

case study

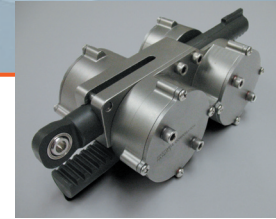
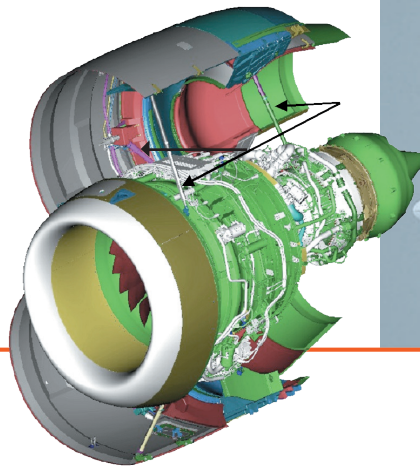
nacelle hold-open & rate control rods

installation eligibility

ARJ-21

part numbers

- HA-1460
- HA-1461
- HA-1477



the problem

The nacelle was being designed for GE C34-10A engines destined for use aboard the ARJ-21. The customer required a nacelle hold-open/close system that met stringent weight, strength, rate-control and durability standards.

the solution & benefits

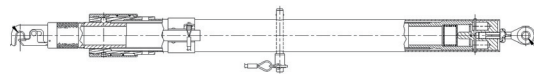
Equipped with state-of-the-art engineering tools and in-house rapid prototyping techniques, Hartwell based its approach on proven hold-open rod designs and an innovative new solution to rate control. The resulting system is exceptionally durable and lightweight — offering easy, smooth operation.

The aft hold-open thrust rod assembly was based on Hartwell's existing design currently in service on the C17 military transport aircraft engine nacelle. The assembly is constructed primarily of nickel plated carbon steel and has a proven field record. This hold open rod assembly is designed to maintain performance under high temperature conditions. The forward assembly is constructed of carbon composite and aluminum and also has a proven field record. This hold open rod assembly is designed to keep weight to a minimum. The overall operation of both hold open rods is smooth and reliable and offers the end-user clear operation instructions.

The damping unit was developed specifically for the application. It uses the well know principals of viscous shear to provide the necessary damping loads and offers a very smooth and consistent damping load. It also keeps internal pressures to virtually zero allowing reliable sealing of fluid within the device.

for more information

For more information on this product and other examples of Solutioneering at work, contact Hartwell Corporation at 1.714.993.4200.



Solutioneering at work

