



**THE GARAGE EQUIPMENT ASSOCIATION
CODE OF CONDUCT FOR THE CALIBRATION OF ROLLER
BRAKE TESTERS**

CODE OF CONDUCT

This Code has been produced to provide guidance to the garage equipment industry when conducting the calibration of Roller Brake Testers (RBT) and is divided into the following sections:

1. Calibration Equipment
2. Procedure & Functional Test
3. Calibration Certificate
4. Engineers

It's the GEA member's responsibility to ensure that their calibration management system follows this Code, provides suitable written risk assessments and the appropriate staff training.

1. Calibration Equipment

Calibration rigs should:

- Have a method and operational accuracy that is traceable to a national physical standard.
- If the RBT is used for MOT the calibration equipment must be certified by an ISO 17025 accredited laboratory (UKAS in the UK) or an equivalent International laboratory, and that the whole calibration device is traceable to a national physical standard.
- All component parts of the calibration device, including any weights, shall be individually marked with a unique identity number to enable all parts to be kept together as a set. The certificate shall relate to the set and each calibration device produced shall require its own certificate.
- The member shall provide an assurance that a system is in place to ensure all calibration devices used for the subject RBT are checked and certified by an accredited organisation on a regular basis.

2. Calibration Procedure & Functional Test

During calibration you should:

- Complete the allocated electrical and mechanical risk assessments and safety checks and identify any additional hazards before conducting calibration.
- Check the calibration rig meets all requirements in section 1 of this Code.
- Ensure the calibration follows the approved procedure within the equipment's calibration manual.
- After the static calibration has been completed, to assess the level of torque required to rotate the RBT drive train mechanism, including any unexpected cause of increased friction such as a failing roller bearing, the following test shall be carried out: with the RBT in 'calibration mode' and with NO vehicle in the rollers, the rollers shall be rotated and the brake force displayed shall not exceed: 3% of the maximum brake force.

For example: $3\% \times 800 \text{ kgf (max brake force)} = 24 \text{ kg}$

- Inspect roller surface for wear and damage and bring such item to the operator's attention and make a note on the job sheet.
- Where possible confirm the roller size is correct for the brake tester type, to check it has not been changed for different size rollers.
- Ensure any components that could affect the accuracy of vehicle readings, calibration readings and/or safe operation meet the original OEM specification.
- Inspect the product for imminent failure and advise and/or correct at time of calibration, such as damaged bearing, or loose drive chain etc.
- Complete electrical/mechanical safety tests before handback to customer.
- Perform a functional (operational) test before leaving site and ensure everything is working correctly.

3. **Calibration Certificate**

Calibration certificate must show the following information:

- Serial number.
- Name of the calibration company.
- Name and/or identification number of the calibration engineer.
- Traceability of equipment used for the calibration (to national standards).
- Should contain before adjustment values. Calibrated results (values) and % error (for both brake force and vehicle weighing if applicable).
- Date of Calibration and the Calibration Next Due Date.
- Engineer's signature.
- Site address and if for MOT the VTS number/details.
- If for MOT the certificate should also certify the equipment has been calibrated within the limits set by DVSA.

See example Roller brake tester certificate on GEA website.

4. **Engineers**

Engineers must:

- Work to the GEA code of conduct for engineers on a customer site.
- Be competent in the calibration procedure and should be GEA accredited, for calibrations / MOT).
- Check that the calibration rig meets all requirements in section 1 of this Code, is in good working condition and is within the calibration period.
- Be aware of any risk assessment and method statements pertaining to the calibration by the company, perform a site risk assessment before commencing any work.