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## EASY STEER



We haven't quite arrived at the self-lacing shoes made famous by Back to the Future, but there's no denying that modern life makes us lazy in many ways, something which is

really noticeable in older cars. Having to use the key to gain access in the first place, fiddle with a manual choke to get it going and then double-declutching in town traffic are all things of wonderment to someone who has never driven anything older than a '90s car but what really gets them is the effort required to turn the wheel on a car without power steering. If you love old cars then none of this is a problem but sometimes it can be a real barrier to sharing the enjoyment with those drivers less prepared to put up with the steering effort.

In some cases it's simply because a taller driver struggles to fit their knees under the huge steering wheel required to provide the necessary leverage, and in other it's the result of modern tyres to increase the car's handling limits. Yes, you can fit a smaller wheel but the effort will rise accordingly, while switching back to crossplies is nobody's

idea of fun. There are also instances where family members simply refuse to drive a car they might otherwise enjoy, simply because of the effort required to park it.

For many popular classics though, the option exists to retrofit power steering and such is capability of our classic car specialist industry these days that there are bolt-on kits for many models. The MGB for example is well served by bolt-on kits, which use a conventional hydraulic assistance set-up. The pump can be either driven from the engine or electrically powered and although fitting requires a modified front crossmember, this is effectively a bolt-in. Specialists can supply either a



modified MGB part or the part used in the RV8 which of course came with power steering as standard.

These are just two examples though and current technology means it's possible to retrofit power steering to pretty much any steering used a hydraulically-driven power steering rack fed by an engine-driven hydraulic pump and this produced more or less unchanged until the late '90s when it was refined into the electro—mechanical system. This setup used the same principles for the steering rack part of the system, but replaced the engine-driven pump by an electrically-driven hydraulic pump. The system provided advantages in underbonnet packaging without the need to drive the pump from an engine pulley and could also provide efficiency gains with the pump being driven only when required.

It's this system which was fitted to the first-generation New Mini and which is responsible for the car's characteristic buzzing noise when parking.

It didn't end there, though: a further development which in the world of classic cars is generally identified with the MGF, was the fully electric power steering. In this system the assistance is applied not at the steering rack but at the column itself, with a powerful electric motor detecting when the wheel is being turned and applying assistance as required. A fully electric system can be easily packaged when engine bay space is tight and can be electronically controlled to interface with engine revs,

road speed and steering angle in order to provide varied assistance in different conditions. This has since been developed into a retrofit for many classic cars and has the advantage that the underbonnet area can be left unmodified: a replacement column is fitted, adapted to take the assistance motor and other than



the wiring modifications everything is otherwise left standard.

Most of the kits also come with a full range of safeguards including 'freewheeling' motor designs which can't restrict the steering if they fail and indeed can be switched off entirely should a driver wish to drive the car in standard form.

So which is the better option? As with so many things it comes down to personal preference. The fully electric systems are sometimes criticised for lacking steering feel, while the hydraulic systems generally consume more engine power from their pump drive. The hydraulic set-ups require more work to install, but the electric motor fitted to the steering column can be an issue in cars with limited legroom like the MGB. On the other hand, hydraulic systems have been refined in recent years to the point where the pumps are much more efficient than their '70s equivalents and the technology is well understood. As ever, it pays to drive a selection before making your choice but certainly you don't need to sell a muchloved classic simply because it's becoming a struggle to back it out of the garage.

HOW MUCH? MGB (hydraulic) £1016 MGB (electric) £2550

## Have a look at this https://www.youtube.com/watch?v=iWk7XYYK\_EY







