

[1] OIL FLOW



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| (1) Transmission Case | (4) Hydraulic Pump | (7) Front Hydraulic Block | (10) Control Valve |
| (2) Oil Filter | (5) Relief Valve | (8) Boom Control Valve | (11) Bucket Cylinder |
| (3) Engine | (6) Control Spool | (9) Bucket Control Valve | (12) Boom Cylinder |

1. When the engine (3) is started, the hydraulic pump (4) is rotated to suck oil from the transmission case (1) through the suction pipe. Supplied oil is filtered by the hydraulic oil filter (2).
2. Filtered oil is forced out by the hydraulic pump to the control valve (10) of front-end loader through the front hydraulic block (7) on the tractor.
3. The control valve (10) consists of a boom control valve (8) and bucket control valve (9). The boom control valve (8) switches the direction of oil flow to feed oil to **Extend** or **Retract** side of the boom cylinder (12).
4. Oil returning from the boom cylinder (12) flows into the bucket control valve (9) when the boom control valve is in any position other than the floating position.
5. The bucket control valve (9) switches the direction of oil flow to feed oil to **Extend** or **Retract** side of the bucket cylinder (11).
6. Oil returning from the bucket cylinder (11) flows back to the transmission case through the return hose.
7. When the bucket control valve is in the neutral position, oil is fed to the three point hydraulic system.
8. Meanwhile the maximum pressure in the front-end loader hydraulic circuits is restricted by the relief valve (5) which is contained within the front hydraulic block (7).