

Issue 760

PS

★
March
2016

THE PREVENTIVE MAINTENANCE MONTHLY

TB 43-PS-760

Approved for
Public Release;
Distribution is
Unlimited

Learn
how to
take care of
YOUR jacks.
See Pages
27-30!

WHOA,
BUDDY!
YOU'RE
LOOKING
A LITTLE
UNSTABLE
THERE!

YOU'D
BE SHAKY,
TOO, IF
YOU DIDN'T
GET ANY
PM!

**AIRCRAFT
ON
JACKS**

MAINTENANCE HAULIN'
with SMA Dailey and CSM Sims
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EDITORIAL

Maintenance Haulin' with SMA Dailey,
AMC CSM Sims



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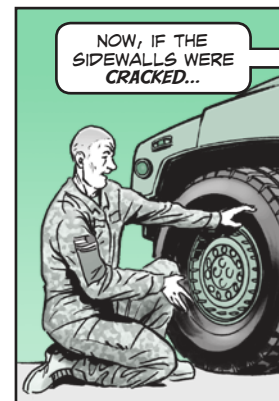
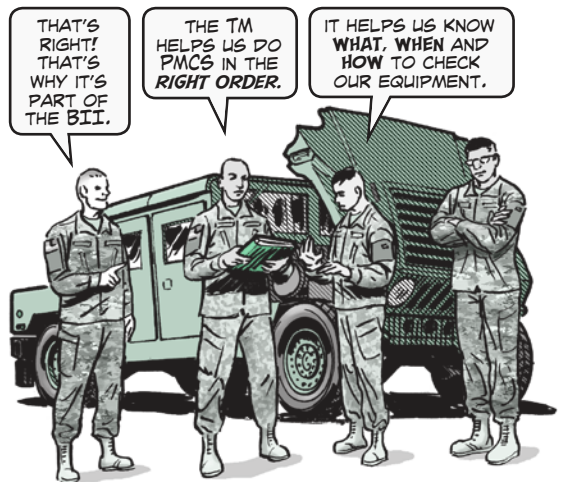
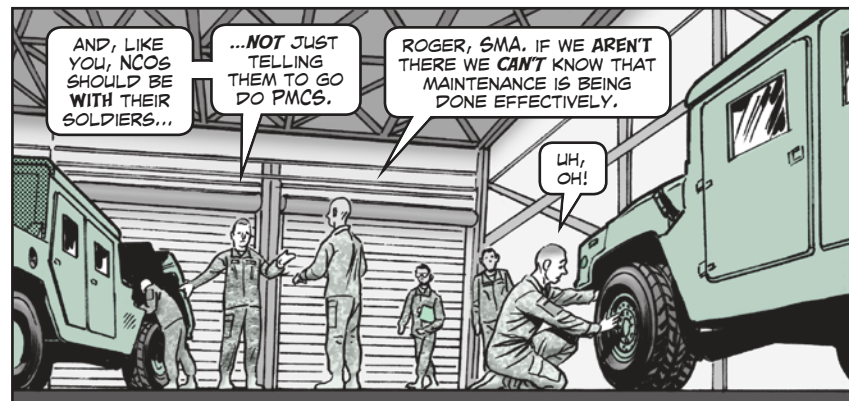
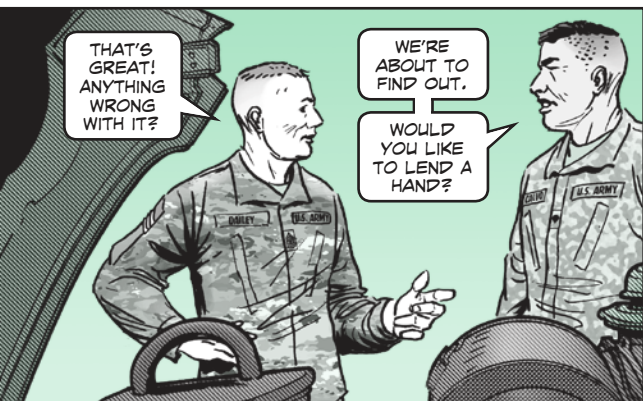
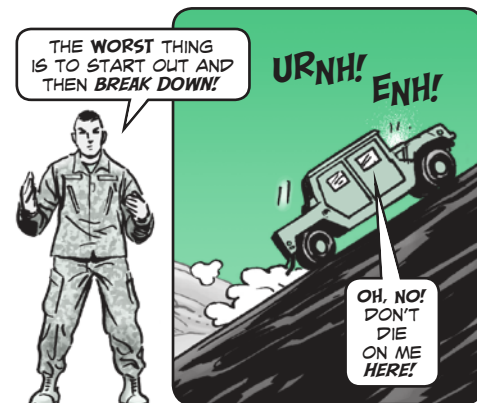
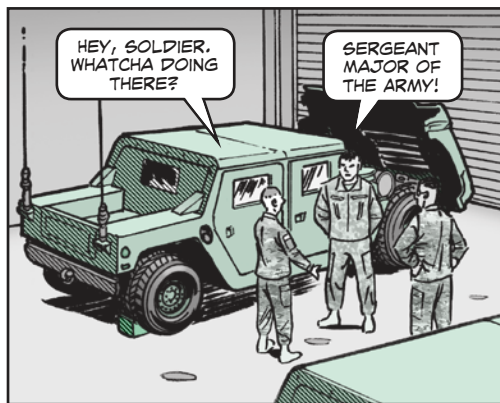
Administrative Assistant to the Secretary of the Army

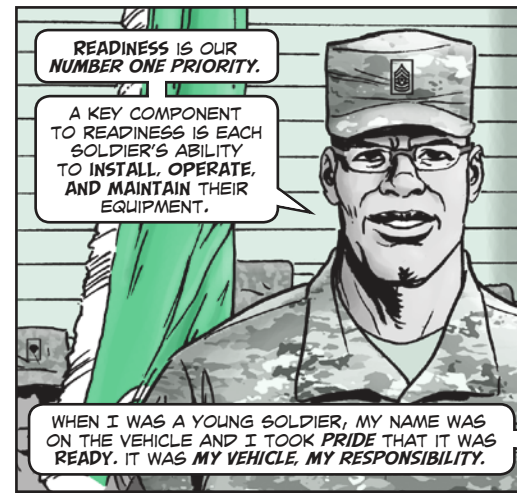
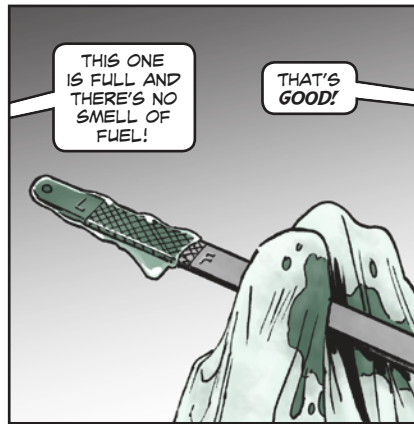
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MAINTENANCE HAULIN'







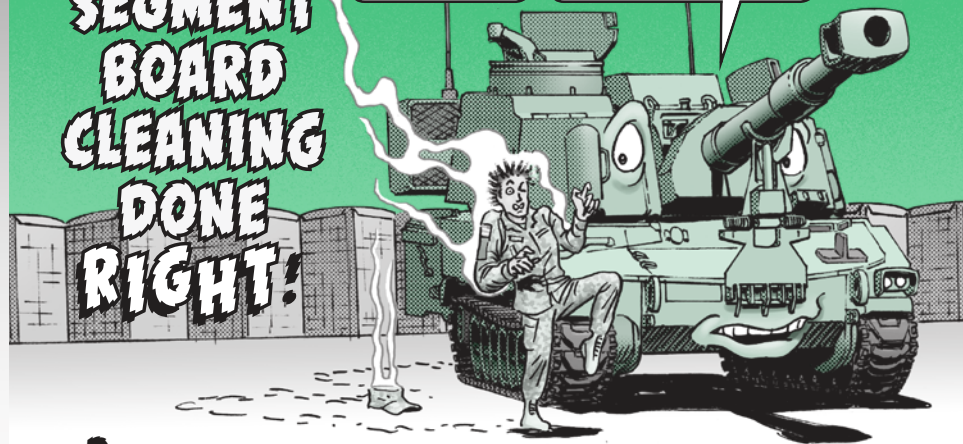


M109A6 Paladin...

SEGMENT BOARD CLEANING DONE RIGHT!

HOW MANY TIMES DO I GOT T'TELL YA?

YOU HAVE TO POWER ME DOWN **BEFORE** YOU CLEAN MY SEGMENT BOARD!

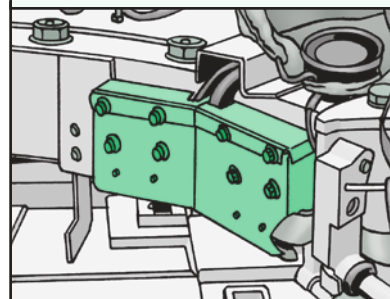


Dirt, sand, oil and condensation tend to collect on your Paladin's slip ring, crewmen. As the cab is traversed, that crud builds up on the segment board and shorts it out.

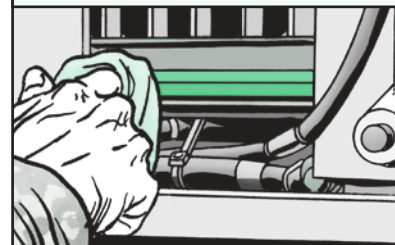
Things only get worse from there. A shorted segment board shuts down your ammo and the vehicle motion sensor. You'll also get navigation faults in the digital fire control system.

Keep your Paladin up and running by cleaning the segment board once a week just like it says in the -10 TM. Here's how:

1. Turn the vehicle master power switch to OFF.
2. Remove the cover plates over the segment board.



3. Soak a nylon scrub pad, NSN 7920-00-753-5242, with isopropyl alcohol, NSN 6810-01-190-2538, and clean the exposed portion of the board. Do not use denatured alcohol. It is too volatile and could result in a fire.



4. Wipe the scrubbed area of the board again with a clean cloth.
5. Manually traverse the cab enough to expose the next portion of the segment board and clean again.

Keep manually traversing until the entire board is clean. Watch out, though! Using power to traverse the cab will give anyone cleaning the segment board a big shock or even cause a fire!

Check out WP 0183 of TM 9-2350-314-10-2 (May 14) for the full scoop on cleaning your Paladin's segment board.

For more details, check out TACOM ground precautionary action message 15-013 on the TACOM-Unique Logistics Support Applications (TULSA) website:

<https://tulsa.tacom.army.mil/Safety/message.cfm?id=GPA15-013.html>

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

Questions? Contact Joshua Smrt at (586) 282-7312 or email:

joshua.a.smrt.civ@mail.mil

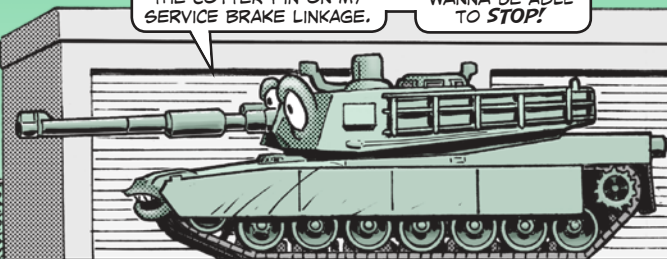
PS END

M1-Series Tanks... **PUT BRAKES ON COTTER PIN FAILURE**

READY TO GO FOR A LITTLE SPIN?

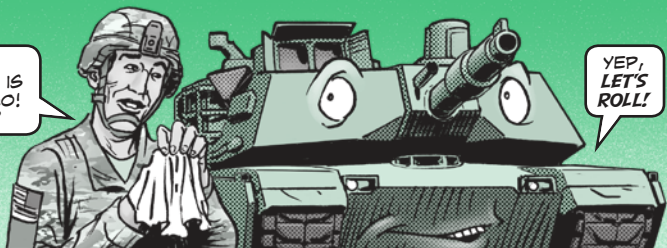
NOT UNTIL YOU CHECK THE COTTER PIN ON MY SERVICE BRAKE LINKAGE.

IF WE GO, I WANNA BE ABLE TO STOP!



LATER...

OK, THE COTTER PIN IS GOOD TO GO! ARE YOU?



YEP, LET'S ROLL!



CREWMEN, THE SERVICE BRAKES ON SOME M1-SERIES TANKS HAVE BEEN FAILING BECAUSE A VERY SMALL PART-A SIMPLE COTTER PIN-IS FALLING OUT.

THE COTTER PIN, NSN 5315-01-379-4226,



LOCKS THE CLEVIS PIN IN PLACE ON THE SERVICE BRAKE LINKAGE.

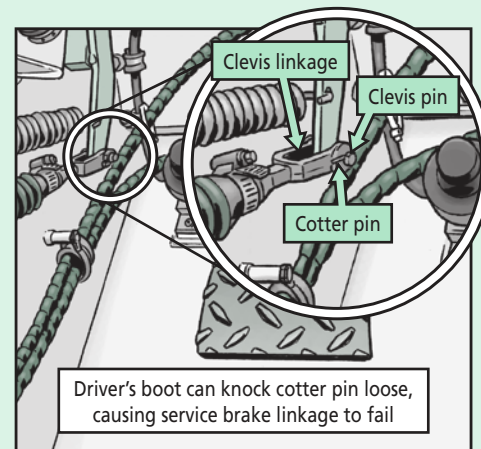
IF IT FALLS OUT, THE SERVICE BRAKE LINKAGE COMES APART. THAT CAN RESULT IN DAMAGED TANKS AND INJURED SOLDIERS!

THE PROBLEM IS THAT THE LINKAGE IS IN THE BOTTOM OF THE DRIVER'S COMPARTMENT RIGHT BESIDE THE SERVICE BRAKE PEDAL.

DRIVERS TEND TO RUB THEIR BOOTS AGAINST THE COTTER PIN, CAUSING IT TO FALL OUT.



AW, C'MON! IT'S NOT MY FAULT!



Driver's boot can knock cotter pin loose, causing service brake linkage to fail

THE QUICK FIX IS TO HAVE YOUR MECHANIC **REVERSE** THE DIRECTION OF THE CLEVIS PIN. WITH THE COTTER PIN ON THE **OTHER** SIDE, THE DRIVER'S BOOT ISN'T A PROBLEM.

MECHANICS, INSPECT **ALL** SERVICE BRAKE ASSEMBLIES **RIGHT AWAY**. AFTER REMOVING THE COTTER PIN AND WASHER, REMOVE THE CLEVIS PIN FROM THE CLEVIS LINKAGE AND REINSERT THE CLEVIS PIN IN A RIGHT-TO-LEFT ORIENTATION.

BE SURE TO REINSTALL THE WASHER **AND** USE A **NEW** COTTER PIN.



WHEN YOU'RE DONE, THE FLAT HEAD OF THE CLEVIS PIN SHOULD BE FACING THE BRAKE PEDAL AND THE COTTER PIN SHOULD BE FACING THE HULL WALL.

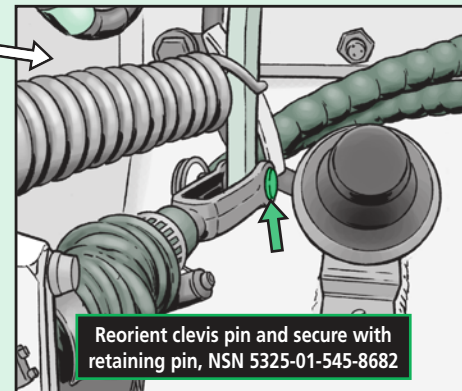
THEN FIX THE PROBLEM FOR GOOD BY ORDERING RETAINING RINGS, NSN 5325-01-545-8682, TO REPLACE THE COTTER PINS ON ALL YOUR UNIT'S M1-SERIES TANKS.

CHECK OUT THE DETAILS IN TACOM GROUND PRECAUTIONARY ACTION MESSAGE 15-003.

YOU'LL FIND IT ON THE TACOM-UNIQUE LOGISTICS SUPPORT APPLICATIONS (TULSA) WEBSITE:

<https://tulsa.tacom.army.mil/Safety/message.cfm?id=GPA15-003.html>

YOU'LL NEED YOUR CAC. FIRST-TIME USERS MUST REQUEST ACCESS.



Reorient clevis pin and secure with retaining pin, NSN 5325-01-545-8682

QUESTIONS?? CONTACT MICHAEL HENDRICKSON, DSN 282-2463, (586) 282-2463 OR EMAIL: michael.s.hendrickson.civ@mail.mil

GIVE SOLDIERS A BREAK WITH LONGER REACH!

HEY!

HEY, BUDDY!

HOW 'BOUT A SLAVE START OVER HERE?

HOW AM I S'POSED TO REACH YOU WAY OVER THERE?

SOMETIMES ALL IT TAKES IS A LITTLE EXTRA REACH TO SLAVE START A DEAD VEHICLE.

SO WHEN A SINGLE NATO SLAVE CABLE FALLS SHORT, WHAT'S A SOLDIER TO DO?

GOOD NEWS!

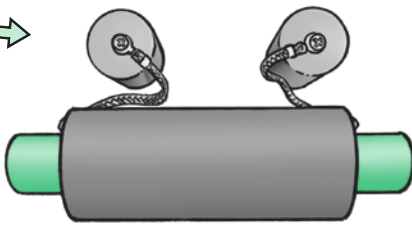
A NEW EXTENSION ADAPTER, NSN 6625-01-647-6380, IS NOW AVAILABLE.

IT LETS YOU CONNECT TWO SLAVE CABLES TOGETHER, **DOUBLING** THE REACH.

THAT'S A GREAT HELP WHEN VEHICLES ARE TOO FAR APART TO REACH WITH A SINGLE CABLE.

AND EVEN IF THE VEHICLES ARE CLOSE ENOUGH, A LITTLE EXTRA ROOM CAN COME IN HANDY. USING A SINGLE CABLE CAN BE A SAFETY ISSUE IF A VEHICLE JERKS SUDDENLY. IF THAT HAPPENS, YOU COULD GET CRUSHED BETWEEN THE TWO VEHICLES!

THE NEW EXTENSION ADAPTER GIVES YOU THE SPACE NEEDED TO GET THE JOB DONE SAFELY.



Join two slave cables with connector extension

New M51 Hose Disconnect

WHADDAYA MEAN YOU *STILL* HAVE THE OLD NBC QUICK DISCONNECT? THE NEW M51 MASK NEEDS A **NEW DISCONNECT!**

TELL THAT TO MY CREW!

Crewmen, if your Bradley is still equipped with the NBC quick disconnect for the M42 protective mask, you'll need to get it ready for the newly-fielded M51 protective mask.

That means replacing the NBC heater hose's current quick connect adapter, NSN 4240-01-486-7210, with a new style quick disconnect coupling half, NSN 4730-00-935-1643. You'll also need to install a new hose clamp, NSN 4730-00-541-8297.

You'll find information on removing the old parts and installing the new ones in TM 9-2350-408-13&P in IETM EM 0356 (Apr 15).

Be sure to order enough parts for the vehicle commander, gunner and driver positions. The dismount stations will get a retrofit at a later date.

Get the parts at no charge by contacting Brianne Woodell with the Armored Brigade Combat Team at DSN 786-2448, (586) 282 2448, email: brianne.m.woodell.civ@mail.mil

M51 protective masks requires new quick disconnect coupling half, NSN 4730-00-935-1643, and hose clamp, NSN 4730-00-541-8297

For more details, check out TACOM maintenance action message 15-039 on the TACOM-Unique Logistics Support Applications (TULSA) website:

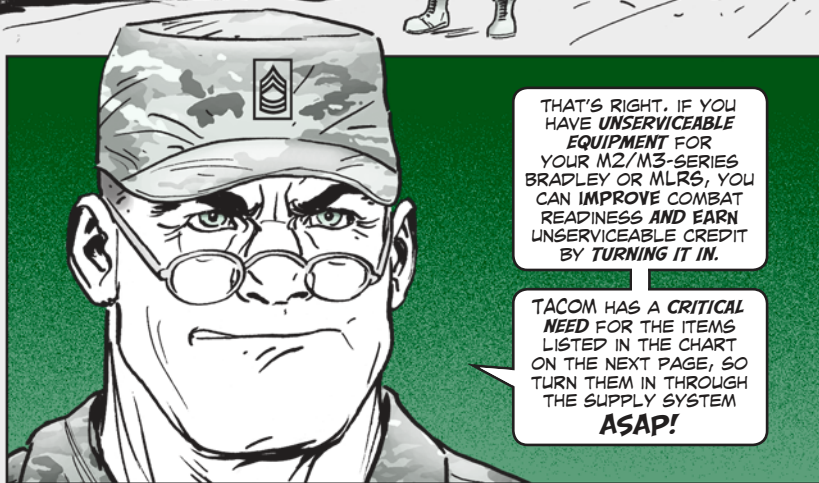
<https://tulsa.tacom.army.mil/Maintenance/message.cfm?id=MA15-039.html>

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

UNSERVICEABLE EQUIPMENT NEEDED **NOW!**

UNITS, BE SURE TO CHECK FOR UNSERVICEABLE ITEMS **RIGHT AWAY!**

YOU'LL GET TURN-IN CREDIT **AND** INCREASE YOUR COMBAT READINESS.



THAT'S RIGHT. IF YOU HAVE **UNSERVICEABLE EQUIPMENT** FOR YOUR M2/M3-SERIES BRADLEY OR MLRS, YOU CAN **IMPROVE** COMBAT READINESS **AND** EARN UNSERVICEABLE CREDIT BY **TURNING IT IN.**

TACOM HAS A **CRITICAL NEED** FOR THE ITEMS LISTED IN THE CHART ON THE NEXT PAGE, SO TURN THEM IN THROUGH THE SUPPLY SYSTEM **ASAP!**

FOR MORE INFO, CHECK OUT TACOM MAINTENANCE INFORMATION MESSAGE 15-037 ON THE TACOM-UNIQUE LOGISTICS SUPPORT APPLICATIONS (TULSA) WEBSITE:
<https://tulsa.tacom.army.mil/Maintenance/message.cfm?id=M115-037.html>
 YOU'LL NEED YOUR CAC AND FIRST-TIME USERS MUST FIRST REQUEST ACCESS.

TURN THESE ITEMS IN THROUGH THE SUPPLY SYSTEM **ASAP.**

IT'S CRITICAL YOU **TURN IN** THESE CRITICAL ITEMS!



Item	NSN	Unserviceable credit
Electrical control box	1005-015-98-4399	\$12,107
Electrical control box	1005-015-98-4401	\$6,646
Turret power box	6110-015-98-7674	\$18,668
Power control module	6110-015-98-7677	\$9,388
Communication control panel	5895-015-98-7687	\$8,646
Gunnery control panel	5895-015-98-7688	\$5,831
Wired housing assembly	5855-015-88-5668	\$28,090
Fire extinguisher	4210-015-03-1522	N/A
Solid rubber wheel	2530-011-02-4713	\$56.28
Solid rubber wheel	2530-011-02-4714	\$262
Fuel injector assembly	2910-013-33-3648	N/A
Distribution box	6110-013-39-2031	\$2,887
Display assembly	5895-015-35-3047	\$33,467
Fire extinguisher	4210-014-63-0807	N/A
Friction clutch assembly	3010-014-63-7157	\$2,173
Interface assembly	2520-014-69-8749	\$7,553
Fuel pump	2910-013-84-5304	\$1,628
Hull power box	6110-014-78-2381	\$1,658
Crankshaft kit	2815-015-49-5577	\$1,605
Direct current generator	6115-015-62-6264	\$6,828
Fuel pump	2910-015-14-7372	\$1,046
Electronic components assembly	5998-015-58-3563	\$8,585
Circuit card assembly	5998-015-71-1959	\$4,728
Power supply	6130-015-80-0138	\$35,383
Electrical cable and conduit assembly	6150-015-46-3025	\$5,183
Lift gearbox assembly	1005-011-13-3762	\$9,154
Circuit card assembly	5998-013-80-0284	\$818
Gun mount	1005-012-67-8103	\$585
Fire extinguisher	4210-015-65-9982	\$1,321
Fire extinguisher	4210-015-66-2417	\$1,099
Direct current motor	6105-014-62-7177	\$2,832
Control power module	6110-015-98-7684	\$7,957
Distribution box	6110-014-63-3913	\$21,660
Transmission power takeoff	2520-014-63-5441	\$18,442
Circuit card assembly	5998-014-94-8760	N/A

PS TACTICAL VEHICLES

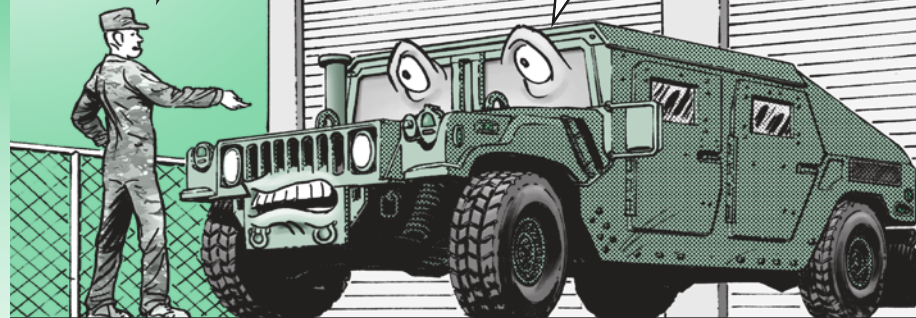


New HMMWV Fuel Pumps Available

LOOKS LIKE YOU'RE GOING TO NEED A **NEW FUEL PUMP**. I'M GONNA ORDER YOU ONE OF THOSE NEWLY **REDESIGNED** ONES.

YOU'RE NOT SUPPOSED TO USE **THOSE NSNs** UNTIL **AFTER JANUARY 2017**.

USE THE OLD NSN... AND I MIGHT STILL GET ONE OF THE IMPROVED PUMPS!



NEWLY REDESIGNED FUEL PUMPS ARE AVAILABLE FOR YOUR HMMWV. THE NEW FUEL PUMPS HAVE THE **SAME FORM, FIT AND FUNCTION** AS THE OLD PUMPS, BUT ARE **MORE RELIABLE**.

TACOM IS ROLLING TOGETHER THE STOCK FOR THE OLD AND NEW PUMPS.

FROM NOW THROUGH JANUARY 2017



TO MAKE SURE YOU GET A REPLACEMENT **QUICKLY**, USE THE OLD NSNs THROUGH JANUARY 2017, EVEN THOUGH THE AAC IS V (TERMINAL ITEM).

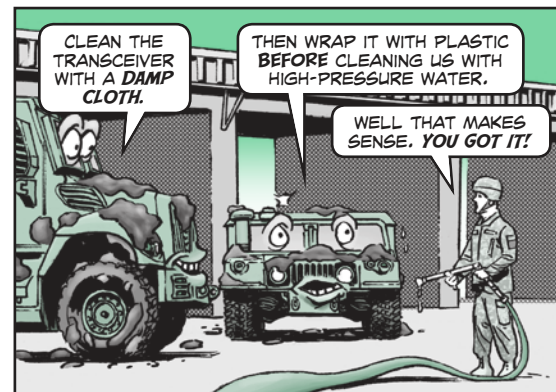
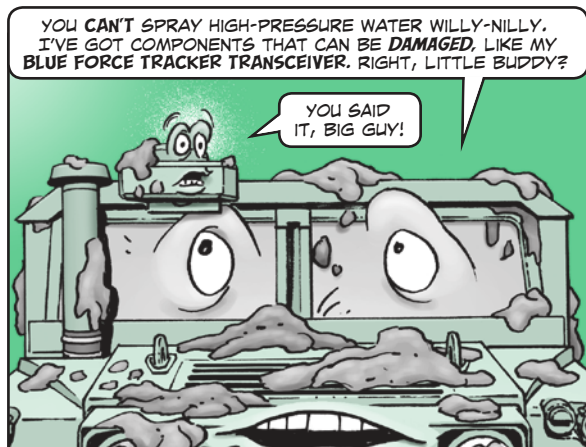
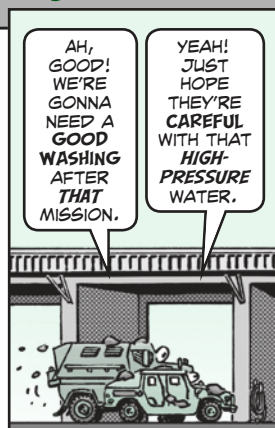
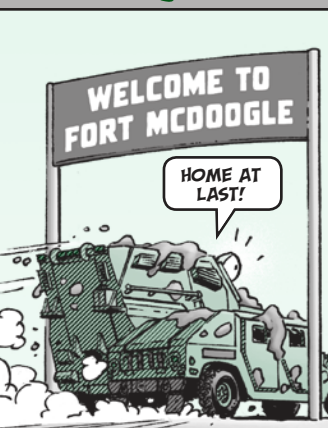
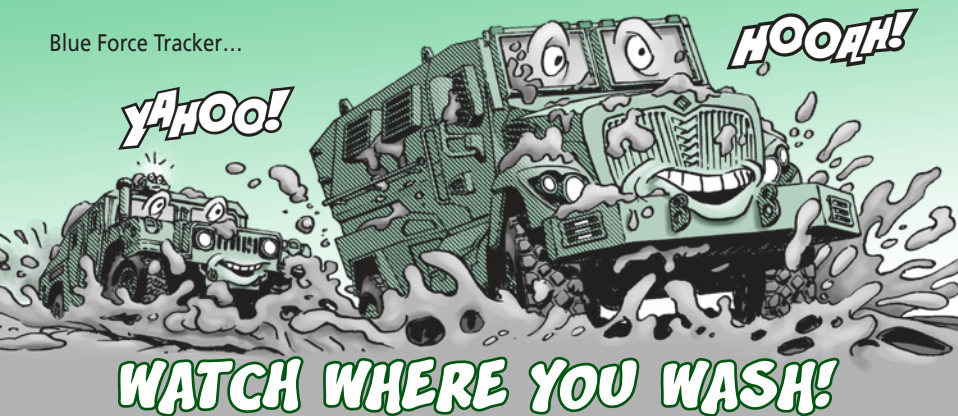
YOU MAY GET EITHER THE OLD OR NEW PUMP, DEPENDING ON WHICH MODEL IS IN STOCK AT THE TIME.

FEBRUARY 2017 AND BEYOND!

AFTER JANUARY 2017, THE NEW NSNs WILL BE IN EFFECT AND **ALL** ORDERS WILL GET THE **IMPROVED** FUEL PUMPS. USE THIS TABLE TO **MATCH** THE OLD AND NEW NSNs...

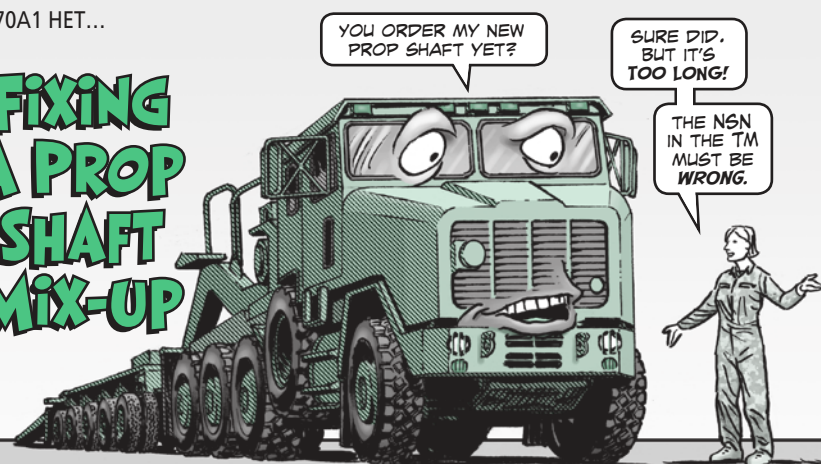
Engine type	Old NSN, 2910-	New NSN, 2910-
6.2L clean burn engine	01-326-9221	01-641-0007
6.5L turbo engine	01-434-8597	01-641-0042
6.5L naturally aspirated engine	01-414-1272	01-633-7271
6.5L detuned engine	01-467-9029	01-633-7261





M1070A1 HET...

Fixing A PROP SHAFT Mix-UP



Dear Editor,

We found a mix-up with two NSNs for the M1070A1 HET's propeller shafts shown as Item 4 in Figs 113 and 114 of TM 9-2320-427-13&P in IETM EM 0310 (Jan 11).

The TM has the NSNs transposed between the two figures. The axle two to axle three propeller shaft, shown as Item 4 of Figure 113, should be NSN 2520-01-578-5910. The axle three to axle four propeller shaft, shown as Item 4 in Fig 114, comes with NSN 2520-01-578-5887.

Matthew Watkins
Product Specialist
Defense Supply Center
Columbus, OH

Editor's note: Getting the right prop shaft is important stuff. Thanks for the update!

Up-armored HMMWVs...

GO FIRST CLASS WITH RIGHT GLASS

THE DELAMINATION ON MY WINDSHIELD IS GETTING PRETTY BAD. MAYBE WE OUGHTA REPLACE IT.

HOPE I CAN FIND THE RIGHT NSN. THERE ARE SO MANY TYPES OF GLASS AVAILABLE.



WHEN IT'S TIME TO REPLACE YOUR HMMWV'S WINDSHIELD OR DOOR GLASS, YOU WANT TO MAKE THE RIGHT CHOICE. AND THE NUMBER OF OPTIONS IS PRETTY BIG!

FOR WINDSHIELDS, THE CHOICE IS BETWEEN WINDSHIELD, HEATED WINDSHIELD, OR THE IMPROVED VEHICLE EMERGENCY EGRESS (IVEE) WINDSHIELD. ORDER THE RIGHT ONE THE FIRST TIME BY USING THIS TABLE...

Windshield Glass

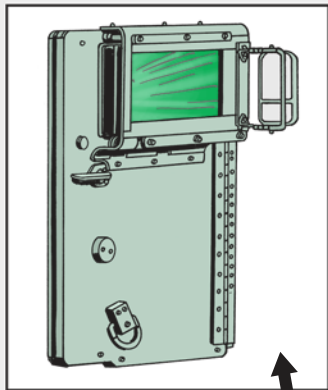
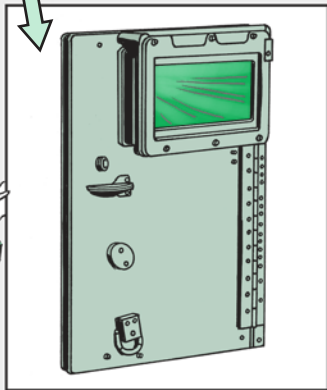
HMMWV Model	Type of windshield	Left hand, NSN 2510-	Right hand, NSN 2510-	Kit NSN
M1114	Windshield	01-435-9690	01-435-9693	N/A
	Heated windshield	01-435-9690	01-435-9693	N/A
	IVEE windshield	01-552-0620	01-552-0624	2510-01-552-0617
M1151A1	Windshield	01-535-6001	01-535-6000	N/A
	Heated windshield	01-560-1159	01-561-2540	2540-01-558-7677
	IVEE windshield	01-560-7677	01-560-7680	2510-01-560-7672
M1152A1	Windshield	01-535-6001	01-535-6000	N/A
	Heated windshield	01-560-1159	01-561-2540	2540-01-558-7677
	IVEE windshield	01-560-7677	01-560-7680	2510-01-560-7672
M1165A1	Windshield	01-535-6001	01-535-6000	N/A
	Heated windshield	01-560-1159	01-561-2540	2540-01-558-7677
	IVEE windshield	01-560-7677	01-560-7680	2510-01-560-7672
M1167	Windshield	01-535-6001	01-535-6000	N/A
	Heated windshield	01-560-1159	01-561-2540	2540-01-558-7677
	IVEE windshield	01-560-7677	01-560-7680	2510-01-560-7672

NEXT UP IS DOOR GLASS.
WHAT YOU ORDER DEPENDS ON YOUR VEHICLE'S ARMOR TYPE, AND YOU CAN ORDER JUST THE GLASS ALONE OR AN ASSEMBLY THAT INCLUDES THE FRAME AND GLASS.
HERE'S WHAT'S AVAILABLE...



B-Kit Door Glass

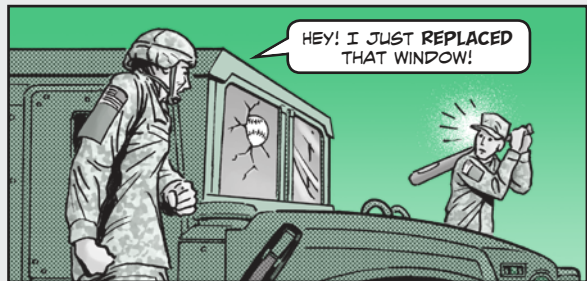
Vehicle	Glass only (front and rear, both sides)	Assembly (left front and rear)	Assembly (right front and rear)
M1151A1	2510-01-581-2107	2510-01-581-4181	2510-01-581-4183
M1152A1			
M1165A1			
M1167			



Frag 5 Kit Door Glass

Vehicle	Glass only (front and rear, both sides)	Assembly (left front and rear)	Assembly (right front and rear)
M1151A1	2510-01-563-8322	2510-01-545-5898	2510-01-545-5899
M1152A1			
M1165A1			
M1167			

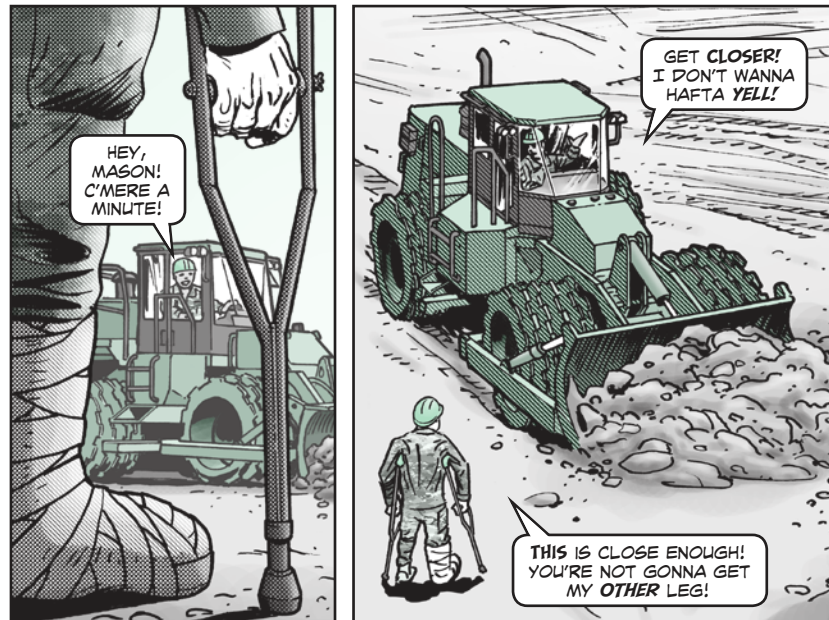
FOR M1114S WITH THE FRAG 5 KIT, THE DOOR WINDOWS COME WITH NSN 2510-01-545-5856. THERE IS NO DOOR ASSEMBLY NSN.





815F
Compactor...

STEERING WHEEL CAN MAKE YOU SQUEAL!



Operators, the compactor's articulated steering system moves the vehicle's front chassis from side-to-side—all with the touch of a hand. It only takes a second to happen.

That's not a problem unless one of your buddies comes over to talk while the engine's running. When you lean over to listen, your right arm or leg can press against the steering wheel. Your buddy can get crushed or knocked off his feet by the tampering tips on the wheel assemblies.

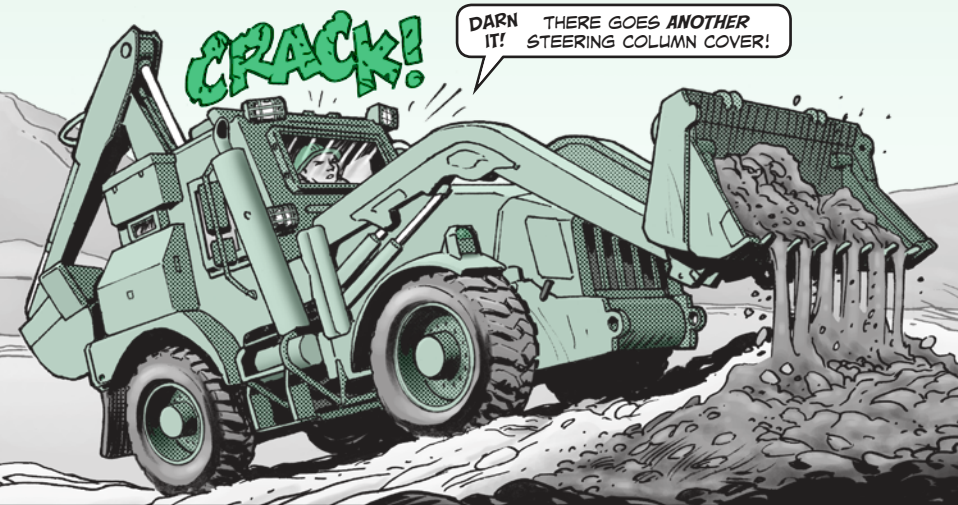
So play it safe. If the compactor's not in operation, tilt the steering column forward to keep it out of the way.

WHEN YOU CLIMB IN OR OUT OF THE VEHICLE, MAKE SURE YOU USE THE **HANDHOLDS** ALONG THE CAB'S STRUCTURE.

THE STEERING WHEEL IS **NOT** FOR HOISTING YOURSELF INTO THE CAB.



BHL... TURN SIGNAL MOUNT NEEDS REINFORCEMENTS

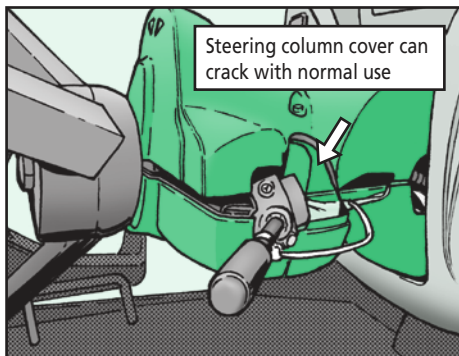


Dear Editor,

The backhoe loader (BHL) steering column cover is plastic and doesn't hold up well. It eventually breaks after using the turn signal arm a lot.

We've had to replace quite a few of the covers, NSNs 5340-01-546-6551 and 5340-01-545-7071, because of cracking. It doesn't take much time for the costs to mount up.

Here's a quick fix that we came up with to reinforce the cover and keep it working. First, you'll need the following items:



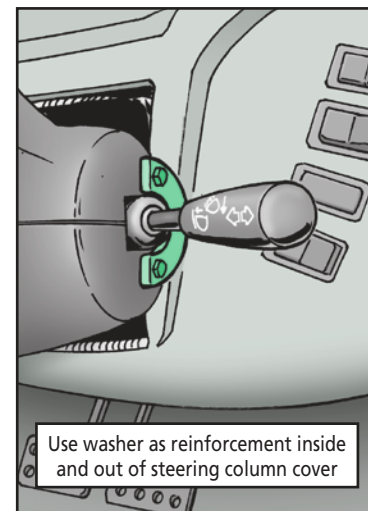
Item	NSN	Size	Qty Needed	NSN Qty
Flat washer	5310-00-579-2073	1 3/4-in OD x 1 1/16-in ID x 1/8-in thick	2	5-lb box
Shoulder bolt	5306-01-523-8995	M4 x 0.7 x 20mm	2	1 ea
Flat washer	5310-00-160-9817	7/16-in OD x 1/4-in ID x 3/64-in thick	2	1 ea

Here are the steps:

1. Cut one of the large washers in half and smooth out the edges.
2. Place the half-washer on top of another large washer and use the turn signal cover as a guide for drilling two 1/8-in holes through both washers.
3. Put the whole washer on the inside of the cover. The half-washer goes on the outside.
4. Line up the holes and install the two shoulder bolts and flat washers to hold the assembly together.

With the half and whole washer in place, the turn signal cover will last a lot longer.

Phillip Uptgraft
Paden Friend
TACOM FMX, Engr Spt
Ft Leonard Wood, MO



10K ATLAS Forklift Fuel Pressure Sender Banjo Bolt NSN

Get the 10K ATLAS forklift's MSD/ICE fuel pressure sender banjo bolt with NSN 5305-01-414-1415. Make a note until the NSN is added to TM 10-3930-673-24P.

M400T/W Skid Loader Auger

The auger, NSN 5360-01-566-4250, for the M400T/W compact skid loader is no longer available as a complete assembly. Instead, you'll need to order its two component parts: the hydraulic drive unit, NSN 3010-01-631-8818, and the housing, NSN 3820-01-631-8624. Make a note until Fig 75 of TM 5-3805-292-23P is updated.

M400W Skid-Steer Loader Door Switch

Get the cab door switch for your M400W skid-steer loader with NSN 5930-01-628-4872 (PN 392269A2). PN Z15GK355-MR-IM, which is listed as Item 33 in Fig 66 of TM 5-3805-292-23P (Mar 10), does not cross to an NSN.

No More Drip For EMS Alarm

WHAT'S UP WITH YOU?!

GURGLE GURGLE!*

* TRANSLATION: MY EMS FAULT ALARM IS FULLA WATER!

Dear Editor,

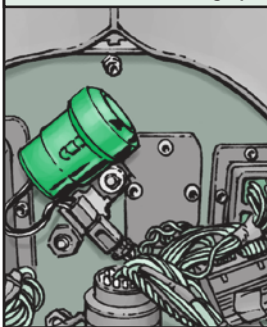
Mechanics need to eyeball the 120M road grader's electronic monitoring system (EMS) fault alarm behind the instrument panel on the front dash. The alarm is mounted with the horn/drain side facing up.

Condensation from the windshield and air conditioning vents drips into the alarm. When enough moisture builds up, the alarm's circuit board shorts out, shutting down the alarm.

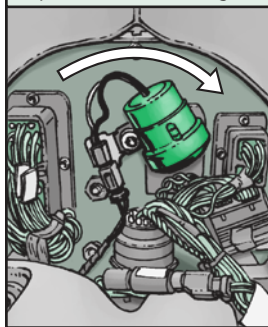
We've found that mounting the alarm with the horn/drain side facing down will keep it working. That position lets moisture drain so it can't build up in the alarm.

Robert Wilbur
Jason Wood
TACOM FMX
Ft Leonard Wood, MO

Condensation drips into EMS alarm when facing up



Turning alarm down prevents water damage



Editor's note: You guys deserve a pat on the back! This fix puts the buzz back in the road grader's EMS fault alarm.

DON'T Shun the Shims!

YE OUCH!

THOSE MOUNTING BOLTS ARE REALLY GOUGING MY CIRCLE ASSEMBLY.

SOME-BODY GET ME SOME SHIMS!

Dear Editor,

There are no specific checks for the 120M grader's drawbar assembly wear strips in either TM 5-3805-293-10 or TM 5-3805-293-23-3.

But we've noticed graders coming into our shop with the mounting bolts for the wear strip cover plate rubbing against the top of the circle assembly. Bolts that rub against the circle assembly make the assembly drag, causing unnecessary wear-and-tear during grading operations.

You'll know something is wrong if you see bolt marks on the top of the circle assembly.

If you see wear, have your mechanic shim the bolts so they don't rub against the drawbar circle. He'll follow the instructions in WP 0303 of TM 5-3805-293-23-5 to remove, clean, inspect, install and adjust the wear strips. Spare shims can be found in the tool box in front of the vehicle.

If you need extras, order the 0.25mm shim with NSN 5365-01-579-9236 and the 0.5mm shim with NSN 5365-01-579-9251.

Joe Wideman
Tommy Barks
TACOM FMX Engineer Support
Ft Leonard Wood, MO

Look for bolt wear marks on top of circle assembly



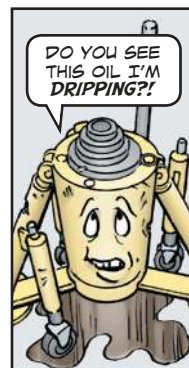
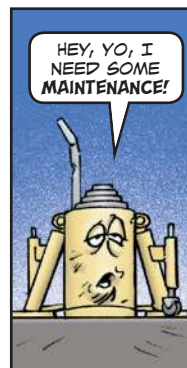
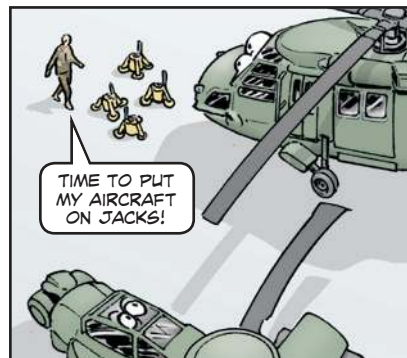
Editor's note: Excellent suggestion, gentlemen. Operators and mechanics, make a note of this inspection until it is added to the TMs.



AGSE...

MAINTAINING JACKS

YOU ALL LOOK JACKED UP. WHAT A MESS!





HERE ARE SOME THINGS YOU SHOULD EYEBALL...

- THE HYDRAULIC PUMP CYLINDER AND RAM FOR LEAKS
- SUPPORT STRUCTURE BASE CRACKS
- LOOSE LOCKNUTS.

ALSO CHECK FOR...

- MISSING OR DAMAGED HARDWARE
- BAD HOSES

AND DON'T FORGET THE BASE—IT'S OFTEN **NEGLECTED**. IF THE BASE HAS CASTERS, THEY SHOULD MOVE FREELY AND HAVE GOOD TREAD.

MAKE SURE THE JACK IS FREE OF DIRT. DIRT ACTS LIKE AN ABRASIVE AND GRINDS INTO PARTS. THAT LETS CORROSION GAIN A FOOTHOLD.

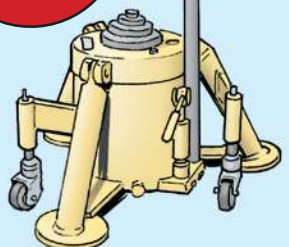
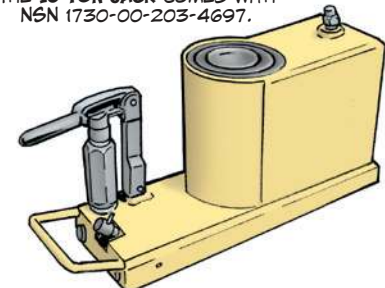
IF YOUR JACK HAS A LEAK, DON'T USE IT UNTIL IT'S BEEN CHECKED OUT.

AFTER A JACK IS REPAIRED, MAKE SURE IT'S **LOAD TESTED** PRIOR TO USE. IT'S **REQUIRED** BY PARA 4 OF TB 43-0142, **SAFETY INSPECTION AND TESTING OF LIFTING DEVICES**.

THERE ARE THREE DIFFERENT JACKS IN USE FOR AIRCRAFT LIFTING.

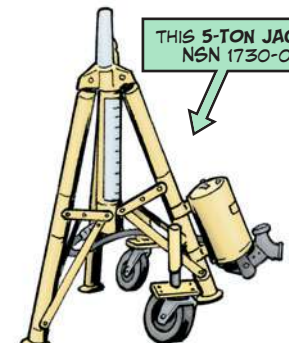
THE 12-TON JACK, NSN 1730-00-912-3998, HAS TWO DIFFERENT MANUFACTURERS: MALABAR AND COLUMBUS REGENT.

THE 10-TON JACK COMES WITH NSN 1730-00-203-4697.

THIS 5-TON JACK COMES WITH NSN 1730-00-516-2018.

I'M NOT USED ANY MORE.




MALABAR

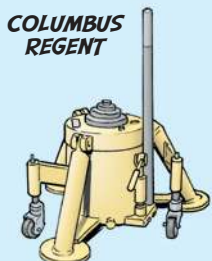


THE MALABAR AND COLUMBUS REGENT JACKS ARE **SIMILAR**, BUT THERE ARE A FEW **DIFFERENCES**.

ONE GOOD EXAMPLE IS THE **O-RING GASKET** SHOWN AS ITEM 35 IN FIG 1 OF TM 55-1730-218-20P.

THE **MALABAR O-RING** COMES WITH NSN 5330-01-622-6209, WHILE NSN 5331-01-075-2184 GETS THE **COLUMBUS REGENT O-RING**.

COLUMBUS REGENT



ANOTHER WAY TO IDENTIFY THE JACKS IS TO LOOK AT THEIR **DATA PLATES**. COLUMBUS REGENT JACKS WILL HAVE ONE OF THE FOLLOWING SERIAL NUMBERS...

- 801-1291
- 0371-2 thru -3
- 10152-1 thru -3
- 10193-1 thru -4
- 10366-5 thru -6

- 10495-1 thru -6
- 10674-1 thru -3
- 10691-1 thru -6
- 11420-1 thru -4
- 11490-1 thru -20

- 11691-7 thru -18
- 11719-1 thru -230
- 11738-1 thru -2
- 11952-5 thru -8
- 12089-14 thru -20



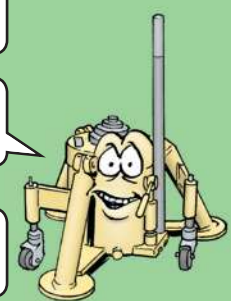
BEFORE DISCARDING A BROKEN JACK AND LAYING OUT BIG DOLLARS FOR A NEW ONE, TRY **REBUILDING** THE JACK.

MOST OF OUR PROBLEMS STEM FROM **DAMAGED SEALS**. REPLACING THE SEALS USUALLY TAKES CARE OF MOST PROBLEMS.

ALL THREE JACKS HAVE REBUILD KITS AVAILABLE TO MAKE OVERHAULING EASY. ORDER THE KIT YOU NEED WITH THESE NSNs/PN...

Jack	NSN/PN
Columbus Regent 12-ton	2590-01-642-3505
Malabar 12-ton	1730-01-500-4443
10-ton	1730-00-673-4717
5-ton	PN TES3-5, CAGE 00994

AFTER YOU'VE DETERMINED WHAT JACKS CAN BE REPAIRED, REFERENCE THE FOLLOWING TMS FOR MAINTENANCE HELP...

- TM 55-1730-218-12, 12-ton jack
- TM 55-1730-218-20P, 12-ton jack
- TM 1-1730-221-23P, 10-ton jack
- TM 1-1730-202-13&P, 5-ton jack
- TM 1-1730-219-23P, 5-ton jack

REMEMBER TO CHECK OUT CHAPTER 9 IN TM 1-1500-204-23-9, **GENERAL AIRCRAFT MAINTENANCE**, FOR MORE INFORMATION ON JACKS.



TO 35A2-2-112-1
TM 1-1730-270-13&P

IDENTIFYING TECHNICAL PUBLICATION SHEET
FOR
COMMERCIAL MANUAL

1. Purpose: This technical publication is issued for the purpose of identifying and authorizing the following commercial manual for Air Force use and for providing supplemental technical information thereto.

MANUFACTURER: COLOMBUS JACK CORPORATION, REGENT MANUFACTURING

PURCHASE ORDER OR CONTRACT NUMBER: FAS18-06-M-0288

EQUIPMENT: 3 TON TRIPOD JACK

PART NUMBER/NSN: MODEL 9775-010/NSN 1730-01-541-3186

TITLE: OPERATION AND MAINTENANCE MANUAL WITH ILLUSTRATED PARTS LIST, HYDRAULIC TRIPOD JACK, 3 TON, P/N 9775-010, NSN 1730-01-541-3186 (COLOMBUS JACK CORP., REGENT MANUFACTURING)

PUBLICATION DATE: 25 OCTOBER 2006

ADDITIONAL IDENTIFICATION:

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25 October 2006

IF YOU'RE STILL USING THE 3-TON JACK, NSN 1730-01-541-3186, FOR GROUND SUPPORT, YOU'LL FIND EVERYTHING YOU NEED TO MAINTAIN IT IN TM 1-1730-270-13&P.

WE **12-TON JACKS** ARE MANAGED BY THE **AIR FORCE**. OUR NEW TM WILL BE A MULTI-SERVICE MANUAL WITH **BOTH** THE AIR FORCE TECH ORDER AND ARMY TECH MANUAL NUMBERS APPEARING ON THE COVER.

YOU ARMY USERS SHOULD CONTINUE USING A DA FORM 2028 FOR SUBMITTING SUGGESTED CHANGES TO THIS TM.

IF YOU HAVE **QUESTIONS** ABOUT JACKS, TMS OR MAINTENANCE MESSAGES, CONTACT THE **AGSE** TEAM ON THE WEB AT:

<https://upw.jtdi.mil>

YOU'LL NEED YOUR CAC CARD TO ACCESS THE SITE.

WHEN YOU ENTER THE SITE, CLICK ON THE **AGSE** TAB. ON THE RIGHT SIDE OF THE PAGE UNDER **AGSE SUPPORT**, CLICK ON **AGSE HELP TICKET** TO SUBMIT QUESTIONS.

THE **HELP TICKET** ALLOWS YOU TO SUBMIT AN EQUIPMENT-SPECIFIC PROBLEM OR QUESTION **DIRECTLY** TO A SUBJECT MATTER EXPERT. AN EMAIL WILL BE SENT BACK WITHIN 24 HOURS TO PROVIDE YOU THE STATUS OF YOUR QUERY.

PS
END

All Aircraft...

Got Questions About ALSE?



ALSE TECHS, UNDERSTANDING AVIATION LIFE SUPPORT EQUIPMENT (ALSE) AND WHERE INFORMATION CAN BE FOUND IS KEY.

WHEN IT'S TIME FOR YOUR ALSE SHOP INSPECTION, CERTAIN ARMY REGS, TMS AND DA PAMS SHOULD BE IN EVERY ALSE SHOP'S LIBRARY BASED ON WHAT IS REQUIRED BY THE AVIATION RESOURCE MANAGEMENT SURVEY (ARMS).

WHAT IF I HAVE SOME **UNANSWERED** QUESTIONS?

YOU CAN UNCOVER **MOST** UNANSWERED ALSE QUESTIONS BY CHECKING OUT THE ALSE TRAINING CIRCULAR, TC 3.04.72, AVIATION LIFE SUPPORT SYSTEM MANAGEMENT PROGRAM.

OH, YOU MEAN THE "ALSE BIBLE"!

YES! IT'S PACKED WITH REFERENCES AND SUGGESTED READINGS.

YOU CAN CONTINUE THE HUNT FOR ALSE KNOWLEDGE BY CHECKING OUT AR 95-1, FLIGHT REGULATIONS.

IF YOU NEED **ALSE** INFORMATION FROM MANUALS, TM 1-1500-204-23-1, *GENERAL AIRCRAFT MAINTENANCE MANUAL*, CONTAINS **FIRST AID INFORMATION**.

FOR THOSE OF YOU WHO USE THE AH-64'S INTEGRATED HELMET AND DISPLAY SIGHT SYSTEM (IHADSS), TM 9-1270-233-23&P AND TM 1520-LONGBOW/APACHE EM 0126, ARE YOUR HELMET SOURCES.



FOR MAINTENANCE INFORMATION ON AIR WARRIOR EQUIPMENT SUCH AS HELMETS, RADIOS, THE PRIMARY SURVIVAL GEAR CARRIER AND **MORE**, THE SOURCE IS EM 0250, TM 1-1680-377-13&P.



QUESTIONS ABOUT FILLING OUT FORMS AND RECORDS CAN BE ANSWERED BY DA PAM 738-751, *TAMMS-A*. IT'S STILL THE GO-TO BOOK FOR AVIATION MAINTENANCE MANAGEMENT.

TO KEEP UP ON **ALSE** INFORMATION, CHECK OUT PM AIR WARRIOR'S WEBSITE: <https://airwarrior.redstone.army.mil/> THE POSTED AIR WARRIOR MESSAGES ARE LIKE ASAMS OR SOFS, BUT THEIR FOCUS IS **ALSE**-RELATED ISSUES.



MOST ANSWERS TO **ALSE** QUESTIONS CAN BE FOUND. ALL YOU HAVE TO KNOW IS **WHERE** TO FIND THEM.

PS END

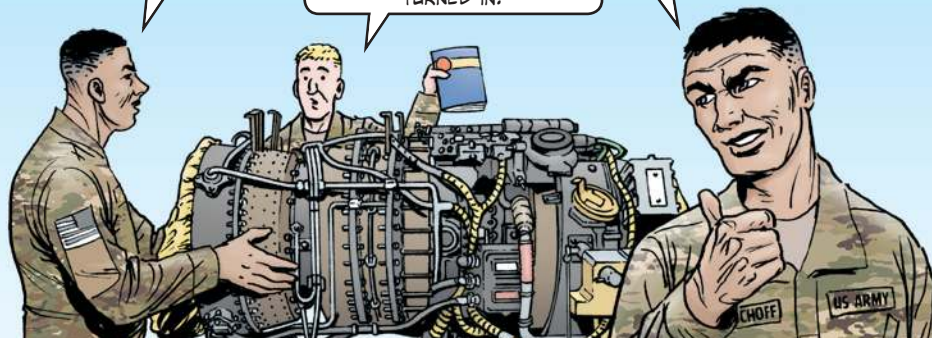
UH/HH-60 Series...

SUPPLY SYSTEM NEEDS CRITICAL ASSETS!

I NEED SOME **PARTS** FOR MY ENGINE BUT I **CAN'T** GET THEM!

PS SAYS THAT COMBUSTION CHAMBER LINERS AND ENGINE ICING VALVES **AREN'T** BEING TURNED IN.

LOOKS LIKE SOME-BODY'S BEEN **HOARDING** PARTS AGAIN.



Mechanics, unserviceable parts lying around the hangar don't do anybody any good. Fully support the maintenance and repair program by turning in those critically needed assets **now**. If you don't, you might not get repair parts for your helicopter when you need them.

So if you have unserviceable T700-GE-701D combustion chamber liners, NSN 2840-01-494-0694, or engine inlet anti-icing valves, NSN 2995-01-159-4660, lying around, turn them in.

UH/HH-60M Series...

REPAIR PART NEEDS TURN-IN

I'M STILL HAVING PROBLEMS ORDERING PROPULSION SHAFTS.

IF MECHANICS **AREN'T** TURNING IN UNSERVICEABLE SHAFTS FOR REPAIR, IT RESULTS IN **LOW RETURN RATES**.

AND THAT'S PROBABLY WHY YOU'RE **NOT** GETTING THE PARTS YOU NEED.

Mechanics, unserviceable return rates are low for the Black Hawk propulsion shaft, NSN 1615-01-083-2953. That results in a high demand for the part in the supply system.

So check your storage rooms, supply closets and anywhere else you might've stuck an unserviceable propulsion shaft. If you find one, turn it in for repair. You might just be supplying the repaired shaft you're going to need.

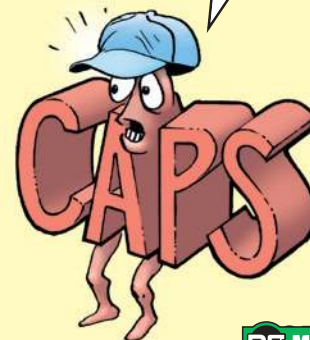


All Aircraft...

CAPS Bows Out for JTDI

DON'T FEEL SO BAD, CAPPY. YOU DID A **GOOD JOB** WHILE YOU WERE ON TOP.

YEAH, BUT YOU'RE THE MAN, NOW, DOG! JUST MAKE SURE YOU KEEP THAT AVIATION INFORMATION FLOWING!





PS HAS HAD SEVERAL ARTICLES ABOUT THE **TRANSITION** FROM THE JOINT TECHNICAL DATA INTEGRATION (JTDI) WEBSITE TO THE CONSOLIDATED AVIATION AND PORTAL (CAPS) AS THE ONE STOP SHOP FOR INFORMATION ON ARMY AIRCRAFT. THAT TRANSITION HAS NOW REVERSED COURSE!

Effective 1 Feb 15, JTDI was restored as Army Aviation's premiere information website. The switch back to JTDI will decrease costs and reduce redundancies between the two websites.

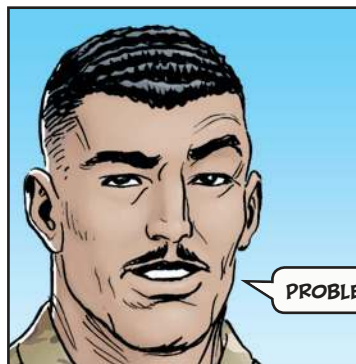
JTDI is once again the go-to website for aviation data, newsletters, air worthiness releases (AWR), aviation maintenance actions messages (AMAM), aviation safety action messages (ASAM), maintenance information messages (MIM), safety of flight (SOF) messages, PM contact lists and training information.

You should begin accessing JTDI now to establish or re-establish your accounts so you'll have access to the latest information. Log in with your CAC at:

<https://upw.jtdi.mil/>

If your registration has lapsed, you'll need to update it as soon as possible to prevent removal of your account. Here's how:

1. Log in to JTDI.
2. Click on any of the gray tabs at the top of the page.



PROBLEMS?

CONTACT THE JTDI HELPDESK AT 1-888-JTDISOS (583-4767), OR BY EMAIL AT: help@jtdisos.us



PS SMALL ARMS



YOUR M9 PISTOL WILL EVENTUALLY DEVELOP **CRACKS** IF IT'S FIRED REGULARLY. THAT'S JUST A FACT OF LIFE.

SO IT'S IMPORTANT THAT YOU **SPOT CRACKS** BEFORE YOUR M9 COMPLETELY CRACKS UP. HERE'S HOW TO CATCH CRACKS EARLY...



WIPE OFF ANY OIL.

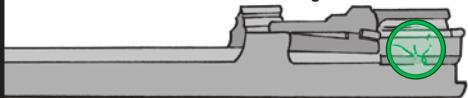
OIL CAN **HIDE** CRACKS. THEN **EYEBALL** THESE AREAS:

- Locking block along the front and rear of the locking lugs.
- The barrel in the area around the locking block
- The inside of the slide where the locking lugs sit
- The receiver rails where the locking blocks sit in the receiver
- Around the magazine catch

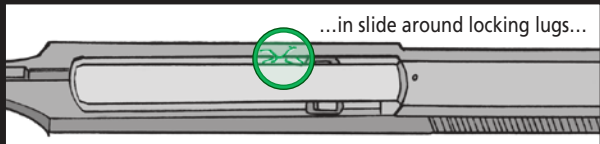
Check for cracks in locking block...



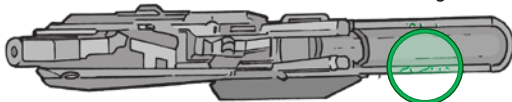
...in barrel around locking block...



...in slide around locking lugs...



...in receiver rails where locking blocks sit...



...and around magazine catch

NO CRACKS PLEASE!

I LIKE A **GOOD JOKE** BUT I'D PREFER YOU **DON'T** LET ME CRACK UP TOO MUCH!

CRACKS IN THE LOWER RECEIVER MEAN YOU NEED TO HAVE THE PISTOL INSPECTED AND POSSIBLY REPLACED. CRACKS ELSEWHERE ARE USUALLY REPAIRABLE. TELL YOUR REPAIRMAN.

PS MORE

Subscribe to Clean Magazines

THE MAGAZINE IS OFTEN **OVERLOOKED** DURING PMCS. IF CRUD INVADERS THE MAGAZINE'S INSIDES, IT MAY NOT FEED RIGHT. GET RID OF DIRT BY DISASSEMBLING THE MAGAZINE AND GIVING ITS INSIDES A GOOD WORKING OVER WITH A TOOTHBRUSH. SEE WP 0012-6 IN TM 9-1005-317-10.

Clean out magazine with toothbrush



WHEN YOU **REASSEMBLE** THE MAGAZINE, FOLLOW THE STEPS IN WP 0013-6.

REMEMBER THAT THE FOLLOWER GOES ON THE SPRING END THAT POINTS UP AND FORWARD.



FOLLOWERS CAN GET WORN AND WON'T LOCK BACK THE SLIDE WHEN THE MAGAZINE'S EMPTY. IF THE SLIDE WON'T LOCK BACK WHEN YOU DO THE FUNCTION CHECK, TELL YOUR REPAIRMAN.

Trigger Bar Spring Warning

CAREFUL WHEN CLEANING INSIDE THE MAGAZINE WELL. MANY TRIGGER BAR SPRINGS ARE **LOST** DURING CLEANING.

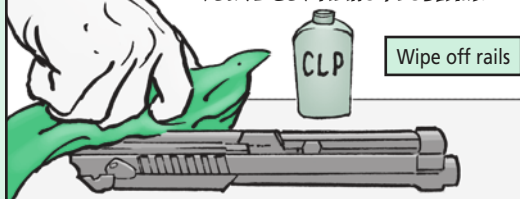
THE SPRING IS UNDER **LOTS** OF TENSION. IF YOU NUDGE IT **-ZING-** IT'S **GONE!** AND **NO SPRING MEANS NO FIRING.**



KEEP CLEANING TOOLS **AWAY** FROM THE SPRING AND MAKE SURE THE SPRING IS **STILL IN PLACE** WHEN YOU'RE THROUGH CLEANING.

Rail Reminder

MAKE A POINT WHEN CLEANING TO **WIPE OFF THE RECEIVER AND SLIDE RAILS.** IF THE RAILS BECOME GRITTY WITH SAND, THE BACK-AND-FORTH ACTION OF THE SLIDE WEARS OUT THE BEARING SURFACES AND SOON YOU'VE GOT **FIRING PROBLEMS.**

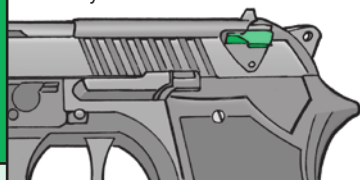


Wipe off rails

Be Safe with Safety Lever

IF THE SAFETY LEVER IS **BENT, DON'T TRY TO BEND IT BACK.** THAT JUST WEAKENS THE LEVER OR SNAPS IT OFF. **DS** NEEDS TO REPLACE THE LEVER.

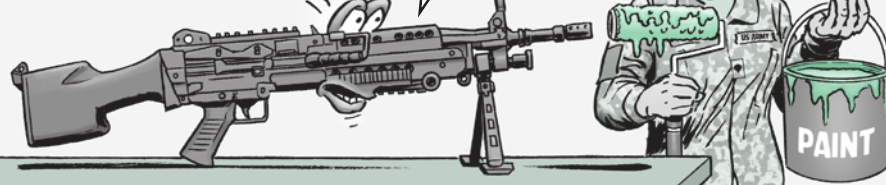
Report bent safety lever. Don't try to fix it



WE HAVE THE WORLD'S BEST EQUIPMENT-TAKE CARE OF IT!

M240B/L, M249 Machine Guns...

HOLD ON THERE! IT'S OK TO PAINT ME FOR CAMOUFLAGE, BUT YOU HAVE TO **CAREFULLY FOLLOW** THE DIRECTIONS.



Camouflage OK... If CO Approves

If you fire the M240B, M240L, or M249 machine guns, you can paint them for camouflage purposes if your commander approves.

TACOM LCMC maintenance information message 15-021 gives detailed instructions on how to paint both the M240B/L and M249. You must carefully follow the directions to avoid damaging your weapon.



IT'S **MORE** IMPORTANT THAT YOUR WEAPON BE FUNCTIONAL THAN CAMOUFLAGED, **SO BE CAREFUL!**

To access the message, go to:

<https://tulsa.tacom.army.mil/Maintenance/message.cfm?id=MI15-021.html>

For instructions on how to paint the M16 rifle, M4 carbine and other individual small arms, see TACOM Maintenance Information Message (MIM) 15-002 at:

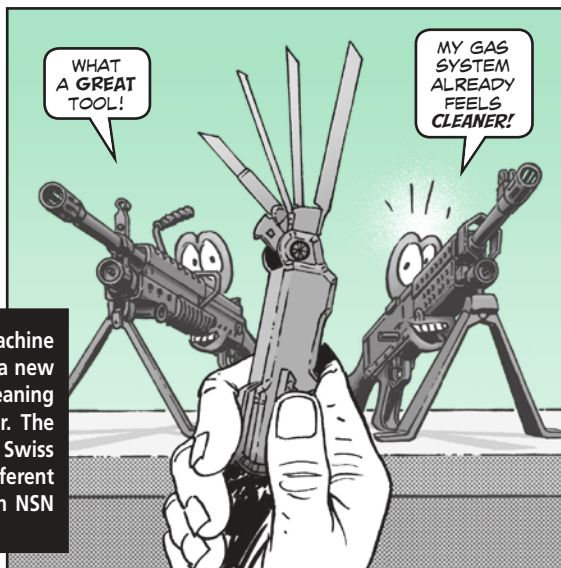
<https://tulsa.tacom.army.mil/Maintenance/message.cfm?id=MI15-002.html>

WITH THIS CAMO JOB, THE **ONLY** PLACE I'M GOING IS THE **REPAIR SHOP!**



New M240/ M249 Scraper Available

M240 and M249 machine gun gunners can now order a new pocket tool that makes cleaning the guns' gas systems easier. The tool, which folds up like a Swiss Army knife, has eight different scrapers. Order the tool with NSN 5110-01-641-4777.



M240/M249 Crew Served Weapons Tool

M240 Gas block outer groove scraper

M249 Gas block inner and outer groove scraper.
Gas tube inner groove scraper

M249 Gas block shoulder scraper

M240 Gas block shoulder scraper

M249 Gas block
barrel scraper

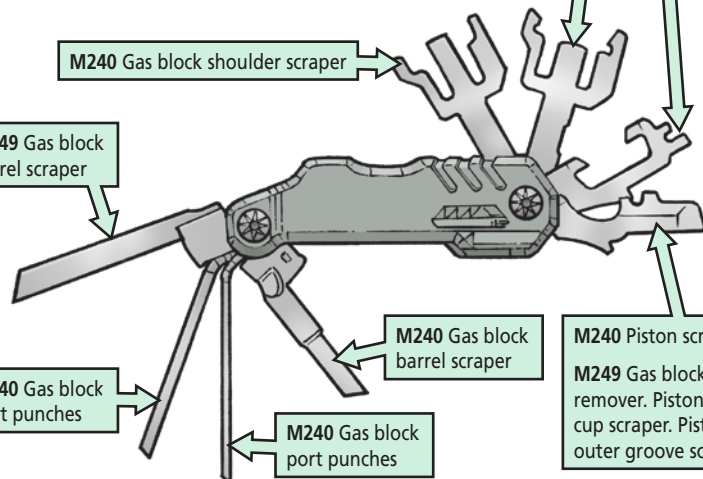
M240 Gas block
port punches

M240 Gas block
port punches

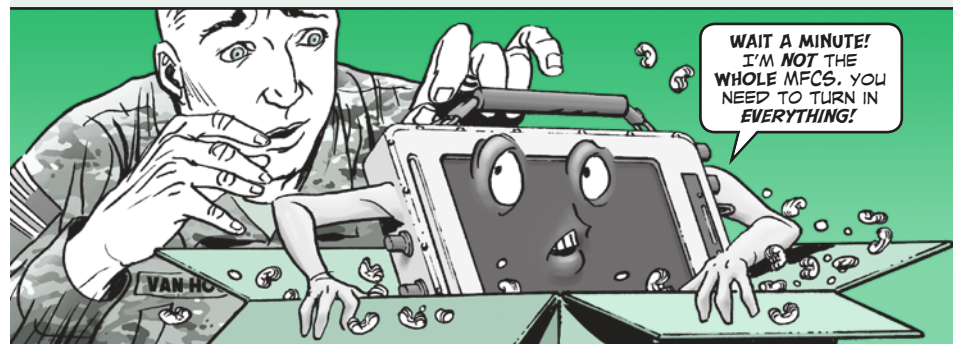
M240 Gas block
barrel scraper

M240 Piston scraper

M249 Gas block
remover. Piston inner
cup scraper. Piston
outer groove scraper



Mortars... MFCS More Than Computer



UNITS ARE
TURNING IN
JUST THE
COMPUTER
FOR THE
MORTAR
FIRE
CONTROL
SYSTEMS
(MFCS).

BUT THE COMPUTER IS **ONLY PART OF THE TOTAL MFCS**, SO THE MISSING COMPONENTS ARE CAUSING **PROBLEMS** IN THE SUPPLY SYSTEM.

WHEN YOU TURN IN AN MFCS, TURN IN **ALL** THE COMPONENTS. CHECK THE COEI AND BII IN THESE TMS TO ENSURE YOU'RE TURNING IN EVERYTHING:

- M150, TM 9-1230-205-10, TM 9-1230-205-23&P
- M95, TM 9-1230-203-13&P
- M32, TM 9-1220-255-13&P

IF YOU HAVE ANY **QUESTIONS**, CONTACT TACOM'S JOE LEIGH AT DSN 786-1223, (586) 282-1223, OR EMAIL: usarmy.detroit.tacom.mbx.ilsc-mortar-systems@mail.mil

Mortar Stowage Kit...

KEEP IT COVERED!

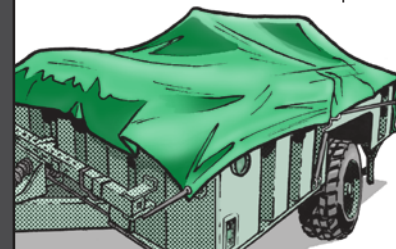
The mortar stowage kit (MSK) isn't made to sit outside open to rain, snow and sun. If the MSK sits uncovered for weeks, metal rusts and rubber cables dry rot. Eventually, you're talking major repairs.

The best solution, of course, is to park your MSK inside. But most units don't have the room to do that.

So the next best solution is to keep the MSK covered with a tarp. Just make sure the lift drive assembly is completely covered. Order a good tarp with NSN 2540-00-653-7589.

For more info on your MSK, see TM 9-2590-527-13&P (May 12) or contact TACOM's Erik Jensen at DSN 786-1220, (586) 282-1220 or email: erik.s.jensen4.civ@mail.mil

MSK going to be sitting?
Park it inside or cover with a tarp



Small Arms...

SHINY SPOTS? TOUCH THEM UP WITH SFL PEN

LOOK AT THIS!
I'VE GOT A
SHINY SPOT!

CHILL, LYL DUDE. I'VE
GOT JUST THE THING TO
TAKE CARE OF THAT.

Touching up nicks,
scratches and shiny
spots on small arms just
got easier for 91F small
arms repairmen.
A solid film
lubricant (SFL) paint
pen dispenser is now
available with NSN
9150-01-646-0099.

M320 Grenade Launcher...

WATCH YOUR FINGERS!

THE M320 GRENADE LAUNCHER
HAS A **VERY SHORT** BARREL.

IF YOUR FINGERS **STICK OUT**
INSTEAD OF FULLY WRAPPING
AROUND THE GRIP,
THEY'RE **MUCH MORE** LIKELY
TO BE **INJURED** WHEN THE
ROUND EXPLODES OUT OF
THE BARREL.

Hold your fingers like this...

GOOD!

...not like this

BAD!

M66 Ring Mount...

Is There a TM?

I COULD **REALLY**
USE SOME **PMCS!**

I **KNOW!**
BUT I
DON'T
THINK YOU
HAVE A
TM.

I **DO NOW!**
CHECK IT OUT
ON **LIW.**

Dear Half-Mast,

Is there a TM for the M66 ring
mount? A TM would really help with
M66 maintenance and repair.

SFC C.D.

THERE SURE IS, SERGEANT.
IT'S TM 9-1005-451-13&P (APR 14) AND
IT'S ONLINE THROUGH LIW ON THE
ETM WEBSITE:

<https://www.logsa.army.mil/etms>

FOR INFORMATION ON
OTHER MOUNTS, SEE
TM 9-1005-245-13&P
(APR 05). IT'S ALSO ON
THE ETM SITE.

FOR MOUNT QUESTIONS,
CONTACT TACOM'S
GRANT BAKER AT
DSN 786-1238, (586) 282-1238, OR EMAIL:
grant.t.baker.civ@mail.mil

M2/M2A1, MK 19 Machine Guns...

Got the New M205 Tripod? Then Turn in M3

WE'VE
GOT **GOOD**
NEWS AND
BAD NEWS!

THE GOOD NEWS IS THE ARMY IS REPLACING THE M3 TRIPOD
FOR THE M2/M2A1 AND MK 19 MACHINE GUNS WITH THE NEW
M205 LIGHTWEIGHT TRIPOD. AT 34 POUNDS, IT'S 32 PERCENT
LIGHTER THAN THE M3. THE M205 ALSO INCLUDES AN
INTEGRAL TRAVERSE AND ELEVATING MECHANISM.

THE BAD NEWS IS THAT TOO MANY UNITS WHO RECEIVE THE
M205S **AREN'T** TURNING IN THEIR M3s. AS A RESULT, THE
ARMY IS **RUNNING SHORT** OF M3s, WHICH WILL
CONTINUE TO BE USED FOR 3-4 YEARS. SO...

M205



...TURN
IN YOUR
M3s ASAP
AFTER YOU
GET THE
M205!

QUESTIONS?

CONTACT GRANT BAKER AT
DSN 786-1238, (586) 282-1238,
OR EMAIL: grant.t.baker.civ@mail.mil

ALSO
FEATURING
TOOLS



M50/M51 Mask...

Disappearing Retaining Ring

UH-OH, I THINK MY
RETAINING RING HAS
DISAPPEARED!

SHOOT, THAT
MEANS A WHOLE
NEW FACEPIECE.



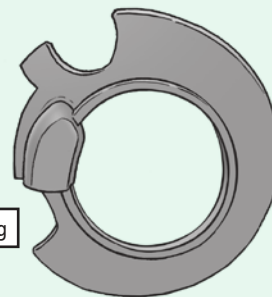
Dear Editor,

We've had a problem with M50/M51 nose cup retaining rings disappearing. Without the ring, the nosecup can slip and let the eye lenses fog up. Unfortunately, the ring is not a replacement part, so the only fix is to order a new facepiece. We had to replace 50 facepieces because of this.

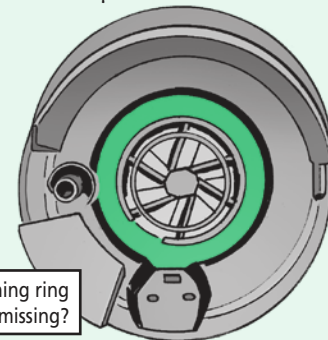
We think the ring is disappearing when the inlet valve is replaced or when Soldiers jerk the mask out of the carrier by the nosecup.

Check for
nosecup
retaining
ring *after*
repairs and
PMCS

Retainer ring



Retaining ring
missing?



CBRN specialists need to make sure they don't lose the ring when replacing inlet valves. They also need to tell Soldiers to be careful with the ring during PMCS and not to jerk on the nosecup.

Harold Bever
Ft Leonard Wood, MO

Editor's note: Good information to air, Harold.

TM NOT Needed for Every Mask

Dear Editor,

According to AR 25-30, *Army Publishing Program*, units are supposed to have one operator's TM for each piece of equipment.

But because the M50/M51 protective mask's TM 3-4240-542-13&P is around 350 pages, that's not practical. So the Army has issued a waiver for the M50/M51. Units need only two copies of the TM. The TM is available on LIW's ETM site:

<https://www.logsa.army.mil/etms>

But they do need a set of operator cards, NSN 7690-01-529-1398, for each mask.

Please spread the word about this.

David Whitmire
Technical Instructor
JBLM, WA

CONSIDER IT DONE, DAVID! UNITS CAN REQUEST
A COPY OF THE WAIVER BY SENDING AN EMAIL TO:
usarmy.redstone.logsa.mbx.psmag@mail.mil



WHAT'S THE NUMBER FOR NUMBERED SECURITY SEALS?

Dear Half-Mast,

Is there an NSN for serial-numbered security seals? The ones I've seen are silver and include an engraved serial number.

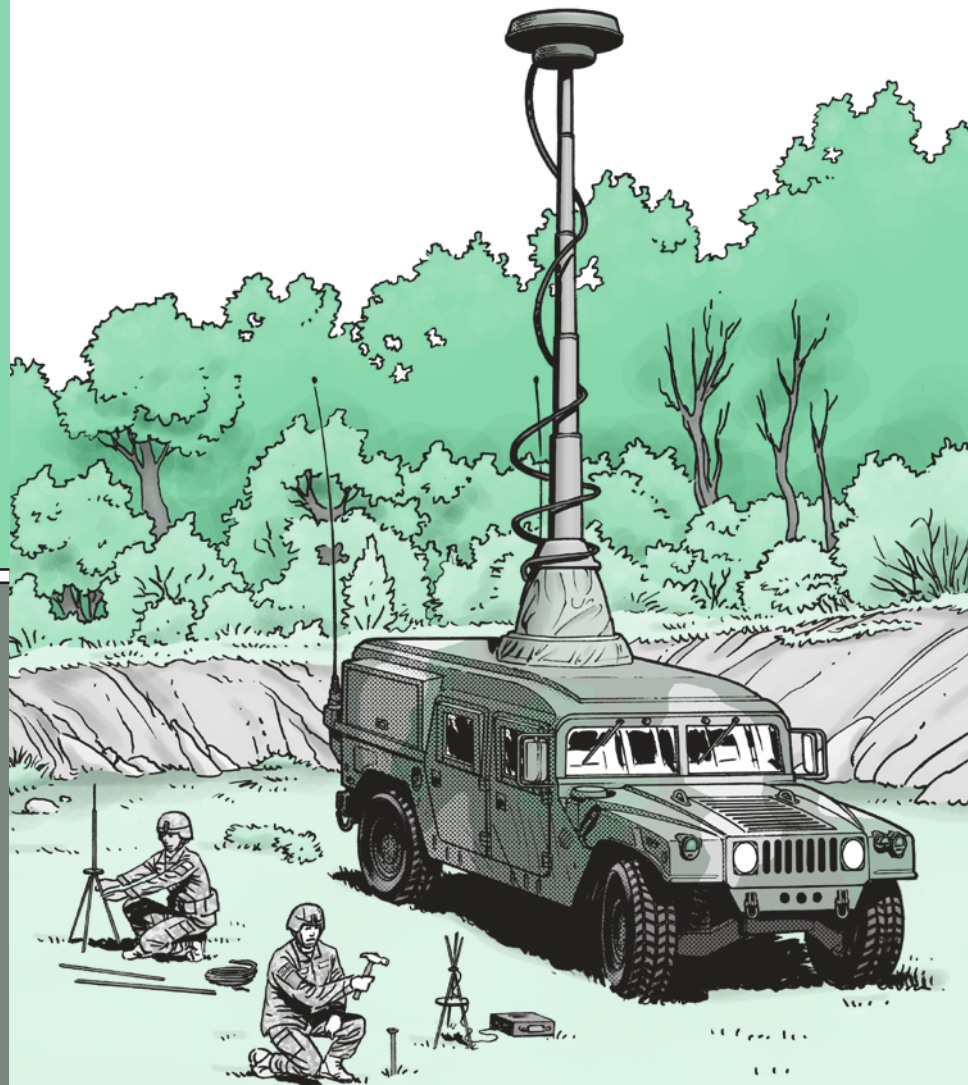
The wraps are used to seal shipping containers, tool boxes, wall lockers or anything else with secure items.

Ms. A.S.



ACTUALLY,
MA'AM, YOU HAVE
A WIDE VARIETY
OF SECURITY
SEAL CHOICES...

- Serial-numbered cable seal lock, NSN 5340-00-084-1570
- Ball-type seal lock with a peened bolt and nut, NSN 5340-00-081-3381
- Bolt seal, NSN 5340-01-260-9935
- Cable seal lock, NSN 5340-00-084-1570
- Cable seal lock, NSN 5340-01-177-7405
- Bolt seal, NSN 5340-01-260-9935
- Car ball seal, NSN 5340-01-237-7646



PS COMMUNICATIONS

LEAD-FREE SOLDER "NO GO" IN ARMY ELECTRONICS!

gonna try out this new lead-free solder I found.

HOLD UP, CARTER. I REMEMBER HEARING SOMETHING 'BOUT **NOT** USING LEAD-FREE SOLDER ON MILITARY ELECTRONICS.

LET'S CHECK WITH MASTER SERGEANT HALF-MAST.

TIN WHISKERS CAN CAUSE **SHORT CIRCUITS**, LEADING TO **WIDER SYSTEM FAILURE**.

THE GLOBAL PUSH TO RESTRICT LEAD USE IN ELECTRONICS MANUFACTURING HAS MADE THIS ISSUE AN ONGOING CHALLENGE FOR THE MILITARY. TOBYHANNA ARMY DEPOT NOW USES **SPECIAL SCANNING TECHNOLOGY** TO MAKE SURE THE LEAD CONTENT IN COMPONENTS IS SUFFICIENT AND MEETS ARMY SPECS.

Tobyhanna Army Depot checks solder lead content in integrated circuits

FOR **MORE INFO**, VISIT THE LEAD-FREE ELECTRONICS/SOLDER COMMUNITY OF PRACTICE AT THE DEFENSE ACQUISITION UNIVERSITY:
<https://acc.dau.mil/CommunityBrowser.aspx?id=724437>
 FOR **TECHNICAL QUESTIONS**, CONTACT MICHAEL ORAVITZ AT DSN 795-9055, (570) 615-9055, OR EMAIL: michaelj.oravitz.civ@mail.mil

Dear Half-Mast,

My unit wants to remove as many toxic items as we can from our electronics shop. Our shop is mostly radio/COMSEC repair, but we also fix wiring harnesses in vehicles and other small electronic items. We currently use a solder with lead in it. Is there an Army-approved, lead-free solder for electronics repair?

SSG H.J.

GREAT QUESTION, SERGEANT. AND WE APPLAUD YOU FOR LOOKING FOR WAYS TO **INCREASE WORKER SAFETY**.

HOWEVER, THIS IS ONE AREA WHERE THE ANSWER MAY **SURPRISE** YOU: LEAD-FREE SOLDER IS **NOT** RECOMMENDED FOR USE IN ARMY ELECTRONICS REPAIR.

Pb LEAD

A MINIMUM 3 PERCENT LEAD (CHEMICAL ELEMENT Pb) CONTENT IS REQUIRED WHEN SOLDERING ELECTRONIC COMPONENT LEADS.

THIS LEAD REQUIREMENT IS MAKING ITS WAY INTO PERFORMANCE SPECIFICATIONS FOR ELECTRONIC COMPONENTS, LIKE THE GENERAL SPECIFICATION FOR INTEGRATED CIRCUITS (MICROCIRCUITS) MANUFACTURING (MIL-PRF-38535K) AND THE GENERAL SPECIFICATION FOR SEMICONDUCTOR DEVICES (MIL-PRF-19500P)

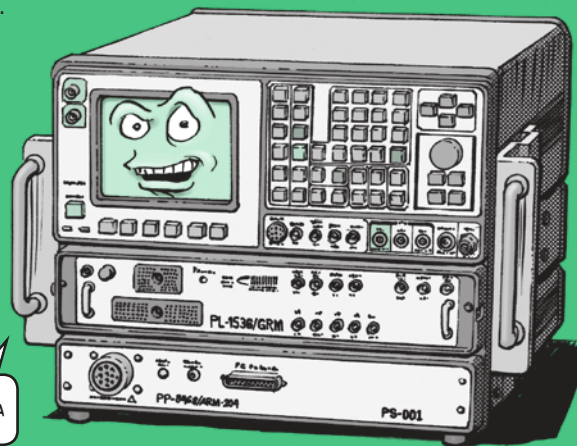
THE REASON IS THAT **LEAD-FREE SOLDER IS USUALLY HIGHER IN TIN CONTENT...**

...AND THAT INCREASES THE **GROWTH OF TIN WHISKERS**, WHICH ARE SMALL, HAIR-LIKE FILAMENTS THAT **POP UP** ON ELECTRONIC COMPONENTS.

AN/GRM-122 Radio Test Set...

QUEST FOR A TEST CABLE

IF YOU WANT ME TO DO ANY TESTING, YOU GOTTA HAVE THE RIGHT CABLE!



Dear Half-Mast,

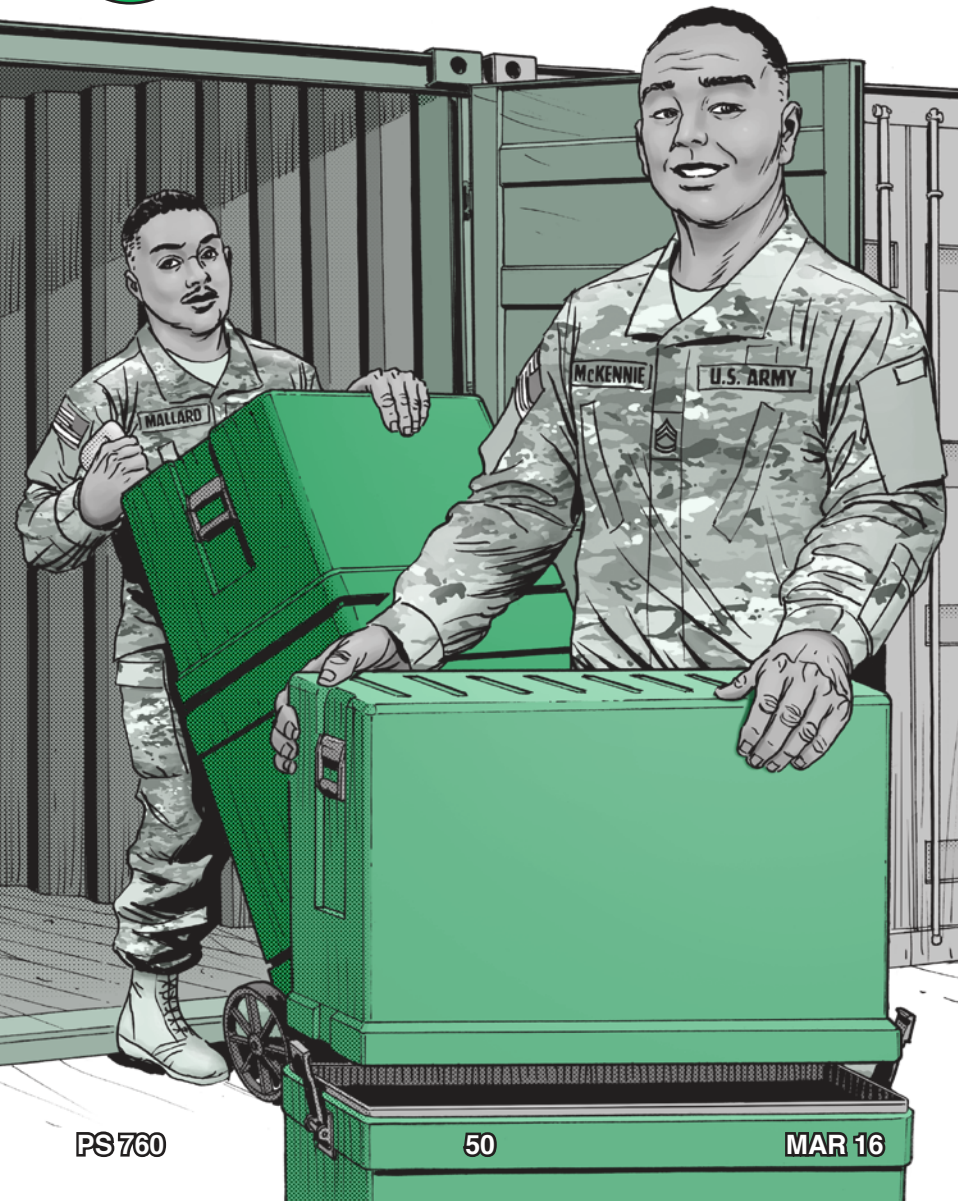
I have some Harris RT-1796 and RT-1694D receiver-transmitters in need of repair. But I can't find an NSN for the test cable used to connect them to the AN/GRM-122 test set. Can you help?

SPC R.A.C.

Dear Specialist,

You bet! The W-30 test cable comes with NSN 5995-01-569-3123.

Half-Mast



1,500-GPH TWPS...

TIME TO TEST TANK?

PHEW!
WHAT IS
THAT
TERRIBLE
SMELL?

IT'S THE HIGH-PRESSURE
AIR TANK ON THE TWPS.
I THINK IT'S PAST ITS
EXPIRATION DATE.

Dear Half-Mast,

Does the high-pressure air tank on the 1,500-GPH tactical water purification system (TWPS) have a test or expiration date?

MSG D.L.B.

Dear Master Sergeant,

The tank has only a test date. It needs to be tested every five years. You'll find the date of manufacture stamped on the exterior of the tank.

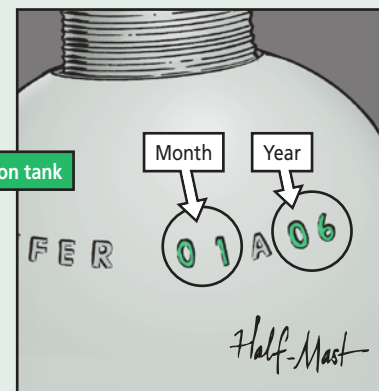
The first two digits are the month and the last two digits are the year of manufacture. Just add five years and you'll know the month and year the tank should be tested.

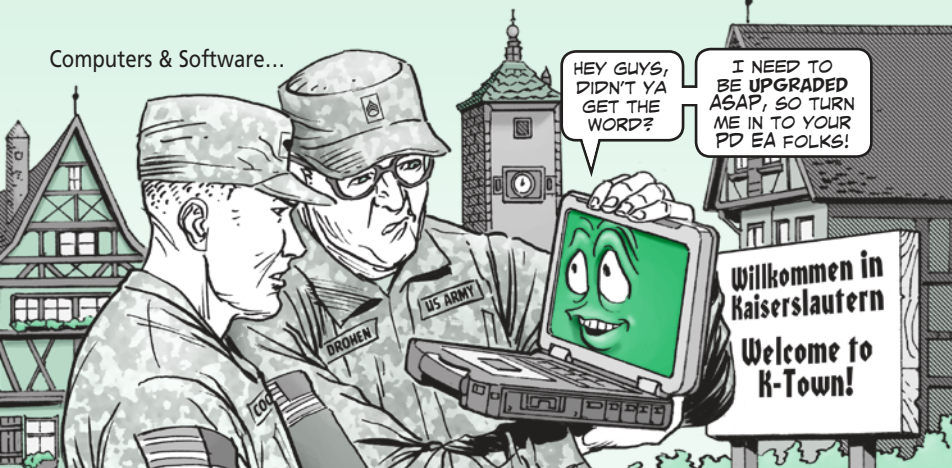
Month and year of manufacture is stamped on tank

To have the air tested, go to:

<http://phmsa.dot.gov>

In the Search block, type in cyl_XX. Substitute the abbreviation for your state in place of the XX. On the next screen, click the PDF file and contact one of the hydrostatic testers listed for your state.





Turn In EWO Laptops

THE PHASE-OUT OF MICROSOFT'S WINDOWS XP® FORCED SEVERAL BIG CHANGES IN THE ARMY. ONE OF THE BIGGEST AFFECTS ELECTRONIC WARFARE OFFICERS (EWOS).



FOR YEARS, MULTIPLE SOFTWARE PLATFORMS USED BY THE ELECTRONIC WARFARE COMMUNITY WERE LOCATED ON **MULTIPLE LAPTOPS**.

THIS MEANT THAT **EACH EWO** HAD TO USE AND MAINTAIN UP TO **THREE LAPTOPS**.



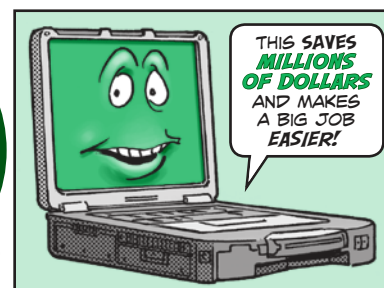
NO SINGLE LAPTOP HAD ALL THE SOFTWARE NEEDED FOR EWO OPERATIONS.

HOWEVER, THE ARMY'S **RECENT UPGRADE** TO WINDOWS 7® MADE THE AUTOMATED INFORMATION MANAGEMENT SUPPORT EQUIPMENT (AIMSE) IN THE OLD EWO TOOLKIT **OBSELETE**.



TO FIX THIS ISSUE, PD ELECTRONIC ATTACK (EA), (FORMERLY PD CREW), MOVED ALL COUNTER RADIO CONTROLLED IMPROVISED ELECTRONIC DEVICE ELECTRONIC WARFARE (CREW) SUPPORT TOOLS FROM THE EWO LAPTOP TO THE UNIVERSAL TEST SET (UTS) V2 AN/GLM-11, NSN 5865-01-620-2133, WHICH RUNS ON WINDOWS 7®.

THIS MEANS THAT **ONE LAPTOP** AND A SINGLE SOFTWARE SOLUTION ARE **REPLACING MULTIPLE LAPTOPS** AND SOFTWARE PREVIOUSLY USED FOR EWO OPERATIONS.



Turn In Old Laptops

EWO LAPTOP COMPUTER MODELS CF-29 AND CF-30, WHICH RUN WINDOWS XP®, ARE NOW **OBSELETE** AND **MUST** BE RETIRED FROM SERVICE.

THE OLD LAPTOPS SHOULD BE TURNED IN AS FOLLOWS...

OCONUS
Turn in old laptops to your local PD EA Regional Support Center (RSC).

CONUS

Ship to:
Ken Klemke/Todd Edwards
DODAAC: SW310Z
DLA DISTRIBUTION TOBYHANNA W1BGUE
SECOND AND GIBBS STREET
WAREHOUSE 7 BAY 5 (CREW BT3)
TOBYHANNA PA 18466-5059
Questions? Call (570) 615-6646.

More Info

NEW SOFTWARE IMAGES HAVE BEEN DEVELOPED THAT WILL BE DISTRIBUTED TO UTS USERS IN THE FIELD. ANY CF-31 LAPTOPS, NSN 7021-01-601-2466, SHOULD BE TURNED IN TO PD EA PERSONNEL FOR SOFTWARE UPGRADE AND LAPTOP REUSE.

LAPTOP-ONLY SOLUTIONS FOR SCHOOLHOUSE AND TRAINING ENVIRONMENTS ARE STILL BEING DEVELOPED FOR MORE AFFORDABLE LAPTOP PLATFORMS.



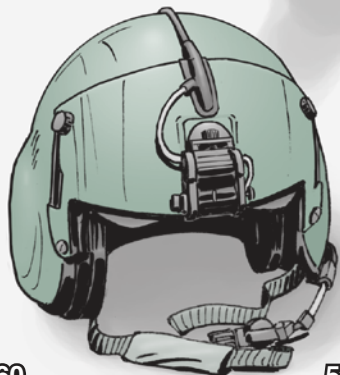
To get the UTS software image in theater, email:
jason.m.oliver@afghan.swa.mil

For UTS support in all other locations, contact Kristi Watt at DSN 648-4756, (443) 395-4756, or email
kristin.l.watt.ctr@mail.mil

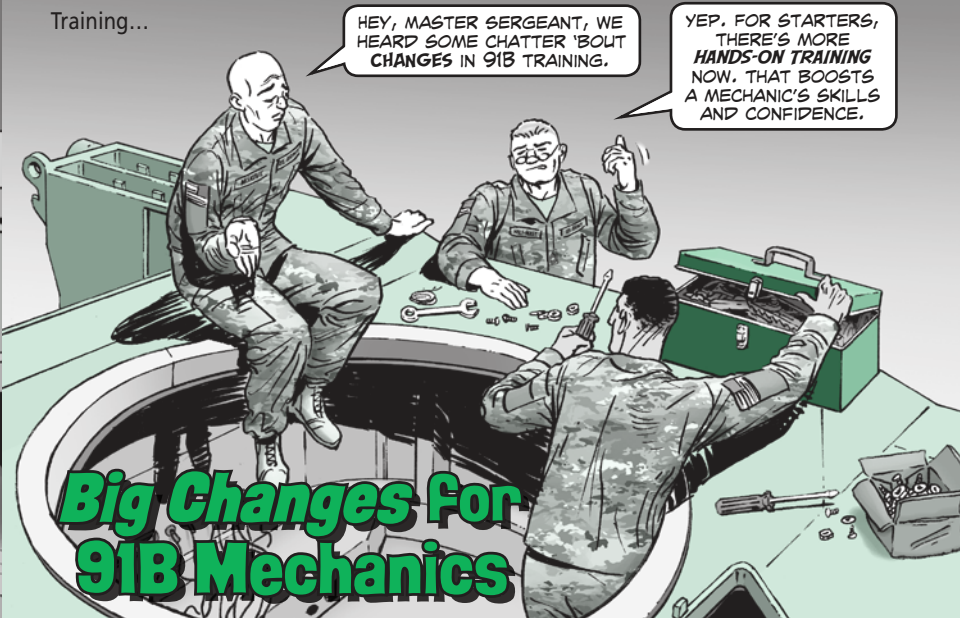
For information assurance questions or concerns, contact Scott Redding at DSN 648-4744, (443) 395-4744, or email:
scott.t.redding.ctr@mail.mil

For more details, download CECOM's Maintenance Advisory Message (MAM) 2015-05-02 from the Logistics Support Activity's Logistics Information Warehouse (LIW) portal. Login to LIW at: <https://liw.logsa.army.mil/>

Enter the MMIS application or if you haven't visited before, add the "MMIS" button first from the App Warehouse. You'll find MAMs in the MMIS Library.



Training...



HEY, MASTER SERGEANT, WE HEARD SOME CHATTER 'BOUT CHANGES IN 91B TRAINING.

YEP. FOR STARTERS, THERE'S MORE **HANDS-ON TRAINING** NOW. THAT BOOSTS A MECHANIC'S SKILLS AND CONFIDENCE.

Big Changes For 91B Mechanics

CHECK IT OUT! THE ORDNANCE SCHOOL HAS CONSOLIDATED ALL 91B (WHEELED VEHICLE MAINTENANCE) ADVANCED INDIVIDUAL TRAINING (AIT) AT FT LEE, VA.

IT ALSO REDESIGNED THE 91B AIT COURSE TO EMPLOY A **SKILLS-BASED TRAINING (SBT)** METHODOLOGY THAT STRESSES **PROBLEM-SOLVING SKILLS**.

ABOUT 6,000 91B AIT SOLDIERS USED TO TRAIN ANNUALLY AT BOTH FT LEE AND FT JACKSON, SC. ALL THE STUDENTS, MILITARY AND CIVILIAN AUTHORIZATIONS, AIT COMPANIES AND EQUIPMENT MOVED TO FT LEE IN 2015. THIS "RELOCATIONING" SAVED MONEY AND ALSO RETURNED MILLIONS OF DOLLARS OF EQUIPMENT TO THE ARMY.

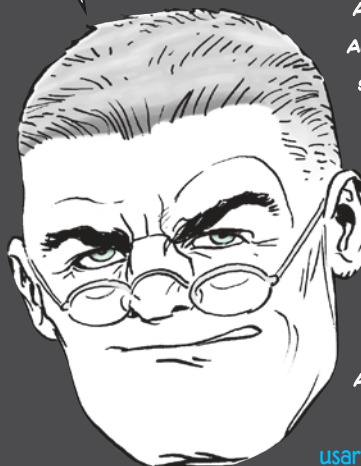
THE NEW SBT IS A CHANGE FROM THE OLD "REMOVE AND REPLACE" MENTALITY. INSTEAD, STUDENTS LEARN CRITICAL THINKING AND DIAGNOSTIC SKILLS.

FOR EXAMPLE, THEY MIGHT RECEIVE A DEMONSTRATION ON HOW TO TROUBLE-SHOOT AN ENGINE ON ONE VEHICLE, PERFORM A PRACTICAL EXERCISE ON A DIFFERENT VEHICLE, AND BE TESTED ON A THIRD. EACH GRADUATE WILL ALSO BE GO9 CERTIFIED IN AIR CONDITIONING SERVICE AND REPAIR.

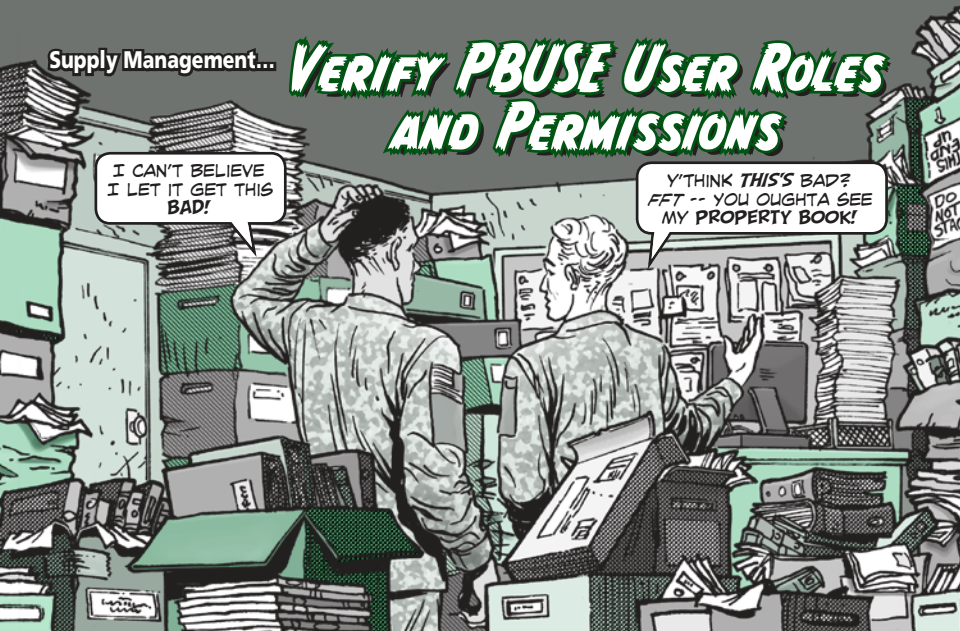
THE GOAL IS TO PRODUCE 91B GRADUATES WHO ARE MORE CONFIDENT, WELL-ROUNDED MECHANICS IN A WORLD OF INCREASINGLY COMPLEX EQUIPMENT.

FOR QUESTIONS OR MORE INFO ABOUT ORDNANCE SCHOOL TRAINING, EMAIL:

usarmy.lee.tradoc.mbx.scoe-od-ask-the-chief@mail.mil



VERIFY PBASE USER ROLES AND PERMISSIONS

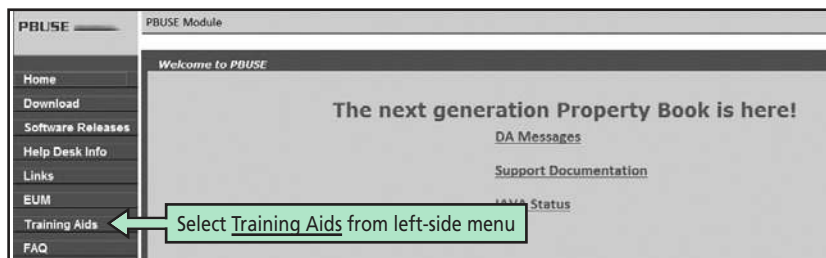


If cleaning falls behind at the home or office, problems can pile up. Same goes for database systems like PBASE. Periodic housecleaning is a must.

All user roles in PBASE should be routinely verified and updated. This makes timely transfer of equipment easier, while also reducing the risk of unauthorized access.

Property book officers (PBOs) and unit commanders should periodically review the names and user roles of personnel with access to property book information for their unit identification codes (UICs).

Find step-by-step PBASE training at: <https://pbuse.army.mil/>



To validate user roles in PBASE, go to "User Roles," "View" and search by organization for your UIC "FF Header" record. Click on the Include SASMO button. Then run a printout of all personnel with access to your unit's UICs.

Verify and update all names, ranks, telephone numbers, installation/ interface (INS) codes and CAC codes, and roles and permissions by UIC.

Check that all ranks are current and that everyone listed shows a rank, including civilians. Civilians can be listed by a rank/grade or another indication of civilian status, i.e., CIV, logistics management specialist (LMS) or senior logistics management specialist (SLMS).

Check that all personnel who have access to property book or unit-level access to your unit's UICs are still in those positions. Soldiers or civilians who are no longer in the chain of command can still touch a unit's property books and hand receipts if they are not deleted from their former user roles in PBASE.

Delete any personnel who have left or no longer need access. The supply sergeant should update all sub-hand receipt holders as well to maintain property accountability at the unit level.

Army Adds EPUBs Option

HERE'S AN EXCITING NEW OPTION FOR LEARNING ON THE GO!



A GROWING LIST OF ARMY DOCTRINE PUBLICATIONS (ADPs) AND ARMY DOCTRINE REFERENCE PUBLICATIONS (ADRP) IS MAKING THE LEAP FROM ORDINARY PORTABLE DOCUMENT FORMATS (PDFS) TO ELECTRONIC PUBLICATIONS (EPUBS).

BESIDES MAKING PUBS EASIER TO READ ON TABLETS AND SMART PHONES, THIS MEANS THAT READERS CAN ALSO USE BOOKMARKING, HIGHLIGHTING OR NOTE-TAKING FEATURES BUILT INTO THEIR MOBILE DEVICES.

VIEW A LIST OF AVAILABLE EPUBS AT:
http://armypubs.army.mil/doctrine/Browse_Series_Collection_1.html

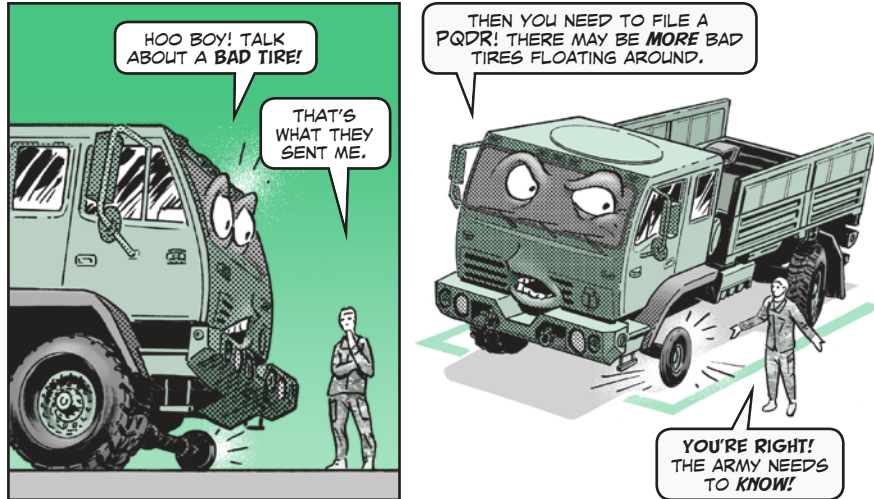
IN ADDITION TO EPUBS, SOME DOCTRINAL MANUALS WILL HAVE ENHANCED ELECTRONIC BOOKS (E2BOOK) SUPPLEMENTS.

E2BOOKS INCLUDE AUDIO, VIDEO, ANIMATION, SIMULATION AND OTHER EMBEDDED MULTIMEDIA.

YOU CAN GET THE FIRST E2BOOK FOR THE ADRP 1, THE ARMY PROFESSION (JUN 15), AT:
<http://cape.army.mil/adrp-1/>

OR FROM THE CENTRAL ARMY REGISTRY (CAR): <http://www.train.army.mil/adrp1/>

Bad Parts? It's PQDR Time



If you order a repair part with the right NSN but receive a defective one, you need to do more than curse the Army supply system. It's PQDR time!

A product quality deficiency report (PQDR) ensures you get a free replacement part or refund. But, more importantly, a PQDR lets the Army know there are defective parts kicking around the supply system.

Fortunately, the Product Data Reporting and Evaluation Program (PDREP) makes it easy to file a PQDR.

First, put the defective part where it won't disappear. Keep a copy of the document number used to order the part and the packaging the part came in. The packaging has the CAGE code and contract number, which you'll need for the PQDR. That's why it's an excellent idea to keep parts in packaging until you use them. That way the packaging won't disappear and you won't have trouble figuring out where the part came from. But even if you've lost the packaging, do a PQDR with the info you have.

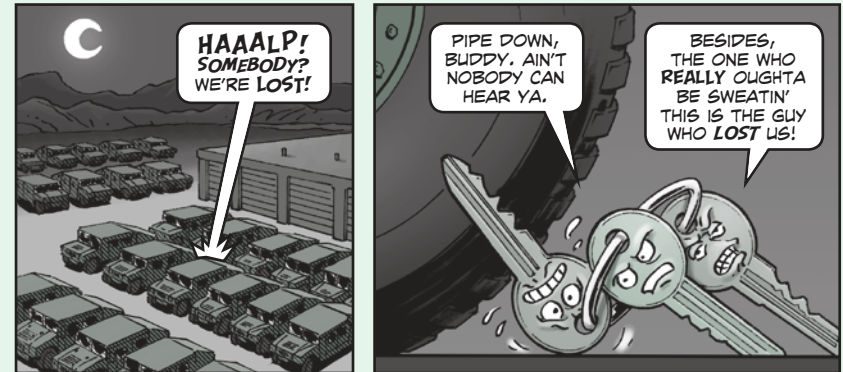
To submit the PQDR, go to: <https://www.pdrep.csd.disa.mil/>

Click on [EZ PDR Logon](#) and follow the steps. Be sure to include all required information, such as the document and contract numbers and CAGE code.

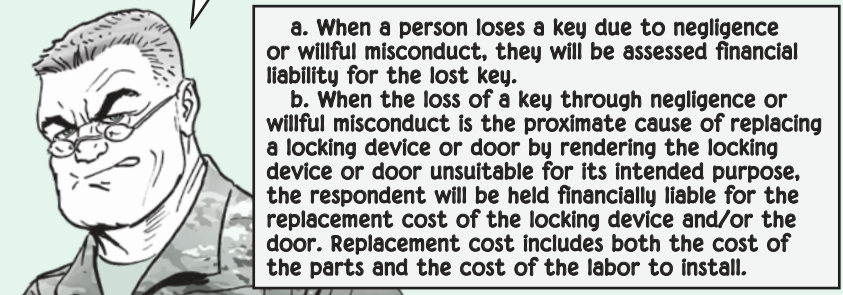
After you file the PQDR, a quality assurance rep will give you instructions for sending in the defective part. They'll need it for their investigation. It's important you send the part ASAP. If they don't receive it within two weeks, they'll close the investigation.

If you receive the **incorrect** part, file a supply discrepancy report (SDR). The basic steps are the same, but select the **SDR** radio button instead of PQDR.

On the Hook for Lost Keys?



IT'S LIKE THIS, SERGEANT. SECTION 14-23 IN AR 735-5, **PROPERTY ACCOUNTABILITY POLICIES** (MAY 13), SERVES IT UP STRAIGHT...



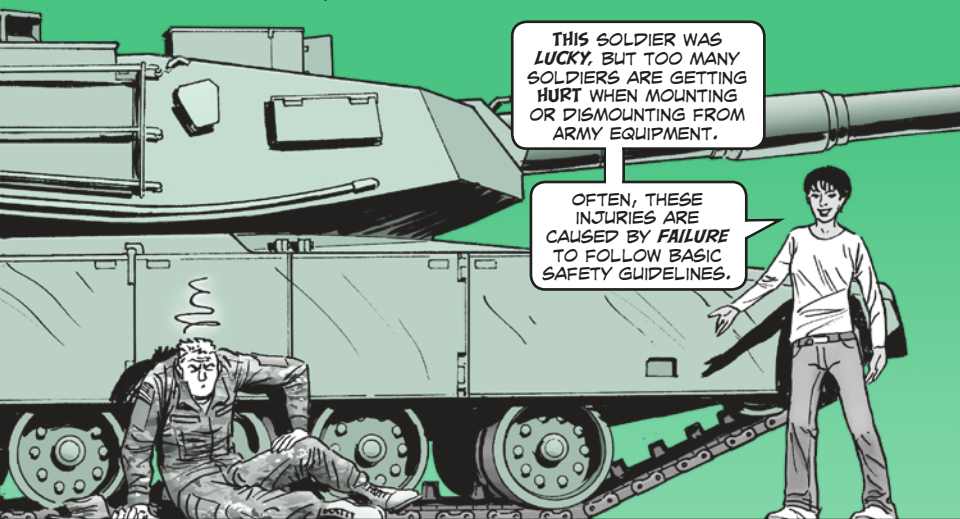
WANT PROPERTY ACCOUNTABILITY TIPS? CHECK OUT THE COMMAND SUPPLY DISCIPLINE PROGRAM (CSDP) AND PROPERTY ACCOUNTABILITY KNOWLEDGE CENTER ON AKO:

<https://www.us.army.mil/suite/page/670916>

QUESTIONS? CLICK THE RED **ASK THE EXPERT** BUTTON IN THE CENTER OR EMAIL:

usarmy.lee.tradoc.mbx.pa-csdp-helpdesk@mail.mil

Safety... **THINK Before You Climb!**



THIS SOLDIER WAS **LUCKY**, BUT TOO MANY SOLDIERS ARE GETTING **HURT** WHEN MOUNTING OR DISMOUNTING FROM ARMY EQUIPMENT.

OFTEN, THESE INJURIES ARE CAUSED BY **FAILURE** TO FOLLOW BASIC SAFETY GUIDELINES.

HOW CAN **YOU** AVOID GETTING HURT?

BE AWARE AND THINK IT THROUGH **BEFORE** YOU EVEN MAKE A MOVE. HERE ARE SOME TIPS...

- Before climbing on equipment, remove all jewelry and put on protective gloves.
- Make sure your boot soles have good traction to reduce chances of slipping.
- Never mount or dismount from a moving vehicle. Drivers must bring the vehicle to a **complete** stop before allowing anyone to mount or dismount.

- Make sure you understand and use the three points of contact method when mounting, dismounting or moving around on the vehicle. This means having two hands and one foot or two feet and one hand on the equipment at all times.



- Break three points of contact only when you reach the ground, cab, turret or a stable platform.
- When climbing, keep both hands free for grasping handholds. Don't try to hold supplies, lunch buckets, tools or other items. If you need something, hoist it up after mounting the equipment or have a buddy hand it up to you. Do the same in reverse before climbing down.

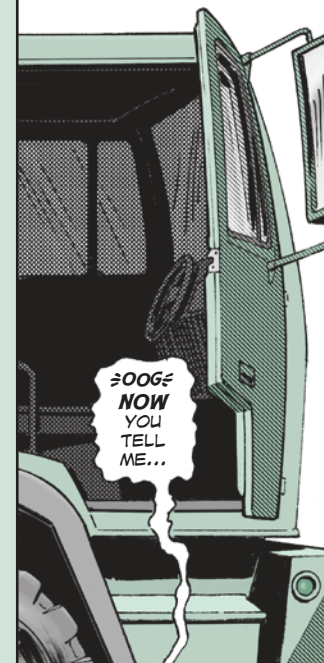
- Use the parts designed by the manufacturer for mounting and dismounting, such as steps, running boards, traction strips, footholds and handgrips. Keep these parts free of mud, snow, grease and other hazards.



- Avoid using wheel hubs, machine tracks or door handles for mounting and dismounting.
- Be sure the driver and gunner are aware whenever people mount or dismount from the vehicle.
- Never climb in front of a weapon when mounting or dismounting from a vehicle.

FOR MORE SAFETY POINTERS, CHECK OUT THE US ARMY COMBAT READINESS CENTER'S ON-DUTY SECTION AT: <https://safety.army.mil/ON-DUTY.aspx>

- **Never** dismount from a vehicle by jumping.



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

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

THE BIG **CLANG** THEORY!



SOMETHING **LOOK** WRONG?
FUNNY **NOISE?** STRANGE **SMELL?**

**BEST SAFETY PRACTICES
INCLUDE TRUSTING YOUR
*EYES, EARS, AND NOSE!***

