



Section A

Attachments

[Section 1 - General Information](#)

[Section 2 - Care and Safety](#)

[Section 3 - Routine Maintenance](#)

[Section A - Attachments](#)

[Section B - Body and Framework](#)

[Section C - Electrics](#)

[Section E - Hydraulics](#)

[Section F - Transmission](#)

[Section G - Brakes](#)

[Section H - Steering](#)

[Section K - Engine](#)



Publication No.
9803/4180-8



Sample Manual. Download All pages at

<https://www.arepairmanual.com/downloads/jcb-446456-wheeled-loader-service-repair-manual/>

World Class
Customer Support



Section A - 1

Contents	Page No.
Optional Attachments	
Connecting/Disconnecting Hydraulic Hoses	A - 1
Introduction	A - 1
Connecting the Hydraulic Hoses	A - 1
Disconnecting the Hydraulic Hoses	A - 2
Quick Release Couplings	A - 3
Quickhitch	
Removal and Installation	A - 5
Removal	A - 5
Installation	A - 6
Quickhitch Ram	
Removal and Installation	A - 7
Removal	A - 7
Installation	A - 7



Contents

Page No.

Optional Attachments

Connecting/Disconnecting Hydraulic Hoses

T4-004

Introduction

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

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

Some attachments are hydraulically powered. The following procedures show how to connect and disconnect the hydraulic hoses safely.

Connecting the Hydraulic Hoses

- 1 Make the machine safe. Refer to *Routine Maintenance, Prepare the Machine for Maintenance*.
- 2 Vent the hydraulic system. Refer to *Routine Maintenance, Releasing the Hydraulic Pressure*.
- 3 If necessary, remove the blanking caps.
- 4 Check the hoses and adaptors for damage. Refer to *Routine Maintenance, Checking for Damage*.
- 5 Connect the hoses.

If the hoses have quick releases couplings, refer to *Quick Release Couplings*.

- a Make sure that the hose is not twisted. Pressure applied to a twisted hose can cause the hose to fail or the connections to loosen.

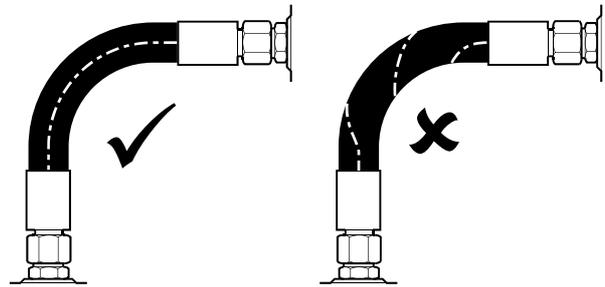


Fig 1.

T037400

- b Make sure that the hose does not touch hot parts. High ambient temperatures can cause the hose to fail.
- c Make sure that the hose does not touch parts which can rub or cause abrasion.
- d Use the hose clamps (where possible) to support long hose runs and keep the hoses away from moving parts, etc.

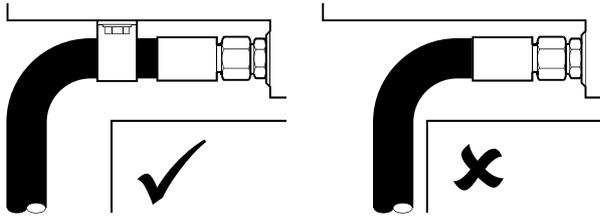


Fig 2.

T037420

To allow for length changes when the hose is pressurised, do not clamp at the bend. The curve absorbs the change.

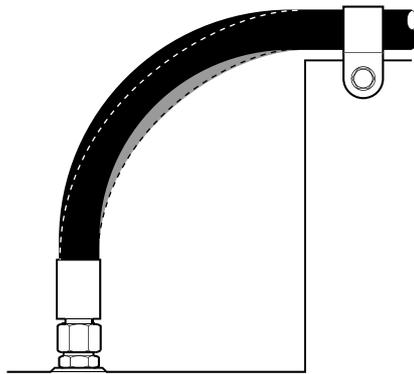


Fig 3.

T037410

Disconnecting the Hydraulic Hoses

- 1 Make the machine safe. Refer to ***Routine Maintenance, Prepare the Machine for Maintenance.***
- 2 Vent the hydraulic system. Refer to ***Routine Maintenance, Releasing the Hydraulic Pressure.***
- 3 Disconnect the hoses.

If the hoses have quick releases couplings, then refer to ***Quick Release Couplings.***

- 4 Check the hoses and adaptors for damage. Refer to ***Routine Maintenance, Checking for Damage.***
- 5 If necessary, install the blanking caps
- 6 Check for leaks.

- a Start the engine.
- b Operate the related control to increase the pressure in the hydraulic system.
- c Stop the engine then remove the starter key.
- d Check for indications of leakage at the hose connections. Correct, as necessary.

- 6 Check for leaks.
 - a Start the engine.
 - b Operate the related control to increase the pressure in the hydraulic system.
 - c Stop the engine then remove the starter key.
 - d Check for indications of leakage at the hose connections. Correct, as necessary.

Quick Release Couplings

Flat face quick release couplings allow the operator to remove and install attachments swiftly and efficiently. Generally, your machine pipework will be fitted with a female coupling **A** and a male coupling **B**. The optional attachment hoses will also be fitted with a female coupling **A** and a male coupling **B**. → [Fig 4. \(□A-4\)](#).

The quick release couplings should be trouble free and relatively easy to connect and disconnect, provided they are kept clean and used correctly. The recommendations listed below should always apply when using flat face quick release couplings.

Finally, please read the correct fitting and releasing procedures before you install or remove any optional attachment fitted with quick release couplings.

Quick Release Couplings - Do's and Don'ts

- Do wipe the two faces of the coupling and make sure they are clean before connecting.
- Do make sure the outside sleeve (female coupling) is pulled back when disconnecting.
- Do connect and disconnect a new coupling two or three times to 'work' the PTFE seals - sometimes a new coupling will stick if the seals have not been 'worked'.
- Do use a spanner on the hexagon flats of the coupling when fitting adaptors.
- Do use a rubber or hide hammer to disconnect a coupling if it sticks - sticking may occur if there is dirt present in the coupling.
- Don't attempt to re-connect a damaged half coupling - this will destroy the seals and necessitate replacing both half couplings.
- Don't leave the coupling where it may be run over by a machine or otherwise crushed - this will distort the coupling sleeve and prevent correct connection and disconnection.
- Don't clamp on the smooth diameter of the coupling when fitting adaptors - always use the hexagon.
- Don't try to turn the sleeve (female coupling) when the coupling has been disconnected - the locking ball will

wedge underneath the sleeve and destroy the coupling.

- Don't damage the faces of the couplings - this can prevent connection and disconnection, or damage seals and cause leakage.
- Don't try to dismantle the couplings - they are non serviceable parts. If a coupling is damaged it should be replaced with a new one.

WARNING

The external surfaces of the couplings must be clean before connecting or disconnecting. Ingress of dirt will cause fluid leaks and difficulty in connecting or disconnecting. You could be killed or seriously injured by faulty Quick Release Couplings.

2-4-1-15

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.

Connecting Quick Release Couplings

- 1 Remove any residual hydraulic pressure trapped in the service line hose.
- 2 Wipe the two faces of the male and female couplings and make sure they are clean.
- 3 Make sure that ball **C** in the female coupling is located in one of its slots.
- 4 Fit the male coupling into the female coupling.
- 5 Where applicable, rotate sleeve **E** half a turn and make sure that the locking ball **C** does not align with the slot **D**.

Disconnecting Quick Release Couplings

- 1 Remove any residual hydraulic pressure trapped in the service line hose.
- 2 Where applicable, align the slot **D** with ball **C**.
- 3 Pull back sleeve **E** to release the coupling.

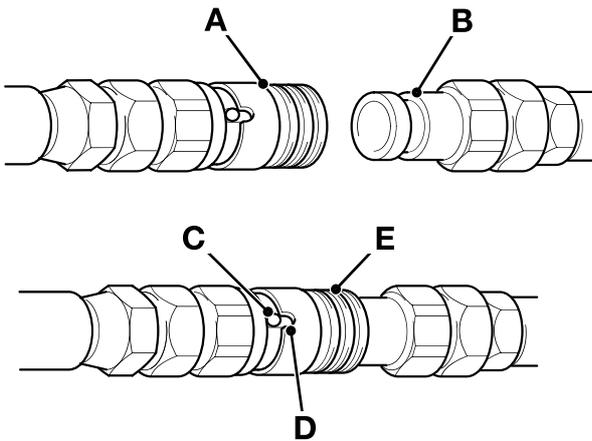


Fig 4.

C007100-1

Quickhitch

Removal and Installation

Removal

- 1 Make the machine safe.
- 2 Install the articulation strut **A**.

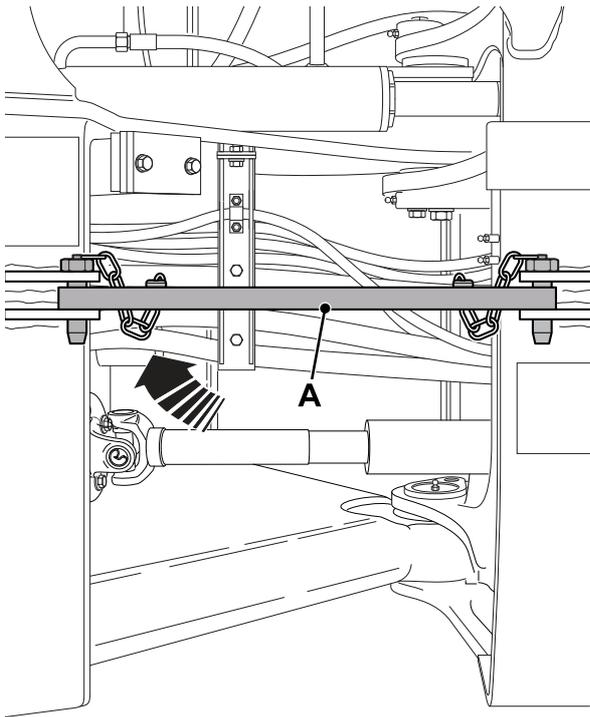


Fig 1.

P002110

- 3 Remove the starter key from the cab.
- 4 Isolate the battery.
- 5 Securely chock all of the wheels.
- 6 Use suitable lifting equipment to support the Quickhitch.
- 7 Disconnect the hydraulic hoses **B** (x2).

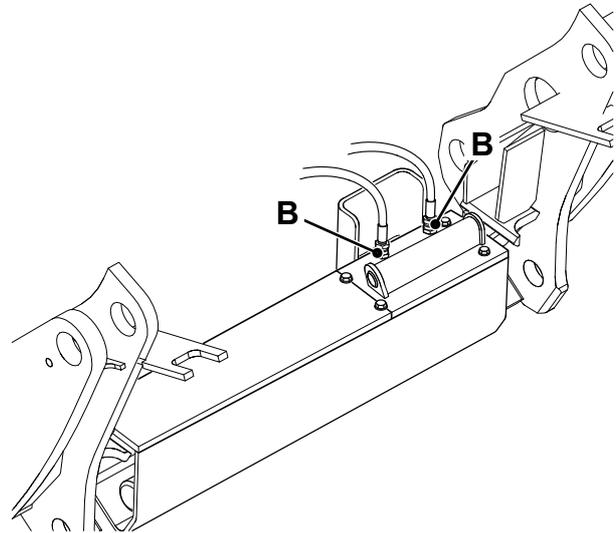


Fig 2.

P003840

- 8 Remove the bolt **C** (x4) and pivot pins **D** (x4) from both sides of the Quickhitch **E**.

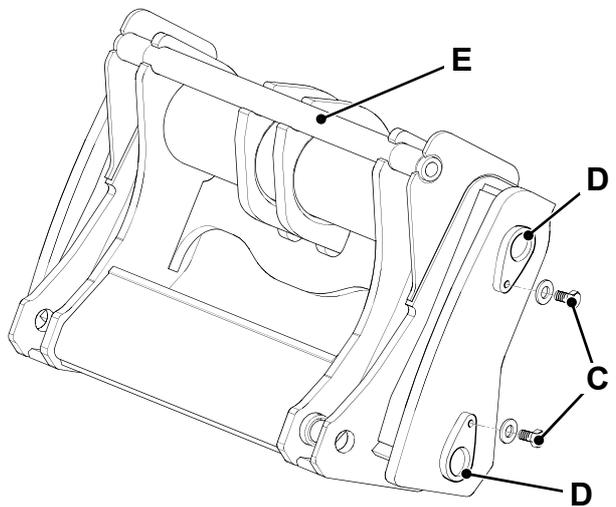


Fig 3.

P003870

- 9 Remove the Quickhitch **E** from the loader arms.
- 10 Inspect the condition of the bushes **F** and seals **G**.
- 11 Replace worn or damaged bushes **F** and/or seals **G**.

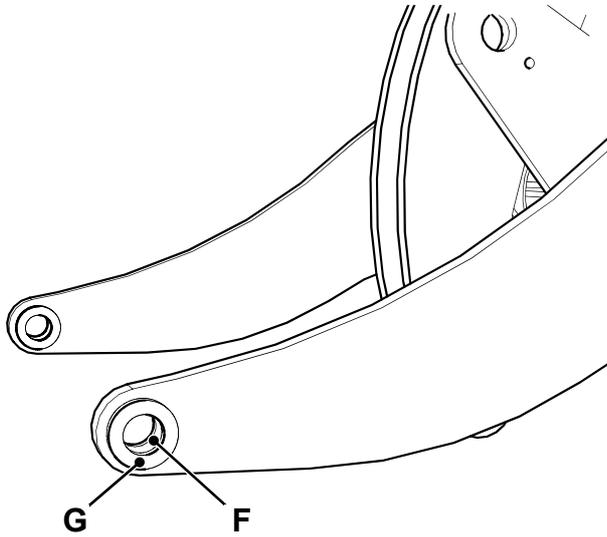


Fig 4.

P003850

- 12 Use a press to remove the bush **F**.
- 13 Use a press to install the new bush **F**, replace the seal **G**.

Installation

The Installation procedure is the opposite of the removal procedure.

Install the spacer shims **H** as necessary.

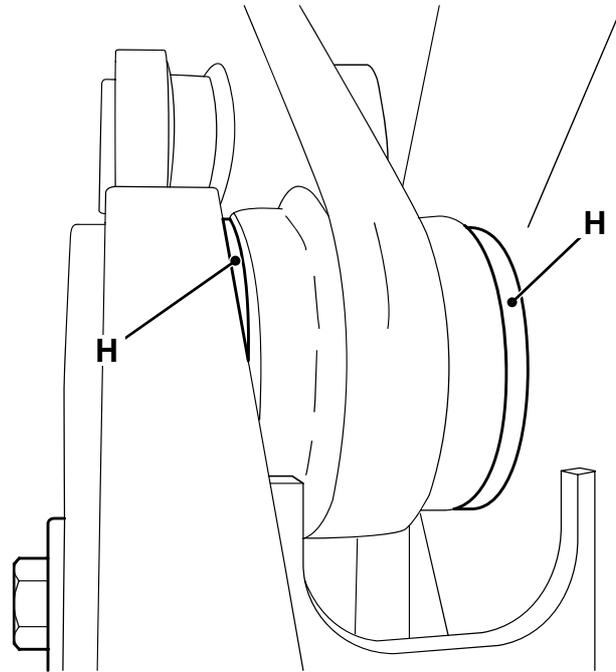


Fig 5.

P003860

Quickhitch Ram

Removal and Installation

Removal

- 1 Make the machine safe.
- 2 Install the articulation strut **A**.

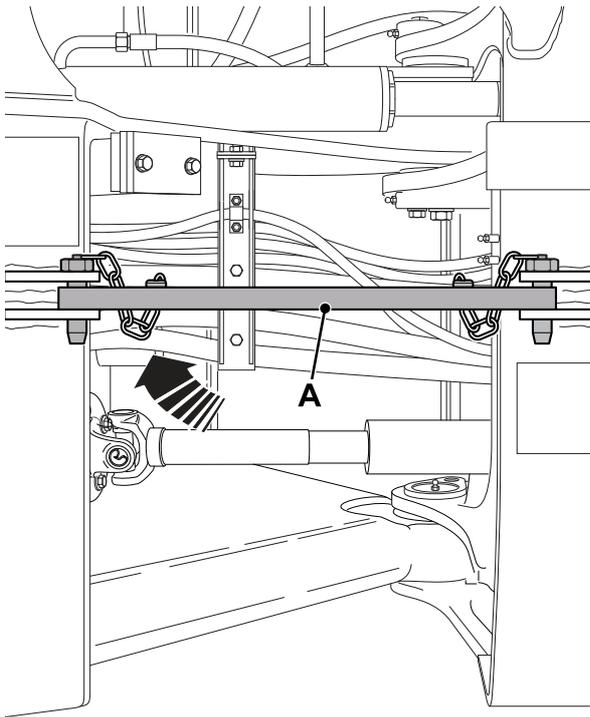


Fig 1.

P002110

- 3 Remove the indicator pin mounting plate bolts **B** (x8).
- 4 Remove the plates **C** from the Quickhitch assembly.
- 5 Remove the guide pins **D** from the pivot pins **E**.
- 6 Disconnect the hydraulic hoses **F** (x2) from the ram **F**.
- 7 Remove the pivot pin **E** (x2) from locking pin **G** (x2) and the ram **F**.

- 8 Remove the ram **F** and locking pins **G** (x2) from the Quickhitch assembly.

Installation

The Installation procedure is the opposite of the removal procedure.

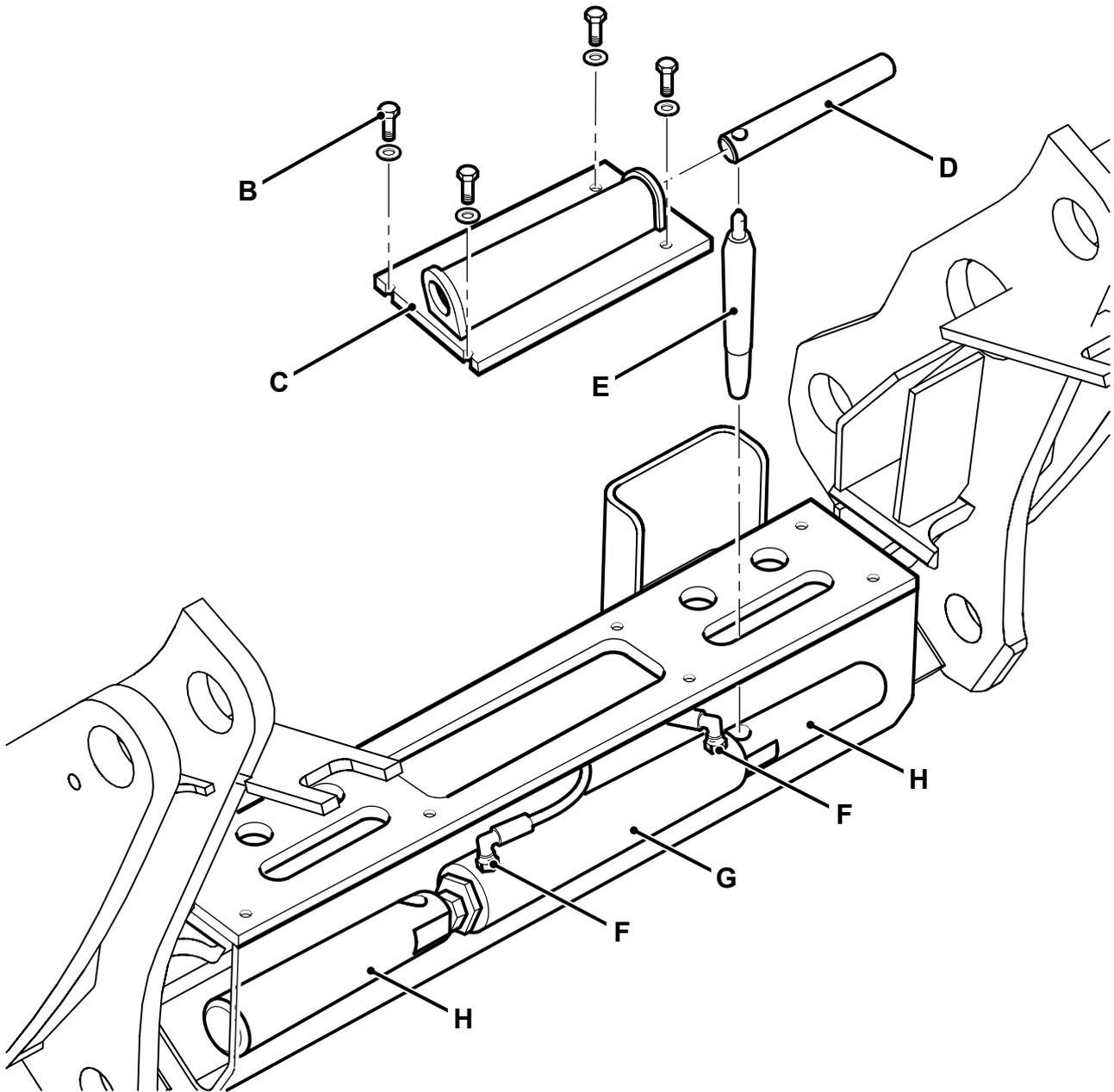


Fig 2.

P003260