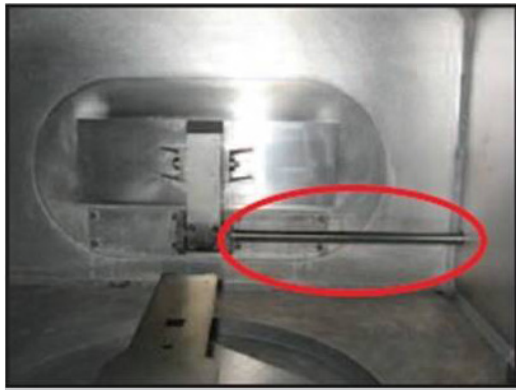


# Load Lock Door Shaft



Current Load Lock Door with 2 piece shaft causes unwanted rubbing and particle shed



Load Lock Door with improved 1 piece shaft eliminates rubbing and particle shed

**Reducing wafer defects is a vital component for ensuring today's aging semiconductor equipment meets the increasing demands of a more complex manufacturing environment. The Concept One Load Lock Door Shaft enhancement can provide up to a 30% reduction in defects occurring in the load-lock caused by friction of components.**

The current Load Lock Door Shaft for the Concept One system consists of two separate aluminum parts. A U-joint inside the Load Lock connects both parts allowing the two items to rub against each other as the door opens and closes. This produces unwanted particles to shed-off into the Load Lock. The upgrade design replaces the two separate pieces with a one-piece Load Lock door shaft eliminating the rubbing action that generates these unwelcome particles.

Installing the Load Lock Door Shaft - For Concept One systems shipped before March 1996, installation requires the drilling of four holes and taping them into the Load Lock wall to properly complete the upgrade. For systems shipped after March 1996, drilling and taping the Load Lock wall is not necessary. Concept Part Solutions can loan the Load Lock Door Drill Kit, PN 04-047558-00, to customers purchasing the enhancement (when available) or the kit may be purchased separately.

## Upgrade Benefits

- Eliminates particle-shed in the Load Lock
- Reduces PM time associated with original door shaft
- Improves vacuum sealing from the load lock to chamber
- Lowers overall Cost of Ownership

CONCEPT ONE PRODUCT UPGRADES

# Loadlock Door Shaft

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Concept Parts Solutions (CPS) is fully authorized and approved by Lam Research Inc.; CPS is the only company licensed to provide original OEM parts, upgrades, and service for the Novellus Concept One and GaSonic Legacy Asher platforms.

For pricing, quotations and ordering guidance, or for additional information, please contact:

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