

DigMaster Quick Hitch

DigMaster DM100 Mini Excavator Quick Hitch Instruction Manual

Model: Quick Hitch

1. INTRODUCTION

This manual provides essential information for the safe and efficient setup, operation, and maintenance of your DigMaster DM100 Mini Excavator Quick Hitch. Please read this manual thoroughly before using the equipment to ensure proper understanding and to prevent injury or damage.

The Quick Hitch is designed to facilitate rapid attachment and detachment of various excavator implements, such as buckets and thumb clamps, enhancing operational efficiency on the DigMaster DM100 Mini Excavator.

2. SAFETY INFORMATION

Always prioritize safety when operating heavy machinery. Failure to follow safety instructions can result in serious injury or death.

- Ensure all personnel are clear of the working area before operating the quick hitch.
- Always wear appropriate personal protective equipment (PPE), including hard hat, safety glasses, gloves, and steel-toed boots.
- Inspect the quick hitch and all attachments for damage or wear before each use.
- Verify that the quick hitch pins are fully engaged and locked before lifting or operating any attachment.
- Never exceed the rated lifting capacity of the excavator or the quick hitch.
- Do not modify the quick hitch or any of its components.

3. SETUP AND INSTALLATION

This section details the installation of the Quick Hitch onto the excavator arm and the attachment of implements.

3.1 Unpacking and Initial Inspection

Carefully unpack the Quick Hitch. Inspect all components for any signs of shipping damage. Verify that all parts listed in the packing list are present. Contact your dealer immediately if any damage or missing parts are found.

3.2 Attaching the Quick Hitch to the Excavator

1. Position the excavator arm to a stable, level position.
2. Align the Quick Hitch mounting points with the excavator arm's attachment points.
3. Insert the main pins through the corresponding holes, securing the Quick Hitch to the excavator arm.
4. Ensure all pins are fully seated and secured with their retaining clips or bolts.



Figure 3.2.1: Quick Hitch with key dimensions. The main pin diameter is 25mm, and the internal width is 93mm. The mounting plate thickness is 10mm.

3.3 Attaching an Implement (e.g., Bucket)

1. Position the Quick Hitch over the implement's attachment points.
2. Carefully lower the Quick Hitch until the front pin engages with the implement's front lug.
3. Actuate the Quick Hitch's locking mechanism to engage the rear pin with the implement's rear lug.
4. Visually confirm that both pins are fully engaged and the locking mechanism is secure.



Figure 3.3.1: Various views of the Quick Hitch, highlighting the attachment points and the locking mechanism for secure implement changes.

4. OPERATING INSTRUCTIONS

The Quick Hitch simplifies changing attachments, allowing for efficient transitions between tasks such as digging with the 0.025m³ bucket and handling materials with the thumb clamp.

4.1 Engaging and Disengaging Attachments

- **To Engage:** Align the Quick Hitch with the attachment. Slowly lower the excavator arm to engage the front pin. Use the hydraulic controls to actuate the Quick Hitch's rear locking mechanism until the rear pin securely engages the attachment. Always perform a visual check to confirm full engagement.
- **To Disengage:** Ensure the attachment is resting on a stable, level surface. Actuate the Quick Hitch's locking mechanism to retract the rear pin. Carefully lift the excavator arm, disengaging the front pin from the attachment.

SMALL DIGGING QUICK CHANGE AIDS



Figure 4.1.1: The Quick Hitch facilitates rapid changes of small digging implements, improving operational flow.

4.2 General Operation Tips

- Operate the excavator and Quick Hitch smoothly. Avoid sudden movements that could stress components.
- Regularly check hydraulic lines and connections for leaks or damage. The DM100 features protected internal hydraulic hoses, but external connections still require inspection.
- When using the 0.025m³ bucket, be mindful of the 1763.7 lbf digging force and operate within safe limits.

5. MAINTENANCE

Regular maintenance is crucial for the longevity and safe operation of your Quick Hitch.

5.1 Daily Checks

- Inspect all pins, bolts, and retaining clips for wear, damage, or looseness.
- Check for any cracks or deformation in the Quick Hitch structure, especially around welds.
- Ensure the locking mechanism operates smoothly and fully engages.

5.2 Lubrication

Lubricate all grease points on the Quick Hitch daily or before each shift. Use a high-quality multi-purpose grease. Pay particular attention to the pivot points of the locking mechanism and the pin engagement areas.

5.3 Periodic Inspection

- **Weekly:** Thoroughly clean the Quick Hitch to remove dirt and debris. Inspect for corrosion and apply protective coating if necessary.
- **Monthly:** Check for excessive play in the pin connections. Replace worn pins or bushings as needed.

SUPER REINFORCED WELDS FOR LONGER LIFE

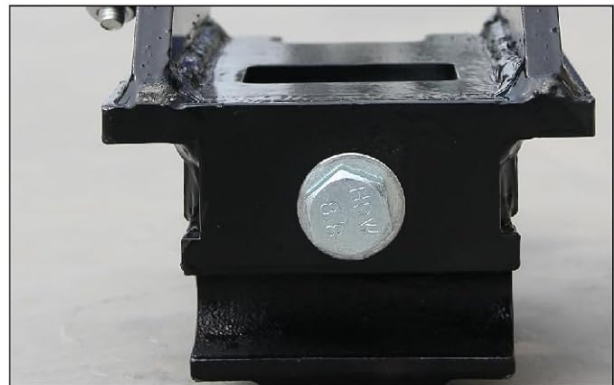


Figure 5.3.1: The Quick Hitch features super reinforced welds for enhanced durability and longer service life. Regularly inspect these areas for integrity.

6. TROUBLESHOOTING

This section addresses common issues you might encounter with the Quick Hitch.

Problem	Possible Cause	Solution
Pins not engaging fully	Misalignment with attachment; debris in pin holes; worn pins/bushings; hydraulic issue (if applicable)	Re-align attachment; clean pin holes; inspect and replace worn parts; check hydraulic fluid levels and connections.
Difficulty disengaging attachment	Pressure on pins; locking mechanism jammed; worn components	Ensure attachment is resting on ground with no pressure on pins; inspect and clear locking mechanism; lubricate moving parts.
Excessive play in attachment	Worn pins or bushings; improper engagement	Inspect and replace worn pins/bushings; ensure full and secure engagement of both pins.

7. SPECIFICATIONS

Key specifications for the DigMaster DM100 Mini Excavator Quick Hitch and related excavator features.

- **Model:** Quick Hitch
- **Compatible Excavator:** DigMaster DM100 Mini Excavator
- **Excavator Engine:** 13.5 HP RATO single-cylinder, air-cooled
- **Bucket Capacity (Standard):** 0.025m³
- **Digging Force:** 1763.7 lbf
- **Quick Hitch Pin Diameter:** 25mm (approximate, refer to Figure 3.2.1)
- **Quick Hitch Internal Width:** 93mm (approximate, refer to Figure 3.2.1)
- **Overall Excavator Item Weight:** 2000 pounds
- **Excavator Transport Dimensions (L x W):** 108.27 inches x 36.61 inches

8. WARRANTY INFORMATION

For detailed warranty terms and conditions, please refer to the official warranty documentation provided with your DigMaster DM100 Mini Excavator and Quick Hitch, or contact DigMaster customer support directly. Warranty coverage typically includes manufacturing defects under normal use and service.

9. CUSTOMER SUPPORT

If you require assistance, have questions, or need to order replacement parts, please contact DigMaster customer support. Have your product model number (Quick Hitch) and serial number ready when contacting support to ensure efficient service.

For the most current contact information, please visit the official DigMaster website or refer to the documentation included with your purchase.

