

GROUP 62 B 62 02 96 Woodcliff Lake, NJ May 1996  
Instruments Product Engineering

**SUBJECT:** Maximum Permissible Speedometer Error

**MODELS:** All

**General  
Information:**

A certain amount of "speedometer advance" is necessary to compensate for negative tolerances in tire diameter, electronic controls, and other factors. This advance reduces the risk of the speedometer displaying a speed that is less than the vehicle's actual speed.

The amount of speedometer advance can be calculated by inputting a frequency (using the DIS Tester, "Kombi Test Schedule") that corresponds to a given speed and noting the speed that is indicated by the speedometer. The maximum permitted speedometer advance is 10% of the actual (input) speed plus 2.4 mph.

Example:

Actual Speed = 50 mph

$50 \text{ mph} \times 10\% = 5 \text{ mph}$ ;  $5 \text{ mph} + 2.4 \text{ mph} = 7.4 \text{ mph}$

Therefore, the permissible displayed speed is 50 to 57.4 mph.

(Note: The displayed speed must never be less than the actual speed).

No repairs should be attempted if the speedometer advance is within  $10\% + 2.4 \text{ mph}$ .

NOTE: The amount of speedometer advance has no effect on recording of accumulated mileage in the odometer display. The odometer records total mileage digitally and does not incorporate any "advance" tolerances.

**Warranty  
Status:** Information Only.

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