

Lord of the rings

There's more than one way to update your lights. We try an add-on 'angel eyes' conversion.

The 'angel eye' headlamp style on the later E39 5-Series has started a trend that even BMW itself would be surprised by. It's got to the point where there are several options available, but if you own a car that was never fitted with them from the factory — like an E36 3-Series — you can't just nip down to your local BMW dealer and order up a set.

Many of the advertisers in *Total BMW* however can supply the 'angel eye' style lamps for E36 3-Series cars and we covered the fitment of a set in our May 2002 issue. It's not a cheap job though and does involve throwing away a perfectly good pair of headlights.

With models like the 7-Series and E34 5-Series, there are no 'angel eye' lamp

units on the market, so a universal fitting kit is the only way to update the lamp style. The kit we're fitting here is marketed by CA Automotive, well known in BMW circles for its xenon lamp conversions.

Basically it involves two horseshoe shaped rings with several tiny LEDs. They clip inside your existing headlamps and take power from the sidelight bulb circuit — as simple as that.

On an E36 3-Series, it's really pretty easy and these were done while we waited in about an hour per side, although the photography slowed the process down a little. With the help of a 1996 328iSE Convertible, we're going to show you what's involved.

You'll Need

8 mm socket, ratchet and long extension 19 mm spanners Phillips and flat blade screwdrivers Small flat blade screwdriver Small sharp knife

How Much?

'Angel Eyes' universal kit £270

Contact

CA Automotive 01252 792572 www.ca-automotive.co.uk





Safety

The first rule of working on cars and using tools of any kind is don't take risks:

- If you're using power tools, protective gear is essential.
- Never work under a car without supporting it using axle stands first.
- When cars catch fire, they burn fast. Always have a fire extinguisher to hand.
- If you're not completely confident in your own ability to complete any task safely, don't even start it. Leave it to the experts.

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- 1 Job number one is to remove the top cover over the lamp it's just four crosshead screws and a couple of plastic clips.
- Next, remove the headlamp. Start by removing the two 19 mm locknuts at the top, but hold the plastic fittings they screw into these alter the headlamp beam height. Then there are two 8 mm bolts at the top and a further two 8 mm bolts at the base of the lamp accessible from behind.
- 3 Push a screwdriver down the side of the headlight and lever the indicator retaining clip outwards. Pull the indicator forwards a little to release it —

you may need to apply some force here. If it still works, you'll find the glovebox torch is useful to see what you're doing with the screwdriver, as that plastic clip is pretty well hidden from view.

4 Carefully pull the headlamp from the car, disconnecting the wiring sockets as you go.







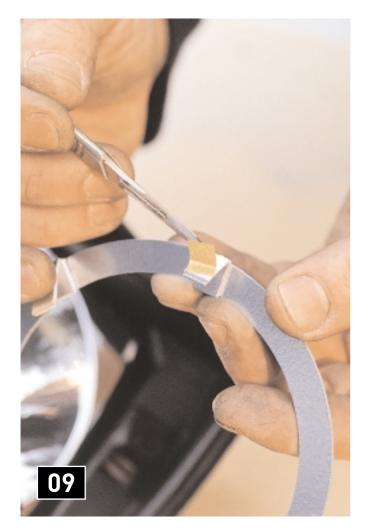


Blue Bulbs

If all this seems like too much trouble and you'd be happier with a gentle blue tinge to your sidelights fooling people into thinking you've got xenon lights on your BMW, try these LED sidelight bulbs. They're available from several places now in either white-blue or blue versions and we've been impressed with the ones we've tried. Claimed to be both several times more powerful than conventional sidelight bulbs and longer-lasting, the white-blue versions give just enough of a blue tinge to look like xenon lights without being bad taste enough to belong on a low-riding Corsa ring road racer. CA can sort you out with a set for £22.



- ${\bf 5}^{\rm Here's}$ what you get in the kit two horseshoe-shaped LED units, the fixings and the wiring.
- Start by sticking the clips on to the angel eye rings (well, they're more of a horseshoe shape but horseshoe lamps wouldn't sound too good, would it?), spacing them evenly apart like this. Don't take the backing off the sticky pads just yet though.
- **7** Spray the backs of the rings with silver chrome paint. This isn't strictly essential but it just looks better. Spray it on in a couple of light coats; don't drown the things in paint.
- Back to the headlamp. Unclip the front glass lens, separate the two halves and pull the indicator from the headlamp. Pull the sidelight from the inner headlamp and remove the bulb from the socket.











9 Twist the loom wires together, and feed it through the lamp body. Wire the loom into the new angel eye rings, connecting the black wire to the inner circumference and the white wire to the outer one. A tiny screwdriver is needed.

 $10^{\rm With}$ the rings wired up, plug the new loom into the existing sidelight bulb socket — where the old sidelight bulb used to go.

11 A tricky bit. Bend the tabs on the angel eye rings so that the ring fits perfectly inside the headlamp chrome reflector. Take your time to get this right...

12 ... before removing the backing from the tabs with a small blade and sticking them down. The dipped beam lights are the most tricky. Pull the wires back out of sight once done, refit the headlamp glass and refit the lamp unit.

 $\begin{tabular}{ll} \bf 13 & \textbf{Job done. See the first page of this feature to see what the lights look like in action. For a complete 2003-style front end, add these clear indicator units, available from many of our advertisers including CA Automotive. \end{tabular}$