



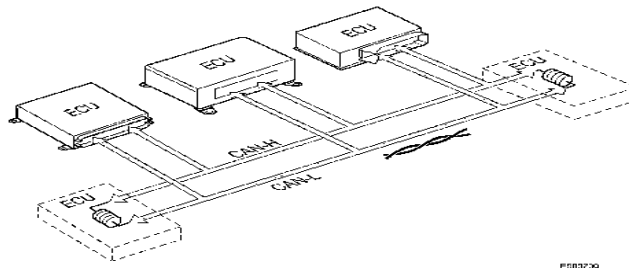
Truck Electrical Fault Finding



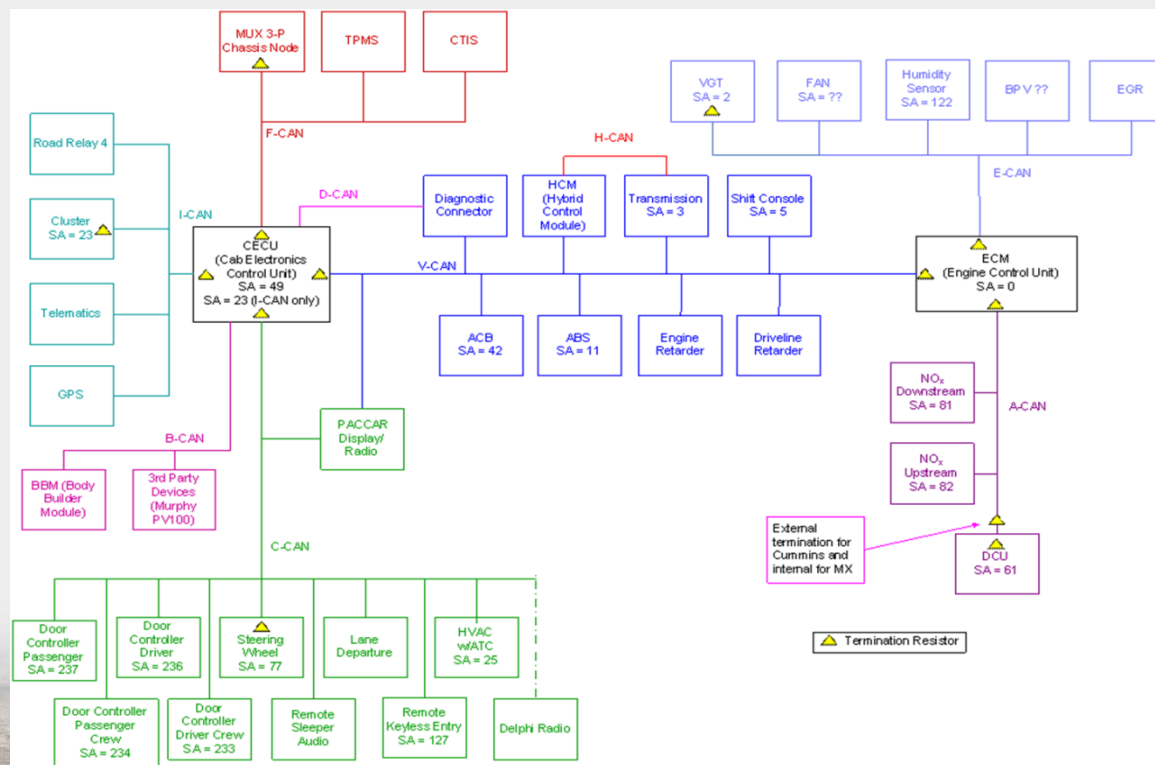
Ngee Chong
Paccar Australia Pty Ltd



CAN Network



Typical CAN Network on Trucks



Network Topology

J1939-11

- Max Stub length 1 metre
- Cable configuration Shielded twisted twin core
- Diagnostic Connection Stub Truck 0.66 metre max
Diagnostic Tools 0.33 m max

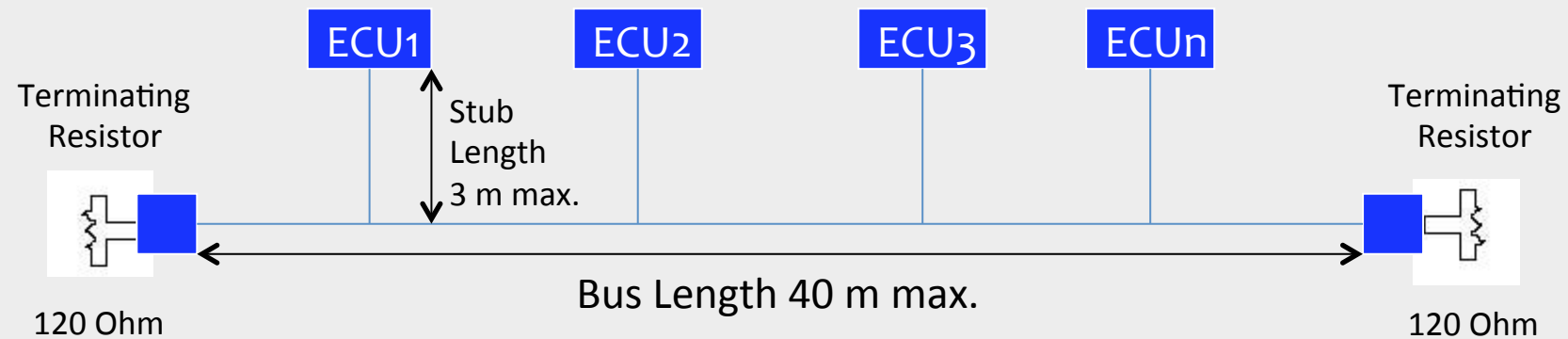


J1939-15

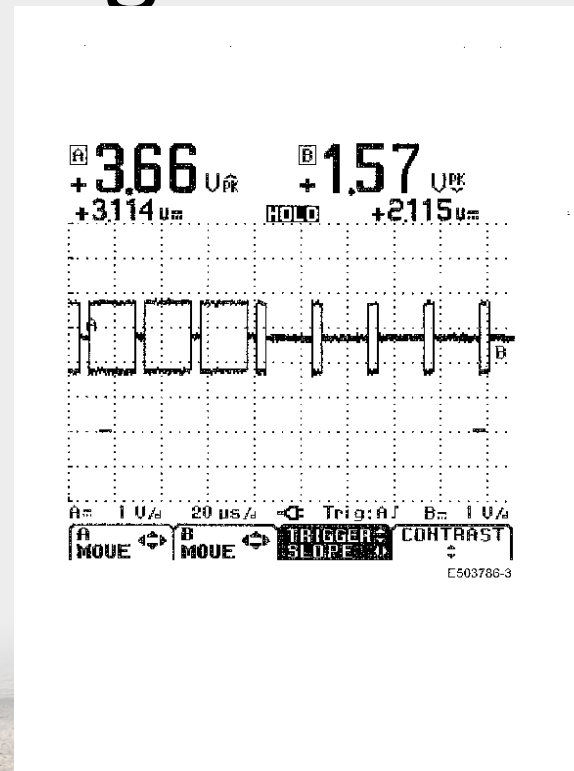
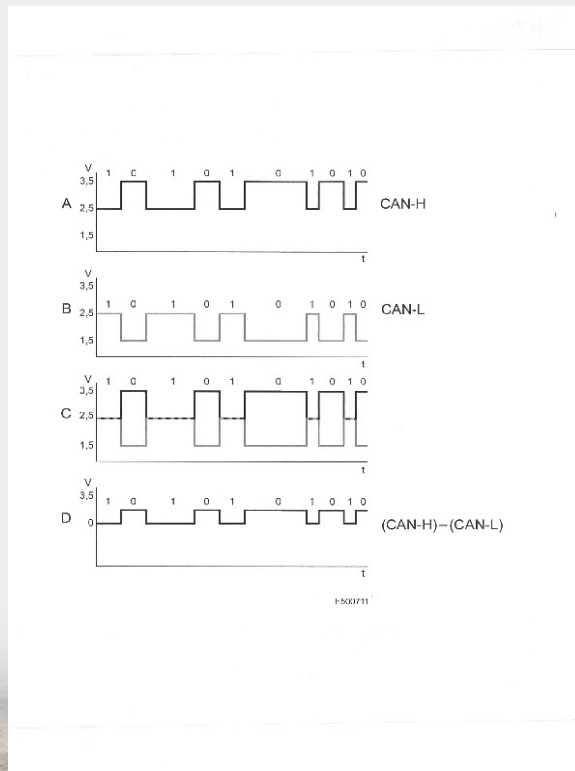
- Max Stub length 3 metre
- Cable configuration Twisted Twin Core
- Diagnostic Connection Stub Truck 2.66 metre max
Diagnostic Tool 0.33 m Max



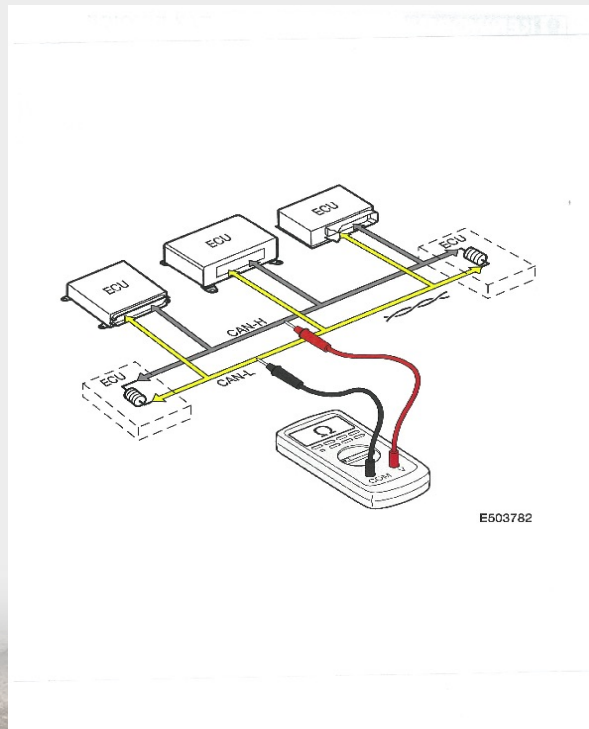
SAE J 1939 -15 Network Topology



CAN Signal



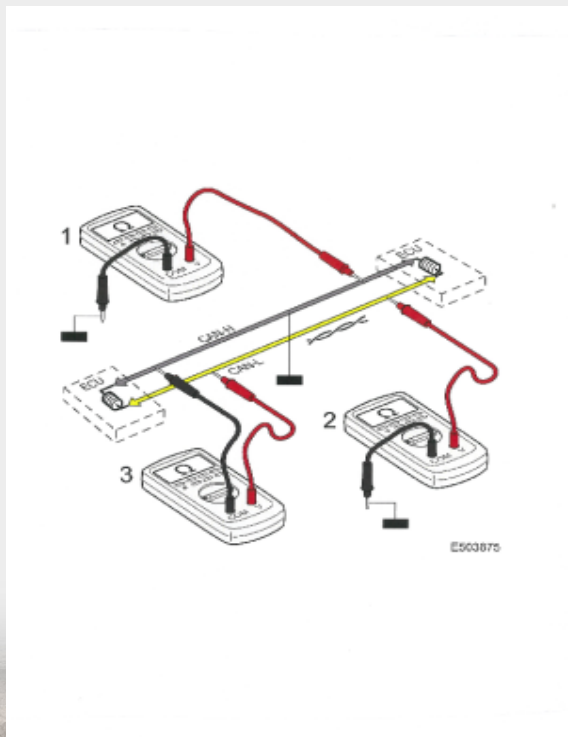
Normal CAN Resistance



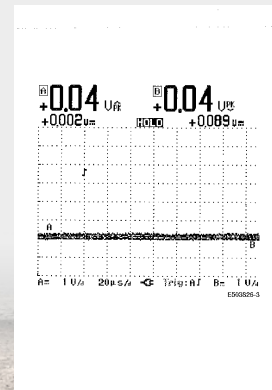
- Resistance Measurements:
- Meter : 60 Ohm



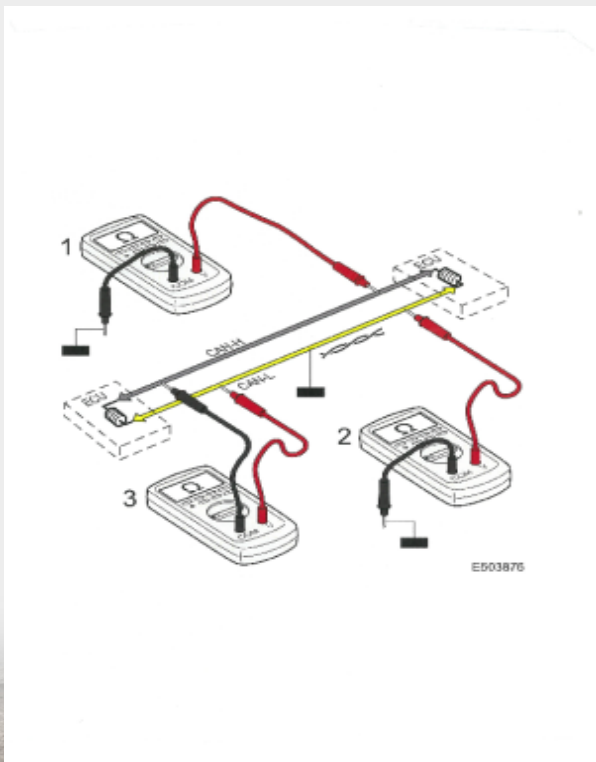
CAN- High Short-circuit to Earth



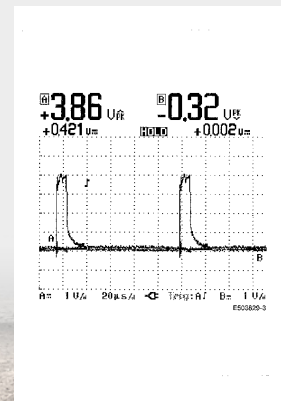
- Resistance Measurements:
- Meter 1 : 0 Ohm
- Meter 2 : 60 Ohm
- Meter 3 : 60 Ohm



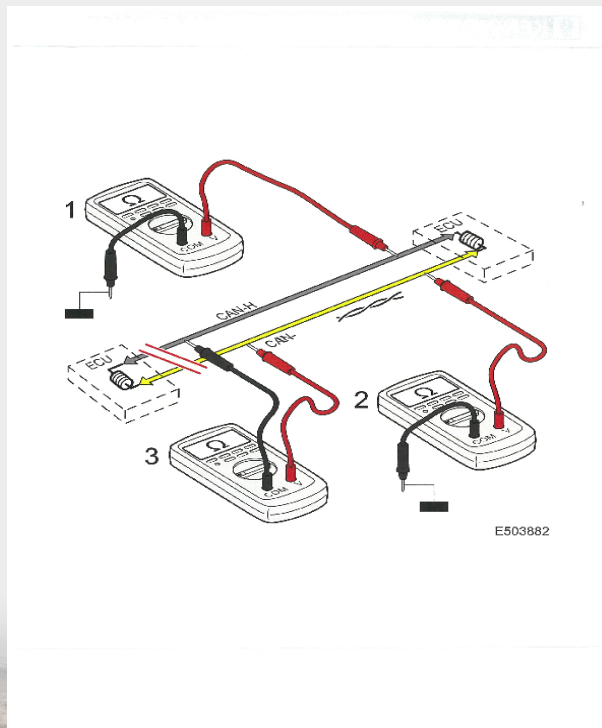
CAN-Low Short-circuit to Earth



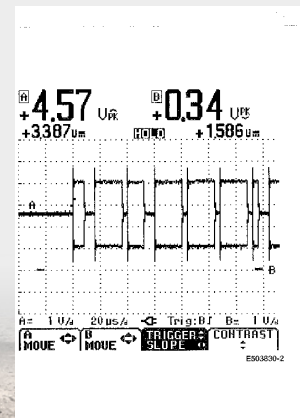
- Resistance Measurements:
- Meter 1 : 60 Ohm
- Meter 2 : 0 Ohm
- Meter 3 : 60 Ohm



One Terminating Resistor Broken



- Resistance Measurements:
- Meter 3 : 120 Ohm



Thank you

