



## ENGINE EXHAUST CONDENSATION PARTICLE COUNTERS (EEPCs):

MODELS 3790, 3790A, 3791, 3792

TSI service, performed on an annual basis, helps to keep your EEPC in proper working order. TSI offers two levels of service: **Clean and Calibrate**, and **Repair, Clean and Calibrate**. In addition, ISO 17025-accredited versions of these services are also available. Read below to learn what is included in each service.



### Clean and Calibrate Service includes:

<b>Maintain</b>	<ul style="list-style-type: none"><li>+ Clean optics, align laser, and adjust laser power to optimize count signal</li><li>+ Inspect and clean orifices, inlet, and nozzle</li></ul>
<b>Replace</b>	<b>Parts</b> <ul style="list-style-type: none"><li>+ Replace aged parts, as needed: discolored tubing, liquid and air filters</li><li>+ Replace wick</li></ul>
	<b>Firmware</b> <ul style="list-style-type: none"><li>+ Ensure that all available firmware updates are installed</li></ul>
<b>Test</b>	<b>Flows</b> <ul style="list-style-type: none"><li>+ Leak check, and flow rate accuracy tests for inlet flow</li></ul>
	<b>Sensors</b> <ul style="list-style-type: none"><li>+ Calibrate temperature and fill sensors to ensure accuracy</li></ul>
<b>Calibrate per ISO 27891</b>	<b>Concentration</b> <ul style="list-style-type: none"><li>+ <i>Zero check</i>: test CPC for 12 hours with a filter at the inlet to ensure accuracy at very low concentrations</li><li>+ <i>vs. Reference CPC</i>: compare your CPC's reading to a Reference unit challenged in parallel. Agreement between the two instruments ensures accuracy of your CPC across the tested concentration range.</li></ul>
	<b>Counting efficiency</b> <ul style="list-style-type: none"><li>+ Measure counting efficiency of the EEPC at 23 and 41 nm, to ensure performance in accordance with PMP requirements</li></ul>
<b>Does NOT Include</b>	<b>Broken Parts</b> <ul style="list-style-type: none"><li>+ Pump, laser, display, etc. <i>(In such cases, consider 'Repair, Clean and Calibrate' service)</i></li></ul>
	<b>Physical Damage</b> <ul style="list-style-type: none"><li>+ Physical damage to frame or housing</li></ul>

## Repair, Clean and Calibrate includes:

<b>Repair</b>	Repair or replace broken parts
<b>Clean and Calibrate</b>	All actions in a standard 'Clean and Calibrate' service are then performed
<b>Does NOT Include</b>	Physical damage to frame or housing

## ISO 17025-ACCREDITED CALIBRATION

TSI also offers ISO 17025-accredited calibrations for all models of EEPCs. For more details on these accredited calibrations, please refer to our brochure, "Calibration Service Options for Engine Exhaust CPCs and Reference Instruments".

## WHAT MAKES TSI SERVICE VALUABLE?

As a result of TSI service, you are returned an optimally performing and updated instrument. The service is performed by TSI's experienced technicians for a fixed price. This simple service process allows you to stay focused on the work that is important to you. TSI CPCs are calibrated traceable to National Standards and Metrology Institutes (NIST and NPL UK) and other accepted values of physical constants. TSI is registered to ISO-9001:2015.

These TSI services come with a 90-day warranty on labor performed, or parts used, during the service.

## REQUEST SERVICE

Specify	Description
CL-379X	Clean and Calibrate (standard)
RP-379X	Repair, Clean and Calibrate (standard)
CA-379X	Clean and Calibrate, ISO 17025 accredited
RA-379X	Repair, Clean and Calibrate, ISO 17025 accredited

Call, or visit

[tsi.com/requestservice](http://tsi.com/requestservice)



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