

Front Seats and Door Mirrors - Memory Battery Pack Replacement

Note:Both door mirrors are controlled by the driver's seat memory from Chassis 30.000 onwards

Applicable to

All Rolls-Royce and Bentley motor cars from vehicle identification numbers (VIN)

Rolls-Royce

Silver Spirit

SCAZS0002HCH20003

Silver Spur

SCAZN0009HCX20004

Silver Spur Limousine

SCAZN0005HCX20632

Bentley

Mulsanne and Mulsanne L

SCBZS0000HCH20023

Mulsanne S

SCBZS00A7JCH22047

Turbo R and Turbo RL

SCBZS0T03HCX20001

Eight

SCBZS8009HCX20006

On Bentley Eight cars (prior to vehicle identification number (VIN) *SCBZE00A2JCX22008* - 1988 model year) the four individual seat position memory function was not fitted as standard equipment.

Introduction

The driver's seat and the door mirrors, and the passenger's seat, are controlled by individual Electronic Control Units (ECUs) incorporating position memory functions. Positions stored in memory rely on rechargeable batteries for retention of memory data.

Description

The seat control and memory ECU modules are originally fitted with Nickel Cadmium (NiCd) rechargeable battery packs. These batteries have a limited life, and are prone to leakage with age. A failed battery pack will disable the seat mechanism entirely. Battery leakage has led to the destruction of the ECU in several cases. It is recommended that the batteries be replaced by NiMH or Li-ion batteries after a period of 10 years. NiMH and Li-ion batteries are less prone to failure than NiCd batteries, and the replacement batteries are likely to malfunction long before module damage occurs.

Procedure

The underseat control modules should be removed, dismantled, the battery pack replaced, reassembled and refitted to the vehicle.

- 1.) Disconnect the two five-way connectors (see fig. M13-1 on Page 2, item 1)
 - M13-1 Seat connections**
 - 1 Five-way connectors
 - 2 Twelve-way connector
 - 3 Relay socket
 - 4 Nine-way connectors
- 2.) Disconnect the twelve-way connector (item 2)
- 3.) Disconnect the two nine-way connectors (item 4)
- 4.) Unscrew the module and withdraw it
- 5.) Unscrew the metal covers from the module and withdraw the printed circuit board (PCB)
- 6.) **IMPORTANT:** Apply an earthing strap to the ground plane of the PCB.
- 7.) Mask the connector conductors on both sides of the PCB.
- 8.) Using an instrument soldering iron and solder wick or solder sucker, remove the solder at the joint on the PCB to release the two electrical connections and the retaining pin of from the battery pack, then withdraw the battery pack
- 9.) Discard the battery pack at a recycling depot
- 10.) Select a rectangle of stiff cellophane approximately 10cm x 12cm . Punch suitable holes in the cellophane and slide the cellophane home over the terminals of the new battery pack
- 11.) Fit the new battery pack and solder it in place
- 12.) Apply two generous layers of electrical insulation spray lacquer to both sides of the PCB
- 13.) Fit the PCB to the ECU module
- 14.) Remove the masking tape then remove the earthing strap
- 15.) Refit the covers to the ECU
- 16.) Reverse procedures 1-4 to refit the ECU module to the vehicle
- 17.) Allow the module battery pack to charge for approximately 3 hours
- 18.) Activate the ECU memory module as described under Memory Seats and Mirrors - to activate

Parts Required

A suitable battery pack is: Varta 3/V150H; 3.6V 140mAh 3/V150H Ni-MH.
Be sure to use a Ni-MH or Li-ion rechargeable battery pack with the correct pin connections.

CAUTION Lithium cells and silver oxide cells, such as those used in watches or for short-term backup on mains-powered devices, are usually much smaller. They are not rechargeable. They are quite unsuitable for memory seats in many respects.

Defect Code	Repair Code	Time required
SM001AUSD	SM001AUSR	0.75 hours per module

Layout

Figure M13-1

