

SERVICE BULLETIN

Date: February 6, 2015
Update Number: S2015-01
Subject: Troubleshooting Diagnostic Code 5-Flashes
Product Affected: LiftMaster® CSL24V, CSW24V Gate Operators (CSL24VDC, CSW24VDC not affected)

Gate Operator Symptom: Troubleshooting Diagnostic Code 5

We have recently received reports of two separate issues on models CSW24V and CSL24V that can cause diagnostic “Code 5-Flashes”. These are NOT a result of striking an obstruction (ERD):

1. **CSL24V/CSW24V Motor Fault**, this is a result of variation in brush assemblies being slightly larger than their tolerance. When this fault occurs, the motor will not turn and the firmware interprets the fault as an obstruction and diagnostic Code 5-Flashes.
2. **CSW24V Gate Oscillation**, this is a result of gate oscillation in very heavy gate applications. In this instance, excessive gate oscillation causes an obstruction reversal (5-Flashes) due to either a variation in the specification of the output shaft collar or gearbox assembly.

Solution

We have worked with our suppliers to ensure all of these components are now within specification and have made replacement components available for immediate shipment should these issues arise.

5-Flash Troubleshooting Steps: Troubleshooting steps to validate whether the 5-Flash error is caused by the motor and/or the gate oscillation are noted below:

- A. If you experience 5-Flashes on a CSL24V operator, go to **Part 2** to test the motor.
- B. If you experience 5-Flashes on a CSW24V operator, follow **Parts 1-3** to further troubleshoot the 5-flash code.

Part 1 – Determine if Fault is Related to Motor or Gate Oscillation

When experiencing the 5-Flash error mode, reset the operator. Then, go into learn limit mode. Using the Move Gate buttons, does the operator run?

- A. No – Check for motor fault – go to Part 2.
- B. Yes – Check for gate oscillation – go to Part 3 (CSW24V only).

Part 2 – Test Motor

NOTE: Do not rely on powering the motor directly from the batteries to determine if a motor is operating correctly.

1. Remove the motor plug from the logic board and make sure that the operator is still in learn limit mode.
2. Set the volt meter to measure +/- 20 VAC.
3. Place the positive lead of the volt meter on the positive '+' pin of the motor plug of the logic board.
4. Place the negative lead of the volt meter on the negative '-' pin of the motor plug of the logic board.
5. Press and hold the Move Gate Up button while observing the volt meter. A voltage of 10 Volts or more should be observed for one or two seconds, and then the voltage will return to 0 and the board will Flash-5 on the diagnostic LED.
 - If voltage of -10 Volts or more is seen on the volt meter for one or two seconds, and the motor does not move, the motor is faulty. Replace the motor (K76-36398).
 - If no voltage is seen on the volt meter, verify the meter is good by measuring a battery for a double check. If there is no voltage and the meter is good, replace the board (K1D8059-1CC).



Figure A
Testing motor connection on the Logic Board

Part 3 – Test Gate Oscillation

1. Disconnect the short arm from the long arm connecting to the gate at the arm elbow joint.
2. Measure out 28 in. from the center of the output shaft collar and make a mark on the arm at that length.
3. Push the arm in a direction until you feel resistance, and hold a ruler or tape measure over the arm perpendicular to the arm at the mark made in Step 2.
4. If the amount of play is 3 in. or greater than the combination of tolerances of the gearbox, output shaft collar and gate arm bracket are out of specification and all three components should be replaced as listed below.

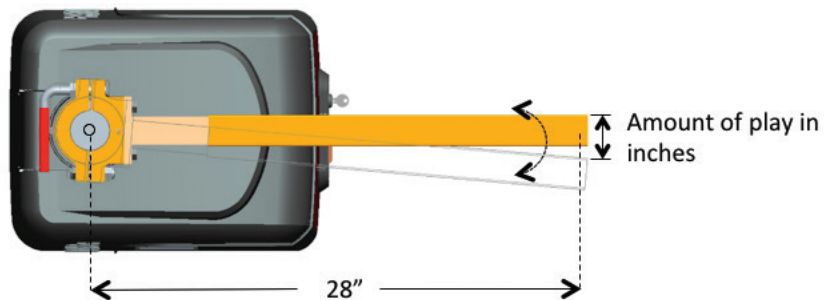


Figure B
Measuring from Center of Output Shaft Collar

Model	Component	Part Number
CSL24V & CSW24V	24VDC Motor	K76-36398
CSW24V	Gearbox Replacement Kit (Includes): <ul style="list-style-type: none"> • 30:1 Top Gearbox • Output Shaft Collar • Gate Arm Bracket 	GEARCSW24V

All replacement components are available for immediate shipment. For more information or to place an order, please call LiftMaster Technical Support at 800.528.2806. Thank you for your continued support of LiftMaster Gate Operators.