LMS2, Service Bulletin, IO Module Connectors

Description of Service Bulletin

This SB relates to the occurrence of corrosion and/or electrical connection anomalies in the power / signal connections to the IO Module of the LMS2.

To date there have been approximately 8 occurrences of warranty claims where the following items were reported as part of the claim:

- LMSs Display modules not switching on.
- LMSs IO module not switching on, or switching off randomly.
- Forward / Reverse problems.
- Green / Yellow / Cable Reel sensors not found on network.

In most instances the fault investigation for warranty claims have found:

- Connector Pins backed out of connectors. This could occur during installation, or during maintenance.
- Connector pins corroded or damaged.
- Moisture, dirt or other contamination in connector.

In many instances the customer was asked to check the quality of the connector, however **reported that "it was fine".** This led to unnecessary replacement of components.

Affected Components

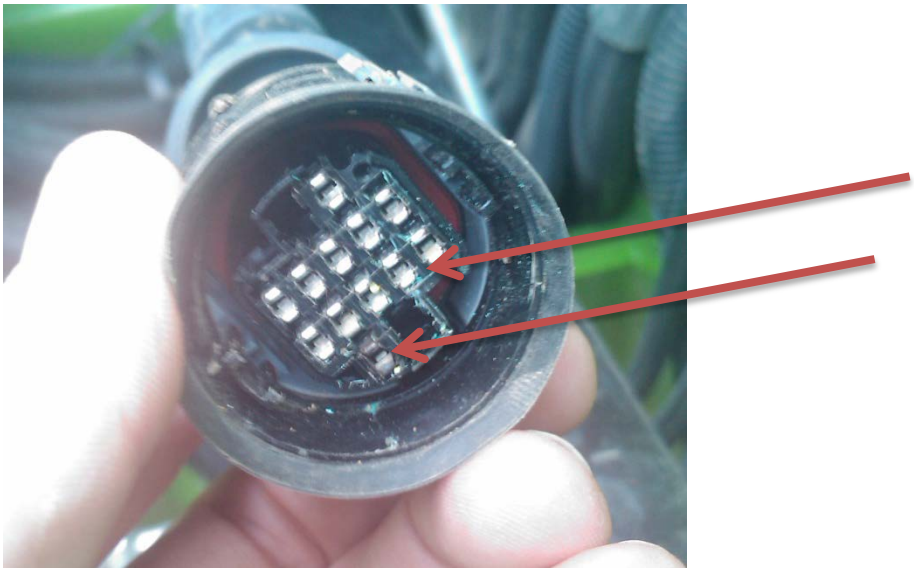
- LMS2-LASX060 – IO Module

Compliance Requirements

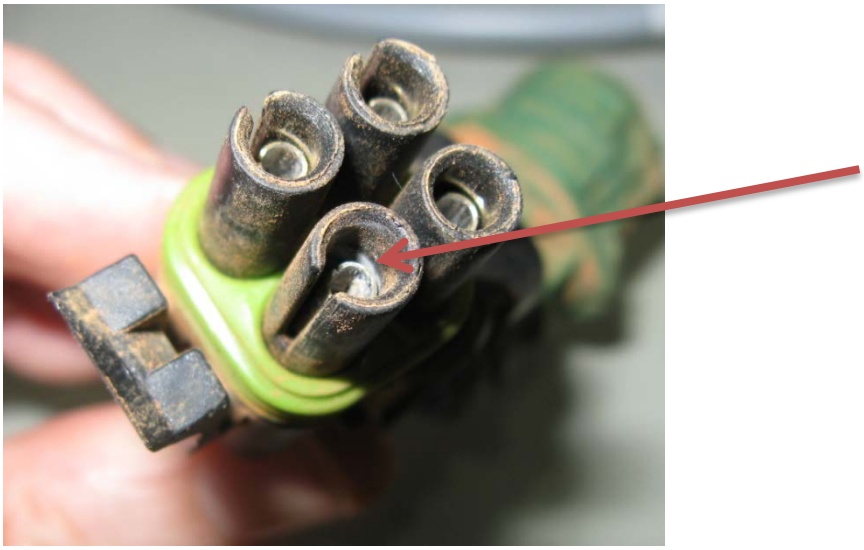
Optional – Should be checked during service intervals or when a fault report is generated.

Action Required

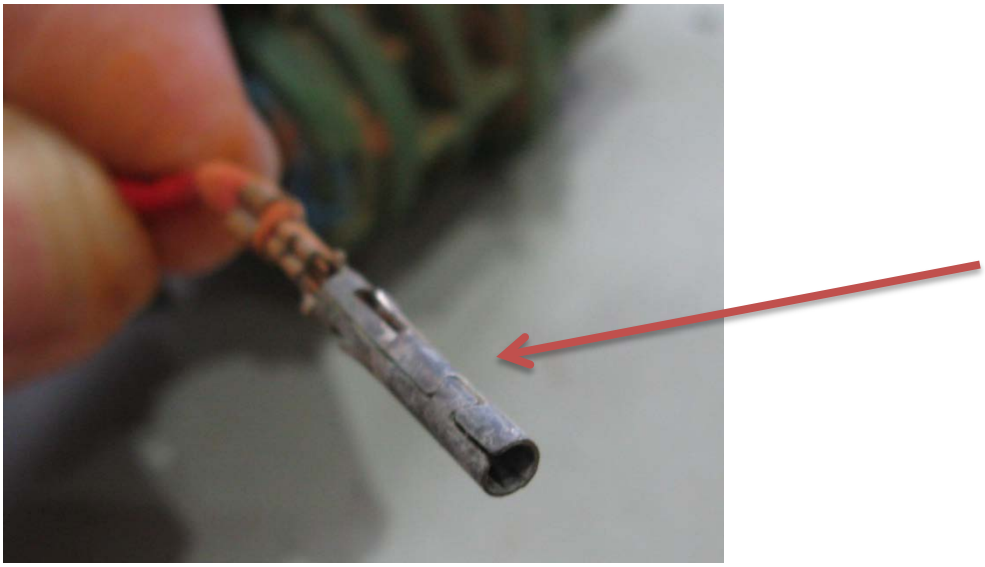
Check both ends of the 14 pin FCI connector. It is essential that the yellow and white retainers are removed from the connectors and each pin checked. Signs of corrosion will vary from a slight discoloration of the pin, to a blue coloured copper oxide. This is indicative of moisture ingress into the connector.



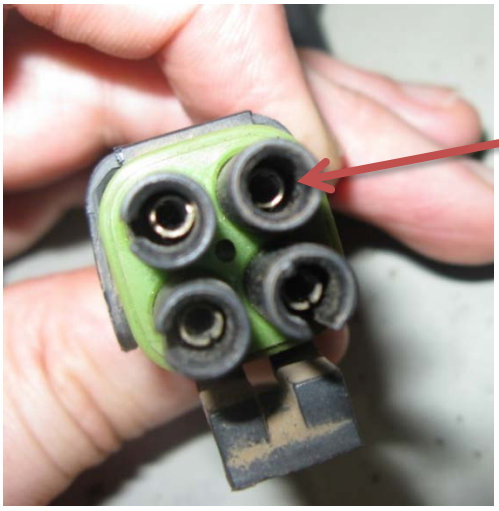
The above image shows blue copper oxide around the connectors as well as one connector pin badly tarnished. In this instance the connector must be changed, cleaning will not suffice.



In the above instance the connector pin (PIN B – Main power pin) was corroded. Without careful inspection this fault was missed. The unit reported sensors failing and an un-reliable display module. The fault inspection determined that the electrical pin had a large voltage drop across it causing the LMS system to lose power.



The above instance shows a crimp terminal that is tarnished. This causes a voltage drop across the connector, or total loss of LMS power.



In the above example a connector pin has been backed out of the connector. This causes an intermittent electrical connection and loss of display power. The IO Module was returned for warranty however no faults other than the connector were found.

Additional Notes

In any instance that the integrity of the electrical connector is compromised, especially the 4 pin power connector, the entire connector must be replaced with a suitable replacement connector.

In the event of corrosion of the pins, it is unacceptable just to clean one connector as both ends of the connector will suffer the same problem.

If in doubt change the connector, it is the least expensive option.

To obtain spare parts or further information please visit http://sil3.com.au/lms2/