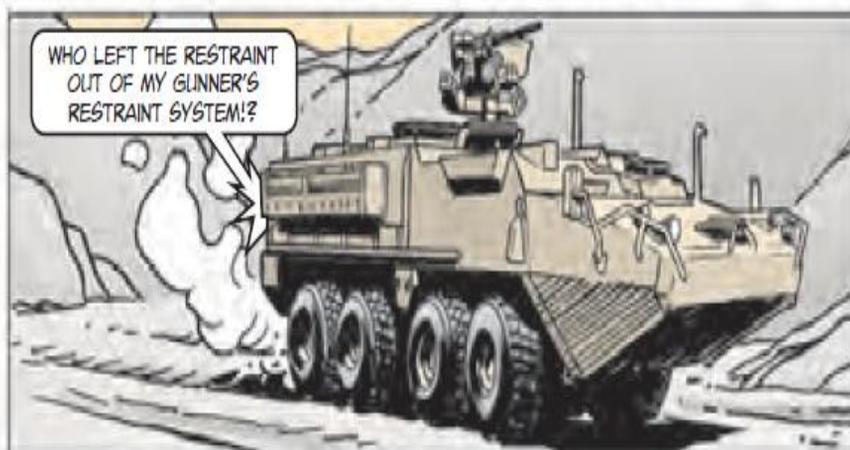


Stryker...

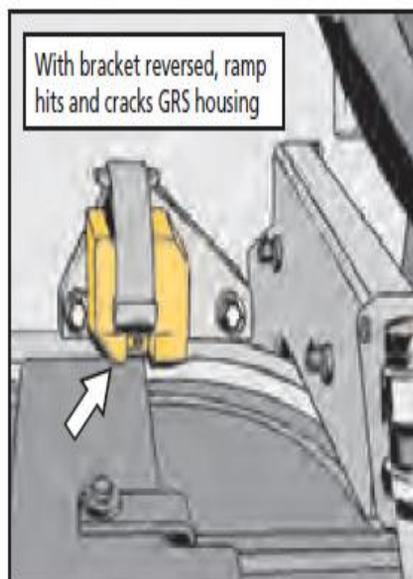
BRACKET FIX SHOWS SOME RESTRAINT



The newly installed gunner's restraint system (GRS) on the M1126 ICV, M1127 RV, M1130 CV, M1131 FSV, and M1132 ESV Strykers won't do much restraining if it's not installed right.

The right-rear retractor for the air sentry guard GRS was installed the wrong way on some of these Strykers. The bracket that mounts the retractor to the floor was flipped, moving the retractor closer to the center of the vehicle.

Unfortunately, that places the retractor too close to the ramp. When the ramp is closed, it hits the retractor casing and cracks it. Then the GRS webbing can bind as it retracts. That can keep it from tightening properly, which puts you at risk.

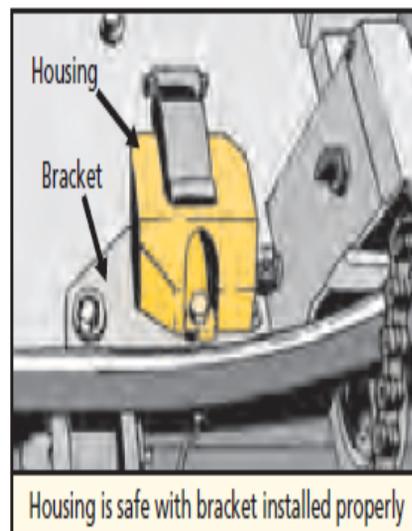


As part of your before-operations PMCS, inspect all of the GRS harnesses, retractors and brackets, but pay special attention to the right-rear air guard bracket. If the bracket is installed wrong, it's considered a safety issue and your vehicle is NMC until the problem can be fixed. Notify your mechanic and he'll correct the bracket orientation.

If the bracket was installed properly and there's enough clearance for safe operation of the retractor, you're good to go. However, there may be a few vehicles that still have an interference problem even after the bracket is reinstalled correctly.

In those cases, tell your mechanic. He'll replace the old bracket with a new one, CAGE 1EAW9, PN DTA201374. The new bracket mounts the same way, but has been reshaped to move the retractor $\frac{3}{4}$ inch farther out of the way. The bracket is also stamped with the word **TOP** for proper orientation.

You'll find the complete scoop on this issue in TACOM GPA 11-007.



Up-armored
HMMWVs...

Preventing A/C Compressor Failure

NOBODY
WANTS
PARTS
TO FAIL
ON THEIR
VEHICLES.

BUT THAT'S HAPPENED
SEVERAL TIMES WHEN THE
A/C COMPRESSORS FAILED
ON M1151, M1151A1, M1152,
M1152A1, M1165, M1165A1, AND
M1167 UP-ARMORED HMMWVs.

THE GOOD NEWS IS
THAT SOME CHANGES
TO OPERATING AND
MAINTAINING THE A/C
SYSTEM CAN STOP
A/C FAILURE.



PREVENT FAILURE OF YOUR UP-ARMORED HMMWV'S A/C COMPRESSOR, COMPRESSOR CLUTCH AND PULLEY ASSEMBLY BY INSTALLING AN UPGRADED THERMOSTAT SWITCH, NSN 6685-01-539-7057. AND MAKE SURE YOU PRACTICE THE FOLLOWING NEW PROCEDURES:

Changes for Operators

OPERATORS, GET TM 9-2320-387-10 W/CHANGE 6 AND MAKE THESE PMCS CHANGES:

1	ADD THE FOLLOWING TO THE BOTTOM OF TABLE 2-2, PMCS, ON PAGE 2-32.2:			
	7	Before	Serpentine Drivebelt and Pulleys	<p>7 Before Serpentine Drivebelt and Pulleys</p> <p>a. Visually check drive and idler pulleys for evidence of excessive wear or misalignment.</p> <p>b. Check if serpentine drivebelt is missing, broken, cracked, frayed, loose, misaligned, or split.</p>
	7.1	Before	Service Port Caps	<p>7.1 Before Service Port Caps</p> <p>Check the A/C service port caps for presence and security.</p>
2-32.2 Change 2				

HAND TIGHTEN IF LOOSE, REPORT TO MAINTENANCE PERSONNEL IF MISSING. (YOU DON'T NEED AN ENTRY IN THE NOT FULLY MISSION CAPABLE IF COLUMN.)

2

ON A SEPARATE SHEET OF PAPER, WRITE THE FOLLOWING TWO CAUTIONS AND INSERT IT BETWEEN PAGES 2-40 AND 2-41...

*****CAUTION*****

Prior to engagement and during operation of the A/C, ensure the voltmeter needle is in the green zone. Failure to comply may result in damage to equipment.

*****CAUTION*****

For A/C system operation in ambient temperatures of 75 degrees Fahrenheit or less, ensure that all instrument panel vents are fully open and the fan switch is on high. Failure to comply may result in damage to equipment.

116 9-2420-387-10

2-35.1. AIR CONDITIONER OPERATION (M1151, M1151A1, M1152, M1152A1, M1165, M1165A1, M1167)

a. Operation:

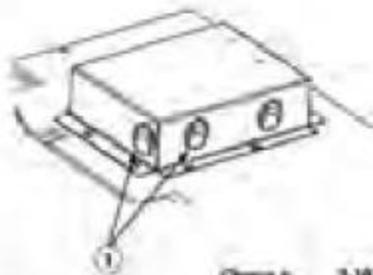
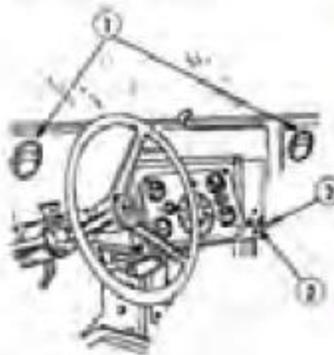
- (1) Start engine (para 2-12).
- (2) Flip A/C (HEAT) switch (2) up to engage air conditioning.
- (3) Flip fan switch (4) to desired setting (FORSEEM) to activate A/C fan range.
- (4) Adjust vent (1) for air flow direction.

b. After Operation:

- (1) Flip fan switch (2) down to OFF position.
- (2) Stop engine (para 2-14).

*****CAUTION*****

For A/C system operation in ambient temperatures of 75 degrees Fahrenheit or less, ensure that all instrument panel vents are fully open and the fan switch is on high. Failure to comply may result in damage to equipment.



Change to 3-181

3

WRITE IN THE FOLLOWING CAUTION IN THE BLANK AREA OF PAGE 2-101...



PS MORE

Changes for Mechanics

MECHANICS, YOU'LL NEED TO MAKE THE FOLLOWING PMCS CHANGES...

1

ON A SEPARATE SHEET OF PAPER, WRITE THE FOLLOWING TWO CAUTIONS AND PMCS ITEM AND INSERT IT BETWEEN PAGES 2-20 AND 2-21 OF TM 9-2320-387-24-1 W/CHANGE 6.

*****CAUTION*****

Prior to engagement and during operation of the A/C, ensure the voltmeter needle is in the green zone. Failure to comply may result in damage to equipment.

*****CAUTION*****

For A/C system operation in ambient temperatures of 75 degrees Fahrenheit or less, ensure that all instrument panel vents are fully open and the fan switch is on high. Failure to comply may result in damage to equipment.



WRITE IN THESE CHANGES TO THE PMCS TABLE:

ITEM NO.	INTERVAL	ITEM TO BE INSPECTED	PROCEDURES	NOT FULLY CAPABLE
24.1	Semi-Annual	Deep Water Fording Kit	<p>a. Inspect vent tubes for bends, cracks, breaks, deterioration, and restrictions.</p> <p>b. Inspect vent tube mounting hardware for proper installation.</p> <p>c. Inspect intake and exhaust extensions for proper installation and leaks.</p>	c. Any ex leaks.
24.2	Semi-annually	Air Conditioning	<p>a) Inspect compressor, clutch/pulley assembly, and all A/C lines/hoses/fittings for evidence of leaks.</p> <p>b) Open all A/C vents. Turn A/C on, flip fan switch to HI, wait 5 minutes to allow temperature to stabilize.</p> <p>c) During the 5 minute wait period, observe the compressor clutch for rapid on/off cycling. If rapid cycling is evident, shut off A/C system.</p> <p>d) Check air flow at the commander's right hand vent for cool air. If air at the vent is not cooler than crew ambient, and/or rapid cycling of the compressor clutch occurred, initiate A/C troubleshooting.</p>	

25-50 L. A/C SYSTEM SERVICING (Cont'd)

1. Charging System

NOTE

If A/C system requires replacement of a major component or has been flushed, refrigerant oil must be added to system to compensate loss (refer to task 4.)

1. Evacuate A/C system (refer to task 4.)
2. Connect refrigerant R-134a source to service (2) of manifold gauge set (3).
3. Open refrigerant R-134a source to allow refrigerant to flow into system (4).
4. Purge condenser (5) low pressure (6) and high pressure (7) as follows:
 - a. Shutoff (8) service (9) and service port (1) of manifold gauge set (3) and refrigerant source (2). Tighten (10).
 - b. Open high pressure gauge valve (11) and low pressure gauge valve (12) to allow refrigerant to flow into high pressure (6) and low pressure (7).
 - c. Purge high pressure (6) and low pressure (7) of service port (1) to atmosphere.
 - d. Close high pressure gauge valve (11) and low pressure gauge valve (12) (lockout in 20% position).
5. Connect R766 (R-134a) (14) to service (9) and (10) (refer to task 4.)

WARNING

Observe high pressure gauge valve or its shutoff position on manifold gauge set during charging. Failure to do so will cause compressor to build pressure on refrigerant, increasing operating pressure or damage to equipment.

6. Start engine and set engine speed to 1,800 rpm with hand throttle (TM 9-2320-387-10).
7. Close A/C system (TM 9-2320-387-10) and set engine (6) to high speed.

NOTE

Keep refrigerant container upright at all times as refrigerant settles to bottom of can.

8. Open low pressure gauge valve (1) on manifold gauge set (3) until pressure is fully charged with 2.8 to 3.0 psi (refrigerant) (refer to task 4-4).
 9. Close low pressure gauge valve (1) on manifold gauge set (3).
 10. Remove hand throttle (14) service (9) (TM 9-2320-387-10).
 11. Stop engine (TM 9-2320-387-10).
 12. Remove refrigerant R-134a source (14) service (9) of manifold gauge set (3).
- * If an refrigerant oil is needed, disconnect manifold gauge hoses (6) and (7) from A/C system service ports (8) and (10). Install cap (8) on service ports (8) and (10). If refrigerant oil is needed, perform task 4.

CAUTION

Ensure service port caps are installed and hand tightened. Failure to comply may result in damage to equipment.

**goes between steps 12 and 13*

IN THE SPACE AT THE BOTTOM OF PAGE 25-168.8 OF TM 9-2320-387-24-2, ADD THE FOLLOWING CAUTION AND ASTERISK IT TO GO BETWEEN STEPS 12 AND 13:



3

FINALLY, DURING THE NEXT MAINTENANCE OF THE A/C SYSTEM, WHETHER IT IS A COMPONENT REPLACEMENT OR JUST A REFRIGERANT RECHARGE, MAKE SURE THE THERMOSTAT SWITCH, NSN 6685-01-539-7057, LABEL HAS A **GOLD BACKGROUND WITH BLACK LETTERING**. THE GOLD LABEL SWITCH IS DESIGNED TO PREVENT THE COMPRESSOR FROM CYCLING/SWITCHING ON BEFORE VALIDATING AVAILABLE VOLTAGE, VALIDATING SYSTEM PRESSURE, OR COMPLETELY DISENGAGING BASED ON A PREVIOUS OFF SIGNAL. THERMOSTAT SWITCHES WITH ANY OTHER COLOR LABELING SHOULD BE REPLACED.

LOOK FOR THESE UPDATED A/C OPERATING AND MAINTENANCE CHANGES...

...IN FUTURE UPDATES TO
TM 9-2320-387-10,
TM 9-2320-387-24-1
AND
TM 9-2320-387-24-2.

PS END

Preserve Your



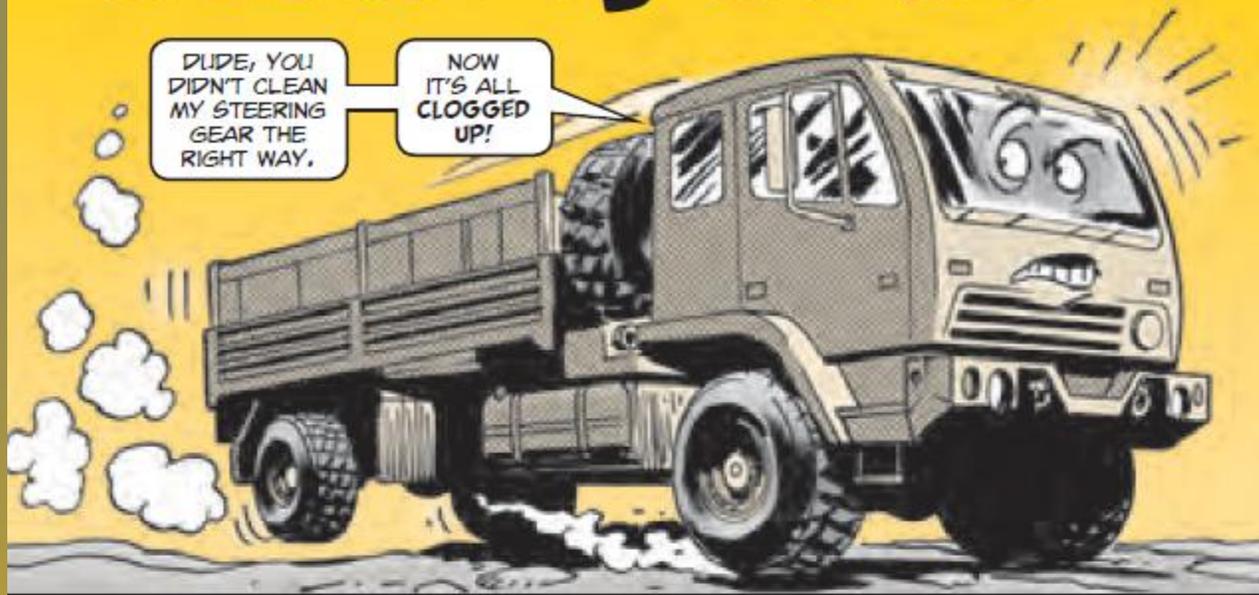
These steering gears, NSN 2530-01-555-4681, are used on all FMTVs, including LTAS variants.

Improper cleaning creates steering gear trouble. Using a high-pressure air hose on steering gear components forces sand, dirt, and other debris into the components, creating damage and wear.

Also, exceeding the vehicle's payload limits can cause undue stress on the steering gear assembly.



Steering Gears



These issues can put your life in danger and make your FMTV NMC. But you can avoid that! Here's how you can preserve your FMTV's steering gear and maintain control of your steering.

DON'T use high-pressure air when you clean the steering gear. That should help you avoid forcing dirt, sand or other debris into the components.

And when operating your FMTVs, it is vital **NOT** to exceed maximum payload or maximum towed load limits!

FOLLOW THE LIMITS IN THIS TABLE.



Vehicle	Payload	Maximum Towed Load
Truck, Cargo, M1083A1	10,000 lbs	21,000 lbs
Truck, Cargo, M1083A1P2	10,000 lbs	21,000 lbs
Truck, Cargo w/MHC, M1084A1	10,000 lbs	21,000 lbs
Truck, Cargo w/MHC, M1084A1P2	10,000 lbs	21,000 lbs
Truck, Cargo, Long Wheelbase, M1085A1	10,000 lbs	21,000 lbs
Truck, Cargo, Long Wheelbase, M1085A1P2	10,000 lbs	21,000 lbs
Truck, Cargo, Long Wheelbase w/MHC, M1086A1	10,000 lbs	21,000 lbs
Truck, Cargo, Long Wheelbase w/MHC, M1086A1P2	10,000 lbs	21,000 lbs
Truck, Expansible Van, M1087A1	10,000 lbs	21,000 lbs
Truck, Expansible Van, M1087A1P2	Not Applicable	21,000 lbs
Truck, Tractor, M1088A1	Not Applicable	21,000 lbs on pintle hook 60,710 lbs on fifth wheel
Truck, Tractor, M1088A1P2	Not Applicable	21,000 lbs on pintle hook 63,000 lbs on fifth wheel

MRAP
M-ATV...

RPG Net Kits

CAN'T YOU DO SOMETHING
TO PROTECT ME FROM THE
DAMAGE RPGS DO?



WOW! I FEEL
SAFER ALREADY!

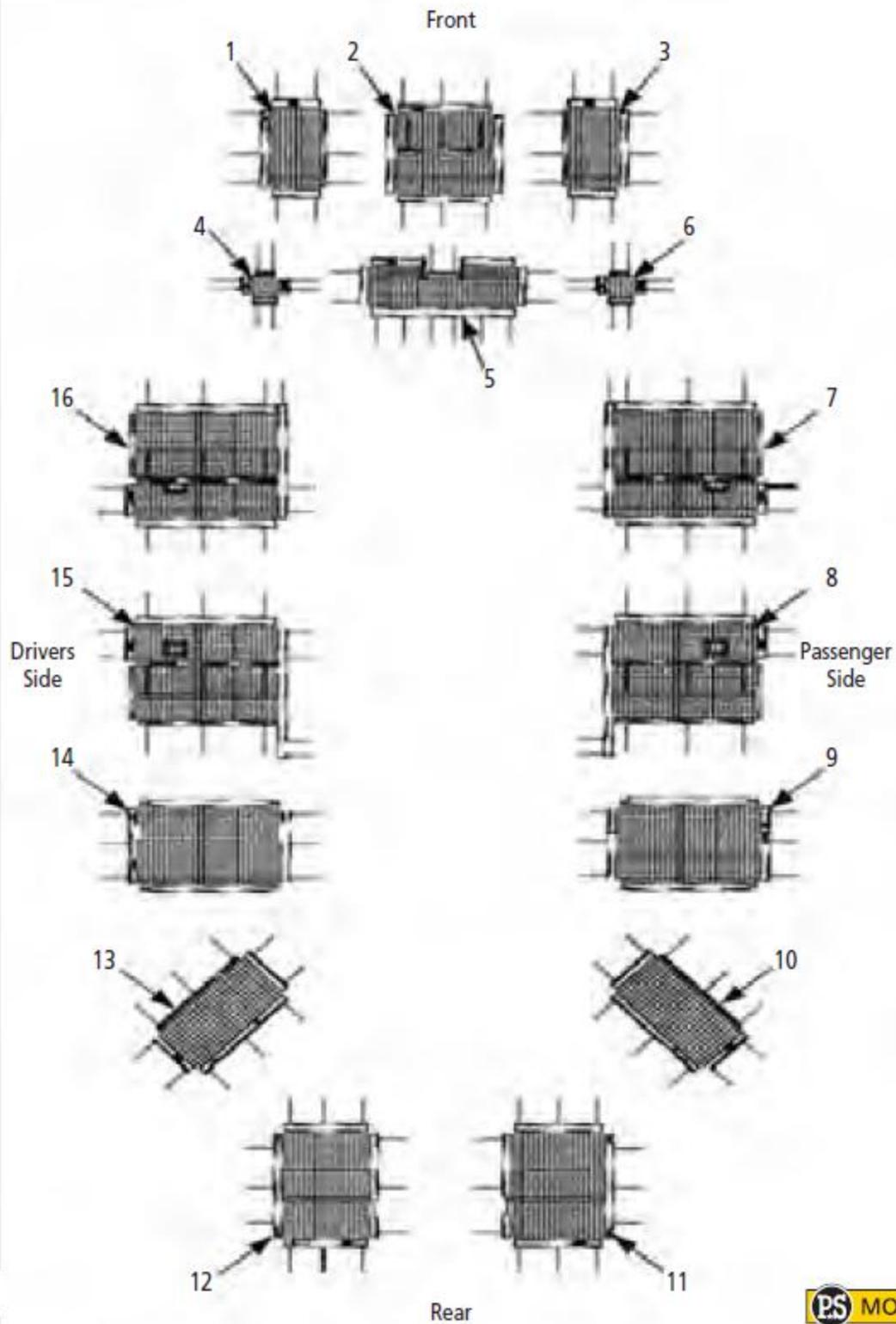


Rocket-propelled grenade (RPG) net and frame kits are now available for the MRAP M-ATV. The initial installation is performed by Oshkosh field service representatives (FSRs). These FSRs can help you identify maintenance procedures. Some repair parts are still being provisioned and a COTS manual will be available in late summer or fall. However, DA G-4 wants you to know about these parts.

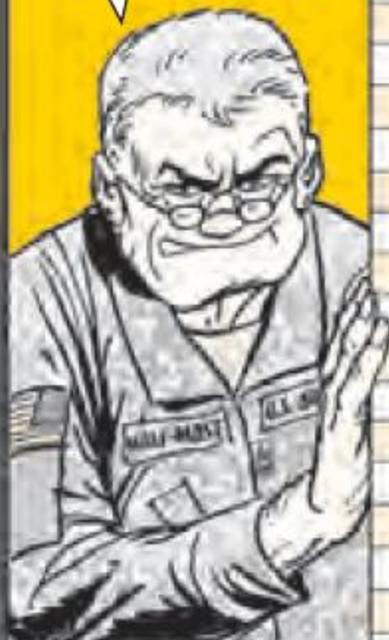
There are sixteen (16) nets that you can order at your unit that fit on the M-ATV to deflect RPGs and help minimize damage to the vehicle.

Here's the list of kits:

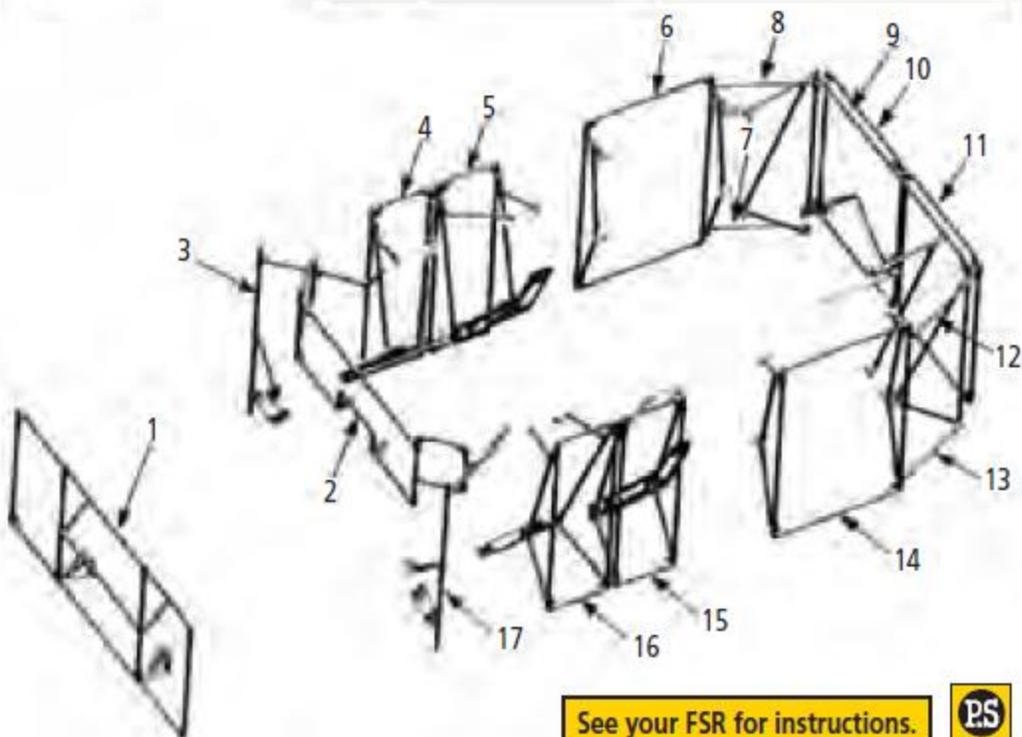
Net	NSN 2540-01-586-	Location on Vehicle
1.	0820	DS Grill Frame Net
2.	0822	Middle Grill Frame Net
3.	0819	PS Grill Frame Net
4.	0818	DS Support Frame Net
5.	0821	Windshield Frame Net
6.	0823	PS Support Frame Net
7.	0816	PS Front Door Frame Net
8.	0814	PS Rear Door Frame Net
9.	0812	PS Canopy Frame Net
10.	0810	PS Rear Corner Net
11.	0808	PS Cargo Door Frame Net
12.	0809	DS Cargo Door Frame Net
13.	0811	DS Rear Corner Net
14.	0813	DS Canopy Frame Net
15.	0815	DS Rear Door Frame Net
16.	0817	DS Front Door Frame Net



HERE'S WHAT
CORRESPONDING
FRAMES ARE
AVAILABLE...



Frame	NSN	Location on Vehicle
1.	2510-01-586-0778	DS Grill Frame
2.	2541-01-586-0779	Windshield Frame
3.	2510-01-586-0950	PS Fender Frame
4.	2510-01-586-0944	PS Front Door Frame
5.	2510-01-586-0946	PS Rear Door Frame
6.	2510-01-586-0947	PS Canopy Frame
7.	2510-01-586-0949	PS Bottom Corner Strut
8.	2510-01-586-0949	PS Upper Corner Strut
9.	2510-01-586-0958	Cargo Doors Support Frame
10.	2510-01-586-0953	PS Cargo Door Frame
11.	2510-01-586-0952	DS Cargo Door Frame
12.	2510-01-586-0949	DS Upper Corner Strut
13.	2510-01-586-0949	DS Bottom Corner Strut
14.	2510-01-586-0948	DS Canopy Frame
15.	2510-01-586-0945	DS Rear Door Frame
16.	2510-01-586-0943	DS Front Door Frame
17.	2510-01-586-0962	DS Fender Frame



See your FSR for instructions.

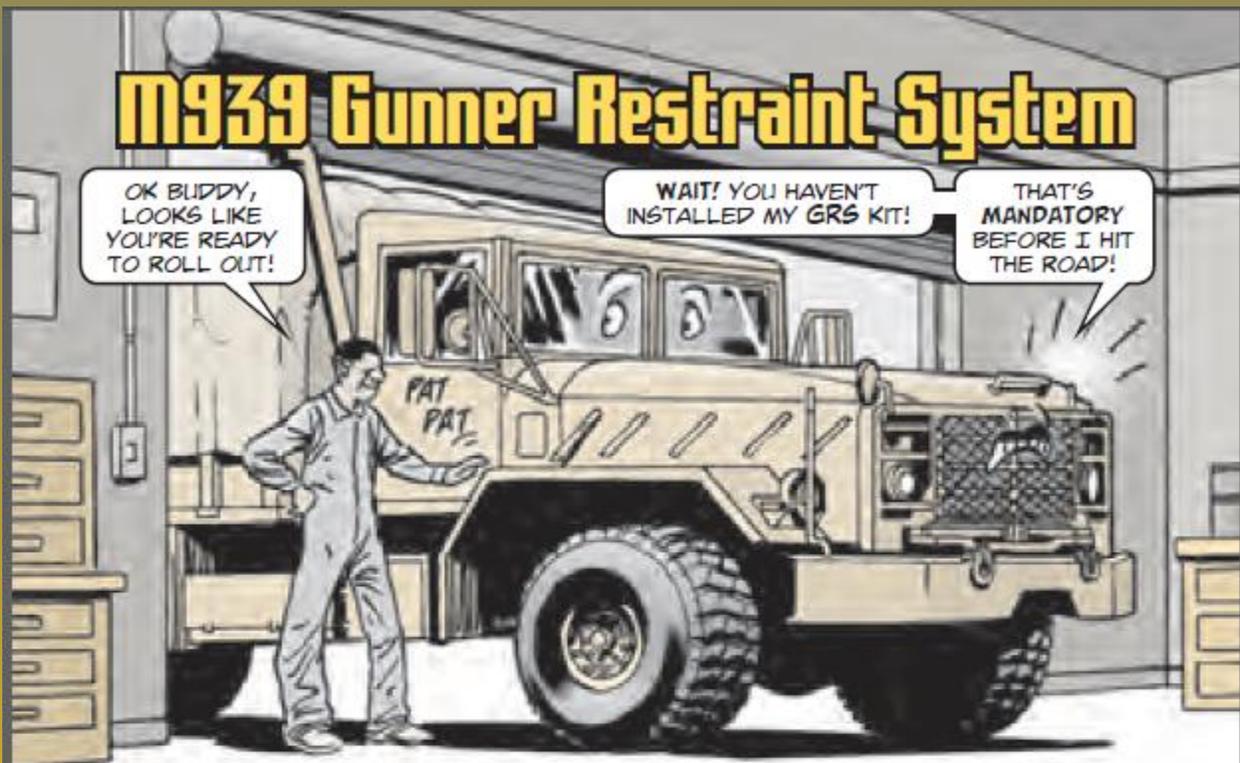


M939 Gunner Restraint System

OK BUDDY,
LOOKS LIKE
YOU'RE READY
TO ROLL OUT!

WAIT! YOU HAVEN'T
INSTALLED MY GRS KIT!

THAT'S
MANDATORY
BEFORE I HIT
THE ROAD!



To get a gunner restraint system (GRS) kit for M939/A1/A2-series 5-ton trucks equipped with the light weapon station (LWS), order NSN 2540-01-582-2639. The restraint system prevents a gunner from being ejected in an accident or rollover and **must be** used on these vehicle models: M923/A1/A2, M925/A1/A2, M927/A1/A2, M928/A1/A2, M931/A1/A2 and M932/A1/A2. Also, an instructional video on how to wear the GRS harness is available through the Army Training Network at:

<https://atn.army.mil>

For further details, see Page 61 of PS 697 (Dec 10):

<https://www.logsa.army.mil/psmag/archives/PS2010/697/697-60-61.pdf>

HMMWVs...

AUTHORIZED LED LIGHTS

Looking for LED lights to install on your unit's HMMWVs? That's probably a tough search because the TMs don't list the approved LED lighting yet.

But we've got good news! Your search is over. The authorized NSNs in this table should square you away.

Just remember to replace both the left and right sides when you swap out incandescent lights with LED lights.

NSN 6220-01-	Nomenclature
564-0484	LED blackout, drive and composite lamp kit (full kit)
566-3669	LED blackout drivelight assembly
566-4110	LED front composite light assembly
566-4728	LED rear composite light assembly
586-4949	LED headlight

PS 706

21

SEP 11