

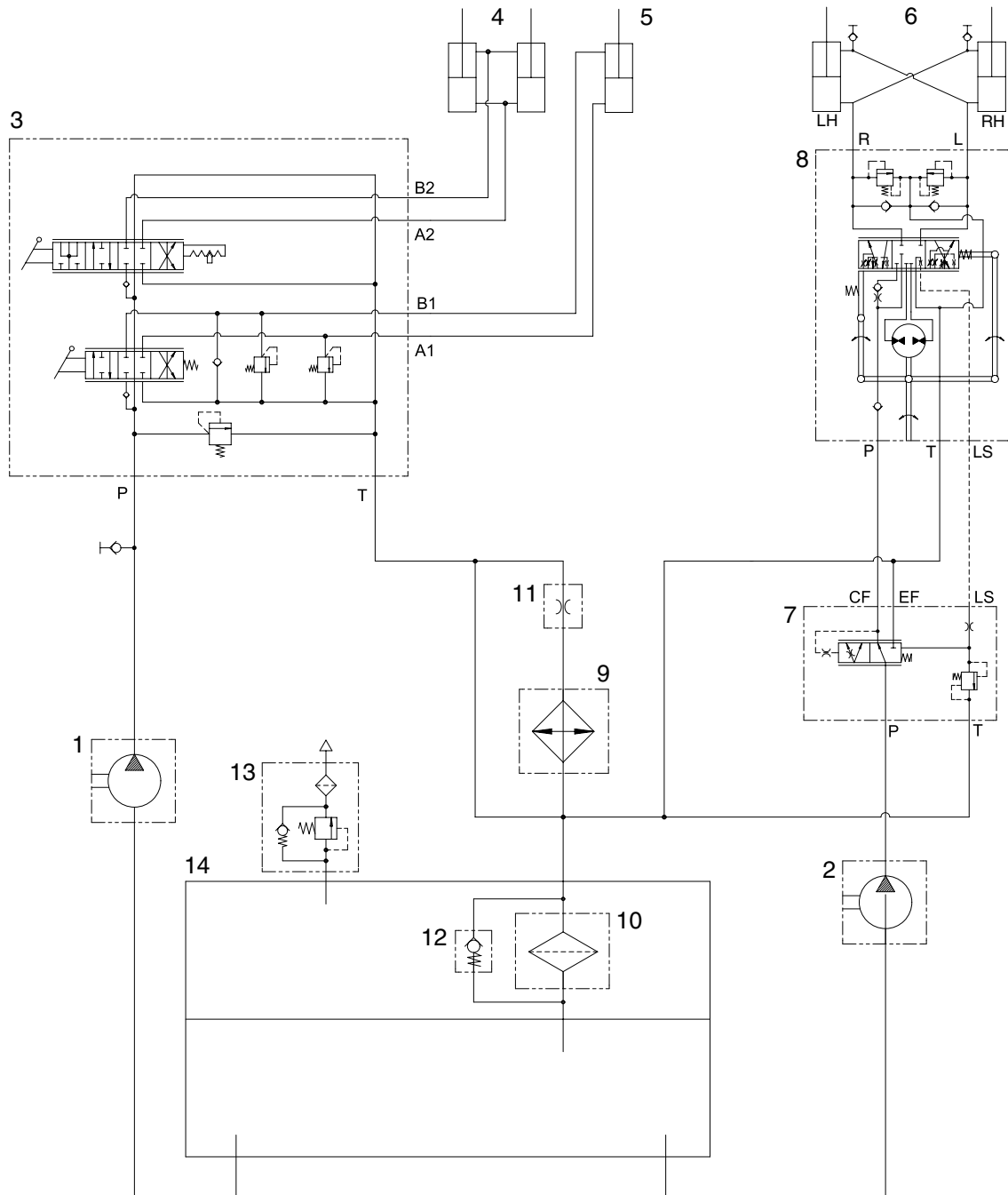
SECTION 5 WORK EQUIPMENT

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SECTION 5 WORK EQUIPMENT

GROUP 1 HYDRAULIC CIRCUIT

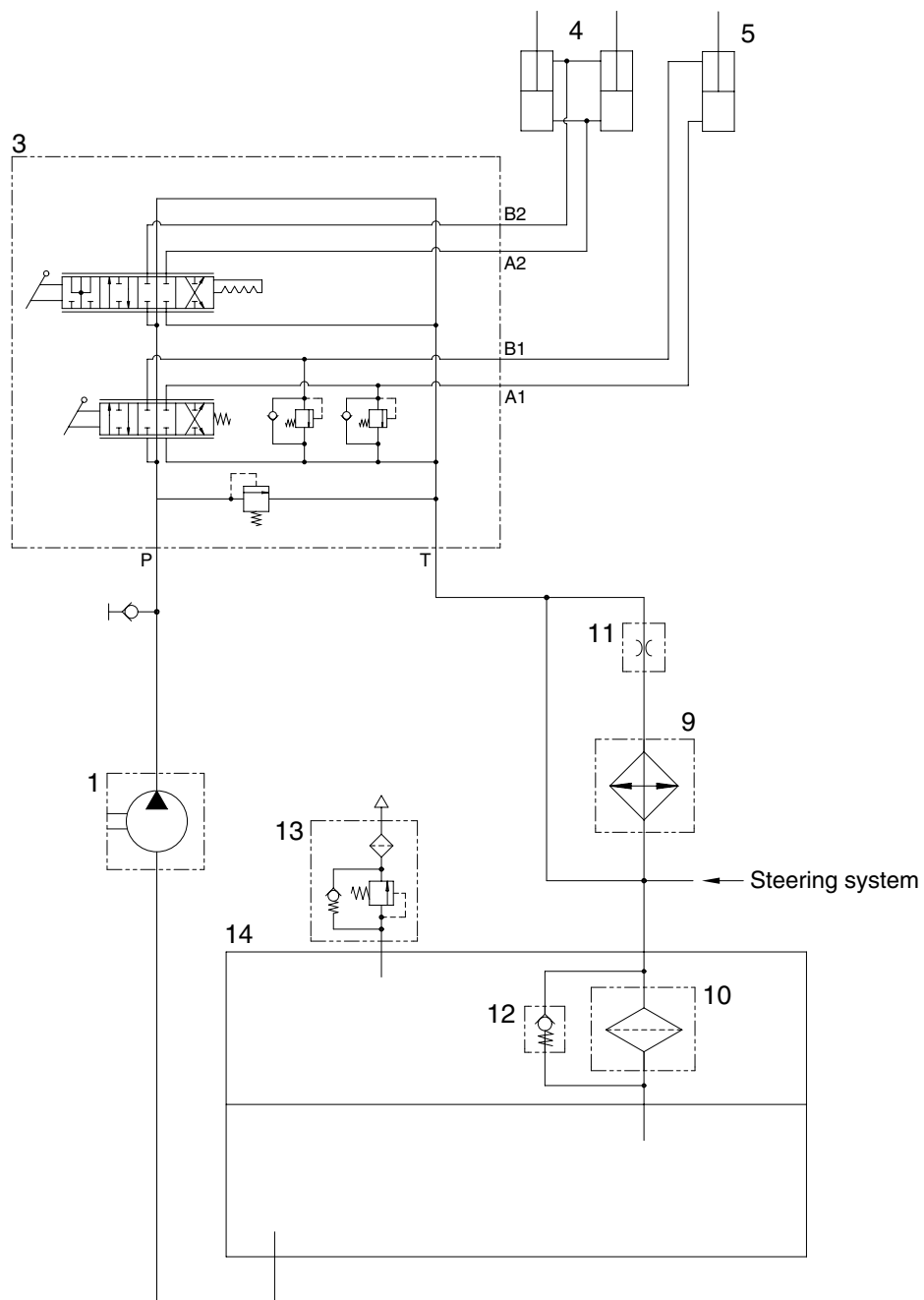
1. HYDRAULIC CIRCUIT



850K3HC01

- | | | | | | |
|---|--------------------|----|-------------------|----|-----------------|
| 1 | Main pump | 6 | Steering cylinder | 11 | Orifice fitting |
| 2 | Steering pump | 7 | Priority valve | 12 | Bypass valve |
| 3 | Main control valve | 8 | Steering unit | 13 | Air breather |
| 4 | Boom cylinder | 9 | Oil cooler | 14 | Hydraulic tank |
| 5 | Bucket cylinder | 10 | Return filter | | |

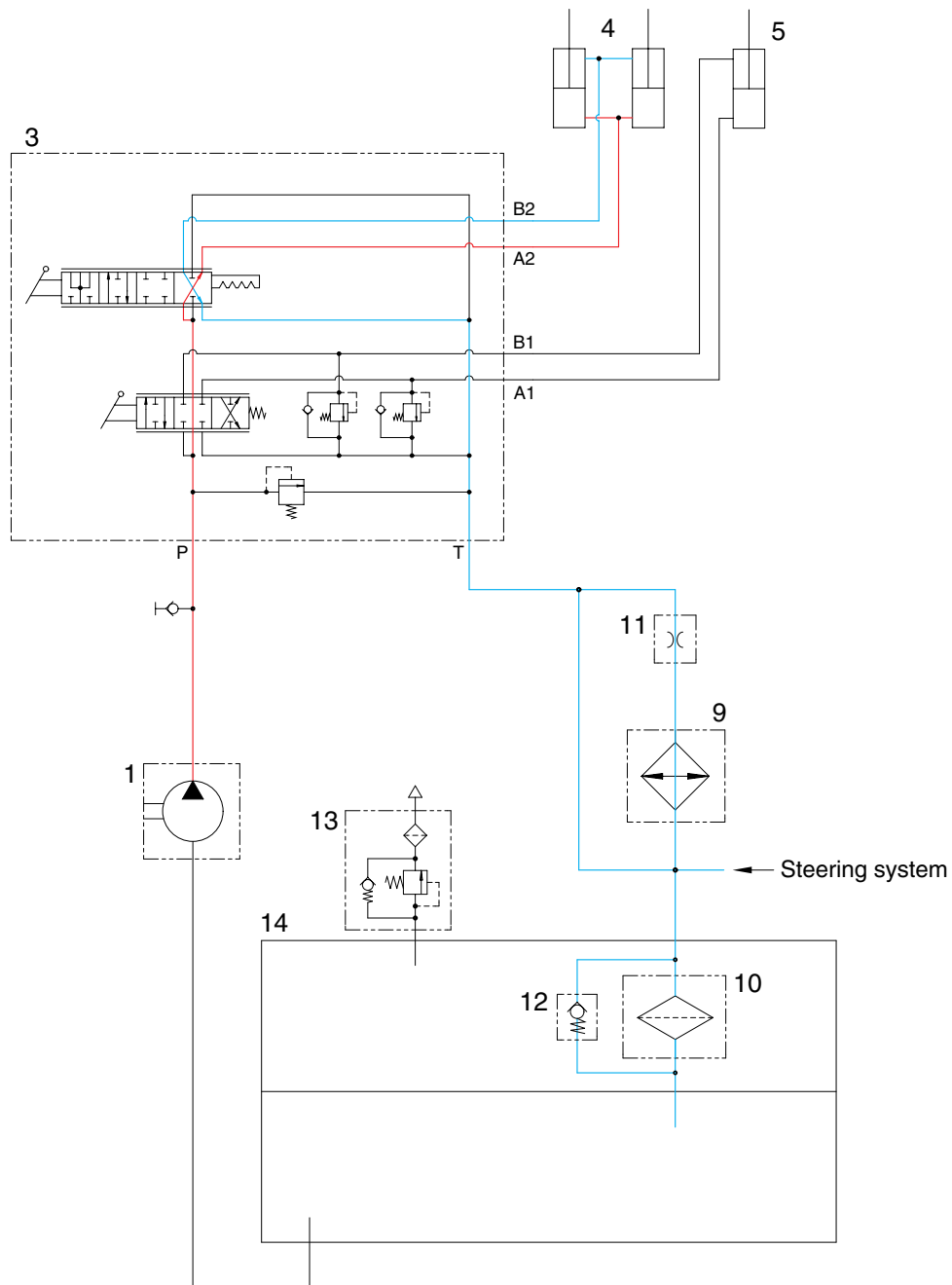
2. WORK EQUIPMENT HYDRAULIC CIRCUIT



850K3HC30

- | | | | |
|---|--------------------|----|-----------------|
| 1 | Main pump | 10 | Return filter |
| 3 | Main control valve | 11 | Orifice fitting |
| 4 | Boom cylinder | 12 | Bypass valve |
| 5 | Bucket cylinder | 13 | Air breather |
| 9 | Oil cooler | 14 | Hydraulic tank |

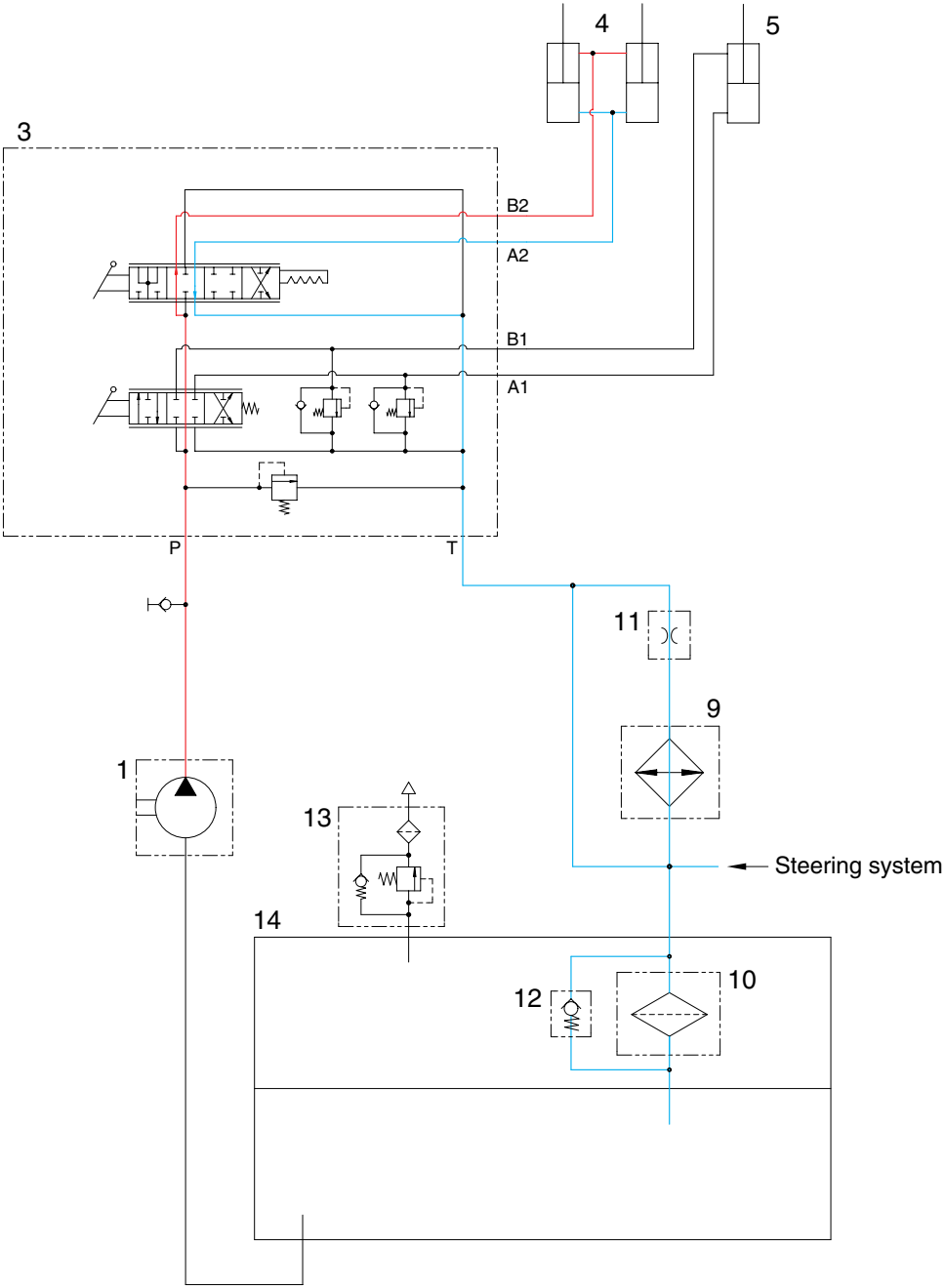
1) WHEN THE BOOM CONTROL LEVER IS IN THE RAISE POSITION



850K3HC21

- When the boom control lever is pulled back, the boom spool is moved to raise position.
- The oil from main pump (1) flows into main control valve (3) and then goes to the large chamber of boom cylinder (4).
- The oil from the small chamber of boom cylinder (4) returns to hydraulic oil tank (14) through the boom spool at the same time.
- When this happens, the boom goes up.

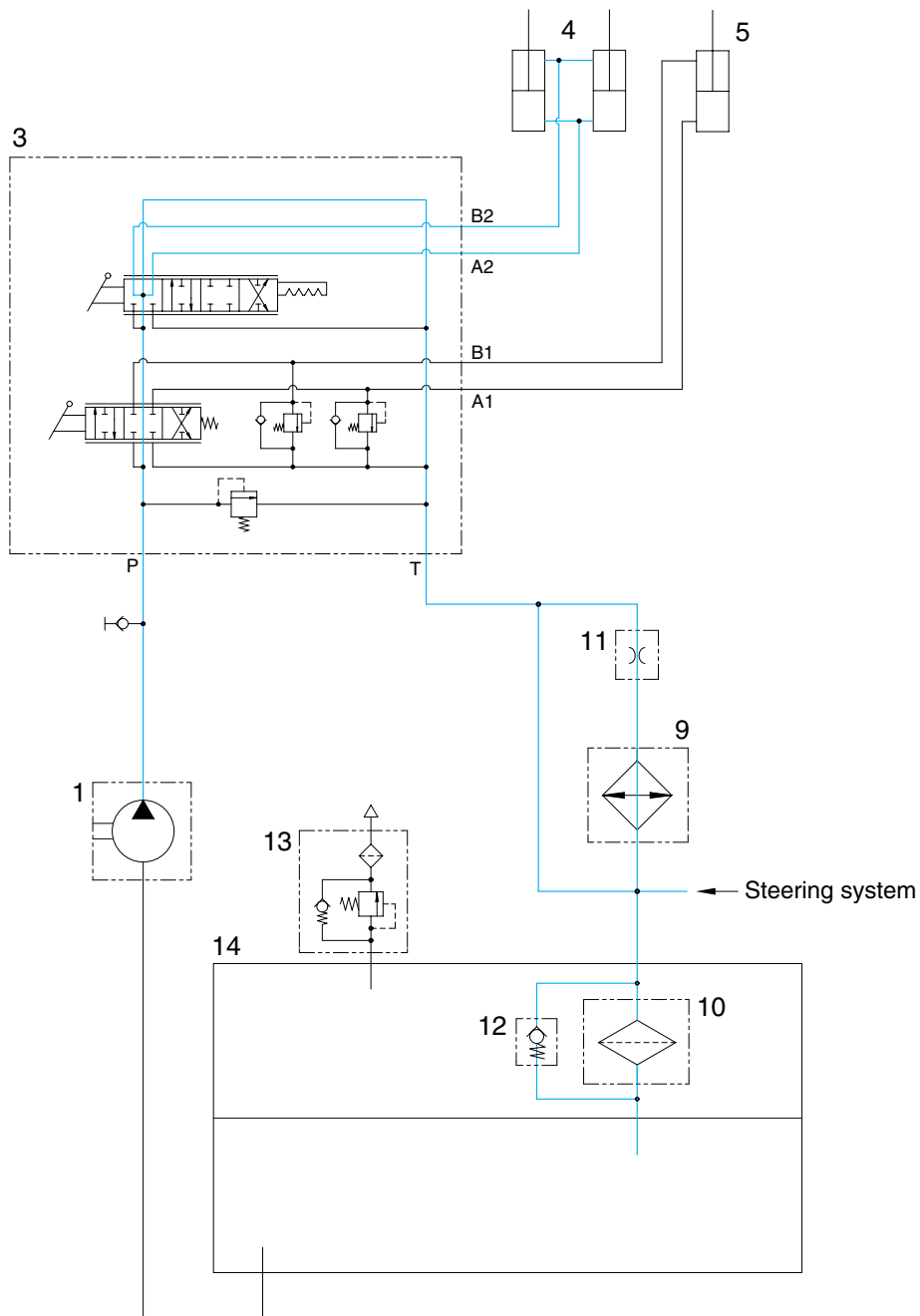
2) WHEN THE BOOM CONTROL LEVER IS IN THE LOWER POSITION



850K3HC22

- When the boom control lever is pushed forward, the boom spool is moved to lower position.
- The oil from main pump (1) flows into main control valve (3) and then goes to small chamber of boom cylinder (4).
- The oil returned from large chamber of boom cylinder (4) returns to hydraulic tank (14) through the boom spool at the same time.

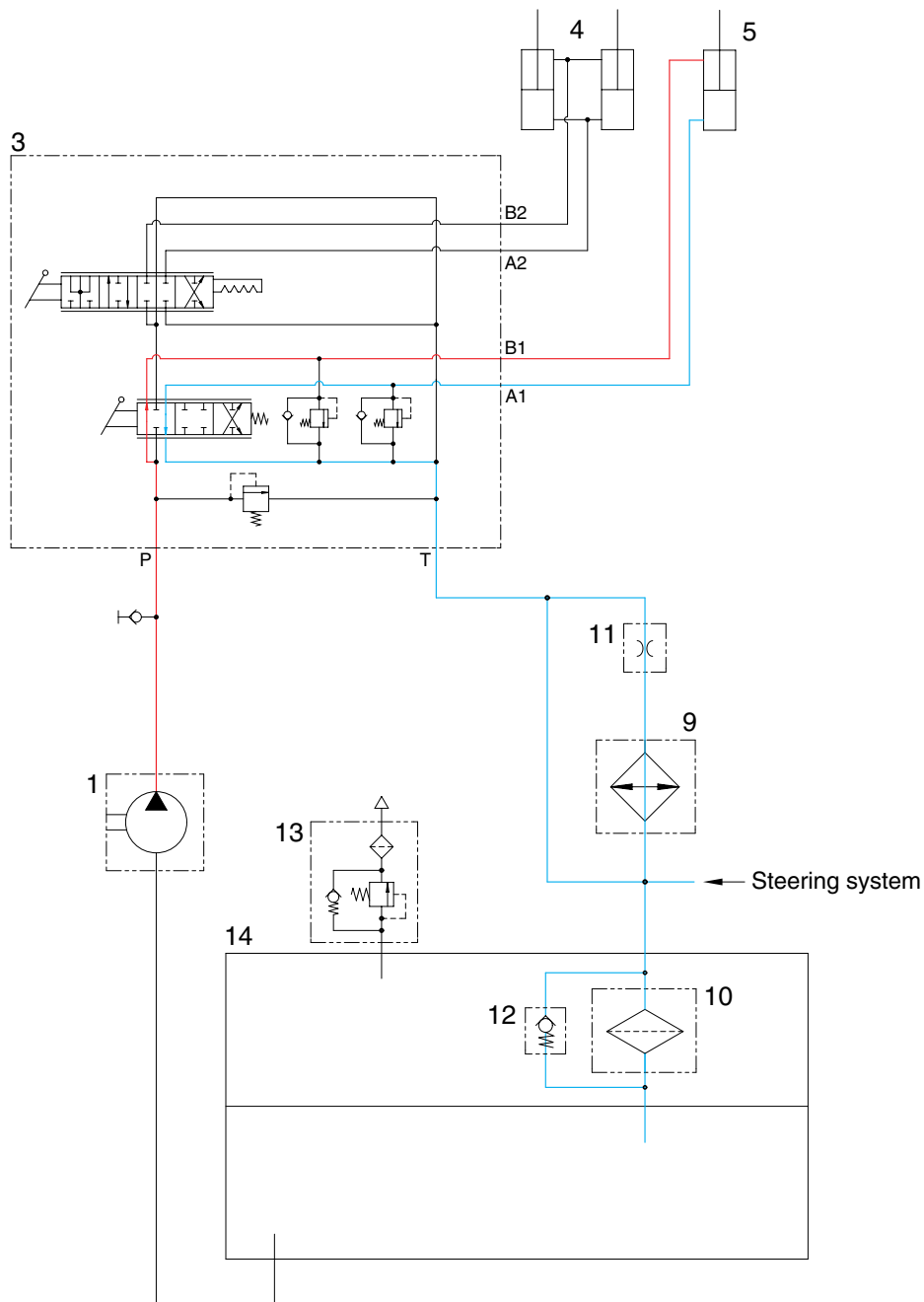
3) WHEN THE BOOM CONTROL LEVER IS IN THE FLOAT POSITION



850K3HC23

- When the boom control lever is pushed further forward from the lower position, then the boom spool is moved to floating position.
- The work ports (A2), (B2) and the small chamber and the large chamber are connected to the return passage, so the boom will be lowered due to its own weight.
- In this condition, when the bucket is in contact with the ground, it can be move up and down in accordance with the shape of the ground.

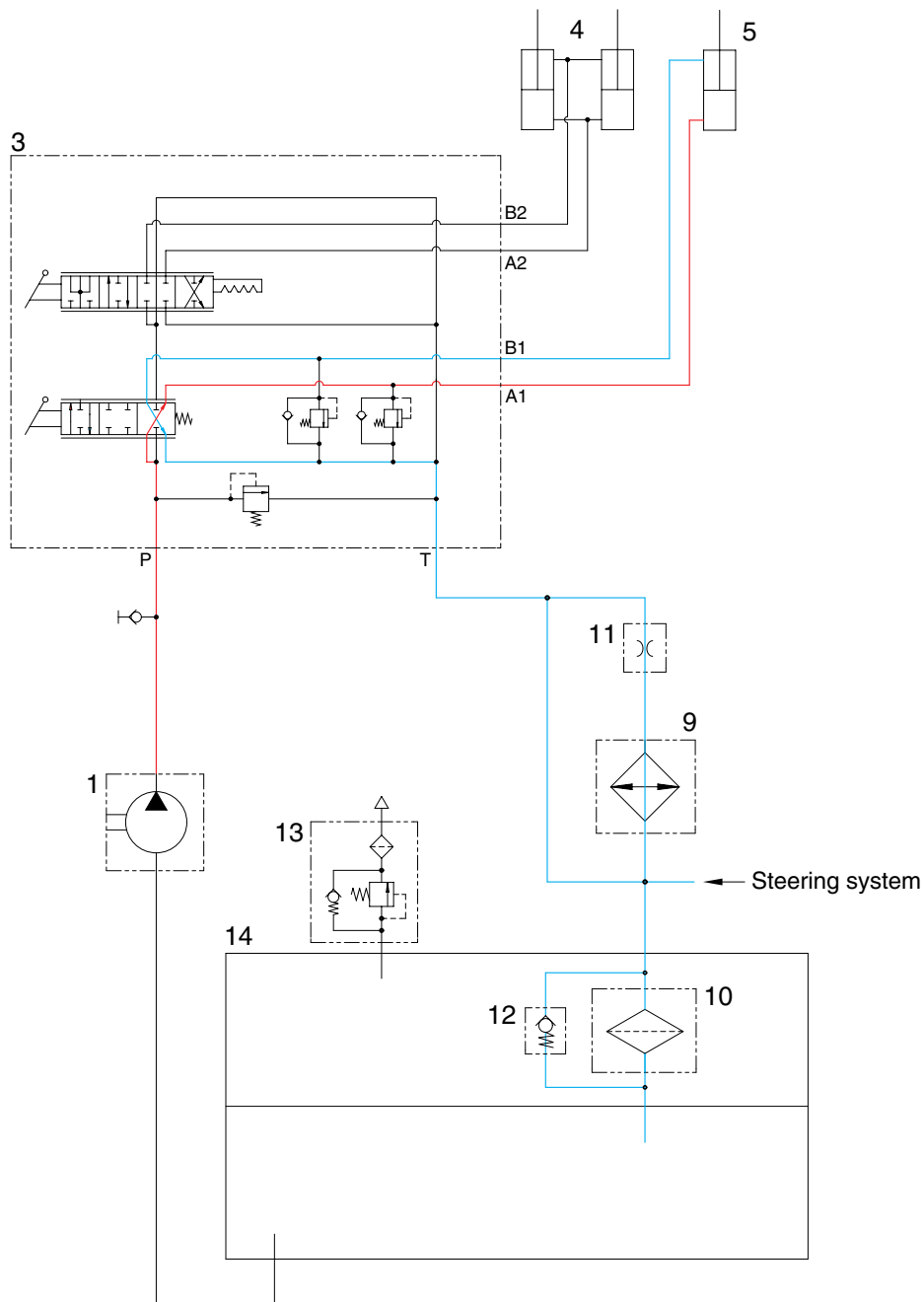
4) WHEN THE BUCKET CONTROL LEVER IS IN THE DUMP POSITION



850K3HC24

- If the bucket control lever (4) is pushed forward, the bucket spool is moved to dump position.
- The oil from main pump (1) flows into main control valve (3) and then goes to the small chamber of bucket cylinder (5).
- The oil at the large chamber of bucket cylinder (5) returns to hydraulic tank (14).
- When this happens, the bucket is dumped.

5) WHEN THE BUCKET CONTROL LEVER IS IN THE ROLL BACK (retract) POSITION



850K3HC25

- If the bucket control lever is pulled back, the bucket spool is moved to roll back position.
- The oil from main pump (1) flows into main control valve (3) and then goes to the large chamber of bucket cylinder.
- The oil at the chamber of bucket cylinder (5) returns to hydraulic tank (14).
- When this happens, the bucket roll back.