The goal of this Diploma thesis is to consolidate questions asked during the training of medical personnel for the correct usage of the lung ventilator Hamilton Medical G5, and to create more effective training methodology to safely operate this unit, based on collected inquiries. The training for this concrete device is assumed to be valid for at least 10 years. The practical utilization of the thesis is for the exclusive distributor of devices of this brand and also for technical departments of hospitals where the unit is installed in. The theoretical part of the thesis cosists of a legislative scope, which defines the issue of training, the training process itself and a basic description of the lung ventilator. Practical part consists of training methodology for effective and safe usage of the lung ventilator Hamilton Medical G5, based on collected inquiries. It is divided into two basic parts with an emphasis on issues related to medical personnel at first, and then to the issues oriented more to doctors.