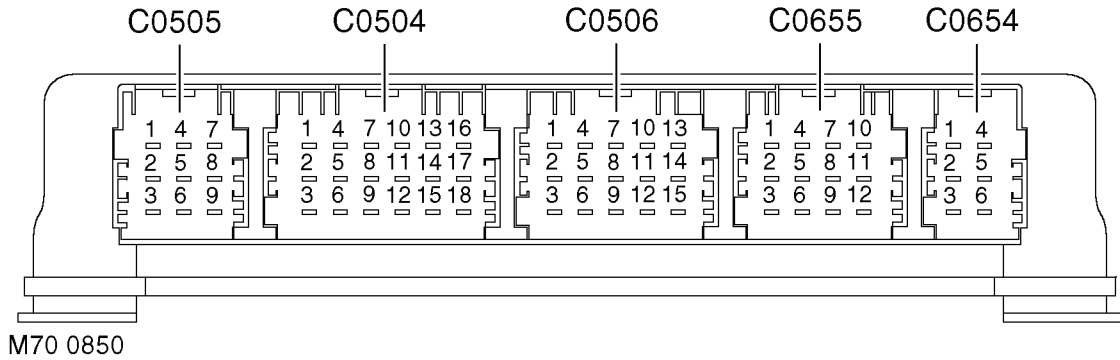




SLABS ECU


The SLABS ECU is attached to a bracket behind the front passenger glovebox. Brake related inputs are processed by the SLABS ECU, which then outputs control signals to the ABS modulator. Five electrical connectors interface the SLABS ECU with the vehicle wiring.

SLABS ECU connector pin details



Connector/Pin No.	Description	Input/Output
C0504		
1	Battery supply	Input
2	Ignition supply	Input
3	Road speed	Output
4	Rough road (V8 models only)	Output
5	K line (diagnostics)	Input/Output
7	Reverse gear	Input
8	Return pump monitor	Input
9	Brake warning lamp	Output
10	Engine data (throttle position, torque, engine type, gearbox type)	Input
11	Transfer box range	Input
12	Earth	-
13	ETC warning lamp	Output
14	HDC switch	Input
15	Neutral selected (automatic gearbox only)	Input
16	HDC fault warning lamp	Output
17	HDC information warning lamp	Output
18	ABS warning lamp	Output
C0505		
1	Front left wheel speed	Input
2	Front left wheel speed	Input
3	Rear right wheel speed	Input
4	Front right wheel speed	Input
5	Front right wheel speed	Input
6	Rear right wheel speed	Input
7	Rear left wheel speed	Input
8	Rear left wheel speed	Input
C0506		
1	Front left outlet solenoid valve	Output
2	Front left inlet solenoid valve	Output
3	Earth	-
4	Front right outlet solenoid valve	Output


BRAKES

Connector/Pin No.	Description	Input/Output
5	Front right inlet solenoid valve	Output
6	Shuttle valve switches	Input
7	Rear left outlet solenoid valve	Output
8	Rear left inlet solenoid valve	Output
9	Centre differential lock switch	Input
10	Rear right outlet solenoid valve	Output
11	Rear right inlet solenoid valve	Output
12	Brake lamp relay	Output
15	Return pump relay	Output
C0655		
7	Audible warning	Output
10	Engine speed	Input
Connector and pins not listed are either not used or used by the self levelling suspension system.  REAR SUSPENSION, DESCRIPTION AND OPERATION, Description.		









The SLABS ECU continually calculates vehicle speed using the wheel speed inputs from all four ABS sensors. The calculated vehicle speed is then used as a reference against which individual wheel speeds are monitored for unacceptable acceleration or deceleration. The ABS sensor inputs are also used by the SLABS ECU to detect vehicle deceleration rate, vehicle cornering rate and rough terrain.

The engaged forward gear and (on manual gearbox models) the clutch status are computed from the engine data input, the engine speed input and vehicle speed. Reverse gear status is provided by an input from the reverse lamp switch (manual gearbox models) or the BCU (automatic gearbox models). On automatic models, the BCU also provides the neutral selected input.

In addition to controlling the brake related functions, the SLABS ECU:

- Controls the operation of the self levelling suspension (SLS) system (where fitted).
 **REAR SUSPENSION, DESCRIPTION AND OPERATION, Description.**
- On V8 models, outputs a rough road signal to the ECM when traversing rough terrain.
- Outputs a vehicle speed signal.

The vehicle speed signal is output to the following systems (where fitted):

- Active Cornering Enhancement.
 **FRONT SUSPENSION, DESCRIPTION AND OPERATION, Description - ACE.**
- Air conditioning.
 **AIR CONDITIONING, DESCRIPTION AND OPERATION, Description.**
- Cruise control.
 **ENGINE MANAGEMENT SYSTEM - Td5, DESCRIPTION AND OPERATION, Description.**
 **ENGINE MANAGEMENT SYSTEM - V8, DESCRIPTION AND OPERATION, Description - engine management.**
- Engine management.
 **ENGINE MANAGEMENT SYSTEM - Td5, DESCRIPTION AND OPERATION, Description.**
 **ENGINE MANAGEMENT SYSTEM - V8, DESCRIPTION AND OPERATION, Description - engine management.**
- In-car entertainment.
 **IN CAR ENTERTAINMENT, DESCRIPTION AND OPERATION, Description.**
- Instrument pack.
 **INSTRUMENTS, DESCRIPTION AND OPERATION, Description.**