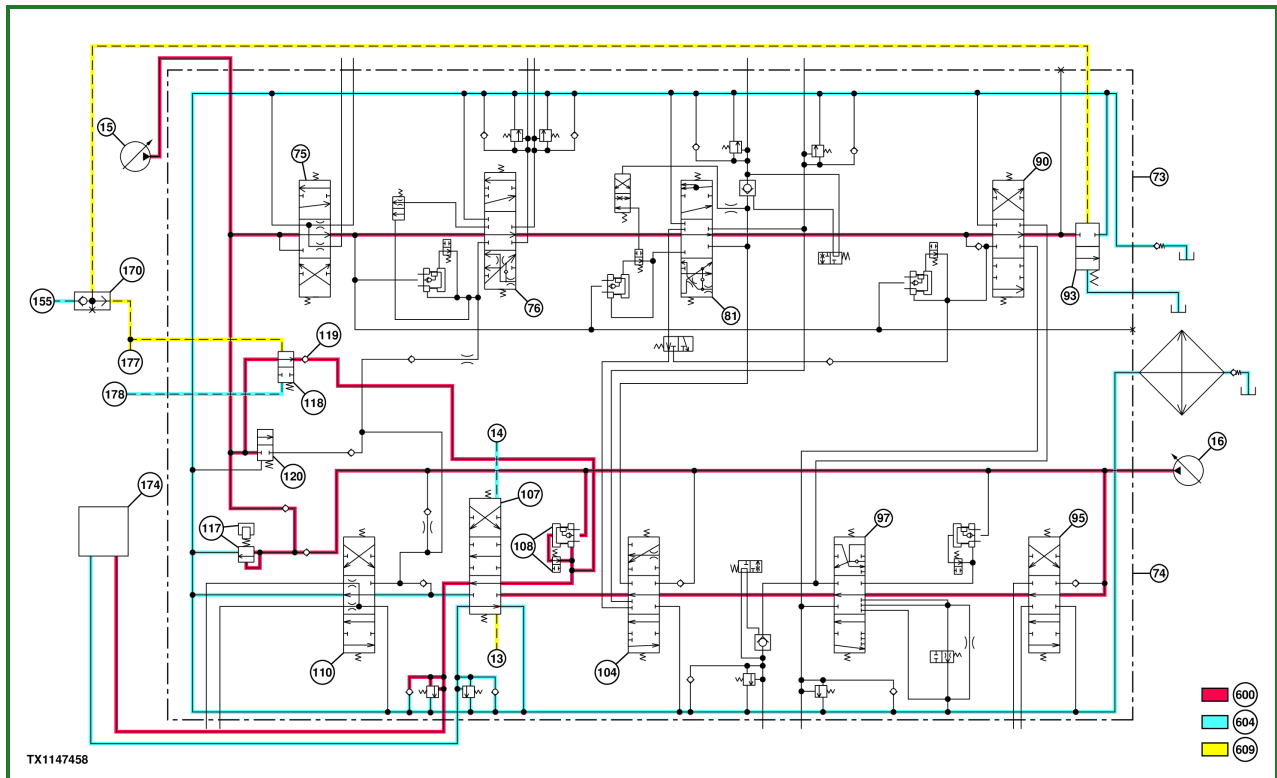


## Auxiliary Flow Combiner Valve and Bypass Shutoff Valve Operation



**TX1147458-UN: Auxiliary Flow Combiner Valve and Bypass Shutoff Valve Schematic**

**LEGEND:**

- 13 - Auxiliary (pilot)
- 14 - Auxiliary (pilot)
- 15 - Pump 1 (4-spool side)
- 16 - Pump 2 (5-spool side)
- 73 - 4-Spool Side Control Valve
- 74 - 5-Spool Side Control Valve
- 75 - Right Travel Spool
- 76 - Bucket Spool
- 81 - Boom 1 Spool
- 90 - Arm 2 Spool
- 93 - Bypass Shutoff Valve
- 95 - Swing Spool
- 97 - Arm 1 Spool
- 104 - Boom 2 Spool
- 107 - Auxiliary Spool
- 108 - Auxiliary Flow Rate Control Valve (valve and poppet)
- 110 - Left Travel Spool
- 117 - Main Relief and Power Dig Valve
- 118 - Auxiliary Flow Combiner Valve
- 119 - Check Valve—Flow Combiner Valve Circuit
- 120 - Travel Flow Combiner Valve
- 155 - From Shuttle Valve
- 170 - Auxiliary Shuttle Valve
- 174 - Auxiliary Attachment
- 177 - From Flow Rate Select Solenoid Valve
- 178 - To Flow Rate Select Reducing Valve

600 - High-Pressure Oil

604 - Return Oil

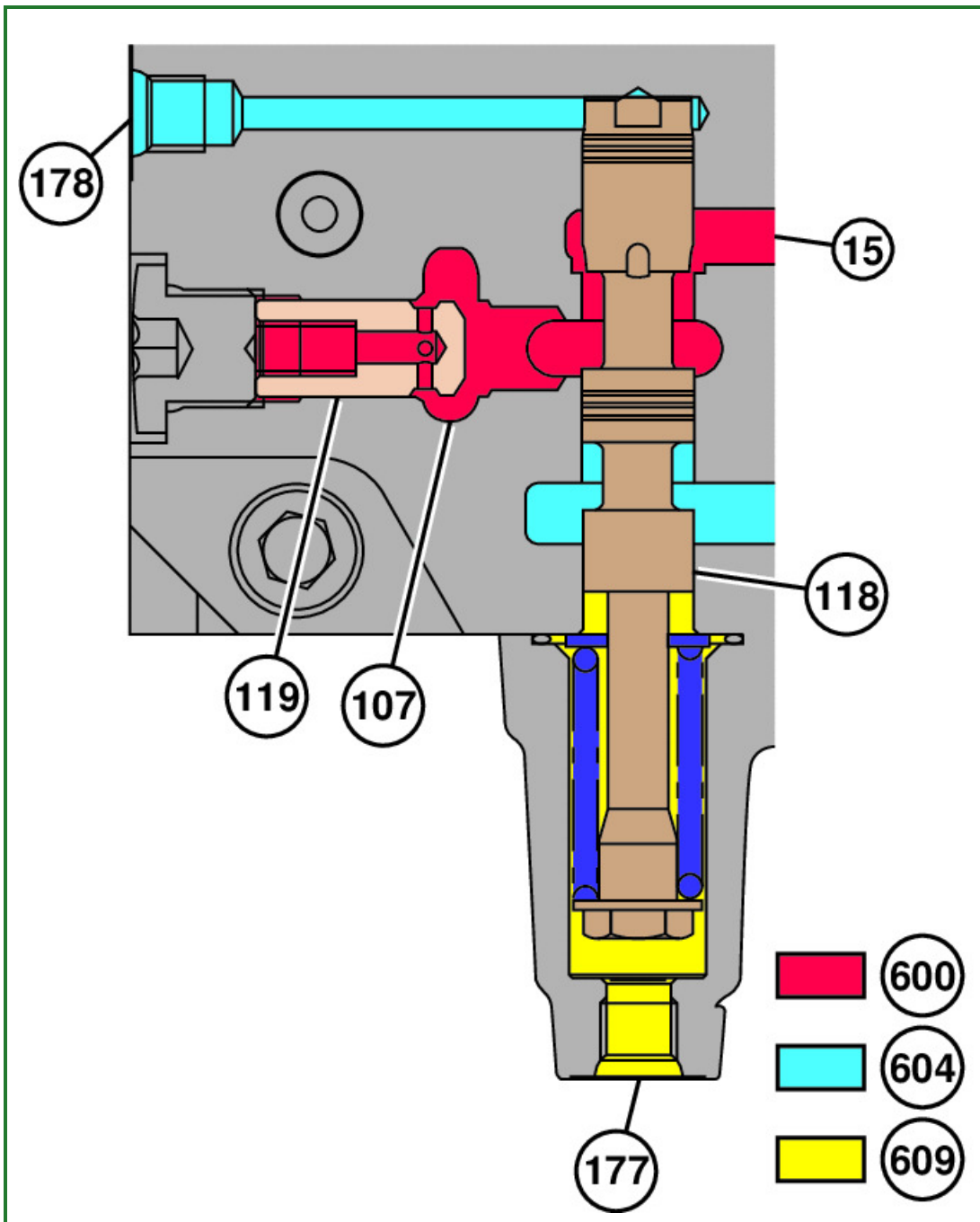
609 - Pilot Oil

**NOTE:**

*Auxiliary flow combiner valve and bypass shutoff valve will not work properly unless appropriate kits are installed on machine.*

The combined functions of auxiliary flow combiner valve (118) and bypass shutoff valve (93) combine high-pressure oil (600) flow from pump 1 (4-spool side) (15) with pump 2 (5-spool side) (16) at the auxiliary spool (107) to increase hydraulic oil flow to auxiliary attachment (174).

**Auxiliary Flow Combiner Valve Operation**



**TX1147189-UN: Auxiliary Flow Combiner Valve**

**LEGEND:**

15 - From Pump 1 (4-spool side)