

# Rover mechanism survey

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## 1 Rocker bogie mechanism

### 1.1 Structure members

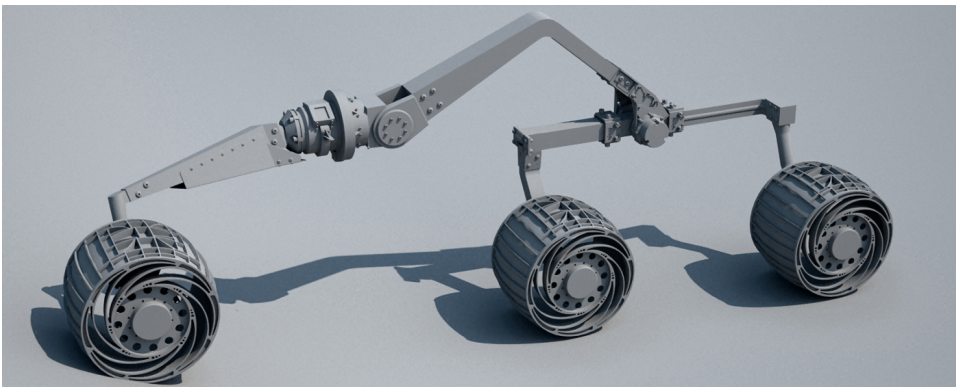
1. 6 wheels
2. between 6 to 10 motors
3. rocker force member - bogie force member per side
4. differential bar

### 1.2 Advantages

1. back wheels can overcome the obstacles up to two times the size of a wheel reducing the change in the plane of the platform.
2. no springs needed in the main mechanism function

### 1.3 Disadvantages

1. too much motors
2. the rocker wheel feels the obstacles noise



## 2 8 wheels double bogie mechanism

### 2.1 Structure members

1. wheels
2. between 6 motors
3. two bogie force member per side

## 2.2 Advantages

1. back and front bogies can overcome the obstacles up to two times the size of a wheel noise
2. no springs needed in the main mechanism function
3. less motors than Rocker bogie mechanism

## 2.3 Disadvantages

1. too much wheels
2. complex in control than Rocker bogie mechanism



## 3 Ordinary 4 Wheels Car

### 3.1 Structure members

1. 4 wheels
2. 4-8 motors
3. struts
4. springs

### 3.2 Advantages

1. least wheels
2. easy control
3. low cost

### 3.3 Disadvantages

1. the platform is unstable in the rough grounds with relatively big obstacles