



U.S. Department
of Transportation
National Highway
Traffic Safety
Administration

Memorandum

Subject: Technical meeting with Toyota, 6/24/2004

Date: July 7, 2004

From: Scott Yon

To: File for PE04-021, Toyota Throttle Control

NHTSA Attendees:

Jeff Quandt, ODI

Scott Yon, ODI

Bob Young, ODI

Mike Pyne, Rulemaking

Toyota Attendees:

Chris Tinto, TMA (DC)

Chris Santucci, TMA (DC)

Kevin Ro, TMA (DC)

Tsuyoshi Yokoi, TMA

Kenji Ogata, TMA

Morikazu Saito, TMC

Masaru Saito, TMC

The meeting was held at Toyota's office in NW Washington DC on 6/24/2004 starting at 1:30 PM. Toyota prepared sample hardware components (ECM's, throttle bodies, pedal assemblies, sensor elements, in both full and sectioned condition) from subject vehicles and from non-subject (Lexus) vehicles that also used electronic throttle control (ETC). The components were reviewed by NHTSA personnel. Toyota made a presentation to NHTSA which covered an overview and history of Toyota's ETC systems, design strategy/ETC system operation, diagnostic capabilities and failure mode/failsafe operations.

The group then traveled to a nearby location where two subject vehicles were presented for NHTSA assessment. One vehicle was outfitted with an oscilloscope (to allow monitoring of various ETC system circuits) and a circuit interrupt device (to allow simulation of component or circuit failure). Additionally, the vehicle had a modified ECM that allowed Toyota to demonstrate ETC system response to a microprocessor failure. Toyota demonstrated various types of component failures and their resultant failsafe operation for NHTSA assessment.

The group returned to Toyota's office. A general discussion occurred, and Toyota answered questions posed by NHTSA personnel. The meeting terminated about 4:30 PM.