

SHIM LOCK/PIN ANTI-ROTATION BUMPER DESIGN

ABSTRACT OF THE DISCLOSURE

The present invention relates to a bumper system for use with a compressor variable vane system. The bumper system broadly comprises a synchronizing ring, a bumper, a shim for defining a gap between a bumper pad and the bumper, a pin for preventing rotation of the bumper relative to the synchronizing ring, and a device for fully trapping the shim. In a first embodiment, the device for fully trapping the shim comprises a sleeve passing through the synchronizing ring. In a second embodiment, the device for fully trapping the shim comprises a pin which passes through the synchronizing body. In a third embodiment, the device for fully trapping the shim comprises a fastener with a shoulder.

Figure 5