ARDENT CONCEPTS
Signal Integrity is our Passion

APPLICATION NOTE

LID ADJUSTMENT PROCEDURE

Document # AE-AN-SK-005

Family GA Lid Adjustment Procedure

RC Spring Probe™ Test Sockets

2 Piece Insulator System

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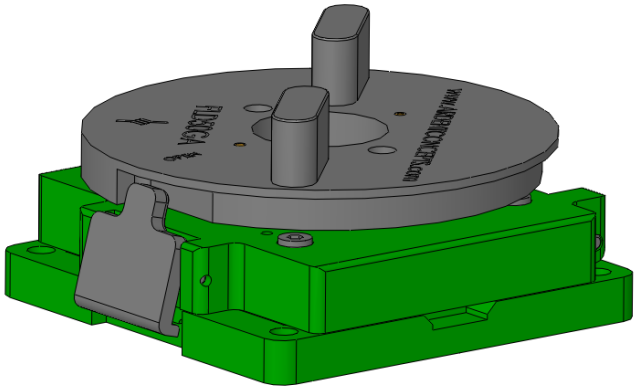
CHAPTER I: ADJUSTING THE FAMILY LID TO A SPECIFIC DEVICE, OR TO ITS FACTORY SETTING

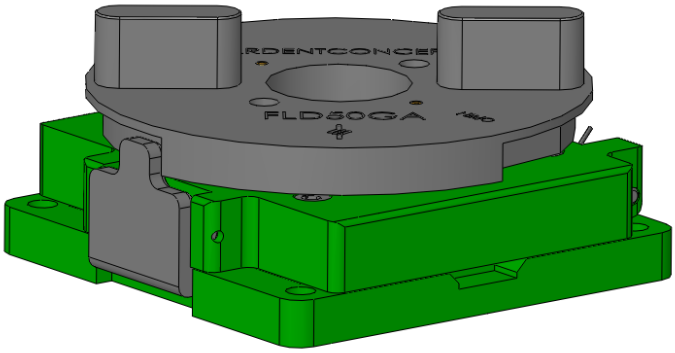
PART I: LOOSENING THE LID

DESCRIPTION:

THIS GUIDE WILL INSTRUCT THE USER ON HOW ADJUST THE LID TO A SPECIFIC DEVICE UNDER TEST. ADJUSTING THE LID TO A SPECIFIC DEVICE ALLOWS FOR THE LEADBACKER TO ACTUATE FROM ITS OPEN POSITON (A) TO ITS CLOSED POSITION (B). AT THE OPEN POSITION, THE LEADBACKER WILL NOT BE IN CONTACT WITH THE DEVICE. AT THE CLOSED POSITION, THE LEADBACKER WILL INTERFERE WITH THE DEVICE UNDER TESTING, CAUSING THE DEVICE TO BE PROPERLY SEATED IN THE SOCKET IN A WAY THAT CAUSES THE CONTACTS TO FULLY COMPRESS. IT IS IDEAL TO HAVE THE LEADBACKER COME INTO CONTACT WITH THE DEVICE AT THE CLOSED POSITION. THE LID MAY NEED TO BE RE-ADJUSTED TO THE DEVICE IF THE LEADBACKER COMES IN CONTACT WITH THE LID TOO EARLY, OR IF THE LID DOES NOT COME IN CONTACT WITH THE DEVICE AT ALL.

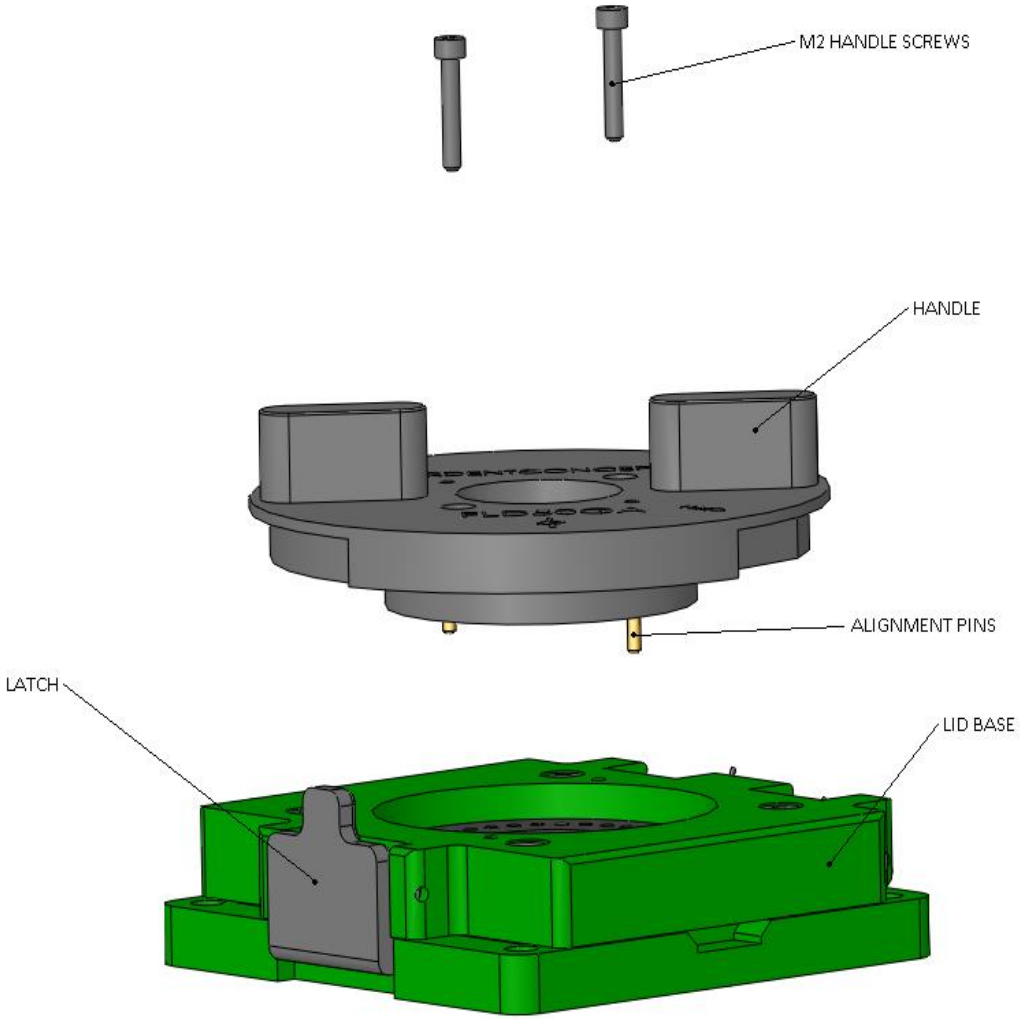


(A) OPEN POSITION

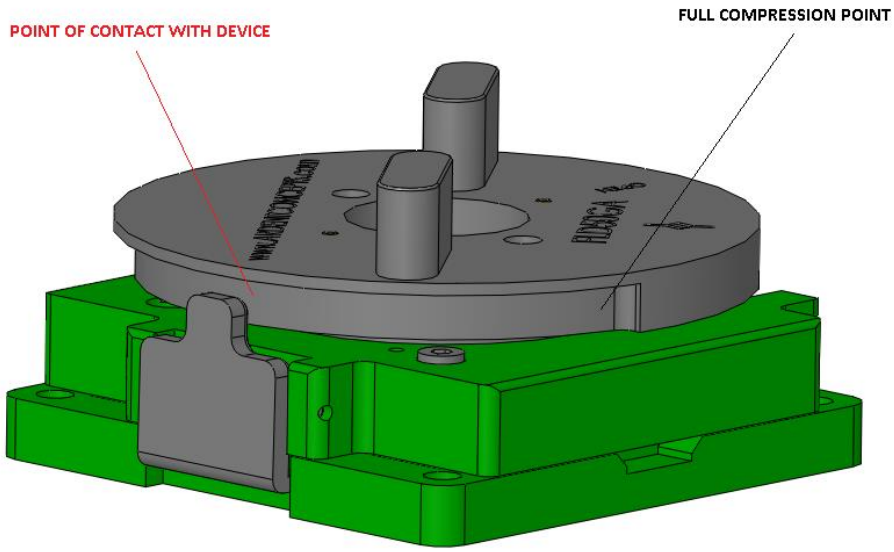


(B) CLOSED POSITION

REFERENCE ASSEMBLY:

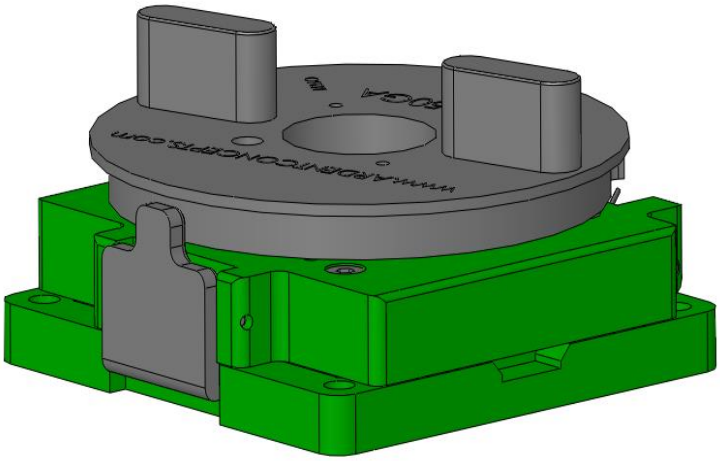


THE IMAGE BELOW DEMONSTRATES HOW THE LID SHOULD OPERATE AFTER SUCESSFULLY COMPLETING THIS SETUP GUIDE.

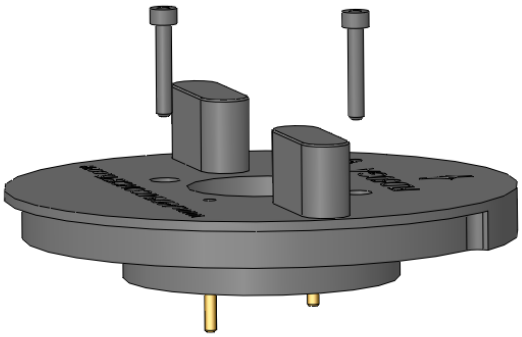


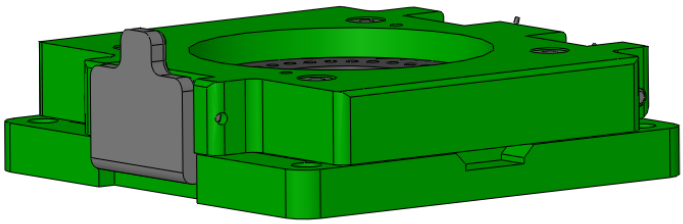
WARNING

MAKE SURE THAT THE LID IS ATTACHED TO THE SOCKET AND THAT THE SOCKET IS ATTACHED TO THE TESTING BOARD (OR SHIPPING COVER), WITH THE APPROPRIATE DEVICE UNDER TESTING IN THE POCKET. DO NOT ATTEMPT ADJUSTING THE LID WHEN THE SOCKET IS NOT INSTALLED ON THE BOARD OR SHIPPING COVER, AS THIS MAY CAUSE THE CONTACTS AND INTERPOSER OF THE SOCKET TO BECOME DAMAGED.

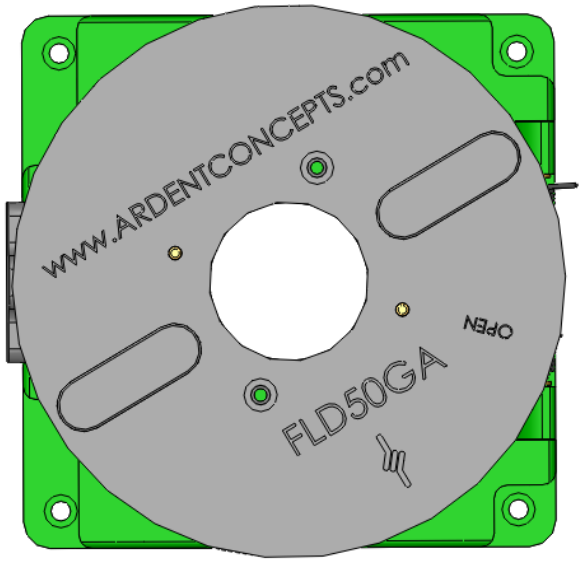


1. PLACE THE DEVICE IN THE SOCKET'S TESTING POCKET AND CLOSE THE LID. ENGAGE THE LID SO THAT IT TURNS AS FAR AS POSSIBLE, UNTIL THE LEADBACKER COMES IN CONTACT WITH THE DEVICE, ALLOWING NO FURTHER ROTATION OF THE HANDLE.



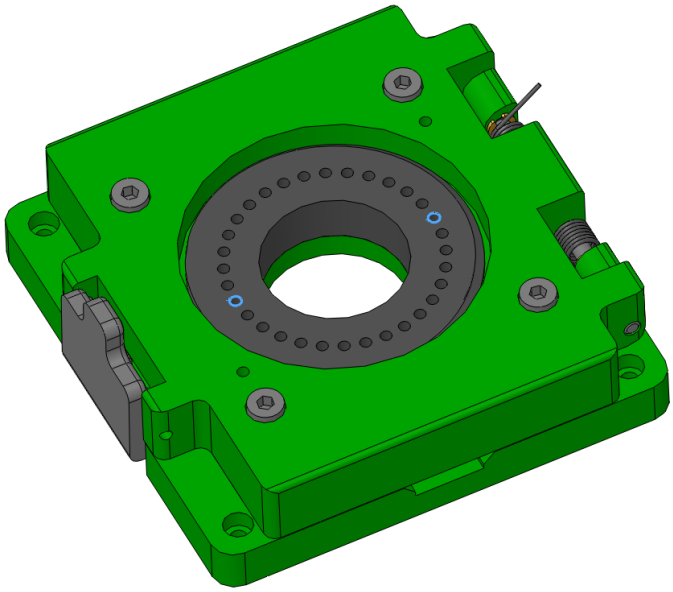


2. ONCE THE LEADBACKER OF THE LID IS IN FIRM CONTACT WITH THE DEVICE, REMOVE THE M2 HANDLE SCREWS FROM THE HANDLE, AND REMOVE THE HANDLE FROM THE LID.



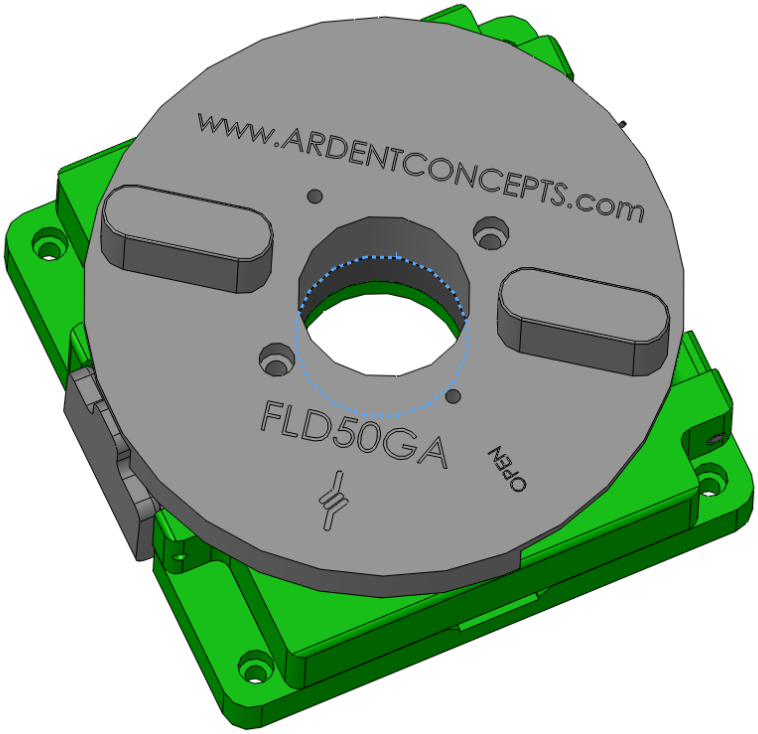
3A. IT IS SUGGESTED TO REPOSITION THE HANDLE SO THAT THE TOP OF THE LATCH IS ALIGNED NEAR THE "www.ARDENTCONCEPTS.com" ENGRAVING AS SHOWN IN THE IMAGE TO THE LEFT.

THE ENGRAVING IS IN THE MIDDLE OF THE START AND END POINTS OF THE HANDLE STROKE. FROM HERE, THE HANDLE CAN BE REMOVED AND ROTATED CLOCKWISE FOR LESS COMPRESSION OR COUNTER-CLOCKWISE FOR MORE COMPRESSION.

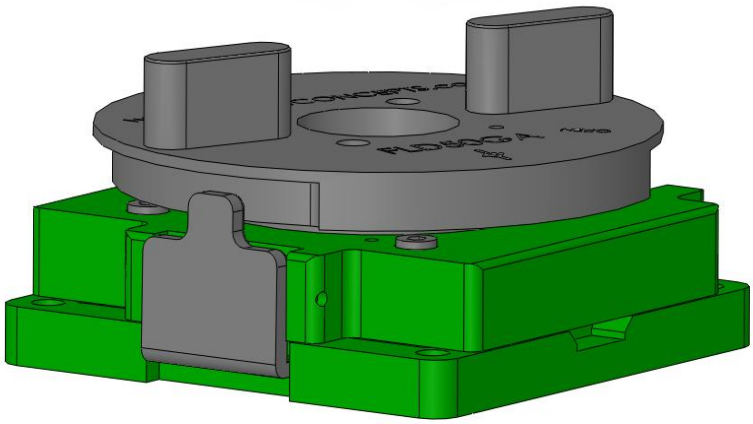


3B. THE JACK SCREW HAS A SERIES OF ALIGNMENT HOLES CORRESPONDING TO DOWELS PRESSED INTO THE HANDLE.

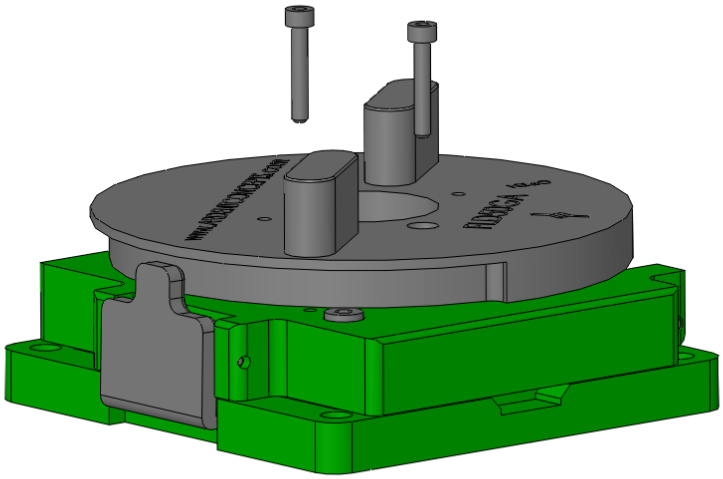
THE HANDLE MUST BE POSITIONED ON THE JACK SCREW ON DIAMETRICALLY OPPOSITE HOLES ONLY.



3C. IF THE INNER CYLINDRICAL SURFACE OF THE HANDLE MATCHES THE INNER CYLINDRICAL SURFACE OF THE JACK SCREW, THE HANDLE IS IN A VALID POSITION.



4. BEFORE RE-INSERTING THE M2 HANDLE SCREWS, IT IS A GOOD IDEA TO TEST THE ACTUATION OF THE LID WITH THE DEVICE IN THE POCKET. YOU SHOULD START TO FEEL SOME TORQUE WHEN TURNING THE HANDLE AT THE END OF THE HANDLE'S ROTATION. THIS TORQUE IS A GOOD INDICATION THAT THE CONTACTS IN THE SOCKET ARE BEING COMPRESSED AND THAT THE DEVICE UNDER TEST IS PROPERLY SEATED IN THE SOCKET.



5. RE-INSERT THE M2 HANDLE SCREWS. THE LID IS NOW ADJUSTED AND READY FOR USE.

IF EXTENSIVE TESTING SHOWS THAT THE LID NEEDS FURTHER ADJUSTMENTS, REPEAT THE PROCESS WHILE PAYING PARTICULARLY CLOSE ATTENTION TO STEP 3 OF THIS GUIDE.

Who Is Ardent Concepts?

Ardent Concepts, Inc. is a leading designer and manufacturer of high performance multicoax and coaxial assemblies, connectors, and sockets used in the development of next generation semiconductors and electronics systems. Our core technology is the smallest, fastest, most electrically efficient compression mount connector technology worldwide. As data rate requirements increase and devices and systems shrink, Ardent's products deliver superior signal integrity in a dense footprint that can be reusable across programs to maximize cost savings.