## TROUBLESHOOTING GUIDE

AOI AIRBAG ON/OFF SWITCHES DRIVER'S, PASSENGERS, AND SIDE-CURTAIN



This guide is intended for general troubleshooting purposes of the AOI Electrical Air Bag ON/OFF Switch and its installation only. It is not to be used or referenced for any other Supplemental Restraint System (SRS) repair or diagnostics.

## **WARNING:**

Never probe the electrical connectors on air bag, safety canopy or side air curtain modules. Failure to follow this instruction may result in the accidental deployment of these modules, which increases the risk of serious personal injury or death.

## **WARNING:**

When performing service on or near the Supplemental Inflatable Restraint (SIR) components or the SIR wiring, the SIR system must be disabled. Failure to observe the correct procedure could cause deployment of the SIR components. Serious injury can occur. Failure to observe the correct procedure could also result in unnecessary SRS system repairs. Consult OEM Dealer or Repair Manuals for correct procedures.

The Electrical Connections between the AOI Switch and the OEM SIR System are commonly the culprit of a SRS trouble codes. A note about connections, the best electrical connection is achieved with a hot soldered joint, i.e., a hot joint is shiny rather than dull and during soldering, the solder is melted by the wires themselves instead of being melted by the soldering iron directly. This is the preferred connection method, and soldered connections should be insulated with the appropriate size of heat shrink tubing or the 3M Adhesion tape supplied in the installation kit.

Butt connections are an acceptable substitute for soldering. If using insulated butt connectors, we strongly recommend a flat-jawed crimp tool, e.g., Klein model 1002. The best method is to fold over the stripped wire before inserting in the butt connector for a secure connection, the connections should be insulated with the appropriate size of heat shrink tubing or the 3M Adhesion Tape supplied in the installation kit.

Confirm that the vehicle passed the Pre-Installation Test Procedure (see Installation Instructions). If the vehicle failed the Pre-Installation Test, remove the AOI Switch. The vehicle SRS System should be serviced by a reputable repair facility before attempting to reinstall the AOI Switch.

Make certain that all of the following conditions are true.

- All components of the SRS System are installed and functioning properly, e.g., Occupant Present System, SIR air bag modules, Seat Rail switches., Seat Belt Pretensioner switches.
- Attempted to reset the SIR trouble code by cycling the vehicle ignition. Turn the ignition OFF, wait at least 3 minutes, turn the vehicle ignition From OFF to ON, visually monitor the air bag indicator. Confirm that a code still exist.
- AOI Air Bag Switch is the correct model for my vehicle?
- The vehicle has a dependable 12V power source (charged battery)?
- AOI Air Bag Switch has 12V power and a solid ground?
- Both the AOI Switch and OEM air bag connectors are oriented and seated properly?

- All connections related to the AOI Air Bag Switch meet the above connection criteria?
- AOI Air Bag Switch wiring connection wire colors and routing are in accordance with the Install Instructions and/or other supplied wiring diagrams?

If all above conditions have been meet and do not resolve the SRS trouble code please call AOI Electrical Technical Assistance at 1-800-480-6680.

You will need the following information:

- Vehicle Make, Model, Year of manufacture, and the SIR System you are attempting to disable.
- AOI Switch model number and serial number (located on the switch box).
- Supplier from where the switch was purchased. If purchased directly from AOI

## **Prove Out Procedure**

AOI Electrical Air Bag Switch

For this test you will need a Multimeter that measures resistance, or on Ohmmeter. Note many digital meters cannot be zeroed and initial values need to be taken into account to determine the actual measured values. Minor differences are acceptable.

You will need to uninstall the AOI Switch from the vehicle, however you will still need to provide a 12V power source and ground. **NOTE:** *DO NOT use a Multimeter on the vehicle's wiring or a switch connected to the vehicle* 

Call AOI Technical Support if there are significant differences in the values in the tables shown below.

Turn the AOI Switch to the ON position. Measure the following resistances between the switch wires and note any variances from the nominal values.

WIRE TO WIRE COLOR	NOMINAL MEASUREMENT	ACTUAL MEASUREMENT
WHITE to YELLOW	Zero	
PINK to ORANGE	Zero	
WHITE to GREEN	Open (infinite resistance)	
PINK to TAN	Open (infinite resistance)	
YELLOW to GREEN	Open (infinite resistance)	
ORANGE to TAN	Open (infinite resistance)	

Turn the AOI Switch to the OFF position. Measure the following resistances between the switch wires and note any variances from the nominal values.

WIRE TO WIRE COLOR	NOMINAL MEASUREMENT	ACTUAL MEASUREMENT
WHITE to YELLOW	Open (infinite resistance)	
PINK to ORANGE	Open (infinite resistance)	
WHITE to GREEN	Near 2 Ohms	
PINK to TAN	Near 2 Ohms	
YELLOW to GREEN	Open (infinite resistance)	
ORANGE to TAN	Open (infinite resistance)	