

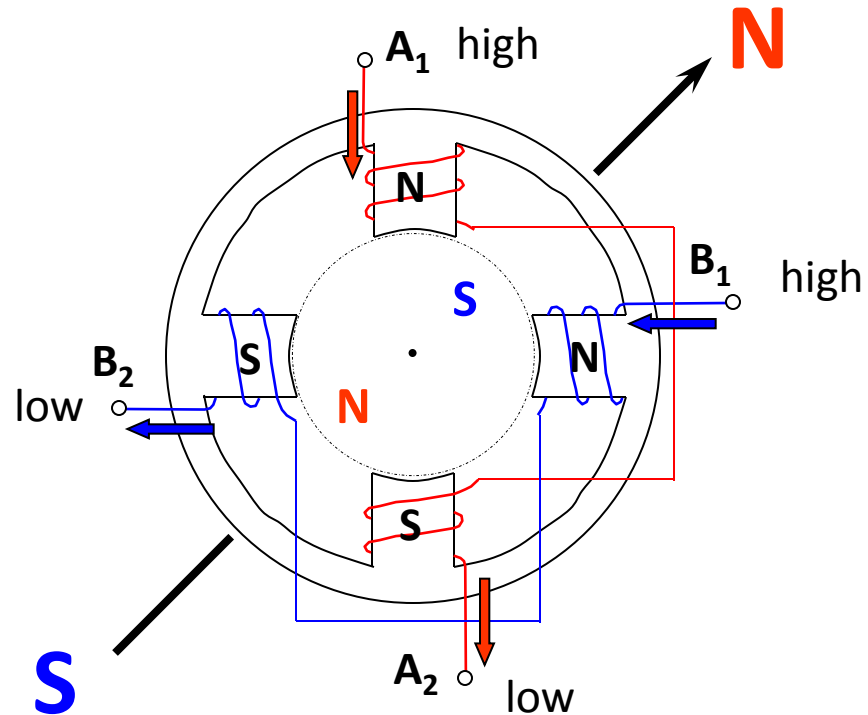
Special Electrical Machines

Stepper Motor Operation - Full Step Mode

Step 1b

Energize windings:

- Rotor moves to align with net magnetic field

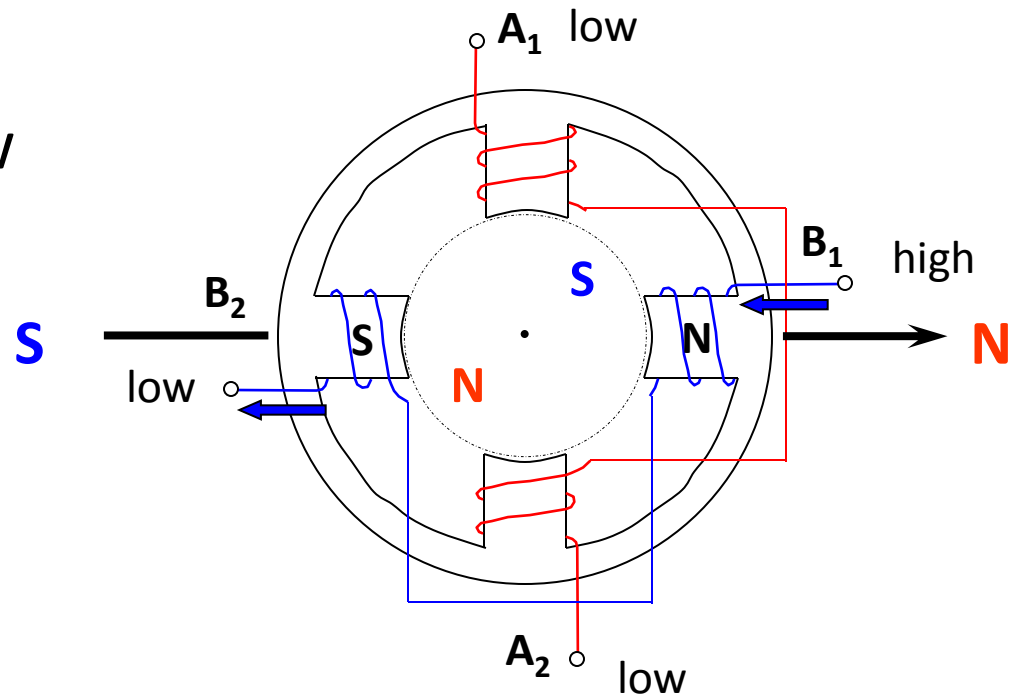


Stepper Motor Operation - Half Step Mode

Step 1a

Energize windings:

- Just B_1 high
- A_1 , A_2 and B_2 low

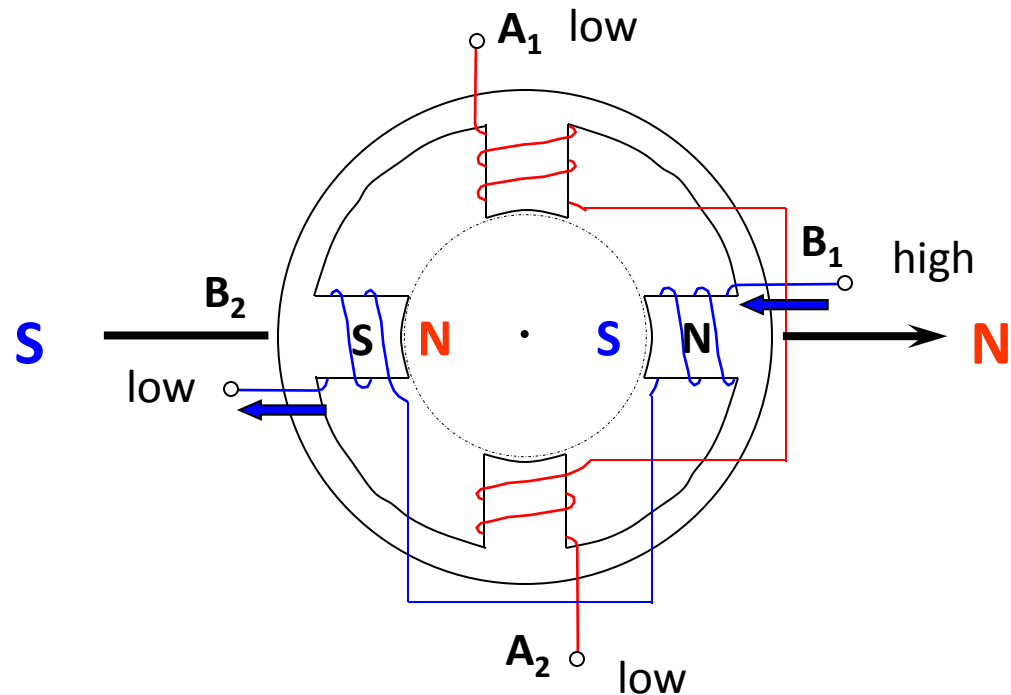


Stepper Motor Operation - Half Step Mode

Step 1b

Energize windings:

- Rotor moves to align with net magnetic field
- Only 45 deg. rotation!

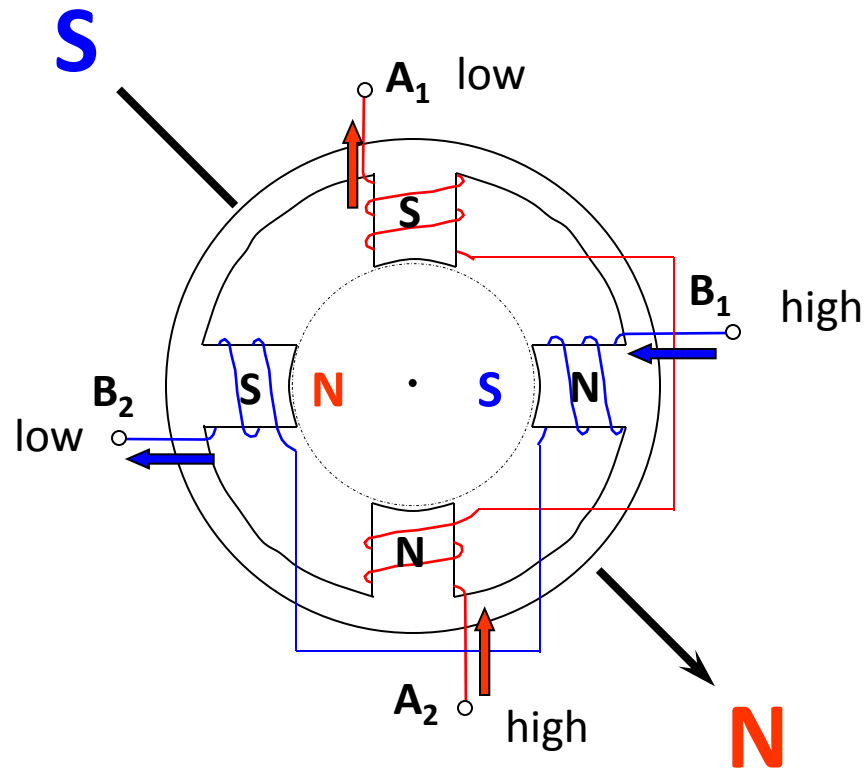


Stepper Motor Operation - Half Step Mode

Step 2a

Energize windings:

- A_2 and B_1 high
- A_1 and B_2 low

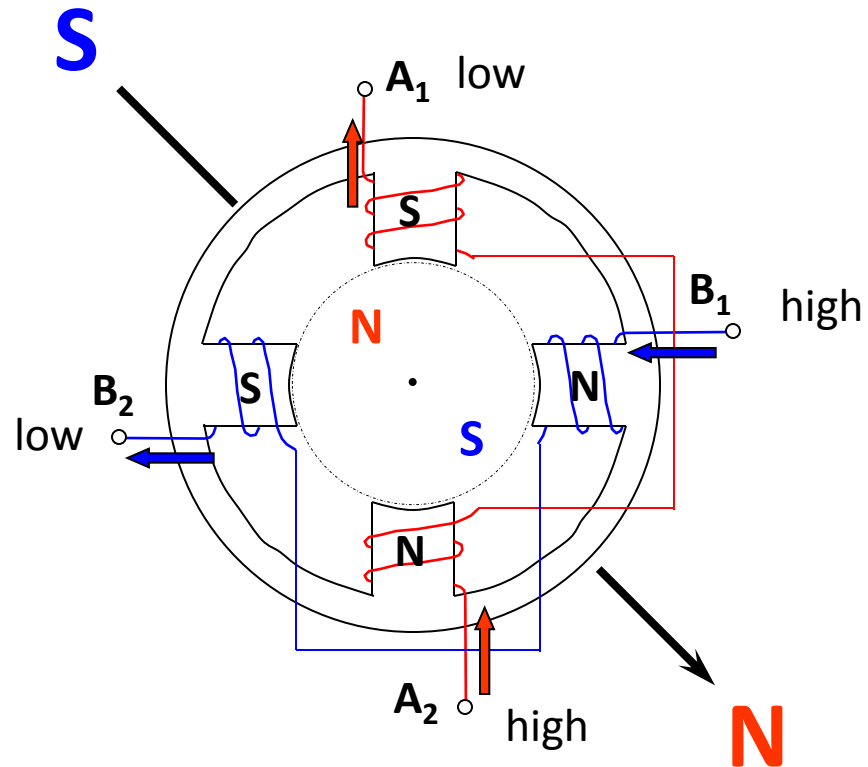


Stepper Motor Operation - Full Step Mode

Step 2b

Energize windings:

- Rotor moves to align with net magnetic field



THANKS....

Queries Please...