

# S-TYPE Advanced Diagnostics

Mode of Operation/Fault	When Logged	Ignition Sw Position	DTC	LED Fault Code	Indication
Prove-Out	N/A	Off to Run/Start	N/A	N/A	3 seconds of steady illumination
Perimeter Theft Control	N/A	Off	N/A	N/A	Off or 0.5Hz flash, 5% duty cycle +/- 20% until not Off
Anti Scan - Incode	Security Access	Run/Start	N/A	None	None
Transceiver Not Connected (No Diagnostic Byte Received)	Key Read	Run/Start	9681	11	60 seconds of 4Hz flashing at 50% duty cycle followed by fault code flashing 10 times
Bad Diagnostic Byte Received	Key Read	Run/Start	A103	12	60 seconds of 4Hz flashing at 50% duty cycle followed by fault code flashing 10 times
Key Problem. No code received or without transponder	Key Read	Run/Start	9600	13	60 seconds of 4Hz flashing at 50% duty cycle followed by fault code flashing 10 times
Key/Transceiver problem, partial code received, checksum error	Key Read	Run/Start	9602	14	60 seconds of 4Hz flashing at 50% duty cycle followed by fault code flashing 10 times
Key code not stored in memory (also due to having 8 key codes already stored in memory)/ Signature mismatch	Key Read/ Diag. Test	Run/Start	9601	15	60 seconds of 4Hz flashing at 50% duty cycle followed by fault code flashing 10 times
Problem with SCP link (PCM verify does not match key status - 00 01 80 or FF in data verify message)	PCM SCP Comm	Run/Start	D147	16	60 seconds of 4Hz flashing at 50% duty cycle followed by fault code flashing 10 times
Or vehicle security system status message missing			D262		
Less than 2 keys programmed in the system	B & A/ Dealer	Run/Start	9213	21	60 seconds of 4Hz flashing at 50% duty cycle followed by fault code flashing 10 times
No initialisation after part replacement or EOL, No PCM ID	B & A/ Dealer	Run/Start	A141	22	60 seconds of 4Hz flashing at 50% duty cycle followed by fault code flashing 10 times
SCP not configured, PCM ID does not match (81 in data verify message)	Challenge/ Response	Run/Start	A139	23	60 seconds of 4Hz flashing at 50% duty cycle followed by fault code flashing 10 times
Transponder Programming Failure	Key Prog.	Run/Start	A431	13	

In all cases of suspected PATS non-start issues, always check the most logical failure modes.

- Check that a permanent 12v supply is present at the starter relay.
- Check that when the key is held in the crank position, a 12v supply is present at the relay coil.

If both these conditions are correct and there are no supporting DTC's and/or PATS LED fault codes present, the ground from the IC to the relay coil should be verified.