JOB CARD

Vehicle Model	Reported Customer Concern
2017 XE R-Sport	Auto Stop Start Not Available

Vehicle Symptoms

Area of Concern/Possible Causes

Diagnostic Route / Tests

Step	Description	Result	Fault Identified? (Y/N)
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

Conclusion / Recommendations

Activity – MultiCAN Operating Parameters

INSTRUCTION
OBJECTIVES: Gather MultiCAN network reference data. ACTIVITY: • Observe network operating values and behavior when the network is operating correctly. • Record your observations and measured values. • The activity involves the use of the PicoScope. – Instructions for setting the PicoScope are provided, however your trainer will assist you if you are unfamiliar with the use of the PicoScope • If at any point you are unsure of the task instructions, please ask your trainer for assistance TIME: 30 Minutes

Network Operating Voltage

INSTRUCTION
OBJECTIVES: Collect MultiCAN network operating voltages. ACTIVITY: • Use a multimeter to measure and record the network operating voltages. • Ensure the vehicle ignition is switched on before any measurements are taken. • Ensure a fully functioning, JLR approved battery charger/conditioner has been connected to the vehicle

Network	CAN High Voltage	CAN Low Voltage
BO – MSCAN		
CH – HSCAN		
CO – HSCAN		
PT – HSCAN		

High and Medium Speed Signals

INSTRUCTION
OBJECTIVES: To compare a High speed CAN signal to a Medium speed CAN signal. ACTIVITY: • Use the PicoScope to obtain a signal pattern for both a HS and a MS network. Ensure the vehicle ignition is switched on before any measurements are taken. • Ensure a fully functioning, JLR approved battery charger/conditioner has been connected to the vehicle. • Use the following settings for the PicoScope: – Channel A: Blue cable/scale – HS PT CAN High signal – Channel B: Red cable/scale – HS PT CAN Low signal – Channel C: Green cable/scale – MS BO CAN High signal – Channel D: Yellow cable/scale– MS BO CAN Low signal – Set the “y” axis voltage range for all four channels to +/- 10 Volts – Set the “x” axis or time-base to 100 us/div (micro-seconds per division). – Set the “y” axis offset to - 30% for channels C and D. – This will separate the CAN traces, making them clearer to observe. • Ensure a suitable trace is displayed on all four channels. • Stop the trace from running. Use the buffer frame navigation buttons to locate a good trace pattern which shows the start of both a MS and a HS message. • Use the graphic E165628 to record your image. Use the NOTES table to record any observations. • Study the PicoScope image to answer Question 1.