Diagnostic Trouble Codes - Troubleshooting Manual Instrument Cluster

Contents

Contents

| Contents | 2 |
|--|----|
| B1091- 11 – LH Grip Temperature Sensor Short to Ground | 4 |
| B1091- 13 – LH Grip Temperature Sensor open | 7 |
| B1096- 11 – RH Grip Temperature Sensor Short to Ground | 10 |
| B1096-13-RH Grip Temperature Sensor open | 13 |
| B1097- 18– Heated Grip Output Under-current | 16 |
| B1097- 19 – Heated Grip Output Over-current | 19 |
| B1114- 12- Heated Grip Switch Short to Battery | 21 |
| B1054-11– Hazard Driver Short to Ground | 36 |
| U1005-00– Turn Indicator Driver Over-current | 39 |

List of Diagnostics Trouble Codes

| Sr No | Error Codes | Error code description |
|-------|----------------|--|
| 1 | B109111 | LH Grip Temperature Sensor short to ground |
| 2 | B109113 | LH Grip Temperature Sensor open |
| 3 | B109611 | RH Grip Temperature Sensor short to ground |
| 4 | B109613 | RH Grip Temperature open |
| 5 | B109718 | Heated Grip Output Under-current |
| 6 | B109719 | Heated Grip Output Over-current |
| 7 | B111412 | Heated Grip switch short to battery |
| 8 | U100002 | ABS Malfunction |
| 9 | U100287 | CAN ERROR EMS-Missing |
| 10 | U100387 | CAN ERROR ABS-Missing |
| 11 | U100500 | Turn Indicator Over-current |
| 12 | P1621-11 | Fuel Level sensor short to ground |
| 13 | P1622-12 | Fuel Level sensor short to battery |
| 14 | B1054-11 | Hazard Driver short to ground |
| 15 | U1012-22 | CAN Failure/Bus OFF |

Note: Actual description of DTC may vary to make it fit to display on diagnostics tool screen.

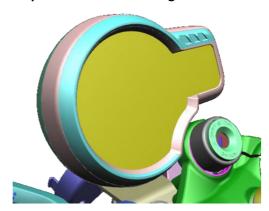
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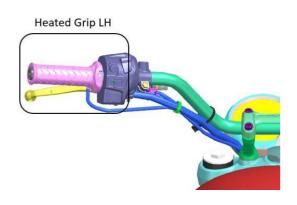
B1091-11 - LH Grip Temperature Sensor Short to Ground

Overview:

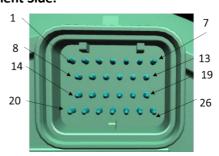
| | |
|-----------------------|---|
| Error Code | B1091-11 |
| Customer Symptom | Heated grip not working |
| Fault effects (On | Heated grip function disabled |
| vehicle) | |
| Lamp Status (If any) | Not applicable |
| Fault detection | This fault gets logged if Left hand side Heated grip temperature sensor |
| condition | input is short circuited to GROUND. |
| Probable trouble area | Instrument cluster, Wiring harness, Heated grip LH |
| Healing condition | Fault rectification after electrical diagnosis. |
| | |

Component Location & Image:





Connector View & Information: Component Side:

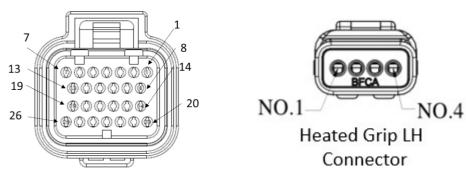


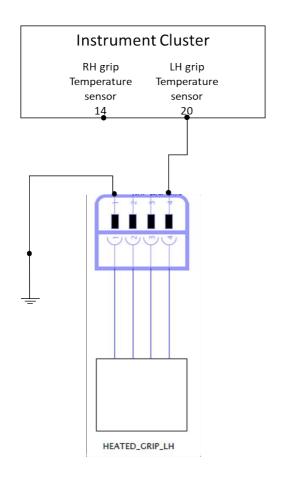
| Pin Number | Pin Description (Instrument Cluster) |
|------------|---|
| Pin 20 | LH grip temperature sensor |



| Pin Number | Pin Description (Heated Grip LH) |
|------------|-------------------------------------|
| Pin 1 | Ground |
| Pin 2 | PWM supply input |
| Pin 3 | ON/OFF switch output |
| Pin 4 | Temperature sensor output |

Wiring Harness Side:





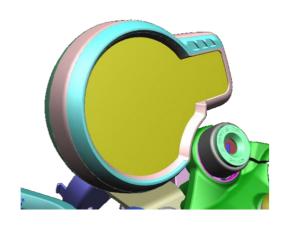
| Step | Checkpoint | If Yes | If No |
|------|---|--|---|
| 1 | Is there any rust/ oxidation observed on Instrument cluster terminals? | Replace instrument cluster | Go to Step 2 |
| 2 | Is there any terminal bend/damage inside Instrument cluster connector? | Replace instrument cluster | Go to Step 3 |
| 3 | Disconnect the Instrument cluster, disconnect heated grip and check following in wiring harness. Is pin no 20 short circuited to GROUND? | Short circuit in harness. Check/ Replace wiring harness | Go to Step 4 |
| 4 | Disconnect the Heated Grip LH and check following. Is pin no 4 short circuited to GROUND? | Open/ cut in harness. Check/ Replace heated grip | Go to Step 5 |
| 5 | Disconnect the Heated Grip LH and measure resistance between Pin 1 (Ground) & Pin 4 (Temperature sensor output) At 25°C, is resistance = $10 \pm 0.5 \text{ k}\Omega$? | Go to Step 6 | Open/ cut in harness. Check/ Replace heated grip |
| 6 | Erase fault in diagnostics tool and check again. Is fault still present? | Replace Instrument cluster | |

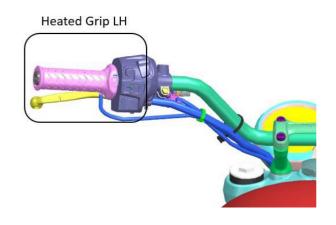
B1091-13 – LH Grip Temperature Sensor open

Overview:

| Error Code | B1091-13 |
|-----------------------|---|
| Customer Symptom | Heated grip not working |
| Fault effects (On | Heated grip function disabled |
| vehicle) | |
| Lamp Status (If any) | Not applicable |
| Fault detection | This fault gets logged if Left hand side Heated grip temperature sensor |
| condition | input is short circuited to GROUND. |
| Probable trouble area | Instrument cluster, Wiring harness, Heated grips LH |
| Healing condition | Fault rectification after electrical diagnosis. |
| | |

Component Location & Image:

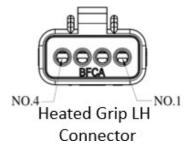




Connector View & Information: Component Side:

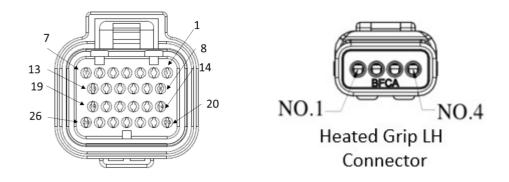


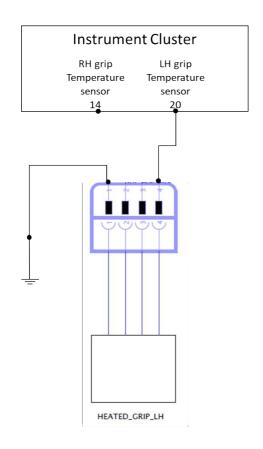
| Pin Number | Pin Description (Instrument Cluster) |
|------------|---|
| Pin 20 | LH grip temperature sensor |



| Pin Number | Pin Description (Heated Grip LH) |
|------------|-------------------------------------|
| Pin 1 | Ground |
| Pin 2 | PWM supply input |
| Pin 3 | ON/OFF switch output |
| Pin 4 | Temperature sensor output |

Wiring Harness Side:





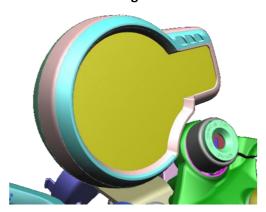
| Step | Checkpoint | If Yes | If No |
|------|---|-------------------------------|---|
| 1 | Is there any rust/ oxidation observed on Instrument cluster terminals? | Replace instrument cluster | Go to Step 2 |
| 2 | Is there any terminal bend/damage inside Instrument cluster connector? | Replace instrument cluster | Go to Step 3 |
| 3 | Disconnect the Instrument cluster, disconnect heated grip and check following in wiring harness. Is pin no 20 to Pin 4 wire continuity ok? | Go to Step 4 | Open circuit in harness. Check/ Replace wiring harness |
| 4 | Disconnect the Heated Grip LH and measure resistance between Pin 1 (Ground) & Pin 4 (Temperature sensor output) At 25°C, is resistance = $10 \pm 0.5 \text{ k}\Omega$? | Go to Step 6 | If resistance is shown OPEN. Check/ Replace heated grip |
| 5 | Erase fault in diagnostics tool and check again. Is fault still present? | Replace Instrument cluster | |

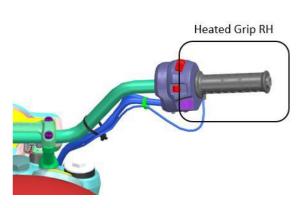
B1096-11 - RH Grip Temperature Sensor Short to Ground

Overview:

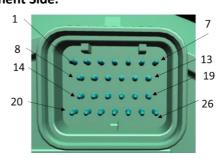
| • | |
|---|--|
| Error Code | B1096-11 |
| Customer Symptom | Heated grip not working |
| Fault effects (On | Heated grip function disabled |
| vehicle) | |
| Lamp Status (If any) | Not applicable |
| Fault detection | This fault gets logged if Right hand side Heated grip temperature sensor |
| condition | input is open circuit. |
| Probable trouble area | Instrument cluster, Wiring harness, Heated grips RH |
| Healing condition | Fault rectification after electrical diagnosis. |
| | |

Component Location & Image:

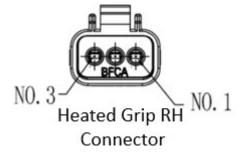




Connector View & Information: Component Side:

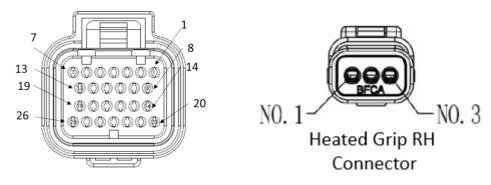


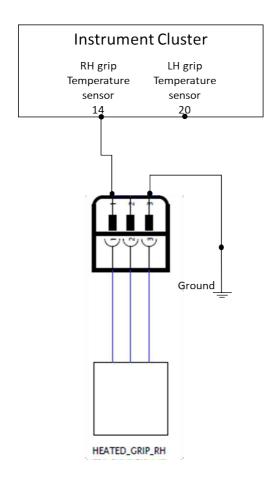
| Pin Number | Pin Description (Instrument Cluster) |
|------------|---|
| Pin 14 | RH grip temperature sensor |



| Pin Number | Pin Description (Heated Grip) |
|------------|----------------------------------|
| Pin 1 | Temperature sensor output |
| Pin 2 | PWM supply input |
| Pin 3 | Ground |

Wiring Harness Side:





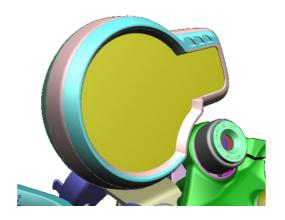
| Step | Checkpoint | If Yes | If No |
|------|--|---|---|
| 1 | Is there any rust/ oxidation observed on Instrument cluster terminals? | Replace instrument cluster | Go to Step 2 |
| 2 | Is there any terminal bend/damage inside Instrument cluster connector? | Replace instrument cluster | Go to Step 3 |
| 3 | Disconnect the Instrument cluster, disconnect heated grip and check following in wiring harness. Is pin no 14 short circuited to GROUND? | Short circuit in harness. Check/ Replace wiring harness | Go to Step 4 |
| 4 | Disconnect the Heated Grip RH and check following. Is pin no 1 short circuited to GROUND? | Open/ cut in harness. Check/ Replace heated grip | Go to Step 5 |
| 5 | Disconnect the Heated Grip RH and measure resistance between Pin 1 (Temperature sensor output) & Pin 3 (Ground) At 25°C, is resistance = $10 \pm 0.5 \text{ k}\Omega$? | Go to Step 6 | Open/ cut in harness. Check/ Replace heated grip |
| 6 | Erase fault in diagnostics tool and check again. Is fault still present? | Replace Instrument cluster | |

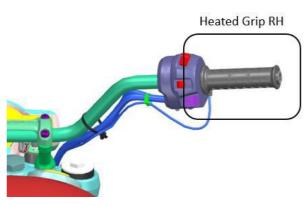
B1096-13-RH Grip Temperature Sensor open

Overview:

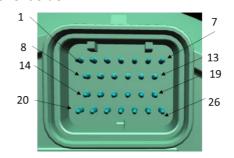
| orking |
|--|
| orking |
| DIKING |
| on disabled |
| |
| ed if Right hand side Heated grip temperature sensor |
| it. |
| , Wiring harness, Heated grips RH |
| after electrical diagnosis. |
| i |

Component Location & Image:





Connector View & Information: Component Side:

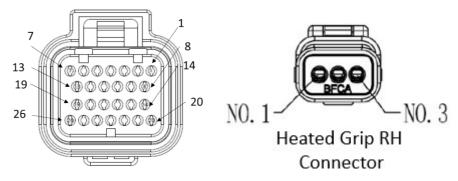


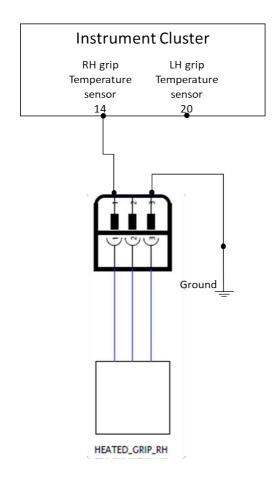
| Pin Number | Pin Description (Instrument Cluster) |
|------------|---|
| Pin 14 | RH grip temperature sensor |



| Pin Number | Pin Description (Heated Grip) |
|------------|----------------------------------|
| Pin 1 | Temperature sensor output |
| Pin 2 | PWM supply input |
| Pin 3 | Ground |

Wiring Harness Side:





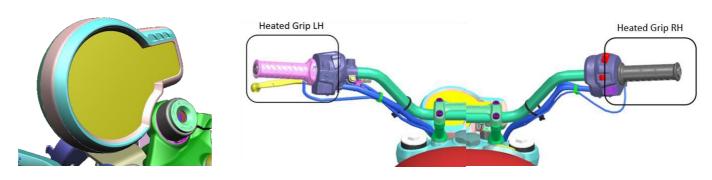
| Step | Checkpoint | If Yes | If No |
|---|--|---|--|
| 1 | Is there any rust/ oxidation observed on Instrument cluster terminals? | Replace instrument cluster | Go to Step 2 |
| 2 | 2 Is there any terminal bend/ damage inside Instrument cluster connector? Replace inside cluster | | Go to Step 3 |
| Disconnect the Instrument cluster, disconnect heated grip and check following in wiring harness. Go to Step 4 Is pin no 14 to Pin 1 wire continuity ok? | | Open circuit in harness. Check/ Replace wiring harness | |
| 4 | Disconnect the Heated Grip RH and measure resistance between Pin 1 (Temperature sensor output) & Pin 3 (Ground) At 25°C, is resistance = $10 \pm 0.5 \text{ k}\Omega$? | Go to Step 6 | If resistance is shown OPEN. Check/ Replace heated grip |
| 5 | Erase fault in diagnostics tool and check again. Is fault still present? | Replace Instrument cluster | |

B1097-18- Heated Grip Output Under-current

Overview:

| • | |
|---|---|
| Error Code | B1097-18 |
| Customer Symptom | Heated grip not working |
| Fault effects (On | Heated grip function disabled |
| vehicle) | |
| Lamp Status (If any) | Not applicable |
| Fault detection | This fault gets logged if heated grip LH/ RH drawn current is less than |
| condition | threshold |
| Probable trouble area | Instrument cluster, Wiring harness, Heated grips LH & RH |
| Healing condition | Fault rectification after electrical diagnosis. |
| | |

Component Location & Image:

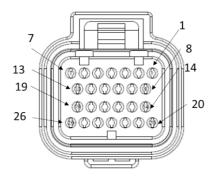


Connector View & Information: Component Side:

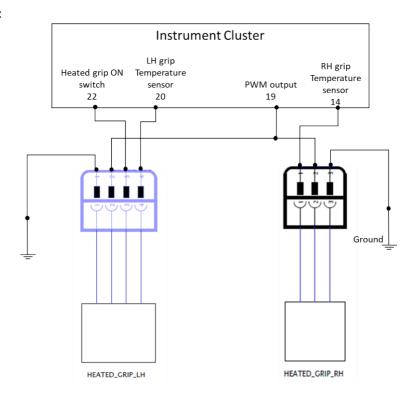


| Pin Number | Pin Description |
|------------|------------------------|
| Pin 19 | Heated Grip PWM Output |

Wiring Harness Side:



Circuit Interface:



| Step | Checkpoint | If Yes | If No |
|------|---|----------------------------------|--------------|
| 1 | Is there any terminal bend/ damage inside Instrument cluster connector? | Replace instrument cluster | Go to Step 2 |
| 2 | Check if any of the heated grip is electrically open circuit. Disconnect LH heated grip and check wire continuity between Pin 19 (PWM output) and Pin 2 (LH heated grip) Is wire continuity NOK? | Check/ Replace LH heated grip | Go to Step 3 |

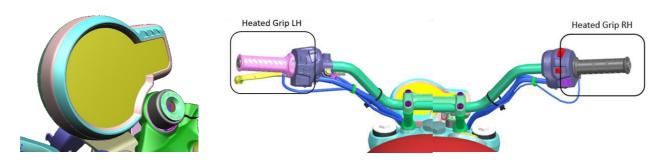
| 3 | | Check if any of the heated grip is electrically open circuit. Disconnect RH heated grip and check wire continuity between Pin 19 (PWM output) and Pin 2 (RH heated grip) Is wire continuity NOK? | Check/ Replace RH heated grip | Go to Step 4 |
|---|---|---|----------------------------------|--------------|
| | 4 | Disconnect the LH and RH heated grip one by one and check if fault gets rectified. | Replace defective Heated Grip | Go to Step 4 |
| | 5 | Erase fault in diagnostics tool and check again. Is fault still present? | Replace Instrument cluster | |

B1097-19 – Heated Grip Output Over-current

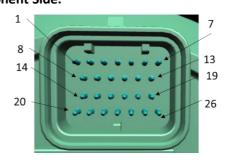
Overview:

| Error Code | B1097-19 |
|-----------------------|---|
| Customer Symptom | Heated grip not working |
| Fault effects (On | Heated grip function disabled |
| vehicle) | |
| Lamp Status (If any) | Not applicable |
| Fault detection | This fault gets logged if heated grip LH/ RH drawn current is higher than |
| condition | threshold |
| Probable trouble area | Instrument cluster, Wiring harness, Heated grips LH & RH |
| Healing condition | Fault rectification after electrical diagnosis. |
| | |

Component Location & Image:

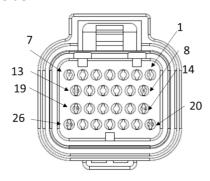


Connector View & Information: Component Side:

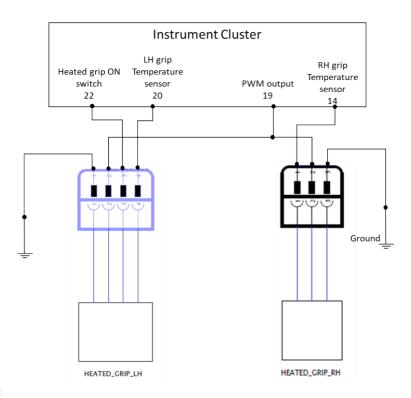


| Pin Number | Pin Description |
|------------|-----------------------|
| Pin 19 | PWM output for heated |
| 111115 | grips |
| | |

Wiring Harness Side:



Circuit Interface:



| Step | Checkpoint | If Yes | If No |
|------|---|----------------------------------|--------------|
| 1 | Is there any terminal bend/damage inside Instrument cluster connector? | Replace instrument cluster | Go to Step 2 |
| 2 | Check if any of the heated grip is short circuit to ground. Disconnect LH heated grip and check wire continuity between Pin 19 (PWM output) and Ground. Is continuity | Check/ Replace LH heated grip | Go to Step 3 |
| 3 | Check if any of the heated grip is short circuit to ground. Disconnect RH heated grip and check wire continuity between Pin 19 (PWM output) and Ground. | Check/ Replace RH heated grip | Go to Step 4 |
| 4 | Disconnect the LH and RH heated grip one by one and check if fault gets rectified. | Replace defective Heated Grip | Go to Step 4 |
| 5 | Erase fault in diagnostics tool and check again. Is fault still present? | Replace Instrument cluster | |

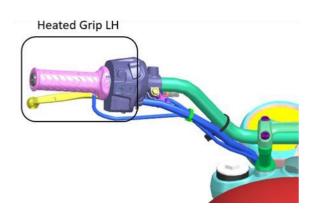
B1114-12– Heated Grip Switch Short to Battery

Overview:

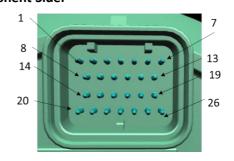
| • | |
|---|---|
| Error Code | B1114-12 |
| Customer Symptom | Heated grip not working |
| Fault effects (On | Heated grip function disabled |
| vehicle) | |
| Lamp Status (If any) | Not applicable |
| Fault detection | This fault gets logged if heated grip LH input switch is short to GROUND. |
| condition | |
| Probable trouble area | Instrument cluster, Wiring harness, Heated grips LH |
| Healing condition | Fault rectification after electrical diagnosis. |
| | |

Component Location & Image:

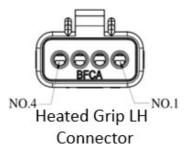




Connector View & Information: Component Side:

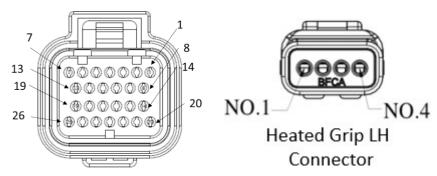


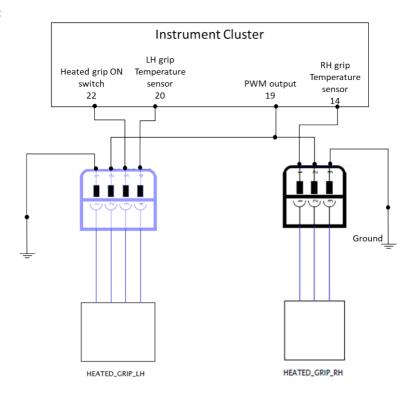
| Pin Number | Pin Description (Instrument Cluster) |
|------------|---|
| Pin 22 | Heated grip On/Off switch |



| Pin Number | Pin Description (Heated Grip LH) |
|------------|-------------------------------------|
| Pin 1 | Ground |
| Pin 2 | PWM supply input |
| Pin 3 | ON/OFF switch output |
| Pin 4 | Temperature sensor output |

Wiring Harness Side:





| Step | Checkpoint | If Yes | If No |
|------|---|--|--------------|
| 1 | Is there any rust/ oxidation observed on Instrument cluster terminals? | Replace instrument cluster | Go to Step 2 |
| 2 | Is there any terminal bend/damage inside Instrument cluster connector? | Replace instrument cluster | Go to Step 3 |
| 3 | Disconnect the Instrument cluster and check following. Is pin no 22 short circuited to BATTERY? | Short circuit in harness. Check/ Replace wiring harness | Go to Step 4 |
| 4 | Disconnect the Heated Grip LH and check following. Is pin no 3 short circuited to BATTERY? | Open/ cut in harness. Check/ Replace heated grip LH | Go to Step 5 |
| 5 | Disconnect Heated Grip LH and check if fault gets rectified. | Replace defective Heated Grip | Go to Step 6 |
| 6 | Erase fault in diagnostics tool and check again. Is fault still present? | Replace Instrument cluster | |

U1000-02 - ABS Malfunction

Overview:

| U1000-02 |
|---|
| ABS Tell-tale continuously ON |
| ABS not working |
| ABS Tell-tale is ON |
| This fault is detected if CAN communication message 0x121, signal |
| T_state_ABS is set to ABS failure, indicating internal faults in ABS ECU. |
| ABS |
| Fault rectification after electrical diagnosis. |
| |

Component Location & Image:

NA

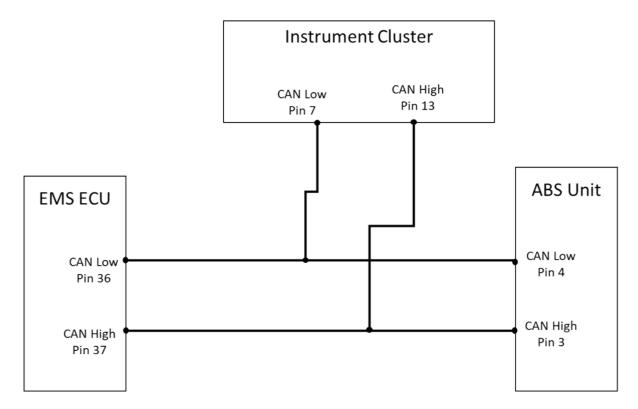
Connector View & Information:

Component Side:

NA

Wiring Harness Side:

NA



| Step | Checkpoint | If Yes | If No |
|------|--|---|-------------------------------------|
| 1 | Is there any rust/oxidation/ sulphation observed on any of the terminal? | Repair/ Clean | Go to Step 2 |
| 2 | Disconnect Instrument cluster and ABS and check continuity of wires Is continuity observed for wire of "CAN Low" Pin 36 of ABS ECU and Pin 7 of Instrument cluster? | Go to Step 3 | Check/ Replace wiring harness |
| 3 | Disconnect Instrument cluster and ABS ECU and check continuity of wires Is continuity observed for wire of "CAN High" Pin 37 of ABS ECU and Pin 13 of Instrument cluster? | Go to Step 4 | Check/ Replace wiring harness |
| 4 | Is fault still present? | Replace ABS ECU/ Replace Instrument cluster | |

U1002-87- CAN error EMS missing

Overview:

| Error Code | U1002-87 |
|----------------------------|--|
| Customer Symptom | Tell-tales related to Engine keep flashing |
| Fault effects (On vehicle) | Instrument cluster to EMS ECU communication disabled |
| Lamp Status (If any) | Tell-tales related to Engine keep flashing |
| Fault detection condition | This fault gets detected if CAN communication between instruments cluster and EMS ECU is affected. |
| Probable trouble area | Instrument cluster, Wiring harness, Engine ECU |
| Healing condition | Fault rectification after electrical diagnosis. |

Component Location & Image:

NA

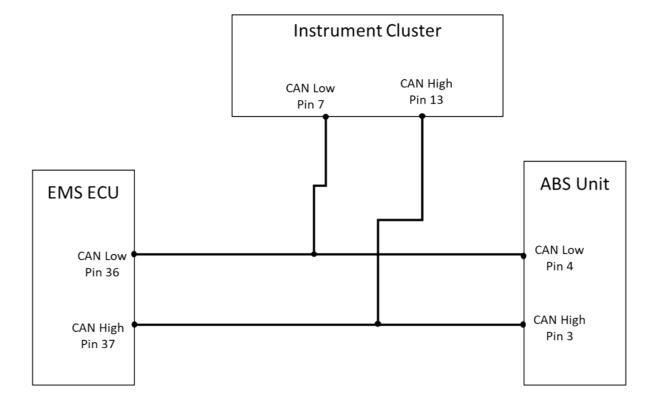
Connector View & Information:

Component Side:

NA

Wiring Harness Side:

NA



| Step | Checkpoint | If Yes | If No |
|------|--|--|-------------------------------------|
| 1 | Is there any rust/oxidation/ sulphation observed on any of the terminal? | Repair/ Clean | Go to Step 2 |
| 2 | Disconnect Instrument cluster and Engine ECU and check continuity of wires Is continuity observed for wire of "CAN Low" Pin 36 of Engine ECU and Pin 7 of Instrument cluster? | Go to Step 3 | Check/ Replace wiring harness |
| 3 | Disconnect Instrument cluster and Engine ECU and check continuity of wires Is continuity observed for wire of "CAN High" Pin 37 of Engine ECU and Pin 13 of Instrument cluster? | Go to Step 4 | Check/ Replace wiring harness |
| 4 | Is fault still present? | Replace Engine ECU/ Replace Instrument cluster | |
| | | | |

U1003-87- CAN error ABS missing

Overview:

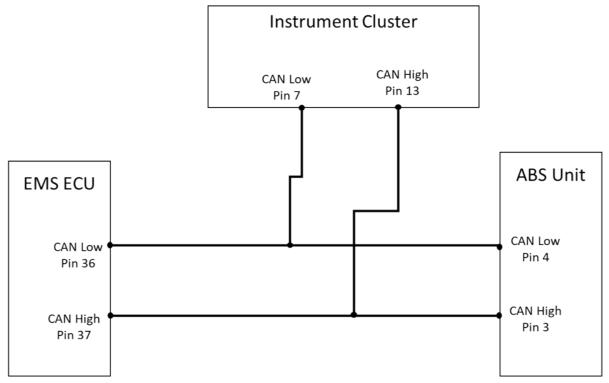
| Error Code | U1003-87 |
|----------------------------|--|
| Customer Symptom | ABS Tell – tale ON |
| Fault effects (On vehicle) | ABS ECU to Instrument Cluster CAN messages timeout detected. |
| Lamp Status (If any) | Tell-tales related to ABS ON |
| Fault detection condition | This fault gets detected if CAN communication messages between received from ABS have errors/ CAN messages not received. |
| Probable trouble area | ABS ECU, Wiring harness, Instrument cluster |
| Healing condition | Fault rectification after electrical diagnosis. |

Component Location & Image:

NA

Connector View & Information:

NA



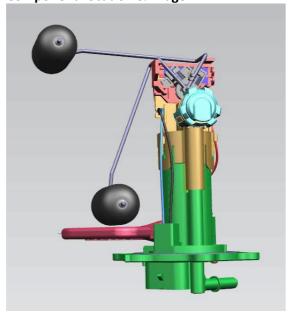
| Step | Checkpoint | If Yes | If No |
|------|---|---|-------------------------------------|
| 1 | Is there any rust/oxidation/ sulphation observed on any of the terminal? | Repair/ Clean | Go to Step 2 |
| 2 | Disconnect Instrument cluster and ABS ECU and check continuity of wires Is continuity observed for wire of "CAN Low" Pin 4 of ABS ECU and Pin 7 of Instrument cluster? | Go to Step 3 | Check/ Replace wiring harness |
| 3 | Disconnect Instrument cluster and ABS ECU and check continuity of wires Is continuity observed for wire of "CAN High" Pin 3 of ABS ECU and Pin 13 of Instrument cluster? | Go to Step 4 | Check/ Replace wiring harness |
| 4 | Is fault still present? | Replace ABS ECU/ Replace Instrument cluster | |

P1621-11- Fuel Level Sensor Short to Ground

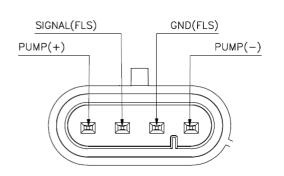
Overview:

| Error Code | P1621-11 |
|----------------------------|--|
| Customer Symptom | All fuel bars blinking with 1 Hz |
| Fault effects (On vehicle) | Fuel related information displayed on LCD is not valid/hampered. |
| Lamp Status (If any) | NA NA |
| Fault detection condition | This fault is detected when the FLS input is short to ground |
| Probable trouble area | Wiring harness, Instrument cluster |
| Healing condition | Fault rectification after electrical diagnosis. |

Component Location & Image:

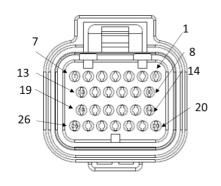


Connector View & Information: Fuel Pump side:

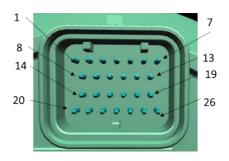




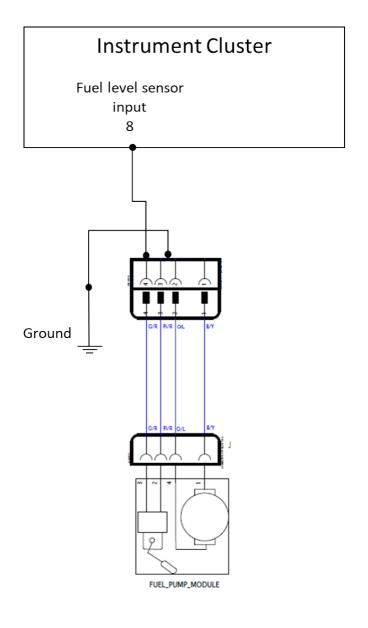
Wiring Harness Pigtail side:



Instrument Cluster side:



| Pin Number | Pin Description (Instrument Cluster) |
|------------|---|
| Pin 08 | Fuel level sensor input |



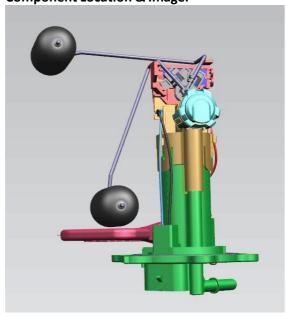
| Step | Checkpoint | If Yes | If No |
|------|---|--|--------------|
| 1 | Is there any rust/ oxidation observed on Instrument cluster terminals? | Replace instrument cluster | Go to Step 2 |
| 2 | Is there any terminal bend/damage inside Instrument cluster connector? | Replace instrument cluster | Go to Step 3 |
| 3 | Disconnect the Instrument cluster, disconnect heated grip and check following in wiring harness. Is pin no 8 short circuited to GROUND? | Short circuit in harness. Check/ Replace wiring harness | Go to Step 4 |
| 4 | Disconnect the FLS and check following. Is pin no 3 short circuited to GROUND? | Open/ cut in harness. Check/ Replace heated grip | Go to Step 5 |
| 5 | Check for the interconnection Pigtail from FLS to main harness for short circuit to ground at Pin 3. | Replace Fuel wiring flylead. | Go to Step 6 |
| 6 | Erase fault in diagnostics tool and check again. Is fault still present? | Replace Instrument cluster | |

P1622-12 - Fuel Level Sensor Short to Supply

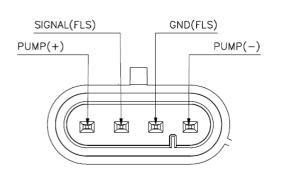
Overview:

| Error Code | P1622-12 |
|----------------------------|--|
| Customer Symptom | E & F Blinking with 1 Hz |
| Fault effects (On vehicle) | Fuel related information displayed on LCD is not valid/hampered. |
| Lamp Status (If any) | NA |
| Fault detection condition | This fault is detected when the FLS input is short to supply |
| Probable trouble area | Wiring harness, Instrument cluster |
| Healing condition | Fault rectification after electrical diagnosis. |

Component Location & Image:

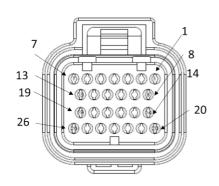


Connector View & Information: Fuel Pump side:





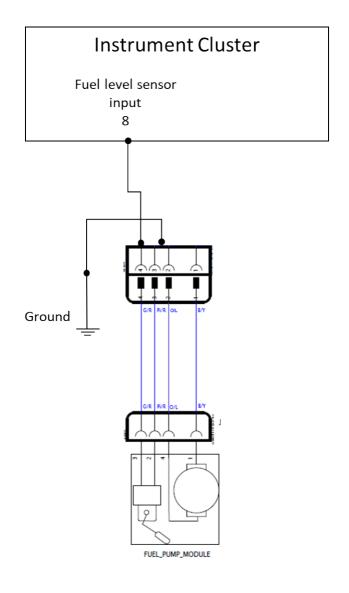
Wiring Harness Pigtail side:



Instrument Cluster side:



| Pin Number | Pin Description (Instrument Cluster) |
|------------|---|
| Pin 08 | Fuel level sensor input |



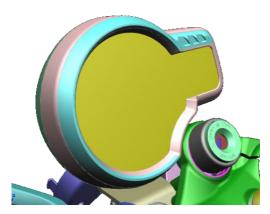
| Step | Checkpoint | If Yes | If No |
|------|--|--|--------------|
| 1 | Is there any rust/ oxidation observed on Instrument cluster terminals? | Replace instrument cluster | Go to Step 2 |
| 2 | Is there any terminal bend/damage inside Instrument cluster connector? | Replace instrument cluster | Go to Step 3 |
| 3 | Disconnect the Instrument cluster, disconnect heated grip and check following in wiring harness. Is pin no 8 short circuited to BATTERY? | Short circuit in harness to BATT. Check/ Replace wiring harness | Go to Step 4 |
| 4 | Disconnect the FLS and check following. Is pin no 3 short circuited to BATTERY? | Open/ cut in harness. Check/ Replace heated grip | Go to Step 5 |
| 5 | Check for the interconnection flylead from FLS to main harness for short circuit to battery at Pin 3. | Replace Fuel wiring flylead. | Go to Step 6 |
| 6 | Erase fault in diagnostics tool and check again. Is fault still present? | Replace Instrument cluster | |

B1054-11– Hazard Driver Short to Ground

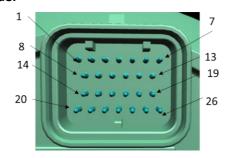
Overview:

| P Code | B1054-11 |
|-----------------------|---|
| Customer Symptom | Hazard function not working/ disabled |
| Fault effects (On | Hazard function disabled |
| vehicle) | |
| Lamp Status (If any) | Not applicable |
| Fault detection | This fault gets logged if Hazard indicator output is short circuited to |
| condition | GROUND. |
| Probable trouble area | Instrument cluster, Wiring harness, Turn Indicators |
| Healing condition | Fault rectification after electrical diagnosis. |

Component Location & Image:

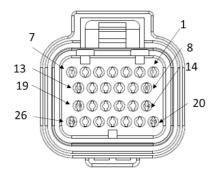


Connector View & Information: Component Side:

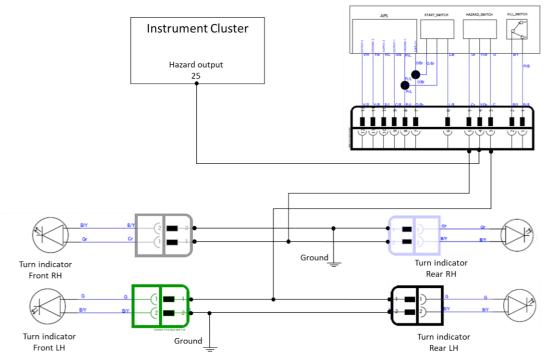


| Pin Number | Pin Description |
|------------|-----------------|
| Pin 25 | Hazard output |

Wiring Harness Side:



Circuit Interface:



| Step | Checkpoint | If Yes | If No |
|------|---|--|--------------|
| 1 | Is there any rust/ oxidation observed on sensor terminals? | Replace the sensor | Go to Step 2 |
| 2 | Is there any terminal bend/ damage inside sensor connector? | Replace the sensor | Go to Step 3 |
| 3 | Disconnect the sensor and then check following. Is ECU pin no 18 short circuited to GROUND? | Short circuit in harness. Check/ Replace wiring harness | Go to Step 4 |
| 4 | Is ECU pin no 18 open circuited? Is there any damage/ cut/ pinching of wiring | Open/ cut in harness. | Go to Step 5 |

| | | wiring harness | |
|---|--|-------------------------------------|--------------|
| 5 | Is there +5V supply available at pin no 4 of sensor? | Replace wiring harness/ Replace ECU | Go to Step 6 |
| 6 | Erase fault in diagnostics tool and check again. Is fault still present? | Replaced Sensor/ Replace ECU | |

U1005-00– Turn Indicator Driver Over-current

Overview:

| U1005-00 |
|---|
| Turn indicator function not working/ disabled |
| Turn indicator function disabled |
| |
| Not applicable |
| This fault gets logged if LH/RH turn indicator output current drawn is more |
| than threshold of 750 mA |
| Instrument cluster, Wiring harness, Turn Indicators |
| Fault rectification after electrical diagnosis. |
| |

Component Location & Image:

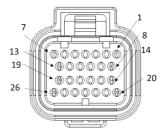


Connector View & Information: Component Side:

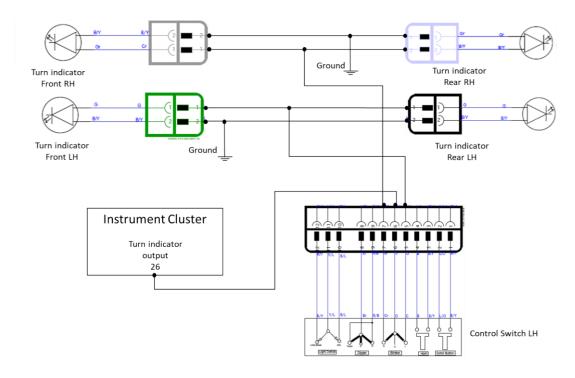


| Pin Number | Pin Description |
|------------|-----------------------|
| Pin 26 | Turn indicator output |

Wiring Harness Side:



Circuit Interface:



| Step | Checkpoint | If Yes | If No |
|------|--|---|--------------|
| 1 | Is there any terminal bend/ damage inside Instrument cluster connector? | Replace instrument cluster | Go to Step 2 |
| 2 | Measure current drawn by each side (LH & RH) and ensure it is below 750 mA. | Identify which side is causing excess current | Go to Step 3 |
| 3 | Disconnect the all 4 Turn indicators one by one and check if fault gets rectified. | Replace defective turn indicator | Go to Step 4 |
| 4 | Erase fault in diagnostics tool and check again. Is fault still present? | Replaced Instrument cluster | |

U1012-22- CAN failure/ Bus off

Overview:

| P Code | U1012-22 |
|----------------------------|---|
| Customer Symptom | Instrument cluster |
| Fault effects (On vehicle) | Instrument cluster all CAN communication disabled and works in limited function mode. |
| Lamp Status (If any) | All CAN based tell-tale start blinking at 1Hz |
| Fault detection condition | This fault gets detected if CAN communication is not present/timeout. |
| Probable trouble area | Instrument cluster, Wiring harness |
| Healing condition | Fault rectification after electrical diagnosis. |

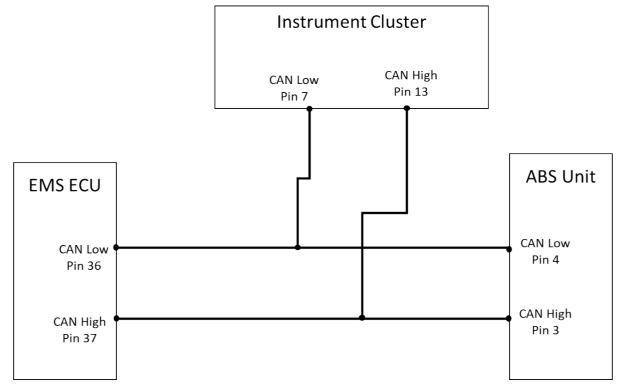
Component Location & Image:

NA

Connector View & Information: NA
Circuit Interface: NA

Troubleshooting:

CAN bus fault - Check for CAN bus resistance.



End of Document