Service Manual

801
Tracked Excavator

JCB HYDRAPOWER LTD. ©
UNIT 23/24, POWER STATION ROAD,
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Publication No. 9803/3161

Published by the Technical Publications Dept. of JCB Service

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TECHNICAL DATA

Pump Type

• Three element gear pump driven from the rear end of the engine crankshaft.

Pump Flow Rate

(at 2200 engine revs/min and M.R.V pressure)

No. 1 Element	8.8 litres/min (1.9 UK gal/min)
No. 2 Element	12.1 litres/min (2.6 UK gal/min)
No. 3 Element	12.1 litres/min (2.6 UK gal/min)

Relief Valve Operating Pressures	bar	kgf/cm²	lbf/in²
Main Relief Valves (M.R.V.'s)			
- Dipper / L.H. Track / Auxiliary	207	211	3000
- Bucket / Boom / R.H. Track / Auxiliary	207	211	3000
- Swing / Slew/ Dozer	155	158	2250
Auxiliary Relief Valves (A.R.V.'s)			
- Boom, Head side	240	245	3480
- Boom, Rod Side	240	245	3480
- Dipper, Head Side	240	245	3480
- Dipper, Rod Side	240	245	3480
- Dozer, Head Side	220	224	3190
Cross Line Relief Valves			
- Slew	147	150	2130

Rams	Bore		Rod Dia		Stroke	
	mm	in	mm	in	mm	in
Boom	50	1.97	30	1.18	360	14.17
Dipper	50	1.97	30	1.18	400	15.75
Bucket	50	1.97	30	1.18	286	11.26
Swing	50	1.97	30	1.18	340	13.39
Dozer	70	2.76	35	1.38	85	3.35

*Track and Slew Motor Leakage Test Data

Conditions of test	
- Oil temperature	50° C
- Counterbalance holding pressure	70 bar (1015 lbf/in²)
Acceptable rotation of track sprocket	1 revolution in 7 minutes, 15 seconds
Acceptable rotation of superstructure	1 revolution in 3 minutes

GENERAL DESCRIPTION

The main components of the hydraulic system are the tank, pump, control valve, rams and rotary coupling. The tank is mounted inside the machine cab and is filled through the filter. Tank fluid level is indicated by a sight tube viewed from the right hand side of the machine. The hydraulic pump is mounted directly to the engine crankshaft. Hydraulic fluid from the pump is directed to machine services through a control valve located beneath the cab floor plate. Selection of services is through a system of manually operated levers and foot pedals.

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