

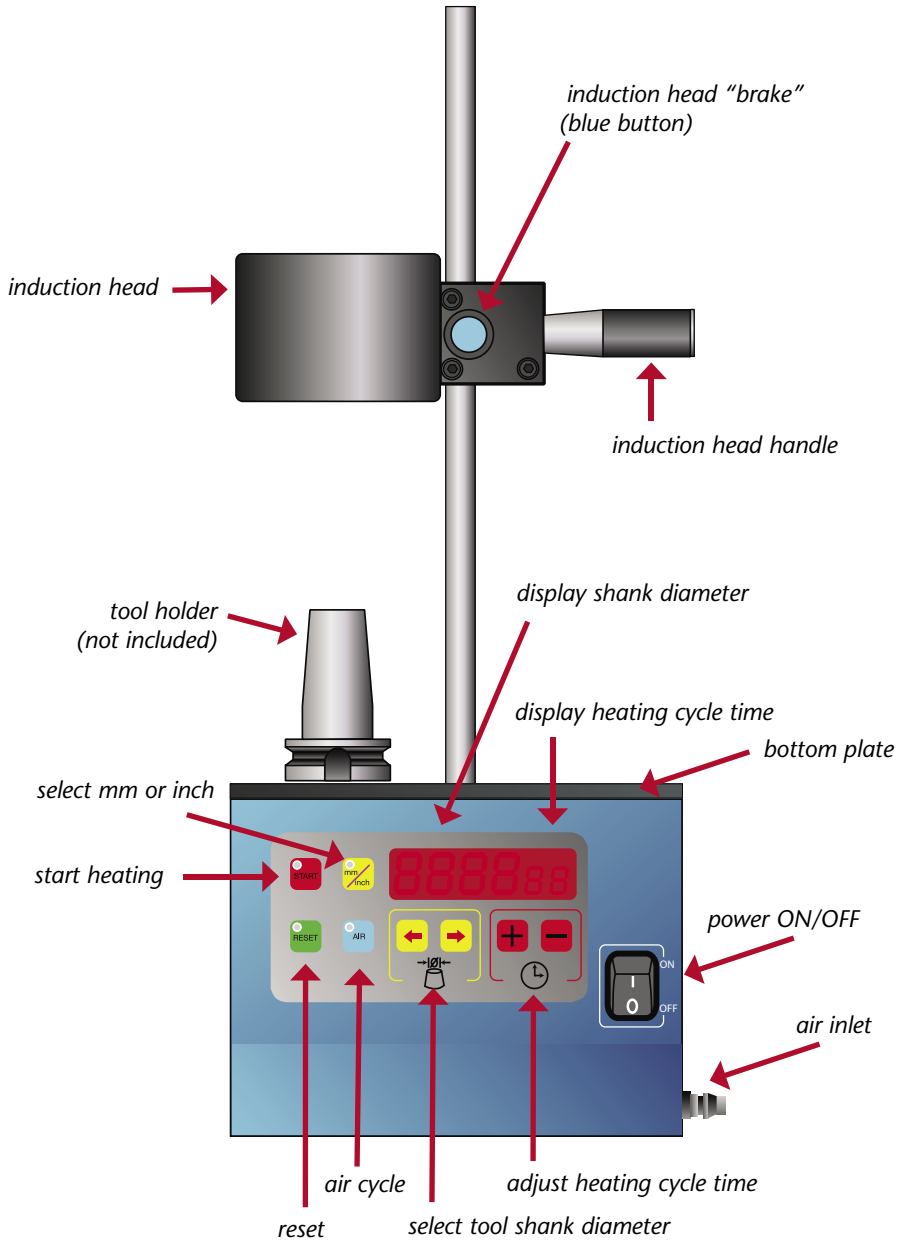
# Techno-Shrink II Owners Manual



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# Techno-Shrink II



## Machine Requirements

### Electrical Supply

This machine requires a 220 VAC +/- 10%, 1 phase, 20 amp connection. 50/60 Hz. Power output is 3000 watts.

### Air Supply

This machine requires a 90 psi supply of dry shop air. The use of an in-line filter is required.

## Packing List (Box Contents)

Part No.	Description	QTY.	Part No.	Description	QTY.
00300	TechnoSHRINK II, with power cord, induction head, and air line	1	00151	toolholder adapter - 30 taper	1
00300-T	dual tower assembly with 2 M5x0.8 cap screws	1	00152	toolholder adapter - 40 taper	1
00300-08	dual tower handle	1	00153	toolholder adapter - 50 taper	1
00300-02-1	small induction head (3-16mm)	1	00157	toolholder adapter - HSK 40	1
00300-02-2	large induction head (20-32mm)	1	00158	toolholder adapter - HSK 50	1
00165	induction stop ring (3-5mm)	1	00159	toolholder adapter - HSK 63	1
00166	induction stop ring (6-12mm)	1	00170	toolholder sleeve - use with adapters (listed above)	1
00167	induction stop ring (14-20mm)	1	200.001.018	thermal insulated glove	1
00168	induction stop ring (25-32mm)	1		Owners Manual (this document)	1



## Techno-Shrink II – Cautions and Warnings

The Techno-Shrink II has been constructed using the latest technology and is extremely safe and easy to operate. Despite that, there is still some danger if the unit is operated incorrectly and/or by untrained personnel.

Pay particular attention to the following Cautions and Warnings marked with the “Attention” and “Danger” symbols. Failure to follow safe operating practices may cause injuries, death, or damage to the machine, and may void your manufacturers’ warranty.



### ATTENTION

- Before attempting to use the unit you must have read and fully understood this Owners Manual. Keep this Owners Manual within easy reach of operating personnel.
- Visually inspect the unit, power cord, and accessory items for any signs of wear or damage before operating the unit. Do not use the unit if there is the any sign of damage, or if the unit is not performing normally.
- Never operate the machine without the correct induction stop ring in place on the induction head. Do not allow any part of the induction head to contact the tool holder or cutting tool during operation or damage to the machine may occur.
- Do not wear rings, bracelets, or other metallic objects while operating the machine. Metallic objects may heat up very quickly when near the induction head during operation.
- Use the provided thermal insulated glove whenever handling tools or toolholders. Never try to handle hot tools or toolholders until the cooling cycle is complete.
- If the machine is moved from a cold environment to a warm one, wait two hours before operating to prevent condensation build-up from causing electronic system errors.
- Persons with heart pacemakers may not operate the machine, and must maintain a safety distance of 6 feet (2 meters) from the machine at all times.
- Cutting tools have sharp edges. Handle with caution.



### DANGER

Electric Shock Risk

- The power cord must be plugged into a properly grounded outlet (3-prong). Never operate the machine with an extension cord, or multi-strip power tap. Operating the unit without a proper ground may cause death or injury.
- Position the power cord so it cannot be damaged by fork trucks or other equipment, or cause a tripping hazard for personnel.
- Do not operate the machine in a wet environment where exposure to coolant or spills are likely to occur. Electric shocks or damage to the machine may occur.
- Never operate the machine around flammable materials, or fumes. Do not use flammable liquids or aerosols to clean tool holders. Never expose the machine or hot tools to combustible materials.
- Never open the machine or attempt repairs or you will VOID the manufacturer’s warranty. Dangerous residual voltage is inside that may cause death or injury.
- Unauthorized modifications or changes to the TechnoSHRINK machine will VOID your manufacturer’s warranty. Do not try and service your unit yourself. Techniks can provide any necessary repairs or maintenance. Do not modify or disable the built-in safety features of the machine.
- Turn off the power switch and disconnect the power cord from the outlet before cleaning, servicing, or storing the unit.



# Techniks-Shrink II – Installation, Setup and Operation

## Installation

This machine weighs approximately 40 lbs., and requires a level, stable surface with good ventilation for proper operation. Keep the machine clean and dry.

## Setup

Wire the appropriate electrical plug to the 4 wires. The green wire is the ground wire. The black, red and white wires are all hot and connect to the 3 phases. It does not matter which hots you connect to the phases. The machine will recognize the high voltage phase. After wiring the plug connect the power source line to the unit. Remember the green wire is the ground.

Install the source air line to the machine's air inlet (90 psi required) Hook up the blue air line to the orange quick disconnect on the induction head.

Turn on the power source switch on the left side of the machine and the display should light up indicating that the machine is ready for use.

## Operation

1. This machine is designed to work with shrink fit tool holders made from H13 tool steel with bore diameters from 3mm to 32mm (1/8" to 1-1/4"). It is meant for shrink fitting tools with carbide shanks. Tool shank diameter tolerance is critical. At least an H6 tolerance is advised for optimum performance.
2. Inspect the new cutting tool for any imperfections on the shank such as chips, burrs, or scarring. If you find any do not use that cutting tool in a shrink-fit tool holder. You may not be able to get it back out! The ability to install and remove tools is improved when cutting tools and holders are dry and clean.
3. Place tool holder into the tool holder seat.
4. Position the appropriate induction stop ring into the induction head and rotate the ring 90 degrees to secure it in the induction head.
5. Lower the induction head by pushing the blue "brake" button. Leave a 1/4" gap between the stop ring and the end of the tool holder. Do not allow any part of the induction head to contact the tool holder or cutting tool during operation or damage to the machine may occur.

6. Select inch or millimeters by pressing the yellow in/mm button.
7. Select the appropriate tool shank diameter by pressing the yellow arrow keys.
8. Press the red "Start" button on the control panel or the red button next to the induction head, and hold it down until the cycle is finished (machine will beep).
9. While wearing the insulated glove remove the used cutting tool and install the new one.
10. The cooling cycle automatically starts 5 seconds after the heat cycle ends. The cooling cycle lasts for 5 minutes and turns off automatically. After 1 minute of cooling it can be stopped by pressing the green "Reset" button. It can be started again by pressing the blue "Air" button. At the end of the cooling cycle the toolholder should be safe to handle. Use caution and the provided glove to prevent accidental burns.
11. Raise the induction head by pressing the blue brake button to remove the tool holder from the tool holder seat and begin the next tool change.

## Error codes

### E1

If the unit displays the error code "E1" this indicates that the induction coil has overheated, and the protective circuitry has engaged to prevent damage to the machine. Please turn the machine off and restart after the unit cools down for 30 minutes.

### E7

If the unit displays the error code "E7", then either the voltage of the machine is too high, or the induction coil is not operating. If this occurs, contact Techniks. (1-800-597-3921) for troubleshooting advise or repairs.

