Introduction
INFO CENTRE is a side of trailer mounted diagnostic unit used for readout of odometer and diagnostic codes, plus other information as available in the EB+ Electronic Control Unit (ECU).

The INFO CENTRE is connected permanently to the ECU's diagnostic 'DIAG' connection. While the ECU is powered from its normal source (ISO7638 permanent) information is transferred to the Info Centre's memory, which can be recalled. Power is supplied from the vehicle system via the ECU diagnostics connector.

INFO CENTRE comprises an LCD (Liquid Crystal Display) and two buttons marked up/down and right pointing arrows.

The left hand button (showing a right pointing arrow), means 'select' or 'confirm' whilst the right hand button (showing an up/down arrow) means 'change' or 'next' to allow the movement between menus and options.

INFO CENTRE also has an internal battery which allows readout of information (including fault indication) when the trailer is uncoupled and unpowered (N.B. INFO CENTRE ADR, this feature is not available see page 33). It is housed in a plastic enclosure provided with a cover boot for environmental protection.

Functions available

Vehicle supply

EB+ Info Centre battery supply

INFO MENU:
Read Diagnostic Trouble Code (DTC) Active
Read Diagnostic Trouble Code (DTC MEM) Stored
Clear DTC
Configuration
ECU software version number
ECU serial number
Vehicle Ident Number (VIN)
Manufacturer OEM
Info Centre software version number

DISTANCE MENU:
Odometer - Total distance
Trip distance
Service distance
Tyre size
Clock (time and date)
Clear Trip

CHANGES MENU:
Service Due
Service interval
Service interval Distance
Service interval Days
Lining Wear Indication
Clock (time and date)
Options-on/off (parameter updating / backlight)
Password (PIN number)
Unlock Info Centre (PIN number Un-known)

TESTS MENU:
Load
Wheels (sensor / cabling check)
Pressure
Plate (Load plate data)
Auxiliaries
Brake test
Lining Wear Indication
### Meaning of LCD icons

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>🔒</td>
<td>LOCK: Not implemented</td>
</tr>
</tbody>
</table>
| ⚡   | POWER:  
- ON = Vehicle supply (ISO7638)  
- FLASHING = Back up power supply only ISO1185 (24N)  
- ON = Internal EB+ Info Centre Battery  
To save battery life, if neither button is pressed for a period of 10 seconds, the Info Centre switches off. |
| 📦 | BELLOWS: Used to indicate pressure readings |
| 🚗 | ODOMETER DISPLAY  
- Total distance  
- Trip distance |
| 🔑 | KEY HOLE: Used to indicate external diagnostic session in progress from other tester |
| 🔧 | SERVICE FUNCTION / SERVICE DUE  
Indicates service is due:  
- ON = Whilst displaying the odometer value indicates service is due,  
- FLASHING = Current EB+ fault (initial ODO display only) |
| 📊 | MEMORY: Stored information displayed or memory operation in progress  
AM: Real time clock function  
PM: Real time clock function |
| ⭕ | DASHED LINE: General purpose indicator showing graphical representation of numeric readings |
| % °F °C lb kg mile km psi bar | UNITS: Unit used in conjunction with appropriate alphanumeric characters. Units are arranged in mutually exclusive pairs for temperature, pressure, distance and weight. |

### Symbol Key

<table>
<thead>
<tr>
<th>Icon</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>⏰ ⏰ ⏰ ⏰</td>
<td>Flashing display</td>
</tr>
<tr>
<td>⭕ ⭕ ⭕ ⭕</td>
<td>Scrolling display</td>
</tr>
</tbody>
</table>
DISTANCE MENU with EB+ Info Centre battery supply

2 sec.
‘EB+ INFO’ DISPLAY

1 sec.
ODOMETER DISPLAY

ODOMETER DISPLAY

INFORMATION MENU DISPLAY

DISTANCE MENU DISPLAY

DISTANCE MENU DISPLAY

ODOMETER DISPLAY

ACTUAL DISTANCE 3 sec.

TRIP DISTANCE 3 sec.

SERVICE DUE VALUE 3 sec.

SERVICE DUE VALUE 3 sec.

TYRE SIZE 3 sec.

See note on page 13

3 sec.

ACTUAL TIME

3 sec.

ACTUAL DATE

3 sec.

3 sec.

5
CHANGE CLOCK (Time and Date) with EB+ Info Centre battery supply

2 sec.

1 sec.

1 sec.

ENTER PIN NUMBER

= CHANGE DIGIT

= NEXT DIGIT

See page 7
CHANGE CLOCK (Time and Date) with EB+ Info Centre battery supply

See page 6

- Correct PIN number
- Set time
- Amended time
- Accept amended time
- Accept?
- Y = YES N = NO
- Set date
- Amended date
- Accept amended date
- Accept?
- Y = YES N = NO
- Accepted time and date
- Rejected time and date

1 sec.

Alternative

Incorrect PIN number

3 sec.

- Change digit
- Next digit

= Change digit (Hour or Minute)

= Next digit (Hour to Minute)

= Change digit (Date, Month or Year)

= Next digit (Date to Month to Year)

1 sec.

3 sec.

See page 6

= Change clock (Time and Date) with EB+ Info Centre battery supply
Reading and Deleting DTC with Vehicle supply

**NO DTC**

- 'EB+ INFO' DISPLAY
- ODOMETER AND LOAD DISPLAY
- INFORMATION MENU DISPLAY

**WITH ACTIVE AND STORED DTC**

- 'EB+ INFO' DISPLAY
- ODOMETER AND LOAD DISPLAY
- INFORMATION MENU DISPLAY

**Refer to Page 28**
N.B. Initial Trip distance is factory set to zero in order to start the Trip distance
CHANGE MENU with Vehicle supply

- 'EB+ INFO' DISPLAY
- ODOMETER AND LOAD DISPLAY
- INFORMATION MENU DISPLAY
- DISTANCE MENU DISPLAY
- CHANGE MENU DISPLAY

SERVICE DUE VALUE
- SERVICE INTERVAL DISTANCE DISPLAY
- SERVICE INTERVAL DAYS DISPLAY
- LINING WEAR INDICATION DISPLAY
- CLOCK INFORMATION
- INFO CENTRE OPTIONS DISPLAY
- PIN NUMBER DISPLAY
- UNLOCK INFO CENTRE DISPLAY
N.B. On initial entry this activates the SERVICE due value which is the distance set in the SERVICE INTERVAL functions (see page 13 and 14).
CHANGE SERVICE INTERVAL - DISTANCE with Vehicle supply

Refer to page 11

SERVICE INTERVAL DISTANCE MENU DISPLAY

ENTER PIN NUMBER

HALDEX SET PIN NUMBER

CORRECT PIN NUMBER

SERVICE INTERVAL DISTANCE (Haldez set value = 100 000 km)

AMENDED SERVICE INTERVAL DISTANCE (200 000 km)

ACCEPT AMENDED SERVICE INTERVAL

Y = YES
N = NO

ACCEPTED SERVICE INTERVAL
REJECTED SERVICE INTERVAL

± = CHANGE DIGIT
= NEXT DIGIT

1 sec.
3 sec.
CHANGE SERVICE INTERVAL - DAYS with Vehicle supply

1. Enter PIN number

2. Enter correct pin number

3. Service interval days (Haldex set value = 100 000 km)

4. Amended service interval in days

5. Accept amended service interval

6. Y = YES, N = NO

7. Accepted service interval

8. Rejected service interval
CHANGE LINING WEAR INDICATION with Vehicle supply

Refer to page 11

15

CHANGE MENU DISPLAY

LINING WEAR INDICATION DISPLAY

ENTER PIN NUMBER

HALDEX SET PIN NUMBER

CORRECT PIN NUMBER

DONE

BRAKE PADS REPLACED

1 sec.

1 sec.

3 sec.

1 sec.

3 sec.

ENTER PIN NUMBER

= CHANGE DIGIT

= NEXT DIGIT

NOT FITTED

NOT DONE

BRAKE PADS NOT REPLACED

IN-CORRECT PIN NUMBER

FAILED

ALTERNATIVE

3 sec.

Alternatively

Correct PIN NUMBER

OK

DONE

BRAKE PADS REPLACED

1 sec.

3 sec.

1 sec.

3 sec.
CHANGE CLOCK (TIME) with Vehicle supply

Refer to page 12

CLOCK MENU DISPLAY

1 sec.

ENTER

1 sec.

PIN

1 sec.

SET TIME

1 sec.

AMENDED TIME

1 sec.

ACCEPT AMENDED TIME

1 sec.

Y = YES

N = NO

HALDEX SET PIN NUMBER

SET PIN NUMBER

CORRECT PIN NUMBER

ENTER PIN NUMBER

IN-CORRECT PIN NUMBER

= NEXT DIGIT

= CHANGE DIGIT

See page 17
CHANGE OPTIONS with Vehicle supply

Refer to page 11

INFO CENTRE OPTIONS MENU DISPLAY

1 sec. ENTER PIN NUMBER

HALDEX SET PIN NUMBER

CORRECT PIN NUMBER

1 sec. CHANGE DIGIT

IN-CORRECT PIN NUMBER

3 sec. = NEXT DIGIT

ECU PARAMETER UPDATE ON (Haldex set)

OPTION SAVE TO MEMORY

LCD BACKLIGHT OFF (Haldex set)

OPTION SAVE TO MEMORY

ECU PARAMETER UPDATE OFF

OPTION SAVE TO MEMORY

LCD BACKLIGHT ON

OPTION SAVE TO MEMORY

(Backlight never on)

(Used to update a replacement EB+ ECU with the settings of the previously fitted ECU)
UNLOCK INFO CENTRE (PIN number un-known) with Vehicle supply

THIS FUNCTION REQUIRES TO BE EXECUTED FULLY WHILE ON LINE TO HALDEX

Refer to page 11

UNLOCK MENU DISPLAY

OBTAIN SEED NUMBER

SEED NUMBER (Random number example only)

KEY NUMBER FROM HALDEX

ENTER HALDEX KEY NUMBER

NEW KEY NUMBER FROM HALDEX (Example only)

CORRECT KEY NUMBER

PIN number reset to 1221

Inform SEED number to HALDEX to receive KEY number

CHANGE MENU DISPLAY

CHANGE Dgit

= NEXT

DIGIT

= CHANGE

DIGIT

EB+
TEST MENU with Vehicle supply

- 'EB+ INFO' DISPLAY
- ODOMETER AND LOAD DISPLAY
- INFORMATION MENU DISPLAY
- DISTANCE MENU DISPLAY
- CHANGE MENU DISPLAY
- TEST MENU DISPLAY

LOAD MENU DISPLAY

- SENSED WHEEL MENU DISPLAY
- PRESSURE MENU DISPLAY
- PLATE (Load plate data) MENU DISPLAY
- AUXILIARY EQUIPMENT MENU DISPLAY
- BRAKE TEST DISPLAY
- LINING WEAR INDICATOR DISPLAY
- ALL SEGMENT DISPLAY TEST

EB+
TESTING LOAD with Vehicle supply

Refer to page 21

LOAD
MENU
DISPLAY
(Real-time)

LOAD
DISPLAY
Example 23% Loaded

HOLD
2 sec.

Alternatively

LOAD
DISPLAY
Example 150% Loaded
(50% Over Loaded)
**TESTING SENSED WHEELS with Vehicle supply**

**SENSED WHEELS MENU DISPLAY**

- **SENSOR S1A**
  - NO SIGNAL
  - 1 rev / 2 sec
  - Display count down to 0
  - HOLD 2 sec.

- **SENSOR S1B**
  - NO SIGNAL
  - 1 rev / 2 sec
  - Display count down to 0
  - HOLD 2 sec.

- **SENSOR S2A**
  - NO SIGNAL
  - 1 rev / 2 sec
  - Display count down to 0
  - HOLD 2 sec.

- **SENSOR S2B**
  - NO SIGNAL
  - 1 rev / 2 sec
  - Display count down to 0
  - HOLD 2 sec.

**Other sensed wheel displays**

- **@ 1 rev / 2 sec Sensor signal low** (check sensor gap)
  - **SENSOR S1A**
  - km

- **Wheel rotation more than 1 rev / 2 sec Sensor signal high**
  - **SENSOR S1A**
  - km

**Sensor location**

Example: 2M, Side by Side, ECU LH

- **B Sensors**
- **A Sensors**
TESTING PRESSURE with Vehicle supply

Refer to page 21

BAG PRESSURE (PORT 41) DISPLAY

RESERVOIR PRESSURE (PORT 1) DISPLAY

CONTROL PRESSURE (PORT 4) DISPLAY

DELIVERY PRESSURE (PORT 21) DISPLAY

DELIVERY PRESSURE (PORT 22) DISPLAY

HOLD 2 sec.
Haldex brake calculation

Input datas for the EBS-Modulator EB+:

<table>
<thead>
<tr>
<th>Axle</th>
<th>Axle load (Kg)</th>
<th>Bag press. unladen (bar)</th>
<th>Brake press. unladen (bar)</th>
<th>Axle load laden (Kg)</th>
<th>Bag press. laden (bar)</th>
<th>Brake press. laden (bar)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1150</td>
<td>0.60</td>
<td>1.75</td>
<td>8000</td>
<td>4.30</td>
<td>2.60</td>
</tr>
<tr>
<td>2</td>
<td>1150</td>
<td>0.60</td>
<td>1.75</td>
<td>8000</td>
<td>4.30</td>
<td>2.60</td>
</tr>
<tr>
<td>3</td>
<td>1150</td>
<td>0.60</td>
<td>1.75</td>
<td>8000</td>
<td>4.30</td>
<td>2.60</td>
</tr>
</tbody>
</table>

Values relate to a Haldex brake calculation shown in table below.

N.B. Indicated positions are as in the DIAG+ program.
BRAKE TEST with Vehicle supply

In this test mode the ECU assumes LADEN suspension bag pressure and lowers any lift axles that are operated by ILAS®-E

Procedure
1 - Vehicle in a stationary condition with power off
2 - Switch power on
3 - Observe lamp check out sequence
4 - Operate Info Centre enter the following Menu:-

Refer to page 21

Within this function
1 - Warning lamp flashes
2 - Apply brakes
Testing auxiliary equipment with vehicle supply

Refer to page 21

Auxiliary equipment testing state

COLAS® = Solenoid energised
ILAS®-E = Solenoid energised
Retarder = Relay/solenoid energised
Trailer Lamp = Stops flashing remains ON

Testing lining wear with vehicle supply

Refer to page 21

Testing display with vehicle supply

Refer to page 21
### Diagnostic Trouble Codes (DTC):

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1A CONT</td>
<td>1A Sensor/wiring open or short circuit</td>
</tr>
<tr>
<td>S1B CONT</td>
<td>1B Sensor/wiring open or short circuit</td>
</tr>
<tr>
<td>S2A CONT</td>
<td>2A Sensor/wiring open or short circuit</td>
</tr>
<tr>
<td>S2B CONT</td>
<td>2B Sensor/wiring open or short circuit</td>
</tr>
<tr>
<td>S1A SIGNAL</td>
<td>1A Sensor signal fault</td>
</tr>
<tr>
<td>S1B SIGNAL</td>
<td>1B Sensor signal fault</td>
</tr>
<tr>
<td>S2A SIGNAL</td>
<td>2A Sensor signal fault</td>
</tr>
<tr>
<td>S2B SIGNAL</td>
<td>2B Sensor signal fault</td>
</tr>
<tr>
<td>S1A OUTPUT</td>
<td>1A Sensor system fault</td>
</tr>
<tr>
<td>S1B OUTPUT</td>
<td>1B Sensor system fault</td>
</tr>
<tr>
<td>S2A OUTPUT</td>
<td>2A Sensor system fault</td>
</tr>
<tr>
<td>S2B OUTPUT</td>
<td>2B Sensor system fault</td>
</tr>
<tr>
<td>BRK APPLY SC</td>
<td>Brake apply solenoid short circuit</td>
</tr>
<tr>
<td>BRK APPLY OC</td>
<td>Brake apply solenoid open circuit</td>
</tr>
<tr>
<td>BRK APPLY SC DRIVE</td>
<td>Brake apply solenoid short circuit permanently energised</td>
</tr>
<tr>
<td>BRK APPLY UNSPEC</td>
<td>Brake apply solenoid control circuit fault</td>
</tr>
</tbody>
</table>

### Possible Causes:

- **No supply on ignition switch line.**
  - **Possible causes:** Fuse blown. EB INFO CENTRE or cable fault. Open circuit B -

- **Intermittent low sensor output group**
  - **Possible causes:** Loose sensor, connection, bracket or exciter. Damage exciter maladjusted sensor or worn sensor cable insulation.

- **Low sensor output group**
  - **Possible causes:** Sensor worn, maladjusted sensor, wiring open or short circuit.

- **Brake apply solenoid group**
  - Brake apply solenoid short circuit
  - Brake apply solenoid open circuit
  - Brake apply solenoid short circuit permanently energised
  - Brake apply solenoid control circuit fault

---

**ECU TIME OUT or NO LINK**

All displayed DTC’s are scrolling text.
## DIAGNOSTIC TROUBLE CODES (DTC):

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EPRV 21 HOLD SC</td>
<td>Modulator 21 hold solenoid short circuit</td>
</tr>
<tr>
<td>EPRV 21 DUMP SC</td>
<td>Modulator 21 dump solenoid short circuit</td>
</tr>
<tr>
<td>EPRV 21 HOLD OC</td>
<td>Modulator 21 hold solenoid open circuit</td>
</tr>
<tr>
<td>EPRV 21 DUMP OC</td>
<td>Modulator 21 dump solenoid open circuit</td>
</tr>
<tr>
<td>EPRV 21 HOLD SC DRIVE</td>
<td>Modulator 21 hold solenoid short circuit permanently energised</td>
</tr>
<tr>
<td>EPRV 21 DUMP SC DRIVE</td>
<td>Modulator 21 dump solenoid short circuit permanently energised</td>
</tr>
<tr>
<td>EPRV 21 HOLD UNSPEC</td>
<td>Modulator 21 hold solenoid control circuit fault</td>
</tr>
<tr>
<td>EPRV 21 DUMP UNSPEC</td>
<td>Modulator 21 dump solenoid control circuit fault</td>
</tr>
<tr>
<td>EPRV 22 HOLD SC</td>
<td>Modulator 22 hold solenoid short circuit</td>
</tr>
<tr>
<td>EPRV 22 DUMP SC</td>
<td>Modulator 22 dump solenoid short circuit</td>
</tr>
<tr>
<td>EPRV 22 HOLD OC</td>
<td>Modulator 22 hold solenoid open circuit</td>
</tr>
<tr>
<td>EPRV 22 DUMP OC</td>
<td>Modulator 22 dump solenoid open circuit</td>
</tr>
<tr>
<td>EPRV 22 HOLD SC DRIVE</td>
<td>Modulator 22 hold solenoid short circuit permanently energised</td>
</tr>
<tr>
<td>EPRV 22 DUMP SC DRIVE</td>
<td>Modulator 22 dump solenoid short circuit permanently energised</td>
</tr>
<tr>
<td>EPRV 22 HOLD UNSPEC</td>
<td>Modulator 22 hold solenoid control circuit fault</td>
</tr>
<tr>
<td>EPRV 22 DUMP UNSPEC</td>
<td>Modulator 22 dump solenoid control circuit fault</td>
</tr>
<tr>
<td>DEMAND SC</td>
<td>Service line pressure transducer short circuit</td>
</tr>
<tr>
<td>DEMAND OC</td>
<td>Service line pressure transducer open circuit</td>
</tr>
<tr>
<td>EPRV 21 DEL SC</td>
<td>Modulator 21 delivery pressure transducer short circuit</td>
</tr>
<tr>
<td>EPRV 21 DEL OC</td>
<td>Modulator 21 delivery pressure transducer open circuit</td>
</tr>
<tr>
<td>EPRV 22 DEL SC</td>
<td>Modulator 22 delivery pressure transducer short circuit</td>
</tr>
<tr>
<td>EPRV 22 DEL OC</td>
<td>Modulator 22 delivery pressure transducer open circuit</td>
</tr>
</tbody>
</table>
### Diagnostic Trouble Codes (DTC):

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ONE WHEEL WITH SLOW RECOVERY GROUP</strong></td>
<td></td>
</tr>
<tr>
<td>EPRV 2 1 SLOW REC</td>
<td>Slow recovery of one wheel of Modulator 21</td>
</tr>
<tr>
<td>EPRV 2 2 SLOW REC</td>
<td>Slow recovery of one wheel of Modulator 22</td>
</tr>
<tr>
<td><strong>Possible causes:</strong></td>
<td>Slow brake release, foundation brake mechanical faults, dry bearings, broken spring, restricted piping. Modulator fault check for kinks and blockages etc. Incorrect piping, wiring. Modulator fault. Sensor wiring crossed across an axle.</td>
</tr>
<tr>
<td><strong>RESERVOIR PRESSURE TRANSDUCER GROUP</strong></td>
<td></td>
</tr>
<tr>
<td>RESR SC</td>
<td>Reservoir pressure transducer short circuit</td>
</tr>
<tr>
<td>RESR OC</td>
<td>Reservoir pressure transducer open circuit</td>
</tr>
<tr>
<td>HIGH RES PRESSURE</td>
<td>Reservoir pressure above 9.5bar</td>
</tr>
<tr>
<td><strong>SUSPENSION PRESSURE TRANSDUCER GROUP</strong></td>
<td></td>
</tr>
<tr>
<td>SUSP SC</td>
<td>Suspension pressure transducer short circuit</td>
</tr>
<tr>
<td>SUSP OC</td>
<td>Suspension pressure transducer open circuit</td>
</tr>
<tr>
<td>SUSP LOW</td>
<td>Suspension pressure values outside operating range</td>
</tr>
<tr>
<td><strong>PRESSURE SWITCH GROUP</strong></td>
<td></td>
</tr>
<tr>
<td>REV SWITCH SC</td>
<td>Relay Emergency Valve pressure switch short circuit</td>
</tr>
<tr>
<td>REV SWITCH OC</td>
<td>Relay Emergency Valve pressure switch open circuit</td>
</tr>
<tr>
<td>REV SWITCH PNEUMATIC</td>
<td>Relay Emergency Valve pressure switch pneumatic fault</td>
</tr>
<tr>
<td>REV SWITCH SIGNAL</td>
<td>Relay Emergency Valve pressure switch failed to activate</td>
</tr>
<tr>
<td><strong>ISO11992 (CAN) ELECTRICAL SIGNAL GROUP</strong></td>
<td></td>
</tr>
<tr>
<td>PNEUMATIC DEMAND LOSS</td>
<td>No corresponding pneumatic demand pressure</td>
</tr>
<tr>
<td>TOWED CAN DEMAND LOSS</td>
<td>CAN line (pin 6 and 7 on ISO7638) fault</td>
</tr>
<tr>
<td>TOWED CAN CONTROL LOSS</td>
<td>CAN line (pin 6 and 7 on ISO7638) data fault</td>
</tr>
<tr>
<td><strong>SUPPLY VOLTAGE GROUP</strong></td>
<td></td>
</tr>
<tr>
<td>PWR ISO7 6 3 8 FAIL</td>
<td>Power loss on pin 1 or 2 (ISO7638)</td>
</tr>
<tr>
<td>PWR LO VOLT</td>
<td>Supply voltage at ECU less than 19v when brake apply solenoid is energised.</td>
</tr>
<tr>
<td>PWR HI VOLT</td>
<td>Supply voltage at the ECU greater than 32v.</td>
</tr>
<tr>
<td>PWR UNSPEC</td>
<td>Internal ABS ECU fault.</td>
</tr>
</tbody>
</table>
### DIAGNOSTIC TROUBLE CODES (DTC):

<table>
<thead>
<tr>
<th>Group</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ECU GROUP</strong></td>
<td></td>
</tr>
<tr>
<td>ECU EE ERR</td>
<td>Internal ECU fault or ECU not programmed.</td>
</tr>
<tr>
<td>ECU PARAM ERR</td>
<td>Internal ECU fault or ECU not programmed.</td>
</tr>
<tr>
<td>ECU EE UNSPEC</td>
<td>Internal ECU fault or ECU not programmed.</td>
</tr>
<tr>
<td><strong>AUXILIARY COMPONENTS GROUP</strong></td>
<td></td>
</tr>
<tr>
<td>AUX 1</td>
<td>Auxiliary 1 system/wiring open or short circuit</td>
</tr>
<tr>
<td>AUX 2</td>
<td>Auxiliary 2 system/wiring open or short circuit</td>
</tr>
<tr>
<td>AUX 3</td>
<td>Auxiliary 3 system/wiring open or short circuit</td>
</tr>
<tr>
<td>AUX 4</td>
<td>Auxiliary 4 system/wiring open or short circuit</td>
</tr>
<tr>
<td>AUX 5</td>
<td>Auxiliary 5 system/wiring open or short circuit</td>
</tr>
<tr>
<td><strong>LINING WEAR GROUP</strong></td>
<td></td>
</tr>
<tr>
<td>BRAKE PADS</td>
<td>Lining wear wiring open circuit</td>
</tr>
<tr>
<td><strong>LATERAL ACCELEROMETER</strong></td>
<td></td>
</tr>
<tr>
<td>LAT ACC OC</td>
<td>Lateral accelerometer wiring open circuit</td>
</tr>
<tr>
<td>LAT ACC SC</td>
<td>Lateral accelerometer wiring short circuit</td>
</tr>
<tr>
<td>LAT ACC SIGNAL</td>
<td>Lateral accelerometer signal fault</td>
</tr>
<tr>
<td><strong>SLAVE VALVE GROUP</strong></td>
<td></td>
</tr>
<tr>
<td>SLAVE VALVE SENSOR</td>
<td>Pressure transducers open or short circuit</td>
</tr>
<tr>
<td>SLAVE VALVE MODULATOR</td>
<td>Hold, Dump or Brake Apply solenoid open or short circuit</td>
</tr>
<tr>
<td>SLAVE VALVE CABLE</td>
<td>Link cable open or short circuit</td>
</tr>
<tr>
<td>SLAVE VALVE SLOW REC</td>
<td>Slow recovery of one wheel of slave valve</td>
</tr>
<tr>
<td>SLAVE SUSP LOW</td>
<td>Suspension pressure values outside operating range</td>
</tr>
</tbody>
</table>
OTHER DISPLAYS

If there is no load plate data in either Info Centre or EB+ ECU, the display shows 'EOLT REQ'. This means that the EB+ ECU needs to be programmed using the DIAG software (Kit No. 815 001 001).

If display reads 'ACCESS' or 'BUSY' there has been an error in entering the relevant diagnostic mode. Users should wait 5 seconds and try again.

INFO CENTRE ADR Version

The ADR version of the INFO CENTRE has no battery fitted and therefore cannot operate in battery mode. Other functions which relate to the battery, (eg. CLOCK) are not available when the INFO CENTRE is powered from the EB+.
The Haldex Group is a global supplier of proprietary products for trucks, cars and industrial vehicles, with special emphasis on performance and safety. The Group is organized in Divisions which focus on their respective product niche:

- **Haldex Brake Systems** supplies ABS and brake components for heavy vehicle air brakes.
- **Haldex Barnes Hydraulics** supplies gear pumps and hydraulic systems for power steering and lifting functions on industrial vehicles and trucks.
- **Haldex Garphyttan Wire** supplies specially steel-alloyed wire products mainly for applications in combustion engines.
- **Haldex Traction Systems** supplies 4WD systems for cars and trucks.

Sales companies are established in Europe, North and South America and Asia. Production takes place in 9 factories in USA, 9 factories in Europe and 1 joint venture in India. The Haldex Group is listed on the Stockholm Stock Exchange.

**Company Vision**

We use our demonstrated competence to provide innovative components, systems and service for trucks, trailers and buses, that lower life cycle costs and improve vehicle safety. Haldex wants to become the first choice business partner of commercial vehicle manufacturers worldwide in the areas of braking and suspension control systems with special emphasis on heavy commercial vehicles.

**Total Support**

A uniquely wide range of services is available from Haldex. These include expert consultancy for braking and suspension development, brake calculations, type approvals and application engineering. The aim is accurate specification for manufacturers and low cost of ownership for the operator. Full aftermarket support includes a Worldwide parts distribution and service network, on-line technical advice, field visits and installation/maintenance training held on-site or at Haldex facilities.

**Research and Development**

Continual, heavy investment in Research and Development is carried out in response to ever increasing commercial, legislative, environmental, performance and technological demands.

**Quality and Production Standards**

The very latest production technology ensures the very highest quality standards. All production sites are ISO 9001 approved.