# Shop Manual

VEBM250100

# WA65-5
# WA70-5
# WA80-5

# WHEEL LOADER

| MODEL: | SERIAL NUMBER: |
|---|---|
| WA65-5 | H50051 AND UP |
| WA70-5 | H50051 AND UP |
| WA80-5 | H50051 AND UP |

- This shop manual may contain attachments and optional equipment that are not available in your area. Please consult your local KOMATSU distributor for those items you may require. Materials and specifications are subject to change without notice.

- The Wheel Loaders WA65-5, WA70-5 and WA80-5 are equipped with the engine 4D95LE-3
  For details of this engine see Engine Manual, P/N CU3666417-00.

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# Weight table WA70-5

**This weight table is a guide for use when transporting or handling components.**

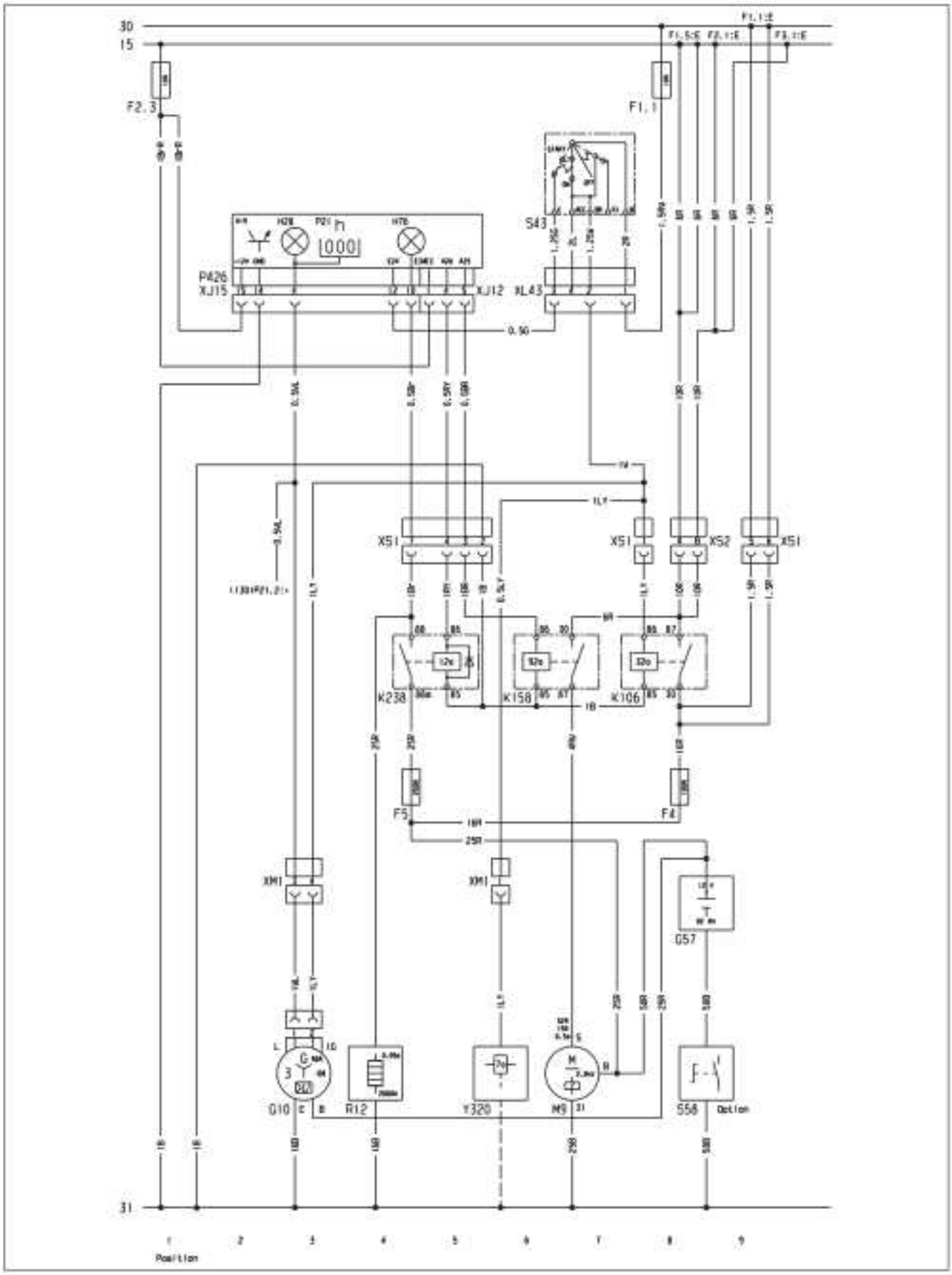
| Component | Weight [kg] |
|---|---|
| Engine | 241 |
| Radiator | 30 |
| Drive shaft | 11 |
| Front axle | 239 |
| Rear axle with transfer box | 300 |
| Wheel | |
| Variable-displacement motor | 34 |
| Variable-displacement pump | 31 |
| Steering cylinder | 18 |
| Boom cylinder | 35 |

| Component | Weight [kg] |
|---|---|
| Bucket cylinder | 35 |
| Engine hood | 32 |
| Front frame | 388 |
| Rear frame | 491 |
| Quick-coupler | 102 |
| Bellcrank | 59 |
| Boom (including bushing) | 236 |
| Counterweight | 615 |
| Cabine | |
| Operator seat | 32 |



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# Engine stop / start / preheating circuit






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★ For more details of testing and adjusting the engine, see Engine Manual Part-No. YMHINSHI-H8013.

• When using the standard value table to make judgement for testing, adjusting, and troubleshooting the following precautions are necessary.

1. The standard values in the table are the values for a new machine and are given as reference values for the time when the machine is shipped from the factory. These values should be used as a guide when estimating wear and tear after the machine has been operated, and when carrying out repairs.

2. The permissible values given in the table are values estimated based on the results of various tests carried out on machines shipped from the factory. They should be used together with other information such as repair conditions or the operating history of the machine when judging the condition of the machine.

3. These standard values do not form a basis for judging claims.

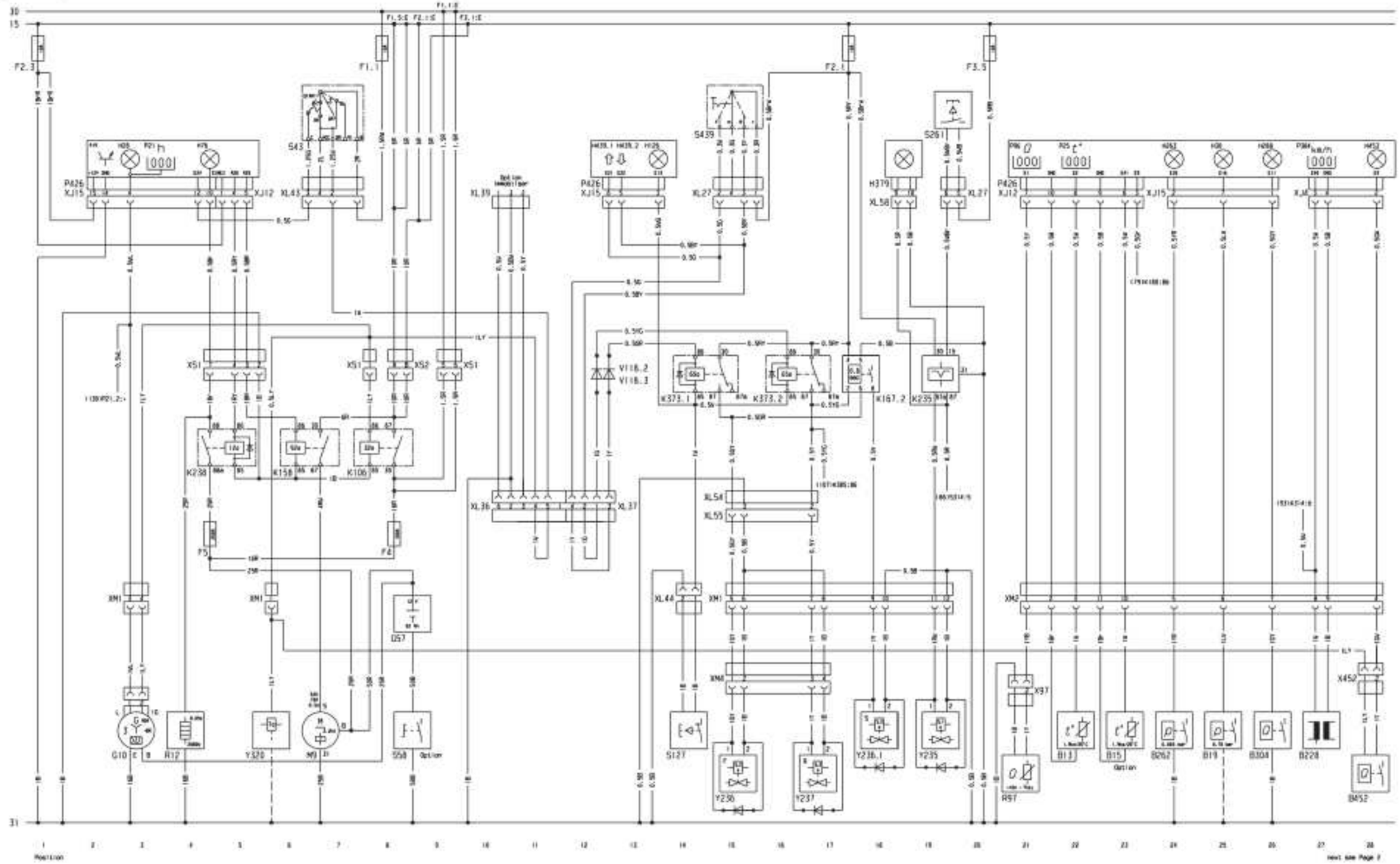
**⚠**

- **When carrying out testing, adjusting, or troubleshooting, park the machine on level ground and use the safety pins and blocks to prevent the machine from moving.**
- **When carrying out work together with other workers, always use signals and do not let unauthorized people near the machine.**
- **When checking the water level, always wait for the water to cool down. If the radiator cap is removed while the water is still hot, the water will spurt out and cause burns.**
- **Be careful not to get caught in the fan, fan belt, or other rotating parts.**



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# Wiring diagram1/5



| No. | Componente | Pos. | No. | Componente | Pos. | No. | Componente | Pos. | No. | Componente | Pos. | No. | Componente | Pos. | No. | Componente | Pos. |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| S43 | Key Switch | 6 | P21 | Service Meter | 3 | K106 | Relay Battery | 7 | XL... | Connector Floor Frame Harness | - | H28 | Control Lamp Alternator | 3 | B13 | Sensor Cooling Watertemperat. | 22 |
| S58 | Battery Main Switch | 8 | P25 | Gauge Cooling Watertemperature | 22 | K158 | Relay Startermotor | 6 | XM... | Connector Engine Harness | - | H30 | Control Lamp Engine Oil Press. | 25 | B15 | Sensor Hydraulic Oil Temperat. | 23 |
| S127 | Switch Parking Brake | 14 | P96 | Gauge Fuel Level | 21 | K167.2 | Relay Timer 0.8 sec. | 17 | XF... | Connector Front Frame Harness | - | H76 | Control Lamp Preheater Engine | 4 | B19 | Sensor Engine Oil Pressure | 25 |
| | | | P384 | Gauge Speed | 27 | K180 | Relay Blower Engine Cooler | 23 | XJ... | Connector Main Monitor | - | H126 | Control Lamp Parking Brake | 14 | B228 | Sensor Speed | 27 |
| S261 | Switch Driving Range | 19 | P426 | Main Monitor | 2 | K235 | Relay Driving Range | 19 | XS... | Connector Fuse | - | H263 | Control Lamp Air Cleaner | 24 | B262 | Sensor Air Cleaner | 24 |
| S439 | Switch Drive Direction | 14 | | | | K238 | Relay Air Preheater Engine | 4 | F... | Fuse | - | H288 | Control Lamp Brake Oil Level | 26 | B304 | Sensor Brake Oil Level | 26 |
| | | | Y236.1 | Magnet Valve Synchron | 18 | K314 | Switch Frequency ALS | 27 | SS... | Joint Of Wires | - | H379 | Control Lamp Driving Range | 18 | Y235 | Magnet Valve Driving Range | 19 |
| G10 | Alternator | 3 | | | | K373.1 | Relay Parking Brake Forward | 14 | - | - | - | H439.1 | Control Lamp Forward | 13 | Y236 | Magnet Valve Forward | 15 |
| G57 | Battery | 8 | R12 | Air Preheater Engine | 4 | K373.2 | Relay Parking Brake Reverse | 16 | - | - | - | H439.2 | Control Lamp Reverse | 13 | Y237 | Magnet Valve Reverse | 17 |
| M9 | Starter Motor | 6 | R97 | Sensor Fuel Level | 21 | K385 | Relay Backup Alarm | 17 | B452 | Sensor Water-In-Fuel | 28 | H453 | Control Lamp Water-In-Fuel | 28 | Y320 | Magnet Engine Stop | 5 |



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