# 13.Feb.03 Parts Required for e30 OBC Conversion © 2003 Matt Rhoads xmon@rcn.com

**Coding Plug** Corresponding to the Engine \$45 to \$60 dependent upon motor:

<b>M10B18</b> (318i):	82 to 09/85	65 81 1 375 816
<b>M20B20</b> (320):	83 to 09/87 09/87 on Vehicles with Extra Fuel Tank	65 81 1 376 032 65 81 1 385 939 65 81 1 376 033or 65 81 1 381 319
<b>M20B23</b> (323):	83 to 09/87	Same as M20B20
<b>M20B25</b> (325i):	from 9/87	65 81 1 385 941
<b>M20B27</b> (325e):	83 to 09/86 10/86 on Vehicles with Extra Fuel Tank	65 81 1 373 698 65 81 1 381 795 65 81 1 381 320
<b>M42</b> :	89 to 09/91	65 81 1 394 111
<b>S14(M3)</b> :	from 9/87	65 81 1 380 891

- Notes: Range function for the M10B10 may NOT be accurate, as the coding plug was designed for the M10B10 as used in the e28 518i, which had a 70Liter fuel tank in comparison to the 55liter tank of the e30 318i
  - Apparently there are no plugs for the M40 motor or the Diesel Motors

OBC Control Unit	65 81 1 386 867
Upper Wiring Harness	61 12 1 385 794
Turn Signal Switch	61 31 1 375 190
AIRBAG Cars	61 31 1 377 966
Note: The early style switches work, but the are slight	htly further from the wheel

than the factory switch would have been, when used in the Airbag cars. It's really not noticeable once you're used to it. I currently have one in my '90.

Relay Box	65 81 1 373 726
Screw	<b>2x</b> 07 11 9 916 973
Lower Wiring Harness	61 12 1 386 982
Alarm Horn	61 33 1 379 090
Horn Wiring Harness	61 21 1 380 016

You only actually need the items in blue to do the conversion if you don't care about the CODE disable function for the starter. The turn signal switch isn't as big of a pain in the ass as everyone claims it to be. You can just plug in your current out door temp wire and chime module.

If you want the CODE function enabled things get a little more complicated. Dependent upon the year, and of course I can't find where I have it, the starter disable was either the main relay or the ECU. I'm not positive that you can just add the CODE function for those cars that should have had the ECU disable, but I'm sure when I get to that point I can come up with a solution.

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### Disassembly

To get things apart to put the OBC in: Pull off the knobs on the sliders for the vents. Pull off the temp knob. Gently pry the plate behind the vent sliders off Remove the 4 #2 Phillips head screws Remove the stereo Remove hazard switch, defrost switch and anything else in that row Remove the two screws in the panel at the top (One above the second from left and one above the right most switch) (There are two screws on the bottom inline with those up top) Remove all four screws with a #1 Phillips.

The panel will then be able to be removed; the OBC gets screwed into the back with four Phillips screws.

To put in the turn signal switch: Disconnect Battery Remove the 4 T30 safety torx screws on the back of the steering wheel Disconnect the electrical connector and remove the airbag module Mark the alignment of the steering wheel relative to the spline Remove the 22MM nylock nut on the steering column Put key in position 1 and remove steering wheel Remove 4 #2phillips screws in the steering column lower trim panel Unplug the electrical connector Remove the 2 #2Phillips screws in the turn signal switch

**Note:** On Airbag cars, make sure to pull the battery before you pluck airbag wires, and then make sure to have everything reconnected before you power back up. Otherwise you have to go to the DEALER to have the Airbag reset

Remove the 4 8mm hex bolts in the driver's side under dash panels Remove the 3 Screws in the driver's side upper under dash panel Remove the upper under dash panel Remove the lower under dash panel Remove the 5 10mm bolts in the knee bolster and remove knee bolster Remove the 2 thumb nuts on trim panel under the instrument cluster Carefully pry the top of the trim panel out, and remove Remove 6 #1 Phillips screws in the instrument cluster trim panel Remove the 2 #1 Phillips screws on the instrument cluster tabs Carefully tilt the top of the cluster towards the back of the car Remove instrument cluster, taking care not to break off mounting tabs

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## **Electrical Connections**

2 Pin White Connector with Blue and Brown wires->Outdoor Temp Sensor

4 Pin Black Connector-> Chime Module in under dash panel

1 Pin Blue Connector with Black wire->Turn Signal Switch

20 Pin Yellow Connector->Instrument Cluster

XX Pin Green Connector->OBC

XX Pin White Connector from turn signal->Turn Signal Socket

- 3 Pin White Connectors (2 total)-> Connect together to create loop
- 2 Pin White Connector with Green and Green/Red wires-> no connection

1 Pin White Connector with Yellow Wire-> no connection

### Reassembly

Put everything back together in the reverse order, making sure to wait a minute or two after reconnecting the air bag wire to connect the batter, and then another minute or two till you try your new OBC. Otherwise you will get the airbag light and have to go to the DEALER for a reset.

You will probably want to reassemble everything but the center dash bits, and test the OBC for lighting, before you reassemble, as otherwise you will have to tear things all apart to change bulbs. If in doubt, replace to save yourself from future hassle.

I am currently looking for pictures of the installation to add to this article. If you use this information to perform an upgrade, please take pictures along the way. Each step would be nice, but do what you can. Then send them to me in digital format, and I will provide you with credit in the article for the pictures.

-The Author

### **Disclaimer:**

I'm human, I fuck up, my brain gets ahead of my fingers. If you find errors in anything written, let me know. I will correct them. Of course anything you do on YOUR car is at YOUR OWN risk. I can not, will not, and refuse to be held responsible for any damage you may inflict, or any adverse performance you may encounter. Written solely from my own experience on installations in an '89 and a '90 325iX.