EZ ELECTRIC POWER STEERING

INSTALLATION MANUAL
AUSTIN HEALY MKIII





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THE PRODUCT

Thank you for choosing an EZ ELECTRIC POWER STEERING product for its quality, it's 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 or send an e-mail to info@ezpowersteering.nl. If you have any questions of a technical nature please contact workshop@ezpowersteering.nl.

Version C1 Date 1/2/19

This installation manual must be read very carefully to avoid mistakes.

Check if all parts are present in the kit using the picture in the manual.

Compare the EZ Power Steering Column with the original column. Examine if the sizes are similar. If you do not have the skills or tools to carry out the installation, then have a professional fit the kit for you.

EZ Power Steering cannot be held accountable for a faulty installation or damages to the kit or vehicle.



OVERVIEW OF THE KIT



EZ-AH3-1. Complete Set

EZ-AH3-2. Wiring loom with potientiometer

EZ-AH3-3. 6mm² electric cable

EZ-AH3-4. Input side

EZ-AH3-5. Output side

EZ-AH3-6. Clamp

EZ-AH3-7. ECU



INSTALLATION

Step 1.

Check tire pressure, take the car for a test drive and check the steering system for defects and alignment. If everything is working correctly, continue with the conversion.

Step 2.

Locate an ignition switched plus wire and label it. Disconnect the earth cable from battery (also check if the car has a positive or negative earth). Align the front wheels straight ahead and mark their position.



Step 3.
Remove the indicator light switch and cut the wiring.





Step 4.
Remove both dash gauges to improve accessibility.



Step 5.

Measure the distance from the steering

shaft to the dash. Make a note of this.





Step 6.
Remove the upper mounting bracket from the original steering column



Step 7.

Remove the cover to get access to the lower mounting points from the steering

column.





Step 8.

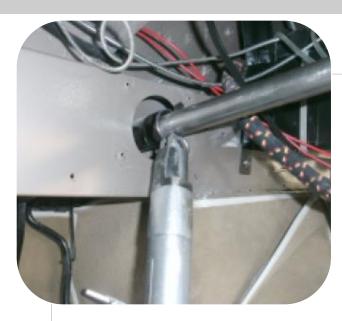
Remove the lower mounting bolts from the original column (via the removed cover). The bracket needs to be cut, so that it can be removed completely. (see photo for cutting line).



Step 9.

Cut the steering tube as low as possible.





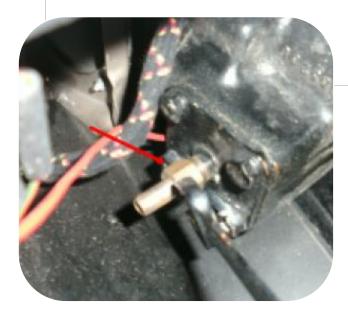
Step 10.

Cut the steering shaft at the right length. Measure the length from the power steering columns, including the output shaft. This length can be cut off from the original shaft. (Caution: do not measure the length from the piece which goes into the steering shaft).



Step 11.

Loosen the nut from the steering box which guides the wires internal. Push it about 10cm through and cut this length off (this is needed to fit the output shaft inside the original steering shaft.







Step 12.

Fit the output shaft in the original steering shaft. Weld it to the original shaft.

CAUTION: the EZ output shaft is ready to fit the original steering shaft. Once the original steering shaft has been replaced, it's possible that the EZ output shaft doesn't fit. The standard internal diameter for a replacement steering shaft is normally 13.95mm. Check this and adapt the EZ output shaft if needed.



Step 13.

Cut about 1cm out of the area at the steering tube. It's marked red on the photo. This is needed to give the clamp enough clearance while mounting.





Step 14.
Slide the mounting clamp over the steering tube.



Step 15.
Install the mounting bracket behind the gauges.





Step 16.

Connect the EZ power steering harness to the car. Check if the car is positive or negative earth.

Step 17a.

NEGATIVE EARTH: Connect the thick red wire (30+) through the fuse holder direct to the battery plus.

Step 18a.

Connect the thin red wire (15+) to an ignition switched plus (12v). See point 2.

Step 19a.

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

Step 17b.

POSITIVE EARTH: Connect the thick red wire (30+) to a suitable point at the chassis.



Step 18b.

Connect the thin red wire at the same point as the 30+ wire. Connect the white wire to the ignition switched earth. (see attachments at last page).

Step 19b.

Connect the black wire, through the fuse holder directly with the battery negative

Step 20.

Find a suitable location for the potentiometer and install it.





Step 21.

Slide the output flange over the original tube. Slide the clamp over the output shaft afterwards.



Step 22.
Install the EZ unit onto the output flange.
Tighten all 3 mounting bolts. The clamp from the output shaft can be fastened through the opening into the output flange.





Step 23.

Position the EZ unit into the right, position (also see point 5) and tighten the lower clamp through the heater channel (see point 14).



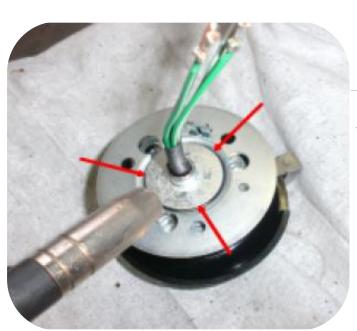
Step 24.
Install the upper clamp and tighten it.





Step 25.

Cut off the tube from the indicator switch (be careful not to damage the internal wiring). For the best result it is best to use a pipe cutter.



Step 26.

Weld the inner ring to the outer ring.
Use 3 spot-welds to do this. Crimp the connectors to the wiring so that it can be connected to the EZ unit wiring.





Step 27.

Use a multimeter to determine which wires correspond (wires through the steering shaft and contact pins) Install steering wheel and indicator switch to the EZ unit. Connect the original wiring from the indicator switch to the contact pins at the EZ unit.



Step 28.

Install both dash gauges together with cover underneath heater channel (see point 7).

Step 29.

Reconnect battery earth, after switching on the ignition a click from the ECU should be noticeable. The system is now operational, check this! Also check the function from the indicator horn switch. After the ignition has been switched off it takes approx. 3 sec. before the EZ unit switches off, again noticeable by a click. Check this.



Step 30.

Take a test drive and recheck that all systems are functioning correctly.



Step 31.

The end result.

(Picture is an example of an Austin Healey with a collapsible column.)



Positive Earth Attachment.

When you have a positive earth car, the EZ Powersteering wire harness has a extra relay which switches the 15+. See the schematic below.

Keep in mind, that at a positive earth car, the battery + is connected to the chassis. The Thick red wire (30+) needs to be connected to the chassis. In some case it's necessary to isolate the ECU housing from the chassis! (to be sure, measure from earth wire to housing).

The thin red wire (15+) is connected with the relay (pin 87).

The black wire is connected via the fuse holder directly to battery -.

The White wire is connected to an ignition switched earth (simplest option is to use the switched earth wire from the ignition coil).

