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Automatic Transmission Hydraulic Control Systems - Terminology

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1. **Scope**—The following is a list of the most common terminology used in describing hydraulic control systems.

The hydraulic control system of an automatic transmission may include oil pumps, pressure regulator, governor, and control valves.
2. **References**
 - 2.1 **Applicable Publication**—The following publication forms a part of this specification to the extent specified herein. The latest issue of SAE publications shall apply.
 - 2.1.1 SAE PUBLICATION—Available from SAE, 400 Commonwealth Drive, Warrendale, PA 15096-0001.

“Design Practices - Passenger Car Automatic Transmissions,” SAE Advances in Engineering, Vol. 2
3. **Pump**—A device which provides fluid flow to the transmission hydraulic circuits.
4. **Pressure Regulator Valve**—A device which regulates a pressure in the hydraulic control system.
5. **Manual or Selector Valve**—A valve through which the desired driving range is selected.
6. **Shift Valve**—A valve which brings about a ratio change when acted upon by control forces for a step ratio transmission.
7. **Line Pressure**—The primary pressure of a hydraulic control system.
8. **Modulated Pressure**—Any controlled variable pressure.
9. **Throttle Pressure**—A pressure which varies in relation to throttle opening.
10. **Governor Pressure**—A pressure which varies in relation to speed, usually that of the transmission output shaft.
11. **Compensator Pressure**—A modulated pressure which is varied to modify engagement characteristics of ratio changing elements.