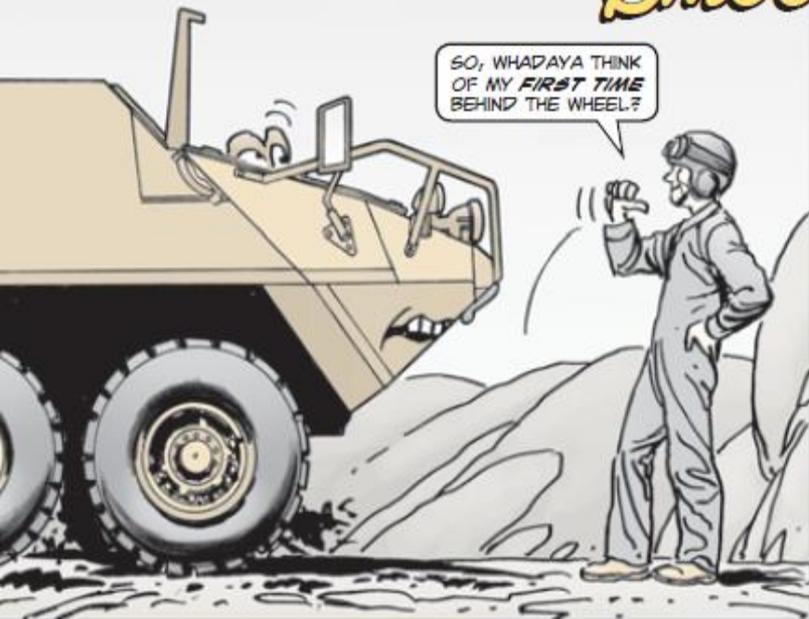


Training...

Smooth Operator



SO, WHADAYA THINK OF MY *FIRST TIME* BEHIND THE WHEEL?



I THINK THE INSTRUCTOR GAVE YOU MY KEYS *TOO SOON!*

Dear Half-Mast,
 Is there a prescribed length of time that an operator should spend behind the wheel before he or she is licensed on a piece of equipment?
 Also, is there a set time frame for classroom training before the operator goes out on the road? How much time should be spent in the classroom and how much should be hands-on training?

Mr. M.C.

Because learning curves vary, all operator training should be outcome-based and follow the standards prescribed in the specific training circular (TC) for each vehicle. Outcome-based training accommodates the unique learning pace and needs of each individual, rather than the general pace of a class or group.

Training circulars provide standardized training and testing for operators following AR 600-55, The Army Driver and Operator Standardization Program (Selection, Training, Testing, and Licensing).

The emphasis is on hands-on training with minimal classroom instruction. (Note: TCs do not include any theater-unique requirements.)

Training techniques are generally aimed at novices (inexperienced operators of tactical wheeled vehicles) or apprentice operators, who have driven military vehicles for at least one year. It seems logical that operator skills might be easily transferred from one vehicle to another, but experienced master driver trainers know that is sometimes not the case. It's possible that an apprentice may need more training than a novice to safely operate an unfamiliar vehicle.

Noncommissioned officers responsible for training Soldiers on unit vehicles must ensure those Soldiers test to the same standards contained in the applicable TCs. Soldiers licensed through unit training programs should be supervised until they gain the experience to operate vehicles safely and correctly in their unique operating environments.

New operators should not be placed in situations beyond their skill levels. Supervisors should occasionally ride with all of their operators to see if procedures are followed and to assess the need for additional, refresher, or remedial training.

For further information, visit the Army Driver Standardization Office's website:

http://www.transchool.eustis.army.mil/adso/ADSO_index.htm

Or email:

eustis.AMVCcentral@conus.army.mil

Half-Mast



MISTER M.C., I HAVE YOUR ANSWERS RIGHT HERE!

GRS Guidance

IN 2009, THERE WAS BREAKING NEWS ABOUT GUNNER RESTRAINT SYSTEMS (GRS).

THAT NEWS CAME IN JANUARY IN THE FORM OF TACOM SOLIM 09-013 AND IN JULY THROUGH AN ARMY-WIDE GUNNER RESTRAINT SYSTEMS POLICY MESSAGE.

BOTH MESSAGES PROVIDED GUIDANCE FOR THE USE OF GRS IN THE REFERENCED TACTICAL VEHICLES.

HAVE YOU ALREADY READ TACOM SOLIM 09-013 OR THAT POLICY MESSAGE?

IF YOU HAVEN'T AND YOU'VE GOT VEHICLES WITH TURRETS FOR GUNNERS IN YOUR UNIT, KEEP READING.

THOSE MESSAGES SAID THE PROCEDURES FOR PROPERLY USING THE GRS WILL EVENTUALLY BE STANDARDIZED AND ADDED TO THE PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) AND OTHER RELATED SECTIONS IN TECHNICAL PUBLICATIONS.

THEY ALSO DESCRIBED WHAT GRS CONDITIONS RENDER A VEHICLE NON-MISSION CAPABLE (NMC).

HERE'S SOME HELPFUL INFO FOR YOU.



What's a GRS?

THE GRS IS PART OF AN OCCUPANT PROTECTION SYSTEM THAT INCLUDES A HARNESS, TAIL STRAP, A RIGIDLY MOUNTED RETRACTOR, AND POSSIBLY A TURRET SEAT ASSEMBLY.

IT'S A PERSONAL SAFETY RESTRAINT DEVICE, JUST LIKE SEAT BELTS, SEAT BELT RESTRAINT SYSTEMS, SAFETY STRAPS, AND ANY OTHER SAFETY DEVICE USED TO SECURE OR PROVIDE A SAFETY MECHANISM FOR SOLDIERS OPERATING OR RIDING IN A VEHICLE.



GRS PMCS

OPERATORS MUST PERFORM THE FOLLOWING BEFORE OPERATIONS GRS PMCS...

Check the harness, tail strap, mount retractor, buckles and clasp ends for security, damage and proper operation. If the harness or tail strap is missing, frayed, damaged, or doesn't fasten, adjust, retract or operate as designed, your tactical vehicle with the GRS is NMC.

Not using a working GRS could result in severe injury or death in a rollover accident.



Which GRS is Best?

THE ONLY APPROVED GRS DEVICES ARE THOSE CERTIFIED AND APPROVED BY TACOM.

MAKE SURE YOU USE THE CORRECT GRS FOR EACH SPECIFIC VEHICLE MODEL..

MIXING OR MODIFYING PERSONAL SAFETY RESTRAINT SYSTEM KITS OR COMPONENTS IS A SERIOUS SAFETY RISK.



THE KITS DESIGNED AND APPROVED FOR A PARTICULAR VEHICLE SHOULD BE USED ONLY FOR THAT VEHICLE.

THAT ALLOWS YOU TO USE THE CORRECT LOWER RETRACTOR AND MOUNTING BRACKETS ON THE CORRECT VEHICLE.



THE ONLY APPROVED GUNNER'S RESTRAINT HARNESS IS NSN 4240-01-542-8160, PN 900-L6-07301, CAGE CODE IEAW9.

KITS THAT CONTAIN THIS APPROVED GRS ARE...



- Basic HMMWV gunner restraint kit, NSN 2540-01-559-1734
- M1114 up-armored HMMWV, NSN 2540-01-542-7412
- M1151A1 up-armored HMMWV, NSN 2540-01-542-1130
- M1167 TOW up-armored HMMWV, no kit (Use gunner restraint harness, NSN 4240-01-542-8160, and the lower retractor, NSN 2540-01-573-9444)
- FMTV low signature armored cab (LSAC), NSN 2540-01-569-6578
- FMTV RADIANT armored crew kit (RACK), NSN 2540-01-569-8599 (Unarmored trucks can also use the RACK design)
- Cougar/JERRV (all models), NSN 2540-01-542-7412
- CAIMAN (all variants); the M-ATV; MaxxPro Ambulance, MaxxPro Cat I, MaxxPro Dash, MaxxPro MEAP and MaxxPro Plus; RG-31A0 (MKI, MKII, MKIII), RG-31A1 (MKV), RG-31A2 D04, RG-3142 (MKVE), RG-31A2 RTR and the RG-33 MRAP (all models), NSN 2540-01-572-5699

AGAIN, EXCEPT FOR THE HARNESS, DO NOT MIX OR MODIFY COMPONENTS OF GRS KITS.

THAT'S NOT AUTHORIZED!



COMMERCIALY AVAILABLE GRS ARE NOT AUTHORIZED FOR USE IN THE ARMY VEHICLES, EITHER.

REMOVE UNAUTHORIZED GRS.

Deadline Guidelines

THE BREAKING NEWS WE TOLD YOU ABOUT SAID...



The absence of a TACOM-approved GRS in wheeled vehicles with turrets will subject that vehicle to an administrative deadline. Unit commanders can "circle X" the vehicle fault if the gunner's position is not manned when it is being used on its mission. If the gunner's position is manned, commanders or their representatives can make the decision to authorize dispatch of the vehicle based on urgency of mission requirements.

Reinforce Rollover Rehearsals

ENSURE SOLDIERS ARE TRAINED AND REHEARSED IN ROLLOVER DRILLS.

THE GRS PROVIDES MAXIMUM PROTECTION WHEN USED WITH PRESCRIBED ROLLOVER PROCEDURES.



SHHEW! I SURE AM GLAD WE WENT THROUGH ALL THOSE PRACTICES!!

REMEMBER, THE GRS ONLY PREVENTS THE GUNNER FROM EJECTING.

IT WON'T PULL THE GUNNER BACK INTO THE VEHICLE!



ES
END

WRECKER SAFETY FOR

ROUTE CLEARANCE TEAMS

WHEN YOU'RE TASKED WITH A RECOVERY MISSION, YOU'VE GOTTA DO IT SAFELY.

AND NOW THAT THE ARMY HAS NEWER AND HEAVIER EQUIPMENT, RECOVERY MISSIONS CAN BE A TOUGHER TASK.

THIS IS ESPECIALLY TRUE FOR ROUTE CLEARANCE TEAMS IN AFGHANISTAN.

SINCE RECOVERY CAN BE DANGEROUS, IT'S BEST TO GET SOLDIERS TRAINED UP ON RECOVERY OPERATIONS, INCLUDING WRECKER SAFETY—BEFORE THEIR BOOTS HIT THE GROUND IN SWA.

YOU WANT TO DO ALL YOU CAN TO **AVOID DAMAGING EQUIPMENT AND INJURING PEOPLE.**

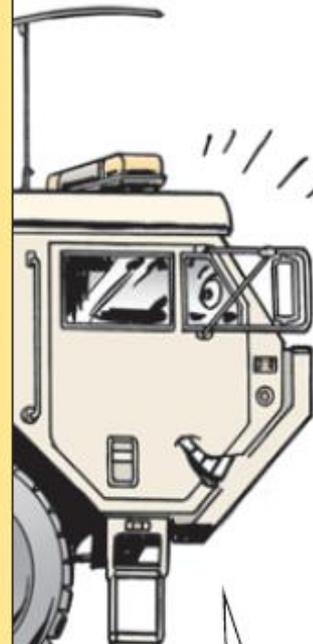
SOLDIERS NEED TO KNOW THE IMPORTANCE OF WRECKER SAFETY.

IN FACT, SOLDIERS WHO ARE HB (RECOVERY OPERATIONS) QUALIFIED SHOULD **ALREADY KNOW** THE IMPORTANCE OF WRECKER SAFETY.

NO MATTER WHAT YOUR ROLE IS IN VEHICLE RECOVERY, HERE ARE A FEW GENERAL REMINDERS TO HELP YOU PLACE **SAFETY FIRST!**

- Follow the advice in safety warnings found in the operator's manuals for both the recovery vehicle and the recovered vehicle or equipment.
- Before starting a recovery, decide which equipment to use and which recovery techniques to apply.
- Make sure the recovery vehicle winches and towing capabilities you'll use are able to recover the disabled vehicle. If overloaded, the recovery vehicle can slide out of control.
- Be aware that winch cables can break and whip into personnel.
- Limit access to the recovery site to only required personnel.
- Use extreme caution while towing.
- Follow recommended towing speeds and maintain safe following distances.

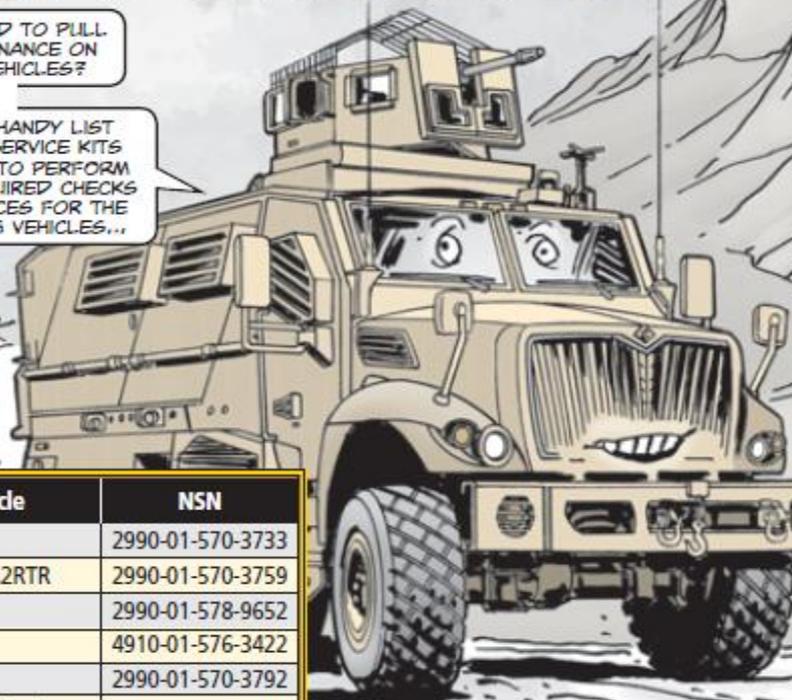
FOR MORE VEHICLE RECOVERY INFORMATION, CHECK OUT FM 4-30.31, RECOVERY AND BATTLE DAMAGE ASSESSMENT AND REPAIR.



New Service Kits

MECHANICS, NEED TO PULL ANNUAL MAINTENANCE ON YOUR MRAP VEHICLES?

USE THIS HANDY LIST FOR THE SERVICE KITS YOU NEED TO PERFORM THOSE REQUIRED CHECKS AND SERVICES FOR THE FOLLOWING VEHICLES...



MRAP Vehicle	NSN
RG-33/RG-33 Plus	2990-01-570-3733
RG-31A2/A2M1/A2RTR	2990-01-570-3759
RG-31A3	2990-01-578-9652
Cougar	4910-01-576-3422
MaxxPro	2990-01-570-3792
MaxxPro Plus (Ambulance and Dash Service Kit)	2990-01-578-9655
Caiman/Caiman Plus	2990-01-570-3716



EACH OF THESE SERVICE KITS CONTAIN THE FOLLOWING...

- engine oil filter
- transmission filter(s)
- primary air filter
- fuel/water separator element
- fuel filter
- air-dryer filter
- and other vehicle-specific service parts

Caiman MRAP...

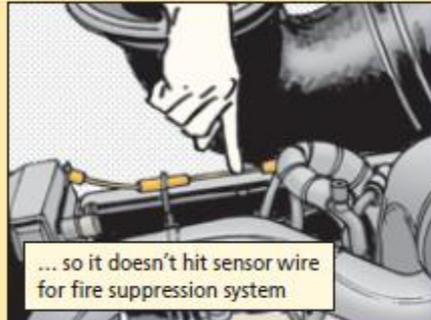
BEFORE YOU START YOUR NEXT MISSION, KEEP THESE CAIMAN UNDER-THE-HOOD PM POINTERS IN MIND.

Under the Hood

Air Filter Canister Removal

Use a little TLC when you remove the air filter element's canister housing on the curbside of the vehicle. Do not set the housing on the sensor wire for the vehicle's fire suppression system (FSS). The weight of the housing will nick or cut the wire, causing the FSS to activate without warning.

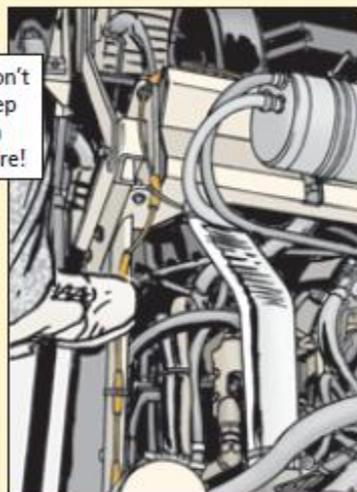
Be careful when you remove air filter elements canister housing...



... so it doesn't hit sensor wire for fire suppression system

If that happens, you'll be blasted by a loud explosion, not to mention the gray, fine chemical dust that'll cover you and the engine and everything else within an arm's throw. What a mess! So easy does it when you remove the canister housing.

Don't step on wire!



Sensor Wire Attire

Make it a habit to eyeball the FSS's sensor wire where it's attached to the engine shield. Look for a loose wire and connections. A loose wire that touches the engine also sets off the FSS!

And be careful where you place your boot while stepping around the engine. It goes without saying — do not step on the sensor wire!

WHILE IN TRAFFIC...



KEEP THESE POINTS IN MIND WHEN DRIVING YOUR MRAP IN TRAFFIC BECAUSE...

...TRAFFIC ACCIDENTS ARE BOUND TO HAPPEN AND THE MRAP IS *NO EXCEPTION*.



THESE ARE POINTERS THAT *OTHERS* HAD TO LEARN THE *HARD WAY*.

THEY'LL HELP *YOU* REDUCE UNEXPECTED MISHAPS AND "FENDER BENDERS."

- Don't drive too close to the vehicle in front of you. Maintain a "stand off" distance of at least "one vehicle" for every 10 mph that you drive.
- Gunners and vehicle commanders, warn your driver of any upcoming or possible traffic hazards.
- Drive defensively and expect the unexpected.
- Drive at speeds appropriate to conditions and terrain.
- Don't drive aggressively or rely on other vehicles to yield.
- Don't drive while fatigued. Vehicle commanders must make sure drivers are alert.
- Know your vehicle's blind spots. Keep the windows and mirrors clean.

MRAP MaxxPro Plus...

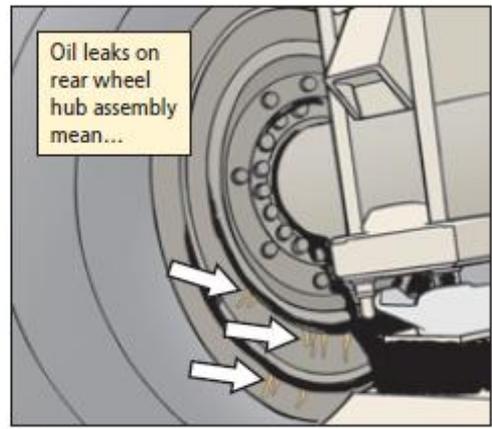
Rear Wheel Seal Deal



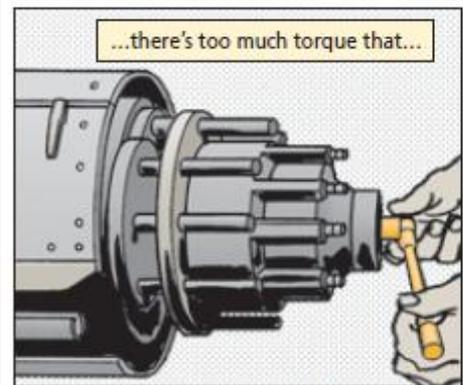
HEY! WHY'S THERE ALL THIS OIL BACK HERE!?

Dear Half-Mast,
We are experiencing oil leaks with the rear wheel hub assembly on our unit's MRAP MaxxPro Plus vehicles. What is causing the leak? Are other units having this same problem?
SFC M.S.F.

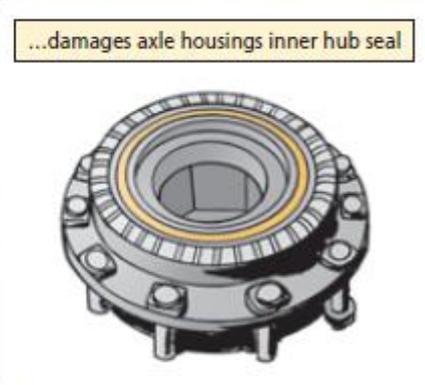
Dear Sergeant M.S.F.,
Yep. We've received several inquiries about oil leaks on the rear wheel hub assembly of the MRAP MaxxPro Plus vehicles.
The leak is usually caused by a damaged wheel seal. The seal gets ruined when a well-meaning mechanic tries to stop the leak by cranking more torque on the axle hub nut. This does not fix the leak, but instead damages the seal, causing the leak to get worse. Then the wheel seal, NSN 5330-01-566-6178, has to be replaced.



Oil leaks on rear wheel hub assembly mean...



...there's too much torque that...

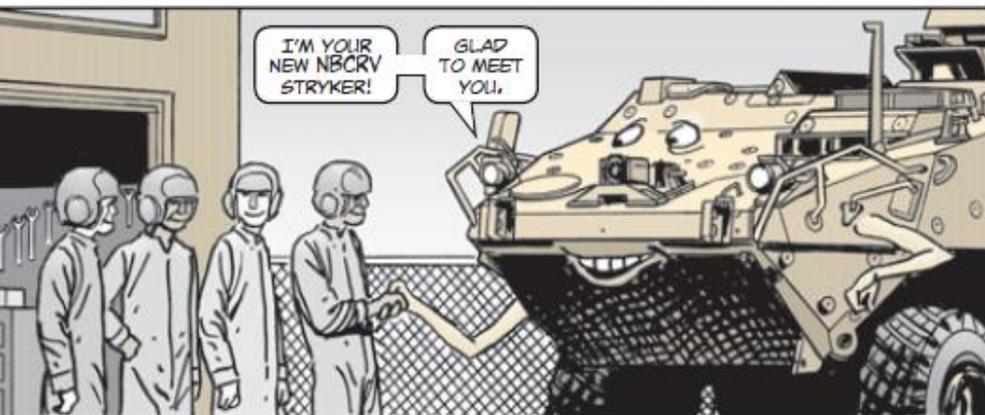
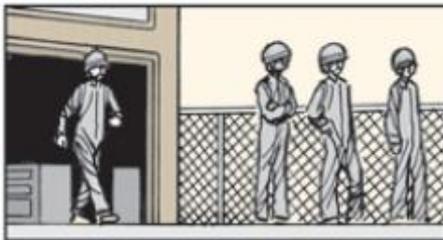


...damages axle housings inner hub seal

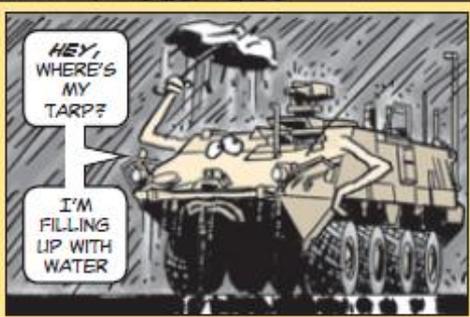
Mechanics, torque the axle hub nut to 200 lb-ft. WP 4-8.1 of TM 9-2355-318-23-3 shows how to remove and replace the wheel seal.

Half-Mast

Help for Your New NBCRV Stryker



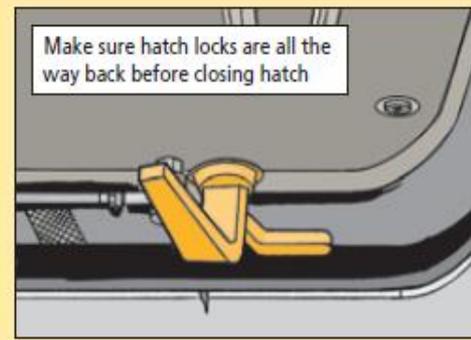
Keep it covered. The NBCRV comes with a tarp that you need to use when it's sitting in the motor pool. Otherwise, rain drains down under the floor of the hull and causes corrosion and electrical problems. Any time your NBCRV goes through rain, open all 13 drain plugs as soon as possible to drain out any water.



It's also a good idea to open the material port when the NBCRV is going to sit for days. The fresh air keeps mold from forming inside the vehicle. One NBCRV crew opened up their vehicle after it had sat unused and shut up to find the mold so thick inside that they could write their names on the walls. What a stinking mess to clean!



Save the seals. If the door or hatch seals are damaged, the NBCRV has trouble creating overpressure and is NMC until the seal is replaced. Keep your feet off the seals when you climb in and out of the vehicle. Make sure the recessed pins in the hatch locks are all the way back before you pull the hatch shut. Otherwise, a pin will tear the seal.



Don't skip steps when you power up. If you don't power up in the proper sequence, you will get communication errors.

Don't forget to turn on the power inverter, too. It's behind the JPBDS next to the power outlets. If the power inverter is left off, you'll have no warning that the batteries are almost exhausted while operating on battery power. Your Stryker could end up with dead batteries.

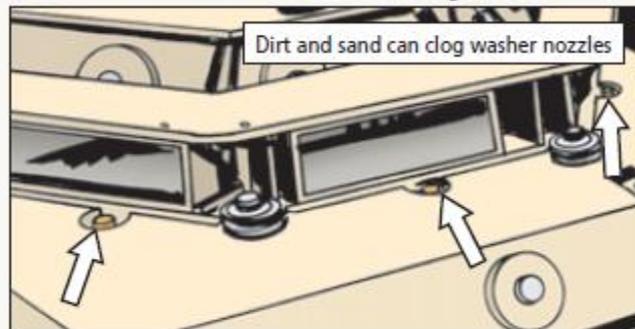


Drill holes for M100 decon bracket. The NBCRV Stryker has a place for the M11 decon bracket, which is no longer used. Use the M100 bracket to mark where you need to drill new holes in the M11's spot for the M100. Use spacers with the bracket to keep the bracket from being flush with the engine access panel. Otherwise, the bracket interferes with the knobs on the panel.



PM Keeps Stryker Stylin'

When the mud and dirt are flying, you're gonna need the periscope washer and blower. It doesn't take much mud, dirt and sand to clog the washer nozzles and air blower holes. So a little PM now will keep them both working later.



The operator's manual tells you to use the washer and blower during your weekly PMCS. That's to make sure it works, so thinking you have a clean periscope is not an excuse for avoiding this check.

You'll find the washer switch and blower knob on the driver's lighting control module. Press up and hold the spring-loaded washer switch to spray cleaner on the periscopes. Turn the blower knob clockwise to send out blasts of air. The farther you turn the knob, the shorter the interval between air blasts.



After checking the washer and blower, don't forget to take a look at the washer reservoir. If it's low, fill it with windshield cleaning compound, NSN 6850-00-926-2275.

Keep this PMCS check in mind and your Stryker will be stylin' in no time.