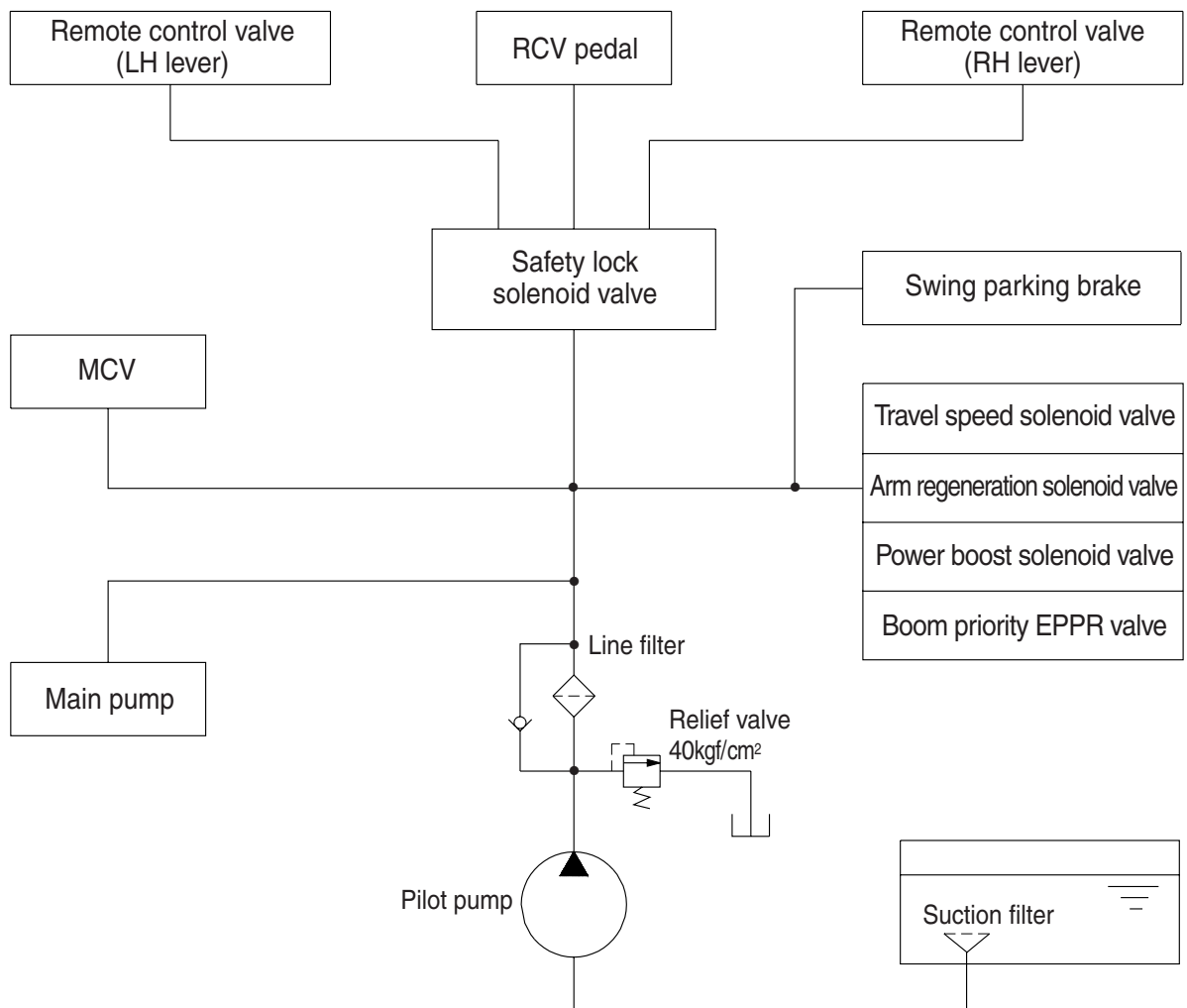


GROUP 3 PILOT CIRCUIT



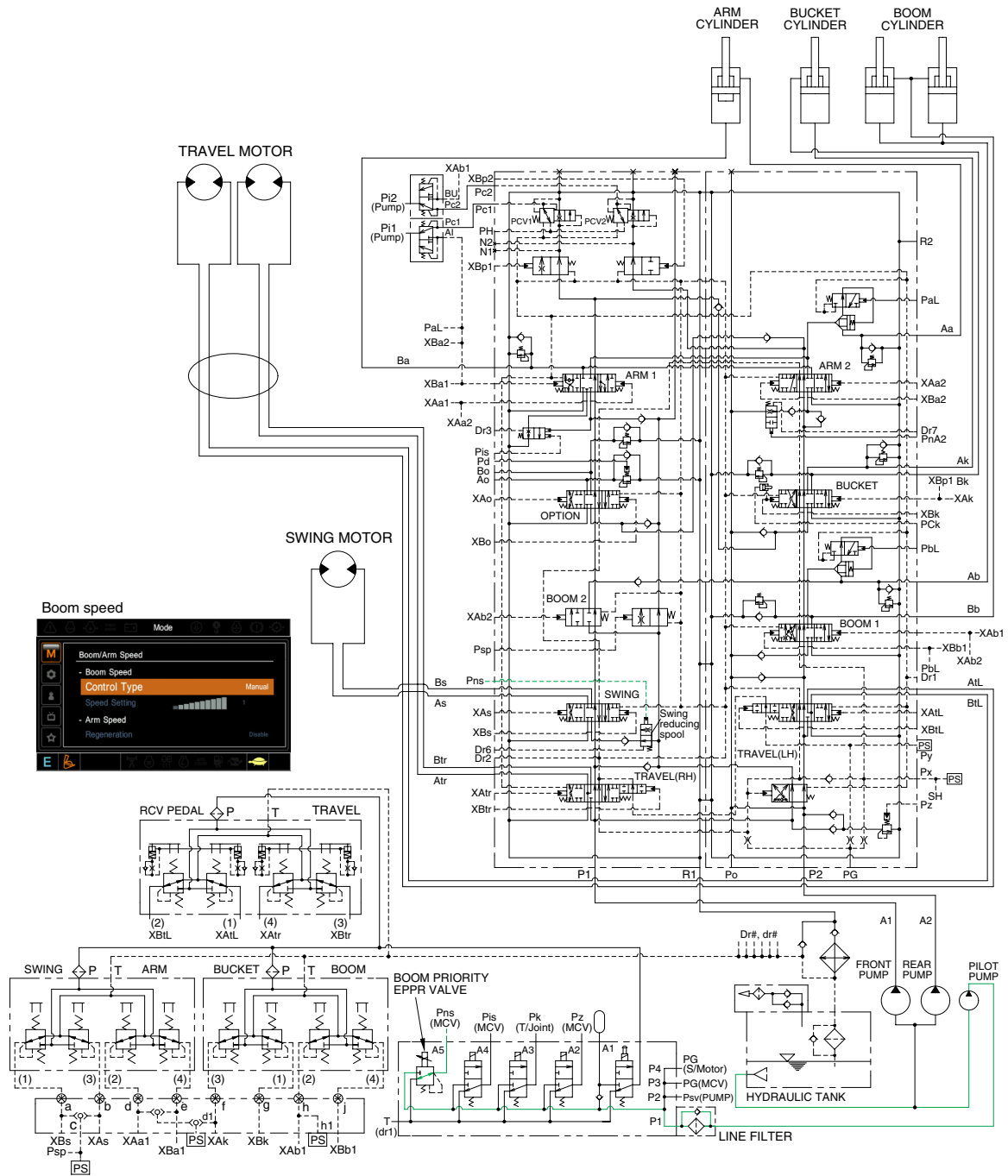
(210-7) 3-05

The pilot circuit consists of suction circuit, delivery circuit and return circuit.

The pilot pump is provided with relief valve, receives the oil from the hydraulic tank through the suction filter.

The discharged oil from the pilot pump flows to the remote control valve through line filter, EPPR valve, solenoid valve assemblies, swing parking brake, main control valve and safety lock solenoid valve.

3. BOOM PRIORITY SYSTEM



210N93HC04

When carrying out the combined operation of swing and boom up, the boom up operating speed is lowered then normal operation.

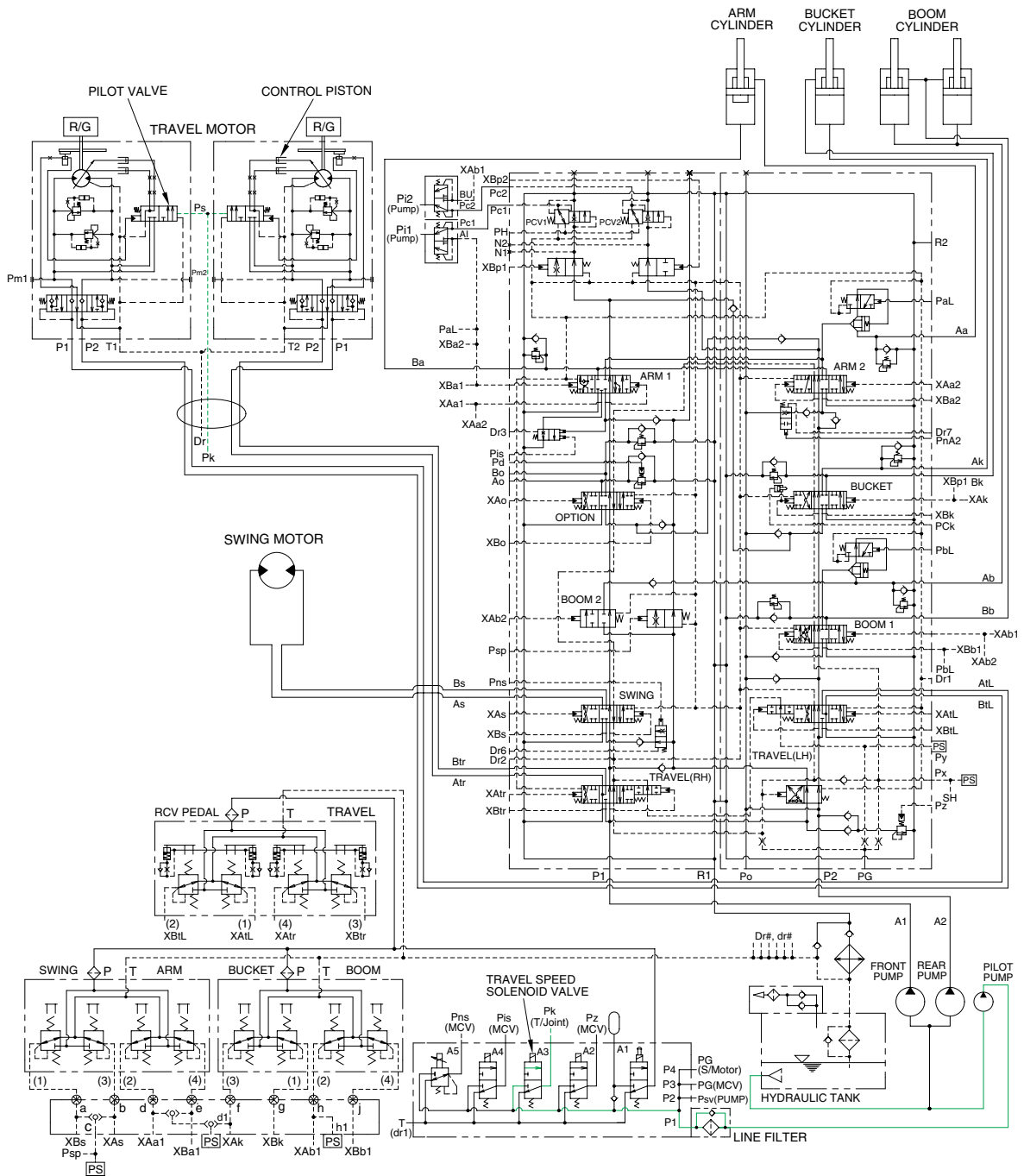
To increase working efficiency, swing speed reducing system is used.

The pilot oil from pilot pump flow into Pns port in main control valve through boom priority EPPR valve. Pns oil pressure moves swing reducing spool to lower position and oil flow rate to the swing motor decreased.

Then, the boom up speed is increased. This is called the boom priority system.

The boom up speed can be adjusted by the cluster. Refer to page 3-12 of the operator's manual.

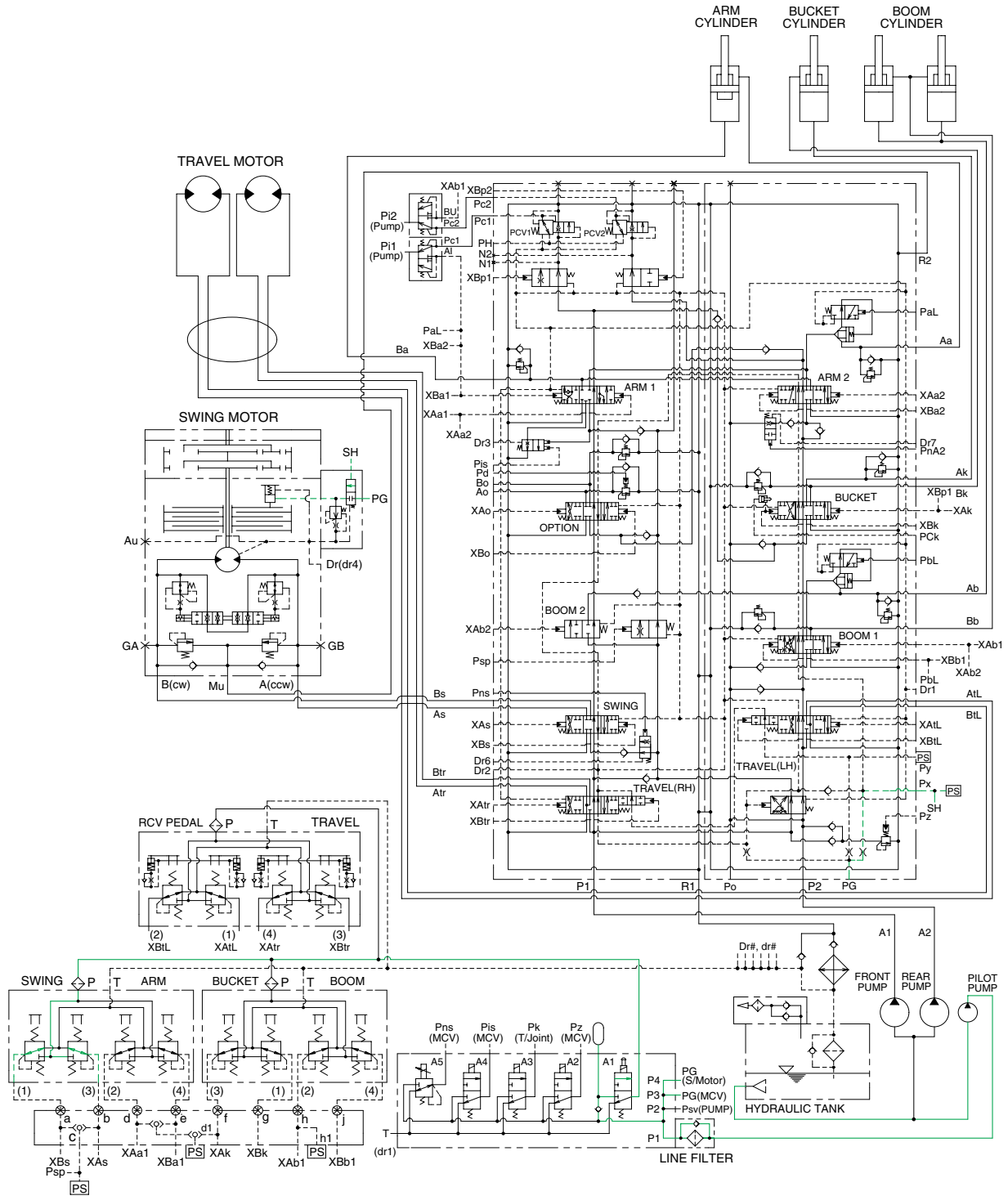
4. TRAVEL SPEED CONTROL SYSTEM



210N93HC05

When the travel speed switch is pushed, the travel speed solenoid valve is actuated and the discharged oil from the pilot pump flows to the **Ps** port of pilot valve in the travel motors. As a result, the control piston is pushed by the main oil flow, thus the displacement is minimized. When the travel speed switch is pushed once more, the travel speed solenoid valve is return to original position by the force of spring, the hydraulic oil of **Ps** port returns to the hydraulic tank. As a result, the control piston is returned by the main oil flow, thus the displacement is maximized.

7. SWING PARKING BRAKE RELEASE



210N93HC08

When one of the RCV lever (except travel lever) is tilted, the pilot oil flows into SH port through main control valve.

This pressure moves spool so, discharged oil from pilot valve flows to swing motor PG port.

This pressure is applied to swing motor disc, thus the brake is released.

When all of the RCV lever are set in the neutral position, oil in the swing motor disc cylinder is drained, thus the brake is applied.