**XZT XZT-JY03**

# XZT JY12 Hydraulic Breaker Hammer Nitrogen Gas Charging Valve User Manual

Model: XZT-JY03

## Introduction

This user manual provides essential information for the safe and effective use of the XZT JY12 Hydraulic Breaker Hammer Nitrogen Gas Charging Valve. This device is specifically designed for charging nitrogen gas into hydraulic breakers. Its design emphasizes overall cohesiveness, a delicate appearance, and user-friendliness. It is compatible with hydraulic breakers from a majority of brands. The primary application of this product is to facilitate the charging of nitrogen gas into hydraulic breaker systems, ensuring optimal performance and longevity of the equipment.

## Safety Information

Always prioritize safety when working with pressurized systems and heavy machinery. Failure to follow safety instructions can result in serious injury or equipment damage.

- **Personal Protective Equipment (PPE):** Always wear appropriate PPE, including safety glasses, gloves, and protective clothing, when handling the valve and working with hydraulic systems.
- **Pressure Awareness:** Nitrogen gas is stored under high pressure. Exercise extreme caution. Never attempt to disassemble the valve or connect it to systems with unknown pressure levels.
- **System Compatibility:** Ensure the valve's thread specifications (BSP1/2" for breaker connection, M10*1 for gas valve) match your hydraulic breaker and nitrogen source before connection. Incompatible connections can lead to leaks or damage.
- **Ventilation:** Work in a well-ventilated area when handling pressurized gases.
- **Leak Checks:** After connecting, always perform a leak check using a suitable leak detection solution before fully pressurizing the system.
- **Storage:** Store the valve in a clean, dry place, away from extreme temperatures and corrosive materials.

## Product Overview

The XZT JY12 Nitrogen Gas Charging Valve is a robust component designed for durability and ease of use. It is constructed from steel, ensuring longevity and resistance to wear.

*Figure 1: XZT JY12 Nitrogen Gas Charging Valve. This image shows the overall appearance of the black metal valve, featuring a hexagonal head and a threaded body.*

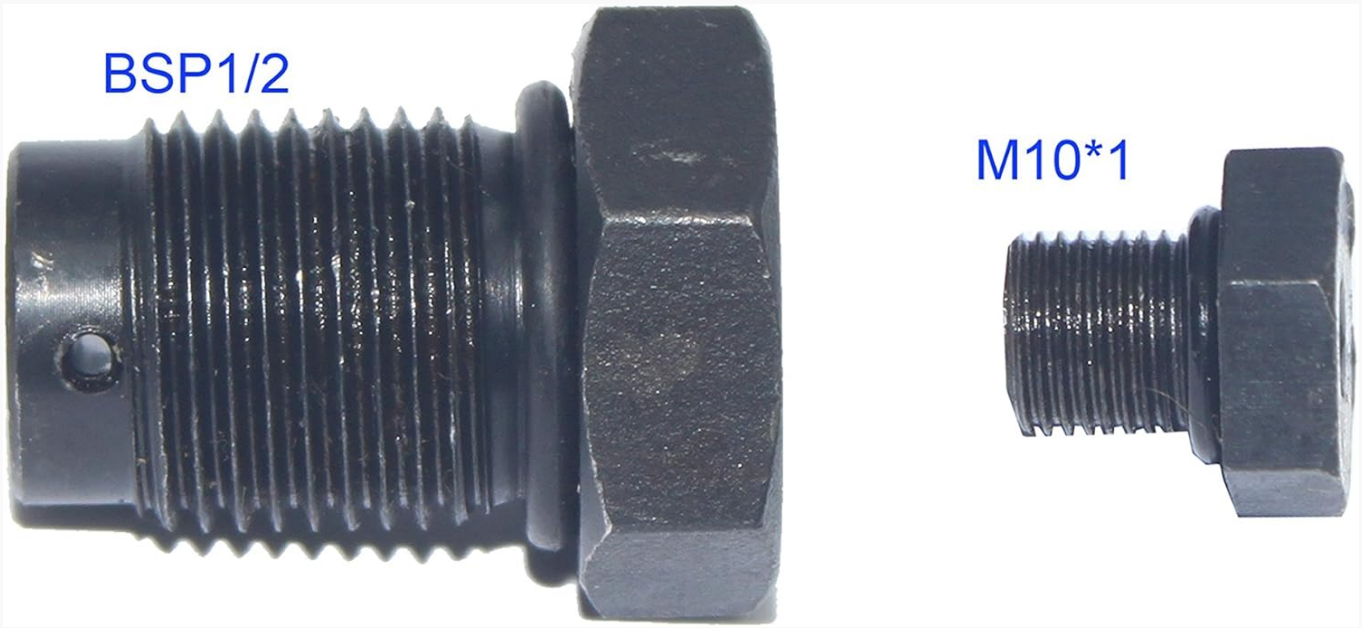


*Figure 2: Thread Specifications. This image illustrates the two main thread types: the larger BSP1/2 thread for connection to the breaker and the*

*smaller M10*1 thread for the gas valve.*

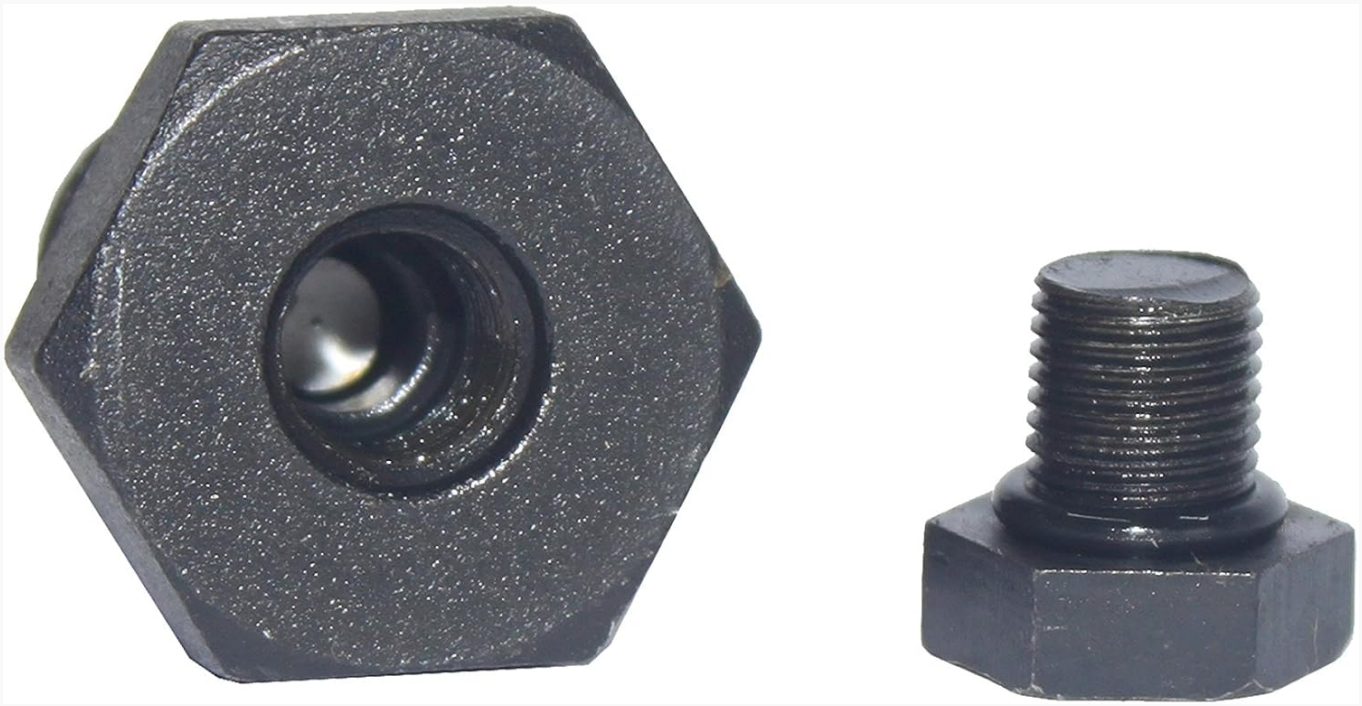

*Figure 3: Valve Head and Gas Connection. This image provides a closer view of the hexagonal head of the valve and the M10*1 threaded component, highlighting the internal opening.*

### Key Features:

- Thread connection to breaker: BSP1/2"
- Gas valve thread: M10*1
- Suitable for gas charging and pressure testing for a majority of brand breaker hammers.
- Easy to use design.
- Constructed from durable steel.

## Setup

Before beginning the setup process, ensure you have read and understood all safety information.

1. **Inspect the Valve:** Visually inspect the XZT JY12 charging valve for any signs of damage, corrosion, or debris. Ensure all threads are clean and free of obstructions.
2. **Prepare the Hydraulic Breaker:** Locate the nitrogen charging port on your hydraulic breaker. Clean the area around the port to prevent contaminants from entering the system.
3. **Verify Thread Compatibility:** Confirm that the breaker's charging port thread is BSP1/2". The XZT JY12 valve's larger thread is designed to connect to this port.
4. **Connect to Breaker:** Carefully thread the BSP1/2" end of the XZT JY12 valve into the hydraulic breaker's nitrogen charging port. Hand-tighten first, then use an appropriate wrench to secure it firmly, but do not overtighten.
5. **Prepare Nitrogen Source:** Ensure your nitrogen gas cylinder and regulator are in good working condition. Verify that the regulator's output thread matches the M10*1 thread of the XZT JY12 valve.
6. **Connect Nitrogen Source:** Attach the nitrogen gas regulator's hose or fitting to the M10*1 thread of the XZT JY12 valve. Tighten securely.
7. **Leak Check:** Before opening the nitrogen supply, apply a leak detection solution (e.g., soapy water) to all connections. Slowly open the nitrogen cylinder valve and check for bubbles, indicating a leak. If leaks are detected, close the nitrogen supply, relieve pressure, and re-tighten connections. Repeat until no leaks are present.

## Operating Instructions

Once the setup is complete and all connections are secure and leak-free, you can proceed with charging the hydraulic breaker.

1. **Determine Required Pressure:** Consult your hydraulic breaker's manufacturer specifications for the correct nitrogen gas pressure. This is crucial for optimal performance and to prevent damage.
2. **Open Nitrogen Supply:** Slowly open the valve on your nitrogen gas cylinder.
3. **Adjust Regulator:** Gradually adjust the nitrogen gas regulator to achieve the desired pressure as indicated on the regulator's gauge. Monitor the pressure carefully.
4. **Charge Breaker:** Allow the nitrogen gas to flow into the hydraulic breaker until the internal pressure matches the manufacturer's specification. The XZT JY12 valve facilitates this transfer.
5. **Close Nitrogen Supply:** Once the desired pressure is reached, close the valve on the nitrogen gas cylinder first.
6. **Bleed Regulator Pressure:** Slowly release any remaining pressure from the nitrogen gas regulator and hose.
7. **Disconnect:** Carefully disconnect the nitrogen gas regulator from the XZT JY12 valve. Then, slowly unthread the XZT JY12 valve from the hydraulic breaker's charging port. Be aware of any residual pressure that might escape.
8. **Cap Breaker Port:** Replace the protective cap or plug on the hydraulic breaker's nitrogen charging port to prevent contamination.

*Note: For pressure testing, connect a suitable pressure gauge to the M10*1 port of the XZT JY12 valve instead of the nitrogen source.*

## Maintenance

Proper maintenance ensures the longevity and reliable operation of your XZT JY12 Nitrogen Gas Charging Valve.

- **Cleaning:** After each use, wipe down the valve with a clean, dry cloth to remove any dirt, grease, or moisture. Avoid using harsh chemicals that could damage the metal.
- **Thread Inspection:** Regularly inspect the BSP1/2" and M10*1 threads for wear, damage, or cross-threading. Damaged threads can lead to leaks.
- **O-Rings/Seals:** If the valve includes any O-rings or seals, inspect them for cracks, hardening, or deformation. Replace them if necessary to maintain a proper seal.
- **Storage:** Store the valve in a clean, dry, and protected environment when not in use. Keep it away from direct sunlight, extreme temperatures, and corrosive substances.
- **Avoid Impact:** Do not drop or subject the valve to heavy impact, as this can deform the threads or internal components.

## Troubleshooting

This section addresses common issues you might encounter with the XZT JY12 Nitrogen Gas Charging Valve.

| Problem | Possible Cause | Solution |
|---|---|---|
| Gas Leak at Connections | ◦ Loose connection<br>◦ Damaged threads<br>◦ Worn or missing O-ring/seal<br>◦ Incorrect thread type | ◦ Tighten connections securely.<br>◦ Inspect threads for damage; replace valve or mating part if necessary.<br>◦ Inspect and replace O-rings/seals.<br>◦ Ensure correct BSP1/2" and M10*1 threads are used. |
| Difficulty Threading Valve | ◦ Cross-threading<br>◦ Dirty or damaged threads<br>◦ Incorrect thread size | ◦ Ensure valve is aligned straight before threading.<br>◦ Clean threads thoroughly. If damaged, replace.<br>◦ Verify the breaker port is BSP1/2" and the gas source is M10*1. |

| Problem | Possible Cause | Solution |
|---|---|---|
| Nitrogen Not Flowing | ◦ Nitrogen cylinder valve closed<br>◦ Regulator not set correctly<br>◦ Obstruction in valve or hose | ◦ Open nitrogen cylinder valve.<br>◦ Adjust regulator to desired pressure.<br>◦ Inspect valve and hose for blockages. |

## Specifications

| Attribute | Detail |
|---|---|
| Model Number | XZT-JY03 (also referred to as JY12) |
| Material | Metal (Steel) |
| Breaker Connection Thread | BSP1/2" |
| Gas Valve Thread | M10*1 |
| Item Dimensions (L x W x H) | 1.97 x 1.97 x 0.79 inches |
| Item Weight | 3.52 ounces |
| Manufacturer | XZT Fluid Technology Ltd. |
| UPC | 603097852035 |
| Specification Met | CE, ISO 9001, OSHA, ANSI B1.20.1, ANSI B16.11 |

## Warranty and Support

For specific warranty information regarding your XZT JY12 Hydraulic Breaker Hammer Nitrogen Gas Charging Valve, please refer to the documentation provided at the time of purchase or contact XZT customer support directly.
If you require technical assistance, have questions about product compatibility, or need to report an issue, please visit the official XZT store or contact their customer service department. Always provide your product model number (XZT-JY03) and purchase details when seeking support.
You can visit the XZT Store for more information:XZT Official Store