



Coolant goes to the center of the rotor through a shaft to cool it.

Rotor spins at ~10k RPM @ 100mph

Need seal to keep coolant contained and not leak into motor's (rotor+windings) chamber

Seal leak quickly trashes outer bearing (nearby), then eventually inner bearing. Eventually goes through a tunnel (inverter's wire to the windings to generate magnetic field to rotate the rotor) to the inverter side where high voltage and current electronics components are.

Seal failure mod. 2 drains, and a barrier. Keep leaked coolant out of motor chamber and inverter. Don't bet on seal won't leak in this particular design regardless how good the seal is. Seal is trying to keep out a very low viscosity (thin) water based coolant rather than something much thicker like oil.

Speed sensor is near the seal so a good part to inspect for leak. Leaked coolant likely gets spun all over any open chamber in this area resulting in the droplets we see on the sensor.