

Figure 1

## 1. INTRODUCTION

QUADRA Seating Tool Kits are used to seat the QUADRA cage assembly onto a host printed circuit (pc) board. The cage assemblies contain press fit contacts to allow solderless pc board installation. Read these instructions thoroughly before using the seating tool.



*Dimensions on this instruction sheet are in millimeters [with inch equivalent dimensions in brackets]. Figures and illustrations are for identification only and are not drawn to scale.*

## 2. DESCRIPTION

Each seating tool kit consists of one seating tool. The top of the seating tool provides a surface to accept the force applied by the application tool to seat the cage assembly onto the pc board.

## 3. REQUIREMENTS

### 3.1. PC Board Support Fixture

A pc board support must be used to provide proper support to the pc board and protect the pc board and product from damage. The pc board support must be designed for specific needs using the following recommendations:

- It should be at least 25.4 mm [1.00 in.] longer and wider than the pc board.
- If the pc board is less than 3.0 mm [.118 in.] thick, it should have flat surfaces with holes or channels large enough and deep enough to receive any protruding components of the cage assembly.

## 3.2. Application Tooling

Power for seating tools must be provided by an application tool with a ram capable of supplying a downward force of 44.5 N [10 lb-force] per contact.



*Over driving of the cage assembly will deform parts critical to the quality of the assembly. Maximum force occurs prior to the cage assembly bottoming on the pc board.*

## 4. SETUP

When setting up equipment to seat the cage assembly, pay particular attention to the following:

- The seating tool must be matched to the cage assembly
- The seating tool, cage assembly, and application tool ram must be properly aligned before cycling the application tool.

## 5. SEATING (Figure 2)

1. Place the pc board on the support fixture.
2. Place the cage assembly on the pc board so that the cage contact tips are aligned and started in the matching holes in the pc board.
3. Orient the seating tool over the cage assembly so that the back is aligned with the back of the cage assembly. The cutout step must be aligned over the receptacle connector.
4. Center the seating tool under the ram of the application tool. Slowly lower the ram until it meets

the seating tool. Verify alignment of the pc board support, pc board, cage assembly, and seating tool.

5. Cycle the application tool to seat the cage assembly onto the pc board. Then retract the ram and carefully remove the seating tool by pulling straight from the cage assembly.

6. Check the cage assembly for proper seating according to the following:

- Each of the cage assembly contacts are in their respective pc board holes.

- The cage assembly is seated on the pc board with a seating height measured from the top of the cage assembly of  $12.95 \pm 0.1$  mm [ $.510 \pm .004$  in.].

6. REVISION SUMMARY

- Updated document to corporate requirements
- New artwork provided in Figures 1 and 2
- Added, deleted, or changed text in Sections 2 and 4, and Paragraph 3.1

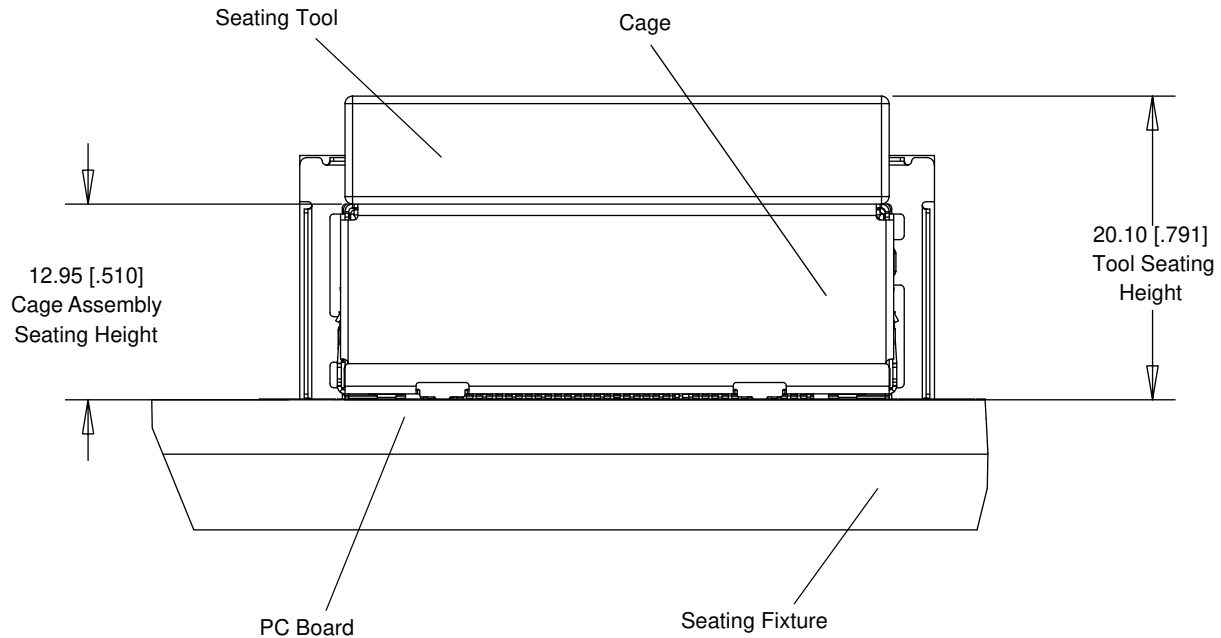


Figure 2