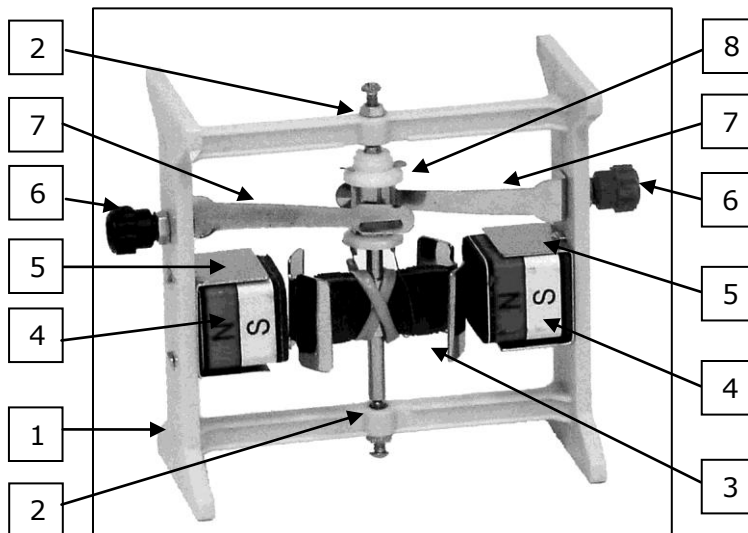


# OPERATING INSTRUCTIONS

## AND SUGGESTED ACTIVITY

### DC MOTOR

DMOT01



#### DESCRIPTION

The DC Motor DMOT01 is designed for physics students to study electromagnetic forces. Physical science teachers can also use it to demonstrate the conversion of electrical energy into mechanical energy. The device is pre-assembled. It can stand either vertically or horizontally for optimal viewing according to the application. The motor operates on 1.5V or 3V DC power (max. 6V) using batteries or a power supply.

The parts of the motor are shown in the picture above:

- |                   |                 |            |               |
|-------------------|-----------------|------------|---------------|
| 1 Frame           | 2 Bearing       | 3 Armature | 4 Magnet      |
| 5. Magnet Support | 6. Binding Post | 7. Brush   | 8. Commutator |

#### SETUP

1. Turn the armature by hand to check if it can rotate freely on the screw bearings. Adjust the tightness of the bearings with a screwdriver if necessary.
2. Check both brushes to make sure they are in good contact with the commutator.
3. Check the magnets to make sure the "N" pole of one magnet is facing the "S" pole of the other magnet.