

STRALIS

CIRCUIT DIAGRAMS (BC2)

IVECO

"This document provides data, characteristics, instructions and methodology to perform repair interventions on the vehicle and its components.

Anyway, this document is addressed to qualified and specialised personnel. Iveco commercial and assistance network personnel as well as all Iveco authorised points of assistance are specifically qualified and equipped to perform the repair interventions that are indicated in this document.

Before performing any intervention, check to have available the document relating to the vehicle model on which the intervention is being performed and also make sure that all accident prevention devices, such as, as a rough guide, goggles, helmet, gloves, shoes, as well as work tooling, lifting and transport tooling, etc., are available and efficient, and further make sure that the vehicle is put such a way that an intervention can be made in safety conditions.

Making interventions strictly observing the indications given here, as well as using specific tooling indicated, assures a correct repair intervention, execution timing observance and operators' safety.

Each repair intervention must be finalised to the recovery of functionality, efficiency and safety conditions that are provided by Iveco.

Each intervention, on the vehicle, that is finalised to a modification, alteration or else, which is not authorised by Iveco, involves the exclusion of any responsibility for Iveco, and, in particular, where the vehicle is covered by a guarantee, each such intervention involves an immediate lapse of the guarantee.

Responsibility for Iveco in repair intervention execution is excluded.

Iveco is available to provide all clarifications necessary to make interventions, as well as to provide indications in cases and situations not included in this document.

Data and information contained in this document could result not to be updated owing to modifications made by Iveco at any moment for technical or commercial reasons, or because of the need to adapt the vehicle to law requirements in different countries.

In the case of a difference between what contained here and what actually found on the vehicle, please contact Iveco network before making any intervention."

The data contained in this publication might fail to reflect the latest changes which the Manufacturer may introduce at any time, for technical or sales purposes, or to meet the requirements of local legislation.

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NEW FEATURES DUE TO THE INTRODUCTION OF BODY COMPUTER 2 (BC2)**Functions moved from BCI, CM (now eliminated) and VCM:**

- Engine cranking
- Some body builder signal
 - Ext. Body Builder Cruise Control,
 - Parking light,
 - Parking brake.

Functions moved from CM to BC2:

- Window curtain,
- Red light,
- Windscreen washer pump,
- Windscreen water low sensor,
- Vehicle standstill signal for BB.

Functions eliminated from the Multiplex:

- Rotating lights,
- Front window heater,
- Automatic snow chain.

Functions added to the Multiplex with BC2:

- External Light signal / Emergency light for BB
- K15 low for frame computer (the K15 with BC2 will be connected to Vbat instead of ground as BCI),
- Seat belt inserted sensor (not used at the moment),
- Fading white lights,
- New bed spot lights,
- Power preservation for production line and showroom, power management supplement shut off at very low battery,
- Programmable spare I/O,
- KW2000 on CAN.

Apart from these changes to the MUX system, the connectors are being standardised for the Stralis, Trakker and Eurocargo bodybuilders.

CAN LINES

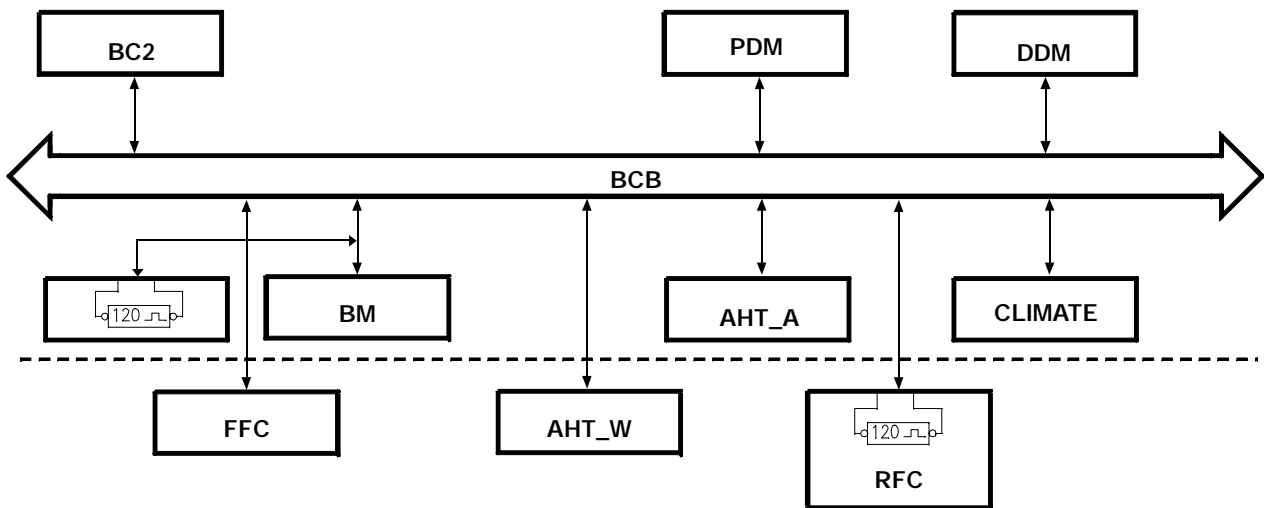
Dialogue between the Multiplex system, vehicle systems, engine control unit, SCR system, radio and various setters is carried out by means of the CAN lines:

- BCB - Body Control Bus
- VDB - Vehicle Data Bus
- ECB - Engine Control Bus
- ICB - Instruments Cluster Bus
- IDB - Infotainment Data Bus
- FMB - Fuhrpark Management Bus

BCB (Body Control Bus) communication line

Allows communication between the different electronic systems on the vehicle. This line does not regard directly the units on the VDB line but the units that carry out different onboard services.

Figure 1



113545

Technical features

- Data transmission speed 62.500 (BIT/SEC)
- Color of the wire Gray

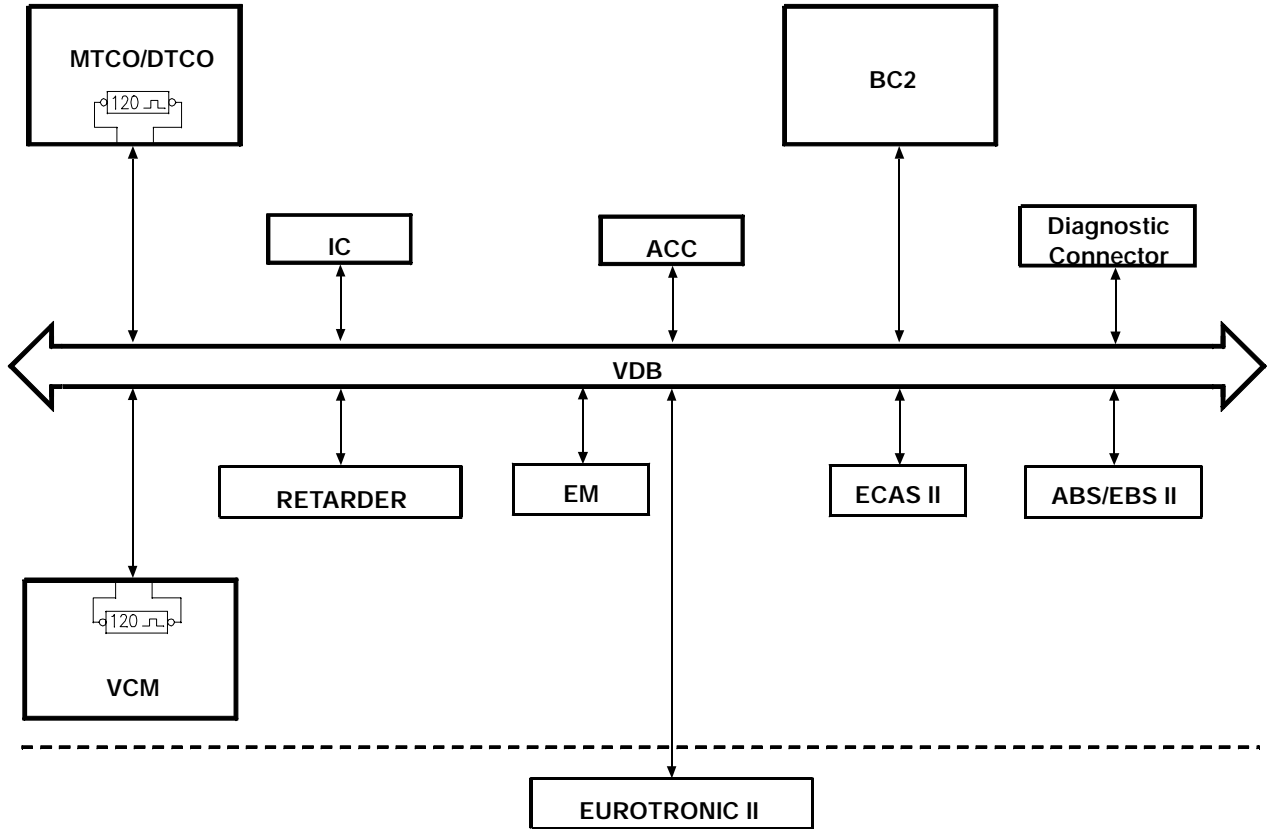
List of Units

Ref.	Description
BC2	Body Computer
DDM	Driver Door Module Unit
PDM	Passenger Door Module Unit
BM	Bed Module
CLIMATE	Air Conditioning
FFC	Front Frame Computer Unit
RFC	Rear Frame Computer Unit
AHT-A	Air type heater, located on the rear right part of the cab
AHT-W	Water type heater, located on the front right wheel house, next to the FFC

VDB (Vehicle Data Bus) Communication Line

Allows the electronic systems on the vehicle to dialogue. The units connected to it are: Eurotronic Transmission, Retarder, EBS, Ecas, Diagnosis connector, VCM, Tachograph, ACC and EM
 This line also dialogues with the Cluster and the Body Computer.

Figure 2



113546

Features

- Data transmission speed 250.000 (BIT/SEC)
- Color of the wire Black

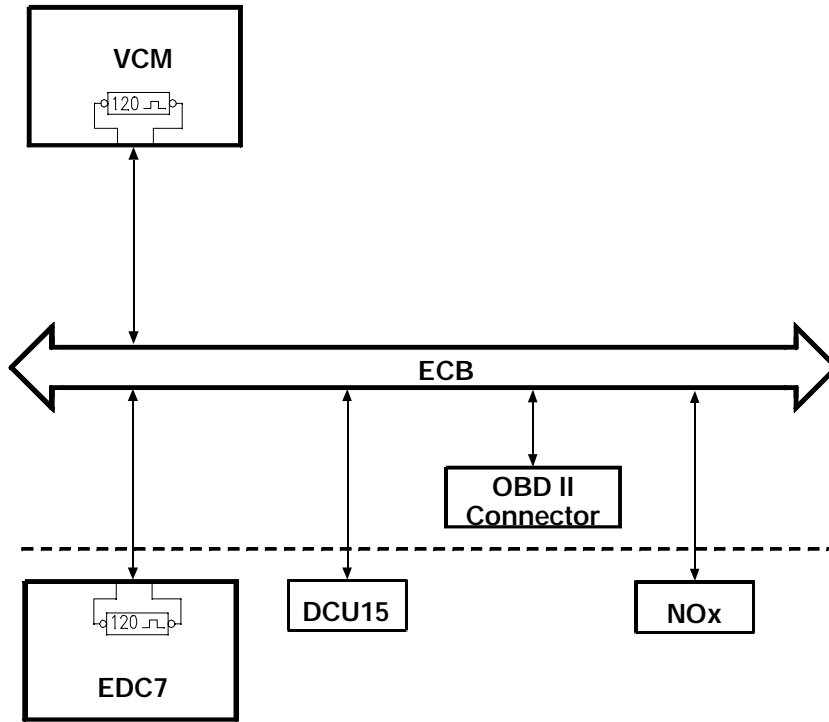
List of Units

Ref.	Description
MTCO	Tachograph
DTCO	Digital Tachograph
VCM	Vehicle Control Module Unit
IC	Cluster
BC2	Body Computer
Diagnostic Connector	30 pole diagnosis connector
ABS	ABS Unit
EBS II	EBS II Unit
RETARDER	Intarder Unit
ECAS II	Pnuematic suspension unit
EUROTRONIC II	Eurotronic II automatic transmission unit
ACC	ACC (Adaptive Cruise Control) Unit
EM	Expansion Module

ECB (Engine Control Bus) communication line

Allows the units and the engine control sensors to dialogue together. The units connected to it are: EDC, VCM, DCU15, NO_x sensor and the OBD connector.

Figure 3



113547

Features

- Data transmission speed 250.000 (BIT/SEC)
- Color of the wire Yellow

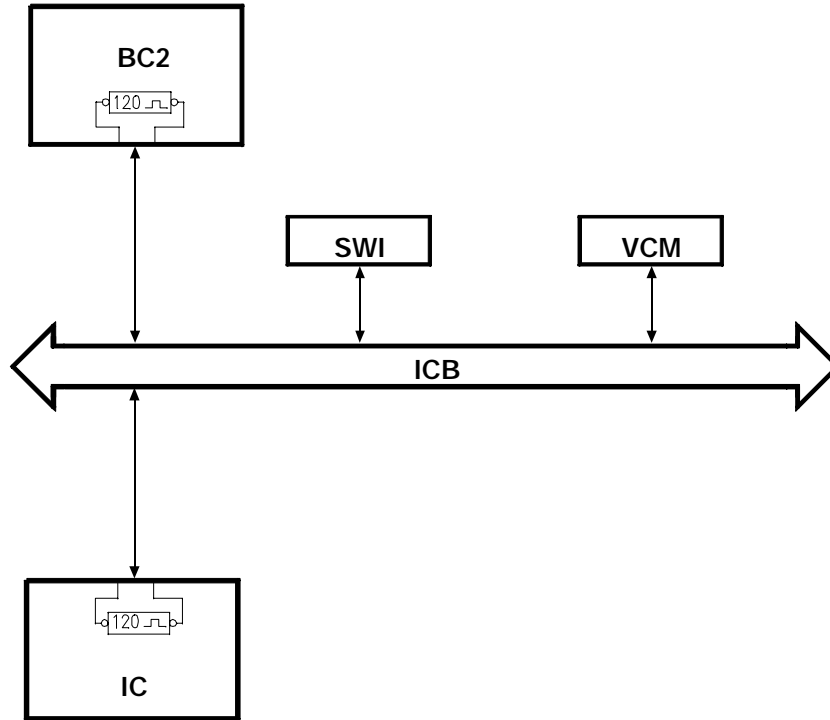
List of Units

Ref.	Description
VCM	Vehicle Control Module Unit
EDC7	Engine control unit
DCU15	SCR pumping module unit
OBD II Connector	16 pole connector for OBD (onbord diagnose)
NO _x	NO _x sensor

I.C.B. (Instruments Cluster Bus) communication line

Allows dialogue between the unit located on the steering column (SWI), BODY COMPUTER, CLUSTER and VCM,. In this way all information coming from the steering wheel and the power steering can reach their respective users i.

Figure 4



113548

Technical features

- Data transmission speed 250.000 (BIT/SEC)
- Color of the wire Green

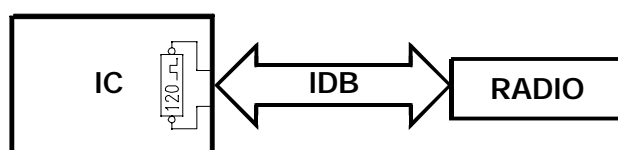
List of Units

Ref.	Description
IC	Cluster
BC2	Body Computer
VCM	Vehicle Control Module Unit
SWI	Steering Wheel Interface Unit

I.D.B. (Infotainment Data Bus) communication line

Allows communication between the Cluster and the Radio. The messages sent are shown on the CLUSTER.

Figure 5



112282

Technical features

- Data transmission speed 100.000 (BIT/SEC)
- Color of the wire Blue

List of Units

Ref.	Description
Radio	Radio
IC	Cluster