

Williams BM-621

Williams BM-621 3/8 Drive Shallow Socket, 6 Point, 21mm Instruction Manual

INTRODUCTION

This manual provides essential information for the proper use and maintenance of your Williams BM-621 3/8-inch Drive Shallow Socket. Designed for professional and industrial applications, this 21mm, 6-point socket offers reliable performance for fastening and unfastening tasks.

Please read these instructions carefully before use to ensure safe and effective operation and to maximize the lifespan of your tool.

PRODUCT OVERVIEW AND FEATURES

The Williams BM-621 socket is engineered with specific features to enhance its functionality and durability:

- **SUPERTORQUE Lobular Openings:** Designed to provide greater turning power while minimizing fastener deformation.
- **Quick Engagement:** Chamfered ends facilitate easy engagement with both 6 and 12-point fasteners.
- **Durable Construction:** Cold formed from alloy steel, precision machined, and fully heat-treated for strength.
- **Easy Maintenance Finish:** Features a mirror-like chrome finish that is easy to clean after use.
- **Shallow Hex Depth:** Allows for easy engagement on short threaded bolts, improving accessibility.



Figure 1: The Williams BM-621 3/8-inch drive shallow socket, 21mm, showcasing its polished chrome finish.



Figure 2: Illustration highlighting the SUPERTORQUE lobular openings, designed for enhanced turning power without damaging fasteners.



Figure 3: Depiction of the socket's construction from cold-formed alloy steel, precision machining, and fully heat-treated process, along with chamfered ends for easy engagement.



Grip Rings allow for a firm hold to easily remove sockets even with greasy or gloved hands



Designed for maximum engagement on 6 point fasteners

Figure 4: Image illustrating the grip rings on the socket, which aid in secure handling and removal, even with oily or gloved hands.

SETUP AND INSTALLATION

1. **Select the Correct Drive Tool:** Ensure you are using a 3/8-inch square drive ratchet, breaker bar, or torque wrench that is compatible with the socket.
2. **Attach the Socket:** Align the square drive opening of the socket with the drive tang of your tool. Push the socket firmly onto the drive tang until it clicks into place, indicating a secure connection.
3. **Verify Engagement:** Gently pull on the socket to confirm it is securely attached to the drive tool before applying force.

OPERATING INSTRUCTIONS

Follow these steps for safe and effective use of your Williams BM-621 socket:

1. **Identify Fastener Size:** Confirm that the fastener (nut or bolt head) is 21mm. Using an incorrect size socket can damage both the fastener and the socket.
2. **Position the Socket:** Place the socket squarely over the fastener. Ensure full engagement of the socket's 6-point opening with the fastener's head. The chamfered ends are designed to assist with this.
3. **Apply Force:**
 - For loosening, apply steady, counter-clockwise force.
 - For tightening, apply steady, clockwise force. If a specific torque value is required, use a calibrated torque wrench.
4. **Maintain Control:** Always maintain a firm grip on the drive tool. Avoid sudden jerking motions, which can cause slippage and potential injury or damage.

5. **Remove Socket:** Once the task is complete, pull the socket off the drive tool.



TRUSTED.
Williams drive tools and sockets are engineered to withstand demanding needs of industrial environments.

CHROME SOCKETS



STRONG.
Williams special blend of steel allows for a higher heat treat than average steel. This means each tool gets just the right hardness, toughness, and strength for industrial applications.

VALUED.
With 140 years of experience, people trust Williams to design and manufacture tools that are safe, strong and reliable.

Figure 5: Example of a socket being used with a drive tool to apply force to a fastener.

MAINTENANCE

Proper maintenance ensures the longevity and performance of your Williams socket:

- **Cleaning:** After each use, wipe the socket clean with a cloth to remove dirt, grease, and debris. The chrome finish is designed for easy cleaning.
- **Inspection:** Regularly inspect the socket for any signs of wear, cracks, or damage. Pay close attention to the drive opening and the 6-point fastener engagement area.
- **Storage:** Store the socket in a dry environment to prevent rust. Keep it organized in a tool tray or box to protect it from impacts and loss.
- **Lubrication:** While the socket itself does not require lubrication, ensure your drive tools are properly maintained and lubricated as per their respective instructions.

TROUBLESHOOTING

Most issues with a socket are related to incorrect application or selection:

- **Socket Does Not Fit Fastener:**
Ensure the fastener is indeed 21mm. If it is, check for any debris or damage on the fastener or inside the socket that might prevent proper seating. Do not force the socket onto an incorrect size fastener.
- **Socket Slips on Fastener:**
This can occur if the fastener head is rounded or damaged, or if the socket is not fully engaged. Ensure the socket is pushed completely onto the fastener. If the fastener is damaged, consider using a specialized fastener extraction tool.

• **Socket Does Not Attach to Drive Tool:**

Verify that your drive tool has a 3/8-inch square drive. Check for any obstructions in the socket's drive opening or on the drive tool's tang.

SPECIFICATIONS

Key specifications for the Williams BM-621 3/8 Drive Shallow Socket, 6 Point, 21mm:

| Specification | Detail |
|--------------------|---------------------------|
| Model Number | BM-621 (JHWBM-621) |
| Drive Size | 3/8 inch |
| Socket Type | Shallow, 6 Point |
| Size (Metric) | 21mm |
| Material | Chrome Vanadium Steel |
| Finish Type | Polished Chrome |
| Item Weight | 3.2 ounces |
| Product Dimensions | 1.22 x 1.14 x 1.14 inches |
| Measurement System | Metric |
| UPC | 662459212214 |

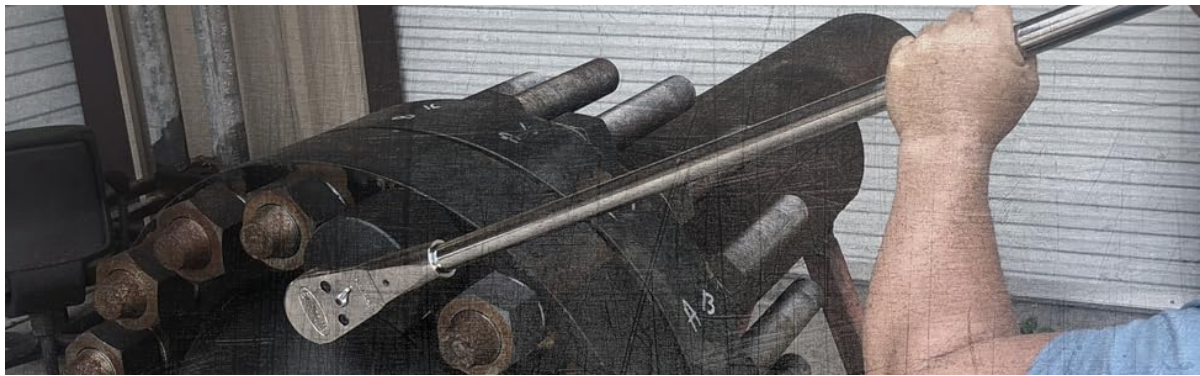





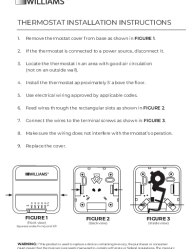

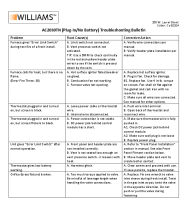
Figure 6: Detailed dimensional specifications for various Williams 3/8-inch drive shallow 6-point sockets, including the BM-621 model.

WARRANTY AND SUPPORT

Williams tools are manufactured to high standards and are designed for durability and performance. For information regarding product warranty, service, or technical support, please refer to the official Williams website or contact their customer service department. Keep your purchase receipt as proof of purchase.

For additional resources and product information, visit the [Williams Store on Amazon](#).

Related Documents - BM-621

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|  | <p>Williams Solana Electric Counterflow Furnace 3144030W Owner's Manual & Installation Guide</p> <p>Comprehensive owner's manual and installation instructions for the Williams Solana Electric Counterflow Furnace (Model 3144030W), detailing safety precautions, installation procedures, operation, maintenance, and warranty information.</p> |
|  | <p>Williams Counterflow Top Vent Gas Wall Furnace Installation & Operating Manual</p> <p>Comprehensive installation and operating manual for Williams Counterflow Top Vent Gas Wall Furnaces, covering safety, installation, operation, and maintenance for models 3508331, 3508332, 3508731, 3508732, 5008731, 5008732, 5508331, 5508332, 6508731, and 6508731.</p> |
|  | <p>Williams Belt Drive Air Handlers: 800-12,000 CFM Advanced Hydronics</p> <p>Comprehensive information on Williams Belt Drive Air Handlers (AH/AV Series) with capacities from 800 to 12,000 CFM. Features, options, technical specifications, dimensional drawings, and performance data for commercial and industrial HVAC applications.</p> |
|  | <p>WILLIAMS Thermostat Installation Instructions</p> <p>Step-by-step guide for installing a WILLIAMS thermostat, including safety warnings and detailed descriptions of thermostat components.</p> |
|  | <p>Williams Overture III Digital Piano Owner's Manual</p> <p>This owner's manual provides detailed instructions for the Williams Overture III Digital Piano with Bluetooth Audio, covering setup, operation, features, safety, and specifications.</p> |
|  | <p>WILLIAMS AC2030TN Troubleshooting and Installation Guide</p> <p>Comprehensive troubleshooting bulletin and installation guide for the WILLIAMS AC2030TN Plug-In/No Battery furnace, covering common problems, root causes, corrective actions, and proper installation pointers.</p> |