SERVICE MANUAL

PS760, PS764, PS766

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This manual contains original instructions, verified by the manufacturer (or their authorized representative).

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Foreword

The Operator's Manual

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You and others can be killed or seriously injured if you operate or maintain the machine without first studying the Operator's Manual. You must understand and follow the instructions in the Operator's Manual. If you do not understand anything, ask your employer or JCB dealer to explain it.

Do not operate the machine without an Operator's Manual, or if there is anything on the machine you do not understand.

Treat the Operator's Manual as part of the machine. Keep it clean and in good condition. Replace the Operator's Manual immediately if it is lost, damaged or becomes unreadable.

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Fault-Finding

(For: PS760, PS764, PS766)

Fault		
Machine drives but lacks power in all gears. Gearbox oil may also be overheating.	Table 11.	Page 27-10
Machine does not drive in any gear.	Table 12.	Page 27-11
Some gears fail to engage or lack power.	Table 13.	Page 27-11
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Consequential Faults (Gearbox faults caused typically by water contamination and other factors related to the gearbox oil.)- Clutch failure due to friction lining separation.	Table 20.	Page 27-14
Consequential Faults (Gearbox faults caused typically by water contamination and other factors related to the gearbox oil.)- Badly worn or noisy bearings.	Table 21.	Page 27-14
Machine does not achieve maximum speed when travelling on the highway (Lock-up torque converter variants only).	Table 22.	Page 27-15
Gear shifts fail to function normally or shifts occur at the incorrect road speed.	Table 23.	Page 27-15

Table 11. Machine drives but lacks power in all gears. Gearbox oil may also be overheating.

Cause	Remedy
Gearbox oil level low.	Check for leaks and top up oil level as required.
Gearbox oil contaminated or wrong grade.	Investigate the reason for the contamination and rectify as required. Drain the oil and flush the gearbox. Refer to driveline- semi automatic gearbox, refer to (PIL 27-06).
Suction strainer restricted or blocked.	Remove the suction strainer and clean or install new as applicable. Refer to driveline- semi-automatic gearbox, refer to (PIL 27-06).
Pressure maintenance valve defective.	Carry out oil pressure and flow tests. Refer to driveline- semi-automatic gearbox, refer to (PIL 27-06).
	Remove the pressure maintenance valve and inspect for signs of damage or excessive wear. Clean or install new as applicable.
Torque converter relief valve defective.	Carry out oil pressure and flow tests. Refer to driveline- Torque converter, refer to (PIL 27-14).
	Remove the torque converter relief valve and inspect for signs of damage or excessive wear. Clean or install new as applicable.
Oil cooler lines restricted or blocked. Internal blockage within the oil cooler matrix due to contamination.	Carry out oil pressure and flow tests. Refer to driveline- semi-automatic gearbox, refer to (PIL 27-06).
	Clear the restriction. Inspect the hose routing and install new the hoses or oil cooler matrix as applicable.

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Note: Connect the USB cable directly to the laptop computer. Do not connect the cable via a USB hub.

Note: Older DLA and laptop computers may not be compatible with USB ports. Use the serial PC cable to connect the DLA to the laptop serial port.

1. Make sure the machine ignition system is OFF.
2. To use the Servicemaster diagnostic tool, connect the laptop computer to the machine.

   Special Tool: Data Link Adaptor (DLA) Kit (Qty.: 1)
   Special Tool: Machine Cable (Qty.: 1)
3. Connect the USB PC Cable to the DLA and a free port on the laptop computer.
4. Connect the Machine Cable to the DLA. The Machine Cable has a 15-way D-type connector on one end and a 9-way CAN connector on the other. Plug the 15-way connector into the DLA and tighten the thumb screws.

Figure 112.



A USB PC Cable
B Serial PC cable
C Centre pin location tab
D Locking ring

5. Connect the 9-way CAN connector into the machines Diagnostics Connector as follows:

   5.1. Position the CAN connector to align the centre pin location tab with the diagnostics connector.

   5.2. Couple the connectors. Turn the locking ring clockwise to secure the connectors.

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