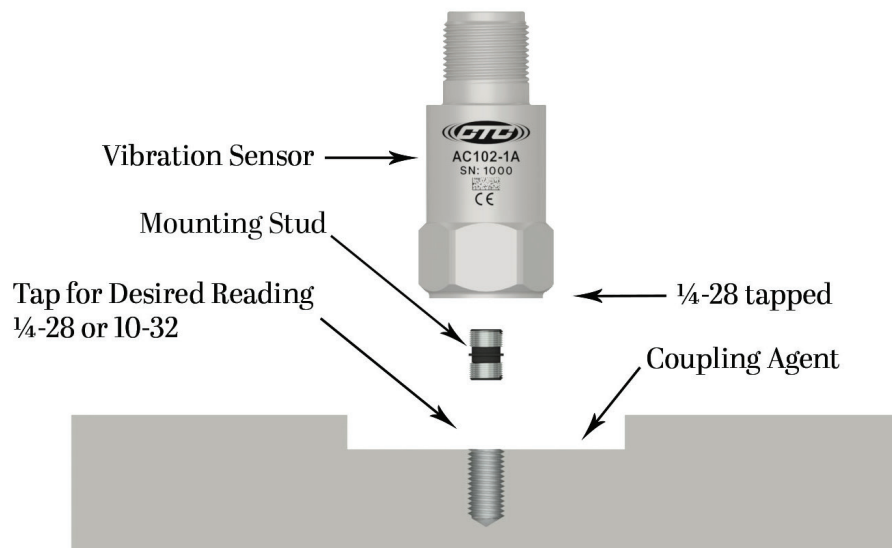


## **Sensor Installation onto Mounting Hardware/Stud Mounting**

- 1.** Hand tighten the sensor to the mounting disk and tighten using **2 to 5 pounds of mounting force**



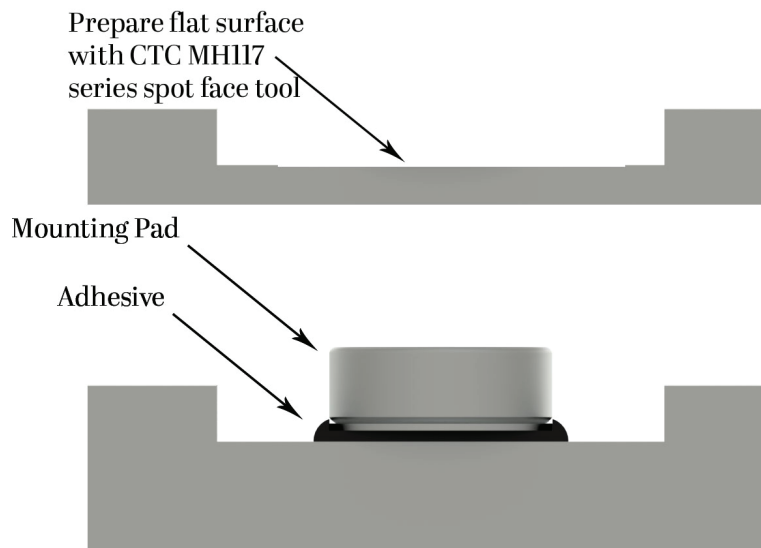
- The mounting torque is important to the frequency response of the sensor for the following reasons:
  - If the sensor is not tight enough, proper coupling between the base of the sensor and the mounting disk will not be achieved
  - If the sensor is over tightened, stud failure may occur
- A coupling agent (such as MH109-2A epoxy) will maximize the high frequency response of your hardware, but is not required

## **Permanent/Stud Mounting Surface Preparation**

- 1.** Prepare flat surface using a spot face tool and drill pilot hole for tapping
- 2.** The mounting surface should be clean and free from any residue or paint
- 3.** Tap for desired threading ( 1/4 - 28 or 10-32)
- 4.** Install sensor
  - Suggested Installation Tool Kit: MH117-1B

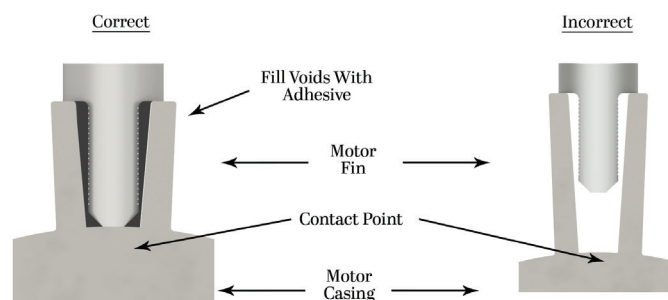
## ***Adhesive Mounting Installation***

- 1.** Ensure mounting surface is clean and free from any residue or paint to ensure proper bonding of the adhesive
- 2.** A smooth, flat mounting surface is desirable, and can be achieved by milling or grinding at the surface where the mounting stud is to be installed
- 3.** Place a small portion of adhesive on the underside of the mounting base
- 4.** Firmly press down the mounting disk to mounting area to force the adhesive out from under the disk
- 5.** Hold disk onto surface until the adhesive can support the weight of the mounting disk, ensuring the disk does not move or slide on the adhesive
- 6.** Allow full cure for adhesive
- 7.** Install sensor



## Motor Fin Mount Probe/Pad Installation

1. Prepare cooling fins on motor for mounting by scraping or grinding any paint or debris between cooling fins
2. Clean mounting area with a spray degreaser that will not leave a thin film lubricating residue
3. Mix adhesive
4. Apply adhesive to the sides and the bottom of the probe portion of the motor fin mount probe/pad (please note: the area is roughened to enhance the bonding area)
5. Place the motor fin mount probe/pad between the motor fins at the desired location
  - The probe must fit in between the motor fins and the bottom of the probe must contact the motor casing
  - For motors that have a space greater than 1/2" between each fin, motor fin mount probe pads with a thickness of 1/2" are available and will reduce the amount of adhesive needed
6. Firmly press the motor fin mount probe/pad into place, ensuring the bottom of the motor fin mount probe/pad is touching the motor casing (this contact area is where the vibration is transferred from the motor to the sensor)
  - The tip of the motor fin mount probe/pad should be as flat against the motor casing as possible (See Figure 2A)
  - **The motor fin mount probe/pad should not be resting on the top of the fins – if it does, then the bottom of the probe may not be in direct contact with the motor casing** (See Figure 2B)
7. Use a spatula to redirect any epoxy that has been displaced from the mounting area when pushing the fin mount probe/pad into place
8. Fill in any remaining voids with adhesive to ensure the motor fin will be fixed in place
9. Allow full cure for the adhesive
10. Install sensor



## ***Quick disconnect instructions***

- 1.** Ensure mounting surface is clean and free from any residue or paint to ensure proper bonding of the adhesive
- 2.** A smooth, flat mounting surface is desirable, and can be achieved by milling or grinding at the surface where the mounting stud is to be installed
- 3.** Determine the orientation of the axis on the machine.
- 4.** Place a small portion of adhesive on the underside of the mounting base
- 5.** Firmly press down the mounting disk to mounting area to force the adhesive out from under the disk
- 6.** Hold disk onto surface until the adhesive can support the weight of the mounting disk, ensuring the disk does not move or slide on the adhesive
- 7.** Allow full cure for adhesive
- 8.** Screw receptacle into captive bolt through multiaxial sensor
- 9.** Align notch from receptacle with notch on mounting stud base
- 10.** Turn receptacle 90° clockwise and take readings
  - CTC's Quick Disconnect mounting stud feature allows for consistency in the field when taking measurements with multi-axial accelerometers. CTC's MH107-1B is a flat-base, epoxy mount stud which connects to CTC's MH107-1A for sensor mounting and configuration. Many times, vibration routes are walked with different personnel on different shifts. Shift A member sets the triaxial sensor on an asset to take and record readings. Shift member B walks his routes and measures the same assets at the same points, however rotates the sensor 90°, thus altering the orientation of the axis and changing the readings of the sensor. CTC's MH107-1A and MH107-1B prevent this by having notches on each piece for proper alignment and only able to rotate 90° one-way for consistent axial configuration.