

# WSM

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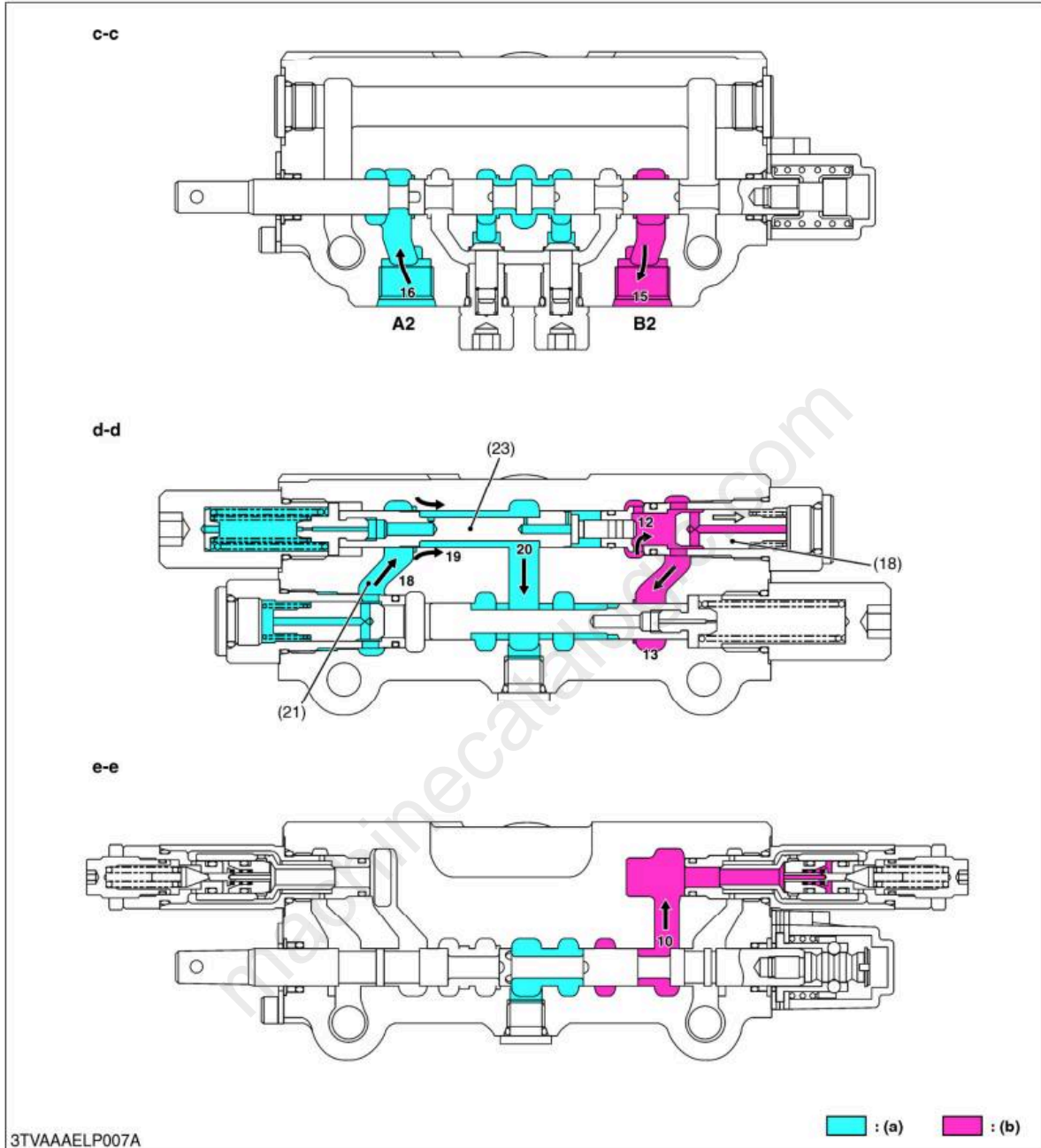
WORKSHOP MANUAL  
**FRONT LOADER**

**LA1153AU, LA1353AU**

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**Kubota**

**Self-leveling on Boom Up (Figure 3)**



3TVAAAELP007A

- (18) Check Valve
- (21) Passage H
- (23) Raising Sequence Spool

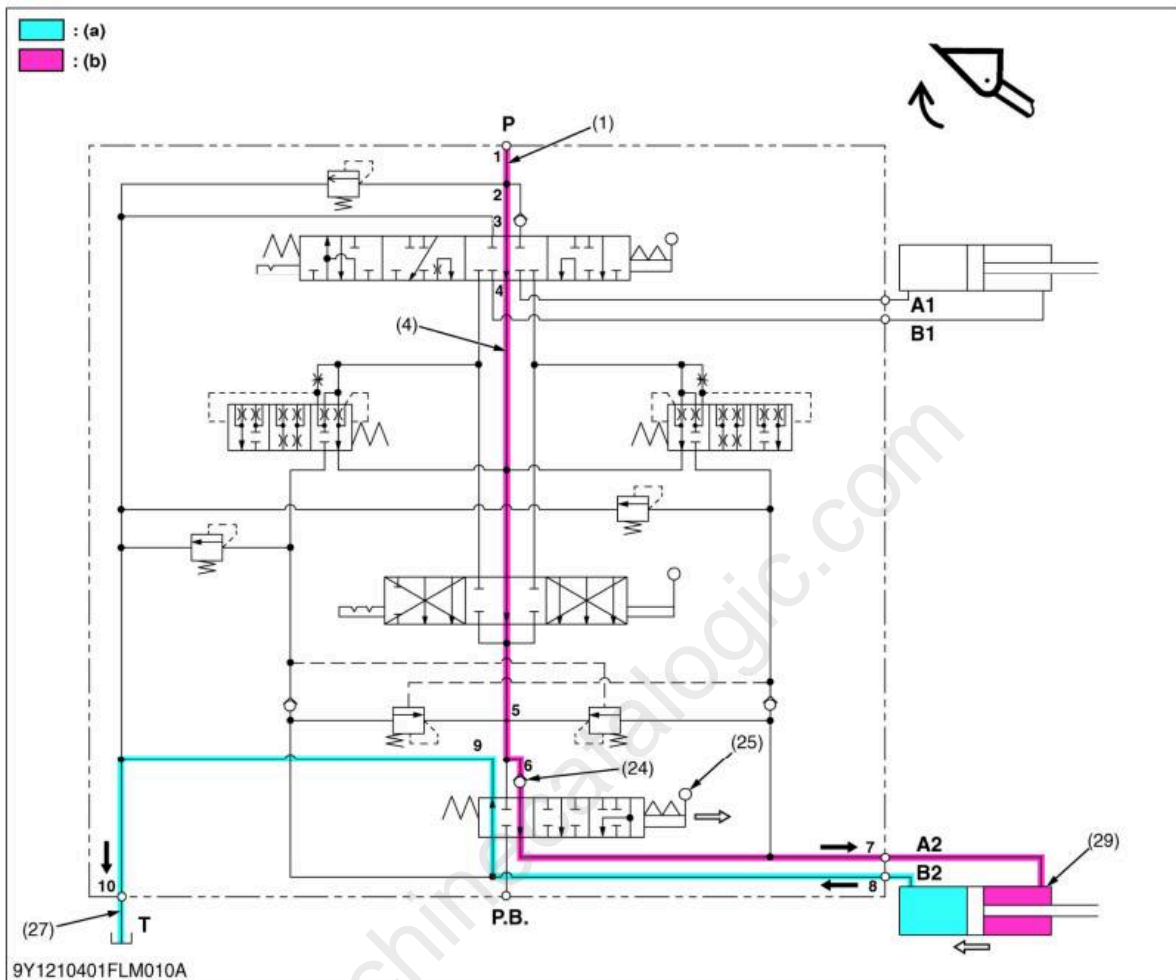
- A2:** A2 Port (Connected Bucket Rod Cylinder)
- B2:** B2 Port (Connected Bucket Bottom Cylinder)
- c-c:** Bucket Section
- d-d:** Sequence Section
- e-e:** Self-leveling Section

- (a) Low Pressure
- (b) Middle Pressure
- 1 to 22: Oil Flow

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## (7) Bucket Roll-Back

Bucket (Roll-Back) (Figure 1)



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- |                            |                       |                      |  |
|----------------------------|-----------------------|----------------------|--|
| (1) P Port                 | (24) Load Check Valve | (27) T Port          | 1 to 10: Oil Flow<br>(a) Low Pressure<br>(b) Middle Pressure |
| (4) Center By-pass Passage | (25) Bucket Spool     | (29) Bucket Cylinder |  |

The following section explains illustration **figure 1, 2, 3 and 4.**

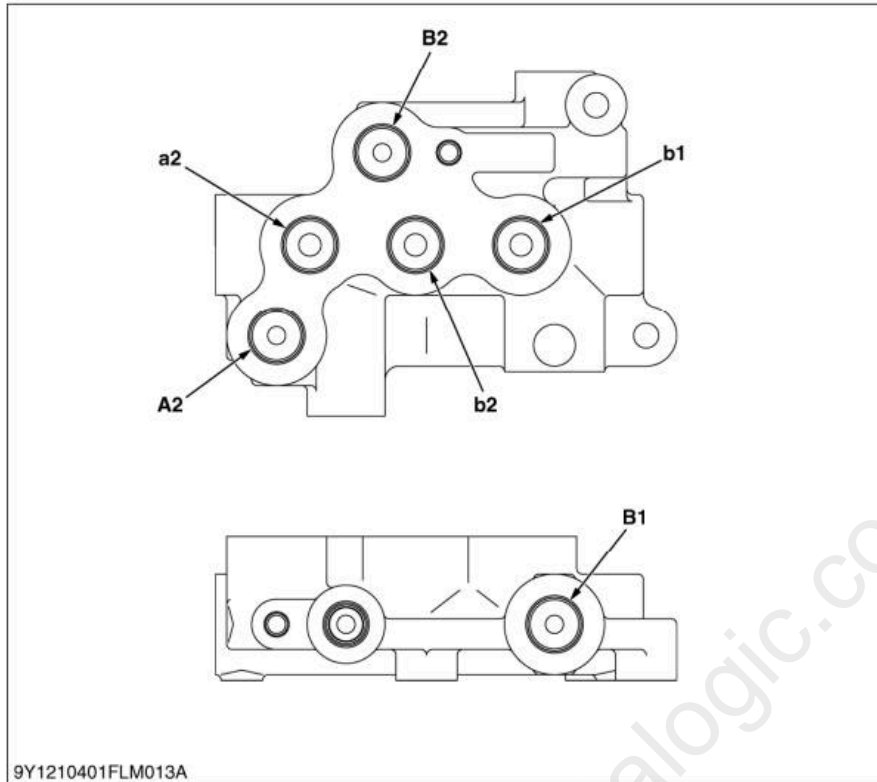
When the bucket spool (25) is pulled out, the hydraulic oil flowing from **P** port (1) passes through the center by-pass passage (4) (Refer to the **b-b.**) via the load check valve (24) and is discharged into the opened **A2** port. The oil is then supplied to the bucket cylinder rod side and acts in the direction of retracting the bucket cylinder (29).

As the bucket cylinder (29) retracts, the oil in the bottom side flows into the valve through **B2** port, and is discharged from the **T** port (27).

When the bucket cylinder (29) retracts and reaches the stroke end during roll-back operation, the tractor main relief valve operates and retains the pressure of **P** port (1) at the set pressure by discharging hydraulic oil from the pump into the tank.

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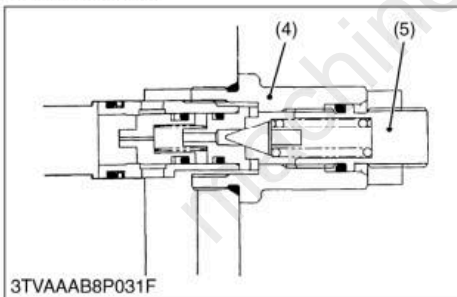
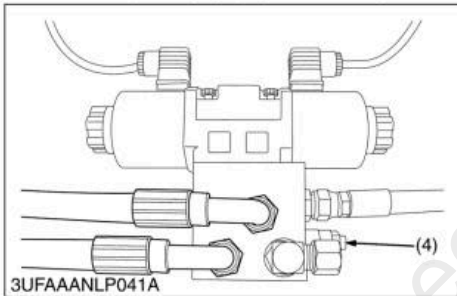
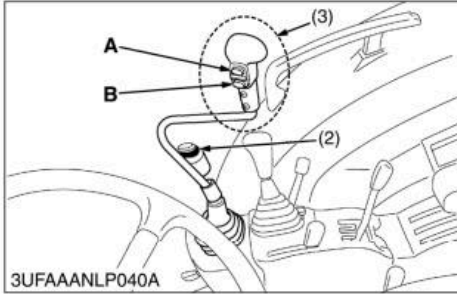
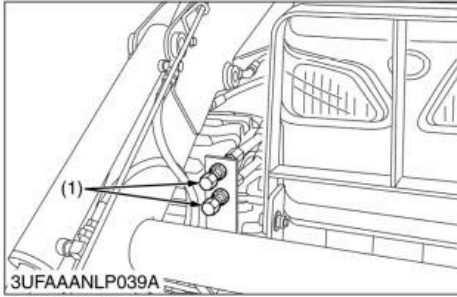
**Spill Guard Valve**



- A2: 3 Port
- B1: 2 Port
- B2: 5 Port
- a2: C Port
- b1: AB Port
- b2: E Port

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### (4) 3rd Function Valve (Option)



#### Relief Valve Setting Pressure

1. Assemble the relief valve set adaptor and pressure gauge (30 MPa).
2. Connect the assembled adaptor to delivery port (1).
3. Start the engine.
4. Push the "ON-OFF" switch (2). ("ON" position)
5. Push the activation switch A or B (3) and read the pressure gauge.
6. If the pressure is not within the factory specification, adjust the relief valve adjustor (5).

Relief valve setting pressure	Factory specification	LA1153 AU	19.2 to 20.1 MPa 195 to 205 kgf/cm <sup>2</sup> 2780 to 2910 psi
		LA1353 AU	20.1 to 21.0 MPa 205 to 215 kgf/cm <sup>2</sup> 2920 to 3050 psi

#### Condition

- Engine speed  
Approx. 2600 min<sup>-1</sup> (rpm)
- Oil temperature  
45 to 55 °C (113 to 131 °F)

- |                       |                  |
|-----------------------|------------------|
| (1) Delivery Port     | (4) Relief Valve |
| (2) ON-OFF Switch     | (5) Adjustor     |
| (3) Activation Switch |                  |

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# Full Version Available

Kubota LA1353AU Front Loader Workshop Manual

This is a short preview. The complete manual contains all chapters, wiring diagrams, torque specifications and full service procedures.

[VIEW THE FULL MANUAL](#)

<https://machinecatalogic.com/kubota-la1353au-front-loader-workshop-manual/>