



MEMORANDUM OF RECORD

Eric Alleyne
Air Safety Investigator
National Transportation Safety Board Office
of Aviation Safety - Eastern Region

NTSB Case Number: ERA20LA278

Examination Facility: Atlanta Air Recovery

Aircraft: Cessna 210N, N6300W

Engine: TSIO-520P, Ser# 278621-R

Subject: Post accident examination of the accident aircraft

Examination of the engine revealed the external accessories of the engine was fire damaged. All fuel system and oil lines were fire damaged. The engine driven fuel pump remained attached to the accessory section of the engine and was fire damaged. The engine driven fuel pump was removed and it displayed signs of heat damage within the unit. The fuel pump screen was removed from the throttle body and an excessive amount of debris (dirt-non-metallic) was found within the screen.

Both magnetos remained attached to the engine and were fire damaged. The magnetos were removed for further examination and revealed that the internal components were melted. The ignition leads were fire damaged and broken in multiple areas. The top sparkplugs were removed and were gray in color. All six cylinders were examined with a borescope and the cylinder walls were not scored. The no. 6 cylinder was removed and revealed no damage to the piston dome (the reason for the removal was because during the borescope, damage was thought to be on the piston dome).

The fuel manifold was removed and disassembled for examination and the diaphragm was heat damaged. The fuel injectors were removed and injector No. 3, No. 5 had blockage noted.

All valve covers were removed and when the propeller was rotated 360 degrees, all valves, push rods, accessory gears and camshaft moved accordingly. The propeller was then rotated to conduct a thumb compression check. All cylinders created compression during rotation. (Before the No. 6 cylinder was removed)

The exhaust manifold was removed with the turbo assembly, and examination of the turbo revealed it was heat damaged and turned freely with no binding. Examination of the turbo assembly did not reveal any anomalies within the turbo housings. The exhaust manifolds were heat damaged and impact damaged.

The oil sump pan was removed and displayed impact damage. Examination of the oil sump pan revealed no metal particles within the sump. The oil sump pick up screen was free and clear of debris.

The three-bladed propeller was damaged, and one blade was loose in the hub. All propeller blades displayed chordwise scoring and bending.