## **ABSTRACT**

Ultrasonic Nebulizer is a device that enabled elektromedik for the treatment of patients with respiratory disorder or disturbance with the help of liquid vapors are mixed by a drug, fluid vapor produced by the breakdown of a liquid medication into a very fine mist, which is then inhaled through the respiratory organs of the mouth and nose to the lungs to relieve respiratory tract abnormalities in patients

The principle on this plane that is set fogging and set the time that the need for fogging the patient. These aircraft use of piezoelectric vibration resulting from high frekuenzi to break the liquid medication into mist.

In accordance with the conditions existing tools adapted to the improvement and modification of the condition. On this plane the principle works is by filling the chamber with a high level, and the Medium set time required and adjust the thickness fogging that will be needed to the patient

On Nebulizer this author repair aircraft and modify the control board with an electric timer as original equipment with the addition of a water level detector circuit. Inhibition of this module is a module if the initial circumstances that could damage the function with the addition of Water Level Detector circuit and repair aircraft system can work normally again

According to the data presented a new modification of the control board output ultrasonic frequencies produced measurable 1,785 MHz and voltage amplitude on pizzoelektrik 60V and 140V at a minimum condition on condition of maximum.

Key words: piezoelectric, ultrasonic Nebulizer, Oscillator, Water Level Detector