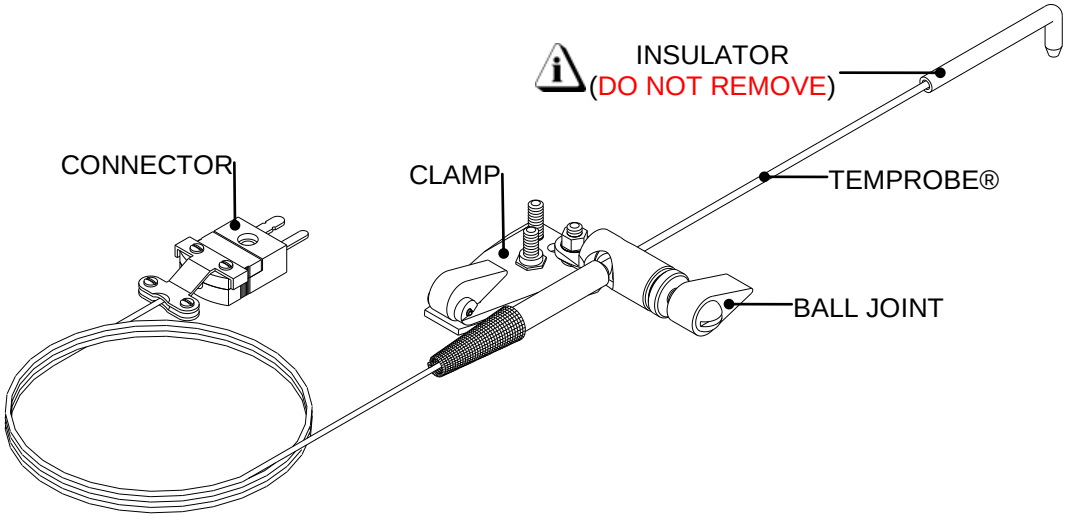
SINCE 1964

ECD
4287-B S.E. International Way, Milwaukie, Oregon 97222-8825
Telephone: (503) 659-6100; (800) 323-4548; FAX: (503_ 659-4422

GETTING STARTED WITH YOUR TEMPROBE™



This custom silicon insulator has been added to the Temprobe™ to allow it to best simulate typical thermal profiles produced by a permanently attached T/C.

USING THE TEMPROBE

1) POSITIONING THE TEMPROBE™ SENSOR TIP (The thermocouple sensor tip projects slightly from the end of the small tube.)

- First release the locking lever on the ball joint. Then position the ball joint by holding the large diameter tube, lifting the sensor tip clear of the PCB, and pivoting it about one inch past the test point to be temperature monitored. This should center the pivoting range of the ball joint on the test point.
- Slide the thermocouple tube through the ball joint and manually position the sensor tip beside the test point. Press down gently on the Temprobe™ insulator. Tighten the locking lever on the ball joint to lock the sensor tip in place. This produces a spring force on the tip for good thermal contact.
- Lift the sensor tip and set it down on the test point. (The sensor tip can be placed directly in solder paste.) If necessary, pivot the ball joint slightly, using the 3/16" tube as a lever.
- Plug the thermocouple connector into your temperature monitoring device. Remember, the temperature limit for a Standard Lead-Free Temprobe™ is 572°F / 300°C.

2) ADJUSTING THE MOUNTING CLAMP

- The flat head Phillips screw in the bottom of the clamp is used to adjust the clamp jaws to grip a PCB up to 1/4 inch thick. Adjust the screw so the clamp jaws start to grip the PCB when the cam lever is vertical. Rotate the cam lever down to its horizontal stop for a secure grip on the PCB.

3) ADJUSTING THE BALL JOINT

- The locking lever on the ball joint can be set to lock when it is horizontal, to give the lowest profile to the Temprobe™. To adjust the locked angle of the locking lever, turn the knurled nut in or out slightly as required. (It has a left-hand thread).
- To reduce the drag of the thermocouple tube through the ball joint, turn the knurled nut out about half a turn, and reset the locking lever angle.
- The self-locking nut that holds the ball joint to the clamp should be snug enough to prevent the ball joint from being accidentally pivoted when in use.

4) REMOVING TEMPROBE™ FROM A PCB----CAUTION; allow TEMPROBE™ to cool before handling!

- Release the ball joint locking lever so the sensor tip springs clear. Then release the mounting clamp cam lever and remove the Temprobe™ assembly. We recommend storing Temprobe™ in the foam lined plastic box it was shipped in, to protect the tip.

OTHER OPTIONS

1) MOUNTING TWO TEMPROBES™ ON A CLAMP

- The second ball-joint is attached to the left stud on the camp. This requires that the insulator tip and second ball joint be ***CAREFULLY*** slid off the thermocouple assembly, reversed, and replaced. When installing the second ball-joint on the clamp, the two thick and one thin flat washers are placed under the tang, and the two conical spring washers under the nut, with the cones pointing up.

2) MOUNTING TEMPROBE™ WITHOUT THE MOUNTING CLAMP

- Temprobe™ can be mounted on a 6-32 stud using the locking nut provided, or with a 6-32 locking screw. In either case, the conical washers should be under the nut or screw head, and a nut or the three flat washers under the tang of the ball joint, for clearance.

3) MINIMIZING THE OVERALL HEIGHT OF TEMPROBE™

- The overall height of the ball joint can be reduced by 1/16” (1.5mm) by removing the two thick flat washers between the ball joint and the clamp. *Be sure to replace the single thin washer, that serves as a bearing between the ball joint and clamp.*

4) SHORTENING THE CABLE

- The extension cable may be shortened to make it more convenient to use. Remove the connector and slide the rubber strain relief and the shrink tube spacer inside it, up the cable beyond the point where the cable is to be cut. It may be necessary to

split the shrink tube to slide it, cut the cable, strip the leads and reconnect the cable. *Make sure the yellow lead is connected to the + (positive) terminal.*