

# TMC'09 – HISTORIC MILITARY VEHICLE MAINTENANCE SOP



## Vehicle Operations, Maintenance, Repair Parts and Repairs

Standing Operating Procedures, Revised 01-15-09

### PURPOSE

The purpose of this document is to outline policy and procedure for Vehicle Maintenance for all Historic Military Vehicles (HMVs) on the MVPA 2009 Transcontinental Motor Convoy (TMC'09) taking place in the summer of 2009.

This document is being presented as a guide to those MVPA Members who not only will be a part of the Coast-to-Coast convoy, but also to those members desiring to accompany the convoy for shorter periods of time.

All Historic Military Vehicles registered for the Convoy shall be in good working order and should be capable of being driven from Washington, D.C. to San Francisco, California, during the summer months of 2009, with minimal problems.

**KEEP THIS SOP in your  
HISTORIC MILITARY VEHICLE  
AT ALL TIMES!**

## **Details**

**Safety: It MUST BE OUR FIRST OBJECTIVE!**

The following guidelines are presented here for your safety;

- 1. If your HMV has seat belts, wear them.**
- 2. Maintain a 4 second interval between vehicles.**
- 3. During TMC operations, all windshields will be in the up-right position. Drivers will wear safety goggles if their HMV has the windshield canted open. Windshields may be lowered during parades, static display or while moving on private property.**
- 4. HMV occupants will wear hearing protection.**
- 5. No smoking in convoy formation.**
- 6. HMV drivers, there will be no alcohol consumption within 12 hours of scheduled departure.**
- 7. Check vehicle condition during stops.**
- 8. Have appropriate size and type of fire extinguisher attached to your HMV and available immediately to the driver.**
- 9. Have a highway warning kit in your HMV.**
- 10. Chock blocks will be used by all HMVs when parked.**
- 11. When changing tires, follow appropriate safety procedures. Flats occurring on split rim wheels will need to be repaired by professional tire repair shops.**
- 12. Get a good nights rest prior to convoy departure each day.**
- 13. Stay hydrated! Whether you think you need it or not...drink plenty of water and/or Gatorade. Avoid soft drinks and caffeinated drinks. Once the convoy passes Central Nebraska, this will become critical!**
- 14. Use a high numbered sunscreen on all exposed body parts.**
- 15. Wear a wide brimmed hat.**
- 16. Wear sunglasses with a high UV number.**
- 17. Wear a long sleeved, light weight, light colored, cotton shirt on hot, sunny days.**
- 18. Know where the Yellow "SEND HELP" Flag is in your HMV.**

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### Yellow “SEND HELP” Flag:

One of the items in the packet will be an emergency Yellow Flag. The purpose of the Yellow Flag will be to alert TMC Maintenance Personnel that you are in need of maintenance help. **Keep the Yellow Flag WITH the HMV at all times.** When needed, attach the Yellow Flag on the street side of your HMV and on a high point so that it can be easily seen and word passed to Mike personnel. As to what course of action will be taken, see the section titled “Wreckers, Maintenance Vans and Mike 6.”

### Communications:

The MVPA representative chosen to direct the “Vehicle Maintenance-Repair Parts-Repairs” aspect of the operation will have a radio call sign of “Mike 6”. “Mike” is phonetic for “M” (maintenance) and “6” is the military designation for the Officer in Charge of a Unit. Wreckers and Maintenance Vans will also carry the Mike prefix. Radio numbers will be given to all Mike personnel for the duration of the TMC. Other communications information will be added as it is received.

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## HMV Maintenance:

1. **Vehicle maintenance will be preformed each travel day at a predetermined time, rain or shine.**
2. It will be the responsibility of the HMV driver/owner to keep the HMV properly serviced for the duration of the TMC.
3. Each HMV will be fueled upon arrival at the overnight stop, thus preventing condensation from forming in the fuel tank.
4. Check fluid levels, tire pressures, tire wear, lights, signals, clean windows, mirrors and lights. In general, insure your HMV is prepared for the next days travel.
5. Due to the length of the TMC trip, stop and go traffic, mountains, desert conditions, etc. it may be necessary to change fluids and filters during the trip. Members should be prepared to perform this maintenance during our rest day stops. These days can be found on the “Drive Schedule.” It is imperative that vehicle fluids being drained be disposed of in an environmentally safe manner. If State and/or Federally approved disposal methods are not available, the HMV driver/owner will be responsible to maintain the waste fluid until such containers become available.

## Breakdowns / Disabled HMVs:

If an HMV becomes disabled on the Convoy, it is expected that a second HMV will pull out of the Convoy to act as a “buddy” for that disabled HMV crew and begin to make a diagnosis of the problem and associated repairs. The march unit leader will alert “Mike 6” of the disabled HMV. Members are encouraged to assist the driver/owner of disabled HMVs by getting the HMV back in running order and on the road, which is what we are about. It is recommended that you bring the proper TM to repair your HMV. Pool your resources with other like HMV owners to save space and duplication.

## Repairs and Repair Parts:

All vehicles should have immediately available “small” parts that the owner feels are necessary to complete the mission. In case of a breakdown requiring parts not on hand, it is the responsibility of the vehicle owner to obtain parts. They may exist in the spares trailer.

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## Spare Parts:

The following partial list of parts covers MB, GPW, M38, M38A1, M151 series ¼ ton and M37 ¾ ton vehicles;

### Cooling;

- Hoses & clamps
- Radiator cap
- Thermostat
- Water pump
- Radiator
- Antifreeze

### Brakes;

- Master cylinder
- Brake shoes
- Wheel cylinders
- Brake fluid

### Electrical;

- Plugs
- Plug wires
- Points
- Condenser
- Rotor cap
- Distributor cap
- Head light
- Various light bulbs
- Generator
- Fan belt (s)

### Steering;

- Drag link repair kit
- Tie rod ends
- King pin bearings
- Drag link

### Drive train;

- Gaskets
- Filters
- Clutch
- Through out bearing
- Pressure plate
- Seals
- U-joints
- Differential
- Zirk fittings
- Transfer case
- Yoke Speedy Seal
- Drive shafts
- Fluids

### Fuel:

- Carburetor
- Carb rebuild kit
- Fuel pump
- Fuel filter
- Gas cap

Add or delete to your list as you see fit. Make arrangements with owners of the same type of vehicles to reduce on hand quantities of parts and tools. An enclosed, 24' parts trailer will be provided to house parts and tools. Whenever possible, place your spare parts in copy paper boxes. Staff will mark contents prior to placing in the parts trailer.

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### Wreckers, Maintenance Vans and Mike 6:

Wreckers and maintenance vans will position at the rear of the TMC. Mike 6 will position at the rear of the TMC. Mike 6 will be known by the orange and white checkered airport ramp flag flown from his vehicle. All other Mike vehicles will have an orange flag on their left front bumper. They will remain available to move into recovery mode at all times. If an HMV(s) is disabled as a result of an accident, the HMV(s) involved should not be moved until told to do so by responding Law Enforcement Officers. If an HMV is disabled as a result of a maintenance problem, or an accident, the HMV(s) should be moved to a position of safety at the earliest possible time. Conversations between the affected driver/owner, parts suppliers, experienced personnel and Mike 6 will determine what course of action to take that best suits the situation. Options that might be considered are: on the spot repair, limp in to the next stop, chase vehicle trailer, buddy tow, or wrecker tow. The affected HMV might be taken to that night's stop, the next rest day stop, a local maintenance facility or, regrettably, sent home. We must always keep in mind what is best for the owner of the HMV, but we must maintain the TMC schedule; this is not an item for compromise. LT Jackson's report of 3 August 1919..."the Militor pulled every vehicle in the convoy today and at one point pulled 9 vehicles chained together." Let us hope we can avoid this dubious record.

### Tools:

The HMV owner/driver should have the appropriate mechanics hand tools available to remove or install replacement parts. A full complement of "Pioneer Tools" (shovel, axe, etc.) came with most or all HMV originally; they are also recommended for the TMC. Tire changing tools need to be available (see Safety item # 10.) Take time to mark your tools. Remember, it's not theft we're concerned about...it's just very easy to lose a socket in someone else's tool bag.