SUMMARY REPORT

In this project, we will describe the interior transformation of a bus to a limousine vehicle.

The motivation of this project is to improve the chances if we compare with a traditional limousine. We have detailed step by step the inside transformation, studied all homologation we need to work with and normative we have to follow. My idea of this project is create a base for a future vehicle reform, like a guide.

Our customer decided to create some ambience inside the bus, the reason is because people can find easily a comfortable place to be inside the bus.

The process starts removing all seats and installation from de bus. After that, it’s easier to take real measures of the vehicle and know how much space you provide. Now, we can star designing the new bus distribution.

When we get the customer design, we have to start working with the 3D model to make sure customer design keeps inside the bus.

Firstable we will install the new sofa with ten places, two tables and eights eats, as customer designed. This new accessories need a M8 screw to set up in the vehicle.

In order to improve every ambience, we installed a TV cabinet with the purpose to install a TV with a karaoke and a music equipment, and some games if you want to stay on the table.

In order to satisfy our costumer, we get two ambiences with this last combination.

A very important equipment is the fridge, with this equipment you can serve cool food and drinks. This equipment give to the vehicle a better ranking and exclusive service comparing with another limousine.

We have installed a long rod from the floor to the roof. The reason is to add some security measures while bus is running and have fun dancing while they are having fun.

To improve illumination, we have installed four strips LED lights in the roof and the floor. This lights have a high power, so we can modify the intensity whenever we want to change the ambience.

In order to improve the air condition, we installed four modules on the roof. This air conditioners have more power than the original, so it’s easier to get the temperature desired.

All this accessories needs a lot of electricity, for that, we installed four batteries of 12V 225Ah to solve this problem and increase electricity range.

We have installed fifteen solar panels on the bus to support the battery charge. This solar panels have 210W of power, so the charge support is very high.
All modifications of the vehicle are made consulting every normative in order to have a well-made vehicle. The vehicle must be submitted to the VTI (vehicles technical inspection) with all reforms finished, a project that included all amendments and specific certificates for each reform (assembly workshop certificate, certificate completion of the work, technical project etc ...)

At last, if we have submitted VTI and get all homologation approved, we have to change vehicle service. Before reform, bus was for a public service rental with driver (A02). Now, we have a recreative public transport (A19).