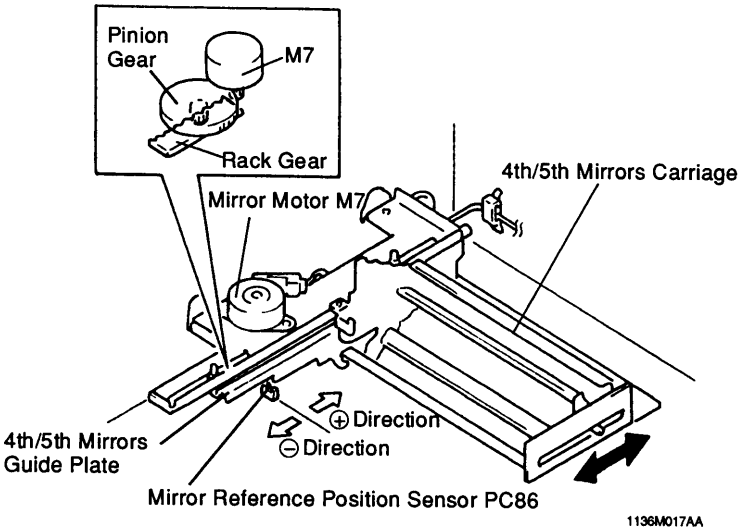
9-8. 4th/5th Mirrors Carriage Positioning Mechanism/Control

(1) 4th/5th Mirrors Carriage Positioning Mechanism

- To ensure that a focused image of the original is reproduced on the surface of the PC Drum when in an enlargement or reduction mode, the distance between the original and the surface of the PC Drum (conjugation distance) must be greater than that when in the full size mode. To accomplish this, the 4th/5th Mirrors Carriage is moved in the direction of a greater conjugation distance (⊕ direction).
- The 4th/5th Mirrors Carriage is moved by the rack gear fitted to the 4th/5th Mirrors Guide Plate, which is in mesh with the pinion gear. Mirror Motor M7 gives drive to this pinion gear.
- M7 is a two-phase stepping motor. The Motor is turned forward or backward by the pulse signals output from SCP Board PWB-J, thus moving the Carriage in the required direction.
- When a zoom ratio is selected, pulse signals from PWB-J are input to M7. The Motor's shaft turns 7.5° per step, which is equivalent to approx. 0.09 mm of linear Mirrors Carriage movement.



(2) 4th/5th Mirrors Carriage Reference Position Detection

- Mirror Reference Position Sensor PC86 detects the home position of the 4th/5th Mirrors Carriage when the power is turned ON.
- The 4th/5th Mirrors Carriage is at the home position when the PC86 output goes from LOW (⊖ side) to HIGH (⊕ side). The carriage moves from this position a distance equivalent to the correction [Adjust Mode A-2 (Mirror Full Size Position Adjustment)] to arrive at the full size position.