PARKING BARRIER PROJECT

Project objectives

Introduction

It is called "parking barrier" or commonly "parking barrier" to the automated devices in charge of the control of access to the car parks or in the steps at the level of the railway lines.

Basically, it is a rotating arm (sometimes articulated) that rises to allow access to the vehicle and returns to its initial position after a time or deactivate a presence detector.

Objective

Project purpose is designing and assembling a parking barrier controlled by an electrical circuit. It is able of activate the barrier so that it rises while a switch is activated and down to its initial position when the switch is repositioned. In addition, the circuit may include a light signal (bulb) while the barrier is rising.

Conditions

The design of the parking barrier is free although the use of high-reduction motors is recommended or, failing that, a reduction stage that includes an endless screw for its assembly.

The movement of the swivel arm must be controlled with limit switches for its final positions.

The dimensions of the project should be adjusted so that it can be stored in a 210x297 mm (A4) base box.

It is the responsibility of the working group to keep in perfect condition the electrical and electronic components provided by the teacher.

The deterioration of the supplied material will mean a rating of less than 5 points.

Basic safety rules

Keep the work area clear as untidy workbenches are more prone to accidents.

Use the right tools for the work that is done and in no case the tools should be forced.

Respect the established safety norms for each tool and wear gloves or goggles if necessary.

Ask your teacher for any further question that may arise.