

## Aerodynamic Particle Sizer

### Model 3320 Upgrade to 3321

Upgrade of a Model 3320 Aerodynamic Particle Sizer Model to a Model 3321 consists of these procedures:

- 1) Review written instructions or explanation of problem from customer
- 2) Initial inspection
- 3) Installation of new:
  - a. LCD display
  - b. Hi voltage PC board
  - c. LED PC board
  - d. Digital PC board
  - e. Chassis
- 4) Assign new serial number
- 5) Update manual and software as necessary
- 6) Clean inner and outer nozzle, optics, and pumps
- 7) Calibrate sheathe and aerosol flow rates
- 8) Inspect and replace as needed: filters, nozzles, tubing, and O-rings
- 9) Align optics
- 10) Leak check
- 11) Time-of-flight calibration with Poly Styrene Latex microspheres
- 12) Final electrical checkout and performance verification

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Contact your local TSI Distributor or visit our website [www.tsi.com](http://www.tsi.com) for more detailed specifications.

This service includes minor repairs and replacement parts. With major repairs, customers will be charged for additional parts and labor. TSI will contact the customer for approval before making any major repairs.

Turnaround time for standard service is approximately two weeks after receipt of the instrument. TSI service work is backed by a 90 day service warranty.

\* Due to the age of this instrument and replacement part unavailability it may be necessary to upgrade this instrument in order to perform the repair. If this is the case, TSI will contact the customer before performing service.