



Robert Gretz
Senior Air Safety Investigator
Eastern Region Aviation

Date: 4/8/2022

Subject: ERA22LA159

Contact: Mike Dwyer, Seminole, FL

Mr. Dwyer continued to tear down his engine today and noticed an anomaly with the pull starter motor. The starter motor turns a large gear that goes through a sprag clutch into a small gear that drives the crankshaft. The unit disengages from the crankshaft gear when you release the pull handle. The small gear had disintegrated, probably on startup. The fractured pieces entered the accessory case and likely seized the oil pump. The pull starter is a certificated aircraft part and had about 100 hours on since overhaul in 2018. On the day of the accident, the airplane started perfectly.



Robert Gretz
Senior Air Safety Investigator
Eastern Region Aviation

Date: 12/8/2022

Subject: ERA22LA159

Contact: Mike Dwyer, Seminole, FL

I told Mr. Dwyer the findings of the metallurgical exam and asked him if he had modified the starter motor. He stated yes, he had shortened the pivot lever so that the motor would fit in his airplane.