

# SERVICE BULLETIN

**Subject:** Guide Assembly with Small Bore and Improper Bonded O-Ring

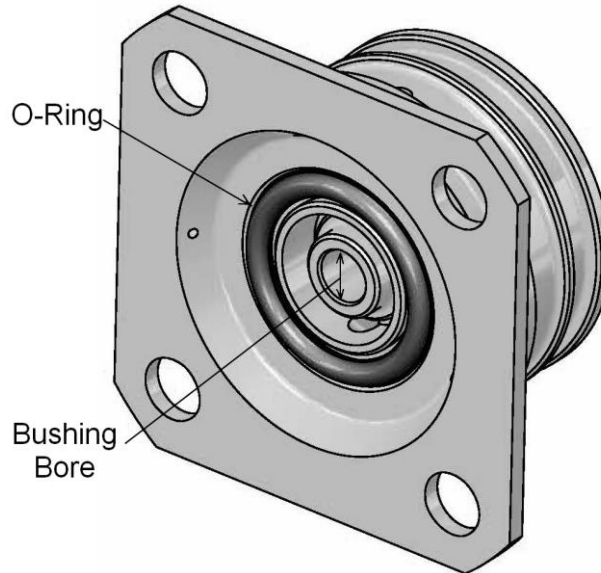
1. Planning

a. Effectivity

Wencor P/N	NHA P/N	NHA Description	ATA	Aircraft Application
3162808-6WE	107460-X 3399004-6	High Stage Pilot	36-11-37 36-11-95	B757-200 B757-300

b. Reason

As a result of a single customer report, Wencor has confirmed that the Guide Assembly PN 3162808-6WE has a bushing bore that may be slightly undersize and the bonded in O-ring may have an inadequate bond that would allow the O-ring to come out of the groove at assembly or in service.



**Figure 1, Guide Assy Showing the O-ring and Bushing Bore**

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### c. Background

The Guide Assembly is installed in the over-pressure sensor sub-assembly of the NHA High Stage Pilot as shown in Figure 3. The Guide Assembly serves two main purposes: (a) provide a bore to "guide" the guide shaft as it moves in and out through the Guide Assembly bushing and (b) provide a seal to prevent bleed air leakage when the plate on the guide shaft contacts the bonded in-place O-ring.

The bushing bore was manufactured with an ID size of .1570" - .1575" and the required ID size is .1574" - .1579". This allows for the possibility of an undersized condition which will prevent the guide shaft from installing into the bushing bore of the Guide Assembly.

The bonding process to bond the O-ring in the groove of the Guide Assembly may not have been done properly to achieve an acceptable bonded joint. This could possibly allow the O-ring to fall out or be dislodged from the groove.

### d. Safety

The undersize bushing bore will prevent assembly with the mating guide shaft. This condition will prevent assembly, but does not result in an in-service safety condition.

The improper bonding of the O-ring may allow the O-ring to fall out of the groove in the Guide Assembly, or allow portions of the O-ring to break off and fall out of the groove. This will result in downstream bleed air leakage past the O-ring.

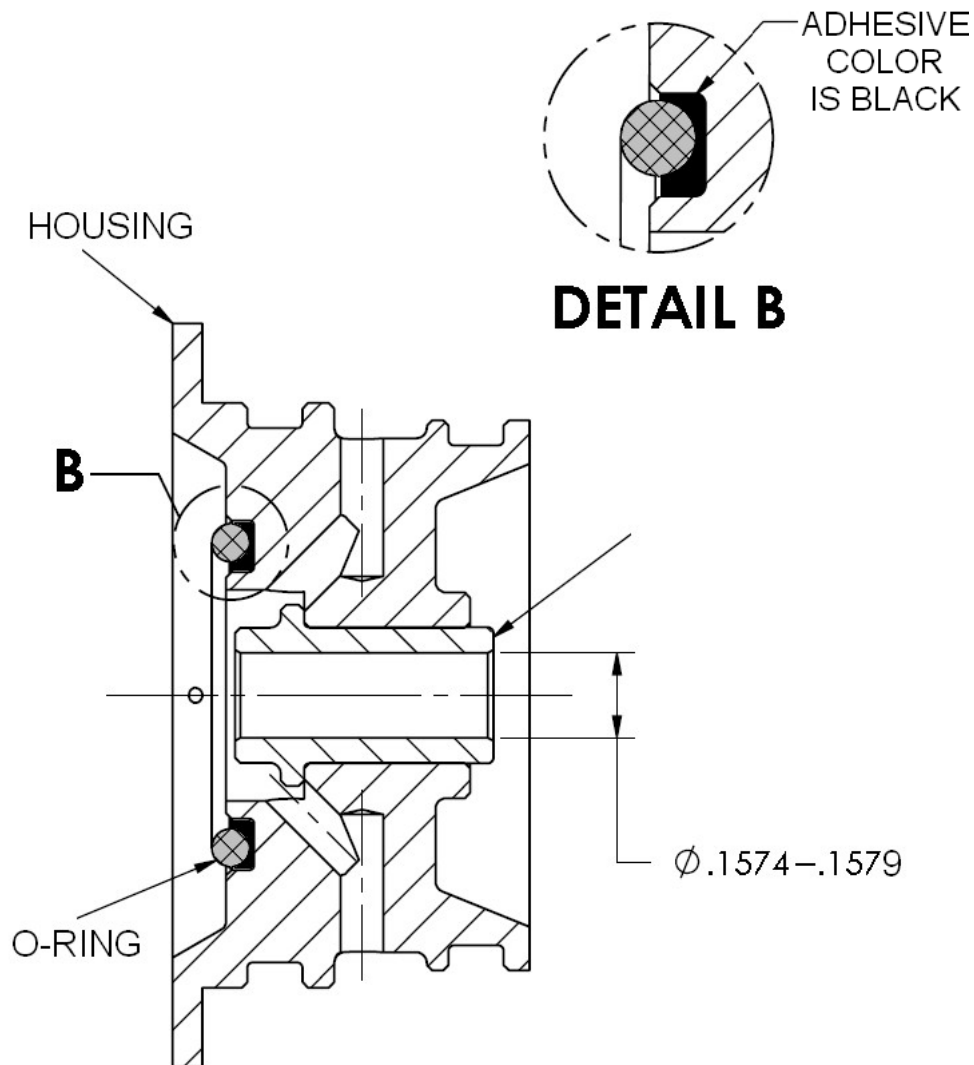
## 2. Required Action

### a. Repair and Overhaul

All Wencor Guide Assemblies in stock (new & uninstalled) should be inspected as described below:

- I. Verify the bushing bore ID is sized at 0.1574" – 0.1579" as shown in Figure 2. If the bushing bore ID size is within these limits the Guide Assembly is acceptable. If the bushing bore ID size is outside these limits, the Guide Assembly should be returned to Wencor as described in section 4 of this SB.

- II. Verify the bonded O-ring is properly bonded to the Guide Assembly. Using light finger pressure, verify all bonded surfaces of the O-ring are intact (no gaps) and the O-ring will remain in the groove. The adhesive should be visibly present on the ID and OD of the O-ring as shown in Figure 2 with enough adhesive to achieve this requirement. If the O-ring is found to be fully bonded to the Guide Assembly, the bond is acceptable. If the O-ring bond does not meet this criteria, the Guide Assembly should be returned to Wencor as described in section 4 of this SB.



**Figure 2, Cross-Section View of Guide Assy**



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Springville, UT 84663  
801-489-2000

b) In Service

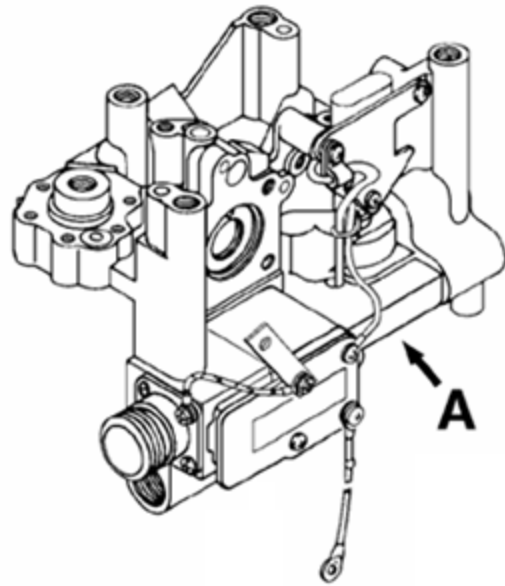
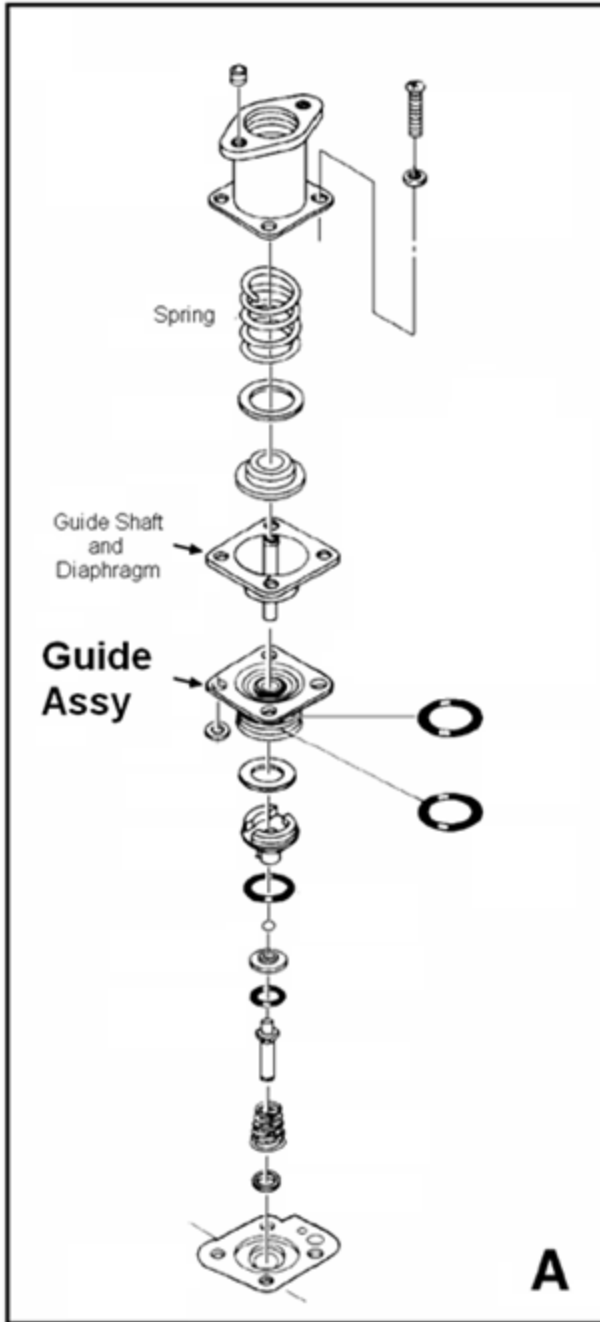
All Wencor Guide Assemblies that are installed into the NHA High Stage Pilot and have passed the CMM testing requirements may remain in service at the discretion of the operator and in accordance with the B757 AMM.

3. Compliance

There is no defined time requirement associated to this SB.

4. Material

Any Wencor Guide Assembly PN 3162808-6WE, that requires replacement as a result of this Service Bulletin will be covered free of charge under the Wencor material warranty. If there are any questions regarding this Service Bulletin, please contact the applicable Wencor representative by calling 801-489-2000 or email: [sales@wencor.com](mailto:sales@wencor.com).



**High Stage Pilot  
Overpressure  
Sencor  
Sub-assembly**

**Figure 3, Guide Assembly Installed Into High Stage Pilot**