

Issue 489

**PS**

August  
1993

# THE PREVENTIVE MAINTENANCE MONTHLY

TB 43-PS-489

Has your  
buddy read  
this issue?  
Pass it along!



Approved for Public Release;  
Distribution is Unlimited



# EDUCATE YOUR ROOKIES



TB 43-PS-489. The Preventive Maintenance Monthly, is an official publication of the Department of the Army, providing information for all soldiers assigned to combat and combat support units and all soldiers with unit maintenance and supply duties. All information published has been reviewed and approved by the agency responsible for the equipment, publication or policy discussed. Application of the information is optional with the user.

ISSUE 489 AUGUST 1993

<b>FIREPOWER</b>			
M9 Bayonet	2-4	ALICE	10-11
Machine Guns	5	Fire Control	
Small Arms	5	Instruments	12-15
M40, M42 Masks	6-7, 8	M2/M3 Bradley	16
M203 Grenade Launcher	9	M88A1 Recovery Vehicle	17

<b>GROUND MOBILITY</b>			
CUCV	18, 19, 20	M9 ACE	23
HMMWV	18, 19, 20, 21	SEE	24-25, 26
2 1/2-Ton Trucks	21	Lubrication	27-30
HEMTT	22		

<b>AIR MOBILITY</b>			
AH-1	35	UH-60A	38, 39, 40, 41
AH-64A	36	OH-58	41, 42, 43
CH-47	37	Proseal	43

<b>COMMUNICATIONS</b>			
AN/TSC-85B, -93B	44-45	RL-31	48-49
Cables	46-47		

<b>TROOP SUPPORT</b>			
Generator PM	31-34	Tool Handle Grips	55
5-, 10-KW DED		AMDF	56
Generators	50-51	CD-ROMs	57
Maintenance Tent	52-53	Automated SAMS	58-59
Rope	54	Hazardous Waste Drums	60

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

MSG Staff-Meat  
The Preventive Maintenance Monthly  
Bldg. 3325  
Redstone Arsenal, AL 35898-7466

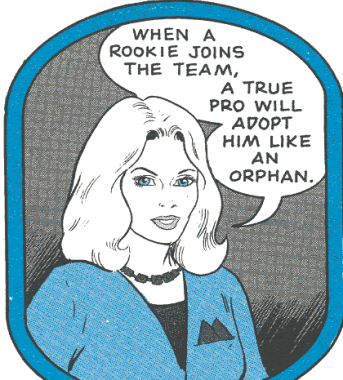
By Order of the Secretary of the Army:

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

Official: *Milton H. Hamilton*

**MILTON H. HAMILTON**  
Administrative Assistant to the Secretary of the Army  
04571

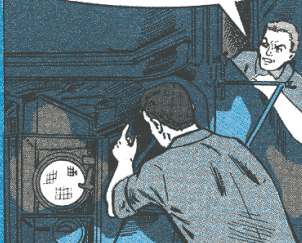
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WHEN A ROOKIE JOINS THE TEAM, A TRUE PRO WILL ADOPT HIM LIKE AN ORPHAN.

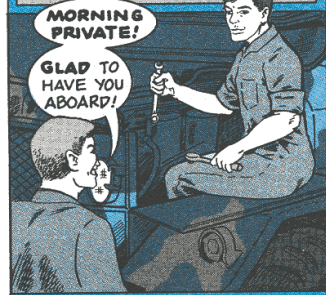
Do they know their job is not confined to TM instructions or orders given? Rookies must be trained to see, hear and smell and then report.

I DON'T LIKE THE SOUND OF THAT. LET'S BLEED THE FUEL FILTER!



They must be taught that they are a 24-hour, lean, mean, maintenance machine and not an 8-hour clock watcher.

A pro knows that if the rookie improves, the whole team benefits. You NCOs are the pros of the Army's maintenance team. Are you teaching your rookies?



MORNING PRIVATE!

GLAD TO HAVE YOU ABOARD!

A pro also knows that how he uses his rookies in maintenance operations is essential to a winning effort. Who does what well? Who doesn't? Who leads? Who follows? Who needs over-the-shoulder instruction and who needs the pat-on-the-back? A pro knows that maintenance is more than just sticking a wrench in a rookie's hand and sending him out on his own.



HEY, WAIT FOR ME.

A pro teaches a rookie about weather-related maintenance. If your rookie has a southern drawl and your duty station is Ft Drum, chances are he may need to know what the cold can do to lubes, metals and batteries.

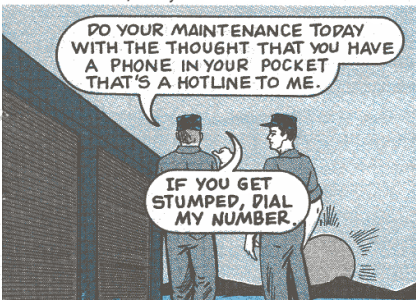
WHEN THE WEATHER TURNS COLD, HERE'S WHAT YOU SHOULD LOOK FOR.



A pro teaches a rookie that appearances can be deceiving. A spotless fuel tank outside might have sediment and rust inside.

A pro teaches a rookie that gambling with readiness by doing poor maintenance is a gamble that puts the team in the cellar, not the Super Bowl.

Pros, take your rookies aside and tell them:



DO YOUR MAINTENANCE TODAY WITH THE THOUGHT THAT YOU HAVE A PHONE IN YOUR POCKET THAT'S A HOTLINE TO ME.

IF YOU GET STUMPED, DIAL MY NUMBER.

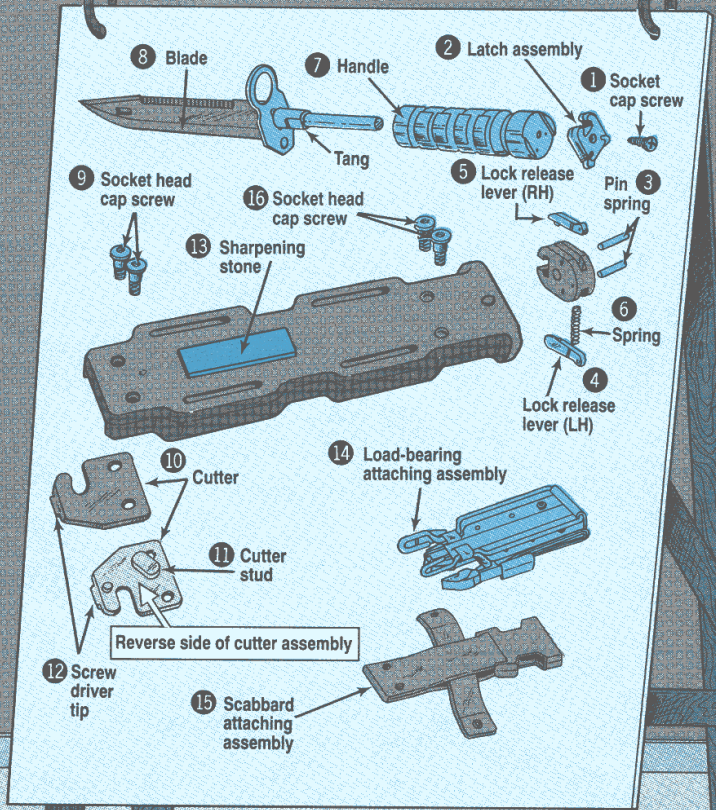


# Get Your Parts Here

YOU NO LONGER NEED TO JUNK YOUR M9 BAYONETS WHEN THEY'RE DAMAGED, ARMORERS. USE THESE PARTS TO FIX M9s.



Item	Part	NSN
1	Screw, cap, socket	5305-01-278-1150
2	Latch assembly	(Order new M9)
3	Spring, pin	5315-00-058-6081
4	Lever, lock-release (LH)	5340-00-051-3901
5	Lever, lock-release, (RH)	5340-00-051-3899
6	Spring, helical compression	5360-00-716-0949
7	Handle, knife blade	5110-01-277-5767
8	Blade	(Order new M9)
9	Screw, socket head, cap	5305-01-305-6170
10	Cutter assembly (DS)	1005-01-275-5397
11	Cutter stud	(part of cutter assembly)
12	Screwdriver tip	(part of cutter assembly)
13	Stone, sharpening	5345-01-275-5395
14	Attaching assembly, load bearing	1005-01-278-1174
15	Attaching assembly, scabbard	5340-01-275-5398
16	Screw, socket head, cap	5305-01-351-4305





DO THIS **PMCS**  
ON **M9s** AT LEAST  
QUARTERLY!



### PMCS

❑ Test the latch assembly to see if the latch securely holds the bayonet on an M16 rifle. If the spring pins, lock release levers, or helical spring needs to be replaced, see Page 2-28 in TM 9-1005-237-23&P, (Jan 93) the TM for the M6, M7 and M9 bayonets. If the latch plate is damaged, order a new M9.

❑ Remove the socket head capscrew and inspect it for stripped threads or other damage. Replace if necessary.

❑ Remove the handle from the bayonet-knife. Inspect the handle for cracks and chips. Cracks longer than 1/2 inch or chips larger than 1/4 inch mean the handle is shot.

Do not disassemble the bayonet any further. If the blade is badly damaged, order a new M9.

❑ Lubricate the bayonet and then reassemble it by putting the handle on the tang and the latch assembly on the handle, and by screwing in the socket head capscrew. Make sure the bayonet fits on the rifle correctly.

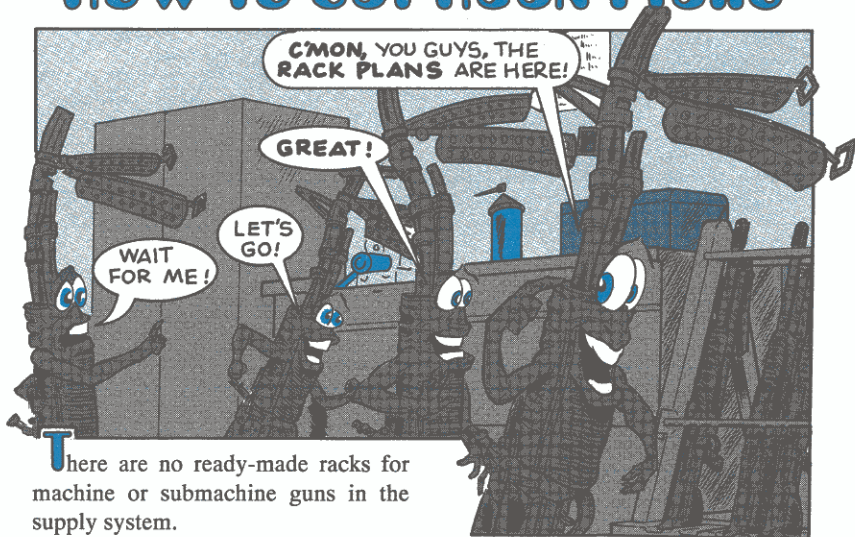
❑ Remove the scabbard's socket head capscrews and look for stripped threads and other damage. Replace them if necessary.

❑ Inspect the cutter assembly for damage, especially the stud. If the cutter can no longer cut, DS replaces it. The cutter's still good, though, if the screwdriver tip is damaged, as long as it can remove the cap screw.

❑ Eyeball the sharpening stone. If the stone's too smooth or part of it is missing, knock it out with a cold chisel. Be careful not to damage the scabbard. Take off any adhesive with drycleaning solvent, NSN 6850-00-281-1985. Stick on the new stone with silicone adhesive sealant, NSN 8040-00-851-0211.



# How to Get Rack Plans



**T**here are no ready-made racks for machine or submachine guns in the supply system.

But you armorers can get plans to make racks for machine and submachine guns by writing:

AMCCOM  
ATTN: AMSMC-MAW-SS  
Rock Island, IL 61299-6000

Plans include NSNs for material. One set of plans is for the M60 machine gun. Other plans can be adapted to fit the other machine and submachine guns. Specify which plans you need.

## Only Solvent for Small Arms

**S**tay away from the new biodegradable cleaning compounds, armorers. The compounds are water-based and could cause corrosion in your rifles, machine guns, or mortars.

FOR TOUGH  
CLEANING  
JOBS, USE  
DRY CLEANING  
SOLVENT  
LIKE YOUR  
TMs SAY.



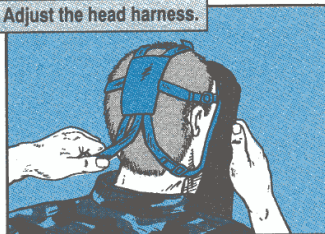
# TAKING CARE



**F**irst step, read and heed the word in TM 3-4240-300-10-1, -10-2 and -20&P. Second step, eyeball these points:

➔ If you don't get the head harness headpad right, the mask will slip. The temple straps should be just above the ears. That keeps the mask tight.

Adjust the head harness.



➔ Keep track of the outlet valve disks. They disappear faster than ice in August. Without the disk, or with a damaged disk, the mask will not protect you. Check it frequently and keep the disk and its seat clean. NBC NCOs need to keep extra disks, NSN 4820-01-260-8709, on hand.

Keep track of outlet valve disks.



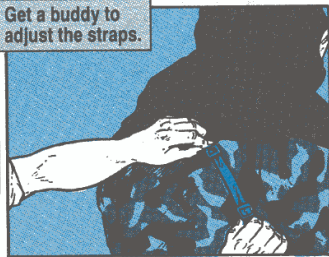
➔ Easy does it with the hood and hood straps. Rough handling will rip them. Hold the hood by the facepiece when putting it on and taking it off.

Hold by the facepiece.



Loosen the straps as much as possible before putting on the hood. Use the buddy system, if possible, to tighten the straps. Never jerk them.

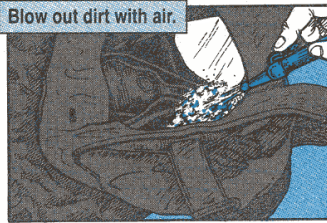
Get a buddy to adjust the straps.



# OF YOUR NEW MASKS

➔ Be careful when cleaning sand out of the inside of the mask. If you use a stiff brush or wet cloth around the inner lens rims, the lenses will be scratched.

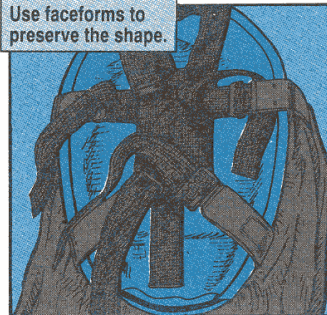
Blow out dirt with air.



To get rid of sand or dirt, blow it out with an air hose. If that's not possible, shake out as much of the sand as you can. Then wipe out the rest with a dry, clean cloth.

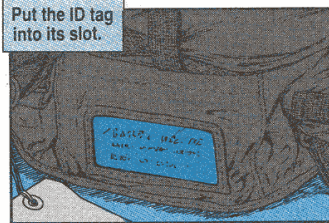
➔ Keep the faceforms that come with the masks. You need them to store masks not used for 30 or more days. Without the faceform, a mask takes a permanent set, which means leaks. The mask is ruined.

Use faceforms to preserve the shape.



➔ Do not mark the carrier. That hurts its protective qualities. The carrier comes with a slot for an ID tag. Use it.

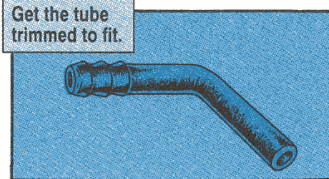
Put the ID tag into its slot.



➔ If you have trouble installing the airflow deflector, try putting in the prong closest to the nosecup first. That makes the job much easier.

➔ If your mask's drinking tube is so long it rests on your lip, your NBC NCO can trim it—as long as he leaves at least one ridge of the tube.

Get the tube trimmed to fit.



WITH PM LIKE THAT, WE CAN BOTH BREATHE EASIER.





# What's That Smell?

Dear Half-Mast,

There are some things about our new M40 masks that are bothering us. We smell ammonia sometimes while wearing them. What causes that? Is it dangerous? Is there any way to prevent it?

Also, why is there a hole under the chin portion of the hood?

SGT A.D.



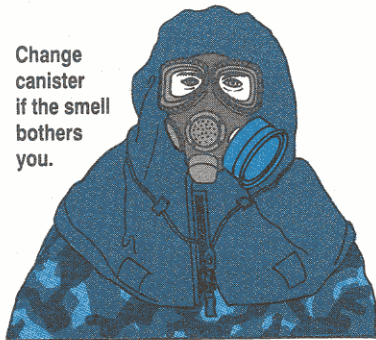
Dear Sergeant A.D.,

The ammonia smell is coming from the carbon used in the C2 canister. You will notice the smell most often in hot, humid weather. You are in absolutely no danger from the ammonia. But if the smell is bothering you, switching canisters will usually solve

the problem. New canisters won't have this smell.

The opening in the hood is for when the hood is worn over the outlet valve assembly.

Change canister if the smell bothers you.



The army decided the opening wasn't needed, so future hoods won't have it.

Half-Mast



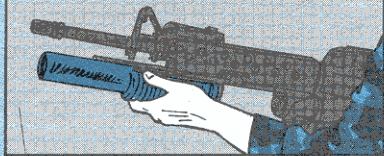
# Stop Slipping Sears



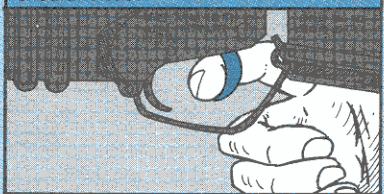
A slipping sear could let your M203 grenade launcher fire when you least expect it. That would make you quite unpopular in what's left of your unit.

Always do this test **BEFORE** you use the M203.

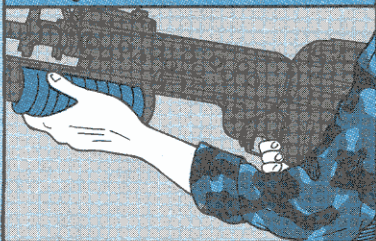
- ✓ Cock the launcher. Do this with a dummy round to protect the breech insert.



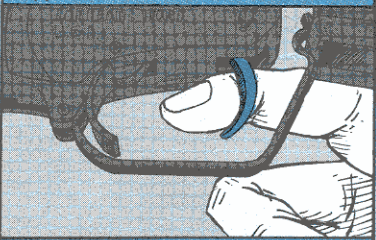
- ✓ Squeeze the trigger. The firing pin should release.



- ✓ Hold the trigger to the rear while cocking the launcher.



- ✓ Release the trigger. Nothing should happen.



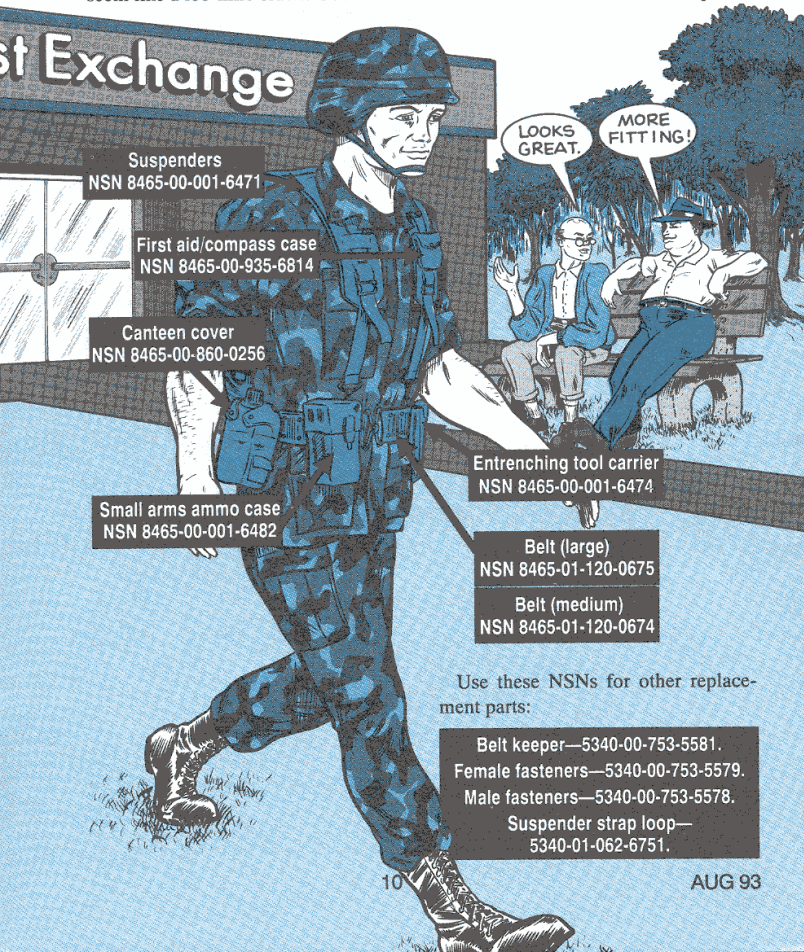
- ✓ Squeeze the trigger. The firing pin should release.

Problems? Tell your armorer.



# Carrying Equipment Care

**P**oor maintenance of the fighting load carrying equipment can make a 5-mile hike seem like a 100-mile crawl. Good PM can turn that hike into a walk in the park.



Suspenders  
NSN 8465-00-001-6471

First aid/compass case  
NSN 8465-00-935-6814

Canteen cover  
NSN 8465-00-860-0256

Small arms ammo case  
NSN 8465-00-001-6482

Entrenching tool carrier  
NSN 8465-00-001-6474

Belt (large)  
NSN 8465-01-120-0675

Belt (medium)  
NSN 8465-01-120-0674

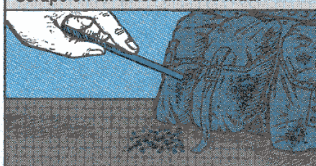
Use these NSNs for other replacement parts:

- Belt keeper—5340-00-753-5581.
- Female fasteners—5340-00-753-5579.
- Male fasteners—5340-00-753-5578.
- Suspender strap loop—5340-01-062-6751.

## Cleaning

Here's how to clean and repair the gear.

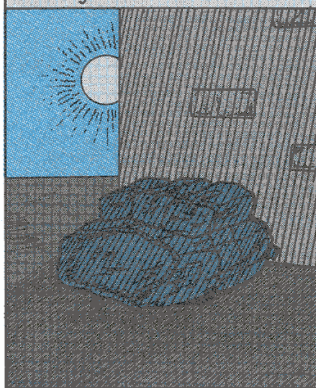
Scrape off all loose dirt and mud.



Hand-wash with warm water and detergent, NSN 7930-00-252-6797, then rinse well in warm water.



Dry in the shade to avoid fading and shrinking.



## Repairs

You, the user, can repair small rips, tears, and loose seams on the canteen cover, the ammo case and the compass case.

If the tear is less than an inch long, repair it with tape, NSN 8315-00-958-0744, or safety pin, NSN 8315-00-787-8000.

For tears up to three inches, use the needle and thread in the tentage repair kit, NSN 8340-00-262-5767.

Replace all bad keepers. Use NSN 5340-00-753-5581 for the belt keepers and NSN 5340-00-753-5580 for the keepers on other equipment.

Replace all bad keepers.



Replace the belt female fastener with NSN 8315-01-287-0604; replace the male fastener with NSN 8315-01-287-0603.

Replace the suspender strap fastener loop with NSN 5340-01-062-6751.

That's all you can do to keep your ALICE fighting load clean and ready. Any other repairs go to DS.



# GET THE FOG OUT

Purging and charging every 180 days for tank fire control instruments and every 90 days for artillery or when condensation is evident is the norm. The 180 days does not apply to rangefinders, which are purged once a year. Under tough conditions you're going to need to do it a lot more often. If you don't, moisture will build up until it ruins a lot of expensive — and vital — equipment.

## What You Need

TM 750-116 and your equipment TMs tell how to purge and charge most fire control instruments, but you'll still need the right stuff:

- ☑ Purging kit, NSN 4931-00-065-1110, does the job.
- ☑ Check out your vehicle or equipment TMs, too. Some have info on purging and charging gear and how to use it.
- ☑ TM 750-116 lists equipment needed for purging and charging.

☑ Before accepting a cylinder for purging, make sure it has a CGA 580-series valve. It has right-hand internal threads.

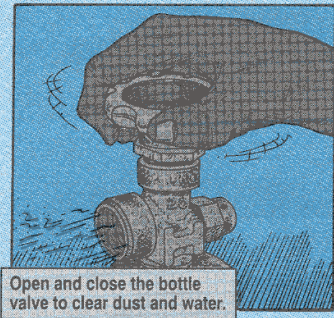
Never drop the cylinder. It could explode. You also need plenty of ventilation when purging and charging. Too much nitrogen can kill you.



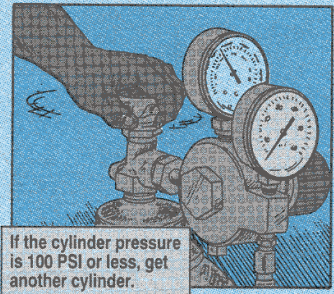
## Set Up the Gear

Line up your purging and charging gear and check it out before you begin.

Take the valve protection cap off the cylinder and quickly open and close the valve. That gets rid of dust or water in the valve seat.



If the pressure is 100 PSI or less, get another cylinder from supply. You can't do a good job at low pressure. Never drain the cylinder below 100 PSI either.



The pressure helps keep dirt and water out of the cylinder.

If you've got good pressure, slowly open the regulator valve until the low pressure gauge reads 10 PSI. That blows water, dust, spiders, and other unwanted elements out of the hose so they don't get pushed into your instrument. Now, turn off the regulator valve.

If nothing happens, either the cylinder's empty or the valve stem is stuck closed. If you smell something, you've got the wrong cylinder, because nitrogen has no odor. Either way, get a new cylinder.

Mount the regulator on the cylinder and the hose on the regulator. Use 9/16- and 11/8-in wrenches, but don't overtighten. The brass threads can't take it. Both gauges on the regulator should read zero.

Close the regulator valve by turning it counterclockwise. Open the cylinder valve slowly until the high-pressure gauge needle stops moving and the valve is wide open. Where the needle stops is the PSI of the cylinder.



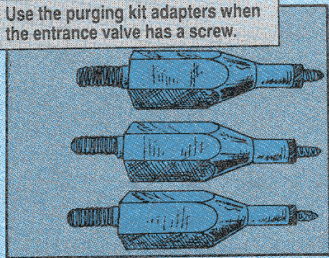
**F**ire control instruments that are fogged up or full of fungus are about as useful as a flashlight with dead batteries.



## Are You Really Ready?

Need an adapter? Got port caps or screws? Read on or you may leave something out.

Use the purging kit adapters when the entrance valve has a screw.



Look up the particular instrument you're purging in TM 750-116 or the instrument TM. It'll tell you what adapter to use (if any) and show where the entrance and exhaust ports are.

Entrance ports are usually circled in gray paint and outlet ports in yellow.

Take off the outlet port caps (or unscrew the screws) before you start. If you don't open the outlet port, pressure could build up and blow things apart inside the instrument. That's especially dangerous when dealing with radioactive fire control instruments.

Do not lose the port caps or screws. You'll need them after charging. If the entrance valve has a screw instead of a cap, you'll need one of the adapters in the purging kit. Use either 8-32 UNC-2A, 10-24 UNC-2A or 10-32 UNC-2A.

## The Purge Urge

TM 750-116 or the vehicle or instrument TM has the purging formula for the instrument you're working on. In the case of an M1A1 collimator, NSN 1240-00-332-1780, for example, you would

open the regulator valve until the pressure reads 5 PSI on the low-pressure gauge.

Once the instrument has been purged for the required time (five minutes for a collimator), shut off the regulator valve and replace the outlet port cap or screw.

If an outlet port doesn't have a gasket or seal, put a little sealing compound, NSN 8030-00-275-8110, on the screw and reinstall it.

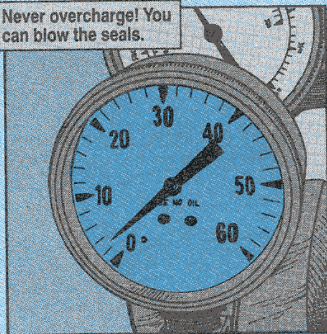
Nitrogen leaks are bad news, so if you need replacement gaskets, screws, or caps, order them from TM 750-116.

## Charge It, Please

If you don't charge the device after purging, dust and water will get inside.

Charging, as with purging, is done with nitrogen. Set the regulator valve to the correct pressure and charge for the time specified in TM 750-116 or your

Never overcharge! You can blow the seals.



equipment TM. For example, the M1A1 collimator should be charged at 3 PSI for 10 seconds, then leak tested for a minimum of 5 minutes. If there are no leaks, shut off the gas flow, remove the hose assembly and release all pressure

by depressing the inlet port valve stem. Then reconnect the hose assembly and charge the instrument at 1 PSI for 10 seconds. Remove the hose and replace the inlet port cap.

## That's Not All

You're not finished until you shut off the nitrogen. Completely close the valve on the cylinder. Open the valve on the low-pressure side of the regulator just a little to bleed off pressure and then close it.

If you don't bleed off the pressure, the rubber diaphragm in the regulator stays under strain. That could cause a leak and then you'll need a new regulator.

For your own safety, read up on compressed gases in AR 700-68, Storage and Handling of Compressed Gases and Gas Cylinders. Working with a high-pressure nitrogen cylinder and its accessories can be dangerous unless you know what you're doing.

Make sure the cylinder is correctly marked and has all the right safety devices—dust plug and/or valve protection cap.

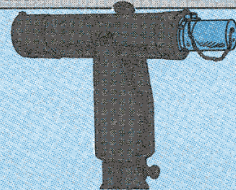
## Radiation Reminder

Remember, there's no difference in how radioactive fire control instruments

are purged and charged—unless the radioactive cells are broken or not illuminated.

The M1A1 collimator, which contains radioactive tritium, is a good example. Check it closely before purging and charging. Here's how:

Check under the cover assembly and through the collimator's objective end for a cracked reticle and loss of illumination.

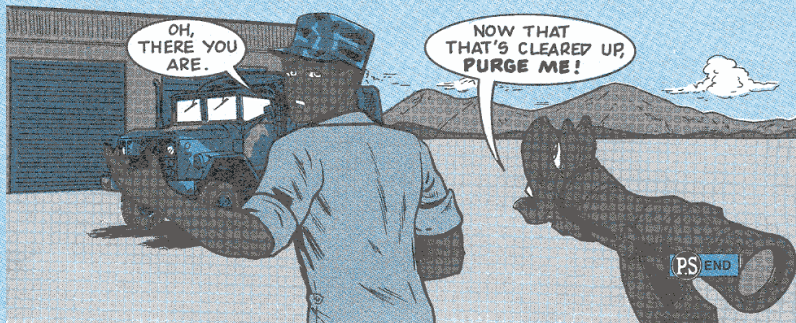


If the reticle is intact and the device is illuminated, you're OK.

If you see cracks, but the device is still illuminated, turn in the collimator to DS for repair.

If you see no illumination at all, remove the collimator and re-check it in a dark room or closet. If you see a slight glow or haze, turn it in to support for repair.

If there's still no glow, seal the entire collimator in a double plastic bag and notify the radiation protection officer.



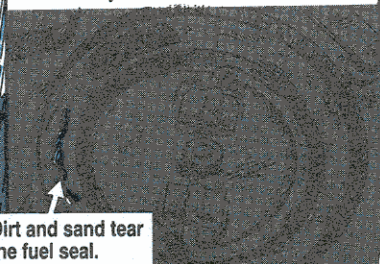


# Fuel Filler Neck Fix

Drivers, the area surrounding the fuel filler neck on the M2/M3-series Bradley collects a lot of dirt and sand.

That buildup makes it difficult to close the cap properly. Forcing the cap tears the fuel seal, NSN 5330-01-107-3315, allowing rain water to trickle down into the fuel system.

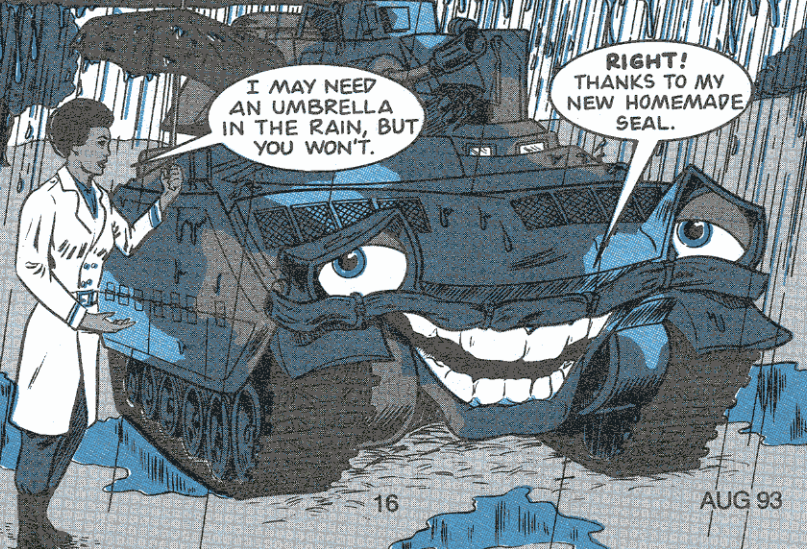
Until you can get a new seal, use this temporary fix: Cut out a piece of old rubber innertube about the size of the fuel cover. After cleaning out any dirt and sand from around the filler neck, place the homemade seal over the fuel cap and latch down the cover.



Dirt and sand tear the fuel seal.



Place seal over cap and latch cover.

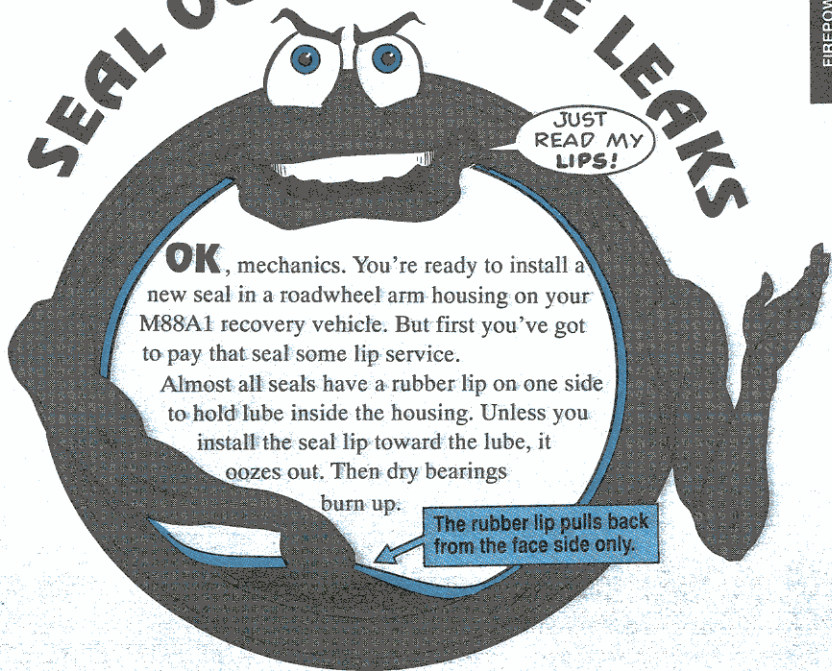


I MAY NEED AN UMBRELLA IN THE RAIN, BUT YOU WON'T.

RIGHT! THANKS TO MY NEW HOMEMADE SEAL.



# SEAL OUT GREASE LEAKS



**OK**, mechanics. You're ready to install a new seal in a roadwheel arm housing on your M88A1 recovery vehicle. But first you've got to pay that seal some lip service.

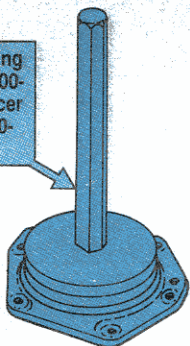
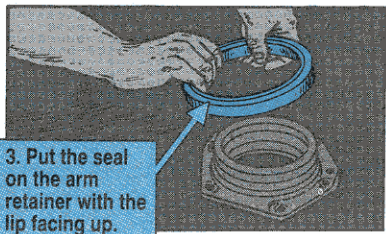
Almost all seals have a rubber lip on one side to hold lube inside the housing. Unless you install the seal lip toward the lube, it oozes out. Then dry bearings burn up.

The rubber lip pulls back from the face side only.

Here's how to install the seal:

1. After you disassemble the upper roadwheel arm, place the seal retainer face-side down on a bench.
2. Apply a light coat of lube on the outer diameter of the seal and to the rubber lip.

4. Seat the seal using replacer, NSN 5120-00-473-7471, and replacer handle, NSN 5120-00-708-3883.



Put everything back together and you're done. No leaks, no seeps, no drips.



# Lube Spindle Bearings, Too

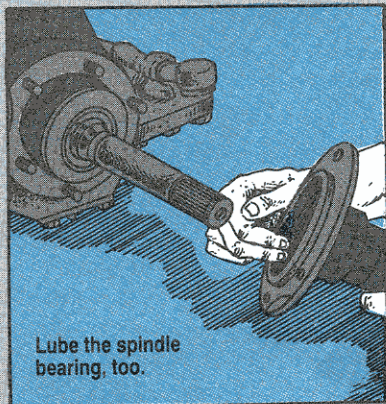


**A** little extra lubing, mechanics, can save a U-joint on your CUCVs.

When you're lubing the front wheel bearings, lube the spindle bearings, too. Without grease, the bearing can freeze to the U-joint yoke, and the yoke snaps.

It's no sweat since you've already removed the parts needed to grease the wheel bearings. Just remove the spindle per Para 6-7, TM 9-2320-289-20. Then, lube the spindle bearing just as you do the front wheel bearings.

This word is on Page 5-3 of TACOM EIR Digest, TB 43-0001-39-7 (Dec 91).



Lube the spindle bearing, too.

## Glow Plug Warning Label

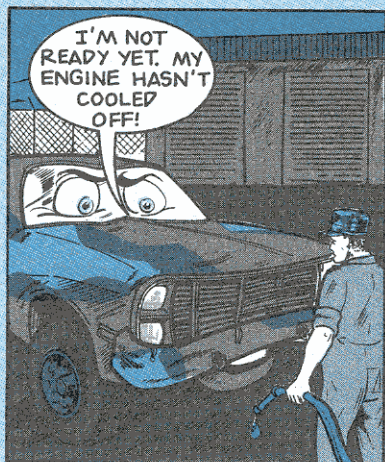
You can now get a warning label to stick on the dashboard of the HMMWV or CUCV to remind drivers to wait till the ready light goes out before they try to start the engine. It comes with NSN 7690-01-267-7370. It says:

**Warning: Do not start engine until wait light goes out.**



CUCV ...

# Cool Down Before Hose Down



A well-meaning operator can destroy components of a hot engine by washing them down with water. A good example is the fuel injection pump on CUCV engines.

The outside casing on a hot pump cools off quick-like when it gets sprayed with water. Problem is, the pump's inner shaft and bearings are still hot. The temperature difference causes the pump's shaft to crack. Now you're stuck with a ruined pump, a down vehicle and a major repair bill.

Be cool when you wash your vehicle. Let it cool down before you hose it down.

GROUND MOBILITY

## Make Your Own Hoses



YOU CAN MAKE YOUR OWN HOSES FROM BULK HOSE, NSN 4720-01-156-0549.

USE 7 INCHES OF BULK HOSE TO REPLACE THE FOLLOWING READY-MADE HOSES.

CUCV — Items 5 and 13, Fig 8,  
TM 9-2320-289-20P.

HMMWV — Items 9 and 22, Fig 11,  
TM 9-2320-280-20P.

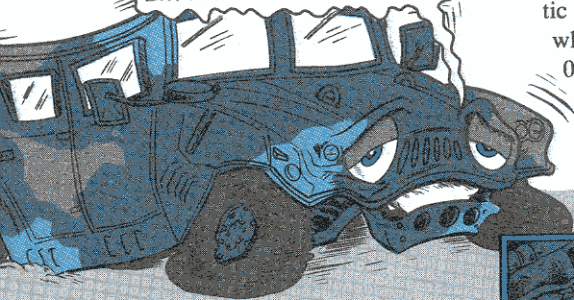


HMMWV...

# Safe, Clean Fuel Drain

**A** dirty fuel filter clogs fuel injectors and can slow your HMMWV to a crawl. No problem. Just remember to drain the filter daily per your -10 PMCS.

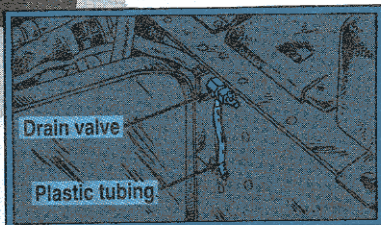
**OH-H-H-H,  
I'M MOVING MIGHTY SLOW.**



Keep the operation clean and safe by adding an 8-in length of 1/4-in plastic tubing to the drain valve. Get what you need with NSN 4720-00-833-0867.

That keeps the fuel from splashing on the vehicle—or you—and makes it easier to tell when you're draining clean fuel.

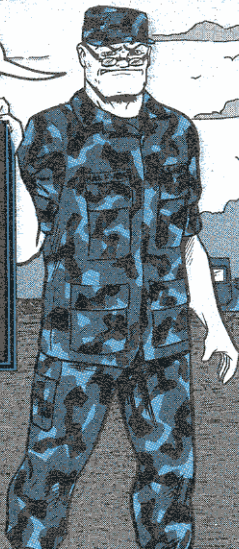
**Be sure to dump drained fuel into a waste container. Never dump it down a handy drain or on the ground.**



## Leaky Seams Fix

**HERE'S HOW TO PUT AN END TO THOSE PESKY LEAKY CARGO COVER SEAMS...**

**P**ut a stop to leaky seams on plastic-coated cargo covers on the HMMWV and CUCV and tarps of the M871/M872 semitrailers. Coat the seams with adhesive. NSN 8040-00-262-9028 gets a pint, NSN 8040-00-262-9031 a quart and NSN 8040-00-281-1972 a gallon. Coat leaky seams as needed.





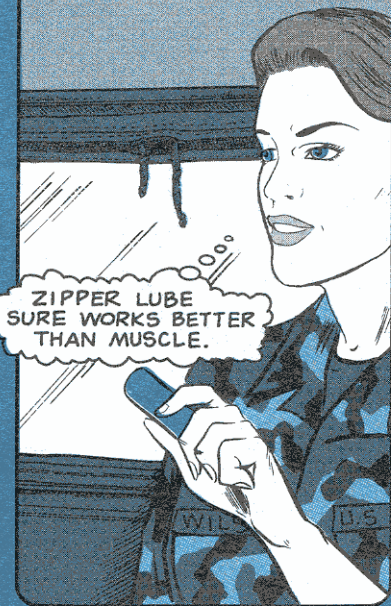
HMMWV ...

## Zipper Stuck? Lube It!

Use zipper lube—not elbow grease—when the zipper sticks on your soft-top Humvee’s plastic window.

To clean sticking zippers, clean out grit or dust in the works with an old toothbrush.

Then rub the zipper generously with zipper lube, NSN 9150-00-999-7548. That brings a box of 24 sticks. The lube’ll keep the zipper moving easily.



2 1/2-Ton Trucks ...

## Cut the Hassle

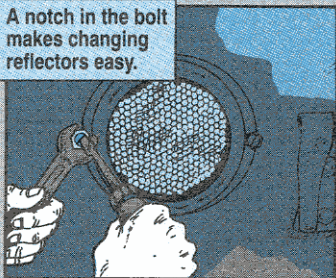
Dear Editor,

Changing reflectors on the cargo box of shelter-carrying trucks can be next to impossible.

There's just not room between the shelter and cargo box to get a wrench on the bolt head.

No sweat. I cut a notch in the thread end of the bolts holding the reflector. Using two blades in the hacksaw from the No. 1 Common shop set makes a nice groove.

A notch in the bolt makes changing reflectors easy.



Then, I use a screwdriver to hold the threaded end of the bolt and turn the nut with a wrench.

Ssg Robert A. Akin  
AMSA 14(G)  
Fresno, CA

FROM THE DESK OF THE Editor 

A top-notch idea. Thanks for passing it on.



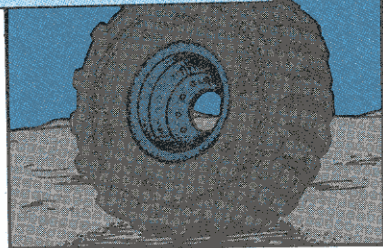
# Choose Tires Carefully



Mismatching tires to rims creates big-time problems, mechanics, so read the sidewall before mounting tires on HEMTT rims.

HEMTT rims take 16.00x20 tires. Some troops have found out the hard way that smaller M939-series truck tires (14.00x20) will also fit on HEMTT rims.

Make sure the tire's 16.00 x 20 for the HEMTT.



The smaller tire doesn't match up with the rim flange and split ring of the HEMTT wheel. When the air pressure gets too great, the assembly explodes.

The parts become missiles that slam into anything — or anyone — in their way.

## Build a Cage

Even when you're sure you have the right tire, be safe. Put the tire in a cage to air it up.

You can make your own cage by using the plans on Page 2-3 of TM 9-2610-200-14. For HEMTT tires, you have to add four inches to the width.

Always use a cage.

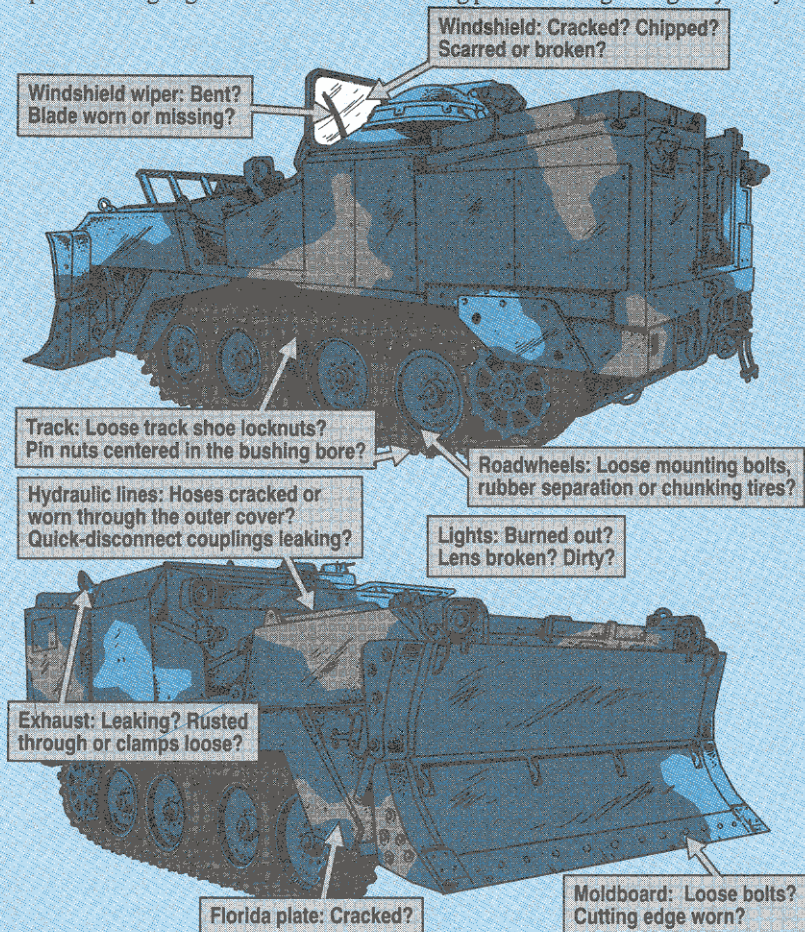




# Be Your Own Inspector

As an M9 ACE operator, your job is to make sure your vehicle can move mountains of dirt or sand when it has to.

Start your inspection by taking a slow walk around your ACE. Look for any wet spots . . . dangling wires . . . broken or missing parts . . . things that grab your eye.



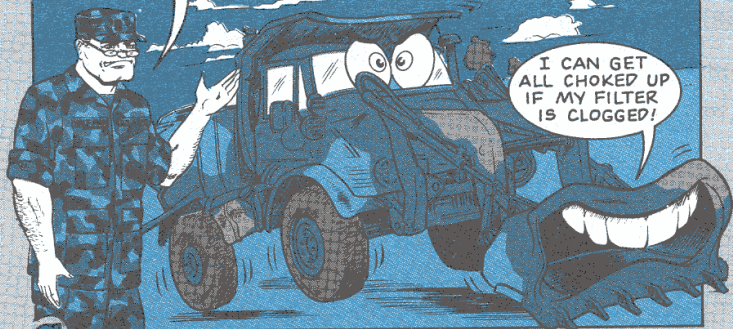
If you find anything you can't fix yourself, jot it down on your DA Form 2404. Get it checked out before you go!



# Let's SEE

# What Fuel Matters

**OPERATORS, HEAT, DIRT AND SAND WILL DO A NUMBER ON YOUR SMALL EMPLACEMENT EXCAVATOR'S FUEL SYSTEM.**

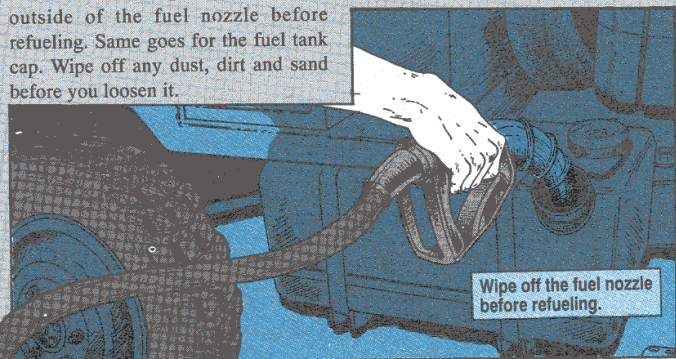


Condensation forms in the SEE's fuel tank when hot days turn to cool nights. Water in fuel chokes filters and fuel injectors. Same goes for dirt and sand. They get through open caps and into the fuel tank.

You wage a losing battle against all of them unless you take care of these problems.

## Keep Fuel Clean

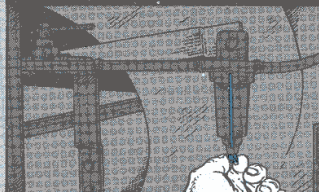
Start off on the right foot by keeping fuel clean during refueling. Wipe off the outside of the fuel nozzle before refueling. Same goes for the fuel tank cap. Wipe off any dust, dirt and sand before you loosen it.



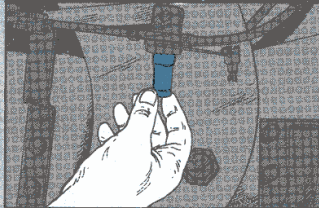
## Clean the Fuel Filter

The fuel prefilter is mighty small and clogs quickly. Each week, clean it like so:

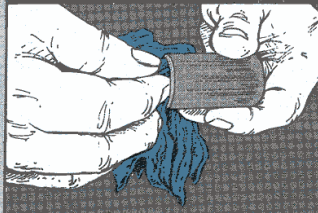
- 1** Close the fuel shut-off cock. Loosen the wing nut and push the clip aside.



- 2** Unscrew the bowl, then the strainer.



- 3** Take a clean rag and wipe any crud out of the bowl.



- 5** Screw the strainer and bowl back in place.  
**6** Push the clip back in place and tighten the wing nut.  
**7** Open the fuel shut-off cock.

Never run your SEE without a prefilter strainer.



## Back to Basics

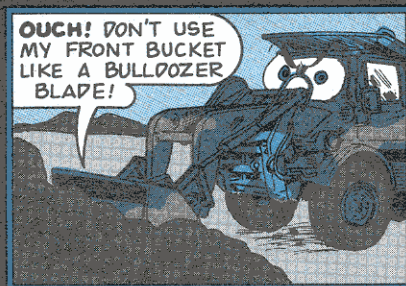
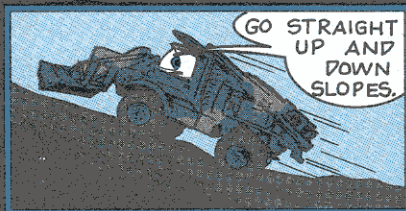
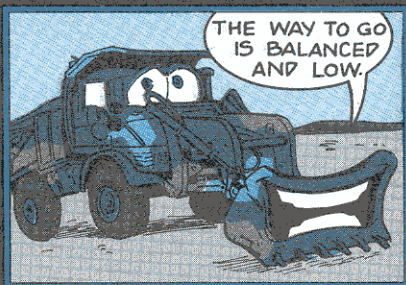
Careful is the word to keep in mind when operating the SEE. It has some unique vehicle characteristics you need to remember every time you crank it up.

■ Run your SEE low and balanced when traveling over rough or hilly ground. If you're hauling a bucket of dirt, keep it low until you're ready to dump. A full bucket carried overhead makes the SEE top heavy. When you're on the move, gullies, bumps and tricky slopes can rock the SEE from side to side. Low and balanced keeps you upright.

■ Steady as she goes when driving the SEE up or down a slope. Never approach a slope at an angle, with one side of the vehicle higher than the other. Go straight up and straight down.

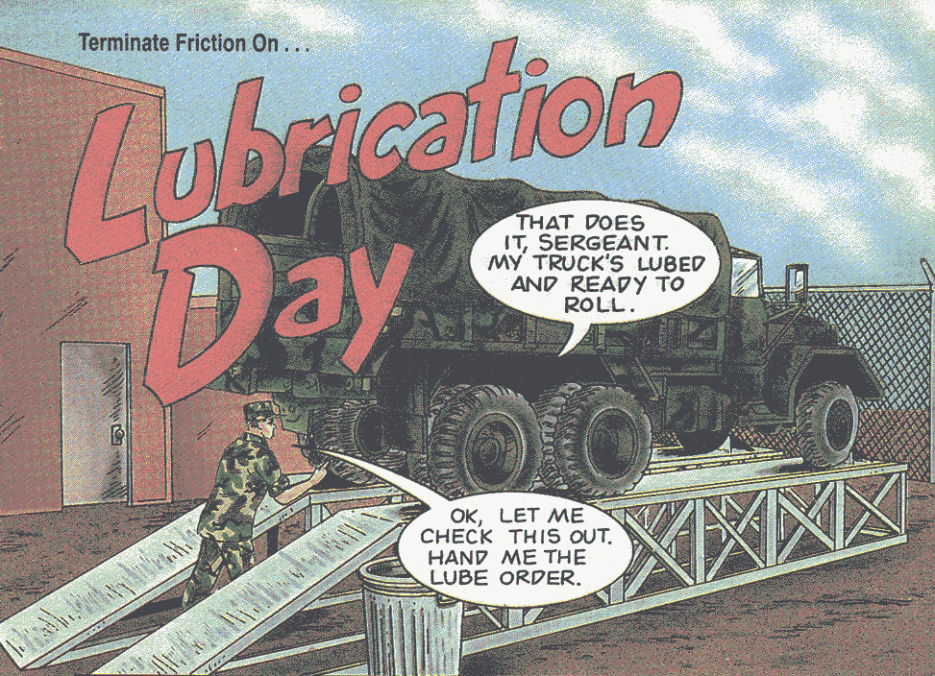
■ Always use four-wheel drive when moving cross country. And on really steep hills, engage the differential locks.

■ Remember what the SEE is designed to do and how to make it do the job. Use the front bucket only for loading or backfilling loose dirt. Never use it to excavate banked or compacted soil. It does not have the power of a bulldozer or the M9 ACE for digging, and hydraulic system and bucket failure is a sure result if you try to dig.






# Lubrication Day



THAT DOES IT, SERGEANT. MY TRUCK'S LUBED AND READY TO ROLL.

OK, LET ME CHECK THIS OUT. HAND ME THE LUBE ORDER.



DON'T NEED ONE. I'VE BEEN LUBING SINCE I WAS A KID!

WHAT?

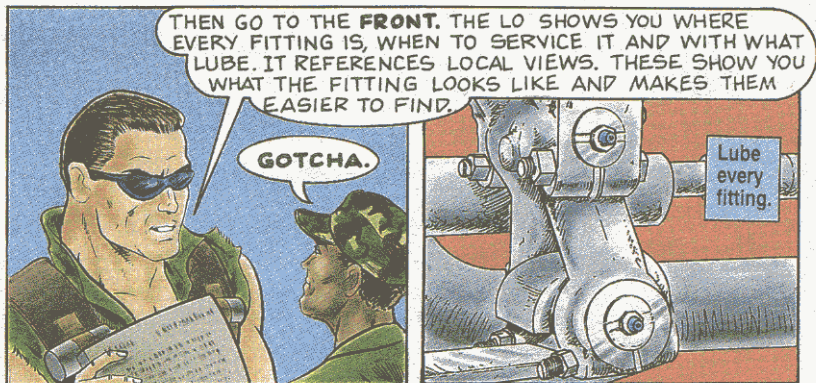


**GRRRR!!!**  
IT'S TIME FOR A TALK FROM THE LUBRICATOR!









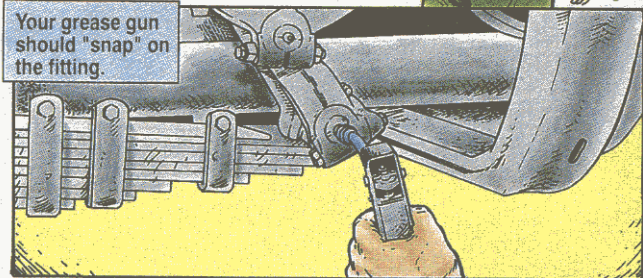
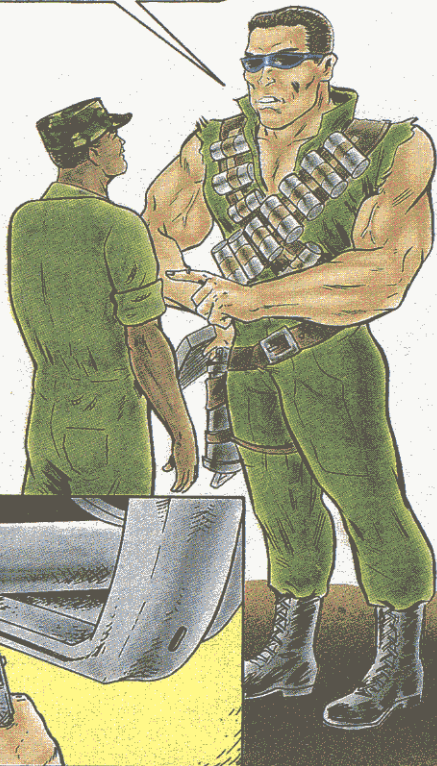
ONCE YOU'VE GOT THE SCORECARD, IT'S UP TO **YOU** TO EXECUTE.

💧 Don't give up. Some fittings are hard to find and harder to get to. Give them grease.

💧 Dirt and grease don't mix. Wipe each fitting before you grease it. That keeps dirt and grit out. Likewise, keep dirt out of your bulk grease when you open the container.

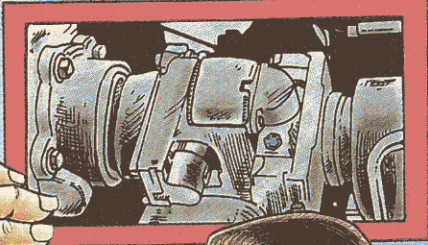
💧 Don't over- or under-lube. Remember the Notes? They will often give you a clue on how to lube correctly.

💧 Make sure the grease gun end snaps on the fitting. If it fits snugly, and there's no flow of grease — that is, you feel back pressure — try cleaning the fitting opening with a piece of wire.





**FINALLY**, SOME LUBE POINTS HAVE REMOVABLE PLUGS. THE LO TELLS YOU WHEN TO REMOVE THE PLUG AND INSERT A FITTING BEFORE YOU LUBE. WHEN YOU'RE DONE, REMOVE THE FITTING AND PUT THE PLUG BACK IN. DON'T LEAVE THE FITTING.



I'VE GOT THE IDEA NOW. YOU WON'T CATCH ME UNDER THERE WITHOUT MY LO AGAIN. THANKS, MISTER.

**NO SWEAT**, SPECIALIST. GOTTA GO. ARRIVEDERCI. NO, THAT'S NOT IT. CIAO. NO. AUF WIEDERSEHEN UH-UH. HASTA LA...

...VISTA, BABY.

BABY?

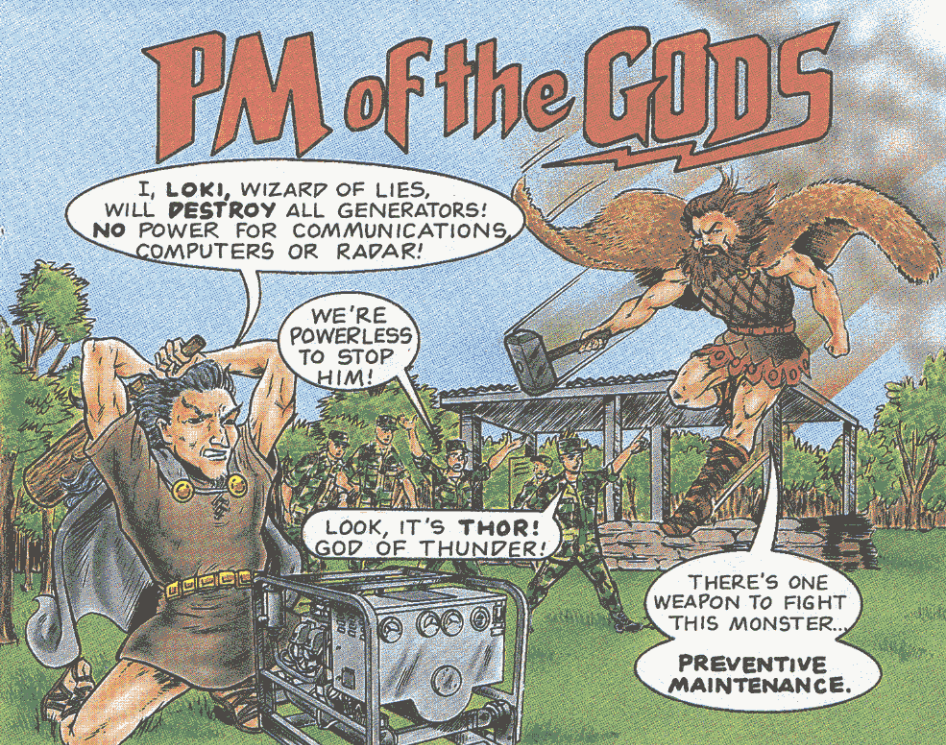
ARE YOU ALL RIGHT, SERGEANT? YOU SEEMED TO GO INTO A DAZE FOR A SECOND.



YEAH, I'M FINE. NOW ABOUT THIS GREASE JOB, SOLDIER...



# PM of the GODS



I, **LOKI**, WIZARD OF LIES,  
WILL **DESTROY** ALL GENERATORS!  
NO POWER FOR COMMUNICATIONS,  
COMPUTERS OR RADAR!

WE'RE  
POWERLESS  
TO STOP  
HIM!

LOOK, IT'S **THOR!**  
GOD OF THUNDER!

THERE'S ONE  
WEAPON TO FIGHT  
THIS MONSTER...

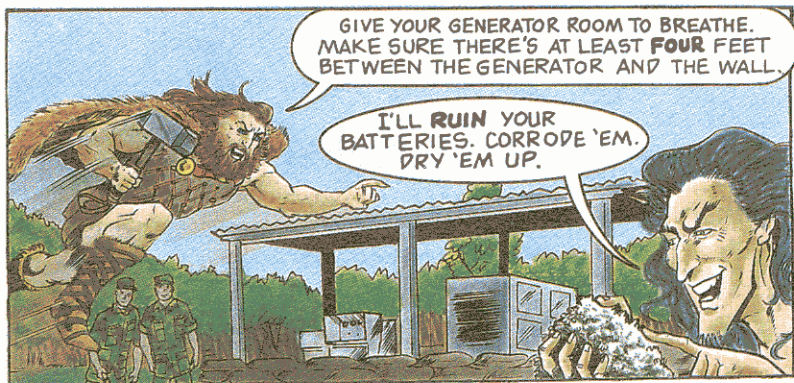
**PREVENTIVE  
MAINTENANCE.**



HEAT! HEAT  
DESTROYS  
GENERATORS!

OIL THINS OUT.  
INTERNAL PARTS  
WEAR RAPIDLY.  
CLOSE SHROUDS AND  
DOORS TO KEEP AIR  
CIRCULATING TO COOL  
THE ENGINE.

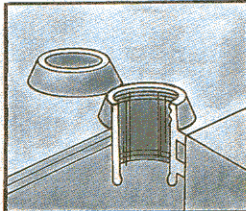
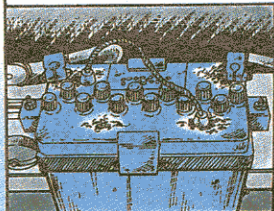




GIVE YOUR GENERATOR ROOM TO BREATHE. MAKE SURE THERE'S AT LEAST **FOUR FEET** BETWEEN THE GENERATOR AND THE WALL.

I'LL RUIN YOUR BATTERIES. CORRODE 'EM. DRY 'EM UP.

CORROSION EATS UP METAL PARTS AND SHORT-CIRCUITS THE BATTERY. WIPE OFF LIGHT STUFF WITH A CLOTH. FOR REALLY HEAVY STUFF, SCRUB THE CORRODED PARTS WITH A BRISTLE BRUSH AND A MIXTURE OF BAKING SODA AND WATER.

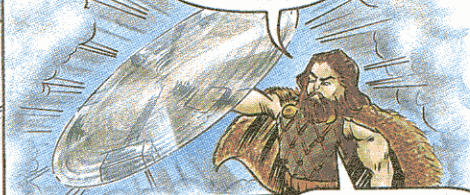


**WATER'S THE LIFEBLOOD** OF YOUR BATTERY. KEEP BATTERY PLATES COVERED ABOUT **THREE-EIGHTHS INCH** ABOVE THE PLATES.



DIRT IN THE ENGINE GRINDS MOVING PARTS TO BITS.

A DIRTY OR CLOGGED AIR FILTER STOPS THE FLOW OF AIR AND CHOKES THE ENGINE.



EYE THE AIR RESTRICTION INDICATOR DAILY. IF YOU SEE THE AIR FILTER IS DIRTY, CLEAN IT OR REPLACE IT.



**CONTAMINATE  
THE FUEL!  
NEGLECT  
LUBRICATION!**

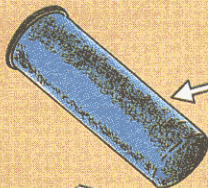
DIRT AND MOISTURE IN THE FUEL SYSTEM SPELL DISASTER FOR YOUR GENERATOR. HERE'S YOUR FIRST LINE OF DEFENSE AGAINST THEM...

**OOOF!**

... A TIGHT-FITTING FUEL CAP TO KEEP OUT DIRT AND MOISTURE...  
... A GASKET IN GOOD CONDITION, NOT DRY-ROTTED OR CRACKED...

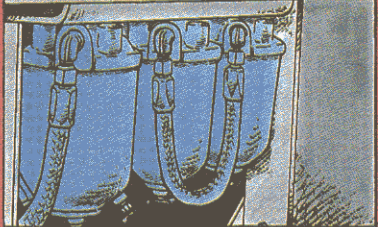


... ALONG WITH A FUEL STRAINER IN THE FUEL TANK.



YOUR BEST WEAPONS AGAINST CONTAMINATED FUEL ARE **FUEL FILTERS**. INSPECT THEM ACCORDING TO YOUR **PMCS** AND CHANGE THEM WHEN NEEDED.

**CLOGGED FUEL FILTERS CAUSE THE ENGINE TO SPUTTER AND DIE.**





GENERATORS NEED REGULAR LUBRICATION TO KEEP MOVING PARTS MOVING. TOO **LITTLE** OIL CAUSES THE ENGINE TO SEIZE. TOO **MUCH** OIL CAUSES INTERNAL PRESSURE AND BLOWS GASKETS AND SEALS.



IF THE OIL LEVEL'S LOW, FILL TO BETWEEN THE **ADD** AND **FULL** MARKS ON THE DIPSTICK.

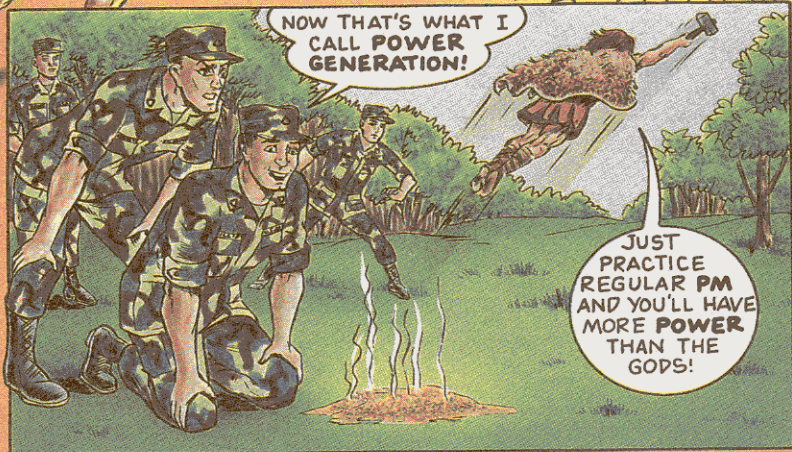
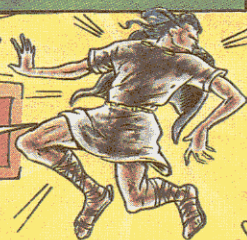


DO NOT OVERFILL!

THOR! LOOK OUT!

BY ODIN, I'VE HAD ENOUGH OF THIS FOOLISHNESS! I SHALL NOW FINISH YOU, ONCE AND FOR ALL!

**WONK A DOOM  
WONK A DOOM**



NOW THAT'S WHAT I CALL **POWER GENERATION!**

JUST PRACTICE **REGULAR PM** AND YOU'LL HAVE MORE **POWER** THAN THE GODS!



# What's Watt?

Dear Windy,  
Is the infrared cover authorized to be mounted on our Cobras' skid light and the searchlight? Also, what is the highest wattage that can be used in the skid light and searchlight?  
CW2 L.S.B.

Dear Mr. L.S.B.,

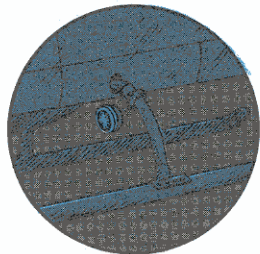
The infrared cover, Item 2C, Fig 110, (AH-1P), and Item 4A, Fig 110A (AH-1E/F) in TM 55-1520-236-23P, should be used only on the searchlight, Item 2A in those figures.

Confusion over this started when MWO 55-1520-236-50-5 was applied. At that time, the searchlight lamp was removed and put in the newly installed skid landing light. But the infrared cover stayed put. Some of you moved the cover to the skid light, but that's wrong.

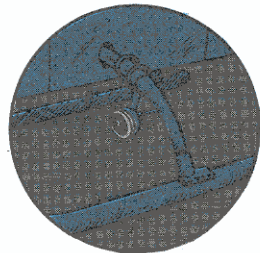
Use lamp, NSN 6240-00-690-1094, for your searchlight with the infrared cover. It's 150 watts. Never use more than a 250-watt lamp with the cover.

Use lamp, NSN 6240-00-372-4841, for the skid light. It's 450 watts.

Windy



Skid light right—without infrared cover.



Skid light wrong—with infrared cover.



# Water in the Indicator

MY OIL BYPASS INDICATOR LIGHT IS LIT. WHAT ARE YOU GOING TO DO ABOUT IT?

HMMMM... WELL, IT COULD BE A POPPED DIRTY FILTER INDICATOR!

A lit OIL BYPASS UTIL HYD indicator sends a good mechanic to the utility hydraulic manifold to look for a popped dirty filter indicator.

If neither the return or pressure indicator is popped, the TM tells you it's time to search for an electrical short. And do that first. But the problem may just be water in the indicator.

Water's not a new problem. In fact, new indicators have a rubber boot over the pop-up button to try to solve it.

If water gets in the indicator, dry it out instead of replacing it. Remove it and let it dry for about three days. Then try it

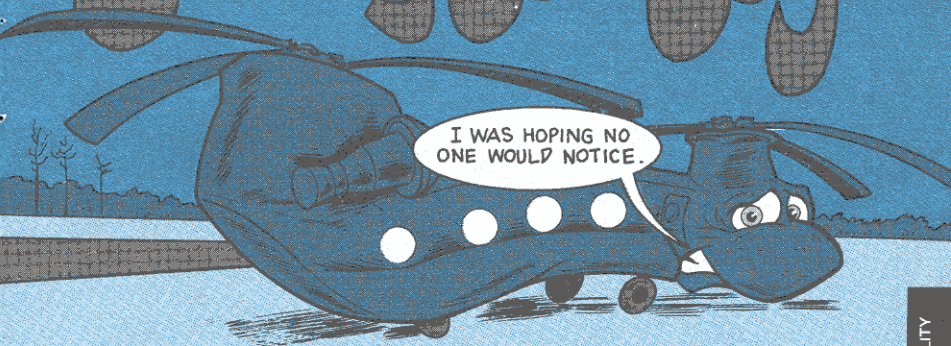
Return dirty filter indicator.

Pressure dirty filter indicator.

again. If it still fails, replace it. If the indicator works, proseal can be applied to the seams to prevent further water intrusion. If it still fails, replace it.



# Solving Seat Sag



Dear Windy,

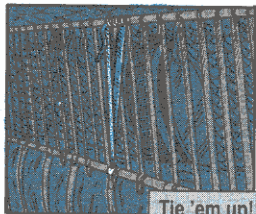
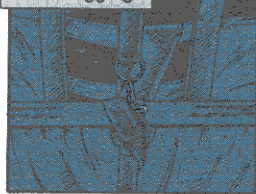
Stowing Chinook seats by hooking the seat bottom to the seat back is guaranteed to cause seat sag. Sagging seats are a safety hazard, especially during night ops.

A simple solution is to use cord, NSN 1680-00-862-9248, hooked to the seat clip and then up to the seat retaining bar.

Now your seats are stowed tight and the sag's solved.

SPC Joseph M. Kaufman  
Ft Campbell, KY

Seats sagging?



Tie 'em up!

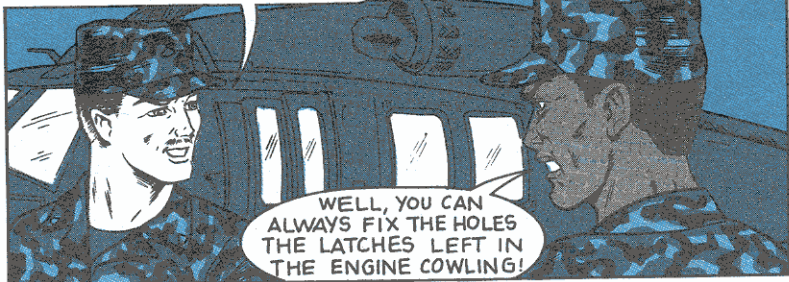
A simple solution to solving seat sag.  
Good job, Joe.

*Windy*



# Lock Down the Latch

HEY, SERGEANT, I JUST FINISHED UP THE TRANSMISSION OIL COOLER. WHAT'S NEXT?



WELL, YOU CAN ALWAYS FIX THE HOLES THE LATCHES LEFT IN THE ENGINE COWLING!

It's time to work on the transmission oil cooler. So, you pop open the access doors, swing 'em back and let 'em fall. Now you've got another job . . . fixing the holes in the engine cowling made by the access door's open latches.

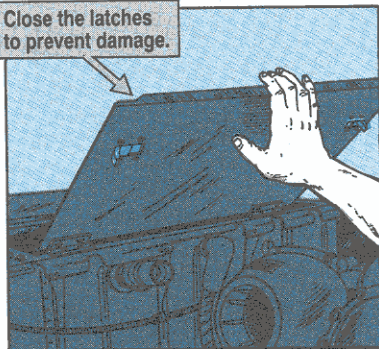
It shouldn't happen, but it does . . . time and time again.

It's easy to forget to close the latches, you say.

Sure is.

That's why you need to make closing latches a habit.

Close the latches to prevent damage.



Next time you pop the latches to open the access doors, stare at the latches a minute. Now close them and open them several times. You'll be amazed how quickly your mind will make the two actions, opening and closing, one action. Next time you open the access doors, you'll immediately close down the latches.

DON'T BELIEVE IT? TRY IT.





UH-60A ...

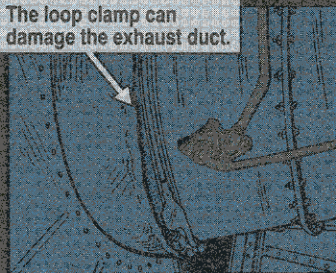
## Clamp Down on Damage

The loop clamp, Item 36 of Fig 289 in TM 55-1520-237-23P-2, can badly dent the UH-60A engine's exhaust duct.

The bolt and nut on the clamp bang into the duct and bend it out of shape.

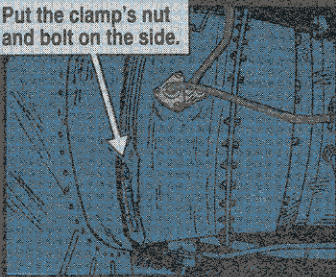
You can't stop the damage entirely, but you can limit it. Every

The loop clamp can damage the exhaust duct.



time you tighten down the loop clamp, put the nut and bolt in the same spot on the side. The clamp doesn't seem to rub as much on the side, and keeping it in one spot will limit the damage.

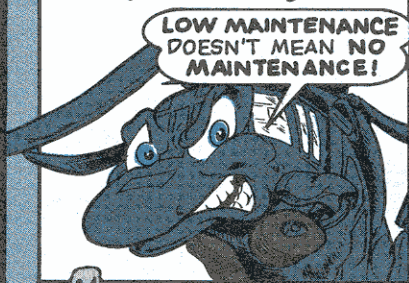
Put the clamp's nut and bolt on the side.



UH-60A ...

## You "Nose" It Hangs by Its Hinges

LOW MAINTENANCE DOESN'T MEAN NO MAINTENANCE!

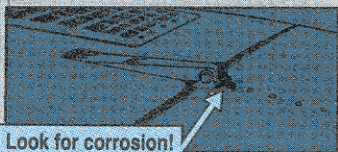
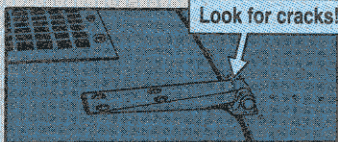


Your nose door assembly hangs by two hinges that usually do their job and don't require much attention. But this inattention means too many are showing up with cracks and corroded hardware.

Right now, run an eyeball check of your Black Hawks' nose door hinges. If they're cracked, replace 'em. If the hardware is corroded, clean it and replace it as necessary.

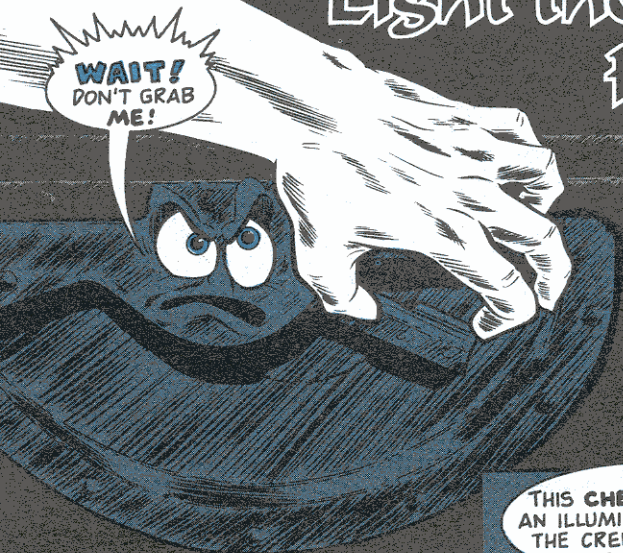
Once your hinges are in shape, make a mental note to look them over every time the nose door is opened.

Look for cracks!



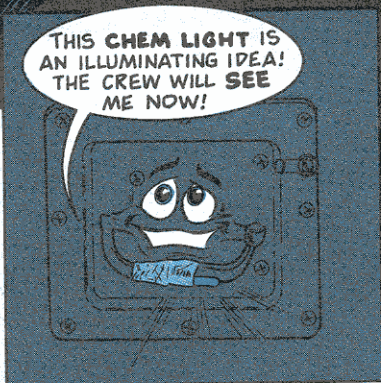
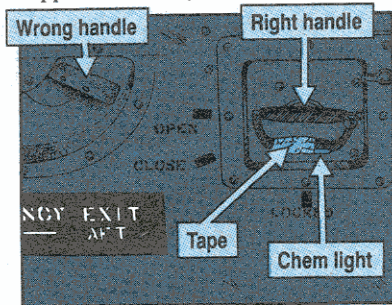


# Light the Right Handle



Going after the inexperienced troop who tried to open the cargo door during night ops by grabbing the window jettison handle doesn't keep someone else from doing the same thing.

The two handles are so close together that, in the dark, mistakes can happen to anyone. You mechanics and crew chiefs can make sure those mistakes don't happen and save yourself a repair job.



This problem is simple to solve. Light the handle with a mini-chemical illumination light, NSN 6260-01-209-4434, before night ops. The light is green, about 1 1/2 inches long, lasts 8 hours and only costs about \$10 for a box of 50. Just tape it to the cargo door handle before night operations. It doesn't give off enough light to be a distraction, but it does give enough light to see the right handle.



# In Search of the Seal



**T**he trip to replace the cargo door weather strip seal, NSN 5680-01-137-3839, starts out as an easy ride.

But your train gets derailed when the AMDF tells you the NSN has been deleted without replacement.

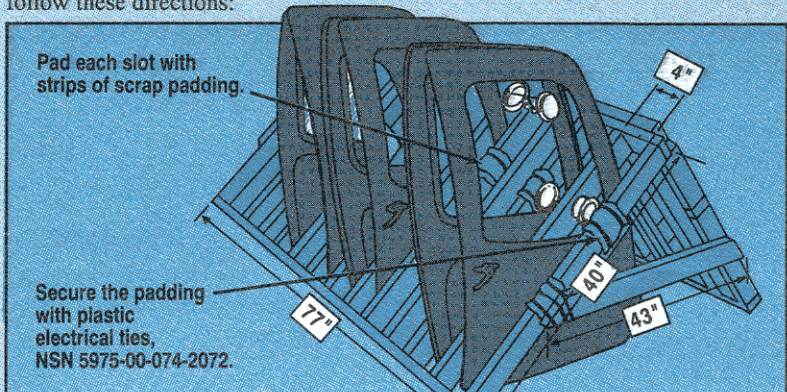
To get back on track, jump over to Page H-177 of TM 55-1520-237-23-8. There you will find instructions on how to make the seal and what materials to use.

OH-58 ...

## Don't Stack 'em, Rack 'em!

**S**toring Kiowa doors is a problem. They get stacked against a wall or piled into a bin. Then they're knocked on the floor or somebody tosses other equipment in the same bin. The results are scratched windows and damaged doors.

Solve the problem by building a door rack. Just get yourself some 2 x 4s and follow these directions:





# It's a Pain to Drain

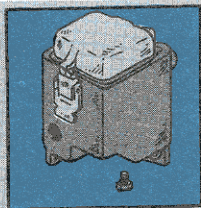
Dear Editor,

The six-month hydraulic reservoir check on our Kiowas used to be a real sloppy job.

To do the check, you must first drain the reservoir and that means hydraulic fluid all over the pump and everywhere else.

We cleaned up this mess by replacing the reservoir drain plug with a drain valve and by using a special drain tool.

Replace drain plug, NSN 5365-00-837-0856, with ...



... drain valve, NSN 2915-00-202-6250,



and nut NSN 5310-00-282-7823.



Add a new O-ring, NSN 5330-00-805-2966,



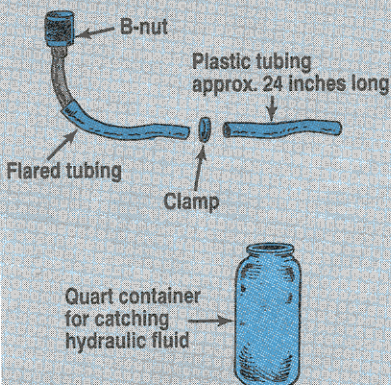
and tube cap, NSN 4730-00-221-2115.



It'll look like this:



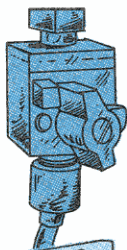
Then make this tool:



Make the tool out of discarded common hardware ... nut, clamp and tubing.

Now when you do the six-month reservoir check, simply remove the cap from the drain valve, install your new tool and drain into a container.

James E. Battle  
Ft Jackson, SC

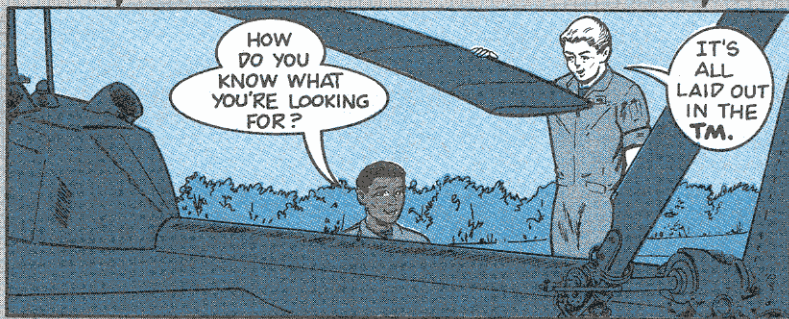


FROM THE DESK OF THE Editor

Good job, James, the cost of the drain valve might be too high for some units, but you've planted the seed of a good idea.



# Keep Bird's Skin in Shape



Just a small opening in a main rotor blade seam lets water seep in and cause blade skin separation.

Use Task 5-1-38 of TM 55-1520-248-23-2 to help you spot those voids when the blades are both on and off the aircraft.

That means when you do your daily aircraft blade inspection, do the thorough job laid out in Task 5-1-38.

Also, if you need to repair an edge void (like it says in Step 13.e.) using the standard injection method, flip over a few pages to Task 5-1-43 for specific instructions on that method.

All Aircraft...

## It's in the Bag!

Proseal can be a mess to apply, especially if you only need a small bead.

So, mix your proseal in a baggie. NSN 8105-00-837-7554 brings 6x6-in bags; -7755 8x8-in bags; and -7757 12x12-in bags.

Cut the corner of the baggie to the size bead you need and then squeeze on the proseal.

It's just like decorating a cake!

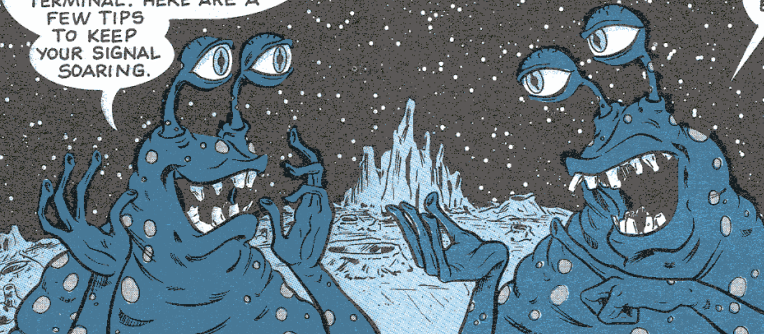




# Out of This World PM

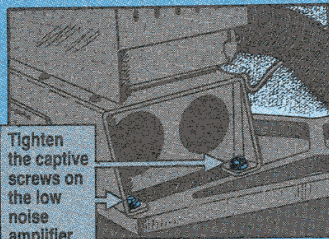
THE SKY'S THE LIMIT WHEN YOU GIVE REGULAR PM TO YOUR AN/TSC-85B OR -93B SATELLITE COMMUNICATIONS TERMINAL. HERE ARE A FEW TIPS TO KEEP YOUR SIGNAL SOARING.

THAT'S GREAT NEWS... BUT WHAT'S A SKY?



## Low Noise Amplifier

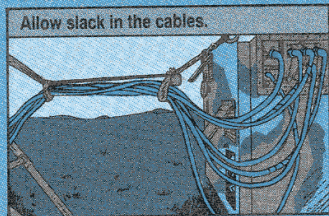
Captive screws that hold the low noise amplifier (LNA) to the antenna-mounted electronics vibrate loose during transport. When you set up the antenna or install a new LNA, make sure the screws are tight. Then apply a dab of sealing compound, NSN 8030-00-148-9833, on and around the heads of the screws. That way you'll make sure the LNA stays in place.



Tighten the captive screws on the low noise amplifier.

## Antenna Cables

Setting up your antenna too far from the shelter is really stretching your luck. Even a few extra feet put a strain on cables and connectors. Allow some slack in the cables. Set up the antenna with the rear ground pad about one foot away from the rear wall of the shelter.

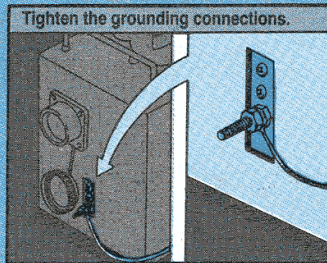


Exposure to the elements day after day dries and cracks the cables. Extend cable life by coating each cable with silicone, NSN 6850-00-880-7616.

## Grounding

Poor grounding can fry both you and your gear. Make sure grounding connections are tight at the following points:

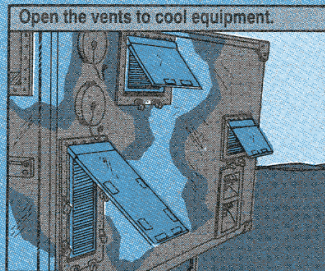
- ✕ Ground lugs at the shelter's power entry panel and the antenna's left pillow block.
- ✕ Ground lugs on the power transfer switch box and both generators.
- ✕ Clamps on all ground rods.



## Shelter Needs Air

Your shelter needs a steady airflow to keep inside temperatures cool. Without cooling air, equipment overheats and shuts down.

Keep temperatures down by opening the door's inlet cover and side vent covers. Before operations, inspect the door filter and intake vent filters for dirt, bugs and debris. Clogged filters block airflow. Remove dirty filters and rinse them in clean water. Let them air dry.



When the weather's warm, close the door's inlet cover and turn on the air conditioner to help cool the shelter.

Inside the shelter, make sure equipment front panels are screwed on tight. Tight panels help circulate air around your equipment.



# Make Your

# Cable Able

CABLES FACE A WHOLE PACK OF ENEMIES WAITING TO DO THEM IN.

CORROSION, DIRT, MOISTURE, HEAT AND SUNLIGHT ARE JUST A FEW OF THE CULPRITS.

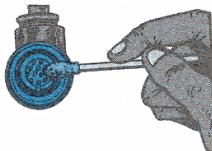
IT'S YOUR JOB TO PROTECT YOUR CABLES WITH A LITTLE PM AND A STEADY HAND, SO YOU DON'T BECOME AN ENEMY, TOO.

## A Little PM

⊗ If you suspect a bad connection, remove the cable and tap the connector a few times in the palm of your hand to free bits of dirt and corrosion.

If tapping doesn't work, clean the connector and receptacle with isopropyl alcohol, NSN 6810-00-753-4993, and foam swabs, NSN 7045-01-154-1317. Order the swabs on DD Form 1348-6 from RIC S9E. In the remarks column, write: "NSN not on the AMDF."

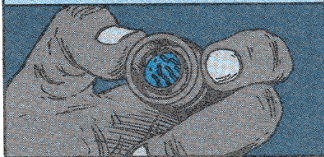
Clean with alcohol and a foam swab.



Apply a light coating of corrosion preventive compound, NSN 8030-00-546-8637, to the pins and the threads.

⊗ Connector pins bent? Straighten them with needlenose pliers or contact removing tool kit, NSN 5120-00-765-3688.

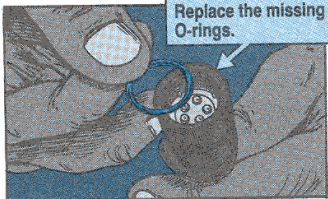
Can't straighten the pins? Replace the cable. Same goes for cables with missing or broken pins.



⊗ Look at keys and keyways on connectors and receptacles. If they're missing or broken, report it.

⊗ Replace missing O-rings so that you keep a tight, moisture-proof connection. Lube O-rings with silicone, NSN 6850-00-880-7616.

Replace the missing O-rings.

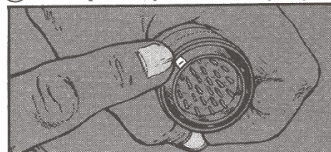


## A Steady Hand

HERE'S A BETTER WAY TO HOOK UP CONNECTORS SO YOU DON'T BEND OR BREAK PINS.



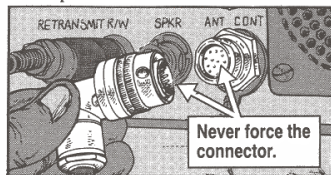
⊗ Line up the keys with the keyways.



⊗ Gently push and turn the connector clockwise. You'll feel the keys slip into the keyways.

⊗ Keep pushing and turning the connector until it's seated snugly.

⊗ Never use force if the connector won't seat. Have your mechanic look at the problem.



Never force the connector.

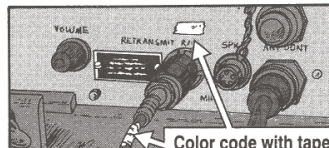
⊗ Test the connection at the connector itself. Never check tightness by tugging on the cable.

⊗ To disconnect the cable, push the connector in and turn it counterclockwise.

⊗ Use silicone on cable insulation, especially in hot weather. It protects against cracks and dry rot.

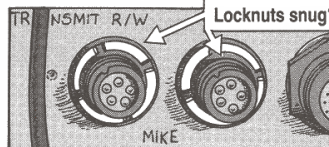
⊗ Work the kinks out of your cables. Kinks can break cable wires.

⊗ Mate cables to the right receptacles. If need be, color code cables and receptacles with tape.



Color code with tape.

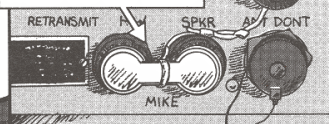
⊗ Make sure receptacles are tight. Tighten external locknuts, like those on the SINGARS or AN/VRC-12-series radios, if they're loose. Twisting a connector onto a loose receptacle tears up the wire inside your radio. Locknuts inside? Call in your repairman.



Locknuts snug?

⊗ Put dust covers on connectors and receptacles when the cables are not hooked up. If you have no covers, use a plastic bag and a rubber band.

Protect with dust covers.

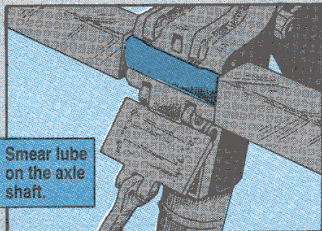




# REELIN' AND A ROLLIN'

EVEN THOUGH YOUR RL-31 REEL UNIT IS A SIMPLE PIECE OF GEAR, IT STILL NEEDS REGULAR PM TO KEEP IT ROLLING. USE THESE TIPS IN ADDITION TO THE PMCS.

**D**ry bearings can bring the axle to a sudden halt, snapping the wire.

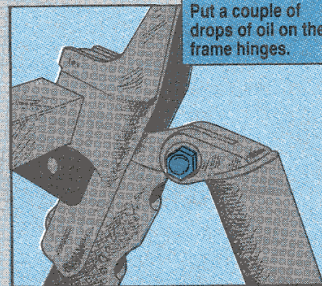


Smear lube on the axle shaft.

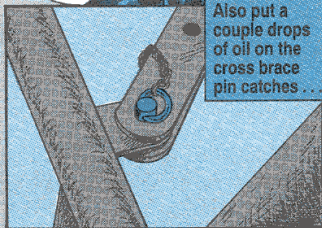
Open the bearing caps and lube the axle shaft bearings with GAA. Then turn the axle 180° and lube the bearings again.

If your reel has a divided axle, take it apart and lube the inside bearing surface.

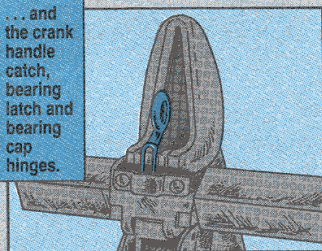
Wipe off excess grease. If it gets in the brake, you'll have a hard time slowing down the reel.



Put a couple of drops of oil on the frame hinges.



Also put a couple drops of oil on the cross brace pin catches ...



... and the crank handle catch, bearing latch and bearing cap hinges.

✓ When touchup painting, keep paint off the bearings. It puts a drag on the axle.

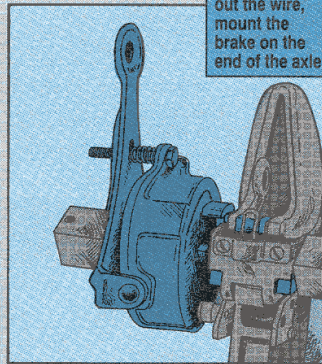
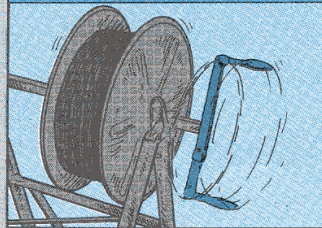


DON'T GO! I CAN DO THE PM TO KEEP YOU ROLLIN'!

I REELY DON'T BELIEVE YOU!

- ✓ Keep your reel clean. Use a lint-free cloth and P-D-680 drycleaning solvent.
- ✓ Turn the crank a few times to make sure it has a good fit to the axle. If there's more than one inch of play, you'll work harder recovering the wire.

Too much play? Turn in the reeling unit. It's unserviceable.



Before paying out the wire, mount the brake on the end of the axle.

Remove the crank so that it doesn't become a swinging club.

When it's time to recover wire, remove the brake and mount the crank on the end of the axle.







# Order Tent by the Parts

You can't get a maintenance tent with NSN 8340-00-951-6419. That NSN is only used for identification.

If you need to order a complete maintenance tent, use the NSNs for the three major frame sections — the end, door and intermediate sections. Or order just the parts you need.

**Frame Section, End NSN 8340-00-951-6420**

- 1 circuit breaker assembly  
NSN 5925-01-027-9050
- 1 lighting and outlet assembly  
NSN 6230-00-970-1227
- 4 end assembly purlins  
NSN 8340-00-845-4210
- 13 short purlins, w/male and female ends  
NSN 8340-00-845-4212
- 13 short purlins, with female ends  
NSN 8340-00-951-1008
- 2 end arch assemblies
  - NSN 8340-00-951-0987
  - NSN 8340-00-951-0994 (left hand)
  - NSN 8340-00-951-0988
  - NSN 8340-00-951-0993 (right hand)
- 1 intermediate arch assembly
  - NSN 8340-00-951-0988
  - NSN 8340-00-951-0987 (2 ea)
  - NSN 8340-00-951-0989 (2 ea)
- 6 guy assemblies  
NSN 8340-00-845-4202

**Frame Section, Door NSN 8340-00-951-6421**

- 2 right-hand door post assemblies  
NSN 8340-00-845-4207
- 2 left-hand door post assemblies  
NSN 8340-00-845-4206
- 2 door winch and transom cord assemblies  
NSN 8340-00-845-4229
- 8 door spar assemblies  
NSN 8340-00-845-5387

For a standard 32-ft maintenance tent, you'll need to order one end section (which includes both ends), one door section (enough for two doors) and three 8-ft intermediate sections.

**Frame Section, Intermediate NSN 8340-00-951-6422**

- 1 intermediate arch assembly
  - NSN 8340-00-951-0989 (2 ea)
  - NSN 8340-00-951-0988
  - NSN 8340-00-951-0987 (2 ea)
- 1 lighting and outlet assembly  
NSN 6230-00-970-1227
- 13 long purlins NSN 8340-00-845-4211

For longer tents, order one intermediate section for each extra 8-ft length. Normally, tents are no longer than 64 feet.

Here are some items you'll also need:

Item	NSN	Quantity
Tent section, end	8340-00-951-6424	2
Tent section, intermediate	8340-00-951-6425	1 for each intermediate section
Pin, steel, 12 inches long	8340-00-823-7451	24
Tent liner, end "A"	8340-00-986-0024	1
Tent liner, end "B"	8340-00-978-9627	1
Tent liner, intermediate	8340-00-951-6426	1 for each intermediate section
Pipe, aluminum, liner support, 43 inches long	4710-00-542-2903 (Supplied by the foot)	18 (9 for each end)
Pipe, aluminum, liner support, 91 inches long	4710-00-542-2903 (Supplied by the foot)	9 for each intermediate section

Get a ground anchor kit with NSN 8340-00-951-6423. This kit has 50 ground anchors, two driving heads and two handles. You provide the mallet or sledgehammer.

Eyeball TM 10-8340-207-14 to see how much rope's needed. Read through the TM and jot down the lengths you'll need. Then add about a third more before ordering. When you order the rope, NSN 4020-00-536-3476, specify the length, or you'll get a 2,250-ft roll.

Never order an entire tent section to replace one part. If you can't find the item you need here, look in the TM.



# No More Fraying

Dear Editor,

Here's a way to finish rope ends that's as good as whipping or heat shrinking. Use a plastic coating compound. It adds no bulk to the rope and won't come off.

1. Before cutting the rope, use an acid swabbing brush to paint a 1-in band of compound around the area where the end will be. NSN 7920-00-514-2417 gets 144 brushes for less than \$5. Toss the brush when finished. Or, a popsicle stick will work fine, too. Let the compound dry overnight.

2. Cut the rope through the band.

3. Dip the rope end (approximately 2 inches) into the plastic coating compound. Let it dry overnight.

The plastic coating compound comes in a pull-tab can with these part numbers:

<u>PN</u>	<u>Color</u>
11601	Red
11602	Yellow
11603	Black

Order the color compound you need on a DD Form 1348-6 by using CAGE 08629 and the part number from RIC GSA.

MSG Ronald E. Mobley  
Hayward, CA

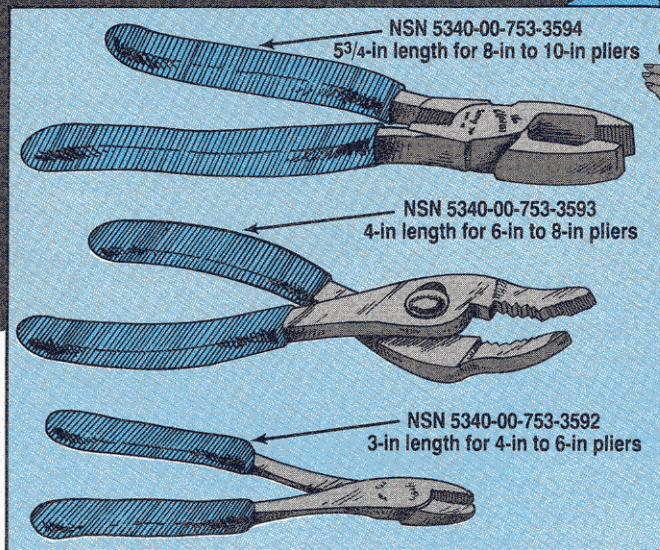
FROM THE DESK OF THE *Editor* 

Great! 1...2...3...  
you're done!



# A Gripping Tale

PLASTIC GRIPS FOR HAND TOOLS GIVE YOU ADDED PROTECTION WHEN YOU WORK AROUND ELECTRICITY. THESE NSNs GET YOU PLASTIC GRIPS FOR PLIERS.



If you need plastic grips for other hand tools, use plastisol coating compound. Once dried, the black plastic coating insulates against a low-level electrical shock of 300 volts for each mil thickness of coating.

Here are the NSNs:

NSN 8030	SIZE
-00-957-6542	1 pint
-01-181-5548	1 gallon
-01-181-9236	5 gallons

EACH ITEM COMES WITH INSTRUCTIONS. USE APPENDIX A OF CTA 50-970 AS YOUR AUTHORITY FOR ORDERING PLIER GRIPS AND THE PLASTISOL COATING COMPOUND!



# INFORMATION BY THE BYTE

YOU DON'T  
NEED TO BE A  
COMPUTER WHIZ  
TO GAIN ACCESS TO  
RTAIS. THE CATALOG  
DATA ACTIVITY  
PAM 18-5 HAS ALL  
THE INFORMATION  
YOU NEED.



If your unit does not have CD-ROM drives with its computer hardware, try instead the Remote Terminal AMDF Inquiry System (RTAIS).

The RTAIS gives you up-to-date information from the AMDF, I&S, SB 700-20, and other microfiche

reference files. This system places AMDF data as close as your computer keyboard. To order a copy of this pamphlet, write:

**Logistics Support Activity  
Customer Support Center  
Redstone Arsenal, AL 35898-7466**

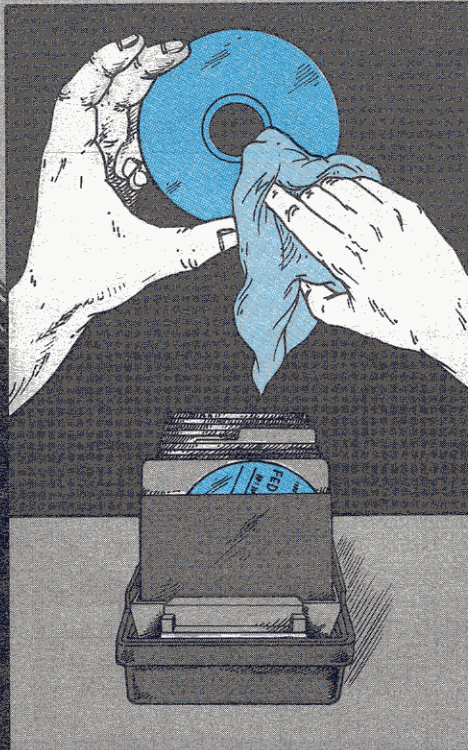


# Fight CD Damage!

Any logistics products that you use every day, such as the AMDF and SB 38-101, are now on CD-ROM (Compact Disk-Read Only Memory). However, there's no guarantee that you'll be able to read the disk when you need to unless you take good care of it.



**PREVENT  
COMPACT DISK  
FAILURE WITH  
THESE PM  
TIPS.**



**X Hold a disk by its edges.**

You could damage the disk surface with the oil from your skin. You also run the risk of not being able to read parts of the disk information.

**X Never clean a disk with solvents or harsh chemicals.**

Cleaners such as alcohol or paint thinner damage the disk surface. Clean the disk with a soft cloth, using a sweeping motion from inside to outside. Never use an arcing motion that could follow the spiral track.

**X File the disk when it's not in use.**

You run the risk of ruining the disk surface if you happen to be writing on a piece of paper and the disk is hiding underneath.



# Automated

# Status Reporting

THE ARMY MATERIEL STATUS SYSTEM (AMSS) REPLACES ALL MANUAL MATERIEL READINESS REPORTS FOR GROUND, AVIATION, AND MISSILE EQUIPMENT.

**AMSS** was added to the ULLS-A (Unit Level Logistics System-Aviation) system and to Software Change Proposal 5 in the ULLS (Unit Level Logistics System).

With AMSS, your CO can monitor the maintenance and supply transactions of the unit until a piece of equipment is returned to a fully mission capable status. That way mechanics can be placed where they're needed the most.

AMSS automatically:

- Collects, compiles, and reports materiel status data at the unit and provides this information to the battalion level.

Status information accumulated at the company level is sent through Standard Army Maintenance Level 1 (SAMS-1) to the battalion level Standard Army Main-

NOW THE INFORMATION ON DA FORM 2406, DA FORM 1352 AND DA FORM 3266-1 IS PROCESSED THROUGH THE AUTOMATED READINESS REPORTING SYSTEM.

tenance System Level 2 (SAMS-2). They in turn will forward the information to the USAMC Logistics Support Activity.

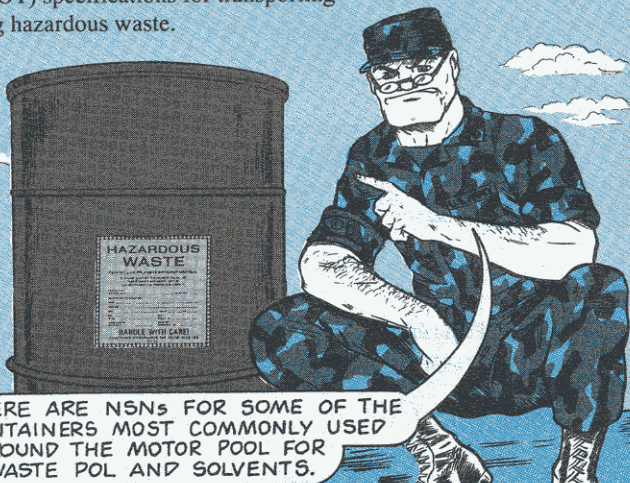
- Consolidates the "real time" status information received from subordinate units.
- Accumulates Not Mission Capable (NMC) time (in hours and minutes) for all reportable end items, systems and subsystems.
- Keeps up with NMC supply information for all reportable end items, systems and subsystems.
- Accumulates and reports gain/loss and usage data of reportable equipment.
- Maintains required, authorized, and on-hand data.
- Receives support and depot level NMC data from SAMS-1.



Hazardous Waste . . .

# Container NSNs

Yes, there are containers in the supply system that meet Department of Transportation (DOT) specifications for transporting or storing hazardous waste.



HERE ARE NSNs FOR SOME OF THE CONTAINERS MOST COMMONLY USED AROUND THE MOTOR POOL FOR WASTE POL AND SOLVENTS.

NSN	MIL SPEC	DOT SPEC	DESCRIPTION
8110-00-366-6809	PPP-D-736	17C	Drum, shipping and storage: steel, 18 gauge, 30-gal capacity, removable cover with locking ring closure.
030-7780	PPP-D-736	17C	Drum, shipping and storage: steel, 16 gauge, 55-gal capacity, removable cover with locking ring closure.
292-9783	PPP-D-729	17E	Drum or barrel, shipping and storage: steel, 18 gauge, 55-gal capacity, non-removable head.
030-7779	PPP-D-705	17H	Drum, shipping and storage: steel, 18 gauge, 30-gal capacity, removable head.

Remember that when you package hazardous wastes, the container must be compatible with the waste material.

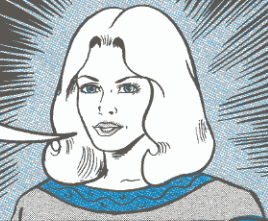
For example, strong acids or caustics should not be put in steel containers. They will corrode steel, leading to leaks, spills and sometimes fires.

Explosives must be packaged in non-sparking containers to prevent detonation.



# Connie's Notes

CHECK OUT THE  
FOLLOWING TIMELY  
INFORMATION.



Hotline Help ...

## DIAL FOR LOGISTIC SUPPORT

The new Logistics Support Activity (LOGSA) headquartered at Redstone Arsenal in Huntsville, Alabama has a Customer Support Center ready to help you. The support center is a focal point for the collection and exchange of logistic data and puts a wealth of logistic knowledge at your fingertips.

Just dial the 24-hour hotline: **1-800-878-2869**

or: **COMM 205-955-0499**

**DSN 645-0499**

After the recorded message and tone, leave your name, DSN or commercial phone number, duty station and ask your question.

The support center will be back to you within 3 working days.

The center can answer questions on product distribution, logistic data bases, micro-publishing products, AMDF discrepancies, government contracts, sample data collection, oil analysis, equipment deficiency reporting and warranty claims.

If you're not sure whether a question falls in the support center arena . . . it never hurts to ask!

## SAMS and TAMMS Update

TAMMS headquarters and the SAMS input point have moved! Now send your weekly closed work order data (floppy disks) and DA form 2408-9, Equipment Control Records, or requests for TAMMS/AOAP usage data or US Army registration numbers to:

**USAMC Logistics Support Activity  
ATTN: AMXLS-RBP  
Redstone Arsenal, AL 35898-7466**

Or call these extensions using DSN  
645- or Commercial (205) 955- :

**SAMS-2 or WOLF  
ext 9705/9712/9728**

**TAMMS or US Registration Numbers  
ext 9707/9718/9695**

**DA Pam 738-750  
ext 9716/9721**

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# Be a PLUG SAVER!

**OUCH!**

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MY **KEY**  
AND  
**KEY WAY!**