

Re: Question about wind resistance of vehicles

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- *From:* "Morris Dovey" <mrdovey@xxxxxxxx>
 - *Date:* Thu, 18 Oct 2007 12:31:44 -0500
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Eeyore wrote:

| Morris Dovey wrote:

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|| Larry Snyder wrote:

||| Hi All. I'm building a motor to install in a vehicle. I only

||| have enough material to build about 10 hp. (12 tops).

||| Would this be enough to get a car down the road at 65 mph ? I'm

||| thinking of a vw van type vehicle to give me room

||| for solar collectors on top. ~2 meters x ~5 meters = ~10 square

||| meters @ 1kw per. Thanks in advance

||

|| Larry...

||

|| The answer will depend on the following five factors:

||

|| [1] Gross weight of vehicle

|| [2] Rolling resistance of tires

|| [3] Wind speed and direction

|| [4] Steepness of road's slope

|| [5] Cloud cover

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| How does cloud cover affect the power needed for a given speed ?

Probably not so much affect the power needed as power available, all other things being equal.

I'm thinking that with a 10-12 hp VW van, absolutely /everything/ (even tidal force) becomes a critical factor. :-)

I remember driving my VW beetle into a light headwind on a straight and level road with the "pedal to the metal" – and not being able to go faster than 50 MPH...

—

Morris Dovey

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