

a. EV Repair and Maintenance

The job roles/functions involved in servicing a car can be broadly categorised into 3 main domain areas, namely Diagnostics, Electrical/Electronics and Mechanical. The proportion mix of job roles within the 3 domains will shift as the vehicle populations transit to EVs. EVs are fundamentally different from ICE vehicles, with battery engine systems instead of fuel-based systems. Their components involve high voltage power and electrical circuit boards that require new sets of electrical skills to handle and understand.

Therefore, technicians that maintain and recover EVs will have to learn to isolate main electricity supply before working on the various components to ensure safety, understand the usage of diagnostic tools to read fault codes and comprehend OEMs' instructions for component replacement processes. The battery systems will be different from ICE systems such as the lack of requirement for oil changes and EV transmission fluid changes. Examples of job roles include EV technician, EV service recovery technician.

The relevant skills required to perform these tasks include battery system maintenance, electric drivetrain systems maintenance, high voltage system maintenance and some mechanical skills for body works, brakes, steering suspension system maintenance and others.

Given this niche set of skills needed, an emerging job role for would thus be an EV Technician/ EV Technical Specialist, with illustrative persona provided in Figure 14.

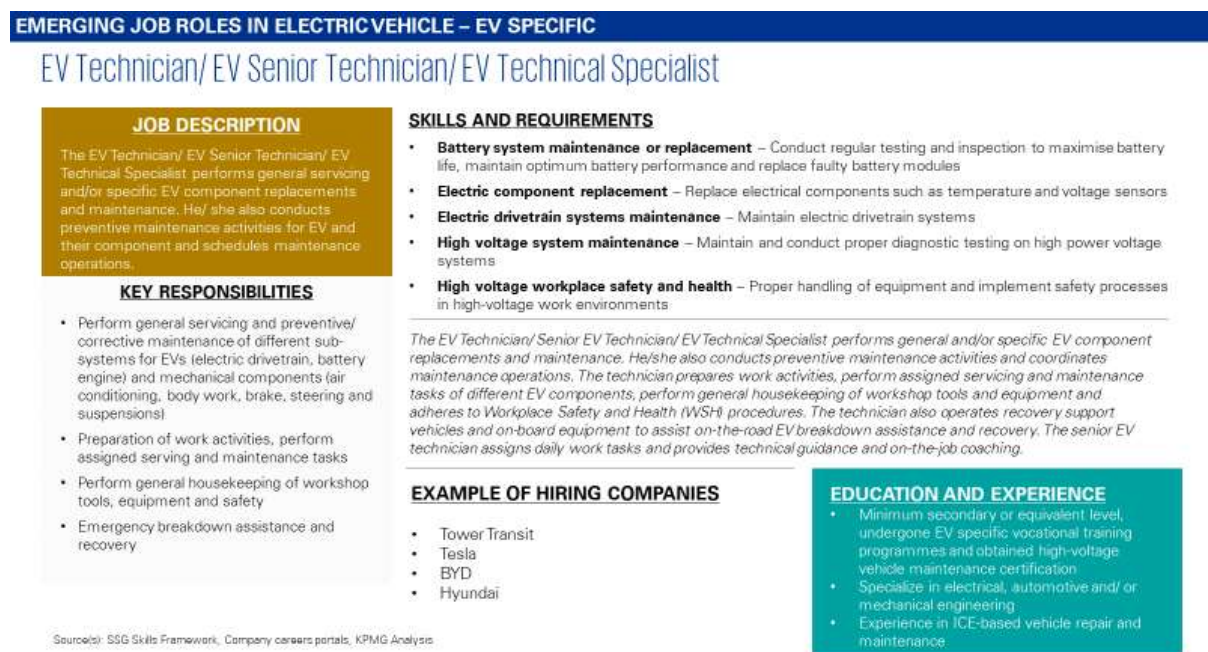


Figure 14: EV Technician/ EV Senior Technician/ EV Technical Specialist Persona