

DASS (Door Ajar Switch System) Troubleshooting Guide



Please read and carefully follow these instructions!

The Door Ajar Switch System (DASS) is sealed for weather and vibration protection with an epoxy potting material. There are no user serviceable components inside the DASS.

Before replacing the DASS, please check the following areas:

Weak Magnetic Field or Loss of Magnetic Field:

This is the most common reason for the apparent DASS failure. It usually shows an intermittent cab indicator light.

Causes:

- Weak magnet
- Lost magnet/retainer
- Lift bar out of position in relation to the DASS

Procedure:

- Remove the Magnet Retainer and visually inspect to see if the magnet is present.
- Reattach the retainer and slide the door all the way to the opposite side of the switch, noting the position of the black end cap in relation to the DASS.
- Check the cab indicator light. If it is activated move the door back in the opposite direction and recheck the cab indicator light. If the cab indicator light goes out, the door is losing the magnetic field for the DASS.
- Contact your vehicle manufacturer and tell them your findings.
- We will work with your OEM to correct the problem.
- If you are missing a magnet, contact R•O•M directly for a new magnet retainer.

Chaffed or Pinched Wires:

This is the second most common reason for DASS system failure.

Causes:

- Unprotected circuit wires
- Loss of grommets or anti-chafe tubing
- Crushing of wires in chassis

Procedure:

- Check for melted or discolored insulation on wires in the circuit. Sometimes the chafed or crushed point in the wire is obvious.
- If the wiring is damaged, the DASS is probably damaged and requires replacement.
- Check all wiring and devices in the circuit controlled by the DAS for shorts before installing a new DASS.

Corroded Wire Connections:

This can show an intermittent indicator light. This is harder to detect and not as common.

Causes:

- Unprotected wire connection(s)
- Damaged wire connection(s)

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Procedure:

- Locate each connection in both the 8 amp light circuit and the 0.5 amp Indicator light circuit.
- Visually examine the connections for corrosion and replace as required.
- Recheck the DASS for proper operation.
- If the DASS still does not function correctly, replace the DASS.

Relay Sensitivity:

The DASS uses internal transistors instead of relays to switch the light and indicator light circuits. This keeps the size of the DASS compact and reduces the need for external relays and other switching components. However, external relays may still be used by the chassis manufacturer. These may operate under low voltage and current and may not release, even if the DASS functions properly. This results in an “always on” indicator light.

Causes:

- Relay sensitivity

Procedure:

- Remove and reapply power to the circuit. If the circuits switched by the DASS return to normal, a relay or relays in the circuit are particularly voltage and current sensitive.
- Please contact R•O•M for information to fix the problem.

Series Wiring of DASS System:

At present there is no direct link between DASS system failure and this method of DASS wiring style. Series wiring makes DASS troubleshooting difficult. Electrical back feed may occur, resulting in an intermittent or “always on” cab indicator.

Additional Components in the Cab Indicator Circuit:

In some apparatus, additional switches and other components are in the cab indicator circuit. Proper operation of these components should be verified before troubleshooting the DASS.

Weldon V-Mux Multiplexer:

If your vehicle uses the Weldon V-Mux multiplexer, please contact your vehicle manufacturer to have the parameters for the node input for the DASS changed to “ground only”. Refer to the R•O•M Technical Bulletin FM-8.5-261 – Interfacing R•O•M Door Ajar Switch with Weldon Multiplexers.

If these checks are made and it is determined the DASS is at fault:

Please contact your dealer or your R•O•M Customer Service Representative at 800-827-3692. Locate the serial number from your roll-up shutter door, located on the bottom rail. We will work with you to get your system repaired.

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