

Technical Note 3623A

JEX 0

Basic manual: Technical Note 3385A

FAULT FINDING Special notes

Software version: 3.9

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"The repair methods given by the manufacturer in this document are based on the technical specifications current when it was prepared.

The methods may be modified as a result of changes introduced by the manufacturer in the production of the various component units and accessories from which his vehicles are constructed."

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IMMOBILISER Fault finding - Introduction



These changes involve new coding for each IMMOBILISER function fault. Fault processing is as described in Technical Note 3385A. It also contains the customer complaints and fault-finding charts.

This information can be viewed with the diagnostic tool under FAULT CONTROL by communicating with the IMMOBILISER function.

This application requires software version No. 0390 Vdiag: 04.

IMPORTANT: The connection unit cannot be configured if the battery is low. The proper voltage (> 9.5 V) must be available.



DF055 PRESENT OR STORED CODED LINE CIRCUIT

CO.0 : Short circuit to earth CC.1 : Short circuit to + 12 V

NOTES

None.

CO.0 - CC.1

NOTES

None.

Check the injection computer connections and MOT connector in the passenger compartment connection unit. Repair if necessary.

Check **insulation** from earth and from + 12 V of the connection between:

Passenger compartment connection unit MOT connector **track 18** — **Track (*)** of the injection computer

Repair if necessary.

If not, contact your Techline.

(*) Track 35 for engine F3R
Track 58 for engine F4R
Track 50 for engine L7X
Track 59 for engine F9Q
Track 1-G2 for engine G9T
Track 1 of coded solenoid valve (G8T)

AFTER REPAIR

Clear the fault memory.

Carry out a check using the diagnostic tool.

Deal with any other possible faults.



| DF061 PRESENT OR STORED | CLOCK LINE CC : Short circuit | |
|---|---|---------------------------------|
| | | |
| NOTES | None. | |
| | | |
| | | |
| cc | NOTES | None. |
| СС | NOTES | None. |
| Disconnect ring and se | NOTES ee if fault is still present. replace the transponder ri | |
| Disconnect ring and se If fault DF061 is gone, Check insulation from | ee if fault is still present. replace the transponder ri | ing. of the connection between: |

AFTER REPAIR

Clear the fault memory.
Carry out a check using the diagnostic tool.
Deal with any other possible faults.

DF062 PRESENT OR STORED **DATA LINE**

CC.0 : Short circuit to earth

OC : Open circuit or short circuit to + 5 V / 12 V

NOTES

None.

CC.0

NOTES

None.

Ensure insulation against earth of the connection between:

Passenger compartment connection unit ECH connector **track 8** — **Track 4** antenna ring connector

Repair if necessary.

Disconnect the 6-track antenna ring connector.

With the ignition off, check for 12 V on **track 9** of the passenger compartment connection unit ECH connector. If the value is faulty (+ before ignition), change the connection unit.

Reconnect the 6-track antenna ring connector.

With the ignition off, check for 12 V on **track 9** of the passenger compartment connection unit ECH connector. If the value is faulty (+ before ignition), change the antenna ring.

Switch off the ignition and wait until the immobiliser warning light flashes (immobiliser active). Disconnect the antenna ring.

If DF062 is no longer in short circuit (CC.0), the ring is defective. Replace the antenna ring.

If DF062 is in short circuit (CC.0), contact your Techline.

AFTER REPAIR

Clear the fault memory.

Carry out a check using the diagnostic tool.

Deal with any other possible faults.



| DF062 CONTINUED | | |
|--|-------|-------|
| NOTES | None. | |
| | | |
| со | NOTES | None. |
| Check the continuity of the connection between: Passenger compartment connection unit ECH connector track 8 Track 4 antenna ring connector Repair if necessary. Switch off the ignition and wait until the immobiliser warning light flashes (immobiliser active). Disconnect the antenna ring. If DF062 is no longer in open circuit, the ring is defective. Replace the antenna ring. If DF062 is in open circuit, contact your Techline. | | |

AFTER REPAIR

Clear the fault memory.
Carry out a check using the diagnostic tool.
Deal with any other possible faults.



| DF063 PRESENT OR STORED | SOLENOID VALVE ACKNOWLEDGEMENT | | |
|----------------------------------|--|--|--|
| NOTES | G8T engine | | |
| With the ignition on aga | Turn on the diagnostic tool's oscilloscope function. With the ignition on again, check for a pulse on track 18 of the passenger compartment connection unit MOT connector. Ignition on, if there are no pulses, change the connection unit. | | |
| immobiliser warning lig | for more than 30 consecutive seconds, then switch off the ignition and wait until the ght flashes (immobiliser active). on and see if ET167 is steadily lit. | | |
| YES | Change the passenger compartment connection unit. | | |
| NO | Replace the solenoid valve coded electronic unit. | | |

AFTER REPAIR

Clear the fault memory.

Carry out a check using the diagnostic tool.

Deal with any other possible faults.



| ET001 | <u>IMMOBILISER</u> |
|-------|--------------------|
| NOTES | None. |

ET001: INACTIVE The vehicle will not start.

Make sure there are no immobiliser or injection function faults.

Make sure the keys are the right ones (Espace key, right number ordered).

Repair if necessary.

Check for change in immobiliser function status ET002 and ET003.

Check immobiliser status in the injection function.

Repair if necessary.

If the fault persists, contact your Techline.

ET001: ACTIVE The vehicle starts.

Make sure there are no immobiliser or injection function faults.

Repair if necessary.

Check immobiliser activation.

Repair if necessary.

See if immobiliser status switches to ACTIVE in the injection function.

If the fault persists, contact your Techline.

AFTER REPAIR

| ET002 | KEY CODE RECEIVED |
|-------|-------------------|
| NOTES | None. |

ET002: INACTIVE

Transponder key displayed.

Make sure there are no immobiliser function faults.

Remove any metal objects near the key.

Make sure the keys are the right ones (Espace key, right number ordered).

Repair if necessary.

Insert the key head into another Espace. If status **ET002** is still INACTIVE, replace the key head(s). If status **ET002** switches to ACTIVE, check the connections in the vehicle concerned.

If the fault persists, contact your Techline.

ET002: ACTIVE

Transponder key not displayed.

Make sure there are no immobiliser function faults.

Repair if necessary.

Disconnect the transponder ring; if status **ET002** becomes inactive, replace the transponder ring. If the fault persists, contact your Techline.

AFTER REPAIR



| ET003 | VALID KEY CODE |
|-------|----------------|
| NOTES | None. |

ET003: INACTIVE

Transponder key displayed.

Make sure there are no immobiliser function faults.

Check whether status ET002 is OK.

Repair if necessary.

If the fault persists, contact your Techline.

ET003: ACTIVE

Transponder key not displayed.

Make sure there are no immobiliser function faults.

Repair if necessary.

Disconnect the transponder ring; if status ET003 becomes inactive, replace the transponder ring.

Check whether status ET002 is OK.

If the fault persists, contact your Techline.

AFTER REPAIR

| ET004 | + 12 V ACCESSORIES |
|-------|--------------------|
| NOTES | None. |

ET004: INACTIVE

+ 12 V accessories on.

Check the ignition switch connections.

Voltage not present.

Check fuse F33.

Check the continuity between **track 1** of the ignition switch and **track 5** of the yellow 26-track SS1 connector in the connection unit.

Check for 12 V in track 5 of the yellow 26-track SS1 connector in the connection unit.

Check the connections of the SS1 connector in the connection unit.

Repair if necessary.

Contact your Techline.

ET004: ACTIVE

+ 12 V accessories off.

Check for the absence of 12 V in **track 5** of the yellow 26-track SS1 connector in the connection unit. Check the connections of the SS1 connector in the connection unit.

Repair if necessary.

If no voltage, contact your Techline.

AFTER REPAIR



| ET005 | + 12 V AFTER IGNITION |
|-------|-----------------------|
| NOTES | None. |

ET005: INACTIVE

+ 12 V after ignition on.

Check the ignition switch connections.

Voltage not present.

Check fuse F15.

Check the continuity between **track 2** of the ignition switch and **track 17** of the yellow 26-track SS1 connector in the connection unit.

Check for 12 V in track 17 of the yellow 26-track SS1 connector in the connection unit.

Check the connections of the SS1 connector in the connection unit.

Repair if necessary.

Contact your Techline.

ET005: ACTIVE

+ 12 V after ignition off.

Check for the absence of 12 V in **track 17** of the yellow 26-track SS1 connector in the connection unit. Check the connections of the SS1 connector in the connection unit.

Repair if necessary.

Contact your Techline.

AFTER REPAIR



ANALYSIS OF IMMOBILISER CONDITIONS

The following four STATUSES display proper immobiliser system function and various malfunctions:

ET002: Key code received ET003: Key code valid ET001: Immobiliser

ET130: Immobiliser warning light

To test the transponder keys and/or the interconnection box, simply carry out a combined check of the four statuses.

1. System working properly, key recognised.

ET002: YES ET003: YES

ET001: INACTIVE

ET130: ACTIVE (3 seconds)

2. Faulty key or wrong key for ESPACE vehicle or defective ring.

ET002: NO ET003: NO ET001: ACTIVE ET130: INACTIVE

3. Key belongs to another ESPACE

ET002: YES ET003: NO ET001: ACTIVE ET130: INACTIVE

4. Faulty connection unit, right key, but connection unit fails to unlock.

ET002: YES ET003: YES ET001: INACTIVE

ET130: ACTIVE (3 seconds)

AFTER REPAIR

| ET007 | FORCED PROTECTION MODE |
|-------|------------------------|
| NOTES | + After ignition. |

This status indicates immobiliser function activation by diagnostics following command AC004.

AFTER REPAIR

| ET131 | TRANSPONDER PROGRAMMING COMPLETED |
|-------|-----------------------------------|
| NOTES | + After ignition. |

This status indicates whether the immobiliser system has been programmed for the keys.

ET131: YES

AFTER REPAIR Repeat the conformity check.

| ET132 | 1st TRANSPONDER KEY PROGRAMMED | |
|--|--------------------------------|--|
| NOTES | + After ignition. | |
| This status indicates whether the first transponder key has been programmed. | | |

AFTER REPAIR Repeat the conformity check.

| ET138 | KEY PROGRAMMING COMPLETE |
|-------|--------------------------|
| NOTES | + After ignition. |

This status indicates whether the vehicle has been programmed for the transponder keys.

ET138: YES

AFTER REPAIR Repeat the conformity check.

INSTRUMENT PANEL Fault finding - Introduction



These changes involve processing and new coding for status and parameters in the INSTRUMENT PANEL CONFIGURATION and READ CONFIGURATION functions.

This application requires software version No. 0390 and Vdiag: 04.

IMPORTANT: The instrument panel cannot be configured if the battery is low. The proper voltage must be available.



| ET001 | +12 V ACCESSORIES |
|-------|-------------------|
| NOTES | None. |

ET001: INACTIVE

+ 12 V accessories on.

Check the ignition switch connections.

Voltage not present.

Check fuse F33.

Check the continuity between **track 1** of the ignition switch and **track 5** of the yellow 26-track SS1 connector in the connection unit.

Check for 12 V in track 5 of the yellow 26-track SS1 connector in the connection unit.

Check the connections of the SS1 connector in the connection unit.

Repair if necessary.

Contact your Techline.

ET001: ACTIVE

+ 12 V accessories off.

Check for the absence of 12 V in track 5 of the yellow 26-track SS1 connector in the connection unit.

Check the connections of the SS1 connector in the connection unit.

Repair if necessary.

Contact your Techline.

AFTER REPAIR



| ET002 | + 12 V AFTER IGNITION |
|-------|-----------------------|
| NOTES | None. |

Check the ignition switch connections.

Voltage not present.

ET002: INACTIVE

Check fuse F15.

Check the continuity between track 2 of the ignition switch and track 17 of the yellow 26-track SS1 connector.

+ 12 V after ignition on.

Check for 12 V in track 17 of the yellow 26-track SS1 connector in the connection unit.

Check the connections of the SS1 connector in the connection unit.

Repair if necessary.

Contact your Techline.

ET002: ACTIVE + 12 V after ignition off.

Check for 12 V in track 17 of the yellow 26-track SS1 connector in the connection unit.

Check the connections of the SS1 connector in the connection unit.

Repair if necessary.

Contact your Techline.

AFTER REPAIR



| ET060 | VALID RADIOFREQUENCY KEY |
|-------|--------------------------|
| NOTES | None. |

RF key pressed.

See if the batteries in the remote control are OK.

Repair if necessary.

ET060: INACTIVE

Check whether status **ET067** is OK.

Repair if necessary.

If the fault persists, contact your Techline.

ET060: ACTIVE RF key not pressed.

Check whether status ET067 is OK.

Repair if necessary.

Reprogram.

If the fault persists, contact your Techline.

AFTER REPAIR



| ET062 | SEAT BELT ALARM |
|-------|------------------------|
| | |
| NOTES | + 12 V after ignition. |

ET062: INACTIVE

BELT BUCKLED

Check the belt switch connections and make sure the switch works properly.

Repair if necessary.

NOTES

Check for the earth in track 1 of connection R496.

Check the continuity between track 1 of connection R496 and track 22 of the yellow 26-track SS1 connector.

Check the connections of the SS1 connector in the connection unit.

Seat belt buckled.

Check the condition of the seat belt bulb.

Repair if necessary.

Contact your Techline.

ET062: ACTIVE **BELT NOT BUCKLED**

Check the belt switch connections and make sure the switch works properly.

Repair if necessary.

Check for no earth in track 1 of connection R496.

Check the insulation from earth between track 1 of connection R496 and track 22 of the yellow 26-track SS1 connector.

Check the connections of the SS1 connector in the connection unit.

Repair if necessary.

Contact your Techline.

AFTER REPAIR



| ET067 | RF FRAME RECEIVED |
|-------|-------------------|
| NOTES | None. |

ET067: INACTIVE RF key pressed.

Make sure there are no faults in the connection unit function.

Repair if necessary.

Make sure the radiofrequency remote control (Espace part) is OK.

See if the batteries in the remote control are OK.

Repair if necessary.

Check status ET067 functioning on another vehicle.

If the status does not change to ACTIVE, replace the key head.

If the status becomes ACTIVE properly, contact your Techline.

Reprogram.

If the fault persists, contact your Techline.

ET067: ACTIVE RF key not pressed.

Make sure there are no faults in the connection unit function.

Repair if necessary.

Reprogram.

If the fault persists, contact your Techline.

AFTER REPAIR

RADIOFREQUENCY KEY STATUS ANALYSIS

The following two STATUSES display proper functioning of the remote control system and its various malfunctions:

ET067: RF frame received ET060: Valid RF key

To test the transponder keys and/or the interconnection box, simply carry out a combined check of the two statuses.

1. System functioning properly, radiofrequency key recognised.

ET067: YES ET060: YES

2. Faulty radio key or wrong key for ESPACE vehicle.

ET067: NO ET060: NO

3. Radiofrequency key belongs to another ESPACE.

ET067: YES ET060: NO

AFTER REPAIR



| | COOLANT TEMPERATURE |
|---|------------------------------------|
| PR027 | |
| | |
| | |
| NOTES | + after ignition on. |
| 0001 ANT TEMPERA | |
| | TURE refers to the engine coolant. |
| The reading is on a scale of 1 to 9. This matches the number of blocks displayed on the instrument panel. The bar climbs with the temperature: | |
| Minimum temperature < level 1 < 55°C | |
| 55°C < level 2 < 67°C | |
| 67°C < level 3 < 80°C | |
| 80°C < level 4 < 97°C | |
| 97°C < level 5 < 102°C | |
| 102°C < level 6 < 107°C | |

AFTER REPAIR

107°C < level 7 < 112°C 112°C < level 8 < 115°C

115°C < level 9 < maximum temperature



| PR035 | <u>FUEL LEVEL</u> |
|-------|----------------------|
| | |
| NOTES | + after ignition on. |

The FUEL LEVEL information reflects the amount of fuel in the tank.

The reading is on a scale of 1 to 9. This matches the number of blocks displayed on the instrument panel.

AFTER REPAIR



| P:R036 | OIL LEVEL |
|--------|----------------------|
| NOTES | + after ignition on. |

The OIL LEVEL INFORMATION reflects the amount of oil in the engine sump. The reading is on a scale of 1 to 9. This matches the number of blocks displayed on the instrument panel.

After replacing a connection unit or battery, or a voltage drop, the display might be 0 (zero). Follow these steps for an accurate reading:

- switch off the ignition,
- close the driver's door,
- wait for more than 1 minute,
- open the door,
- switch on the ignition;
- the level should now be displayed.

AFTER REPAIR



| ET061 | SOURCE OF LAST OPENING ELEMENT COMMAND |
|-------|--|
| | |
| NOTES | None. |

There are two possible sources:

Electric door locking: doors and boot last opened by manual lock/unlock control in the courtesy light console. **Radiofrequency remote control:** doors and boot last opened by vehicle's remote control.

AFTER REPAIR



| ЕТ070 | REMOTE CONTROL PROGRAMMING COMPLETED |
|-------|--------------------------------------|
| NOTES | + 12 V after ignition. |

This status indicates that the instrument panel and connection unit have memorised the radiofrequency transmitters.

AFTER REPAIR



| ET075 | REMOTE CONTROL PROGRAMMING IN PROGRESS |
|-------|--|
| NOTES | + 12 V after ignition. |

The status is **YES** during programming of one or more radiofrequency remote controls. In other words, after pressing on the electric door lock control > 5 seconds (ignition off).

AFTER REPAIR

| ET076 | NUMBER OF RF KEYS MEMORISED |
|-------|-----------------------------|
| NOTES | + 12 V after ignition. |

This status indicates the number of radiofrequency keys store in the instrument panel (0, 1 or 2 keys).

AFTER REPAIR

INSTRUMENT PANEL Fault finding - Configurations

| NOTES | Ignition off. |
|-------|---------------|
|-------|---------------|

CF129: With hazard lights reminder on radiofrequency remote control

This configuration makes the hazard lights come on when the radiofrequency remote control is pressed (doors closed).

CF128: Without hazard lights reminder on radiofrequency remote control

This configuration prevents the hazard lights from coming on when the radiofrequency remote control is pressed (doors closed). It is required when a second alarm is installed. Then the hazard lights are controlled by the alarm when the remote control is pressed.

LC043: This display is used to check the current configuration.

AFTER REPAIR

CONNECTION UNIT Fault finding - Introduction



These changes cover a new way of dealing with a fault in function DF052. The procedure for other faults is the same as in Note Technique 3385A.

This application requires software version No. 0390 and Vdiag: 04.

IMPORTANT: The connection unit cannot be configured if the battery is low. The proper voltage must be available.

CONNECTION UNIT Fault finding - Fault Interpretation



DF052 PRESENT OR STORED EXTERIOR TEMPERATURE SENSOR CIRCUIT

CC : Short circuit
CO : Open circuit

NOTES

+ after ignition on.

Vehicle equipped with exterior temperature sensor.

Vehicle without climate control.

CC

NOTES

None.

Check the insulation against the earth and + 12 V in the connection between **track 16** of the yellow 26-track SS1 connector and **track 6** of the temperature sensor.

Repair if necessary.

If the fault persists, replace the temperature sensor.

CO NOTES None.

Check the continuity of the connection between **track 16** of the yellow 26-track SS1 connector and **track 6** of the temperature sensor.

Repair if necessary.

Check the continuity of the connection between **track 3** of the yellow 26-track SS1 connector and **track 5** of the temperature sensor.

Repair if necessary.

If the fault persists, replace the temperature sensor.

AFTER REPAIR

Clear the fault memory.

Deal with any other possible faults.

CONNECTION UNIT Fault finding - Configurations

NOTES

Ignition off.

Battery voltage > 9.5 V.

Configuration to carry out when a connection unit is replaced:

CF636 BII TYPE

A message on the screen says to check for the proper voltage (> 9.5 V).

Then a calibration is carried out.

The next screen displays the vehicle's equipment:

Type of engine : F3R, Z7X, F4R, L7X, G8T AS3, G8T TTP EGR,

G9T, F9Q, F3R LPG

Vehicle type : JE0P or JE0E

Except JE0P or JE0E

Steering wheel position : Right

Tailgate module Left With

None

Type of rear screen : Lit

Opening element

With hazard lights reminder on

radiofrequency remote control : With None

Type of heating and ventilation : Manual

Climate control

Radio display : With

None

Based on the preceding selections, the second configuration screen displays the following headings:

Trip Computer : With None

Type of air bag : SDM

EC5

20-sec. oil level display : Press on trip computer

+ after ignition feed present

Next the configuration read screen appears.

AFTER REPAIR

Clear the fault memory.

Deal with any other possible faults.