

CIRCULAR NO.38-2-1

ADR 38 TIME RESPONSE MEASUREMENT

1. ADR 38 requires that the starting point for measuring brake application and release response times shall be determined by sensing the pressure drop in the control line adjacent to the brake control valve.
2. In recognition of the difficulties some manufacturers may have in obtaining equipment to perform these tests, especially the high cost of suitable pressure transducers, the Australian Motor Vehicle Certification Board (AMVCB) has agreed to the use of an alternative procedure. It is expected that the small errors which may occur will not be in the manufacturers' favour.
3. The alternative procedure is to use an electrical switch mounted on the operating lever of the brake control valve on the test rig. This lever may be a foot pedal. The actuation times must be measured from the instant the operating lever commences to move, either when applying brakes or releasing them.
4. When measuring brake application times, the switch must operate as soon as the control valve starts to open from the fully closed position. As an example, a pad switch could be mounted on the top surface of a foot pedal.
5. When measuring brake release times the switch must operate as soon as the control valve starts to close from the fully open position. As an example, a pad switch could be mounted on the underside of the pedal so that it would operate as soon as the pedal commenced to move upward.