The test cases here are described using Gherkin syntax, a non-technical, human readable language

The tests are ordered by opcode

# 0x87: Test\_RDGN

|  |  |
| --- | --- |
| Given: | The node number of the unit under test, a valid diagnostic number, and a valid service index number |
| When: | The cbus message RDGN is sent |
| Then: | **If the diagnostic number is 0:**  Expect a number of DGN messages from the unit under test  And expect the returned diagnostic numbers matches the expected diagnostic numbers defined in the module descriptor for the specified service (note: – not the diagnostic value)  **If the diagnostic number is non-zero:**  Expect a single DGN message for the specified node variable index |
| Additional: | The values received are stored against the corresponding service index |

# 0x87: Test\_RDGN\_INVALID\_DIAG

|  |  |
| --- | --- |
| Given: | The node number of the unit under test, a valid service index number and an invalid diagnostic number |
| When: | The cbus message RDGN is sent |
| Then: | Expect a GRSP message with a result of ‘Invalid Diagnostic’ (253) |
| Additional: |  |

# 0x87: Test\_RDGN\_INVALID\_SERVICE

|  |  |
| --- | --- |
| Given: | The node number of the unit under test, an invalid service index number and an valid diagnostic number |
| When: | The cbus message RDGN is sent |
| Then: | Expect a GRSP message with a result of ‘Invalid Service’ (252) |
| Additional: |  |

# 0x87: Test\_RDGN\_SHORT

|  |  |
| --- | --- |
| Given: | The node number of the unit under test, a valid service index number and a valid diagnostic number |
| When: | The cbus message RDGN is sent with the diagnostic number missing |
| Then: | Expect a GRSP message with a result of ‘Invalid Command’ (?) |
| Additional: |  |