



CENTER FOR INFRASTRUCTURE ENGINEERING STUDIES

PULL-OFF TESTER

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**UTC
R45**

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PULL-OFF TESTER

The pull off tester is a portable device to measure the peak strength of FRP/Epoxy lamination in a tension or shear mode. The concept is based on a screw jack. With a selective control of moving components a tension or shear stress in bonding between FRP/Epoxy and concrete surfaces can be developed. With slight modification, this device can be used to develop combined tension and shear to test the bonding effect under more complex stresses. In these applications, the calibration curve of the sensor is converted to read the actual sensor load with compensation for friction between moving parts.

To simplify the use of a pull-off tester, it was decided to separate the shear and tension modes of operation. Components of the pull-off tester are depicted in Figure 1. The use of the pull-off tester in a shear and tensile mode is shown in Figure 2 and 3, respectively.

The device used in a shear mode is shown in Figure 1.

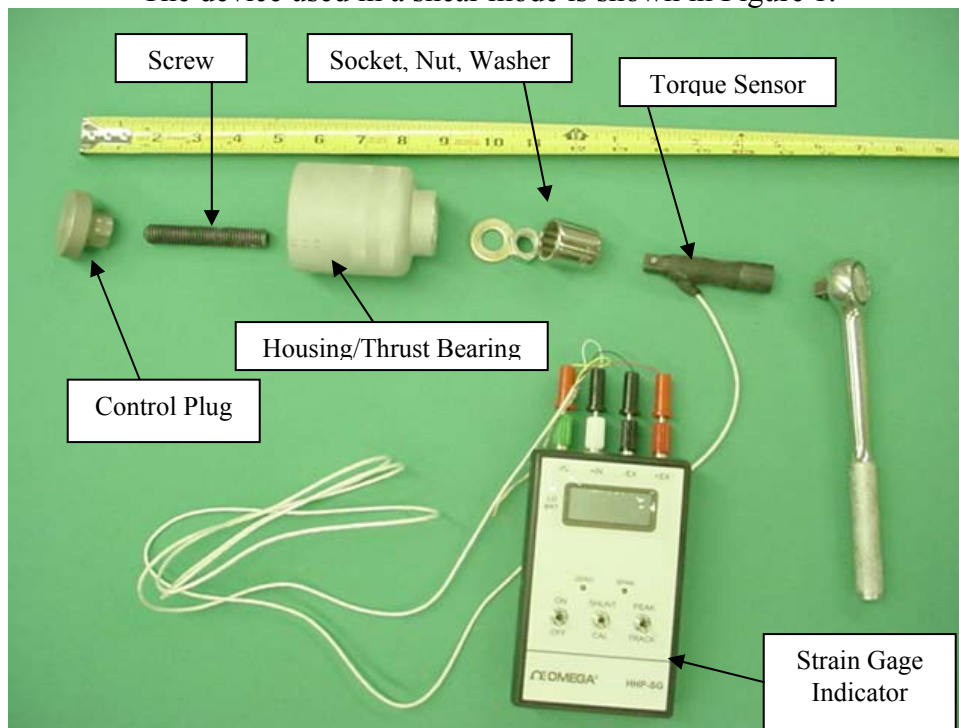


Figure 1. Exploded view of the pull-off tester.



Figure 2. Pull-off tester used in a shear mode.



Figure 3. The pull-off tester used in a tensile mode.