

Danaher Motion brings together best-in-class products, unsurpassed customization expertise, and innovative solutions to the commercial aircraft industry. Our prominent brands—Thomson, Kollmorgen, Micron, Deltran PT and Portescap can be found in a wide variety of applications performing flawlessly every day.

For further information on our products,visit: www.DanaherLinear.com



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Some images courtesy of Southwest Airlines.

Aerospace Ball Screw Overhaul Services

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Long-Standing Reputation

The Thomson brand has long been recognized as the world's leader in ball screw design and manufacture. Backed by 60 years experience, the brand has acquired a first-class reputation for delivering superior technical and repair assistance and a loyal customer base for delivering what it promises. Today, as part of the Danaher Motion family of products, the Thomson ball screw still remains synonymous with excellence.

Overhaul and Repair Capabilities

Our expert ball screw overhaul service, performed at our FAA-approved repair station in Saginaw, Michigan, is available for ball screws of any make, size or age. Our aerospace engineers and repair technicians restore worn ball screw assemblies to their original specifications on a daily basis, providing the highest reliability and the lowest cost for ball screw maintenance. Customers utilizing our overhaul service will:

- Reduce aircraft downtime
- Save 35-50% compared to the cost of new ball screws
- Extend ball screw service life
- Reduce overall lifecycle cost

At Danaher Motion, we recognize the high cost of aircraft downtime. Our overhaul station is geared to put aircraft back into revenue service as quickly as possible. To help ensure this happens, we:

- Provide a firm, fixed price contract for overhaul work
- Maintain an inventory of new and overhauled assemblies
- Provide exchange units in advance where required
- Provide a three-year warranty on all rebuilt assemblies
- Provide a five-year warranty on new assemblies

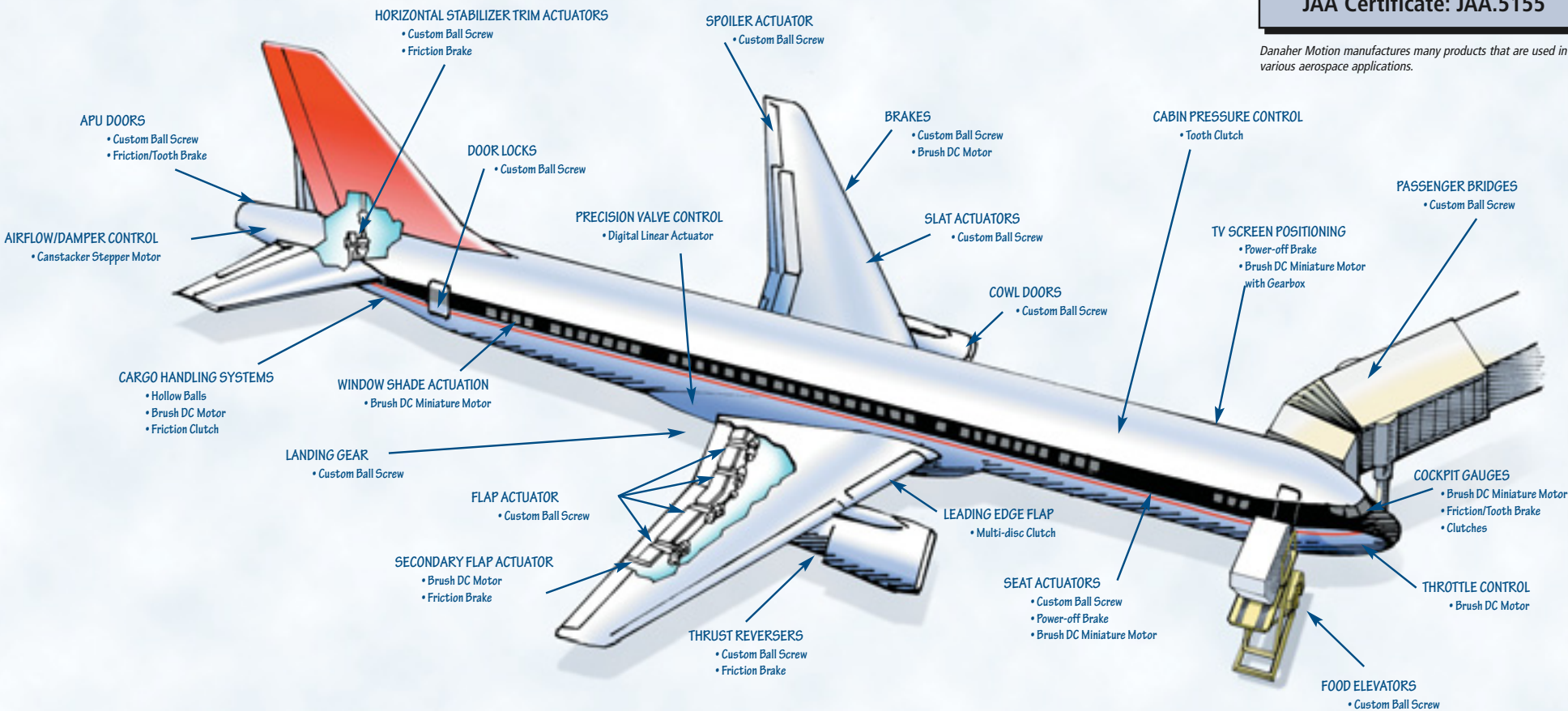
Quality Repair Process

Danaher Motion engineers, metallurgists, production specialists and customer service representatives provide the industry's most reliable overhaul service. We evaluate the condition and performance characteristics of each ball screw shipped to us, including:

- Straightness
- Ball groove form
- Wear
- Metal fatigue
- Chrome coverage
- Bearing surfaces and attachment points

Once the initial inspection is complete, we provide a detailed assessment along with recommendations for repair or remanufacture. Depending on the condition, we will advise the most suitable method of repair in order to provide "like new" performance at the lowest cost. Using the latest technology, we will rebuild your assembly per the overhaul manual specifications. The overhaul process includes:

- Eddy current inspection
- Chrome strip and replate
- Replacement of worn components
- Efficiency testing
- Backlash testing
- Wiper torque testing
- Lubricant retention



FAA Repair Station: TOWR001L
JAA Certificate: JAA.5155

Danaher Motion manufactures many products that are used in various aerospace applications.

As a result, each ball screw assembly that leaves our overhaul and repair facility meets the same stringent performance criteria as a new assembly. We are so confident in our service and quality control that each repaired assembly carries a three-year warranty covering any defects in material or workmanship.

Special Programs

Danaher Motion also offers a broad range of special programs to enhance and support customer maintenance programs. We work with customers to:

- Evaluate special repair opportunities to salvage screws that were characterized as beyond repair
- Provide advanced ball screw exchange programs to minimize aircraft downtime
- Custom tailor exchange programs to minimize inventories of assemblies and components
- Establish a tracking record for all products shipped and returned
- Conduct training sessions to keep staff up to date on the latest advancements in ball screw design and maintenance



737 Wing Flap Ball Screws

Additional Aerospace Products from Danaher Motion



Digital Linear Actuator



Multi-disc Clutch



Lead Screws



Flap Actuator



Power-off Brake



Brush DC Miniature Motor