

EBC Yellow Diesel vs Performance Friction Brake Pads

19 & 20 Dec 2006

These tests were conducted at Cantonment, FL on a stretch of just-completed asphalt roadway which had not yet been opened to through traffic. The section where the actual tests were run was essentially level. There were open stretches of at least ¼ mile to each end of that section which were used to accelerate to the test speed. Each run was made in each direction (which was not recorded); however, there was little or no wind or roadway slope to affect the results.

Participants were John Nicholls, John Richardson (20 Dec only), Fred Veehschoten, and Ken Henderson.

The 23' GMC motorhome test vehicle was equipped with an air-operated pneumatic cylinder beneath the floorboard under the brake pedal. A compressor-supplied air tank connected to an air pressure regulator provided the driving force for the cylinder through a solenoid operated valve. The air for the cylinder was also supplied to another cylinder which operated the trigger of a paint ball gun aimed at the roadway from the motorhome's front bumper.

The test procedure was to have an observer(s) positioned at the planned location to start braking. Another observer rode as a passenger in the motorhome. The GMC was accelerated so as to pass the roadside observer at the planned test speed. As he passed the observer, the driver flipped the switch which operated the brake pedal puller and the roadway marking paint ball gun. He simultaneously lifted his foot from the accelerator. Only the brake pedal puller cylinder was used to apply the brakes. For all except the final test run, normal engine vacuum was applied to the brake booster; for the final run, the booster was disconnected and the vacuum supply line blocked.

When the motorhome came to a stop at the end of each test run, the on-board observer debarked and marked the stop location. The driver then pulled the motorhome clear of the roadway and exited also. While the driver paced the distance back to the start of braking location, the on-board observer recorded brake caliper temperatures and prepared the test equipment for the next run. The roadside observer located the paint ball mark for the driver's distance measurement. The distance was recorded before the next test run.

The IR temperature measurement gun was causing problems so the temperature measurements were not at all reliable on the 19 Dec.; the 20 Dec measurements are considered reliable.

Ken Henderson