SERVICE MANUAL

411HT, 413S, 417HT

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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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02 - Rear Chassis

Remove and Install

Remove

1. Make the machine safe. Refer to (PIL 01-03).
2. Install the articulation strut. Refer to (PIL 06-27).
3. Drain all the fluids from the machine.
4. Lift the machine onto the chassis support stands.
5. Remove the rear wheels. Refer to (PIL 27-30).
6. Remove the rear fenders and steps.
7. Remove the cab. Refer to (PIL 09-00).
8. If necessary, remove the rear grille. Refer to (PIL 06-06).
9. Remove the engine cover. Refer to (PIL 06-06).
10. Remove the cooling pack. Refer to (PIL 21-03).
11. Remove the SCR (Selective Catalytic Reduction) frame.
12. Disconnect the front chassis from the rear chassis at the articulated joint. Refer to (PIL 06-33).
13. Remove the engine and transmission. Refer to (PIL 15-00).
14. Remove the DEF (Diesel Exhaust Fluid) tank. Refer to (PIL 18-30).
15. Remove the rear axle. Refer to (PIL 27-21).
16. Remove the remaining hoses, harnesses, fuel fittings, hydraulic fittings etc.

Installation

1. Installation is the opposite of the removal procedure.

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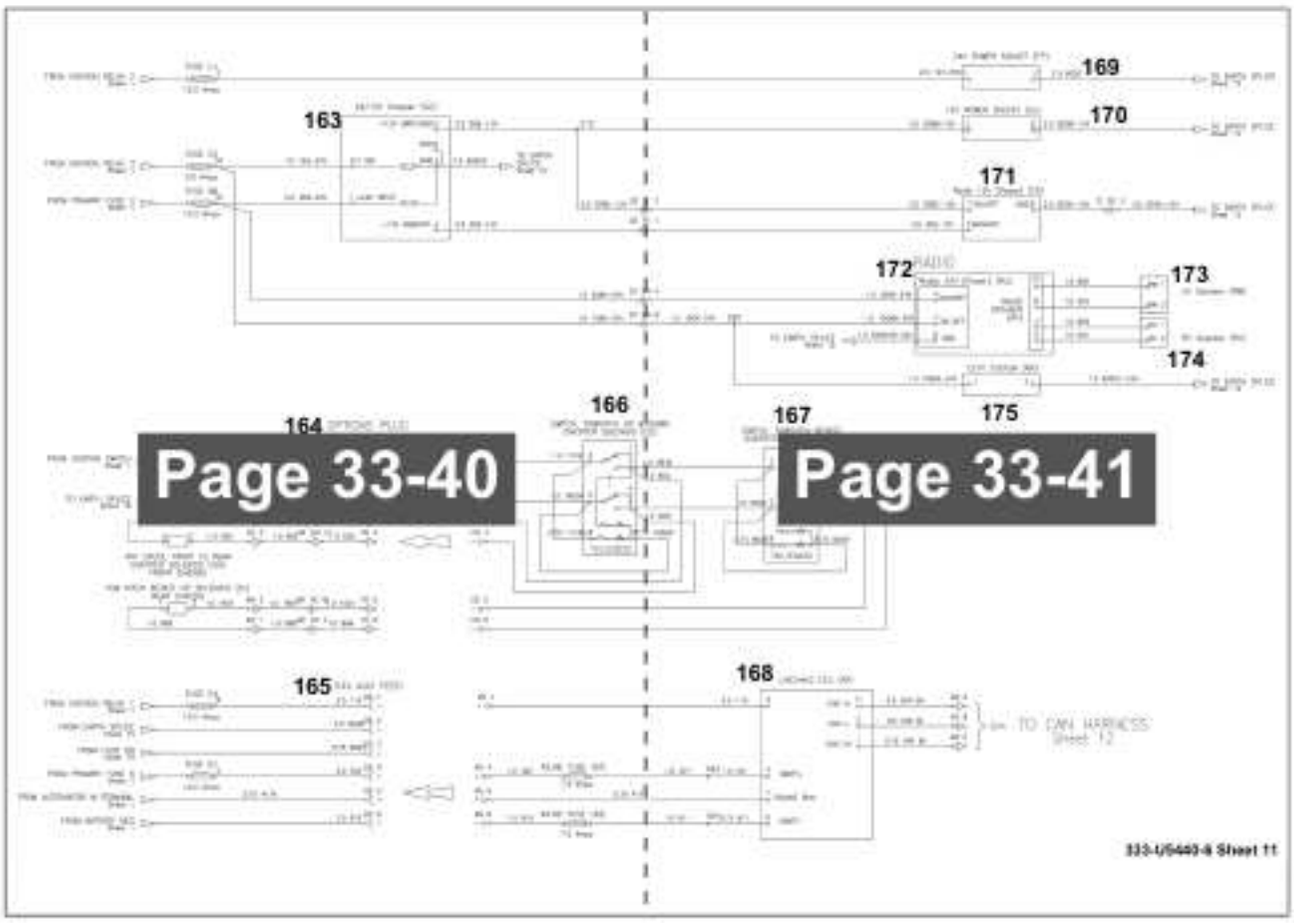
Technical Data

Table 246.

Service port flow (Max)	325L/min
Service port pressure (Max)	325bar (4,710.1psi)
Tank pressure (Max)	20bar (289.9psi)
MRV (Main Relief Valve) pressure	280bar (4,058.0psi)
ARV (Auxiliary Relief Valve) pressure	350bar (5,072.4psi)
Pilot supply flow	10L/min
Solenoid connection	PS25/24V

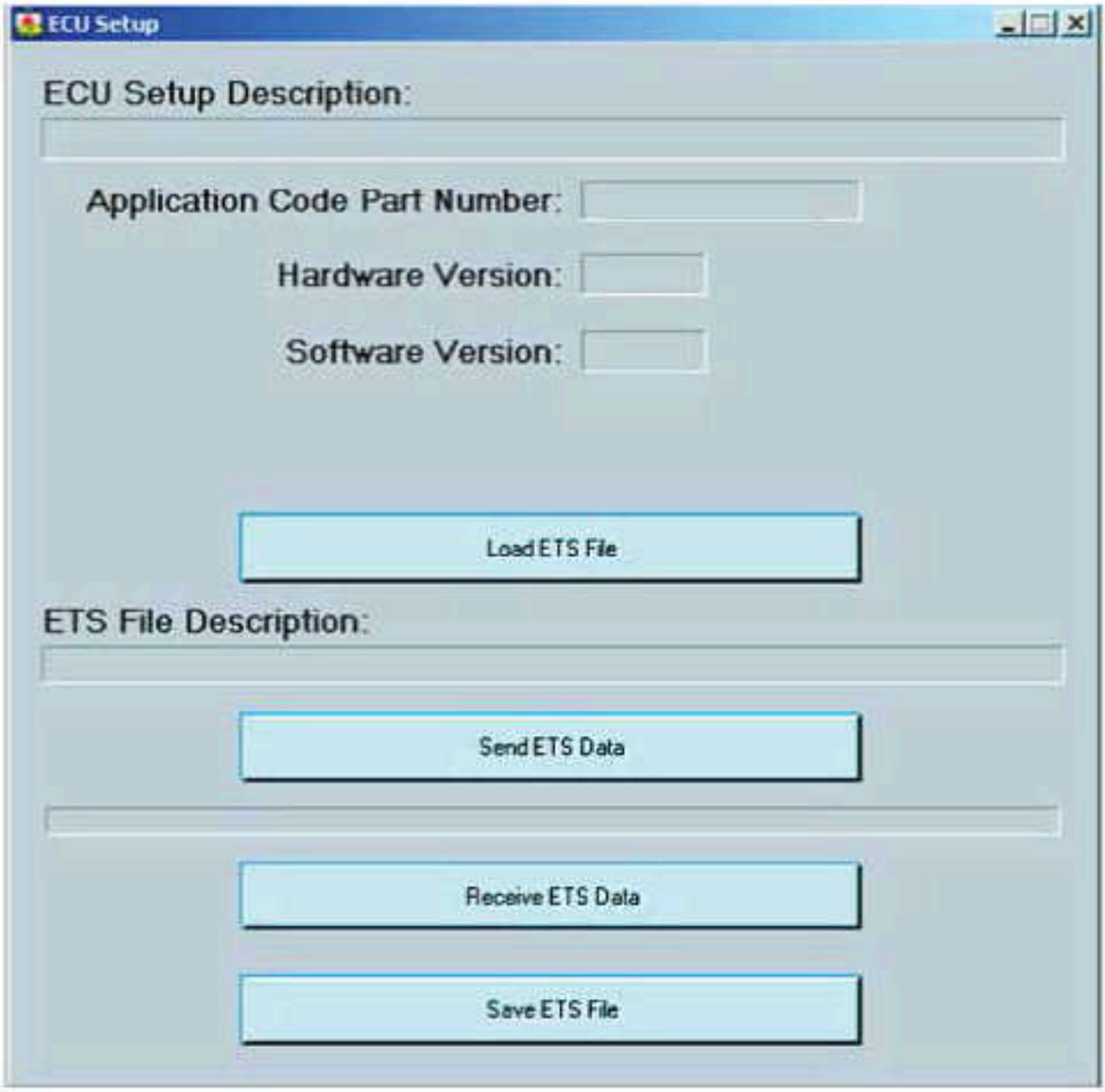
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Figure 710. Radio, Power Socket, Aux Socket, CCTV (Option), Livelink (Option), Rear Tow Hitch (Option)



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Figure 832.



ETS Function

The ETS function provides a means of loading and uploading gearbox ECU software setup files between the ECU and the computer. On earlier versions of servicemaster a separate program was required to perform this function. This is now incorporated within shiftmaster diagnostics 2.3. The setup files have a file name extension of.ets.

- Load ETS File: A revision to the gearbox ECU software file may be supplied by JCB for installation on particular ECU models. Store the file on the computer which is to be connected to the gearbox ECU. The shiftmaster diagnostic program needs to open this file and obtain the software version and other applicable information to make sure it is compatible with the ECU connected to the computer.
- Send ETS Data: This allows the computer to send a software setup file to the gearbox ECU.
- Receive ETS Data: This reads the existing setup file from the gearbox ECU.
- Save ETS File: This saves the data received from the ECU onto the computer.

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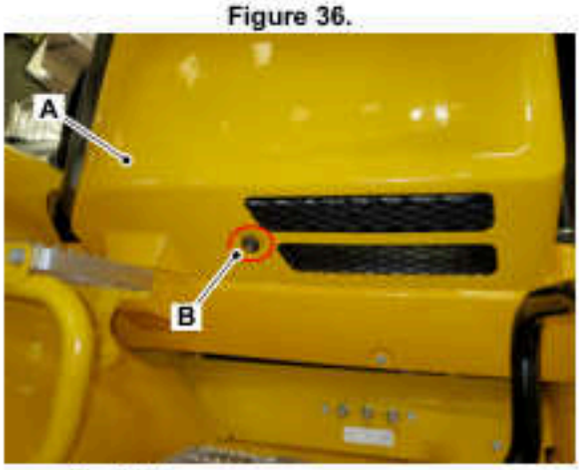
36 - Cab Heater

Open and Close

Open

1. Make the machine safe. Refer to (PIL 01-03).
2. Install the articulation strut. Refer to (PIL 06-27).
3. Turn the latch to specified angle and press it.
   Angle: 90°

Figure 36.



A Door
B latch

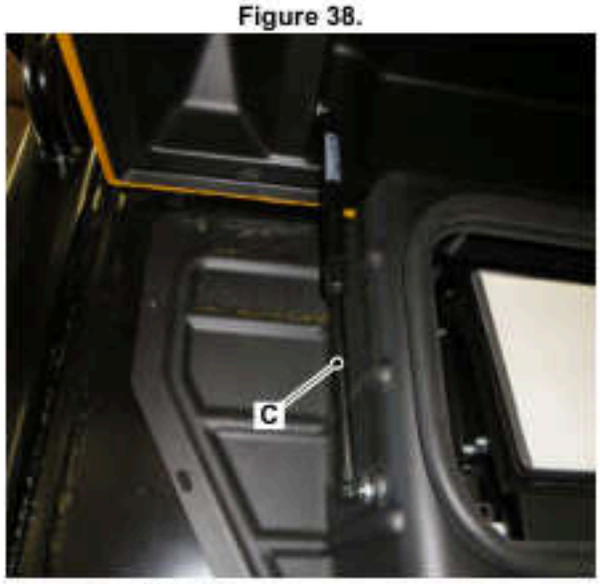
4. Open the door upwards.

Figure 37.



5. The door is supported on its gas strut.

Figure 38.



C Gas strut

Close

1. Push the door downwards.
2. Turn the latch anticlockwise to specified angle.
   Angle: 90°

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