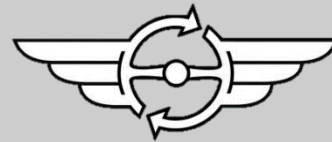


# **EZ ELECTRIC POWER STEERING**

## **INSTALLATION GUIDE**

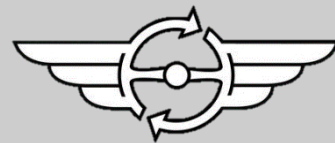
**MG MGA**





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## THE PRODUCT

Thank you for choosing an EZ ELECTRIC POWER STEERING product for its quality, its performance, type approval and its straightforward assembly. Since 2006 we have been manufacturing complete steering columns with integrated electrical assistance. All columns are tailor made for each type of car and we have over 200 different types in stock. For more information about our products (power steering systems and replica steering wheels) or to place an order, visit our website [www.ezpowersteering.com](http://www.ezpowersteering.com) or send an e-mail to [info@ezpowersteering.nl](mailto:info@ezpowersteering.nl). If you have any questions of a technical nature please contact [workshop@ezpowersteering.nl](mailto:workshop@ezpowersteering.nl).

Version C1.1

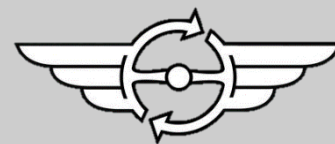
Date 20-06-2022

*This manual should be read carefully to avoid errors. Check whether all parts of the set are present. This can be done on the basis of the picture in this manual. Before installation, compare the EZ POWER STEERING column with the original column. Check that the dimensions are the same. Also fit the steering wheel to the column.*

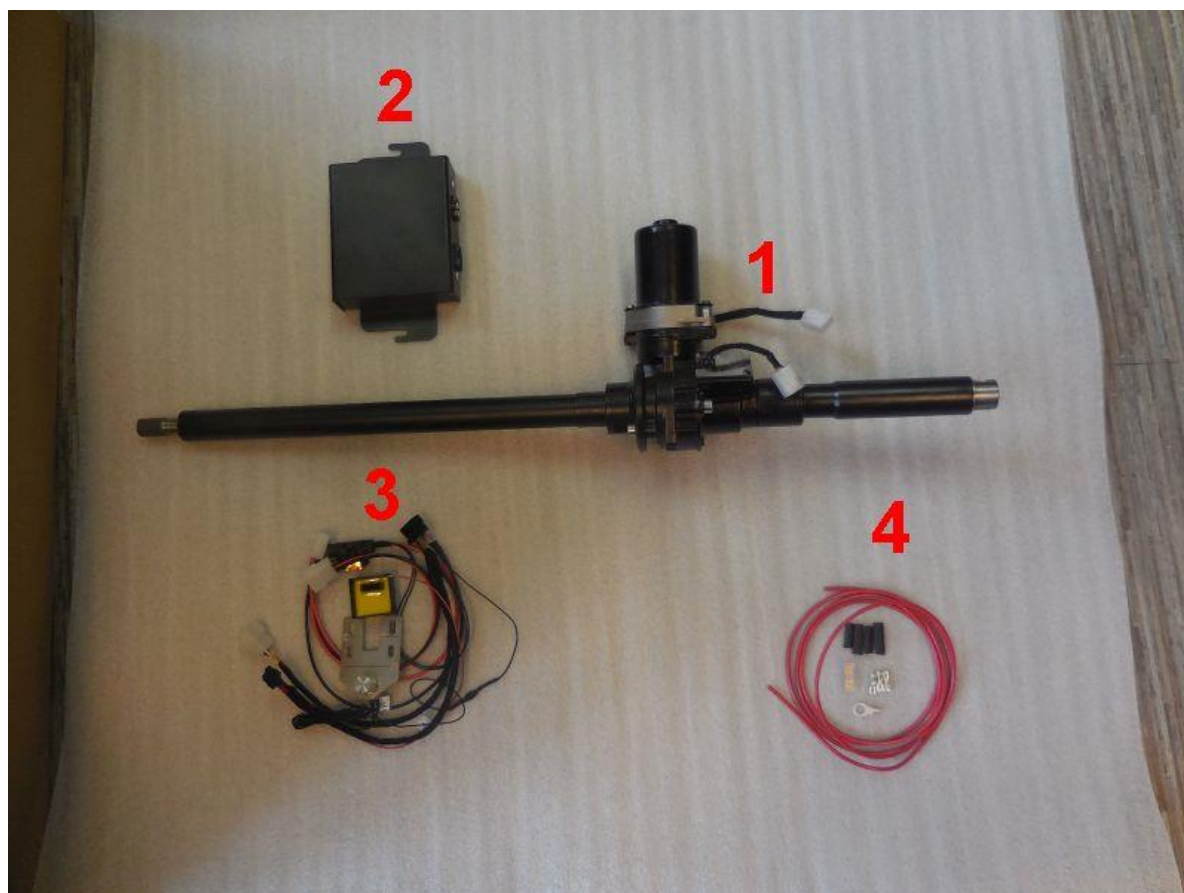
*If you do not have the skills or tools to perform the installation, have it performed by a professional. EZ POWER STEERING cannot be held liable for incorrect installation or self-inflicted damage.*

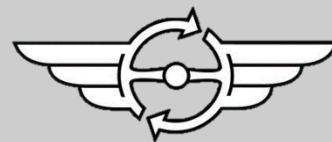
*The manuals are generally based on a left-hand-drive vehicle. In most cases, the right-hand drive version is the mirror image of the installation of a left-hand drive vehicle.*

*If you think that any changes are needed in this manual, we would like to receive your pictures and comments. With your feedback we can improve our manuals!*

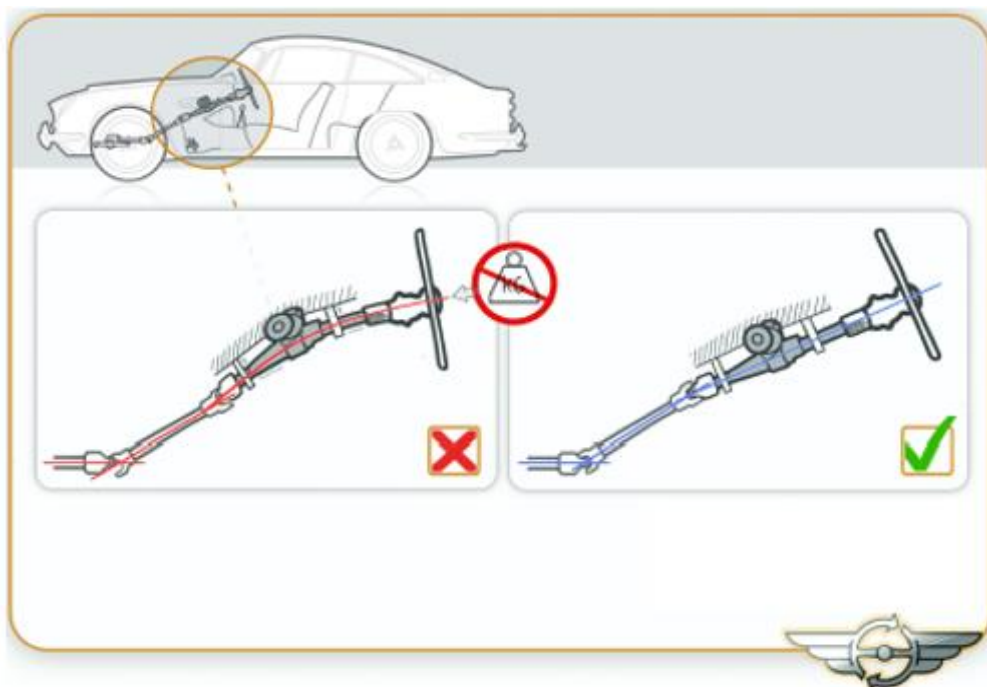


# OVERVIEW OF THE KIT

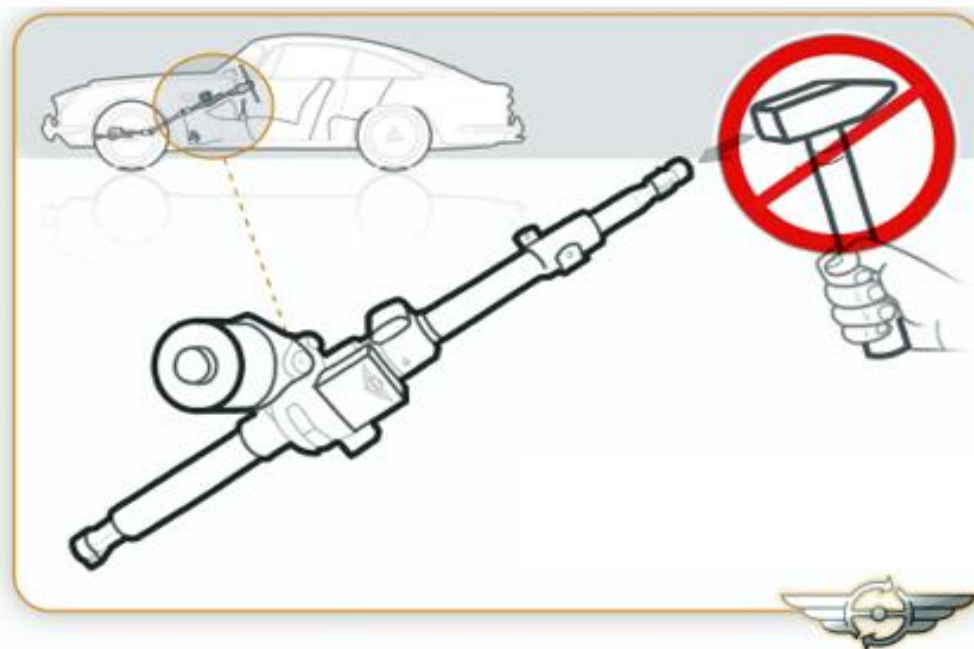




# INSTALLATION

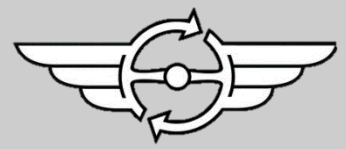


The steering system must always be properly aligned and mounted without tension.



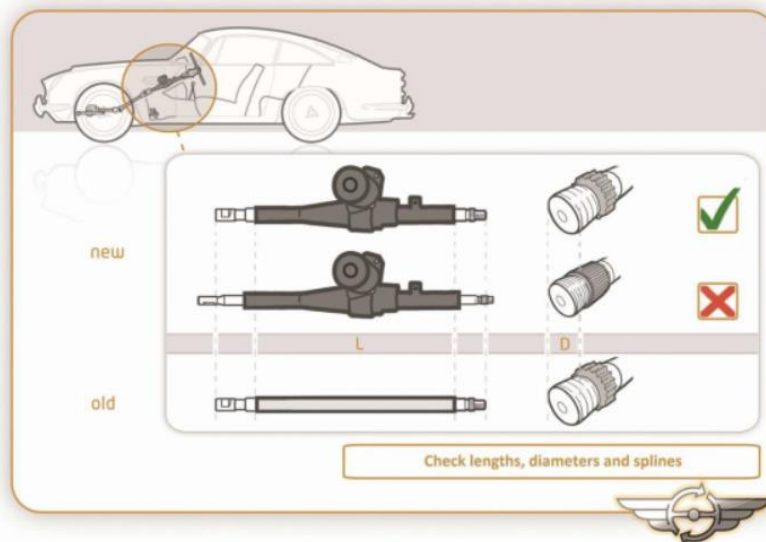
Never strike the input shaft with an object during or after assembly. This can adversely affect the sensors.



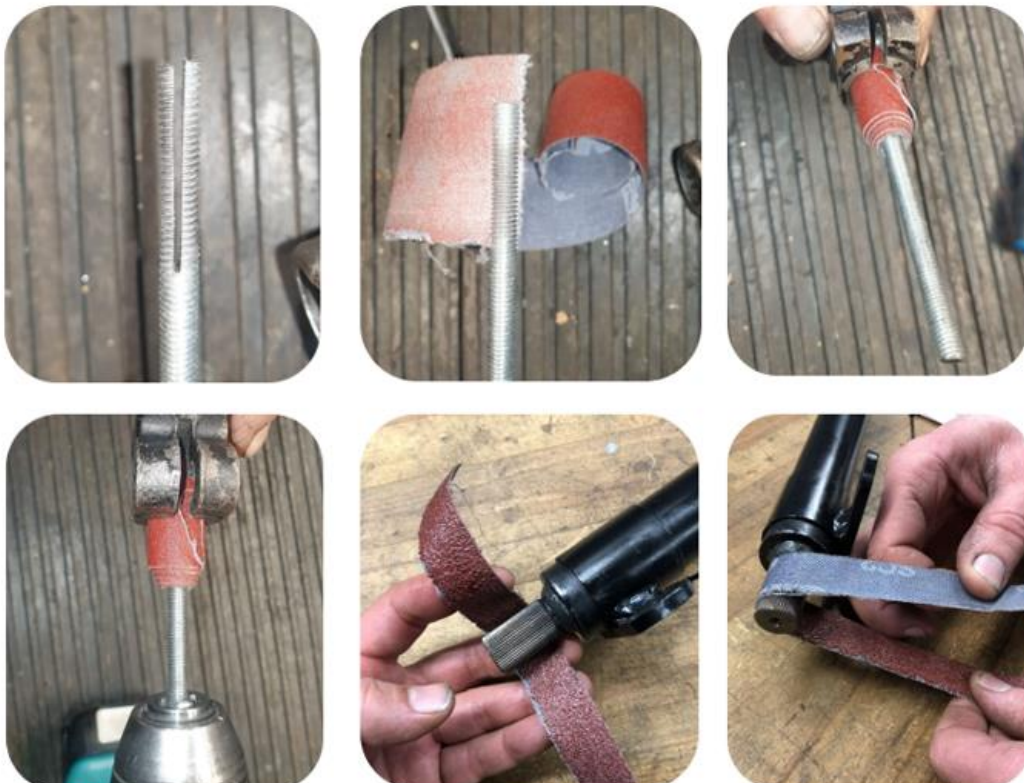


## Check length, diameter and splines

Compare the EZ Power Steering Column (EZ-unit) with the original steering column before installing it. Check if the splines on the top and bottom, the diameter of the steering tube and the length of the column are all the same as the original steering column. When in doubt you can use the original steering wheel to check the top splines for fit. Never hammer on the steering shaft of the EZ unit!



In the car industry its common to have some small tolerances in spline connections. In very exceptional cases connecting a new shaft from the EZ-unit in the original (old) U-joint could cause a tight fitting. This is sometimes relatively easy to solve by sanding only about 0,2mm (0,007 inch) in the inner part of the U-joint and also the spline on the output shaft on the EZ-unit.





### Torque tightening values in Nm.

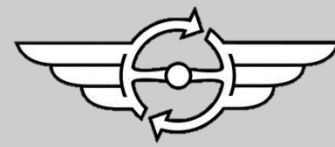
When the new steering column is being fitted hand tighten all the bolts and check if everything turns smoothly before tightening to required Torque, use torque tightening table below:

	Alu	8.8	10.9	12.9
M6	6	11	16	19
M8	15	27	40	47

The system works with a torsion bar into the unit, this measures the amount of torque/load on the steering shaft while steering, the torque sensor measures this and sends a voltage to the ECU. The ECU uses this signal together with the speed signal to control the electric motor from the EZ-unit.

### Voltage

The basic EZ-unit, is a 12V system with negative earth! There are extra wiring sets available, so that the kit will work with a 6V or 24V system and/or positive earth. Check your vehicle setup before fitting the EZ-unit.



### Step 1.

Check the tire pressure and take a test drive with the car. Check the wheel's straight position and the car's driving characteristics. If everything is functioning correctly, proceed with the conversion.

### Step 2.

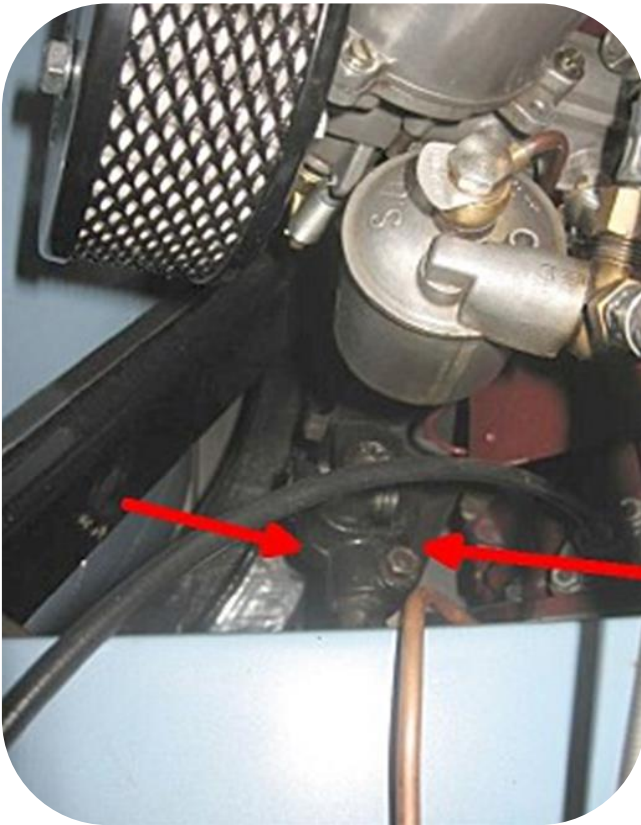
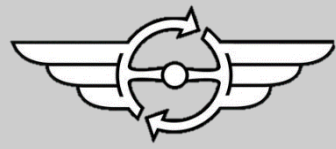
Find an ignition switched feed wire. This is necessary to control the power steering unit (see point 11). Subsequently, disconnect the negative cable from the battery and put the front wheels in straight-ahead position. Mark this position.



### Step 3.

Remove the steering wheel including chrome spring.





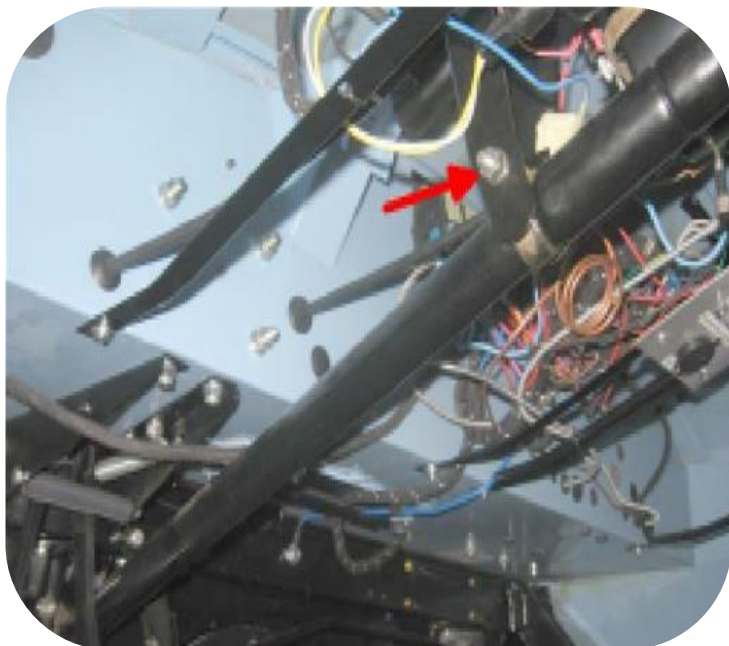
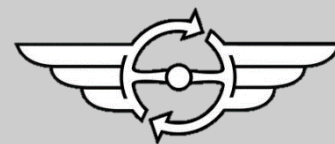
**Step 4.**

Remove the mounting bolt from the universal-joint in the engine bay



**Step 5.**

Remove the lower mounting bolt from the original steering column.



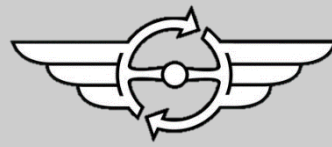
**Step 6.**

Remove the upper mounting bolt from the original steering column.



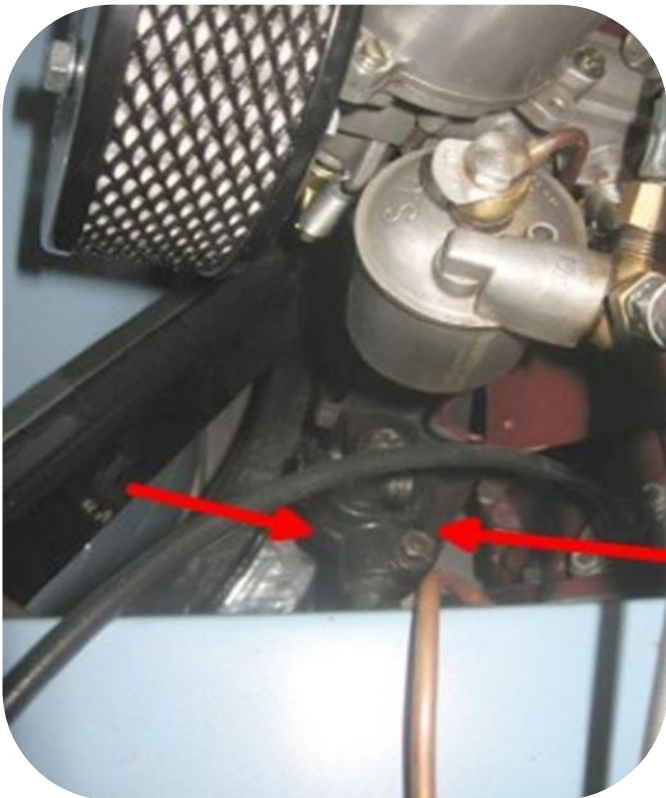
**Step 7.**

The column can now be removed from the car. Pay attention to the U-joint.



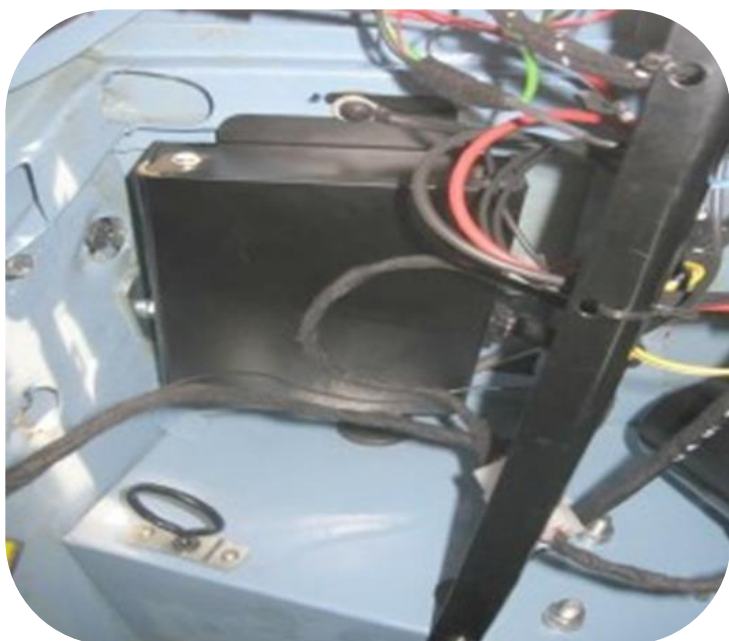
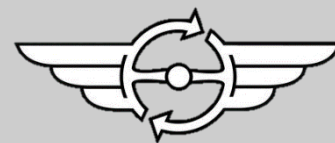
**Step 8.**

Fit the original mounting clips on the EZ Power Steering column and install this column in the car.



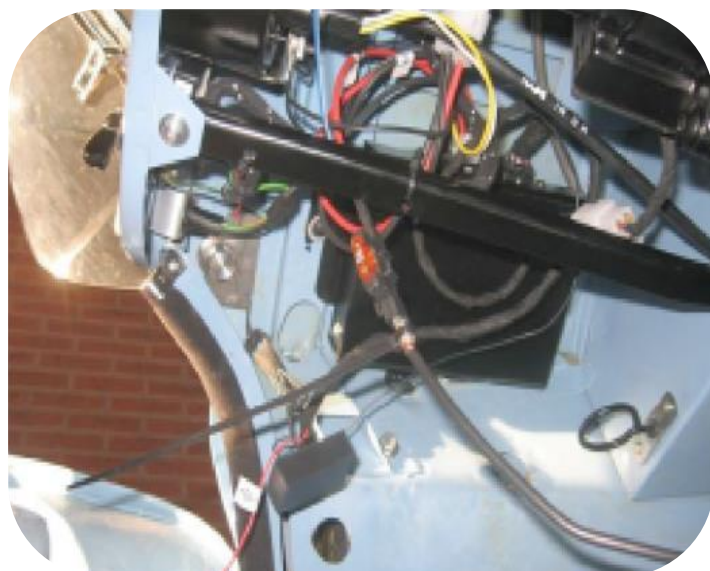
**Step 9.**

Attach the U-joint with the mounting bolt back to the column.



**Step 10.**

Fit the ECU in an appropriate location in the car.



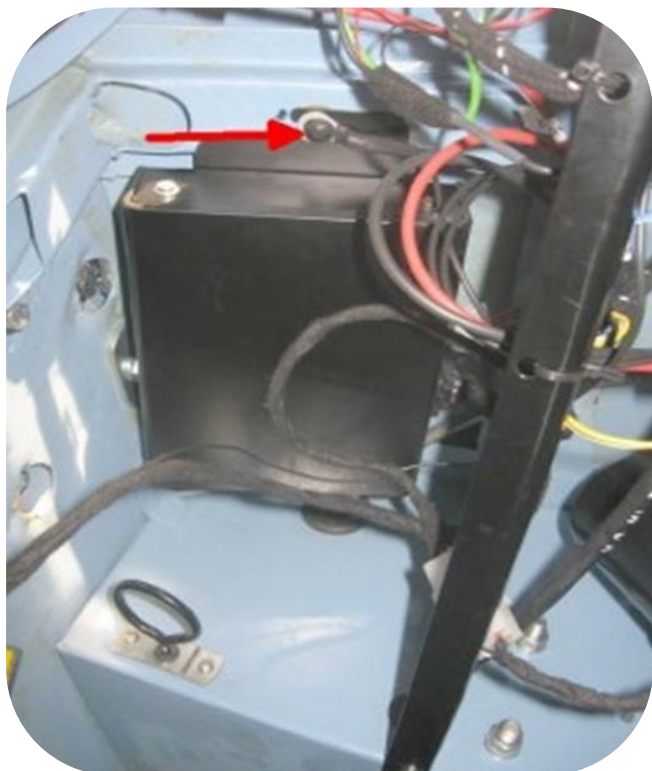
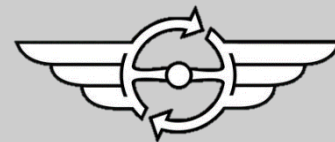
**Step 11.**

Connect the included wiring loom in the car.

Connect the thick red cable (30+) and its inline fuse to the battery positive lead.

Connect the thin red cable (15+) to an ignition switched feed See point 2.





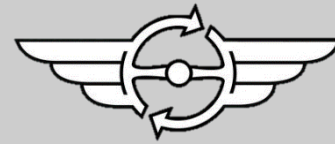
**Step 12.**

Connect the black wire (31-) to a suitable earth point.



**Step 13.**

Mount the potentiometer on a good accessible location. If the optional speed adapter is being used, the potentiometer is not required (see point 14).



#### Step 14.

If the optional speed adapter is chosen, this can be fixed between the speedometer and cable. Connect the wires of the adapter through the plug with the corresponding colors to the EZ Power Steering wiring loom.



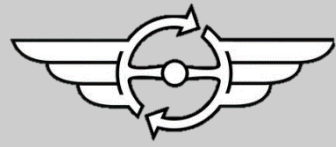
#### Step 15.

Mount the steering wheel with chrome ring back on the car.

#### Step 16.

Contact the ground wire back to the battery -. After turning on the ignition, there should be a 'click' noticeable from the ECU. The EZ Power Steering system should work after this. Check if it does.





### Step 17.

Take a test drive with the car and check if all systems function correctly. Also pay attention to the position of the steering wheel.