## **Eclipse™ Battery Troubleshooting**

#### Symptom:

Eclipse<sup>™</sup> has a FAIL 95 error message displayed on the screen. The FAIL 95 indicates that the Eclipse<sup>™</sup> has shut off due to a "Battery Communication Error." -or- The Eclipse<sup>™</sup> is alarming with a yellow light. The battery display is not showing that the battery is charging. It is giving an alarm code of 01 (Eclipse<sup>™</sup> 2) or 001 (Eclipse<sup>™</sup> 3 & 5) when the "no-smoking" icon is pressed. This error code indicates that the Eclipse<sup>™</sup> "Cannot Charge the Battery Cartridge."

#### Troubleshooting:

The first step is to reset the Eclipse™ to see if the failure or error code reoccurs. The Eclipse™ will not turn back on or deliver air until it is reset once the FAIL 95 error has occurred. The Eclipse™ is reset by first removing the power cartridge and any external power cords. This will cause the code to disappear from the screen and the red light to go off. Reconnect the power sources approximately 20 seconds later and the Eclipse™ should power back on as normal. If the fail or error code does not return after the warm-up time, then you can continue to use the Eclipse™ normally. If the FAIL 95 or alarm code occurs again, then there is a malfunction causing this error. This error can either be caused by a problem with the Eclipse™, or simply with a faulty battery. The easiest way to determine if the repeating error is caused by a fault with the Eclipse™ or the power cartridge is to try running the Eclipse™ with a second, or spare, battery cartridge. If the FAIL 95 or error code occurs again with the second battery, then the Eclipse™ itself will need to be serviced. Contact CAIRE Technical Support for more information. If the alarm condition does not occur with the second battery, then you have diagnosed the original battery as the faulty component. In this case, the faulty battery would need to be replaced.

#### Symptom:

The Eclipse™ battery is not holding a charge. The battery is showing as being fully charged, but it is not lasting as long as it should.

### Troubleshooting:

Any time battery duration is suspected to be low the first step is to attempt to calibrate the battery cartridge. Often times, doing this can increase the capacity of a full charge and maximize the time that a full charge will last. You may want to reference the "Calibrate Battery" section in the corresponding procedure above. If the battery still does not last as long as it should after calibration, then the battery may be past its useful life. Perform the battery capacity test given above to determine if the battery needs to be replaced.

# Periodic Inspections for European CAIRE Liquid Oxygen Reservoirs and Portables

The ADR (European Agreement Concerning the International Carriage of Dangerous Goods by Road) and regulation EN1251-3 (Cryogenic vessels - Transportable vacuum insulated vessels of not more than 1000 litres) require that periodic inspections are performed on closed cryogenic vessels every 5 and 10 years. All CAIRE Liquid Oxygen Reservoirs and Portables fall under these requirements.

Charts European facilities in UK, Germany and Italy are fully accredited to perform the required inspections and also offer a further TPED accreditation service. Please contact customer service for further information.