

Motorhome Axles

Don't neglect your drive (rear) axle! Drive axles have feelings, too, and if they start feeling ignored or neglected they can provide very unpleasant surprises.

Consider our experience:

We park our rig on a concrete pad, and we tend to get busy with other things, so we don't really notice much about it until getting ready for the next trip. On one such getting-ready occasion my lovely wife commented that the concrete pad was in need of cleaning (it had dark smudges on it under the motorhome). So an item was added to the honeydo list, and we continued packing and getting ready.

About a week later, driving along the Interstate, the engine suddenly accelerated and made a loud roar while at the same time the coach went into coasting mode, as if it were coming to a stop. Quickly moving off the road onto the shoulder before the complete stop, I tried tapping the accelerator pedal - the engine roared again but the coach continued decelerating.

After coming to a complete stop on the shoulder, we got out to investigate. The driver's side rear wheels were further out than normal, so that the tread of the outside dual tire actually extended a little beyond the coach side panel. Other than that there was nothing that seemed amiss.

Back in the coach I started the engine again and touched the accelerator pedal. Same result - roaring engine but no movement. We had become the famous immovable object!

Skip forward in time to the repair shop, and we found that the right (driver's) side rear axle had actually slid out of its connection to the differential (that is a spline connection). The wheel bearings on the right side had completely disintegrated and the cast iron housing of the rear axle at the right side was distorted by heat to the point that it was oval instead of round in cross section. The repair consisted of a complete replacement of the rear axle at a cost of entirely too many thousands of dollars.

Thinking back, those dark smudges under the motorhome had to have been indications of an oil seal leak at or very near the right rear axle wheel bearing. Investigation showed the seal itself to be torn (it is a thin rubbery membrane-type seal). That tear allowed the oil to slowly ooze or leak while the coach was sitting still - a slow enough leak that it was hardly noticeable until the stain on the concrete grew big enough to see.

But when rolling at highway speed, the hotter oil leaks much faster, and the rear axle drained completely dry of lubricating oil. Not a good thing!

The moral of the story is "Don't neglect your rear (drive) axle. Check its oil level regularly (or have your mechanic check it). As part of your daily pre-driving inspection, look under the rear axle particularly near the rear wheels for any signs of oozing or leaking oil. This may not be the easiest or most comfortable thing to do, but it can save you big problems, a possible highway breakdown and significant expense.

Part of your get-ready-to-drive routine should be a quick check for any fluid spots under the rig or tow vehicle. Spots under the transmission could signal an upcoming failure, which will definitely be less severe if caught before the fluid has leaked out. You should do the check list every morning before you depart for the days driving. You do have a list, right??

The other moral is to pay more attention to your lovely wife when she notices something seemingly unimportant.