

TECH BULLETIN

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Entity:

Tekonsha Towing Systems

Subject: Setting boost levels for the Prodigy

“What level of boost should I use when I tow with my Prodigy brake control?”

First it must be understood that in an ideal situation the tow-vehicle brakes should stop the tow vehicle and the trailer brakes should stop the trailer. However the trailer brakes should provide a little additional drag on the hitch to help keep the combination straight. This is especially important at the beginning of braking.

Next we must take into consideration that the braking effectiveness of tow-vehicles and trailers can vary extensively, and that there needs to be some variability and control in the application of the trailer brakes.

Because the Prodigy is an accelerometer-based control it delivers power to the trailer brakes based on the deceleration it senses. Without boost this means that the tow-vehicle brakes have to initiate the braking for the combination of tow-vehicle and trailer. This works well with lighter trailers, however with a heavy trailer this puts an excessive strain on the tow-vehicle brakes.

One of the functions of boost is to eliminate this condition. When a boost setting is used, the Prodigy applies a minimum output to the trailer at the onset of braking to initiate deceleration. The level at which the power knob is set, determines what that initial output will be. Boost level 1 generates about 13% of power set for the first 2 seconds and boost level 2 and 3 generate about 25% of power set for the first 2 seconds. All levels reduce by 50% after 2 seconds when the braking system is generating enough deceleration of its' own accord.

The remaining function of boost is to accommodate for the variables in the tow-vehicle and trailer brakes due to respective weights, number of axles, etc. Boost levels 2 and 3 each provide higher sensitivity to deceleration. This helps compensate and balance the braking between tow-vehicle and trailer.

The final setting is done by feel. The driver should not feel that the trailer is pushing him, or experience over-aggressive trailer braking.

**Please contact a Technical Service Representative for additional information at
888.785.5832**



Thank you, we sincerely appreciate and value your business!

