WIPER CONTROL SYSTEM

Requirements:

Introduction:

The aim is to design and develop a control system based on an electronically controlled automotive rain operated motor called AUTOMATIC RAIN OPERATED WIPER. Rain operated motor consists of a conduction sensor (Touch sensor) circuit, Control Unit, wiper motor and glass frame. The sensor is used to detect the rain or water flow. If there is any rain on the glass, the sensor senses the rain or flow water and giving the control signal to the wiper motor. The battery supplies the power to the sensor as well as rain operated motor.

Wiper motor is automatically ON during the time of rainfall. The senor is fixed in the vehicle glass. The conductive (Touch) sensor is used in this project. It senses the rainfall and giving control signal to the control unit. The control unit activates the wiper motor automatically. This operation is called Automatic rain operated wiper.

Advantages:

1) The servo motor can be operated automatically.

2) Automatic rain moisture detection using rain sensor.

3) Efficient working with lowcost design.

4) Low power consumption.

5) Fast response.

Disadvantages:

1) The status and feed back of the wiper motor is not obtained.

2) The system uses wired technology supports only for limited distance.

Applications:

1) The system can be used in any automobiles for cleaning of glasses.

2) This can be implemented in any four wheeler vehicles.

High & low level requirements:

ID	Description	Status (implemented/future)
HR.01	Cleans the water on the glass	Implemented
HR.02	Wiper comes to the original position	Implemented
HR.02	Starts automatically when rain falls	Future