SERVICE MANUAL

EXCAVATOR

JZ140 [T4i], JZ141 [T4F]

EN - 9813/6300
ISSUE 2 - 05/2017

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

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Foreword

The Operator's Manual

⚠

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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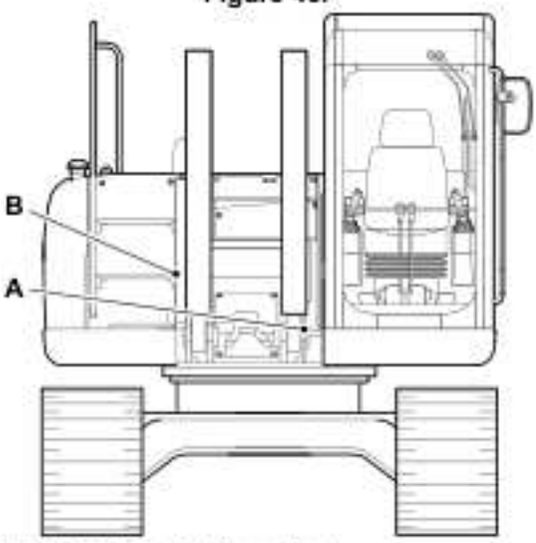
03 - Machine

Introduction

Your machine has an identification plate. The PIN (Product Identification Number), weight, engine power, year of manufacture and serial number of the machine are shown on the identification plate.

The machine serial number is also inscribed at the baseplate of the rear frame.

Figure 46.



A Identification plate (location)
B Serial number (inscribed)

The machine model and build specification are indicated by the PIN. The PIN has 17 digits and must be read from left to right.

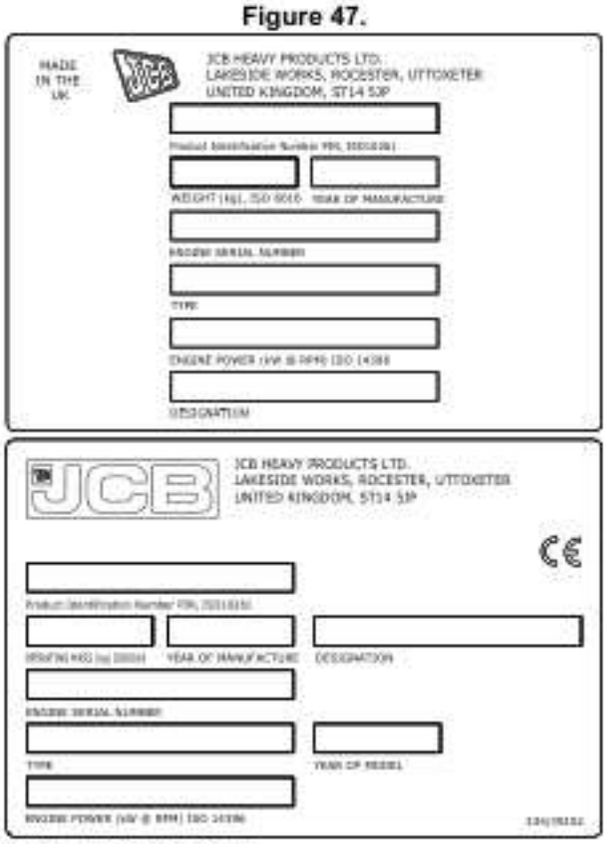
Table 14. Typical PIN

JCB	8085	L	01536000

Table 15. Explanation of the PIN

Digit	Description
1 to 3	World manufacturer identification. For example, JCB = UK Build.
4 to 8	Machine type and model. For example, 8025 = 8025.
9	Random check letter. The check letter is used to verify the authenticity of a machine's PIN.
10 to 17	Machine serial number.

Figure 47.



A Identification plate

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Key to Schematic Sheets - Refer to Table 315.

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Fault Code	Machine Reaction	Fault Description
C0321	High Flow Proportional Hydraulics inhibited	High Flow Pressure Transducer output is Out of Range High
C0322	Low Flow Proportional Hydraulics inhibited	Low Flow Pilot Pressure Transducer output is Out of Range Low
C0323	Low Flow Proportional Hydraulics inhibited	Low Flow Pilot Pressure Transducer output is Out of Range High
C0324	High Flow Proportional Hydraulics inhibited	High Flow Pilot Pressure Transducer output is Out of Range Low
C0325	High Flow Proportional Hydraulics inhibited	High Flow Pilot Pressure Transducer output is Out of Range High
C0326	Hammer Operation inhibited	Short circuit fault condition for the Hammer Speed Regulator Solenoid (HECU)
C0327	Hammer Operation inhibited	Open circuit fault condition for the Hammer Speed Regulator Solenoid (HECU)
C101D		Fuel Level Low Alarm
C101E		Fuel Level Empty Alarm
C101F		Fuel Level Sensor Short Circuit
C1020		Fuel Level Sensor Open Circuit
C1021		Engine Coolant Level Low
C1023	Machine will de-rate	Hydraulic Oil Temperature High Alarm
C1024		Hydraulic Oil Temperature Sensor Open Circuit
C1025	T4F Inducement	Battery Voltage High Fault Condition
C1026	T4F Inducement	Battery Voltage Low Fault Condition
C1027		Alternator Voltage High Fault Condition
C1028		Alternator Voltage Low Fault Condition
C1029		Ambient Air Temperature Sensor Short Circuit
C102A		Ambient Air Temperature Sensor Open Circuit
C102B	Cooling Fan will run at 100%	Cooling Fan Solenoid Fault Condition
C102C	Cooling Fan will run at 100%	Cooling Fan Solenoid Short Circuit
C102D	Cooling Fan will run at 100%	Cooling Fan Solenoid Open Circuit
C1032	Machine will de-rate	Hydraulic Oil Temperature Critical Alarm
C1035		Hydraulic Oil Temperature Sensor Short Circuit
C1300	Boost feature will not work as intended	Short circuit - 2 stage MRV (Main Relief Valve) solenoid
C1301	Boost feature will not work as intended	Open circuit - 2 stage MRV solenoid
C1303	Machine will be limited to 1 Speed	Sort circuit - travel speed solenoid
C1304	Machine will be limited to 1 Speed	Open circuit - travel speed solenoid
C1305	Feature will not work as intended	Sort circuit - maximum flow solenoid
C1306	Feature will not work as intended	Open circuit - maximum flow solenoid
C1307	Machine Controls will be Isolated	Open circuit - Controls enable solenoid
C1308	Machine Controls will be Isolated	Short circuit - Controls enable solenoid
C1309	Slew will be locked in position at moment of failure	Short circuit - Slew lock solenoid
C130A	Slew will be locked in position at moment of failure	Open circuit - Slew lock solenoid
C130B	Slew will be locked in position at moment of failure	Short circuit - Slew park brake solenoid
C130C	Slew will be locked in position at moment of failure	Open circuit - Slew park brake solenoid

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Figure 588.



19. Install new O-rings on to plugs. Install plugs in to the rear flange and temporarily tighten with an Allen key.

Figure 589.



20. Install the pistons in to the rear flange.

Figure 590.



21. Install new O-rings on to plugs. Install plugs in to the rear flange and temporarily tighten with an Allen key.

Figure 591.



22. Insert the brake spool into the flange.

Figure 592.



23. Install a new O-ring on to the plug. Install washer and spring on to the plug.

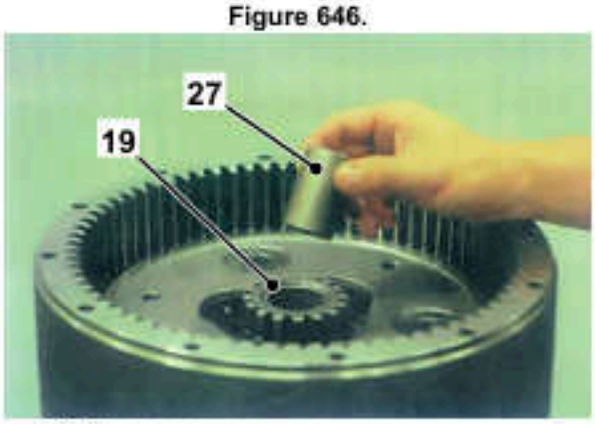
Figure 593.



24. Install plug in to the rear flange making sure that the spring does not get deformed. Temporarily tighten the plug.

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Figure 646.

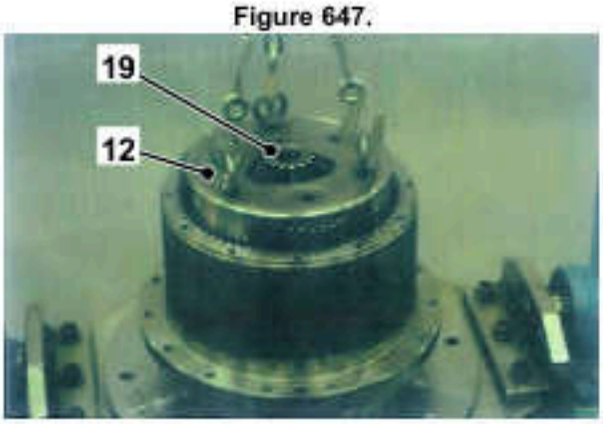


19 Sun gear
27 Coupling

9. Attach three eyebolts to second reduction planet carrier assembly and remove from housing using suitable lifting equipment.

10. Remove the second stage sun gear.

Figure 647.



12 Carrier
19 Sun gear

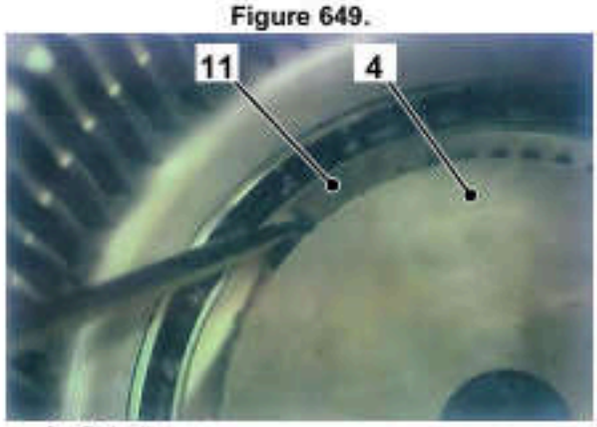
11. Fix gearbox assembly to a workbench.

Figure 648.



12. Using a punch and hammer, tap lock washers from groves in spindle and remove.

Figure 649.

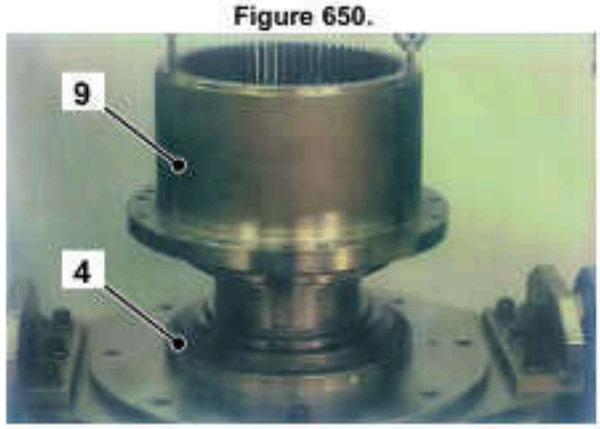


4 Spindle
11 Lock washer

13. Release the housing from the workbench.

14. Fit two eye bolts to the hub and use suitable lifting equipment to lift it clear of the spindle.

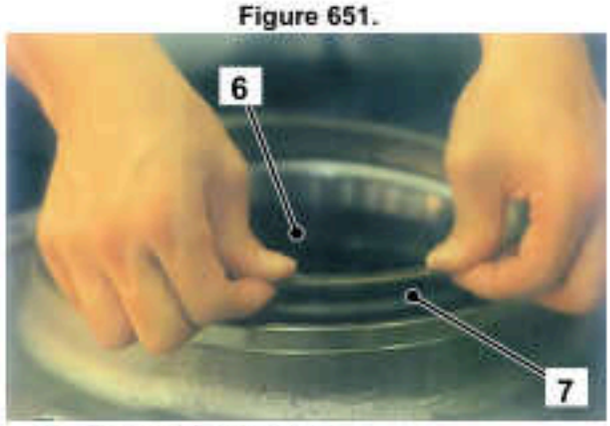
Figure 650.



4 Spindle
9 Hub

15. Remove the floating seal.

Figure 651.



6 External floating seal
7 Internal floating seal

16. Only remove bearing if a replacement is available as removal will cause damage.

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