Take on the hybrids

Phil Curry learns that high-voltage vehicles are not scary





THE NEW UK government wants to push on with making every vehicle in the UK zero carbon by 2050. This may be some time away and a near impossible target given the number of cars currently on the road, but the growth of these alternative fuel vehicles (AFVs) is evident.

The SMMT new car registrations data for 2014 shows that the market for AFVs increased from just over 30,000 sales in 2013 to over 50,000 in 2014. Plug-in electric cars saw their sales figures quadruple from 3,586 in 2013 to 14,498 in 2014, partially due to the increase in manufacturers including them in their ranges.

Hybrid servicing

As these vehicles become more popular, the likelihood of a request to service one in the independent sector increases. For some garages, this is seen as a problem. The high-voltage element causes safety concerns with technicians keen to hold back from working on something they feel they don't understand, especially when there could be a danger of death. Yet as these cars increase in number, turning them away means you will be losing a lot of business in the future.

Training in these vehicles is obviously paramount if you want to work on them, it certainly is not recommended you go about prodding high-voltage batteries with a screwdriver. The question is just how different are they to normal vehicles? To find out, I sat in on a hybrid and electric vehicle training course with Snap-on trainer Vince Thorpe.

The course focused not only on the safety precautions that a garage must take but also on the areas where technicians can ensure the vehicle is safe to work on, through isolating the battery and understanding the powertrain to see how energy is generated and stored. Vince is a former Toyota employee and with the manufacturer a leader in hybrid technology through its Prius model he has the experience to be able to inform and educate the true nature of the beast. As well as explaining the difference between micro-hybrids and full hybrid vehicles, the course also went into detail on the high-voltage battery, pointing out how to isolate them before working on any electrical system and how to safely remove and check them should they need it. The various types of battery were covered, as well as the way of putting Toyota and Honda vehicles into inspection modes.

Much needed

The course is often attended by up to 60 technicians at a time and has proven a popular choice from Snap-on. Discussing the technology, it includes topics such as how to isolate systems, how the various motors within the car work, systems to watch out for or that may work differently to those in a normal vehicle and how to use certain scan tools to identify faults. The information certainly made a difference with those on the course saying they felt more confident over servicing hybrid vehicles, especially seeing how apart from the electrical systems they were simply normal vehicles with normal components in many places. Simple safety precautions such as ensuring the area is marked out to warn of the vehicle in the bay and keeping keys in a locked box at least 15ft from the car will help toward safe working practices.

All in all, the course highlighted that hybrid vehicles are serviceable by the independent workshop market, as long as the right steps are taken. Training in new technology is important and it will certainly help the revenue keep coming in when AFVs make up more and more of the UK vehicle parc.