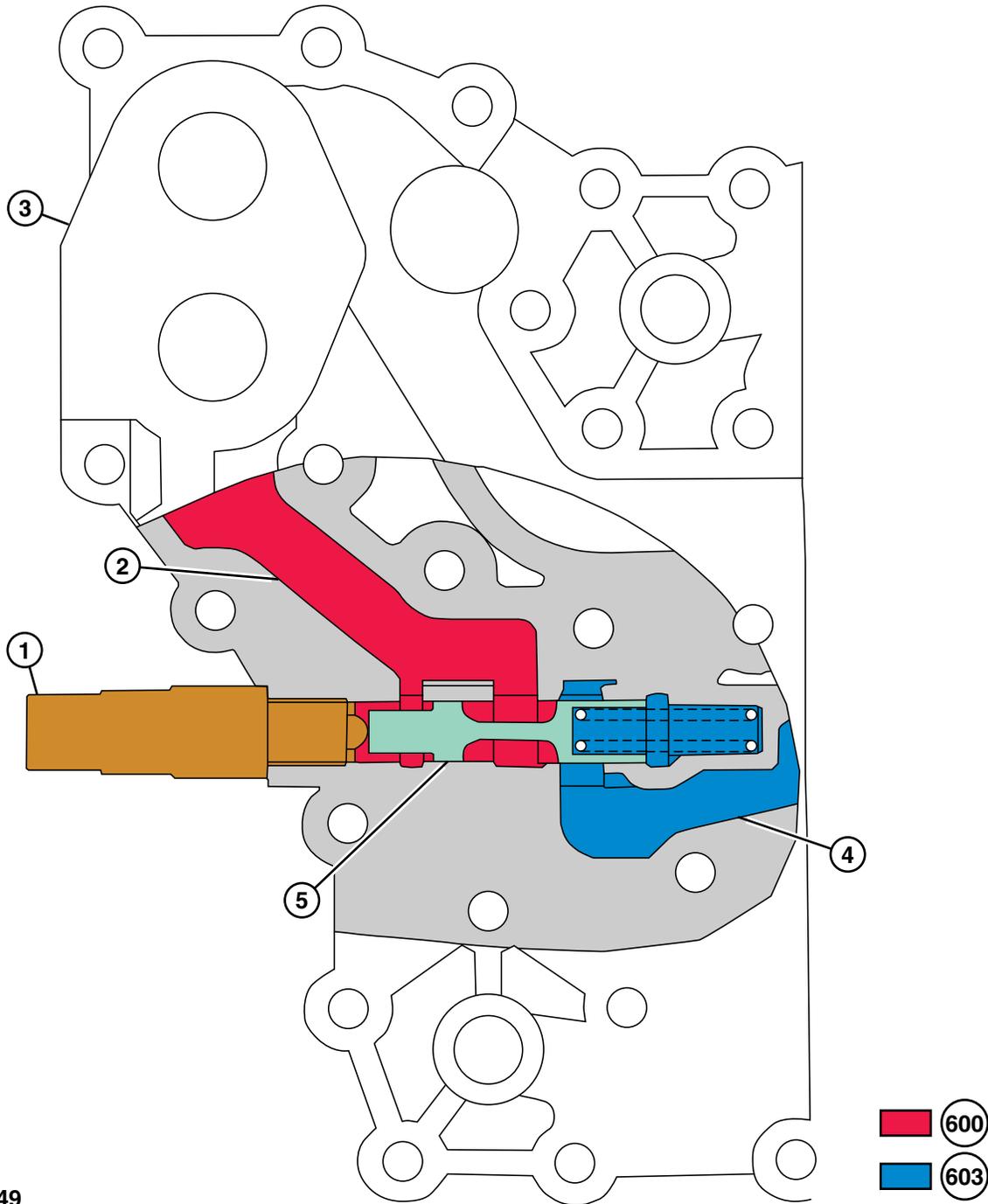


## Transmission Filter Bypass Valve Operation



TX1042849

- |                                     |   |                                |
|-------------------------------------|---|--------------------------------|
| 1— Filter Restriction Switch        | 3— Transmission Filter Base Mounting Area | 5— Bypass Valve Spool          |
| 2— Inlet Oil from Transmission Pump | 4— Lube Pressure Passage Port             | 600— Transmission Pressure Oil |
|                                     |   | 603— Lube Pressure Oil         |

The transmission filter base mounting area (3) is located on the front of the transmission. The transmission filter base uses a spin-on type filter. A pressure differential type bypass valve and a filter restriction switch (1) protect the transmission.

the system pressure passage. The bypass valve spool (5) is held in the closed position by a spring and filtered downstream oil pressure entering the control valve.

The bypass valve senses inlet oil from the transmission pump (2). The bypass valve is located in series with

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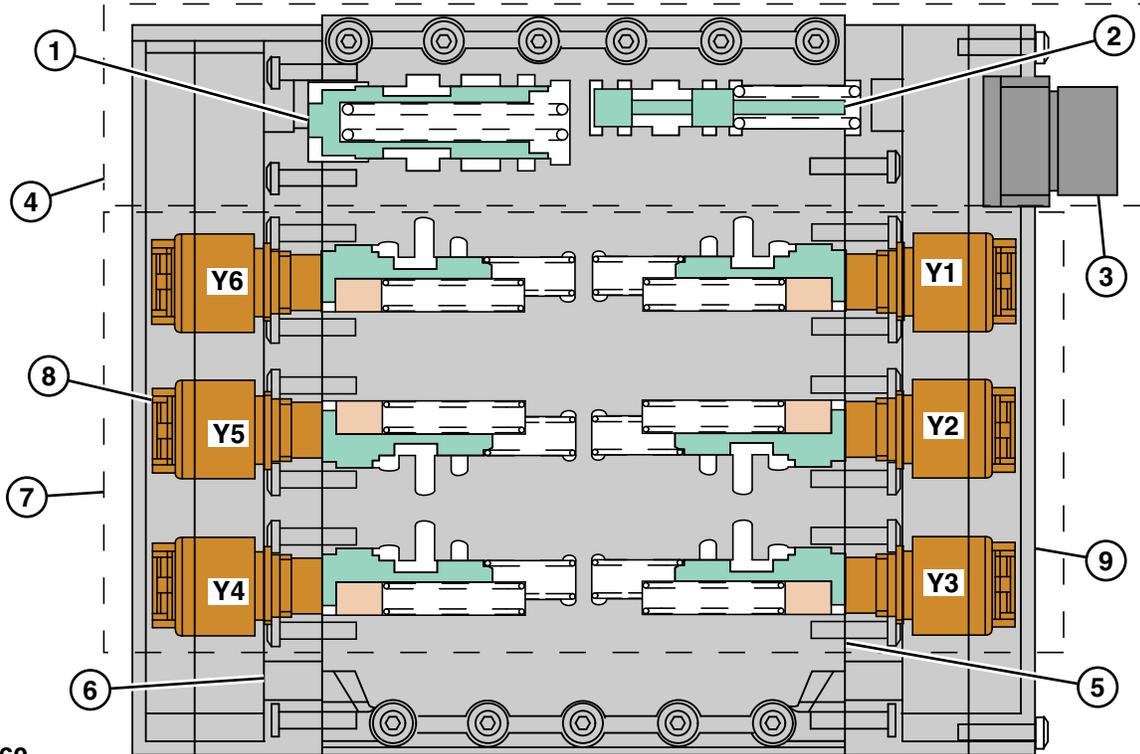
## Theory of Operation

During normal operation, the inlet and outlet pressures of the filter are nearly equal, and the bypass spool valve and indicator switch remain seated. If the filter becomes plugged or the oil is very cold, the inlet pressure becomes higher than the outlet pressure and spring tension.

During relief operation, the bypass valve spool is shifted, overcoming spring tension. This causes the filter restriction switch to open and the filter restriction indicator light to illuminate on the monitor. The bypass valve allows unfiltered oil to the lube pressure passage port (4).

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## Transmission Control Valve Component Operation



**TX1041960**

*Transmission Control Valve*

- |                              |   |   |          |
|------------------------------|---|---|----------|
| 1— Pressure Regulating Valve | 3— Connector                                | 5— Valve Body                           | 9— Cover |
| 2— Pressure Reducing Valve   | 4— Transmission Pressure Regulating Circuit | 6— Housing                              |          |
|                              |   | 7— Modulation Circuit                   |          |
|                              |   | 8— Proportional Solenoid Valve (6 used) |          |

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