



TA Instruments

Packing the DHR Instrument

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

Packing Materials Provided:

DHR shipping box (Including Pallet)
Complete shipping foam set (6 pieces)

Misc. Items Required:

Bearing cap
8mm air inlet plug

Tools Required:

Heavy-duty packing tape
Strapping kit

Part Numbers:

DHR Shipping Kit	201410.908
DHR ETC Shipping Kit	201410.906

- 1.) Make sure air is turned on.
- 2.) Remove geometry from motor spindle and store in a safe place.
- 3.) **Remove all accessories attached to the instrument. These should be disconnected from the instrument prior to shipping. If you are shipping the accessories along with the instrument, any that do not fit into the accessory cavity of the ECU box should be shipped separately in its own box.**
 - a.) **PELTIER OPTION:** Shut down the circulator that supplies water to instrument. Disconnect the two fluid quick connectors on the front of test station. Press release button. Disconnect smart swap connector from test station. Press release button again to release magnet to the peltier. Lift the peltier off of base. Disconnect the two water lines going into the back of the test station from the circulator. Turn off power switch located on Electronics' box.
 - b.) **ETC OPTION:** Press release button on the front panel. Disconnect smart swap connector from test station. Press release button again to release magnet to the lower tool. Lift the lower tool off of base. Turn off the power switch located on the Electronics' box. Disconnect purge gas line. Remove the Left and Right attachments on back of the test station. If ETC is equipped with camera, disconnect the USB cable going to the back of the ETC. Loosen the 4 captive screws securing the ETC. With one hand on each of the handles underneath the ETC clamshells, open the ETC wide and carefully pull the oven until the 4 locating dowels are free of the test station.
 - c.) **CONCENTRIC CYLINDER:** Shut down the circulator that supplies water to Instrument. Disconnect the two fluid quick connectors on the front of test station. Press release button on the front panel. Disconnect smart swap connector from test station. Press release button again to release magnet to the concentric cylinder. Lift the cylinder off base. Disconnect the two

water lines going into the back of the test station from the circulator. Turn off the power switch located on the Electronics' box.

- 4.) Lower air bearing head to the bottom most position of its travel.
- 5.) Lock Air Bearing with draw rod and bearing clamp. Ensure that the Air bearing clamp cannot be moved. Use masking tape to hold the clamp to bearing cover.
- 6.) Disconnect the airline to the back of the instrument and insert the 8mm air inlet plug. If you do not have an 8mm air inlet plug, cover up the air inlet with some tape.
- 7.) Mark all cables connected to the DHR Instrument.
- 8.) Disconnect all cables between Test Station and Electronics box.

If shipping the instrument in the reusable TA plastic shipping container;

- a. Place electronics box in shipping container.
- b. Place test station "face down" in shipping container.
- c. Include any cables, cords, and small accessories.
- d. Close top portion of shipping container over the instrument. Secure the latches on all of the sides.
- e. Your instrument is now ready to ship.

If shipping the instrument in the cardboard carton, follow steps below:

- 1.) Place U-Sheet in ECU box (Figure 1).

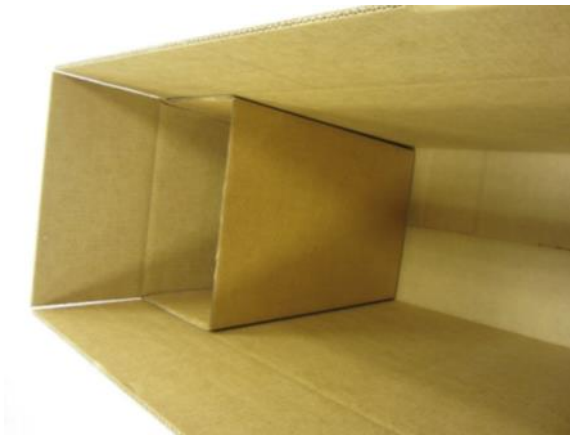


Figure 1

- 2.) Determine ECU style to be shipped (Figure 2).



Old Style



New Style

Figure 2

- 3.) If **old** style ECU is to be packed, remove spacers from top and bottom ECU foam packing (Figure 3).

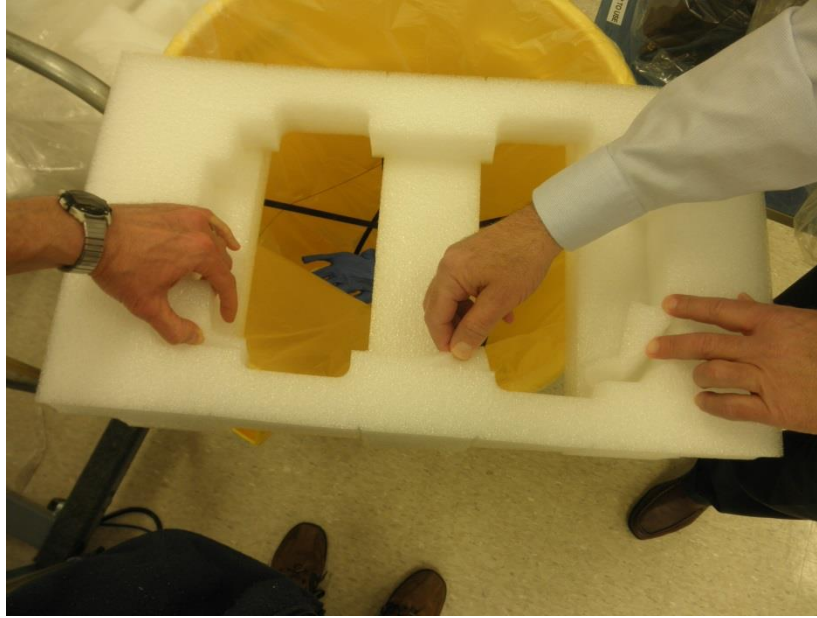


Figure 3

- 1.) Place bottom foam in ECU box (Figure 4).

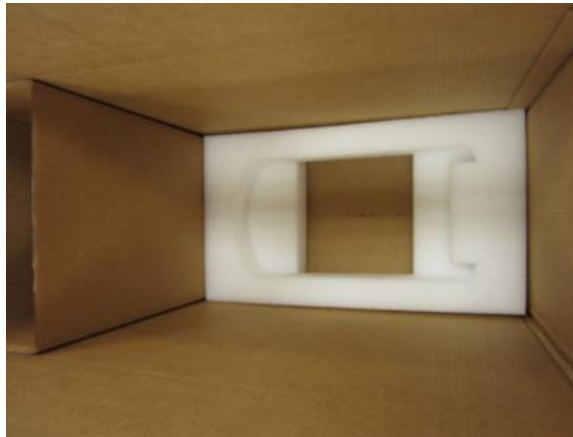


Figure 4

2.) Place ECU in plastic bag and place in box (Figure 5).



Figure 5

3.) Place top foam on ECU (Figure 6).



Figure 6

- 5.) If packing **new** style ECU, place cardboard spacer on top of ECU foam (Figure 7).
If packing **old** style ECU, cardboard spacer can be discarded.



Figure 7

- 6.) Place inflatable bag inside accessory cavity of ECU box (Figure 8).



Figure 8

7.) Place accessories into cavity (Figure 9).

8.) Inflate bag (Figure 10).



Figure 9



Figure 10

9.) Close box (Figure 11).



Figure 11

10.) Place bag over DHR then place DHR into foam cutout on pallet (Figure 12).



Figure 12

11.) Place dessicant packet into DHR bag (Figure 13).



Figure 13

12.) Secure test station to the pallet using banding and protective banding foam, then seal test station bag (Figure 14)



Figure 14

13.) Run banding through slots in pallet where ECU box is placed. Place ECU on pallet and secure (Figure 15).



Figure 15

14.) Place outer box on pallet and secure (Figure 16)



Figure 16

15.) Instrument is now ready to ship.

TA Instruments strongly recommends using a Motor Freight Carrier!