

Practical Tutor Notes

Safe use of Excavator Quick Hitch Devices: Practical	
<p>SESSION NUMBER: i</p> <p>SESSION TITLE: Quick Hitch Attachments</p>	<p>SESSION DURATION:</p> <p>EXERCISE DURATION: N/A</p>
<p>LEARNING OBJECTIVES:</p> <p>By the end of the Lesson the delegate should be able to:</p> <ul style="list-style-type: none"> • Identify the risks associated with quick hitch devices • Perform the operators legal duties with respect to the use of quick hitches • Demonstrate the safe working practices for the use of quick hitches • Demonstrate the procedures for connecting and disconnecting attachments • Demonstrate when and how to conduct visual inspections of the quick hitch equipment • Carry out maintenance of quick hitch equipment • Demonstrate the appropriate methods for testing connections • Comply with the manufacturers specification for use 	
<p>TUTOR NOTES:</p> <p style="padding-left: 40px;">Session introduction and objectives Cover relevant safety Ensure PPE is issued and worn</p> <p>Show the Types of quick hitch Manual Semi – Automatic Fully automatic</p> <p>Intro to disconnecting and connecting attachments</p> <p>Disconnecting and Connecting Attachments</p> <ul style="list-style-type: none"> • Never swing the bucket over the workers and never let the workers under the bucket • Never operate an unsafe coupler. Report it immediately to your supervisor • Never operate the coupler without the supplemental safety device in place • Never Use retaining pins which have not been designed for this specific use <p>Disconnecting and Connecting Attachments</p> <ul style="list-style-type: none"> • Always establish a safe zone free from other workers when undertaking any detachment or attachment activities • Ensure the retaining pin has been replaced correctly and inspected before starting work again 	

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Manual system

- Position the bucket such that the lynch pin and safety pin are accessible
- Remove the lynch pin and store it safely
- Remove the safety pin and store it safely
- Insert the tommy-bar
- Use the tommy-bar as a lever to free the rear pivot pin retaining mechanism
- Rear pivot pin is released from quick-hitch jaw
- Lower the bucket to the floor
- Raise the dipper arm to release the front pivot pin from the front quick-hitch jaw (the bucket has rolled back in this instance due to its rounded exterior shape – keep feet a safe distance away!)
- To reconnect the bucket follow the procedure in reverse
- Remember do not forget to replace the safety pin
- Then carry out a shake test keeping the bucket low to the ground before using

Demonstrate how to do it

Do it with them

Get them to do it

Semi Automatic Hitch

- Remove the lynch pin
- Store in a safe place
- Remove the safety pin
- Place in a safe place
- Fully close the bucket to increase the pressure in the quick hitch ram
- Place the bucket on the floor
- Then open the bucket to release the hitch from the first pin
- Move the dipper away from the second pin
- Then raise the boom to clear the bucket
- To reattach a bucket follow the above procedure in reverse
- Complete a shake test keeping the bucket low to the ground before starting work again
- Replace the safety pin immediately in the correct position

Demonstrate how to do it

Do it with them

Get them to do it

Fully-automatic Quick-hitch System

- Check all grease points within the device are greased in accordance with the manufacturer's instructions
- Put the bucket in the correct position in accordance with the manufacturers instructions
- Then activate the quick hitch release system
- Place the bucket on the ground
- Open the bucket to release the quick hitch from the first pin
- Now move the dipper away to release the second pin and then raise the boom

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to clear the bucket

- To reconnect an attachment - complete the procedure in reverse
- Check that the safety locking device has returned to its correct position
- Do not forget to carry out a shake test keeping the bucket low to the ground before starting work

Demonstrate how to do it

Do it with them

Get them to do it

Manufactures Connection Procedures

- The manufactures connection procedures must be followed at all times
- All operators must be trained in the correct connection methods relating to specific quick hitch makes and models

Summary you have shown that you can

- Identify the risks associated with quick hitch devices
- Carry out the operators legal duties with respect to the use of quick hitches
- Demonstrate the safe working practices for the use of quick hitches
- Demonstrate the procedures for connecting and disconnecting attachments
- Demonstrate when and how to conduct visual inspections of the quick hitch equipment
- Carry out maintenance of quick hitch equipment
- Demonstrate the appropriate methods for testing connections
- Understand the importance of following the manufacturers specification for use

Slide 44 – Any Questions?