This procedure will cover the steps to properly pack up the Q5000 TGA for shipment.

**Packing Materials Provided:**

<table>
<thead>
<tr>
<th>Q5000IR:</th>
<th>Q5000SA:</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Foam inserts</td>
<td>2 Foam Inserts</td>
</tr>
<tr>
<td>3½” Furnace shipping support</td>
<td>2 ½” Furnace shipping support</td>
</tr>
<tr>
<td>IR Autosampler shipping foam</td>
<td>SA Autosampler foam</td>
</tr>
<tr>
<td>4 L brackets and screws</td>
<td>4 L brackets and screws</td>
</tr>
<tr>
<td>Lower furnace shipping box</td>
<td></td>
</tr>
</tbody>
</table>

**Tools Required:**

- 7/64” Allen key
- 3/8” wrench
- 1/2” wrench
- Philips screwdriver
- Heavy-duty tape
- Strapping kit

NOTE: Before starting this procedure, remove all hang down wires, pans, water, and gas lines from the instrument.

1. Carefully remove the pans, hang down wires and the autosampler tray.

2. Remove the 2 screws of the balance cover (Figure 1). Remove cover.

3. Remove the foam insulation cover. The instrument cannot ship with insulation cover installed. Package separately.
   If you are returning the instrument to TA Instruments for repair, **DO NOT SEND INSULATION COVER.** Store in a safe place.

4. Remove the front balance housing cover by removing the six screws (Figure 2).

5. Remove the balance side cover (Figure 3).

6. Place the shipping foam inserts on the balance arms (Figure 4).
7. Reinstall the balance side covers.

8. Reinstall the front balance housing cover, leaving out the bottom two screws.

9. Place the balance lockdown brackets on the balance (Figure 5).

10. Using the longer screws (provided with bracket) attach the four shipping brackets to the balance housing (2 in the front, 2 in the rear).

11. Next install the screws that attach the bracket to the lower part of the balance housing (Figure 6).

12. Reinstall the balance cover. **Note: DO NOT REPLACE THE INSULATION COVER.**

13. Raise the furnace to it’s closed position.

14. Remove the purge line from the bulkhead fitting (Figure 7).

15. **For Q5000IR:**
   a. Remove the lower furnace assy electrical connection (Figure 8).
   b. Remove the lower furnace assy from the bottom of the furnace (Figure 9).
   c. Place lower furnace assy in the lower furnace assy shipping box.
   d. Install the furnace shipping support. Using a 3/8” wrench, tighten the foot under the furnace. Next, use a 1/2” wrench to tighten the locknut in place (Figures 10 & 11).

   **For Q500SA:**
   a. Manually drain humidity chamber.
   b. Install the furnace shipping support. Using a 3/8” wrench, tighten the foot under the furnace. Next, use a 1/2” wrench to tighten the locknut in place (Figures 12 & 13).

16. Install the autosampler shipping foam between the furnace and autosampler (Figure 14).

17. Perform a shutdown on the instrument. Press the “Display Menu” button on the LCD screen. Press the “Shutdown” button. Follow the prompts.

18. Remove all purge lines, water cool lines, air cool line and electrical connection.

19. If shipping the instrument in the reusable TA plastic shipping container;
   a. Place instrument in shipping container.
   b. Place lower furnace assy shipping box next to instrument inside container.
c. Place top portion of shipping container over the instrument. Note the direction, the “FRONT” is labeled on both the top and bottom portions of the container. Secure the latches on all of the sides.
d. Your instrument is now ready to ship.

20. If shipping the instrument in the cardboard shipping carton;
a. Carefully lift the instrument and remove the feet.
b. Place the instrument on the plastic pallet.
c. Secure instrument to pallet with 5 shipping bolts.
d. Place feet, accessories, and lower furnace assy shipping box into accessory box and place box next to instrument on pallet.
e. Place outside carton over pallet and seal with heavy-duty tape.
f. Using a strapping kit, secure outside carton to the plastic pallet.
g. Your instrument is now ready to ship.

TA Instruments strongly recommends using a Motor Freight Carrier!
Figure 6

Figure 7

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Figure 8

Lower furnace electrical connection

Figure 9

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Figure 12