e-STROKE®
Electronic Stroke Alert

Trouble-Shooting Guide

Item	Problem Description	Brake System Condition	Solution*
1	System status LED does not come on at all	No actuation	A,B,C,D,E
2	System status LED flashes RED then GREEN and repeats, or not constant GREEN	No actuation	D,C
3	CCM wheel LED indicates a dragging brake (slow RED blink)	No actuation	O,H,K,P,L,T,U
4	All CCM wheel LEDs indicate a dragging brake (slow RED blink)	No actuation	L
5	CCM wheel LED indicates a brake actuator overstroke condition (rapid RED blink)	Actuate service brake to 95-100 psi	M,T,V
6	CCM wheel LED indicates a non-functioning brake actuator (alternating RED/GREEN blink)	Service brake application	N,S
7	CCM wheel LED indicates a faulty sensor condition (ORANGE blink)	All conditions	F,I,J,Q,R
8	CCM does not indicate overstroke fault when it is known that an overstroke condition exists	Actuate service brake to 95-100 psi—actuator travels to overstroke position	F,G
9	All CCM LEDs for parking brakes ONLY indicate a dragging brake (slow RED blink)	No actuation	P

*KEY on Reverse Side

Key	Test to Perform and/or Action to Take
A	Make sure ignition switch is turned on.
B	Test fuse in the CCM power supply cable for an open circuit. This is located at power source connection. Replace fuse if open circuit.
C	Check CCM power cable for electrical shorts or cut wires. Also, connectors can be damaged due to road debris. Replace any damaged cable with MGM Brakes cables.
D	Test vehicle system voltage—it must be above 8.6 volts.
E	Make certain all connectors are plugged in far enough so that the connector body tabs are locked.
F	Inspect sensor to ensure it is plugged into the brake actuator stone shield all the way to the sensor stop tabs.
G	Test for faulty vehicle brake light switch.
H	Actuator push-rod must be perpendicular to the bottom of the non-pressure housing within ±3°. If greater than 3°, check to be sure actuator mounting bolts are in correct bracket holes (or if centered in bracket holes). Install actuator into correct holes or loosen and reposition until push-rod is aligned.
I	Inspect sensor and connector for physical damage due to debris. Replace sensor if damaged.
J	Measure continuity of sensor with digital meter, red (positive) to black (negative) wires. Resistance should be 12k-16k ohms.
K	Inspect brake actuator for improperly cut push-rod (too short). Pull the yoke pin. The shaft should not retract.
L	Make sure there is no pressure in the service brake system. Could be faulty air valve or a leak past the push-rod seal from the parking brake chamber.
M	Measure stroke of actuator to validate overstroke condition.
N	Inspect brake actuator for movement when service brake is applied. If no movement, check for burst diaphragm or bad air leak or faulty ABS valve.
O	Make sure parking brake air pressure is at least 95 psi.
P	Check for rusted or worn foundation brake components.
Q	Unplug sensor assembly at wheel and plug in a new sensor assembly. If ORANGE indication goes away, use the new sensor assembly.
R	Unplug sensor harness and connect a new sensor harness. If the ORANGE indication goes away, use the new sensor harness.
S	Service pressue switch may be faulty (brake light stays on).
T	Check for damage to sleeve on push-rod which would cause the calibration to change.
U	With parking brakes released and no air pressure applied to service brake, inspect plastic sleeve on push-rod. If the push-rod angle is too great, the plastic sleeve may hang up on the plastic stone guard inside the unit. This can prevent the push-rod from fully retracting back to zero stroke. To repair follow 'H' above.
V	Automatic slack adjuster may need to be adjusted or replaced. Be sure push-rod is fully retracted with service brake not applied and parking brake released.

If you require e-STROKE® system trouble-shooting assistance, please call MGM Brakes at 1-800-849-0108, ext. 300.