



Fig 54.

C068800

Item	Nm	Kgf m	lbf ft
10	1400	143	1032
3	205	21	151

Rotary Coupling

Operation

The coupling is located in the centre of the machine between the lower and upper sections and rotates around the slew centreline. The supply and return oil flow to the coupling, piped from the upper to the lower section, is not affected by the rotational movement and allows the machine to slew 360° in both directions.

The rotary coupling consists of the inner axle 11 and outer rotor 13 with packing rings, 'O'-rings, thrust plate and cover. In the axle and rotor there are pairs of ports and oil passages, each pair being sealed from the others by packing rings and 'O'-rings. Both the axle and rotor can rotate and the oil can flow freely through the oil grooves.

Item	Part Name
11	Axle
12	V-ring
13	Rotor
14	O-ring
15	Packing ring
16	Thrust plate
17	Socket head screw
18	O-ring
19	Cover
20	Socket head screw

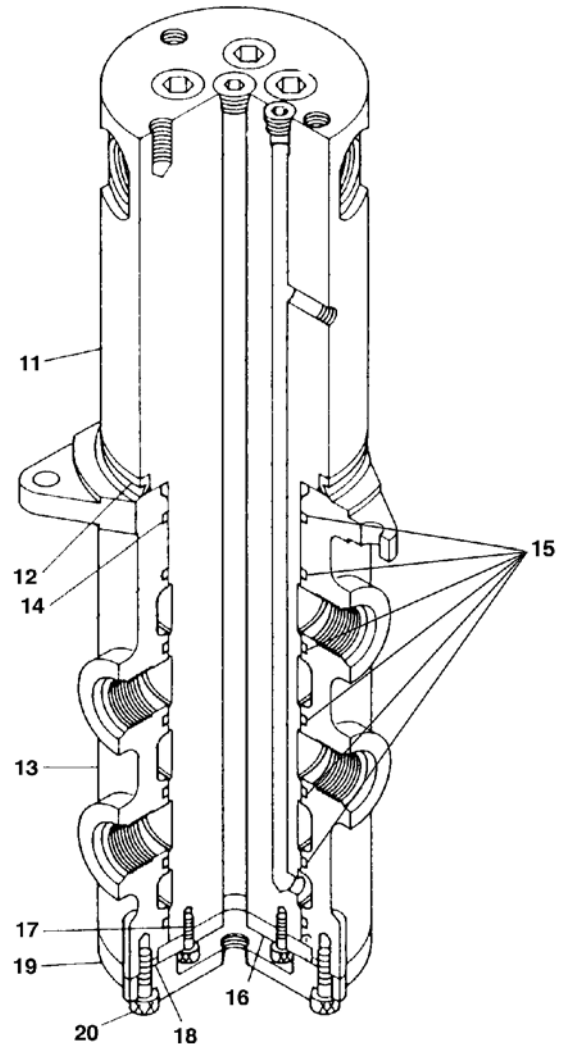


Fig 1.

Removal and Replacement

Removal

- 1 Jack up the machine by pressing the boom/dipper on the ground. Install wooden blocks under the tracks. → [Fig 2.](#) ([E-172](#)).

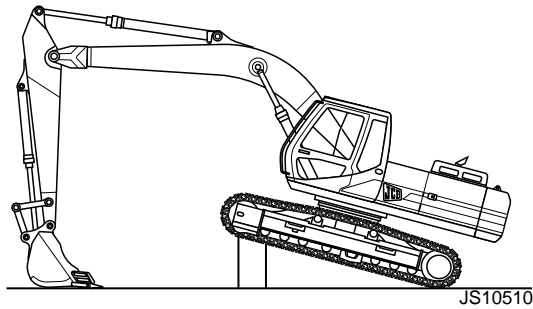


Fig 2.

- 2 Stop the engine and release hydraulic system pressure (see [Section 3, Releasing Hydraulic Pressure](#)).
- 3 Remove the belly plates. → [Fig 3.](#) ([E-172](#))

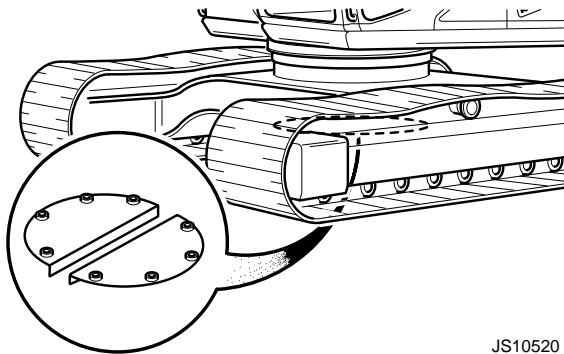


Fig 3.

WARNING

Hydraulic Pressure

Hydraulic fluid at system pressure can injure you. Before connecting or removing any hydraulic hose, residual hydraulic pressure trapped in the service hose line must be vented. Make sure the hose service line has been vented before connecting or removing hoses. Make sure the engine cannot be started while the hoses are open.

INT-3-1-11_2

WARNING

Do not go underneath the machine with the engine running. Switch off the engine, apply the park brake and block both sides of all wheels before going underneath the machine.

TRANS-2-1

- 4 Attach identification tags to the rotary coupling hoses for reconnection purposes. Remove the hoses and install blind plugs and caps to prevent contamination.
- 5 Remove the three screws/washers **4-A** and lift off locking bar **4-B**.

Item	Description	Torque
A	Bolt - Lock bar to rotary joint	259Nm
C	Bolts - Rotary Joint to Frame	104Nm

Replacement

Installation is the reverse of removal.

Apply JCB Threadlocker and Sealer to screws **4-A**.

WARNING

Fluid Under Pressure

Fine jets of fluid at high pressure can penetrate the skin. Keep face and hands well clear of fluid under pressure and wear protective glasses and gloves. Hold a piece of cardboard close to suspected leaks and then inspect the cardboard for signs of fluid. If fluid penetrates your skin, get medical help immediately.

INT-3-1-10_3

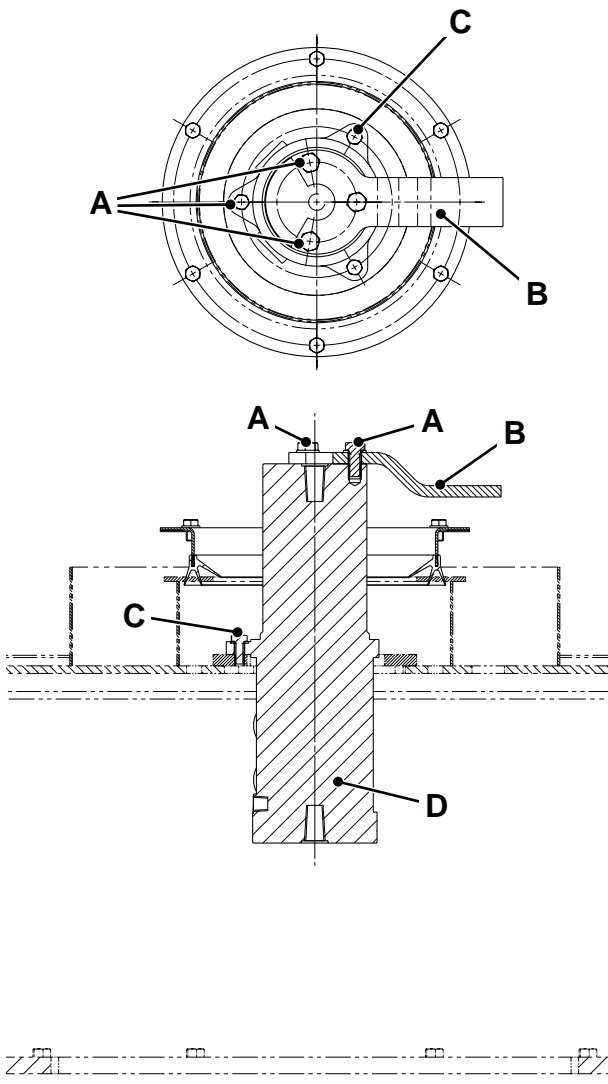


Fig 4.

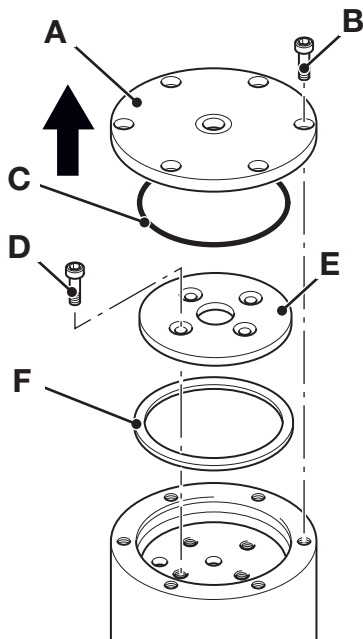
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- Remove the three mounting bolts **4-C** and lift the rotary coupling assembly **4-D** clear of the lower frame.

Dismantling

as a guide to the dismantling and assembly procedures refer to the sectional illustration, → [Fig 1. \(□ E-171\)](#).

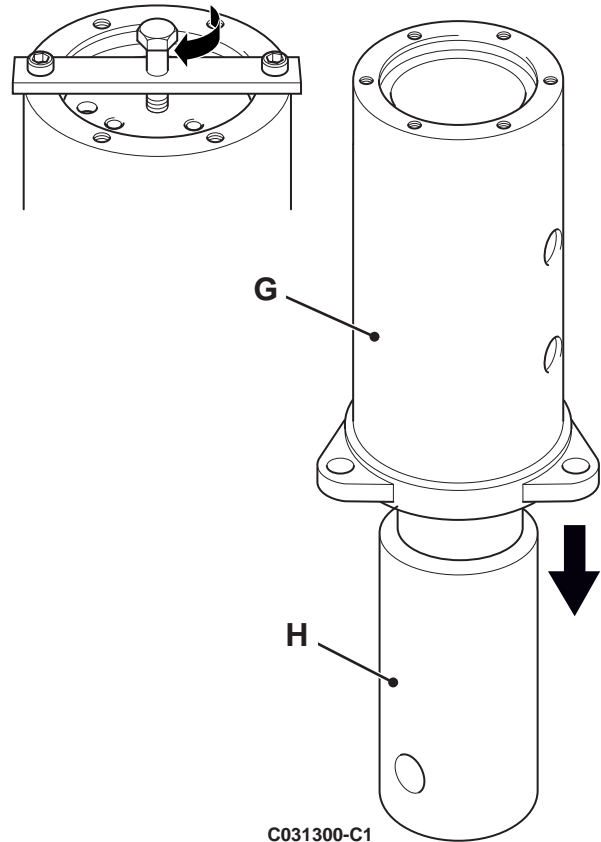
- 1 Remove the bolt **5-B** and cover **5-A**.
- 2 Remove the 'O'-ring **5-C**.
Do not reuse the 'O'-ring **5-C**.
- 3 Remove bolts **5-D** and the thrust plate **5-E**.
- 4 Remove seal **5-F**.



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Fig 5.

- 5 Using a jig push off the axle **6-G** from the rotor **6-H**.
Do not hit with a hammer.



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Fig 6.

- 6 Remove the V-ring **7-J** and nylon ring **7-K** from the axle **7-H**.

Note: Do not reuse the V-ring **J** and nylon ring **K**.