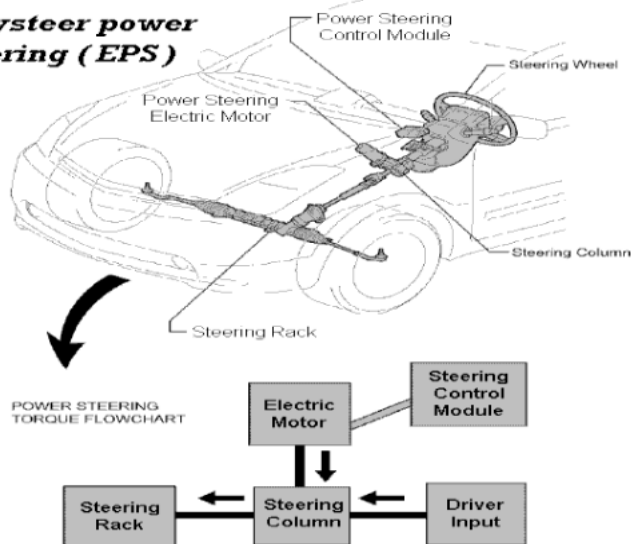


easysteer power steering (EPS)



Review of the easysteer EPAS retrofit

Following several reports from V8 members who have had an easysteer **electronic power steering system** (EPAS) retrofit on their MG V8, Victor Smith discussed the system and how it is installed on an MGBGT V8 and an RV8 with Rick Birchall at easysteer. Here we have a review of the easysteer EPAS system and its installation in an MG V8. Members' reports on how it performs on the road will be very welcome.

What do easysteer offer?

Easysteer provide a **supply and fit EPAS service** at their workshop in Chorley in Lancashire and also **supply their EPAS kits** for an installation by a classic car servicing specialist or by an owner. Easysteer see their EPAS power steering as the perfect answer to the age-old steering issue with classic cars in an age when so many drivers have become conditioned to the ease with which they can steer their daily-use car fitted with power assisted steering as standard equipment. In addition to that conditioning over the last 10 to 20 years, tyre technology has improved tyre performance, not least with increased grip which increases the effort needed to steer a car, particularly at low speeds. So understanding the needs of their customers and their cars, the easysteer team designed a power assisted steering system that would be stronger than most of the original steering, and then they hid the system under the dash so it appears untouched. Once their EPAS kit is fitted, it will outlast and outperform all your original steering components and as it is maintenance free it won't rot or wear out like an old hydraulic PAS set up.

Easysteer EPAS systems are a "fit and forget" retrofit - nearly all your original steering components remain unchanged, so your rack, track control arms, track rod ends and column universal joint are standard, none are power steering items meaning no extra cost when it's time to replace them. One of the real advantages of an EPAS system over a hydraulic system is that in the highly unlikely event of a power loss, the worst your steering will do is to revert back to how it used to be before the EPAS was installed, unlike the old hydraulic systems which, if ever you lose the power steering, your car becomes undrivable because with that type of system the original steering rack is removed and replaced with a lower ratio rack making the effort to steer without power assistance beyond the effort a driver can make. **An easysteer supply and fit installation avoids complications as there are several types of steering column with different features on the MG V8 models.**

How does the easysteer EPAS system work?

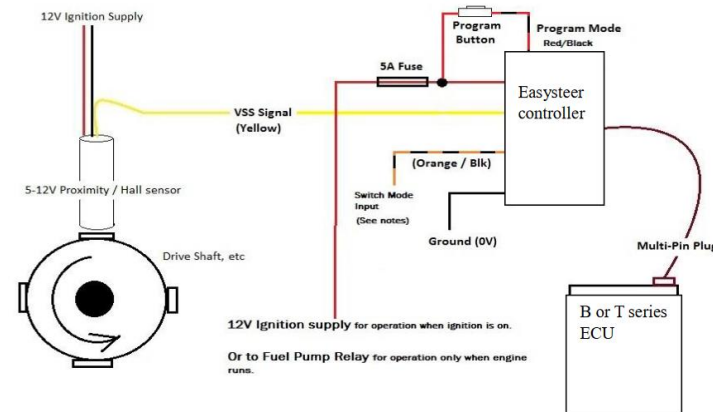
The easysteer EPAS system uses the same steering column as originally fitted to the car, but with the addition of an electric motor connected in the middle of the column. The company uses specially machined joints to connect all the sections of the steering column together making it much stronger and it mounts in the car in the normal position with an extra bracket on the base of the motor. Easysteer attach that bracket to the pedal box or the bulkhead for extra support for the column. Their easysteer EPAS system still retains the original fittings (including the ignition barrel, steering wheel and column surrounds) and it all looks as it should with all the wiring and control boxes easily hidden away under the dashboard. All their systems are fused by a 35/40 amp maxi fuse to the motor and a 5 amp inline fuse to the controller. All their EPAS units include simple plug and play wiring instructions and they are all 12volt negative earth. The supply and fit package is around £1,000.

Steering control module

The EPAS Speed Unit can convert your vehicles existing speed pulses into a signal that the EPAS ECU expects to see. This gives the EPAS ECU the ability to run different levels of power assistance depending on the vehicle's speed:

Below 15mph	high power assistance
From 15mph to 35mph	medium power assistance
Over 35mph	low power assistance

To do this the Speed Unit needs a 5V to 12V pulse from your speed sensor, so it would need either a proximity sensor or a hall sensor that detects a bolt, toothed wheel, etc. If you have a VR sensor (abs style) then this needs converting to a 12V pulse before it can feed the Conversion Unit. Easysteer find fitting a **GPS speed sensor** is particularly good at providing reliable speed readings.



The **installation guide notes** provided by easysteer (also available online) describe how the module is wired up and then the set up procedure. [See the easysteer guide notes online](#)

Speed sensitive power assistance

The easysteer **speed sensitive controller** can be used to convert the power steering to be speed sensitive by converting speed pulses into a signal that the steering ECU expects to see. This ultimately gives the steering ECU the ability to run different levels of power assistance depending on the vehicle's speed. All changes to the level of power assistance are done seamlessly. This involves mounting a remote proximity sensor to the vehicle to read the road speed, normally pointed at the prop shaft or a wheel hub. Based on installations made by easysteer, their speed controllers are relatively easy to install with reliable LED proximity switches. These are very hard wearing and produce a reliable signal needed by the control unit. They also have an LED to show you when it is reading correctly.