

TIMCO LW50B

TIMco LW50B Self-Drilling Screw 5.5 x 50 Instruction Manual

Model: LW50B

1. INTRODUCTION

This instruction manual provides essential information for the safe and effective use of the TIMco LW50B Self-Drilling Screws. Please read this manual thoroughly before installation and retain it for future reference. Adherence to these instructions will ensure proper application and performance of the screws.

2. PRODUCT OVERVIEW

The TIMco LW50B is a BZP (Bright Zinc Plated) wing tip self-drilling screw, designed for fastening applications in light section steel up to 5mm thick. These screws feature a coarse self-tapping thread and a hex head with an integrated washer for secure fastening.





Figure 1: A single TIMco LW50B self-drilling screw. The image displays the hex head, threaded body, wing tips, and the self-drilling point. The screw has a bright zinc plated finish.

Key Features:

- **Hex Head with Washer:** Provides a strong bearing surface and prevents pull-through.
- **Self-Drilling Tip:** Eliminates the need for pre-drilling in light gauge metals.
- **Wing Tips:** Designed to ream a clearance hole in timber or other soft materials when fastening to steel, preventing thread engagement in the top material.
- **Zinc Plated:** Offers corrosion resistance (3-5 microns plating).

- **Coarse Self-Tapping Thread:** Ensures secure engagement in the substrate.
- **Application:** Suitable for light sectional work, specifically up to 5mm thick steel.

3. SAFETY INFORMATION

Always observe the following safety precautions when handling and installing screws:

- Wear appropriate personal protective equipment (PPE), including safety glasses and gloves, to protect against flying debris and sharp edges.
- Ensure the work area is well-lit and clear of obstructions.
- Use power tools according to their manufacturer's instructions and safety guidelines.
- Verify that the screw length and diameter are appropriate for the materials being joined to prevent damage or failure.
- Do not over-tighten screws, as this can strip threads or damage the material.
- Keep screws out of reach of children.

4. SETUP AND INSTALLATION

Required Tools:

- Power drill or impact driver with adjustable torque settings.
- Appropriate hex driver bit (e.g., No. 3 hex drive for this screw).
- Safety glasses and gloves.

Installation Steps:

1. **Prepare Materials:** Ensure the materials to be joined (e.g., timber to light section steel) are clean, dry, and properly aligned.
2. **Select Driver Bit:** Insert the correct size hex driver bit into your power drill or impact driver.
3. **Position Screw:** Place the self-drilling screw onto the driver bit and align it with the desired fastening point.
4. **Initiate Drilling:** Apply firm, consistent pressure to the drill and begin driving the screw at a moderate speed. The self-drilling tip will create its own pilot hole in the steel.
5. **Engage Wings:** As the screw passes through any top material (like timber), the wing tips will ream a clearance hole, preventing the screw thread from engaging prematurely in the top material.
6. **Fasten Securely:** Once the wing tips break off (this is normal as they contact the steel), continue driving the screw until the threads fully engage in the steel and the hex head with its integrated washer sits flush against the surface of the top material. Adjust torque settings to prevent over-tightening.
7. **Inspect:** Verify that the screw is securely fastened and the materials are firmly joined.

5. OPERATING INSTRUCTIONS (USAGE TIPS)

- **Material Compatibility:** These screws are specifically designed for light section steel up to 5mm thick. Using them on thicker steel or other unsuitable materials may lead to poor performance or screw breakage.
- **Speed Control:** Use a consistent, moderate speed during the drilling phase. Too slow may cause the tip to dull, while too fast may generate excessive heat.

- **Torque Settings:** Utilize the torque settings on your drill to prevent over-tightening, which can strip the threads in the substrate or damage the screw head.
- **Straight Driving:** Always drive the screw straight into the material. Angled driving can cause the screw to bend, break, or fail to engage properly.

6. MAINTENANCE

TIMco LW50B self-drilling screws require minimal maintenance. Proper storage is key to preserving their quality and performance.

- **Storage:** Store screws in a dry environment, away from moisture and corrosive substances, to prevent rust and maintain the integrity of the zinc plating.
- **Inspection:** Before use, visually inspect screws for any signs of damage, corrosion, or manufacturing defects. Do not use damaged screws.

7. TROUBLESHOOTING

- **Screw Not Drilling:**
 - Ensure the material thickness is within the screw's capacity (max 5mm steel).
 - Verify the drill speed is appropriate and consistent.
 - Check if the screw tip is damaged or dull. Use a new screw if necessary.
 - Apply sufficient, consistent pressure.
- **Screw Head Stripping:**
 - Ensure the correct size hex driver bit is used and fully seated in the screw head.
 - Reduce drill speed and torque settings.
 - Avoid excessive pressure once the screw is seated.
- **Screw Breaking:**
 - This often indicates excessive torque, incorrect material application, or misalignment during driving.
 - Ensure the screw is driven straight and the material is suitable.

8. SPECIFICATIONS



Attribute	Detail
Model Number	LW50B
Brand	TIMCO
Fastener Size	5.5mm x 50mm
Material	Alloy Steel, Zinc
Head Style	Hex with Washer
Point Style	Self-Drill Point (Wing Tip)





Attribute	Detail
Exterior Finish	Zinc Plated (3-5 microns)
Thread Type	Coarse Self-Tapping, UNC
Thread Size	#0-80
Dimensions (L x W x H)	1.97 x 0.22 x 0.22 inches (approx. for single screw)
Weight (per 200 count box)	3.02 pounds
Application	Light section steel up to 5mm thick

9. WARRANTY AND SUPPORT

For information regarding product warranty, please refer to the terms and conditions provided by your retailer or contact TIMCO directly. For technical support or further inquiries, please visit the official TIMCO website or consult your product supplier.

Related Documents - LW50B

	<p>Timco Ball Joint Separator Tool Set - User Guide</p> <p>A user guide for the Timco ball joint separator tool set, including instructions for use, safety precautions, and product specifications. The set includes forged carbon steel forks for manual and air hammer operation.</p>
	<p>TIMCO ATV 28T Käyttöohje ja Turvallisuusopas</p> <p>Tämä käyttöohje tarjoaa yksityiskohtaiset ohjeet TIMCO ATV 28T -halkomakoneen kokoamiseen, käyttöön, huoltoon ja turvallisuuteen. Opi käyttämään laitetta turvallisesti ja tehokkaasti.</p>

 <p>Timco Oil-Free Compressor Käyttöohje</p> <p>ISO 9001 CE</p> <p>Timco Työtaso yhden ovella ja kuudella laatikolla 160 x 60 x 85 cm - Kokoamisohjeet</p>	<p>Timco Oil-Free Compressor Operating Instructions - Models 103071161, 103071174, 102298050</p> <p>Comprehensive operating instructions for Timco oil-free piston compressors. Covers product structure, safe usage, storage, maintenance, troubleshooting, and includes a pneumatic diagram for models 103071161, 103071174, and 102298050.</p>
 <p>Timco Painevesiautomaatti Käyttöohje</p> <p>Timco Painevesiautomaatti Käyttöohje: Mallit 103580596, 103580598, 103580608</p>	<p>TIMCO Painevesiautomaatti Käyttöohje: Mallit 103580596, 103580598, 103580608</p> <p>Lataa TIMCO Painevesiautomaatti käyttöohje. Tämä opas sisältää tärkeät turvallisuusohjeet, asennus-, käyttö- ja huoltotiedot TIMCO-pumppumalleille 103580596, 103580598 ja 103580608.</p>
 <p>Timco CLE5500SDG / TCLE5500SDG Diesel Generaattori Käyttöopas</p> <p>Timco CLE5500SDG (230V) ja TCLE5500SDG (400V) diesel-generaattoreiden kattava käyttöopas. Sisältää turvallisuusohjeet, tekniset tiedot, osaluettelon, käyttö- ja huolto-ohjeet sekä vianetsintäoppaan.</p>	<p>TIMCO CLE5500SDG / TCLE5500SDG Diesel Generaattori Käyttöopas</p> <p>TIMCO CLE5500SDG (230V) ja TCLE5500SDG (400V) diesel-generaattoreiden kattava käyttöopas. Sisältää turvallisuusohjeet, tekniset tiedot, osaluettelon, käyttö- ja huolto-ohjeet sekä vianetsintäoppaan.</p>
 <p>Timco Työtaso yhden ovella ja kuudella laatikolla 160 x 60 x 85 cm - Kokoamisohjeet</p> <p>Kattavat kokoamisohjeet Timco-työtasolle, jossa on yksi ovi ja kuusi laatikkoa (160 x 60 x 85 cm). Sisältää turvallisuustiedot, osaluettelon ja vaiheittaiset asennusohjeet.</p>	<p>Timco Työtaso yhdellä ovella ja kuudella laatikolla 160 x 60 x 85 cm - Kokoamisohjeet</p> <p>Kattavat kokoamisohjeet Timco-työtasolle, jossa on yksi ovi ja kuusi laatikkoa (160 x 60 x 85 cm). Sisältää turvallisuustiedot, osaluettelon ja vaiheittaiset asennusohjeet.</p>