When a sample clamp does not appear to work properly, I would first examine the two components of the Sample Clamp assembly.

- 1) The Sample Clamp arm and actuator,
- 2) The Sample Clamp mounting channel.

Sample Clamp Arm- Exercise each button on the sample clamp.

- One button moves the "teeth" that allows the clamp to engage or release from the channel. To test this function, remove sample clamp from channel. Exercise the "in/out" button. If teeth move, the clamp is probably ok.
- The Second button, allows the Sample Clamp arm to swing. If both of these function properly, I would move to the next assembly.

Sample Clamp mounting channel- The channel is mounted to the sensor base plate. To examine the channel, you first need to carefully move the sensor on its side so that you can view the channel. The channel functions to guide and position the Sample Clamp. Within the Sample Clamp channel is a spring loaded detent that catches the teeth of the Sample Clamp and allows the Clamp to lock at the desired position. The detent is the most common point of failure in the channel.

If the Sample Clamp slides freely in the channel and does not lock, check to ensure the detent is present and has not frozen in place or been broken by pulling the Sample Clamp out of the channel without first actuating the Sample Clamp buttons.

Most Sample Clamp repairs can be made by a qualified technician in the field or can be done by returning the Sample Clamp assembly to the factory.