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› XYohykai Main Relief Valve 14513267 Instruction Manual

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XYohykai Main Relief Valve 14513267 Instruction Manual

For Volvo and Doosan Daewoo Excavators

1. PRODUCT OVERVIEW

This manual provides essential information for the installation, operation, and maintenance of the XYohykai Main Relief Valve, part number 14513267. This valve is a critical component in the hydraulic system of compatible excavators, designed to regulate and limit the maximum pressure within the hydraulic circuit, thereby protecting the system from overpressure damage.



Figure 1: XYohykai Main Relief Valve, part number 14513267. This image displays the valve's external structure, including its ports and adjustment mechanism, which is typical for hydraulic relief valves used in heavy machinery.

2. COMPATIBILITY AND APPLICATION

The Main Relief Valve 14513267 is designed for use in specific excavator models. It is crucial to verify compatibility before installation.

Compatible Excavator Models:

- **Volvo Excavators:** EC135B, EC140D, EC160B, EC180B, EC200B, EC210D, EC240C, EW145B, FC2924C
- **Doosan Daewoo Excavators:** DX220-5, DX220-7

Important Notice: Application information provided is for reference only. Always confirm the part number and compare with the old part before purchase and installation to ensure correct fitment and function. If you have any questions regarding compatibility, please consult a qualified technician or the product supplier.

3. SETUP AND INSTALLATION

Installation of hydraulic components should be performed by trained personnel following safety protocols and manufacturer guidelines. Improper installation can lead to system malfunction, damage, or injury.

General Installation Steps:

1. **Safety First:** Ensure the excavator is powered off, hydraulic pressure is relieved, and the machine is safely secured before beginning any work. Wear appropriate personal protective equipment (PPE).
2. **Identify Location:** Locate the existing main relief valve in the hydraulic manifold. Refer to the excavator's service manual for the exact location.
3. **Drain Hydraulic Fluid:** If necessary, drain a small amount of hydraulic fluid to prevent spillage during valve removal.
4. **Remove Old Valve:** Carefully unthread and remove the old relief valve. Be prepared for residual hydraulic fluid.
5. **Inspect and Clean:** Inspect the valve cavity for any debris or damage. Clean the area thoroughly.
6. **Install New Valve:** Apply a thin layer of clean hydraulic fluid to the O-rings of the new XYohykai Main Relief Valve 14513267. Carefully thread the new valve into the manifold.
7. **Torque Specification:** Tighten the valve to the torque specification recommended in the excavator's service manual. Overtightening can damage the valve or manifold; undertightening can lead to leaks.
8. **Refill and Bleed:** Top up hydraulic fluid if necessary and follow the excavator manufacturer's procedure for bleeding the hydraulic system to remove any trapped air.
9. **Test System:** Start the excavator and carefully test the hydraulic system, monitoring for leaks and proper pressure regulation. Adjust the relief pressure if required, following the excavator's service manual.

4. OPERATING INSTRUCTIONS

The Main Relief Valve operates automatically within the hydraulic system. It is not a user-adjustable component during normal operation. Its primary function is to act as a safety device.

Function:

- When the pressure in the hydraulic circuit exceeds a pre-set maximum limit, the relief valve opens, diverting excess hydraulic fluid back to the reservoir.
- This action prevents overpressure conditions that could damage hydraulic pumps, cylinders, hoses, and other components.
- The valve ensures the hydraulic system operates within its safe design parameters.

Ensure that the hydraulic system is always operated within the manufacturer's recommended pressure settings. Any adjustments to the relief valve pressure should only be made by qualified technicians using appropriate pressure gauges and following the excavator's service manual.

5. MAINTENANCE

Proper maintenance extends the life of hydraulic components and ensures reliable operation.

Maintenance Guidelines:

- **Regular Inspection:** Periodically inspect the valve and surrounding area for any signs of leaks, corrosion, or physical damage.
- **Hydraulic Fluid Quality:** Ensure the hydraulic fluid is clean and maintained according to the excavator manufacturer's specifications. Contaminated fluid is a leading cause of hydraulic component failure.

- **Filter Replacement:** Regularly replace hydraulic filters to prevent contaminants from reaching sensitive components like the relief valve.
- **Pressure Checks:** During routine service, a qualified technician should check the main relief pressure setting to ensure it is within the specified range.
- **Cleaning:** Keep the exterior of the valve clean to prevent dirt ingress during any future servicing.

6. TROUBLESHOOTING

If you experience issues with your hydraulic system that may be related to the main relief valve, consider the following common problems and potential causes. Always consult a qualified hydraulic technician for diagnosis and repair.

Common Issues:

- **Low System Pressure:**
 - *Possible Causes:* Relief valve set too low, valve stuck open due to contamination, worn valve components, or a damaged spring.
- **High System Pressure:**
 - *Possible Causes:* Relief valve stuck closed, valve set too high, or internal blockage.
- **Erratic Pressure:**
 - *Possible Causes:* Contamination interfering with valve operation, worn valve seat, or damaged spring.
- **External Leaks:**
 - *Possible Causes:* Damaged O-rings or seals, improper torque during installation, or physical damage to the valve body.

Warning: Do not attempt to repair or adjust hydraulic components without proper training, tools, and safety equipment. High-pressure hydraulic systems can cause severe injury.

7. SPECIFICATIONS

Specification	Detail
Part Name	Main Relief Valve
Part Number / Model Number	14513267
Brand	XYohykai
Manufacturer	XYohykai
Unit Count	1.0 Count
ASIN	B0CQXT6L8R

8. WARRANTY AND SUPPORT

Specific warranty information for the XYohykai Main Relief Valve 14513267 is not provided in this document. For details regarding warranty coverage, terms, and conditions, please refer to the original purchase documentation or contact the seller directly.

For technical support, inquiries about compatibility, or assistance with troubleshooting, please contact your supplier or a certified hydraulic service professional.

ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

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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