

PARTS & SERVICE NEWS

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Page 1 of 2

SUBJECT: PAYLOAD METER III REPLACEMENT PRESSURE SENSORS

PURPOSE: Introduce to the field a kit for replacing payload meter pressure sensors.

APPLICATION: Komatsu Electric Drive Dump Trucks:
 730E: 32530-32845, A30079 thru A30245;
 830E: 31320-32825, A30544 thru A30700;
 930E: 32604-32816, A30019, A30026-A30120;
 930E-2: A30012, A30098, A30100, A30121-A30293, A30295-A30303;
 930E-3: A30294, A30304 & A30305;
& all other units equipped with Payload Meter III

FAILURE CODE: DH00KB

DESCRIPTION: Payload Meter III Sensor Kit (AK4998)

Payload Meter III systems use four suspension pressure sensors per truck to help calculate payload. Payload meter systems were originally fitted with pressure sensor (PC0328). These pressure sensors had a high failure rate due to internal short circuiting caused by twisting or kinking of the pressure sensor cable. Because of the sensitivity to twisting and the subsequent failures, pressure sensor (PC0328) has been replaced by pressure sensor (PC1578). The new pressure sensor is resistant to internal shorts such as those previously mentioned, and will provide a longer, more reliable service life.

Payload Meter III Sensor Kit (AK4998) contains the necessary parts for replacing a pressure sensor. Each kit contains only enough parts to replace one sensor. Four kits will be required per truck to exchange all of the suspension pressure sensors. Refer to Table 1 for a complete listing of the kit contents. Instructions for replacing the pressure sensors are outlined on the following page.

NOTE: The new vinyl clamps and cord grips have been included in the kit to accommodate the change in the diameter of the pressure sensor cable. These parts are necessary to properly route, secure, and grip the pressure sensor cables.

Part Number	Description	Quantity
PB2125	Terminal Ring	2
PC1578	Pressure Sensor	1
VY3109	Vinyl Clamp	7
VZ3046	Cord Grip	2

NOTE: Pressure sensor (PC1578) is not available separately. Kit (AK4998) must be ordered for each pressure sensor to be replaced.

Replacement Procedure

NOTE: The new pressure sensor (PC1578) is supplied with an excess length of cable. The excess cable allows the sensor to be routed to the corresponding terminal box location. Refer to Table 2 for required lengths of pressure sensor cables.

TRUCK MODEL	SUSPENSION LOCATION			
	LEFT FRONT	RIGHT FRONT	LEFT REAR	RIGHT REAR
730E	790 mm (31.1 in.)	480 mm (18.9 in.)	2820 mm (111.0 in.)	2050 mm (120.1 in.)
830E	790 mm (31.1 in.)	660 mm (26.0 in.)	2820 mm (111.0 in.)	2050 mm (120.1 in.)
930E	1350 mm (53.2 in.)	1030 mm (40.6 in.)	2820 mm (111.0 in.)	2360 mm (92.9 in.)

1. Remove the old pressure sensor and clamping. Note the routing and clamping locations of the sensor cable for installation purposes.

Unscrew the pressure sensor from the schrader valve on the suspension cylinder. DO NOT remove the schrader valve from the suspension cylinder. Refer to the appropriate shop manual for instructions for working around suspension cylinders.



All Hydrair® II suspensions are charged with compressed nitrogen gas with sufficient pressure to cause injury and/or damage if improperly handled. Follow all safety instructions, cautions, and warnings provided in the shop manual to prevent any accidents during maintenance.

2. Install the new pressure sensor in the schrader valve. Tighten the sensor to **34 Nm (25.4 ft.lbs.)**.
3. Install a cord grip on the sensor side of the cable.
4. Determine the routing path of the new pressure sensor/cable.
5. Secure the cable with the vinyl clamps supplied in the kit.
6. Strip back the cable jacket approximately 75 mm (3 in.) after cutting the cable to the proper length. Slide the remaining cord grip onto the cable.
7. Strip each individual insulation back 4 - 5 mm (0.16 - 0.20 in.).
8. Crimp the two ring terminals (PB2125) onto the individual wires.
9. Label the red wire (39F). Label the white wire accordingly:

Right Rear Suspension - 39FA
 Left Rear Suspension - 39FB
 Right Front Suspension - 39FC
 Left Front Suspension - 39FD

10. Install the wires onto the proper terminals in the junction box. Adjust and attach the cord grip.
11. Repeat Steps 1-10 for the remaining sensors.