

HILTI DX 351

Hilti DX 351 Fully Automatic Powder-Actuated Tool with X-MX 32 Magazine

INSTRUCTION MANUAL

1. Introduction

This manual provides essential information for the safe and effective operation, maintenance, and troubleshooting of the Hilti DX 351 Fully Automatic Powder-Actuated Tool with X-MX 32 Magazine. The Hilti DX 351 is a high-performance fastening tool designed for various applications in construction and industrial settings, utilizing powder-actuated technology for efficient and reliable fastening.

2. Safety Instructions

WARNING: Powder-actuated tools are powerful and can cause serious injury or death if not used properly. Always follow all safety guidelines provided by Hilti and local regulations.

- Always wear appropriate personal protective equipment (PPE), including safety glasses, hearing protection, and gloves.
- Never point the tool at yourself or others.
- Ensure the work area is clear of bystanders and obstructions.
- Only use Hilti-approved fasteners and powder loads with the tool.
- Do not use the tool in explosive atmospheres.
- Before loading, ensure the tool is clean and free from debris.
- Store the tool, fasteners, and powder loads securely and separately, out of reach of unauthorized persons.
- Refer to the full safety manual provided by Hilti for comprehensive safety information.

3. Components and Overview

The Hilti DX 351 system includes the main tool body, the X-MX 32 magazine, and a durable carrying case for transport and storage.



Figure 3.1: Hilti DX 351 Powder-Actuated Tool with X-MX 32 Magazine and its red carrying case. The image shows the red Hilti branded case at the top, and the red and black tool with the attached magazine lying in front of it on a speckled surface.

- **Hilti DX 351 Tool Body:** The main unit, featuring the trigger, handle, and power adjustment.
- **X-MX 32 Magazine:** Attaches to the tool for automatic feeding of fasteners.
- **Carrying Case:** A robust red case with the Hilti logo, designed for safe transport and storage of the tool and accessories.

4. Setup and Preparation

1. **Unpack the Tool:** Carefully remove the DX 351 tool and X-MX 32 magazine from the carrying case.
2. **Inspect for Damage:** Before each use, visually inspect the tool, magazine, and all accessories for any signs of damage or wear. Do not use damaged equipment.
3. **Attach Magazine:** Securely attach the X-MX 32 magazine to the tool body according to the instructions provided in

the full Hilti manual. Ensure it clicks into place.

4. **Select Fasteners and Loads:** Choose the appropriate Hilti fasteners and powder loads for your specific application and base material. Refer to Hilti's fastener selection guide.
5. **Load Magazine:** Load the selected fasteners into the X-MX 32 magazine. Load powder loads into the tool as per the manufacturer's instructions.
6. **Adjust Power:** Set the power adjustment dial to the recommended setting for your application. Test on a scrap piece of material if unsure.

5. Operating Instructions

1. **Prepare Work Surface:** Ensure the base material is clean, stable, and suitable for fastening.
2. **Position Tool:** Place the tool firmly and perpendicularly against the work surface. Ensure the fastener guide is flush with the material.
3. **Apply Pressure:** Apply firm, consistent pressure to the tool to compress the safety mechanism. The tool will not fire unless sufficient pressure is applied.
4. **Fire Tool:** Once the tool is fully compressed, pull the trigger to fire the fastener.
5. **Release and Advance:** Release the trigger and lift the tool from the surface. The X-MX 32 magazine will automatically advance the next fastener.
6. **Check Fastening:** Inspect the fastened element to ensure proper penetration and secure attachment.
7. **Unload Tool:** After use, or if there is a misfire, carefully unload the tool and magazine following Hilti's specific instructions for safe unloading.

6. Maintenance and Care

Regular maintenance is crucial for the longevity and safe operation of your Hilti DX 351 tool.

- **Daily Cleaning:** After each use, clean the tool thoroughly to remove powder residue and debris. Use Hilti cleaning sprays and brushes as recommended.
- **Lubrication:** Lubricate moving parts as specified in the official Hilti manual using Hilti-approved lubricants.
- **Inspection:** Regularly inspect the piston, buffer, and other wear parts for signs of damage or excessive wear. Replace worn parts immediately with genuine Hilti spare parts.
- **Storage:** Store the tool in its original carrying case in a dry, secure location, away from extreme temperatures and moisture.
- **Professional Servicing:** Hilti recommends periodic professional servicing of powder-actuated tools to ensure optimal performance and safety.

7. Troubleshooting

Problem	Possible Cause	Solution
Tool does not fire.	Insufficient pressure applied; tool not fully compressed. No powder load or fastener loaded. Tool is dirty or jammed.	Apply more firm, perpendicular pressure. Check and load powder load and fastener. Clean the tool according to maintenance instructions.

Problem	Possible Cause	Solution
Fastener not fully driven.	Incorrect power setting. Wrong powder load for material. Worn piston or buffer.	Increase power setting. Use a stronger powder load. Inspect and replace worn parts.
Misfire or weak shot.	Defective powder load. Tool not properly cleaned. Magazine not correctly seated.	Carefully remove and dispose of the powder load. Try a new one. Clean the tool. Re-seat the magazine firmly.

For more detailed troubleshooting, refer to the comprehensive Hilti DX 351 operating manual or contact Hilti customer support.

8. Technical Specifications

Model:	Hilti DX 351
Part Number:	FAP351
Item Weight:	0.01 ounces (Note: This weight seems unusually low and likely refers to a component, not the full tool. Refer to official Hilti documentation for accurate tool weight.)
Color:	Red
Material:	Metal, Plastic
Item Package Quantity:	1
Magazine Type:	X-MX 32 Magazine
Power Source:	Powder-Actuated

Note: For complete and up-to-date technical specifications, always refer to the official Hilti product documentation or website.

9. Warranty and Support

For detailed information regarding the Hilti warranty policy, product registration, and customer support, please visit the official Hilti website or contact your local Hilti representative. Hilti provides comprehensive support and service for its tools.

Official Hilti Website: www.hilti.com