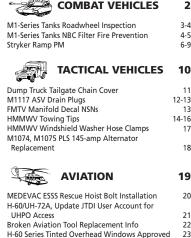


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TB 43-PS-780, The Preventive Maintenance Monthly, is an official publication of the Department of the Army, providing information for all Soldiers assigned to combat and combat support units and all Soldiers with unit maintenance and supply duties. All information published has been reviewed and approved by the agency responsible for the equipment, publication or policy discussed. Agication 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-Dob hyperlinks, along with their content, does not constitute endorsement by Dob or DA. Heither Dob nor DA exercises any editorial control over, and cannot vouch for, content on non-Dob websites.

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Just write to:

MSG Half-Mast PS, the Preventive Maintenance Monthly USAMC LOGSA (AMXLS-GP) Bldg. 3303

Redstone Arsenal, AL 35898

AGSE List of Equipment NSNs

Or email:

usarmy.redstone.logsa.mbx.psmag@mail.mil

Internet address:

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

By order of the Secretary of the Army:

#### MARK A. MILLEY

General, United States Army Chief of Staff

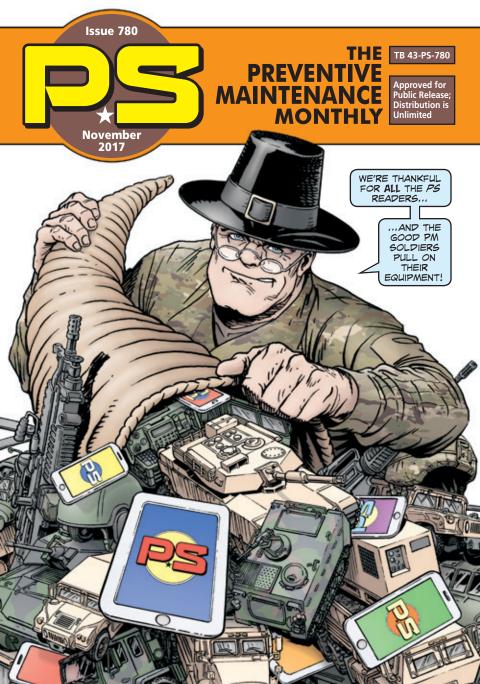
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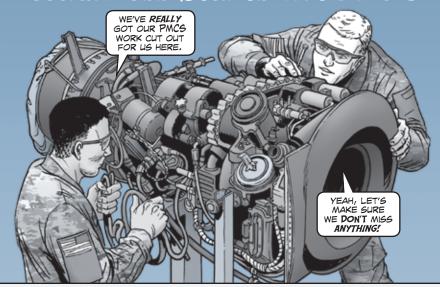
GERALD B. O'KEEFE

Administrative Assistant to the Secretary of the Army

1724251



### Readiness Starts with YOU



OPERATORS, YOU KNOW THAT MOST DECISIONS IN THE ARMY GO FROM THE TOP DOWN-LIKE WHEN AND WHERE YOUR UNIT AND ITS EQUIPMENT GET SENT.



BUT THERE IS AN EXCEPTION: INFORMATION ON HOW READY THAT EQUIPMENT IS TO DO ITS JOB COMES FROM THE BOTTOM UP.

THAT MEANS THE PERSON BEST SUITED TO PETERMINE YOUR EQUIPMENT'S READINESS IS YOU.

REMEMBER THAT THE NEXT TIME YOU PULL PMCS.

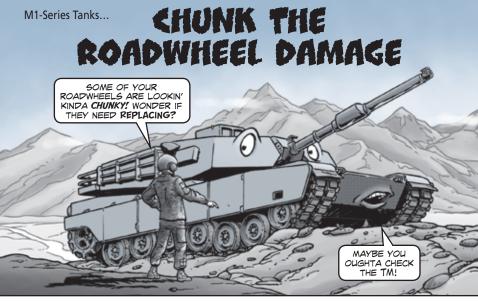
FIX WHAT YOU CAN AND REPORT WHAT YOU CAN'T. IF THE EQUIPMENT ISN'T READY, REPORT THAT ON THE MAINTENANCE INSPECTION WORKSHEET.

YOUR HONEST ASSESSMENT HELPS YOUR COMMANDER DETERMINE UNIT READINESS. THAT'S A BIG RESPONSIBILITY. MAKE SURE YOUR REPORT TELLS IT LIKE IT IS.



# COMBAT VEHICLES

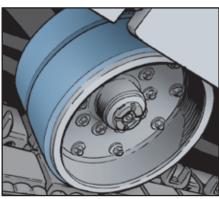




Some chunking and separation on the roadwheels and compensating idler wheels on your M1-series tank are normal. But how much is too much and when do you need to replace a roadwheel or idler wheel?

Check roadwheels and idler wheels for chunking and separation from rubber tread

If there's one inch or more of rubber tread from approximately 75 percent or more from the metal surface, or chunking that exposes <sup>3</sup>/<sub>4</sub>-inch or more of the metal surface, it's time for a new roadwheel or idler wheel.



Checking for proper track tension, loose hardware and debris will keep roadwheels and idler wheels in good shape



THERE ARE A FEW WAYS TO KEEP DAMAGE TO ROADWHEELS AND IDLER WHEELS TO A MINIMUM.

### CHECK TRACK TENSION AFTER EVERY OPERATION AND ADJUST IT AS NECESSARY.

LOOSE TRACK LETS THE CENTER GUIDES HIT THE RUBBER TREAD ON ROADWHEELS AND IDLER WHEELS. THAT RESULTS IN RUBBER GOUGING AND CHUNKING.

### CHECK ROADWHEEL AND IDLER WHEEL MOUNTING NUTS FOR LOOSENESS.

IF YOU FIND ANY, TIGHTEN THEM LIKE IT SAYS IN THE -10 TM.

#### KEEP THOSE LUG NUTS TIGHT.

LOOSE LUG NUTS ALLOW THE ROADWHEELS AND SUPPORT WHEELS TO WOBBLE. THAT STRIPS THE LUG BOLT THREADS AND EATS AWAY AT THE WHEEL'S MOUNTING HOLES, THE MORE THE WHEEL'S MOVE, THE BETTER THE CHANCE THAT THE CENTER GUIDES WILL HIT AND PAMAGE THE TREAD.

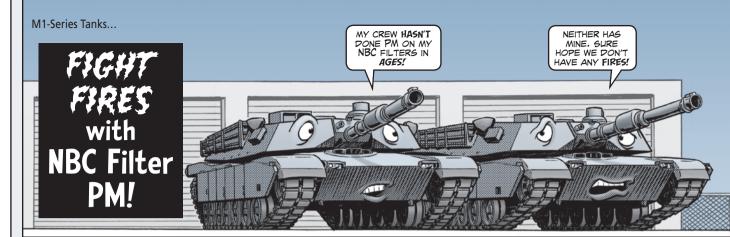
### MAKE SURE YOU CHECK TRACK DAILY FOR ROCKS AND OTHER DEBRIS.

ROCKS GET THROWN UP BY THE TRACK AND LODGE BETWEEN THE ROADWHEEL ARMS, THAT RESULTS IN GOUGING AND DEEP CUTS OR GROOVES IN THE TREAD.

REMOVING THEM WILL GO A LONG WAY TOWARD KEEPING THE ROADWHEELS AND IDLER WHEELS IN GOOD SHAPE.

CHECK OUT YOUR TANK'S -10 TM AND TM 9-2530-200-24, STANDARDS FOR INSPECTION AND CLASSIFICATION OF TRACKS, TRACK COMPONENTS AND SOLID-RUBBER TIRES, FOR MORE INFORMATION.





CREWMEN, POING REGULAR PREVENTIVE MAINTENANCE ON YOUR MI-SERIES TANK'S NBC SYSTEM IS VERY IMPORTANT. DOING PMCS NOT ONLY KEEPS YOUR TANK READY TO FIGHT, IT CAN KEEP YOU FROM BEING HURT OR EVEN KILLED!

TWO CREWMEN WERE RECENTLY INJURED BY NBC SYSTEM-RELATED FIRES. THOSE FIRES COULD HAVE BEEN PREVENTED BY FOLLOWING THE PMCS GUIDELINES IN THE TMS.

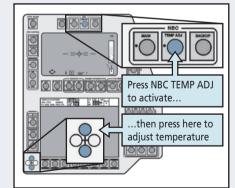


BEFORE OPERATIONS, IT'S **CRITICAL** TO PO THE **BEFORE CHECKS** IN TM 9-2350-264-10-3 (SEP 11, W/CH 3, JAN 15) FOR THE MIA1 AND IN TM 9-2350-388-138P (EM 0334, AUG 16) FOR THE MIA2 SEP2. IF THE NBC SYSTEM MEETS ANY OF THE "NOT FULLY MISSION CAPABLE" CRITERIA, YOUR TANK IS NMC!

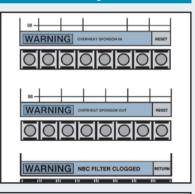
PURING
OPERATIONS,
WATCH
FOR THESE
WARNING
SIGNS

• Low or no air flow at the NBC hose sockets or bulk dump.

 Air temperature that doesn't change when NBC TEMP is adjusted.



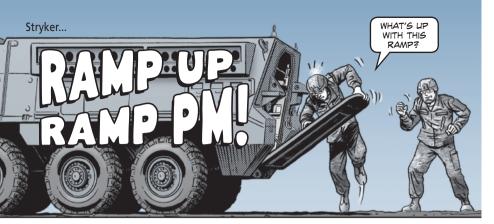
 The OVERHEAT SPONSON IN, OVER-HEAT SPONSON OUT, or NBC FILTER CLOGGED warnings come on.



IF ANY OF THESE THINGS HAPPEN, THE FILTERS CAN CATCH FIRE UNLESS YOU SHUT DOWN THE MAIN NBC SYSTEM IMMEDIATELY. IF YOU NEED CLEAN AIR, ACTIVATE THE BACKUP NBC SYSTEM. WHILE THE BACKUP SYSTEM DOESN'T PROVIDE COOLED AIR, IT DOES GIVE YOU FILTERED AIR FROM OUTSIDE THE TANK.

MAKE SURE YOUR TANK'S NBC SYSTEM WARNING LIGHTS ARE WORKING PROPERLY BY CHECKING THE 2W118 CABLE'S P1 CONNECTION IN THE NBC SPONSON AREA. THE CABLE SHOULD BE FULLY CONNECTED AND ATTACHED TIGHTLY.

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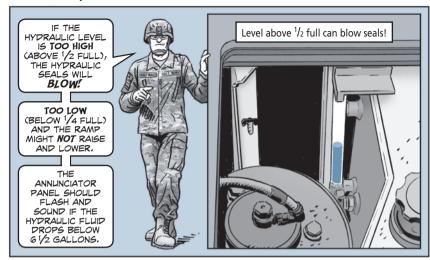








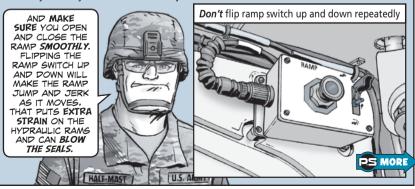
 A slow or balky ramp can be a sign of hydraulic problems. Open the rear service hatch and take a close look at the vertical tube at the back. If the fluid is <sup>1</sup>/<sub>4</sub> to <sup>1</sup>/<sub>2</sub> full in the tube, the hydraulic level is OK.



 Be careful not to exceed the load capacity for the ramp and ramp door. The ramp chains may stretch or break and you can ruin the hydraulics. The ramp door seal or hinges could be damaged.

The ramp's load capacity with slat armor is 1,000 pounds and the door's load capacity is 500 pounds.

Always raise or lower the ramp completely. Don't lower the ramp partially so that Soldiers can have a seat or to carry equipment, especially when slat armor is installed. Leaving the ramp partially opened for a while can stretch the chains. Extra weight from you and your fellow crewmen just makes it worse.



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 Remove any water buildup under the floor plates, then have your mechanic give the ramp chains a light coat of GAA semiannually to prevent rust.

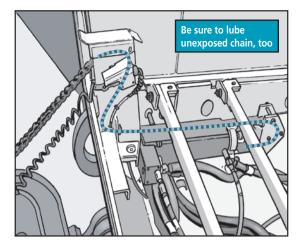
Sometimes only the portion of the chain that shows when the ramp is down gets lubed. There's quite a bit more wrapped around the pulleys and hidden beneath the floor plates. So make sure your mechanic lubes all of the chain.

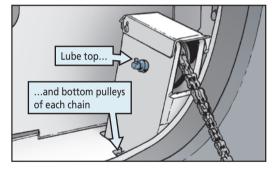
 Give the ramp chain pulleys a few shots of GAA, too. There's a lube point at the top and bottom of both housings holding the pulleys. It's easy to miss the bottom ones.

Tap the horn twice and then wait a few seconds before raising or lowering the ramp. That gives others a warning and enough time to get out of the way.

 Before closing the ramp, make sure the vehicle has enough air pressure built up. It needs to be at least 90 psi. If the air pressure's low, the ramp locks may not engage completely. Check to make sure the ramp open LED goes out.

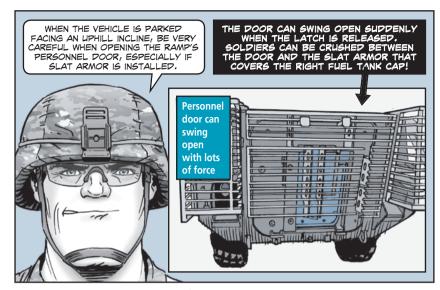
If you're closing the ramp from the squad compartment, make sure the cam locks rotate all the way to the closed position.







 A Stryker facing downhill on a slope of more than 15° may need a push from inside the vehicle to help the ramp start opening, especially if slat armor is installed.



The ramp won't lower completely if the tow pintle is installed. It juts out enough that
the ramp will hit and bend the pintle shaft.

Until it's actually needed, remove and stow the pintle and replace it with the pintle plug, NSN 5340-20-001-0203. That keeps dirt and moisture out of the vehicle. You'll also need an O-ring, NSN 5331-00-585-1068, and a lock pin, NSN 5315-01-328-5286, to install the plug properly.

NOTE THAT THIS PINTLE INFORMATION IS FOR FLAT-BOTTOMED STRYKERS. NOT DOUBLE V-HULLED (DVH) VEHICLES. THESE PARTS WILL NOT FIT DVH STRYKERS.



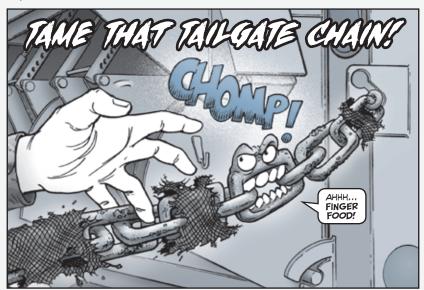


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# S TACTICAL VEHICLES



- Tame that Tailgate Chain!
  Open the Drain Plugs
  Manifold Decal Found
  Time to Tow? Try These Tips!
  Stay in the Loop on Washer Hose
  Alternate Alternator Needed



OPERATORS, WHEN EYEBALLING YOUR DUMP TRUCK DURING PMCS, PAY CLOSE ATTENTION TO THE TAILGATE CHAIN COVERS.

THE COVERS ARE THERE TO DEADEN SOUND, PREVENT RUST AND PROTECT YOUR FINGERS! BUT THEY TEND TO WEAR OUT WHEN THE TAILGATE IS OPENED AND CLOSED REPEATEDLY DURING OPERATIONS.

IF EITHER CHAIN COVER IS WORN OR MISSING, ORDER TWO NEW 12-IN NYLON COVERS WITH NSN 4030-00-594-0475.

THE COVERS
CAN BE A LITTLE
TRICKY TO
SLIP OVER THE
CHAIN, THAT'S
ONE REASON
WHY THEY'RE
NOT ALWAYS
REPLACED
WHEN THEY GET
PAMAGED OR
DETERIORATE.

SO HERE'S HOW TO MAKE THE JOB EASIER!

SLIP A BATTERY HOLD-DOWN BOLT, NSN 5306-00-739-7754, THROUGH THE COVER. HOOK ONE END TO THE LAST CHAIN LINK AND PULL THE CHAIN THROUGH.



# M1117 ASV... OPEN THE DRAIN PLUGS









Winter, spring, summer or fall, regardless of the weather, water is going to collect in the hull of your armored security vehicle (ASV).

That's because water drips off wet boots and uniforms. trickles in from the top of the vehicle when it rains, is forced in at the wash rack, or seeps past loose drain plugs during fording.

### Water in All Its Forms

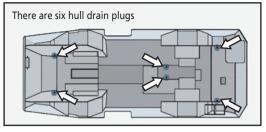
Solid: If you're in a cold-weather region like Alaska or areas of Afghanistan, water that gets under the floor plates will freeze. And because water expands as it freezes, lines and fittings are ruptured, causing all kinds of damage.

Liquid: Water that collects in the hull rusts the vehicle's air brake valves and just about anything else made of metal.

Gas: As temperatures go up, water evaporates and condenses on radios and other electronic gear. Enough moisture can short out electronic equipment.



You'll find a plug in all four wheel wells (behind the wheel assembly) of the vehicle. The last two plugs are directly under the vehicle, near the back half of the middle area. You'll see the locator views of the plugs shown in WP 0076-2 of TM 9-2320-381-10 (Nov 14).

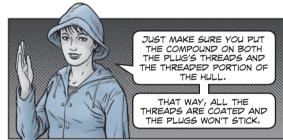


By the way, make sure any water drained from the hull goes into a drip pan and is disposed of according to your unit's SOP. That's because any fluid leaks, like coolant, oil and power steering fluid, can end up in the vehicle's hull, too. So never dump contaminated water down a drain or let it run onto the ground.

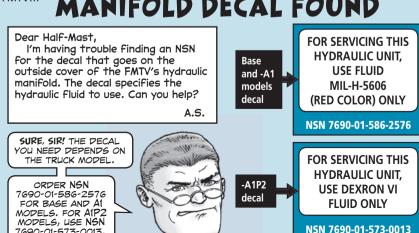
Also, you don't want water to get back in through the drain plug openings. Make sure you reinstall the plugs before operation, and do it right. Plugs that are too loose will vibrate free. And plugs that are too tight are hard to open and more likely to be left closed when draining is needed.

So apply a little antiseize compound, NSN 8030-01-087-8254, to the threads before installing the plugs. That lets you tighten the plugs enough to keep them from vibrating loose, but makes them easier to open next time.

7690-01-573-0013.



### FMTV... MANIFOLD DECAL FOUND





# Time to Tow? Try These Tips!

Dear Editor,

Para 2-3 of TM 9-4910-593-12&P, Wheeled Motor Vehicle Towbar, states, "Do not use the disabled vehicle's bumper shackles with the towbar." But during a recent Joint Readiness Training Center (JRTC) rotation at Ft Polk, I witnessed and corrected many operators towing vehicles by the bumper shackles, sometimes even using sling legs.

This is a real safety hazard and can lead to vehicle damage as well. Could you get the message out about the proper use of tow bars and adapters? It might prevent a catastrophe.

MSG Phillip L. Schafer Ft Stewart, GA

YOU BET,
MAGTER
SERGEANT!
THE TOW
BAR FOR
UP-ARMORED
HMMWVS
COMES WITH
N\$O 4910-01554-7296.
THE CORRECT
ADAPTER TO
USE IS N\$ON
5340-01022-4686.

THERE IS ALSO AN IMPROVED FRONT TOW BRACKET AVAILABLE FOR UP-ARMORED AND EXPANDED CAPACITY VEHICLE (ECV) HMMWV MODELS.

THE NEW BRACKET REQUIRES

DIFFERENT SCREWS AND LOCKNUTS

THAN THE ORIGINAL SETUP, BUT

THE WASHERS AND MOUNTING

TORQUE (90 LB-FT) ARE

UNCHANGED.

HERE'S WHAT YOU'LL NEED:

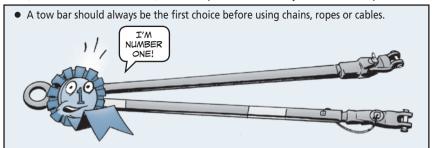
Item NSN		Qty	
Bracket	2540-01-599-0075	1	
Screw	5305-00-071-2071	2	
Locknut	5310-01-548-1848	3	
Washer	5310-01-121-1703	4	

THE TOWED AND TOWING VEHICLES' TMS FOR ANY SPECIAL TOWING INSTRUCTIONS, THEN FOLLOW THESE TIPS...

ALWAYS CHECK



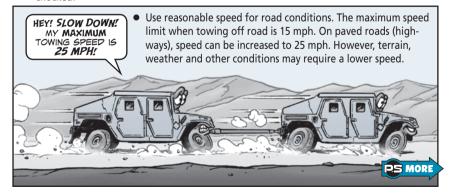
 Recovery operations require specific skills. A trained vehicle recovery specialist (additional skill identifier H8) should be part of the recovery team whenever possible.



 If a tow bar is unavailable, connect cables, chains or ropes to the pintle of the prime mover and to the lifting shackles of the towed vehicle.

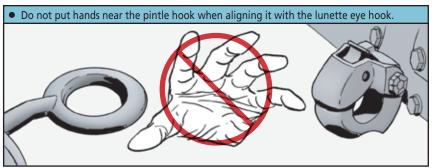


- Prior to towing, make sure all personnel are clear of vehicles before removing wheel chocks.
- Avoid making sharp turns when towing. Keep turning speed at 5 to 10 mph to reduce skidding risk.
- Before disconnecting the vehicles, make sure both are on level surfaces with wheels chocked.

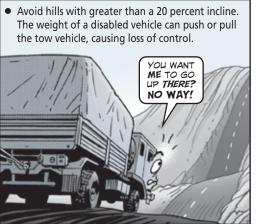


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 Be sure to put the cotter pin in the pintle hook. This keeps the tow bar and towed vehicle from disconnecting during stops.



- The towing vehicle operator should always make a final safety check of the tow bar pins and safety clips before moving out and at all rest stops.
- Always insert tow bar pins with the head facing up and the safety clip on the bottom.
   That way, if the safety clip fails, the pin is less likely to fall out.
- Never substitute anything for the tow bar pins or safety clips. Use only the authorized hardware that is listed in the tow bar's TM.
- When using a tow bar, also connect a safety chain with the appropriate load rating between the two vehicles. That can prevent an accident if the tow bar breaks or disconnects.
- When using a tow bar, also connect a safety chain between the two vehicles in case the tow bar breaks or disconnects. Use a chain with an appropriate load rating.
- If a disabled vehicle's brakes aren't working, don't try to flat tow it. Call for dedicated wrecker support.



- If you must tow in heavy traffic, tie the front lifting shackles of the towed vehicle tightly to the rear lifting shackles of the prime mover and connect the air brake lines.
- Use a ground guide whenever moving a disabled vehicle. The ground guide must remain visible to the driver at all times. See Chapter 11-4, Section (9)h in AR 385-10, The Army Safety Program (Feb 17), for more ground guide rules and tips.
- Only the driver is allowed to ride in the disabled vehicle being towed.



# STAY IN THE LOOP ON WASHER HOSE

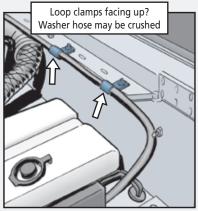




Mechanics, replacing the HMMWV's windshield washer hose is a simple task. But if it's not done right, you'll have to turn around and do it all over again—and you may have to replace the hose, too.

Some mechanics pay no attention to how the loop clamps that hold the hose in place are positioned. But if they're turned so the loop faces up, the hose is held at a higher profile. That makes it more likely that the hose will be crushed when the hood is closed.

Instead, make sure the clamps are positioned with the loops facing down. That holds the hose at a lower position and decreases the chance of crushing it. If you need to replace the hose, order it with NSN 4720-01-164-7803. The hose comes by the foot, so order as much as you need.







Dear Half-Mast,

Our unit has a base model M1074 palletized loading system (PLS) with a busted 145-amp alternator, NSN 2920-01-349-9934. Problem is, this NSN is a terminal item on FED LOG, and no replacement is listed.

TM 9-2320-364-14&P in IETM EM 0206 (Apr 09) shows a 200-amp alternator for the M1074, but it's not compatible with the 145-amp charging system.

Is there a replacement 145-amp alternator or a kit to convert our PLS to the 200-amp system? I've checked everywhere else with no luck. Can you help?

SFC T.D.S.

Dear Sergeant,

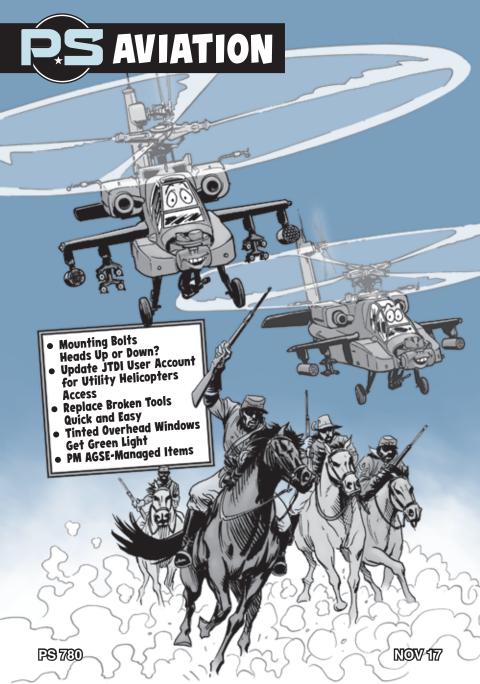
You bet. The base PLS with the DDEC II engine came equipped with a 145-amp generator that is no longer supported.

That means your vehicle has to be upgraded to the 200-amp charging system and external battery disconnect that comes with NSN 2920-01-460-9889.

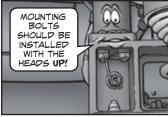
This upgrade kit also includes the 200-amp generator. You'll find installation instructions for the kit in TM 9-2320-364-14&P.

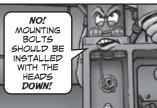
And by the way, the DDEC II engine in the base PLS is no longer supported, either. If your unit has an issue with an engine that needs to be upgraded to a DDEC III/IV, contact TACOM's PLS Team at:

usarmy.detroit.tacom.mbx.ilsc-PLS2@ mail.mil Half-Mast



### MOUNTING BOLTS HEADS UP OR DOWN?





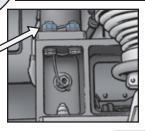


MECHANICS, SOME MEDEVAC HELICOPTERS WITH THE ESSS MOUNTED RESCUE HOIST (EMRH) INSTALLED HAVE A MOUNTING BOLT PROBLEM!

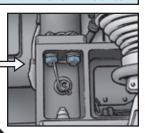
THE PROBLEM COMES WHEN THE FOUR MOUNTING BOLTS CONNECTING THE HOIST ADAPTER TO THE WESTWIND ARM ARE INSTALLED WITH THE BOLT HEADS ON TOP.

THAT MAY SEEM LOGICAL **BUT** THE **CORRECT** WAY IS TO INSTALL THE BOLTS WITH THE HEAPS DOWN. THAT'S ACCORDING TO WP 1355 OF TM 1-1520-237-23&P ANP MWO 1-1520-237-50-108.

Mounting bolts should be installed this way...



...and **not** this way



THE CAUTION IN THE MWO SAYS TO MAKE SURE THE BOLLS ARE INSERTED HEAD SIDE DOWN TO PREVENT EQUIPMENT DAMAGE.

SO CHECK OUT AVIATION MAINTENANCE ACTION MESSAGE (AMAM) H-GO-17-AMAM-07, WHICH ADDRESSES THE CORRECT INSTALLATION OF THE MOUNTING BOLTS. GO TO:
https://asmprd.redstone.army.mil

ALL THE INFO
YOU NEED TO
KNOW ABOUT
EMRH IS IN
THE TM, THE
MWO AND
THE AMAM.

IF YOU'RE LOOKING FOR THE LATEST LAKOTA OR BLACK HAWK NEWS, CHECK OUT THE UHPO TAB AT **Itdi.mil**  WHILE YOU'RE THERE, MAKE SURE YOUR JTDI USER ACCOUNT IS UPDATED TO KEEP IT FROM EXPIRING AND BEING DELETED.



# Update JTDI User Account for Utility Helicopters Access

**T**he Utility Helicopter Project Office (UHPO) tab on the JTDI website is a "One Stop Knowledge Base" tool to support information sharing with Black Hawk and Lakota maintainers.

On the UHPO, you can view information on current air worthiness releases (AWRs), safety messages, technical publications, newsletters, material fielding, fleet management, engine maintenance manuals and other information about H-60 and UH-72A aircraft.

Go to the JTDI website at: https://www.jtdi.mil

If you don't have access to the UHPO website on JTDI, log in with your CAC and register. Make sure you know your government sponsor's information to complete the application.

If you've already registered, you need to review your account information once a year. If you don't, your account will expire and be deleted. And you must log into your account every 30 days. If you don't, you'll have to reactivate your account within seven days or risk having your account deleted.

Procedures for updating your account are provided under the UHPO Account Help on the right side of the page. Under Account Help, click on <u>Update Registration Info</u>. Your information is updated after you accept the JTDI Acceptable Use Policy (AUP). After you read the policy and click the acknowledgement box, you'll receive a pop-up that says your information has been updated.

Got questions? Contact Richard (R.D.) Davis, DSN 788-8874, (256) 842-8874 or Dionne Croone, DSN 546-9856, (256) 876-9856. Or send an email to:

richard.l.davis132.civ@mail.mil wynetta.d.croone.ctr@mail.mil

# REPLACE BROKEN TOOLS QUICK AND EASY







MECHANICS,
DID YOU KNOW
THE AVIATION
FOOT LOCKER
(AFL) AND THE
NEW AVIATION
TOOL SYSTEM
(NATS) ARE
COVERED
LINDER A
ROCK ISLAND
ARSENAL (RIA)
WARRANTY
PROGRAM?

SO IF
YOUR TOOLS
ARE DAMAGED.
EXCHANGE
THEM FOR NEW
ONES. HERE'S
HOW!

EMAIL A LIST OF DAMAGED OR WORN TOOLS TO INCLUDE THE MANUFACTURER'S PART NUMBER, NSN (IF AVAILABLE), TOOL NAME, BRAND NAME/CONTRACTOR AND QUANTITY.

ALSO INCLUDE THE UNIT DESIGNATION THAT YOU NEED ETCHED ON THE TOOLS.
FORWARD THE INFORMATION TO:

Scott Forsberg richard.s.forsberg.civ@ mail.mil

Commercial:

(309) 782-6568 FAX: DSN 782-3682

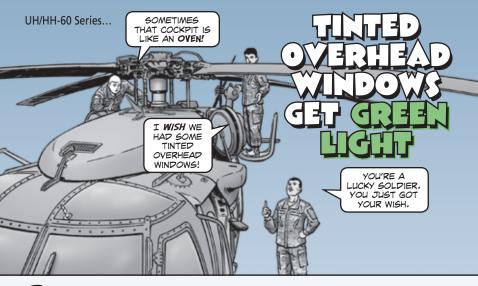
THE RIA WARRANTY PROGRAM IS A ONE-FOR-ONE TOOL EXCHANGE WITH THE TOOL VENDOR.

IF RIA CAN'T GET THE EXACT TOOL REQUIRED OR ORDERED, THEY WILL TRY TO FIND AN EQUIVALENT TOOL FROM ANOTHER VENDOR.

ALSO, KEEP IN MIND THAT SOME VENDORS MAY HAVE LONG LEAD TIMES FOR FILLING ORDERS. RIA WILL COORDINATE WITH TOOL VENDORS TO RESOLVE ANY PROBLEMS.

After coordinating with RIA, ship unserviceable tools to:

Rock Island Arsenal ATTN: Scott Forsberg Bldg. 299 Tool Warranty Program Rock Island, IL 61299-5000



Pilots, here's some good news about the overhead cockpit windows on your Black Hawk: Things are about to get a whole lot cooler!

Tinted overhead greenhouse windows are now approved for all Black Hawk helicopters in place of the current lighter windows. In addition, the tinted windows are an alternate to the clear windows. The **left-hand** tinted window comes with NSN 1560-01-495-5522 (PN 70206-01001-111). The **right-hand** tinted window comes with NSN 1560-01-495-5529 (PN 70206-01001-110).

Make a note that the free air thermometer holes are not located in the same location as the H-60A/L windows. On the H-60M LHS configuration, it is located 9.12 inches outboard of the inside edge of the window. This requires a longer bonding jumper, which you must order separately.



TM 1-1520-237-23&P (EM 0013) identifies the LH bonding strip as item 26 in Fig 1-66, NSN 5999-01-498-2232. WP 0807 00 provides the installation procedure for the bonding jumpers.

TM 1-1520-280-23&P identifies the RH bonding strip as item 9 in Fig 1-75, NSN 5999-01-583-8035. WP 0758 00 provides the installation procedures for the bonding jumpers.

These windows reduce the amount of light that gets through to the cockpit by 30 percent. That in turn lowers cockpit temperatures. Installation of the windows is still the same as called out in both TM 1-1520-280-23&P and TM 1-1520-237-23&P.

The **current left-hand window** is NSN 1560-01-550-2632 (PN 700-21113-042), and the **current right-hand window** is NSN 1560-01-298-1557 (PN 70206-01001-106).

# **PM AGSE-Managed Items**



MECHANICS, TAKING CARE OF AIRCRAFT IS IMPORTANT. THAT'S WHERE AVIATION GROUND SUPPORT EQUIPMENT (AGGE) COMES IN. COMBING THROUGH
MULTIPLE TMS, ETMS
AND IETMS TO FIND
AN NSN FOR A PIECE
OF AGSE CAN BE A
CHORE.

SO IF YOU NEED TO KNOW WHAT EQUIPMENT THE AGGE HEADSHED MANAGES, HERE'S A LIST OF EQUIPMENT NSNS FOR QUICK ACCESS...

NSN 1730-

00-734-9382

00-540-2343

00-516-2018

00-203-4697

**Aviation Jacks** 

Item

3-ton jack (tripod)

5-ton jack (tripod)

10-ton jack (axial)

5-ton jack (axial)

Tool Kits		
Item	NSN 5180-	
Engine tool kit (PPTK) (B07) CATS*	01-628-2371	
Power train tool kit (PTTK) (B13) CATS	01-628-2374	
Sheet metal tool kit (SMTK) (B02) CATS	01-628-2376	
General mechanic tool kit (GMTK) (B01) CATS	01-628-2375	
Electrical tool kit (ELTK) (B06) CATS	01-628-2373	
Hydraulic tool kit (HYTK) (B03) CATS	01-628-2370	
Technical inspection tool kit (TITK) (B09) CATS	01-628-2372	
Aviation foot locker (AFL)	01-560-0584	

12-ton jack (tripod)		00-912-3998
Aviation Carts		
Item		NSN
AGPU, E-model	1730-	01-552-2313
GANG (new)	3655	01-568-2711
GANG (old to new)	3655	01-589-1954

<sup>\*</sup>Common Aviation Tool System (B17 managed)

Aviation Shop Sets- A92 & AVIM Shops		
Item NSN 492		
Turbine repair shop set	01-600-7332	
Armament and electrical (A&E)	01-548-2317	
Machine/welding shop set	01-600-7348	
Pneudraulic shop set	01-600-7377	
Powertrain shop set	01-600-7379	
Production/QC shop set	01-600-7374	
NDI shop set	01-600-7368	
Sheet metal shop set	01-600-7364	
Composite shop set	01-600-7365	
Tool crib shop set 01-600		
A92 tool set 01-551-7472		

Aviation Scales		
Item	NSN 6670-	
Aircraft weighing scales (load cell type)	01-430-1949	
DAWS (set of 3)	01-568-1177	

Combat Aviation Kits		
Item NSN		
BDAR 4920-01-603-8540		
UMARK 1670-01-501-8140		
UMARK 1670-01-641-7829		



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### **Aviation Non-Destructive Test Sets** Item NSN 6635-01-568-2670 Ultrasonic detector 01-655-2655 01-568-2652 Portable eddy current 01-655-2666 01-568-2666

Aviation Wheeled Vehicles		
ltem	NSN	
Standard aircraft towing system (SATS)	1730-01-575-5662	
Shop equipment contact maintenance (SECM)	4920-01-548-2315	
Aviation light utility mobile maintenance cart (ALUMMC)	1740-01-632-9476	

THERE ARE MORE NSNS HERE THAN YOU CAN SHAKE A STICK AT!

Pitot static test set

Exhaust gas tester

Bridge capacitance FQTS (digital)

Swaging kit-B

Vibration analyzer (AVA)

Engine test stand (FEDS)

Fuel quantity test set (FQTS)

Item

Bond tester

PRINT THESE PAGES AND KEEP 'EM HANDY. IT'LL SAVE YOU TIME AND HEADACHES

4920-01-208-3635 4920-01-360-3853

6625-01-574-9949

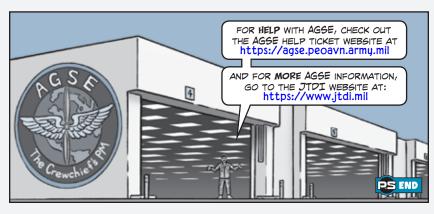
01-655-2608

**Aviation Test Sets** 

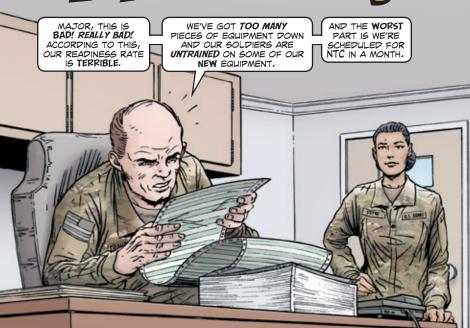
HEADACHES.	
Sets	
NSN	
4920-01-388-6790	
4920-01-209-0664	
6635-01-282-3746	
5180-01-115-7008	
4920-00-503-1895	
6625-01-297-5305	



Aviation Stands and Trailers		
Item	NSN 1730-	
B1 maintenance stand	00-390-5618	
B4 maintenance stand	00-294-8883	
Rail trailer	01-086-1653	
Aircraft tow bar	01-967-9556	



# Readiness Problems? Elstribem Artes





MY ADVICE IS TO **BLST** YOUR PROBLEMS AWAY!







EVERY BRIGADE COMBAT TEAM IS ASSIGNED A BLST, WHICH IS MADE UP OF LOGISTIC ASSISTANCE REPRESENTATIVES-LARG-FROM EACH OF THE LIFE CYCLE MANAGEMENT COMMANDS.

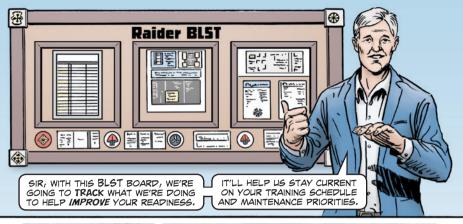
THESE LARS ARE HIGHLY TRAINED EQUIPMENT EXPERTS WHOSE JOB IS TO SOLVE PROBLEMS WITH WEAPON SYSTEMS, EQUIPMENT, LOGISTICS AND TRAINING.

IF A SOLDIER SHOOTS IT, WEARS IT, COMMUNICATES WITH IT, DRIVES OR FLIES IT, A LAR CAN HELP.









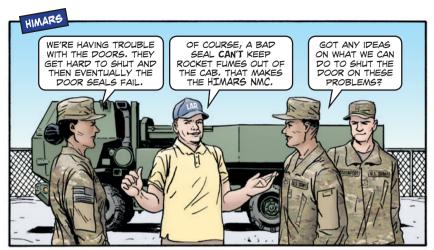


THAT'S OUR JOB! FROM WHAT MASTER SERGEANT HALF-MAST HAS TOLD ME, THE REAL PROBLEMS FOR YOU HAVE BEEN WITH HIMARS, SHADOW, THE RAPID EMPLACEMENT BRIDGE SYSTEMS (REBS), AND YOUR NEW M50 MASKS.





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FIRST, TELL YOUR PEOPLE TO REPORT POORS THAT ARE GETTING HARD TO SHUT ASAP. THE POORS CAN BE ADJUSTED SO THEY SHUT LIKE THEY'RE SUPPOSED TO. IF YOU KEEP FORCING THE POORS, IT DAMAGES THEIR HINGES AND THE SEAL.



SECOND, TELL THEM NOT TO USE THEIR FEET TO OPEN DOORS. WHEN THEY

WHEN THEY DO THAT, THEIR FEET SLIDE DOWN THE DOOR AND KICK THE SEAL. PRETTY SOON THE

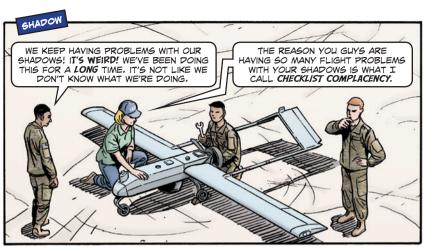
SEAL IS

SHOT.



I KNOW THE POORS ARE HEAVY,
BUT YOUR PEOPLE NEED TO BE USING
THEIR HANDS, NOT THEIR FEET.

**NOV 17** 





WELL, YEAH. THAT'S
HOW IT WORKS! YOU
DO IT ENOUGH AND
THEN YOU JUST KNOW
WHAT YOU GOTTA DO.



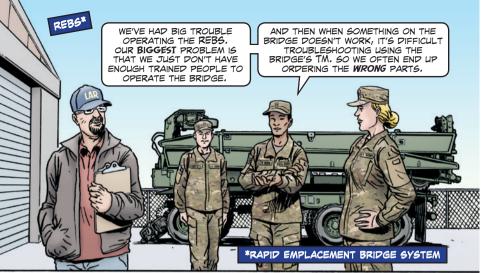
THERE ARE 78 CHECKS AND THEY INCLUDE THE SHADOW, THE LAUNCHER AND THE SHELTER. IT'S CRITICAL YOU DO EVERY SINGLE CHECK.



A THOROUGH INSPECTION TAKES AT LEAST 75 MINUTES.



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32



...I'M GOING TO GET WITH THE PROGRAM MANAGER TO CLEAR UP TROUBLE-SHOOTING CONFUSION,

I'D LIKE YOU TO TELL ME WHAT PARTS OF THE BRIDGE TM ARE DIFFICULT TO UNDERSTAND SO I CAN TELL THE PROGRAM MANAGER.







NOT ONLY THAT, BUT THE M50 FEATURES A DUAL FILTER SYSTEM MAKING IT TWICE AS EASY TO BREATHE THROUGH THE MASK AS THE M40.



I'M ONLY HERE TODAY, BUT YOUR UNIT CAN FIND TRAINING HELP FOR THEIR NEW M50 MASKS ANYTIME AT THE JOINT ACQUISITION CBRN KNOWLEDGE SYSTEM (JACKS) WEBSITE...







ANDROID: https://play.google.com/store/apps/details?id=mil.logsa.army.psmag&hl=en APPLE: https://itunes.apple.com/us/app/p.s.magazine/id1082232259?mt=8

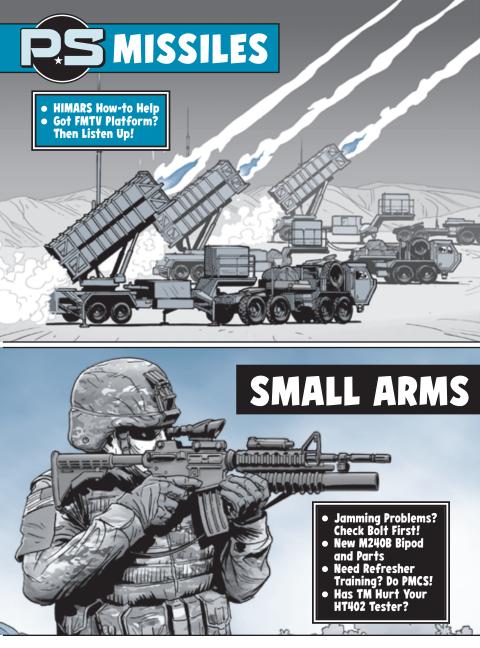


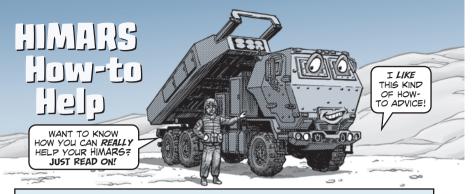








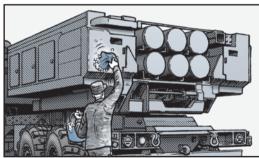




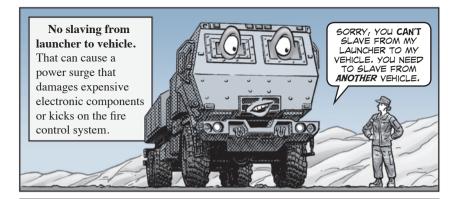
**Exercise, exercise, exercise.** The worst thing you can do is let your HIMARS sit for weeks. Without exercise, grease coagulates and moving parts like the limit switches and rollers stop moving and start sticking. The flex drive shaft binds and can be damaged. Taking the LLM through its paces weekly can prevent these problems.



Clean, clean, clean after firing. The rocket residue is very corrosive. If you don't clean it off ASAP, soon you've got major and expensive corrosion problems. The bad news is that the only way to get rid of the residue is with lots of CLP and elbow grease. The good news is that the sooner you clean, the easier the job is.

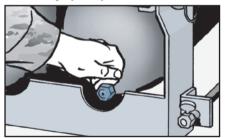


**Take it slow and straight loading and unloading rocket pods.** Raise and lower pods as straight up and down as possible. That prevents cables from fraying and makes it easier on the LLM motor. Keep an eye on the cables to make sure they don't twist and become tangled. Stop and reposition the pod if necessary.



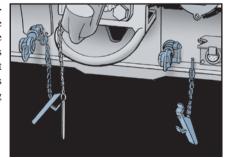
Pay attention to torque when putting on wheels. The tires have aluminum rims that can be damaged if tightened too much. Follow the procedure in TM 9-2330-450-13&P: Torque the wheels in sequence following this chart:

Bleed truck air tanks before bleeding the hydraulic system. Otherwise, hydraulic fluid will spray everywhere. A true mess!

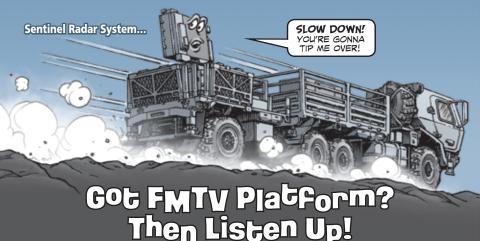


Torque them first to 40 ft-lbs, then 150-200 ft-lbs. Next tighten the CTIS lug nut to 150-200 ft-lbs and then tighten the 9 non-CTIS lug nuts to 350-400 ft-lbs.

Install gladhand covers when gladhands aren't being used. Bugs think the gladhands are great places to nest and the wind blows dirt in the receptacles. Bugs and dirt cause blockages and you've got air pressure problems. Plus the covers help keep the gladhand seals from drying out and leaking.



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Dear Editor.

If your Sentinel is on the new FMTV platform, there are a few things you need to remember:

Take it real slow. The Sentinel trailer is top heavy and can easily flip if you're not careful. That, of course, would mean major damage. When you're off-road, drive as slowly and carefully as possible, avoiding bumps when you can.

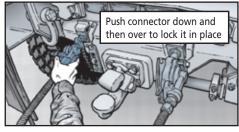
Think level. The Sentinel platform can be leveled on a slope no more than 10 degrees, so you need to look for level ground. This will take planning, so be prepared.

Careful hooking up the trailer air hoses. If you do it wrong, the gladhand coupler seals rip and you lose air pressure for the brakes. Push the connectors down and then over to lock them in place.

TM 9-2330-394-13¢P-1 says to lube the coupler seals monthly with GAA and a wiping rag. That keeps the seals from drying out and starting to leak.

SGT Ryan Pfeiffer SGT Manuel Lara Ft Carson, CO



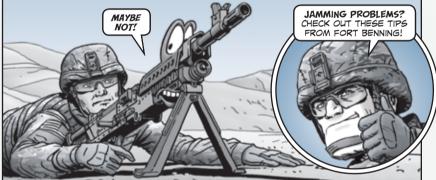


Editor's note: Super Sentinel suggestions, Sergeants. Thanks!

M240-Series Machine Gun...

# JAMMING PROBLEMS? CHECK BOLT *FIRST!*



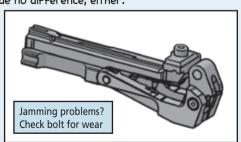


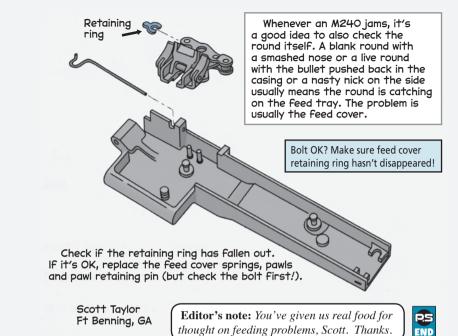
Dear Editor,

If your M240 keeps jamming, it's not always a problem with the feed tray. I had a problem with an M240 that would pick up a new round, but the round's tip would catch on the feed tray. I replaced all the feed tray pawls and springs, which didn't fix it. Then I replaced the feed cover and all the assemblies in the cover. That made no difference, either.

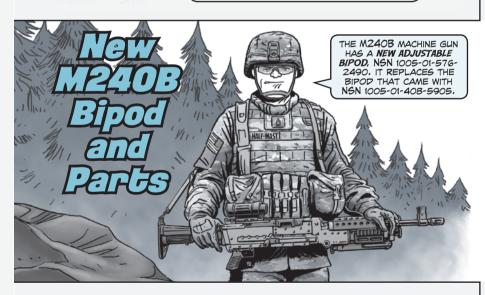
As a last resort, I checked the bolt and noticed there was too much wear on the top. I put in a new bolt and headspaced it to the weapon. Problem solved.

So before small arms repairmen go to the trouble of replacing pawls, springs and the feed cover when an M240 won't feed, they should first check the bolt for wear. It could save lots of time.

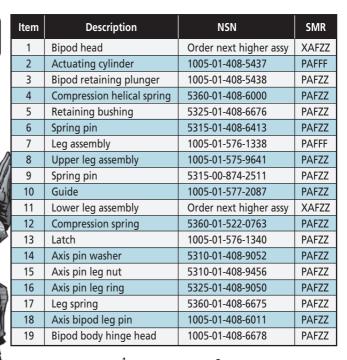


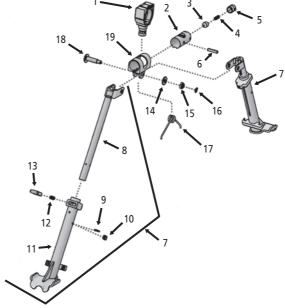


thought on feeding problems, Scott. Thanks.

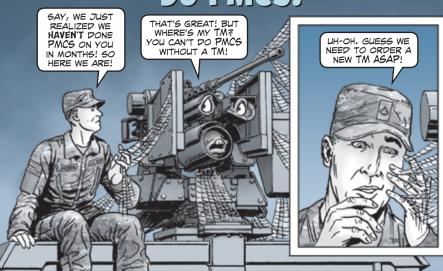


PS 780 39 PS MORE PS 780 40 **NOV 17**  HERE ARE THE REPAIR PARTS FOR THE NEW BIPOD...





# Need Refresher Training? Do PMCS!



Dear Editor,

Soldiers come out of M153 CROWS training fairly expert on how to operate the system. But unfortunately, in many units CROWS doesn't get much use. As weeks go by and CROWS sits unused, all that knowledge starts to slip away.

When it's finally time to crank up CROWS, operators are hazy on procedures. They make mistakes like forgetting to unlock one of the locks, which causes expensive damage.

One way to keep CROWS operators on their toes is have them do weekly PMCS. A good PMCS takes around 45 minutes and doing that week after week is certainly going to keep Soldiers fresh on CROWS.

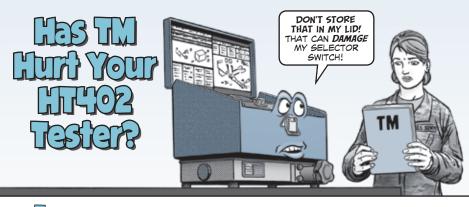
But PMCS brings up another problem: Many units don't have the CROWS' TM 9-1090-219-10. Without the -10, it's impossible to do a proper PMCS.

So units need to make sure their pubs clerk orders a copy of the -10 for every CROWS system. But there's no need to wait for the mailman to start doing PMCS. TM 9-1090-219-10 is on the ETM site:

https://liw.logsa.army.mil/etmapp/#/etm/home
After downloading the TM, print out the weekly PMCS section and aet started.

SSG Marquette Battle SSG Francisco Sanchez Ft Polk, LA

**Editor's note:** Definitely a tip to crow about, Sergeants. Thanks.



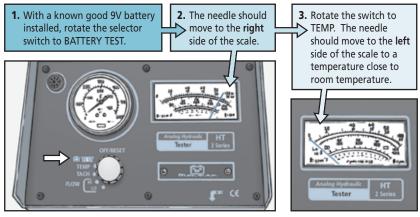
The TM is usually your equipment's best friend. But unfortunately it may have caused a problem for the HT402-S-506 hydraulic tester, NSN 6680-01-383-0784.

The tester's manufacturer shipped it with its TM stored under the lid. But there's not enough clearance between the selector switch assembly and the lid to store the TM there.

This puts too much stress on the selector switch and the control circuit card assembly. Eventually the card assembly cracks around the switch and the tester stops working.

Obviously, stop storing the TM under the lid!

### To make sure your hydraulic tester is OK, do this check:



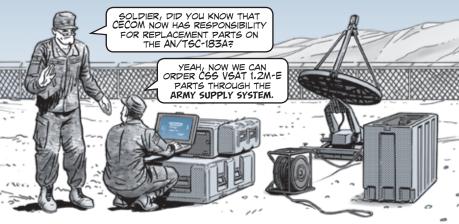
If it doesn't, turn in the hydraulic tester for repair.

Questions? Contact Ross Breitkreutz at DSN 897-0894, (256) 313-0892, or email:

ross.a.breitkreutz.civ@mail.mil

# **PS** COMMUNICATIONS AN/TSC-183A SATCOM Terminal Transitions to Sustainment

### AN/TSC-183A SATCOM Terminal Transitions to Sustainment



HARDWARE SUSTAINMENT FOR THE AN/TSC-183A SATELLITE COMMUNICATIONS TERMINAL, NSN 5895-01-559-1209 (LIN J97857), HAS TRANSITIONED TO CECOM LCMC.

THAT MEANS
COMPONENTS ARE NO
LONGER AVAILABLE
FROM THE PRODUCT
LEAD, DEFENSEWIDE TRANSMISSION
SYSTEMS (PL DWTS).

HOWEVER,
PL DWTS IS STILL
RESPONSIBLE FOR
SOFTWARE, SECURITY
ACCREDITATION, HOST
NATION AGREEMENTS
AND CONFIGURATION
MANAGEMENT OF THE
SYSTEM.

THE AN/TSC-183A
PROVIDES NIPRNET
COMMUNICATIONS AND
VOICE OVER INTERNET
PROTOCOL (VOIP)
ACCESS BY SATELLITE
TO USERS AROUND
THE WORLD.

#### IT CONSISTS OF FOUR TRANSIT CASES:

- 1. Indoor equipment 2. Antenna pedestal
- 2. Antenna pedestal
  3. Reflector

4. RF equipment

NOTE: THE COS VOAT SYSTEM

NOTE: THE CSS VSAT SYSTEM HAS THE SAME 4-5 DIGIT SERIAL NUMBER ON EACH CASE FOR PROPERTY ACCOUNTABILITY.

UNITS AUTHORIZED THE
AN/TSC-183A SHOULD CHECK THEIR
MTOE TO ENSURE THE EQUIPMENT
IS ON HAND. FOR SHORTAGES,
FIRST CHECK FOR LOCAL EXCESS
ON YOUR INSTALLATION OR WITHIN
YOUR STATE.

NATIONAL GUARD UNITS SHOULD CHECK WITH THE US PROPERTY AND FISCAL OFFICE (USPFO). ALL OTHER COMPONENTS, INCLUDING FAILED LINE REPLACEABLE UNITS (LRU), SHOULD BE ORDERED THROUGH THE ARMY SUPPLY SYSTEM USING A FUNDED REQUISITION.

TO ORDER COMPONENTS, USE THE PARTIAL COMBAT SERVICE SUPPORT (ĈŚŚ) VERY SMALL APERTURE TERMINAL (VŚAT) 1.2M-E HARDWARE LISTING ON PAGES 46-55.

THEN CHECK OUT NEXT MONTH'S ISSUE (PS 781, DEC 17) FOR THE REMAINING ITEMS



### The Indoor Equipment Unit/Case

Item	Description	NSN	PN
1	Antenna control (indoor equipment unit (IDU) case w/components)	5985-01-628-3212	0102-1000-10T
	IDU consists of:		
2	Electronic components assembly (modem tray assembly with components), refer to Items 64-102 for parts breakdown	5998-01-629-4938	0102-1500-00
3	Digital computer system (laptop), refer to Items 62-63 for parts breakdown	7010-01-640-8866	0102-1805-01
4	Antenna subassembly (I/O rear panel assembly), refer to Items 109-135 for parts breakdown		0102-1700-00
5	Antenna case (Indoor Equipment Unit case only), refer to Items 52-61 below for parts breakdown		41-40159T
6	Electrical connector cover (#12 metal dust cap), used with Item 4		71-8112CA
7	Electrical connector cover (#20 metal dust cap), used with Item 4		71-8120CA
	Item 8 is located in RF Equip	ment Case	
8	Electrical power cable assembly (power cable w/yellow GFCI)	6150-01-628-3571	0056-1010-00
9	Electrical connector cover (dust cap), used with Item 8		71-8012CA
10	Antenna control (antenna control unit, handheld device)	5985-01-640-8905	67-10308
11	Special purpose electrical cable assembly (antenna control unit cable for handheld device)		10-00291
12	Electronic equipment mounting tray (retrofit kit for CF-53 laptop that contains laptop tray, top and bottom slide rails, velcro strips, tie wraps, clamp, spacer blocks, ethernet/LAN cable, RJ-45 adapter and various hardware) Note: Required when replacing CF-52 with CF-53 laptop	5975-01-640-7748	0102-1380-01
13	Electrical outlet power strip (Tripp-Lite AC surge protector assembly)	6150-01-640-6931	0056-1310-00
14	Mounting bracket, used with Item 13		FOL-243
15	Machine screw (#4-40 x <sup>1</sup> /4-in), used with Items 98 and 99	5305-01-546-9812	91771A106

ltem	Description	NSN	PN		
	Items 16-25 are located in RF Equipment Case				
16	Telephone set (7811G phone bundle)	5805-01-661-1551	02-2856212-1		
17	Handset (Cisco 7800-series handset)	5965-01-662-0169	CP-DX-HS-NB=		
18	Handset electrical cord assembly (Cisco 7800-series handset cord)		CSC9THV		
19	Footstand		CP-7811-FS		
20	Telephone cable assembly (CAT-5E cable, black, 25-ft)		11-855BK-25		
21	Telephone cable assembly (CAT-5E cable, black, 10-ft)		11-CAT54PR10BKB		
22	Electrical power cable assembly (Cisco 7800-series power cord)	6150-01-532-5218	CP-PWR-CORD-NA		
23	Power supply (Cisco 7800-series power supply adapter)	6130-01-568-4928	CP-PWR-CUBE-3		
24	Telephone adapter (RJ-45 coupler)		TRPA105		
25	Electronic communications equipment case (VoIP phone bag/case w/foam)		0102-3520-01		
26	Special purpose electrical cable assembly (1-in ethernet cable, blue, booted)		TRP925J		
27	Electric mounting tray, includes tray shell, slide rails and front door		2UENC		
28	Screw (8-32 <sup>1</sup> / <sub>4</sub> -in), used with Item 27	5305-01-524-2932	91771A055		
29	Special purpose electrical cable assembly, DB9 null modem, female to female (serial cable, laptop to PSU controller)	5995-01-640-7473	12-LL9FF		
30	Power supply (3-prong plug with power adapter for laptop), used with Item 3	6130-01-587-1468	CF-AA5713AM		
31	Special purpose electrical cable assembly (5-ft ethernet cable, black, booted)		TRD-815BLK-5		
32	Loop clamp, <sup>3</sup> /4-in diameter		7572K16		
33	Self-locking hexagon nut, 11/32-in	5310-01-543-2318	90101A009		
34	Flat washer, #6	5310-01-520-7812	90107A007		
35	Loop clamp, 1/2-in diameter		7572K14		
36	Blank panel (black rack panel)		20-63090		
37	Electronic communication equipment cover (computer drawer door), hinge not included		25-04849		
38	Panel screw assembly (clip nuts captive fasteners)		47-62-534-10		
39	Butt hinge (piano hinge), used with Item 4		25-04849		

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### The Indoor Equipment Unit/Case (continued)

Item	Description	NSN	PN
40	Machine screw (4-40 x 0.25-in, cross-tip)	5305-00-054-5647	91400A106
41	Flat washer (#4)	5310-01-011-8112	92141A005
42	Flat washer (#6)	5310-01-520-7812	90107A007
43	Self-locking hexagon nut (1/4-in)	5310-01-601-4367	90715A005
44	Angle bracket set (IDU modem tray angle bracket, small)		25-04833
45	Machine screw (8-32 x 0.625mm, cross-tip), used with Item 44		91400A196
46	Lock washer (#8), used with Item 45	5310-01-559-8194	91475A025
47	Flat washer (#8), used with Item 46	5310-01-528-6397	90107A010
48	Angle bracket set (IDU computer tray assembly angle bracket, large)	Х	25-48410
49	Machine screw (8-32 x 0.625mm, cross-tip), used with Item 48		91400A196
50	Lock washer (#8), used with Item 49	5310-01-559-8194	91475A025
51	Flat washer (#8), used with Item 50	5310-01-528-6397	90107A010
	Items 52-61 are a part of	Item 5	
52	"Indoor Equipment" label		87-01010
53	"Arrow" label		87-01011
54	Electronic communication equipment cover (5-in tan lid)		41-00003
55	Electronic communication equipment cover (2-in tan lid)		41-00004
56	Lock-release lever (IDU latch)		20-00504
57	Nonmetallic solid wheel (replacement wheel for IDU Case) Note: This part number brings only a single wheel		90-50123
58	Plastic bag (nylon pouch, located inside IDU lid)		94-P7721
59	Extension drawer slide (laptop slide rails) Note: Two slides and hardware are provided	5340-01-641-2002	20-30516
60	System pressure regulating valve (pressure relief valve)		70-30000
61	Screw assembly (10-32 x <sup>3</sup> / <sub>4</sub> -in cross-tip screw with flat washer)		RA6205-50W
	Items 62-63 are a part of	Item 3	
62	Power supply (AC power adapter), includes adapter and power cord	6130-01-587-1468	CF-AA5713AM
63	Power supply battery (CF-53 only)		PSTV203

Item	Description	NSN	PN	
	Items 64-102 are a part of Item 2			
64	Screw assembly (10-32 x <sup>3</sup> /4-in cross-tip screw with flat washer), used with Item 65		RA6205-50W	
65	Power supply (24-volt DC, 5A, Power Supply CCA for modem)	6130-01-629-9179	200-44075	
66	Machine screw (#2 cross-tip), M4 x 5mm, 0.75 threads, length 5.00, 1.69 head height, 6.34 head diameter, flat tapered head, <sup>3</sup> /16-in/0.1875mm		92010A212	
67	Self-locking hexagon nut (1/4-in)	5310-01-601-4367	90715A005	
68	Flat washer (#4), used with Item 67	5310-01-011-8112	92141A005	
69	Power supply (12-24 volt DC desktop power supply for 8-port switch) Note: Mounting clamp included	6130-01-629-9181	0102-1581-01	
70	Electrical power cable assembly (internal power cable assembly for 8-port switch)	6150-01-640-8789	0056-1200-08	
71	Communications modem, refer to Items 97-101 and 104-108 for parts breakdown	5895-01-641-2170	0102-1510-00	
72	Machine screw (#1 cross-tip), 40 threads, 0.10-in length, 0.059-in head height, 0.194-in head diameter, flat tapered head, #4 x 40, 0.125		91771A103	
73	Electrical power cable assembly (AC input power cable for 29-volt DC power supply CCA (PSU) and modem)	6150-01-640-8792	0056-1200-01	
74	Power supply (29-volt DC power supply CCA, powers the antenna pedestal and/or handheld antenna control unit)	6130-01-640-6869	410-03145	
75	Machine screw (#1 cross-tip)	5305-01-565-5759	90116A151	
76	Lock washer, used with Item 75	5310-01-546-0401	92153A416	
77	Flat washer, used with Item 75	5310-01-546-0399	90965A130	
78	Machine screw (6-32 x 0.25-in cross-tip), used with Item 74	5305-01-527-0501	91735A144	
79	Toggle switch (labeled "ANTENNA"), includes wiring, ¹/₂-in hexagon nut and ¹/₂-in star lock washer	5930-01-640-8271	0056-1200-02	
80	Toggle switch (labeled "RF"), includes wiring, ¹/₂-in hexagon nut and ¹/₂-in star lock washer	5930-01-640-7745	0056-1513-01	

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### The Indoor Equipment Unit/Case (continued)

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Item	Description	NSN	PN
81	Circuit card assembly (PSU controller CCA)	5998-01-640-6810	420-03137
82	Machine screw (6-32 x 0.38-in cross-tip), secures PSU controller CCA to the modem tray assembly	5305-00-054-6652	MS-51957-28
83	Lock washer (#6) (Outside Diameter: 5.15 mm) (Inside Diameter: 2.8 mm) (Thickness: 0.7 mm), used with Item 82	5310-01-525-0623	92147A420
84	Flat washer (#6), 7.96mm OD, 2.8mm ID, 0.89mm thick, used with Item 82	5310-01-520-7812	90107A007
85	Machine screw (6-32 x <sup>1</sup> / <sub>2</sub> -in cross-tip), supports PSU controller CCA spacer block	5305-01-530-2631	91400A148
86	Lock washer (#6), 5.15mm OD, 2.8mm ID, 0.7mm thick, used with Item 85	5310-01-525-0623	92147A420
87	Flat washer (#6), 7.96mm OD, 2.8mm ID, 0.89mm thick, used with Item 85	5310-01-520-7812	90107A007
88	Loop clamp, <sup>3</sup> / <sub>4</sub> -in diameter	X	7572K16
89	Loop clamp, 1/2-in diameter		7572K14
90	Machine screw (6-32 x <sup>1</sup> / <sub>2</sub> -in cross-tip), supports the PSU Controller CCA spacer block, used with Items 88 and 89	5305-01-530-2631	91400A148
91	Lock washer (#6), 5.15mm OD, 2.8mm ID, 0.7mm thick, used with Item 90	5310-01-525-0623	92147A420
92	Flat washer (#6), 7.96mm OD, 2.8mm ID, 0.89mm thick, used with Item 90	5310-01-520-7812	90107A007
93	Threaded spacing standoff (hex female standoff, 6-32)		91115A133
94	Automatic data processing interface unit (8-Port industrial ethernet switch with wiring block and bracket)	7025-01-629-8144	0102-1580-01
95	Nut (1/4-in), used with Item 94	5310-01-601-4367	90715A005
96	Flat washer (#4), used with Item 95	5310-01-011-8112	92141A005
Items 97-101 and 104-108 are a part of Item 71			
97	Special purpose electrical cable assembly (TX output cable assembly from modem)	5995-01-640-8826	0056-1200-06
98	Special purpose electrical cable assembly (RX output/monitor cable assembly from modem)	5995-01-640-8928	0056-1512-00
99	Special purpose electrical cable assembly (RX input cable assembly from modem)	5995-01-640-8892	0056-1200-07

	case (continued)		
Item	Description	NSN	PN
100	Electrical plug connector (TNC connector, crimp-crimp to RG-59)	5935-01-655-5576	71-31126
101	Electrical plug connector (N-male crimp, for LMR-240)	5935-01-654-7688	71-36421
102	Special purpose electrical cable assembly (Control unit antenna cable for handheld device)		10-00291
103	Electrical receptacle connector (TracStar bulkhead coupler, RJ-12 keystone coupler)		03673
104	Special purpose electrical cable assembly (Console ethernet cable, 1-ft)		TRP925J
105	Connector adapter (RJ-45 coupler), enables connection for console cable (Item 95) to special purpose electrical cable assembly (J9 control cable assembly, NSN 5995-01-640-7819 for IDU)	x x	TRPA1F2
106	Special purpose electrical cable assembly (LAN B ethernet cable, 24-in), connects from modem LAN B port to port 2 of the 8-port switch		LANB
107	Connector adapter (right angle cable attachment at 90 degrees, F-type, female to male) Note: Connector adapters are optional with 8-port switch, NSN 7025-01-629-8144		70032175
108	Electrical plug connector (50 Ohm F-male connector)		71-FPC4F
	Items 109-135 are a part o	of Item 4	
109	Panel screw assembly (Clip Nuts captive fasteners)		47-62-534-10
110	Electrical connector cover (#20 metal dust cap for receptacle J9)	х	71-8120CA
111	Electrical connector cover (#12 metal dust cap for receptacle J10)		71-8112CA
112	Special purpose electrical cable assembly (J9), control cable assembly located inside IDU that connects to PSU CCA and IDU rear panel	5995-01-640-7819	0102-1700-02
113	Electrical receptacle connector (J10), AC connector for rear panel	5935-01-640-8799	0056-1700-01
114	Machine screw (#4x40, 1/4-in cross-tip), used with Items 112 and 113	5305-01-476-8130	91771A106

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### The Indoor Equipment Unit/Case (end)

Item	Description	NSN	PN
115	Flat washer (#4), used with Items 112 and 113	5310-01-011-8112	92141A005
116	Self-locking hexagon nut (1/4-in), used with Items 112 and 113	5310-01-601-4367	90715A005
117	Circuit breaker	5925-01-640-8268	250-30020
118	Screw (6-32 x $^{1}/_{4}$ -in), used with Item 117		90825A140
119	Dust and moisture seal boot (flexible boot that covers the circuit breaker)		250-00245
120	Electrical connector cover (dust cover for RJ-45)		71-70300
121	Switch guard (for circuit breaker)		25-48210
122	Electronic equipment air cooler (fan assembly, all four fans)	5999-01-640-8156	0056-1700-fan
123	Electronic equipment air cooler (sealed single fan)	5999-01-640-8251	79-00113
124	Fan impeller guard (plastic fan guard), hold the filter (Item 126) in place	4140-01-640-9672	79-00F60
125	Fan impeller guard (metal fan guard) Note: Used only on intake fans	4140-01-640-9685	20-30188
126	Electrostatic air filter (low-loft polyester fan filter) Note: Used only on intake fans	4460-01-640-9701	0056-0210-00
127	Machine screw (8-32 x 1.5-in cross-tip), used with Items 122 and 123	5305-00-054-6676	91400A203
128	Self-locking hexagon nut, used with Items 123 and 127	5310-01-560-7537	90715A007
129	Flat washer (#6), used with Items 123 and 127	5310-01-520-7812	90107A007
130	Sleeve spacer (stainless steel, unthreaded spacer, 0.75-in long, 0.18-in OD, 0.130-in ID), used with Items 123 and 127		92320A024
131	Screw assembly (10-32 x $^{3}/_{4}$ -in), contains cross-tip screw and flat washer		RA6205-50W
132	Electrical receptacle connector (RJ-45 receptacle/port), includes lock nut		71-JP1F5
133	Butt hinge (door piano hinge)		25-04849
134	Self-locking hexagon nut (6-32 <sup>5</sup> / <sub>16</sub> -in), used with Item 133		90715A007
135	Flat washer (#6), used with Item 134	5310-01-520-7812	90107A007

### **RF Equipment Case**

Item	Description	NSN	PN		
1	Antenna case (RF equipment case with components)	5985-01-659-1265	0102-3000-10T		
	RF equipment case consists of:				
2	Antenna case (RF equipment case only), refer to Items 16-19 for parts breakdown		0102-3500-01T		
3	Electrical power cable assembly (power cable assembly with yellow GFCI)	6150-01-628-3571	0056-1010-00		
4	Electrical connector cover (#12 metal dust cap)		71-8012CA		
5	Telephone set (7811G phone bundle), refer to indoor equipment unit/case, Items 16-25	5805-01-661-1551	02-2856212-1		
	Note: PNs 0102-0800-05T and 0102-0800-04T, v complete feed horn assembly, except for the LN	when combined, con Bs which are listed s	nprise a eparately		
6	Antenna subassembly (1296 carbon fiber system feed assembly), comprised of feed assembly shell with BUC and LNB quick-disconnects and windows, refer to reflector case for parts breakdown	5985-01-629-9184	0102-0800-05T		
7	Electronic frequency converter (6-watt BUC assembly, Ku-band, tan), includes quick-disconnect, waveguide window, 4 screws and 1 O-ring, also listed in reflector case (Item 19)	5895-01-629-7500	0102-0800-04T		
8	Magnetic compass-inclinometer		65-80011		
9	Radio frequency amplifier (#1 low noise blockdown (LNB) converter assembly, European, tan), includes quick- disconnect and waveguide window, also listed in reflector case (Items 13-15)	5996-01-629-4634	0102-3337-01T		
10	Label ("1")		87-03001		
11	Radio frequency amplifier (#21 low noise blockdown (LNB) converter assembly, CONUS, tan), includes quick- disconnect and waveguide window, also listed in reflector case (Items 13-15)	5996-01-629-4855	0102-3335-01T		
12	Label ("2")		87-03002		
13	Radio frequency amplifier (#3 low noise blockdown (LNB) converter assembly, INTELSAT, tan), includes quick- disconnect and waveguide window, also listed in reflector case (Items 13-15)	5996-01-629-5343	0102-3336-01T		

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### **RF Equipment Case (continued)**

Item	Description	NSN	PN	
14	Label ("3")		87-03003	
15	Cable assembly and reel (IFL cable assembly with cable and reel), refer to Items 20-23 for parts breakdown	5995-01-629-0120	0102-3100-01	
	Items 16-19 are a part of	Item 2		
16	System pressure regulating valve (pressure relief valve)		70-30000	
17	Lock-release lever (case latch)		20-02559	
18	Label ("RF EQUIPMENT"), black letters		87-03010	
19	Solid nonmetallic wheel (2-in replacement wheel assembly for RF equipment case), assembly supports only one wheel		90-50123	
	Items 20-23 are part of Item 15			
20	Special purpose cable assembly (IFL cable assembly, cable only)	5995-01-629-5341	0102-3200-01	
21	Elastic cord assembly (bungee cord)		19-BUNGE	
22	Cable reel, does not include IFL cable assembly	8130-01-630-0899	77-R380S	
23	Manual control handle		73-0702180100	

### **Special Tools**

Item	Description	NSN	PN
1	Electronic level (digital inclinometer)	5210-01-550-7444	92346
2	Special purpose cable (GPS configuration cable assembly), used to configure GPS assembly (Pedestal Case Item 30)	5995-01-656-9183	0056-2160-00
3	Special purpose electrical cable assembly (USB to serial adapter cable), used with Item 2 if laptop performing configuration does not have a serial port	6150-01-558-7214	BPMI07-5044-01
4	Spanner wrench (Lumberg), used for install/service on Lumberg plugs/connectors for the direction finder set (Reflector Case Item 44)	5120-01-657-9893	90-20380

YOU CAN ALSO FIND A **COMPLETE LIST** OF COMPONENTS THAT HAVE NSNS IN THE CSS VSAT'S TM 11-5895-1817-23&P AND ON THE PL DWTS WEBSITE:

https://peoeis.kc.army.mil/csscomms

AT THE WEBSITE, CLICK ON COMBAT SERVICE SUPPORT (CSS)

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AND THEN NAVIGATE TO THE AREA YOU NEED.

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TO ACCESS THE COMMUNICATION BULLETIN, CLICK ON MAINTENANCE ACTION MESSAGE (MAM), THEN SCROLL DOWN AND CLICK ON CSS VSAT COMMUNICATION BULLETIN.

TO TURN IN UNSERVICEABLE EQUIPMENT, COORDINATE WITH YOUR LOCAL SUSTAINMENT AUTOMATION SUPPORT MANAGEMENT OFFICE (SASMO), LOG-TI LARS AND 94F COMMUNICATIONS AND ELECTRONICS (C&E) SHOPS FOR FIELD-LEVEL MAINTENANCE SUPPORT.

UNSERVICEABLE LRUS SHOULD BE DISPOSED OF ACCORDING TO ITS' SMR AND PEMIL COPES.

### **NEED MORE HELP?**

FOR HARDWARE QUESTIONS, CONTACT CECOM ITEM MANAGER, VIRNA SCOTT, AT (443) 395-1183 OR EMAIL:

virna.scott.civ@mail.mil

OR CONTACT CECOM ILS MANAGER, TRUONG LE, (ALSO POC FOR FSRS AND LARS), AT (443) 395-1188 OR EMAIL: truong.n.le.civ@mail.mii

FOR CSS VSAT 1.2M-E QUESTIONS (OTHER THAN REQUISITIONING COMPONENTS OR SYSTEMS), CONTACT RUBY HANCOCK AT (703) 806-8483 OR EMAIL:

ruby.p.hancock.civ@mail.mil

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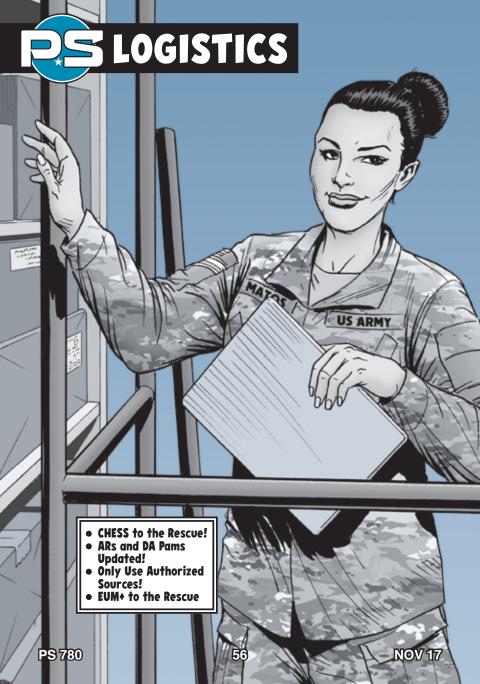
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NOTE: THE REMAINDER OF THIS ARTICLE WILL CONTINUE IN PS 781 (DEC 17).



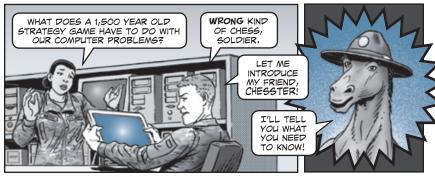
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# ARS and DA Pams UPDATED!





WHEN IT COMES TO UNIFORMITY AND GETTING THINGS DONE, ARMY REGULATIONS KEEP YOU ON THE STRAIGHT AND NARROW! NEW AND REVISED REGULATIONS AND PUBLICATIONS HAVE BEEN POSTED ON THE APP WEBSITE. TO POWNLOAD, GO TO: http://armypubs.army.mil

USE THE SEARCH FUNCTION TO LOOK FOR NEW AND UPDATED REGULATIONS AND DA PAMS. MAKE SURE YOU ENTER EITHER AR OR PAM BEFORE THE PUBLICATION NUMBER IN THE SEARCH ENGINE. HERE'S A LIST OF WHAT'S NEW:

- AR 11-7, Internal Review Program (29 Mar 17)
- AR 59-3, Movement of Cargo by Scheduled Military Air Transportation (23 Mar 17)
- AR 115-13, Installation Geospatial Information and Services (24 Mar 17)
- AR 135-32. Retention in an Active Status After Qualification for Retired Pay (27 Mar 17)
- AR 385-10, The Army Safety Program (24 Feb 17)
- AR 600-86, Army Disaster Personnel Accountability and Assessment Program (28 Feb 17)
- AR 640-30. Official Army Photographs (29 Mar 17)
- AR 700-4, Logistics Assistance (23 Mar 17)
- AR 700-37, Packaging of Army Materiel (23 Mar 17)
- AR 700-137, Logistics Civil Augmentation Program (23 Mar 17)
- AR 715-9, Operational Contract Support Planning and Management (24 Mar 17)
- AR 740-26. Physical Inventory Control (23 Mar 17)
- DA PAM 672-1, Unit Citation and Campaign Participation Credit Register (24 Mar 17)
- DA PAM 672-3, Unit Citation and Campaign Participation Credit Register, January 1960-February 1986 (24 Mar 17)
- DA PAM 710-7, Hazardous Material Management Program (23 Mar 17)



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### Only Use Authorized Sources!





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DON'T BUY

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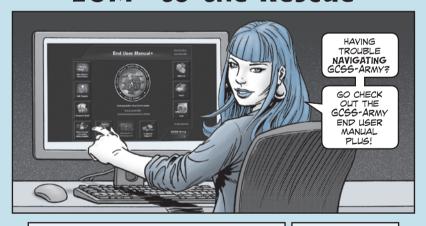
IF YOU HAVE ANY GEAR FROM AN UNAPPROVED SOURCE, STOP USING IT IMMEDIATELY. GO TO YOUR UNIT SUPPLY ACTIVITY AND LET THEM GET YOU THE **RIGHT** EQUIPMENT FROM THE **RIGHT** PLACES.





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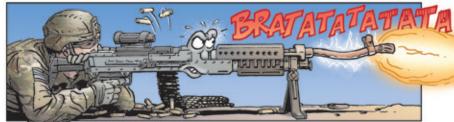
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