**Pneumatic Automatic Bumper**

**Abstract**

Aim of the project is to design and develop a control system based an intelligent electronically controlled automotive bumper activation system is called “AUTOMATIC PNEUMATIC BUMPER”. This system is consists of IR sensor, Control Unit, Pneumatic bumper system. The IR sensor is used to detect the obstacle. There is any obstacle closer to the vehicle (within 90 cm), the control signal is given to the bumper activation system and with the help of IR sensor pneumatic bumper actuate and brake is applied. In today’s world accident are increasing day by day so to reduce accident to a certain level the sensor arrangement is applied to the bumper as when the obstacle will come in front of the sensor the brake can be applied and prevention of accident can be done.

KEYWORDS: Pneumatic Bumper, IR sensors, braking system, wheels, Piston, Solenoid valve.