LEM ERROR CODES:

Codes 1, 2, 3: RAM failed self test. This indicates the RAM on the calibration board has failed its self test on power up. If this does not clear by cycling power then the calibration board must be repaired.

Code 4: Start/Stop button stuck down. This error will be set when the calibration board detects the Start/Stop button pressed on power up.

Code 5: Not used

Code 6: RAM overflow - Too much data gathered. This only happens on very long actuators. Increase the gather data resolution by one and try again until this error goes away.

Code 7: Pattern memory internal fault;

Code 8: Pattern memory update timed out;

Code 9: Pattern memory data verify error;

Code 14: Pattern memory ID error. These four errors all indicate a communication problem between the calibration board and the calibration memory chip on the DB1A. It usually indicates a failing ribbon cable. First try reseating the ribbon cable and cycling power and then calibrate again. If the error persists then first try a new ribbon, then a new DB1A. If the error is still there it is likely a problem with the calibration board, although I can not remember this ever being the case.

Code 10: Internal program error. This indicates a malfunction/bug in the calibration board software. This should never happen, and I have never heard of it happening.

Code 11: Gather data reversal. This error is set when the calibration board detects that the actuator moved backwards during the calibration gather procedure. This code can also be set by a bad LEM head or bad wiring/connectors on the LEM head. Try cycling power and retry first. If the error persists try changing the following in this order: ribbon cable, DB1A, LEM head.

Code 12: Gather data null. This error is set when the calibration board detects that the reference encoder has moved the gather sampling distance but the LEM encoder shows no position change. This is usually caused by a defective LEM head, or a cabling issue with the head. Be sure to check that nothing is pinched in the LEM head backshell. It can also be caused by using a very low gather resolution setting during calibration. Try leaving the gather resolution at its default auto-calculated value. Try changing the ribbon cable, DB1A, and LEM head in that order to diagnose.

Code 13: External encoder quadrature error. This error is set when the calibration board detects that the A and B channels on the reference encoder have changed at the same time. This is almost always caused by moving the actuator too fast during calibration. If the error persists check the reference encoder wiring and that the calibration board is set to 'Differential' or 'Single Ended' as appropriate for the encoder used. It should be noted that some encoders have high speed noise on their outputs that is too fast for the calibration board. Those encoders will not be usable for calibration.