



TORQUE STRENGTH OF MIRROR BUTTON ADHESION

Application

This procedure describes a method of determining the breakaway torque required to detach a mirror button.

Apparatus and Materials Required

Torque wrench, 3/8" drive up to 100 ft-lbs, 135 Nm with peak load capture. A 1/2" drive torque wrench with a longer arm for improved leverage can also be used.

Attachment block, Custom made block with a 3/8" (or 1/2") square drive that is centered over an opening that fits over the mirror button. See Figures #1 and #2.

Fixture to support and hold small windshield sections (not necessary for full windshields)

Chemicals, materials, parts, and equipment referenced in this document must be used and handled properly conforming to local regulatory requirements.

Procedure

1. Test samples need to be normalized at standard laboratory conditions of 23 +/- 2 °C and 50 +/- 5 % relative humidity for 2 hours.
2. Secure small test sections in the fixture
3. Attach torque wrench with attachment block over the mirror button
4. Reset peak load torque to zero
5. Torque the mirror button at a constant rate until it breaks away from the windshield. Since the breakaway failure will be sudden, be conscience of where arms and hands may travel.

Evaluation

6. Report the peak or max torque in Nm

Date	Action	Revisions	Rev. 00
2017 10 27	Released		

General Supplemental Information for Reference only

Figure #1 – Torque attachment

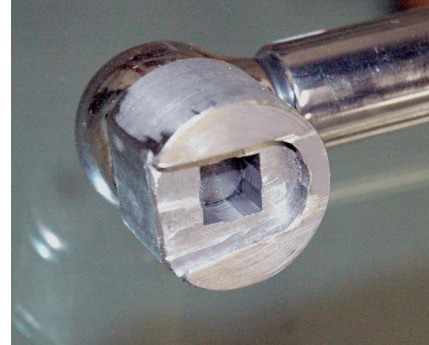


Figure #2 – After being torque



Figure #3 – Determining the breakaway torque on a full windshield



Figure #4

