



# Technical Service Bulletin

No.LTB00100  
03  
December 2007

**Subject/Concern:** Vehicle Not Starting at Low Ambient Temperatures

**Models:**

Freelander 2	Left-Hand Drive Diesel with Fuel Operated Heater Installed Only	Left-Hand Drive Diesel with Fuel Operated Heater Installed Only VIN- range: H000200 Onwards
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**Markets:** Russia Only

**Section:** 412-00

**Summary:**

Vehicle not starting at ambient temperatures below -25°C.

**Cause:** Poor/failed cranking due to extreme low temperatures. Remote start of the fuel-operated heater allows up to a 30-minute burn of the heater prior to attempting to start the vehicle. This performs an engine pre-heat function by heating the coolant, hence raising the engine block and engine oil temperatures which in turn facilitates cranking/starting. **Suggested Customer Concern Code - D03.**

**Action:** Should a customer express concern, follow the Service Instruction outlined below.

**Parts Required:**

Description	Part Number	Quantity
Telestart Kit	LR007959	1

**Labour Time:**

Operation Description	Operation No.	Time
Install Telestart Kit - Prior VIN H074139	80.40.89/33	1.2 hours
Install Telestart Kit - From VIN H074140	80.40.89/33	0.9 hours

**Repair/Claim Coding:**

<b>Causal Part:</b>	LR007959
<b>ACES Condition Code:</b>	42
<b>Defect Code:</b>	

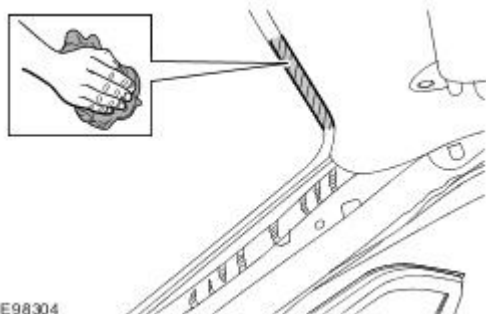
## Service Instruction

### Removal

1. Disconnect the battery ground cable (see Global Technical Reference (GTR) Workshop Manual, section 414-01).
2. Remove the glove compartment (see Global Technical Reference (GTR) Workshop Manual, section 501-12).
3. Remove A-pillar trim panel (see Global Technical Reference (GTR) Workshop Manual,

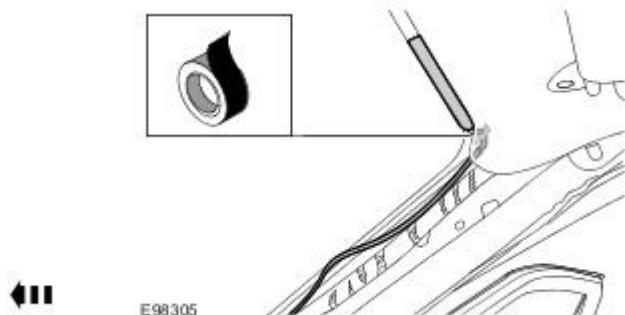
section 501-05).

- 4 . Clean marked area of the inside of the windshield with Isopropanol or suitable cleaner.



## Installation

- 5 . Remove the protective backing from the antenna mounting tape.
- 6 . Press the antenna into place as close to the front edge of the roof panel as possible on the black-out area of the windshield, and route the cable just above the edge.



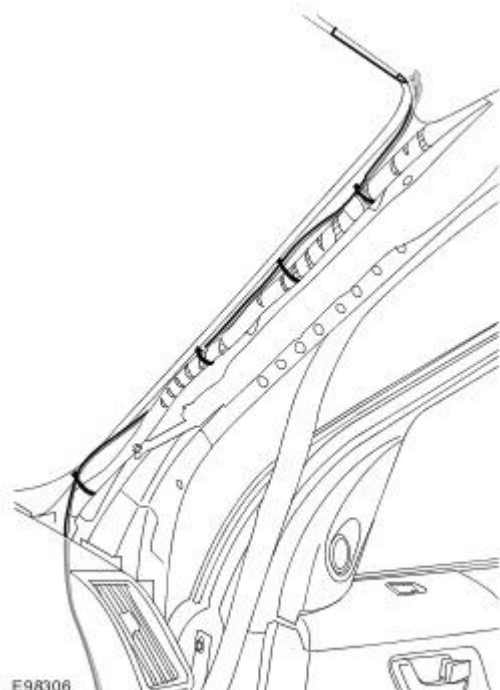
- 7 . Secure the antenna cable at the front edge of the roof panel with suitable tape.
- 8 .



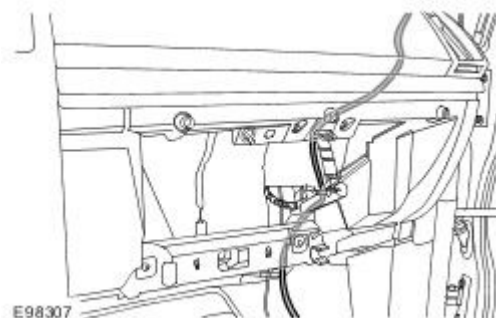
**WARNING: Avoid fouling the airbag curtain.**

Run the antenna cable parallel to the existing A-pillar harness run.

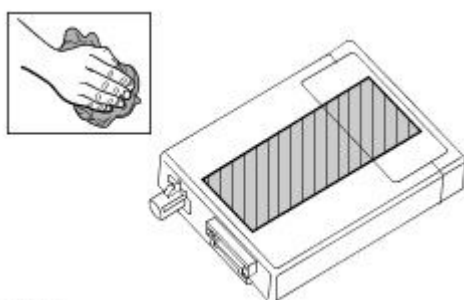
- 1 . Secure to existing harness using four cable ties.



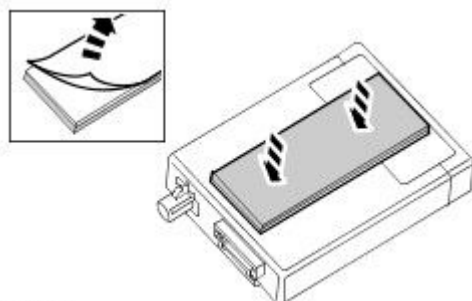
- 9 . Feed the antenna cable through the dashboard and behind the glove compartment, following the existing cable run, and pull through the glove compartment aperture.



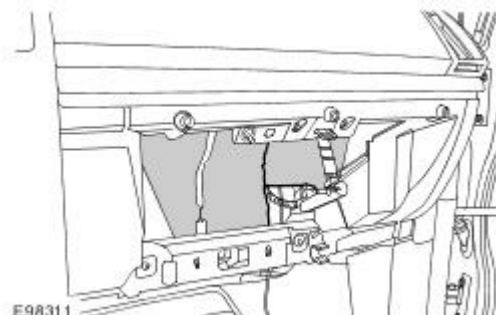
- 10 . Reinstall the A-pillar trim panel (see Global Technical Reference (GTR) Workshop Manual, section 501-05).
- 11 . Ensure the Telestart receiver unit is clean on both sides. Clean with Isopropanol or suitable cleaner if required.



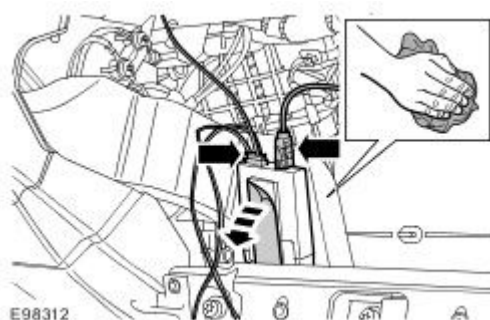
- 12 . Peel off the protective backing tape from one of the Velcro pieces.
- 13 . Press the Velcro onto the label side of the receiver unit.



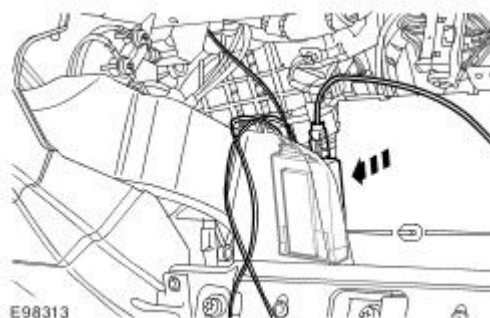
- 14 . Plug the supplied harness into the receiver unit.
- 15 . Peel off the NVH pad from the back of the floor heater duct.



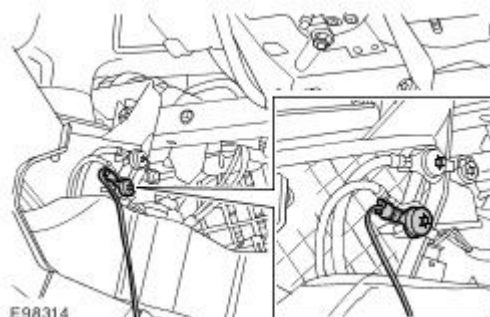
- 16 . Clean the rear of the heater duct with Isopropanol or suitable cleaner.
- 17 . Remove the protective backing tape from the other Velcro piece.



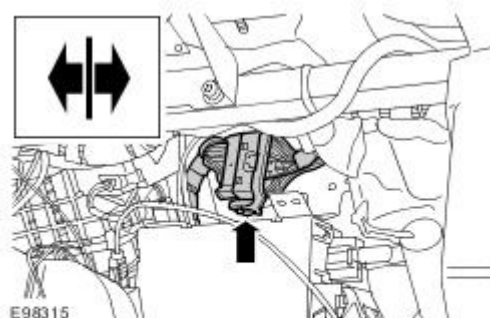
- 18 . Fix the receiver unit to the rear of the heater duct (see graphic E98313).



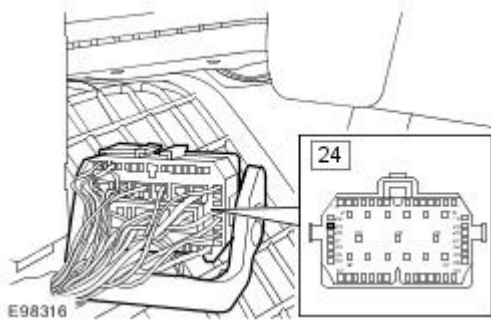
- 19 . Remove Torx bolt from the ground stud located on the driver's side of the glove compartment aperture.
- 20 . Connect the brown harness wire terminated in an M6 eyelet to the ground stud. Route the cable as shown in graphic E98314.



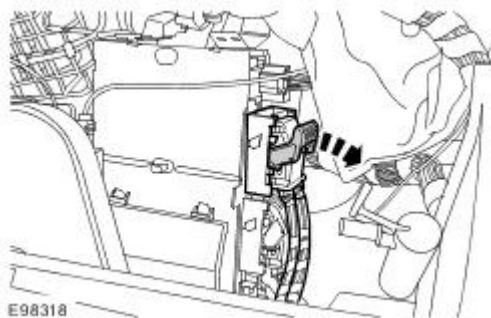
- 21 . Route the red harness wire and antenna cable along the existing harness run behind the metal brace. Fix with two cable ties, using the driver's side cable tie to also secure the yellow and brown harness wires.
- 22 . Pull the NVH pad to one side to access the engine compartment to floor harness inline connector.
- 23 . Dismantle the connector, removing the clips.



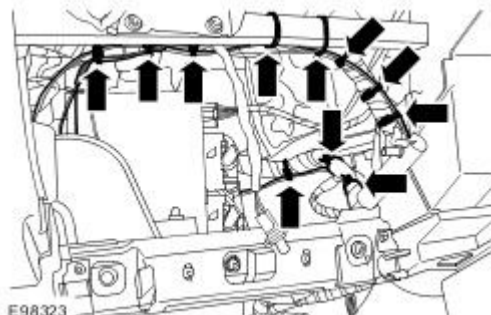
- 24 . Insert the yellow harness wire into cavity 24 of the connector housing.



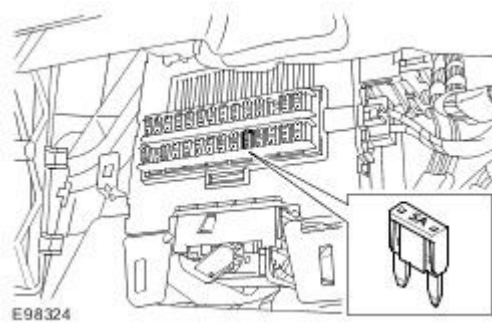
- 25 . Secure the yellow cable to the existing harness run with tape/cable tie(s) as required and replace the NVH pad.
- 26 . Pull the NVH pad to one side to access the brown floor harness to passenger fusebox connector.
  - 1 . Note that the two adjacent connectors may need to be removed to access the connector.
  - 2 . Cut the small cable ties securing the harnesses to the connector and remove the connector backing plate.
  - 3 . Prise out the anti-backout tab.
  - 4 . Insert the red harness wire into cavity 75 of the connector housing.
  - 5 . Tape the new wire to one of the existing looms running from the connector for approximately 50mm.
  - 6 . Reassemble the connector and reconnect to the fusebox.



- 27 . Secure the red power cable to the existing fusebox harness run to the passenger side of the glove compartment using cable ties, ensuring that the cable will not foul on the NVH pad or glove compartment.



- 28 . Check that all wiring is secured neatly and that the NVH pad has been returned to its original position.
- 29 . Connect the battery ground cable (see Global Technical Reference (GTR) Workshop Manual, section: 414-01).
- 30 . Synchronise the keyfob and receiver unit.
  - 1 . Remove the fuse from location 24 and replace with 5A fuse.
  - 2 . Within five seconds of doing this, press and hold the keyfob 'OFF' button until the keyfob red LED goes off.



31 . Install the glove compartment (see Global Technical Reference (GTR) Workshop Manual, section 501-12).

32 . Insert the Suppliment supplied in the Telestart Kit into the vehicle Handbook.

33 .



**CAUTION: This procedure requires IDS DVD110 with Patch file 1 or later loaded.**

Connect a Midtronic battery conditioner/power supply to the vehicle.

34 . Connect IDS to the vehicle and begin a new diagnostic session, by entering the correct VIN for the current vehicle.

35 . Follow the IDS prompts to read the vehicle configuration.

36 . When prompted 'Do you wish to read diagnostic trouble codes?', select 'NO' and then press 'tick' to continue.

37 . When the 'Content Model' is displayed select 'Vehicle Configuration' tab.

38 . Select 'Module Programming' from the 'Vehicle Configuration' menu.

39 . Select from the left-hand menu 'Add/Remove Accessories'.

40 . From the right-hand menu select 'Telestart Diesel Engine Pre-Heat'.

41 . Follow all on-screen instructions to complete this task.

42 . When the task is completed, exit the current session.

43 . Disconnect IDS and the battery charger/power supply.

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