

# EXM CAN Stow Module

**Model: 7095**

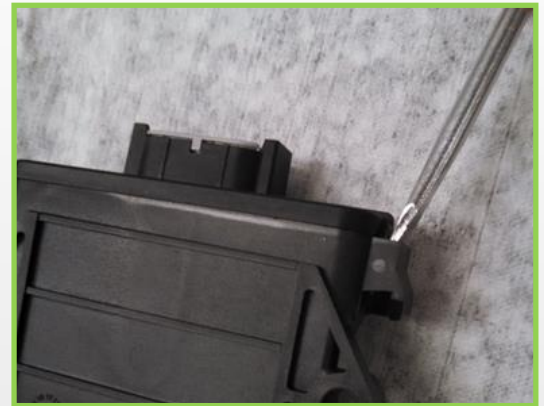
## Troubleshooting Guide

This guide provides troubleshooting tips for the 7095 EXM CAN Stow Module. If the Stow Module still does not work properly after checking the potential issues found in this guide, please contact Elkhart Brass for further assistance.

### CONFIGURATION ISSUES

The Stow Module only requires configuration if the monitor group number is NOT the same as that of the Stow Module. Monitors and Stow Modules sold individually are configured to Group 1 by default, and those should not need to be configured prior to installation. Those sold in packages or for multi-monitor systems may have different group numbers. If you need to verify the Monitor Group number, follow the steps under Operating Instructions step M. Write Diagnostic File\* in an EXM monitor manual\*\*. If needed, the EXM CAN Stow Module's group number can be changed, **prior to installation**, by following the instructions below.

- Ensure that proper Electrostatic Discharge (ESD) precautions are taken and that the Stow Module is not connected to a power supply.
- Remove the cover of the Stow Module enclosure by using a straight screwdriver to disengage the circuit board header clips.
- Find the Selection Switch "SW1" on the circuit board.
- Using a straight screwdriver, carefully turn SW1 to the desired Group Number minus one. (For example, if you want to configure for a Group 3 Monitor, point the SW1 arrow to 2). Standard setting is 0 for Group 1.
- Carefully close the enclosure. Be sure the red seal is not pinched or damaged when closing. Ensure both clips click into place on either side of the enclosure. The red seal should no longer be visible.
- Install the Stow Module according to Installation Instructions Step 1 – EXM CAN Stow Module in an EXM monitor manual\*\*.



\*Operating Instruction step letter may not match 'M'. In this case, refer to the section title "Write Diagnostic File" for instructions.

\*\*EXM monitor manual refers to the Sidewinder EXM, Cobra EXM, Scorpion EXM, etc.

**SYMPTOMS**

**STOWSIGNAL & STOWLAMP Outputs**

If the 7095 Stow Module’s STOWSIGNAL or STOWLAMP outputs are not correctly operating after following the instructions in an EXM monitor manual\*\*, use Table 1 below to resolve the issue. The tips are listed in the order for which they should be checked.

**Table 1: Troubleshooting Tips**

No.	Potential Cause	What to Check
1.	The Stow Module, 7095, is not correctly powered.	<ul style="list-style-type: none"> <li>• Verify that the 12-pin Deutsch connector is properly connected to the 7095.</li> <li>• Verify that the red and black leads (pins 12 &amp; 1) are correctly connected to the vehicle’s power supply and ground, respectively.</li> <li>• Inspect the cable for other damage.</li> <li>• Check fuses for the device power.</li> </ul>
2.	The Stow Module, 7095, is not connected to the J1939 CAN bus.	<ul style="list-style-type: none"> <li>• Verify that the 12-pin Deutsch connector is properly connected to the 7095.</li> <li>• Verify that the green and blue leads (pins 10 &amp; 11) are correctly connected to the CAN Low and CAN High bus through the 3-pin Deutsch connector.</li> <li>• Inspect the cable for other damage.</li> </ul>
3.	The STOWLAMP / STOWSIGNAL is not correctly connected to the vehicle circuitry	<ul style="list-style-type: none"> <li>• Verify that the 12-pin Deutsch connector is properly connected to the 7095.</li> <li>• Verify that the brown, STOWLAMP (pin 4), and the white, STOWSIGNAL (pin 5), lead(s) are correctly connected to the vehicle according to the vehicle-specific application.</li> <li>• Inspect the cable for other damage.</li> <li>• Check any fuses connected to the STOWLAMP and STOWSIGNAL circuits.</li> </ul>
4.	The monitor’s stow position is set too close to a vertical/horizontal limit or a keep-out zone.	<ul style="list-style-type: none"> <li>• Use an EXM input controller to put the monitor into Setup Mode (reference Part B of the Operating Instructions section of the EXM monitor manual**).</li> <li>• Use the EXM input controller to set a stow position that is well away from any vertical/horizontal limits or keep-out zones (reference the “Stow Position” part of the Operating Instructions section of the EXM monitor’s Installation, Operating, and Maintenance Manual).</li> <li>• Exit Setup Mode, then command the monitor to the new stow position.</li> <li>• If the Stow Module, 7095, now correctly operates, then this was the problem. If desired, a different stow position can now be set on the monitor using the previous steps: just be sure that it is not too close to any horizontal/vertical limit or keep-out zone.</li> </ul>

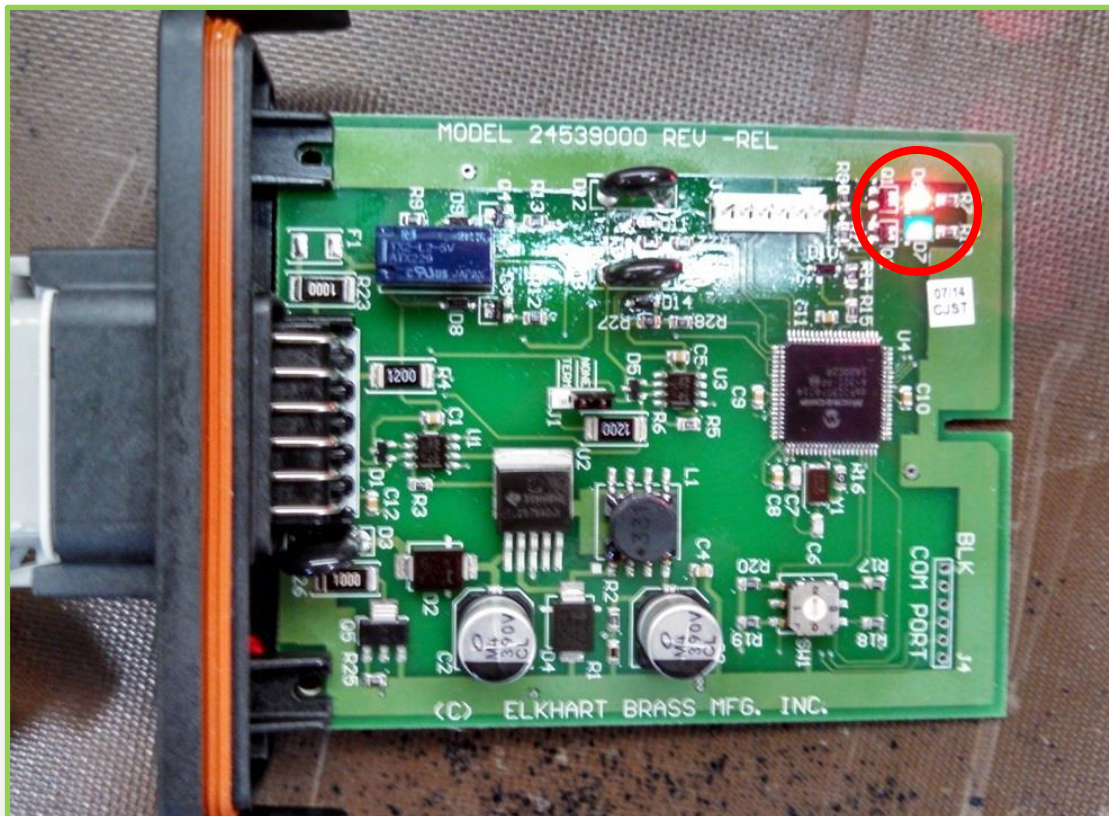
\*\*EXM monitor manual refers to the Sidewinder EXM, Cobra EXM, Scorpion EXM, etc.

**Table 1: Troubleshooting Tips**

No.	Potential Cause	What to Check
5.	The EXM monitor is not communicating to the Stow Module, 7095, over the J1939 CAN bus.	<ul style="list-style-type: none"> <li>• Verify that the 7095's internal red "Error" LED is NOT lit when the STOWLAMP / STOWSIGNAL is not working.               <ul style="list-style-type: none"> <li>○ Open the Stow Module, 7095, according to the "Configuration Issues" section in this troubleshooting guide.</li> <li>○ While the cover's removed, carefully plug in the 12-pin Deutsch connector.</li> <li>○ Apply power to the system.</li> <li>○ Verify that the red "Error" LED is NOT lit.                   <ul style="list-style-type: none"> <li>▪ Refer to Table 2: Stow Module Internal LED States and Figure 1: Stow Module LED internal location in this troubleshooting guide.</li> </ul> </li> </ul> </li> <li>• If the 7095's internal red "Error" LED is lit, then the Stow Module (7095) is not communicating with the EXM monitor.               <ul style="list-style-type: none"> <li>○ Verify that the J1939 CAN bus is properly terminated.                   <ul style="list-style-type: none"> <li>▪ There should be two, and only two, termination points at each end of the J1939 CAN bus. EXM devices on the J1939 bus can be configured to be terminated or not terminated. Refer to the "Configuration Issues" section in this troubleshooting guide.</li> </ul> </li> <li>○ Verify that the J1939 CAN bus and branch (stub) lengths (and other J1939 CAN bus physical properties) are in accordance with SAE J1939-11.</li> <li>○ Verify that the SW1 setting on the 7095 circuit board is set to the number that corresponds to the EXM monitor's Group number according to the "Configuration Issues" section in this guide.                   <ul style="list-style-type: none"> <li>▪ If the monitor's group number is not known, turn the switch to each of the four positions and see if the red "Error" LED turns off after one minute of operation at each switch setting.</li> <li>▪ If changing the switch setting does not work, record a diagnostic file for the EXM system according to step "M. Write Diagnostic File"* of the EXM monitor's Installation, Operating, and Maintenance Instruction manual. Contact Elkhart Brass to make arrangements to have the diagnostic file reviewed.</li> </ul> </li> </ul> </li> <li>• If the 7095's internal red "Error" LED is NOT lit, then the Stow Module, 7095, is receiving at least some CAN messages from the EXM monitor.               <ul style="list-style-type: none"> <li>○ Verify that after the EXM monitor stow operation completes, the blue "Status" LED turns on.</li> <li>○ Verify that when the EXM monitor is moved out of the stow position, the blue "Status" LED turns off.</li> <li>○ If the blue "Status" LED responds in accordance with the previous two conditions, then the EXM monitor is correctly communicating to the Stow Module, 7095. Investigate other Potential Causes.</li> </ul> </li> </ul>
6.	The Stow Module, 7095, is damaged.	<ul style="list-style-type: none"> <li>• Inspect the outside of the Stow Module, 7095, for damage.</li> <li>• Open the Stow Module, 7095, according to the "Configuration Issues" section in this troubleshooting guide.</li> <li>• Inspect the circuit board for damaged areas or components.</li> <li>• If any suspected damage is found, contact Elkhart Brass (800-346-0250) for further assistance.</li> </ul>

**Table 2: Stow Module Internal LED States**

Condition	Status LED (Blue)	Error LED (Red)
Normal Operation - Not Stowed	Off	Off
Normal Operation - Stowed	On	Off
Error - Monitor Not Found	Off	On



**Figure 1: Stow Module internal LED location**