



Official type approval for the EZ EPAS system in Switzerland

A Swiss RV8 enthusiast, Michael A. R. Bernhard, has been working hard with his local classic car specialist and EZ Power Steering in Holland to get official type approval for the retrofitted EZ EPAS system in Switzerland. Here he describes how they have successfully obtained official approval for the retrofit.

I finally took the plunge! In April 2011 Classic & Vintage Cars AG in Hünibach-Thun, Canton of Bern, Switzerland - www.classicandvintagecars.ch - installed an EZ electric power steering device on my 1995 MG Rover RV8 (Woodcote Green 1169) which has a "grand" total of 25 thousand Km behind it so far. Indeed, age never stops creeping up and we will all end up sooner or later with "more muscle in our brains than in our upper- and fore-arms" . . . as is the case for this 72 year old Swiss "petrol-head"! So a solution to my puffing and panting each time I parked my RV8 became an absolute safety and health requirement! I had tried fitting a larger diameter steering wheel (a Moto-Lita out of my 1972 MGBGT) which helped a little bit, but made getting in and out of the car slightly complicated and caused discomfort for larger or long-legged drivers.

Now, with the EZ EPAS I have been able to install the lovely small diameter leather Moto-Lita wheel I salvaged from a past family-owned 1983 Mini 1.3i -

sporting John Cooper's signature, mind you! This looks much nicer than the original steering "black lump" the car came with. (see photos alongside)

My overriding condition was to fit the EZ EPAS only if official approval could be obtained. Indeed, as stipulated in the global international legislation and therefore also here in Switzerland, it is forbidden to modify the steering mechanism on a vehicle "licenced to be used in international traffic" (according to the official jargon) without having it homologated and mentioned on the official vehicle document/license. Finally on 30th December 2011, after many months of administrative hassle, official approval by the Swiss authorities was obtained for the modified steering device. This is the first approval here in Switzerland and, because of reciprocal legal recognition in other countries, it opens to all classic vehicle enthusiasts and veteran car owners the path to safer and easier driving of our classics – see my explanations below.

EZ electric power steering

The EZ electric power steering consists essentially of two parts: a replacement steering column (top section under the dashboard for the RV8 – see the pictures above and on the next page) onto which the electric power steering device is fixed. No other mechanical intervention is needed other than replacing the original steering column and wiring up the electric EPAS device.

The replacement steering columns are professionally forged and specified to the identical performance specifications of the original. Type approval tests undertaken by TÜV-Nord CERT GmbH in Hannover, Germany show that in most cases, these replacement columns can be of superior quality and therefore contribute even more to enhancing the vehicle's safety!

According to my rather amateur understanding of the explanation of its operation, the electric PAS device is designed to vary the amount of power assistance required to turn the steering system by constantly measuring the torsion effort on the column, effort which varies with the speed of the vehicle. The device fits snugly under the dashboard, almost out of sight as illustrated below and it works absolutely silently.

Thus equipped, the car steers easily and smoothly. Above all the power steering is absolutely silent and the electrical consumption is negligible. By turning a small dial next to the device under the dashboard (see on the photo above, round dial), one can adjust the amount of power assistance to one's own requirements from very easy to just enough . . . or even switch it off. At speed



Original steering wheel (top), before installing the EZ EPAS (middle) and after retrofitting the EZ EPAS (lower):



the EZ EPAS is practically inert and the car steers with little or no assistance; the power steering comes on progressively as the physical effort on the steering column increases. When I took the car out on the road for the first time, I over-steered, but it did not take me long to adjust the dial to my personal driving comfort requirements – what a difference!

Safety performance

The safety improvement is impressive. With EZ EPAS driving in town and at lower speeds is easy and very comfortable. Parking manoeuvres are more precise; no more huffing and puffing or scraping of painted bumpers. With the variable power assistance, there is practically no difference from the original at speed on motorways other than that the car progresses smoothly without any wandering; it is far more stable and easy to control on a steady, curved or straight line. On bumps and ruts the steering stays precise and the car no longer moves off course as it had a tendency to do so before – one of the downfalls many MG RV8 owners have remarked on. No need to update the suspension, adjust or replace shock-absorbers or whatever! The car's spectacular inherent performance is enhanced ten-fold and it is now a true delight to drive under all circumstances!

Official approval

Manufactured in Japan, this electric device provided by EZ Power Steering is installed on numerous modern car makes on the world markets. All these have an official international type approval since they are installed, tested, approved and registered

on a global type approval certificate of conformity covering all the equipment on any given new vehicle model. The problem for classic car owners is that this is something our precious vehicles have never even been subjected to when new. Thus I was obliged by the Swiss authorities to seek official homologation of the modification to my car's steering system.

Thanks to the persistent endeavours by EZ Power Steering in the Netherlands and the Swiss national distributor, Classic & Vintage Cars AG, this has been successful even if it took some time. Their concerted efforts, using my MG RV8 as a reference sample, resulted in obtaining once and for all an officially recognised type approval certificate for EZ Electric Power Steering columns for installation in a large number of classic vehicles. Such approvals are of course also valid internationally as is stipulated in the reciprocal recognition clause found in the international UN and EU road vehicle type approval legislation, on which all our national laws are based.

Regarding my MG RV8, the replacement column integrates a collapsible safety element absolutely identical to the original which forms an integral part of the new steering column. In December 2011, TÜV-NORD in Hannover provided the Swiss responsible authorities with their detailed test results which they carried out in October 2011 for EZ Power Steering in the Netherlands, according to the requirements of the related UN ECE Regulations and EU Directives. The TUV approval document contains now a long list of classic vehicles among which are all

MGB derived models and several others as well. The constantly updated list of approved vehicles can be requested from www.ezpowersteering.nl. We were also provided with the type approval report of the electro-magnetic compatibility of the electric components. After accepting all these documents the Swiss authorities officially approved the EZ EPAS modifications to my RV8, chassis number 1169, on 30th December 2011. Now I look forward to driving my RV8 legally with its electric power steering.

Conclusion

With the reciprocal recognition of the documents according to the EU and UN ECE conventions and vehicle test requirements, I strongly recommend EZ EPAS system as a considerable safety and driving comfort improvement for retrofitting to any veteran, historic or classic vehicle. However, a word of warning: officially recognised veteran and/or historic vehicles may lose their status – something which does not yet concern my sixteen year old car. Hence the absolute importance of carefully keeping the original steering column and, as in my case, the steering wheel too so as to be able to reinstall it should one wish to restore a classic vehicle to its original specification or obtain its official recognition as an historical vehicle according to the FIA/FIVA certificate conditions. Currently, through my activities at the FIA International Historic Commission and the FIVA Legal Commission, I intend discussing the possibilities of obtaining acceptance of this “modern” safety device – as well as others such as power assisted braking, better performing lighting and light-signalling devices etc. - on such valuable historic vehicles. After all they are definitely a safety benefit for both the veteran vehicles and their drivers!

As for my RV8, it may never become a 30 year old veteran during our time together – heaven only knows to whom it will belong in fifteen years from now! While the going is good, I'll always be happy to fully enjoy a safe and easily driven MG icon – the last MG based on the MGB chassis built by MG-Rover to mark the 30 years of the MGB, now twenty years ago! Indeed, we are ready to celebrate together with my '72 BGT, the 50th anniversary of the MGB in all its shapes and engine sizes in 2012.