

TEST REPORT

REPORT NO. TH10063/2010
 PAGE NO. 2 OF 4
 DATE: Jan. 19, 2010

Test Result:

Clauses:

Result

4.7.7 Handlebar and stem assembly — fatigue test

Pass

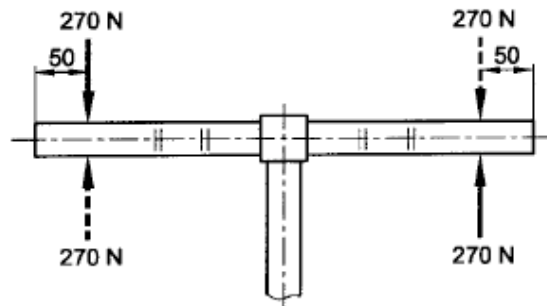
4.7.7.2 Requirement for stage 1

When tested by the method described in 4.7.7.3, there shall be no visible cracks or fractures in any part of the handlebar and stem assembly.

For carbon-fiber handlebars or stems. The peak deflections during the test in either direction from the mean position shall not increase by more than 20 % of the initial values.

4.7.7.3 Method for stage 1

Figure:



Actual Finding:

Test clause	Test conditions			Test Result (cycle)
	Force	Frequency	Cycles	
Clause 4.7.7.3	± 270 N	3 Hz	100,000	100,000
Remark	There was no visible crack on the sample after testing.			

		Peak deflections during the test		
		Initial values	Final values	Test Result
Left	Up	6.68 mm	8.01 mm	Pass
	Down	7.59 mm	9.11 mm	Pass
Right	Up	7.46 mm	8.95 mm	Pass
	Down	7.51 mm	9.01 mm	Pass

- Note:**
1. Information of sample: Material (Carbon (Handlebar) & Aluminum alloy (Stem)), Total Mass (0.22 kg).
 2. The torque of screw of handlebar and stem is 5 N-m.
 3. The torque of screw of stem and holder is 10 N-m.

--- See Next Page ---

TEST REPORT

REPORT NO. TH10063/2010
 PAGE NO. 3 OF 4
 DATE: Jan. 19, 2010

Test Result:

Clauses:

Result

Pass

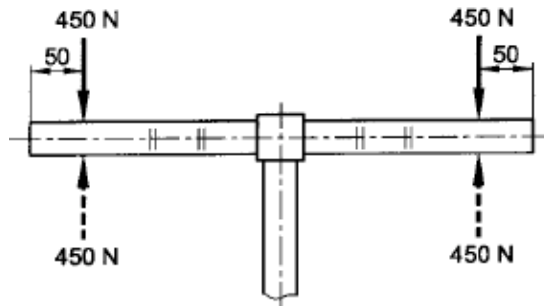
4.7.7.4 Requirement for stage 2

When tested by the method described in 4.7.7.5, there shall be no visible cracks or fractures in any part of the handlebar and stem assembly.

For carbon-fiber handlebars or stems, the peak deflection during the test in direction from the mean position shall not increase by more than 20 % of the initial values.

4.7.7.5 Method for stage 2

Figure:



Actual Finding:

Test clause	Test conditions			Test Result (cycle)
	Force	Frequency	Cycles	
Clause 4.7.7.5	± 450 N	3 Hz	100,000	100,000
Remark	There was no visible crack on the sample after testing.			

		Peak deflections during the test		
		Initial values	Final values	Test Result
Left	Up	5.66 mm	5.85 mm	Pass
	Down	8.33 mm	8.21 mm	Pass
Right	Up	7.41 mm	7.72 mm	Pass
	Down	8.21 mm	8.00 mm	Pass

- Note:**
1. Information of sample: Material (Carbon (Handlebar) & Aluminum alloy (Stem)), Total Mass (0.22 kg).
 2. The torque of screw of handlebar and stem is 5 N-m.
 3. The torque of screw of stem and holder is 10 N-m.

--- See Next Page ---

TEST REPORT

REPORT NO. TH10063/2010
PAGE NO. 4 OF 4
DATE: Jan. 19, 2010

----- Picture page -----



Photo "A" Appearance of sample

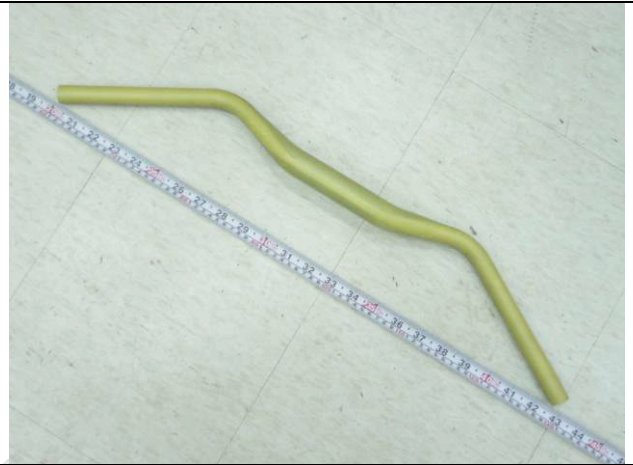


Photo "B" Appearance of sample



Photo "C" Appearance of sample



Photo "D" Appearance of sample

--- End of Report ---