

SKF TIH 100M/230V

SKF TIH 100M/230V Induction Heater User Manual

Model: TIH 100M/230V

1. INTRODUCTION

The SKF TIH 100M/230V Induction Heater is a robust and efficient tool designed for heating bearings and other metallic components prior to mounting. Utilizing advanced power electronics, this heater ensures high performance and reliability. Its design prioritizes ergonomics and safety, featuring bearing support arms to prevent toppling and a remote control for safe operation at a distance from hot components. This manual provides essential information for the safe and effective use, setup, operation, and maintenance of your SKF TIH 100M/230V Induction Heater.

2. SAFETY INFORMATION

WARNING: Failure to follow these safety instructions could result in serious injury or death.

- Always read and understand the entire manual before operating the induction heater.
- Ensure the heater is connected to a properly grounded electrical outlet with the correct voltage (230V).
- Wear appropriate personal protective equipment (PPE), including heat-resistant gloves and eye protection, when handling hot components.
- Do not touch the heating area or heated components directly without proper protection, as they will be extremely hot.
- Keep the work area clear of flammable materials.
- Never operate the heater in wet conditions or with wet hands.
- Ensure adequate ventilation in the work area.
- Use the bearing support arms to prevent components from toppling during heating.
- Utilize the remote control to operate the heater from a safe distance.

3. PRODUCT OVERVIEW AND COMPONENTS



Image: The SKF TIH 100M/230V Induction Heater unit with its main heating body and a separate remote control unit connected by a coiled cable. The main unit features a large C-shaped induction coil and a cylindrical support post, with warning labels visible. The remote control has a digital display and several buttons for operation.

Main Components:

- **Induction Heater Unit:** The main body containing the induction coil and power electronics.
- **Remote Control (TIH RC):** Allows for safe operation and monitoring of heating parameters from a distance. Features a digital display and control buttons.
- **Yokes:** Supplied standard with 3 yokes to accommodate bearings with bore diameters from 20mm. A swivel arm is included for larger size yokes.
- **Bearing Support Arms:** Integrated into the heater unit to provide stability and prevent components from toppling during heating.

4. SETUP

1. **Unpacking:** Carefully remove the induction heater and all accessories from the packaging. Inspect for any signs of damage.
2. **Placement:** Place the heater on a stable, level, and non-flammable surface in a well-ventilated area. Ensure sufficient space around the unit for safe operation and heat dissipation.

3. **Yoke Selection:** Select the appropriate yoke for the bearing or component to be heated. The yoke should fit snugly within the bore of the component and around the heater's core. Insert the yoke into the designated slot on the heater unit.
4. **Power Connection:** Connect the power cable to the heater unit and then to a grounded 230V electrical outlet. Ensure the power switch on the heater is in the 'OFF' position before connecting.
5. **Remote Control Connection:** Ensure the remote control unit is securely connected to the main heater unit via its coiled cable.

5. OPERATING INSTRUCTIONS

The SKF TIH 100M/230V Induction Heater offers both temperature and time control modes for precise heating.

General Operation:

1. Place the bearing or component onto the selected yoke, ensuring it rests securely on the bearing support arms.
2. Switch the main power to 'ON' on the heater unit. The remote control display will illuminate.
3. Select the desired heating mode (Temperature or Time) using the buttons on the remote control.
4. Adjust the target temperature or time using the '+' and '-' buttons.
5. Press the 'START' button to begin the heating process. The display will show the current temperature or remaining time.
6. Once the target is reached, the heater will automatically stop. Carefully remove the heated component using heat-resistant gloves.
7. Press 'STOP' to end the heating cycle manually at any time.

Temperature Control Mode:

This mode is ideal for heating components to a specific temperature. The heater will continuously monitor the component's temperature and stop heating once the set temperature is reached. This ensures optimal expansion without overheating.

Timer Mode:

In this mode, the heater operates for a pre-set duration. This is useful when a specific heating time is known to achieve the desired expansion, or for components where temperature sensing is difficult.

6. MAINTENANCE

Regular maintenance ensures the longevity and optimal performance of your SKF TIH 100M/230V Induction Heater.

- **Cleaning:** Disconnect the power before cleaning. Use a dry, soft cloth to wipe down the exterior of the heater and remote control. Do not use abrasive cleaners or solvents. Ensure no liquids enter the unit.
- **Inspection:** Periodically inspect the power cable, remote control cable, and yokes for any signs of wear, damage, or fraying. Replace damaged components immediately.
- **Storage:** When not in use, store the heater in a clean, dry environment, away from dust and extreme

temperatures.

- **Ventilation:** Ensure the ventilation openings on the heater are not blocked during operation or storage.

7. TROUBLESHOOTING

This section addresses common issues you might encounter with your induction heater.

Problem	Possible Cause	Solution
Heater does not power on.	No power supply; Power cable loose; Main switch off.	Check power outlet; Ensure cable is securely connected; Turn main switch to 'ON'.
Component not heating.	Incorrect yoke selection; Component not properly placed; Heater in standby.	Ensure correct yoke is used and component is seated correctly; Press 'START' on remote control.
Overheating/Error message.	Internal fault; Overload.	Turn off the unit, wait 5 minutes, then restart. If error persists, contact support.
Remote control display is blank.	Remote control cable loose; Main unit not powered.	Check remote control cable connection; Ensure main unit is powered on.

For issues not listed here or if solutions do not resolve the problem, please contact SKF customer support.

8. SPECIFICATIONS

- **Model:** SKF TIH 100M/230V
- **Heating Capacity:** Up to 264 lbs (120 kg) bearing weight.
- **Heating Performance:** Capable of heating a 213 lb (96.6 kg) bearing in less than 20 minutes.
- **Voltage:** 230V
- **Yokes Supplied:** 3 standard yokes for bore diameters from 20mm.
- **Features:** Timer control, Temperature control, Remote control, Bearing support arms, Swivel arm for large yokes.
- **Manufacturer:** SKF
- **First Available:** March 2, 2016

9. WARRANTY AND SUPPORT

Warranty Information:

SKF products are manufactured to high standards and are backed by a manufacturer's warranty. Please refer to the warranty card included with your product or visit the official SKF website for detailed warranty terms and conditions.

Keep your proof of purchase for warranty claims.

Customer Support:

For technical assistance, troubleshooting, or service inquiries, please contact SKF customer support. Contact information can typically be found on the SKF official website or in the documentation provided with your product. When contacting support, please have your product model (TIH 100M/230V) and serial number (if applicable) ready.

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ASK A QUESTION ABOUT THIS MANUAL

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. [Privacy details](#).

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question