

# Design and Prototype of Vertical PVC Pipe Climbing Device for Gas Leakage Detection

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**Abstract:** *This paper describes the Design and Prototype of vertical PVC pipe climbing device for gas leakage Detection. However, manually it is very difficult to reach up and inspect the vertical pipes for leakage or damage, because the pipe height is too long and sometime it installed in very high places and also the environmental condition is not safe. To overcome this type of problem and carry out the inspection more easily, we developed a PVC Vertical Pipe Climbing device to climb up and down vertically to detect the gas leakage, and when the leakage is detecting, the device is automatically stop on detected place. In this project we used the butane gas from cigarette lighter and check the leakage up to the level of 4 feet on vertical PVC pipe with the help of toggle switch. Here MQ-2 sensor is used with the device to help us for inspection of pipe.*

**Keywords:** Pipe climbing device, gas leakage, sensor, vertical pipe

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