A Boeing (BA) engineer turned whistleblower is set to tell lawmakers on Wednesday that the wide-body 787 Dreamliner should be grounded because Boeing knowingly cut manufacturing corners that compromise the plane's safety.

Sam Salehpour, a Boeing quality engineer who worked on the Dreamliner, called for the grounding in an NBC interview ahead of the hearing.

The claim that the aircraft is unsafe, which Boeing disputes, adds another challenge for Boeing as it works to assure regulators, investors, and the public that its planes are airworthy.

It is trying to recover from lawsuits and investigations that followed a midair blowout of a fuselage section that detached from an Alaska Airlines 737 Max 9 jet in January.

A preliminary investigation by the National Transportation Safety Bureau investigation showed four bolt fasteners meant to hold the door in place were missing.

Boeing 787 Dreamliner are under production at the Boeing manufacturing facility in North Charleston, South Carolina, on December 13, 2022. - Betting on robust demand for international travel, United Airlines on Tuesday unveiled an order of 100 new Boeing 787 Dreamliners with options for an additional 100 jets. (Photo by Logan Cyrus / AFP) (Photo by LOGAN CYRUS/AFP via Getty Images)

Boeing 787 Dreamliners under production at the Boeing manufacturing facility in North Charleston, South Carolina, in 2022. (Photo by LOGAN CYRUS/AFP via Getty Images) (LOGAN CYRUS via Getty Images)

Boeing is also under criminal investigation by the Justice Department for its role in the blowout.

The DOJ is reportedly looking into whether events leading to that failure violated the terms of a deferred criminal prosecution agreement it reached with Boeing in 2021 to settle criminal charges connected to two 737 Max 8 aircraft crashes that killed 346 people at the end of the last decade.

'We haven't identified any safety issues'

The contentions made by Salehpour about the Dreamliner, first reported by The New York Times, prompted an investigation by the Federal Aviation Administration.

Salehpour said the aircraft is plagued by substandard connections between sections of its fuselage.

The parts, which he said are fabricated by different manufacturers, are sent to Boeing’s Charleston, South Carolina plant for assembly. Over time, Salehpour said, tiny gaps in the connections, left unfilled, could lead to structural failures.

According to CNN, Salehpour said he witnessed people jumping on pieces of an airplane to get them to alight temporarily. After reporting the activity, he said, Boeing retaliated against him by moving him to its 777 aircraft program.

Boeing has described Salehpour’s claims as "inaccurate."

The issues raised in The New York Times report were subjected to "rigorous engineering examination under FAA oversight," Boeing said in an email to Yahoo Finance. The issues "do not present any safety concerns" over the aircraft’s expected service life of 44,000 pressurization cycles, the company said.

FILE - Boeing employees walk the new Boeing 787-10 Dreamliner down towards the delivery ramp area at the company's facility after conducting its first test flight at Charleston International Airport, March 31, 2017, in North Charleston, S.C. Boeing will be in the spotlight during back-to-back hearings Wednesday, April 17, 2024, as Congress examines allegations of major safety failures at the embattled aircraft manufacturer. (AP Photo/Mic Smith, File)

Boeing employees walk with a Boeing 787-10 Dreamliner in 2017. (AP Photo/Mic Smith, File) (ASSOCIATED PRESS)

"Boeing understands the important oversight responsibilities of the Subcommittee and we are cooperating with this inquiry. We have offered to provide documents, testimony, and technical briefings, and are in discussions with the Subcommittee regarding next steps,” Boeing said.

During a press call on Monday, Boeing chief mechanical and structural engineer Steve Chisholm emphasized that fatigue testing on the Dreamliner’s fuselage simulated use 3.75 times the jet's designed lifespan.

"We haven’t identified any safety issues," Chisholm said about the connection gaps. Nor had the company seen any problems related to in-service Dreamliners related to the areas.

Boeing has previously slowed Dreamliner production and paused deliveries of the aircraft in order to address concerns over the fuselage gaps since its first delivery in September 2011.

In 2021 and 2022, Boeing implemented a pause and production slowdown after employees expressed concerns over "conformance items" on the aircraft.

In response, Boeing said it overhauled how it inspects and verifies “join-up” points. The allowable gap and “fit-up force” at any given join, it said, can vary from join to join and location to location.

Wednesday’s hearing, titled “Examining Boeing’s broken safety culture,” is scheduled to take place at 11:15 a.m. ET before the Permanent Subcommittee on Investigations for the Senate Committee on Homeland Security and Governmental Affairs.

Additional witnesses who plan to testify include former Boeing engineer Ed Pierson, former FAA engineer Joe Jacobsen, and Shawn Pruchnicki, an assistant professor in integrated systems engineering at Ohio State University.