

## Bridgestone Firestone Chassis Dynamometer Test Guidelines for Truck/Bus Tires

### *I. Background*

Vehicle manufacturers and many maintenance facilities conduct in-place vehicle testing on twin-roll chassis dynamometers. Testing is usually conducted over a short period of time on empty vehicles. If the following procedure is not adhered to, irreversible damage may occur to the tire.

### *II. Procedure*

To prevent excessive head buildup in the center of the tire tread, follow the recommended time period based on roller diameter as listed below:

Maximum Allowable Time by Roller Diameter	
8-5/8" Roller	18" Roller
3.5 minutes	6 minutes

Maximum Allowable Speed is 55 mph.

**Load:** These time restrictions apply regardless of the actual load and are, in fact, more critical when the vehicle is tested without a load.

### *III. Precautions*

To avoid the possibility of irreversible tire damage and/or failure during testing, it is important that the following precautions be taken:

- Do not exceed the time and speed restrictions listed in part II.
- Allow at least one hour cool down between tests.
- When it is anticipated that a test will exceed the time/test value established, a worn or "slave" tire should be used in place of the new tire for testing purposes.

Questions regarding test procedures, loads, etc. should be directed to your Regional Field Engineering Office.



Example of Dyno Damage