

Are you aligned, switched off and safe to work?

BUSINESSSENSE BY TIM KELLY



Last month I wrote about the need for repairers to keep up with technology, to invest in themselves and their equipment, and to plan for the future.

Mark Ormerod, estimator at Fix Auto Blackburn, read the article and very kindly reached

out to ask if I would be interested in seeing what is actually required to “de-energise and re-energise” a vehicle – in this case an Audi e-tron using the latest Volkswagen Audi testing equipment. He said they could also run through ADAS recalibration on 360° cameras, lane departure, radar, lidar, ultrasonic and LED matrix headlamp recalibration.

Er, yes please. So I became a roving reporter for the day.



Where to start? Fix Auto Blackburn is a family owned bodyshop that is part of the Fix Auto UK network. Owned by Michael and Peter Weddle and incorporated in 1952, it was first established as a wheelwrights and blacksmiths by the Gillibrand family in 1859.

Over time the business has witnessed many changes in the industry, especially the need to invest in the future, in equipment and training for its staff to keep up with technology. Aligning themselves with manufacturer approvals and becoming a Fix Auto franchise has allowed them to do this.

As a family-owned repairer, Fix Auto Blackburn is no different from any other independent self-run bodyshop. It has been where you are now, the only difference being that it has invested as much as possible in the future of its business.

If there was any point in time when serious consideration of this fact was needed, it is now. You can no longer stand still and think “it won’t affect me”. EVs are not only coming, they are coming fast. The government has stated that all cars sold from 2030 must be electric. This gives you an indication of future demands for your services, and it tells you what you should have been preparing for yesterday, not today.

At Fix Auto Blackburn, I asked what exactly is needed to safely work on one of the newest electric vehicles? I was shown a new Audi e-tron which needed de-energising, and the Thatcham escribe methods describing how to do so using erWin, which is the VW Audi data source.

I would love to publish these methods so you could read them for yourself, but they are some 52 pages long and I am not permitted to do so. So, what are the pertinent points?



Specialist tools, VAS6558 hybrid test module, VAS6649 warning high voltage danger sign, VAS6650 warning sign, access to the ODIS Service module diagnosis software and, most interesting, a padlock (more on that later).

The most important part, stated by the methods, read: “The high-voltage system **MUST** be de-energised using vehicle diagnostic tester in DIAGNOSIS mode, and **ONLY** by this method.”

The message is clear: should you not do this, it could lead to electrocution.



The only way the vehicle can be made safe is by using the VAG diagnostics tools, by logging into VW Audi Germany via ODIS. There is no other way of safely “de-energising” the vehicle without damaging the car. Once these instructions have been followed, the maintenance

connector, which is the bridge between the contactors and the high-voltage battery, then needs to be secured with a padlock to ensure it cannot be plugged back in by mistake.



Only then is the vehicle safe to work on, and safety warning signs should be positioned all around the car.

Continuing on from last month’s article, I also wanted to know how rapidly ADAS is moving on as a technology, what

is required to recalibrate the 360° cameras, radar, lidar, ultrasonic sensors along with matrix LED headlamps.

The answer: it has moved on rapidly and is getting ever more technical. The vehicle we used as a test subject was an Audi RS Q8 2021 model. We ran through the requirements to recalibrate the 360° view cameras. One of the most interesting statements in the methods under “perform calibration/adjustment in the following situations” was “changes of more than 5mm per axle”.

Bearing in mind new tyres have 8mm of tread, and the legal limit is 1.6 mm, it could potentially mean the system needs calibrating if the tread depth gets below 3mm.

A special tool, VAS 721 001, was used with preparations requiring adequate space (a lot of it) with no object permitted in the calibration area. Also, significant differences in lighting can have an effect – apparently, they used to have the unit very well-lit and it would stop the calibration process. The lighting has now been reduced to prevent glare.

There are then 15 points that need to be addressed prior to calibration and another 20 or so during the calibration process. This is not something a mobile technician would be capable of doing.



Watching the technician run through all the requirements was fascinating, from cleaning the cameras and making sure all the doors were shut, to making sure the ride height was at the correct level. It would be very, very easy to cock it up.

The requirements are very specific and must be adhered to, miss something in the process and the “computer says, NO”. That is before you make sure all the alignments are in the cross hairs of the calibration unit.

Lastly, an area I have never encountered – the matrix LED lamps – superbly clever, dimming very specific areas of beam pattern, down to identifying a person and turning off the LEDs so as not to dazzle them. A clear need to make sure they are aligned correctly.

For this, a special tool, VAS 621 001, was used and the erWin methods provides nine pages about what is required for this process. Yes, nine.



This all means you can no longer stand still and do nothing, you need to plan for a technologically advanced electric future.

Many thanks to Fix Auto Blackburn for having me and spending the time to demonstrate what sits behind this important topic.

Tim Kelly is founder of motorclaimguru.co.uk and an expert in insurance and assessing vehicles, a consumer advocate and bodyshop consultant whose goal is to change the industry and put repairers back in control of their profits.

Bodyshop Magazine



auto-motivate



Mike-Ro-Chip

PPE becomes Post Pandemic Education.

We will need to re-educate the way the industry acts and behaves post pandemic!



As we come out of the pandemic period, we know the whole world has been affected in so many ways, in fact the list is endless. There is the natural sense of urgency to return to a more familiar way of life and business normality.

Yet, by now almost every bodyshop business owner will have recognised, some of those changes and there impacts of this extended period has given over to a life changing experience for most people.

Now our workforce is no longer quite seeing things at work the way they did previously. Attitudes, behaviours and performance have been affected. Some simple examples are:

Capabilities

Working conditions

Responsibility

Working hours

Accountability

Relationships

As the recovery builds and repair volumes increase, the ability of individuals to reach past performance levels is by no means a natural guarantee.

How do you address this and be ready for the recovery in time?

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