This procedure will cover the steps to properly pack up the RSA3 for shipment.

**Packing Materials Provided:**
- Shipping carton
- Shelf for oven
- Box for accessories
- Oven/motor foam
- Skid
- 3 Screws hold RSA to skid
- 4 Z-brackets w/ screws
- Shoulder bolt
- Xducer lock bracket w/ screw
- Motor lock bracket w/ screw

**Tools Required:**
- Complete set of metric Allen Keys
- Adjustable wrench
- Complete set of standard Allen keys
- Set of screwdrivers
- Stretch wrap
- Strapping kit
- Heavy duty lifting jack
- Cart

**NOTE:** Before attempting to ship RSA3 instrument, please be sure all the front and back panels are well screwed in position. RSA3 Test Station is about 275 lbs. Enough manpower and adequate tools are required.

1.) Clean air should be flowing through the instrument with the appropriate PRESSURE as indicated on the right hand side of the instrument (Figure 1).
2.) Get the Stage Lock Screw and 4mm Allen key ready.

3.) Slide the Oven to the extreme left.

4.) Switch ON the instrument and open Orchestrator Software on the Host Computer:
   Move the stage up OR down slowly to the position where the outer hole below the transducer
   corresponds with the inner hole (Figure 2).

5.) Insert the Stage Lock Screw into the corresponding holes and tighten the screw carefully using 4mm
   Allen key.

6.) Switch OFF the instrument.

7.) Remove any tools from the transducer and motor tool holders.
8.) Lock the transducer (Figure 3). Use locking plate and screw; tighten screw with 4mm Allen key.

9.) Using 3mm Allen key, remove motor cover completely.

10.) Lock the motor in the same way the transducer was locked, using 4mm Allen key.

11.) Place foam disk on motor. The purpose is to sandwich the foam disk between the motor and oven (Figure 5).

12.) Move the oven gently to extreme right and lock the oven door securely.

13.) Carefully turn back of RSA3 Instrument towards you at about 30 degrees angle. Do not stretch cables and hoses.
14.) Remove power cable from 220 Volt supply socket.

15.) Remove any air hoses connected to air fittings.

16.) Remove communication cable from ‘HOST’ 9DB Connector.

17.) Remove LN2 Control cable from ‘N2 Heater’ and ‘N2’ 15 DB Connector, if applicable.

18) Using the appropriate equipment, Cart and Lifting tool, move the instrument from Laboratory workbench to shipping Department.
19.) The Pallet caddy has seven holes on it, the three inner holes are for bolting down the instrument from under the pallet, using the 3 metric Socket-head Cap Screws–M10 (Figure 7). The four outer holes with embedded threaded nuts are for bolting down the instrument with 4 Z-Brackets and standard short socket-head cap screws.

20.) Carefully lower the instrument on Pallet caddy. Place the instrument on pallet caddy so that 2 of the inner holes are on your left hand side (Figure 7).

21.) Insert the M10 Socket cap screw with washer in the right hand side hole under the pallet (Figure 8). Set the hole to correspond with the threaded hole under the instrument and turn the bolt to ensure that it catches the threading. On the left hand side under the pallet there are 2 holes. Set the 2 holes under the pallet to correspond with the 2 threaded holes under the instrument, insert two M10 Socket head cap screw, and turn the bolts to ensure that they catch the threading. Once it is confirmed that all the 3 bolts are on the instrument, tighten the bolts slightly with 8mm metric hex key. Do not over tighten at this point.
22.) Insert the 4 Hold down Z-Brackets in the 4 slots on the sides on the instrument (Figure 9). Use the 4 short standard Socket-head screws with washers to secure the hold down Z-Brackets on the instrument and bolt them down carefully on the pallet with ¼” standard hex keys. Do not over-tighten the screws on the pallet so as not to damage the embedded threaded nuts in the pallet.

23.) At this point, tighten M 10 Socket-head cap screws under the pallet securely.

24) Wrap corrugated-foam shipping shelf on the Oven (Figure 10).
Pack all accessories, cables and hoses into corrugated carton. Seal the box with heavy-duty tape.
25.) Place the carton filled with accessories on top of wrapped oven (Figure 11).

26.) Stretch wrap instrument:
Wrap the stretch plastic firmly around the instrument several times from the base to top. Ensure that there is no loose object on the pallet (Figure 12).

27.) Open corrugated carton and cover the instrument on the pallet. Use heavy-duty tape to seal the box.

28.) Strap the box tight and secure on the pallet with the appropriate strapping tool and materials (Figure 13).
30) DO NOT STACK anything on top of RSA3.
31) Your instrument is now ready to ship.

PLEASE CONTACT SERVICE DEPARTMENT IF FURTHER CLARIFICATION ON HOW TO PACKAGE SPECIFIC ACCESSORIES.

**TA Instruments strongly recommends using a Motor Freight Carrier!**