

Issue 746

PS

January
2015

THE PREVENTIVE MAINTENANCE MONTHLY

TB 43-PS-746

Approved for
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Unlimited

**2014
INDEX
PAGES
27-34**

HAPPY NEW
YEAR, JONESY!
DIDJA COME UP
WITH A LIST OF
RESOLUTIONS?

January 1st, 2015 10:06 AM

RESOLUTIONS FOR 2015...

1. READ PS MAGAZINE.
2. USE EQUIPMENT TMs.
3. DO PMCS RIGHT.
4. FOLLOW UNIT
MAINTENANCE SOP



HELP US HELP SOLDIERS!



ISSUE 746 JANUARY 2015



COMBAT VEHICLES

Operator's Manuals Mandatory
M88-Series Recovery Vehicle, Order Shoes
Individually
Bradley BUSK Battery Replacement, Charging
Mine Plows, Rollers, Mounting Kits Reported
Monthly
M113A3 FOV IETM Available



TACTICAL VEHICLES

FMTV Security Chain Position
HEMTT A1/A2/A4 TMs
HEMTT Rear Axle Popping Explanation
FMTV, Lunette Trailer Hook Guidance
HIMARS Cab Sling NSN
HMMWV 4L80E Transmission Troubleshooting



CCE/MHE VEHICLES

D7G Tractor Fuel Line Crack
Backhoe Loader Tire and Wheel NSNs
HYEX Fuel Filter Service Interval Updated



AVIATION

DA Form 2028s to Correct AH-64D/E IETM Errors
M134 Mini-gun Barrel Bolt Changes
AGSE Equipment Movement Caution

2014 PS Article Index 27-34



SMALL ARMS

M2 or M2A1, Units Allowed Only One
MK 19 and M203 Ammo Don't Mix
M2, M240, and M249 Spare Machine Gun Barrels
M23 Mortar Ballistic Computer (MBC) Obsolete
M12 Rack Modification Update
AN/PVS-14 Night Vision Sight Neck Cord



TOOLS

TMDE App Available on LIW
AN/PVS-6 MELIOS Laser Rangefinder Carrying Case



CBRN

M40/M42 Masks, No Glasses/Contacts Allowed



LOGISTICS MANAGEMENT

Safety Prevents Slips, Trips, and Falls
IETM Downloads Available
Excess CTA Items Available for Free Issue



COMMUNICATIONS

Do It Yourself Thermal Targets
CECOM Returns Address
Night Vision Devices, Use Lithium Batteries
Only
30-, 60-kW TQG Keypad Assembly Check
GCSS-Army Reminder

TB 43-PS-746, 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. Masculine pronouns may refer to both genders. The use of product or company names does not constitute endorsement of those products, services or companies by the U.S. Army. The use of non-DoD hyperlinks, along with their content, does not constitute endorsement by DoD or DA. Neither DoD nor DA exercises any editorial control over, and cannot vouch for, content on non-DoD websites.

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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:

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https://www.logsa.army.mil/psmag/pshome.cfm

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General, United States Army Chief of Staff

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GERALD B. O'KEEFE

Administrative Assistant to the Secretary of the Army

1430901

UH-OH, LUCY!
GOT ANOTHER
BUNCH OF
MESSAGES FROM
THE FIELD ABOUT
THOSE TERMINAL
DIODES.

I WISH THERE
WAS A WAY TO
LET EVERYONE
KNOW HOW TO
ORDER 'EM
UNTIL THE TM
GETS UPDATED.

HMMM. WHAT ABOUT SENDING
THE INFO TO PS MAGAZINE, SLD?
SEEMS TO ME THEY ALREADY
HAVE THE PERFECT AUDIENCE.

Like most of the Army, PS has been hit by budget cuts. Unfortunately, that has limited our TDY trips and hampered how we've researched articles for more than 63 years. Visiting units was how we kept up-to-date on equipment problems.

Now we need to "think outside the TDY box" to keep articles flowing. To do that, we invite Soldiers, DACs and Army contractors to continue sending in their great ideas. But we also want to nudge the go-to folks who help answer many of our readers' questions.

Are you a subject matter expert on specific Army equipment or systems, in charge of an official publication, or perhaps an item manager who knows the quirks, repair or supply issues that come with a particular item?

Could the frequently asked questions you get from the field be reduced by publishing that information in PS Magazine, an official technical bulletin that reaches thousands of Soldiers worldwide? If so, send us your ideas and we'll take it from there. Knowledge is power, so help us keep our Army strong. HOOAH!

Send your article ideas to: usarmy.redstone.logsa.mbx.psmag@mail.mil



AS WINTER
REALLY BEGINS TO
TAKE HOLD...

...PM BECOMES
MORE IMPORTANT
THAN EVER!

It helps to keep your vehicle running when you use your TMs. Other stories include ordering M88 track, caring for Bradley Busk batteries, reporting on M1 tank mine clearing equipment, and a new M113 TM has been released.

Give Your Vehicle the Gift of a TM

I KNOW I'VE
DONE PMCS ON
YOU A **HUNDRED**
TIMES...

...BUT I
CAN **NEVER**
REMEMBER ALL
THE STEPS!

AND I'VE TOLD
YOU A HUNDRED
TIMES...

...YOU NEED
TO HAVE A
COMPLETE
TM!

Dear Editor,

A lot of units have been showing up at the National Training Center at Ft Irwin without complete operator TMs for their vehicles. Sometimes they don't even have a TM at all!

It seems many Soldiers believe TMs are only available in digital format. Many have spent their own funds getting manuals printed at local print shops. Because that's so expensive, they often skimp by only printing out the PMCS portion of the TMs. That's not good enough because the entire TM is needed so operators can refer to safety and vehicle operation instructions.

Units can still order hard copies of most TMs at no cost by establishing a pubs account with the Army Publication Directorate (APD).

Set up the account by filling out and sending a DA Form 12-R, *Request For Establishment of a Publications Account*, by fax to the Account Processing Team at DSN 693-9620 or (314) 592-0920. You'll find instructions for setting up your pubs account at:

<http://www.apd.army.mil/Orders/EstablishAccount.pdf>

Derek McCrea
TCM-ABCT
Ft Benning, GA

Editor's note: Thanks for the reminder, Derek. Pubs clerks, once you have a pubs account, you can order TMs (and PS Magazine) for your unit through the Point and Click Ordering System at: <https://dol.hqda.pentagon.mil/ptclick/index.aspx>

Once there, click on Search and enter the info for the pub you want to order.

ORDER TRACK SHOES INDIVIDUALLY

I HAVE A TRACK SHOE THAT'S GETTING KINDA **WORN**. I THINK I'M GONNA NEED A WHOLE NEW TRACK ASSEMBLY!

A **WHOLE TRACK?** THAT SOUNDS KINDA **EXPENSIVE!**

YOU BET IT IS! THAT'S WHY YOU SHOULD **ONLY** REPLACE SECTIONS OF TRACK THAT ARE **COMPLETELY** WORN OUT.

Dear Half-Mast,

Is there is an NSN for a full track assembly for the M88A1 and M88A2 recovery vehicles? It seems like it would be a lot easier to order a full track assembly instead of individual sections.

SSG A.J.

DON'T ORDER MORE TRACK SHOES THAN YOU ACTUALLY NEED!

INDIVIDUAL TRACK SHOES COME WITH NSN 2530-00-692-9316. THAT ALLOWS YOU TO ORDER ENOUGH SHOES TO REPLACE **ONLY** SECTIONS OF TRACK THAT REALLY NEED IT.

WHAT'S THE MATTER WITH YOU, PAL?

I **DUNNO!** I'M **NOT** GETTIN' MUCH **CHARGE** OUTTA LIFE THESE DAYS.

CHARGE UP BATTERY CARE

Crewmen and mechanics, you might have noticed that the Exide maintenance-free batteries, NSN 6150-01-582-5710, used in Bradleys with the Bradley Urban Survivability Kit (BUSK 3) modification can go bad in a hurry. Some units are ordering so many replacement batteries that the supply system's coming up short.

Check out these tips to extend battery life and save your unit lots of money:

1. Don't replace all eight batteries if one goes bad. At \$265 each, that adds up in a hurry! Instead, replace only the dead battery and the battery it's paired with. Test batteries with a battery analyzer. New batteries should have an open circuit voltage (OCV) of at least 12.80 volts direct current (VDC). The VDC should be at least 12.60 for batteries that have been charged before.
2. Before replacing a bad battery or battery pair, try recharging. Use the battery charger, NSN 6130-01-500-3401, specified in TM 9-2350-403-13&P and TB 9-2350-395-13&P. It's part of the standard automotive tool set (SATS). Batteries should be on the charger at least four hours before determining if they should be replaced.

REPLACE US IN **PAIRS!**

3. Partially-charged batteries that sit around for extended periods of time won't last as long. So keep 'em charged up. Just don't try to charge the batteries with another vehicle by using the NATO slave receptacle. That won't work with the Bradley's complex electrical distribution system.

4. If you're going to charge batteries on board by running the engine, first check each battery's OCV to estimate its state of charge (SOC).

THIS TABLE SHOWS THE ESTIMATED ENGINE RUN TIME TO FULLY CHARGE BATTERIES...

Don't use slave cables to charge batteries

Single battery (CDC)	Battery pair (VDC)	SOC (percent)	Approximate charging time (hours)
12.80	25.60	100	No charge needed
12.60	25.20	75	0.9
12.30	24.60	50	1.9
12.00	24.00	25	2.9
11.00	22.00	0	4.0

5. If batteries fall below 12.60 VDC, remove them from the vehicle and put them on a charger for 24 to 48 hours. Don't attempt to charge more than eight batteries at a time on the same charger.
6. If a charging attempt fails after 48 hours, tag the battery and turn it in to the Brigade Battery Maintenance Management Program (BMMP). Note on the tag how many hours the battery was left on the charger. If the batteries were new, be sure to also submit an SF 368, *Product Quality Deficiency Report (PQDR)*. The best way to submit an SF 368 is online at: <https://www.pdrep.csd.disa.mil>
Click on [EZ PDR Login](#) and follow the steps.

YOU SURE DO LOOK BETTER THESE DAYS!

Remember, you can avoid a lot of battery problems by always shutting down your vehicle like it says in the -10 TM. Leaving the MASTER or TURRET POWER switches in the ON position at shutdown or not powering down the AFES properly before long-term storage can drain the batteries. Leave all switches and controls in the OFF position before securing the vehicle.

Leave all switches and controls such as MASTER POWER in the OFF position



For long-term storage, follow TM procedures for AFES power down to preserve batteries

For more details on caring for your vehicle's batteries, check out TACOM maintenance information message 14-044 on the TACOM-Unique Logistics Support Applications (TULSA) website:

<https://tulsa.tacom.army.mil/Maintenance/message.cfm?id=MI14-044.html>

You'll need your CAC and first-time users must first request access.

Questions? Contact TACOM's Barry Tabron at DSN 786-2650, 586-282-2650 or email: barry.j.tabron.civ@mail.mil

IT'S AMAZING WHAT A LITTLE BATTERY PM WILL DO FOR A GUY!

P.S. END

REPORT MINE CLEARING EQUIPMENT MONTHLY!

HEY, MY MINE
BLADE WASN'T PUT
ON THE READINESS
REPORT THIS MONTH.
HOW 'BOUT YOU?

NOPE.
THEY
LEFT
MY MINE
ROLLER
OFF
AGAIN!

IF YOU **HAVEN'T** BEEN
REPORTING YOUR UNIT'S MINE
CLEARING BLADES, ROLLERS
AND ROLLER MOUNTING KITS,
START NOW! IT'S REQUIRED
BY AR 700-138.

Loading your unit's mine clearing blades, rollers and roller mounting kits into SAMS-E and listing them on your unit's monthly Army Material Status System (AMSS) report is required by AR 700-138, *Army Logistics Readiness and Sustainability*.

It's vital information for the Army to have so it knows the readiness of that equipment.

Mine clearing blades, rollers and roller mounting kits should be included in the table of reportable items the next time AR 700-138 is updated. But the Logistics Support Activity (LOGSA) puts out an updated list twice a year on LIW.

Here's how to get the list

1. Login to LIW:
<https://liw.logsa.army.mil/>
2. At the bottom of the page, click on App Warehouse.
3. Scroll down to the LIW RSRCs app and click on Go to Application.
4. Scroll down and click on Maintenance Master Data File.

to download and print:

5. Click on Download the... MMDF as a single file and/or Readiness Reportable Item Listing.
6. Click on the B1(date).xls file to access the current list of readiness reportable ground equipment (systems and stand-alone items). The file's date will change each time it's updated.

THE SYSTEMS ARE
LISTED BY LIN IN
ALPHABETICAL ORDER.
HERE ARE THE ITEMS
YOU **SHOULD** BE
REPORTING, ALONG WITH
THEIR NSN AND LINS...

Item	NSN 2590-	LIN
Mine clearing blade	01-230-8862	B71632
Mine roller kit	01-134-3724	M71632
Mine roller mounting kit	01-235-5458	M18157

**M113A3
FOV IETM
Available**

GOOD NEWS!
I ORDERED
YOUR NEW
IETM TODAY!

THAT'S GREAT! BUT
DON'T FORGET YOU'LL
STILL NEED A HARD
COPY OF MY -10 TM!

Operator, maintenance and parts manuals for the M113A3 FOV have been combined in TM 9-2350-277-13&P (IETM EM 0321, Oct 14). The new IETM is available through the Army Publications Directorate (APD).

Set up an account by faxing a completed DA Form 12-R to APD's Account Processing Team at DSN 693-9620 or (314) 592-0920. Instructions for setting up an account are at:

<http://www.apd.army.mil/Orders/EstablishAccount.pdf>

Once your account is set up, order the IETM through the Point and Click Ordering System at:

<https://doi.hqda.pentagon.mil/ptclick/index.aspx>

To order, click Search and fill out the form on the next webpage.

Remember, even though the new IETM includes operator maintenance, you'll still need to keep a hard copy of TM 9-2350-277-10 (Mar 12) with your vehicle.

Read about FMTV security, HEMTT TMs, HEMTT clutch plate popping, FMTV trailer connections, and HMMWV transmissions.

FMTV...

Secure Your Truck by the Book

THERE!
THAT
OUGHTA
DO IT.

DUDE!
SERIOUSLY!?!
THAT'S NOT
HOW YOU
SECURE YOUR
TRUCK!

Drivers, whenever you need to secure your FMTV, follow the guidance in your vehicle's -10 TM. Then you can install the chain and lock the correct way and avoid damaging the wiring harness and turn signal lever.

The right way to secure your unit's -A0 and -A1 FMTVs starts on Page 2-162 of TM 9-2320-365-10 (Jun 98, w/Ch 2, Aug 05) for 5-tons and Page 2-240 of TM 9-2320-366-10-1 (Sep 98, w/Ch 2, Aug 05) for 2 1/2-tons. For the FMTVA1P2 LTAS, the guidance starts on Page 0019-24 of TM 9-2320-333-10-1.

For these trucks, the chain is routed around a steering wheel spoke and through the dash-mounted handhold, then locked.

If you loop the chain around the wheel and steering column, you can damage the wiring harness. And using the chain as a handhold when you get into the cab can damage the turn signal lever.

So make sure you install the chain and lock correctly. Then use the handholds to get in and out of the cab.

Chain goes around wheel spoke and through dash handhold

TMS
KEEP 'EM
RUNNING

YOUR HEMTT IS
READY TO GO AS
LONG AS YOU'VE GOT
THE RIGHT TMS.

...AND THIS
LIST SHOWS
ALL THE
TMS THAT
SUPPORT THE
A4 MODEL
HEMTT.

HEMTT A4	
IETM	TM 9-2320-326-14&P (EM 0288)
Hand receipt	TM 9-2320-326-10-HR
M977A4 cargo (w/ and w/out winch)	TM 9-2320-338-10
M978A4 tanker	TM 9-2320-339-10
M983A4 tractor	TM 9-2320-340-10
M983A4 light equipment transporter	TM 9-2320-341-10
M984A4 wrecker (Volumes 1 & 2)	TM 9-2320-342-10-1 TM 9-2320-342-10-2
M985A4 cargo (w/ and w/out winch)	TM 9-2320-343-10
M985A4 guided missile transport	TM 9-2320-344-10
M1120A4 load handling system	TM 9-2320-345-10
M1977A4 common bridge transporter	TM 9-2320-346-10

HERE ARE
LISTS OF
ALL
THE TMS
THAT
SUPPORT
THE HEMTT'S
BASE, A1
AND A2
MODELS...

HEMTT Base/A1

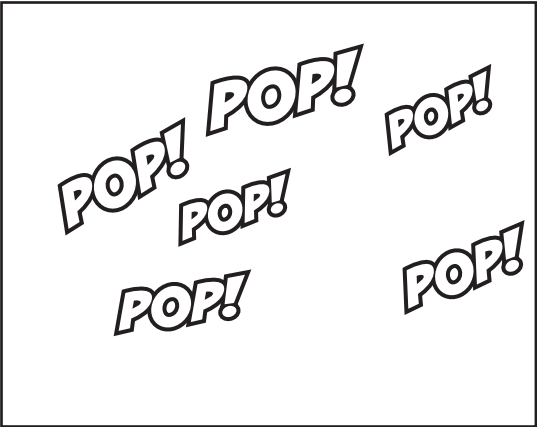
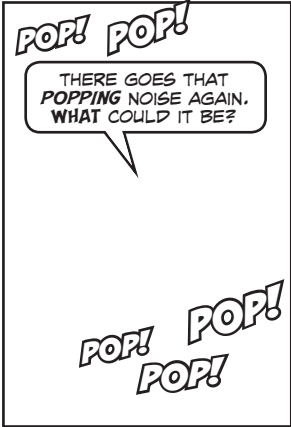
IETM	TM 9-2320-279-14&P (EM 0290)
Hand receipt	TM 9-2320-279-10-HR
M977 cargo	TM 9-2320-428-10
M978 tanker (w/ and w/out winch)	TM 9-2320-429-10
M983 tractor	TM 9-2320-430-10
M984A1 wrecker (Volumes 1 & 2)	TM 9-2320-431-10-1 TM 9-2320-431-10-2
M985 cargo (w/ and w/out winch)	TM 9-2320-432-10
M985 guided missile transport	TM 9-2320-433-10
M1120 load handling system	TM 9-2320-434-10
M1977 common bridge transporter	TM 9-2320-435-10

HEMTT A2

IETM	TM 9-2320-325-14&P (EM 0289)
Hand receipt	TM 9-2320-325-10-HR
M977A2 cargo	TM 9-2320-347-10
M978A2 tanker	TM 9-2320-348-10
M983A2 tractor	TM 9-2320-349-10
M983A2 light equipment transporter	TM 9-2320-420-10
M984A2 wrecker (Volumes 1 & 2)	TM 9-2320-421-10-1 TM 9-2320-421-10-2
M985A2 cargo (w/ and w/out winch)	TM 9-2320-422-10
M985A2 guided missile transport	TM 9-2320-423-10
M1120A2 load handling system	TM 9-2320-424-10
M1977A2 common bridge transporter	TM 9-2320-425-10

HEMTTs...

POP GOES THE AXLE!



Have you noticed a loud popping noise coming from the rear of your HEMTT whenever you turn a corner? No, you didn't just run over a big roll of bubble wrap! That noise is coming from the vehicle's rear axles. The outer wheels have to rotate faster than the inner wheels when making a turn. As torque builds up between the clutch plates in the differential, the plates "pop" to help release torque pressure. So rest easy when you hear the pops. No harm, no foul.

Give Bent Hooks the Hook

BLIMEY,
CAP'N! WHAT
HAPPENED TO
YOUR **HOOK**?

ARR...A **SOLDIER** TOOK
IT, MATEY! SAID IT
WAS JUST RIGHT FOR
THE **SAFETY CHAIN** ON
HIS TRAILER, HE DID.

Dear Editor,

Could you pass the word that the hooks on trailer safety chains should *never* be bent to fit the shackles on the back of FMTVs?

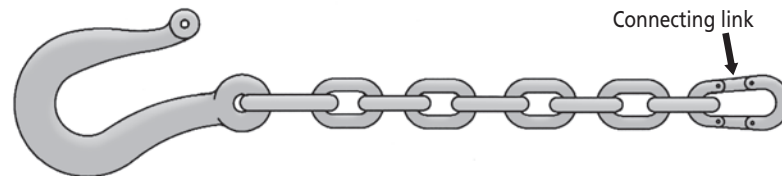
You had the word on Pages 10-11 of PS 721 (Dec 12) about using larger hooks and extensions for the chains. Unfortunately, we're still seeing bent hooks in the field.

Cindy Heyden
Equipment Specialist
TACOM LCMC

Editor's Note: Can do, Ma'am! But first a little history: The FMTV manufacturer increased the size of the truck's tow shackles to meet new air transport and rail tie-down requirements. When this happened, the tow shackles fit the size and weight of the FMTV trailer, but not the smaller hook size of the lunette trailers that FMTVs sometimes tow.

Instead of forcing a fit by bending the open hooks, follow these steps to ensure the right fit:

1. Cut the existing chain five inches from the frame.
2. Discard the old hook and excess chain.
3. Attach a new chain assembly, NSN 4010-01-169-6995, to the existing chain using the connecting link that's attached to the end of the assembly.
4. Cross the safety chain under the trailer tongue. Then pull the end of the chain and eye or clevis end of the hook toward each other.



And here are a few special reminders:

When attaching to a truck that has no extended pintle, you'll need to shorten the trailer safety chains so they don't drag or get caught on brush or commo wire. Try using zip ties or bungee cord to take up the extra slack.

If you have an M105A3, M101A2/A3, or a lunette trailer with a surge brake device, you must adjust the length of the breakaway cable/chain. Make it a bit shorter than the safety chains. Then if the trailer disconnects from the tow pintle, the breakaway cable/chain will fully actuate the trailer brakes before the slack in the safety chains is taken up.

Consider this the latest and greatest guidance.

NICE
HOOK,
CAP'N!

ARR!
GOT ANY
BAIT?

SQUAK!

New HIMARS Cab Sling

The M142 HIMARS has a new increased crew protection (ICP) cab web sling for lifting the cab off the truck. NSN 3940-01-630-8470 (PN 5000-1174) replaces the old sling, NSN 3940-00-276-9165 (PN FDC-8514-2). The new sling will be added to the AAL at the next revision of TM 9-2300-310-14&P in IETM EM 0258. A new safety latch kit, NSN 4030-01-630-7855 (PN 4000-306), for the new sling will be added, too.

HMMWVs...

I'M NOT FEELIN' SO GOOD. CAN'T YOU TROUBLE-SHOOT MY TRANSMISSION?

I'LL TRY... BUT IT **DOESN'T LOOK EASY!**

TROUBLESHOOTING THE 4L80E TRANSMISSION ISN'T SO BAD **IF** YOU KNOW WHAT TO LOOK FOR!

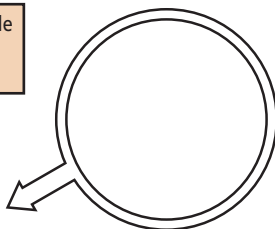
Mechanics, if you're confused by all those codes when it's time to troubleshoot the 4L80E electronic transmission in a HMMWV, read on. We've got a few tips that'll cut through the confusion and save you a lot of troubleshooting time.

Before You Start

Before you get started, remember these tips:

- Write down the trouble codes from the vehicle's transmission control module (TCM) as they flash over the transmission lamp located next to the shift lever. Remember, codes 12 and 63 will always appear and should be disregarded. Next, clear the codes and road test the vehicle. Then check to see which trouble codes still show up. That eliminates false codes and saves troubleshooting time.
- Check all transmission sensor connections. Most problems are caused by loose or corroded wiring connections. After checking the connections, clear the trouble codes and road test the vehicle to see if that clears up the trouble.
- When multiple codes are reported by the computer, always troubleshoot the lowest code first and then work your way up. The higher-numbered codes are sometimes the result of the lower-numbered codes. So if you fix the lower codes first, you'll often find some of the higher codes will disappear.

Write down trouble code flashes from transmission lamp



Before Changing the Transmission

BEFORE YOU GO TO THE EFFORT OF CHANGING OUT AN "INOPERABLE" 4L80E TRANSMISSION, DO THE FOLLOWING...

- Make sure you have all of the proper diagnostic test equipment needed. That includes a multimeter, the throttle positioning sensor (TPS) block gauge, NSN 4820-01-179-4869, and the special purpose tool kit, NSN 5180-01-410-8467. This kit includes the following:

Get special tools for testing

Diagnostic switch cable

Item	NSN
Diagnostic switch cable	6150-01-410-8215
TPS cable	6150-01-412-7774
Seal installer*	5120-01-414-1849
Seal installer*	5120-01-437-0480
Drive handle*	5120-01-026-1666

Multimeter

TPS test cable

TPS block gauge

*These items are not required for diagnostic testing.

- If you've never worked with this type of transmission, consult with your maintenance supervisor or TACOM LAR to get the help you need.
- If the truck's batteries have been serviced or replaced, it's important to properly reconnect the two power wires for the transmission control module (TCM). Do it wrong and the TCM gets 24 volts instead of the required 12. That burns up the TCM.
- Eyeball the transmission relay harness, which is located next to the batteries. If this harness ends up on top of the panel that separates the batteries and the relays, it may get cut when the passenger's seat is taken out and put back in. This will result in a no-shift mode and the transmission will be unable to change gears.
- Check the TPS voltage output signals. The TPS is used to send a signal to the TCM letting it know when to shift. The TPS may need to be adjusted or replaced.

A training video, *HMMWV A2 Electronic 4-speed Transmission*, is also available. The video focuses on the transmission's electronic component locations, functions and interactions and includes a section on common problems for diagnostic test codes.

You can order the video from the Defense Imagery website at:
<http://www.defenseimagery.mil/index.jsp>

If this is your first visit, you'll need to register your CAC card by clicking on REGISTER at the top of the page. Once that's completed, click LOGIN and confirm your certificate.

In the Search block, enter **711363** and deselect all of the result types except **A/V and IMI Products**. Click SEARCH.

On the next screen, click on the video's title. Then click Add Production to Cart. At the top of the screen, click on the SHOPPING CART, and follow the instructions. Once ordered, you'll receive an email confirmation and the DVD will be mailed to you within a week or so.

Enter Search Terms:
711363

Match:
☒ All of the Search Terms
☐ Any of the Search Terms

Result Types:
☐ Still Images
☐ Motion Images
☒ A/V and IMI Products
☐ Site Content

SEARCH

Enter 711363 in search block

Select only A/V and IMI Products

IT ONLY TAKES A FEW CLICKS... AND THEN YOU'RE ALL SET!

Search Results Summary

SUMMARY STILL MOTION A/V (1) IMI (0) SITE

Searched for 711363 in A/V and IMI

Audio/Visual Productions - 1 result

HMMWV A2 ELECTRONIC 4-SPEED TRANSMISSION
 PIN: 711363 Completion Date: 07-APR-00

Click on video's title

RY.MIL

SHARE THIS PAGE SHOPPING CART

SOURCES IMAGERY PRODUCTS COMMUNITY MY ACCOUNT CUSTOMER SERVICE

AV Production Details

RETURN TO SEARCH RESULTS

HMMWV A2 ELECTRONIC 4-SPEED TRANSMISSION
 PIN: 711363
 Description: PROGRAM FOCUSES ON THE ELECTRONIC ASPECT OF THE TRANSMISSION. IT REVIEWS ALL OF THE ELECTRONIC COMPONENTS LOCATION, FUNCTION, AND INTERACTION. THE VIDEO INCLUDES A SECTION ON COMMON PROBLEMS FOR DIAGNOSTIC TEST CODES.
 Date of Completion: 07-APR-00
 Primary Audience: DOD
 Public Clearance: NOT RELEASABLE FOR PUBLIC EXHIBITION/SALE
 Length: 027 MIN 09 SEC
 Delivery Mediums: DOD VHS VIDEO

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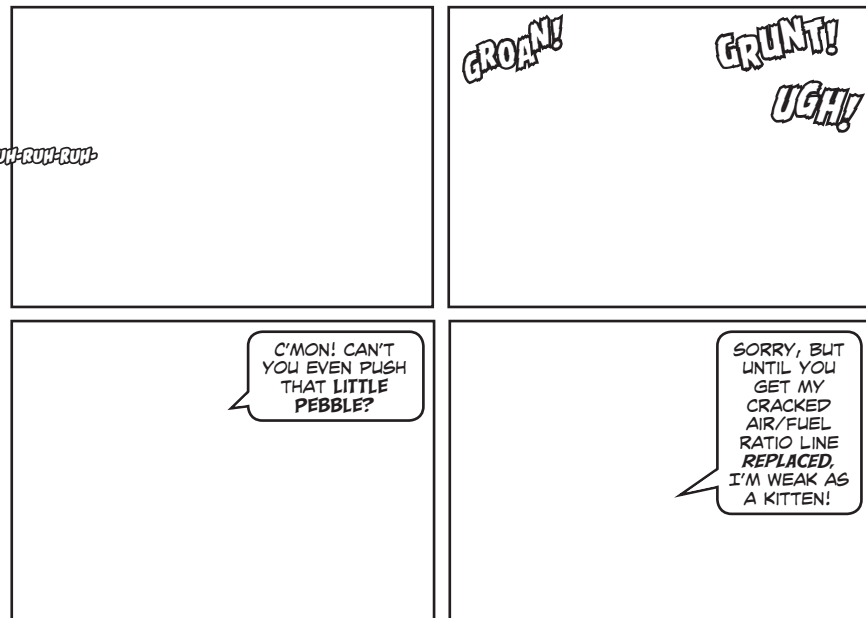
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PS

CONSTRUCTION

We've got construction vehicles here! Can we build it? Yes, we can!

FUEL LINE CRACK TAKES THE BULL OUT OF DOZER



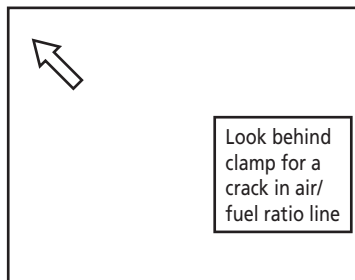
Operators, your dozer sounds and runs fine, but falls flat on its nose when you push a load. What gives?

It could be a crack in the air/fuel ratio line that mounts into the fuel injector pump. Due to the age of the dozer and vehicle vibration, this line sometimes cracks where it's mounted to the engine block by a small bracket.

The crack is usually in the part of the line that's covered by the bracket, so you won't see it. The only way to tell if this is the cause is to have your mechanic remove the bracket so he can eyeball the line.

Any crack in that line means the engine loses turbo boost pressure that's sent to the air/fuel ratio valve. When this happens, the fuel injector pump can't meter the increased fuel that's required to push the load.

If your dozer runs fine until it's under a load, have your mechanic come in for a quick look-see. He can replace the line with NSN 4710-01-253-7056. Then your dozer will run like new!



WHEN IT'S TIME TO REPLACE TIRES ON YOUR BACKHOE LOADER, YOU'VE GOT A LITTLE WORK TO DO!

Dear Half-Mast,
I need new tires for my backhoe loader (BHL). Can you tell me the NSN for the tire and wheel assembly?

SFC J.M.K.

UNLIKE **MOST** EQUIPMENT, SERGEANT, THE BHL DOES NOT HAVE A TIRE AND WHEEL ASSEMBLY.

INSTEAD, YOU'LL NEED TO ORDER THE TIRE AND WHEEL **SEPARATELY** AND PUT THEM TOGETHER YOURSELF.

GET THE **FRONT TIRE** WITH NSN 2610-01-627-2155. NOTE THAT THAT'S A REPLACEMENT FOR NSN 2610-01-533-0485, WHICH IS CURRENTLY SHOWN AS ITEM 2 IN FIG 60 OF TM 5-2420-231-24P (JUN 13).

THE **FRONT WHEEL**, SHOWN AS ITEM 5 IN FIG 60, COMES WITH NSN 2530-01-623-3528.

INSTRUCTIONS FOR INSTALLING THE **FRONT TIRE AND WHEEL ASSEMBLY** ARE IN WP 0203 OF TM 5-2420-231-23-2 (JUL 13).

THE BHL'S **REAR TIRE** IS SHOWN AS ITEM 4 IN FIG 72 OF THE -24P AND COMES WITH NSN 2610-01-533-0486.

THE **REAR WHEEL** IS NSN 2530-01-623-3437 AND IS SHOWN AS ITEM 1 IN FIG 72.

INSTALLATION PROCEDURES FOR THE **REAR TIRE ASSEMBLY** ARE IN WP 0217 OF THE 23-2 TM.

HYEX...

Fuel Filter Service Interval UPDATED

HEY, I'VE HIT
240 HOURS OF
OPERATION.
IT'S TIME TO
REPLACE MY
LUBRICITY
FUEL FILTER!

BUT YOUR
TM SAYS TO
REPLACE IT **EVERY
500 HOURS.**

HMMM...MAYBE
I SHOULD CHECK
WITH HALF-MAST.

PS

AVIATION

LET IT SNOW. LET IT SNOW. LET IT SNOOOOW!

I THOUGHT YOUR NEW
YEAR'S RESOLUTION WAS
TO **STOP SINGING** THAT
DANG SONG!

Dear Half-Mast,

I need a little help with the lubricity filter, NSN
2940-01-567-4018, that's used
on the HYEX Model 240D LCR excavator.

According to Item 9 in the Machine PMCS on
WP 0310-6 of TM 5-3805-294-23-2 (May 12),
the filter is supposed to be replaced after
every 500 hours of operation. But when a new
filter comes in, it's labeled, "CAUTION: TO BE
SERVICED EVERY 250 HOURS."

New filter
says to
replace
every 250
hours

GOOD CATCH!
THE REPLACEMENT
INTERVAL FOR THE
HYEX'S LUBRICITY
FILTER IS
250 HOURS.

TM 5-3805-
294-23-2 WILL
BE UPDATED TO
SHOW THAT AT THE
NEXT CHANGE.

YEAH!

MADE IN U.S.A

CAUTION: TO BE SERVICED EVERY 250 HOURS

So is TM 5-3805-294-23-2 wrong in requiring
a 500-hour interval or is there a different, 500-
hour filter we should be using?

Mr. J.R.

Aviation articles cover
correcting **Longbow/**
Apache TM errors,
change to the M134
mini-gun barrel bolt,
and using caution when
moving AGSE.

SEND A 2028 WHEN PROBLEMS ARISE

DID YOU FIND
THE PROCEDURE
YET?

THERE'S A
PROBLEM WITH
THE IETM. I'M
NOT SURE WHAT
TO DO.

HAVING
PROBLEMS WITH
YOUR IETM?

SINCE THE
PROCEDURES FOR
THE D AND E MODELS
HAVE BEEN COMBINED,
THE HEADSHED REALLY
NEEDS YOU TO SEND
IN 2028s WHEN YOU
SPOT A PROBLEM.

Mechanics, now that the AH-64D/E aircraft repair procedures are combined in TM 1-1520-LONGBOW/APACHE, it's more important than ever to write up DA Form 2028s when you spot problems or want to make recommendations.

Since the headshed uses the same IETM you do, they need you to include as much specific information in your 2028s as possible. For example:

- Tail number of aircraft or model designator
- Answer the Dialogue questions box for modifications to help identify what equipment and MWOs are installed.
- Folder location or exact title in IETM
- Approximately how many steps into the task the issue is located

Within the Longbow IETM is a function called the Annotation Tool. One of its many uses is that it allows you to create and attach an annotation to the 2028. That pinpoints the exact location of the problem you have within the IETM.

To find out how to use the Annotation Tool, go to the top menu bar of the IETM and click on HELP, HOW TO USE THIS MANUAL. Open the HOW TO USE THIS MANUAL folder and click on the Annotations file. This will tell you how to fill out the annotation and how to import and export it.

If you want to submit a 2028 online, go to:

<https://amcom2028.redstone.army.mil>

You can also submit 2028s by fax, email or regular mail. Information on all methods is located in the IETM General Information/How To Use This Manual/Reporting Errors and Recommending Improvements section.

Remember to include your name, a good phone number (either commercial or DSN), and an @mail.mil email address so the 2028 reviewer can contact you with any questions.

M134 Mini-gun...

*Read all
About It!*
**Important
Barrel
Bolt News**

HEY! THERE'VE
BEEN A COUPLE
OF **CHANGES** TO
YOUR BARREL
BOLT!

TELL ME
ABOUT IT!

There have been two important changes for the M134 mini-gun's barrel bolt:

- The old barrel bolt has been replaced. Order the new barrel bolt with NSN 5306-01-505-2891 (PN DMG0073).

Replace the barrel bolt if it doesn't have a "V" on the head, if it's damaged, or after firing 100,000 rounds.

- Any time you remove the barrel bolt, you must replace its cotter pin, NSN 3515-00-234-1864 (PN MS24665-302). This increases your M134's safety and reliability.

Barrel
bolt

Cotter
pin

If you have any questions,
contact TACOM's John Kelty at
DSN 786-1366, (586) 282-1366, or
email: john.m.kelty.civ@mail.mil

AGSE... **USE CAUTION WHEN MOVING EQUIPMENT**

MECHANICS,
GOOD MAINTENANCE
STARTS WITH PAYING
ATTENTION TO DETAIL,
ESPECIALLY
WHEN MANEUVERING
AVIATION GROUND
SUPPORT EQUIPMENT
(AGSE) NEAR
AIRCRAFT.

Slow your roll when positioning maintenance stands and other AGSE near aircraft. That means slowing down early to leave plenty of room to stop before reaching the aircraft.

Ground support equipment like the low level maintenance stand, the B-1 and B-4 stands, the rotor blade stand and the AGPU can get away from you if you're not careful. They can act like a runaway train and before you know it... **BAM!** You just took a chunk out of an airframe.

Protecting aircraft from damage should be a part of PMCS. Always use chock blocks on AGSE wheels. With maintenance stands, make sure you apply the brakes to prevent movement as you go up and down the steps. You don't want equipment to roll into the aircraft or out from under you, right?

When you're not using AGSE, it's a good practice to keep the equipment stationed outside the outer edge of aircraft rotor blades. And when you're doing night maintenance, make sure the equipment has reflective tape. That way you can see where everything is and avoid injury.

Remember, slow and steady is the way to go. Fast and furious just results in aircraft damage or personnel injury.

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Small arms—Units should not have both M2 and M2A1 machine guns; don't mix MK19 and M203 grenade rounds; wherever your M2, M240 or M249 goes, both barrels should also go with them.

Tools—An app for TMDE.

CBRN—Optical lens inserts for M40/M42 masks.



M2 vs. M2A1: IT'S EITHER/OR

I'M REPORTING FOR DUTY. THAT MEANS **YOU** NEED TO GO TO ANOTHER UNIT. I'M AFRAID I **DON'T** WORK WITH M2s. I WORK STRICTLY WITH OTHER M2A1s.

ONCE UNITS RECEIVE THE NEW M2A1 MACHINE GUNS IT'S TIME TO **TURN IN** THEIR OLD M2s. THE ARMY **DOESN'T WANT** M2s AND M2A1s IN THE **SAME UNIT**.

WHY?

YEAH, WHY?

I'LL TELL YOU...

...YOU CAN INTERCHANGE M2 BARRELS WITH OTHER M2 MACHINE GUNS AND YOU CAN DO THE SAME WITH M2A1 BARRELS AND M2A1 MACHINE GUNS.

BUT, IF YOU TRY TO USE AN M2A1 BARREL ON AN M2 OR AN M2 BARREL ON AN M2A1, YOU **DAMAGE THE WEAPON** AND MAYBE EVEN **YOURSELF**.

AND IT'S **PRETTY EASY** TO MAKE THAT **MISTAKE!**

THE BARRELS DON'T LOOK THAT DIFFERENT.

M2A1 BARRELS HAVE INTERRUPTED THREADS ON THE RECEIVER SIDE OF THE BARREL, A BARREL LOCK PIN (OR LUG) AND A CARRYING HANDLE ASSEMBLY.

M2 BARRELS HAVE THE SAME SERIAL NUMBER AS THEIR RECEIVER AND DO NOT HAVE A CARRYING HANDLE ASSEMBLY OR BARREL LOCK PIN.

REMEMBER, **ANY TIME** THE M2 IS TO BE FIRED IT MUST **FIRST** BE HEADSPACED AND TIMED BY THE GUNNER. AND THAT'S ALSO TRUE **ANY TIME** BARRELS ARE **SWITCHED**.

TO DO THAT, EVERY GUNNER **MUST** HAVE HIS OWN M2 HEADSPACE AND TIMING GAGES, NSN 5220-00-535-1217. **DON'T** GO TO THE FIELD OR RANGE WITH ONLY ONE SET OF GAGES FOR ALL THE M2s. THAT'S ASKING FOR **TROUBLE**.

THE M2A1 MUST HAVE ITS HEADSPACE AND TIMING VERIFIED BY YOUR REPAIRMAN BEFORE YOU GO TO THE FIELD.

BUT ONCE THAT'S DONE YOU CAN SWITCH ITS TWO BARRELS WITHOUT WORRYING ABOUT GAGING IT AGAIN.

IF YOU'RE GOING TO BE FIRING THE M2A1 ON THE CROWS, KEEP THE OLD M2 GAGES.

THEY ARE NEEDED TO PERFORM THE ELECTRONIC TIMING FOR THE CROWS SOLENOID.

USE THE FIRE/NO FIRE PORTION OF THE OLD TIMING GAGE FOR THE ELECTRONIC TIMING.

MK 19 AND M203 AMMO **DON'T** MIX!

EXCUSE ME, I SEEM TO BE RUNNING A BIT SHORT OF AMMO.

MIGHT I BORROW A FEW OF YOUR ROUNDS?

ARE YOU KIDDING ME?

OUR ROUNDS **DON'T** MIX!

YOU GOTTA FIRE YOUR ROUNDS **ONLY**.

Dear Editor,

The MK 19 and M203 weapons may both fire grenades, but they definitely can't fire the same ammo.

MK 19 ammo comes linked. M203 ammo has no links. Cutting off the links for MK 19 ammo so it can be used in an M203 is illegal and dangerous. And trying to fire M203 ammo in an MK 19 is equally dangerous. We had one unit try that with an MK 19 and half the rounds burst during the feed stroke.

Just follow the -10 TMs for both weapons on what ammo to use and you'll be fine.

Karl Hayhurst
TACOM Small Arms LAR
Camp Casey, S. Korea

Editor's note:

Thanks for the warning, Karl.

TAKE BOTH BARRELS AND ORDER EXTRAS IF NEEDED

NOW WAIT A DARNED MINUTE! THAT BARREL IS HOT, TOO!

I NEED A COOL BARREL IF I'M GONNA KEEP FIRING. GOT THAT?

Every unit that fires M2, M240 and M249 machine guns should have a sign hanging over the arms room door saying *"Always take both barrels to the field."*

Every year thousands of bucks are spent replacing these weapons' barrels because units leave the spare barrel in the arms room. Especially at the range, they fire many rounds through the same barrel. The barrel gets so hot—red hot in some cases—it warps. That barrel is ruined. And hot barrels can also cause cook offs, which are dangerous.

But if you're firing and firing at the range, you may need more than one spare barrel. For the M240, you should change the barrel every 10 minutes during sustained fire (100 rounds per minute with 4-5 seconds between bursts) and every 2 minutes during rapid fire (200 rounds per minute with 2-3 seconds between bursts). The M249 barrel should be changed every 200 rounds both for sustained and rapid fire.

For the M2, change the barrel at the end of the day if you're firing single shot or slow fire (fewer than 40 rounds per minute). Change the barrel every hour if you're firing more than 40 rounds per minute and every half hour for more than 100 rounds per minute. Of course, change the barrel immediately if the barrel is damaged.

HOLD ON THERE, BUDDY! I'VE FIRED 200 ROUNDS AND I NEED A BARREL CHANGE!

If you're firing rounds fast, the barrels don't have time to really cool off even when you change them like you're supposed to. So, if you replace a hot barrel with another hot barrel, the barrel is ruined. That's why if you regularly do lots of firing at the range, it's a good idea to have extra spare barrels. Then you can rotate three or more barrels instead of two.

Barrel should be cool to touch with your bare hand **before** you reinstall it

But remember for the M2A1, M240 and M249, you can use only spare barrels specifically headspaced to that particular weapon. If you swap barrels between machine guns, you damage not only the barrel but the machine gun itself. And you could damage yourself if the gun blows up! All barrels should be tagged for the machine gun they have been headspaced for.

Mortars...

M23 MBC *Obsolete*

BAD NEWS, OLD TIMER! YOU'RE OBSOLETE!

AT LEAST YOU DON'T HAVE TO TURN ME IN... RIGHT?!

ERR... WELL, ABOUT THAT...

If you're still using the M23 mortar ballistic computer (MBC), NSN 1220-01-119-6049, and its companion computer, NSN 1220-01-161-8888, stop. They're obsolete and should be demilitarized and sent to DLA Disposition Services.

To demil the M23, remove the center circuit card assembly from inside the MBC and destroy it. Fill out a DLIS Form 1867 and tape it to the MBC's back cover plate. Then turn it in to your local DLA Disposition Services.

Destroy center circuit card assembly and turn in M23 to DLA

Let TACOM know you've turned in the MBC by emailing its serial number to: usarmy.detroit.tacom.mbx.ilsc-mortar-systems@mail.mil

The M23 has been replaced with the M32 lightweight handheld mortar ballistic computer.

If you have questions, contact TACOM's Joe Leigh at DSN 786-1223, (586) 282-1223, or email: joseph.t.leigh.civ@mail.mil

A Better Way to Modify M12 Rack

The new fire control selector, NSN 1005-01-585-6042, for the M16-series rifle and the M4/M4A1 carbine makes it necessary to modify your M12 racks. Otherwise, you can't lock the racks.

Pages 38-39 of PS 729 (Aug 13) told you how to modify the M12 racks. But that procedure required cutting and grinding the rack slot and was very time-consuming.

Fortunately TACOM LAR Chris Warner and SSG Shawn Landeen of Ft Stewart have come up with an easier and better way to fit the fire control selector in the M12. Their method doesn't involve cutting, allows the rack to be returned to its original configuration, and cuts the modification time from an hour to about 10 minutes.

To do the job, you'll need welding pliers, NSN 5120-00-494-1895. Here's how:

1. Open the plier grips fully. Position the welding pliers 0.5 inches back from the face of the rack. Set the jaws to a size smaller than the sheet divider when the jaws are closed.

2. Squeeze the pliers in place on the rack until they lock and then remove them.

3. Test to see if the weapon fits in the rack slot.

4. If necessary, adjust the diameter of the pliers and go back to Step 2. Repeat the procedure until the weapon fits snug in the rack.

When you're finished, have your TACOM LAR or local security certify the rack as secure.

DON'T LOSE NECK CORD!

UH-OH, MY NECK CORD IS GONE AGAIN!

SHOOT! THAT MEANS YOU'RE NMC UNTIL WE GET YOU A NEW CORD.

Dear Editor,

I work at Ft Benning's weapons pool where we issue as many as 3,000 AN/PVS-14 night vision sights per week.

We have a big problem with the -14's neck cord disappearing. It's often removed or comes off. Unfortunately, the sight is NMC without the cord, NSN 4020-01-446-8097. So we can't reissue the -14 until we replace the cord. The cord costs only \$1.27, but it adds up when you have to replace cords over and over again. Plus getting new cords is not easy.

Please ask Soldiers not to remove the cord. When they PMCS the sight, they should make sure the cord is not loose. They can re-tie it if necessary.

Raymond Brown
Ft Benning, GA

Editor's note: We'll be glad to do that, Raymond. Units should order extra cords to replace the ones that eventually disappear. You don't want a sight sitting on your deadline report because of a missing cord.

Make sure cord is secured tightly

← Neck cord

WOW, THIS NEW
TMDE APP IS
GOING TO MAKE
TRACKING YOUR
CALIBRATION A
BREEZE!

FINALLY,
I HAVE **MY
OWN APP!**

TMDE Questions? Get the TMDE App!

Worried about the status of your unit's TMDE? Stop worrying and get the TMDE app at the Logistics Information Warehouse (LIW).

The TMDE app lets you easily check the master list and projected, delinquent and in-shop status reports for your unit's TMDE items.

The master list shows all your unit's TMDE items by serial number, model, nomenclature, status and calibration due date.

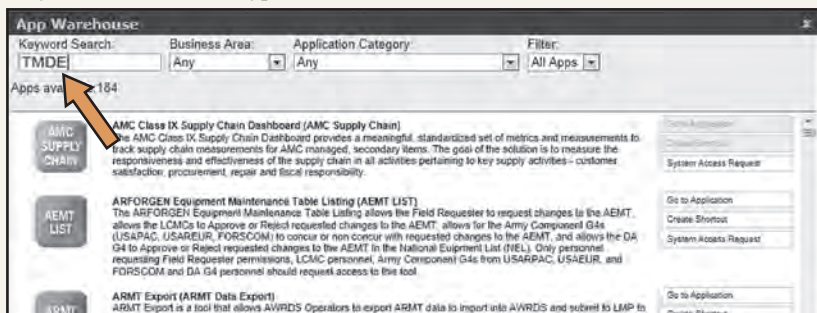
The projected items report lists all TMDE due for calibration in the next 30 days.

The delinquent items list identifies items past due for calibration.

The in-shop status report provides the work order number and status along with the model, serial number, and nomenclature of all your items at TMDE.

To get the app, go to: <https://liw.logs.aarmy.mil/>

Scroll to the bottom of the page and click the App Warehouse button. In the Keyword Search block, type TMDE.



When the TMDE app appears, click Create Shortcut on the right-hand side of the page. Then close the page and click on the TMDE app to get started.

IF YOU HAVE ANY
QUESTIONS THAT THE APP
DOESN'T ANSWER, DON'T
HESITATE TO CONTACT
YOUR LOCAL TMDE
SUPPORT ACTIVITY.

AN/PVS-6 MELIOS Laser Rangefinder...

IS THERE A CARRYING CASE?

HEY, I'M
DELICATE HERE!
I NEED SOME
KINDA **CARRYING**
CASE FOR
PROTECTION.

Dear Half-Mast,
We've had
no luck finding
either a carrying
case or shipping
case for the
AN/PVS-6
mini eyesafe
laser infrared
observation set
(MELIOS) laser
rangefinder.
Are there any
available?

SSG D.J.

Dear Sergeant,
Yes and no. There is a
soft carrying case for the
rangefinder that comes with
NSN 5855-01-546-0126. But
there is no shipping case. You
can order a case online or
buy one at your local big box
store that you can adapt for
the AN/PVS-6. If it protects
your rangefinder, it's worth
the money.

Half-Mast

Order carrying case with
NSN 5855-01-546-0126

M40/M42-Series Masks...

TODAY'S THE DAY WE TRAIN IN THE GAS CHAMBER.

HOPE YOU DO A GOOD JOB OF SEALING OUT THAT TEAR GAS!

NOT IF YOU WEAR THOSE GLASSES! THEY RUIN MY SEAL.

YOU'RE GONNA NEED *SPECIAL* PRESCRIPTION LENSES FOR ME!

PS LOGISTICS

HAPPY NEW YEAR FROM OUR FRIENDS AT SIAD!

NO GLASSES OR CONTACTS PLEASE!

If you wear glasses or contacts to correct your vision, don't wear them with your M40/M42 mask.

If you put on your mask while wearing glasses (yes, sunglasses count!), the mask can't seal properly to your face and can't protect you.

Contact lenses may not affect your mask seal, but they can quickly become a problem. Not only do contact lenses require a good fit, they also need sufficient moisture and oxygen to be worn comfortably. If the mask is cutting down the oxygen to your eyes or dust, smoke or gas have fouled your contacts, they can become extremely painful to wear. If you're in a chemical environment, you can't remove your mask to take out the contacts or put in eye drops. Bottom line, contact lenses and masks don't mix.

That's why every Soldier who wears glasses or contacts needs to use optical lens inserts for his M40/M42. The inserts include prescription lenses; a lens carrier, NSN 6540-01-264-1348; and a carrier mount/frame, NSN 6540-01-389-7152.

Soldiers who wear glasses or contacts need prescription lenses for M40/M42 masks



Order your optical lens inserts through your medical branch or by contacting the Naval Ophthalmic Support and Training Activity (NOSTRA):

<http://www.med.navy.mil/sites/nostra/Pages/default.aspx>

NOSTRA also provides optical inserts for other masks.

Their website has instructions for ordering lenses, tracking the order and installing the lens inserts.

The M40/M42's TM 3-4240-346-23&P also provides installation and removal instructions for the optical lens inserts.

If you need mask help, email the Individual Protection Team at:

us.army.detroit.tacom.mbx.ilsc-masks@mail.mil

The new year brings downloadable IETMs, and free Army equipment from SIAD!

PUT YOUR **BEST** SAFETY FOOT FORWARD

YOU'RE PROBABLY **NOT** GONNA BELIEVE THIS...

...BUT I REALLY **DID** SLIP ON A PENCIL!

I **BELIEVE** YOU, SOLDIER. IT HAPPENS MORE OFTEN THAN IT SHOULD.

An obvious but painful fact is that an accident can result in life-changing injuries. But not all accidents are created equal. Sometimes, what seems to be a minor accident on the surface turns out to be a major one because it affects unit readiness.

Speaking of surfaces... slips, trips and falls are among the most common and preventable accidents around the workplace.

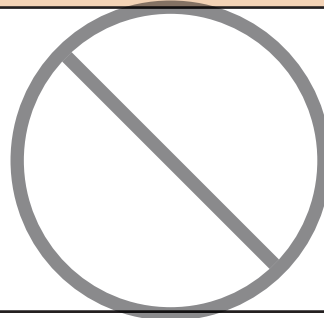
Awareness and taking proactive steps to reduce hazards are the keys to protecting Soldiers and civilians.

Here are some ways to nip slipping and tripping dangers in the bud:

- CLEAR PATHWAYS OF **OBSTACLES** LIKE BOXES AND **TRIPPING HAZARDS** LIKE EXTENSION CORDS. SCOUT FOR SMALL HAZARDS, TOO. SOMEONE CAN SLIP ON SOMETHING AS SIMPLE AS A PENCIL LEFT ON THE FLOOR.

- CHECK THAT ALL FLOORING SURFACES ARE LEVEL AND SECURED. REPAIR BROKEN TILES AND OTHER TYPES OF LOOSE OR TORN FLOORING SUCH AS CARPETING.

- CLOSE DESK AND CABINET DRAWERS WHEN THEY'RE NOT IN USE.



- ADJUST YOUR WALKING SPEED AND STYLE DEPENDING ON SURFACES. IF A SURFACE IS ROUGH, UNEVEN, SLIPPERY OR ANGLED, **SLOW DOWN!** TAKE SMALL, CAREFUL STEPS.

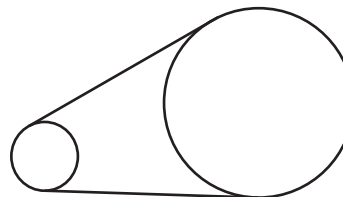
- CIVILIANS SHOULD CHOOSE FOOTWEAR WITH **LOW HEELS** AND **NONSLIP SOLES** FOR THE WORKPLACE. SOLDIERS AND CIVILIANS ALIKE, KEEP THOSE LACES **SHORT AND TIED**.

- BE SURE SHOES AND BOOTS HAVE **ADEQUATE TREAD** BEFORE WALKING ON **ICY, GREASY** OR **WET** SURFACES.

THESE OUGHTA DO THE TRICK!

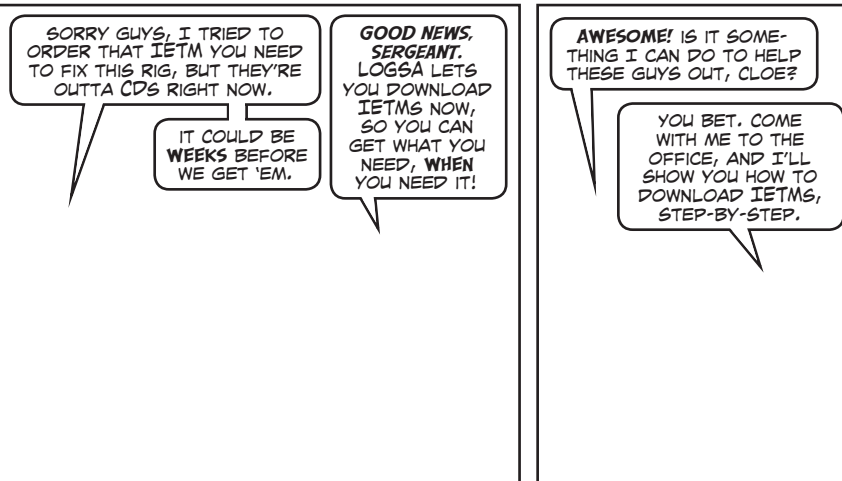
- MAKE SURE ANY NECESSARY WARNING SIGNS ARE POSTED IN WORK AREAS. FOR SPECIFIC MOTOR POOL SAFETY TIPS, SEE PAGES 56-59 IN PS 728 (JUL 13):
<https://www.logsa.army.mil/psmag/archives/PS2013/728/728-56-59.pdf>

- KEEP FOOTWEAR IN GOOD REPAIR. A DEFECT LIKE A NAIL POKING THROUGH A HEEL CAN CAUSE TRIPS OR SLIPS.



FOR MORE POINTERS ON **BOOSTING WORKPLACE SAFETY**, VISIT THE US COMBAT READINESS/SAFETY CENTER WEBSITE AT
<https://safety.army.mil/>

IETMs Get Green Light for Download



Good news! You can now download DA-authenticated interactive electronic technical manuals (IETMs).

IETMs are computerized, screen-based diagnostic and maintenance versions of TMs. They are used for troubleshooting, isolating faults and identifying equipment maintenance needs.

IETMs are still available on CD-ROMs/DVDs and read-only online. But Army funding shortfalls meant there weren't enough disks being printed to meet customer demand.

The Logistics Support Activity (LOGSA) heard pleas from the field and came up with a cost-effective alternative.

Downloadable IETMs mean faster equipment fixes. But remember:

- Authorized IETM downloads are only available from LOGSA's Logistics Information Warehouse (LIW). You must have a valid, current system access request (SAR) and use your CAC whenever you log in to LIW.
- IETM access and download is based on distribution statement codes. The public can view Distribution Statement A information, but viewing or downloading any IETMs coded other than A is restricted.
- LOGSA's goal is to deliver IETMs in the same format as the original CD-ROMs or DVDs. However, IETMs are very large, so to make downloads possible, content is broken down into several zip files (each 500 MB or less). These zips must be recombined by the end user before they work like the original disks.
- Carefully follow the 'IETM_Download_Instruction.txt' file that comes with each downloadable IETM. Instructions vary depending on the IETM's proponent (for example, AMCOM, CECOM, TACOM, etc.) That's why it's important to read the step-by-step instructions **every** time you download a new IETM.
- If you download content and make a CD-ROM/DVD, be sure that the date of the IETM is also written on the disk you create. That way when an updated IETM comes out, you'll be reminded to replace the old disk.

Destruction Instructions for Distribution Restricted CD-ROMs/DVDs (Coded B, C, D)

If your local facility does not destroy distribution restricted CD-ROMs/DVDs, you can send them to the National Security Agency (NSA). Follow these rules:

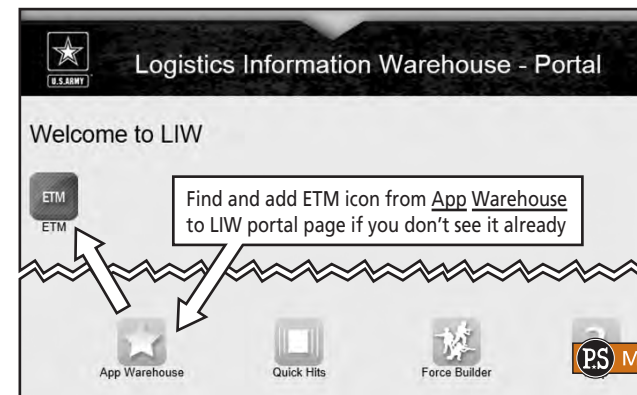
- Ship only whole disks to NSA. No need to scratch disks.
- Don't send sleeves, mailers or cases.
- Maximum shipping box size is 18 inches high x 18 inches wide x 18 inches long. Maximum weight is 40 pounds per box.
- Single-wrap outside shipping box with brown paper. If loose disks rattle, mark box "Rattle Okay."
- Send no more than 10 boxes at one time.
- If you want a receipt, include a documentation/destruction form in each shipping box with the total number of CD-ROMs/DVDs written on it.

Ship boxes by first-class mail to:

Director
National Security Agency
9800 Savage Road
ATTN: CMC-Degaussing-Suite 6875
Ft George G. Meade, MD 20755-6875



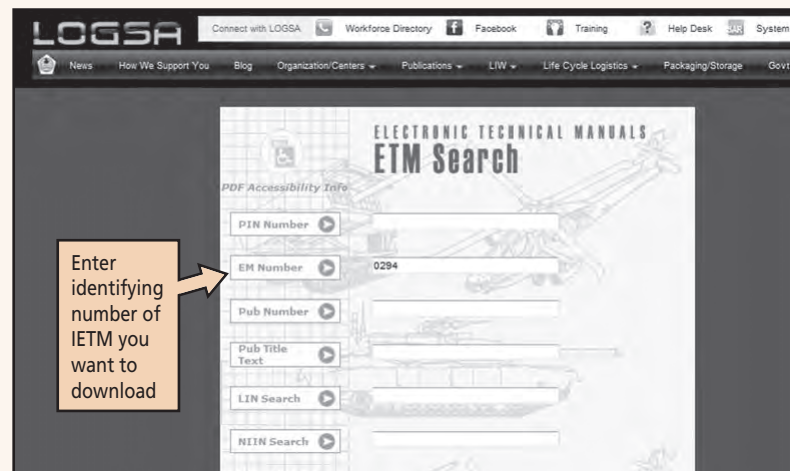
1. Access LIW at: <https://liw.logsa.army.mil/>
2. If you already have an LIW account, choose the yellow "Login with CAC" button. If not, click System Access Request (SAR) at the top right of the screen and follow instructions to get LIW access.
3. Click the ETM icon. If you don't have it in your portal already, you may need to add it. To select applications, click on the App Warehouse at the bottom of the page. Add the ETM icon and then you can enter by clicking it.



4. You should see the Electronic Technical Manuals Authorized Access Page. Read the terms, choose I accept and then Enter the Site.



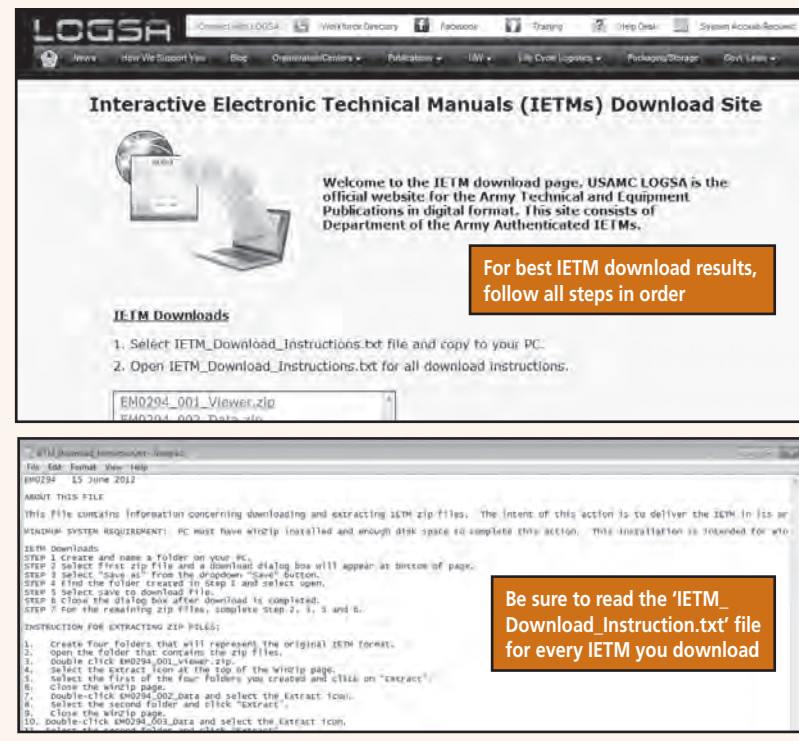
5. On the ETM Search screen, enter the number of the IETM you want in the EM Number field. Or you can search by title or other fields.



6. On the search results page, click on the green download arrow in the ZIP column.



7. Follow the IETM download instructions.



D'YOU THINK THERE'S ANY SPAGHETTI AND MEATBALL MRES?

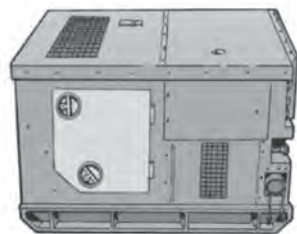
TRES CHIC!

IT'S GOTTA BE MORE COMFORTABLE THAN A HMMWV!

NOW **MOTOR STABLES** MAKES SENSE!

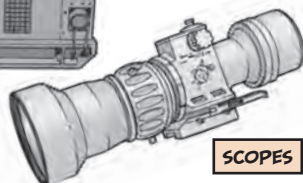
WITH THE ARMY'S RECENT BRIGADE COMBAT TEAM (BCT) REORGANIZATION, MANY EXCESS COMMON TABLE OF ALLOWANCE (CTA) ITEMS WERE RELOCATED TO SIERRA ARMY DEPOT (SIAD), CA.

GOOD NEWS, UNITS! YOU CAN SCOOP UP THESE ITEMS THROUGH THE ARMY'S **REDISTRIBUTION PROCESS**.

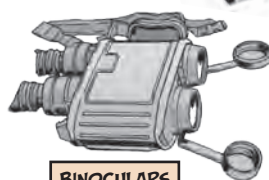


GENERATORS

SOME COMMONLY AVAILABLE ITEMS INCLUDE...



SCOPES



BINOCULARS

BUT THERE IS ALSO A LARGE VARIETY OF OTHER EXCESS NON-STANDARD EQUIPMENT (NS-E) UP FOR GRABS.

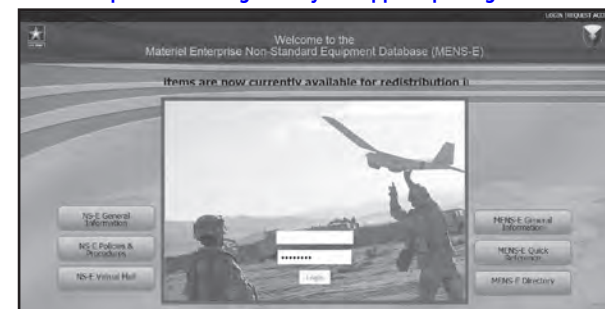
THIS NS-E IS AVAILABLE TO ARMY COMMANDS (ACOMs), ARMY SERVICE COMPONENT COMMANDS (ASCCs) AND DIRECT REPORTING UNITS (DRUs). ALL ITEMS ARE OFFERED **FREE** ON A FIRST-COME, FIRST-SERVED BASIS IN "AS IS" CONDITION.

HERE'S HOW REDISTRIBUTION WORKS...

Once NS-E returns from theater, it's visually inspected and picked up on SIAD's accountable record before going into storage.

SIAD uploads a list of items into a "virtual mall" so Army customers can select what they want. This info is updated twice a week. You can view current inventory in AMC's Material Enterprise Non-Standard Equipment (MENS-E) database:

<https://mens-e.logsa.army.mil/app/scripts/login.cfm>



If your unit wants something, submit a request through your ACOM/ASCC/DRU command representative. Your command can then officially request the equipment release through MENS-E. Once it's approved, your unit coordinates transportation and shipping arrangements directly with SIAD.

Although the equipment itself is free, your unit still must pay for transportation and any future sustainment costs. Items also must be accounted for and transferred in PBUSE.

For more info, contact Timothy Pollard at DSN 320-6924, (256) 450-6924, email:

timothy.c.pollard.civ@mail.mil

Or Bertrand James at DSN 320-6857, (256) 450-6857, email: bertrand.f.james.civ@mail.mil

BY ADDING SOME TAPE TO ME, I'LL LOOK LIKE **THIS** IN YOUR THERMAL WEAPON SIGHT. IT'S **CHEAP** AND **EASY TO DO**.

AND YOU CAN USE ME ON THE FIRING LINE OR IN INERT PRACTICE!

Do It Yourself Thermal Targets

SAVE YOUR UNIT MONEY AND INCREASE THE *QUALITY* OF YOUR SOLDIERS' TRAINING.

The Army's lightweight AN/PAS-13 Thermal Weapon Sight (TWS) gives Soldiers the ability to spot even a well-camouflaged enemy night or day through dust, smoke or fog, but attaining proficiency takes training and practice.

Project Manager Soldier Sensors and Lasers (PM SSL) has developed Do It Yourself (DIY) thermal targets that keep the cost of training with thermal sensors affordable.

A standard store-bought thermal target costs approximately \$60 each, while a DIY version costs approximately 24 cents each. This includes the cost of the E-type silhouette but excludes the labor hours needed to purchase and assemble them.

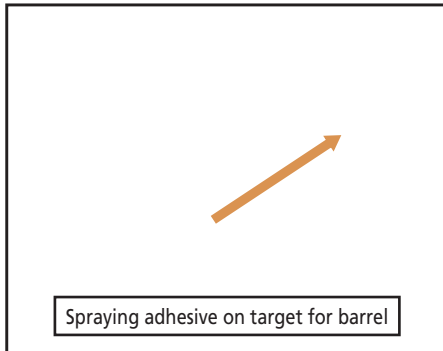
The DIY thermal targets requires no power and can be used at the range or in inert training locations. Thermal tape uses its natural reflective property, so even in near zero illumination the tape will be reflective. Saving money and improving Soldiers' survivability, mobility and lethality couldn't be easier. The DIY idea creates a simulated weapon-shaped thermal signature over the torso of an E-type silhouette.

HERE'S WHAT
YOU'LL NEED...

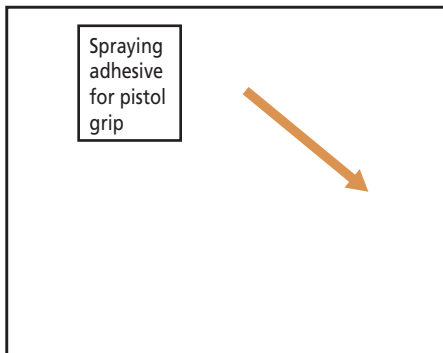
*You can also substitute aluminum tape, NSN 7510-00-684-8803, for the thermal paper, eliminating the need for glue and cutting.

Thermal Target Construction

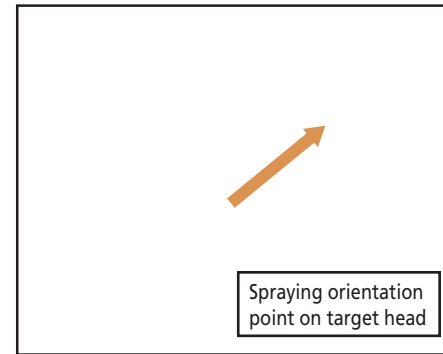
Step 1: E-type Silhouette Target



Place your E-Type target on a flat surface with the green side up. Approximately 4 inches down on the left side (just below the shoulder area), spray the glue from left to right slightly angled upwards, until you reach the right shoulder. This will eventually be the upper receiver. Your glue pattern should be several inches wide.

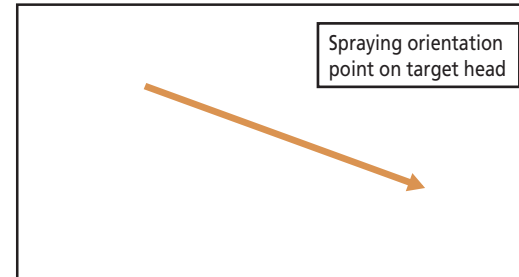


About 3 inches in from the left side, spray a 4-inch swath downward so that you can place the 2" x 4" strip on it, which will form the pistol grip.



In the center of the head, spray (either nose or eyebrow level) a 2" to 3" spot for your 2" x 2" piece of thermal tape. Allow to dry to a point that it is still tacky.

Step 2: Thermal Strips



Holding the spray gun about 6 to 8 inches away from the thermal strip, spray the backside (the uncolored side).

Step 3: Making the Target

While still tacky, take your 2" x 18" thermal strip (upper receiver) and place it on the target, ensuring that you angle it up to the right shoulder.

Then place the 2" x 4" strip for the pistol grip.

With the remaining 2" x 2" strip, place it in the center of the head to give the shooter a point of reference while making head shot.

Your target should look like a man holding a weapon at "Port Arms."

HERE
ARE SOME
ADDITIONAL
TIPS FOR
YOUR DIY
THERMAL
TARGETS...

- In foul weather, place a clear plastic bag over the target but leave it open. This will help the glue last a lot longer. **Note:** If you are zeroing the AN/PAS-13, the spotter will still see the impacts of the round through the plastic bag.
- The target needs to be tilted back 10–12 degrees in order to see the reflection through the AN/PAS-13.

The **Right** Place for CECOM Returns

GOT SOME
MORE PACKAGES
FOR YA!

YOU GOTTA BE
KIDDING! **WHERE**
AM I S'POSED
TO **PUT 'EM?!**

Dear Editor,

Please tell your readers not to send CECOM equipment directly to the LCMC at Aberdeen Proving Ground (APG), MD, under DODAAC W15GK8. This is the **wrong** address and the APG installation warehouse is getting clogged with items that do not belong there.

Most CECOM items can be returned to the Defense Logistic Agency's (DLA) warehouse in Tobyhanna, PA, or DLA's warehouse in New Cumberland, PA. When returning items, type or clearly print mailing labels in ALL CAPS, exactly as shown below. Send returns to one of the following addresses:

Tobyhanna – BY6

For general cargo returns (unclassified and non-radiological)

Ship to:

W25G1W
W1BG UEF DIST DEPOT TOBYANNA
GIBBS AND FIFTH STREETS
WAREHOUSE 6 BAY 4
TOBYHANNA, PA 18466-5059

Classified, non-radiological returns

Ship to:

SV3114
DLA DISTRIBUTION TOBYHANNA
SPEC HANDLING FAC PH 570 615 7354
SQUIRE AND 5TH ST BLDG 5 BAY 5
TOBYHANNA, PA 18466-5059

Classified and unclassified radiological returns

Ship to:

ST3114
DLA DISTRIBUTION TOBYHANNA
RADIOLOGICAL SPEC HANDLING FACILITY
BUILDING 13 6TH STREET
TOBYHANNA, PA 18466-5059

or

New Cumberland – AN5
W25G1U
W1BG DLA DISTRIBUTION
DDSP NEW CUMBERLAND FACILITY
2001 NORMANDY DRIVE DOOR 113 TO 134
NEW CUMBERLAND, PA 17070-5002

If your readers have questions about shipping any CECOM items, they can email: usarmy.APG.cecom.mbx.lrc-leo-s-and-d-support@mail.mil
Their email subject line should reference shipping items to CECOM.

Donna Albietz
CECOM Accountable Property Officer
AMSEL-LCL-D
APG, MD

Editor's note: Thanks for alerting us, Donna. They've got the message now.

Night Vision Devices...

**LITHIUM
BATTERIES
ONLY,
PLEASE**

SORRY,
BUDDY, I'M
STRICTLY A
LITHIUM KIND
OF NIGHT
VISION GUY.

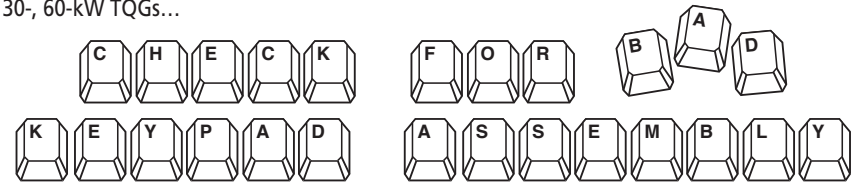
Units are correctly ordering 1.5V AA L91 lithium batteries, NSN 6135-01-333-6101, for their night vision devices. But when the DLA supplier is out of lithium batteries, alkaline batteries are being substituted. That just won't do!

These battery level indicators and alarms for night vision devices are developed specifically for AA L91 lithium batteries. Lithium batteries provide more than 13 hours of operation under ideal conditions, which is vastly superior to alkaline batteries. That's why you should only use alkaline batteries in night vision devices in a pinch.

So how do you prevent battery substitutions? Mark the requisition form DD Form 1348-6 with an advice code of "2J" in record positions 65-66, which means fill or kill, no substitutions.

The NSN brings 12 lithium batteries in individual blister packs packed in a single box.

30-, 60-kW TQGs...



5%***!
THIS THING
ISN'T WORKING
AGAIN.

Y'KNOW, I READ IN *PS* THAT
SOME GENERATOR KEYPADS ARE
DEFECTIVE. MAYBE WE SHOULD
CHECK THIS ONE OUT.

DOES YOUR
UNIT HAVE
A B MODEL
30- OR 60-KW
TACTICAL
QUIET
GENERATOR
(TQG)?

IF SO, THE
GENERATOR
MAY HAVE A
DEFECTIVE
CONTROL
BOX KEYPAD
ASSEMBLY,
NSN 5999-01-
470-4245
(PN 96-23545).

IT'S PART OF
THE DIGITAL
CONTROL
SYSTEM ON
GENERATOR
MODELS
MEP-805B,
-806B,
-815B AND
-816B.

THE KEYPAD
ASSEMBLY
CONTROLS
NAVIGATION IN
THE COMPUTER
INTERFACE
MODULE (CIM).

IF IT'S FAULTY,
ONE CLUE IS
THAT THE CIM
CURSOR DOESN'T
WORK RIGHT.
SOMETIMES THE
CURSOR WON'T
MOVE DOWN-
WARD OR LEFT
AND SOMETIMES
IT WON'T MOVE
AT ALL.

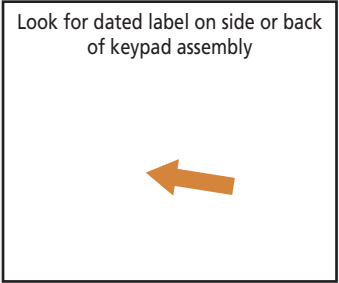
A TOTAL
OF 566
CONTROL
BOX KEYPAD
ASSEMBLIES
WERE
DELIVERED
AS SPARE
PARTS
UNDER THE
FOLLOWING
CONTRACTS
IN THESE
QUANTITIES...

Contract No.	Qty
SPM7M912V5779	145
SPM7M913V1559	110
SPM7M912V9941	89
SPM7M912V6443	86
26473	84
7040592	25
5672	25
NFECL credit card/email	2

Identify the Faulty Keypad Assembly

If your keypad falls under one of these contracts, here's how to check if it's covered:

- If the keypad assembly is already installed, remove it in an electrostatic discharge safe area.
 - For 30-kW generators, remove the keypad following the instructions in Steps 1-8 in WP 0050 of TM 9-6115-671-14.
 - For 60-kW generators, remove the keypad following the instructions in Steps 1-8 in WP 0050 in TM 9-6115-672-14.
- Find the label with the "N.E.K." quality assurance stamp. The label may be on the top or back of the assembly.
- Check the date code. The date code on the label is formatted as "MM/DD/YY" (for example, 11/02/07 is 02 Nov 2007).
 - If the date code on the label falls between 06/01/12 to 06/30/13, your keypad assembly is eligible for repair. The manufacturer will forward defective keypad assemblies to a supplier who will repair and return them to units free of charge. Contact the following POC to get a return material authorization (RMA) number and further instructions:
Kathryn Santine
Contract Administrator
L-3 Communications Westwood Corp.
12402 E. 60th St.
Tulsa, OK 74146
Or call her at (918) 250-4480 or email: Kathryn.Santine@L-3com.com
 - If the date on the label does not fall within the dates in Step 3(a), but the keypad assembly is defective, follow the standard product quality deficiency report (PQDR) process. To submit a PQDR, go to: <https://www.pdrep.csd.disa.mil/>



GCSS-Army Reminder

Remember to check the GCSS-Army website for alerts, updated fielding and training schedules and other important info. Visit: <https://gcss.army.mil/>
Or sign up to get automatic notifications at: <https://gcss.army.mil/Support/register.aspx>

DISTRIBUTION: To be distributed in accordance with the initial distribution number (IDN) 345239, requirements for the TB 43-PS-Series.

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

**DON'T OPERATE IN THE DARK WHEN
IT COMES TO CHEMICAL SAFETY!**



DON'T GUESS! USE THE MSDS!

