



COMBAT VEHICLES

Stryker Remote Weapons Station
M1-Series Tank 120mm Gun Exercising
M1-Series Tank Gunner's Primary Sight
M2A2/M3A2, ODS Bradley Ballistic Sight
M2/M3-Series Bradley M242 Automatic Gun
M88A2 Recovery Vehicle Deck Sling
M109A6 Paladin Segment Board Cleaning



WHEELED VEHICLES

Tire Chain NSNs
HMMWV Swamper Tire Prohibition
HMMWV Air Pre-cleaner Kits
FMTV Door Latches
HEMTT Bearings Lubrication
HEMTT Tire Chain Caution
M35A2-Series Truck Tire Pressure
Semitrailer Safety Ladder
M172A1 Landing Leg
Cab Insulation Adhesive
PLS Trailer Latch, CTIS Hose Assemblies



RADAR

Firefinder Radar Brake and Towing Checks



MISSILES

Avenger Missile System Slew-to-Cue Testing



SMALL ARMS

Mortar Firing and Safety Support Products
DA Form 2408-4 Weapons Card Online Updating

2



COMBAT ENGINEERING

24

2

ATLAS, 6K VRFL Axle Lubrication

24

3

DEUCE Excavator Coolant Tank Leaks

25

4,5

D7G Tractor Fuel Tank Fill Line

26

6

Rio Loco, Part 1

27

7



AVIATION

35

8

M260/M261 Rocket Launcher PM

35-37

9

UH-60 Series Swashplate Link

38

10

Automated Weight and Balance System

39

10-11



COMMUNICATIONS

40

12

18K BTU MPI ECU Modification

40-41

13

LRAS3 AN/TAS-B Parts Turn-in

42-43

14

MX-306 Canvas Carrier

43

15

TQG Voltage Regulator

44

16-17

SINGGARS INC Test Workaround for AM-7239E

45

16

GBS Receive Suite AN/TSR-8 Locking Nut

46

16

GPS PLGR and DAGR Batteries

47

17



CBRN

48

17

18

Mask C2A1 Canister Recall

48-49

18-19



SOLDIER SUPPORT

50

20

DRASH Equipment and POCs

50-53

20

GP Tent Pole NSNs

54

20

Clothing TMs

55

21



LOGISTICS MANAGEMENT

56

21

Unit Status Reports Replaced

56-57

22-23

Service Kits for Land-based Weapons Systems

58-60

Connie's Post Scripts

61

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

Just write to:

MSG Half-Mast
PS, the Preventive Maintenance Monthly
USAMC LOGSA (AMXLS-AM)
5307 Sparkman Circle
Redstone Arsenal, AL 35898-5000

Or e-mail to:

psmag@logsa.army.mil or
half.mast@us.army.mil

Internet address:

<https://www.logsa.army.mil/psmag/pshome.html>

By order of the Secretary of the Army:

PETER J. SCHOOMAKER
General, United States Army Chief of Staff

Official:

JOYCE E. MORROW

Administrative Assistant to the Secretary of the Army

0623401

Issue 648

PS

November
2006

THE PREVENTIVE MAINTENANCE MONTHLY

TB 43-PS-648

Approved for
Public Release;
Distribution is
Unlimited

REX! WITHOUT YOUR
DEMONSTRATION
OF PREVENTIVE
MAINTENANCE, THE TOWN
OF DUSTY BRITCHES IS
FALLING APART...

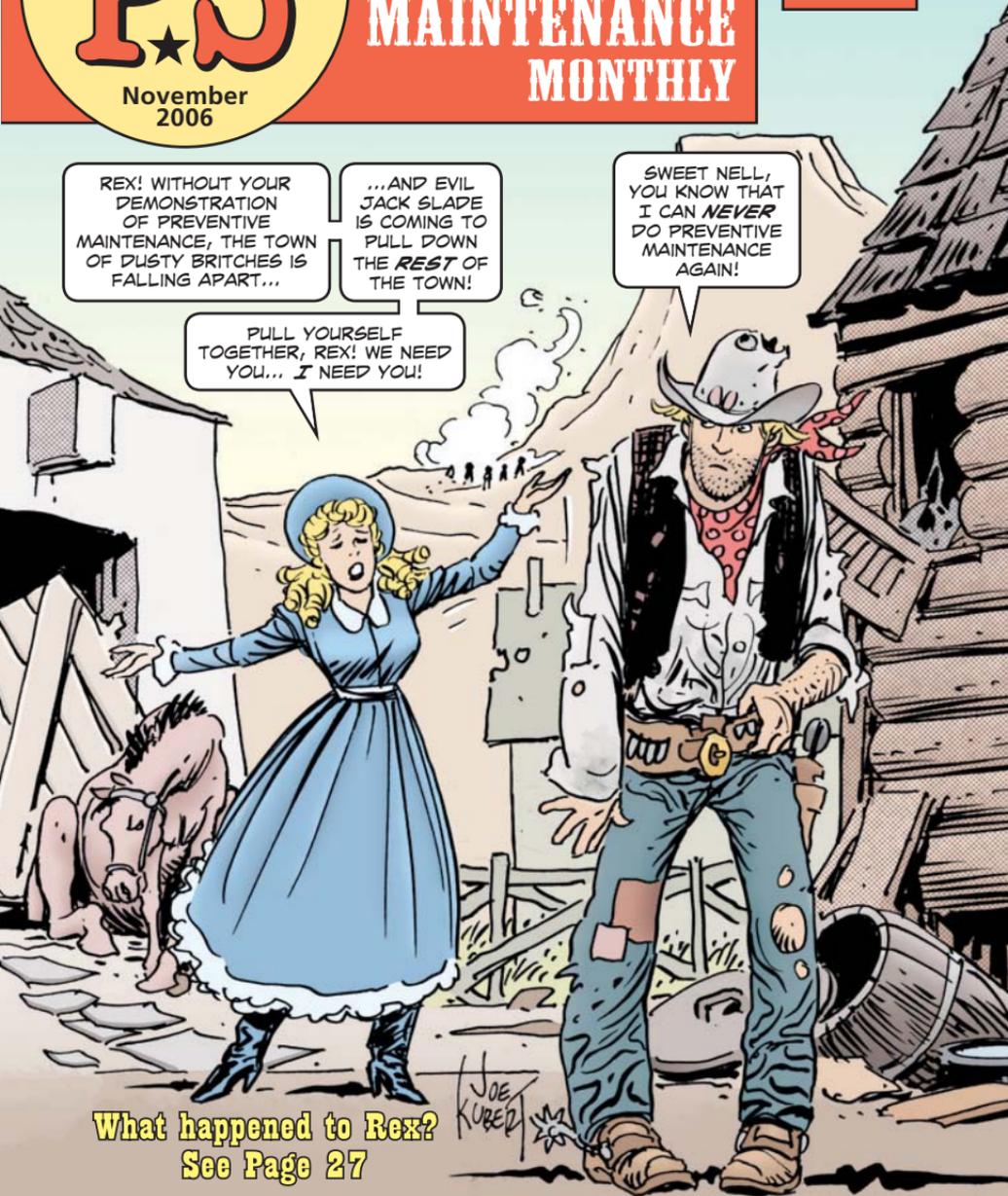
...AND EVIL
JACK SLADE
IS COMING TO
PULL DOWN
THE REST OF
THE TOWN!

SWEET NELL,
YOU KNOW THAT
I CAN NEVER
DO PREVENTIVE
MAINTENANCE
AGAIN!

PULL YOURSELF
TOGETHER, REX! WE NEED
YOU... I NEED YOU!

What happened to Rex?
See Page 27

JOE
KUBERT



DON'T BELIEVE LUBE RUMORS

PSST... BUDDY! I'VE GOT SOME STUFF THAT MAKES CLP LOOK LIKE BACON GREASE!

AND I CAN LET YOU HAVE IT CHEAP!



The rumor mill is always generating claims about some miracle lube that does a better job on your weapon or vehicle than anything the Army has approved. And, of course, in time of war the rumor mill shifts into high gear.

As a result, soldiers in Iraq are hearing all sorts of claims about lubricants that do a better job than what their TMs tell them to use.

Don't believe those rumors! If you use an unauthorized lube on your weapon or vehicle, you take a gamble. If this "better" lube can't do its job, your weapon could stop firing or your vehicle could grind to a halt when you most need it.

In the case of weapons especially, the Army spends many, many hours testing lubricants under all conditions. The Army recently tested 23 commercial lubricants against CLP, the standard lube for most small arms. CLP beat them all. But you won't hear that from the rumor mill.

So if your TM says to use CLP, LSA, or GAA, believe it and do it! That's the best help you can give your equipment.

AND, REMEMBER, JUST BECAUSE A LUBRICANT HAS AN NSN DOESN'T MEAN THE ARMY HAS APPROVED IT FOR USE ON ALL EQUIPMENT.

WHAT WORKS GREAT ON A RIFLE MAY NOT DO THE JOB ON A MORTAR.

THE TM AND LO ARE THE WORD ON WHAT TO USE. ACCEPT NO SUBSTITUTES!



Click here for a copy of this article to save or email.

COMBAT VEHICLES	2	COMBAT ENGINEERING	24
Stryker Remote Weapons Station	2	ATLAS, 6K VRFL Axle Lubrication	24
M1-Series Tank 120mm Gun Exercising	3	DEUCE Excavator Coolant Tank Leaks	25
M1-Series Tank Gunner's Primary Sight	4,5	D7G Tractor Fuel Tank Fill Line	26
M2A2/M3A2, ODS Bradley Ballistic Sight	6		
M2/M3-Series Bradley M242 Automatic Gun	7	AVIATION	35
M88A2 Recovery Vehicle Deck Sling	8	M260/M261 Rocket Launcher PM	35-37
M109A6 Paladin Segment Board Cleaning	9	UH-60 Series Swashplate Link	38
		Automated Weight and Balance System	39
WHEELED VEHICLES	10	COMMUNICATIONS	40
Tire Chain NSNs	10-11	18K BTU MPI ECU Modification	40-41
HMMWV Swamper Tire Prohibition	12	LRAS3 AN/TAS-B Parts Turn-in	42-43
HMMWV Air Pre-cleaner Kits	13	MX-306 Canvas Carrier	43
FMTV Door Latches	14	TQG Voltage Regulator	44
HEMTT Bearings Lubrication	15	SINGGARS INC Test Workaround for AM-7239E	45
HEMTT Tire Chain Caution	16-17	GBS Receive Suite AN/TSR-8 Locking Nut	46
M35A2-Series Truck Tire Pressure	16	GPS PLGR and DAGR Batteries	47
Semitrailer Safety Ladder	16		
M172A1 Landing Leg	17	CBRN	48
Cab Insulation Adhesive	17	Mask C2A1 Canister Recall	48-49
PLS Trailer Latch, CTIS Hose Assemblies	17		
RADAR	18	SOLDIER SUPPORT	50
Firefinder Radar Brake and Towing Checks	18-19	DRASH Equipment and POCs	50-53
MISSILES	20	GP Tent Pole NSNs	54
Avenger Missile System Slew-to-Cue Testing	20	Clothing TMs	55
SMALL ARMS	21	LOGISTICS MANAGEMENT	56
Mortar Firing and Safety Support Products	21	Unit Status Reports Replaced	56-57
DA Form 2408-4 Weapons Card Online Updating	22-23	Service Kits for Land-based Weapons Systems	58-60

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

Just write to:
MSG Half-Mast
PS, the Preventive Maintenance Monthly
USAMC LOGSA (AMXLS-AM)
5307 Sparkman Circle
Redstone Arsenal, AL 35898-5000
 Or e-mail to:
psmag@logsa.army.mil or
half.mast@us.army.mil
 Internet address:
<https://www.logsa.army.mil/psmag/pshome.html>

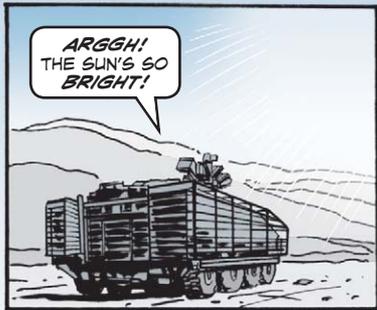
By order of the Secretary of the Army:
PETER J. SCHOOMAKER
 General, United States Army Chief of Staff

Official:

JOYCE E. MORROW
 Administrative Assistant to the Secretary of the Army

0623401

Stryker...



You Can't Hit What You Can't See

The Stryker's remote weapons station (RWS) can be an awesome weapon. But if you don't take good care of the visual imaging module (day sight) and thermal imaging module (night sight), the RWS quickly goes from awesome to awful.

Direct sunlight degrades the sight lenses. Sand and dust scratch and scour the lenses. Pretty soon, the RWS is as blind as a bat.

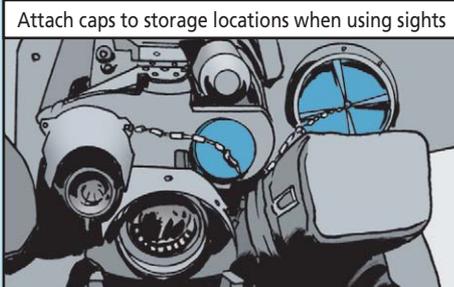
So whenever the sights aren't in use, keep 'em covered. The day sight uses a small lens cap and the night sight takes a large lens cap.

When the sights are being used, screw the caps into their storage locations. That'll ensure the caps are available the next time they're needed. The day sight cap screws onto the sight servo housing. The night sight cap attaches to the ammo box.

You may need to periodically clean the threads on the caps and their storage locations to help prevent cross-threading. A good scrubbing with a toothbrush or something similar will make quick work of dirt and sand.



Keep lenses covered when sights aren't needed



Attach caps to storage locations when using sights

PS 648

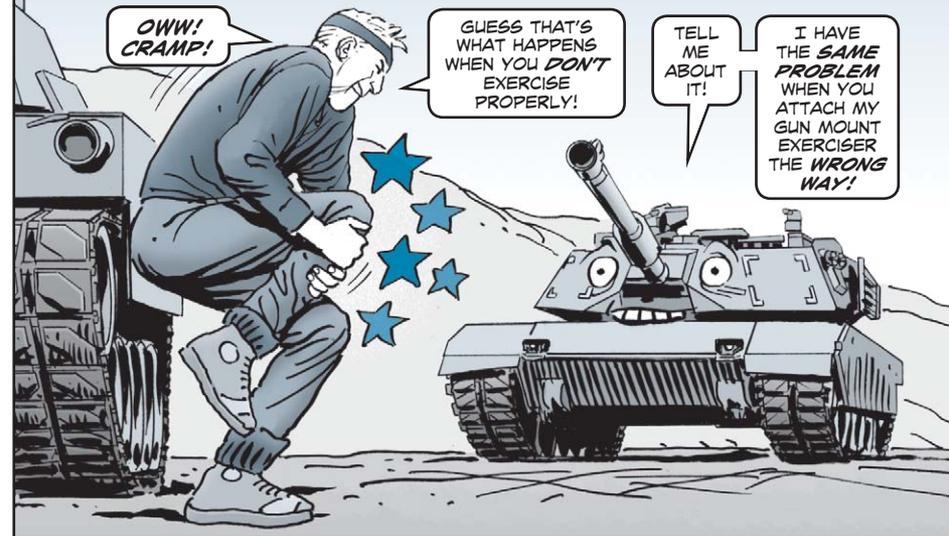
2

NOV 06

[Click here for a copy of this article to save or email.](#)

M1-Series Tanks...

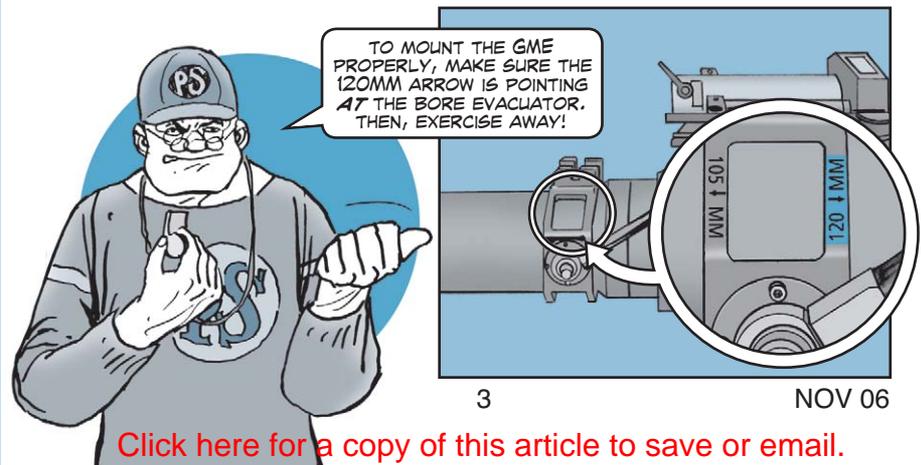
EXERCISE THE RIGHT WAY



If you exercise the wrong way during PT, you're looking at a possible injury. So why should things be any different when you exercise your tank's 120mm gun?

The gun mount exerciser (GME), NSN 4933-01-346-1791, was designed to exercise both 105mm and 120mm guns. So you may be a little confused about which way to position the GME to exercise your tank's gun.

Get it wrong and the gun won't get the exercise it needs. Plus, the GME won't hold properly and the clamp can be damaged.

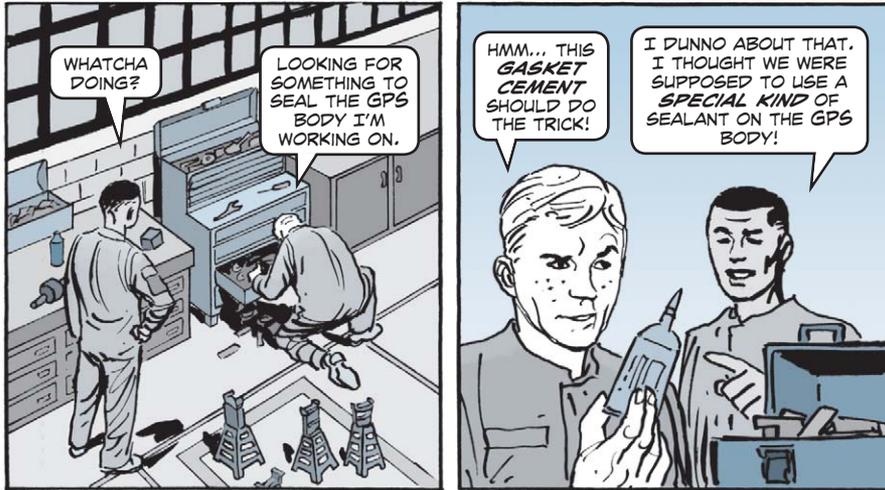


3

NOV 06

[Click here for a copy of this article to save or email.](#)

Shoot Down GPS Leaks



Mechanics, leaks are the price you pay for installing the gunner's primary sight (GPS) body the wrong way on an M1-series tank.

Two mistakes you can avoid are **sloppy cleanup** before installing the GPS body and **using the wrong sealant**.

You must clean the turret access lip completely before you install the GPS body. That means using putty knives, dry cleaning solvent and lots of rags. Any residue you leave behind will keep the new compound from sealing properly. That means leaks.

Once the GPS body's in place, fill the area between the lip of the body and the turret roof with sealing compound, NSN 8030-00-753-5005. This sealing compound comes in a special 6-oz cartridge that must be applied with sealant gun, NSN 5120-00-952-3507.

The sealant gun has been added to Appendix E, Tools List, in the -20-2-4 TMs. The sealing compound will soon be added to App C of the same TMs.

Do not use **any other** sealer for this job. Silicone sealer, adhesive, gasket cement or gasket sealer **will not** work. Take no shortcuts and there'll be no leaks.

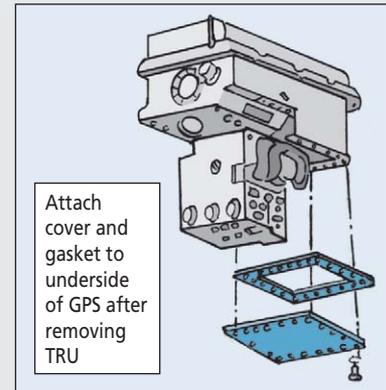
GPS Needs a Cover-up



Mechanics, when you remove the thermal receiver unit (TRU) from the gunner's primary sight (GPS) on an M1-series tank, don't think the job is finished.

It's very important that you cover the opening in the GPS to avoid getting sand, dirt and other debris on its sensitive internal components. Here's what you'll need:

Item	NSN	Qty
Access cover	5340-01-320-5765	1
Gasket	5330-01-320-2673	1
Lock washer	5310-00-933-8120	15
Machine screw	5305-00-050-9230	15



The GPS body assembly must be purged and charged after removing the TRU. Follow the instructions under *Sight Body Assembly Servicing* in Chapter 9 of the -20-2-4 TMs.

The procedure for installing the cover starts on Page 9-166 of TM 9-2350-264-20-2-4, Page 9-111 of TM 9-2350-288-20-2-4, and Page 9-112 of TM 9-2350-388-20-2-4.

NOTE

TM 9-2350-264-20-2-4 (Item 23 in App E) and TM 9-2350-288-20-2-4 (Item 52 in App E) both list the wrong NSN for the GPS cover. Make a note until those two TMs can be updated.

M2A2/M3A2,
ODS Bradleys...

OPEN WIDE AND SAY OUCH!

NOW THAT YOU'RE FINISHED WITH TOW VERIFICATION, WE'RE ALL SET TO GO!



WAIT!

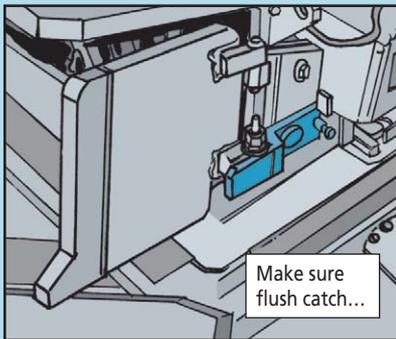
THEY FORGOT TO RESET MY BALLISTIC DOOR STOPS!



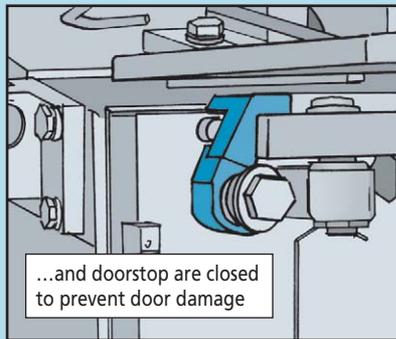
During the Bradley's semiannual TOW verification, the team has to open the flush catch and doorstop on both sides of the ballistic sight cover assembly (doghouse). That lets them open the ballistic doors wide enough to mount their equipment to the doghouse.

Unfortunately, they sometimes forget to close the flush catch and doorstop when they're finished. When that happens, the door on the TOW launcher side is hit by the launcher when it's raised. On the other side, the door hooks the hexhead screw, NSN 5305-00-781-3929, on the ballistic door arm. In either case, you'll end up with damage to the doors, TOW launcher cover and ballistic door arm.

Prevent that damage by making sure the flush catch, NSN 5340-01-313-4781, and doorstop, NSN 5340-01-318-9854, are in the stop position before operation.



Make sure flush catch...



...and doorstop are closed to prevent door damage

M2/M3-Series Bradley...

M242 FIRING HELP IN THE DESERT

NEVER GO INTO BATTLE WITHOUT YOUR CUP!



YES! THAT'S GOOD PROTECTION!



Dear Editor,

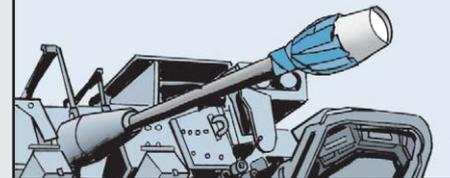
Sand is a killer for your Bradley's M242 automatic gun. If too much sand builds up in the receiver, the bolt has trouble functioning and you get misfires.

We found during our tour in Southwest Asia that taping over the ejection port and taping a paper cup over the barrel helped keep sand out of the receiver. And, of course, if you needed to suddenly fire, the tape and cup will be blown off.

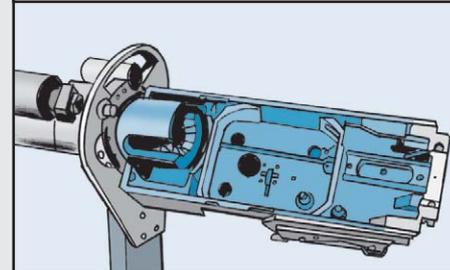
But even with the tape and cup, you still need to take off the feeder every chance you get and clean sand out of the receiver. There's just no way to completely seal sand out of the receiver.

SSG
C Co, 1/78
Ft Sill, OK

Tape cup on barrel and tape over ejection port



But still clean inside receiver every chance you get



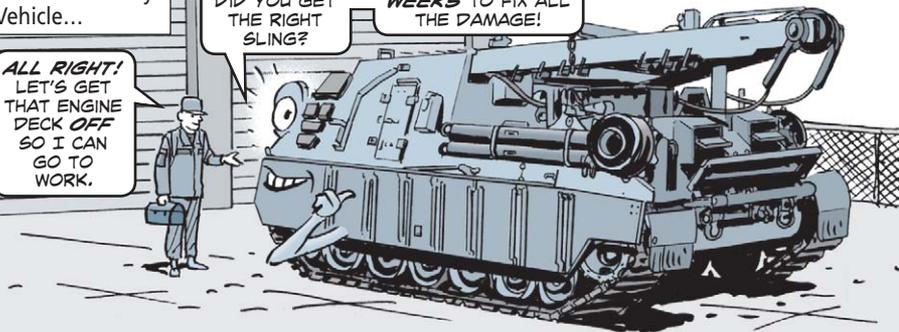
Editor's note: A simple fix that will help keep your M242 firing. Thanks for the tip, Sergeant. But always make sure the M242 is unloaded and the turret lock engaged before putting on the cup and tape.

M88A2 Recovery Vehicle...

ALL RIGHT! LET'S GET THAT ENGINE DECK OFF SO I CAN GO TO WORK.

WHOA! DID YOU GET THE RIGHT SLING?

LAST TIME IT TOOK WEEKS TO FIX ALL THE DAMAGE!



DECK SLING NEEDS ADJUSTMENT

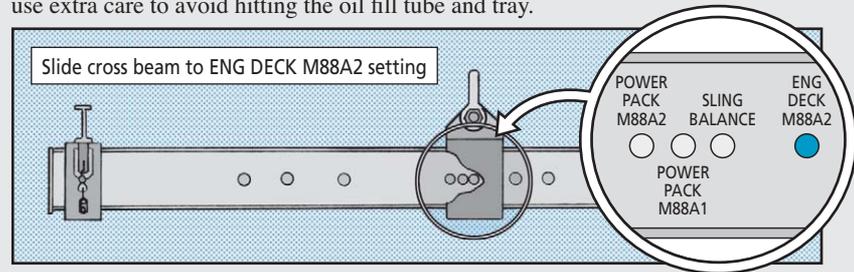
Mechanics, if you've got a damaged oil fill tube or tray on your M88A2 recovery vehicle, chances are you were a little sloppy when removing or installing the engine deck.

If you're not careful or use the wrong lifting equipment, the engine deck can easily smack into the oil fill tube or tray. The oil fill tube is especially vulnerable.

The upper oil fill tube is connected to the lower tube by two O-rings. When the upper fill tube is bumped or hit by the deck assembly, the O-ring seal is damaged and a leak occurs. If enough oil leaks out, you're looking at major damage to the engine.

The right way to remove the engine deck assembly means using the modified sling assembly, NSN 3940-01-440-0283.

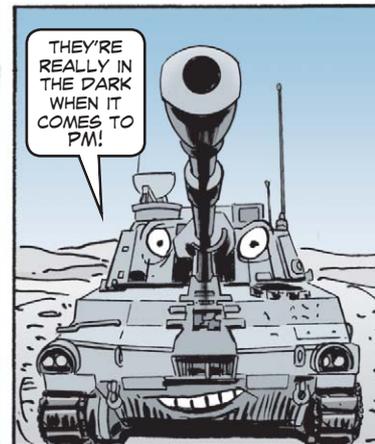
This sling can be adjusted for several different lift capabilities by sliding the cross beam up or down and locking it into the correct setting. When lifting the engine deck assembly, make sure the sling is adjusted to the ENG DECK M88A2 setting. Then use extra care to avoid hitting the oil fill tube and tray.



It's also a good idea to empty the on-vehicle equipment (OVE) box when removing or installing the engine deck. The tools and equipment stored in the OVE box can shift and cause an uneven lift of the deck.

M109A6 Paladin...

SNUB THE RUB!



Crewmen, after you've cleaned the segment board on your Paladin, you're supposed to remove the green pad from the cleaning block.

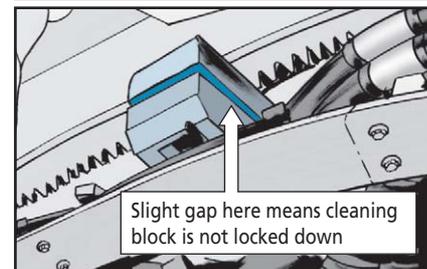
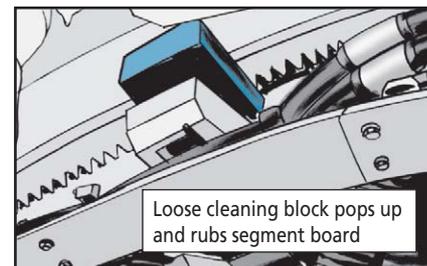
If you leave the pad in place, dirt and other debris begin building up. The pad eventually makes contact with the segment board, causing interference and distortion on the intercom.

When you **do** remove the pad, make very sure that you get the block locked back down on the cleaning mechanism.

If it's not locked down properly, vibration makes the cleaning block pop up. In that position, the cleaning block rubs against the segment board until **-ZAP!** the segment board shorts out. You're left without turret power or commo.

Ensure the cleaning block is locked down by eyeballing it. Look for a slight gap between the cleaning block and the cleaning mechanism. A gap means the cleaning block is not locked down. Try again.

No gap? The cleaning block is locked down and you're good to go.



Wheeled Vehicles...

TIRE CHAINS USAGE

IF YOU THINK YOU HAVE A TOUGH TIME FUNCTIONING IN THE COLD, IMAGINE HOW YOUR TIRES MUST FEEL!

TIRE CHAINS ARE JUST WHAT THE DOCTOR ORDERED TO HELP YOU AND YOUR TIRES COMPLETE MISSIONS IN SEVERE SNOW AND ICY CONDITIONS.

IF YOUR VEHICLE ISN'T LISTED IN THE FIRST CHART, USE THIS CHART TO ORDER CHAINS FOR COMMON TIRE SIZES...



Tire chains improve traction on ice and packed snow, but only if they are installed properly and cleaned regularly. Chains that are packed with ice will lose their effectiveness—just like we would!

It's important to use the right size and type of tire chain. Check your operator's manual to determine what to use. In most cases, this information is found on the additional authorization list (AAL). You can also eyeball FM 21-305, *Manual for the Wheeled Vehicle Driver*, for an explanation on how to install tire chains.

USE THIS CHART TO ORDER TIRE CHAIN ASSEMBLIES FOR THE SPECIFIED WHEELED VEHICLE...

Wheeled vehicle	Tire size	Chain assembly NSN 2540-
FMTV	14x20 or 395/85R20	01-483-2930 or 01-492-2989
HEMTT/HET/PLS	16x20	01-152-7813
HMMWV	37x12.5x16.5 (radial) or 36x12.5x16.5 (bias)	01-214-1264 or 01-530-6341
M915A2/A3/A4	11R22.5	01-453-0497
M916A1/A2/A3 and M917A1/A2/E1/E2	315/80R22.5	01-396-1914
M939	11x20	21-911-1360

HERE ARE THE STRAPS...

Note that for the M35A3, tire size 14.5R20XL, there is no NSN assigned for the tire chain. You can get those chains, part number S055V, only through PEWAG, the vendor. To order, get in touch with the following CONUS and OCONUS points of contact in Newcastle, CA, and Graz, Austria:

CONUS -
Eric Johnson, (800) 445-2895,
ericj@pewagchain.com

OCONUS -
Maria Koeck, 43 316 6070 ext 246,
Koe@pewag.com

Tire size	Chain assembly (Pair) NSN 2540-	Cross chain NSN 2540-00-933-	Swivel hooks NSN 2540-00-937-
7.50x16	00-528-7360	6960	*See note below.
9.00x20	00-933-9024	6916	0404
9.50x16.50	00-057-0204	6916	0404
10.00x15	01-185-8306	6916	0404
10.00x20 (duals, too)	00-933-9034	6916	0404
11.00x18	00-933-6933	6915	0404
11.00x20	00-933-9022	6915	0404
11.00x24	00-933-6935	6915	0404
12.00x20	00-933-6922	6915	0404
14.00x20	00-933-9033	6992	0404
14.00x24	00-933-9023	6992	0404
16.00x20	00-933-6937	Not Available	Not Available

*Use NSN 4030-00-937-0405.

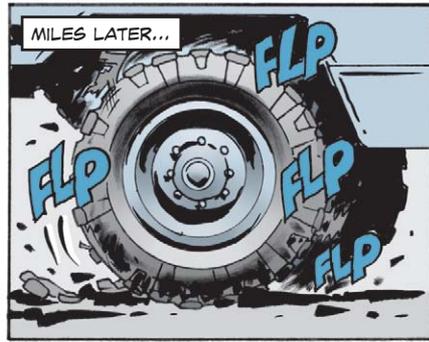
Have your supply clerk check FSC 2500 for other chains not listed here. For more information, contact the DLA Contact Center at DSN 661-7766, (877) 352-2255 or email: dlaccontactcenter@dla.mil

Although tire chains are designed to fit snugly, you should still allow room for some creep. Also, tighten the chains by hand, instead of using tools. This helps prevent over-tightening that can gouge tires. If the chains don't fit properly after you tighten by hand, use tire straps to snug down the tire chains.

Size (in inches)	Stretch (in inches)	NSN 5340-01-
15	20-30	029-9084
21	26-42	231-6015
31	36-42	029-9085

Click here for a copy of this article to save or email.

Swamper Tires Are a NO-GO!



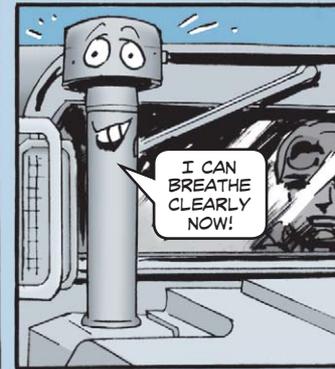
The phrase “anything goes” doesn’t apply to tire choices for your HMMWV. Word from the field is that Super Swamper tires are still showing up on HMMWVs. **Don’t** use Swamper tires on your HMMWV, no matter how good you think they are!

Swampers don’t hold up to heat. They also put extra wear and tear on the vehicle’s suspension. That’s why these tires aren’t approved.

Since you know that Swamper tires aren’t so super for any kind of military usage, use only authorized tires on your HMMWV. To get what’s preferred, use tire, NSN 2610-01-333-7632, or wheel assembly, NSN 2530-01-493-5859.

And while using authorized tires, avoid mixing bias and radial tires on the same vehicle. That can lead to injured personnel and damaged equipment, creating a bad day for your unit.

AIR PRE-CLEANER KITS



A HMMWV’s engine needs clean air to run smoothly, especially in the desert. So when the air filter element gets clogged, the vehicle runs rough, uses more fuel and loses power.

You can help stop clogged filter elements on the following models by adding a pre-cleaner kit. That can help you increase the service life of the filter element.



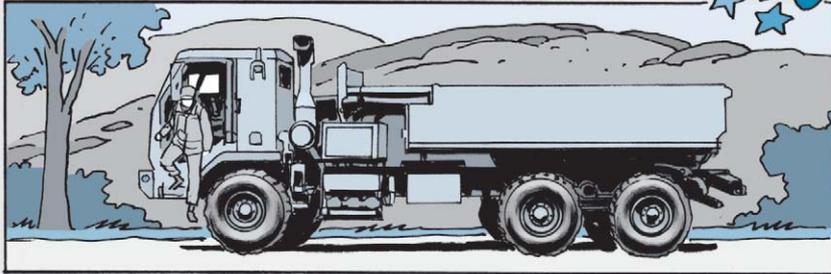
Vehicle Model	KIT NSN 2990-01-531-
M998/A1/A2-series without extended air intake stack (except M996/A1, M997/A1/A2)	4317
M998/A1/A2-series with extended air intake stack (except M996/A1, M997/A1/A2)	4320
M1113, M1114, M1151/A1, M1152/A1	4321

These pre-cleaner kits are smaller, maintenance free, and more efficient than the old-style, clear-plastic bowl pre-cleaner. Each pre-cleaner should be used with an extended intake stack to avoid interference when opening or closing the vehicle’s hood. And this gets the air intake up out of some of the dust for better performance.

By the way, these pre-cleaner kits are **not** a substitute for the HMMWV’s air filter element. The air filter element still needs the same maintenance spelled out in the -10 TM.

The pre-cleaner kits are not applicable to M1113, M1114, M1151/A1, and M1152/A1 vehicles with LVOSS systems.

SHUTTING YOUR DOORS



Dear Editor,

If you have trouble shutting your FMTV doors, here's something to check. There are three metric bolts that hold the door latch on to the inner side of the doors. These bolts work loose after a while, and then they fall out.

If the bolts work loose and you don't see it, then the plastic piece around the door hooking mechanism will break. The door won't shut if this happens, unless you have a screwdriver to hold the door hooking mechanism down until it hooks.

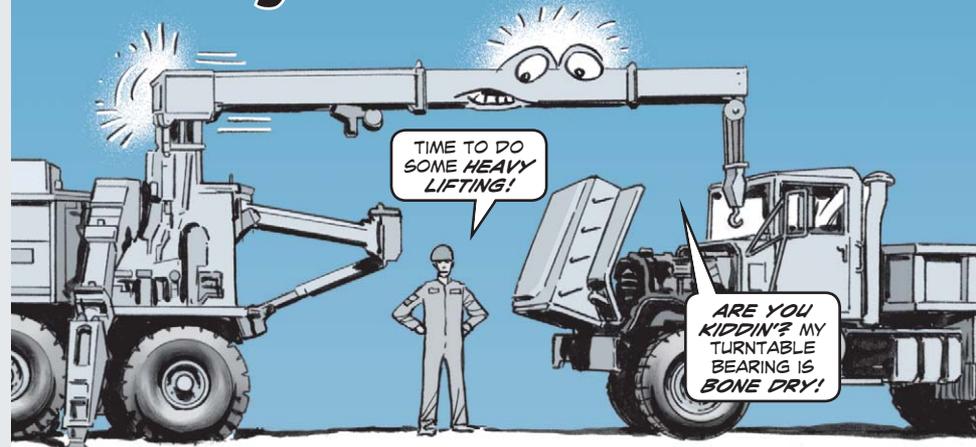
Here's the fix: Apply blue sealing compound, NSN 8030-01-014-5869, to the three bolts so they don't come out.

Hope no one has trouble shutting the doors now.

SFC
NEARNG

Editor's note: That's an idea that'll stick! Thanks for the tip.

Bearings Can't Bear Lube Loss

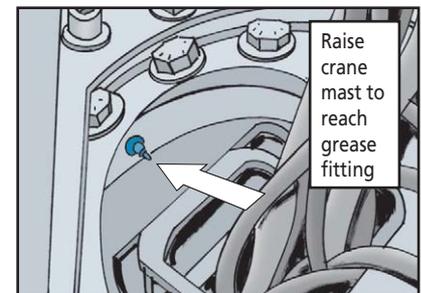
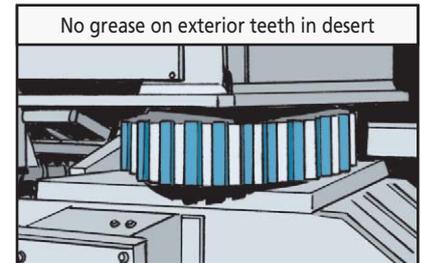


Bearings dry up and wear out when they don't get grease regularly. That'll cost your unit a bundle, so make sure the turntable bearing on your HEMTT crane stays good 'n' greasy.

Every six months or 250 operating hours, whichever comes first, the bearing needs some GAA. Some operators think that just means slapping some grease on the external gear teeth. While that's a good idea—except in desert environments where the grease will attract sand and grind up the teeth—it's not a substitute for lubing the turntable.

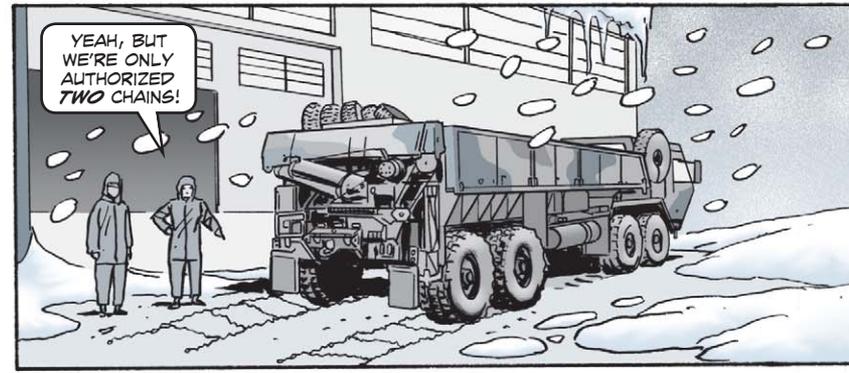
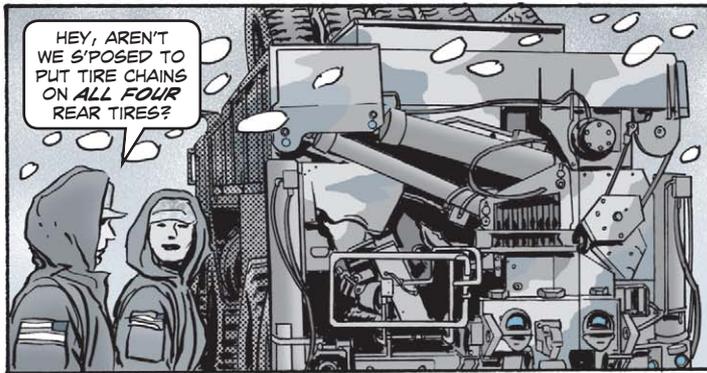
To reach the turntable grease fitting, you'll have to raise the crane mast. Then follow these steps:

1. Pump in GAA until you see new grease coming out of the upper seal.
2. Rotate the crane 90° and repeat step 1. Continue rotating and lubing until the turntable has been lubed four times.
3. Rotate the crane a full 360° to spread the lube completely.



HEMTT...

How Many Tire Chains?



Dear Half-Mast,

The CAUTION on Page 2-385 of TM 9-2320-279-10-1 (Nov 86 w/ Ch 10) says when using tire chains on your HEMTT, you must put chains on all four rear wheels.

However, Page 9 of TM 9-2320-279-10-HR only authorizes one set of tire chains, NSN 2540-01-152-7813, for each HEMTT. Since the NSN brings only two chains, we're left two chains short. What gives?

CW2 M.P.C.

Dear CW2 M.P.C.,

You're right, Sir. A total of four tire chains are needed for each HEMTT. TACOM is currently changing the hand receipt to reflect this. The unit of issue will be changed from SE (set) to PR (pair) and the QTY AUTH column will be changed from 1 to 2. That authorizes the four tire chains you need for each vehicle.

Make a note until the hand receipt is updated.

Half-Mast

Briefly Speaking...

M35A2-Series Truck Tire Pressure

The tire pressure for 11.00R20 radial tires on 2½-ton trucks isn't in TM 9-2320-361-10. The correct pressure in EIR Digest, TB 43-0001-39-1 (June 94), is 50 psi highway and 25 psi cross-country and in mud, sand, and snow.

Semitrailer Safety Ladder

Order NSN 2541-01-531-4064 to get a safety ladder assembly (swing-down step) for M871/A1/A2/A3 22½-ton semitrailers. This assembly allows you to climb safely onto the deck. You may require a mounting bracket, NSN 2590-01-532-8937, for some trailers. Installation instructions come with the assembly.

M172A1 Landing Leg

Use NSN 2590-01-508-5346 to get a set of landing legs (right and left) for the 25-ton lowbed semitrailer. This NSN replaces the parts info shown in Figs 23 (Items 1-32) and 24 (Items 1-39) of TM 9-2330-211-14&P. Installation instructions come with the landing leg assembly.

Cab Insulation Adhesive

Order NSN 8040-01-519-3385 to get a 10.3-oz tube of adhesive. Use this adhesive to keep the cab insulation in place on the PLS, HET, HEMTT and other tactical vehicles.

PLS Trailer Latch Assembly

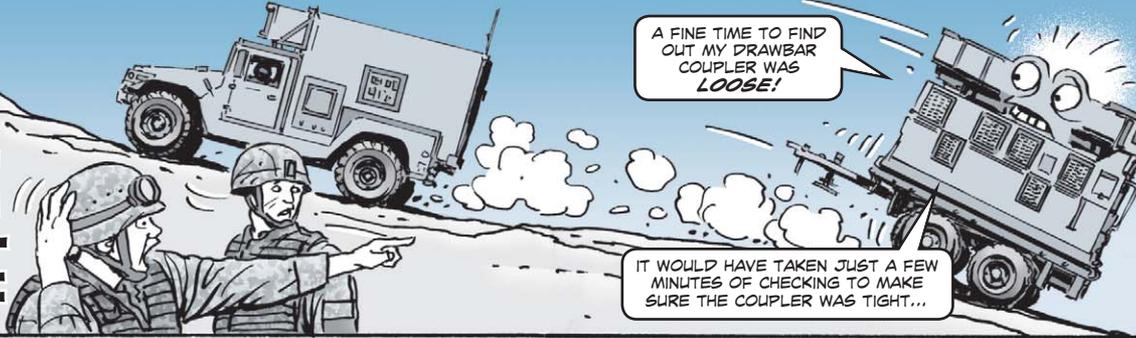
Need to replace the latch assembly on the M1076 PLS trailer's drawbar safety chain hook? Order it with NSN 2540-01-068-7567. Then make a note until the NSN can be added to Item 4 in Fig 32 of TM 9-2330-385-24P.

PLS CTIS Hose Assembly

Use NSN 4720-01-528-3509 to get a CTIS hose assembly for the palletized loading system (PLS). The assembly includes Items 18, 19 and 20 in Fig 270 of TM 9-2320-364-24P.

Firefinder Radar...

PUTTING THE BRAKES ON BRAKE FAILURE



If an AN/TPQ-36(V)7 or AN/TPQ-37(V)8 Firefinder has been sitting for a long time, you must check its trailer brakes and towing components before you hit the road. Several idle Firefinders have suffered brake failure or towing problems when they were put back in action.

Here's how to put the brakes on brake failure.

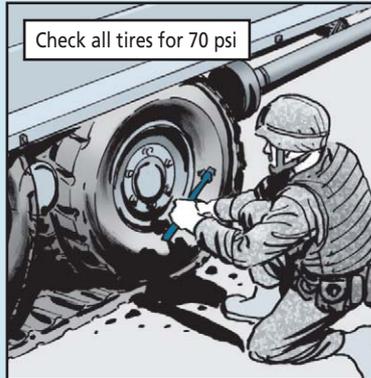
AN/TPQ-37(V)8's M1048A1 Trailer

- Check and service the brake system like it says in Chapters 3 and 4 in TM 9-2330-396-14&P.
- Check that all the tires are at 70 psi. Low psi causes the track belt to rub on the tires and possibly start a fire.
- Make sure the service and emergency air brake lines are connected and marked properly. Several trailers have had both brake line connections painted sand color, which led to the brake lines being cross-connected. The service connections should be painted blue (which replaces the older yellow) and the emergency connections red.
- Check the trailer floating beam alignment like it says in PM Radars Maintenance Bulletin 175, which can be found at:

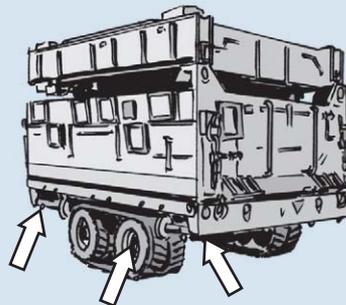
<https://www.us.army.mil/suite/doc/4921441>

PM Radars will have to approve your request to access the files directory. This usually takes 24 hours.

- Lube the trailer like it says in PM Radars Maintenance Bulletin 174, which can be found at the same website.



Lube all trailer lube points



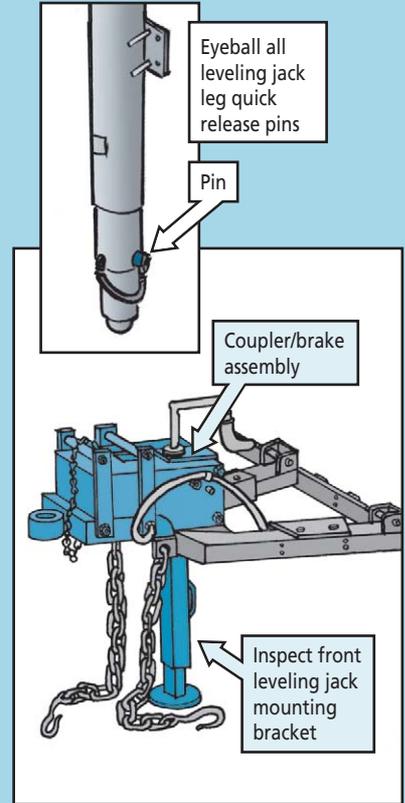
AN/TPQ-36(V)8 Trailer

- Check the condition of all rear leveling jack leg quick-release pins and make sure the jack is secured. Quick-release pins in bad shape can vibrate out during travel, which lets the jack leg drop. This can damage the jack leg and the ATG pedestal mounting point. Your depot support fixes bad quick release pins. Order a new quick-release pin with NSN 5315-01-347-4152.
- Check that the trailer drawbar coupler mounting point has all its securing hardware and the braking system works. See Pages 2-6 and 2-7 in TM 9-2330-202-14&P for info.

The coupler/brake assembly can work loose from the drawbar, which causes the ATG to separate from the HWMV towing it—a major catastrophe for your Firefinder. Never put your -36 on the road until you've checked for and fixed a loose coupler.

- Check that the front leveling jack mounting bracket can be secured in the erected and stowed positions with the quick-release pins installed in the drawbar coupler. If the bracket or front towing frame is bent, the quick-release pins won't align properly and the leveling jack won't be secure. Depot support will fix a bent leveling jack mounting bracket or bent towing frame.

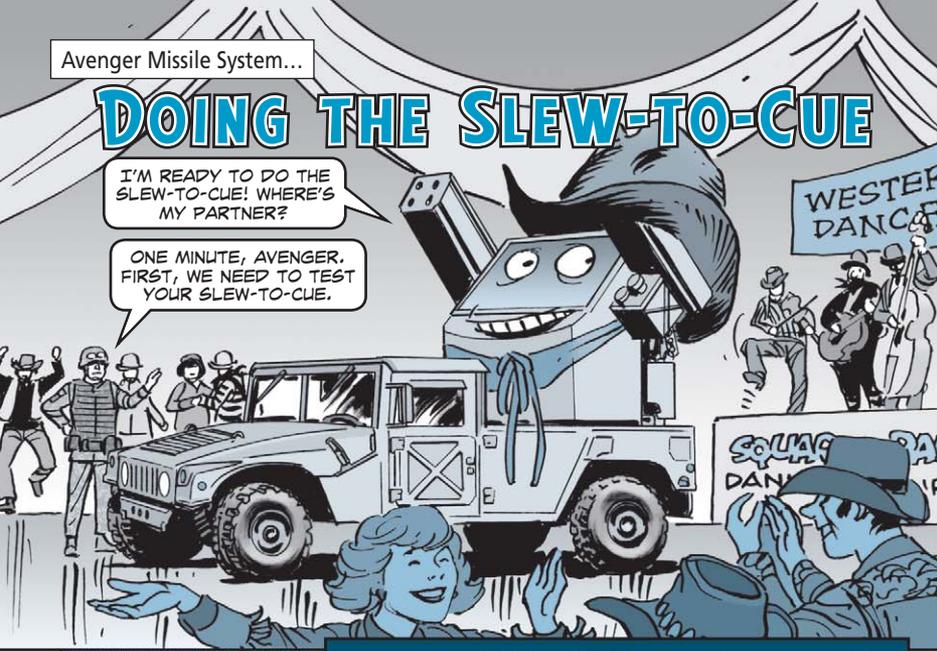
For more info on moving the -36, see Section 3 of Chapter 2 in TM 11-5840-380-10.



DOING THE SLEW-TO-CUE

I'M READY TO DO THE SLEW-TO-CUE! WHERE'S MY PARTNER?

ONE MINUTE, AVENGER. FIRST, WE NEED TO TEST YOUR SLEW-TO-CUE.



MANY UNITS ARE UNSURE HOW TO TEST THE SLEW-TO-CUE FEATURE ON THE NEWER AVENGERS.

WONDER NO MORE, HERE'S HOW TO DO IT.



THIS PROCEDURE WAS ADDED TO TM 9-1425-433-10 IN CHANGE 3 IN PARA 2-40.

1. From the initial battle display screen (BDS) on crew chief azimuth situation display, page down to TIME, then page to the right until WEAPON TEST is highlighted. Push ENTER on the keypad.
2. The WEAPON TEST page should display. Highlight ENABLE WEAPON TEST and push the space bar until YES is highlighted. Press ENTER.
3. The grid of the test target should be highlighted. Press ENTER or input the grid manually.
4. The elevation should be highlighted. Press ENTER or input elevation manually.
5. Press F3 to go back to the BDS.
6. Look on the BDS to make sure the test target is displayed.
7. On the HOOK, ENTER, SLEW, SCALE keypad, press HOOK.
8. Look on the BDS to make sure the target has been hooked indicated either by a square around the test target or the target information being displayed on the right side of the BDS.
9. On the HOOK, ENTER, SLEW, SCALE keypad, press ENTER. Verify the target is displayed on the remote control unit (RCU) or FLIR monitor.
10. On the HOOK, ENTER, SLEW, SCALE keypad, press SLEW. Verify the command is displayed on the lower left of the RCU FLIR monitor.
11. Press and hold the palm grips as the Avenger slews to the test target in azimuth and elevation.

THE ARMY IS NOT SITTING STILL WHEN IT COMES TO SUPPORTING MORTARS.

THREE NEW PRODUCTS TO IMPROVE MORTAR FIRING AND SAFETY HAVE BEEN ADDED TO THE SUPPLY SYSTEM.

DID YOU SEE THIS NEW ARCTIC GREASE?

YEAH! AND WOULDJA LOOK AT THIS CROSS-LEVELING NUT!

New Stuff for Mortars



Hearing Protection

Because a mortar makes so much noise during firing, mortar crews are required to use double hearing protection. To make it easier to meet the protection requirement, every mortar crewmember is now authorized an "earmuff" hearing protector headset, NSN 4240-01-538-7970, for \$16.95. The headset can be used with standard earplugs and fits under the Kevlar helmet.

Hearing muff



The AAL in all the mortars' -10 TMs will be changed to authorize the headset for every member of each mortar crew. Until the change is published, pencil in the headset and its NSN in your -10 TM's AAL.

Better Cold Weather Grease

A new grease, NSN 9150-01-228-3389, that works better in extreme cold is now available for all mortars. The grease has an operating range of -55°F to 156°F. This NSN should be added to the expendable section of the -10 TM.

M120mm Nut

A serrated nut, NSN 5310-01-539-6127, is now being free-issued to all M120mm mortar units for the cross-leveling assembly on both the M190 and M191 bipods. The nut eliminates slop, looseness, and jerking in the assembly. To get the nut, contact TACOM at DSN 793-1279, (309) 782-1279 or email:

Serrated nut



@ria.army.mil

For any mortar questions, contact TACOM at DSN 793-3369, (309) 782-3369 or email: @ria.army.mil

DA Form 2408-4...

THIS SURE IS A LOT EASIER THAN HAVING TO MAIL IN OUR 2408-4s!

YEAH! FIVE MINUTES AND YOU'RE DONE!



Update Weapons Card on Internet

Save the postage you used to use to mail in updates to DA Form 2408-4, *Weapons Record Data Card*. The Army wants those updates on rounds fired from mortars, artillery, and armor sent in through the Army Electronic Product Support (AEPS) website, not through the mail.

This will make it easier for you to input firing data, which is critical for determining gun tube life. Without the correct data, a gun tube could be condemned too soon.

ALL CURRENT TANK, ARTILLERY AND MORTAR WEAPONS FIRING DATA ALREADY SENT IN HAS BEEN ENTERED INTO THE SYSTEM. IF YOUR WEAPON'S SERIAL NUMBER ISN'T LISTED, CONTACT THE WEAPON'S POC LISTED AT THE END OF THIS ARTICLE.

SO ALL YOU NEED TO DO IS PRINT OUT A COPY OF 2408-4, TAKE IT TO THE FIELD, AND RECORD ROUNDS FIRED. WHEN YOU RETURN, INPUT THE INFO LIKE THIS...



Go to the AEPS website:
<http://aeps.ria.army.mil/aepspublic.cfm>
 and log in with your AKO user name and password. If you don't have a user name and password, click on **ACCESS REQUEST FORM** and follow the directions.

After you have been approved, log on and click on **Enter AEPS**. Select the **Gun Card Firing Data** button under Popular Applications...

Click on **Gun Card Firing Data**

...then click on **Edit/View/Print** in the left-hand column and...

Click on **Edit/View/Print...**

...follow the instructions for accessing the card for your gun tube.

...then follow instructions

THE **ONLY** UNITS ALLOWED TO MAIL IN 2408-4s ARE THOSE DEPLOYED WITH NO INTERNET ACCESS.

ACTIVE DUTY UNITS SHOULD MAIL IN THEIR CARDS EACH APRIL AND OCTOBER. RESERVE/NATIONAL GUARD UNITS SHOULD MAIL THEIRS IN OCTOBER.



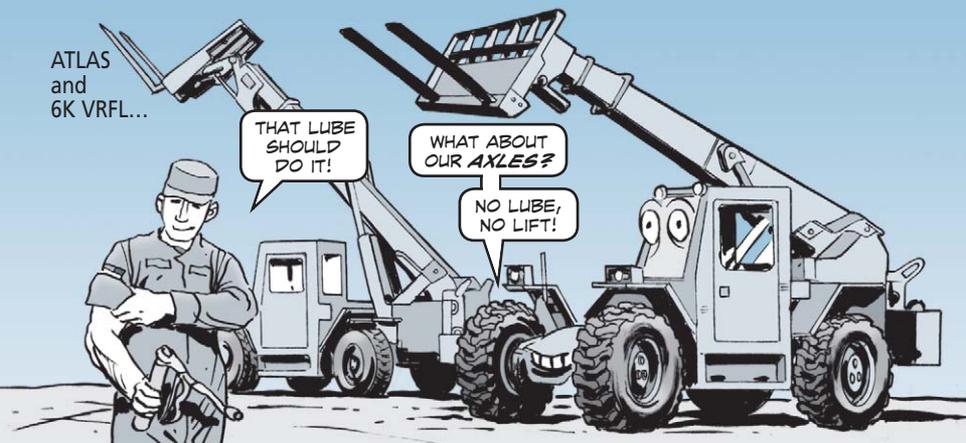
SEND THEM TO...

US Army TACOM AMSTA-LC-LETT (AEPS Help Desk)
1 Rock Island Arsenal
Rock Island, IL
61299-7630

IF YOU HAVE QUESTIONS, HERE'S WHO TO CONTACT...

<p>Mortars</p> <p>DSN 793-3369, (309) 782-3369 @ ria.army.mil</p>	<p>Artillery</p> <p>DSN 793-0030, (309) 782-0030 @ ria.army.mil</p>	<p>Armor</p> <p>DSN 793-2189, (309) 782-2189 @ ria.army.mil</p>	<p>Technical Problems</p> <p>AEPS Help Desk DSN 793-0699, (888) 564-4357 AEPS-Help@ria.army.mil</p>
--	--	--	--

ATLAS
and
6K VRFL...



LUBRICATION PREVENTS AXLE DAMAGE

Want less down time due to axle trouble on your ATLAS and 6K variable reach forklifts? Then remember that lubrication is the key to longer lasting axles.

Lack of lubrication results in the bushings, steering knuckle bearings and joints wearing out beyond repair.

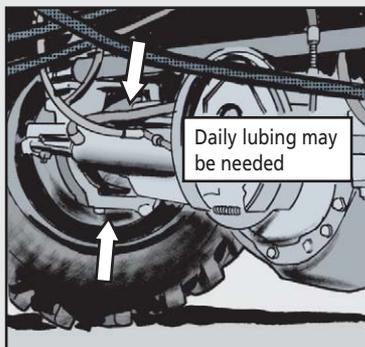
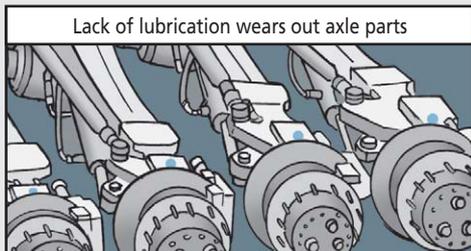
These are part of a continuous casting of the entire axle housing. Lots of damage at either end caused by lack of maintenance and lubrication results in the entire axle housing having to be replaced.

Replacing an axle is very expensive. So avoid this problem by doing the PMCS found in TM 10-3930-673-10 for the ATLAS and TM 10-3930-660-10 for the 6K.

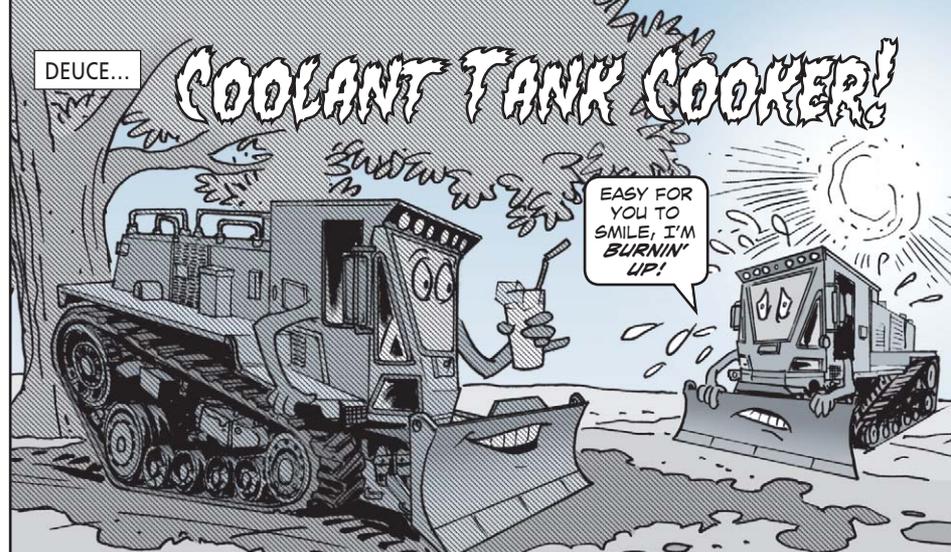
Lubing called for in the TMs is the **minimum**. Severe conditions—like every single day in SWA—call for more frequent lubing. Daily lubing may be needed. It doesn't take long to do the right amount of lubricating.

Just grease the upper and lower kingpin grease fittings on each end of the axle. There are four grease fittings per axle and eight per forklift.

These grease fittings are in plain view, and they're easy to reach. So keep the grease fittings lubricated. Then you can lift when you need to.



DEUCE...



"It's a hot one today!"

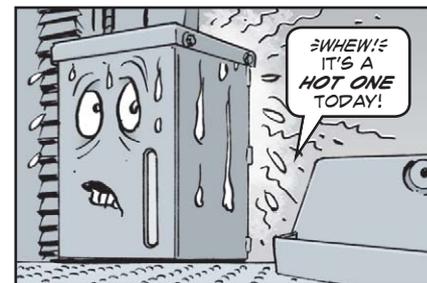
No doubt you've heard that said more than once, especially if you're stationed in Iraq.

Word from the field is the excavator's coolant (purge) tank is deteriorating from exposure to the elements.

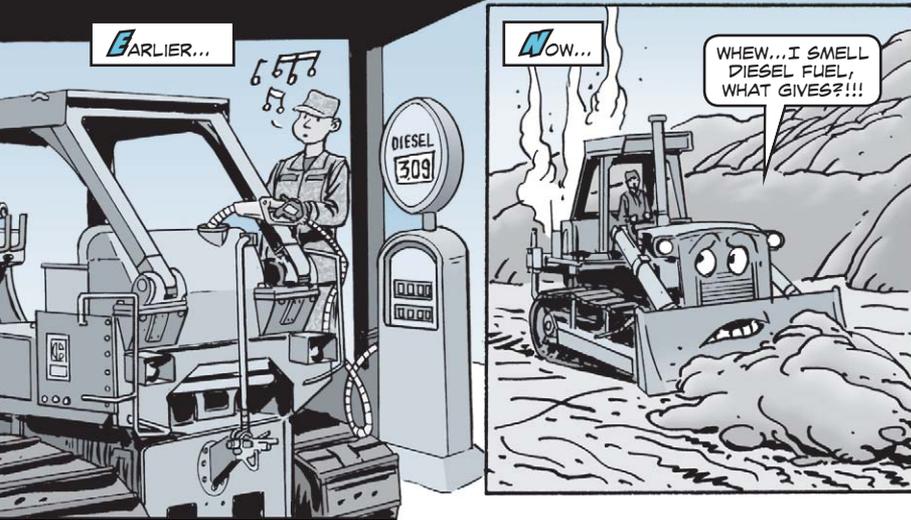
The tank sits inside a protective metal box above the vehicle's platform (curbside). That metal box is a real cooker when the temp climbs over a hundred degrees! Eventually, hot days and cool nights cause the tank's plastic to break apart.

Got a coolant leak or suspect a cracked tank? Eyeball the tank's cap to see if it's missing or cracked. Get a new cap that snaps in place with NSN 5340-01-474-3118. Have your mechanic check and replace a leaking coolant tank with NSN 2815-01-473-6105.

Some units replace the tank every two to three years just to be safe. You'll need your CO's approval before going that route.



FILL LINE REMINDER



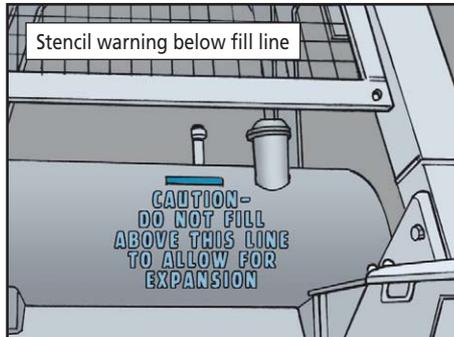
Before you hop in the newly-painted dozer cab for the day's run, eyeball the back of the fuel tank. Make sure there's a stenciled "fill line" on the tank. It's a quick reminder not to overfill the tank.

Diesel fuel that spills outside a too-full tank causes fumes in the cab area. Enough fumes will leave you light-headed and nauseous.

And the spilled fuel can leave an oily mess on your dozer and a hazardous waste spill to clean up.

If the paint line was painted over, have your mechanic use black CARC paint to stencil a new fill line at the bottom of the fill neck—about three inches below the top of the fuel tank.

Below the fill line stencil **CAUTION—DO NOT FILL ABOVE THIS LINE TO ALLOW FOR EXPANSION** in 3-in letters. The stencils are part of the Common shop sets.



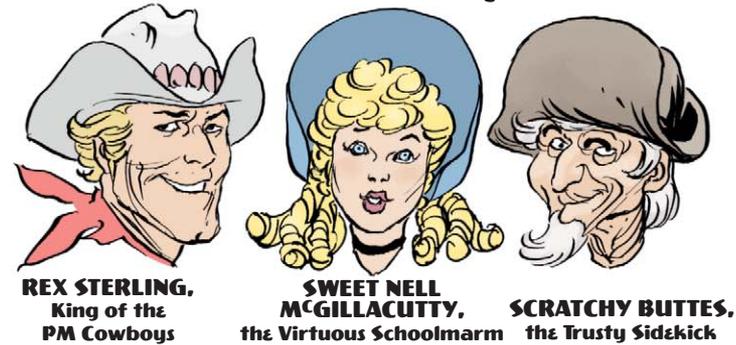
[Click here for a copy of this article to save or email.](#)

HORSE OPERA PICTURES PRESENTS:

RIO LOCO

A Western Saga of Loss and Redemption

Part One *starring:*



and
featuring:



JOE
KUBERT



DO NOT FORSAKE PM,
MY DARLIN',
YOUR DEDICATION
MUST BE PURE.
IF YOU NEGLECT ALL
YOUR EQUIPMENT,
YOU BEST BELIEVIN'
YOU'LL BE A-GRIEVIN',
AND YOU'LL BE OUTTA
LUCK FOR SURE.

FOR
SURRE.

[Click here for a copy of this article to save or email.](#)

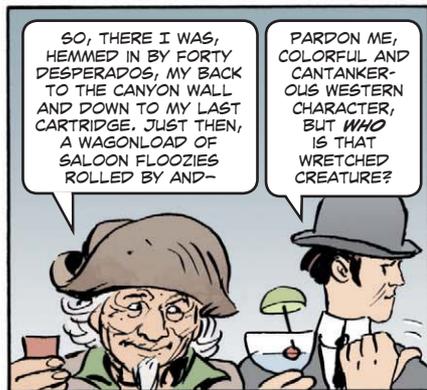


OUR STORY BEGINS ONE FINE MORNING IN THE OLD WEST TOWN OF *DUSTY BRITCHES*. A PRISSEY EASTERN DUDE HAS JUST ARRIVED ON THE STAGECOACH.

WE FIND HIM RELAXING AT THE *COW PIE CANTINA*, DRINKING AND CHATTING WITH SCRATCHY BUTTES, A LOCAL COLORFUL AND CANTANKEROUS WESTERN CHARACTER.

BEER - 5¢
WHISKEY - 10¢
IN A CLEAN GLASS - 15¢

TEMPERANCE UNION MEETS
HERE THURSDAY
AT 10:00PM



SO, THERE I WAS, HEMMED IN BY FORTY DESPERADOS, MY BACK TO THE CANYON WALL AND DOWN TO MY LAST CARTRIDGE. JUST THEN, A WAGONLOAD OF SALOON FLOOZIES ROLLED BY AND-

PARDON ME, COLORFUL AND CANTANKEROUS WESTERN CHARACTER, BUT *WHO* IS THAT WRETCHED CREATURE?



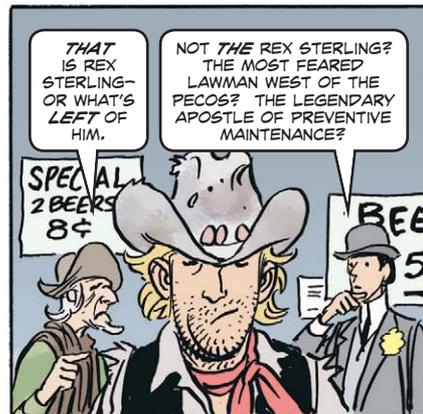
PHEEW!

OH, SPIT!



I'M JUST A LOWLY COW PIE ON THE CATTLE TRAIL OF LIFE!

TOBACCO JUICE
CAUTION
HAZARDOUS MATER



THAT IS REX STERLING- OR WHAT'S LEFT OF HIM.

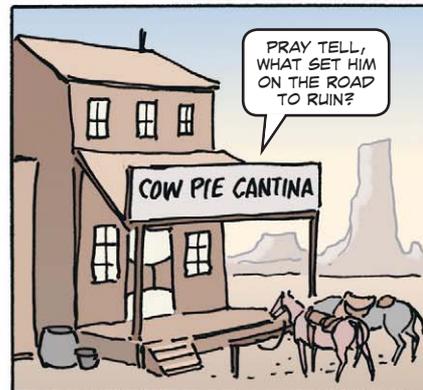
NOT *THE* REX STERLING? THE MOST FEARED LAWMAN WEST OF THE PECOS? THE LEGENDARY APOSTLE OF PREVENTIVE MAINTENANCE?

SPECIAL
2 BEERS
8¢

BEER
5¢



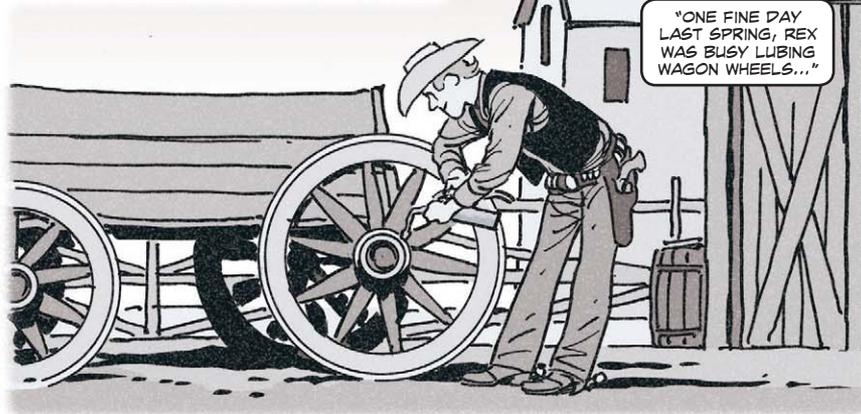
THE VERY SAME. I SHOULD KNOW. I WAS ONCE HIS TRUSTY SIDICK AND BEST FRIEND.



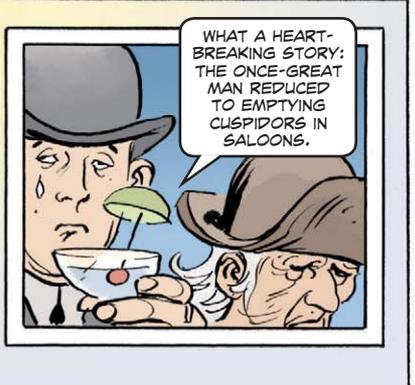
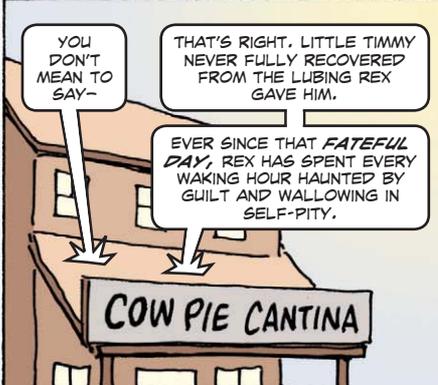
PRAY TELL, WHAT SET HIM ON THE ROAD TO RUIN?

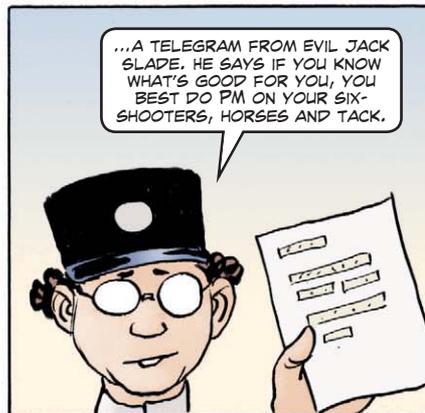
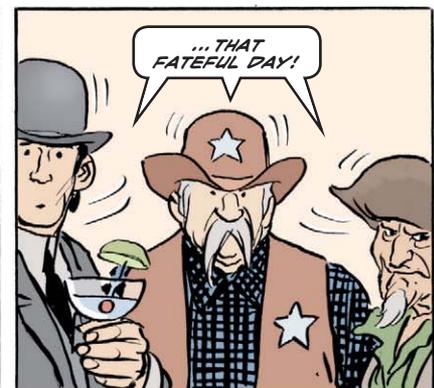
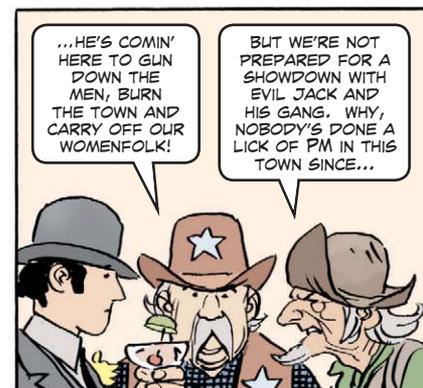


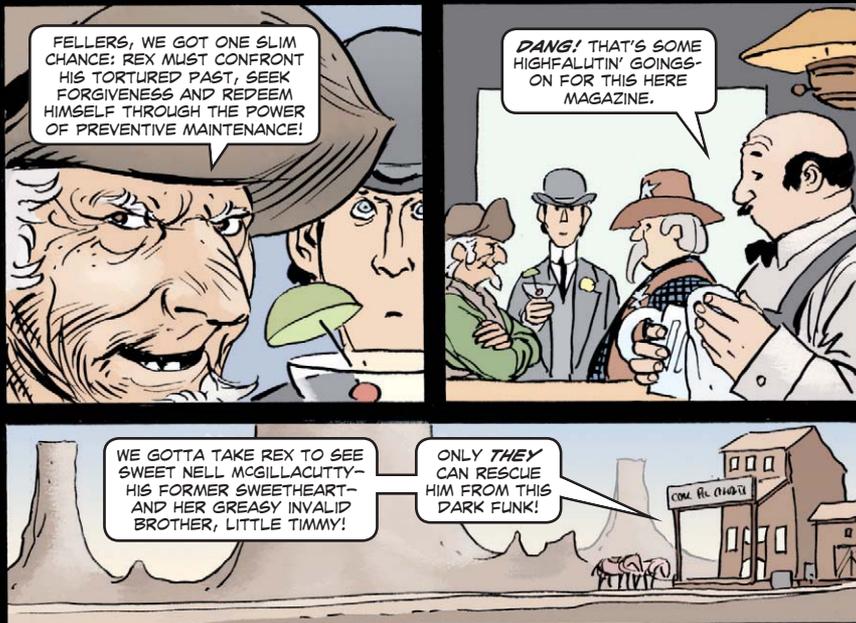
LISTEN AND LISTEN TIGHT, PRISSEY EASTERN DUDE. I'M A GONNA TELL YOU THE WHOLE TRAGIC TALE IN CINEMATIC FLASHBACK.



"ONE FINE DAY LAST SPRING, REX WAS BUSY LUBING WAGON WHEELS..."







FELLERS, WE GOT ONE SLIM CHANCE: REX MUST CONFRONT HIS TORTURED PAST, SEEK FORGIVENESS AND REDEEM HIMSELF THROUGH THE POWER OF PREVENTIVE MAINTENANCE!

DANG! THAT'S SOME HIGHFALUTIN' GOINGS-ON FOR THIS HERE MAGAZINE.

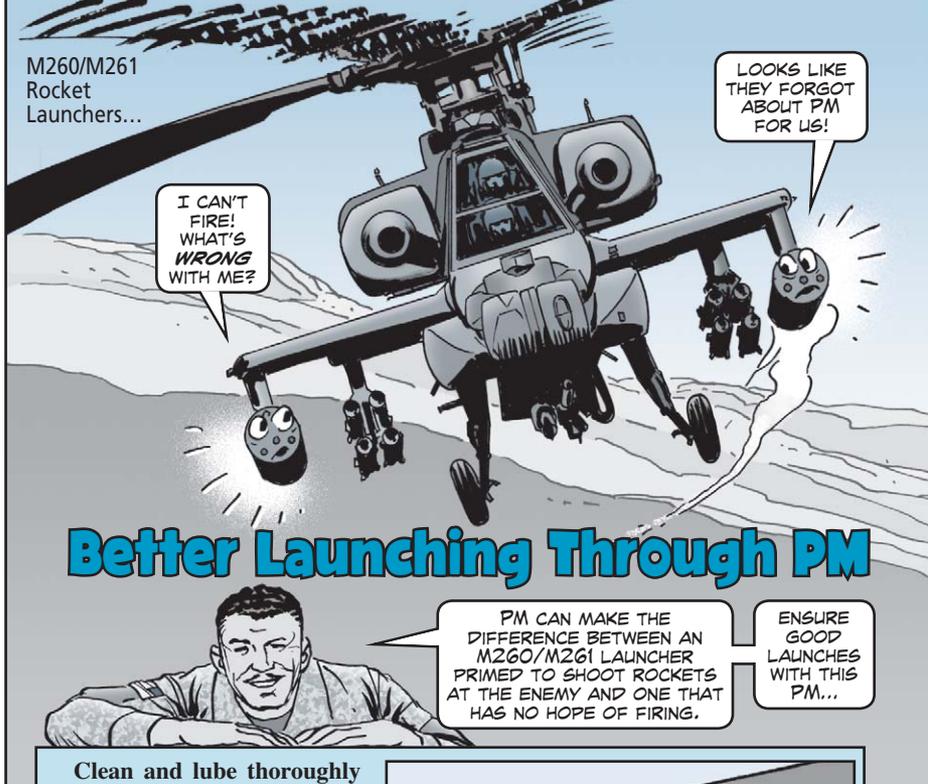
WE GOTTA TAKE REX TO SEE SWEET NELL MCGILLACUTTY—HIS FORMER SWEETHEART—AND HER GREASY INVALID BROTHER, LITTLE TIMMY!

ONLY THEY CAN RESCUE HIM FROM THIS DARK FUNK!

- ★ WILL REX STERLING COME TO GRIPS WITH HIS *TORTURED PAST*?
- ★ WILL HE REDEEM HIMSELF THROUGH PM?
- ★ WILL HE FACE DOWN THE DEADLY OUTLAWS AND SAVE THE GOOD PEOPLE OF DUSTY BRITCHES?
- ★ OR WILL EVIL JACK SLADE RUN *ROUGHSHOD* OVER ALL THAT IS DECENT AND JUST?

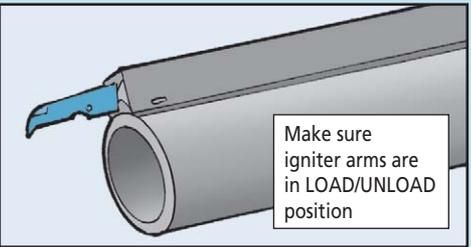
Join us next month in **PS 649** for the *thrilling conclusion* to...

RIO LOCO



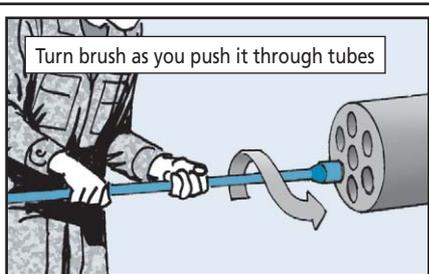
Better Launching Through PM

Clean and lube thoroughly after firing. Just running the bore brush through the rocket tubes is not enough. Before doing any cleaning, make sure the aft igniter arms are in the LOAD/UNLOAD positions and the side firing contacts are recessed so they won't be damaged. Then soak a bore brush with CLP. Put the bore brush into each tube from the front of the launcher. Push the brush slowly to the rear while turning the handle. Repeat this until the inside of the tube is coated with CLP.

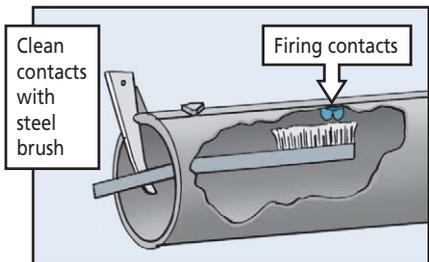


[Click here for a copy of this article to save or email.](#)

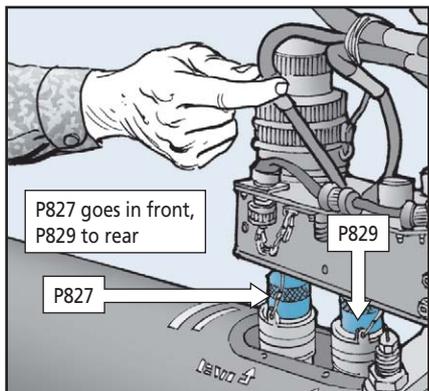
Next, put a small amount of CLP on the brush. Scrub the entire inside of each tube with twisting back and forth strokes one foot long. Attach rags to the brush. Push the brush in through the front of each tube and run the brush all the way through to wipe the tubes dry. Change to a clean rag after every third tube.



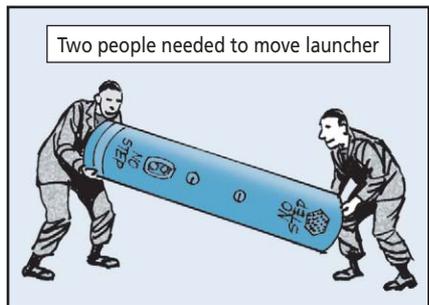
Working from the back of the launcher, place the aft igniter arms in the firing position and scrub the side and aft contacts with a stainless steel brush. Brush back and forth, not side to side, to avoid damage. Make sure the contacts are completely dry and free of the CLP's teflon coating. Otherwise, you'll have electrical problems.



At the front of the launcher, spray CLP directly into each umbilical connector opening. Clean the connectors with an acid swabbing brush, NSN 7920-00-514-2417. Flush away residue with CLP and blot the CLP with a rag. After the connectors are clean, use a pipe cleaner to remove any remaining CLP and dry the connectors.



Be careful connecting the launcher cables. The P827 cable goes to the front launcher connector and is marked FUZE; the P829 goes to the rear one and is marked FIRE. If you connect them backwards, the connector pins can be damaged.



Use care and two people to remove and store the launcher. If you try to do the job alone, you likely will bang the launcher and dent it. Be careful setting it on end. If it's slammed down, the edges of the launcher can be bent and the launcher rivets loosened.

When to Replace a Launcher

Eventually wear and tear will make a new M260/M261 launcher necessary. How do you know when you need a new one? For the M260, the condemnation criteria is more than two bad tubes. For the M261, it's more than three bad tubes. And that's it. You don't need to worry about rounds fired or shelf life when it comes to replacement criteria.

What's a bad tube? One that is loose, dented, deformed or has holes in it. A tube is also bad if rockets can't be loaded into it or if it fails voltage or fuse circuitry continuity checks. A damaged detent or detent spring or igniter arm also flunk a tube.



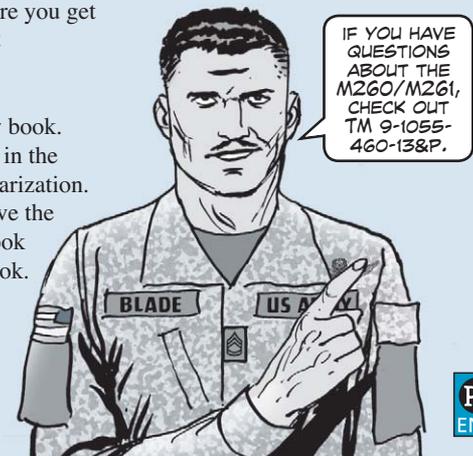
The required operational capability (ROC) for the M260/M261 is no repair, so there are no repair parts in the Army system. But, of course, you can always make minor repairs yourself, like removing rivets to tighten plugs.

If you do need to replace your launcher, turn in a requisition for a new one. Launchers are free issue and you should get a new one in 30 days.

Don't junk the old launcher before you get the new one. Having limited rocket capability is better than none.

Remember the launchers are accountable items on your property book. When you get a new launcher, turn in the old one to PDO/DRMO for demilitarization. Use the turn-in documents to remove the old launcher from your property book and put the new launcher in the book.

If the serial number of the new launcher repeats the number of an old launcher, put the letter A after the new serial number.



UH-60 Series...

SGT BLADE, THESE THINGS LOOK THE SAME TO ME!

THEY MAY LOOK THE SAME, BUT THEY'RE NOT! CHECK THE TM!



SWASHPLATE LINK MIX-UP

Mechanics, looks can be deceiving when you're dealing with the swashplate link on a Black Hawk.

Before you adjust the flight controls, inspect the forward and aft swashplate links to make sure they're installed correctly. Para 11-4-96 or WP 1129 of TM 1-1520-237-23-6 has the word.

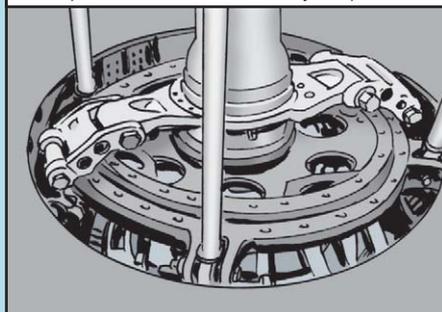
Always inspect them because they are not the same! They can easily be switched by someone not paying attention when rigging flight controls, like when they are removed and installed during phase maintenance. Your TM has a warning.

Inspecting the links prior to adjustments prevents injury to personnel and damage to equipment. Remember the links are critical safety items (CSIs).

So if you're the one installing the links, eyeball them and make sure they go in the right spot on the swashplate by following what the TM says.

Be like an accountant and pay attention to the numbers—part numbers, that is—and you'll be able to tell the difference between the links and install them where they belong.

Swashplate links installed correctly? Inspect them



Before installing links, check TM instructions

Forward swashplate link



Aft swashplate link



[Click here for a copy of this article to save or email.](#)

All Aircraft...

WEIGHT and BALANCE

LISTEN UP, UNIT WEIGHT AND BALANCE TECHNICIANS. ARE YOU LOST...



...WHILE TRYING TO NAVIGATE THROUGH THE AUTOMATED WEIGHT AND BALANCE SYSTEM (AWBS)?



...EDITING YOUR CHART AS, OR WEIGHING YOUR AIRCRAFT USING NEW EQUIPMENT?



...CREATING FORM FS, OR IMPORTING, EXPORTING OR TRANSFERRING AIRCRAFT WEIGHT AND BALANCE RECORDS?



IF YOU ANSWERED YES TO ANY OR ALL OF THESE QUESTIONS, THERE'S HELP JUST ONE CLICK OR PHONE CALL AWAY.



IF YOU NEED HELP WITH WEIGHT AND BALANCE CALL (256) 313-9041/9042; DSN 897-9041/9042; AFTER DUTY HOURS, BY CELL AT (256) 652-6707 OR (256) 656-6121.

THE MASS PROPERTIES TEAM OF THE AVIATION ENGINEERING DIRECTORATE AT REDSTONE HAS PROFESSIONALS READY TO SUPPORT ARMY AVIATION.



ALL UNIT WEIGHT AND BALANCE TECHNICIANS CAN CHECK OUT: <http://www.aeromechjatdi.mil>

THERE YOU'LL FIND INFORMATION ON WEIGHT AND BALANCE MANAGEMENT (W&B), COMPUTER SOFTWARE, MASTER CHART AS, REFERENCES, AROUND-THE-CLOCK TECHNICAL SUPPORT FOR UNIT WEIGHT AND BALANCE MATTERS, COMPUTER-BASED TRAINING AND W&B REFRESHER TRAINING.

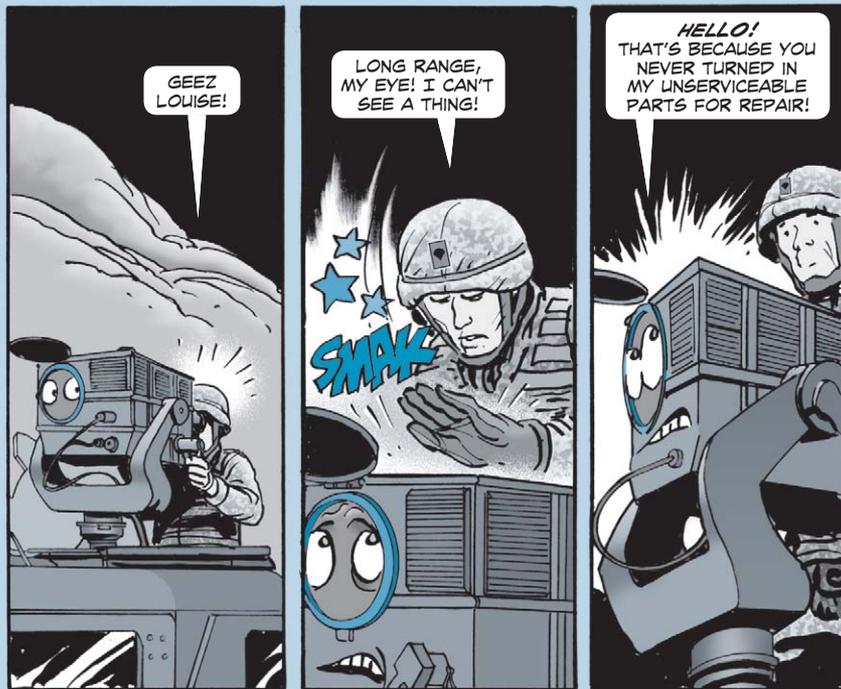
IF YOUR UNIT NEEDS INFO OR TRAINING ON W&B THERE'S AN ANNUAL WORLDWIDE WEIGHT AND BALANCE 3-DAY CONFERENCE TAILORED FOR ALL MILITARY W&B TECHNICIANS.



FOR TRAINING, CONTACT (256) 313-9041 OR DSN 897-9041, OR EMAIL: amrdec.army.mil

[Click here for a copy of this article to save or email.](#)

WAITING FOR PARTS? READ THIS!



Dear Editor,

I manage spare parts for the long range advanced scout surveillance system (LRAS3) infrared night vision sight (AN/TAS-8) and I am fighting an uphill battle trying to get unserviceable parts turned in for repair.

Our biggest problem is with the integrated optical bench (IOB) assembly, NSN 5860-01-486-5044 or NSN 5860-01-506-8843.

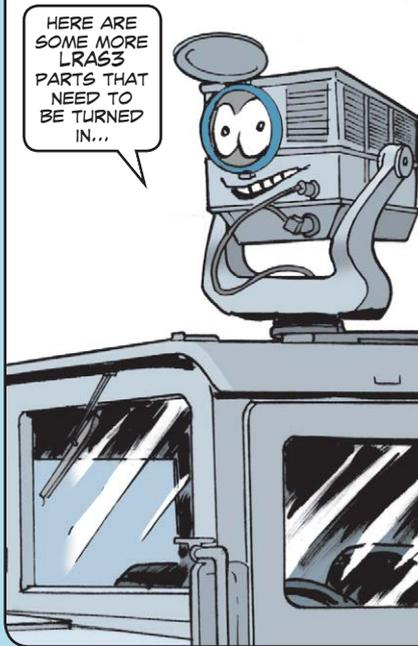
The LRAS3 is taking a beating in Iraq and the IOB assembly is really getting hammered. Right now, it takes a year to get a new IOB assembly. However, a lot of damaged IOB assemblies can be repaired at depot and reissued in a lot less time than it takes to get a new one.

But soldiers must turn them in! Assemblies can't get repaired sitting on the scrap heap or lying in the back of a seldom-used warehouse.

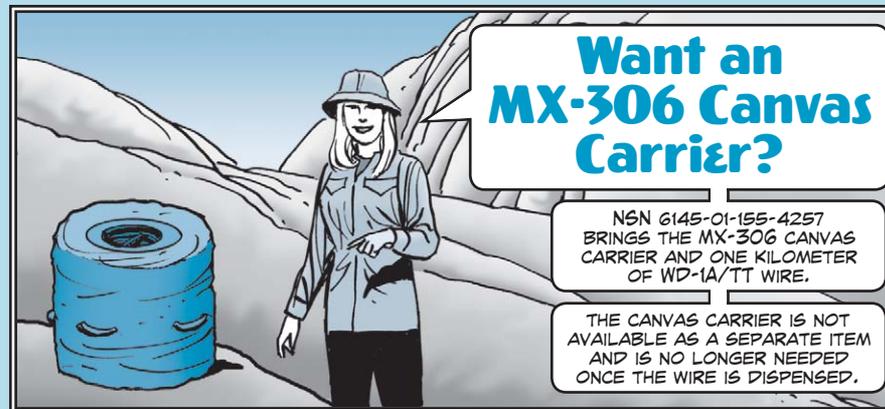
Please put the word out to turn in unserviceable LRAS3 parts *immediately*.

Supply Specialist
CE-LCMC

Editor's note: Thanks, Ms . Warfighters, if you have been complaining about how long it takes to get LRAS3 parts (or even if you haven't), make sure you're not part of the problem by failing to turn in unserviceable parts. Go on patrol around your area and see what parts you can turn up. Contact your counterparts at other units and have them check, too.



Item	NSN
Infrared lens	5855-01-486-5022
Display unit	7025-01-486-5024
Adapter assembly	4920-01-486-5029
Adapter assembly	4920-01-486-5040
Adapter assembly	4920-01-494-5187
Electrical panel	5975-01-486-5035
Tripod mount leg	1020-01-486-5041
Inclinometer	6605-01-486-6395
Housing	5999-01-486-6396
Housing	5999-01-494-3670
Housing	5999-01-518-8796
Housing	5999-01-518-8833
Laser rangefinder	1240-01-486-5003
Laser rangefinder	1240-01-506-8841
Circuit card	5998-01-486-5004
Circuit card	5998-01-486-5005
Circuit card	5998-01-486-5019
Circuit card	5998-01-486-5020
Circuit card	5998-01-486-5021



TQG Voltage Regulator Bargain



READ ON!

Dear Editor,
When replacing a voltage regulator on 60-Hz A-model 15-, 30-, and 60-KW tactical quiet generators (TQGs), it's cheaper—by hundreds of dollars—to order a voltage regulator kit than to order just the voltage regulator.

The kits include the voltage regulator, the T1 transformer, the R1 voltage adjust rheostat and the R16 resistor.

Use NSN 6110-01-532-9723 for the 15-KW kit; NSN 6110-01-442-8622 for the 30-KW kit; and NSN 6110-01-477-4851 for the 60-KW kit.

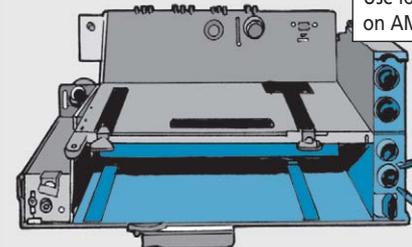
CE-LCMC P&E LAR
Balad, Iraq

Editor's note: We always support an idea where you get more bang for the buck. Thanks!



INC Test Workaround for AM-7239E

Dear Editor,
Internet Controller (INC) modules running software versions 6.1.1 and newer have a design characteristic that results in an invalid INC test if the self-test BIT is run using the upper radio slot on the SINGGARS AM-7239/E vehicular amplifier adapter (VAA).

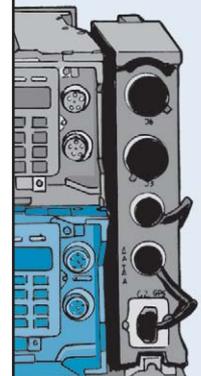


Use lower slot on AM-7239E

A BIT using RT-B will display INC FAIL (Fail 6) even if the INC is good.

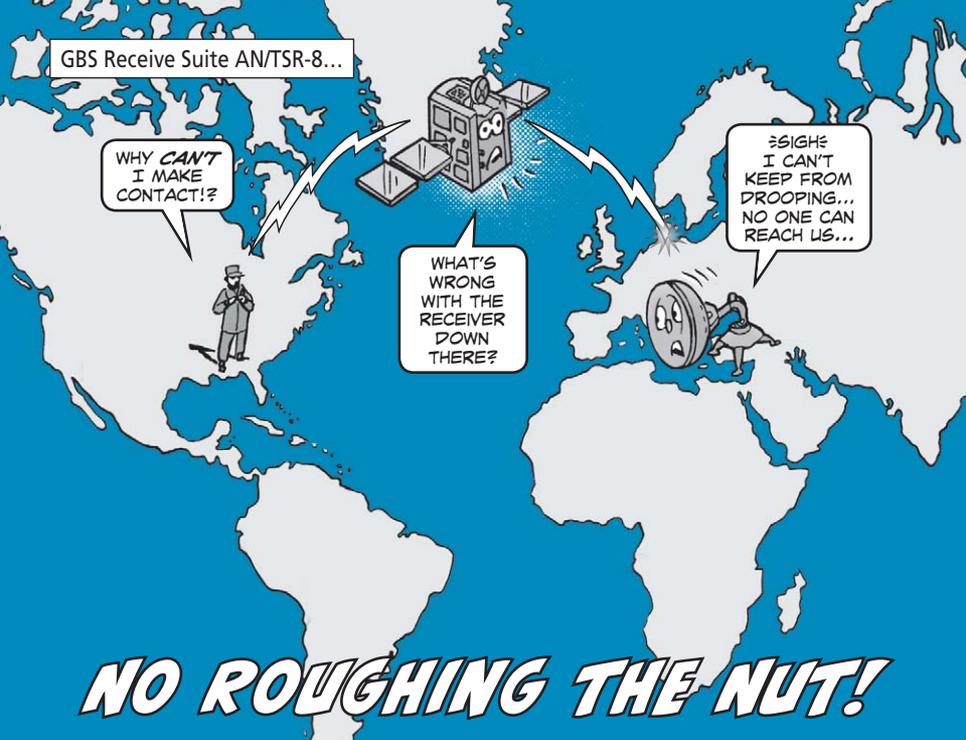
- Q. What do the SINGGARS fail codes mean?**
A. From TM 11-5820-890-20-1, page 1-19:
FAILURE- Codes. If a failure occurs, displays on the RT are interpreted as follows:
FAIL 1 Internal RT Failure Receive
FAIL 2 Internal RT Failure Data Rate Module
FAIL 3 Internal RT Failure ECCM
FAIL 4 Internal Failure Two Wire
FAIL 5 COMSEC Failure/RT not in CT
FAIL 6 SNAP Test or Internet Controller/
FHMUX Failure
FAIL 7 Internal RT Failure Routing Module
FAIL 8 Internal RT Failure Routing Module

Work around this problem by using the lower radio slot (RT-A) to test an INC module that has this newer software. The INC module is good if it passes the RT-A BIT.



SINGGARS
CE-LCMC

Editor's note: When it comes to SINGGARS, is the man! Follow his advice and stop pulling INC modules that you think are bad because they fail a self-test run in the RT-B radio slot.



NO ROUGHING THE NUT!

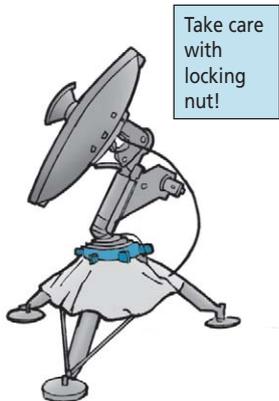
The locking nut on the tripod hub assembly, NSN 5985-01-530-2368, on the next generation receive terminal of the global broadcast service (GBS) receive suite AN/TSR-8 has been getting some rough treatment lately.

Some of you are rotating the reflector assembly without first loosening the tripod hub locking nut. Some of you are using tools to forcibly tighten the locking nut. Both of these "rough" treatments are damaging or breaking the nut.

Once the nut is broken or significantly damaged, the tripod assembly will not hold the antenna dish upright and locked on the satellite. This is not a good thing!

So, loosen the nut when you need to rotate the reflector assembly. And use hand power to lock it in place when the reflector is in position.

One more thing: A broken tripod hub assembly will not fix itself. You must turn it in for repair! This is not being done and supply needs are not being met because of it.



Tapping into AA Battery Power



If your AN/PSN-11 PLGR or AN/PSN-13 DAGR is not plugged into an external power source, you need AA batteries to find out where you are and where you're headed.

The PLGR uses eight AA batteries in the battery holder, NSN 6160-01-385-4358. The DAGR uses four AA batteries in the battery pack, NSN 6135-01-521-3064.

The preferred AA for both GPS receivers is the L91 lithium battery, NSN 6135-01-333-6101. It's the same Energizer® lithium AA that you get in stores.

An alternative to the L91 lithium AA is the alkaline BA-3058, NSN 6135-00-985-7845. Use the alkaline for training and in normal operating conditions. But when it's really hot, the alkalines tend to leak.

A rechargeable alternative is the nickel-metal hydride battery, NSN 6140-01-467-3225.

These batteries are all approved choices, but there are some AAs out there that aren't. You see, not all AAs are created equal. Some bad ones made in China have found their way into PLGRs and DAGRs and caused fires. To be on the safe side, only use the recommended batteries.

Finally, when you replace batteries, use only batteries of the same chemistry type and age. Don't mix 'em.



MASK C2A1 CANISTER RECALL

Some C2A1 canisters, NSN 4240-01-361-1319, for the M40/M42-series, M45, and M48 masks that may not meet protection standards have gotten into the supply system.

NBC NCOs should immediately check all their unit's mask C2A1 canisters, including those in storage, for these lot numbers:

THESE SHOWED UP IN TACOM SAFETY OF USE MESSAGE 06-023...



MMB03B031-001	MMB03C035-001	MMB03C035-003	MMB03D035-005
MMB03E035-007	MMB03E035-009	MMB03F035-011	MMB03F035-013
MMB03G035-015	MMB03G035-016B	MMB03H035-018	MMB03H035-020
MMB03B033-001	MMB03C035-002	MMB03D035-004	MMB03D035-006
MMB03E035-008	MMB03E035-010	MMB03F035-012	MMB03G035-014
MMB03G035-016A	MMB03G035-017	MMB03H035-019	MMB04K035-060



THESE WERE CITED IN TACOM GROUND PRECAUTIONARY MESSAGE #06-015...

MMB03J035-021	MMB04C035-040	MMB05A035-068	MMB04D035-044
MMB04A035-033	MMB04G035-052	MMB05C035-075	MMB04J035-056
MMB04D035-045	MMB03L035-029	MMB04K035-062	MMB04J035-057
MMB03J035-022	MMB04C035-041	MMB05A035-069	MMB04L035-065
MMB04A035-034	MMB04D035-043	MMB05C035-072	MMB05B035-072
MMB04E035-046	MMB03M035-030	MMB04K035-063	MMB04J035-058
MMB03J035-023	MMB04C035-042	MMB05A035-070	MMB04L035-066
MMB04A035-035	MMB04H035-054	MMB05E035-077	MMB05C035-073
MMB04E035-047	MMB03M035-031	MMB04L035-064	MMB04J035-059
MMB03K035-024	MMB04D035-043	MMB05B035-071	MMB04L035-067
MMB04A035-036	MMB04H035-055	MMB05C035-078	MMB05C035-074
MMB04E035-048	MMB03M035-032	MMB03L035-028	MMB04K035-061
MMB03K035-025	MMB04D035-044	MMB04C035-040	MMB05A035-068
MMB04B035-037	MMB04J035-056	MMB04G035-052	MMB05C035-075
MMB04F035-049	MMB03K035-025	MMB03L035-029	MMB04K035-062
MMB03K035-026	MMB04B035-037	MMB04C035-041	MMB05A035-069
MMB04B035-038	MMB05B035-072	MMB04G035-053	MMB05C035-076
MMB04F035-050	MMB04J035-058	MMB03M035-030	MMB04K035-063
MMB03K035-027	MMB04L035-066	MMB04C035-042	MMB05A035-070
MMB04B035-039	MMB05C035-073	MMB04H035-054	MMB05E035-077
MMB04F035-051	MMB03K035-027	MMB03M035-031	MMB04L035-064
MMB03L035-028	MMB04L035-067	MMB04D035-043	MMB05B035-071
	MMB05C035-074	MMB04H035-055	MMB05E035-078
	MMB04K035-061	MMB03M035-032	

Any canister with these lot numbers but marked with a "T" is still usable. The "T", which will be stenciled large on the canister, indicates the canister has been retested and is safe to use. All other canisters with these lot numbers should be used only for training and mask confidence exercises using CS and CN tear gas, but not for training with live agents.

T means canister is OK



FOR MORE INFORMATION, SEE THE SOUM AND GPM LISTED ON PAGE 48. THEY CAN BE FOUND AT THE AEP'S WEB PAGE:
<https://aeps.ria.army.mil>



ONCE YOU HAVE LOGGED ON, CLICK ON TACOM-SBC AND THEN CLICK ON ADVISORY MESSAGES.

IF YOU HAVE ANY OF THE CANISTERS LISTED ABOVE, CONTACT AT DSN 793-2353, (309) 782-2353, OR EMAIL: [@us.army.mil](mailto:us.army.mil)

AND FURNISH THE FOLLOWING INFO...

- Opened and unopened canister quantities in each recalled lot number
- Unit POC with his commercial phone number and email address.

IF ANY OF THE CANISTERS LISTED ON PAGE 48 ARE UNOPENED, THEY CAN BE REPLACED ON AN EXCHANGE BASIS.

QUESTIONS? CONTACT DARRIN MOORE AT THE PHONE NUMBERS OR EMAIL ADDRESS LISTED ABOVE.



SWHEWE THANK GOODNESS WE GOT RID OF THOSE BAD CANISTERS.

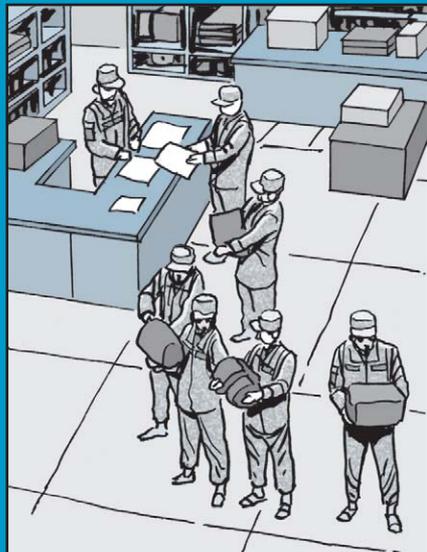
YES, THEY WERE A RISK TO YOU AND TO SOLDIERS.

Tents...

DRASH Equipment and POCs

COMMERCIAL OFF-THE-SHELF (COTS) EQUIPMENT IS A FACT OF LIFE IN TODAY'S ARMY.

FROM CLOTHING TO LAPTOPS TO TENTS, YOU'LL FIND COTS ITEMS EVERYWHERE.



One company that's fielded a variety of COTS equipment is DHS Systems LLC. DHS provides tents and trailers outfitted with generators and environmental control units. You know this equipment as DRASH®—Deployable Rapid Assembly Shelters. What you may not know is who to turn to for support of your DRASH... until now.

Points of Contact

Here are DHS points of contact who can help you with any issues concerning DRASH: technical manuals, repair and spare parts, NSNs and part numbers, parts lists, accessories and training. DHS can also offer technical assistance.

Email: jkerr@drash.com or customersupport@drash.com

Or you can phone: (256) 774-1563 (877) 463-7274 fax (256) 774-1567 mobile (256) 656-4428 Logistics Help Line (800) 977-3647 or (845) 359-6066

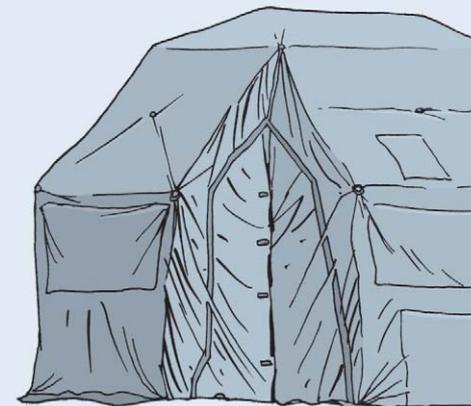
DHS has a website supporting their products: <http://www.drash.com>



AND HERE ARE SOME DRASH ITEMS WITH MODEL NUMBERS AND NSNs TO HELP YOU IDENTIFY THEM...

S Series Shelters

Model	NSN 8340-01-	Color
1S	459-4337	Green
1S	459-4324	Tan
2S	439-8421	Green
2S	395-3976	Tan
3S	439-8416	Green
3S	439-9119	Tan
4S	439-8425	Green
4S	395-3986	Tan
5S	439-8949	Green
5S	439-8947	Tan
6S	439-8957	Green
6S	395-7853	Tan



XB Series Shelters

Model	NSN 8340-01-	Color
1XB	514-0514	Green
1XB	514-0515	Tan
2XB	475-2871	Green
2XB	475-2880	Tan
3XB	475-2973	Green
3XB	475-2975	Tan
4XB	462-6736	Green
4XB	462-6735	Tan
5XB	475-3110	Green
5XB	475-3074	Tan
6XB	475-3075	Green
6XB	475-3077	Tan



Specialty Shelters

Shelter	NSN 8340-01-	Color
Satellite antenna shelter	467-9325	Green
Self-enclosed annex lobby	484-6713	Green
Self-enclosed annex lobby	484-6711	Tan

J Series Shelters

Stowed in transport trailer with 5-KW generator

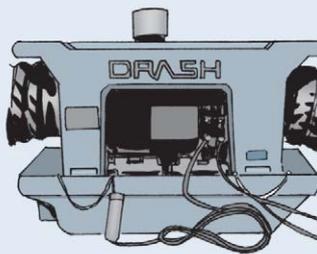
Model	NSN 8340-01-487-	Color
J	6254	Green
J	6271	Tan



WE'RE NOT
DONE YET...
READ ON!

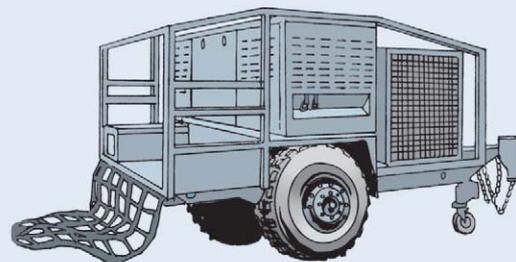
Heater

Model	NSN
D901, 60 Hz	8340-01-467-9165
D1000, 60 Hz	8340-01-467-9165



Utility Shelter Transport (UST) Trailers

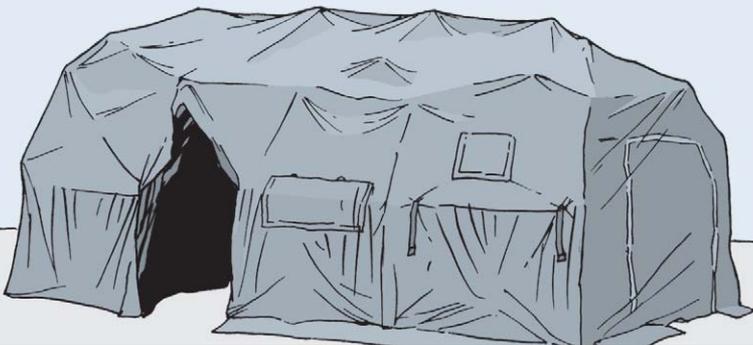
Model	Generator (s) output	Environmental control unit (ECU) output	NSN 8340-01-	Color
HP-4DL	20-KW	8-ton	459-4352	Green
HP-4DL	35-KW	8-ton	514-0577	Green
HP-2C	20-KW	8-ton	459-4366	Green
HP-3C	35-KW	8-ton	513-9267	Green
HP-3C	35-KW	8-ton	514-0578	Tan
HP-2U	20-KW	8-ton	499-1814	Green
HP-2U	20-KW	8-ton	499-1803	Tan
HP-2C1G1	35-KW	NA	459-4361	Green
HP-3G	two 20-KW	NA	504-2616	Green
HP-3G	two 20-KW	NA	504-2617	Tan
HP-3G	two 35-KW	NA	504-2613	Green
HP-3G	two 35-KW	NA	504-2614	Tan
HP-2E	NA	8-ton	514-0586	Green
High mobility cargo trailer	NA	NA	513-9687	Green
High mobility cargo trailer	NA	NA	513-9692	Tan



MX Series Shelters

Trailer mounted support system (TMSS medium)

Model	NSN 8340-01-533-	Color
TMSS100G	5396	Green
TMSS100T	5344	Tan



Trailer Spare Parts Deployment Packages

DHS offers a complete line of deployment packages supporting specific generator engines. Each package includes a duffel bag filled with six months' supply of oil, fuel and air filters. The bag also contains belts, hoses, switches and breakers. It's recommended you order two packages when you prepare to deploy.

Accessories

HERE ARE
SOME COMMON
ACCESSORIES
DHS OFFERS...



- lighting
- stake sets
- spare parts kits
- electrical power distribution unit (PDU) boxes

Tents...

I WONDERED WHY I HAD SO MANY TENT POLES LEFT OVER!



YOU CERTAINLY DON'T HAVE ANY BRAINS LEFT OVER!

No Kit for GP Tent Poles

Dear Half Mast,
Our unit has some of the old general purpose (GP) medium tents. They come with four different types of poles.
Can I order the poles as a complete kit under a single NSN? Or do I have to order each type of pole separately?

SSG M.E.

SERGEANT M.E., THERE'S NO KIT, SO ORDER EACH TYPE OF POLE SEPARATELY BY NSN. KEEP IN MIND, EACH NSN BRINGS YOU A SINGLE POLE, BUT IT TAKES 17 POLES IN ALL TO PITCH THE TENT.

YOU CAN ORDER THE POLES IN WOOD OR ALUMINUM.

HERE ARE THE ITEMS, NSNs, LENGTHS AND THE NUMBER OF POLES NEEDED TO PITCH THE TENT...

Wooden Poles			
Item	NSN 8340-00-	Length	Number of poles per tent
Eave pole	188-8405	5 ft, 8 in	10
Door pole	188-8406	6 ft, 2 in	4
Vertical ridge pole	227-1400	10 ft, 3 in	2
Horizontal ridge pole	188-8400	17 ft	1
Aluminum Poles			
Item	NSN 8340-00-	Length	Number of poles per tent
Eave pole	759-9747	5 ft, 6 in	10
Door pole	759-9751	6 ft	4
Vertical ridge pole	782-3394	10 ft	2
Horizontal ridge pole	782-3396	17 ft	1

For more information on tents, poles, pins, lines and tarpaulins, visit the Defense Supply Center Philadelphia Base Camp website:

<http://warfighter.dla.mil/special/basecamp/index.jsp>

Clothing...

TMs to Care for What You Wear

WE ALL KNOW THAT AIR-CRAFT, VEHICLES, COMMO AND SMALL ARMS NEED GOOD PREVENTIVE MAINTENANCE.



BUT WHAT ABOUT CLOTHING AND INDIVIDUAL EQUIPMENT? THEY DESERVE PM, TOO.



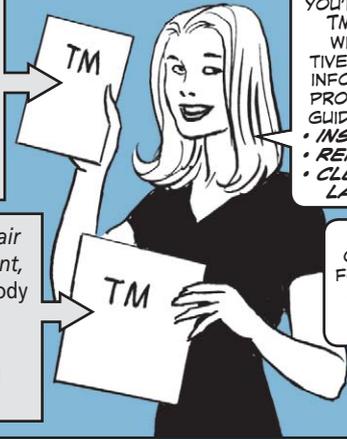
UNFORTUNATELY, THEY TEND TO GET *NEGLECTED*.



SO, BEFORE YOUR BDUs GET ALL RAGGEDY AND YOUR SLEEPING BAG WEARS THIN, MAKE A COMMITMENT TO PRACTICE PM ON YOUR CLOTHING AND INDIVIDUAL GEAR.

START BY ORDERING TWO ESSENTIAL TMS FOR YOUR UNIT...

• TM 10-8400-201-23, *General Repair Procedures for Clothing*, has chapters on BDUs (nothing on ACUs yet), caps and hats, cold weather clothing, wet weather parka and trousers, fire retardant clothing and lots more.



YOU'LL FIND THESE TMS BRIMMING WITH PREVENTIVE MAINTENANCE INFO, THINGS LIKE PROCEDURES AND GUIDELINES FOR...
• INSPECTION
• REPAIR
• CLEANING AND LAUNDERING

• TM 10-8400-203-23, *General Repair Procedures for Individual Equipment*, covers everything from helmets, body armor and mountaineering gear to cold weather sleeping bags and modular lightweight load-carrying equipment (MOLLE).

THEY ALSO CONTAIN NSNs FOR END ITEMS, COMPONENTS AND REPAIR MATERIALS.

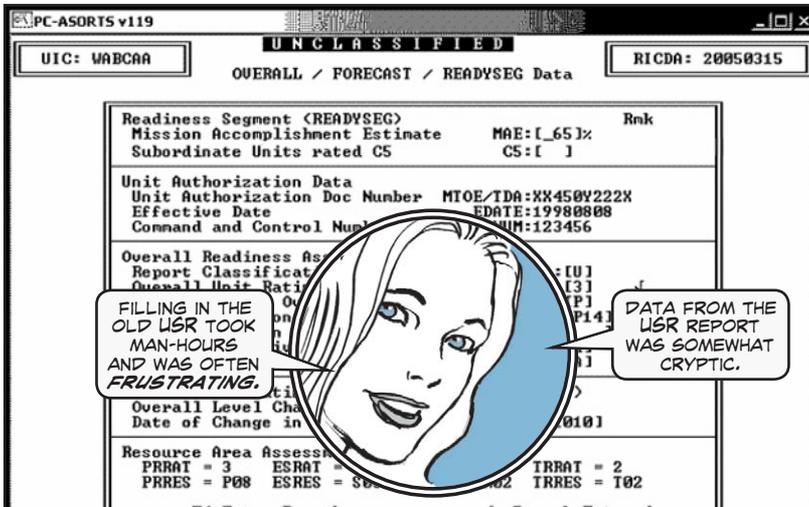
You'll find these TMs online at the U.S. Army LOGSA electronic technical manuals website: <https://www.logsa.army.mil/etms/online.htm>
They're also available on EM 0131. Ask your pubs clerk to order the CD.

UNIT STATUS REPORTS *REPLACED*



The Army began modernizing the procedures for reporting unit readiness status in October when it introduced the Defense Readiness Reporting System-Army (DRRS-A).

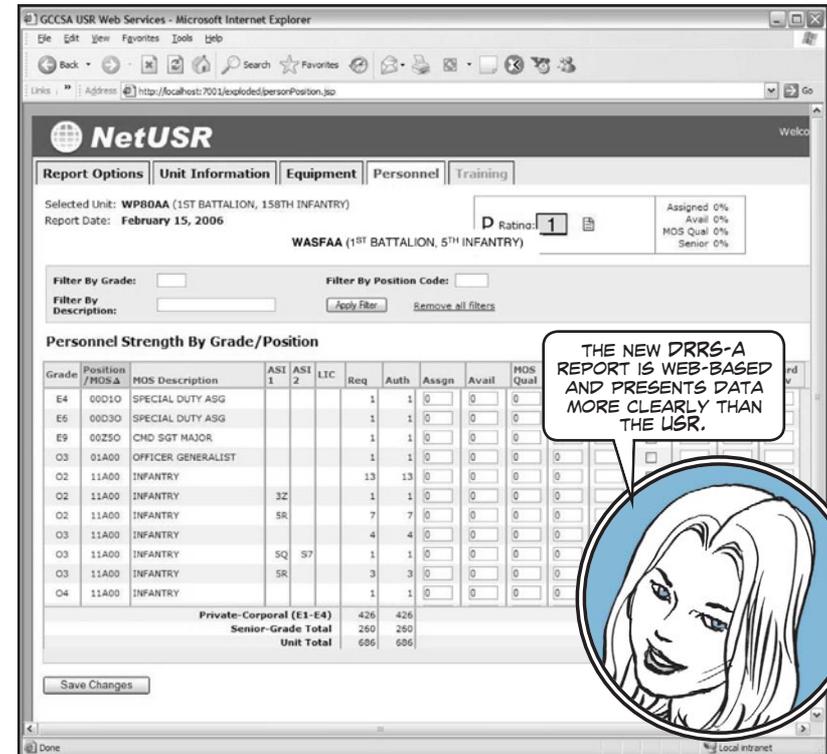
DRRS-A makes the reporting procedures a web-based report and management input tool. It offers two significant improvements over the USR.



It focuses on **measuring unit capabilities**. DRRS-A tracks detailed info on what a unit is capable of doing. For instance, a unit that is going through the Reset/Train pool of Army Force Generation (ARFORGEN) may not be capable of deploying for combat operations, but it may have capabilities that could be used in disaster relief roles in CONUS. These measurements of unit capabilities provide the Army leadership with current, capabilities-based readiness information.

DRRS-A assists individual units and the Army in **implementing ARFORGEN**. Status reporting is a commander's business. The DRRS-A is a commander's assessment and report of the unit's capability to execute missions. It provides links to personnel, logistics, and equipment readiness databases. The web-based format is intended to reduce the time needed to complete status reporting by at least 50 percent.

Because the report will be quicker and easier to put together, the Army leadership hopes to obtain more accurate reports...reports that will help Army leaders fight the Global War on Terrorism by helping them select units that are mission capable.



ANNUAL SERVICE KITS FOR LAND-BASED WEAPONS SYSTEMS



It's time to do the annual service on a vehicle, so the motor sergeant assigns a mechanic to do the service.

If the mechanic is lucky, the motor sergeant provides a list of the needed part numbers. If not, the mechanic will have to search the TM to see what parts need to be ordered. Then the mechanic turns the list over to the maintenance clerk to see if the parts are on hand or if they have to be ordered. That adds up to a lot of non-wrench-turning time.

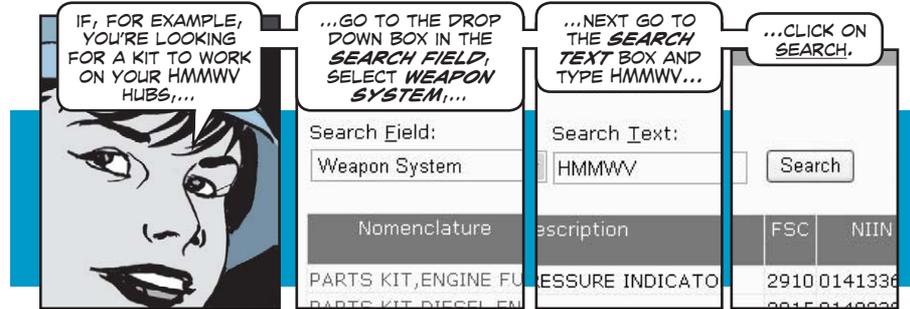
Worse, maybe you've started the service, but discover a key part is missing. Maybe the part didn't get ordered, maybe it's just misplaced, or maybe someone else needed that same part and got to it before you did!

Don't you wish that all you had to do was order one NSN, and get all the needed parts? And, since you're wishing, wouldn't it be nice if they all came together in one box?

No "forgot to order the parts", no "lost parts", no "borrowed" parts and no lost time.

Good news! Now you can get your parts that way—it's called a KIT. The kits let you order everything you need for your services, rebuild, or RESET programs with just one NSN, and get it all shipped in one box or package. Open it and put on **100% of the replacement parts.** How easy is that!

How do you find these kits? That's the easiest part of all. Just go to the Land Kitting web page: <http://www.dscc.dla.mil/programs/kitting>



THIS IS THE SCREEN YOU'LL SEE IF YOU SEARCH FOR HMMWV UNDER WEAPON SYSTEM.

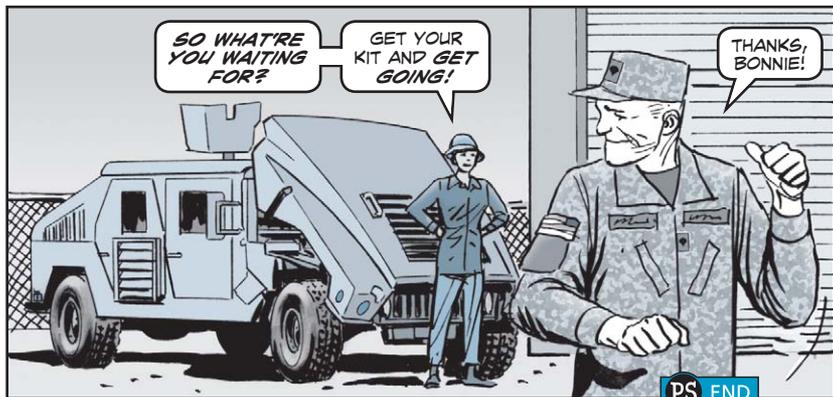
THERE ARE 44 KITS CURRENTLY AVAILABLE FOR THE HMMWV.



All the current kits for the HMMWV will appear showing the nomenclature, description, NSN, number of component lines, shelf life, source of supply, price, and the amount of stock on hand. If you want to know what's in the kit? Click on the nomenclature and it lists all the sub components.

You can also ask your DLA customer support representative (CSR) for help or contact the Kitting Team POCs for the various supply centers on the KIT web pages.

Do you have an idea for a kit that would help you, and maybe other soldiers, on a land-based weapons system? Just go to the [Request a Kit](#) page on the website and enter the info that they need to work on your idea. The DSCC Land Kitting Team will make it as easy as possible and **they'll put it together for you!**



STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION

Title of Publication:

PS, The Preventive Maintenance Monthly

Publication No. 341-0950

Date of Filing: 21 Sept 06

Frequency of Issue: Monthly

No. of Issues Published Annually: 12

Annual Subscription Price:

Domestic \$45.00 Foreign \$63.00

Complete Mailing Address of Publication:

USAMC Logistics Support Activity, PS Magazine

5307 Sparkman Circle, AMXLS-AM

Redstone Arsenal, AL 35898-5000

Complete Mailing Address of Headquarters or

General Business Office of Publisher:

Department of the Army

The Pentagon

Washington, DC 20310

Publisher: Department of the Army

Editor: ROBERT K. CRUNK

Managing Editor: W. RICHARD MORRIS

Known Bondholders, Mortgagees, and Other Security Holders Owning or Holding 1 Percent or More of Total Amount of Bonds, Mortgages, or other Securities: None

Tax Status: The purpose, function, and nonprofit status of this organization and the exempt status for federal income tax purposes has not changed during the preceding 12 months.

Extent and Nature of Circulation

	Last year	Last issue (Oct 06)
a. Total # copies	74,512	73,889
b.(1) Subscriptions	68,743	67,391
b.(3) Non-USPS	2,206	2,623
c. Total paid distrib	70,949	70,014
d.(1) Free distrib/mail	716	716
d.(4) Other free	180	180
e. Total free	896	896
f. Total distribution	71,845	70,910
g. Copies not distributed	2,667	2,979
h. Total	74,512	73,889
i. Percent paid	98.75%	98.74%

Submitted by: STUART A. HENDERSON, Production Manager

★ ★ Connie's Post Scripts ★ ★

ESD Packaging Guide

MIL-HDBK-773 is the bible for electrostatic discharge (ESD) advice. The information contained in that handbook plus updates and new material can be found in a new Power Point presentation, *Packaging Guide: Circuit Boards and Other Electrostatic Discharge (ESD) Sensitive Items*. For information on how to access this guide, click on the USAMC Logistics Support Activity website:

https://www.logsa.army.mil/pscc/PSCC_WebDev/P&T/PACKAGING/packagingwhatsnew.htm

This guide also has quizzes at the end of each section so you can check your, or your students', understanding of the material.

MORE ARMY COMBAT UNIFORMS

Pages 46 and 47 of PS 644 (July 2006) gave you some tips for identifying an authentic Army combat uniform (ACU). The article says a tag on the ACU shows a government contract number. It goes on to say valid contract numbers start either with the letters **SPO** or with the letters and numbers **W911QY**.

Since the article was published, AAFES has secured its own contract for ACUs. These ACUs have a tag with a contract number that begins with **SPM**. These are authorized and authentic uniforms, just like those with numbers that begin with **SPO**. You can purchase them with confidence.

Keep in mind, AAFES may secure future ACU contracts, and other contract numbers may appear on the uniform. The point is, if you purchase ACUs through AAFES, you can be sure they're authentic.

M240 MG BFA CORRECTED, EXTRAS NEEDED

The NSN for the M240/M240C blank firing attachment that was given on Page 23 in PS 638 (Jan 06) is no longer good.

Now you must order the M21 blank firing attachment, NSN 1005-01-142-2841, and the M1/M1A1 firing attachment adapter, NSN 1005-01-218-0893, to fire blanks from the M240/M240C. But, unfortunately, **there are no M21s available**. If you have extra M21s, please turn them in to TACOM-RI. For instructions, contact _____, DSN 793-0758/(309) 782-0758 or email:

_____@ria.army.mil

The NSN for the M240B BFA is correct in PS 638: NSN 1005-01-480-0289.

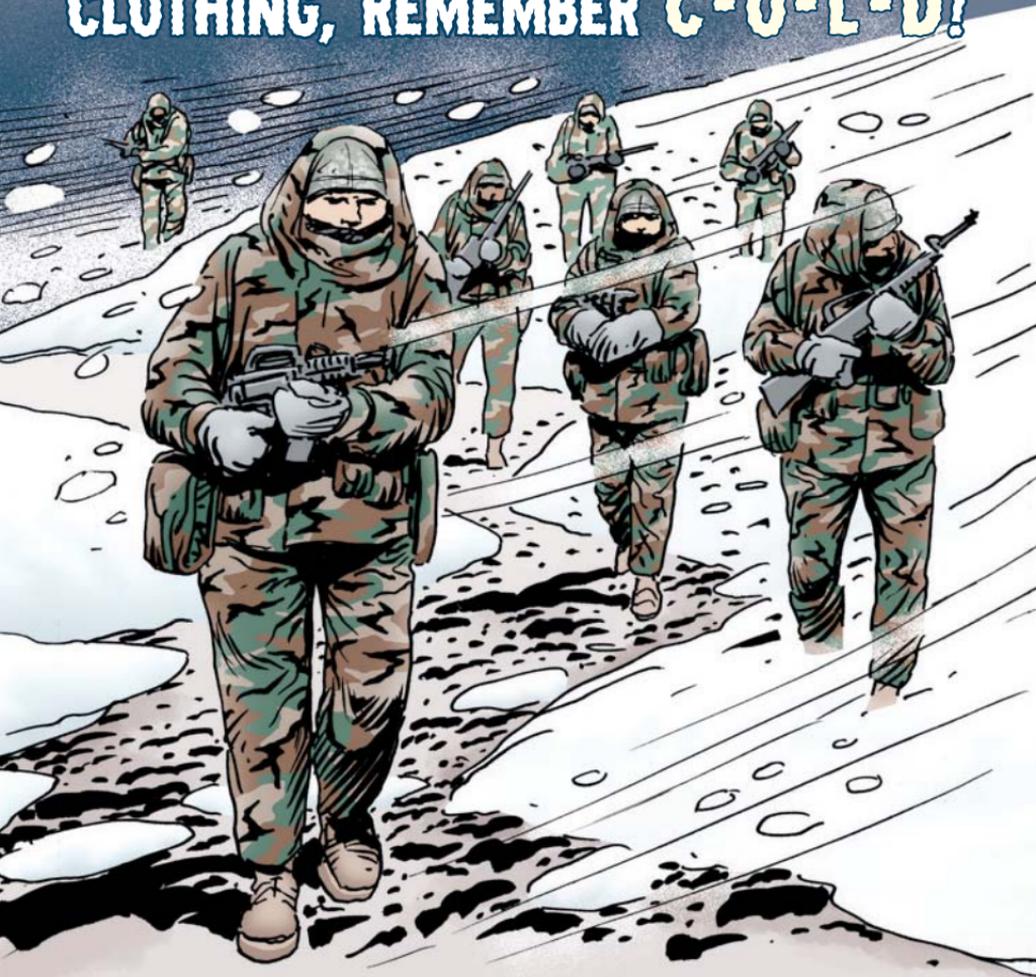
Bradley PLGR Cables

If you're in the habit of frequently connecting and disconnecting the 2W407 PLGR cable, NSN 6150-01-526-6560, on your M2A2/M3A2 ODS Bradley, **stop!** That makes the cable fail before its time. Cables have been hard to get, so keep the one you have in operation. Avoid constantly connecting and reconnecting it as much as possible.

DISTRIBUTION: To be distributed in accordance with the initial distribution number (IDN) 340312, requirements for TB 43-PS-Series.

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

**WHEN YOU WEAR COLD-WEATHER
CLOTHING, REMEMBER C-O-L-D!**



KEEP IT CLEAN
AVOID OVER-HEATING
WEAR IT LOOSE AND IN LAYERS
KEEP IT DRY

[Click here for a copy of this article to save or email.](#)