GOVERNOR

The governor controls the amount of fuel needed by the engine to maintain a desired rpm.

The governor flyweights (8) are driven directly by the fuel pump camshaft. Riser (12) is moved by flyweights (8) and governor spring (1). Lever (7) connects the riser with sleeve (2) which is fastened to valve (3). Valve (3) is a part of governor servo (5) and moves piston (4) and fuel rack (6). The fuel rack moves toward the front of the fuel pump housing (to the right in the illustration) when moved in the FUEL OFF direction.

The force of governor spring (1) always pushes to give more fuel to the engine. The centrifugal (rotating) force of flyweights (8) always push to get a reduction of fuel to the engine. When these two forces are in balance (equal), the engine runs at a constant rpm.