

MANIFOLD OPERATING MANUAL



Please Note: These instructions are given as a general guide. They may need to be adapted to suit your standard operating procedures, or the specific requirements of the part or polymer being moulded.

TECHNICAL SUPPORT

Contact your Area Representative , e-mail us at tech-support@fastheatuk.com, or phone the Hot Runner Helpline on 01323-647375.

fast heat

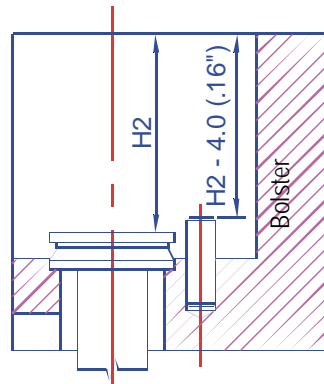
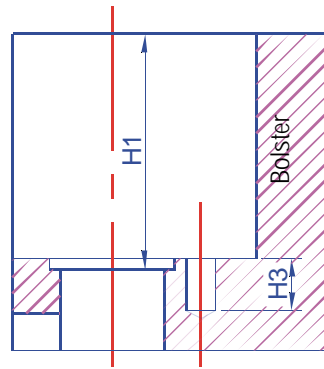
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OVERVIEW

- Check bush and manifold wire slots—positions and sizes.
- Check clearance around manifold, especially around tubular heater exit.
- Check manifold radial dowel hole position.
- Check there are sufficient screws around the manifold drops.

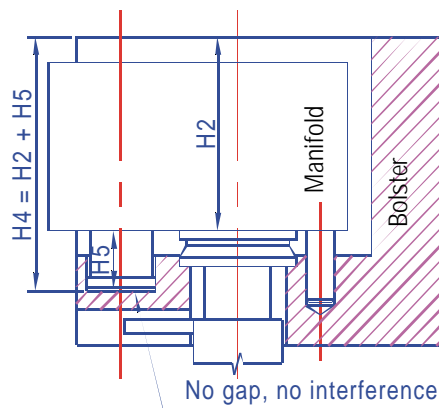
BUSH INSTALLATION CHECKS

- Visually check gate lands and diameters.
- Run ball height check on gate form and reduction ring form if appropriate and record results.
- Visually check finish on bush front fit diameter in tool—**must be ground, not sparked**.
- Remove heaters and thermocouples from bushes, if appropriate, and check fit of bush tip into tool.
- Check and record depth of bush head counterbores (Dimension H1). Tolerance $\pm 0.025\text{mm}$ ($\pm .001"$).
- Fit bushes into tool, check and record head heights (Dimension H2). Tolerance $\pm 0.025\text{mm}$ ($\pm .001"$).



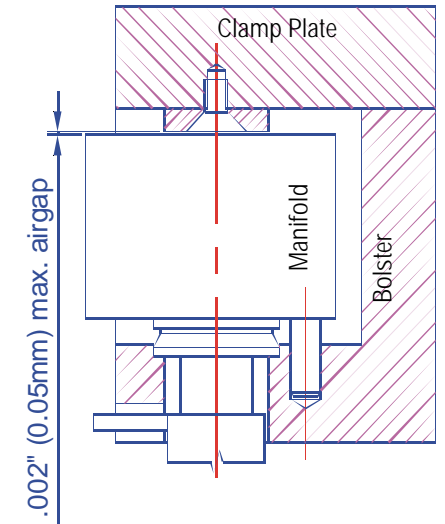
MANIFOLD INSTALLATION CHECKS

- Check depth of radial dowel hole (Dimension H3) and ensure the dowel will protrude to height H2—4mm (.16").
- Fit dowel in the tool.
- Remove manifold locator and check its fit in the tool. Polish down if necessary for an easy slip fit, and refit to manifold.
- Check depth of manifold locator bore in tool H4, subtract from H2, and compare with height locator from the manifold H5. Must be equal $\pm 0.001"$.
- Calculate the pressure pad height required, as H2—manifold height - 0.05mm (.002") airgap at room temperature and get them modified to suit.
- Check fit of nozzle locator in tool clamp plate. This should be a slip fit.



SYSTEM INSTALLATION

- Place the bushes in position and lower the manifold on top.
- Run the manifold heater and thermocouple wires in the slots provided.
- Lower the clamp plate into position and screw down.
- Fit the bush thermocouples and heaters and number them, typically the same as the cavity numbers, or to customer's requirements.
- Sleeve the wires and run them in the wire slots provided.



ELECTRICAL WIRING

- Fix the junction box to the top of the tool, running the sleeved wires through the entry holes.
- Connect the numbered wires as required to the power and thermocouple connectors.
- Run a meter check on each zone for: Heater continuity, thermocouple continuity and heater-to-earth insulation.
- Investigate any odd readings.
- When all is OK, connect to a controller and heat each zone in turn, making sure the correct heater and thermocouple respond.

Thermocouple Type	BS4937 (IEC584-3): Outer / + / -	BS1843 (Old UK Standard) Outer / + / -	US Outer / + / -
J : Iron / Copper-Nickel	Black / Black / White	Black / Yellow / Blue	Black / White / Red
K : Nickel-Chrome /	Green / Green / White	Red / Brown / Blue	Yellow / Yellow / Red