WORKSHOP SAFETY POLICY FOR WORKING ON HIGH VOLTAGE VEHICLES DURING SERVICE/ REPAIR

A. General guidelines to all staffs

1. It is your duty to declare to the management if you are wearing any medical device such as pacemaker, insulin pump or any electronic assistance device on your personal health.
2. All staffs need to follow the BEV service flow process to carry out work and this includes Dynamic Assessment on vehicle exterior, pre-scan for Power HV Battery condition and record the information into the designated JOBSHEET FORM, or HYBRID AND EV INSPECTION AND REPAIR FORM while performing the vehicle inspection.
3. All accident BEV must be parked at open yard and quarantine for at least 2 days for thermal runaway monitoring. All safety precaution measure which have stipulated under the process flow must be strictly adhered e.g. park the accident BEV at least 50-feet away from building and other vehicle and display warning signages.
4. All removal damaged power HV batteries must be barricade and put up warning signage to alert others. Please follow the statutory requirement to dispose the damaged power HV batteries.
5. Strictly follow OEM workshop manual for any repair related to the high voltage system. This includes painting the BEV vehicle under oven baked spray booth for temperature monitoring control, mobilise paralysed BEV vehicle with the use of wheel dollies.
6. Once the BEV repair is completed, it is mandatory for the EV expert to carry out quality check (QC) and get their approval before the vehicle is released back to the customer. Update the QC and post-scan inspection results in the jobsheet for future and keep record.
7. You must be trained and qualified for the electric vehicle courses before you are allowed to approach any hybrid and/or electric high voltage vehicles.
8. If you have not been trained for electric vehicle certification and you are required to assess the high voltage vehicle, please get a qualified technician to support on your task.
9. Do not enter into the restricted zone workbay which has been dedicated for repairing high voltage vehicles without authorization unless it is necessary.
10. Do not remove any insulated tools, warning signage which has been setup for repairing high voltage vehicles at the restricted zone.
11. Do not disturb the technician if he is working on the high voltage vehicles. Let the technician have a peace of mind and focus while he is working on the vehicle.
12. Do not play with the insulated tools and PPEs especially the safety rescue hook. The tools and PPEs are for working high voltage vehicles only. Do not use them for other purposes.
13. Never work alone on the Electric / Hybrid vehicle. Always have a co-partner technician to standby if you are working on the high voltage vehicles.
14. Working on a high voltage vehicle can be fatal. Be focus and serious!

WORKSHOP SAFETY POLICY FOR WORKING ON HIGH VOLTAGE (HV) VEHICLES

B. Undertaking Duties and Responsibilities by Technician working on HV Vehicles

1. It is your duty to declare to the management if you are wearing any medical device such as pacemaker, insulin pump or any electronic assistance device on your personal health.
2. You understand that you must be trained and qualified for the HV vehicle certification only you are allowed to work on HV components and systems.
3. It is your duty to ensure all insulated tools and the high voltage PPEs must be inspected before use when working on the high voltage components and systems. Immediately notify the management or your superior of the PPEs or insulated tools are damaged.
4. You have to always wear full insulated PPE and use correct insulated tools while working on the HV components and systems (HV definition range are AC 30V – 1000V, DC 60V – 1500V).
5. Always follow the S.O.P. that has been set by the workshop management for HV vehicles repair approach.
6. You have been trained and understand it is the requirement to shut down or isolate the HV system if







you intend to remove any HV cables and components.

7. Always setup restricted zone with warning signs before you start working on the HV vehicles.
8. Always alert your co-partner technician to standby for you during the shutdown / isolation or reinstate procedure.
9. Always refer to OEM workshop manual for any HV vehicle model if you require for the shut down or isolation procedures.
10. Test the connections or HV components with multimeter CATIII using live-dead-live approach and ensure they are zero voltage or at low voltage level which are DC less than 60V and AC less than 30V before removing the HV components.
11. Use the jobsheet or record form provided by the management to update and record the pre-scan, after-repair, post-scan inspection results. Take photographs to substantiate the damages if necessary for each HV vehicle service and repair.
12. Always put up status warning signage or barricade the area for storing High Voltage battery pack.
13. Accident HV vehicles need to be quarantine at least 2 days for thermal runaway monitoring and park at open yard (50-feet away from other vehicle and building) before drive them into the workshop building. Notify security guard.

All technicians are required to take care the items below:-

































ACKNOWLEDGEMENT

I/ We hereby have read and understand the above policies (A) and (B) and agreed to adhere the safety rules.

