Service Manual

JS Auto Range - Tracked Excavators - JCB Engine

Service Manual - JS Auto Range - Tracked Excavators - JCB Engine

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Section 2 - Care and Safety

Section 3 - Routine Maintenance

Section B - Body & Framework

Section C - Electrics

Section E - Hydraulics

Section F - Transmission

Section J - Track & Running Gear

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Table 18. JS130-145 and variants

No.	Tightening Point	Bolt Diameter	Wrench mm	Tightening Torque		Checking Torque	
				Nm	lbf ft	Nm	lbf ft
1(1)	Travel Motor	M16	24	290	213	265	195
2(1)	Drive Sprocket	M16	24	290	213	265	195
3(1)	Idler Wheel	M16	24	290	213	265	195
4(1)	Upper (Carrier) Roller	M16/M20	24/30	290/550	213/405	265/515	195/380
5(1)	Lower (Track) Roller	M16	24	290	213	265	195
6(1)	Track Guard	M16	24	290	213	265	195
7	Shoe Bolt (JS130)	M16	24	382-440	282-325	344-396	254-292
7	Shoe Bolt (JS145)	M16	24	363-421	268-311	327-379	241-280
7	Shoe Bolt (JS145HD)	M20	27	643-757	474-558	579-681	427-502
8	Counter weight	M27	41	925	682	840	620
9(1)	Turntable Bearing (Undercarriage)	M16/M20	24/30	296/525	218/387	275/470	203/347
10(1)	Turntable Bearing (Slew Frame)	M16/M20	24/30	296/525	218/387	275/470	203/347
11(1)	Slew Equipment	M16/M20	24/30	290/550	213/405	265/515	195/370
12(1)	Engine (Engine Mount)	M16	24	290	213	265	195
13(1)	Engine Bracket	M10/M12	17/19	68/118	50/87	62/107	45/79
14	Radiator	M12	19	104	77	94	69
15(1)	Hydraulic Pump	M10	17	60	44	54	40
16(1)	Hydraulic Oil Tank	M16	24	250	184	225	162
17(1)	Fuel Tank	M16	24	250	184	225	162
18(1)	Control Valve	M16	24	290	213	265	195
19	Battery	M6	10	7	5	6	4
20(1)	Rotary Coupling	M12	19	116	85	105	80
21	Cab	M16	24	132	97	125	92

(1) Use JCB Threadlocker and sealer (High Strength) and tighten to the torque listed.

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JS145HD - Monoboom

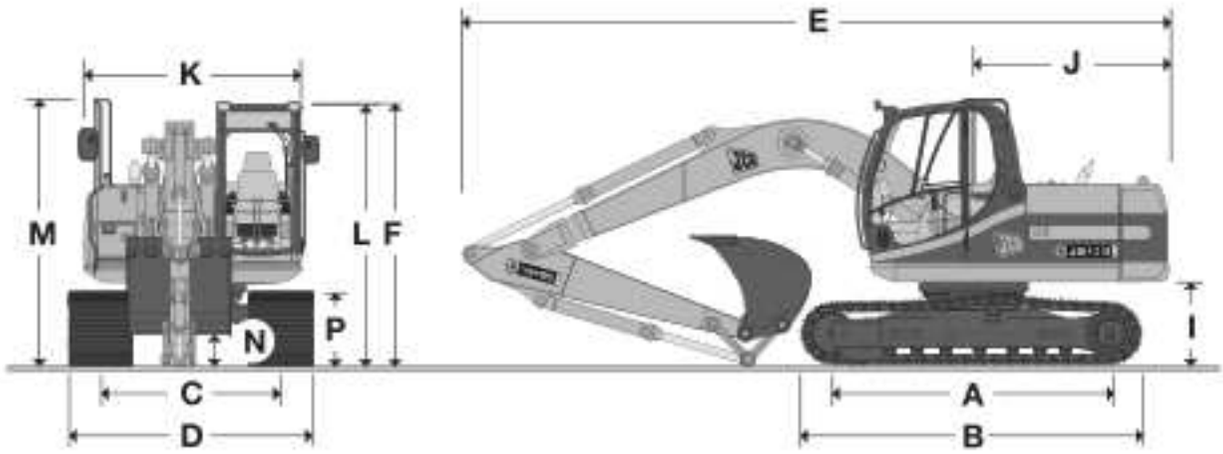


Fig 4.

Table 10.

Dimensions in millimetres (ft. in)	HD
A Track length on ground	3090 (10 ft 2 in)
B Undercarriage overall length	3940 (12 ft 11 in)
C Track gauge	2200 (7 ft 3 in)
D Width over tracks (500 shoes)	2800 (9 ft 2 in)
D Width over tracks (600 shoes)	2900 (9 ft 6 in)
D Width over tracks (700 shoes)	3000 (9 ft 10 in)
D Width over tracks (850 shoes)	3100 (10 ft 2 in)

Table 11.

Dipper lengths	2.1m	2.5m	3.0m
E Transport length	7715 (25 ft 5 in)	7735 (25 ft 5 in)	7765 (25 ft 5 in)
F Transport height	3014 (9 ft 11 in)	3014 (9 ft 11 in)	3014 (9 ft 11 in)

Table 12.

Dimensions in millimetres (ft. in)	HD
I Counterweight clearance	1050 (3 ft 5 in)
J Tailswing radius	2135 (7 ft 0 in)
K Width of superstructure	2410 (7 ft 11 in)
L Height over cab	2895 (9 ft 6 in)
M Height over grab rail	3014 (9 ft 11 in)
N Ground clearance	470 (1 ft 7 in)
P Track height	880 (2 ft 11 in)

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Fig 222. 333/J7613 issue 1

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Fig 84.

14 Remove the circlip **13** from its seat in the toothed ring **10**. ⇨ *Fig 85. (F-142)*.



Fig 85.

15 Remove the nos. 2 discs **12**. ⇨ *Fig 86. (F-142)*.



Fig 86.

16 By using a crowbar lift the toothed ring **16** from the gearbox housing **23**. ⇨ *Fig 87. (F-142)*.



Fig 87.

17 Remove the toothed ring **16**. ⇨ *Fig 88. (F-142)*.

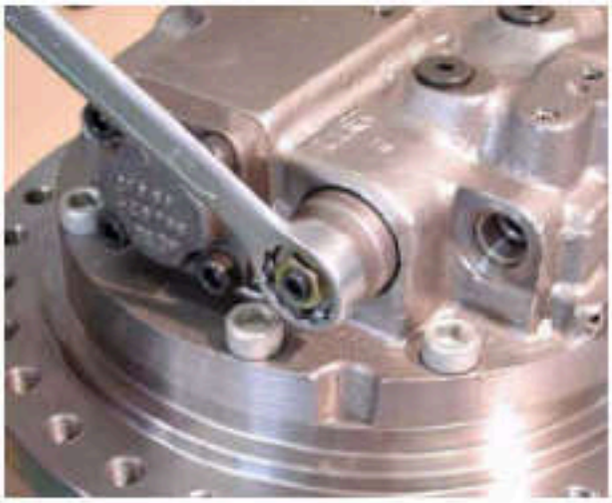


Fig 88.

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Disassembly Of The Relief Valve Assembly

8 Unscrew the relief valve (45) from the base plate (60).



P017180

Fig 77.

9 Take out the free piston from the relief valve (45)



P017200

Fig 78.

10 Remove the O-ring seal (42) and the backup rings (41) from their seats in the free piston.



P017210

Fig 79.

11 Remove the O-ring seal (44) from relief valve (45) Repeat the same steps for the 2nd relief valve disassembly (45).



P017220

Fig 80.

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