Hillman 4729

Hillman Group 4729 3/8 x 1 Inch Shoulder Screw Instruction Manual

Model: 4729 | Brand: Hillman

Introduction

This manual provides essential information for the proper use and maintenance of the Hillman Group 4729 3/8 x 1 Inch Shoulder Screw. These screws are precision-engineered fasteners, typically used in applications requiring a rotating or sliding component, where the unthreaded shoulder acts as a bearing surface or pivot point. Constructed from durable alloy steel, they offer reliability and strength for various mechanical and industrial uses.

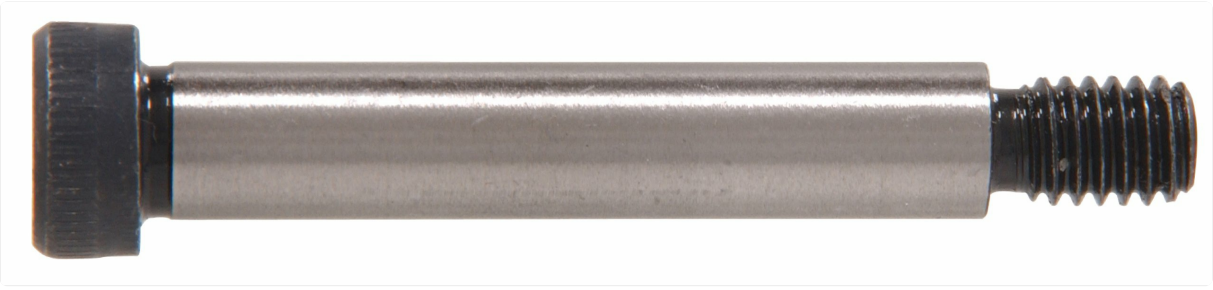

Image showing three Hillman Group 4729 shoulder screws. Each screw features a smooth, unthreaded shoulder section and a threaded tip, designed for precise rotational or sliding applications.

Setup

1. **Identify Application:** Determine the specific purpose and environment for the shoulder screw. Ensure the screw's dimensions (shoulder diameter, shoulder length, thread size) match the requirements of your assembly.
2. **Select Tools:** Use appropriate tools for installation. For a socket shoulder screw, a hex key or Allen wrench of the correct size will be required for the drive.
3. **Prepare Mounting Surface:** Ensure the mounting hole is clean, correctly sized, and free of debris. For optimal performance, the hole should be accurately drilled and tapped if necessary, to match the screw's thread size.
4. **Component Alignment:** Align the components to be fastened, ensuring the shoulder of the screw will properly engage with the part it is intended to pivot or slide within.

Operating

The Hillman Group 4729 shoulder screw is designed for secure fastening while allowing for movement of an attached component. Proper installation is crucial for its intended function.

1. **Insertion:** Carefully insert the shoulder screw through the component that needs to pivot or slide, and then into the threaded hole of the base material.
2. **Tightening:** Using the appropriate hex key, tighten the screw. The shoulder should pass through the moving component, and the threaded portion should engage securely with the base.
3. **Torque Specification:** Tighten the screw to the recommended torque specification for its size and material. Over-tightening can strip threads or damage components, while under-tightening can lead to loosening. Consult engineering specifications for your specific application.
4. **Functionality Check:** After tightening, verify that the component attached to the shoulder screw can move freely as intended, and that the screw is securely fastened without excessive play.

Maintenance

Regular inspection and proper storage will extend the lifespan and ensure the reliable performance of your Hillman Group 4729 shoulder screws.

- **Periodic Inspection:** Periodically check installed shoulder screws for signs of loosening, wear, or corrosion. Re-tighten if necessary, adhering to torque specifications.
- **Cleaning:** Keep screws clean and free from dirt, grease, or other contaminants that could impede their function or accelerate wear.
- **Lubrication:** In applications where the shoulder acts as a bearing surface, consider appropriate lubrication to reduce friction and wear, if compatible with the application environment.
- **Storage:** Store unused screws in a dry environment to prevent corrosion. Keep them organized by size to ensure correct selection for future use.

Troubleshooting

Problem	Possible Cause	Solution
Screw loosens over time	Insufficient torque; vibration; improper thread engagement.	Re-tighten to specified torque. Consider using thread-locking compound or a locking washer for high-vibration environments. Ensure correct thread size.
Component does not pivot/slide freely	Over-tightening; incorrect shoulder length; debris in hole.	Loosen slightly to allow movement. Verify shoulder length matches component thickness. Clean the hole and component.
Threads strip during installation	Over-tightening; misaligned insertion; incorrect tap size.	Reduce torque. Ensure screw is inserted straight. Verify tap size is correct for the screw. Replace damaged components.
Corrosion on screw surface	Exposure to moisture or corrosive agents.	Clean and apply a protective coating if suitable for the application. For highly corrosive environments, consider screws made from more resistant materials.

Specifications

Feature	Detail
Manufacturer	The Hillman Group
Part Number	4729
Model	4729
Material	Alloy Steel
Thread Size	3/8"
Shoulder Length	1 inch (as indicated in product title)
Overall Length	2.5 inches
Head Type	Socket (with shoulder)
Measurement System	Imperial
Package Quantity	3
Product Dimensions (L x W x H)	6.35 x 3.3 x 3.56 cm (2.5 x 1.3 x 1.4 inches)
Product Weight	0.28 g (approx. 0.0006 lbs)
Country of Origin	United States

Warranty and Support

For specific warranty information or technical support regarding the Hillman Group 4729 shoulder screw, please refer to the documentation provided with your purchase or contact The Hillman Group directly through their official website or customer service channels. Warranty terms may vary based on region and retailer.

Please retain your proof of purchase for any warranty claims.