SERVICE MANUAL

BACKHOE LOADER
1CX, 1CXT

EN - 9813/6050 - ISSUE 2 - 07/2018

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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accordance with local regulations. Use authorised waste disposal sites.

Technical Data

Table 11.

Description	Data	Data
Engine type	GN 404D-22	HP 404C-22, Naturally aspirated
Emission compliance	Tier 3	Tier 3
Number of cylinders	4	4
Nominal bore size	88 mm	84 mm
Stroke	102 mm	100 mm
Cylinder arrangement	Vertical In-line	Vertical In-line
Combustion Cycle	4-stroke	4-stroke
Firing order	1-3-4-2	1-3-4-2
Compression ratio	23.3:1	23.3:1
Swept volume	2.216 L	2.216 L
Valve clearance (cold)	0.2 mm	0.2 mm
Idling speed	1400 RPM (Revolutions Per Minute)	1075 RPM
Maximum no-load speed	2800 RPM	2800 RPM
Power output	34 kW at 2600 RPM	38 kW at 3000 RPM
Lubricating oil pressure relief valve	-	3.5 –4.5 bar (50.7 –65.2 psi)
Lubricating oil pressure switch located on top cover	-	0.29 bar (4.2 psi)
Lubricating oil pressure switch located on cylinder block oil rail	-	0.98 bar (14.2 psi)

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Table 127. Outer Track Rubber (Longitudinal Cracks)

Cause	Remedy
The edges of the rubber track are often deformed largely due to a bumpy ground surface, stones and other objects, which cause intensive stress on the edges resulting in damage. Especially when a machine drives over concrete pavements, this type of damage easily occurs	Operate the machine with care, avoid concrete pavements and big rocks

Table 128. Inner Track Rubber (Tearing/Cuts)

Cause	Remedy
Stones and sharp material can tear the rubber at the edges of the track	The life expectancy of a track is greatly reduced by working on a site where sharp and pointed materials are numerous. Operate the machine with attention to the ground's surface in rough terrain, e.g. demolition sites, rocky ground etc.
Driving close to pavement edges and ridges - causing the edges to be forcefully bent against the track frame	Drive the machine carefully, avoid driving over projections, prevent the track edges from contacting ridges etc.
The track can be used as long as the cuts do not reach the metallic components	When the cracks expose the steel cords, the track must be replaced or repaired

Table 129. Inner Track Rubber (Cracks)

Cause	Remedy
Excessive tension of the rubber	Check the tension regularly
Excessive vibration whilst the machine remains stationary, for example using an auxiliary attachment such as a hammer	Do not let the machine sit too long in the same position when operating in these conditions. Move the machine from time to time so that the pressure of the vibrations is not always felt on the same place of the track
The track can be used as long as the cuts do not reach the metallic components	When the cracks expose the steel cords, the track must be replaced or repaired

Table 130. Miscellaneous (Not Engaging Correctly)

Cause	Remedy
Excessive abrasion of the sprocket teeth	Make sure that the sprocket is genuine JCB. Make sure the sprocket is in good condition
Excessive tension of the track leading to incorrect track pitch	Check the track tension regularly (as recommended in service schedules)

Table 131. Miscellaneous (Detracking)

Cause	Remedy
Low track tension	Check the tension regularly
The rollers are worn out and the track is not correctly guided	Check the rollers and running gear components in accordance with the recommended service intervals
Sharp bends (shearing stress)	Drive carefully on hard surfaces like concrete, asphalt etc.
Machine working following a hillside which weathers or is soft	Make sure that the ground is firm when working along a hillside and drive carefully

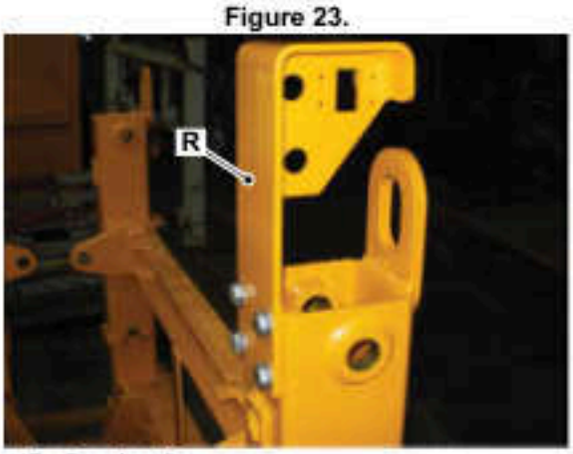
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AF Connect to hand held tool circuit on rear frame

28. Install the bracket 2 to the rear frame with a clamp plate.

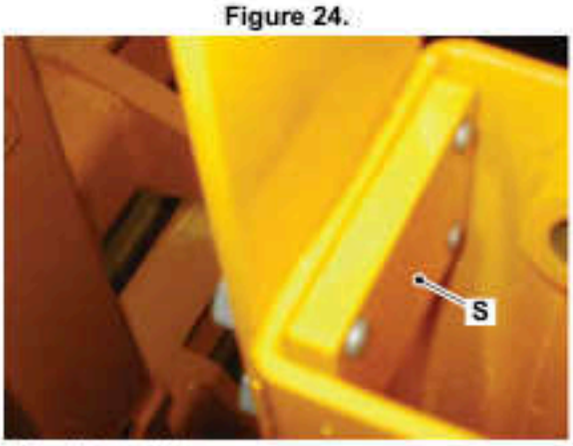
Figure 23.



R Bracket 2

29. Install the clamp plate on the inside of the rear frame leg.

Figure 24.

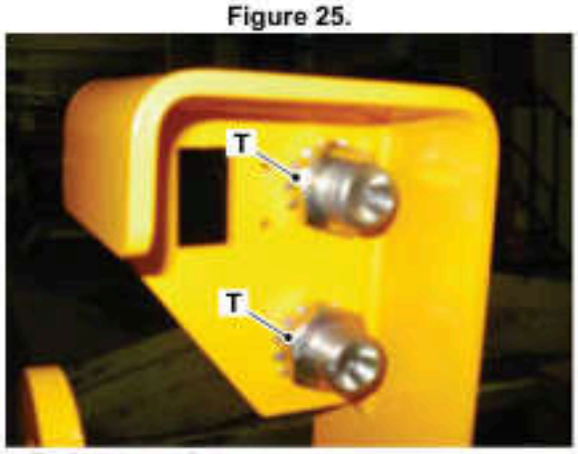


S Clamp plate

30. Install the bulkhead fittings (x2) to the bracket 2.

31. Install the nut and star washer on the inside.

Figure 25.



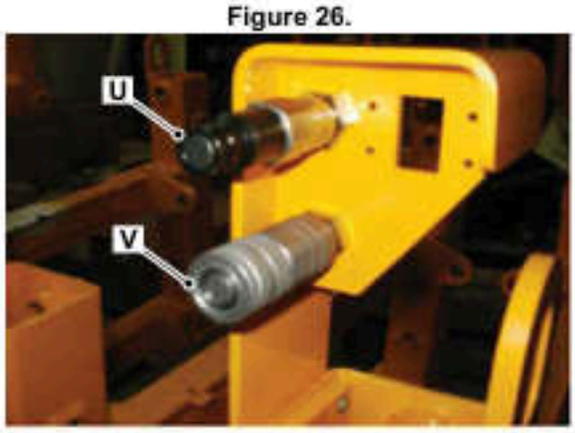
T Bulkhead fittings

32. Apply Loctite 243 to the quick fit adaptors.

33. Install the male quick fit adaptor and female quick fit adaptor at their correct position. Refer to Figure 26.

34. Tighten the quick-fit adaptors to the correct torque value.

Figure 26.



U Male quick-fit adaptors
V Female quick-fit adaptors

35. Connect the hoses to the quick release couplings.

36. Apply Loctite 243 to the bulkhead fittings.

37. Connect the F-marked hose to the bottom fitting and the M-marked hose to the top fitting.

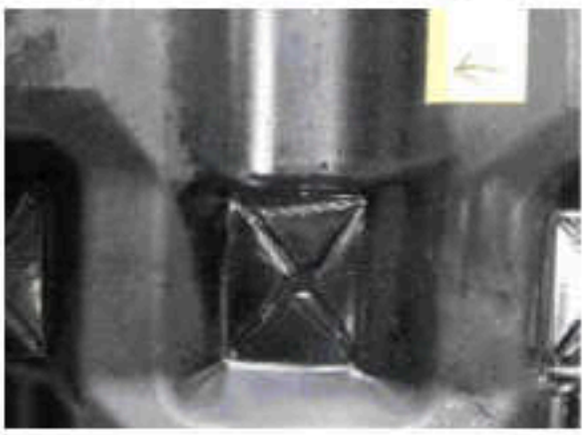
38. Tighten the hoses to the correct torque value.

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Figure 349. Steel Cord (Exposure)



Figure 350. Steel Cord (Sticking Out)



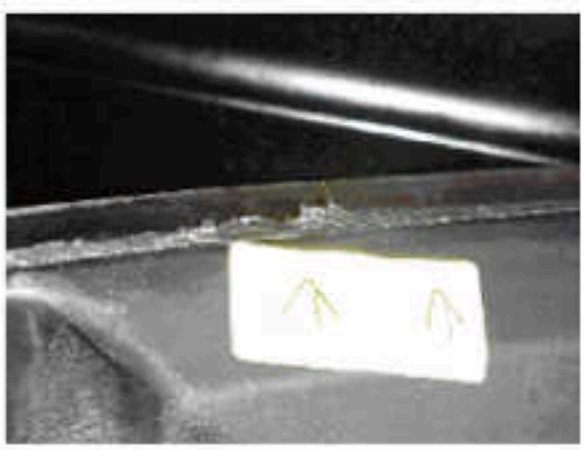


Figure 351. Outer Track Rubber (Tearing/Cuts)



Figure 352. Outer Track Rubber (Fast Abrasion)



Figure 353. Outer Track Rubber (Cracks)



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