

GEARWRENCH 80966

GEARWRENCH 80966 243-Piece 6-Point Mechanics Tool Set

Model: 80966

1. OVERVIEW

The GEARWRENCH 80966 243-Piece Mechanics Tool Set is designed for professional and advanced home users, offering a comprehensive selection of tools for various applications. This set emphasizes productivity, access, and strength, featuring tools crafted from premium alloy steel with a full polish chrome finish for durability and corrosion resistance.

The set includes a wide range of 1/4 inch, 3/8 inch, and 1/2 inch drive tools, including 6-point sockets in both SAE and metric sizes. Key components are the 90-tooth ratchets, which provide a 4-degree swing arc for efficient fastening in confined spaces. All tools are organized within a durable 3-drawer storage box, ensuring easy access and systematic organization.



Image 1.1: The GEARWRENCH 80966 243-Piece Mechanics Tool Set, showcasing the variety of tools and the organized storage box.

2. COMPONENTS

The GEARWRENCH 80966 tool set includes the following:

- 3 Ratchets (1/4", 3/8", 1/2" drive, 90-tooth)
- 11 Extensions
- 4 Adapters
- 3 Universal Joints
- 15 1/4" Drive SAE Sockets
- 13 1/4" Drive Metric Sockets
- 15 1/4" Drive Deep SAE Sockets
- 11 1/4" Drive Deep Metric Sockets
- 13 3/8" Drive SAE Sockets
- 17 3/8" Drive Metric Sockets
- 12 3/8" Drive Deep SAE Sockets
- 12 3/8" Drive Deep Metric Sockets
- 2 3/8" Drive Spark Plug Sockets
- 13 1/2" Drive SAE Sockets
- 14 1/2" Drive Metric Sockets
- 23 Combination Wrenches
- 14 Nut Driver Bits
- 16 Hex Bits
- Bit Holder Socket
- Bit Driver with 30 Bits

3. SETUP

Upon receiving your GEARWRENCH 80966 tool set, ensure all components are present and accounted for as listed in Section 2. The tools are pre-organized within a 3-drawer blow mold storage box. This box is designed for efficient storage and easy transport.

1. **Unpacking:** Carefully remove the tool set from its packaging. Inspect the storage box for any signs of damage during transit.
2. **Accessing Drawers:** The storage box features side latches that secure the drawers. Release these latches to open the drawers and access the tools.
3. **Familiarization:** Take time to familiarize yourself with the layout of the tools within each drawer. Sockets, wrenches, and other accessories are arranged by size and type for quick identification.
4. **Initial Inspection:** Before first use, visually inspect each tool for any manufacturing defects or damage.

4. OPERATING INSTRUCTIONS

Proper use of your GEARWRENCH tools ensures safety, efficiency, and longevity. Always select the correct tool for the task at hand.

4.1 Ratchets and Sockets

- **Selection:** Choose the appropriate drive size (1/4", 3/8", or 1/2") and the correct SAE or metric socket size for the fastener. Ensure the socket is a 6-point type for optimal grip and to prevent rounding of fasteners.
- **Attachment:** Firmly attach the chosen socket to the ratchet. For extensions or universal joints, ensure they are securely connected between the ratchet and socket.
- **Operation:** The 90-tooth ratchets allow for a small 4-degree swing arc, which is beneficial in tight spaces. Turn the ratchet in the desired direction (tighten or loosen) using the directional switch on the ratchet head.
- **Application:** Apply steady, controlled force. Avoid using ratchets as pry bars or with impact tools, as this can damage the mechanism.

4.2 Combination Wrenches

- **Selection:** Choose the correct SAE or metric combination wrench size that fits snugly on the fastener.
- **Usage:** Use the open-end for quick engagement and disengagement, and the box-end for greater torque and reduced risk of slipping.
- **Safety:** Always pull on the wrench rather than push to avoid injury if the fastener breaks loose unexpectedly.

4.3 Bit Driver and Bits

- **Attachment:** Insert the desired nut driver, hex, or other bit into the bit holder socket or directly into the bit driver.
- **Application:** Use for driving or removing screws and other fasteners that require a bit.

5. MAINTENANCE

Regular maintenance will extend the life and performance of your GEARWRENCH tools.

- **Cleaning:** After each use, wipe down tools with a clean, dry cloth to remove dirt, grease, and moisture.

The full polish chrome finish is easy to clean and helps resist corrosion.

- **Lubrication:** Periodically apply a light coat of machine oil to the moving parts of ratchets to ensure smooth operation.
- **Storage:** Always return tools to their designated spots in the 3-drawer storage box. This prevents loss, protects tools from damage, and maintains organization. Ensure the side latches are secured before transporting the box.
- **Inspection:** Regularly inspect tools for wear, damage, or corrosion. Replace any damaged tools immediately to prevent injury or further damage to fasteners.

6. TROUBLESHOOTING

Most issues with hand tools can be resolved with proper selection and technique.

- **Socket Slipping:** Ensure the correct size and type (SAE/Metric, 6-point) of socket is used. A worn or incorrect socket can slip and damage the fastener.
- **Ratcheting Mechanism Issues:** If a ratchet is not engaging properly, it may require cleaning and lubrication. If the issue persists, the internal mechanism may be worn or damaged. Refer to the warranty section for replacement options.
- **Stuck Fasteners:** For stubborn fasteners, apply penetrating oil and allow it to soak. Use steady, increasing pressure rather than sudden jerks. Ensure the tool is fully seated on the fastener.
- **Tool Damage:** Avoid over-torquing tools beyond their intended capacity. Do not use extensions to increase leverage on ratchets, as this can cause damage.

7. SPECIFICATIONS

Feature	Detail
Brand	GEARWRENCH
Model Number	80966
Number of Pieces	243
Drive Sizes	1/4 inch, 3/8 inch, 1/2 inch
Socket Type	6-Point (SAE & Metric)
Ratchets	90-Tooth Gear
Material	Alloy Steel
Finish Type	Polished Chrome
Storage	3-Drawer Blow Mold Storage Box
Product Dimensions	19 x 13 x 12 inches

Feature	Detail
Item Weight	1.19 pounds (Note: This weight seems unusually low for a 243-piece tool set and may refer to a single component or be an error in the source data. Actual weight of the full set with case is significantly higher.)
UPC	099575809668, 095456809635

8. WARRANTY





The GEARWRENCH 80966 243-Piece Mechanics Tool Set is covered by a **Standard Limited Lifetime Warranty**. This warranty typically covers defects in material and workmanship for the expected life of the product. For specific details regarding warranty claims, coverage, and procedures, please refer to the official GEARWRENCH warranty policy or contact their customer support directly.

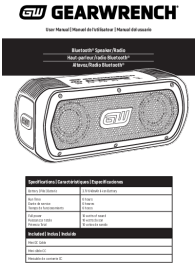

9. SUPPORT

For additional support, product information, or to inquire about replacement parts, please visit the official GEARWRENCH website or contact their customer service department.

You can also visit the [GEARWRENCH Store on Amazon](#) for more products and information.

Related Documents - 80966

	<p>GEARWRENCH MEGAMOD358 358-Piece Metric Mechanics Tool Set with Rolling Cabinet</p> <p>Discover the GEARWRENCH MEGAMOD358, a comprehensive 358-piece metric mechanics tool set designed for professional use. This set includes a premium quality collection of metric chrome and impact sockets, ratchets, and wrenches, all organized in modular foam trays within a durable rolling cabinet. Featuring award-winning 120XP Next Generation ratchets for superior access in tight spaces, this tool set enhances productivity and efficiency for demanding jobs.</p>
	<p>GEARWRENCH MEGAMODMRO 614-Piece Master Mechanics Tool Set with Mobile Workstation</p> <p>Discover the comprehensive GEARWRENCH MEGAMODMRO 614-piece Master Mechanics Hand Tool Set. This professional-grade set includes a mobile workstation, modular foam trays, and over 600 tools across 15 categories, designed for efficiency and organization. Features detailed lists of sockets, wrenches, pliers, screwdrivers, and more.</p>
	<p>GearWrench GWSMARTBT Professional Bidirectional Diagnostic Tool Quick Start Guide</p> <p>A concise guide to setting up and using the GearWrench GWSMARTBT Professional Bidirectional Diagnostic Tool, including product overview, getting started steps, and specifications.</p>
	<p>GEARWRENCH GWSMARTBT Professional Bidirectional Diagnostic Tool User Manual</p> <p>This manual provides instructions for setting up and using the GEARWRENCH GWSMARTBT Professional Bidirectional Diagnostic Tool. Learn how to connect the device, pair it with your smartphone, activate the software, and perform diagnostics.</p>

 <p>The image shows the front cover of the GEARWRENCH Bluetooth Speaker/Radio User Manual. At the top is the GEARWRENCH logo. Below it is a photograph of the silver and black Bluetooth speaker. Under the photo is a table of contents with two columns: 'Section' and 'Page'. The sections listed include 'Introduction', 'Getting Started', 'Charging', 'Powering On/Off', 'Switching Modes', 'microSD Card Playback', 'AUX Mode', 'Bluetooth Pairing', 'Handshake Mode', 'FM Radio Mode', and 'Answering Phone Calls'.</p>	<p>GEARWRENCH Bluetooth Speaker/Radio User Manual</p> <p>This user manual provides instructions for operating the GEARWRENCH Bluetooth Speaker/Radio, including charging, powering on/off, switching modes, microSD card playback, AUX mode, Bluetooth pairing, handshake mode, FM radio mode, and answering phone calls.</p>
 <p>The image shows the front cover of the GEARWRENCH GWSMARTBT Professional Bidirectional Diagnostic Tool Quick Start Guide. It features a collage of images showing the diagnostic tool, its packaging, and screenshots of the accompanying mobile application interface.</p>	<p>GEARWRENCH GWSMARTBT Professional Bidirectional Diagnostic Tool Quick Start Guide</p> <p>Get started with the GEARWRENCH GWSMARTBT Professional Bidirectional Diagnostic Tool. This guide covers setup, Bluetooth pairing, app activation, and connection for OE-level diagnostics.</p>