EcoMedics Exhalyzer D® MBW System Error Messages

Error Message	Description	Operator Response	
Mean N2 Insp. is out of valid range	Sustained re-inspired N ₂ levels above the acceptable threshold of 0.3% (N ₂ tracing not returning to zero on inspiration) indicates a small constant leak, typically at Nafion tube connection.	 Check Nafion tube connections and integrity to rule out a possible leak. Also ensure that mask or mouthpiece is fitted properly to minimize episode of leak. Collect an additional trial. If error message continues to appear, replace Nafion tube. 	
Flow during Insp. is too high	Appears when flow during inspiration exceeds the threshold of 1000 ml/s. The subject breathes beyond the bias flow and inspires N ₂ from room air creating a leak in the circuit.	 Inspect for leak: O₂ not maintained at 100% during inspiration. If leak or if unsure collect an additional trial. 	
Sample Flow not in defined valid range	Sampling rate at the Nafion tube is too low or too high.	Please contact the manufacturer to ensure proper function of MBW device.	
DSR-SET not attached properly? (TransitTimeError)	Appears when the software senses misalignment of the DSR/Spirette/Flowhead assembly. Misalignment of these components may compromise accuracy of flow and volume measurements and cause the trial to be rejected.	 Check equipment set-up and connections. Collect an additional trial. 	
LCI Target not reached - no valid results.	Often triggered by a software error has selected an incorrect breath as the last valid breath of washout $(2.5\% \ [N_2] \ target)$.	 Verify there are three consecutive breaths where N₂ Cet norm is below 2.5%. If so, end of test criteria has been met. The incorrect last valid breath can be changed manually by over-reading centre. 	
O2 calibration not done	Appears when the channel calibration is not performed prior to testing, or the results were not saved.	Perform channel calibration.Make sure to press 'save'.	
St. Dev. CO2Cet is out of valid range	Indicates variable end-tidal CO ₂ levels	Continue to distract/coach and encourage subject to breathe naturally.	
CV% of LCI/FRC is too high.	Currently not rejecting or accepting trials based only on CV % of LCI or FRC. The software flags variable results. Generally, repeatable measurements are encouraging.	 Typically, an extreme (>1 unit) outlier indicates a leak or significant difference in breathing pattern between trials. When error message appears, inspect existing trials and collect an additional trial if possible. 	

