X3000车型BCM电控单元介绍

系统功能概述。

X3000配置的BCM电控单元是专门开发，主要针对陕汽X3000车型BCM项目，零件号DZ97189585116，主要负责实现灯光控制、排气制动控制、雨刮喷淋控制功能以及发动机启动控制、燃油防盗等车身控制功能。

Introduction of BCM Electronic Control Unit of X3000 Model

An overview of system functions.

The BCM electronic control unit of X3000 is specially developed, mainly for the BCM project of Shaanxi Automobile X3000 model, part number DZ97189585116, mainly responsible for light control, exhaust brake control, wiper spray control, engine start control, fuel anti-theft, etc. Body control function.

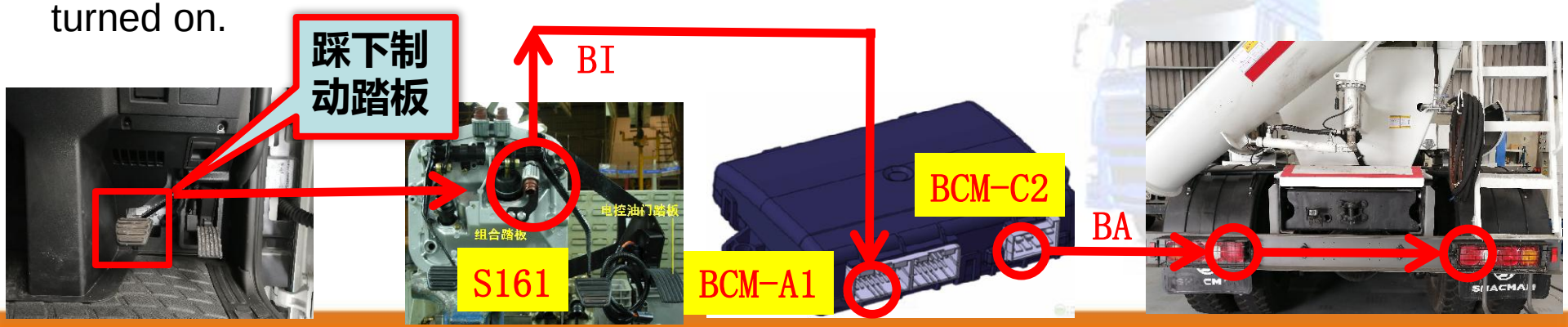
BCM电控单元的基本功能描述及功能详解。

制动灯功能：

当驾驶员踩下制动踏板时，制动踏板轴上面的旋转凸轮转动，S161制动开关前端电磁感应的触点闭合，制动信号通过BI线输入到BCM的A1端子。此时BCM-C2端子输出的制动灯电路，通过BA线连接到后尾灯，制动灯被点亮。

Basic functional description and detailed functional explanation of BCM electronic control unit. Brake light function:

When the driver steps on the brake pedal, the rotating cam on the brake pedal shaft rotates, the contact of the electromagnetic induction at the front end of the S161 brake switch is closed, and the brake signal is input to the A1 terminal of the BCM through the BI line. At this time, the brake light circuit output by the BCM-C2 terminal is connected to the rear tail light through the BA line, and the brake light is turned on.



BCM电控单元的基本功能描述及功能详解。

制动灯(联动)功能：

当排气制动在正常（制动）工作时，

或者缓速器在正常（制动）工作时，

BCM根据收到CAN总线的信号，控制其制动灯同步联动点亮。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Brake light (linkage) function:

When the exhaust brake is working normally (braking),

Or when the retarder is working normally (braking),

According to the signal received from the CAN bus, the BCM controls its brake lights to light up synchronously.

BCM电控单元的基本功能描述及功能详解。

紧急制动功能：制动灯闪烁。

1，当行驶中车速大于50km/h，

2，或者ABS系统工作中，

3，若进行了紧急制动（急刹车），即减速度大于4 m/s² 。

此时的制动灯在点亮时呈现闪烁状态，闪烁频率是4Hz。

Basic functional description and detailed functional explanation of BCM electronic control unit.

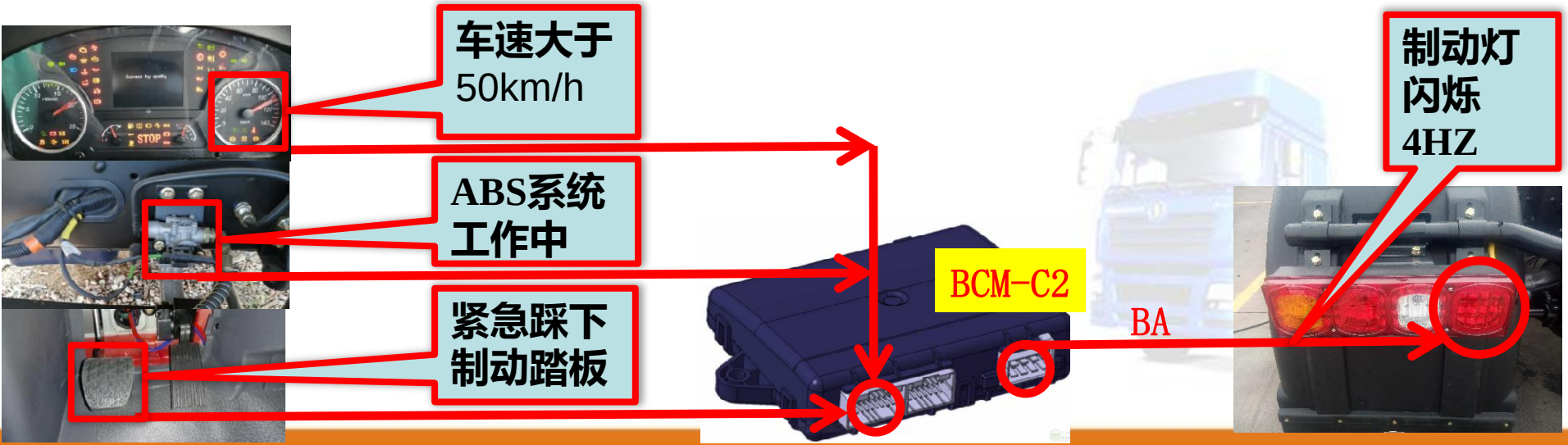
Emergency braking function: The brake light flashes.

1. When the driving speed is greater than 50km/h,

2, or the ABS system is working,

3. If emergency braking (sudden braking) is performed, the deceleration is greater than 4 m/s².

At this time, the brake light flashes when it is on, and the flashing frequency is 4Hz.



BCM电控单元的基本功能描述及功能详解。

紧急制动功能：制动灯闪烁。

当满足条件之一时，

1：减速度降低到小于2.5 m/s2 时。

2：ABS退出工作状态。

此时制动灯停止闪烁。

Basic functional description and detailed functional explanation of BCM electronic control unit.

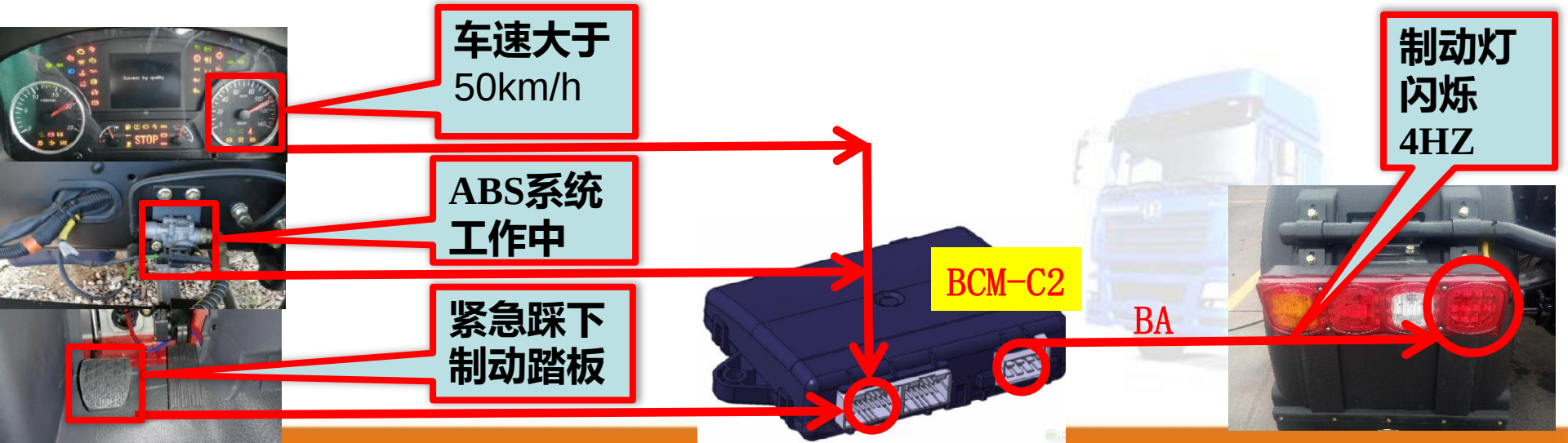
Emergency braking function: The brake light flashes.

When one of the conditions is met,

1: When the deceleration is reduced to less than 2.5 m/s2.

2: ABS exits the working state.

The brake lights stop flashing at this point.



BCM电控单元的基本功能描述及功能详解。

日间行车灯功能：

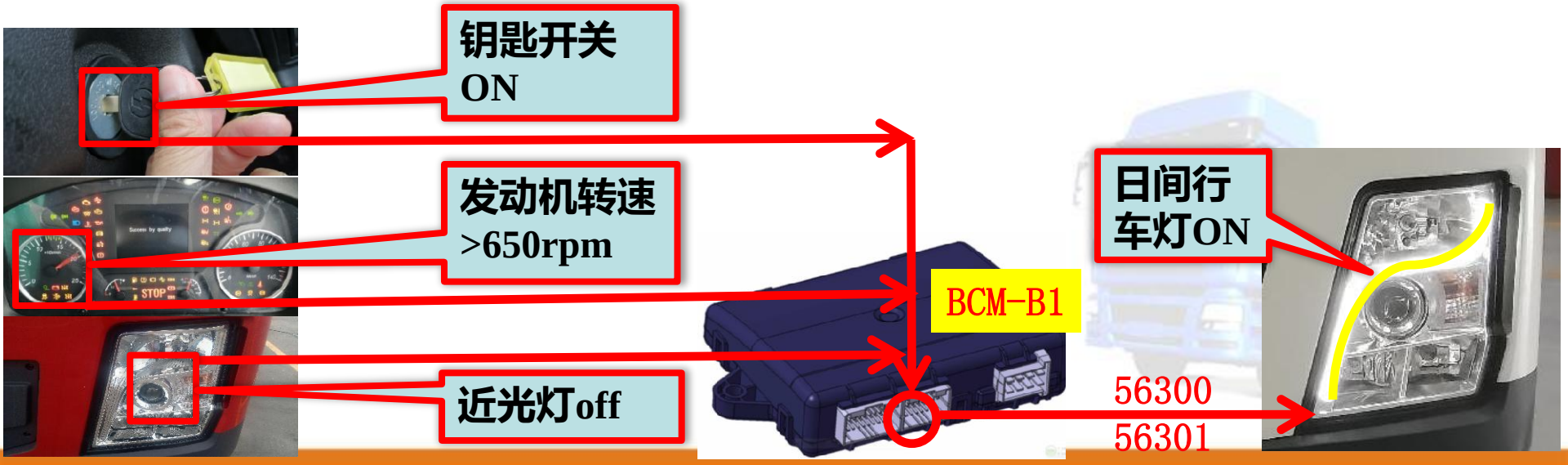
当三个条件都满足时，

1：钥匙开关ON档；

2：发动机转速大于等于650rpm；

3：近光灯没有工作。

BCM控制器通过B1端子输出的56300线，驱动左、右日间行车灯点亮。 同时仪表盘液晶屏显示日间行车灯图案。



Basic functional description and detailed functional explanation of BCM electronic control unit.

Daytime running lights features:

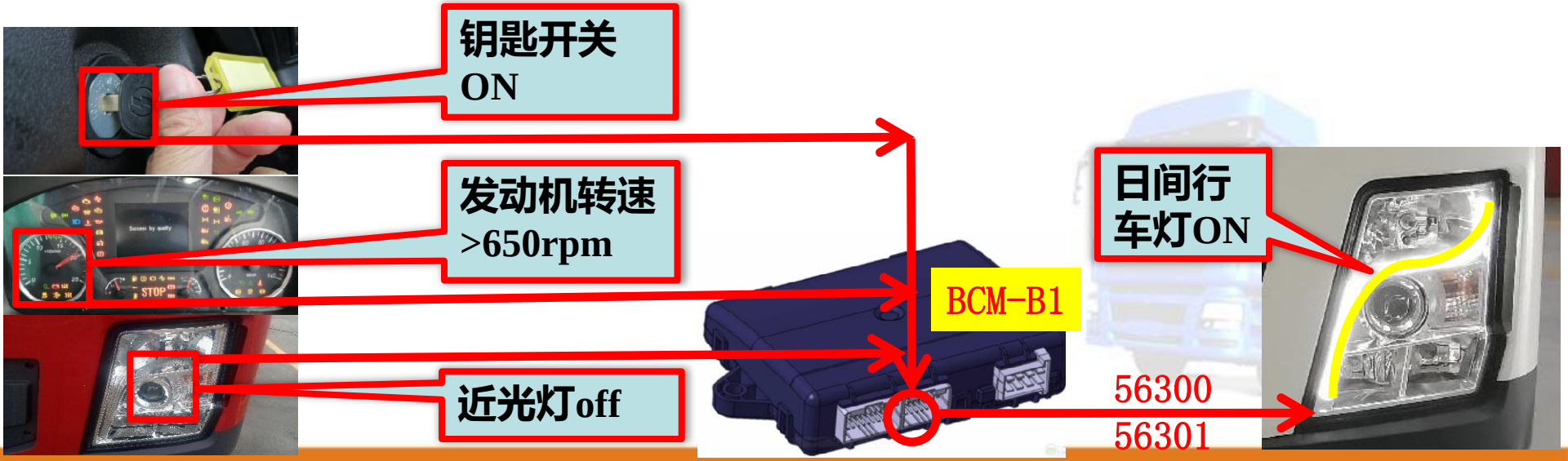
When all three conditions are satisfied,

1: The key switch is ON;

2: The engine speed is greater than or equal to 650rpm;

3: The dipped beam is not working.

The BCM controller drives the left and right daytime running lights to light up through the 56300 line output by the B1 terminal. At the same time, the LCD screen of the instrument panel displays the pattern of the daytime running lights.



BCM电控单元的基本功能描述及功能详解。

日间行车灯功能：

当三个条件之一满足时， BCM控制器关闭日间行车灯：

1：钥匙开关非ON档；

2：发动机转速小于等于300rpm；

3：近光灯工作。

（4：危险灯工作。）

左右日间行车灯熄灭。

Basic functional description and detailed functional explanation of electronic control unit.

Daytime running lights features:

The BCM controller turns off the daytime running lights when one conditions is met:

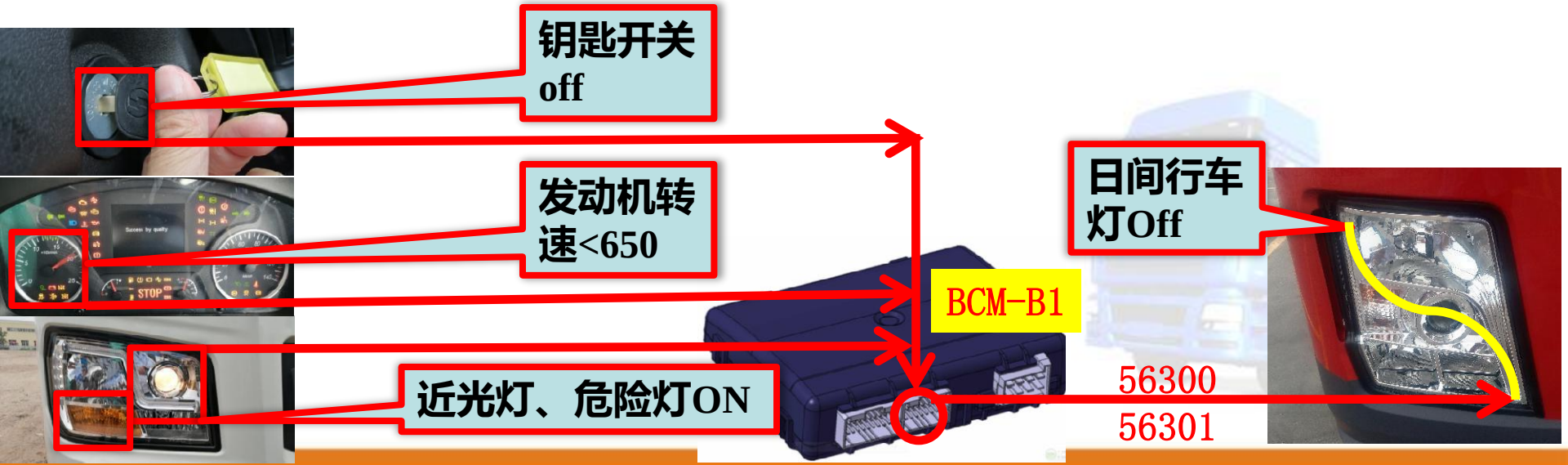
1: The key switch is not ON;

2: The engine speed is less than or equal to 300rpm;

3: Low beam work.

(4: Hazard lights work.)

The left and right daytime running lights go out.



BCM电控单元的基本功能描述及功能详解。

日间行车灯功能：

当日间行车灯发生短路、开路故障时，

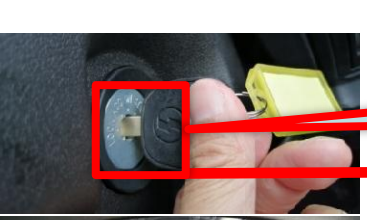
BCM控制器关闭日间行车灯，左右日间行车灯熄灭。

BCM记录并且向CAN总线发送故障码。

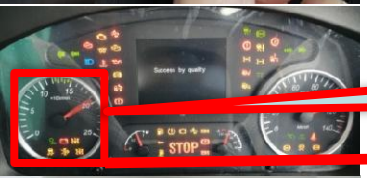
同时仪表盘液晶屏显示闪烁的日间行车灯图案。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Daytime running lights features : When the daytime running lights are short-circuited or open-circuit faults, The BCM controller turns off the daytime running lights, and the left and right daytime running lights go out. BCM records and sends DTCs to CAN bus . At the same time, the instrument panel LCD screen displays a flashing pattern of daytime running lights.

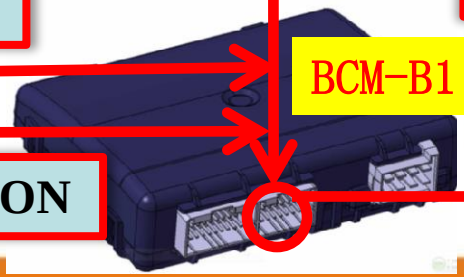


钥匙开关 off



发动机转速<650

近光灯、危险灯ON



BCM-B1

56300
56301

日间行车灯Off

BCM电控单元的基本功能描述及功能详解。

左转向灯功能1：

钥匙开关在ON档，拨动组合开关左转向开启时，S108组合开关输出的左转向控制信号GDA线连接到BCM控制器的A13端子。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Left turn signal function 1:

The key switch is in the ON position, and the combination switch is toggled to turn left.

When turned on, the left steering control signal GDA line output by the S108 combination switch is connected to the A13 terminal of the BCM controller.

BCM电控单元的基本功能描述及功能详解。

左转向灯功能2：

BCM控制器C5端子输出的左转向灯工作电流通过GF线传输，驱动主车左转向灯、左侧转向灯、左尾转向灯闪烁，从BCM-C8的GFD线输出挂车左转向灯。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Left turn signal function 2:

The working current of the left turn signal output from the C5 terminal of the BCM controller is transmitted through the GF line to drive the left turn signal, left turn signal and left tail turn signal of the main vehicle to flash, and the left turn signal of the trailer is output from the GFD line of the BCM-C8.

BCM电控单元的基本功能描述及功能详解。

转向灯功能：

转向灯闪烁频率是90/分钟。

转向灯工作，最低闪烁工作5次。如果组合开关瞬间回复原位，左、右转向控制信号断开，转向灯闪烁工作足够5次才停止。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Turn signal function:

The turn signal flashing frequency is 90/min.

The turn signal works, and the minimum flashes work 5 times. If the combination switch instantly returns to its original position, the left and right steering control signals are disconnected, and the turn signal flashes for 5 times before it stops.

GDA

BCM-A13

BCM-C5

GF

全车转向灯闪烁90次分钟

BCM-C8

BCM电控单元的基本功能描述及功能详解。

右转向灯功能：

钥匙开关在ON档，拨动组合开关右转向开启时，S108组合开关输出的右转向控制信号GDF线连接到BCM控制器的A3端子。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Right turn signal function:

The key switch is in the ON position, toggle the combination switch to turn right

When turned on, the right steering control signal GDF line output by the S108 combination switch is connected to the A3 terminal of the BCM controller.

BCM电控单元的基本功能描述及功能详解。

右转向灯功能：

BCM控制器C3端子输出的左转向灯工作电流通过GA线传输，驱动主车右转向灯、右侧转向灯、右尾转向灯闪烁，从BCM-C6的GAD线输出挂车右转向灯。

Basic functional description and detailed functional explanation of BCM electronic control unit.

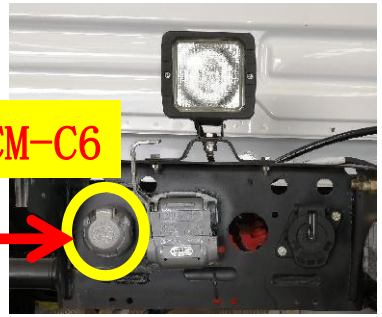
Right turn signal function:

The working current of the left turn signal output from the C3 terminal of the BCM controller is transmitted through the GA line to drive the right turn signal, right turn signal and right tail turn signal of the main vehicle to flash, and the right turn signal of the trailer is output from the GAD line of the BCM-C6.

GDF

GA

全车右转向灯闪烁90次分钟



BCM电控单元的基本功能描述及功能详解。

危急警报功能1：

当驾驶员按压危急警报开关S109时，S109危急警报开关输出的转向控制信号AC线连接到BCM控制器的A12端子 。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Critical Alert Function 1:

When the driver presses the emergency alarm switch S109, the AC line of the steering control signal output by the emergency alarm switch S109 is connected to the A12 terminal of the BCM controller.

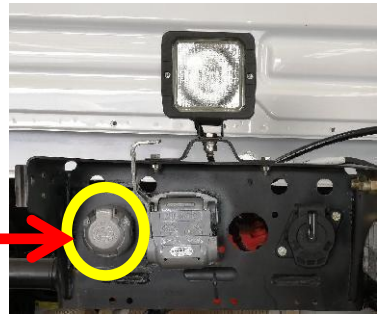
L+R

AC

全车左右转向灯闪烁90次分钟

GF

GA



BCM电控单元的基本功能描述及功能详解。

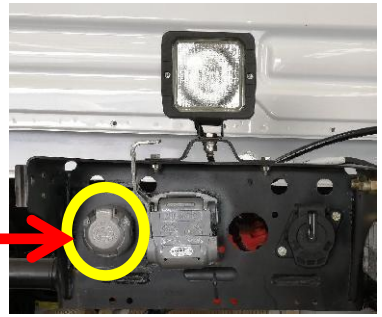
危急警报功能2：

BCM控制器C3、C5端子输出的左、右转向灯工作电流通过GF、GA线传输，驱动全车所有的左右转向灯同时闪烁 。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Critical alert function 2:

The working current of the left and right turn signals output by the C3 and C5 terminals of the BCM controller is transmitted through the GF and GA lines, and drives all the left and right turn signals of the whole vehicle to flash at the same time.



BCM电控单元的基本功能描述及功能详解。

转向灯诊断功能1：

BCM会对主车转向灯进行功率检测，对于挂车左右转向灯进行开路和短路检测，如果转向灯(前、侧、后、挂车)有任意一个失效（断路故障），则转向灯转向指示灯的闪烁频率是通常的2倍，就是180次/分钟。

Basic functional description and detailed functional explanation of BCM electronic control unit.

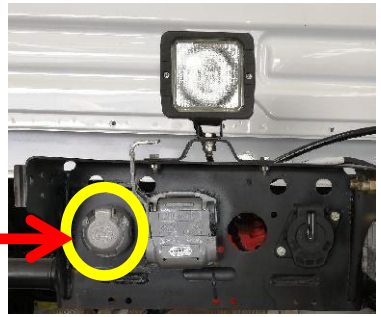
Turn signal diagnostic function 1:

BCM will check the power of the turn signal of the main car, and check the open circuit and short circuit of the left and right turn signals of the trailer. The flashing frequency is 2 times the usual, which is 180 times/min.

转向灯闪烁加快180次分钟

BCM-C3 C5

GA
GF



BCM电控单元的基本功能描述及功能详解。

转向灯诊断功能2：

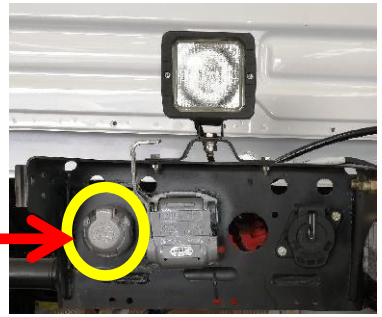
转向灯的负载功率是根据额定负载功率标定，超过或小于额定值，会导致故障的误诊断。所以，不能随意改变转向灯的负载功率，否则可能BCM出现故障码

Basic functional description and detailed functional explanation of BCM electronic control unit.

Turn signal diagnostic function 2:

The load power of the turn signal is calibrated according to the rated load power. If it exceeds or is less than the rated value, it will lead to misdiagnosis of the fault. Therefore, the load power of the turn signal cannot be changed arbitrarily, otherwise a fault code may appear on the BCM.

GA
GF



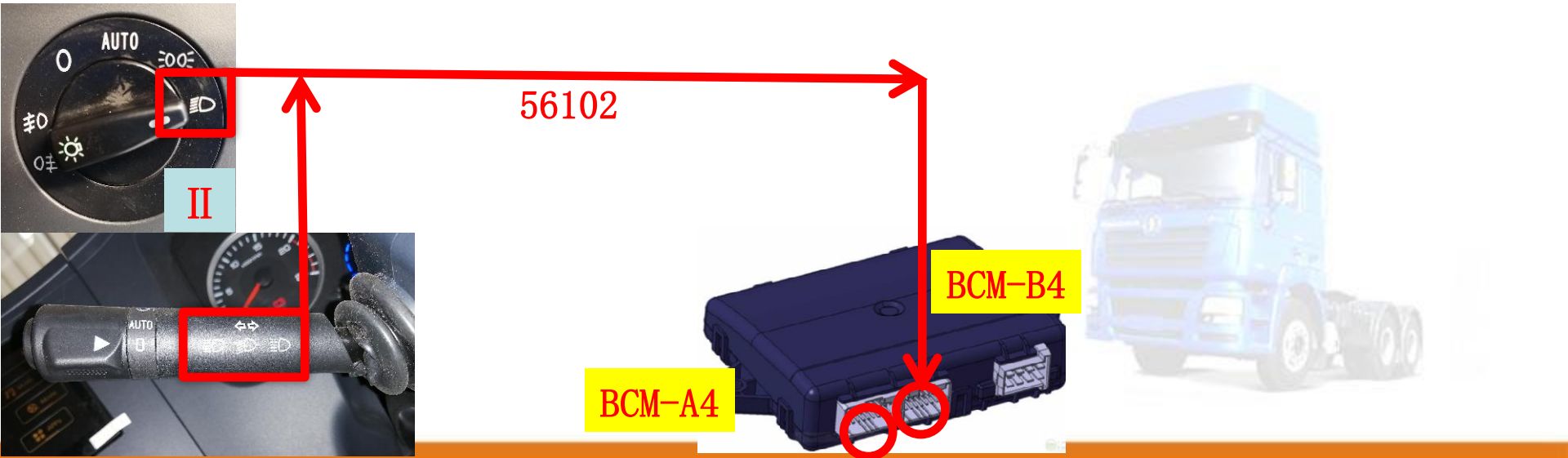
BCM电控单元的基本功能描述及功能详解。

近光灯控制功能1：

钥匙开关在ON档，转动灯光总开关向大灯2档开启时，S110灯光总开关输出的近光灯控制信号BDF(56102)线连接到BCM控制器的B4端子。

Basic functional description and detailed functional explanation of BCM electronic control unit. Low beam control function 1:

When the key switch is in the ON position, and the main light switch is turned to turn on the headlight 2, the low beam control signal BDF (561020) output by the S110 main light switch is connected to the B4 terminal of the BCM controller.



BCM电控单元的基本功能描述及功能详解。

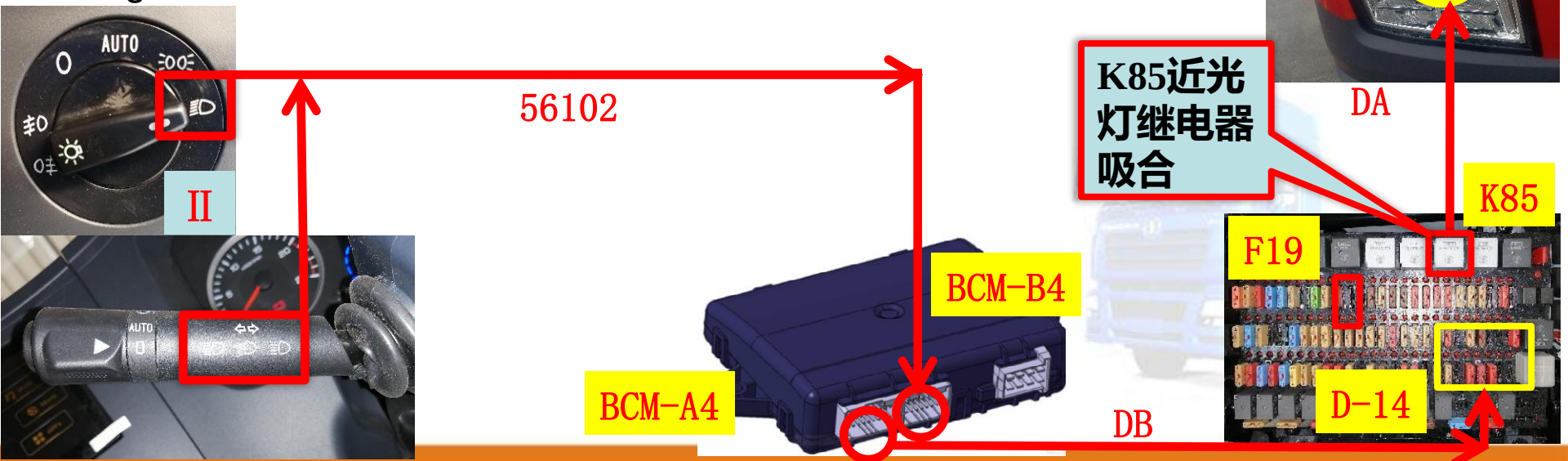
近光灯控制功能2：

BCM控制器根据收到的B4近光灯控制信号， 从A4端子输出的近光灯信号通过DB线传输到A100电器装置板的D14插接器。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Low beam control function 2:

According to the B4 low beam control signal received by the BCM controller, the low beam signal output from the A4 terminal is transmitted to the D14 connector of the A100 electrical device board through the DB line.

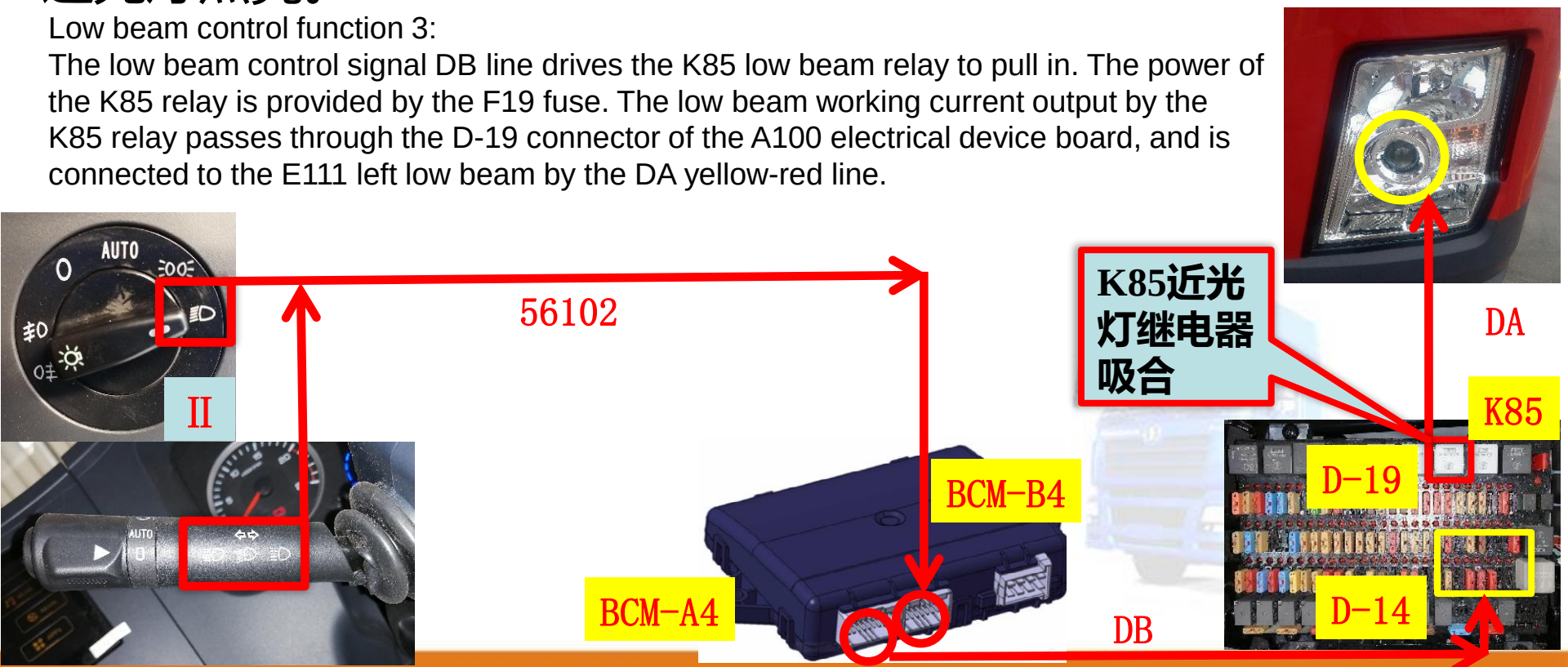


BCM电控单元的基本功能描述及功能详解。

近光灯控制功能3：

近光灯控制信号DB线，驱动K85近光灯继电器吸合，K85继电器的电源由F19保险丝提供。 K85继电器输出的近光灯工作电流通过A100电器装置板的D-19插接器，由DA黄红色线连接到E111左近光灯点亮。

Low beam control function 3:
The low beam control signal DB line drives the K85 low beam relay to pull in. The power of the K85 relay is provided by the F19 fuse. The low beam working current output by the K85 relay passes through the D-19 connector of the A100 electrical device board, and is connected to the E111 left low beam by the DA yellow-red line.



BCM电控单元的基本功能描述及功能详解。

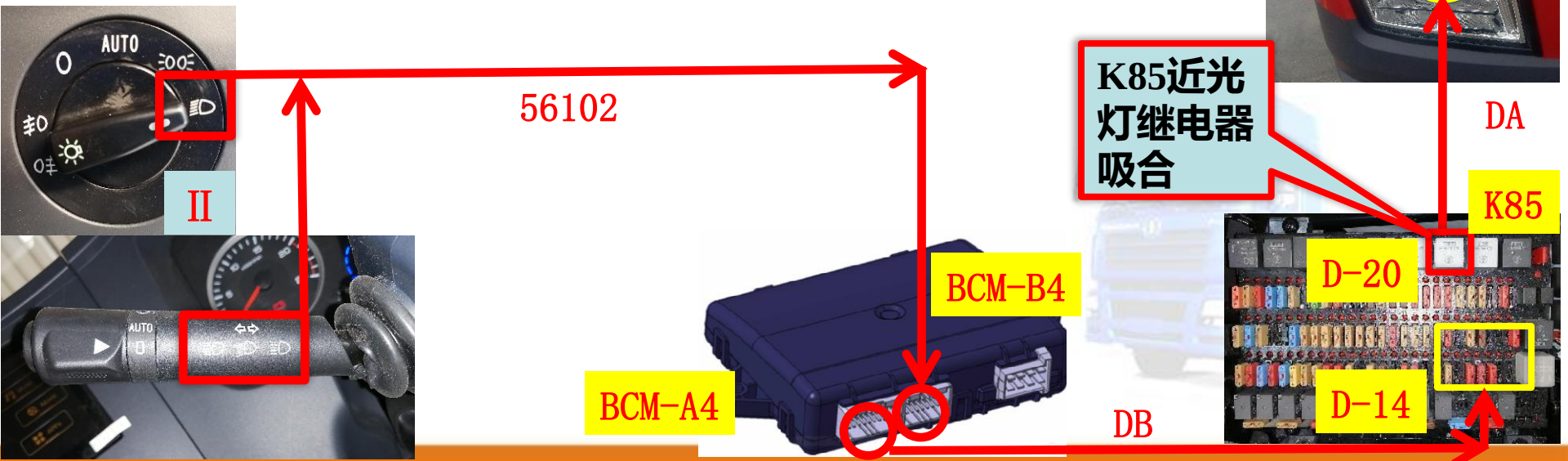
近光灯控制功能4：

近光灯控制信号DB线，驱动K85近光灯继电器吸合， K85继电器输出的近光灯工作电流通过A100电器装置板的D-20插接器，由DA黄红色线连接到E110右近光灯点亮。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Low beam control function 4:

The low beam control signal DB line drives the K85 low beam relay to pull in, the low beam working current output by the K85 relay passes through the D-20 connector of the A100 electrical device board, and is connected to the E110 right low beam by the DA yellow-red wire light up.



BCM电控单元的基本功能描述及功能详解。

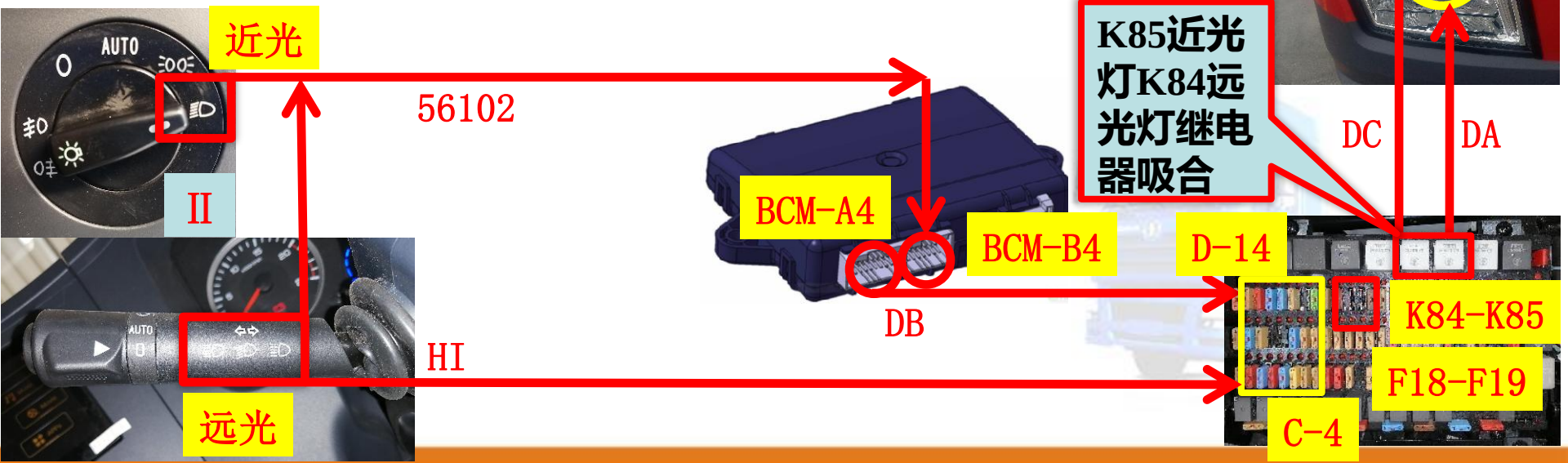
远光灯控制功能1：

钥匙开关在ON档，灯光总开关开启大灯2档时，S108组合开关向下拨动，输出的远光灯控制信号HI线连接到到A100电器装置板的C4插接器。

Basic functional description and detailed functional explanation of BCM electronic control unit.

High beam control function 1:

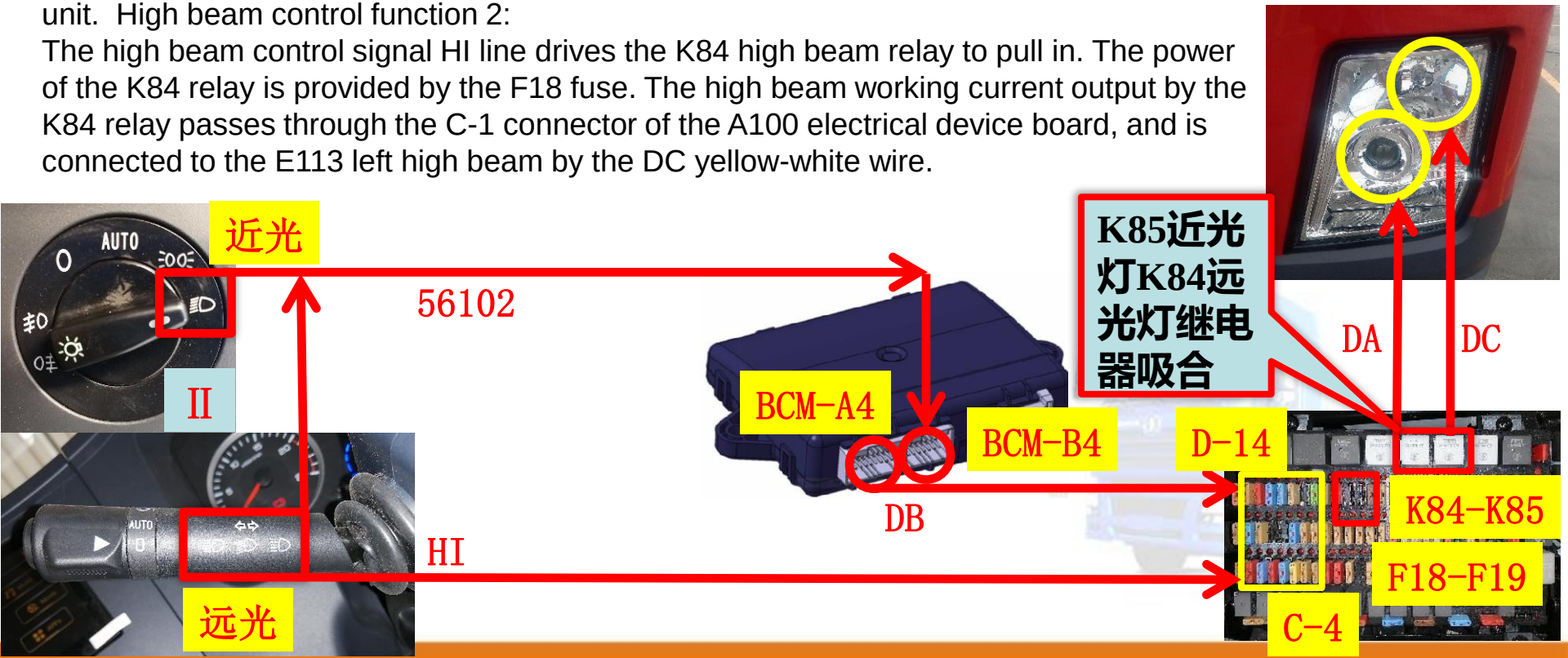
When the key switch is in the ON position and the main light switch turns on the headlight 2, the S108 combination switch is toggled down, and the output high beam control signal HI line is connected to the C4 connector of the A100 electrical device board.



BCM电控单元的基本功能描述及功能详解。

远光灯控制功能2：　　远光灯控制信号HI线，驱动K84远光灯继电器吸合，K84继电器的电源由F18保险丝提供。 K84继电器输出的远光灯工作电流通过A100电器装置板的C-1插接器，由DC黄白色线连接到E113左远光灯点亮。

Basic functional description and detailed functional explanation of BCM electronic control unit. High beam control function 2:
The high beam control signal HI line drives the K84 high beam relay to pull in. The power of the K84 relay is provided by the F18 fuse. The high beam working current output by the K84 relay passes through the C-1 connector of the A100 electrical device board, and is connected to the E113 left high beam by the DC yellow-white wire.



BCM电控单元的基本功能描述及功能详解。

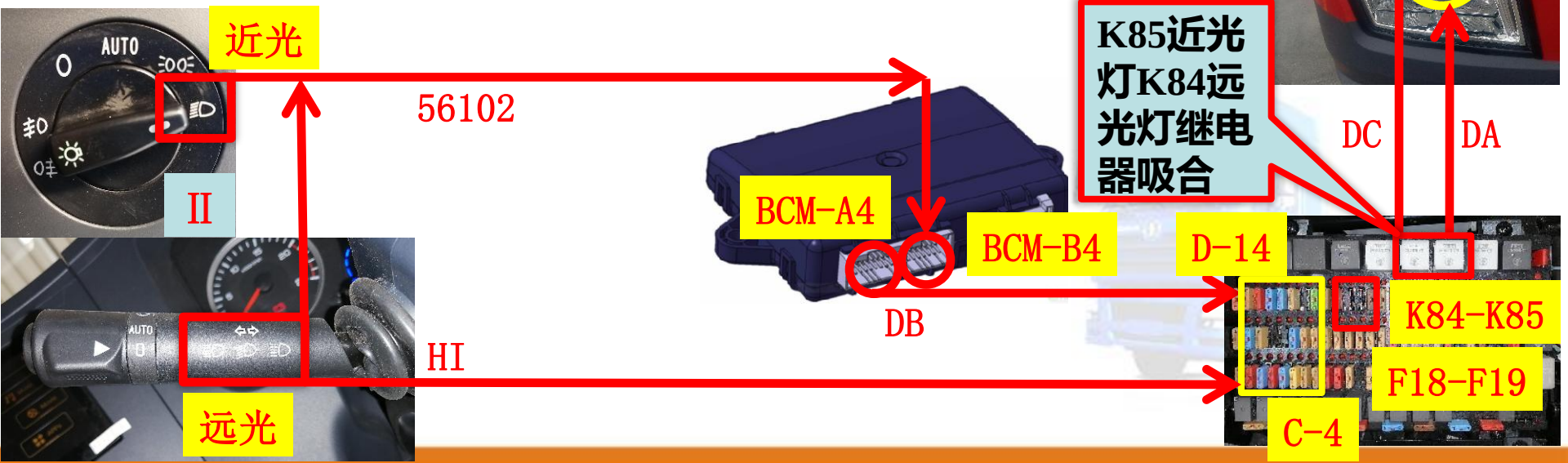
远光灯控制功能3：

远光灯控制信号HI线，驱动K84远光灯继电器吸合， K84继电器输出的远光灯工作电流通过A100电器装置板的C-7插接器，由DC黄白色线连接到E112右远光灯点亮。

Basic functional description and detailed functional explanation of BCM electronic control unit.

High beam control function 3:

The high beam control signal HI line drives the K84 high beam relay to pull in, the high beam working current output by the K84 relay passes through the C-7 connector of the A100 electrical device board, and is connected to the E112 right high beam by the DC yellow-white wire Lights on.



BCM电控单元的基本功能描述及功能详解。

辅助远光灯控制功能1： 钥匙开关在ON档，灯光总开关开启大灯2档时，S108组合开关开启远光灯时，输出的远光灯控制信号HI线连接到到A100电器装置板的C4插接器。同时S108组合开关输出的另一个远光灯控制信号HI线连接到到A100电器装置板的D4插接器。

Basic functional description and detailed functional explanation of BCM electronic control unit. Auxiliary high beam control function 1:
When the key switch is in the ON position, when the main light switch turns on the 2nd gear of the headlight, and when the S108 combination switch turns on the high beam, the output high beam control signal HI line is connected to the C4 connector of the A100 electrical device board. At the same time, the other high beam control signal HI line output by the S108 combination switch is connected to the D4 connector of the A100 electrical device board.

56102

HI

HI

BCM-A4

BCM-B4

DB

D-14

D-4

C-4

K85近光灯
K84远光灯
K86辅助远光灯继电器吸合

DA
DC
CFN

K84.85.86

F18-19-20

BCM电控单元的基本功能描述及功能详解。

辅助远光灯控制功能2：

辅助远光灯控制信号HI线，驱动K86辅助远光灯继电器吸合，K86继电器的电源由F20保险丝提供。 K86继电器输出的辅助远光灯工作电流通过A100电器装置板的D-1插接器，由CFN白绿粉色线连接到E119左辅助远光灯点亮。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Auxiliary high beam control function 2:

The auxiliary high beam control signal HI line drives the K86 auxiliary high beam relay to pull in. The power of the K86 relay is provided by the F20 fuse. The auxiliary high beam working current output by the K86 relay passes through the D-1 connector of the A100 electrical device board, and is connected to the E119 left auxiliary high beam by the CFN white, green and pink wires.

56102

HI

HI

DB

BCM-A4

BCM-B4

D-14

D-4

C-4

K84.85.86

F18-19-20

DA

DC

CFN

K85近光灯
K84远光灯
K86辅助远光灯继电器吸合

BCM电控单元的基本功能描述及功能详解。

辅助远光灯控制功能3：

辅助远光灯控制信号HI线，驱动K86辅助远光灯继电器吸合，K86继电器的电源由F20保险丝提供。 K86继电器输出的辅助远光灯工作电流通过A100电器装置板的D-7插接器，由CFN白绿粉色线连接到E118右辅助远光灯点亮。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Auxiliary high beam control function 3:

The auxiliary high beam control signal HI line drives the K86 auxiliary high beam relay to pull in. The power of the K86 relay is provided by the F20 fuse. The auxiliary high beam working current output by the K86 relay passes through the D-7 connector of the A100 electrical device board, and is connected to the E118 right auxiliary high beam by the CFN white, green and pink wire.

56102

K85近光灯
K84远光灯
K86辅助远光灯继电器吸合

BCM-A4

BCM-B4

D-14

DA
DC
CFN

K84.85.86

F18-19-20

HI

DB

D-4

HI

C-4

BCM电控单元的基本功能描述及功能详解。

超车灯功能1：

钥匙开关在ON档，S108组合开关向上拨动时，整车开启超车灯，S108组合开关输出的远光灯控制信号HI线连接到到A100电器装置板的C4和D4插接器。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Overtaking light function 1:

When the key switch is in the ON position, when the S108 combination switch is toggled upward, the vehicle will turn on the overtaking light, and the high beam control signal HI line output by the S108 combination switch is connected to the C4 and D4 connectors of the A100 electrical device board.

BCM电控单元的基本功能描述及功能详解。

超车灯功能2：

驱动K84远光灯继电器和K86辅助远光灯继电器吸合，则全车的左右远光灯和左右辅助远光灯都同时点亮，实现超车灯功能。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Overtaking light function 2:

When the K84 high beam relay and the K86 auxiliary high beam relay are driven, the left and right high beams and the left and right auxiliary high beams of the whole vehicle are lit at the same time to realize the overtaking light function.

BCM电控单元的基本功能描述及功能详解。

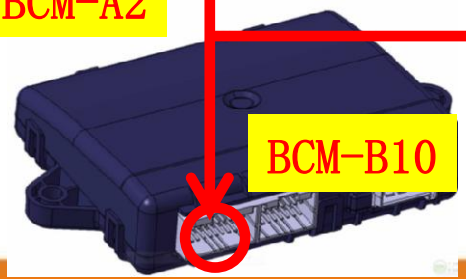
位置灯控制功能1：

钥匙开关在ON档，转动灯光总开关向小灯1档开启时，由F63保险丝提供的工作电源，S111灯光总开关输出的位置灯控制信号BDC线连接到BCM控制器的A2端子。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Position light control function 1:

When the key switch is in the ON position, when the main light switch is turned to the first stage of the small light, the working power provided by the F63 fuse, the position light control signal BDC line output by the S111 light main switch is connected to the A2 terminal of the BCM controller.



BDC

BCM-A2

BCM电控单元的基本功能描述及功能详解。

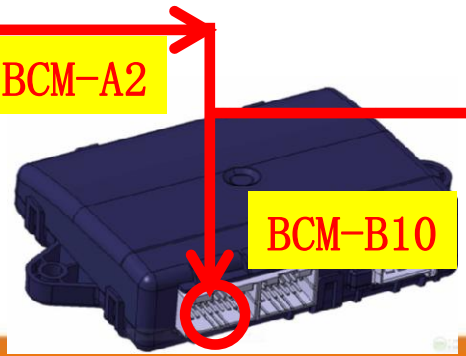
位置灯控制功能2：

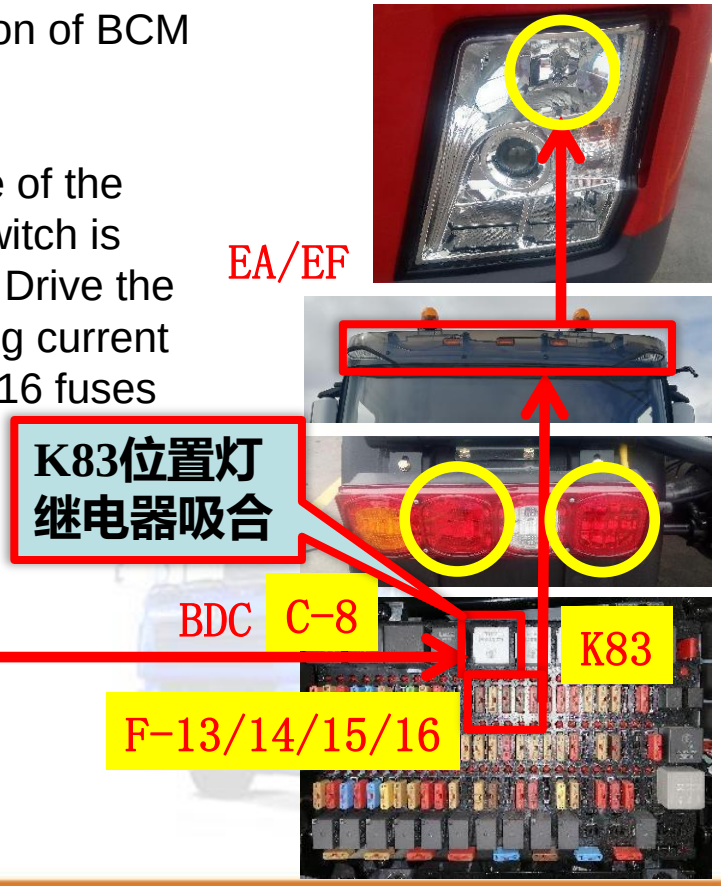
小灯1档开启，S111灯光总开关输出的位置灯控制信号BDC线连接到电器装置版的C8端子。驱动K83位置灯继电器吸合， K83继电器输出的位置灯工作电流通过A100电器装置板的F13，F14，F15，F16的保险丝。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Position light control function 2:

The first gear of the small light is turned on, and the BDC line of the position light control signal output by the S111 light master switch is connected to the C8 terminal of the electrical device version. Drive the K83 position light relay to pull in, and the position light working current output by the K83 relay passes through the F13, F14, F15, F16 fuses of the A100 electrical device board.





BCM电控单元的基本功能描述及功能详解。

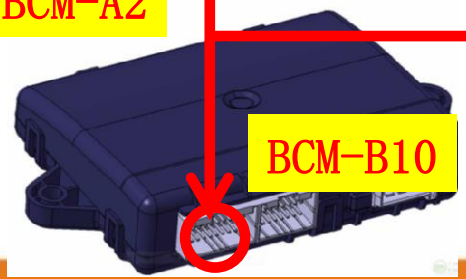
位置灯控制功能3：

小灯1档开启，A100电器装置板的F13保险丝提供整车视高灯及右位置灯的工作电流。F14保险丝提供驾驶室内部的翘板开关夜光照明及仪表夜光照明的工作电流。

Basic functional description and detailed functional explanation of BCM electronic control unit. Position light control function 3: The first gear of the small light is turned on, and the F13 fuse of the A100 electrical device board provides the working current of the vehicle's height light and right position light. The F14 fuse provides the working current of the rocker switch luminous lighting inside the cab and the instrument luminous lighting.

BDC

BCM-A2



EA/EF

K83位置灯
继电器吸合

BDC C-8

K83

F-13/14/15/16

BCM电控单元的基本功能描述及功能详解。

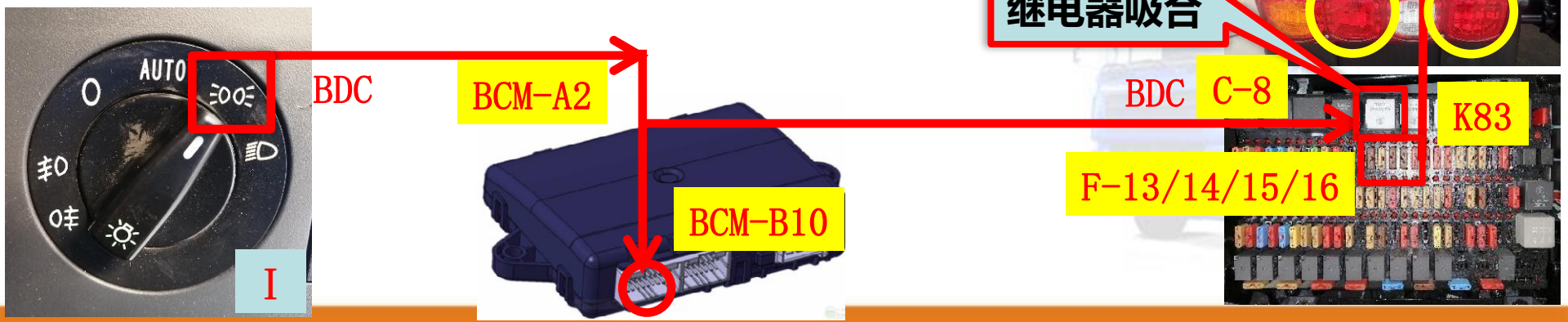
位置灯控制功能4：

小灯1档开启，A100电器装置板的F15保险丝提供整车左位置灯、视高灯，左尾灯、左标志灯的工作电流。F16保险丝提供底盘的挂车插座的小灯工作电流。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Position light control function 4:

The first gear of the small light is turned on, and the F15 fuse of the A100 electrical device board provides the working current of the left position light, the height light, the left tail light and the left marker light of the whole vehicle. F16 fuse provides the working current of the small light of the trailer socket of the chassis.



BCM电控单元的基本功能描述及功能详解。

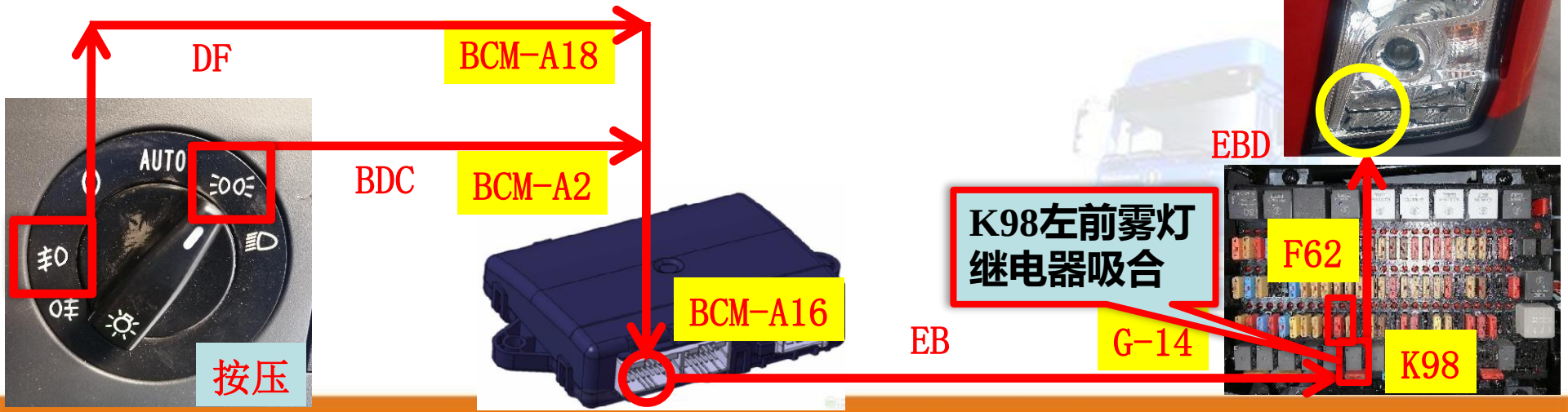
前雾灯控制功能1：

若小灯1档开启，此时向下按压灯光总开关，S111输出的前雾灯控制信号通过DF线连接到BCM控制器的A18端子。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Front fog light control function 1:

If the first gear of the small light is turned on, press the main light switch downward at this time, and the front fog light control signal output by S111 is connected to the A18 terminal of the BCM controller through the DF line.



BCM电控单元的基本功能描述及功能详解。

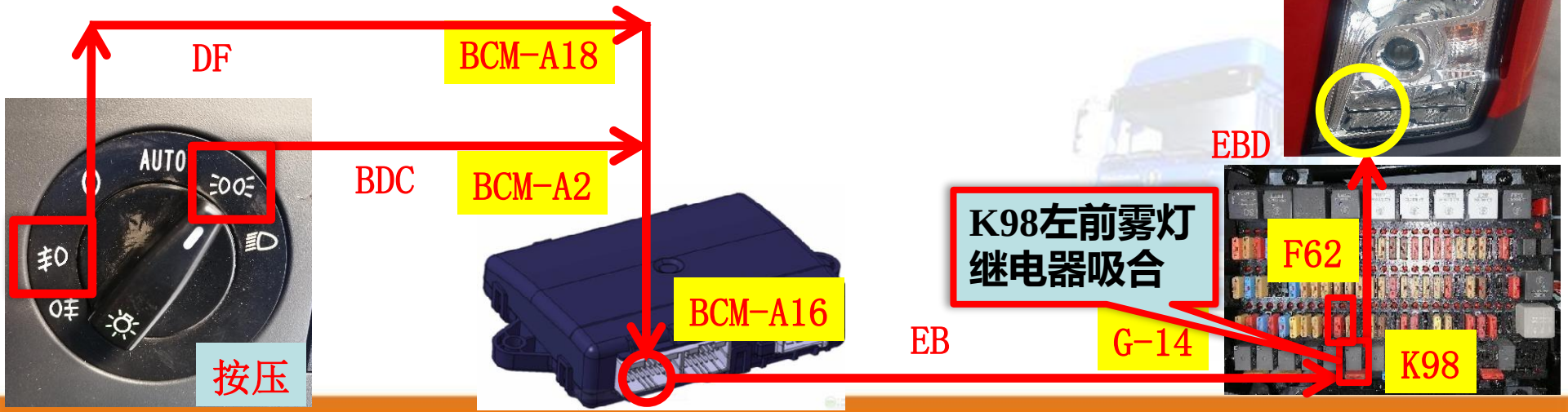
前雾灯控制功能2：

BCM控制器根据收到的A18前雾灯开关信号， 从A16端子输出的左前雾灯信号通过EB线传输到A100电器装置板的G-14插接器。左前雾灯控制信号EB线，驱动K98左前雾灯继电器吸合。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Front fog light control function 2:

According to the received A18 front fog light switch signal, the BCM controller transmits the left front fog light signal output from the A16 terminal to the G-14 connector of the A100 electrical device board through the EB line. The left front fog lamp control signal EB line drives the K98 left front fog lamp relay to pull in.



BCM电控单元的基本功能描述及功能详解。

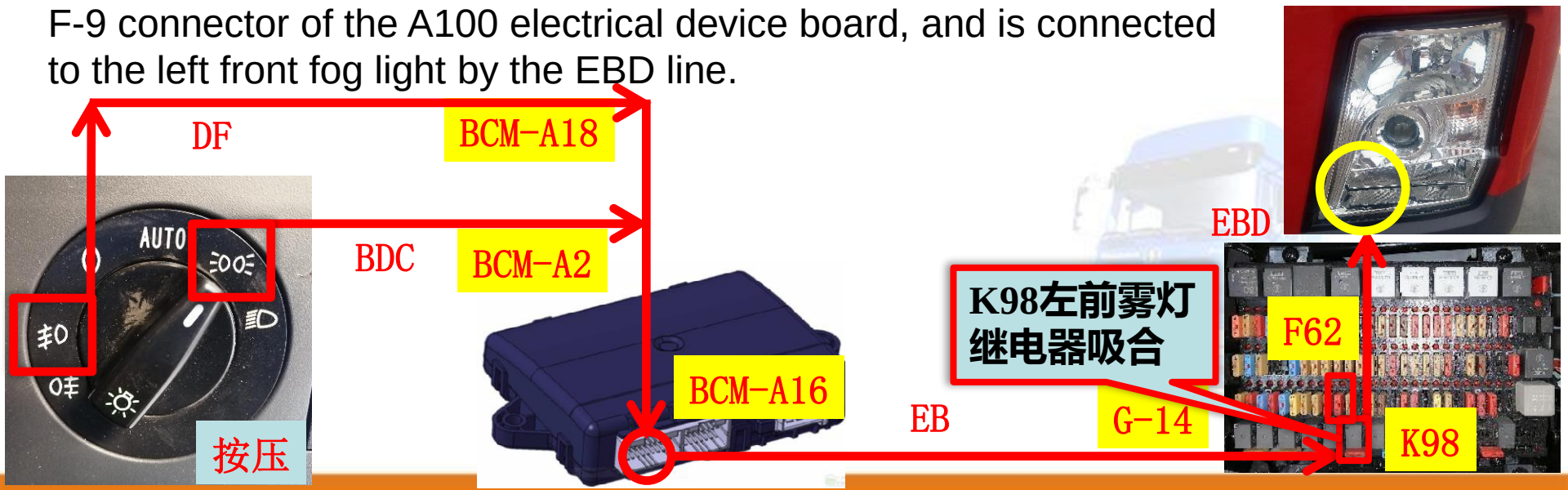
前雾灯控制功能3：

前雾灯继电器的工作电流由F62保险丝提供， K98继电器输出的左前雾灯工作电流通过A100电器装置板的F-9插接器，由EBD线连接到左前雾灯点亮。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Front fog light control function 3:

The working current of the front fog light relay is provided by the F62 fuse. The working current of the left front fog light output by the K98 relay passes through the F-9 connector of the A100 electrical device board, and is connected to the left front fog light by the EBD line.



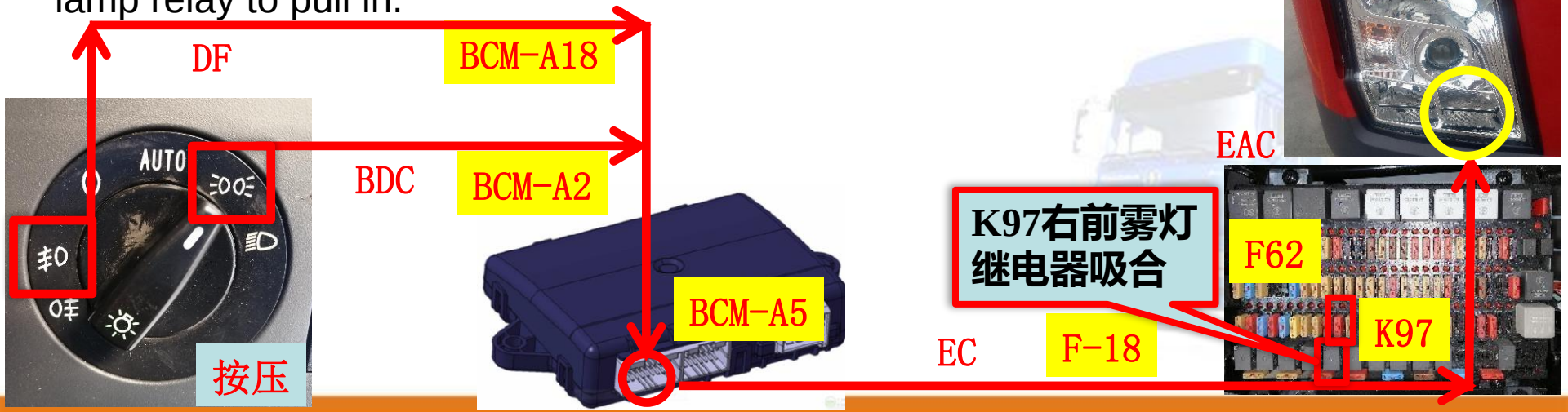
BCM电控单元的基本功能描述及功能详解。

前雾灯控制功能4：

BCM控制器根据收到的A18前雾灯开关信号， 从A5端子输出的右前雾灯信号通过EC线传输到A100电器装置板的F-18插接器。右前雾灯控制信号EC线，驱动K97右前雾灯继电器吸合。

Basic functional description and detailed functional explanation of BCM electronic control unit. Front fog light control function 4:

According to the received A18 front fog light switch signal, the BCM controller transmits the right front fog light signal output from the A5 terminal to the F-18 connector of the A100 electrical device board through the EC line. The right front fog lamp control signal EC line drives the K97 right front fog lamp relay to pull in.



BCM电控单元的基本功能描述及功能详解。

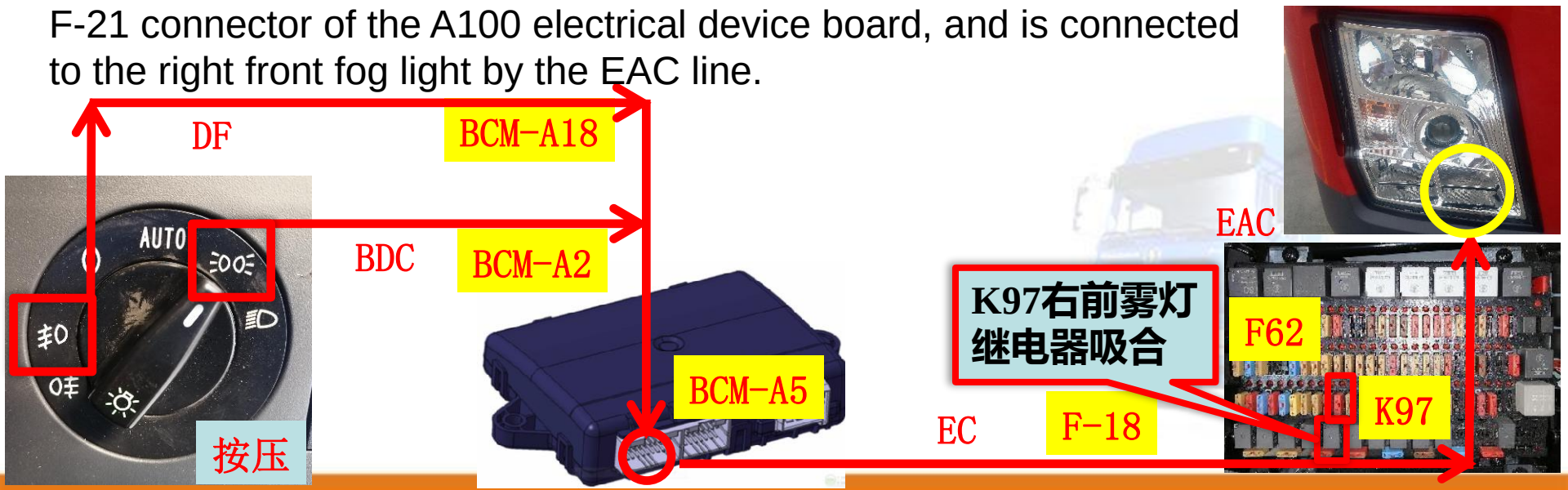
前雾灯控制功能5：

前雾灯继电器的工作电流由F62保险丝提供， K97继电器输出的右前雾灯工作电流通过A100电器装置板的F-21插接器，由EAC线连接到右前雾灯点亮。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Front fog light control function 5:

The working current of the front fog light relay is provided by the F62 fuse. The working current of the left front fog light output by the K97 relay passes through the F-21 connector of the A100 electrical device board, and is connected to the right front fog light by the EAC line.



BCM电控单元的基本功能描述及功能详解。

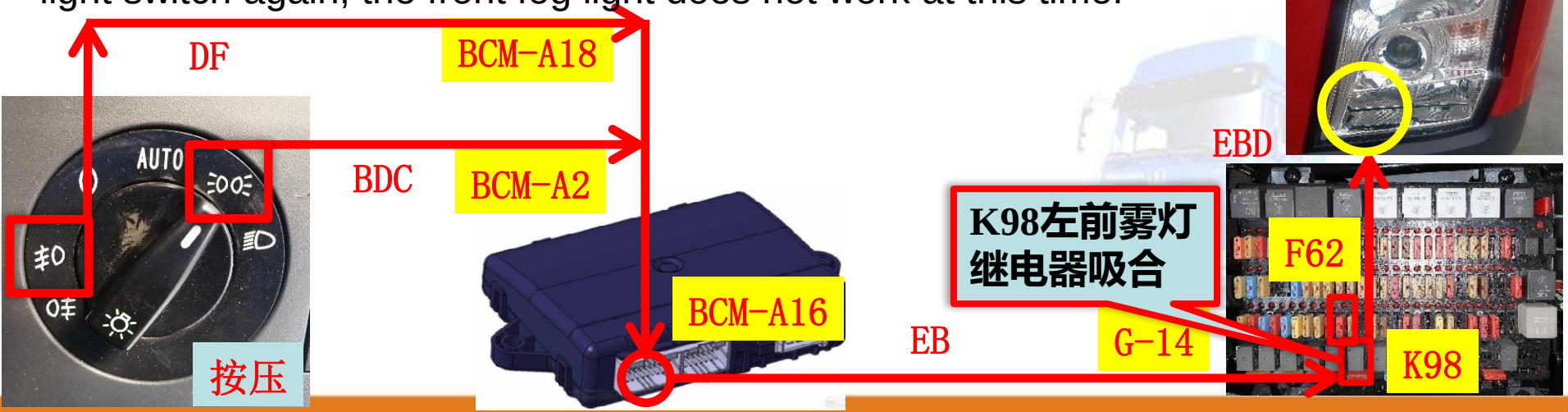
前雾灯控制功能6：

前雾灯开关为复位式开关，每按压一次开关BCM改变前雾灯工作状态。按压一次前雾灯开关，此时前雾灯工作。再次按压前雾灯开关，此时前雾灯不工作。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Front fog light control function 6:

The front fog light switch is a reset switch, and each time the switch BCM is pressed, the working state of the front fog light is changed. Press the front fog light switch once, then the front fog light will work. Press the front fog light switch again, the front fog light does not work at this time.



BCM电控单元的基本功能描述及功能详解。

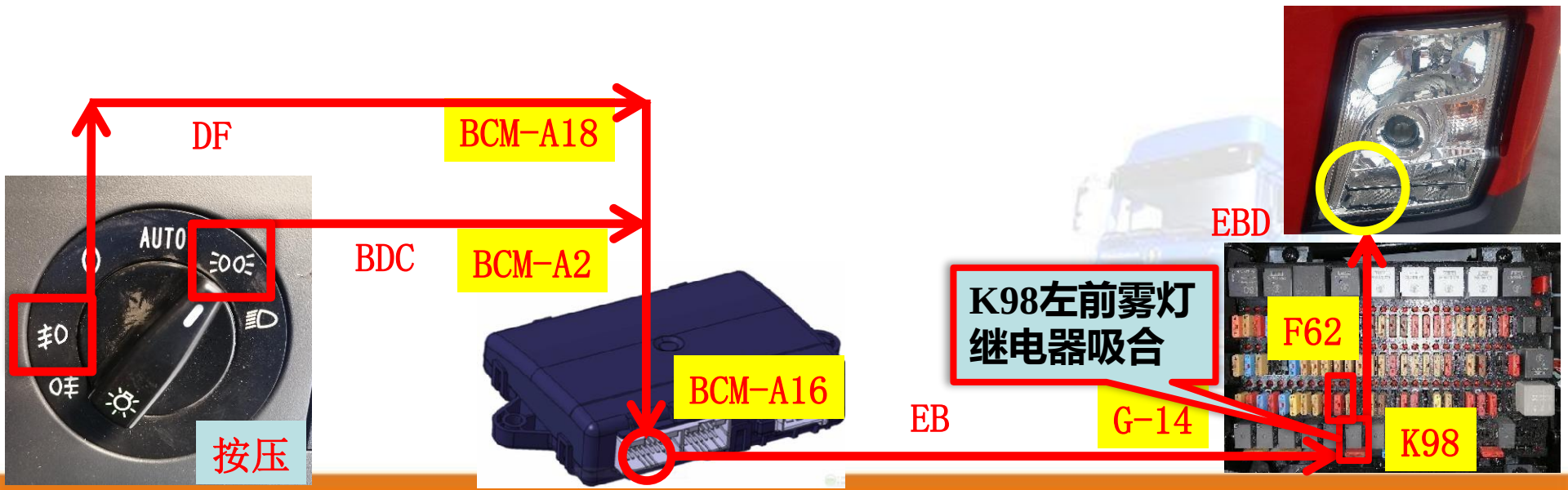
前雾灯控制功能7：

若持续按压前雾灯开关按下时间超过15秒钟，BCM认为前雾灯开关故障，此时前雾灯不工作。直至前雾灯开关故障排除为止。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Front fog light control function 7:

If the front fog light switch is continuously pressed for more than 15 seconds, the BCM considers that the front fog light switch is faulty, and the front fog light does not work at this time. Until the front fog light switch fault is eliminated.



BCM电控单元的基本功能描述及功能详解。

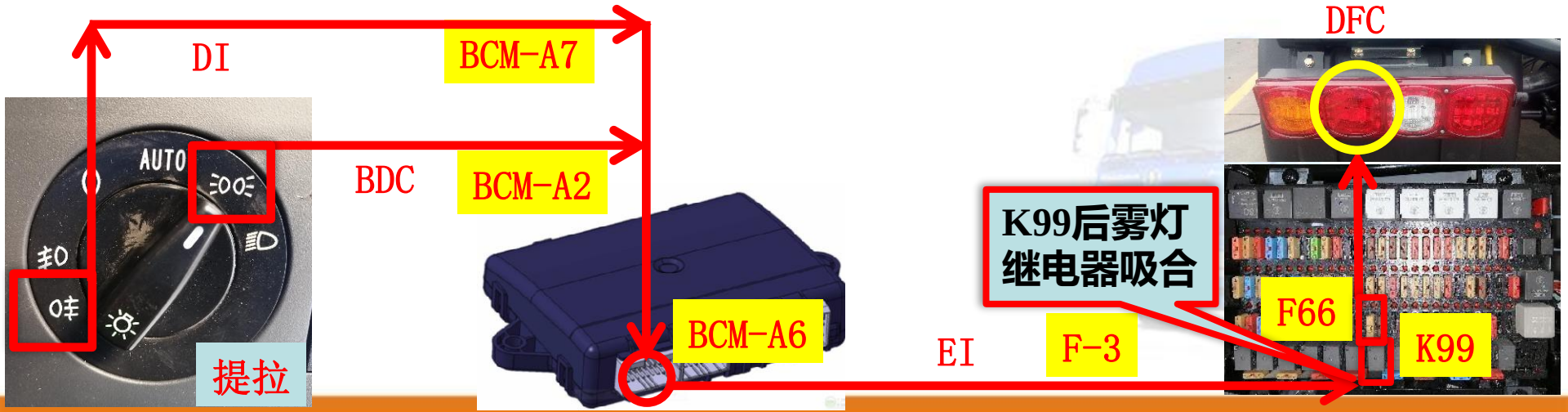
后雾灯控制功能1：

若小灯1档开启，此时向上提拉灯光总开关，S111输出的后雾灯控制信号通过DI线连接到BCM控制器的A7端子。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Rear fog light control function 1:

If the first gear of the small light is turned on, pull the main light switch upward at this time, and the rear fog light control signal output by S111 is connected to the A7 terminal of the BCM controller through the DI line.



BCM电控单元的基本功能描述及功能详解。

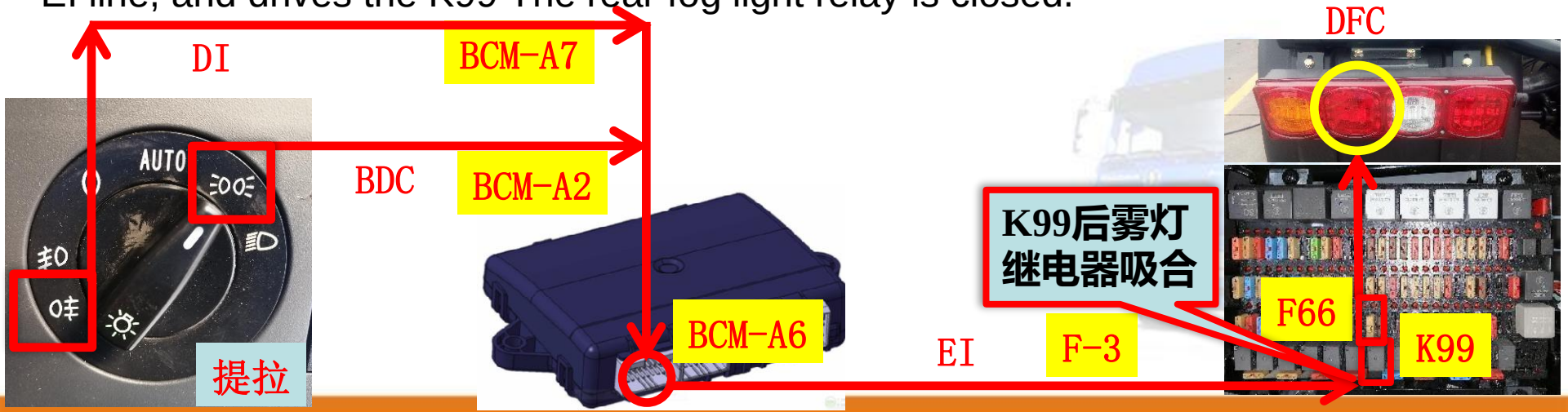
后雾灯控制功能2：

BCM控制器根据收到的A7后雾灯控制信号， 从A6端子输出的后雾灯信号通过EI线传输到A100电器装置板的F-3插接器，后雾灯控制信号EI线，驱动K99后雾灯继电器吸合。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Rear fog light control function 2:

According to the received A7 rear fog light control signal, the BCM controller transmits the rear fog light signal output from the A6 terminal to the F-3 connector of the A100 electrical device board through the EI line, the rear fog light control signal EI line, and drives the K99 The rear fog light relay is closed.



BCM电控单元的基本功能描述及功能详解。

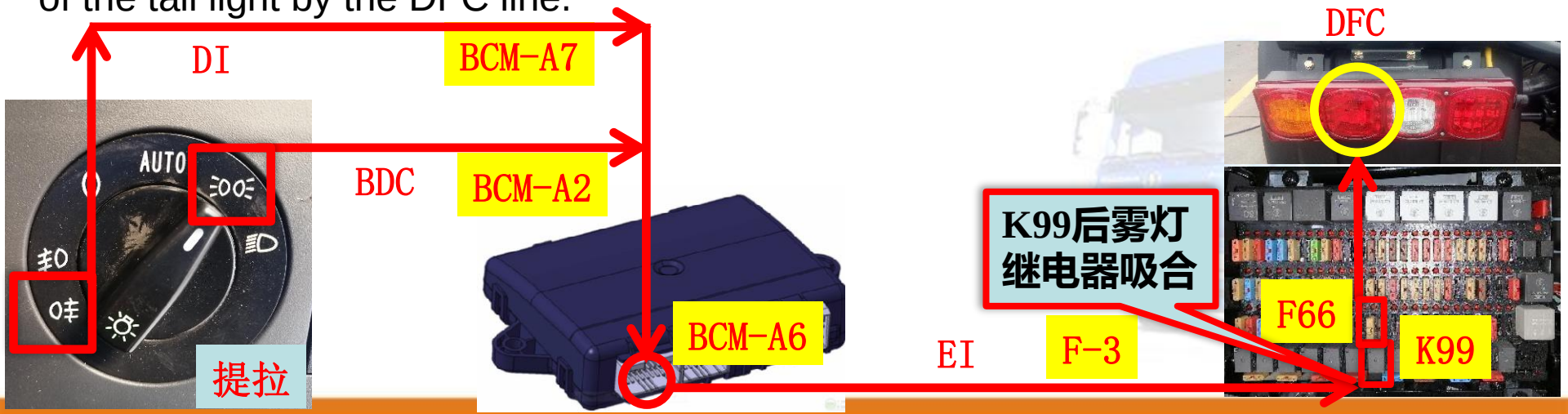
后雾灯控制功能3：

后雾灯继电器的工作电流由F66保险丝提供，K99继电器输出的后雾灯工作电流通过A100电器装置板的F-5插接器，由DFC线连接到尾灯的后雾灯点亮。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Rear fog light control function 3:

The working current of the rear fog light relay is provided by the F66 fuse. The working current of the rear fog light output by the K99 relay passes through the F-5 connector of the A100 electrical device board, and is connected to the rear fog light of the tail light by the DFC line.



BCM电控单元的基本功能描述及功能详解。

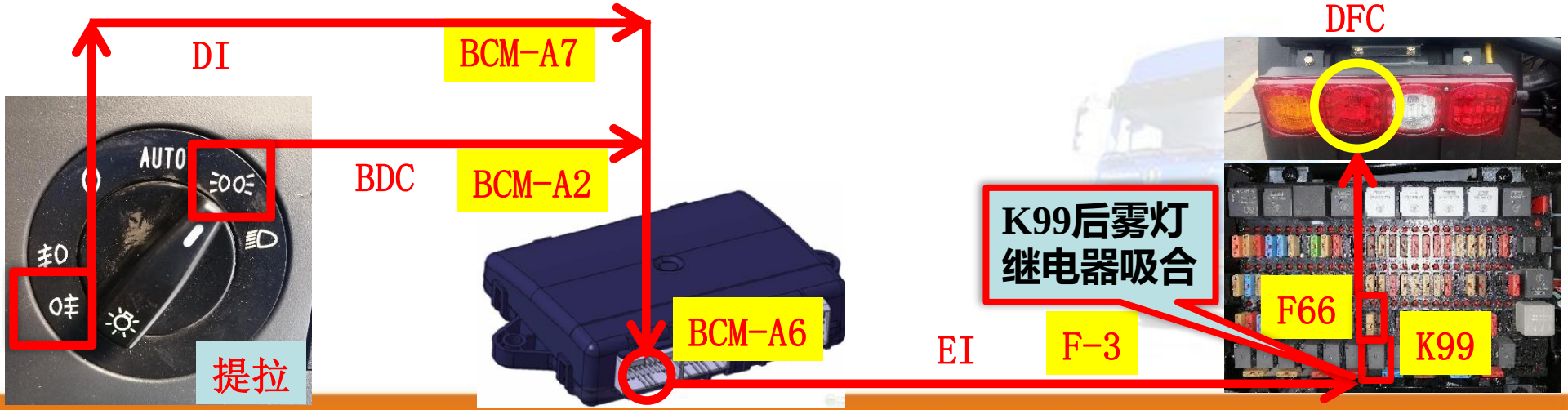
后雾灯控制功能4：

若灯光Ⅱ档（前大灯）工作时，提拉后雾灯开关时，后雾灯可以点亮。当后雾灯工作时，若灯光Ⅰ档（小灯）停止，后雾灯也停止工作。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Rear fog light control function 4:

If the light stage II (headlights) is working, when the rear fog light switch is pulled up, the rear fog lights can be turned on. When the rear fog light is working, if the light gear I (small light) stops, the rear fog light also stops working.



BCM电控单元的基本功能描述及功能详解。

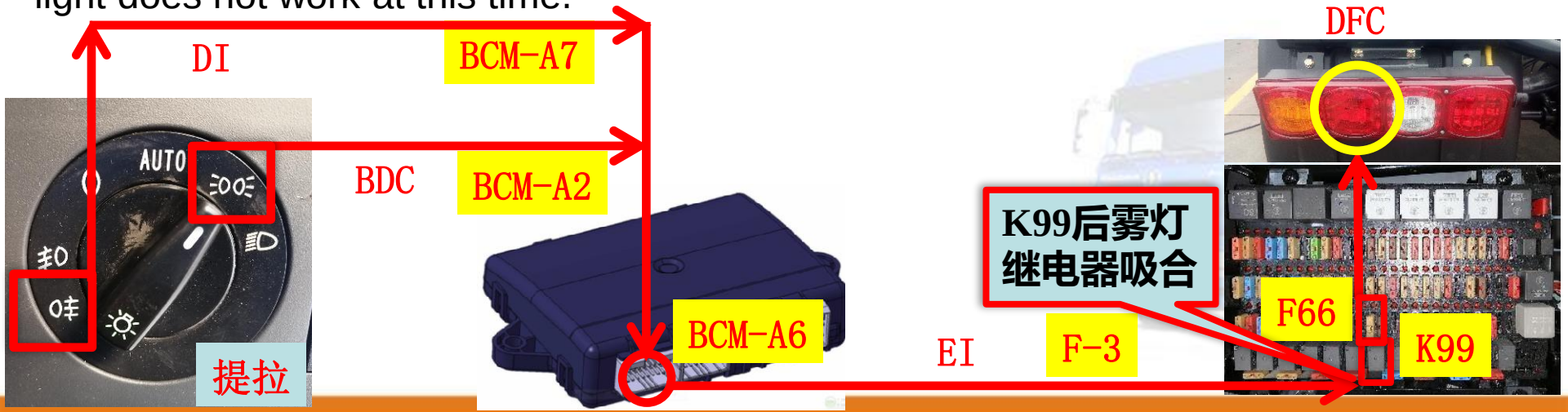
后雾灯控制功能5：

后雾灯开关为复位式开关，每提拉一次开关BCM改变后雾灯工作状态。提拉一次后雾灯开关，此时后雾灯工作。再次提拉后雾灯开关，此时后雾灯不工作。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Rear fog light control function 5:

The rear fog light switch is a reset switch, each time the switch BCM is pulled to change the working state of the rear fog light. Pull the rear fog light switch once, then the rear fog lights will work. Pull the rear fog light switch again, the rear fog light does not work at this time.



BCM电控单元的基本功能描述及功能详解。

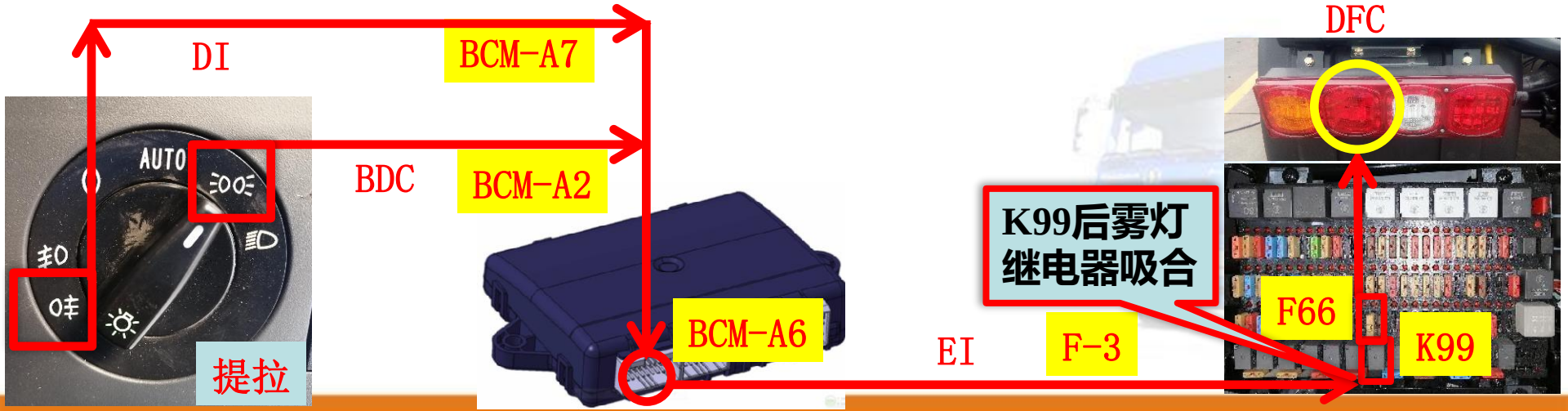
后雾灯控制功能6：

若持续提拉后雾灯开关时间超过15秒钟，BCM认为后雾灯开关故障，此时后雾灯不工作。直至前雾灯开关故障排除为止。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Rear fog light control function 6:

If the rear fog light switch is continuously pulled and pressed for more than 15 seconds, the BCM considers that the rear fog light switch is faulty, and the rear fog light does not work at this time. Until the front fog light switch fault is eliminated.



BCM电控单元的基本功能描述及功能详解。

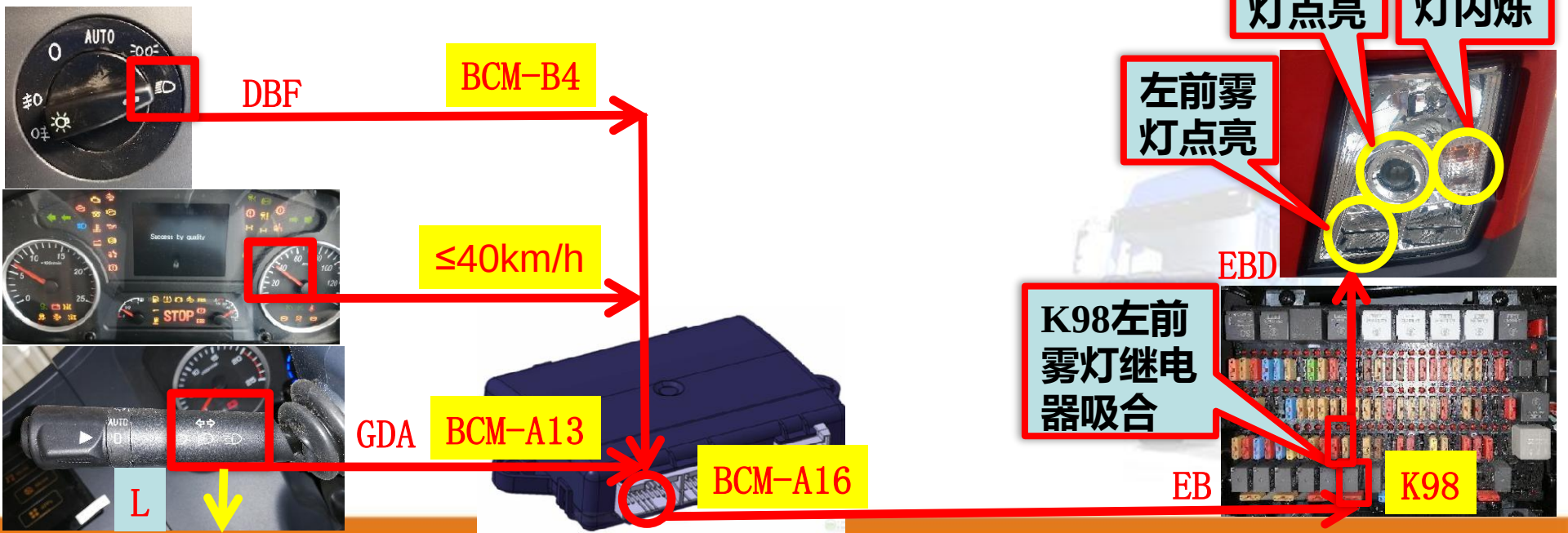
弯道辅助照明功能1：

当行车中车速≤40km/h；并且近光灯在点亮；如果开启左转向灯，左转向灯闪烁，则BCM控制对应的左前雾灯点亮实现弯道辅助照明功能。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Cornering auxiliary lighting function 1:

When the driving speed is less than or equal to 40km/h; and the low beam is on; if the left turn signal is turned on and the left turn signal flashes, the BCM controls the corresponding left front fog lamp to light up to realize the cornering auxiliary lighting function.



BCM电控单元的基本功能描述及功能详解。

弯道辅助照明功能2：

当行车中车速≤40km/h；并且近光灯在点亮；如果开启右转向灯，右转向灯闪烁，则BCM控制对应的右前雾灯点亮实现弯道辅助照明功能。

Basic functional description and detailed functional explanation of BCM electronic control unit.

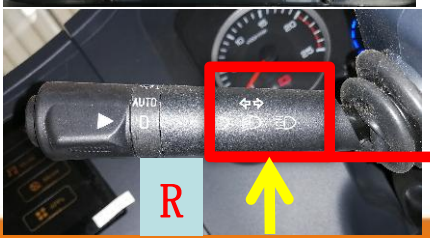
Cornering auxiliary lighting function 2:

When the driving speed is less than or equal to 40km/h; and the low beam is on; if the right turn signal is turned on and the right turn signal flashes, the BCM controls the corresponding right front fog light to light up to realize the cornering auxiliary lighting function.

DBF

BCM-B4

≤40km/h



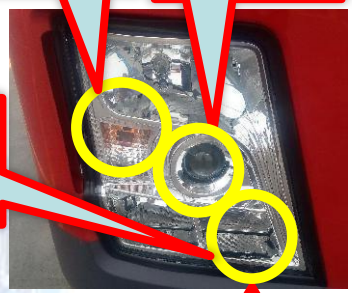
GDF

BCM-A3

BCM-A5

右近光灯点亮

右转向灯闪烁



右前雾灯点亮

EAC

K97右前雾灯继电器吸合

K97

EC

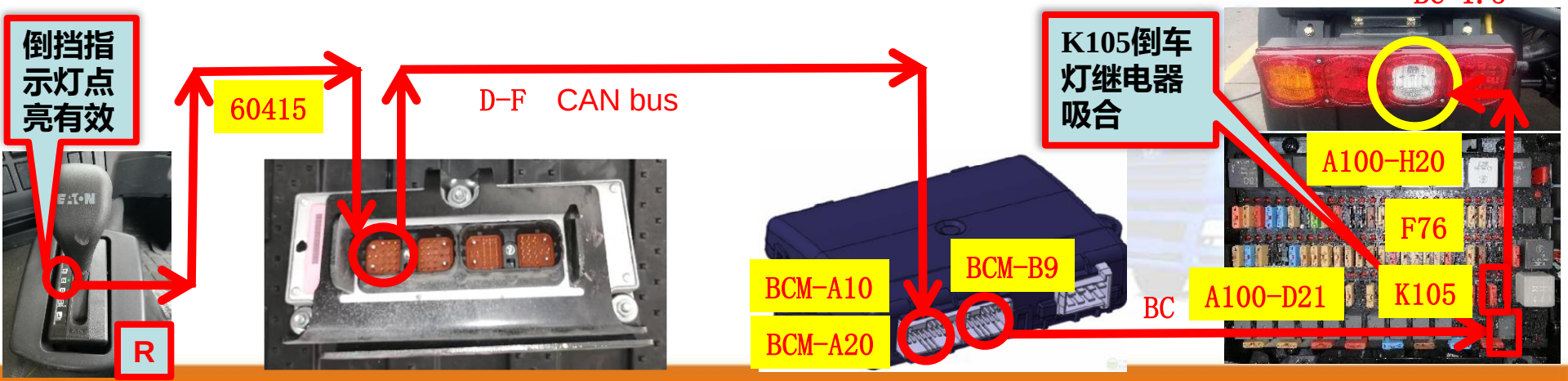
BCM电控单元的基本功能描述及功能详解。

倒车灯功能1：

当变速器置于倒车档（R）时，变速器的倒挡指示灯点亮有效，其换挡控制器通过60415线通讯给变速器TCU，TCU控制变速器换挡置于倒车档位，TCU通过CAN总线传输倒挡报文。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Reversing light function 1:When the transmission is placed in reverse gear (R), the reverse gear indicator light of the transmission is lit and valid, and its shift controller communicates to the transmission TCU through the 60415 line, TCU controls transmission shift to reverse gear，and the transmission TCU transmits the reverse gear message through the CAN bus.



BCM电控单元的基本功能描述及功能详解。

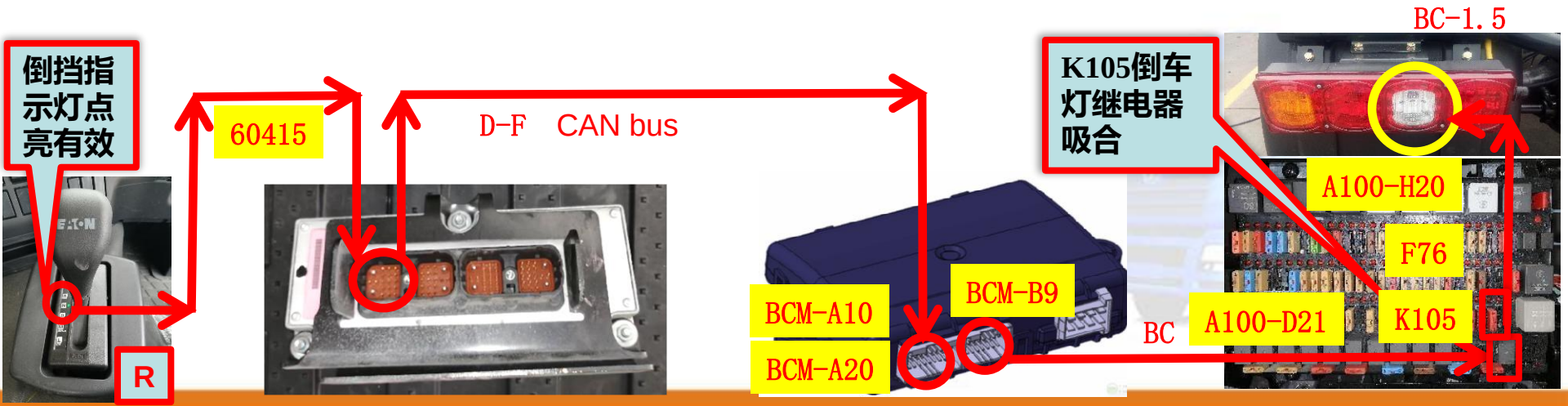
倒车灯功能2：

BCM控制器收到倒挡报文，通过B-9位置的BC线传输倒挡控制信号到电器装置版A100的D21位置，驱动K105倒车灯继电器吸合。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Reversing light function 2:

The BCM controller receives the reverse gear message, transmits the reverse gear control signal to the D21 position of the A100 of the electrical device version through the BC line at the B-9 position, and drives the K105 reversing light relay to close.



BCM电控单元的基本功能描述及功能详解。

倒车灯功能3：

由F76保险丝给K105倒车灯继电器提供电源，K105倒车灯继电器通过H-20位置的BC线传输倒车灯工作电流，连接到两个尾灯的倒车灯点亮。

Basic functional description and detailed functional explanation of BCM electronic control unit.

Reversing light function 3:

The K105 reversing light relay is powered by the F76 fuse, and the K105 reversing light relay transmits the reversing light working current through the BC line at the H-20 position, and the reversing lights connected to the two tail lights are lit.