



Espace

Type

Sub-section

JE0 X

87

87 PASSENGER COMPARTMENT CONNECTION UNIT (BII)

- Engine: XXX Basic manual: M.R. 315
- Gearbox: XXX N.T. 3028A

TECHNICAL DEVELOPMENT OF VEHICLE JE0X

VEHICLE IDENTIFICATION

The red engine immobiliser warning light is located on the instrument panel.

LAUNCH DATE OF VEHICLE EQUIPPED WITH THE PASSENGER COMPARTMENT CONNECTION UNIT (BII)

F3R engine: week 35
Others: week 38

This technological development allows the vehicle wiring to be made simpler by the use of multiplexing, and brings some improvements in terms of customer use but will require no new knowledge in the area of fault finding and repair.

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IMPORTANT:

Fault finding by SUBSTITUTION is FORBIDDEN.

The mileage is in the instrument panel and passenger compartment connection unit memory (BII).

When replacing one of these two parts, the higher mileage will automatically be memorised and displayed.

"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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GENERAL

This technological development allows the vehicle wiring to be made simpler through the use of multiplexing.

This new feature for model year 1999 brings some improvements in terms of customer use, but requires no new knowledge in the area of fault finding and repair.

The special features are dealt with in this section and in the wiring diagram 8141A.

DEVELOPMENTS

- Instrument panel display.
- Radiofrequency PLIP for the doors.
- Interior lighting programming.
- Wiper programming.
- Electric windows.
- Location of fuses.

INSTRUMENT PANEL

The red immobiliser warning light is on the left hand side.

Regrouping of handbrake and brake fluid level warning lights.

Display of outside temperature on all vehicles with radio equipment.

Manages the radiofrequency code (TRF) and sends the command for door locking or unlocking to the passenger compartment connection unit.

PLIP

If the radiofrequency PLIP is pressed and held down, its effective range is 2 metres.

INTERIOR LIGHTING PROGRAMMING

The middle row lights operate in the same way as the front ones.

WIPING

Pulsed wiping.

Rear wiping operation when reverse gear is engaged.

Operation of windscreen wipers varies with vehicle speed.

ELECTRIC WINDOWS

Operation authorised when the ignition switch is at +accessories feed or stop for 30 seconds where + after ignition feed is lost.

Only the driver's window has this function.

TECHNICAL DEVELOPMENTS

New parts:

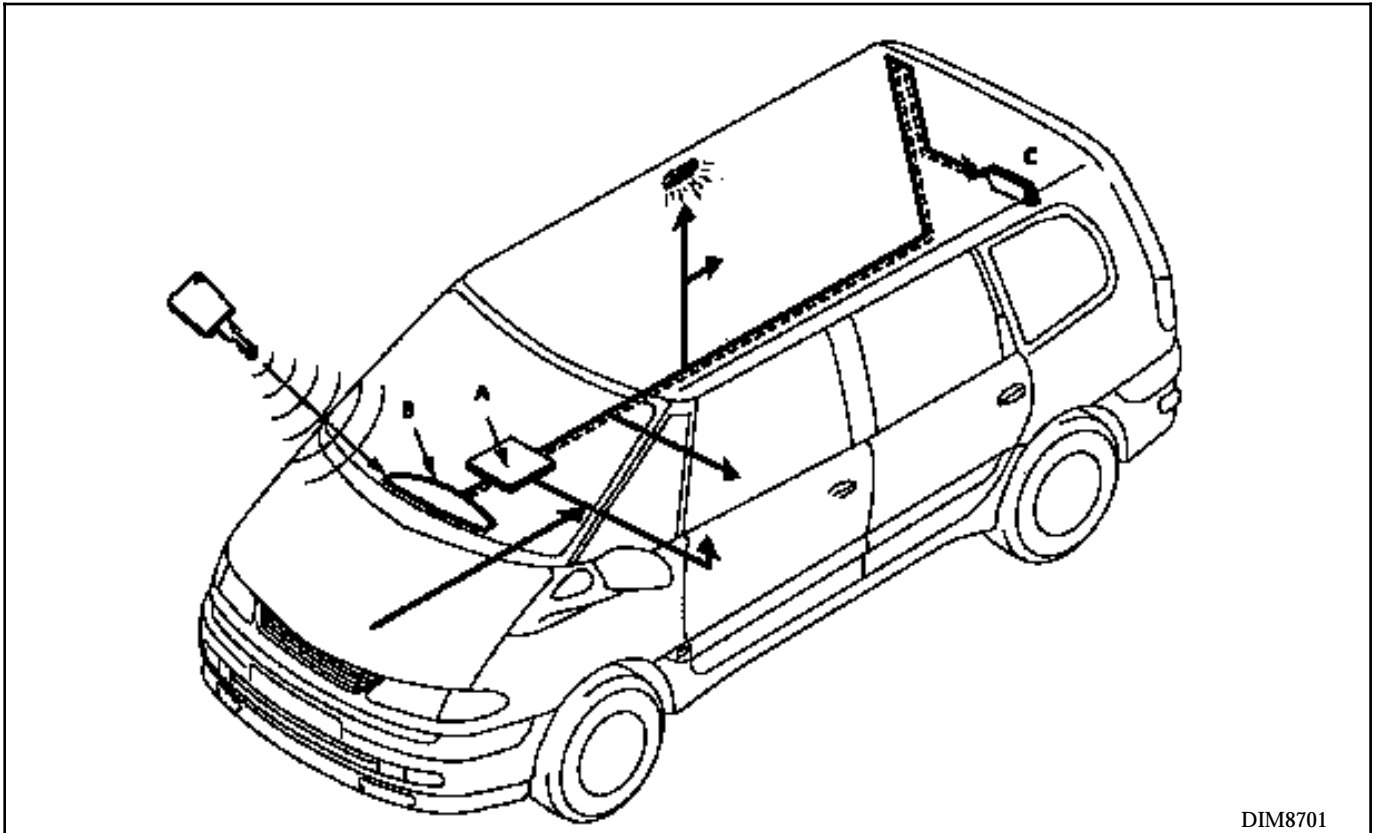
- Passenger compartment structure wiring.
- Dashboard wiring.
- Fuse box.
- Passenger compartment connection unit (BII).
- Tailgate module.
- Instrument panel display.
- Remote control of the opening elements.

OPERATING PRINCIPLE

The passenger compartment connection unit (BII):

- receives driver's commands and engine alerts,
- sends digital codes to the instrument panel and the tailgate module, via two wires for the instrument panel and one wire for the tailgate module which carries several commands simultaneously.

LOCATION OF COMPONENTS RELATED TO THE PASSENGER COMPARTMENT CONNECTION UNIT BII



DIM8701

----- multiplexed connection

A : Passenger compartment connection unit (BII)

B : Instrument panel

C : Tailgate module

COMPOSITION OF MULTIPLEX NETWORK

Multiplexing only affects the management of «comfort»

Passenger compartment connection unit (BII)

OBD diagnostic socket

Instrument panel display

Wiring looms

COMPOSITION OF NON-MULTIPLEXED COMPLEMENTARY NETWORK

OBD diagnostic socket

Injection computer

ABS 5.3 computer

Radio

COA computer

Engine wiring loom

Tailgate module

Description

PASSENGER COMPARTMENT CONNECTION UNIT (A).

This unit deals with and controls the following functions:

- engine immobiliser,
- door locking,
- passenger compartment lighting,
- driver's electric window,
- windscreen wiping,
- engine information,
- sending information to the tailgate module for the operation of: rear screen wiping, rear fog lights....

It mainly exchanges information with the instrument panel display and the tailgate module and also manages the warning lights for the other instrument panel display functions.

It replaces the engine immobiliser unit, the central flasher unit, the air conditioning relay, the rear electric window blocking relay and the 0 Volt relay after the radiofrequency PLIP.

It centralises fault finding information which it sends to the XR25 cassette n°18.

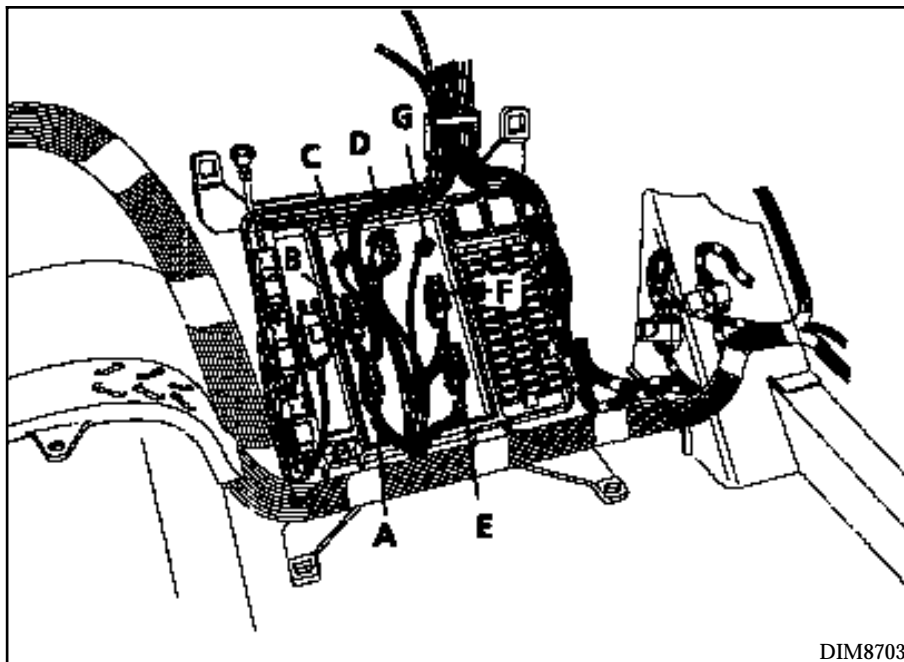
It has four operating modes:

- stand-by mode (vehicle stationary),
- pre-ignition mode (+accessories or +after ignition feed),
- ignition mode (+ignition),
- engine running mode.

It is located in the passenger footwell with the fuse box.

Heated rear screen relay on the left hand side.

After ignition feed relay on the right hand side.



- A 26 track yellow connector
- B 26 track yellow connector
- C 1 track white connector
- D 16 track black connector

- E 12 track blue connector
- F 26 track blue connector
- G 1 track grey connector

Fault finding

FAULT FINDING PRINCIPLE

Fault finding is carried out using conventional RENAULT tools: the **XR25**, the **NXR** and a special bornier **Elé. 1506** for checking the continuity of the wiring looms. This bornier is connected in series between the vehicle wiring loom and the passenger compartment connection unit whose operation it does not interrupt.

Cassette N°**18** for the **XR25** is compatible with the passenger compartment connection unit (BII).

Fault finding is still based on:

- The use of fault bargraphs.
- Forced command modes.
- Acknowledgement of driver commands.

FAULT FINDING SECTION

The sections in the fault finding sections affected by the technological developments are the following:

62 Air conditioning

This fault finding is identical to the other JE0X models with the exception of the location of the air conditioning relay 474 contained in the passenger compartment connection unit BII

82 Engine immobiliser

This fault finding and the parameters are identical to other JE0X models with the exception of the track allocations

83 Instrument panel display

This fault finding is entirely new.

It deals with warning light information in the form of fault charts.

87 Passenger Compartment Connection Unit BII

This fault finding is entirely new.

CONVENTIONAL FAULT FINDING

The following fault finding will not change:

- Pneumatically controlled self-levelling suspension.
- Injection.
- ABS.
- Automatic transmission.
- Radio.

IMPORTANT:

When replacing an instrument panel or passenger compartment connection unit BII, the mileage is retained in the passenger compartment connection unit BII and instrument panel display memory.

When connecting the new part, the mileage in the memory will automatically be displayed on the instrument panel or in the passenger compartment connection unit BII.

Do not carry out fault finding using a substitute part from another vehicle as the higher mileage will be memorised and will be displayed on both vehicles.

Fault finding

Fault finding principle

Engine immobiliser function

Customer complaint	ACTION	KEY HEAD	INSTRUMENT PANEL	BII	INJECTION
Key lost Second key not available	XR25 Renault Assistance	Exchange	Resynchronisation of radiofrequency PLIP	Resynchronisation of key	-
Key lost Second key not available IMMED. ASSISTANCE	XR25 Renault Assistance	Exchange	Exchange	Exchange	Exchange
Engine cannot be started Key head damaged	XR25 Renault Assistance	Exchange	-	-	-
Doors cannot be locked or unlocked	XR25 Renault Assistance	Exchange	Resynchronisation of radiofrequency PLIP	-	-

Fault finding

Fault finding principle

Order of instruction

FAULT	Fault finding XR25 Cassette n° 18		CHECK				PARTS TO REPLACE
	Fiche		Feed	Command	Connections	Wiring loom continuity	
complete failure of instrument panel	67 1/3	1	2		4	3	Instrument panel
partial failure of instrument panel	67 1/3	1			3	2	Instrument panel
radio display	67 1/3	1		2	4	3	Instrument panel, Radio
coolant temperature, oil, oil pressure, level...	67 1/3	1			2	3	Instrument panel BII sensors
+ accessories + after ignition feed	67 1/3	1	2	5	4	3	BII
dialogue	67/68/ 69	1	2		4	3	BII
key for radiofrequency PLIP	68 2/3	1	3	2	4		Instrument panel Radiofrequency PLIP BII
engine immobiliser	68 2/3	1	3	2	4		BII - Antenna ring
side lights, dipped headlights, main beam headlights, fog lights	69 3/3	1	2	5	4	3	BII Command
illumination of courtesy lights	69 3/3	1	5	2	4	3	BII Command
windscreen wipers and washers	69 3/3	1	3	5	4	2	BII - pump motor
electric windows	69 3/3	1	3	5	4	2	BII Command motor
(un)locking	69 3/3	1	3	5	4	2	BII Command
ADAC	69 3/3	1	2	5	4	3	BII Command
rear wipers, washers, fog lights	69 3/3	1	3	5	4	2	BII - Tailgate module - Command
LH/RH indicators	69 3/3	1	3	5	4	2	BII Command
reversing lights	69 3/3	1	3	5	4	2	BII Command
air conditioning			3	1	4	2	BII Command

The Workshop Repair Manual MR 315 Espace is the basic working manual.

The sections:

- 62 Air conditioning,
 - 82 Engine immobiliser,
 - 83 Instrument panel display,
 - 87 Passenger compartment connection unit
- have been modified.

The MATRA AUTOMOBILE TECHNICAL DEPARTMENT is at your disposal to help you deal with incidents connected to the passenger compartment connection unit (BII).

Any incident involving the passenger compartment connection unit (BII) and its peripherals must be diagnosed using the XR25 (cassette n° 18) or the NXR.