

Loader Arm

Removal and Replacement

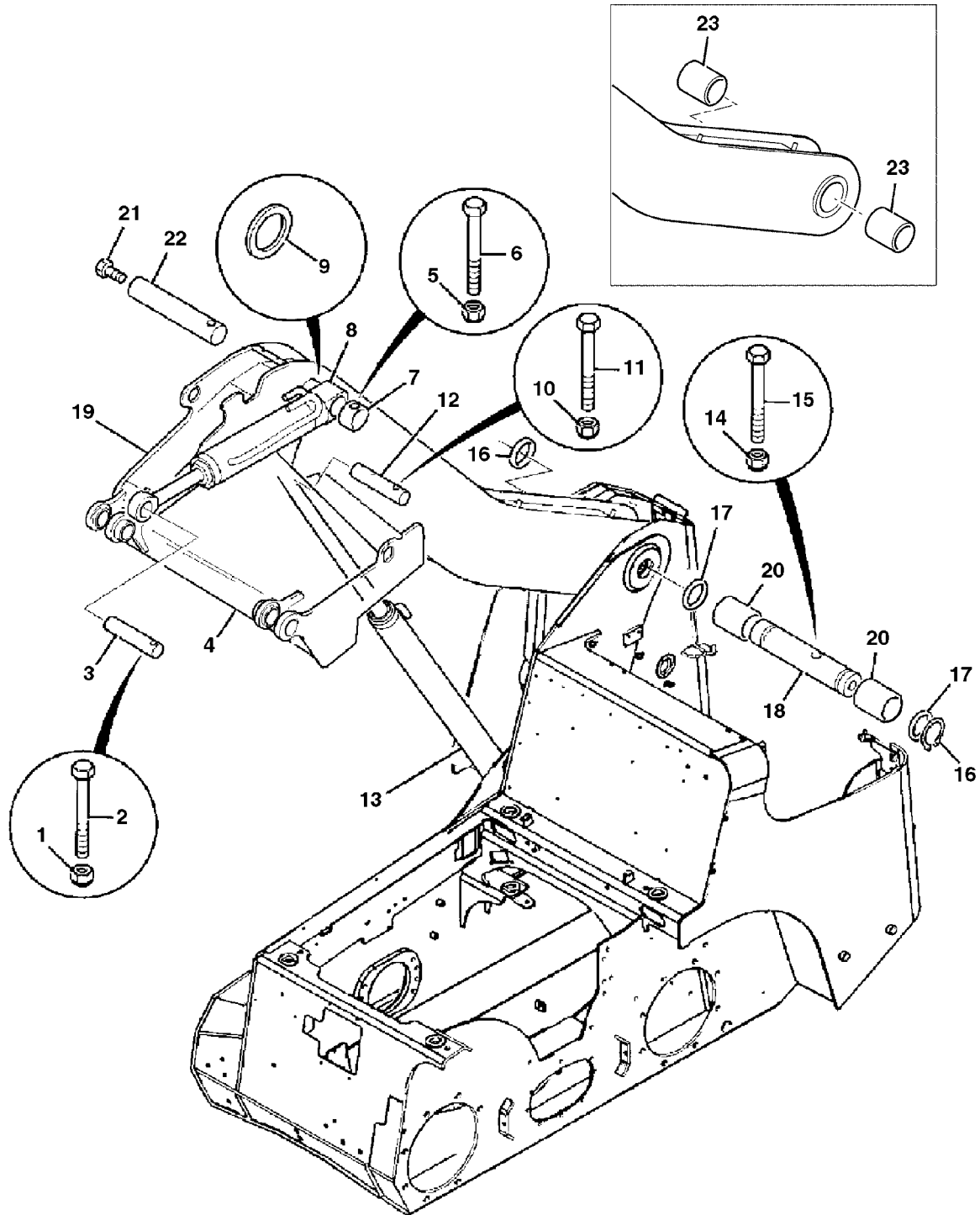


Fig 1.

385510-V1

Removal

Park the machine on firm level ground and stop the engine. Chock all four wheels to prevent accidental machine movement.

Label the auxiliary hydraulic hoses (if fitted) and disconnect them from the metal pipework on top of the carriage. Plug the ends of the hoses then pull them back through the boom.

Remove nuts **1** and bolts **2** from tilt ram and quickhitch pivot pins. Drive out the pivots **3** and remove the quickhitch assembly **4**.

WARNING

It is not possible to vent all residual pressure. Loosen the connection one full turn and allow the pressure to dissipate. Keep face and hands well clear of pressurised hydraulic oil and wear protective glasses.

HYD-4-3

Disconnect hydraulic hoses from tilt ram **8**. Remove nut **5**, bolt **6** and collar **7**. Lift the tilt ram away from the machine. Take care not to lose spacer **9** if fitted. Plug the ends of the hoses then pull them back through the boom.

Support the rod end of lift ram **13** then remove nut **10** and bolt **11** and drift out pivot pin **12**. Lower the lift ram onto the mainframe.

On High-flow machines, label the three hoses where they connect to the metal pipework at the boom pivot area then disconnect the hoses from the pipework.

Note: *It may be preferable to do this after the boom pivot has been removed and the boom lifted slightly.*

WARNING

Lifting Equipment

You can be injured if you use faulty lifting equipment. Make sure that lifting equipment is in good condition. Make sure that lifting tackle complies with all local regulations and is suitable for the job. Make sure that lifting equipment is strong enough for the job.

INT-1-3-7

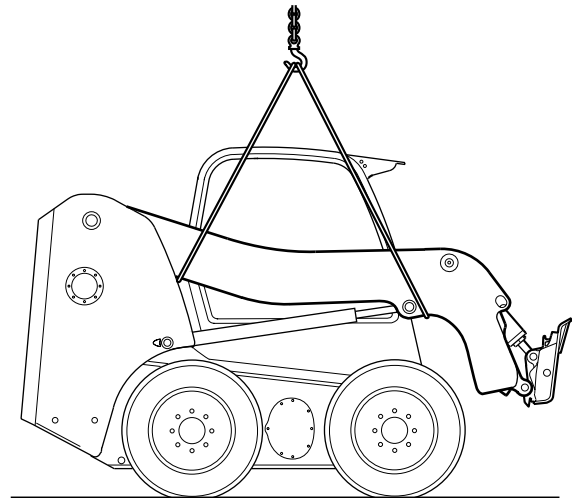
Sling the loader arm as shown [⇒ Fig 2. \(□ B-2\)](#). Take the weight of the arm on the lifting equipment.

Remove nut **14** and bolt **15**. Remove circlips **16** and washers **17** from each end of the lift arm pivot. Drift out pivot pin **18**.

The loader arm can now be manoeuvred from the machine using the lifting tackle. Place the loader arm on a clean dry surface.

Check bushes **20** and **23** for wear and renew as required.

Check pivot pin **22** for wear and renew if necessary by unscrewing bolt **21** and drifting the pin out.



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Fig 2.

Replacement

Replacement is a reversal of the removal procedure. Grease all pins and securing bolts with JCB Special MPL grease.

Reconnect all hoses and bleed the hydraulic system.

Fasteners

Rivet Nuts

TB-001_2

A 'Rivet Nut' is a one piece fastener installed 'blind' from one side of the machine body/framework. The rivet nut **3-A** is compressed so that a section of its shank forms an 'upset' against the machine body/framework, leaving a durable thread **3-B**.

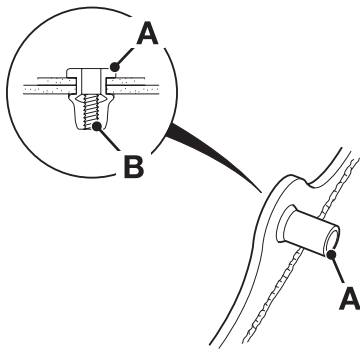


Fig 3.

Rivet nuts are fitted to various parts of the machine body and framework. They are used in a number of applications, for instance, hose clamp and hydraulic valve retention etc.

Various sized rivet nuts are available. → [Table 1. Specifications \(□ B-3\)](#) to determine the size of rivet nut to be used for particular applications.

If for any reason a new rivet nut requires fitting, then the correct installation procedure must be followed. → [Fitting Procedure \(□ B-4\)](#).

Note: In an emergency, and if no installation tool is available, it is possible to fit a rivet nut by using a nut and bolt the same thread diameter as the rivet nut being installed. However, this is not the recommended method.

Table 1. Specifications

Rivet Nut Thread Diameter	Rivet Nut Outside Diameter	Material Thickness	Rivet Length (Total)	Drill Hole Dia.
M5	7	0.25 - 3.00	14.00	7.10
		3.00 - 5.50	17.00	
M6	9	0.50 - 3.00	16.00	9.10
		3.00 - 5.50	19.00	
M8	11	0.50 - 3.00	18.00	11.10
		3.00 - 5.50	21.00	
M10	13	1.00 - 3.50	23.00	13.10
		3.50 - 6.00	26.00	

Note: All dimensions in mm

Fitting Procedure

- 1 Drill a hole in the machine body/framework where the rivet nut is to be fitted. De-burr hole edges.
- 2 Screw the rivet nut onto the mandrel of the installation tool. The bottom of the mandrel should be in line with the bottom of the rivet nut **4-A**.

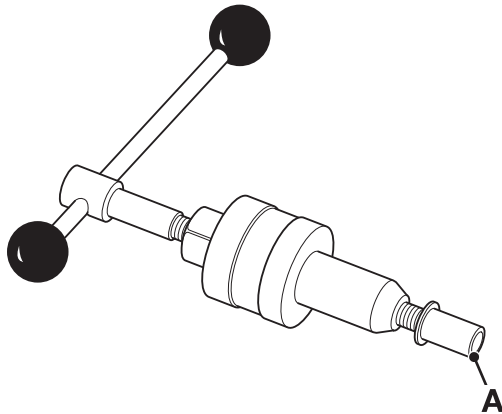


Fig 4.

- 3 Wind the body of the installation tool down the threaded mandrel until it touches the head of the rivet nut **5-B**.

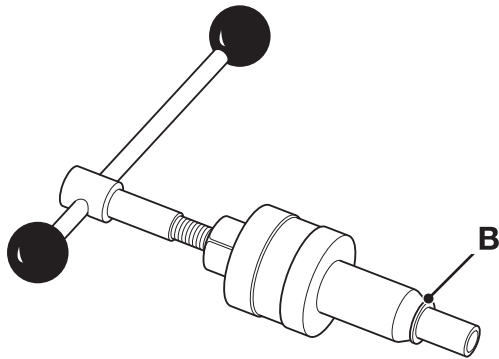


Fig 5.

- 4 Insert the rivet nut (assembled to the tool) into the hole drilled in step 1.
- 5 Hold handle **6-C** and at the same time draw the mandrel into the installation tool by turning nut **6-D**. The rivet nut will contract in length and form an 'upset'

(smooth bulge) seating itself against the body/framework **6-E**.

Note: The thread of the rivet nut must not be stripped, take care when 'upsetting' the rivet nut.

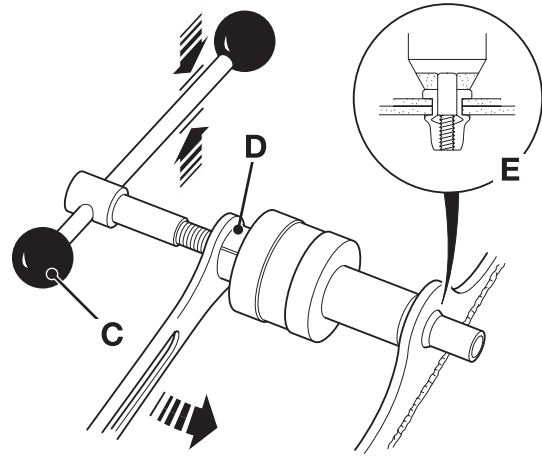


Fig 6.

- 6 Remove the installation tool.

Electrics

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