



The Boeing Landing Gear Overhaul and Exchange Program provides operators with a cost-effective, efficient alternative to purchasing new landing gear.

Landing Gear Program Provides Overhaul Alternative

Boeing has responded to recent supply chain challenges for landing gear overhauls, new gear-sets, exchange gears, and spare parts. A landing gear overhaul and exchange program offers operators an alternative to performing the overhaul work themselves.

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Commercial airlines are required to remove and overhaul airplane landing gear about every 10 years or 18,000 cycles, depending on the airplane model usage and applicable regulations. In response to operators' need for additional options when servicing landing gear, Boeing launched a landing gear overhaul and exchange program in 2008 designed to meet the needs of operators that don't want to purchase new landing gear or perform their own landing gear overhaul.

This article describes the program and how operators can make use of it.

PROGRAM OVERVIEW

In 1997, the Boeing Commercial Airplanes Long Beach Division launched a program that enabled operators of the MD-11 to exchange unserviceable landing gear for an overhauled gear set (i.e., nose and main), saving the operator money compared to the cost of a new gear and reducing the amount of time the airplane was out of service. In 2008, Boeing, after working with the industry and customers to enhance the landing gear program, extended it to additional airplane models. It now includes the 717, Next-Generation 737, 737 Boeing

Business Jet, 757-300, 767-300ER (Extended Range), 767-300 Freighter, 777, and MD-11.

Under the Boeing Landing Gear Overhaul and Exchange Program, Boeing works with global component repair and overhaul suppliers to minimize costs and reduce airplane downtime for customers located throughout the world.

Boeing provides total support for the landing gear of airplanes in the program, including parts, scheduling, exchange, warranty, technical assistance, and record-keeping. The operator pays an overhaul and exchange fee plus any "over and

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above” charges for the service. No initial long-term capital investments are required.

Boeing works closely with airlines’ technical and maintenance departments to address landing gear needs and scheduling requirements. Airlines should plan their overhaul and exchanges well ahead of the mandatory 10-year deadline to ensure the availability of the appropriate landing gear.

HOW THE PROGRAM WORKS

The Boeing Landing Gear Overhaul and Exchange Program provides operators with complete overhaul and exchange services designed to increase efficiency and minimize the economic implications of landing gear maintenance.

When an airplane covered by the program requires landing gear replacement or overhaul, Boeing provides an overhauled, certified, ready-to-install gear for the airplane’s unserviceable landing gear. Once the serviceable gear is installed by the operator, the operator then ships the removed unserviceable gear to one of the Boeing-designated overhaul facilities (see fig. 1). This process eliminates the need for operators to contract and schedule landing gear overhauls themselves and manage the landing gear overhaul supply chain, which can save them labor and other costs.

All parts in the overhauled gear set provided to the operator meet all worldwide regulatory requirements and are covered by a Boeing three-year warranty.

BENEFITS TO OPERATORS

The Boeing program is designed to provide operators with an option that minimizes both cost and airplane downtime. Program benefits include:

- *Complete landing gear assets.* Operators receive a fully overhauled and certified landing gear shipset, including left and right mains and nose shock strut, sidebrace, walking beam, drag brace, mechanical and electrical installations, and installation components.
- *Comprehensive offering.* The program provides complete overhaul and certification of landing gear, including all labor costs; replacement of standards and bushings; and testing and recertification of all hydraulics and electronics according to Component Maintenance Manuals. All in-warranty service bulletins are also included in the basic scope of work.
- *Warranty.* Operators receive a three-year warranty for all parts and labor. The program is fully backed by Boeing to ensure the highest quality and timely delivery.
- *Financial advantages.* Customers can reduce or eliminate capital expenditures for extra or leased gear to support their overhaul requirements. The program minimizes upfront costs and spreads out expenditures over time.

- *Experience.* The program is based on more than 10 years of experience in the MD-11 Landing Gear Exchange Program.

SUMMARY

The Boeing Landing Gear Overhaul and Exchange Program provides operators with a cost-effective, efficient alternative to purchasing new landing gear or performing their own in-house landing gear overhaul. Because of the large global demand for landing gear, it is vital for airlines to plan their overhaul and exchange management well ahead of time.

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