

FAILURE CODE [DKA1KA]

| Action level | Failure code | Failure | Bucket Angle Sensor Open Circuit Or Ground Fault (Work equipment controller system) |
|--------------------------|--|---------|--|
| L01 | DKA1KA | | |
| Detail of fail- ure | Due to open circuit or ground fault in bucket angle sensor system, bucket angle sensor signal volt- age is lower than the normal range. (Bucket angle sensor signal voltage0.3 V and below) | | |
| Action of controller | <ul style="list-style-type: none">• Judges that bell crank angle is small.• Disables bucket positioner function.• Disables semi-auto digging function.• Disables bucket detent.• If cause of failure disappears, machine becomes normal by itself. | | |
| Phenomenon on machine | <ul style="list-style-type: none">• Bucket positioner function is defective (bucket does not stop).• Semi-auto digging system malfunctions (does not work).• Komatsu SmartLoader Logic function is defective. (Since engine control is not optimized, fuel consumption gets worse.) | | |
| Related information | <ul style="list-style-type: none">• Input voltage from bucket angle sensor can be checked with monitoring function. (Code: 55601)• Angle of bucket angle sensor can be checked with monitoring function. (Code: 55600)• After completion of repair, check if the failure code is cleared by the following procedure. Procedure: Turn the starting switch to ON position. | | |

| No. | Cause | Procedure, measuring location, criteria and remarks | | |
|-----|--|--|----------------------------------|--------------|
| 1 | Defective 5 V sensor power supply system | If failure code [DB95KX] is also displayed, perform troubleshooting for it first. | | |
| | | <ol style="list-style-type: none"> Turn the starting switch to OFF position. Disconnect connector F32, and connect T-adaptor to female side. Turn the starting switch to ON position. <p>REMARK</p> <p>If power supply voltage is abnormal, proceed to check on cause 3 and after.</p> | | |
| | | Voltage | Between F32 (female) (C) and (A) | 4.8 to 5.2 V |

| No. | Cause | Procedure, measuring location, criteria and remarks | | | |
|-----|--|--|--|------------------------------|--------------|
| 2 | Defective bucket angle sensor (internal open circuit or short circuit) | 1. Turn the starting switch to OFF position. 2. Disconnect connector F32, and connect T-adaptor to male side. | | | |
| | | Resistance | Between F32 (male) (A) and (C) | 4 to 6 kΩ | |
| | | | Between F32 (male) (A) and ground | Min. 1 MΩ | |
| | | | Between F32 (male) (B) and ground | Min. 1 MΩ | |
| | | | Between F32 (male) (C) and ground | Min. 1 MΩ | |
| | | REMARK <ul style="list-style-type: none">Voltage is measured with wiring harness connected. Accordingly, if the voltage is abnormal, the wiring harness may be defective.Check that the wiring harness is not defective, and then judge whether the sensor is defective or not. 1. Turn the starting switch to OFF position. 2. Insert T-adaptor into connector F32. 3. Turn the starting switch to ON position. 4. Move bucket lever to perform troubleshooting. | | | |
| | | Voltage | Between F32 (B) and (A) | Always | 2.5 to 4.7 V |
| | | | | Full TILT | 4.2 to 4.7 V |
| | | | | Full DUMP | 2.5 to 3.0 V |
| 3 | Open circuit in wiring harness (wire breakage or defective contact) | 1. Turn the starting switch to OFF position. 2. Disconnect connectors L71, L72, and F32, and connect T-adapters to each female side. | | | |
| | | Resistance | Between F32 (female) (A) and L71 (female) (4) | Max. 1 Ω | |
| | | | Between F32 (female) (B) and L72 (female) (36) | Max. 1 Ω | |
| | | | Between F32 (female) (C) and L71 (female) (22) | Max. 1 Ω | |
| 4 | Ground fault in wiring harness (contact with ground circuit) | 1. Turn the starting switch to OFF position. 2. Disconnect connectors L71, L72, and F32, and connect T-adaptor to any female side. | | | |
| | | Resistance | Between F32 (female) (B) and ground, or between L72 (female) (36) and ground | Min. 1 MΩ | |
| 5 | Defective work equipment controller | If no failure is found by above checks, work equipment controller is defective. <ul style="list-style-type: none">Reference 1. Turn the starting switch to OFF position. 2. Insert T-adaptor into connector L72. 3. Set work equipment lock switch to LOCK position. 4. Turn the starting switch to ON position. 5. Operate bucket lever to perform troubleshooting. | | | |
| | | Voltage | Between L72 (36) and ground | Continuous | 2.5 to 4.7 V |
| | | | | TILT operation to stroke end | 4.2 to 4.7 V |
| | | | | DUMP operation to stroke end | 2.5 to 3.0 V |