

VESSEL IB31P02U

VESSEL IMPACT BALL Torsion Bit Set IB31P02U Instruction Manual

1. INTRODUCTION

This manual provides essential information for the proper use, maintenance, and care of your VESSEL IMPACT BALL Torsion Bit 30+1 PC. Set, model IB31P02U. Please read these instructions thoroughly before using the product to ensure safe and effective operation and to maximize the lifespan of your tools.

2. PRODUCT OVERVIEW

The VESSEL IMPACT BALL Torsion Bit Set is designed for use with impact drivers, offering enhanced durability and shock absorption. This set includes 30 high-wear-resistance bits and a 1/4" hex bit holder, all housed in a convenient slide case.

2.1. Contents

- 30 x 1 3/16"-long IMPACT BALL Torsion Bits
- 1 x 2 3/8"-long 1/4" Hex Bit Holder with C-Ring retainer

The bit types included are:

- Phillips: +1, +2, +3
- Slotted: SL4, SL6, SL8
- Square: SQ1, SQ2, SQ3
- Torx: T10, T15, T20, T25, T27, T30, T40
- Pozidriv: PZ1, PZ2, PZ3
- Hex (Metric): H3, H4, H5, H6
- Hex (Imperial): H3/32, H7/64, H1/8, H9/64, H3/16, H7/32, H1/4"

2.2. Key Features

- **IMPACT BALL Torsion Design:** Features a unique ball-shaped torsion zone that absorbs impact and reduces stress on the bit tip, enhancing durability.
- **VoHA Material:** Constructed from high-quality VoHA material for superior wear resistance.
- **62HRC Hardness:** Achieves a hardness of 62HRC through optimal in-house heat treatment, ensuring long-lasting performance.
- **Magnetized Tip:** Each bit features a magnetized tip for secure fastener retention.
- **Slide Case:** A compact and durable case designed for easy access and organization of bits.



Figure 1: VESSEL IMPACT BALL Torsion Bit Set IB31P02U

Slide Case



VESSEL

Figure 2: Slide Case Mechanism for easy bit access.

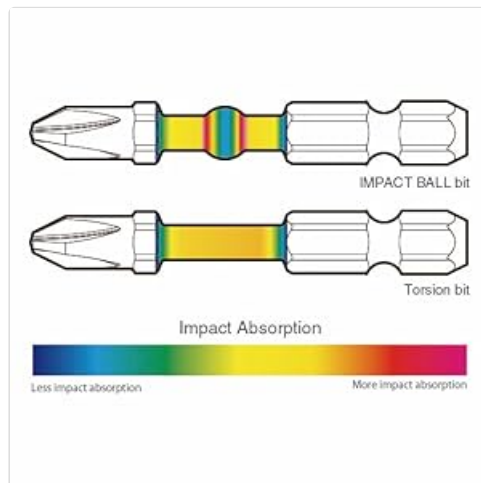


Figure 3: Impact Absorption Diagram

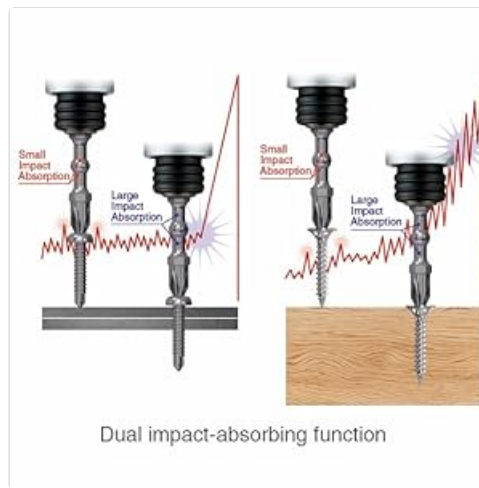


Figure 4: Dual Impact-Absorbing Function

3. SETUP

Before using the bit set, ensure you have the appropriate power tool (e.g., impact driver, drill) and that it is in good working condition.

3.1. Accessing Bits from the Slide Case

1. Locate the red top section of the case.
2. Gently slide the red top section away from the black base. This action will raise the bits, making them easier to grasp.
3. Select the desired bit.
4. To close, push the red top section back into its original position until it clicks securely.

3.2. Inserting Bits into the Bit Holder

1. Take the 2 3/8"-long hex bit holder.
2. Insert the desired 1/4" hex bit into the front opening of the bit holder. The C-ring retainer inside the holder will secure the bit.
3. Ensure the bit is fully seated and held firmly by the retainer.

3.3. Attaching the Bit Holder to a Power Tool

1. Insert the 1/4" hex shank of the bit holder into the chuck of your impact driver or drill.
2. Tighten the chuck securely according to your tool's instructions. Ensure the bit holder is centered and does not wobble.

4. OPERATION

Always wear appropriate personal protective equipment (PPE), including safety glasses, when operating power tools.

4.1. Selecting the Correct Bit

Choose the bit that precisely matches the fastener head. Using the wrong size or type of bit can lead to cam-out, damage to the fastener, or injury.

Note on JIS Compatibility: VESSEL bits are designed to fit both JIS (Japanese Industrial Standard) and standard Phillips screws effectively, minimizing cam-out and providing a secure fit.

4.2. Driving Fasteners

1. Position the bit firmly into the fastener head.
2. Apply steady, downward pressure to prevent the bit from slipping.
3. Start the power tool at a low speed and gradually increase as needed.
4. Allow the IMPACT BALL torsion design to absorb shocks during high-torque applications.
5. Avoid excessive force or angle, which can strip the fastener or damage the bit.



Figure 5: Bit in use with an impact driver.

5. MAINTENANCE

5.1. Cleaning

After each use, wipe bits clean with a dry cloth to remove any dust, debris, or metal shavings. Avoid using harsh chemicals or abrasive materials that could damage the bit's finish or material properties.

5.2. Storage

Store the bits in their original slide case in a dry environment to prevent rust and corrosion. Keep the case closed to protect the bits from damage and loss.

5.3. Inspection

Periodically inspect bits for signs of wear, such as rounded edges, cracks, or excessive corrosion. Replace worn or damaged bits immediately to maintain performance and safety.

6. TROUBLESHOOTING

6.1. Bit Wobbles in Holder

If the bit wobbles excessively in the provided bit holder, ensure it is fully seated. If the issue persists, consider using an alternative, higher-quality bit holder that provides a more secure fit. The provided bit holder uses a C-ring retainer, which may allow for some movement.

6.2. Bit Not Holding Screws Firmly

While VESSEL bits are magnetized, the magnetic strength may vary. If you require stronger magnetic retention for screws, a separate bit magnetizer can be used to enhance the magnetic field of the bit tip.

6.3. Bit Stripping Fasteners

Ensure you are using the correct bit size and type for the fastener. Apply adequate downward pressure and maintain a straight angle to the fastener. Reduce impact force if necessary. If the bit itself is worn, replace it.

7. SPECIFICATIONS

Attribute	Value
Brand	VESSEL
Model Number	IB31P02U
Item Length	7 Inches (case)
Bit Length	1 3/16" (30mm)
Bit Holder Length	2 3/8" (60mm)
Material	VoHA Metal
Hardness	62HRC
Number of Pieces	31 (30 bits + 1 holder)
Drive Bit Shank Style	Hex (1/4")
Head Style Compatibility	JIS, Phillips, Slotted, Torx, Pozidriv, Square, Hex
Item Weight	9.6 ounces

UPC

840921141310

8. SAFETY INFORMATION

- Always wear ANSI-approved safety glasses or goggles when using power tools and accessories.
- Ensure bits are securely seated in the bit holder and the bit holder is securely fastened in the power tool's chuck.
- Do not use damaged or worn bits. Replace them immediately.
- Keep hands and loose clothing away from rotating parts.
- Use the correct bit for the application to prevent cam-out and potential injury.
- Keep out of reach of children.

9. WARRANTY AND SUPPORT

For warranty information or technical support regarding your VESSEL IMPACT BALL Torsion Bit Set, please refer to the official VESSEL website or contact VESSEL customer service directly. Keep your purchase receipt as proof of purchase.

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For further assistance, visit the [VESSEL Store on Amazon](#).