



## Brakes: Electronic Parking Brake (EPB)



*“There is an increased amount of pressure on garages to turn cars around quickly, however, trying to find shortcuts can often lead to serious injuries and cause more work in the long-term.”*

The Electronic Parking Brake (EPB) is now a common feature within most cars, meaning attention must be paid to it when replacing pads on newer model vehicles. The evolving technology has seen an increase in errors when changing the pads, resulting in injuries to those working to replace them on a vehicle. These mistakes can be avoided, however, by following a few best practice rules.

The use of EPB offers vehicles a more comfortable, reliable ride with a huge boost to the overall safety of the car, such as a lower possibility of stalling the engine, giving the driver better control when moving away on a hill start. With the many benefits of an EPB system, it's no real surprise that it is becoming a standard fit in most vehicles. However, there's only one method to safely and correctly change the pads on cars with an EPB.

To help calibrate the brakes, an electronic service tool must be used. Through a diagnostic command, the park brake is opened and is inoperable. Once this procedure has been completed, it is safe to work on and the pads can be removed.

Having the ignition on and the driver's door shut does not open the mechanism. All this can do is put the park brake into the “off” position, as though in normal use. However, in this condition, incidents have been reported where vehicle doors have been opened during repair work, causing the EPB to activate, closing the brake and trapping the fingers of the technician working on the vehicle.

### Further servicing essentials

When the caliper has been opened, you may still need to manually push the piston back, just as you would with a front cali-

per, before fitting the new pads. Ignore the fact that there may be keyways on the face of the piston. You should never manually try to wind back the piston.

Without the correct use of specialist equipment, the rear brake will be seriously compromised, making it unable to function correctly. The incorrect use of specialist equipment could also lead to a braking imbalance and serious damage to the brake caliper. This will not only impact the braking performance, but will ultimately affect the pocket of the customer or the garage, as it will need replacing or fixing.

**Always use non-conductive grease on the pads and moving parts** as greases that use copper paste can negatively affect the vehicle's ABS. After re-assembly and closing, you must perform the calibration sequence. This sets up the air gaps correctly and the torque setting on the electric motor for when the parking brake is fully applied. Without calibration, the “monitoring” functions will not operate correctly.