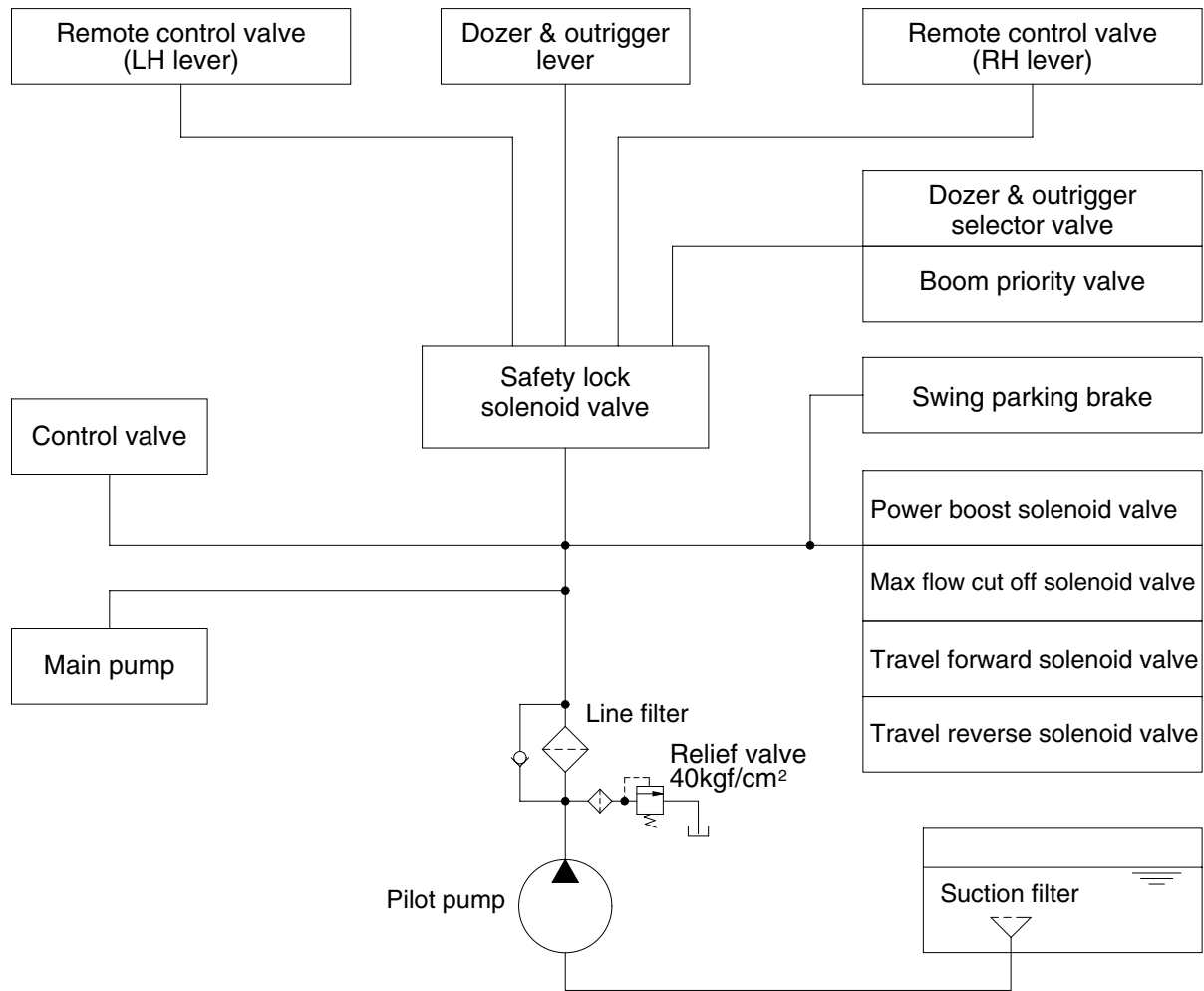


GROUP 3 PILOT CIRCUIT



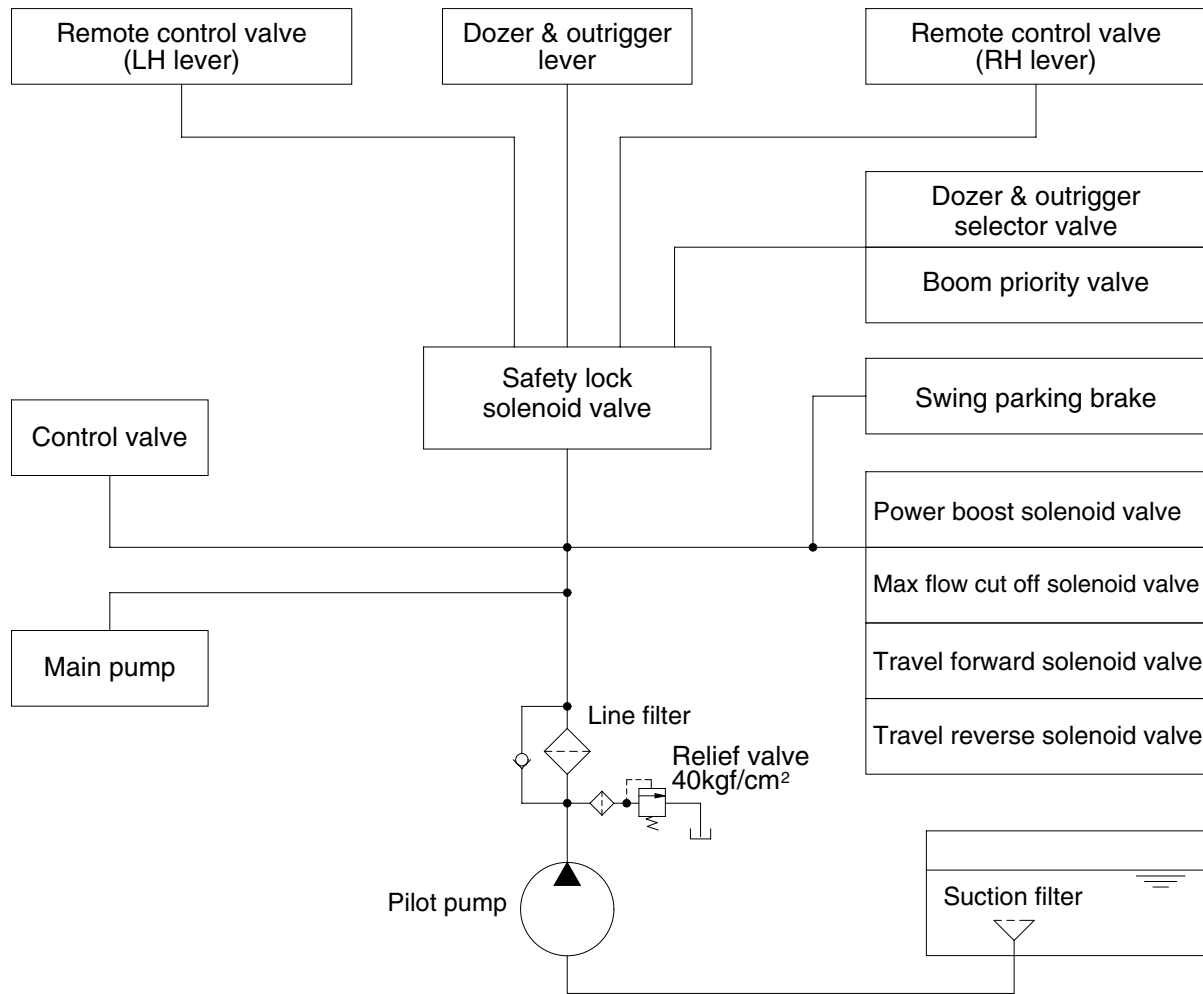
20W73CI03

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, EPPR valve, solenoid valve assemblies, swing parking brake, main control valve and safety lock solenoid valve through line filter.

GROUP 3 PILOT CIRCUIT



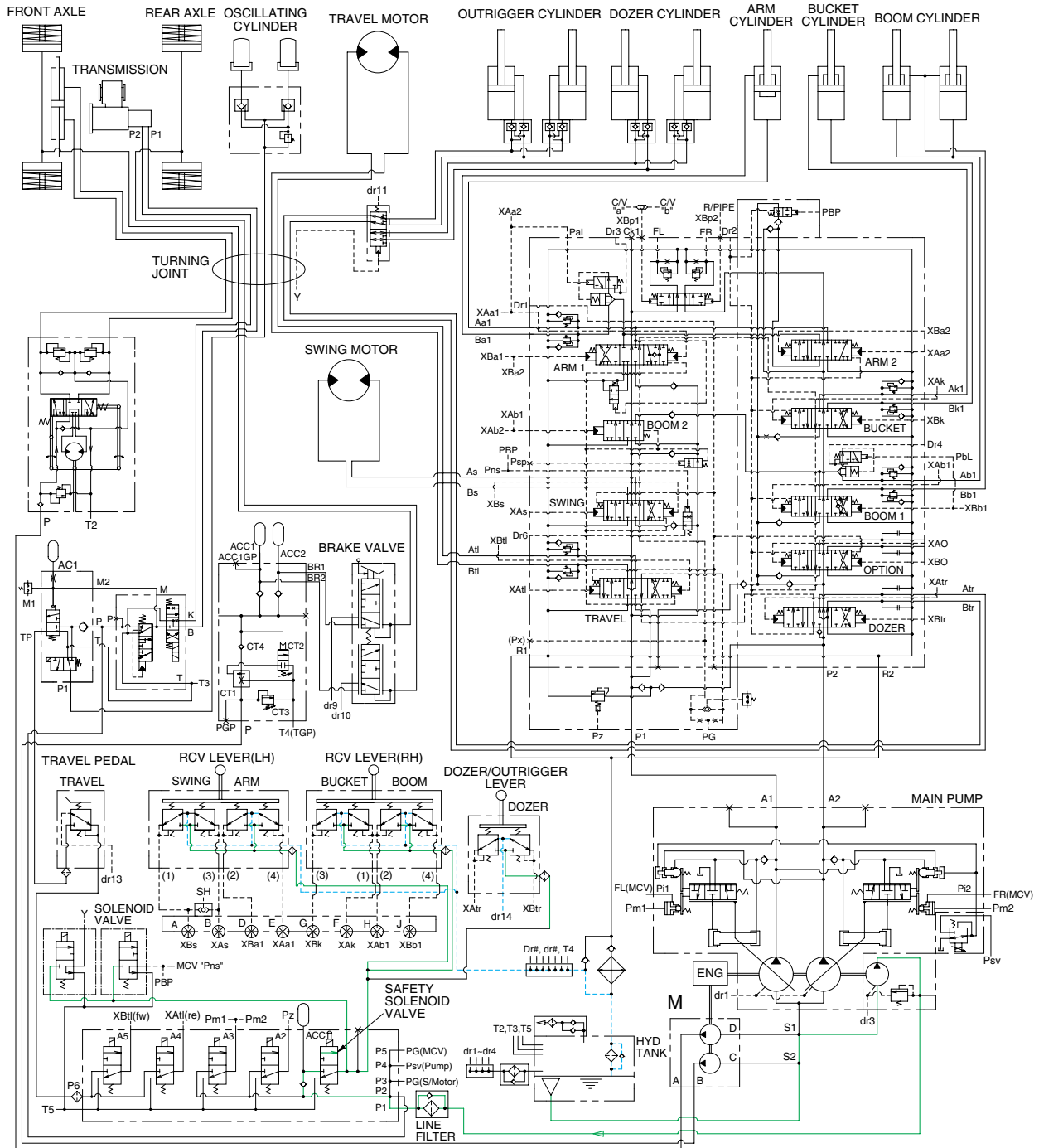
20W73CI03

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1. SUCTION, DELIVERY AND RETURN CIRCUIT



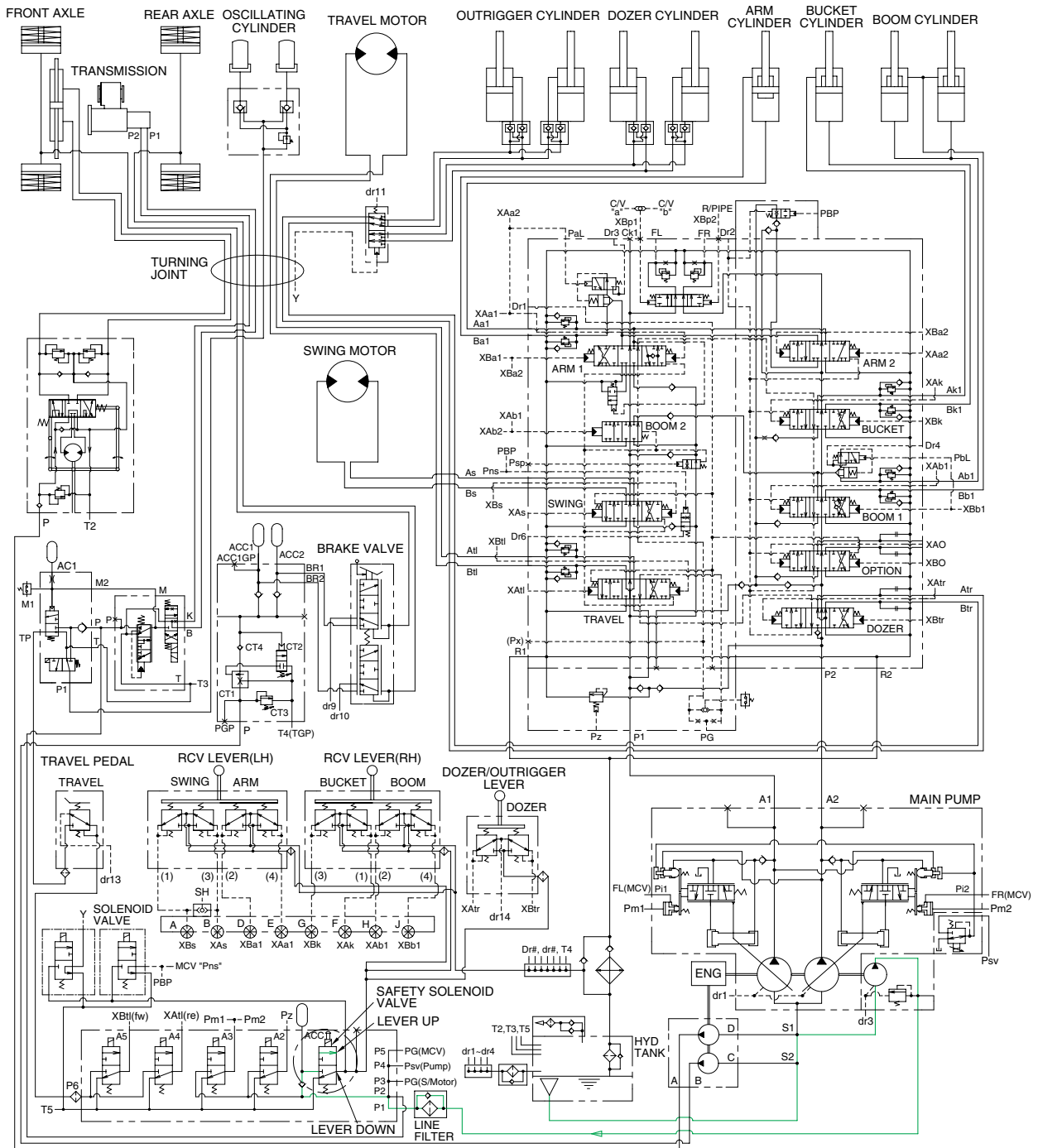
20W7A3HC02

The pilot pump receives oil from the hydraulic tank. The discharged oil from the pilot pump flows to the safety solenoid valve through the line filter. The oil is filtered by the line filter. The pilot relief valve is provided in the pilot pump for limiting the pilot circuit pressure.

The oil filtered by line filter flows remote control valve through safety solenoid valve.

The return oil from remote control valve is returned to the hydraulic tank.

2. SAFETY SOLENOID VALVE(SAFETY LEVER)

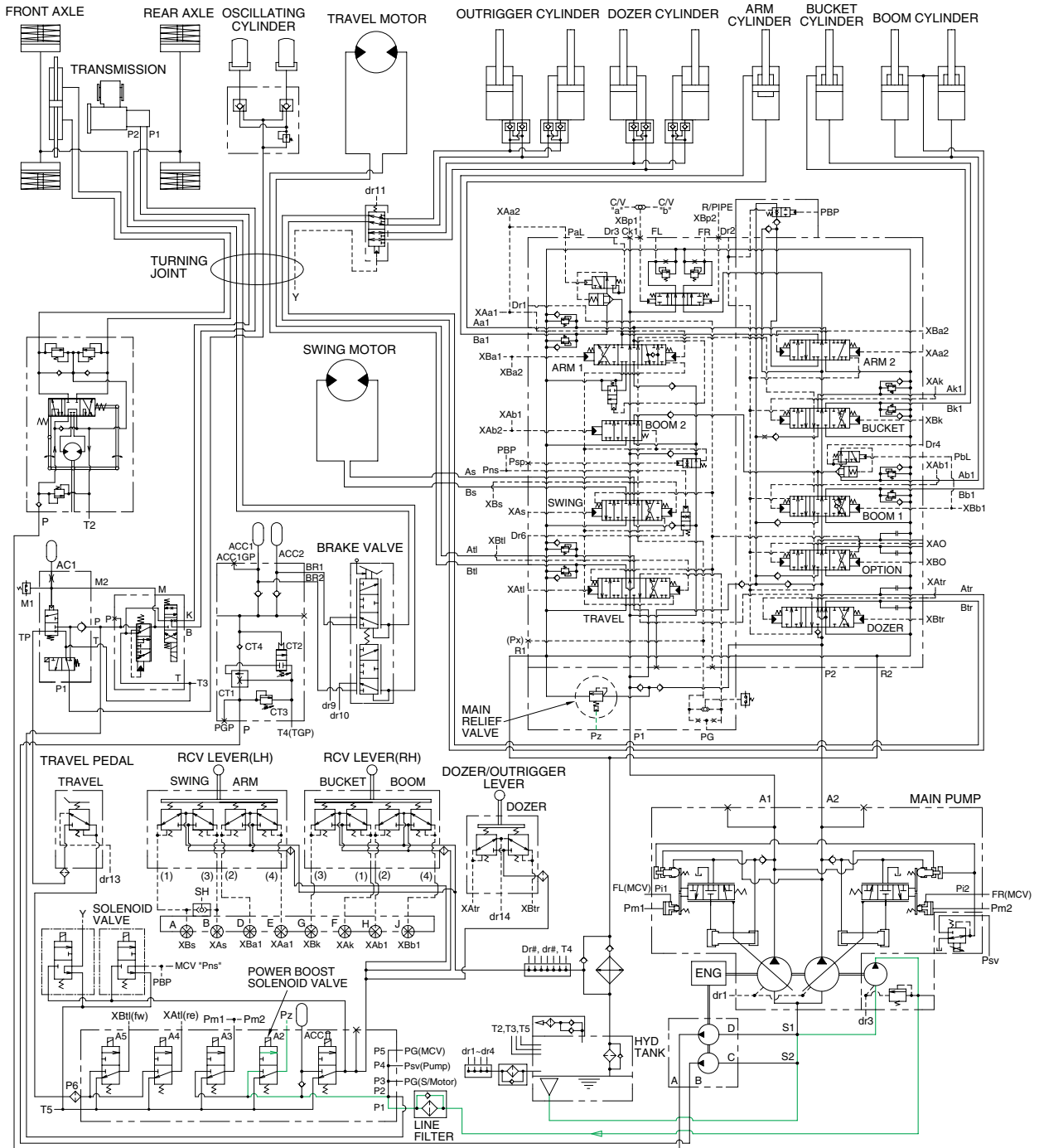


20W7A3HC03

When the lever of the safety solenoid valve is moved upward, oil flows into the remote control valve through solenoid valve and line filter.

When the lever of the safety solenoid valve moved downward, oil does not flows into the remote control valve, because of blocked port.

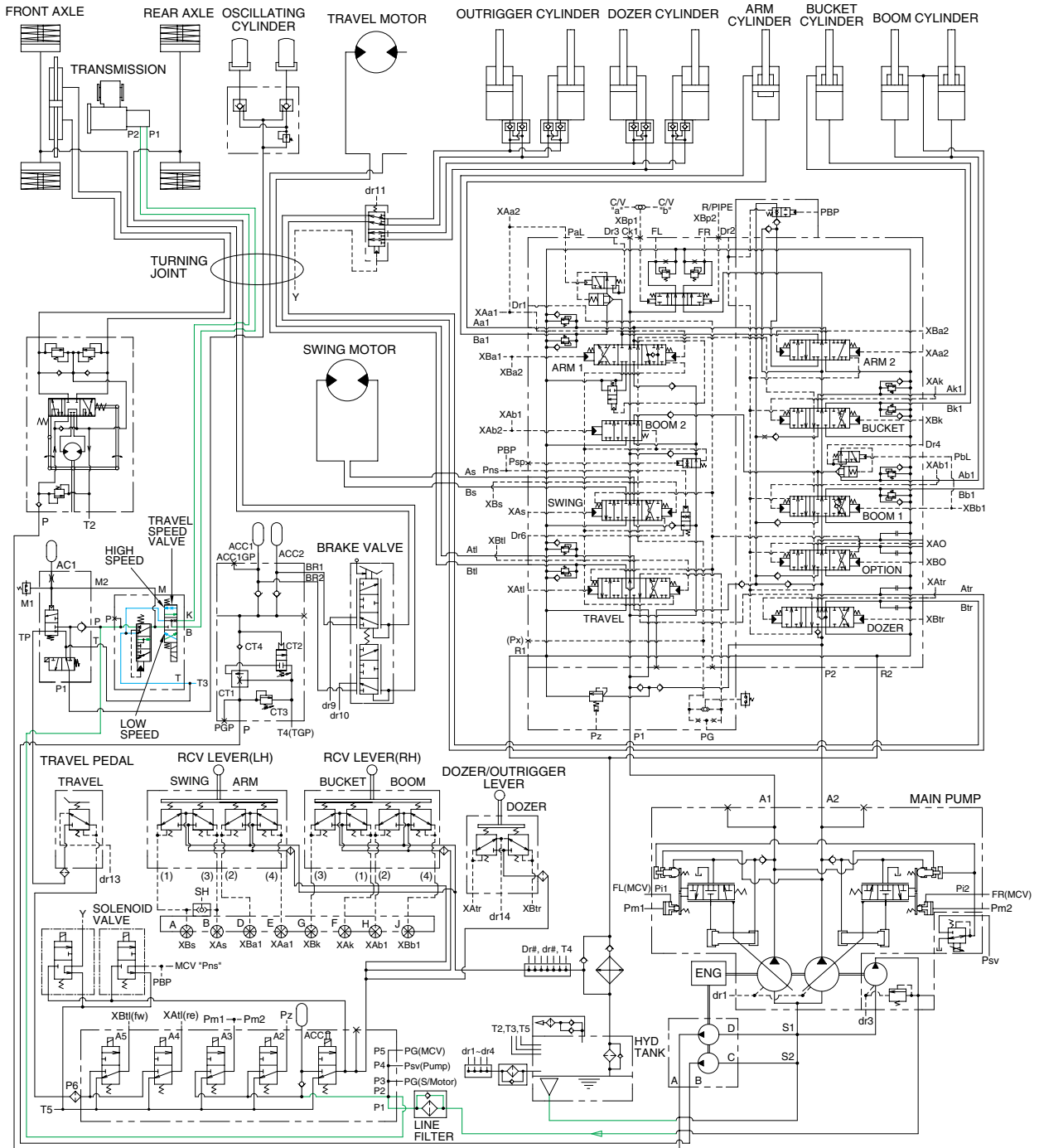
3. MAIN RELIEF PRESSURE CHANGE SYSTEM



20W7A3HC04

When the power boost switch on the left control lever is pushed ON, the power boost solenoid valve is actuated, the discharged oil from the pilot pump into **Pz** port of the main relief valve in main control valve ; Then the setting pressure of the main relief valve is raises from 330kgf/cm² to 360kgf/cm² for increasing the digging power. And even when press continuously, it is canceled after 8 seconds.

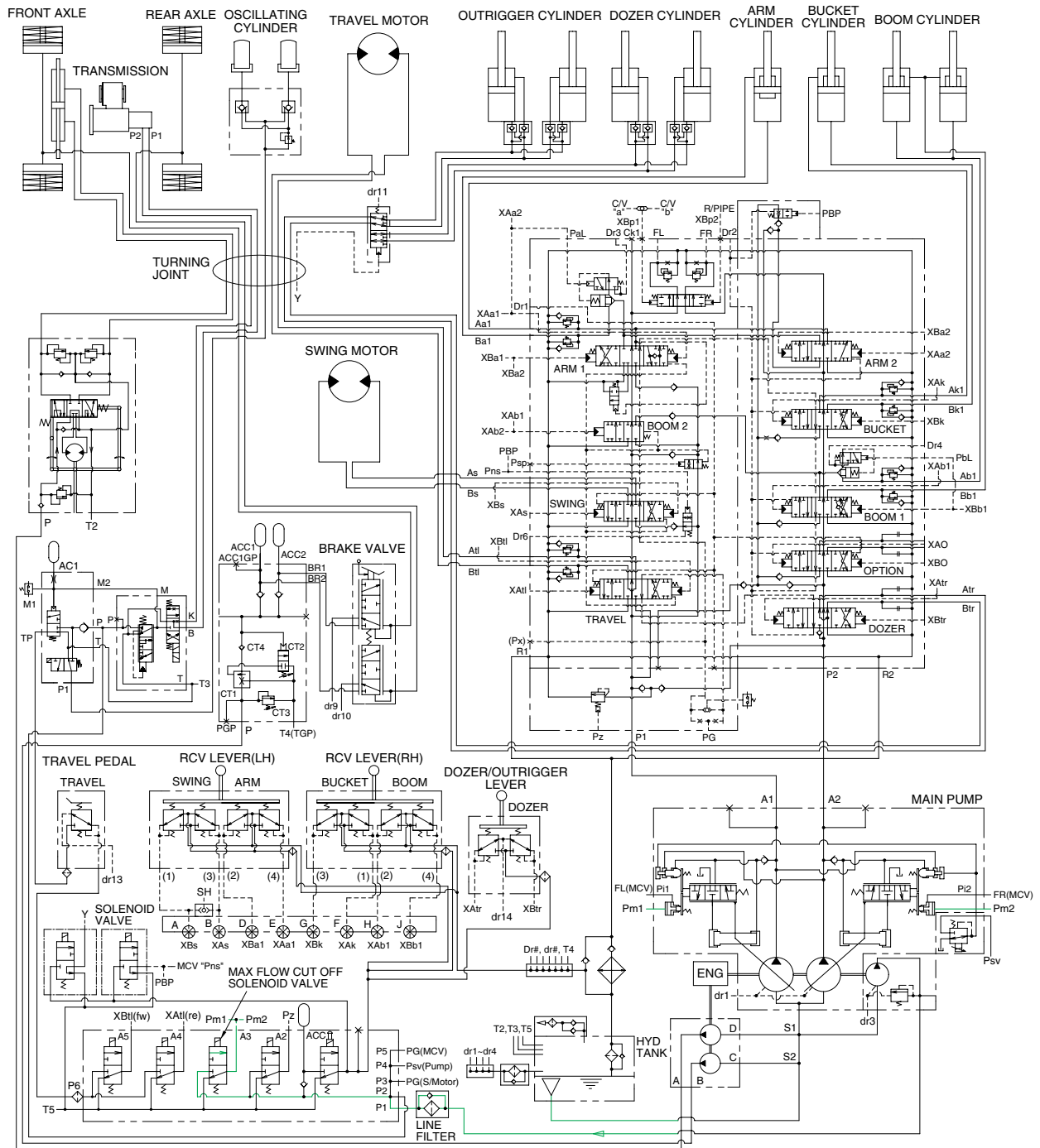
5. TRAVEL SPEED SELECTION SYSTEM



20W7A3HC06

When RH multifunction switch was placed in high or low position, the pressure oil from pilot pump flows through travel control valve to travel speed solenoid valve, thus the transmission is changed into high or low speed condition.

6. MAX FLOW CUT OFF SYSTEM

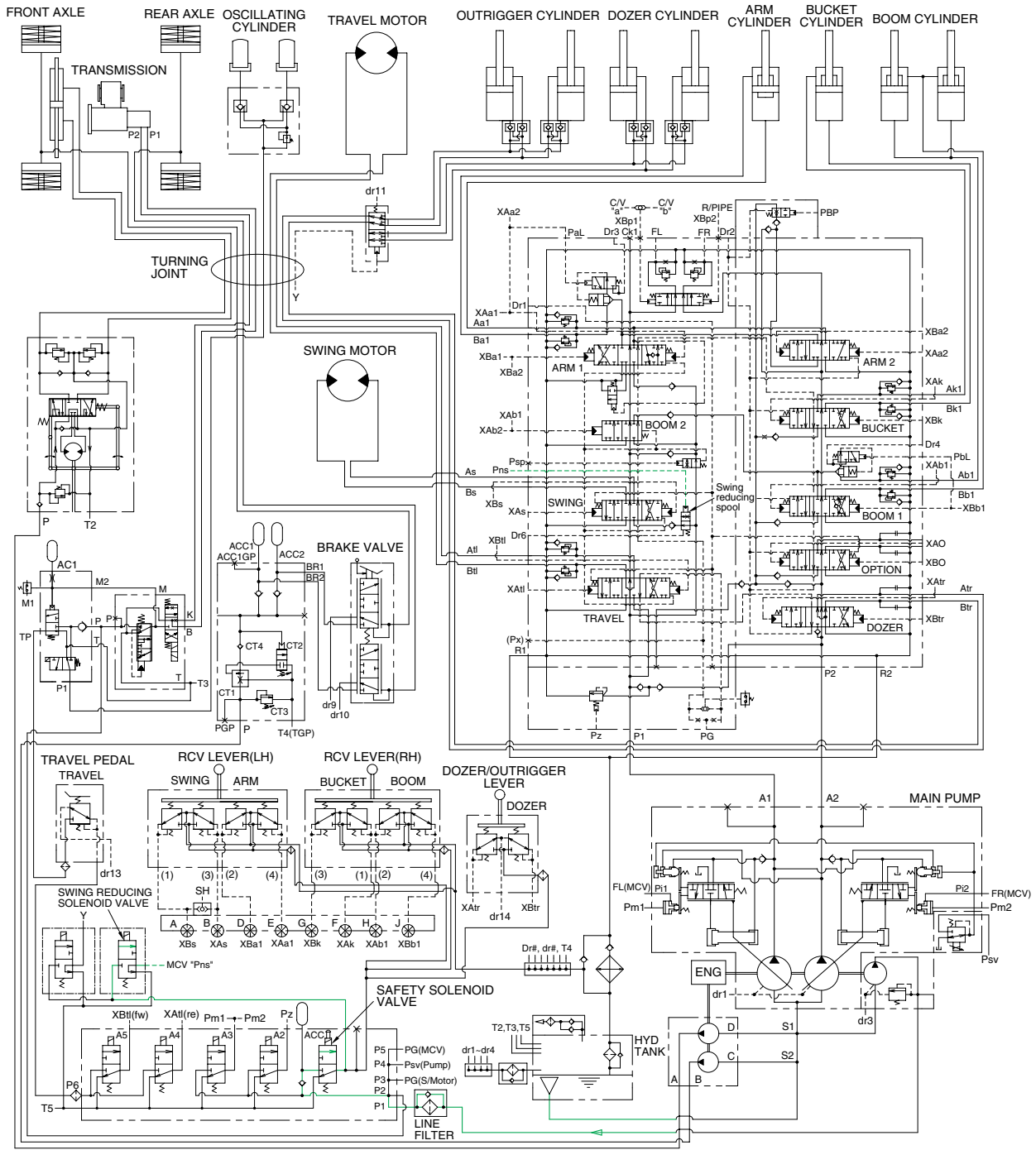


20W7A3HC07

When the breaker operation mode is selected on the cluster, max flow cut off solenoid valve actuates automatically.

Thus pilot pressure (**Pm1,2**) is sent to the regulator and pump discharge volume is decreased.

7. BOOM PRIORITY SYSTEM



20W7A3HC08

When carrying out the combined operation of swing and boom or arm, the boom or arm operating speed is lowered than normal operation.

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

When heavy duty working mode in work mode is on, pilot oil from pilot pump flow into **Pns** port in main control valve through solenoid valve. **Pns** oil pressure move swing reducing spool to lower position and oil flow rate to the swing motor decreased. Then, the boom or arm speed is increased.

This is called the boom priority system.