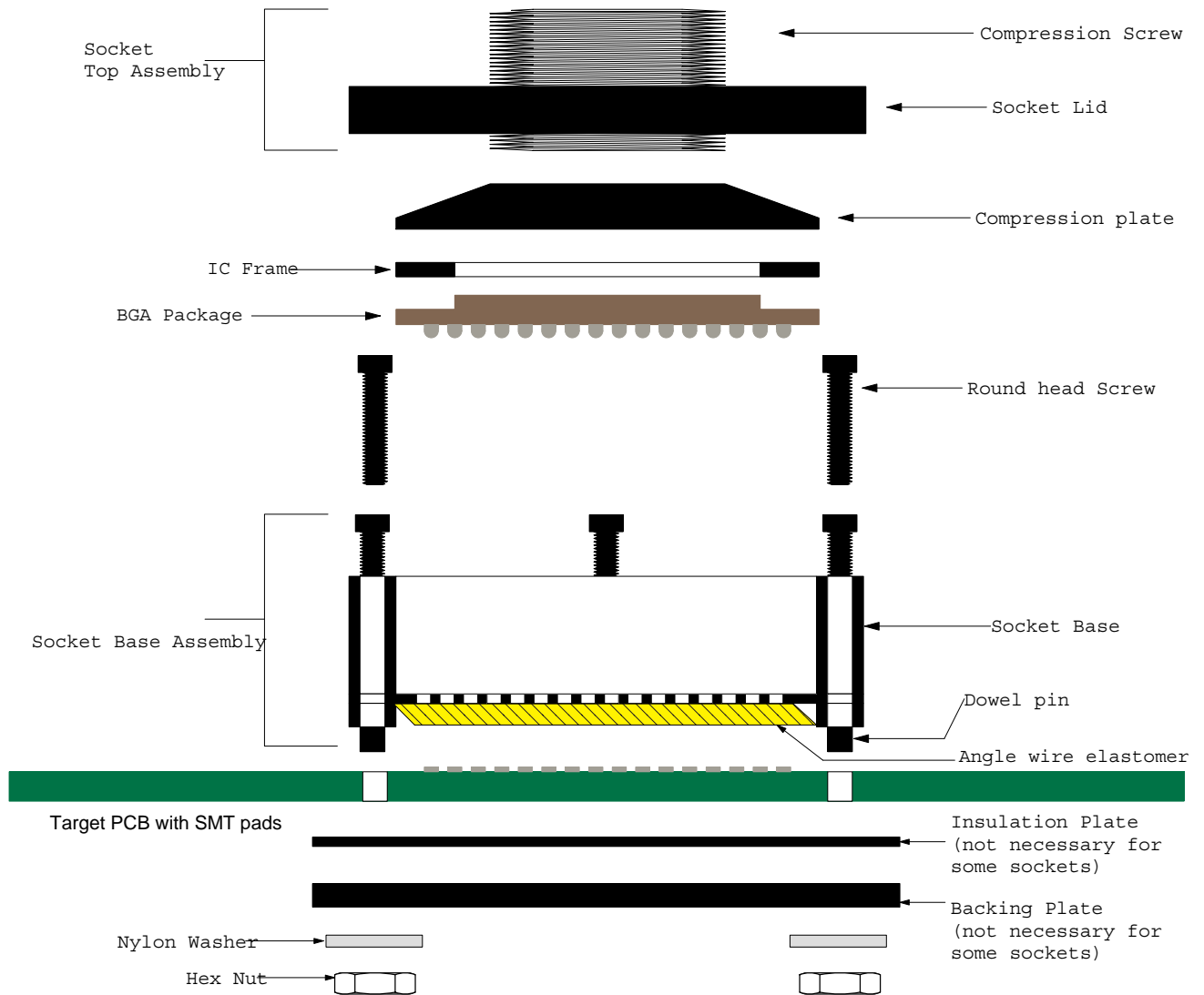


## Socket Assembly:

Refer to figure 1 for graphical illustrations.

1. Install the socket base assembly on the target PCB with the hardware, socket base screws and nuts, provided. Because of the asymmetrical location of the tooling holes, the socket can be assembled only one way.
2. Place IC package into the socket using either vacuum pen or tweezers. In case of the BGA IC package, place the package solder ball side down. In case of the LGA or similar kind of the IC package, place the package pad side down. **NOTE:** The package orientation on the target PCB is critical.
3. Center the IC package inside the IC guide using tweezers. Use microscope if needed.
4. Make sure the IC package is centered.
5. Press on top of the IC with tweezers. Try to press on the area close to the center of the IC first. Then press slightly on all four corners of the IC. **NOTE:** If you are experiencing problem pressing the IC package into the IC guide, it is an indicator that the IC package is not properly centered. When it is centered, it goes in easily when pressed.
6. If IC frame (optional) supplied, place it over the BGA package. Place the compression plate on top of the IC package.
7. Install the socket top assembly onto the socket base assembly and swivel to lock into the position. Tight all the four socket lid screws.
8. Turn the compression screw clockwise to the specified torque called out on page 1 of the drawing. Be careful not to over-tighten compression screw. Over-tightening will damage the elastomer. **NOTE:** the torque value on page 1 of the drawing is the maximum recommended torque value. Typically the socket should work with smaller torque.



**Figure 1: Graphical Illustration of Socket Assembly**

**Torque tool:**

A torque tool should be used to apply the proper torque to the compression screw. There are adjustable and factory preset torque tools currently available, which may be purchased separately.

- TL-TORQUEDRIVER-01 (adjustable, 1.25-6.25 inch lb range)
- TL-TORQUEDRIVER-02 (adjustable, 3-15 inch lb range)



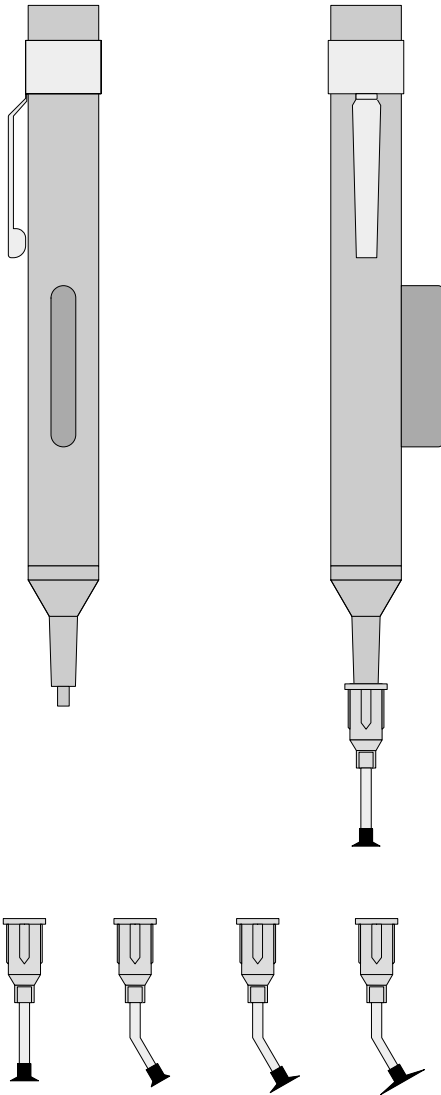
Tel: (800) 404-0204  
[www.ironwoodelectronics.com](http://www.ironwoodelectronics.com)

- TL-TORQUEDRIVER-03 (adjustable, 5-40 inch lb range)
- TL-TORQUEDRIVER-04 (adjustable, 20-100 inch oz range)
- TL-TORQUEDRIVER-05 (factory preset, 8 inch oz)
- TL-TORQUEDRIVER-06 (factory preset, 16 inch oz)

Torque tools will come with a 5mm hex insert (compatible with compression screw). For other inserts, please call Ironwood Tech Support @ 1-800-404-0204.

**Vacuum pen:**

A vacuum pen is recommended for insertion/extraction of ICs having a body size of 8x8mm or larger. Figure 2 shows a typical vacuum pen. This part, TL-VACUUMPEN-01, may be purchased separately.



**Figure 2: Vacuum Pen with attachments**

**Tweezers:**

A small tweezers is recommended for insertion/extraction of ICs having a body size of 7x7mm or smaller. Figure 3 shows a typical small tweezers with a GHz BGA socket.



**Figure 3: Tweezers with SG-BGA socket**