

## SECTION 4 STEERING SYSTEM

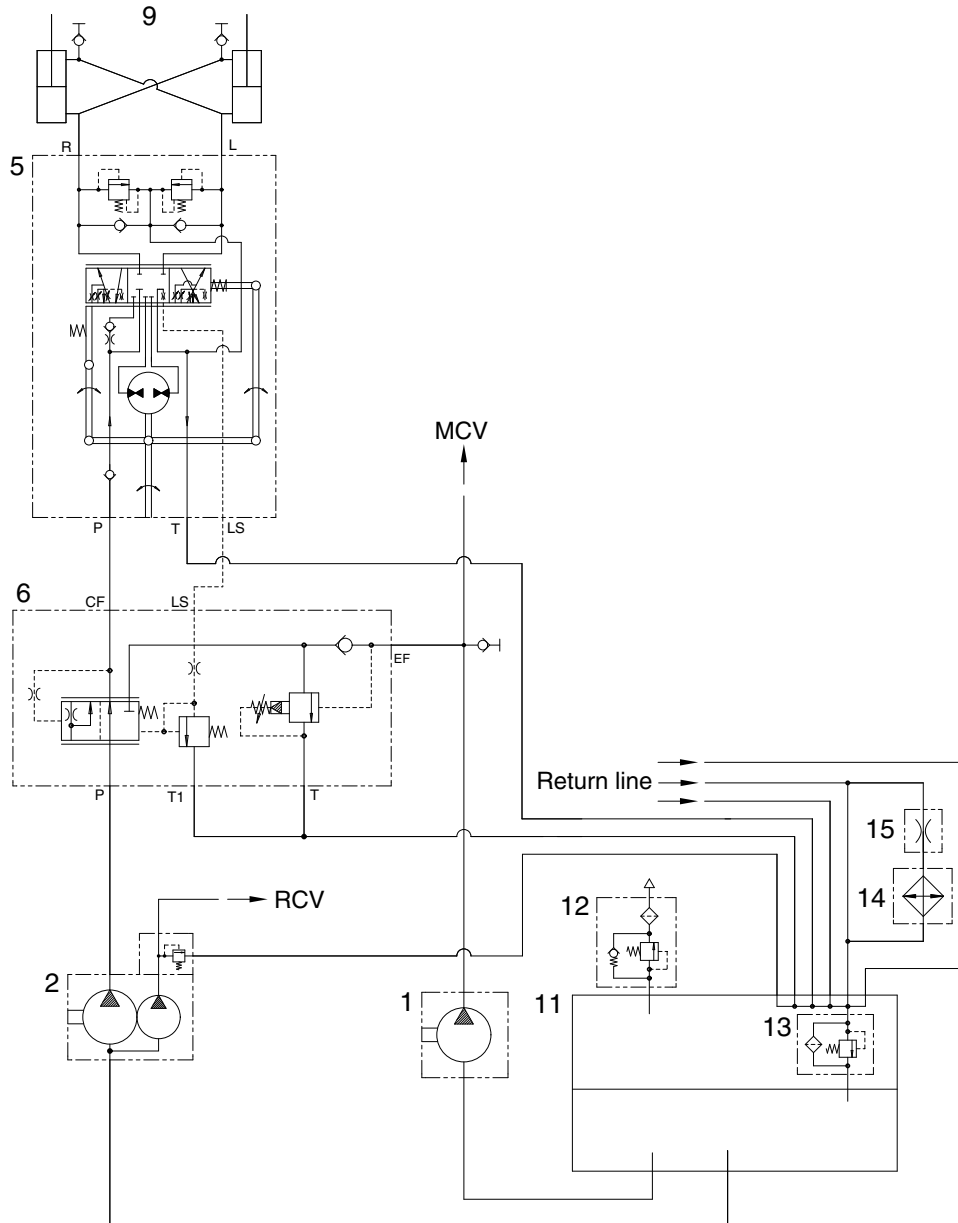
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# SECTION 4 STEERING SYSTEM

## GROUP 1 HYDRAULIC CIRCUIT

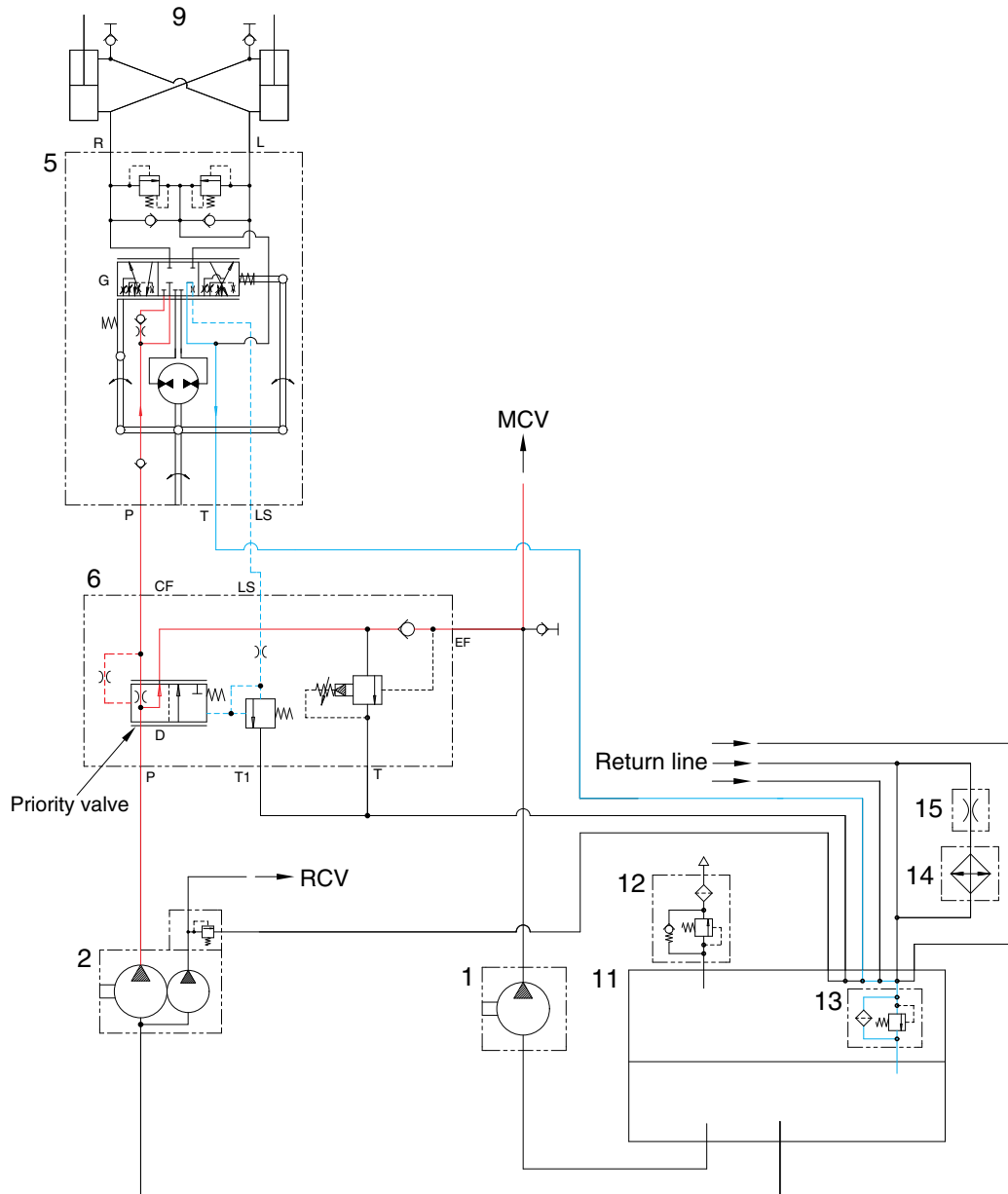
### 1. STEERING CIRCUIT



7614SE01

- |   |                         |    |                   |    |                 |
|---|-------------------------|----|-------------------|----|-----------------|
| 1 | Main pump               | 9  | Steering cylinder | 14 | Oil cooler      |
| 2 | Steering and pilot pump | 11 | Hydraulic tank    | 15 | Orifice fitting |
| 5 | Steering unit           | 12 | Air breather      |    |                 |
| 6 | Steering valve          | 13 | Return filter     |    |                 |

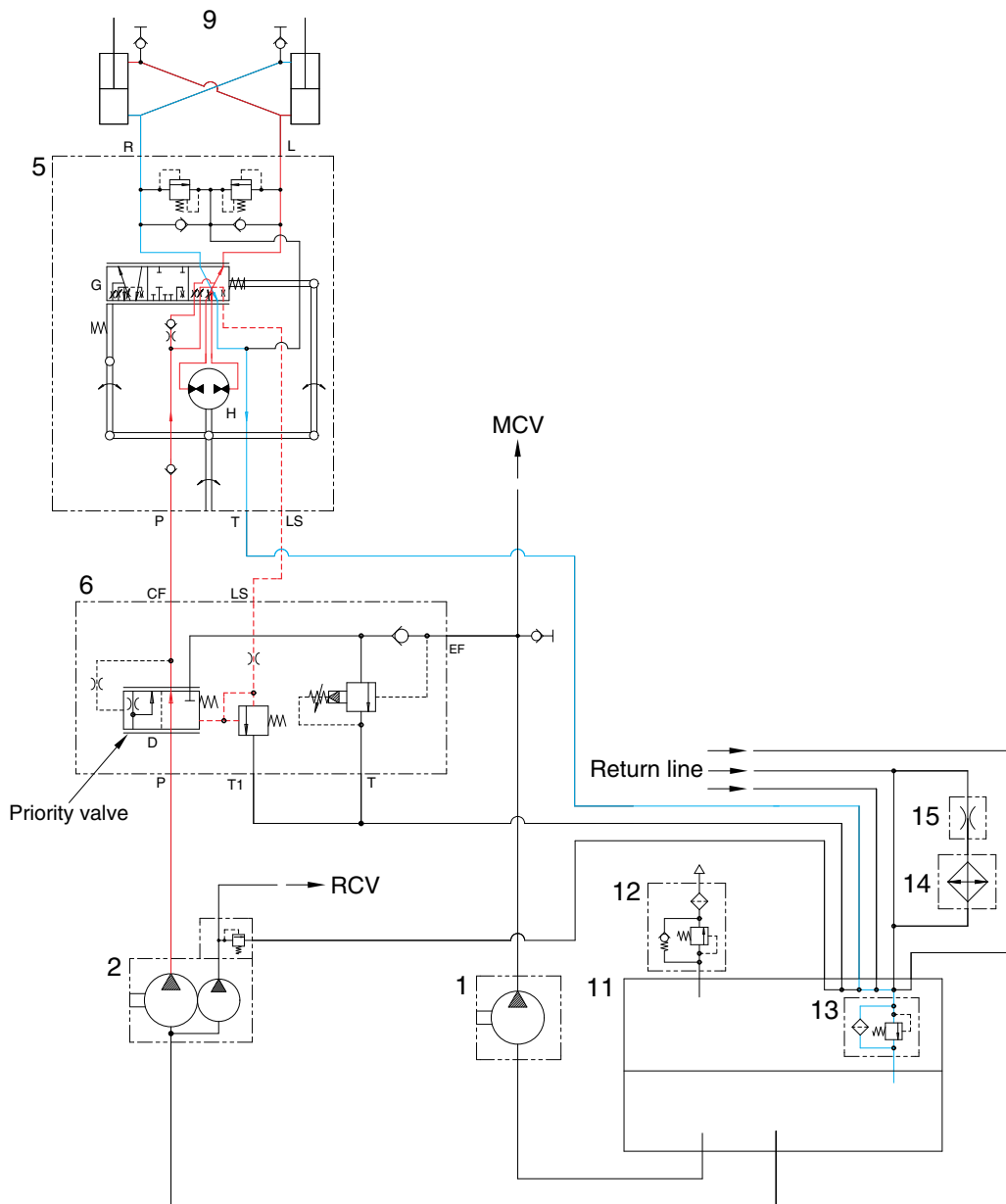
## 2. NEUTRAL



7614SE02

The steering wheel is not being operated so control spool (G) does not move.  
 The oil from the steering pump (2) enters port P of priority valve in steering valve (6) and the inlet pressure oil moves the spool (D) to the right.  
 The pump flow goes to the loader system (main control valve) through the EF port.

### 3. LEFT TURN



7614SE03

When the steering wheel is turned to the left, the spool (G) within the steering unit (5) connected with steering column turns in left hand direction.

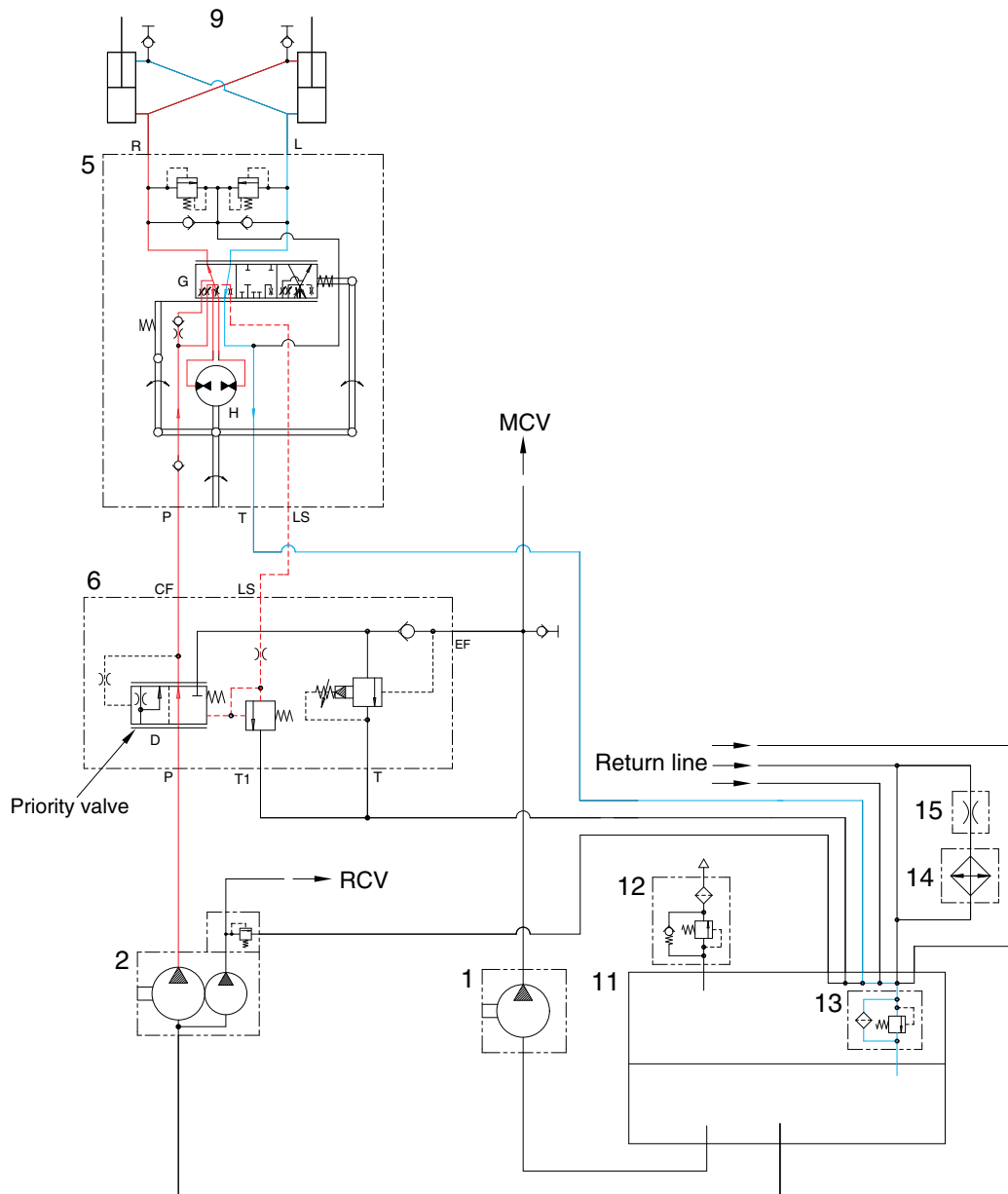
At this time, the oil discharged from the steering pump (2) flows into the spool (G) of the steering unit (5) through the spool (D) of priority valve in steering valve (6) and flows into the gerotor (H).

Oil flow from the gerotor flows back into the spool (G) where it is directed out the left work port (L) to the respective chamber of the steering cylinders (9).

Oil returned from left and right cylinder returns to hydraulic tank (11) through the spool (G) of the steering unit (5).

When the above operation is completed, the machine turns to the left.

#### 4. RIGHT TURN



7614SE04

When the steering wheel is turned to the right, the spool (G) within the steering unit (5) connected with steering column turns in right hand direction.

At this time, the oil discharged from the steering pump (2) flows into the spool (G) of the steering unit (5) through the spool (D) of priority valve in steering valve (6) and flows into the gerotor (H).

Oil flow from the gerotor flows back into the spool (G) where it is directed out the right work port (R) to the respective chamber of the steering cylinders (9).

Oil returned from left and right cylinder returns to hydraulic tank (11) through the spool (G) of the steering unit (5).

When the above operation is completed, the machine turns to the right.