

Gas Spring for AirStair Business Jet Enidine Gas Spring Application

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Product Overview

With 12 years experience, ITT Enidine Inc. is now the largest North American manufacturer of stainless steel gas springs and dampers. ITT Enidine Inc. has an outstanding reputation for quality, innovative design solutions, exceptional customer service and quick delivery. ITT Enidine Inc. offers a wide variety of American made, stainless steel adjustable and fixed force gas springs and dampers at competitive market prices.

Application Opportunity

A business jet manufacturer was not pleased with the current struts utilized on one of its' aircraft models. The manufacturer required a pair of fixed force gas springs for the passenger door. The manufacturer also required a solution that provided damping in the opening motion but not in the closing motion. Also, the rate of the door should open between 3 to 5 seconds.

Product Solution

ITT Enidine Inc. proposed a customized solution for the business jet airstair including a tension gas spring on one side of the door and a damper on the other. ITT Enidine Inc. also recommended specific ball ends and mounting brackets for the springs. ITT Enidine Inc. offers adjustable, fixed force, lockable and custom springs. IT Enidine Inc. offers extension, compression, and dual-rate springs along with a wide variety of mounting hardware.

Product Results

ITT Enidine Inc.'s design concept and product development proved successful. Prototype units were installed on the business jet door along with special ball ends and mounting brackets. The door opened smoothly and the rate was controlled exactly to specification by the gas springs. Because of the success of the gas spring, the aircraft manufacturer is working to replace all of its fleet with ITT Enidine Inc. gas springs.

The solution required a focus on both spring force and damping. When the development was complete, the aircraft manufacturer was pleased with the control of the airstair door.



Features & Benefits of ITT Enidine Inc. Gas Springs:

- 316 Stainless Steel
- Hard chrome piston rod
- Rod wiper to prevent ingestion of contaminants for longer life
- Bearings and piston heads made of brass or bronze (not plastic)
- Variety of mounting hardware available