T2 and P&H MT250 cranes all need working tachometers for over-the-road operation.

All M88A1 and M578 recovery vehicles, M728 CEV's, AVLB's, and the XM501E3 Hawk Loader Transporters require working tachs for their hydraulic systems.

Material handling equipment does not require a working tach.

This new information will be included in revisions to applicable -10 TM's. In the meantime, if you don't have a copy of the message, call your local Logistic Assistance Office.



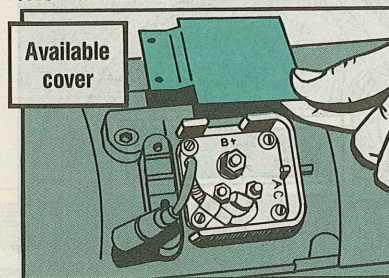
## Alternator Protection

enough to do the job but thin enough to form easily.

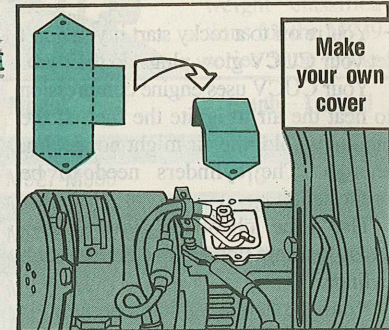
Your truck's alternator is too young for "job burnout." That's what can happen, tho, if it's missing the protective cover over the cable connections.

A wrench or other tool dropped in this area can cause a short circuit... and a dead alternator.

The covers don't wear out—they're lost. There's only one cover available—NSN 2920-01-078-5769. It fits Leece-Neville 3002AD and 3002AE alternators—but not the others.

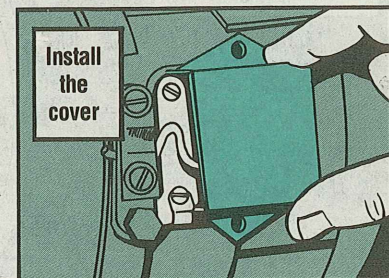


If the cover's gone and there's no replacement, have your mechanic make one with a piece of sheet metal heavy



A cover that'll fit one alternator may not fit other models. Use the dimensions from your alternator when you have the cover made.

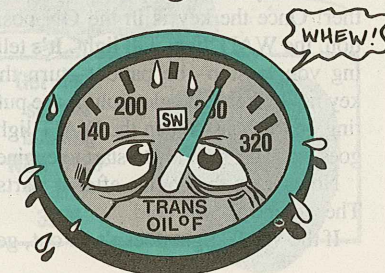
Make the cover high enough to leave plenty of clearance above the connections.



## M915-Series Overheating?

The M915-series transmission oil temperature gage is now only an overheating indicator. An oil cooler was added to the transmission and the normal operating range was greatly lowered.

So, don't sweat the gage reading unless it's over 220° F. That means you're overheating.



## Feelin' Warm Now

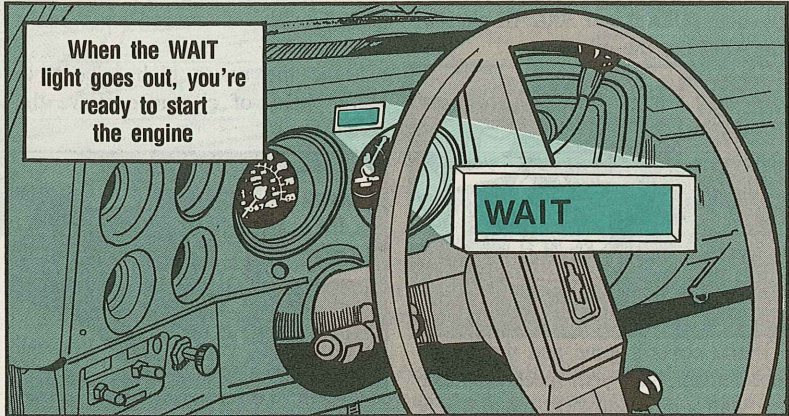
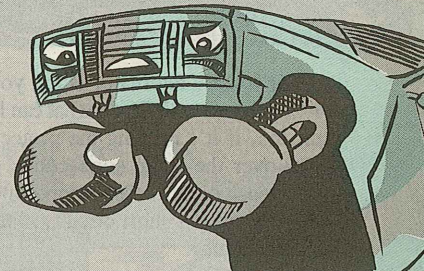
You're off to a rocky start if you don't let your CUCV glow plugs do their job.

Your CUCV uses engine compression to heat the air to ignite the fuel. If the engine is cold, the air might not get hot enough. The cylinders need to be preheated.

That's the job of the glow plugs—small heating elements seated in each cylinder.

Your job as the vehicle operator, is to watch the WAIT light on your dashboard. The WAIT light is above and a little to the right of the speedometer.

WAIT A LITTLE BIT AND GIVE ME A FIGHTING CHANCE!



The CUCV warm-up starts when you turn the key to the ON position—no further! Once the key is in the ON position, the WAIT light will light. It's telling you to stop—be patient—turn the key no further. The glow plugs are putting on the heat. When the WAIT light goes out, you're ready to start to engine.

Never race the engine after it starts. The engine is still cold.

If the WAIT light doesn't go out, get

your mechanic on the job. He'll check the glow plugs, relay and the control unit to find the problem.

If you're restarting a warm engine, the WAIT light may not come on or may just flicker during starting. Don't worry unless it comes on and stays on.

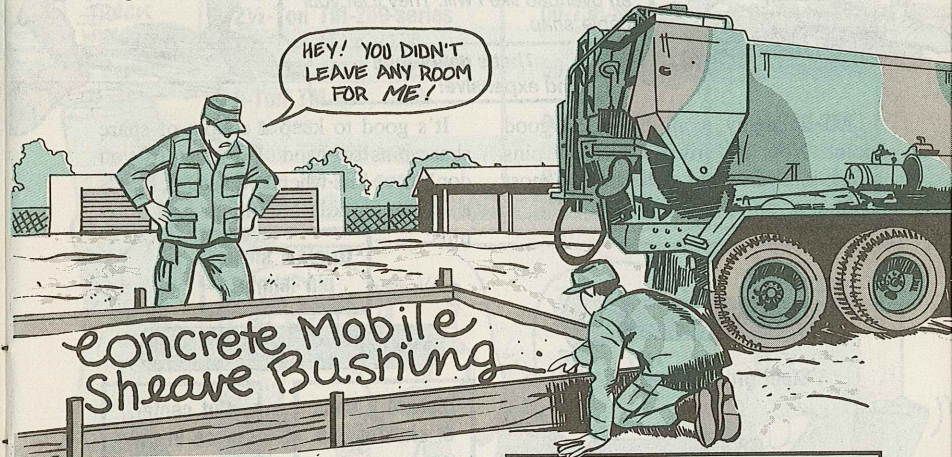
Poor starting procedures will put your CUCV on the ropes. Watch the WAIT light and you'll be ready to answer the bell for the next round of driving.

## M939-Series Bridge Weights

Here are the bridge weight classifications for the M939-series 5-ton trucks:

Model	Empty	Loaded
M923-M926	9	14
M927-M930	10	16
M931 (With winch)	10	18
M931 (W/O winch)	9	17
M932 (With winch)	10	18
M932 (W/O winch)	9	17
M934	11	14
M935	12	15
M936	18	24

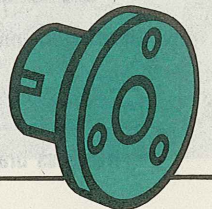
The vehicle weight classification sign, NSN 9905-00-565-6267, is listed on Page 43 of TB 43-0209. Appendix A of CTA 50-970 is your authority for ordering.

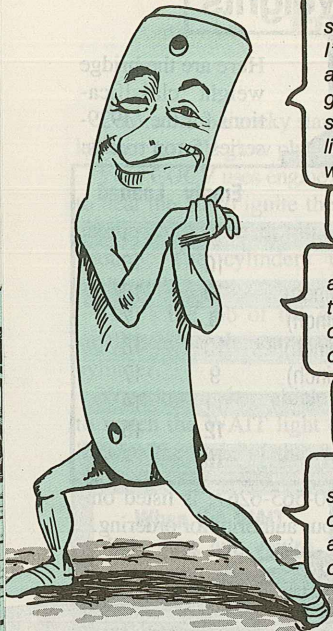


## Concrete Mobile Sheave Bushing

Use NSN 3120-01-203-3276 to get the main sheave bushing in the drive system on your M919 Concrete-Mobile. The number shown for Item 15 of Fig 38 in TM 5-3895-372-20P gets the upper sheave bushing instead of the main bushing.

Get main sheave bushing  
NSN 3120-01-203-3276





Listen up out there! I'm a pin—a shear pin, that is. I do a tough job, but I'm really just a softy. I'm designed and destined to give my all for a greater good. I'm unselfish and self-sacrificing. I'll break so that others, like your winch cable, can remain whole.

**But I don't do anyone any good if you don't use me!**

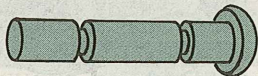
You see, the weakest link in a chain always breaks first. I'm made to be the weakest link in your winching operation. To prevent more costly and dangerous breakage, I break.

**But you've got to use me. I can't do my job lying in your glove compartment or on a supply shelf!**

Oh, I know it's easy to slip in a substitute for me, like a bolt, a rivet, or a nail. But they won't snap under an overload like I will. They'll let your cable snap.

**That's dangerous and expensive!**

All right guy, you've made a good point. Now it's my turn. Shear pins come in a variety of styles but the most common are:



Steel grooved headed pin

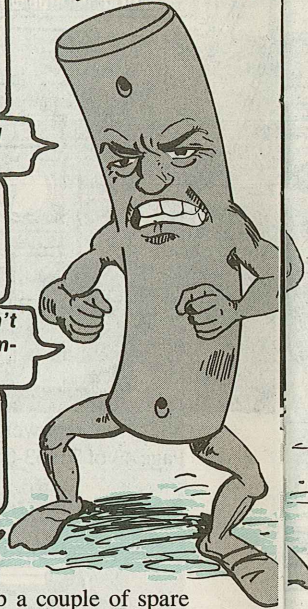


Headless aluminum pin



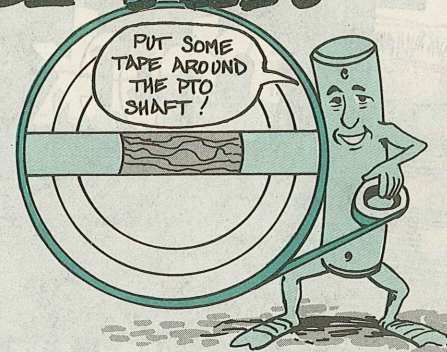
Headless brass pin

# Behold the Shear Pin!



Wrap tape around the PTO shaft and over the pin to keep it in place. This will also help keep the dirt out.

Don't try this with the steel pin. If it's sheared, it's finished! If you're losing a lot of shear pins, make sure you're putting in the cotter pins that hold the shear pins in place.



HERE'RE THE MOST COMMON SHEAR PINS USED IN TRUCK WINCHES...



Truck	Front Winch Shear Pin NSN 5315-	Rear Winch Shear Pin NSN 5315-
1¼-Ton TM-242-series	00-080-9217	
2½-Ton TM-209-series	00-736-8685	01-044-8362
2½-Ton Mdls V17A, V18A, MTQ & M764	00-736-8685	00-252-5669
5-Ton TM-211, -260-series	00-209-7979	00-282-2583
5-Ton TM-230-series	00-880-5861	
5-Ton TM-273-series	01-109-6846	00-282-2583
10-Ton TM-233-series	01-031-6212	

ANY LAST WORDS MR. S. PIN?

THERE'S NO SUBSTITUTE FOR A SHEAR PIN! NEVER USE A NAIL OR A BOLT!



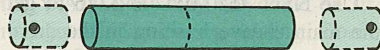
It's good to keep a couple of spare shear pins on hand. However, if you don't have one when you need it, here's a fix for broken aluminum and brass pins:

Original shear pin length



Discard 2 ends of sheared pin

Cut center piece in half



Add wood dowel



# Chock 'em Up!



I'M ONLY USEFUL IF I'M IN YOUR WAY!

It can sure mess up the day if your parked truck or trailer takes off downhill and hits a tree—or worse.

The brakes will usually hold, but why take chances? Carry chocks, NSN 2540-01-052-6234, on your 2 1/2- or 5-ton truck. These chocks will be showing up in the AAL of the -10 TM for your truck. Your CO can authorize them.

It doesn't cost much to carry chocks on all trucks and trailers—your shop can make them from scrap lumber.

A chock on hand will do as a pattern for size and locating bolt holes. Here's the hardware needed:

Item	NSN
Nuts	5310-00-880-7744
Washers	5310-00-809-3078
Bolts	5306-00-358-6518

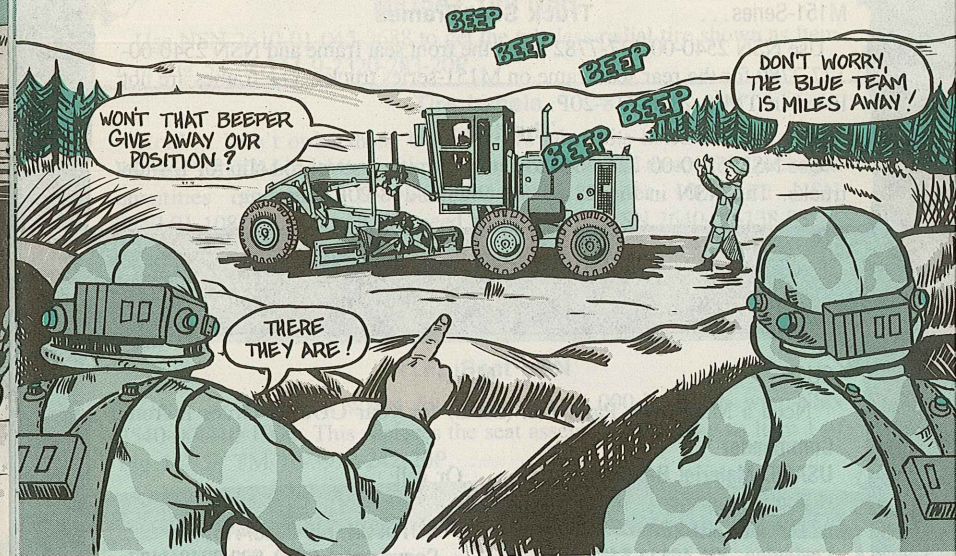
Whether you're chocking a truck, two-wheeled trailer or a semitrailer, always use two chocks.

On level ground when you're chocking a trailer that's not hooked to a truck, set chocks in front of and behind wheels on each side.

If your truck or trailer is parked on a slope, place both chocks on the downhill side.

Before you get on the move, stow the chocks in their brackets, tool stowage compartments or any other handy place.

## Silence Your Backup Alarm



A blaring backup alarm on your construction equipment or truck can give away your position in a tactical situation.

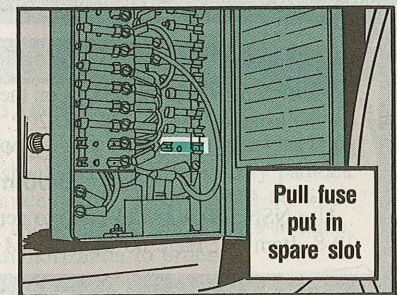
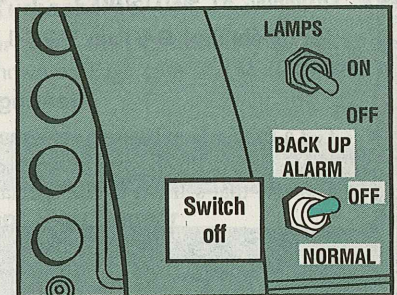
On M916-M920 trucks, use the switch on the dash to shut off your alarm.

On Caterpillar 130G-series graders, turning the light switch to a B.O. position or OFF kills the alarm.

Some commercial construction equipment has a fuse for the alarm system. Pull the fuse and store it in an unused spare slot.

If your vehicle doesn't have either a switch or a separate fuse, check the wires at the alarm for a connector. Pull the connector apart carefully so you can put it back together later.

When you're operating your gear with the backup alarm shut off, use a ground guide and lots of extra caution when backing.



M151-Series...

### Truck Seat Frames

Use NSN 2540-00-177-7782 to get the front seat frame and NSN 2540-00-177-7780 for the rear seat frame on M151-series trucks. The frames are not listed in TM 9-2320-218-20P.

### Throttle Clip

Use NSN 5340-00-776-6646 to get the throttle control rod clip for 1/4-ton trucks. The NSN in Fig 23 of TM 9-2320-218-20P is wrong.

CUCV...

### MPL

Need a Mandatory Parts List (MPL) for your CUCV? Order it from:

#### Commander

USAMC Materiel Readiness

Or call:

#### Support Activity

ATTN: AMXMD-SE

Lexington, KY 40511-5101

AUTOVON 745-3343/4137

Commercial (606) 293-3343/4137

Para 8-6b(2) of DA Pam 710-2-1 tells you what info to include in your request.

### Bearing Wrench

Get a front wheel bearing nut wrench for your 1985 model M1009's with FSCM 25341, PN J-6893-D. 1984 M1009's use wrench, NSN 5120-01-170-6664, that's listed in the special tools list in TM 9-2320-289-20P.

M809-Series...

### Headlight Flap

Those rubber mounting flaps on the top of the headlight bracket assemblies are not listed in TM 9-2320-260-20P. You can make them from rubber sheet, NSN 9320-00-965-0852. This NSN brings a 2- x 3-ft sheet.

### U-Joint Screw

Use NSN 5305-00-724-5885 to get the universal joint yoke setscrew, Fig 20-8, Item 12, Page 60 of C2, TM 9-2320-260-20P.

### M915A1 Tire NSN

Use NSN 2610-01-045-3688 to get the tubeless radial tire shown as Item 1 in Fig 58 of TM 9-2320-283-20P.

### Tire Labels

Hold it! Don't order those US Govt tire label kits listed on Page 26 of PS 386. TACOM has dropped the NSN's for the kits and three of the packaged quantities of labels. If you need labels, order 100 with NSN 2640-01-108-7256. You'll also need buffing fluid, NSN 2640-00-138-8324, and vulcanizing fluid, NSN 2640-00-242-3467.

### RTFL Seat NSN

Get a new operator's seat for your Athey 6,000-lb RTFL with NSN 2540-00-410-1906. This replaces the seat assembly called out as Item 1 of Fig 113 in TM 10-3930-242-20P.

### M10A Forklift Turbocharger

Get the turbocharger assembly for your M10A forklift with NSN 2990-01-097-7656. PN 684238C91, shown on Page 15-4 of TM 10-3930-643-14&P, is no longer good.

### 5-CFM Compressor Sign Danger

The noise warning plate on your 5-CFM air compressor, NSN 4310-01-080-5754, may have sharp corners that could cut you. Look at the plate on your compressor. If it has sharp corners, round them off with a file.

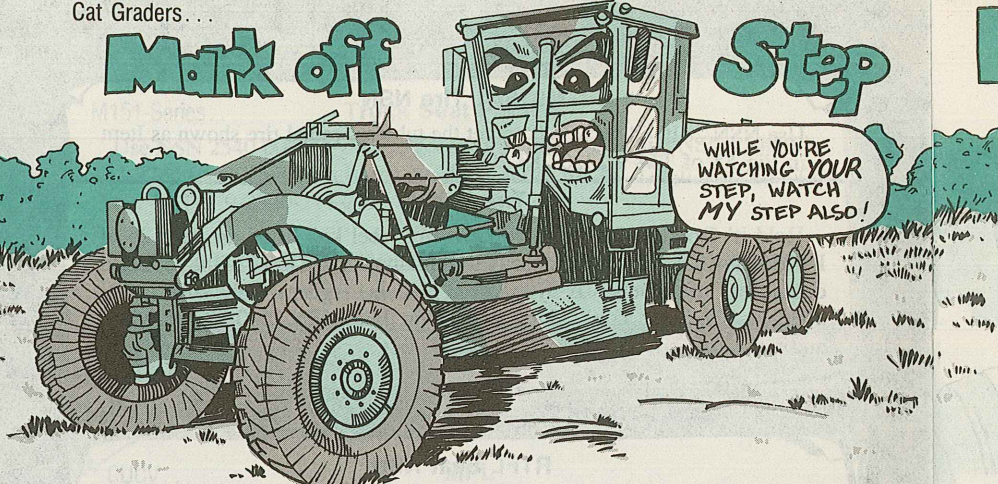
### Fuel Pod Lock

Locking the lid on a 600-gal fuel pod—like it says in Para 3-13b(4) of AR 190-51—takes a lock with a long shackle. Get a low-security padlock with a 2 1/2-in shackle clearance with NSN 5340-00-682-1645. Order NSN 5340-01-004-5180 for a long-shackle lock with a 9-in chain. Appendix A of CTA 50-970 is your authorization to order.

# Mark off

# Step

# Damage



The blade on your 130G-series road grader hits the cab steps when you raise and turn the blade for travel.

You can't see the end of the blade under the cab, so you can't tell when it's about to hit the step.

But you can get your mech to paint a warning to remind you to spare the steps.

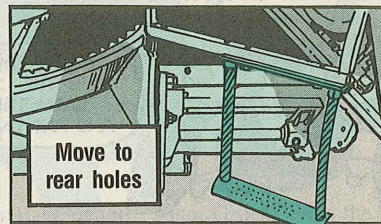
- Rotate the blade so it's ready for travel.
- Have a buddy signal you when the blade is a few inches away from the step.
- Paint a black stripe on the circle reverse and another on the frame just above it. Paint the stripe on the frame



back about 8 inches. This is the "danger zone." Make sure it's in an area you can see from the cab.



Do the same thing on the other side. Your mech can also move the lower wire rope steps to the rearmost set of mounting holes. That'll keep it further from the blade.



When you're turning the blade, keep it low in the danger area. Raise the blade only after it's in the clear. No more banged steps!

# PUT A FREEZE ON FREEZE

The quickest way to foul up a ribbon bridge bay is to let water freeze in the pontons.

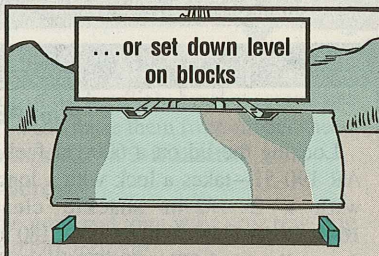
If you park it with one end higher than the other, water will be trapped in some pontons. When it freezes, the ice can damage the ponton... even split a seam!

Drain holes are in the ponton ends.

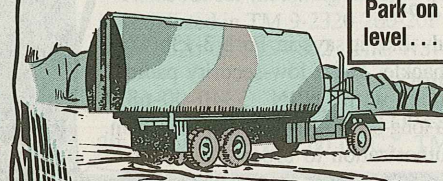
So, you have to keep the bay level for all four pontons to drain.

If you leave the bay on the truck, park it so the bay is level.

If you lower the bay to the ground,



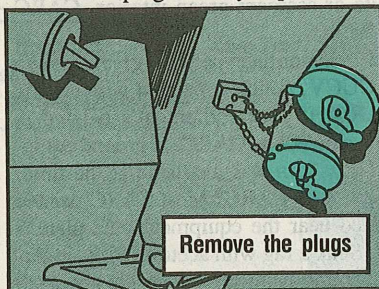
pick a level spot, or lay timbers under the bay to get it level.



Park on level...

# DAMAGE

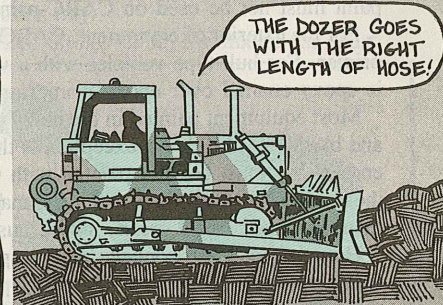
Remove the plugs when you park the



bay, even if the temperature is above freezing. Then you won't forget to take 'em out during a cold snap.

Put the plugs in before you launch the bay.

# Radiator Hose NSN



The lower radiator hose, NSN 4720-00-883-0475, for your D7E dozer is no longer available. You now have to order bulk hose, NSN 4720-00-231-6285, and cut it to fit. Unit of issue is by the foot, so order the length you need.

## The Fine Art of Touch-up



Spot painting of CARC-painted equipment at Org Maint level is in! That's the word in DA Msg DALO-SMP 041531Z Jan 85. Further policy guidance is in DA Msg DALO-SMZ 172022Z Sep 85.

Here're the details you need to tide you over until the full picture shows up in TM 43-0139, Painting Instructions for Field Use.

Before you start making like Picasso, here're two things to keep in mind:

- No person is to use more than a quart of CARC a day.
- Only one person paints on an item at a time.

CARC-painted equipment must be spot painted only with CARC. You can use CARC to spot paint equipment painted by the old (alkyd) method, but alkyd paint must not be used on CARC-painted equipment.

For the exterior of equipment, CARC is polyurethane paint (PUP) over epoxy primer. For hull-type vehicles with a white or seafoam green interior, CARC is epoxy enamel over epoxy primer.

Most equipment painted in the new 3-color camouflage pattern (green, brown and black) is CARC. An exception is the CUCV, which is painted with acrylic enamel but must be spot painted with CARC. If your equipment's painted in the old 4-color camouflage pattern, it may or may not be CARC. If ground equipment is painted solid green, it's because no pattern was available at the time.

How can you tell if your equipment's painted with CARC? Most CARC-painted equipment is identified by "CARC" printed near the equipment data plate.

But if there's any question, test the paint. Soak a rag with acetone (like fingernail polish remover). Rub the rag briskly on the painted surface for about 20 seconds. If little or no paint rubs off, it's CARC.

**A black and white photostat of this material is available from PS Magazine for reproduction by your local printing facility**

## Supplies & Equipment

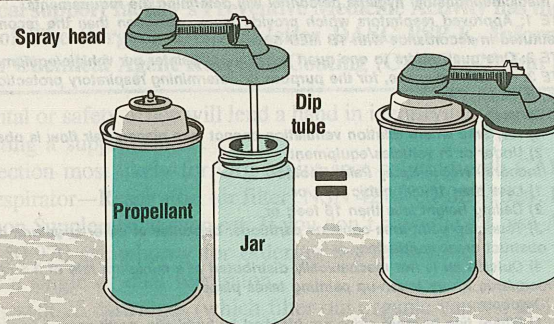
Here's what you need for spot painting with CARC, depending on what kind of equipment you've got and depending on whether you paint with brush, roller or spray:

- Epoxy primer, NSN 8010-01-193-0516, 2-part 1-quart kit for the first coating on bare metal (either ferrous or non-ferrous), both exterior and interior
- Epoxy enamel, NSN 8010-01-053-2647, 2-part 2-quart kit for the white interior top coat
- Epoxy enamel, NSN 8010-01-211-9645, 1-quart kit for the seafoam green interior top coat
- Polyurethane paint (PUP), 2-part 1-quart kit for the exterior top coat—
  - Green 383, NSN 8010-01-160-6741
  - Brown 383, NSN 8010-01-160-6744
  - Black, NSN 8010-01-141-2419

(Those are PUP's for the 3-color camouflage pattern. Also, Green 383 is the PUP for CARC-painted ground equipment without a camouflage pattern.)

- Aircraft gray, NSN 8010-01-144-9882
- Aircraft green, NSN 8010-01-141-2420
- Thinner (also for cleaning)—
- Type I for polyurethane paint
  - One gallon, NSN 8010-00-181-8080
  - Five gallons, NSN 8010-00-181-8079
- Type II for epoxy enamel and primer
  - One gallon, NSN 8010-01-200-2637
  - Five gallons, NSN 8010-01-212-1704
- Paint brush • Paint roller • Roller tray
- Disposable 5-pint plastic pail, NSN 7240-00-889-3785, for mixing one quart

**Spray kit,  
self-pressurized  
NSN 4940-00-803-6444**



This kit contains ten 13-oz cans of propellant, two nylon spray heads, four 8-oz jars with caps, 20 dip tubes, and instructions. Personnel protection required when using this kit is the same as when using any other paint spraying equipment.



## For Personal Protection

- Clothes providing full skin coverage
- Rubber gloves
- Face shield, splash goggles or safety glasses with side shields
- Respiratory protection, depending on these conditions spelled out in Office of the Surgeon General letter DASG-PSP, Occupational Health Requirements in Support of Painting in the Army, 22 Feb 85:

### Respiratory Protection For All Paint Systems (Alkyd, CARC, Oil Resin, etc.)

1. **Spray Painting Indoors.** An approved airline respirator is the standard respirator to be worn when paint spraying indoors; however, alternatives are permitted when spray operations are not conducted in a confined space and statistically valid sampling results document the personal exposure levels.

a. Large vehicular or walk-in booths.

1) If the diisocyanate concentration is below the standard, a full face piece chemical cartridge respirator with a paint prefilter is adequate.

2) If the solvent concentration is less than 10 times the standard, a paint-spray respirator is adequate.

3) If the pigment containing lead or chromate concentration is less than 10 times the standard, an organic vapor respirator with a HEPA (high efficiency particulate air) filter is required.

b. Spray cabinet or conveyor-type booths.

1) If the contaminant (solvent, pigment or diisocyanate) concentration is below the standard, no respiratory protection is required.

2) If the diisocyanate concentration exceeds the standard, an airline respirator is adequate.

3) If the solvent concentration exceeds the standard, but is less than 10 times the standard, a paint-spray respirator is required.

4) If the pigment containing lead or chromate concentration exceeds the standard, but is less than 10 times the standard, an organic vapor respirator with the HEPA filter is required.

2. **Spray Painting Outdoors.**

a. If in a confined space, an airline respirator is required.

b. If not in a confined space, a paint-spray respirator is required.

3. **Brush or roller paint indoors or outdoors.**

a. Using 1 quart or less not in a confined space, no respiratory protection is required.

b. Using over 1 quart, not in a confined space, an organic vapor respirator.

c. In a confined space, an approved airline respirator is required.

d. Application of a water base paint does not normally require respiratory protection; however, local preventive medicine/industrial hygiene personnel will determine the requirements.

**NOTE 1:** Approved respirators which provide more protection than the recommended device may be substituted in accordance with TB MED 502.

**NOTE 2:** One quart refers to one quart per day per painter per vehicle/equipment at any one time.

**NOTE 3:** A confined space, for the purpose of determining respiratory protection required during operations, is defined as:

A. General

1) Any area where dilution ventilation cannot take place or air flow is obstructed; or

2) Under or in vehicles/equipment

B. Indoors - Not in Spray Paint Booths

1) Less than 10,000 cubic feet; or

2) Ceiling height less than 16 feet; or

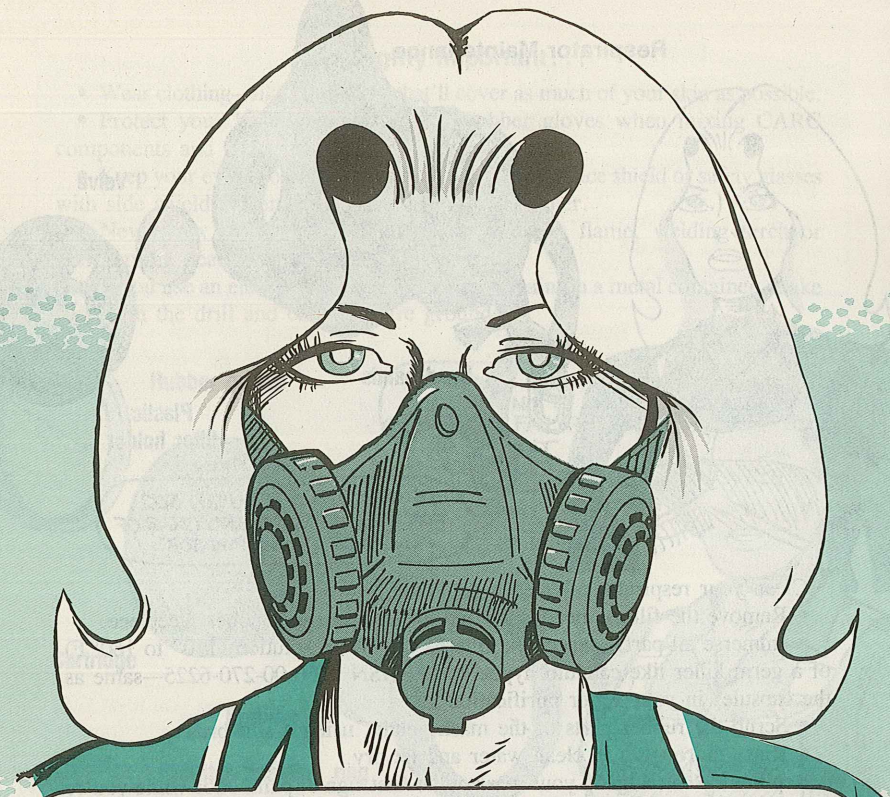
3) Touch-up paint area contains partitions, balconies or other structural barriers to the extent that they obstruct cross ventilation; or

4) Outside air is not mechanically distributed at a minimum rate of 3.5 cfm per square foot of the bay/room/area where touch-up painting takes place.

C. Outdoors

1) Where two or more sides are blocked by buildings, partitions, or barriers; or

2) Under a canopy or roof less than 16 feet in height.



Your local medical support facility's Preventive Medicine Activity has more details in Office of The Surgeon General letter DASG-PSP-E, Information/Discussion on Chemical Agent Resistant Coating (CARC), 20 Jun 85.

Your environmental or safety office will lend a hand in identifying the needed respirator and locating a supply source.

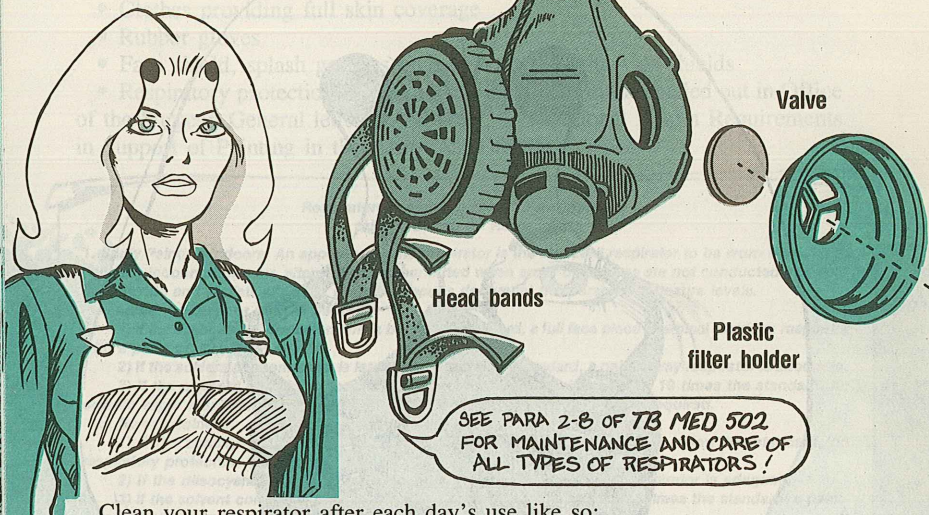
Respiratory protection most likely for Org Maint spot painting with CARC is the paint-spray respirator—Respirator, air filter, NSN 4240-00-022-2524. It's in the No. 1 Common Supplemental shop set. If you don't have the set, use Appendix A of CTA 50-970 as authority for ordering the respirator.

You'll get either a single or dual respirator.

The single comes with 25 cartridges (which filter out organic vapors) and 50 prefilters (which protect you from spray paint mists or drops). The dual version comes with 50 cartridges and 100 prefilters.

You can't get cartridges or prefilters separately. When you've used up those that come with the kit, request a new respirator.

## Respirator Maintenance



Clean your respirator after each day's use like so:

- Remove the filters, headbands and valves from the rubber facepiece.
- Immerse all parts, except the filters, in a warm solution (140° to 160° F) of a germ killer like calcium hypochlorite, NSN 6850-00-270-6225—same as the capsules in your water purification kit.
- Scrub the rubber parts of the mask gently, using a soft brush.
- Rinse thoroughly in clean water and let dry.

Replace the cartridge in your mask at the first sign of paint odor while you're wearing it. Unscrew the cartridge to replace it. Be sure the rubber gasket is evenly seated in the filter holder.

Replace the prefilter when breathing becomes difficult. Remove the prefilter retaining ring from the front of the cartridge. Put the prefilter in the retainer and replace the entire assembly on the cartridge front.

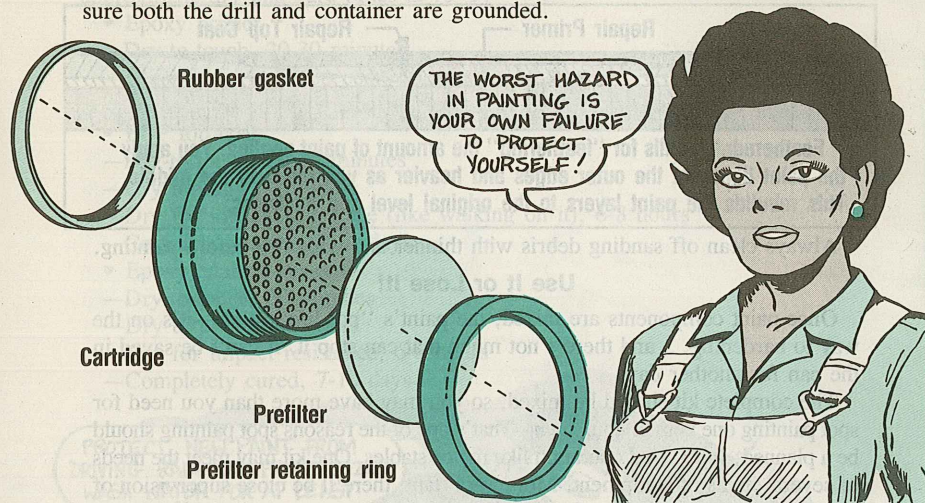
Before storing your respirator, make sure it's clean. Store it in a cool, dry area free from airborne contamination. Be sure to check your respirator again before using.

### Important:

- Use your respirator only in well-ventilated areas where plenty of oxygen is available.
- Don't use it around toxic contaminants.
- Leave the area immediately if breathing becomes difficult, you get dizzy, or you taste or smell the paint.
- Never alter or modify your respirator.
- Make sure your mask is properly fitted.

## Also Mighty Important . . .

- Wear clothing—like coveralls—that'll cover as much of your skin as possible.
- Protect your hands and wrists with rubber gloves when mixing CARC components and when using thinner.
- Keep your eyes protected with splash goggles or a face shield or safety glasses with side shields when mixing paint or using thinner.
- Never mix paint or use thinner near an open flame, welding torch or fuel-burning heater.
- If you use an electric drill accessory to mix paint in a metal container, make sure both the drill and container are grounded.



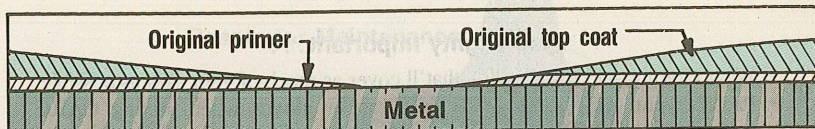
## Warm and CLEAN!

Ordinary paint is easier to work with than CARC. There's more to go wrong with CARC. Learning this the hard way can result in a mess—and a waste of time and material.

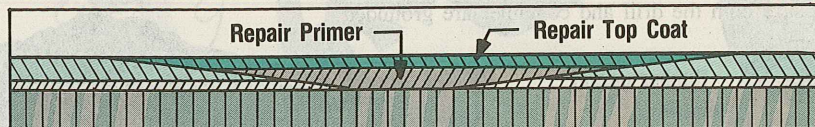
Even the temperature of the surface to be painted is critical—no less than 60° F and no more than 100° F during painting and for at least 4 hours afterward. (Six hours is better.) The PUP top coat will cure at temperatures below 60° F, but more slowly as the temperature drops.

The surface must be completely dry and clean—no sanding debris, carbon deposits, grease, wax, salt, oil, diesel fuel, hydraulic/transmission fluid. . . or even fingerprints. With your face and hands protected, use a clean, thinner-soaked rag for cleaning. Then wipe with a clean, dry rag to make sure there's no moisture left.

Scratches or other light damage to the top coat requires scuff sanding. This is only light sanding to roughen the surface so paint will stick.



A special sanding operation—featheredging—is required when damage or corrosion reaches to the metal. Sand down to bare metal at the damage point. Make sure all corrosion is removed. Then sand the surrounding paint, tapering up to the top coat surface. Paint the bare metal with epoxy primer. Finish with the top coat.



Featheredging calls for “feathering” the amount of paint applied. You apply the paint lightly at the outer edges and heavier as you move to the middle. This rebuilds the paint layers to the original level and thickness.

Always clean off sanding debris with thinner and wipe dry before painting.

#### Use It or Lose It!

Once paint components are mixed, the paint’s “pot life” starts—it’s on the way to hardening... and there’s not much that can stop it. It can’t be saved in the can for another day.

The complete kit should be mixed, so you may have more than you need for spot painting one item of equipment. That’s one of the reasons spot painting should be a planned, supervised operation like motor stables. One kit may meet the needs of several items of equipment. More important, there’ll be close supervision of cleaning, painting... and safety.

In planning, figure on 90 days to get CARC through normal supply channels.

Supervision’s also needed to make sure paint’s used before its pot life runs out—at room temperature, about 8 hours for PUP and about 15 hours for epoxy. Higher temperature shortens pot life. At 100° F, PUP pot life is about 2 hours; epoxy is about 6 hours.

Shelf life (unopened containers) of PUP and epoxy is 1 year. They should be stored at temperatures between 32° F and 120° F.

Any PUP or epoxy mixture left over after painting must be discarded as hazardous waste. This goes, too, for PUP Component “B” if it goes bad in the can. It should be clear to pale yellow. If it thickens and appears crystalline in consistency, seal it back up and get rid of it—as hazardous waste.

If your PUP component “B” container is swollen don’t open it! Turn it in as hazardous waste.

Get information on disposal of hazardous waste material from your installation’s Environmental Coordinator, Directorate for Facilities Engineers

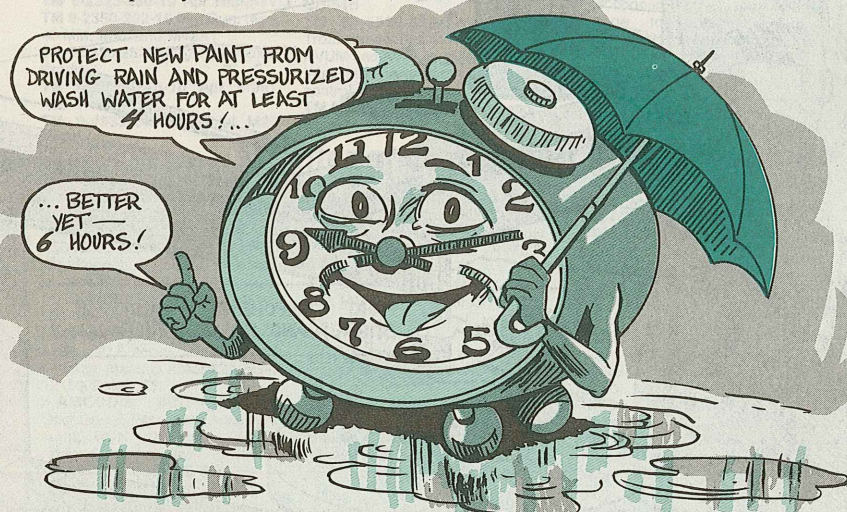
or Directorate for Engineering and Housing. Such waste disposal is covered by AR 420-47, Solid and Hazardous Waste Management.

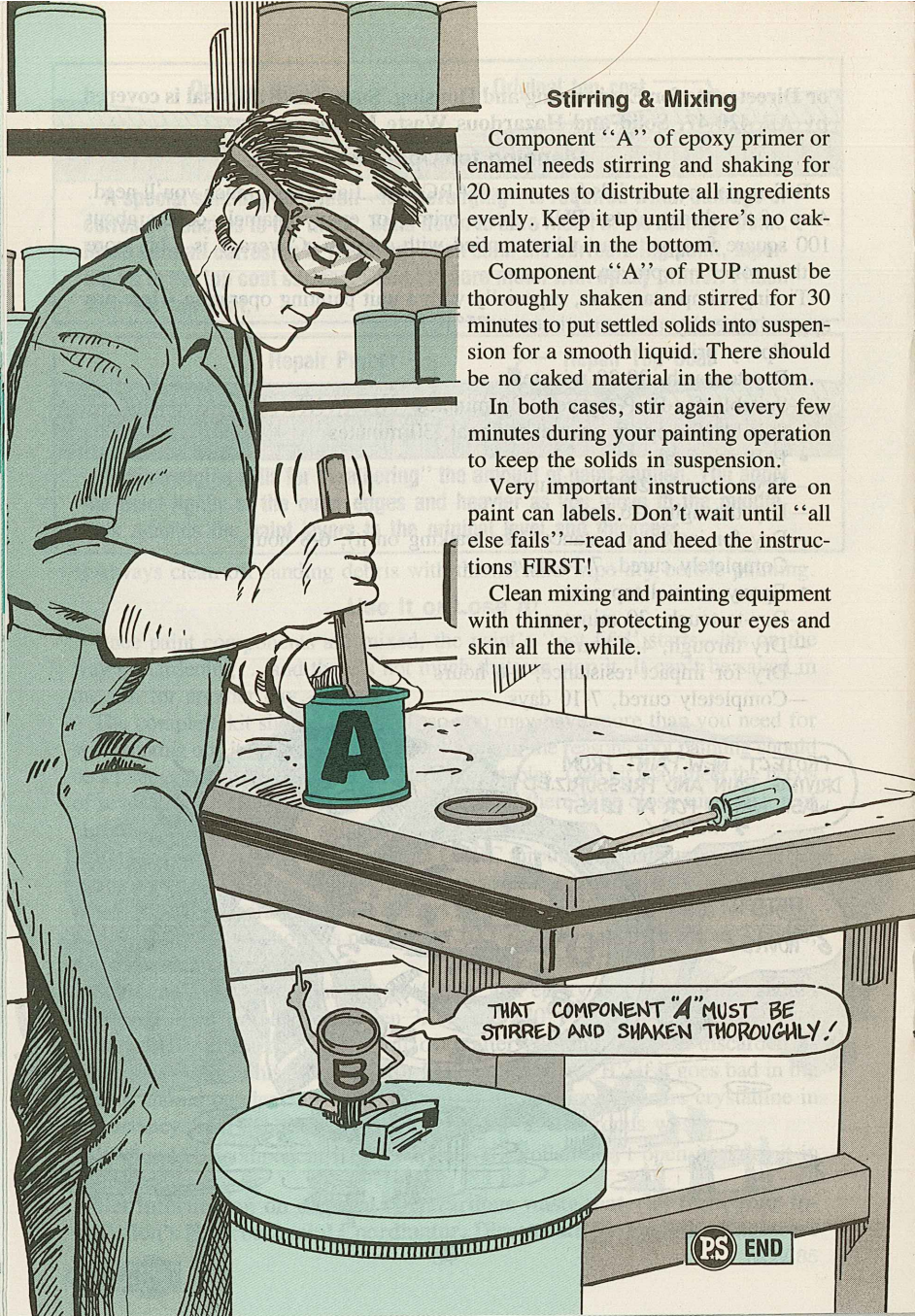
#### Planning for Operation

Before you pop the lids from your CARC cans, figure how much you’ll need. Any of the three paints—PUP, epoxy primer or epoxy enamel—covers about 100 square feet per quart when applied with a brush. Coverage is a bit more with a roller or sprayer.

Timing’s important, too, especially with a unit painting operation. Here are approximate dry and cure times at 75° F:

- Epoxy primer
  - Dry-to-touch, 20-30 minutes
  - Suitable for PUP top coat, 30 minutes
  - Suitable for epoxy enamel top coat, 30 minutes
- PUP top coat
  - Dry-to-touch, 20-30 minutes
  - Dry through, 4-6 hours
  - Dry for impact resistance (like walking on it), 6-8 hours
  - Completely cured, 7-14 days
- Epoxy enamel top coat
  - Dry-to-touch, 30 minutes
  - Dry through, 4-6 hours
  - Dry for impact resistance, 6-8 hours
  - Completely cured, 7-10 days





### Stirring & Mixing

Component "A" of epoxy primer or enamel needs stirring and shaking for 20 minutes to distribute all ingredients evenly. Keep it up until there's no caked material in the bottom.

Component "A" of PUP must be thoroughly shaken and stirred for 30 minutes to put settled solids into suspension for a smooth liquid. There should be no caked material in the bottom.

In both cases, stir again every few minutes during your painting operation to keep the solids in suspension.

Very important instructions are on paint can labels. Don't wait until "all else fails"—read and heed the instructions **FIRST!**

Clean mixing and painting equipment with thinner, protecting your eyes and skin all the while.

THAT COMPONENT "A" MUST BE STIRRED AND SHAKEN THOROUGHLY!



# PUBS

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 5-3805-251-20P May Case MW24B scoop loader
- TM 5-4320-300-24P Jul Centrifugal pump
- TM 5-6115-604-12 Jun 750-KW generator set MEP208A
- TM 5-6130-301-13&P Jul Battery charging distribution panel
- TM 9-1005-201-23&P Apr M249 machine gun
- TM 9-1005-224-10 Jul M60 machine gun
- TM 9-1090-208-23 Aug Armament subsystem helicopter, M139 and M140
- TM 9-1425-473-24P Mar TOW
- TM 9-1430-1532-24P Jul Hawk
- TM 9-2320-260-10 Jun M809-series 5-ton trucks
- TM 9-2320-280-10 Apr HMMWV
- TM 9-2350-202-10 Mar Gun, twin, 40-MM, M42 and M42A1
- TM 9-2350-252-20-2-2 Feb M2/M3 Bradley
- TM 9-2350-266-10 Apr M981 FISTV
- TM 9-4933-249-24&P Jul M26

- boresight w/case
- TM 9-4935-646-24P Oct 84 MLRS
- TM 9-4935-677-12 Apr 84 Dragon
- TM 10-3950-263-14&P-3 Jul 140-ton mobile, container handling crane; FMC link belt model HC-238
- TM 11-5805-387-10-1 Apr 84 Modem, MD-522
- TM 11-5805-387-10-2 Apr 84 Modem, MD-522A
- TM 11-5821-320-12 Mar C-10414 control unit
- TM 11-5895-895-12 May AN/TSQ-84 control center
- TM 11-5895-1195-10 Jul 84 AN/URC-100, AN/URC-101 and AN/URC-104 radio sets
- TM 11-6625-2971-24P Apr MK-1978A maintenance kit
- TM 11-7440-283-20P May AN/GYK-29(V) BCS
- TM 55-1520-210-10 Jul UH-1H/V
- TM 55-1520-217-CL-1 Jun CH-54A
- TM 55-1520-217-CL-2 Jun CH-54B
- TM 55-1520-217-MTF-2 Jun CH-54B
- TM 55-1520-236-T-1 Jun 83 Troubleshooting instructions for AVUM and AVIM level AH-1S(MC) integrated armament and fire control system
- TM 55-1520-237-S Jul Preparation

- for shipment for UH-60A
- TB 55-1510-200-20-6 Jul U-8, U-21, RU-21-series
- TB 55-1510-209-20-23 Jun Inspection and marking of the elevator trim tab system, U-21/RU-21
- TB 55-1520-217-20-28 Jun CH-54B
- TB 55-1520-237-20-63 May UH-60 flight controls
- LO 9-2320-280-12 Apr HMMWV
- LO 9-2320-285-12 Jul M878A1 yard tractor
- SC 8340-90-CL-P01-HR Jul Tentage repair kit
- SC 2090-97-CL-E04 Jan Aluminum craft repair kit
- SC 5180-91-CL-R32 Jul FM-145 photographic repair tool kit
- FM 24-1 Sep Combat communications

### SMART Message

**SMART Msg #62**—Provides info concerning an impending change to present run-up requirements for Army aircraft in a flyable storage status, DALO-PLR 131335Z Aug 85.

### Maintenance Advisories

- AMCCOM MA 85-34**—Test set, flamethrower-riot control agent (RCA) disperser, NSN 1040-00-050-7952, potential problem with Goodman ball and AC ball production bleeder valve, NSN 4820-00-339-1598, AMSMC-MAR-C 061730Z Aug 85.
- AMCCOM MA 85-35**—Protective mask, M17 series, donning procedures update, AMSMC-MAR-C 121500Z Aug 85.
- AMCCOM SOU**—Advisory, Operational, PM147 low level light sight, NSN 1005-00-071-8030, remove sight from service, AMSMC-MA 031436Z Sep 85.
- TACOM SOU**—Advisory, M1

- Abrams Tank, Hull, M1 and M11P, electrical cable bulkhead pass through plates are being improperly installed/sealed, AMSTA-MCD 151500Z Aug 85.
- TACOM SOU**—One-time inspection, M113 Armored Personnel Carrier (APC) family of vehicles (including M901A/A1 and M981 FISTV), locking pin and bracket assembly missing, AMSTA-MCB 081900Z Aug 85.
- TACOM SOU**—Advisory, Operational, Ambulance modular, non-tactical, 4 x 4 and 4 x 2, procured on contract no. DAAE07-83-C-H272, potential safety problem

- exists with wiring/dome lights, AMSTA-MVA 062300Z Aug 85.
- TROSCOM SOU-MES-08-85**—Advisory, Technical/Maintenance, safety problem with container can, catalyst, methyl ethyl ketone peroxide (MEKP), AMSTR-MES 211730Z Aug 85.
- TROSCOM SOU-MES-09-85**—Advisory, Operational, Transport of 600-gal fuel tank on M105-series 1 1/2 ton cargo trailer prohibited, AMSTR-MES 061700Z Sep 85.
- If you need a maintenance advisory, contact your direct support unit or your Logistic Assistance Office (LAO).

AH-1 Series...

THIS NEW TOOL WORKS GREAT!

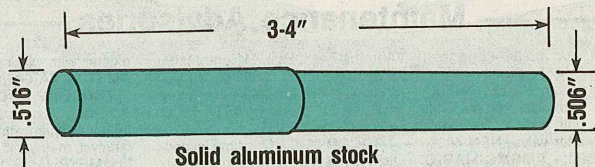
NOW WE WON'T HAVE TO GO BEGGING TO SUPPORT FOR A MICROMETER!

### Tool for an Inside Job

Dear Editor,

We don't have a micrometer to measure bolt-hole wear in the tailboom attachment fittings of our Cobras. Micrometers aren't included in our AVUM tool kits, so we always had to scrounge one from support—when we could.

Then we got AVIM to make us a simple GO—NO GO tool to measure bolt holes. It's made from solid 3/4-inch diameter aluminum stock 3 to 4 inches long and coated with alodine chemical film, NSN 8030-00-057-2354, to make it corrosion resistant.



Solid aluminum stock

One end of the stock is machined to 0.506-in diameter—the same diameter of the bolts. The other end is machined to 0.516-inch—the maximum diameter permitted for the bolt holes.

To use the gage, we put the smaller end into the bolt hole. If it's not sloppy, the hole's OK. If it is sloppy, we turn the tool around and try the big end. If it fits, too, the structural panels have to be repaired or replaced.

SSG Jerry Traino  
Ft Bragg, NC

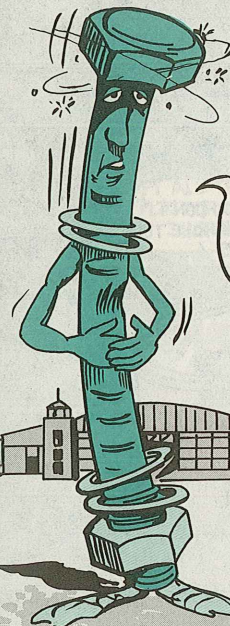
AH-1S (Prod)...

## Cobra "Creeper" Culprit

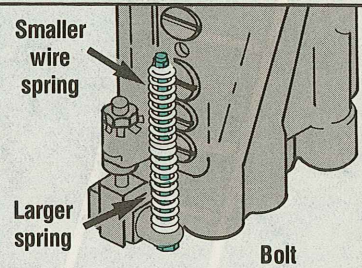
If your Cobra's collective control stick is a "creeper," it may be caused by a worn bolt on your bird's collective servo cylinder.

Take out the bolt, Item 22 in Fig 7-16 of TM 55-1520-236-23-2. If you find grooves worn into the bolt shank, replace the bolt with NSN 5306-00-638-5777.

When you reassemble the bolt and springs, make sure the smaller wire spring goes on top of the larger spring, like it says in Para 7-65.



Replace worn bolt with  
NSN 5306-00-638-5777



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

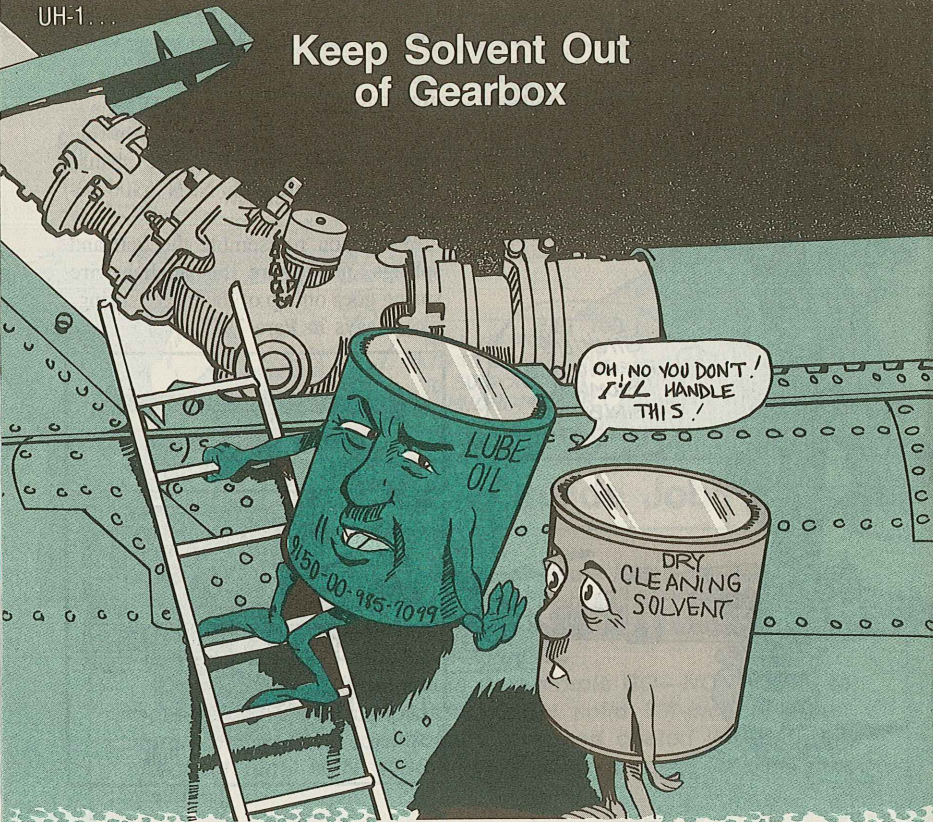
## Aviation Messages

If your unit has not received a message you have an interest in, check with your next higher headquarters.  
U-8-85-04, SOF, Technical, U-8 One-time and recurring inspection of engine mounting structure, 172300Z Jul 85.  
U-8-85-05 and U-21-85-02, SOF, Technical, One-time and recurring inspection of U-8, U-21 and RU-21 series nose landing gear struts, 122230Z Jul 85.  
OH-58-85-02, SOF, Maintenance Mandatory, One-time inspection for

right hand cyclic control stick cracks, 232200Z Jul 85.  
AH-64-85-03, SOF, Technical, AH-64A, One-time inspection of drive shaft couplings for proper assembly, 182200Z Jul 85.  
UH-60A-85-21, SOF, Maintenance Mandatory, Main rotor spindle and tie rod retirement life change, 081600Z Jul 85.  
UH-60A-85-22, SOF, Operational, UH-60A/EH-60A flight restrictions with engine sequence valve assemblies/pressurizing and

overspeed unit assemblies, 112110Z Jul 85.  
UH-60A-85-23, SOF, Technical, One-time inspection, tail rotor drive shaft bearings, 252320 Jul 85.  
AH-1-85-04, SOF, Maintenance Mandatory, One-time and recurring inspection of all K747 main rotor blade erosion guards installed on some AH-1S (all Models), 222359Z Jul 85.  
MIM-OH-58-MEM-85-01, OH-58A/C Main rotor hub pillow block mounting hardware, 031430Z Jul 85.

## Keep Solvent Out of Gearbox



Keep P-D-680 drycleaning solvent out of your 42° gearbox, Huey mechs. It's OK to clean components of the gearbox with P-D-680 when it's disassembled. You can make sure all of the solvent is removed with filtered, compressed air, like it says in Para 6-185 of TM 55-1520-210-23.

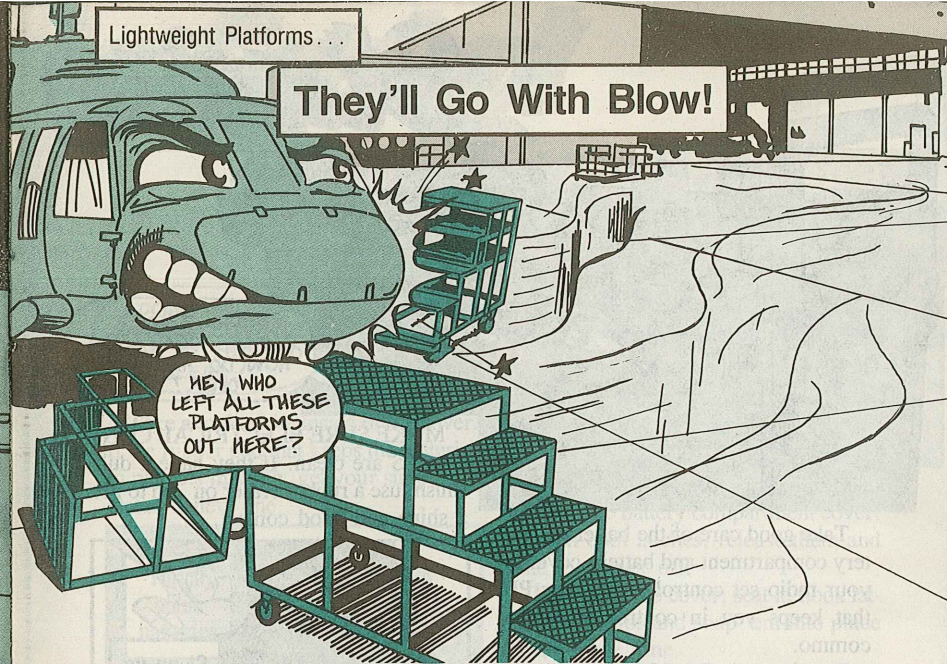
Never use solvent to flush the gearbox. There's no way to get rid of all of it. Any solvent left in the gearbox contaminates the oil.

Instead of P-D-680, use lubricating oil, NSN 9150-00-985-7099, to flush the gearbox.

## Hydraulic Filter O-Rings

OH-58A/C hydraulic fluid filters, NSN 1650-00-179-4027, use two different O-rings, depending on the manufacturer of the filter housing. If the part number on the housing is 206-076-035-1, use O-ring NSN 5330-00-702-5220. If your filter housing has PN 206-076-035-101, use O-ring NSN 5330-00-559-6182.

## They'll Go With Blow!



Low-level platforms weigh only about 115 pounds. They can be pushed around easily by moderately high winds or rotor wash. Anything that gets in their way—personnel, aircraft or ground support equipment—suffers the consequences.

So, when you bird mechs haul one of the lightweights out to the flight line, put it back in the hangar when you're finished.

## New Tools for AVUM No. 2

The following tools have been added to the AVUM No. 2 tool set:

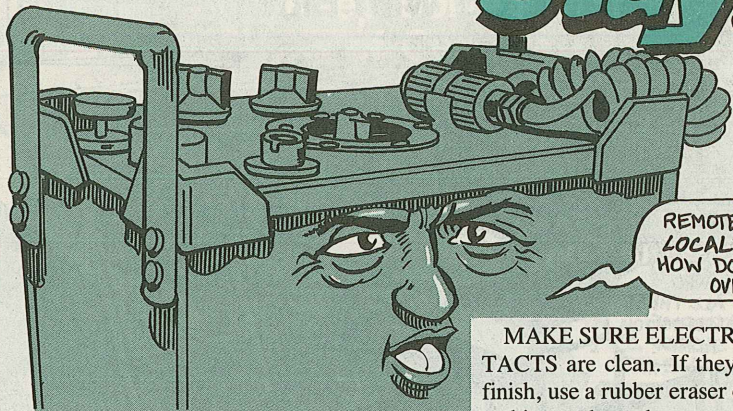
ITEM	NSN
Tool Kit, Riveter, Pneumatic	5130-01-089-1229
Tool Kit, Riveter, Hand	5120-01-089-1231
Pulling Head, Offset Riveter	5130-01-044-7196
Pulling Head, R/Angle Riveter	5130-01-045-3507

The tools will be added to SC 4920-99-CL-A92 when it's updated.

## The Numbers Game

FM 1-506, Fundamentals of Aircraft Powerplant Maintenance, supersedes TM 55-406 on the same subject. From now on, aviation field manuals published by the Aviation Logistics School at Fort Eustis will be issued numbers in the 1-500 series.

# Staying

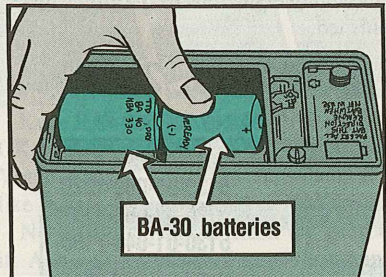


REMOTE, THIS IS LOCAL CONTROL... HOW DO YOU READ? OVER!

**MAKE SURE ELECTRICAL CONTACTS** are clean. If they have a dull finish, use a rubber eraser on 'em to get a shine and good contact.

Take good care of the batteries, battery compartment and battery cover on your radio set control group. It's PM that keeps you in control of remote commo.

Eye those six BA-30 batteries in the C-2328 remote and C-2329 local control units. When your control group's not in use, remove them. Even tho your



BA-30 batteries

set's idle, those batteries are not. They're corroding your set.

When a battery leaks, corrodes or bulges, replace it. If commo's weak, replace 'em all. Even a new battery lasts only about 24 hours.

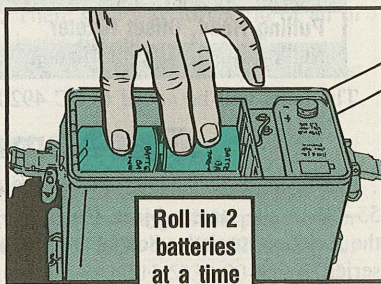
Remember to carry an extra six-pack of batteries for each control unit, too.



Clean up contact strips

Sometimes the contact strips loosen. Get your repairman to glue them. If they slip and slide, they mess up commo contact.

When you install new batteries, make them snug by rolling a pair into position at a time.



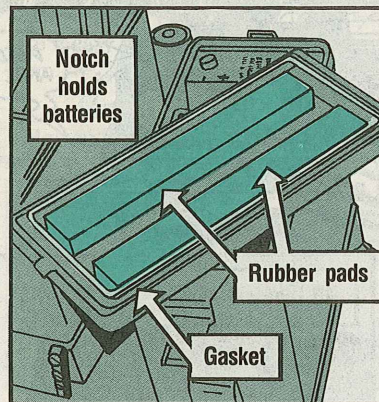
Roll in 2 batteries at a time

# in Control



LOCAL, THIS IS REMOTE CONTROL... READ YOU LOUD AND CLEAR!

Take a look at the inside of the cover. If the rubber pad that keeps the batteries in place is missing, get your support to install a new one.



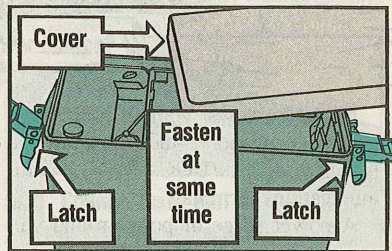
Have your repairman cut a 5/8-in notch down the center of the pad. That'll help hold the batteries in place.

If the batteries still rattle around, slip a piece of cardboard between the battery compartment and control case walls alongside the batteries.

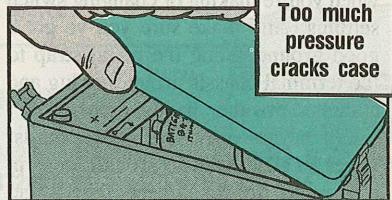
A **TIGHT SEAL** between the battery box and cover is a major moisture knocker. Eye the cover gasket. If it's flattened or cracked, get your support to replace it.

There's only one good way to open or close the battery compartment cover. Loosen both latches, release them and take the cover off.

To replace the cover, seat it, hook latches into clips and snap 'em into place at the same time.



Latching one side and then the other can crack the case.



Also, lopsided latching leads to slipped batteries which gives poor contact for remote operations.

# Halt Power Surge

OH NO, THERE GOES THE COMMUNICATIONS TERMINAL AGAIN...

WHERE AM I??

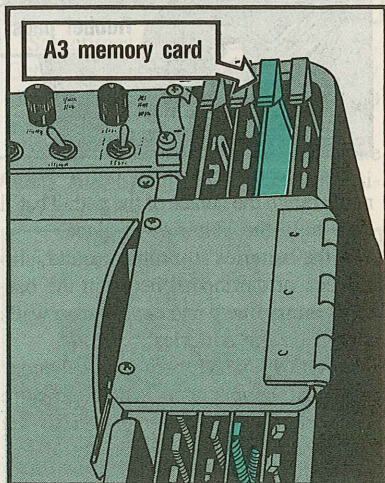
WHO AM I??

Nothing blows your mind like a burned out memory—memory card, that is—in your AN/UGC-74 (V)3 communications terminal.

A power surge or poor ground will damage the A3 memory card.

To prevent this, turn power OFF when you're making or changing switch settings. And make sure you've got a good ground. Snug the metal strap to the terminal chassis grounding lug and a shelter or other handy ground.

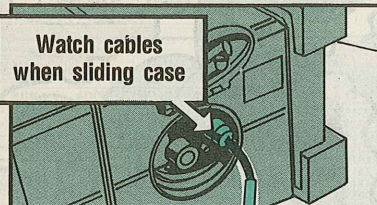
Whenever you have extra cards, never let them shuffle around loose in a storage drawer where they'll get banged and busted. Until a card's ready to be used, keep it in a box, packet or shipping container.



# Memory Knocker

## Other PM Pointers

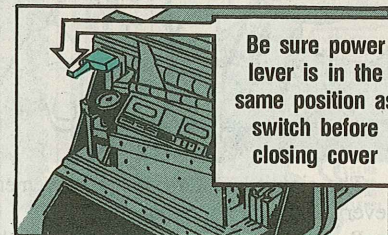
While you're giving your UGC-74 a PM going over, use care handling cable connections and insulation when sliding the terminal from the rear case.



Since the plugs need special tending—they're not soldered and will break easily if you're heavy handed—take it easy when you plug and unplug them.

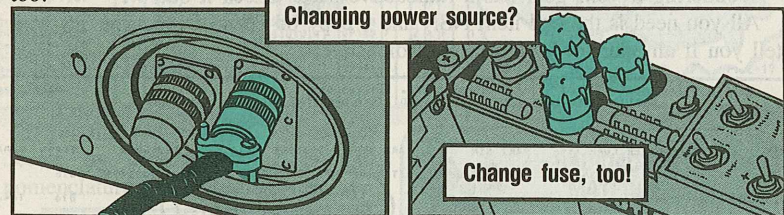
Be sure to watch the switch when you're ready to close the dust cover. The power switch should be in the same position as the switch lever. If it's not, when you latch the cover, the switch can break.

So when you replace the cover, hold the switch in the position—ON or OFF—that terminal is operating in.



## Bigger Is Not Always Better

Remember, when you change power sources for your terminal, change fuses, too.



Use a 6 1/4-amp fuse, NSN 5920-00-529-0618, if you're using a vehicle. Use a 1 1/2-amp, NSN 5920-01-023-4822, or 2-amp, NSN 5920-01-023-5878, with a back-up battery or a generator power source.

When using power cable—	—Use fuse
SM-D-764481 (NSN 5995-00-271-9444)	
or	
SM-D-764482 (NSN 5995-01-090-1423)	1 1/2A
SM-D-915890 (NSN 5995-01-096-8724)	2A
SM-D-764480 (NSN 5995-00-271-9443)	6 1/4A

Remind yourself to switch fuses whenever you switch power cables.

ALWAYS KEEP SPARE FUSES ON HAND!









Pair-26 Cable...  
A B C D E F G H I J

DOT YOUR I'S, CROSS YOUR T'S,  
MIND YOUR P'S AND Q'S...  
BUT IF YOU WANT YOUR CABLE "UP,"  
PAY ATTENTION TO YOUR C'S!

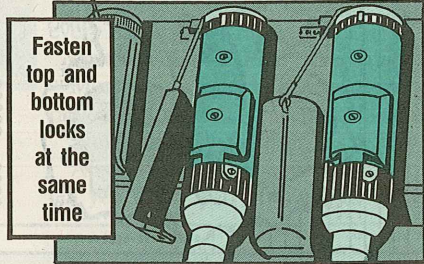
YOU'LL GET AN "A" IN CABLE  
MAINTENANCE IF YOU MIND YOUR  
C'S AT PM TIME. LIKE SO...  $\times 10 = 100$

# C

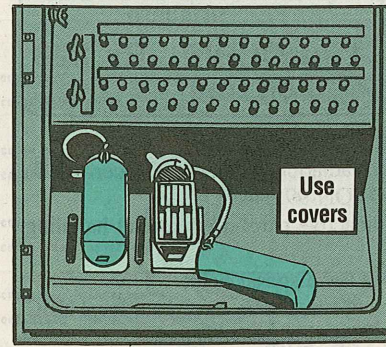
# ing to Your PM <sup>x5</sup>

How NOW  
BROWN COW

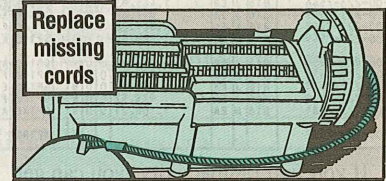
**CONNECTIONS.** Line up the connector and receptacle before you squeeze them together. To protect contacts when you secure the connection, fasten the top and bottom locks at the same time.



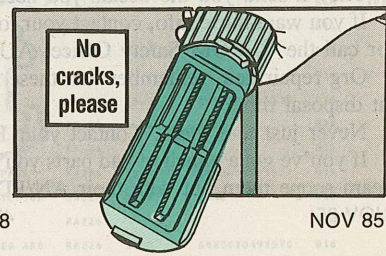
**COVERS.** Use them on both the connector and receptacle when the cable isn't being used. That keeps dirt and moisture out and protects contacts.



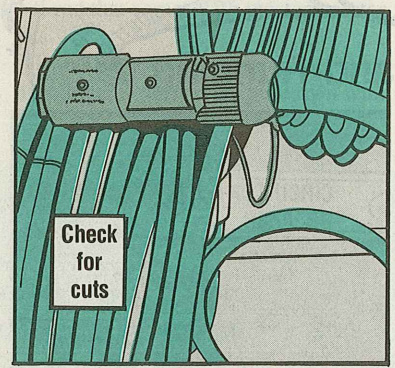
**CORDS.** If you've lost the cords that keep connector covers handy, have your org shop make new ones. They can get rope by the foot with NSN 4010-00-222-4482. Swaging sleeves are NSN 4030-00-431-5536. A compressing tool to crimp the sleeve is NSN 5120-00-323-2292. Appendix A of CTA 50-970 is the OK to order these items.



**CAPS.** If the plastic caps in your connector or receptacle are broken or cracked, get them replaced. Without good contact your communications suffer. Your org shop makes the switch. A replacement kit (with enough caps for 10 connectors) is NSN 5999-01-073-5507.

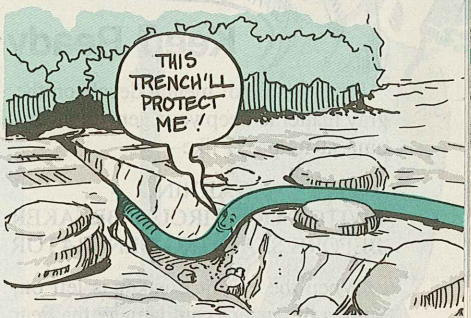


**CUTS.** If you see cuts or damage to cable, tape them. A tape for the job is NSN 5970-00-685-9059. Excessive taping, or cuts clear through to the wires, usually means a new cable, tho.



**COVERUP.** Protect your cable from foot or vehicle traffic when it crosses roads or busy field sites. The heavy

tread of a vehicle can break the insulation and crush the cable. Bury the cable or cut a trench for it. A step can pull on the connector and break a connection, too. A strain relief made from field wire can stop that tug.



Make sure you unhook all cables before you move your vehicle. That smart move might also save you—a C-note.

## Unplug That PU-724!

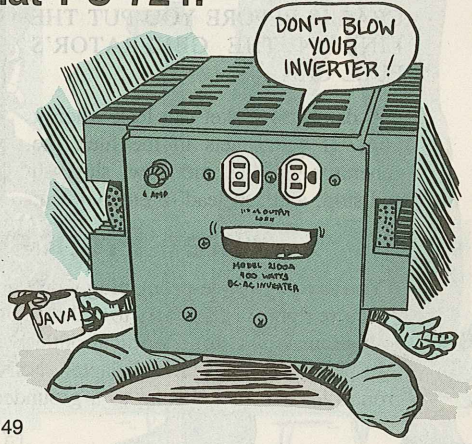
Plugging a coffee pot or space heater into your AN/GRC-142 or -122 radio teletypewriter set's 400-watt inverter will leave you powerless.

Those receptacles are convenient, but they're not up to handling any extra wattage.

The inverters are taxed to the max just sending power to your teletypewriter set's gear.

Any extra power draw puts them over the edge and can burn up rectifiers.

So, if you have to have that cuppa, find another outlet for your appliance.





## Keep Ready and Running

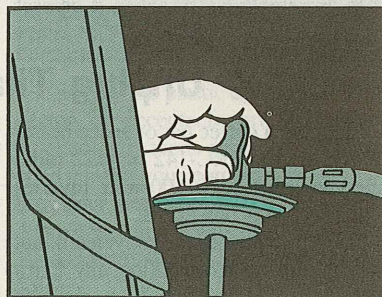
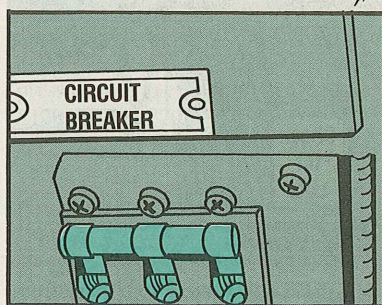
Put a couple of mental decals on the gray matter to keep your generator running at its peak, like—

**WARNING**  
SWITCH OFF CIRCUIT BREAKER BEFORE STARTING GENERATOR

When the circuit breaker is left on, surges of current can damage the gear the generator is powering.

**CAUTION**  
MAKE SURE THE FUEL LINE GASKET IS PRESENT, PLIABLE AND FREE OF NICKS AND CRACKS BEFORE YOU PUT THE LINE IN THE GENERATOR'S FUEL CAN

A damaged gasket can leak when it rains. If water gets in the fuel, the generator will become slow, sluggish and stop, and can lead to engine ruin.



## Three Prongs a Problem?

You say your three-prong plug won't go into a two-terminal electrical outlet? You're right. But don't try to make it fit by clipping off the round prong. That's your ground in a three-terminal outlet.

Instead, get a two-prong adapter, NSN 5935-00-990-2421. It comes with a ground lead for connecting to a grounded outlet.

## Grounding a Grind?

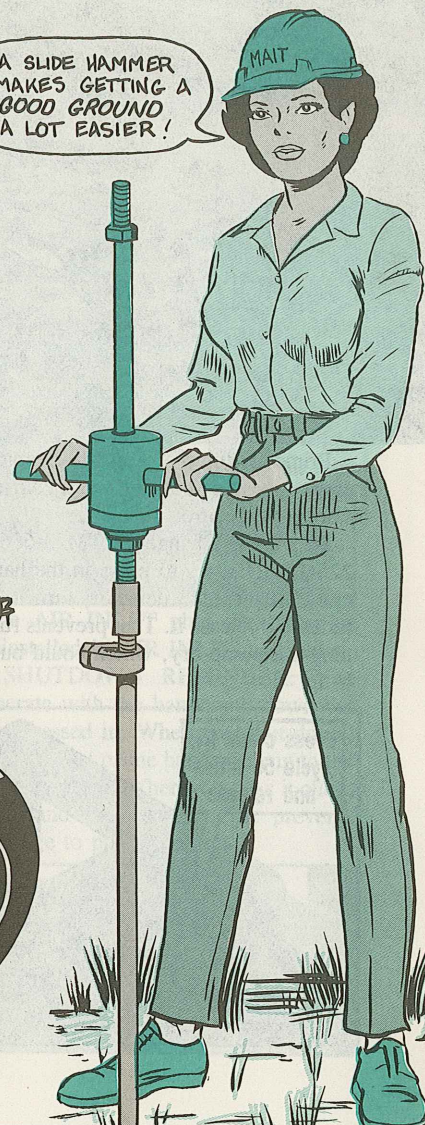
Driving and removing ground rods may not be fun—but it sure beats being turned into a French fry or losing a piece of gear because of a poor ground.

The deeper you drive the rod, the better the ground, of course. You get a big hand in this "ground-pounding" business with a slide hammer, NSN 5120-01-013-1676.

The hammer's 20-lb weight makes it easier to drive and remove the 3-section, 9-ft rod that comes with most generator sets.

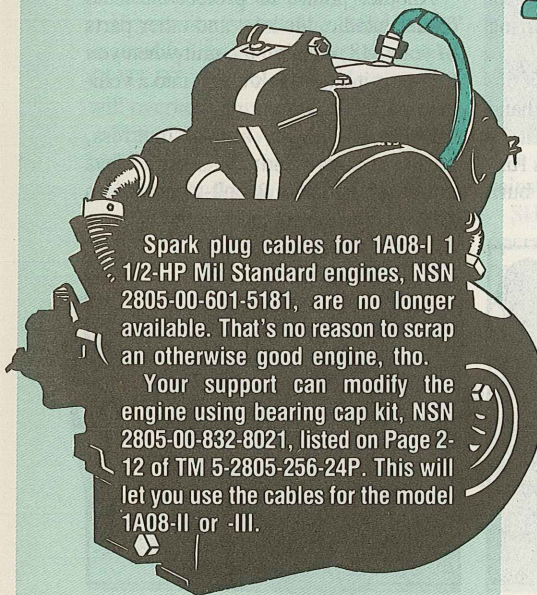
Don't want to spend the money on a store-bought rod? Make your own with the info in TC 11-6. The pub also shows you how to use the hammer.

A SLIDE HAMMER  
MAKES GETTING A  
GOOD GROUND  
A LOT EASIER!



1 1/2-HP Mil Std Engines...

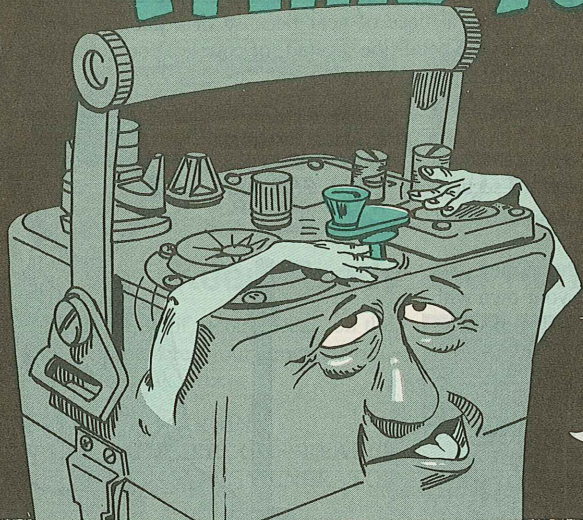
## Bad Cable Won't Scrap Engine



Spark plug cables for 1A08-I 1 1/2-HP Mil Standard engines, NSN 2805-00-601-5181, are no longer available. That's no reason to scrap an otherwise good engine, tho.

Your support can modify the engine using bearing cap kit, NSN 2805-00-832-8021, listed on Page 2-12 of TM 5-2805-256-24P. This will let you use the cables for the model 1A08-II or -III.

# Prime Your



C'MON, GUYS,  
GIMME  
A HAND!

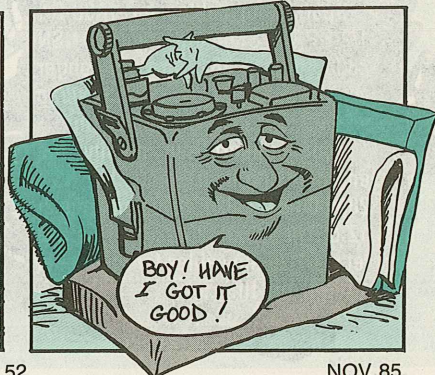
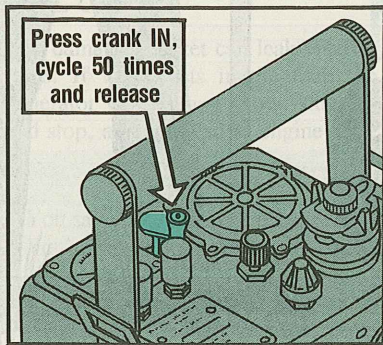
I'M NOT  
SELF-PRIMING  
Y'KNOW!

Prime the pump of your M8 chemical agent alarm's detector unit during startup procedure.

Para 2-9i, Change 2, TM 3-6665-225-12, tells you to press in the hand crank of the M43 detector, turn it 50 times and release it. That prevents running the pump dry, which could burn it up.

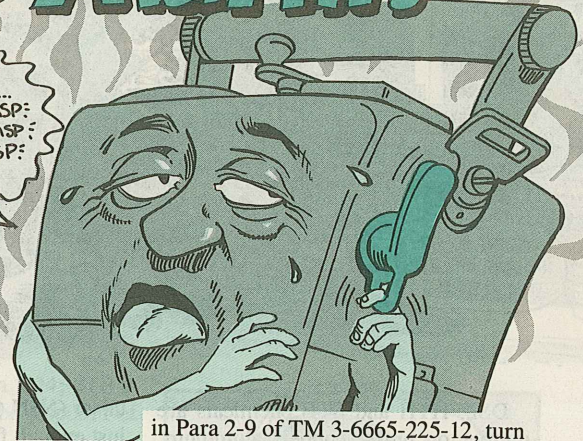
Another point: To protect the hand crank, handle, air inlet and other parts of your M8, cushion the unit when you transport it. Just don't toss it into a vehicle and let it bounce.

Use rags, paper, an old mattress, whatever's on hand. Be sure it stays upright if the TM's Para 2-13 shutdown procedures are not performed.



# M8 Alarm!

HELP...GASP: ME...  
I NEED AIR...GASP:  
GOT TO...GASP, GASP:  
PULL THIS...GASP:  
PLUG!



in Para 2-9 of TM 3-6665-225-12, turn the AIR INLET assembly to OPEN.

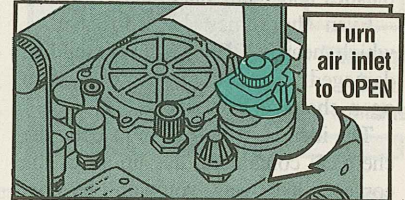
## Needs Air

Your M8 chemical agent alarm also needs lots of air to do its job.

If you don't open the AIR INLET assembly **and** remove the AIR OUTLET cap, your M43 detector unit will overheat. Pump damage can result.

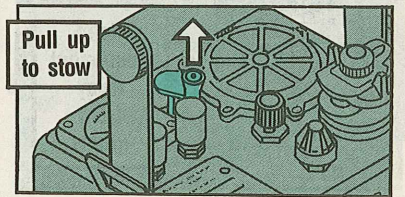
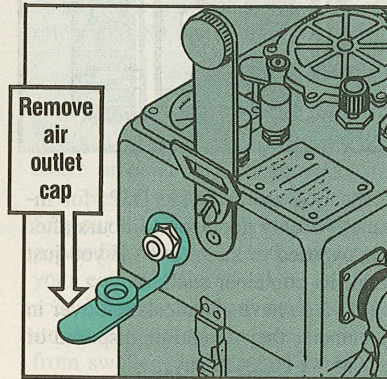
Remove the AIR OUTLET cap before you start operation.

After you do the startup procedures



The AIR INLET plug also must be reinstalled in AIR INLET assembly.

**SHUTDOWN REMINDER:** You operate with the handcrank down but not pressed in. When you shut down, pull the fast prime handcrank up to the stow position. When you hear it click, the hand is in stow. That prevents damage to pump tubing.



# Watch

IF THEY'D USED US ALL UP, THEN WE WOULDN'T HAVE RUINED THEIR GEAR!

LET'S GET OUT OF HERE BEFORE THEY NOTICE!

IT'S NOT OUR FAULT. IT WAS THEIR BAD PM!

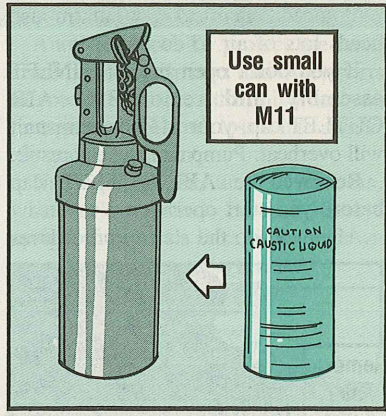
DS2, HTH and STB chemicals are murder on brass, copper, aluminum, plastics and other materials.

Even the fumes are corrosive... which means NBC equipment could be damaged when stored near or next to open chemical containers.

The idea is, if you have to open the chemical containers, use up all of the contents. That way, you won't be storing open containers... and there will be no contents to dispose of.

If you use DS2 in your M11 decons, for instance, use the 1 1/3 quart con-

tainer (NSN 6850-00-753-4827). That's just enough for the M11. Spray out all



of the DS2 in the M11. DS2, for instance, is only good for 48 hours after it is exposed to air... even if you just break its container seal.

If you do have chemicals left over in containers, they should be disposed of as TM 43-0003-28 says.



# Your DS2

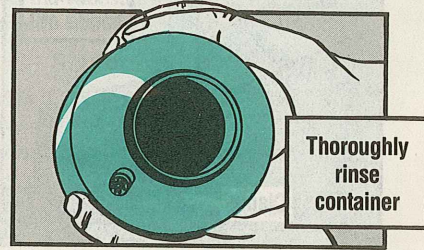
I WANT TO KNOW WHOSE FUMES CORRODED THIS GAS MASK, AND I WANT TO KNOW NOW!

DS2 is covered in Para 3-24; STB is in Para 3-39. HTH can be disposed of like STB (para 3-39).

To beat DS2 rust with your M11's, use water and corrosion inhibitor, NSN 6850-00-753-4967, instead of the chemical during training. For better rust control and more realistic training, use antifreeze, NSN 6850-00-181-7929. Use a half water, half antifreeze mix.

If you switch from antifreeze or water mixture to DS2, remove the liquid and thoroughly rinse the M11 container.

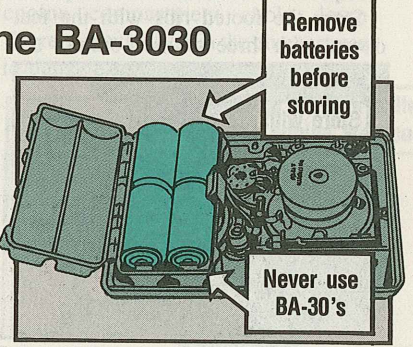
Dry your M11 with warm air (if a source is available) before you add DS2 or store the equipment. Otherwise, antifreeze or water residue will cancel the effect of DS2 or corrode your M11.



## NBC and the BA-3030

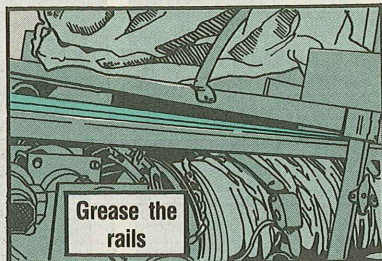
Remember two things about the BA-3030 batteries you use in your M42 alarm or other NBC equipment:

1. Never substitute BA-30 batteries for your BA-3030's. The BA-30's lose power fast. They may leak and damage your equipment.
2. Remove the batteries when you store the equipment to prevent damage from swollen, leaking old batteries.



## M51 CB Shelter . . .

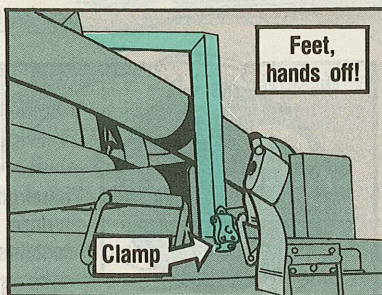
Dab some GAA grease on the support rack (pallet) skids. That lets you



Grease the rails

remove and replace the rack without muscle strain.

Keep feet and hands off the hinged



Feet, hands off!

Clamp

support frames where you store the arch support (ribs). Frames are not steps or handholds. That kind of use can break their welds. You can also break the clamps which hold the frames in place.

Store the footed ribs with the feet down, with three on each side of the



Store with feet down

Rib

Feet

# Sweat



HERE'RE SOME TIPS TO HELP MAKE SETTING UP YOUR CB SHELTER NO SWEAT!

pallet. That way, all of the ribs will fit on the pallet.

Load and unload the entrance assembly on the pallet in one piece. Use

### Keep it together

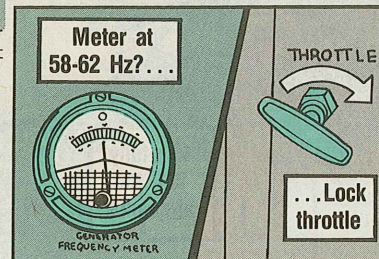


a 6- or 8-man carry. It's easier. Fewer people means somebody can get hurt. With four people you have to carry the entrance and pallet separately.

# and Parts Savers

## Operating Tips

Lock the throttle (turn it clockwise) after you adjust it to 58-62 cycles on the GENERATOR FREQUENCY METER.

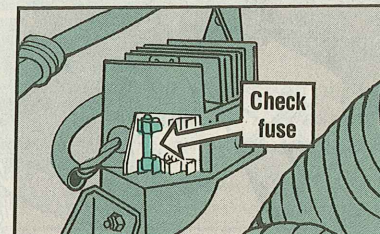


Meter at 58-62 Hz? . . .

THROTTLE

. . . Lock throttle

If you get no reading on the main control panel amp meter, check the fuse



Check fuse

on the rheostat in the engine compartment. Use TM 5-2805-259-14.

## Shutdown and Storage

It takes 2 minutes to burn off excess fuel after you shut down the heater. Wait the 2 minutes before you shut system power down.

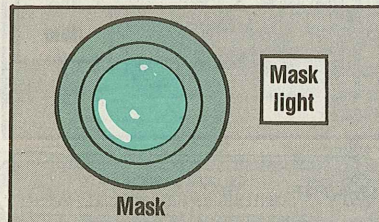
When you deflate the shelter and when you run the evacuator fan, keep your power supply engine running. Otherwise, you'll run the battery down.

After you dismantle the shelter, wait before you store the evacuation hose on top of the door pallet. . . at least until the engine compartment cools down. There's enough heat in the compartment to damage the hose.

If you don't lock it, the throttle will slip during operation. That increases generator cycles which can damage equipment powered by the generator. See Para 2-4, TM 3-4240-264-12.

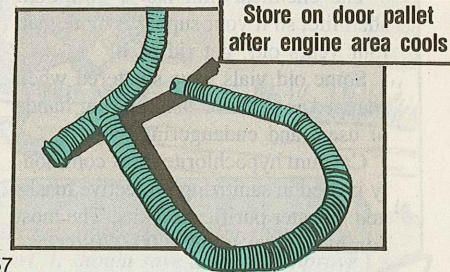
Don't sweat it if the shelter floor rises several inches when you take the top off the heater and air conditioner panels. The floor will go down when you put the tops back on and pressure builds up.

If the MASK light on the shelter auxiliary control comes on after 5-8 minutes operation, readjust the interior air pressure like Para 2-54 of your TM says, using your air flow gage.



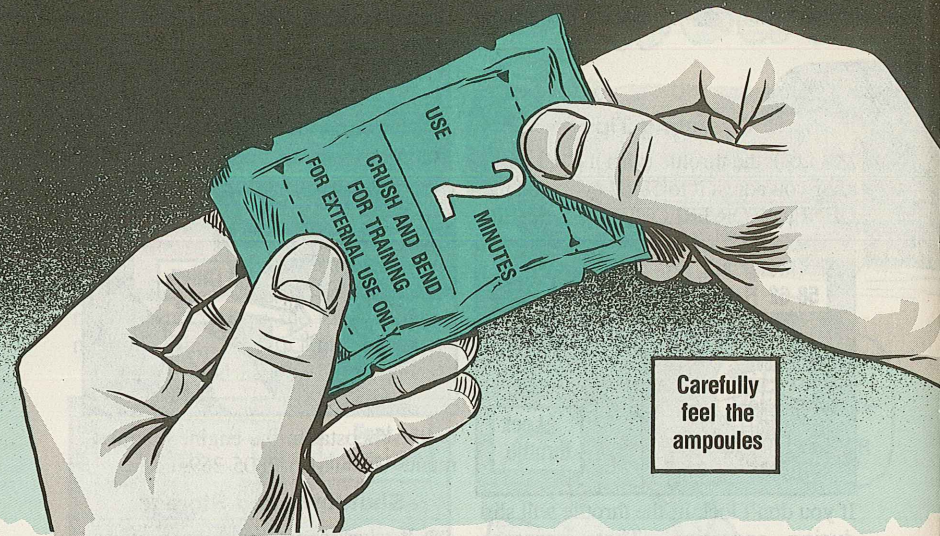
Mask light

Mask



Store on door pallet after engine area cools

## New M258A1 PMCS Check



When you do the Item 2 PMCS check in your M258A1 decon kit's TM 3-4230-216-10, add another for broken ampoules.

Carefully feel the ampoules in the DECON 2 WIPE packet. All three ampoules should be unbroken.

The packet has some give to it, but if it's so swollen you can't feel the ampoules, replace it.

A TM revision will make the swollen packet **and** broken ampoules a Not Ready/Available condition.

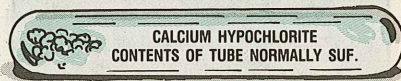
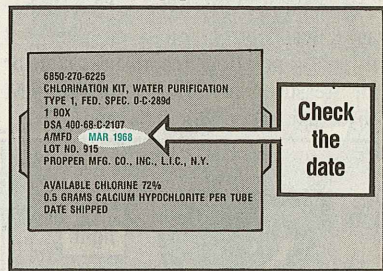
## A Date With Your Calcium Hypochlorite

Take a look at the manufacturer's date on the package before you issue your next batch of calcium hypochlorite vials.

The chemical mix has a 48-month shelf life, so if your supply is more than four years old, get rid of it!

Some old vials have shattered when snapped in half for use, cutting hands of users and endangering eyes.

Calcium hypochlorite most commonly is used in sanitizing protective masks and in water purification kits. The most common NSN is 6850-00-270-6225.



## Chart Your Mask

Dear Editor,

Keeping track of protective masks for scheduled maintenance services, replacement of filters . . . and so forth . . . can take a lot of looking and disassembly, mask by mask.

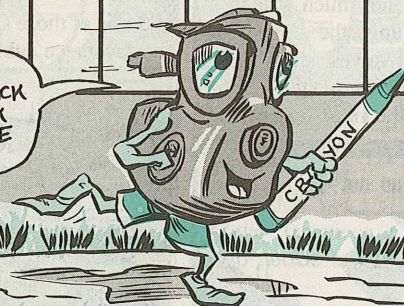
Our MAIT team has devised a maintenance management chart which can be hung on the wall or door of the mask storage area . . . or any appropriate place where any NBC NCO can read the status of any mask with a quick glance. It doesn't replace DD Form 314, but it does save time.

The chart can be sized to the needs of the unit. Plasticized paper or cardboard covered with cellophane works best. Erasable crayons should be used to fill in the columns, and permanent information can be stenciled at the top.

Here's what the chart can contain:

Mask No.	Assigned To	Size	Mask Lot No.	Filter Lot No.	Optical Inserts	Fitted	Tested

KEEP PM ON THE RIGHT TRACK WITH A MASK MAINTENANCE CHART!



Chester E. Wolicki  
Oakdale, PA (Readiness Gp)

(Editor's note—Thanks for sharing the chart. It should save time and improve maintenance.)

THIS IS FOR ALL THOSE YEARS OF MASK ABUSE!

# Filters and Fingers

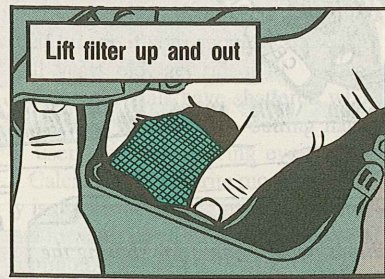


Replacing the filters in your M17-series masks without doing damage is as simple as following the word in Para 3-2 of TM 3-4240-279-10.

If you stuff, stretch and pull with your own methods, you can do your facepiece in.

Getting the filter out is another matter, since there is not much guidance.

After unbuttoning the flaps and removing the inlet valves, slip a finger over the edge of the filter on the nosecup (wide) side. Lift the filter up and out.

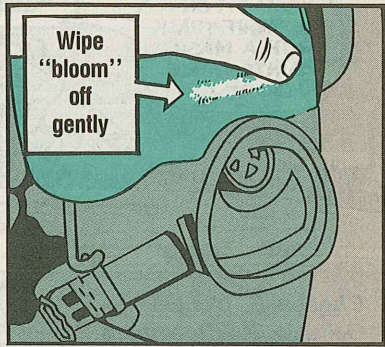


If you try to remove the filter on the narrow (rear) side, you can split the facepiece or damage the flaps.

### Hold the Glow!

Your facepiece is not a pair of dress shoes calling for a spit shine. So hold the commercial products that give it a glow.

Some of those shine-'em-ups damage the facepiece rubber.

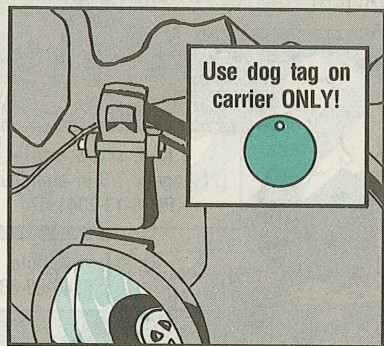


Besides, some of the stuff you may try to shine away is "bloom," an added white or rust-colored preservative that helps protect the rubber from cracking and aging. Just wipe it off lightly. No shine necessary.

### Stick with Dog Tags

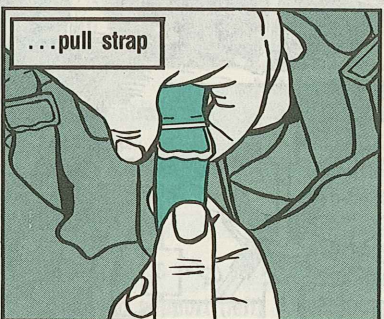
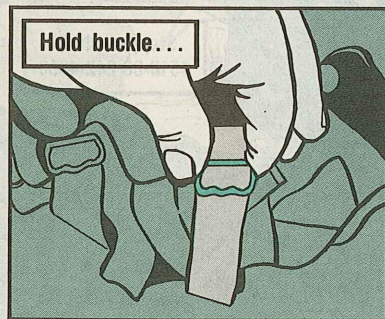
Do not make permanent markings on the facepiece or on your mask carrier.

Use dog tags or removeable tape marked with a unit code or the user's name.



## Buckle Up Right

Buckling the head harness on the facepiece of your M24 and M25/M25A1 protective masks can be a ripping experience...or a snap. It depends on how you do it.



To prevent tearing the harness from the facepiece...or ripping the facepiece...or bending the buckle, do this to buckle up:

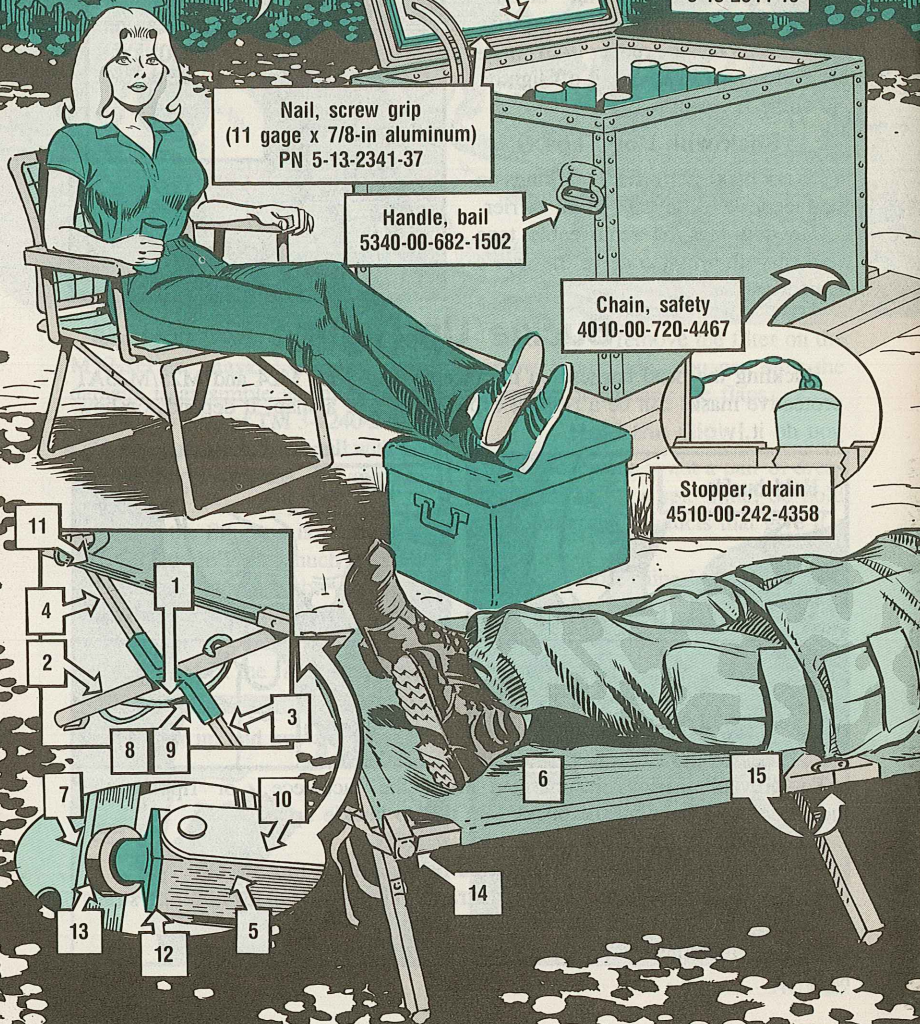
- Insert the straps in the buckles.
- Hold the metal part of each buckle between your fingers.
- With your other hand, pull each strap through the buckles until the straps are snug.

You're in business.



## Ice Chest Parts

HERE'RE THE REPAIR PARTS FOR YOUR FIELD ICE CHEST, NSN 4110-00-142-2445 (200-lb CAPACITY) OR 4110-00-640-1941 (400-lb CAPACITY)



Gasket, door seal  
5330-00-083-9920

Hinge  
5-13-2344-13

Nail, screw grip  
(11 gage x 7/8-in aluminum)  
PN 5-13-2341-37

Handle, bail  
5340-00-682-1502

Chain, safety  
4010-00-720-4467

Stopper, drain  
4510-00-242-4358

Order the hinge using FSCM 81337, RIC S9G, on a DD Form 1348-6.

Gasket, NSN 5330-00-083-9920, comes by the foot, so order as many feet as you need. Also, order enough nails, PN 5-13-2341-37, to install the gasket.

Be sure to keep the ice chest clean—especially the inside and the gasket. Use a mild detergent and warm water for washing. Rinse well with potable water, and let the chest air dry with the top open.

KEEP YOUR  
ICE CHEST  
CLEAN  
AND DRY!



## Aluminum Cot Parts

GET REPLACEMENT PARTS FOR YOUR ALUMINUM FOLDING COTS, NSN 7105-00-935-0422, WITH THESE NSN'S...

Item	NSN 7105-00-
1 Folding strap	113-0003
2 Long leg	935-0425
3 Lower half-leg	935-0427
4 Upper half-leg	935-0426
5 Side rail	935-0423
6 OD cover	935-1845
7 End stick	935-0424
8 Cross leg support (left)	935-0428
9 Cross leg support (right)	935-0429
10 Top leg support (right)	935-0430
11 Top leg support (left)	935-0431
12 Dowel plug	935-0433
13 Spacing plug	935-0434
14 End plug	935-0435
15 Top leg support (center)	935-0432

## Kevlar Helmet Repair Parts

Camouflage Cover  
X-Sm NSN 8415-01-092-7514  
Med/Lg NSN 8415-01-092-7515

Camouflage Band  
NSN 8415-01-110-9981

Chin Strap Assembly  
NSN 8470-01-092-7534

THESE NSN'S  
GET REPAIR PARTS  
FOR YOUR  
KEVLAR HELMET:

Headband Assembly  
X-Sm NSN 8470-01-092-8492  
Sm/Med/Lg NSN 8470-01-092-8493

Suspension Assembly  
X-Sm NSN 8470-01-092-7516  
Sm NSN 8470-01-092-7517  
Med NSN 8470-01-092-7518  
Lg NSN 8470-01-092-7519

Screw  
NSN 8470-01-144-2813

A-nut  
NSN 8470-01-144-5368

Post  
NSN 8470-01-144-5367

Screw  
NSN 8470-01-144-2811

Washer  
NSN 8470-01-144-2812

Clip  
NSN 8470-01-144-2814

Parachutists: Get the foam impact pad with NSN 8470-01-092-8494, the retention strap with NSN 8470-01-092-7524.

The NSN's will be added to TM 10-8400-201-23.



## Urgent MWO for 5-, 10-KW

If you're using an ME P-002A or -003A DED generator set, contact your DS shop ASAP. Your convenience receptacle can be a safety hazard. TB 5-6115-584-30-1 and -585-30-1 contain URGENT MWO's for your sets.

## Armorer's Tools Correction

Cross out drive punch, NSN 5120-00-840-7289, listed at the bottom of Page 32 of PS 394. It's listed and shown correctly on Page 33.

M14, M21...

## Barrel Fault

Eyeball your M14 National Match and M21 sniper rifle barrels for an "SGW" stamp 3 1/2 inches forward of the receiver. If you find that marking, turn in the rifle. The barrel could rupture. AMCCOM Message AMSMC-MML-S 051351Z Jun 85 has the word.

## M60 MG Caution!

When you do the "Hot Gun" procedure on Page 20 of TM 9-1005-224-10, DO NOT CHANGE THE BARREL! You could have a cook-off in your hands. Keep the barrel on and let the weapon cool for 15 minutes.

## AN/PVS-5A's New PMCS

The PMCS added by C1 to your night vision goggle's TM 11-5855-238-20 is for aviation units only. They're the only ones authorized the TS-3895 test set needed for the work. This "aviators only" note will be added to future printings of the TM.

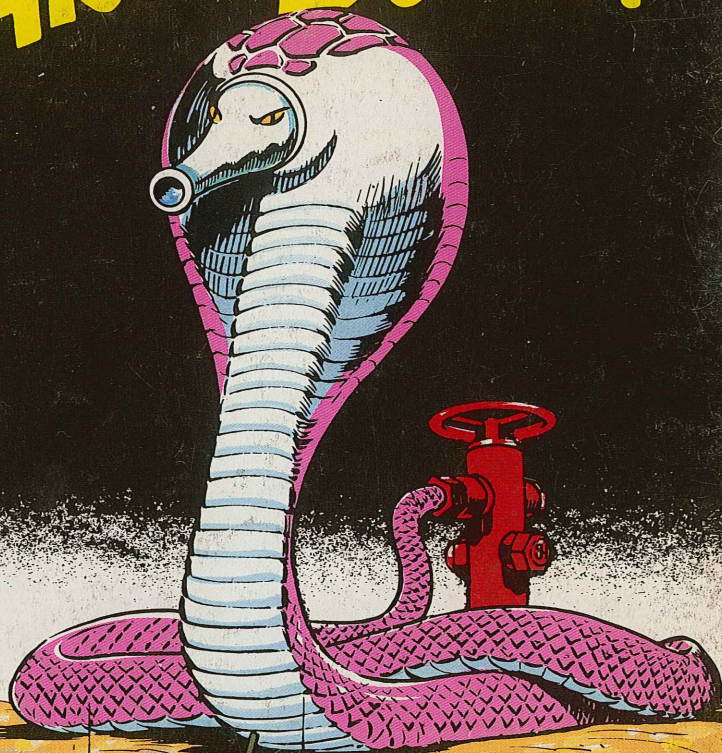
## Fuel Filter Pub Flub

C1 to TM 10-3930-638-24&P lists the same NSN for the secondary fuel filter and the complete fuel filter kit for the M4K RTFL. That's wrong. Use NSN 4330-00-373-1564 to get the filter kit. To get the secondary filter, order on a DD Form 1348-6 with FSCM 81321 PN 6711418 from RIC S9C.

Would You Stake Your Life <sup>right now</sup> on the Condition of Your Equipment?

High pressure water can be . . .

# The Hiss of Death!



UH-OH, IT'S  
ABOVE  
THE TRACKS!

Keep it below  
the turret  
to protect  
optical and  
electrical gear!