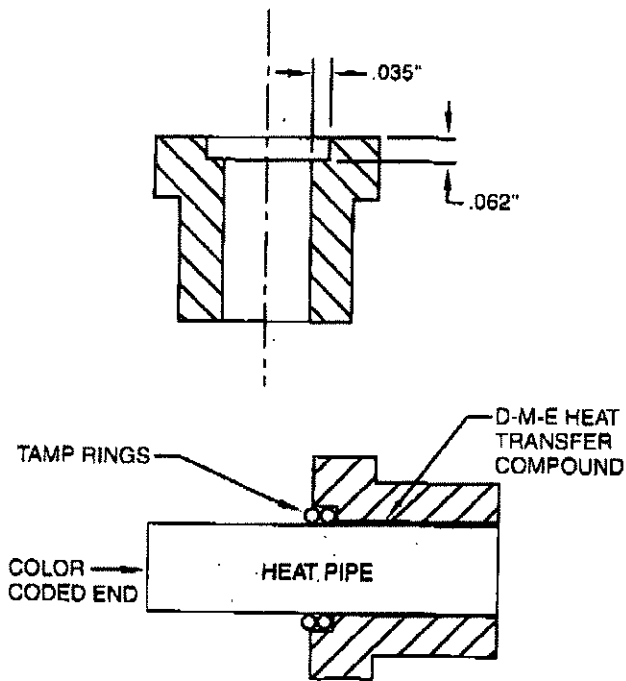




Heat Pipe installation instructions



D-M-E Heat Transfer Compound should be used when installing Heat Pipe heat conductors. Take great care to avoid air pockets as air pockets are insulators that reduce heat transfer.

HEAT TRANSFER COMPOUNDS

Heat transfer compounds are used to maximize heat transfer from the core into the Heat Pipe.

Copper Loaded: Copper-loaded heat transfer compound. Available in 5cc syringes.

Silver Loaded: Ultra-high thermal conductivity silver-loaded heat transfer compound. Available in 5cc syringes.

FOR INJECTION MOLDING

The standard Heat Pipe is easily installed in a hole drilled in the core. To fill the clearance* between the Heat Pipe and the hole, and provide positive heat transfer, silver or copper heat transfer compound is used. In addition, the core should be counterbored to accept two silver alloy tamp rings, which serve to hold the Heat Pipe in place and seal the heat transfer compound in the core.

*The hole is drilled .005" to .015" oversize.

1. CORE PREPARATION

For best results, the core pin should be drilled oversize $+.005"/+.010"$. Thoroughly clean the I.D. of the core with a solvent to remove dirt and oils.

2. HEAT PIPE PREPARATION

Carefully wipe with a clean, dry cloth.

3. COMPOUND APPLICATION

Use the following formula to calculate the amount of heat transfer compound required and apply this amount to the bottom of the drilled core-pin hole.

VOLUME OF PASTE

$$\text{cc's} = (\text{Size Factor}) \times (\text{Hole Depth, inches}) \times (.10)$$

HEAT PIPE DIAMETER	SIZE FACTOR
1/8"	0.7
3/16"	1.0
1/4"	1.3
5/16"	1.6
3/8"	2.0
7/16"	2.3
1/2"	3.0

4. HEAT PIPE INSERTION

WARNING: The Heat Pipe has one color-coded end. This end contains the safety valve and **MUST** protrude from the core. Push the **NON** color-coded end of the Heat Pipe to the bottom of the hole and apply light pressure to force the paste up along the sides of the Heat Pipe. Do **NOT** try to remove the Heat Pipe from the core after insertion, as air pockets will form. If removal is necessary, re-install from scratch.

5. TAMP RINGS

Soft wire tamp rings must be used to seal in the paste. Drop two rings over the end of the Heat Pipe, then slide the tamp tool over it until the tool contacts the tamp rings. Gently tap the tool with a hammer until the rings are fitted into place.