

# **2002 TAIWAN INTERNATIONAL SCIENCE FAIR**

CATEGORY : Engineering

PROJECT TITLE : SPAREWHEELALERT

AWARD : Third Award

SCHOOL : High School Kathu

FINALISTS : Petrus Janse Van Rensburg

COUNTRY : South Africa

# **ABSTRACT**

**CATEGORY**            **ENGINEERING**  
**TITLE:**                **SPAREWHEELALERT**  
**NAME:**                **PETRUS JANSE VAN RENSBURG**  
**COUNTRY:**            **SOUTH AFRICA**

## **PURPOSE OF THE RESEARCH**

It is used by practically everyone that has a vehicle. The device checks your spare wheel and warns you when it is going flat. The device can be used on 12 or 24 v.

## **PROCEDURES**

Take a rubber pipe capable of handling up to 1200 k Pa. Attach a female pressure valve at one end. In the middle you attach another rubber pipe with a T-pipe that has a male valve at the end, and the other you connect to the pressure monitor valve of the pressure switch. Attach the electric warning light as well as the electric wires (for the power of the light) to the electrical switch of the pressure switch.

## **DATA**

1. Adjustable pressure switch
2. Pressure capable rubber pipe (length depends on vechile)
3. Electric wire
4. Electric warning light 12/24 v
5. Female and male pressures valves

## **CONCLUSIONS**

Mount the Sparewheel Alert close to your vehicle's spare wheel. Mount the male pressure valve on an easy reachable place. Install the light on a highly visible place in your vehicle. Connect the electric wire to the power from your vehicle's battery. Attach the female valve to your vehicle's spare wheel. Adjust the pressure of the pressure switch to the desirable pressure and your worries are over.

## 評 語

本作品也是基於實用出發而提出。由於是實用，他也做了問卷調查，相當能把握一項科技走向商品所應注意的問題。