

**R E P L Y**

*Dr. Lee and his colleagues have correctly documented the design history of the means for attaching and sealing the bellows cylinder to the housing of the Air-Shields Ventimeter® Controller and Ventimeter® Ventilator. He has also correctly analyzed the consequences of leakage at the bond between the cylinder and the base of the cylinder assembly on the current model Ventimeter® Controller II and Ventimeter® Ventilator II, the effect on conventional low pressure alarms and the Air-Shields airway disconnect alarm, and the means to recognize the problem clinically.*

*Solvent welding Plexiglas® acrylic plastics is a recognized and accepted bonding means and typically results in a bond as strong as the plastic itself. Based on our investigation we believe the problem of incomplete bonding described by Lee et al. to be restricted to a relatively few units as a consequence of the use of solvent material beyond its rated shelf life. We have therefore imposed closer controls on the manufacturing materials used and have added an in-process bonding check to prevent recurrence of this problem.*

*While Lee et al. have not quantified the degree of risk, we trust they would agree that the likelihood of a significant increase in the leakage during a procedure is highly unlikely, as would be the failure to detect such an increase by routine monitoring of tidal volume, peak airway pressure and vital signs.*

*Thank you for this opportunity to comment.*

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