

Test Procedure

240 km (150 miles) of highway city traffic simulation is driven. Simulated highway and city portion are divided as below:

- 80 km with 110 km/h; every 5 km short stop of 30 sec. Brake application with 0.3 g (highway)
- 80 km with 100 km/h; every 5 km short stop of 30 sec. Brake application with 0.3 g (highway)
- 50 km with 130 km/h; no stop in between (highway)
 - 30 km with 50 km/h; every 1 km short with 0.3 g; forward looking brake application (city)

Test Target

During and after completion of the test, the following conditions are tested:

- Brake disc cover retention.
- No cover damage that prevents retention or permanent deformation of brake cover.
- No brake cover material transfer to brake caliper, rotor, dust shield that prevents or affects brake system performance or function.

Test No 1:

- 39 km is driven with 110 km/h; every 5 km short stop of 30 sec. Brake application with 0.3 g (highway)
- 39 km is driven with 100 km/h; every 5 km short stop of 30 sec. Brake application with 0.3 g (highway)
- 13 km is driven with 130 km/h; no stop in between (highway)
- 10 km on track 3 with every 1 km short with 0.3 g; forward looking brake application (city)

Test Result:

- The entire test targets are met. Brake disc cover worked properly with no failure.



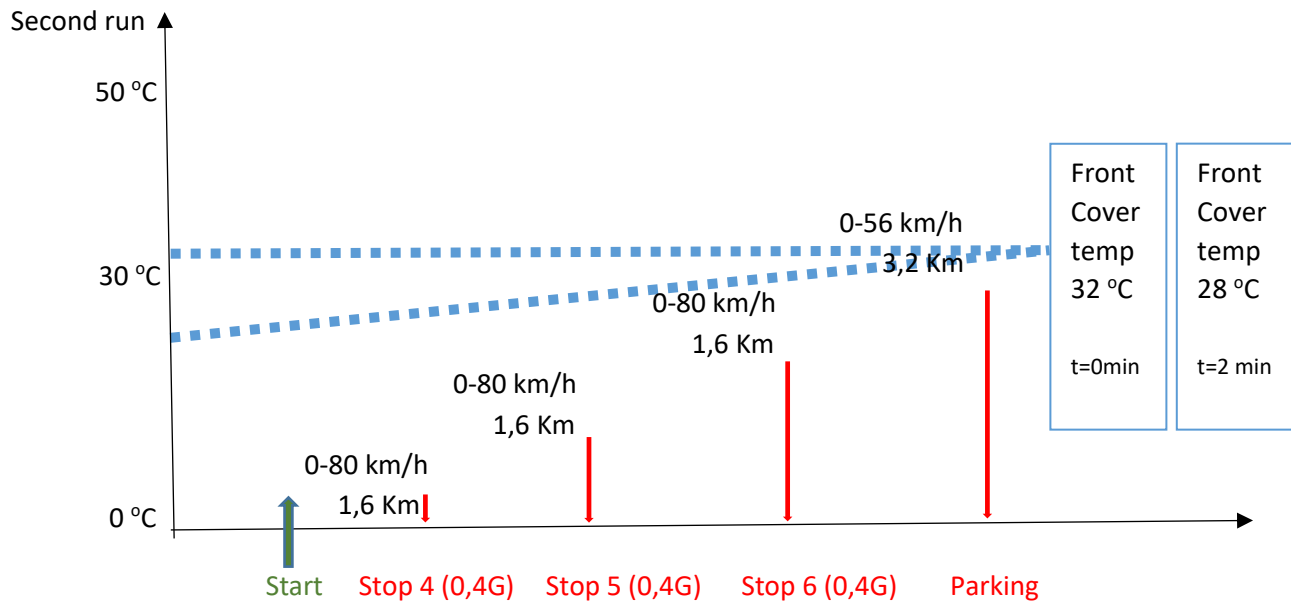
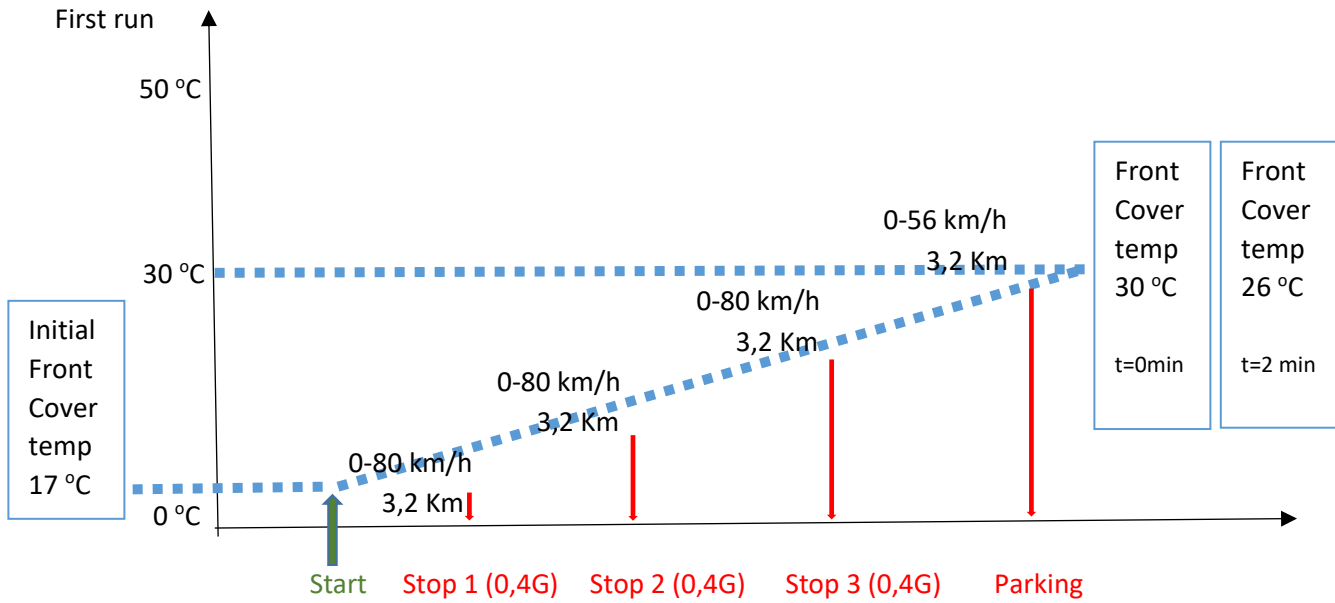
Figure 2-1 : Before test 1

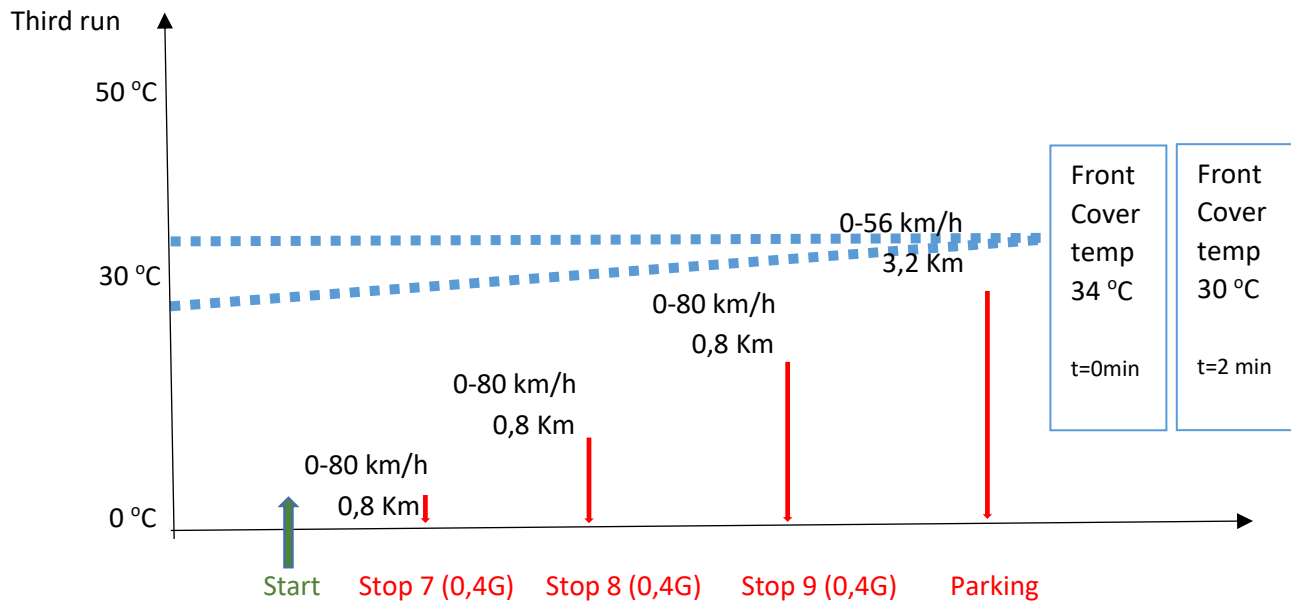
Figure 2-2: After End of Test

TEST NR. 2: HIGH DECELERRATION HOT BRAKE STOPS

Test Procedure and Test Result

The test procedure is run as shown below.





Temperature of the brake disc cover is measured before start of run 1 and after end of each run. The brake disc did match the entire requirement after the test completion. The brake disc cover temperature is measured using touching type of thermometer.



Brake Disc Cover after Test Nr.2

TEST NR. 3 DETACHED BRAKE COVER SIMULATION DYNAMIC

Test Procedure

80 km (50 miles) of highway city traffic simulation is driven with brake disc cover detached form dust shield. Simulated highway and city portions are divided as below:

- 15 km with 110 km/h; every 5 km short stop of 30 sec. Brake application with 0.3 g (highway)
- 15 km with 100 km/h; every 5 km short stop of 30 sec. Brake application with 0.3 g (highway)
- 15 km with 130 km/h; no stop in between (highway)
- 5 km with 50 km/h; every 1 km short with 0.3 g; forward looking brake application (city)

Test Result:

- The entire test targets are met. Below are some photos after the full test.



After End of Test Nr. 3

CONCLUSION

- The brake disc cover did not break during running the test and after completion of all required test.
- The brake disc cover did not generate any noise during running the entire required test.
- The brake disc cover did not get loose from the dust shield during running the tests and after completion of all required test.
- The brake disc cover did not create any problem in normal working of brake, even in a detached condition.
- The brake disc cover did not melt when subjected to 200 °C higher temperature of brake disc.
- The brake disc cover passed the test requirements.