The jack explained below is of the form of a “tilting” mechanism, similar to what is used in Formula 1 Races. Its action lifts both rear or front wheels off the ground at the same time.

- Vehicle must be stationary.
- Place road cones at edge of bitumen
- Vehicle must be on flat ground
- Vehicle must be 1 metre from the bitumen edge
- Vehicle must be on solid ground
- Place the vehicle’s park brake on
- Gather appropriate tools – eg car jack, wheel chocks etc
- Place wheel chocks on wheels that will be in touch with the ground
- Place vehicle jack to one side of vehicle
- Undo wheel nut prior to raising vehicle
- Raise the vehicle to a suitable height to remove the wheel
- Remove the wheel
- Place flat wheel under the vehicle and place good wheel onto the vehicle’s hub\(^1\)
- Replace wheel nut
- Do up wheel nut to specified torque
- Remove punctured wheel from underneath the vehicle\(^1\)
- Lower the vehicle’s jack
- Retorque wheel nuts
- Remove all tools and equipment
- Check tyre before driving off
- Check traffic and when safe drive off.

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\(^1\) In a challenge where time is the essence, the placement of the tyre under the car would not occur. All personnel would be required to ensure none of their body was close enough to become trapped if a mishap occurred. Including the description here is to highlight OH&S requirements on all participants.