# SV208
# SV210
# SV212
# SV216
# Tier 3
## Vibratory Roller

# SERVICE MANUAL

**Part number 47688018**
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CASE CONSTRUCTION

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# Engine - Troubleshooting

| Problem | Possible Cause | Correction |
|---|---|---|
| **Engine does not start even though starter is cranking.** | Empty fuel tank | • Replenish fuel<br>• Bleed the fuel system. |
| | Fuel system leaks | • Inspect the connections for leaks.<br>• Eliminate leaks.<br>• Prime the fuel with the hand priming pump. |
| | Air in the fuel system | Bleed the fuel system. |
| | Clogged precleaner, fuel cleaner or distribution system. | • Clean the distribution system.<br>• Replace the filter elements. |
| | Precleaner, fuel cleaner or distribution system clogged with paraffi n deposits in the winter. | • Clean the system.<br>• Use winter-grade fuel. |
| | The starter turns slowly – poorly charged battery, oxidized terminals or loose clamps at the terminals. | • Inspect the state of the battery.<br>• Replenish electrolyte.<br>• Clean the contacts.<br>• Grease and tighten the clamps. |
| | Oil used too dense during winter season. | Use oil suitable for the actual ambient temperature. |
| | The engine is stopped after starting by the "engine shut-off" device.<br>The hydraulic oil level indicator lamp is on. | Replenish hydraulic oil up to the prescribed level. |
| | The engine is stopped after starting by the "engine shut-off" device.<br>The hydraulic oil level indicator lamp is off. | • Check the hydraulic oil level indicator lamp.<br>• Check voltage at the engine stop magnet Y5 (inspect the fuse F3, cables, relay K3, connectors). |
| | Faulty delivery valve at the injection pump. | Contact your authorized engine dealer. |
| **Engine does not start and starter does not crank.** | The machine electrical system is disconnected. | Turn on the battery master switch to activate the electrical system. |
| | Starting conditions are not met. | The tilting arm of the travel controller is lifted or the emergency brake button is depressed. |
| | The travel controller is not in the neutral position and the neutral position indicator lamp is off. | Move the travel controller to the neutral position. |
| | Faulty battery or connections. | • Test the battery voltage,<br>• Check the cables and connections. |
| | Starter | Inspect the starter connection and check whether the pinion shifts out. |
| | Switch box | Check the function and connection of the switch box (cables, function of the relay K4, terminal switches S13, S10, S11, terminals, etc.). |
| | Mechanical failure of the engine, the clutch or the hydrostatic system. | Verify whether the engine can turn over by turning the belt pulley at the crankshaft. |
| **Engine is overheating.** | Insufficient coolant | • Quickly stop the engine.<br>• Replenish coolant.<br>• Find the leak and repair it. |
| | Clogged radiator | Clean the radiator. |
| | Incorrect belt tension or broken belt. | • Adjust the tension.<br>• Replace the belt. |



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## Test spots – Option

For easy diagnostics of hydraulic loops, the measuring pins are terminated in the panel and equipped with quick-couplers for easy and drip-proof connection of measuring devices.

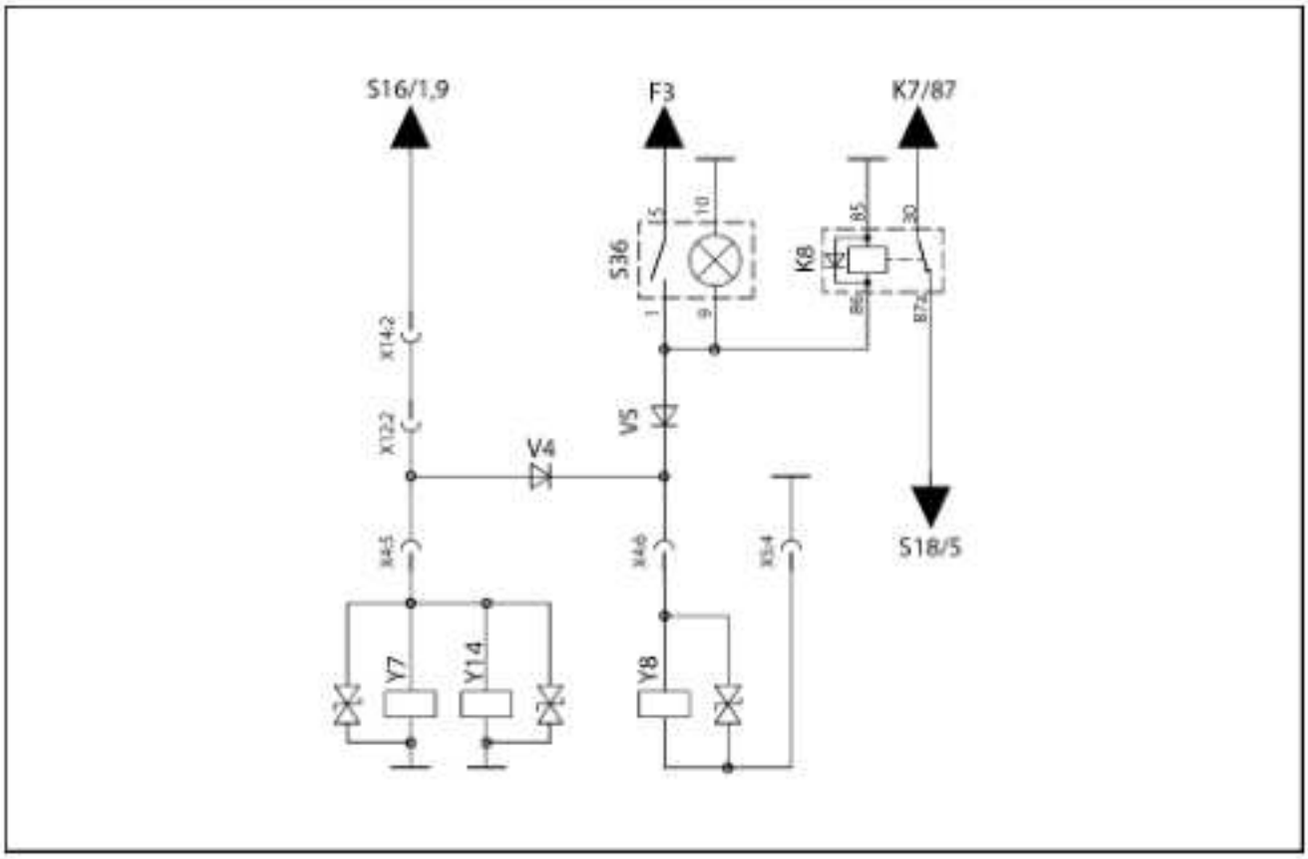
| Position | Designation | Maximum pressure |
|---|---|---|
| 1 | Pressure in the reverse-travel circuit | **35 MPa (5077 psi)*** |
| 2 | Pressure in the forward-travel circuit | **35 MPa (5077 psi)*** |
| 3 | Pressure in the circuit for vibration I | **35 MPa (5077 psi)** |
| 4 | Pressure in the circuit for vibration II | **35 MPa (5077 psi)** |
| 5 | Pressure in the steering circuit | **14 MPa (2031 psi)**** |
| 6 | Feed pressure | **2.4 MPa (348 psi)***** |

* The value will increase by supplementary pressure, i.e. by up to **3 MPa (435 psi)**
** Total pressure in the return steering line (supplementary pressure + flow losses)
*** The value at idling speed (it is higher at maximum speeds). Maximum: **3 MPa (435 psi)**.



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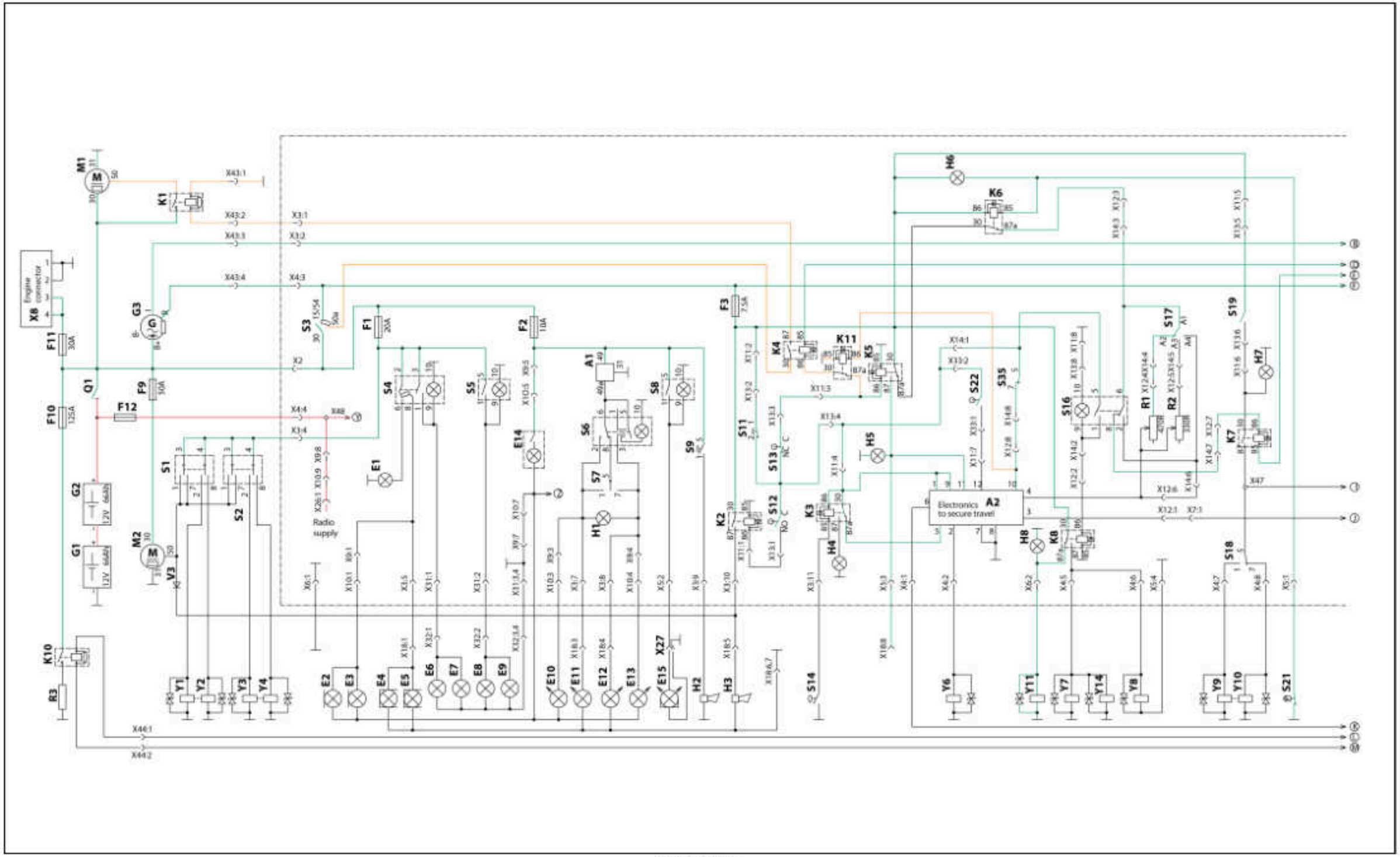
| Position | Designation | Position | Designation |
|---|---|---|---|
| R4 | Engine revolution control potentiometer | Y13 | Servo valve for travel pump |
| S1 | Cab-lifting push button | Y14 | Solenoid valve for fast travel – right-hand wheel |
| S2 | Bonnet lifting pushbutton | | |




**Wiring diagram - seat switch Tier III**



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