XZT GK-01

XZT GK-01 Hydraulic Accumulator Nitrogen Charging System User Manual

Model: GK-01

1. Introduction

The XZT GK-01 Hydraulic Accumulator Nitrogen Charging System is designed for the safe and efficient nitrogen charging and pressure testing of hydraulic accumulators. This kit is compatible with most brands of accumulators and provides the necessary tools for accurate pressure management.

2. Safety Information

WARNING: Handling high-pressure nitrogen gas requires extreme caution. Failure to follow safety guidelines can result in serious injury or death.

- **Always wear appropriate personal protective equipment (PPE)**, including safety glasses and gloves, when operating this system.
- Ensure all connections are secure and leak-free before applying pressure.
- Never exceed the maximum rated pressure of the accumulator or any component in the charging system.
- Use only nitrogen gas for charging hydraulic accumulators. Do not use oxygen, compressed air, or any other gas, as this can cause an explosion.
- Perform charging in a well-ventilated area.
- Keep hands and body clear of pressure relief points.
- Refer to the accumulator manufacturer's instructions for specific charging procedures and pressure limits.
- Do not modify the charging system components.

3. Package Contents

Verify that all items listed below are present and undamaged before use.

Image 3.1: Complete packing list for the XZT GK-01 system, showing the main valve, various adapters, three analog gauges, and the gas hose.

- Main Valve with M28*1.5 adapter
- Seven (7) Type Adapters: UNF7/8, UNF5/8, UNF5/16, UNF1/2, G1/4, M14*1.5, M28*1.5
- Three (3) Analog Gauges (selectable pressure ranges: 1500PSI, 3600PSI, 6000PSI)
- 5 FT / 1.5 M Gas Hose
- Gas Adapter for Cylinder (CGA580 for North American, BSP5/8 for CN/UK)
- Storage Case

4. Product Overview and Components

The XZT GK-01 system consists of several key components designed for precise nitrogen charging.

Image 4.1: The main valve assembly with a pressure gauge and connected gas hose.

Image 4.2: A selection of three analog pressure gauges, allowing for different pressure ranges (1500PSI, 3600PSI, 6000PSI).

Image 4.3: The seven included adapter types: UNF5/16, UNF5/8, UNF7/8, M28*1.5, UNF1/2, M14*1.5, and BSP1/4 (G1/4).

5. Setup Instructions

Follow these steps to set up the nitrogen charging system.

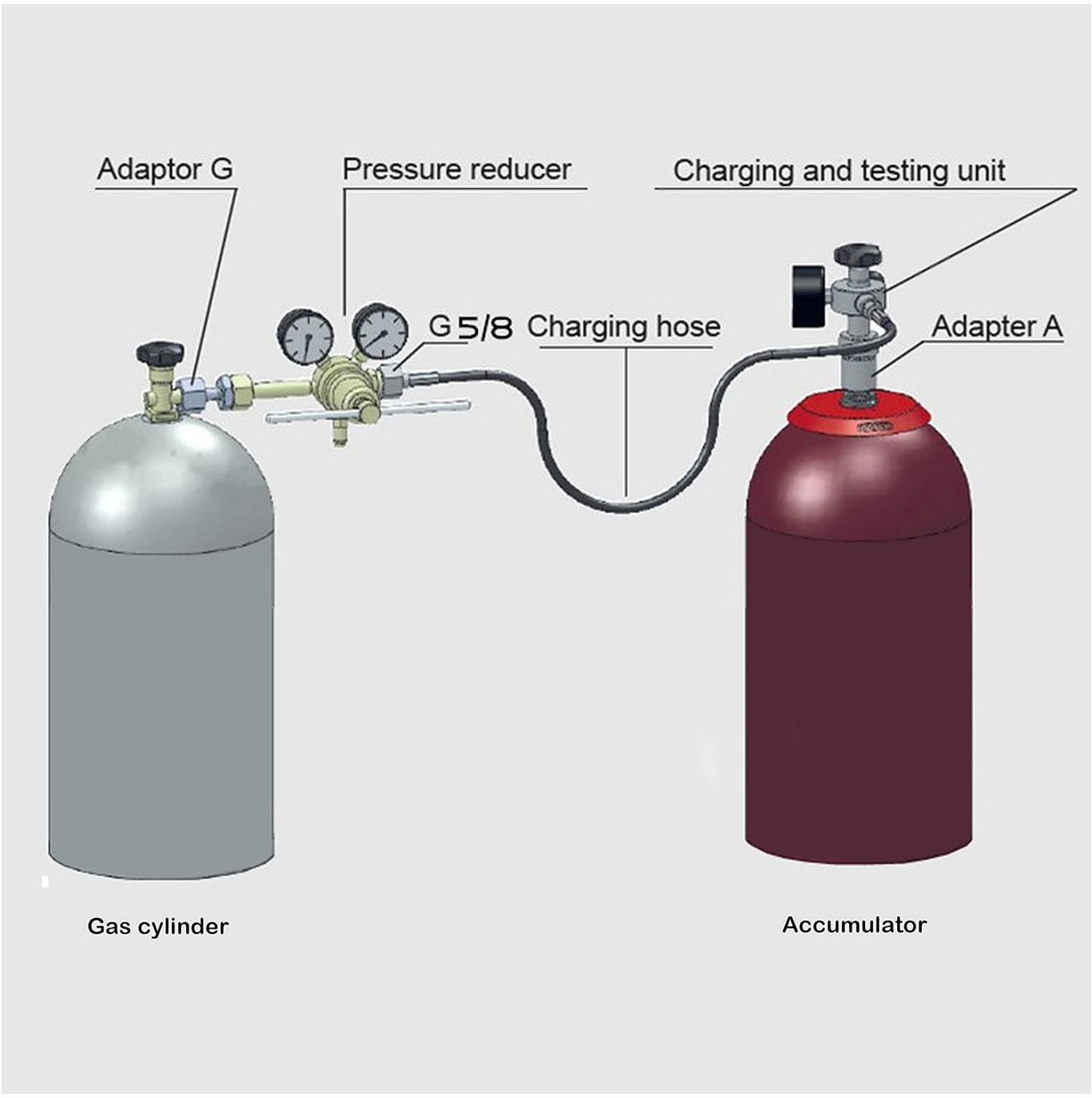

Image 5.1: Connection diagram illustrating the setup from a gas cylinder to a hydraulic accumulator using the charging unit.

1. **Select the Correct Adapter:** Identify the appropriate adapter from the seven provided types that matches your hydraulic accumulator's gas valve.
2. **Attach Adapter to Main Valve:** Securely screw the selected adapter onto the main valve of the charging unit.
3. **Connect Gauge:** Screw the desired analog pressure gauge (1500PSI, 3600PSI, or 6000PSI) onto the main valve. Ensure it is finger-tight.
4. **Connect Gas Hose:** Attach one end of the 5 FT / 1.5 M gas hose to the main valve.
5. **Connect to Nitrogen Cylinder:** Attach the other end of the gas hose to the appropriate gas adapter for your nitrogen cylinder (CGA580 for North American or BSP5/8 for CN/UK), then connect this assembly to your nitrogen gas cylinder. Ensure all connections are tight.
6. **Connect to Accumulator:** Screw the main valve assembly (with the attached adapter) onto the gas valve of the hydraulic accumulator.

Your browser does not support the video tag.

Video 5.1: A detailed demonstration of assembling the XZT GK-01 Nitrogen Gas Charging Tools and connecting them for accumulator charging. This video shows the process of attaching adapters, gauges, and hoses.

6. Operating Instructions

Once the system is set up, follow these steps to charge your hydraulic accumulator:

1. **Verify Connections:** Double-check all connections for tightness to prevent leaks.
2. **Open Accumulator Valve:** Slowly open the gas valve on the hydraulic accumulator.
3. **Open Nitrogen Cylinder Valve:** Slowly open the valve on the nitrogen gas cylinder.
4. **Adjust Pressure:** Use the main valve's control knob to slowly introduce nitrogen gas into the accumulator. Monitor the pressure gauge on the charging unit.
5. **Reach Desired Pressure:** Continue charging until the desired pre-charge pressure for your accumulator is reached, as specified by the accumulator manufacturer.
6. **Close Valves:** First, close the valve on the nitrogen gas cylinder. Then, close the main valve's control knob on the charging unit. Finally, close the gas valve on the hydraulic accumulator.
7. **Bleed Pressure:** Carefully bleed any residual pressure from the charging hose and main valve by slowly opening the bleed valve on the charging unit.
8. **Disconnect:** Once the pressure is fully bled, disconnect the charging unit from the accumulator and the gas hose from the nitrogen cylinder.

7. Maintenance

Proper maintenance ensures the longevity and reliability of your XZT GK-01 system.

- **Cleaning:** After each use, wipe down all components with a clean, dry cloth. Do not use harsh chemicals or solvents.
- **Inspection:** Regularly inspect all hoses, adapters, and gauges for signs of wear, damage, or corrosion. Replace any damaged components immediately.
- **Storage:** Store the charging system in its provided case in a cool, dry place, away from direct sunlight and corrosive materials.
- **O-Rings and Seals:** Periodically check O-rings and seals for cracks or degradation. Replace as needed to maintain a leak-free system.

8. Troubleshooting

This section addresses common issues you might encounter.

Problem	Possible Cause	Solution
Gas Leakage	Loose connections, damaged O-rings/seals, incorrect adapter.	Tighten all connections. Inspect and replace O-rings/seals. Ensure the correct adapter is used for the accumulator.
No Pressure Reading	Valves not fully open, clogged line, faulty gauge.	Ensure nitrogen cylinder and accumulator valves are fully open. Check for obstructions in the hose. Test with a different gauge if available.

Problem	Possible Cause	Solution
Difficulty Attaching Adapter	Incorrect adapter size, dirty threads.	Verify the correct adapter for your accumulator. Clean threads on both the adapter and accumulator valve.

9. Specifications

Brand: XZT

Model: GK-01

Material: Metal

Item Dimensions (L x W x H): 13.78 x 11.81 x 5.12 inches (350mm x 300mm x 130mm)

Item Weight: 4.5 Kilograms

Thread Type (Main Valve): M14*1.5

Included Adapters: UNF7/8, UNF5/8, UNF5/16, UNF1/2, G1/4, M14*1.5, M28*1.5

Analog Gauge Options: 1500PSI, 3600PSI, 6000PSI

Gas Hose Length: 5 FT / 1.5 M

Cylinder Gas Adapters: CGA580 (North American), BSP5/8 (CN/UK)

Image 9.1: The dimensions of the storage case for the XZT GK-01 system, measuring 13 inches (330mm) in length, 11 inches (270mm) in width, and 3.9 inches (90mm) in height.

10. Warranty and Support

For warranty information or technical support regarding your XZT GK-01 Hydraulic Accumulator Nitrogen Charging System, please contact the manufacturer directly. Refer to the product packaging or the official XZT website for contact details.

Manufacturer: XZT Fluid Technology

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question