

# The Right Fit: Tow Bars and Adapters

OK, I  
NEED A  
LITTLE  
HELP  
HERE...

I DON'T KNOW WHICH  
TOW BAR FITS EACH OF  
YOU... OR WHAT ADAPTERS  
I NEED SO YOU CAN TOW  
OTHER RIGGS SAFELY.

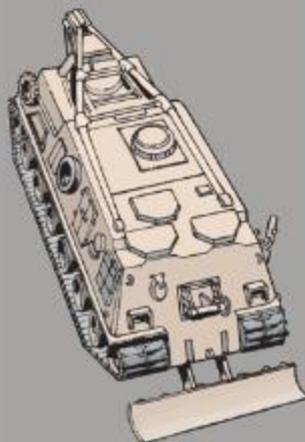
YEAH, IT'S  
HARD FOR US  
TO REMEMBER  
THAT STUFF,  
TOO.

BUT I'M SURE  
HALF-MAST KNOWS!  
LET'S FIND OUT  
FROM HIM!

WE KNOW IT CAN BE TOUGH  
TO FIGURE OUT THE RIGHT  
TOW BARS AND ADAPTERS  
TO USE IN VEHICLE  
RECOVERY OPERATIONS.

SO HERE'S SOME  
HELPFUL INFO ON  
ARMY-APPROVED  
TOW BARS AND  
ADAPTERS.

Towing vehicle: M88A1 recovery vehicle



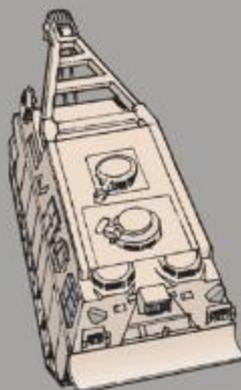
Tow bar: Heavy duty tow bar,  
NSN 4910-01-267-2912 (capacity  
112,000 lbs)



#### Adapters:

- 2.5-10-ton light duty, NSN 2540-00-863-3153
- 10-50-ton medium duty, NSN 5340-01-267-2908 (comes with tow bar)
- 50-ton heavy duty, NSN 2450-00-589-6391
- Adapter, tow bar, NSN 2540-01-440-4979

Towing vehicle: M88A2 recovery vehicle. Also part of the  
HEMTT additional authorization list (AAL).



Tow bar: Heavy duty tow bar,  
NSN 2540-01-434-8595  
(capacity 139,000 lbs)

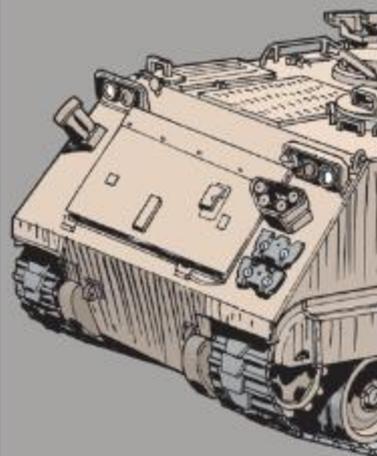


#### Adapters: (Not supplied with tow bar)

- 2.5-10-ton light duty, NSN 2540-00-863-3153
- 10-50-ton medium duty, NSN 5340-01-267-2908
- 50-ton heavy duty, NSN 2450-00-589-6391
- Adapter, tow bar, NSN 2540-01-440-4979

**Note:** The M88A1/A2 heavy duty tow bars do not have a working load limit, but do not exceed the weight of the M88A1/A2 (112,000 lbs/139,000 lbs). Any like-vehicle towing must be done by a vehicle of equal or greater weight.

Towing vehicle: M113 APC



Tow bar: NSN 2540-00-936-7801, (capacity 68,000 lbs)

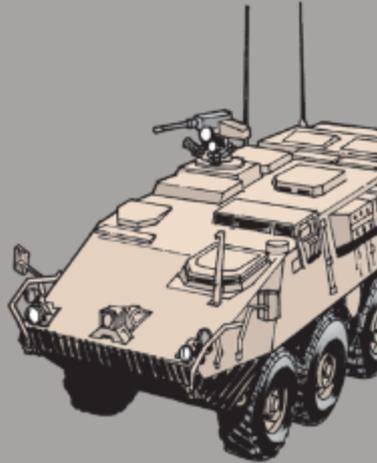


#### Adapters: (supplied with tow bar)

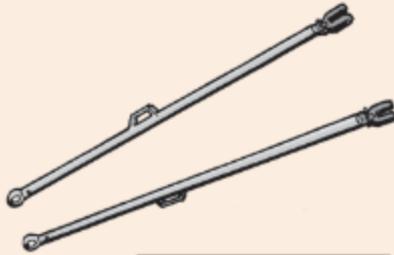
- Clevis, rod end, NSN 5340-01-051-3609
- Clevis, rod end, NSN 5340-01-046-4770

PS MORE

Towing vehicle: Stryker family of vehicles (FOV)



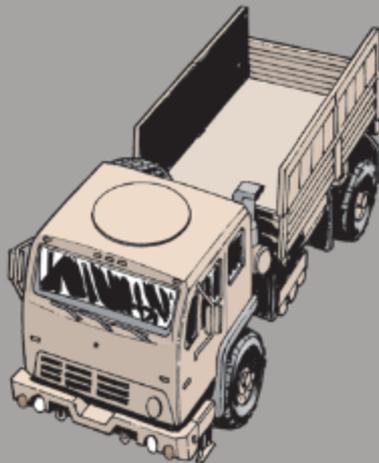
Tow bar: Stryker tow bar, NSN 2540-01-517-9227 (capacity 50,000 lbs)



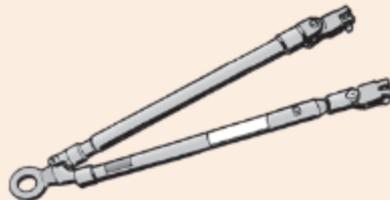
Adapter: Clevis, rod end, NSN 5340-01-051-3609 (comes with tow bar)

**Caution:** Use the Stryker tow bar only on the Stryker FOV. Using it on other vehicles will damage the tow bar and towed vehicle due to the towing angle.

Towing vehicle: MTV



Tow bar: Medium-duty tow bar, NSN 4910-01-554-7296 (capacity 65,000 lbs)



Adapter: Clevis, rod end, 1 inch, NSN 5340-01-023-9801 (comes with tow bar)  
Swivel pins, 1 inch, PN 12424566-004

**Caution:** Use this tow bar only in the retracted position. Using it in the extended position may decrease tow capacity and damage both the tow bar and towed vehicle.

MRAP Flat Towing

MRAP Flat Tow Recovery

Adapter	NSN 2540-00-863-3153 (2.5-10 ton)
For MRAP variants:	BAE Systems RG-33L 6x6 BAE TVS Caiman 6x6 Navistar MaxxPro 4x4
Adapter	NSN 5340-01-267-2908 (10-50 ton)
For MRAP variants:	Force Protection Cougar 6x6 Force Protection Cougar 4x4 General Dynamics RG-31 4x4 MATV Base/UIK/SOCOM 4x4 Force Protection Buffalo A1/A2

MRAPs CAN BE FLAT-TOWED USING ANOTHER MRAP OR LIKE VEHICLE, AS LONG AS THE TOWING VEHICLE IS OF EQUAL OR GREATER WEIGHT.

NOTE: THE ONLY ARMY-APPROVED TOW BARS FOR USE WITH MRAPs ARE HEAVY TOW BARS, NSN 4910-01-267-2912 AND 2540-01-434-8695. THE FOLLOWING CHART IDENTIFIES WHICH ADAPTER TO USE WITH EACH MRAP VARIANT.



**WARNING:** A DISABLED VEHICLE WITH CAGED BRAKES SHOULD NEVER BE TOWED BY A LIKE VEHICLE. USE DEDICATED RECOVERY ASSETS.

FOR DETAILED VEHICLE RECOVERY INSTRUCTIONS, DOWNLOAD THE FOLLOWING BOOKS IN PDF FROM TRADOC'S PROJECT OFFICE FOR BATTLE-FIELD RECOVERY ...

TOW BAR SMART BOOK (OCT 12) AND TACTICS, TECHNIQUES AND PROCEDURES (TTP) FOR RECOVERING THE MINE RESISTANT AMBUSH PROTECTED (MRAP) VEHICLES (MAR 12)...

<https://forums.army.mil/secure/communitybrowser.aspx?id=1054789&lang=en-US>

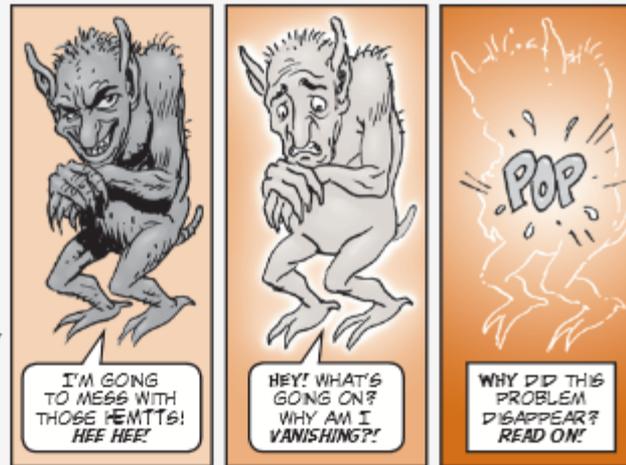
QUESTIONS? CONTACT WILLIAM PAYSON AT DSN 298-4115/AA74, (410) 278-4115/AA74, OR EMAIL: [william.l.payson.civ@mail.mil](mailto:william.l.payson.civ@mail.mil)



PS END

HEMTT A4 and  
PLS A1 Trucks...

## STEERING COLUMN WIRING HARNESS CHANGED!



Ever wish your problems could just disappear? Well, one problem with HEMTT A4 trucks that rolled off the line between Mar 10 and 3 Aug 12 and all PLS A1 trucks produced before 3 Aug 12 is about to do just that. Vanish!

A production issue caused a cab wiring harness to rub against a grease fitting on the steering column of these HEMTT A4 and PLS A1 trucks. That contact can lead to a damaged wiring harness, including sparking of exposed wires or shearing of the wires. But the good news is, steering and other safety-related functions aren't affected.

More good news is that Oshkosh Corporation will inspect and modify suspect trucks. In fact, Oshkosh will provide the required parts and labor to correct this problem at no cost to units. The repair work will include removing and disposing of the problem grease fitting, installing a plug to fill the opening, and adding two half-inch wide cable ties.

The trucks that need to be fixed are identified at this link:

[https://tulsa.tacom.army.mil/maintenance/  
?t=mam&f=HEMTTA4PLSA1STEERWI.xlsx](https://tulsa.tacom.army.mil/maintenance/?t=mam&f=HEMTTA4PLSA1STEERWI.xlsx)

Units should schedule repairs by contacting Christopher Schweitzer at:  
[cschweitzer@defense.oshkoshcorp.com](mailto:cschweitzer@defense.oshkoshcorp.com)

And you shouldn't see this problem in the future because the steering shaft wiring harness change was added to HEMTT A4 and PLS A1 production on 3 Aug 12.

What about the TMs? The HEMTT A4's TM 9-2320-326-14&P (EM 0288, May 09), and the PLS A1's TM 9-2320-319-13&P (EM 0298, May 09) will be updated in the next revision. The grease fitting will be removed and two half-inch wide cable ties will be added.

Want more details? See TACOM LCMC's maintenance information message 12-051 online:

<https://tulsa.tacom.army.mil/SAFETY/message.cfm?id=MI12-051.html>

FMTV...

# MAKE SURE YOUR TIRES MATCH!



Just like a size 10 shoe in one brand can be a size 9½ in another, all tires don't come as a standard size either. Ordering FMTV wheel assembly, NSN 2530-01-500-4619, can bring two different tires. So make sure you take a good look at the manufacturer and the tread. The Goodyear tire is about an inch taller than the Michelin option.



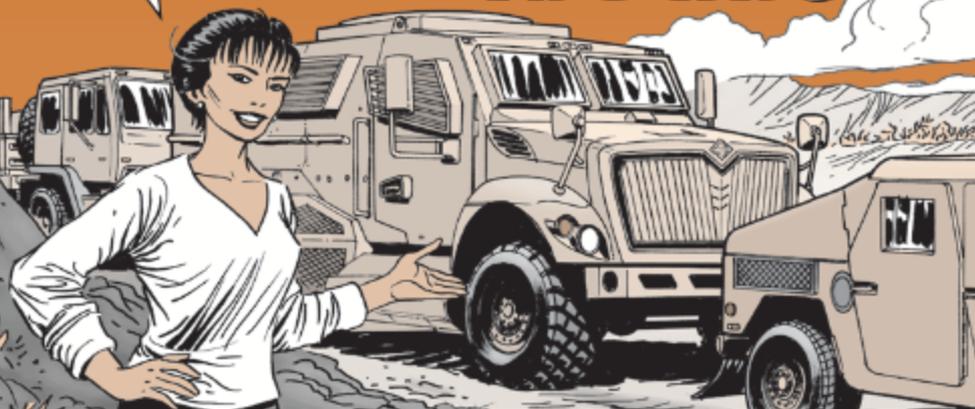
Finally, make sure your spare tire matches the tires on your truck. The spare needs to at least match one of the axles. As a general rule for all Army vehicles, make sure the spare tire matches the tires that are already installed.

## M1117 ASV Seat Switch NSN

If the electric switch for the hydraulic seat on your M1117 armored security vehicle (ASV) goes bad, don't replace it with NSN 6150-01-577-4987 (Item 1 in Fig 69A of TM 9-2320-307-24P). That brings the switch and bracket at a cost of almost \$1,650! Instead, reuse the old bracket and replace just the switch with NSN 5930-00-765-5719. That sets you back only \$51.88.

EYEBALL THE CHARTS ON THESE FOUR PAGES FOR THE LATEST TIRE AND WHEEL ASSEMBLY NSNs FOR ARMY VEHICLES.

# Vehicle Tire Info



## MEDIUM TACTICAL VEHICLES

Vehicle	Assembly NSN	Tire NSN	Size
FMTV A0/A1 (M1078-M1090, M1092, M1093, M1096, M1148, M1157)	2530-01-500-4619	2610-01-356-9098	395/85R20 MV/T (Goodyear); MIL395/85R20 XML (Michelin)
FMTV LTAS (A1P2)	2530-01-571-5857	2610-01-564-6172 (Goodyear); 2610-01-572-6017 (Michelin)	395/85R20 MV/T (Goodyear); 395/85R20 XZL+ (Michelin)
M923A1 & M939A1/A2	2530-01-506-7243	2610-01-214-1344	14.00R20
M818/M926/M939 w/o ABS, M939 FOV	2530-01-506-7244	2610-00-262-8653	11.00-20.00
M939 with ABS	2530-01-506-8319	2610-01-473-3997	11.00R20
M1117 ASV	2530-01-478-0593	2610-01-479-4200	14.00R20
LAV	2530-01-532-5635	2610-01-527-8260	325/85R16
M35A2/M200 Trlr/M149A2/M105A2/M373A2/M332/M313/M750	2530-01-506-5910	2610-00-262-8677	9.00-20
M35A3	2530-01-506-5915	2610-01-397-6976	14.50R20

## MHE AND CONSTRUCTION VEHICLES

Vehicle	Assembly NSN	Tire NSN	Size
10K ATLAS Forklift - Right	2530-01-446-1035	2610-01-459-0440	17.50-25
10K ATLAS Forklift - Left	2530-01-514-8514	2610-01-459-0440	17.50-25
4K RTFL (JI CASE M4K)	2530-01-506-6873	2610-01-320-0460	15.00-19.50
4K Entwistle Forklift	2530-01-596-0860	2610-01-320-0460	15.00-19.50
M10A 10K (right side)	2530-01-506-6884	2610-00-726-5168	20.50-25
M10A 10K (left side)	2530-01-527-9583	2610-00-726-5168	20.50-25
50K RTCH (Caterpillar)	2530-01-506-6885	2610-01-114-3732	35.00/65R33
50K RTCH (Kalmar)	2530-01-484-1419	2610-01-483-5851	29.50-35
6KVRRTFL - (Right Side)	2530-01-518-3656	2610-00-726-5164	17.50-25
6KVRRTFL - (Left Side)	2530-01-518-3659	2610-00-726-5164	17.50-25
IHMEE (Right)	2530-01-543-8303	2610-01-517-5835	14.00R24
IHMEE (Left)	2530-01-543-8304	2610-01-517-5835	14.00R24
130G Grader (Right Side)	2530-01-549-6588	2610-01-543-4493	13.00-24
130G Grader (Left Side)	2530-01-582-3904	2610-00-543-4493	13.00-24
MW24C (Right Side)	2530-01-581-5782	2610-00-726-5165	20.50-25
MW24C (Left Side)	2530-01-584-7913	2610-01-726-5165	20.50-25
CS-563D Vib Roller	2530-01-572-7187	2610-01-559-2780	23.1-26
SEE	2530-01-527-9584	2610-01-220-6413	12.50R20

## MRAP VEHICLES

Vehicle	Assembly NSN	Tire NSN	Size
BAE RG33/RG33 HAGA	2530-01-555-4810	2610-01-552-5577	395/85R20 XZL
BAE RG33/RG33 HAGA PLUS	2530-01-563-0583	2610-01-561-7314	16.00R20 XZL
BAE TVS Caiman	2530-01-555-4749	2610-01-559-2516	395/85R20 XML
BAE TVS Caiman PLUS	2530-01-565-2137	2610-01-564-6172	395/85R20
Navistar MaxxPro & MaxxPro PLUS (Front Axle)	2530-01-555-5456	2610-01-552-5577	395/85R20 XZL
Navistar MaxxPro PLUS (Rear Axle)	2530-01-565-5657	2610-01-561-8321	12.00R20
Navistar DASH	2530-01-570-6352	2610-01-572-6017	395/85R20 XZL+LR J
GDLS RG31 365 w/Steel Rim	2530-01-560-8477	2610-01-388-6679	365/85R20XZL
GDLS RG31A2 365 w/Alum Rim	2530-01-572-5907	2610-01-388-6679	365/85R20 XZL LR J
GDLS RG31A2 395 w/Alum Rim	2530-01-572-5445	2610-01-552-5577	395/85R20 XZL LR J
M-ATV	2530-01-576-5896	2610-01-572-6017	395/85R20 XZL+LR J
M-ATV UIK	2530-01-592-6682	2610-01-561-7314	16.00R20 XZL

### HMMWV AND LIGHT TACTICAL VEHICLES

Vehicle	Assembly NSN	Tire NSN	Size
HMMWV/M1101 Trailer L/R D	2530-01-493-5859	2610-01-333-7632	37.0/12.5R16.5
HMMWV/M1101 Trailer L/R D (24 Bolt Rim w/Michelin Baja/ Goodyear MTR tire)	2530-01-558-2138	2610-01-541-4090	37.0/12.5R16.5
HMMWV/M1101 Trailer L/R E (24 or 20 Bolt Rim w/ Goodyear MTR tire /Michelin Baja T/A)	2530-01-563-8620	2610-01-563-8328	37.0/12.5R16.5

### ROUTE CLEARANCE VEHICLES

Vehicle	Assembly NSN	Tire NSN	Size
Buffalo (Front)	2530-01-535-9462	2610-01-334-2694	16.00R20
Buffalo (Rear)	2530-01-535-9459	2610-01-334-2694	16.00R20
Buffalo (Front for Hull #'s 65-current)	2530-01-554-6621	2610-01-334-2694	16.00R20
RG31 (MK2 and MK3)	2530-01-541-5364	2610-01-537-4093	365/80R20

### LIGHT AND MEDIUM TRAILERS

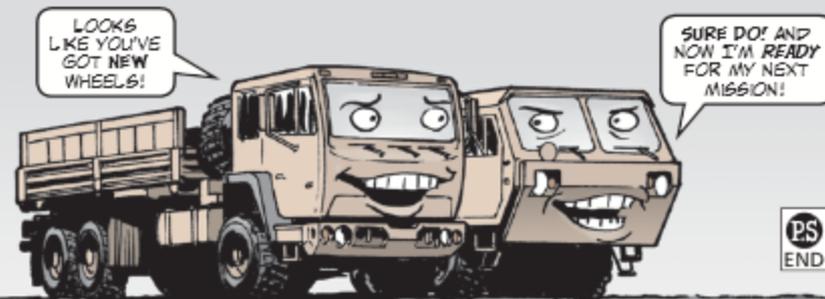
Vehicle	Assembly NSN	Tire NSN	Size
M1076 PLS Trailer	2530-01-500-4991	2610-01-357-8333	15.50/80R20
M860A1 Trailer (Patriot)	2530-01-506-7315	2610-01-500-4505	445/65R22.5
M870 Trailer	2530-01-508-6677	2610-01-325-1934	10.00R15
M870A1 Trailer	2530-01-506-7646	2610-01-325-1934	10.00R15
M870A3 Trailer	2530-01-571-7223	2610-01-518-5292	275/70R22.5
M1062 Trailer	2530-01-506-7648	2610-01-045-3688	11.00R22.50
M172A1 Trailer	2530-01-506-7650	2610-01-325-1934	10.00R15
M129A4 Semitrailer	2530-01-514-7903	2610-01-045-3688	11.00R22.50
M1061A1	2530-01-514-7909	2610-01-204-4488	12.00-16.50
M119A2 (Left side)	2530-01-541-7004	2610-01-551-2684	9.00-16
M119A2 (Right side)	2530-01-541-7001	2610-01-551-2684	9.00-16
FMTV Trailer (M1082, M1095)	2530-01-542-7405	2610-01-518-5292	275/70R22.5
M871, M871A1, M871A2	2530-01-506-4129	2640-01-481-5378	11.00R22.50
M871A3	2530-01-508-2786	2610-01-519-0940	255/70R22.5
M872 Trailer Series	2530-01-547-4136	2610-01-506-0388	11.00R22.50
M872A4, M871R, M871A1R, M871A3R & M871A2R	2530-01-584-7914	2610-01-569-2153	11.00R22.50
M200A1, M149A1/A2, M105A2/A3, M103A3	2530-01-528-9461	2610-01-063-7947	10.00R22.5
M967A2/M969A3	2530-01-527-4609	2610-01-045-3688	11.00R22.50
LHS Trailer (M1147)	2530-01-542-7405	2610-01-518-5292	275/70R22.5

### LINE HAUL TRACTORS

Vehicle	Assembly NSN	Tire NSN	Size
M915A2 (Front), M969, M969A1/A2, M871, M129A2C, M129A3	2530-01-506-4125	2610-01-045-3688	11.00R22.50
M915A3	2530-01-506-4128	2610-01-481-5378	11.00R22.50
M915A4/A2 (Rear), M871A1, M871A2, M871	2530-01-506-4129	2610-01-481-5378	11.00R22.50
M917A1 Front	2530-01-506-4131	2610-01-436-3332	385/65R22.50
M917A1 Rear	2530-01-506-4132	2610-01-436-3334	315/80R22.50
M916A1/A2 Rear	2530-01-506-4133	2610-01-436-3334	315/80R22.50
M916A3 (Up Armor Front)	2530-01-557-2625	2610-01-552-6448	425/65R22.50
M916A3 (Up Armor Rear, Right Outer, Left Inner)	2530-01-584-7917	2610-01-514-3999	315/80R22.50
M916A3 (Up Armor Rear, Left Outer, Right Inner)	2530-01-584-7915	2610-01-514-3999	315/80R22.50
M920	2530-01-506-4136	2610-01-332-1564	11.00R24
M915A2 (Up Armor)	2530-01-537-8294	2610-01-465-5823	12.00R22.5
M915A3 (Up Armor)	2530-01-537-8297	2610-01-465-5823	12.00R22.5
M915A4 (Up Armor)	2530-01-537-8299	2610-01-465-5823	12.00R22.5
M878A2	2530-01-514-5105	2610-01-507-3633	11.00R22.50

### HEAVY TRUCKS AND TRAILERS

Vehicle	Assembly NSN	Tire NSN	Size
M977 HEMTT w/o CTIS	2530-01-477-1660	2610-01-334-2694	16.00R20
M1070/74/75 PLS HET Truck w CTIS	2530-01-506-2715	2610-01-334-2694	16.00R20
M1000 HET Trailer	2530-01-506-5762	2610-01-323-4813	215/75R17.50
M989A1 Trailer HEMAT	2530-01-506-7324	2610-01-452-0605	385/65R22.50

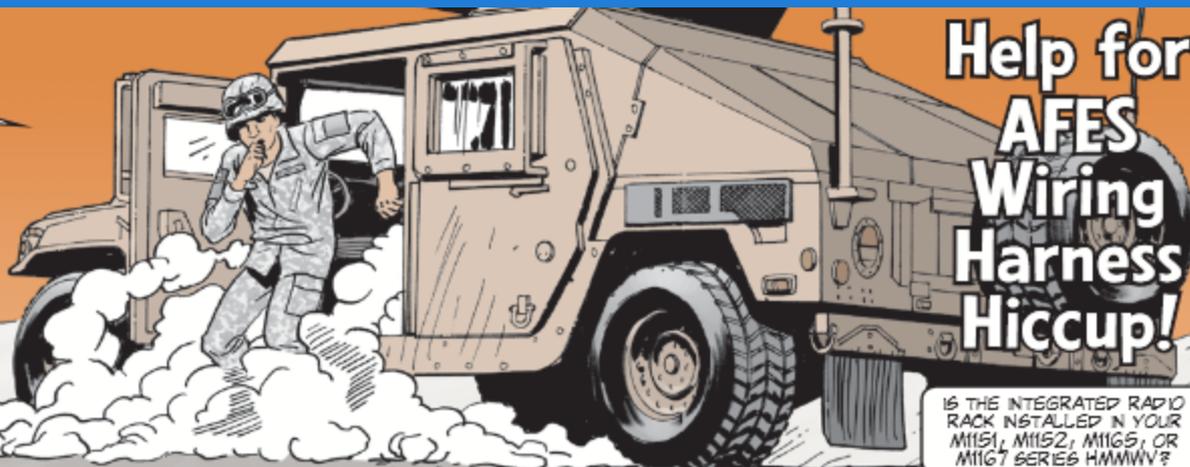


PS  
END

HMMWV...

THANK GOD I GOT OUT IN TIME!

I WONDER WHAT SET OFF THE AFES?



# Help for AFES Wiring Harness Hiccup!



IS THE INTEGRATED RADIO RACK INSTALLED IN YOUR M1151, M1152, M1155, OR M117 SERIES HMMWV?

IF SO, YOU MAY HAVE NOTICED A PROBLEM WITH THE AUTOMATIC FIRE EXTINGUISHING SYSTEM (AFES) MASTER CONTROLLER'S WIRING HARNESS.

THAT UNSECURED HARNESS GETS TANGLED WITH THE HMMWV'S TRANSMISSION, TRANSFER AND PARKING BRAKE CONTROL LEVERS.



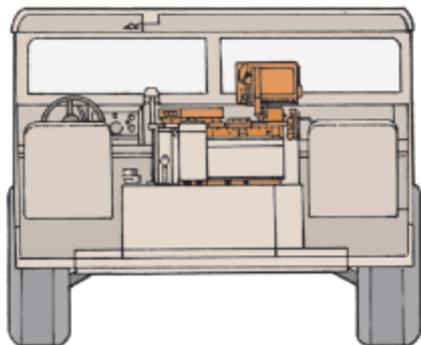
THAT PUTS TOO MUCH STRESS ON THE WIRING HARNESS AND CAN ACCIDENTALLY DISCHARGE THE AFES DURING VEHICLE OPERATION.

## TM Update Needed

Some of you have seen the wiring harness problem and have even tried to fix it. Problem is, TM 9-2320-387-24-2 (Dec 97) only tells you how to route and secure an AFES wiring harness installed with the **standard** radio rack. There are no specific installation instructions for routing or securing the AFES wiring harness with the **integrated** radio rack.

The BFT/integrated radio rack installation TBs, 11-7010-438-23 and 9-2320-387-35-1, don't help you with this, either. So the way you see the AFES routed in HMMWVs with the integrated radio rack installed could vary.

Integrated Rack in an M1151 HMMWV



## Fixing the Problem

Here's the recommended field-level repair. It allows you to secure the wiring harness out of the way of vehicle controls. Just follow this procedure:

1. Disconnect your HMMWV's batteries.
2. Disconnect the wiring harness from the AFES master controller.
3. Move all wiring out from behind the AFES master control mounting bracket.

4. Drill a  $\frac{5}{16}$ -in hole. The hole should be drilled  $\frac{1}{2}$  inch down from the top of the bracket and centered.

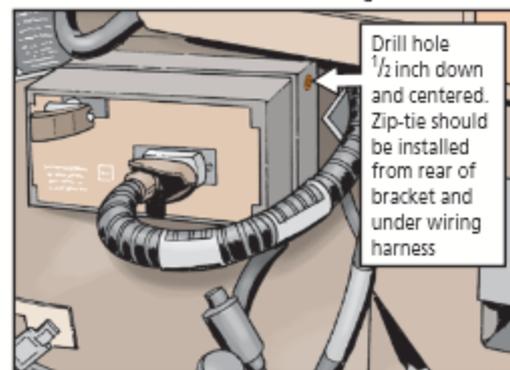
5. Reconnect the wiring harness to the AFES master controller.

6. Form a loop with the excess wiring harness length and secure it with a zip-tie. Place the loop and zip-tie behind the integrated radio rack.

7. Position the wiring harness and secure it to the drilled hole with a zip-tie. The zip-tie should be fed through the back of the bracket and the wiring harness should be positioned toward the top of the bracket.

8. Make sure you can use all vehicle controls without touching the harness.

9. Reconnect your HMMWV's batteries.

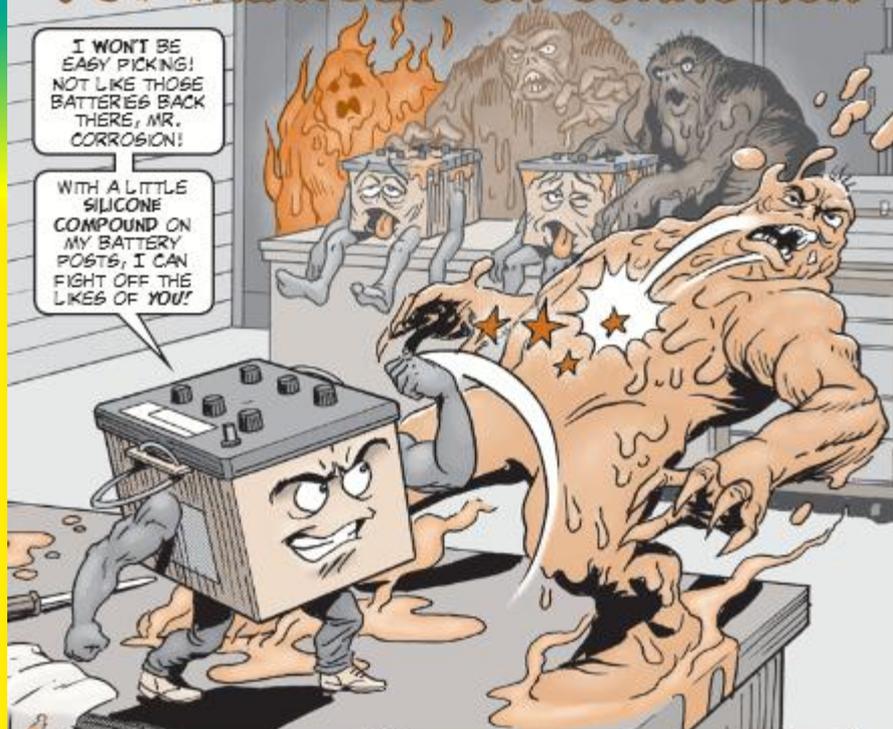


Lead-Acid Batteries...

## PUT THE HOLD ON CORROSION

I WON'T BE EASY PICKING! NOT LIKE THOSE BATTERIES BACK THERE, MR. CORROSION!

WITH A LITTLE SILICONE COMPOUND ON MY BATTERY POSTS, I CAN FIGHT OFF THE LIKES OF YOU!



Dear Half-Mast,

Around the motor pool, I've heard it's a good idea to put a light coat of grease on the terminals of our vehicle's lead-acid batteries. Supposedly, this helps prevent corrosion and makes the clamps easier to remove.

Is this true? And if so, what kind of grease is best to use?

SGT M.S.F.

Dear Sergeant M.S.F.,

Yep, it's true! The TACOM LCMC still recommends putting a light coat of GAA on your battery's positive and negative posts. However, there is a silicone compound that works even better than grease.

When applied, the silicone runs down around the battery post and terminal to completely seal out moisture. Get a 3-oz tube with NSN 8040-01-331-7133 or a 1-pint can with NSN 8040-01-331-7134.

Half-Mast

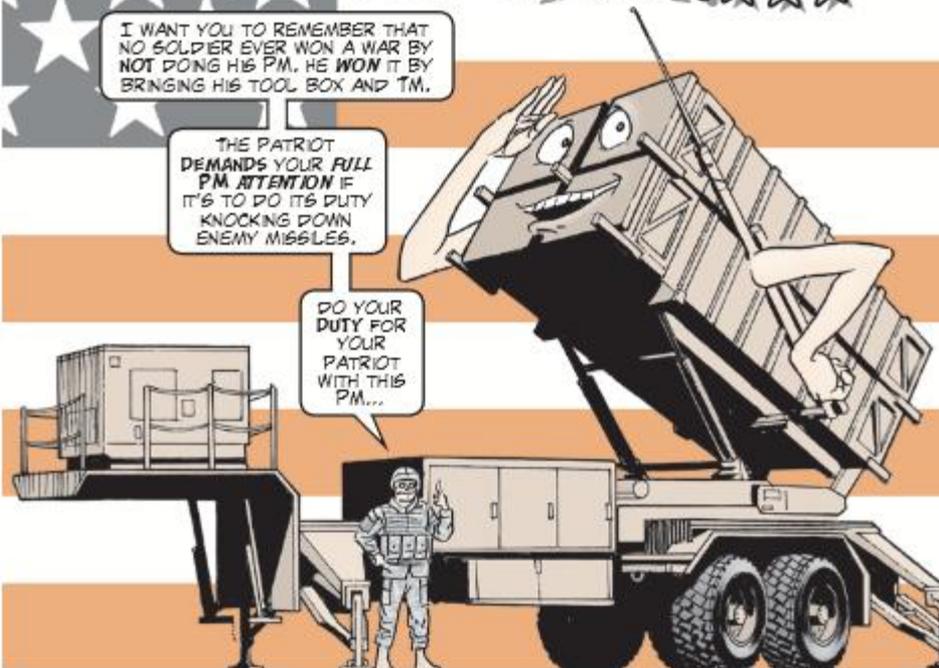
Patriot  
Missile  
System...

# PM IT'S YOUR PATRIOTIC DUTY! ★★★

I WANT YOU TO REMEMBER THAT NO SOLDIER EVER WON A WAR BY NOT DOING HIS PM. HE WON IT BY BRINGING HIS TOOL BOX AND TM.

THE PATRIOT DEMANDS YOUR FULL PM ATTENTION IF IT'S TO DO ITS DUTY KNOCKING DOWN ENEMY MISSILES.

DO YOUR DUTY FOR YOUR PATRIOT WITH THIS PM...



## Ladder Lookout

The AMG ladder is prone to cracking at the welds that secure it to the trailer. Eventually, a ladder can break off if the cracks get bad enough. You could end up hurtling through space if you're the unlucky one on the ladder when that happens. At least monthly, eyeball the ladder welds for cracks. Report any you find.



PS MORE

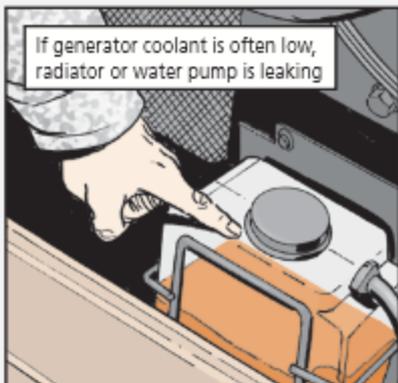
KEEP READING FOR MORE WAYS TO HELP YOUR PATRIOT!



### Generating PM

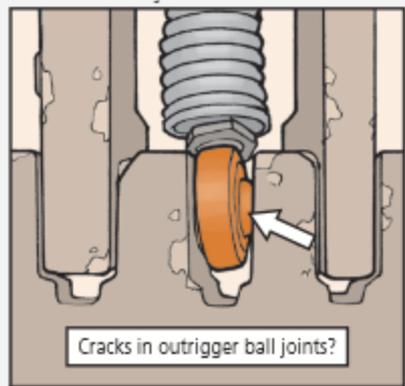
Adjust the voltage, hertz and governor knobs like WP 0044 00 in TM 9-1440-600-10 says. You're not going to help the generator run better by randomly adjusting voltage, hertz or the governor. If you get the generator's settings wrong, you'll start getting voltage faults.

Check the oil and coolant before operating. The generator is bad on oil consumption. It will often need more oil if it's been operating for a while. If the coolant is often low, the radiator or the water pump is leaking. Tell your repairman.

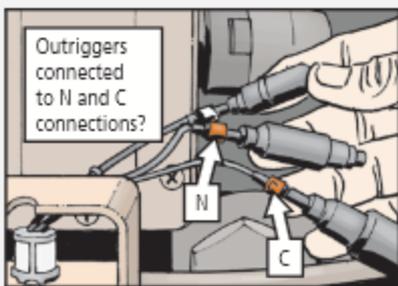


### Check Out Outriggers

Look for cracks in ball joints. Hairline cracks regularly develop in the ball joints. Eventually they can become so bad that the ball joint splits. Then the outrigger has trouble going up and down. Check all the outrigger ball joints at least monthly for cracks.



Make sure the limit switches limit. If a limit switch has stopped working or is adjusted wrong, the outrigger or its motor could be damaged during operations. The easiest way to check them is to just raise and lower the outrigger while watching the limit switches. Also make sure they are connected to the N and C connections, not the 0. Never bypass the interlock circuitry for the outriggers.



### Radar Reminders

Make sure the AN/MPQ-65's shroud is secured completely for storage and for operation. First, properly fold the shroud for storage. If it's bunched up, it will be damaged. Then ensure all the shroud straps are tight and buckled. If the shroud is not secured completely before lowering the antenna, its frame can punch holes in the top of the radar. Water can then get in the radar and cause expensive damage.

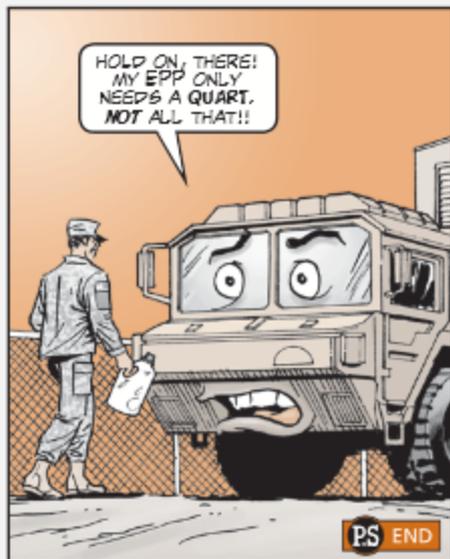


Also make sure the shroud straps are securely buckled for operations. If the shroud flips back down while the radar is radiating, it could catch fire from the transmitted radio frequency.

Don't rush the manual drive for the main array. Some Soldiers attach a power tool to the manual drive to try to make it move faster. All that does is destroy the manual drive's gears. Crank the drive with a wrench like you're supposed to.

### EPP

Easy does it when adding oil to the electrical power plant (EPP). If you overfill the EPP, a gasket will be blown and you've got a major oil leak. Check the dipstick to see if the EPP needs oil and how much. Then use an oil dispenser to add just the right amount. If you use a funnel and a 5-gal jug, you will have trouble getting it right.

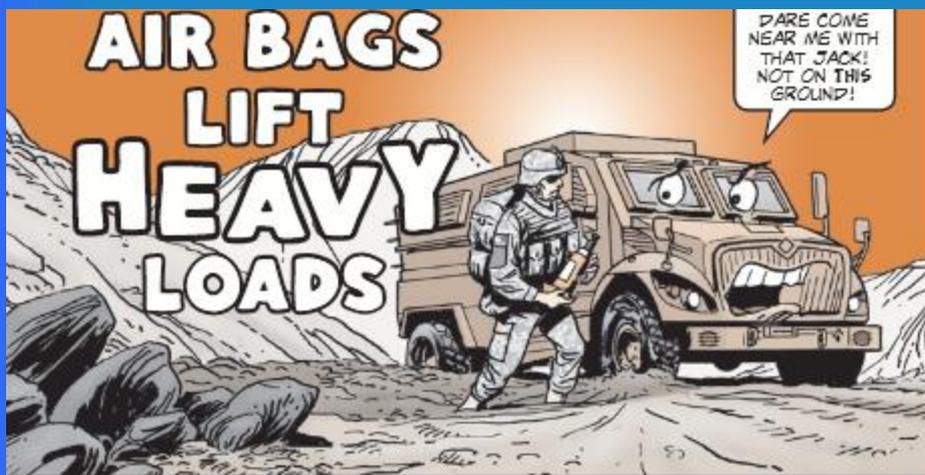


Add fuel just to the bottom of the fill neck. If you push fuel past the bottom of the neck, it can leak from heat expansion and that's a fire hazard.

Check the rubber hinges on the generator access doors for dry rot. If the hinges start to fall apart, the doors won't shut correctly and then rain can get in the generator.

PS END

# AIR BAGS LIFT HEAVY LOADS

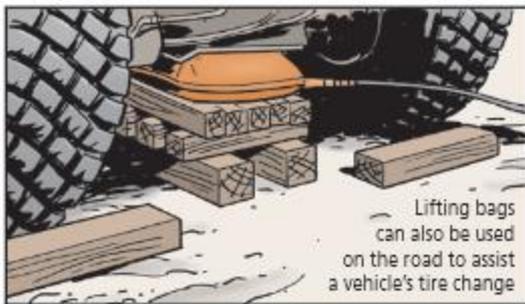


Did you know that airlifting bags that can lift heavy loads are available in the Forward Repair System (FRS)?

The Army often uses them during maintenance operations to lift vehicles for services or in emergency situations, such as removing personnel from underneath vehicles or collapsed structures.

Lifting bags can also be used on the road to assist a vehicle's tire change. Their large area of ground contact makes them helpful on unstable ground and low clearance areas that conventional bottle jacks can't get underneath.

Lifting bags, KPI-44 and KPI-74, come with the FRS. The KPI-32 is part of SATS (Standard Automotive Tool Set).



HERE'S THE CAPACITY OF EACH BAG...

Air Lifting Bag	Weight and Height Capacity
KPI-74	70.2 tons, 20 inches
KPI-44	41.5 tons, 15 inches
KPI-32	29.9 tons, 13 inches

Lifting bags are inflated using compressed air from an air compressor or a vehicle's air system that provides at least 118 psi. Although the lift rating decreases as the lift height increases, you can stack up to two bags to increase the total lift height.

Storage length and width dimensions differ for each bag, depending on a particular bag's lift rating. The deflated thickness for each bag is one inch or less. For example, the KPI-74 (70.2 tons) bag's storage dimensions are 37" x 37" x 1".

To use the lifting bags, you need a controller kit that includes a pressure regulator, air hoses and inflation controller, as well as shutoff adapters to operate the bag from your vehicle's air system. These items are available separately as part of the FRS and SATS. However, the additional components are required if you purchased air bags and don't have an FRS or SATS.

By the way, if your FRS never came with a KPI-74 air lifting bag, go to this website: <https://pmskot.army.mil/wcstart.cfm>

There you'll get a free bag and accessories. But the equipment is free only if it hasn't already been retrofitted under your unit's FRS's serial number.

If you have any questions about the FRS and air lifting bags, email the FRS system acquisition manager, Larry Rigsby: [larry.e.rigsby2.civ@mail.mil](mailto:larry.e.rigsby2.civ@mail.mil)

If you have any questions about recovery techniques, write to TARDEC's Towing and Recovery team: [emily.a.neville2.civ@mail.mil](mailto:emily.a.neville2.civ@mail.mil)