

"BIRBA racing" Instruction for REPLACEMENT Dials

These are replacement faces, they are not to be installed on the top of the original faces!

Considering this operation delicate please follow these instructions carefully and assemble calmly and 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. Remove the cluster from dash, following the supplied instructions. Once removed, use screwdriver to take out the screws that hold the cluster together. This will enable you to remove needles. The front of cluster will separate from back.

(Poke all screws through a piece or card board and mark the location where they came from next to the screw. That way, all the screws go back in the right spot).

3. Now you have to mark the resting point of each needle. Remove pin stops (when present) with pliers by lifting straight up. Make sure you note exact position of needles when pin stop is removed. 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. When there are not pin stops, the resting point corresponds to the minimum value showed by needle. We have provided a copy of the faces, which makes a good reference to mark the exact location of the needles, Important: In some dashboards the pointers of fuel and temp. gauge have an integrated stop (under the caps), in this case you must to pull until this stop surmounts the graphic plane. Now let the pointer come down free until it stops and mark the resting point.

4. Remove needles. You may use curved scissors (similar to those used by electricians) or a fork using the lever technique (fig. 1). Place tool under the needle and using a very light amount of pressure at 12 o'clock position, slightly lift under needle lifting with minimal pressure. Repeat procedure at 3, 6, and 9 o'clock (in clockwise movement around shaft) until needle is removed from shaft. Is also possible remove the pointer using thin pliers to stop the needle behind the dial and pull the pointer turning as if you would to unscrew it(fig. 2).

5. Remove screws on the faces (when present). Some stock faces are glued on, so start at the corner of the face and lift the face off the clear plate. Use a small amount of solvent to get the remaining glue off. Don't press too hard, or get too anxious. Take your time if you want to save faces for later use. Make sure the surface is left clean and dry for proper sticker placement of new gauges.

6. Remove the paper off of the adhesive backing and apply the new face. You can remove any marks on the faces using a humid non-abrasive cotton swab.

7. Now that the faces are in place, it's time to reverse the procedure. When placing needles back on the new faces, the pointer should be as close to original position as possible (as noted in step 3). For speedometer and tachometer, once the needles are installed, lift needles to 12 o'clock position and release, they should return to original position. When stop pins are used, raise needle clockwise forward approximately 20 MPH and 1000 rpm above the pin, replace pin and release needle to rest at pin stop. Re-install screws back onto the gauge faces.

8. After all needles are installed back on faces (don't screw on the front of the cluster yet), plug cluster back in, and start engine. At this time, make sure all gauges are working properly. If everything is correct, replace cover and reinstall cluster in dash. If not, let vehicle rise to operating temperature and check with positions of gauges in step number 1. Pull pin and reset to new and correct position. This is where you might want to plug in the snapshot, copy or scan tool for double checking that everything is set to the proper position. (Now is a good time to check your bulbs to make sure they are all good. You can use a higher wattage bulb. But we recommend against it since the gauges were designed for the stock bulbs and anything brighter may cause hot spots.)

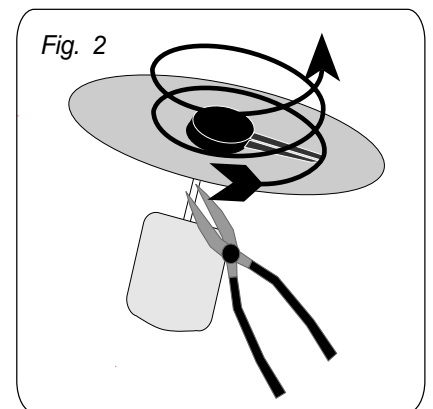
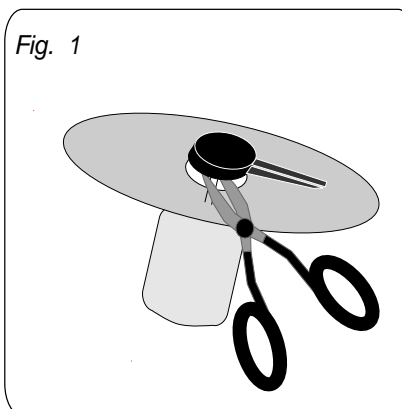
9. If the needles are white, for see them on the white dial, is better color them (just the extremity or complete) using a felt-pen for plastic and glass. (we suggest give only one coat of color)

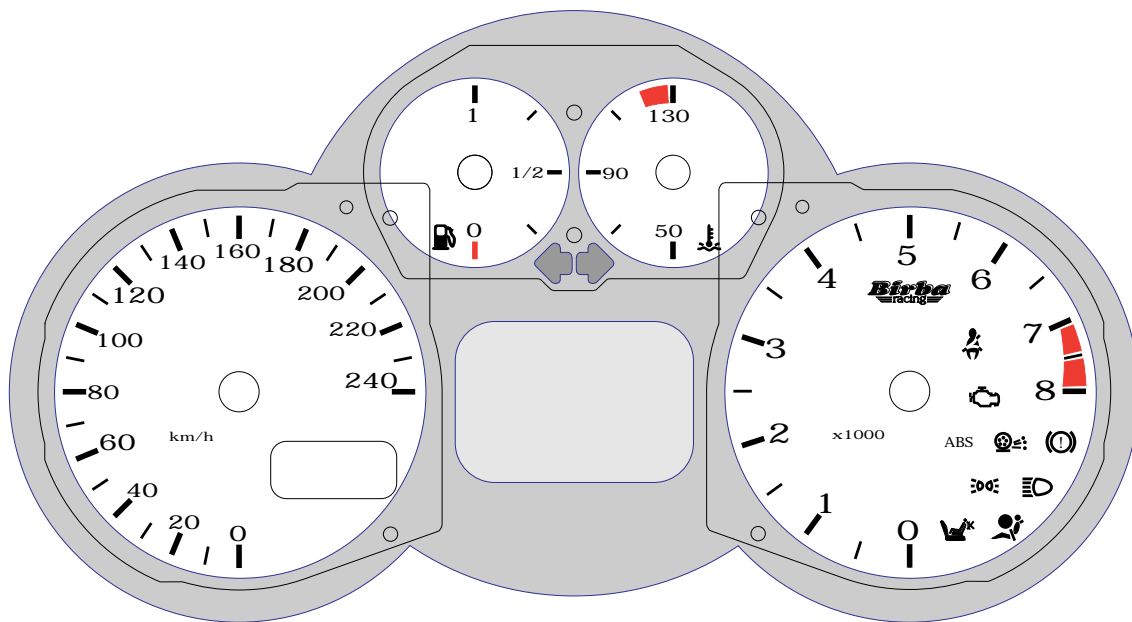
10. Replace front of cluster using original screws and re-install the cluster per the instructions.

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!

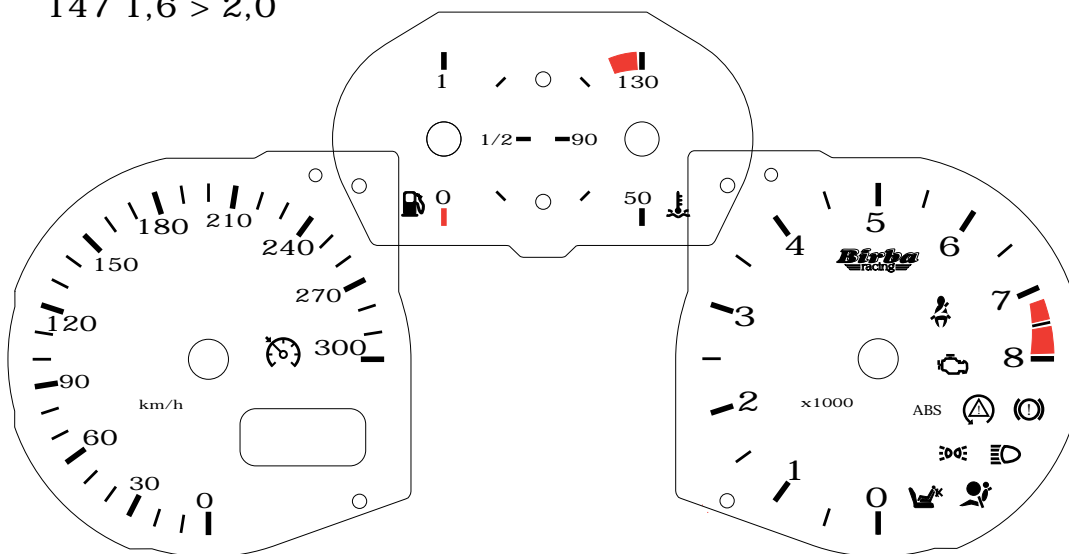
Here how to do: if the needle starts from 0 km/h/mph or 0 Rpm on the original dial, simply replace the needle at the 0 km/h/mph or 0 Rpm of the BIRBA dial, and all works correctly! You have just to relate the "resting point" of the needle on the new scale as above at the point 1-2-3!





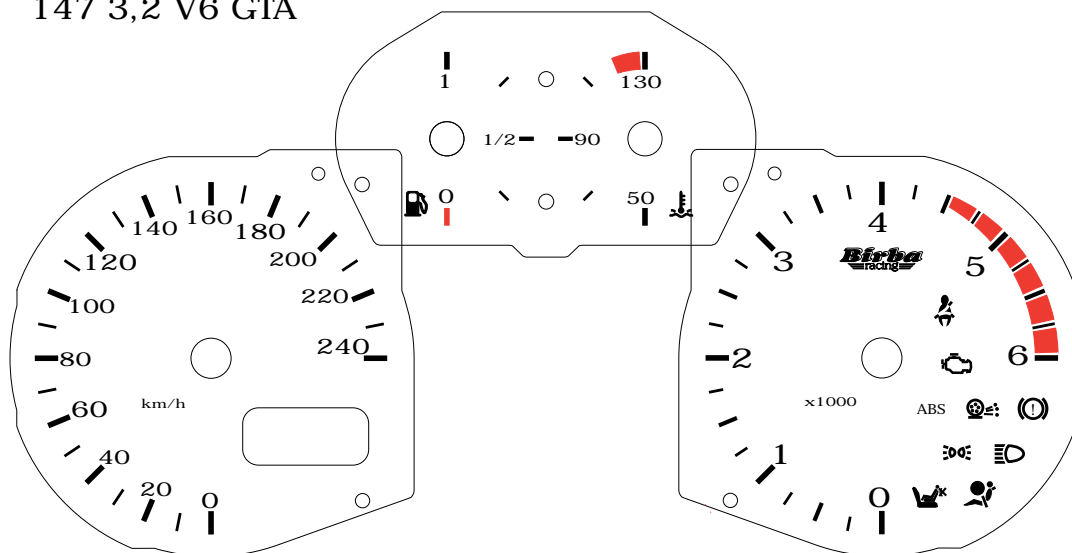
ALFA ROMEO
147 1,6 > 2,0

Codice 10 00 41



ALFA ROMEO
147 3,2 V6 GTA

Codice 10 00 43



ALFA ROMEO
147 1,9 Jtd

Codice 10 00 47