

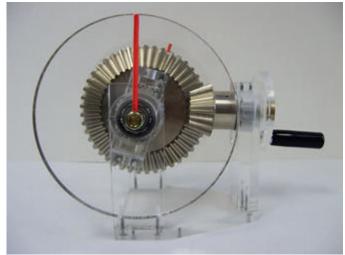
DIFFERENTIAL MODEL

N98-P041-DFG









This model allows the instructor or student to manually turn the handle and apply a load to the transparent wheels to demonstrate the differential mechanism.

In automotive mechanics, the differential gear arrangement directs power from the engine to be transmitted to a pair of driving wheels, dividing the force equally between them but permitting them to follow paths of different lengths, as when turning a corner or crossing an uneven road. On a straight road, the wheels rotate at the same speed. When turning a corner, the outside wheel has farther to go and will turn faster than the inner wheel if unrestrained.

DEMONSTRATIONS:

- 1. Driving Straight Ahead
 - When following a straight line, the wheels rotate at the same speed and the differential pinion remains static.
- 2. Turning a Corner (manually apply a load to either wheel and rotate the steering wheel) When following a curve, the rotational speed of one wheel (outer) will be greater than the other wheel (inner). The differential pinion is in motion and divides the force between the wheels.
- Removal of the Gear Assembly 3.

The gear assembly can be removed from the wooden base by pulling the lever located below the handle and gently lifting the gear assembly. It is designed to sit comfortably on any flat surface, however, use of the display base is recommended when demonstrating to provide more stability. Handle with care. The unit is heavy, due to the weight of the gears.

Manual of Operations IMPORTANT Read the following before using this equipment: Carefully follow all instructions and observe all precautions given in this manual

WEIGHT AND DIMENSIONS:

28cm x 22cm x 25cm (L x W x H)

Net Weight: 5 kg



MOUNTED ON