## **Defective Transmission Roller Bearing Design**

by Tom Endy 2021

The two Model A roller bearings on the market today, part numbers A-7118 and A-7121, have a short service life due to the change in design. The bearings that were on the market a few years ago were of a different design, but carried the same part number and had an axle at the end of each roller element that protruded through holes drilled into the end caps. The current design has a series of mushrooms stamped into the end caps; the roller elements have holes drilled into both ends of the roller elements that rides on the mushrooms. The photo below shows a disassembled new roller bearing of the current design on the market. Note that the holes in the end of the roller element do not appear to be symmetrical. The bearing has a total of 12 roller elements and four support beams. The four support beams were cut in order to disassemble the bearing. The one single roller element is simply standing on end over a mushroom. Once the roller element wears into the mushroom on the end cap the roller element will become uncaged and the bearing will fail. Most have failed between 300 and one thousand miles.

