Error 42 - Lift Position Value Out of Range

Description

This error code monitors the physical lift position via a lift position potentiometer that mechanically tracks the lifts physical position and sends a D.C. voltage back to the control system that is converted to an eight bit digital number. This number is then used to represent the lifts physical position. The software sets upper and lower numerical limits. If the lift position number is found to be outside of the set limits, error 42 will be displayed.

When troubleshooting an error 42 is important to be aware of the actual physical position of the lift when the error occurs. If the lift is physically out of range or jammed you must first determine why the lift is physically out of range. When the lift is out of range the error 42 is a secondary symptom and the problem should treated as an error 40 instead of an error 42.

Possible Cause

1. Bad or intermittent connection in the lift motor connector.
2. The lift motor requires re-calibration.
3. The lift motor potentiometer is bad.
4. The lower PCA to upper PCA interconnect cable is bad.
5. The lower PCA is bad. (this is a rare condition)
6. The upper PCA is bad. (this is a rare condition)

Possible Remedies

1. Intermittent connections can be difficult to locate. If the error 42 condition is intermittent a connection is almost certainly the problem. This is especially true if the error 42 occurs while the lift is within its normal physical range. Carefully inspect the lift potentiometer connector, repair the poor connection, if possible. If the intermittent connection cannot be found or repaired, replace the lift motor. A lift calibration number of 0 or 255 indicates an open or shorted potentiometer connection. This problem could be anywhere between the lift motor and the upper PCA. It can typically be found and traced with an ohmmeter.
2. Refer to the appropriate service manual lift calibration procedure for the unit being tested. If the lift position number/physical lift position does not correspond with the service manual, re-calibrate the lift motor. ***There must be a reason for the lift motor to be out of calibration, therefore simply RE-calibrating the lift motor will often NOT fix the problem***.
3. If the lift calibration number is not 0 or 255 and does not increment when the lift motor moves, replace the lift motor.
4. Substitute a known good interconnect cable to determine if the existing interconnect cable is bad.
5. Substitute a known good lower PCA to determine if the existing lower PCA is bad.
6. Substitute a known good upper PCA to determine if the existing upper PCA is bad.