



Repair Options

Approved re-manufacturing levels can be described as follows:

- Level 1:** Cleaning, minor buffing, dimensional and visual inspection of bearings components
- Level 2:** Level 1 plus – refinishing of raceways, replacement of rolling elements, bore plating as required, and replating or replacement of cage as required
- Level 3:** Level 2 plus – regrinding of one component
- Level 4:** Level 3 plus – replacement of one bearing race. Can also include updating to the latest configuration with new part number assigned.

Barden and FAG repair facilities offer:

- Turnaround Time:** 18 days or less
- Cost:** The cost of refurbishment can be significantly less than the price of new OEM replacement parts
- Reliability:** Barden and FAG are market leaders, combining original design expertise, R&D backing and decades of manufacturing experience
- Inventory Management:** Where reliability of supply and component quality is of primary importance Barden and FAG can offer tailored inventory management solutions.



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Aerospace Repair Services

Barden and FAG, two partners for first class reliability

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Not just a repair station

Two brands, one vision! Since the early days of aviation, when Barden/FAG provided bearings for the Charles Lindbergh Wright J5 Whirlwind engine, our leadership in this market sector has remained constant.

Since then, with material advancements, design innovations and increased engine demands, aviation has changed considerably. However, through years of concentrated research and development, Barden and FAG have remained as prime suppliers to every major engine manufacturer in the aviation industry.

As part of the multinational Schaeffler Group, which specialises in bearing technology and precision products for the aerospace, automotive and industrial plant industries, Barden and FAG produce bearings that support the engines, both large and small, that power today's lightest and largest commercial aircraft.

Barden/FAG understand that modern aerospace applications demand rolling element bearings that combine the highest quality and reliability. This is why, through expert diagnosis and repair, we can restore bearings to an as-new condition in less time, for less cost and to the high standards expected from aerospace experts.



▲ Bearings before refurbishment
▼ Bearings after refurbishment



Barden – The Aerospace Experts

For more than six decades the Barden name has been synonymous with quality, precision and excellence in the aerospace and super precision industries. Aerospace applications form a large part of our core business and include products for a wide variety of aircraft accessories and critical components.

The Barden Corporation operates two self-contained Diagnosis and Repair (D&R) facilities in the USA and the UK. These service commercial and military aircraft maintenance programmes and other industries, such as nuclear and rail applications, where strict regulatory approvals are required.

Barden understands that it is vital that an aircraft spends time in the air and not in the hangar. With a typical D&R turnaround time of up to just three weeks, and at costs often much less than for new bearings, the impact of lengthy downtime can be significantly reduced by the Barden service.

Barden D&R offers re-manufacturing up to level 4 in both the USA and UK. Full traceability for all refurbished bearings can be provided where required. Both facilities are Civil Aviation Authority (EASA – Europe) and FAA (USA) approved and, with the correct OEM approvals, Barden can refurbish bearings from any manufacturer.

With a customer base that includes Honeywell, Sikorsky and AgustaWestland, Barden specializes in refurbishment of bearings for small main engine shaft positions, auxiliary power units, gearboxes and shafts and oil pumps.



FAG – Your partner to save costs without compromising system reliability

What started with a vision in 1883 and the creation of the first machine capable of producing a perfectly round ball bearing, has grown to become a world leader in bearing manufacture. FAG's decades of experience, highly motivated employees and advanced technologies, provide a solid base for its services to the aerospace industry.

As a main supplier for all the major engine programmes, including the CFM56, PW4000, V2500 and CF34, FAG Aerospace has proven its first class reliability to major customer including Pratt and Whitney, SNECMA and GE. Based on this experience with OEMs, FAG Aerospace has gained approval for 3rd party repair of mainshaft engine bearings used in civil and military aircraft.

Certified and audited by FAA, EASA, CAAC and TCCA, the exacting standards of FAG makes the company the first choice of high profile engine repair shops throughout the world.

FAG's partnership with Barden provides customers with a single point of contact for bearing repair and provides all the advantages of a full service repair network. Our extensive, OEM-approved, repair programme, short turn round times and modern repair procedures, can help cut maintenance costs without compromising system reliability.

- All bearings manufactured and repaired by FAG can be traced back to manufacture
- All tools, procedures and auxiliary materials used in the repair process are the same as used in original manufacture
- All quality procedures and other regulations are communicated with the OEM and comply with aviation authority requirements worldwide.

Centres of Excellence