

## "BIRBA racing" Instruction for REPLACEMENT Dials

## OPEL ASTRA G - ZAFIRA

Considering this operation delicate please read and follow these instructions carefully and assemble patiently.

1. Before removing the instrument gauge cluster, start engine and let vehicle rise to operating temperature. At this time note readings on all gauges. (A digital picture or a Polaroid might be very helpful) We recommend that you begin installation with a full tank of gas. Take note of all gauges positions including: tachometer, oil pressure, turbo, water temp., fuel etc. A snapshot might be very helpful in setting the proper MPH or KM/H, water temp and tachometer readings if anything went wrong during disassembly. Anyway on the back of this page there is also a copy of the original dial so you can use this to take reference. Once finished, turn motor and ignition off. This is need to check that the needles are in the right spot when we are done.
2. Dismantle the cluster from dash, and remove the transparent part acting on the blocks at sight. On the rear part besides to the two central blocks, there are four more, not at sight positioned laterally in correspondence of there are some little openings (fig. 1) that once removed permit to release the blocks using a screwdriver. Still on the back side unscrew four "Torqs" screws, Two positioned in the low part, and two near the connection plug, these are at sight after removed the rear cover. At least disconnect the plastic hook (blocking- connection). Is now possible remove the frontal frame and set free the the gauges with whole graphic at sight.
3. Now you have to mark the resting point of each needle. Before removing needles you need to mark on the external side of each gauge where needle rests or you can write this information on the back of this copy. These are the right positions where reinsert pointers.
4. Remove needles. You may use curved scissors (similar to those used by electricians) or a fork using the lever technique (fig. 2). Is also possible pulling the pointer with finger turning as if you would to unscrew it forcing on its end-run.
5. For a correct application you need replace the original face-dials and the BIRBA after cutting-off and removing form the first the correspondent part of the second, following this order:  
once removed the pointers, place the BIRBA on the correspondent original graphics and mark the right outline using a felt-tip pen. Now cut off from the original the correspondent part of BIRBA.  
Now fix the BIRBA and this part of original graphics (all the warning-lights zone) with the supplied adhesive. You can remove any marks on the faces using a humid non-abrasive cotton swab.
6. Now that the faces are in place, it's time to reverse the procedure. Replace all the pointers referring back to the value marked initially as at 3) point above.
7. Since were not possible to light up correctly the maximum value (220 or 240 km/h will be light at half) it' also supplied a black adhesive that ( at Your choice) you can attach on this value on the back of the Birba dial.
8. When the needles are white is better color them on the top ( just the extremity or complete) using a felt-pen for plastic and glass. ( we suggest give only one coat of color).
9. Replace front of cluster using original screws and re-install the cluster per the instructions.

### About the BIRBA Kit with modified value:

No problem to apply BIRBA because the scale are geometrical longer, so if you look better these dials and put the 0 km/h or mph of BIRBA on the 0 km/h or 0 mph of the original you can see that all the values are correspondent, but ,when possible, BIRBA goes on ...! If possible even for RPM!

Here how to do: if the needle starts from 0 km/h/mph or 0 Rpm on the original dial, simply replace the needle at the 0 km/h/mph or 0 Rpm of the BIRBA dial, and all works correctly! You have just to relate the "resting point" of the needle on the new scale as above at the point 3!

Fig. 2

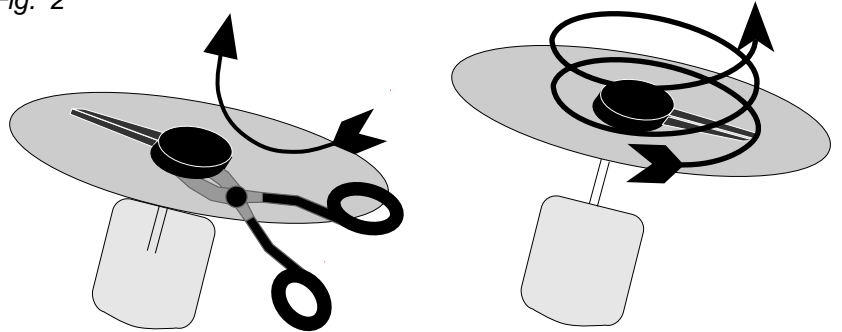
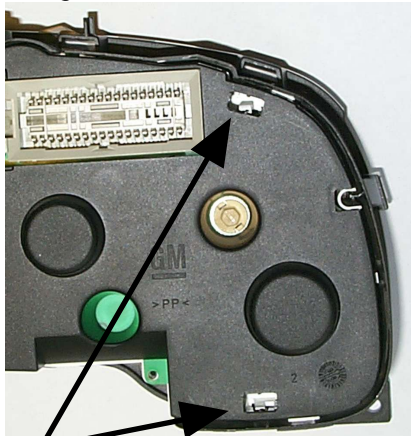
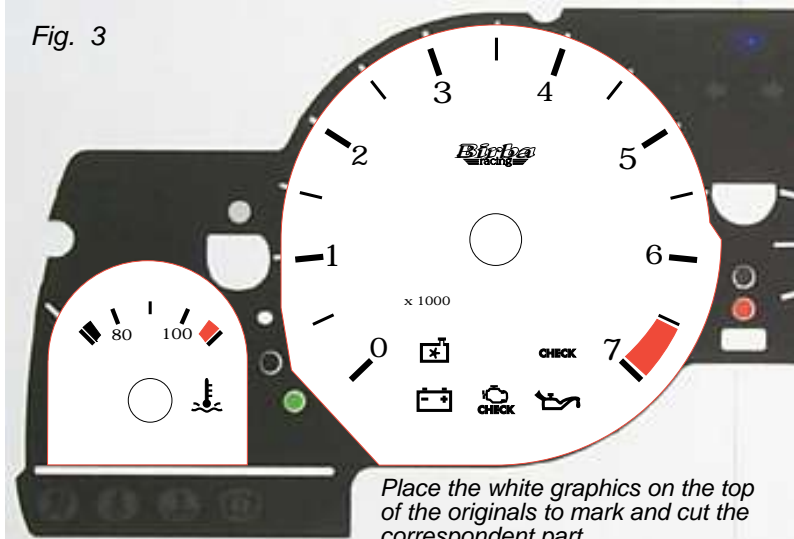


Fig. 1



● Openings to cut for free the blocks.

Fig. 3



Place the white graphics on the top of the originals to mark and cut the correspondent part.