服务培训教材
编号：CT0307-9

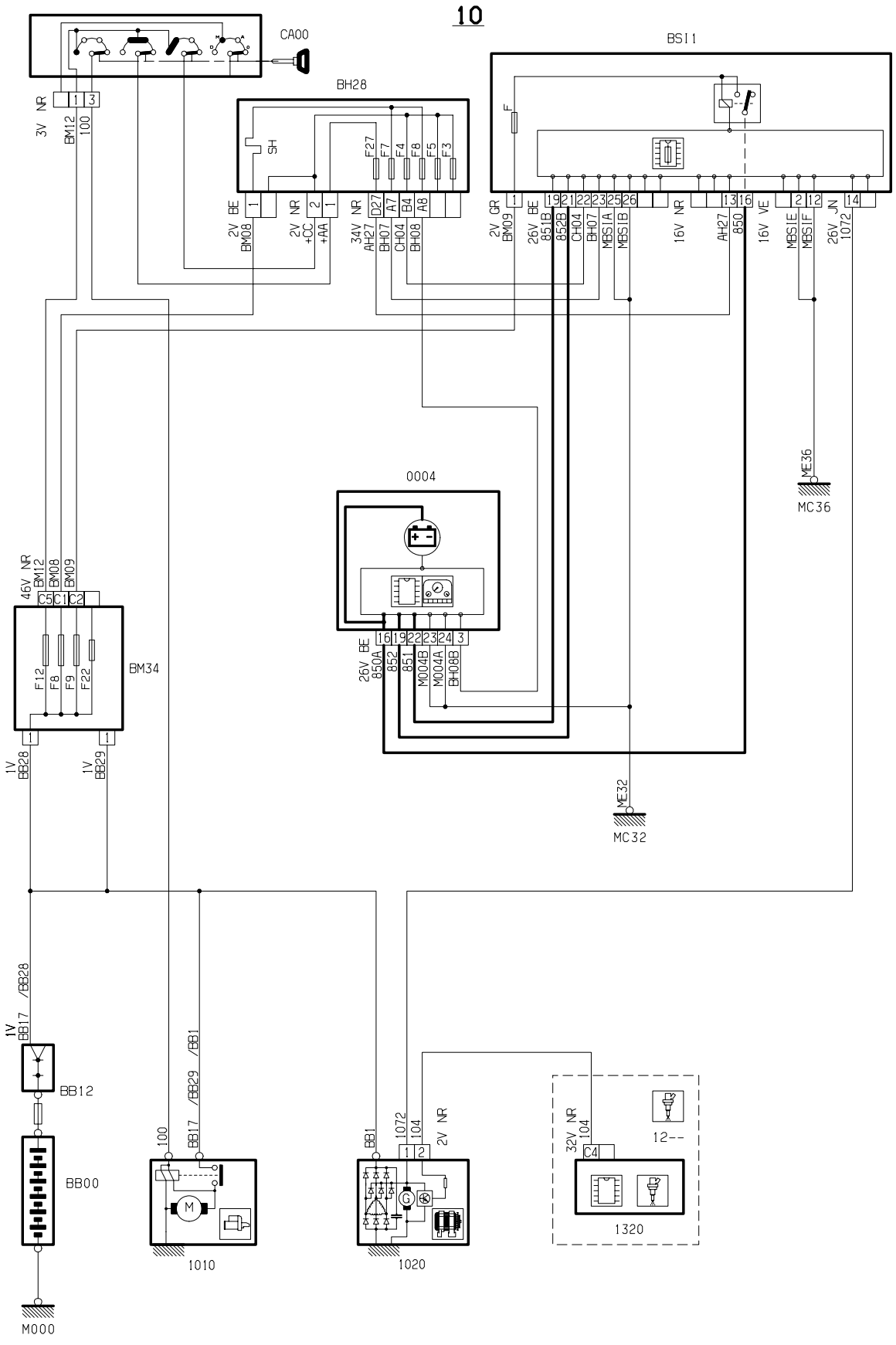
东风雪铁龙
CITROËN

B53 技术培训

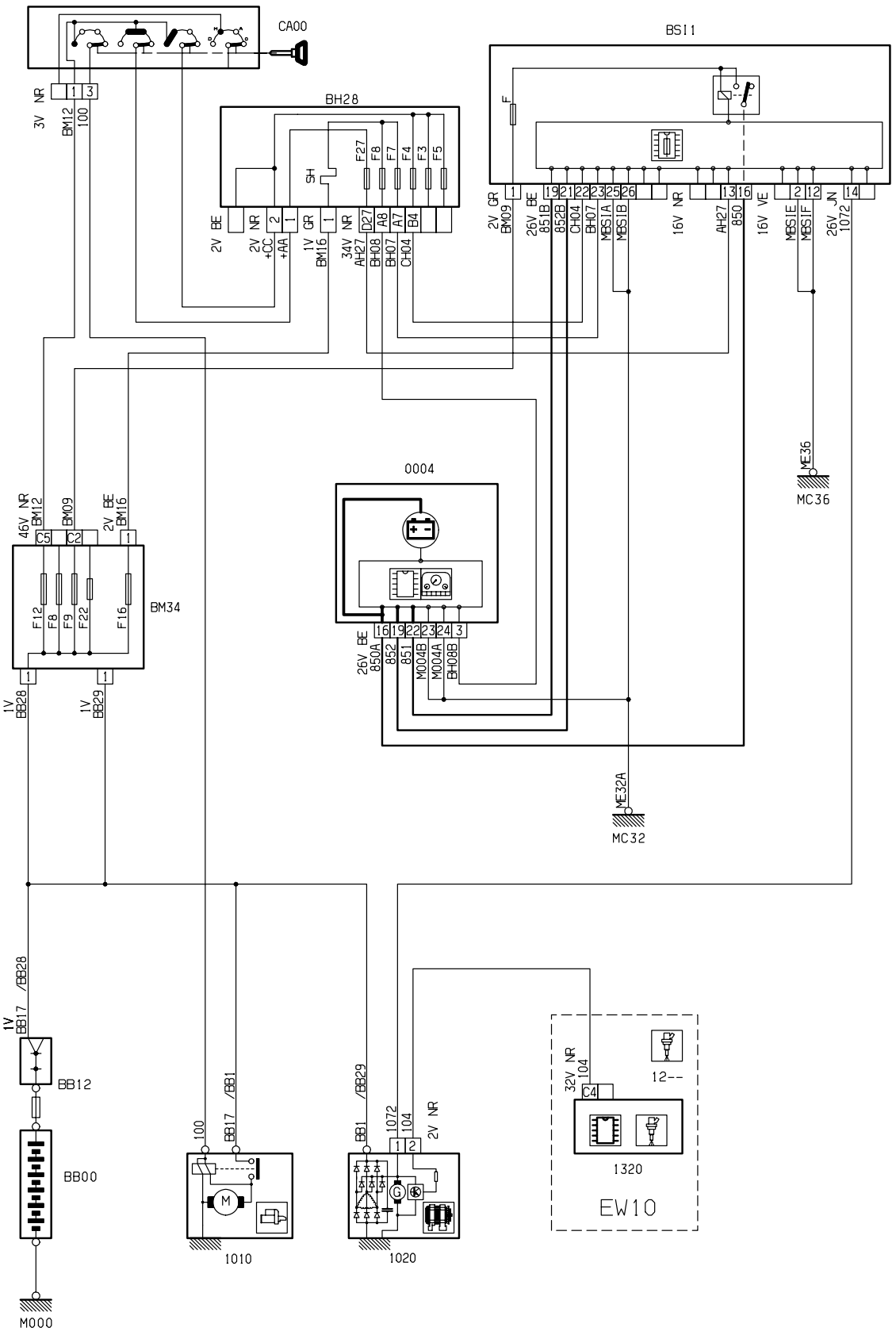
— 基础回顾操作手册

神龙汽车有限公司东风雪铁龙商务部
二 00 六年一月

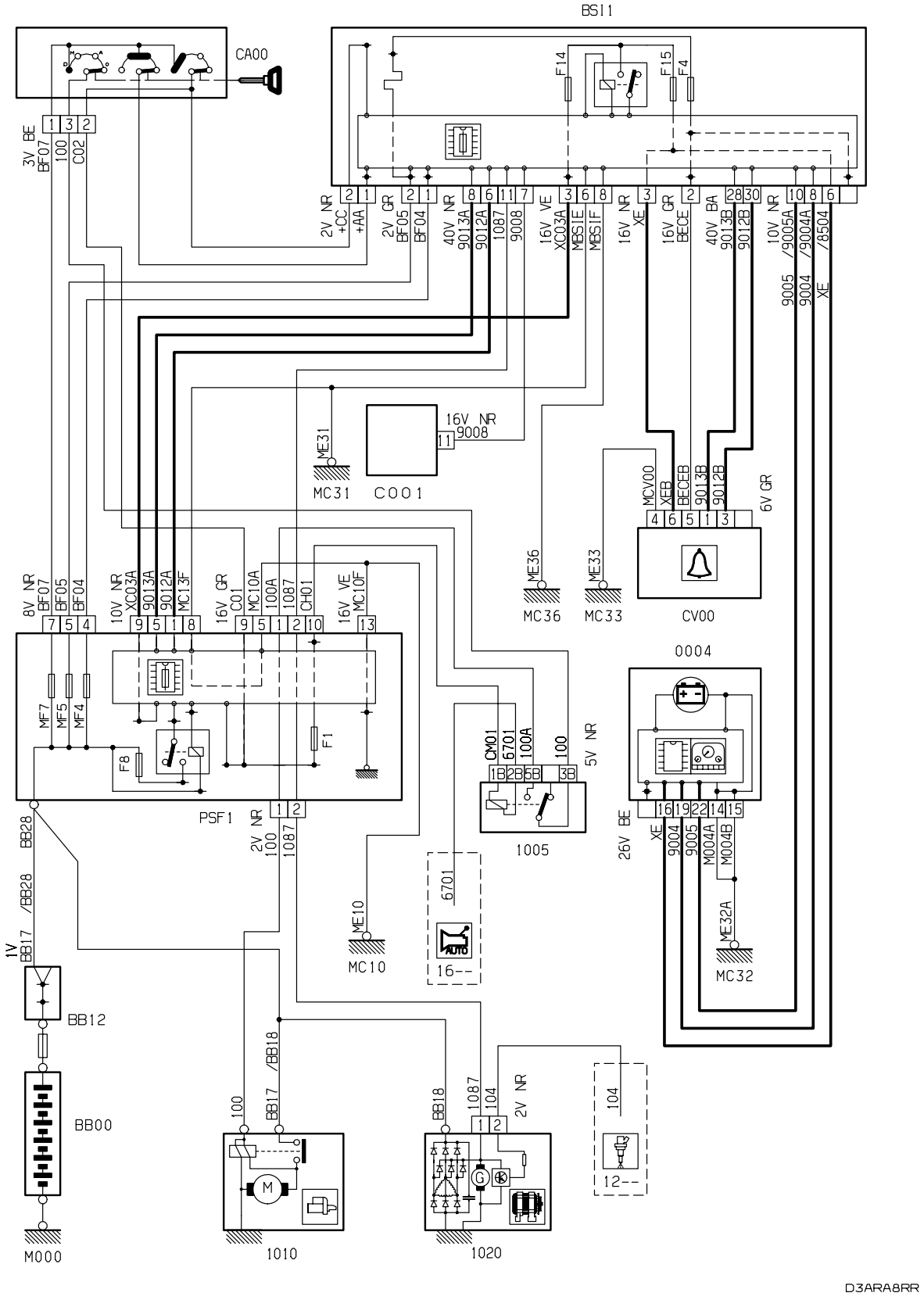
Picasso 1.6 L M7.4.4 启动一发电



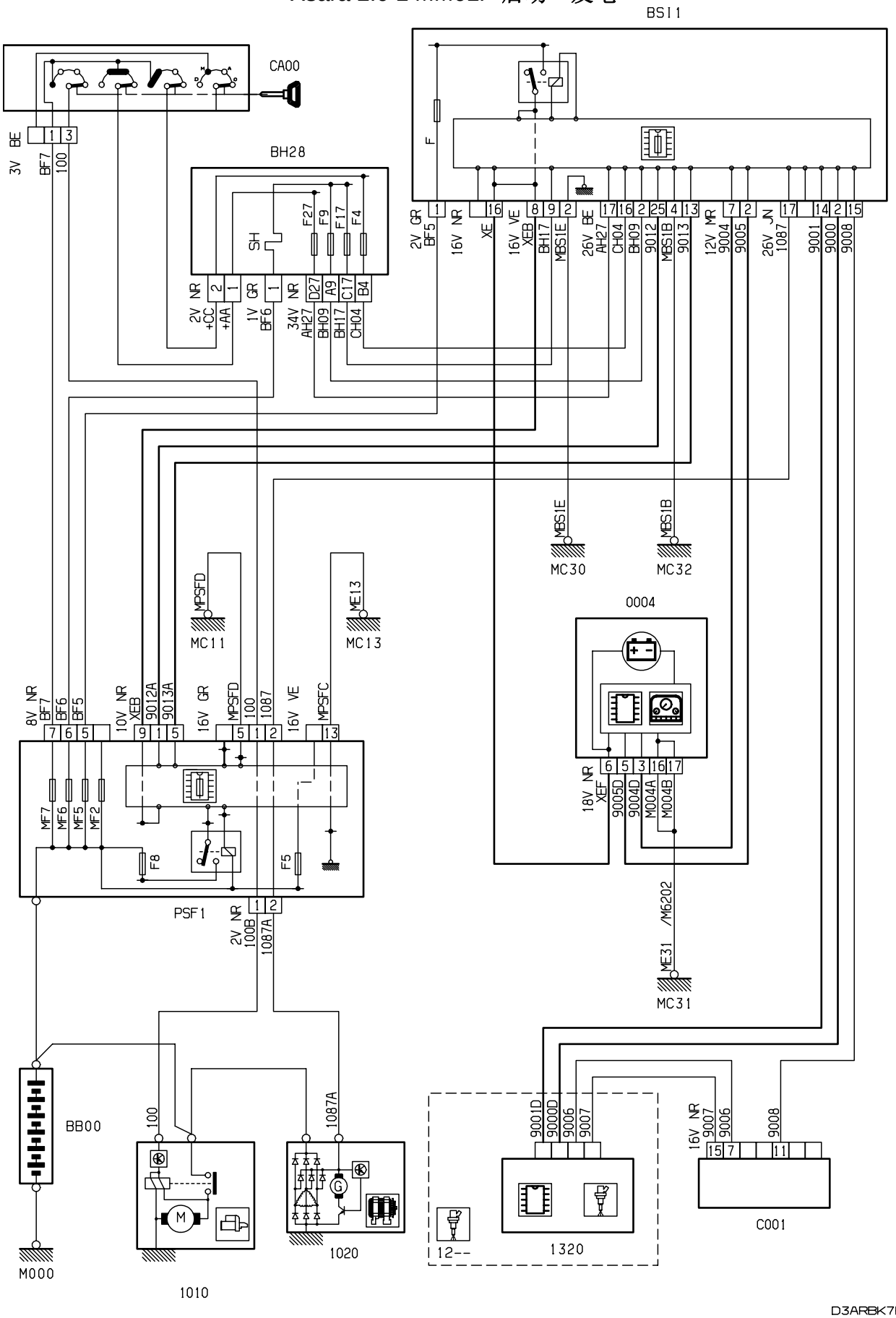
Picasso 2.0 L MM48P 启动一发电



Picasso 2.0 L MM6LP BVA 启动一发电



Xsara 2.0 L MM6LP 启动一发电



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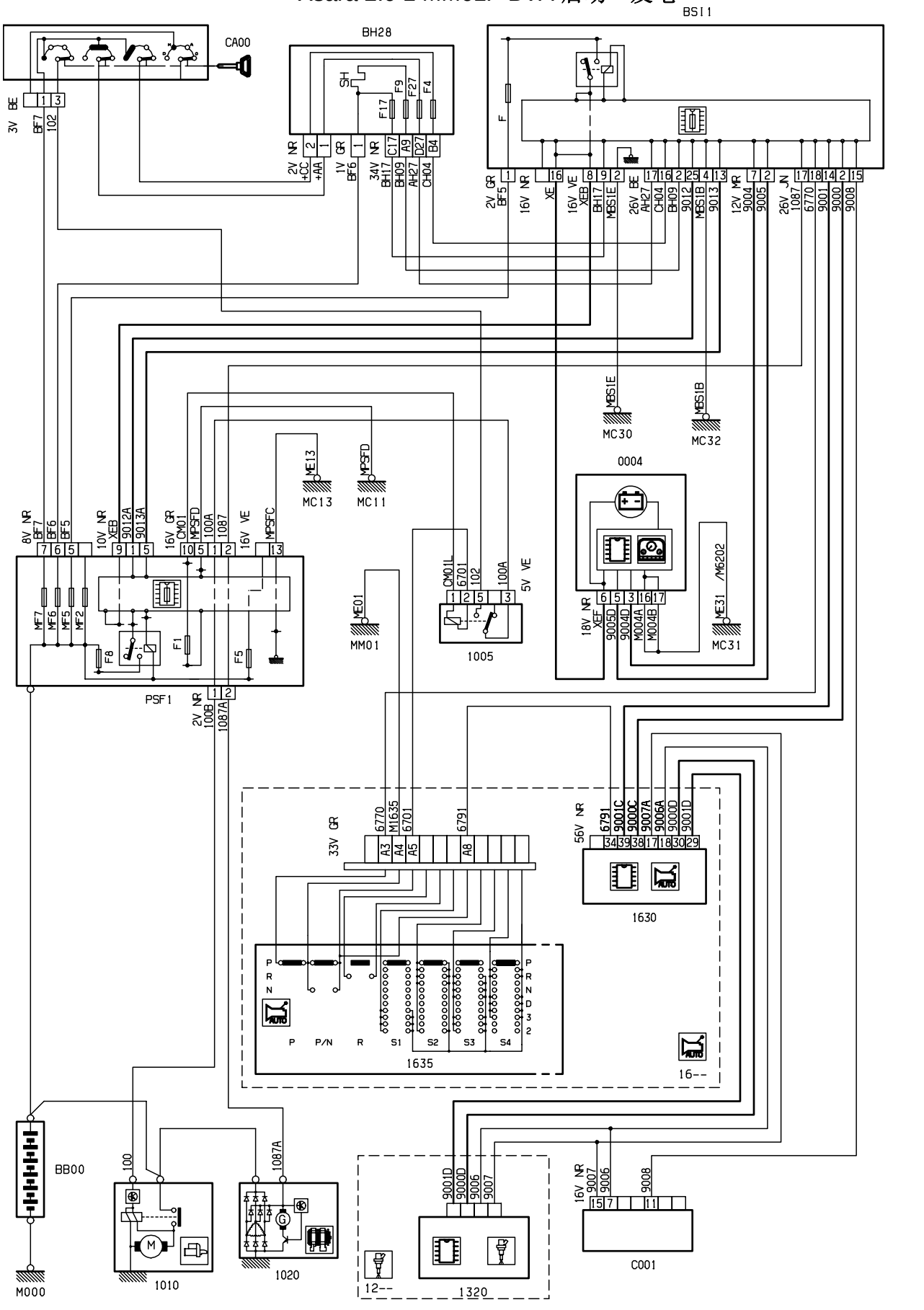
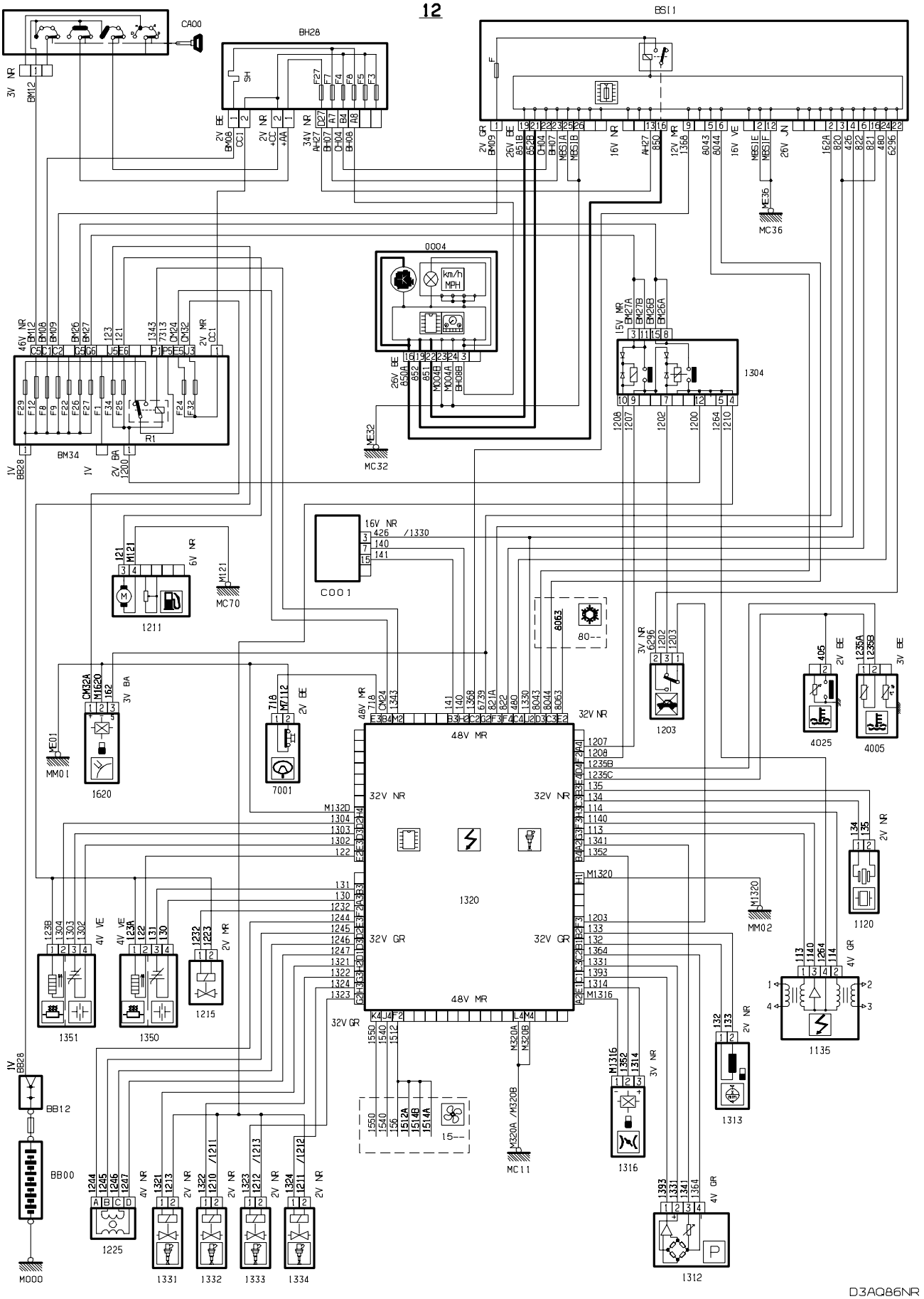
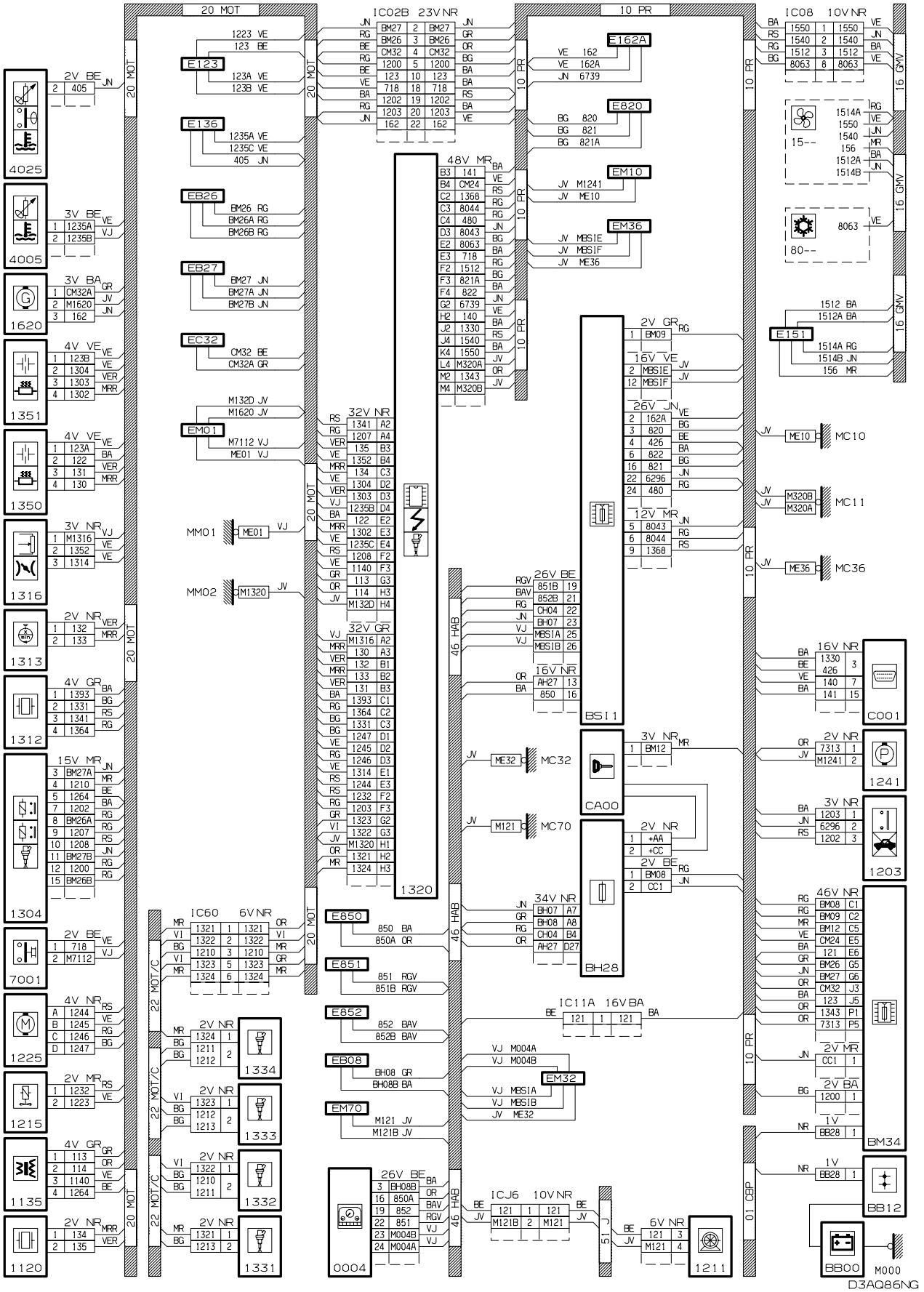


Picasso 1.6L M7.4.4 喷射-点火

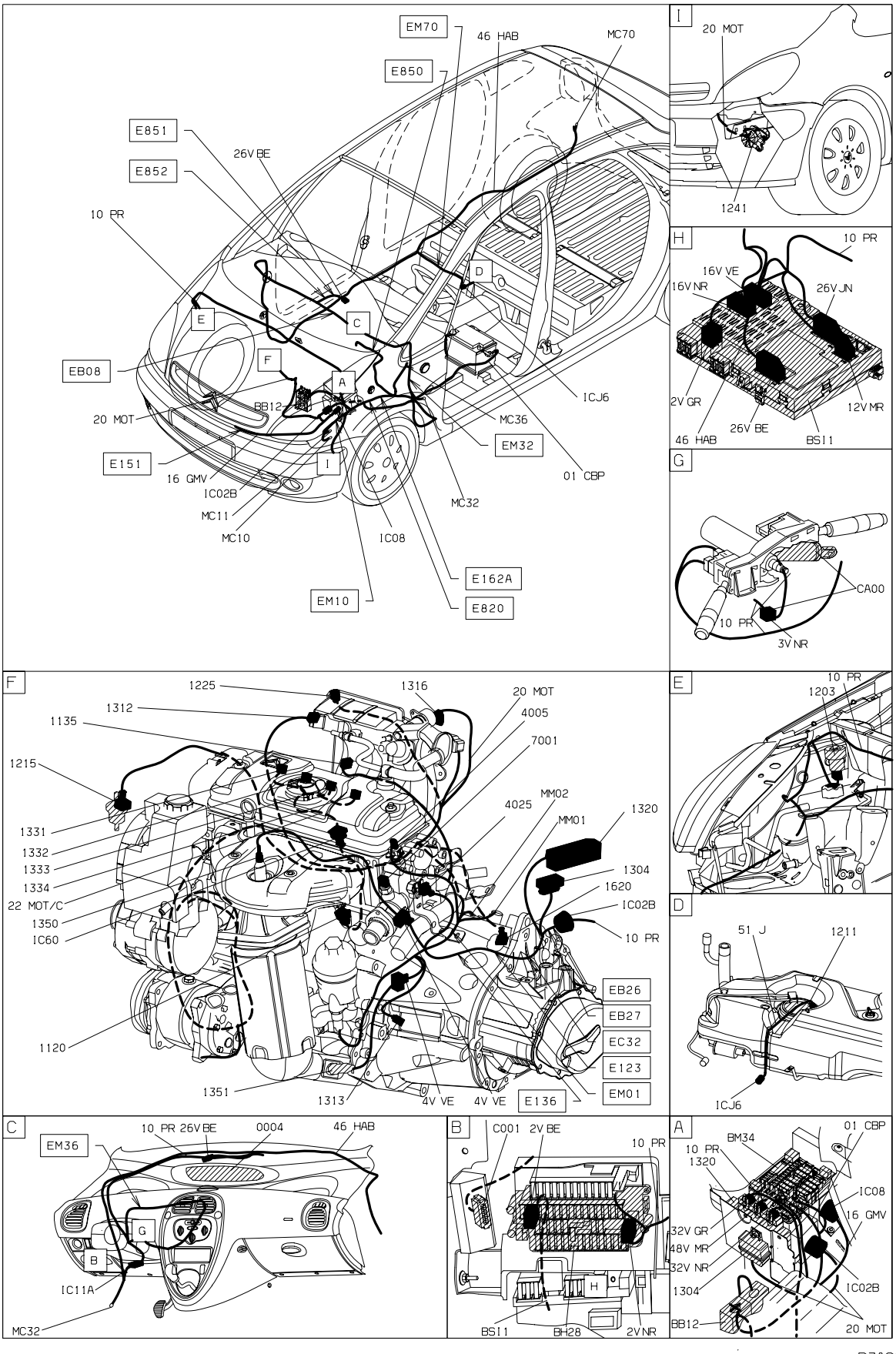
12



Picasso 1.6L M7.4.4 喷射-点火

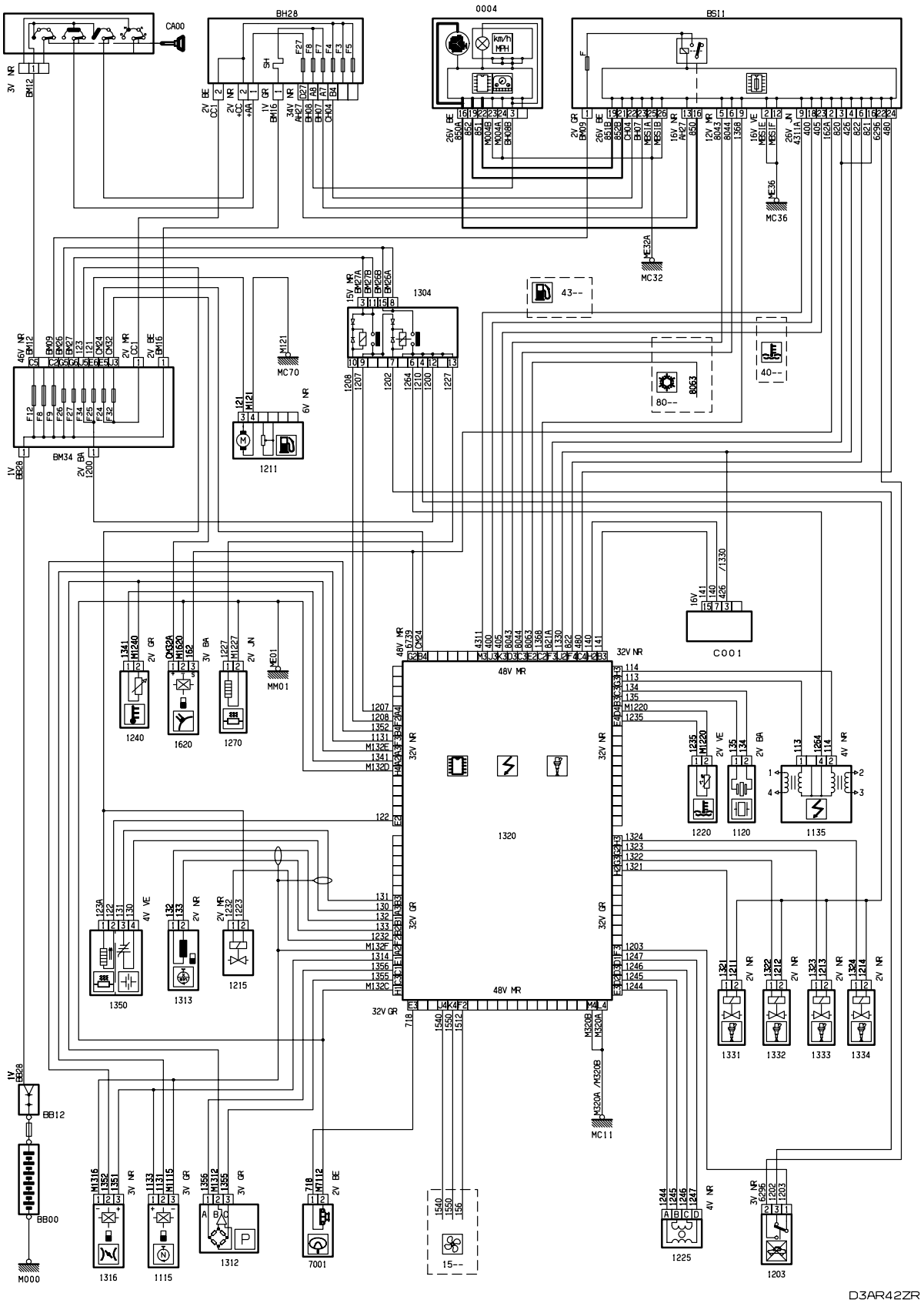


Picasso 1.6L M7.4.4 喷射-点火

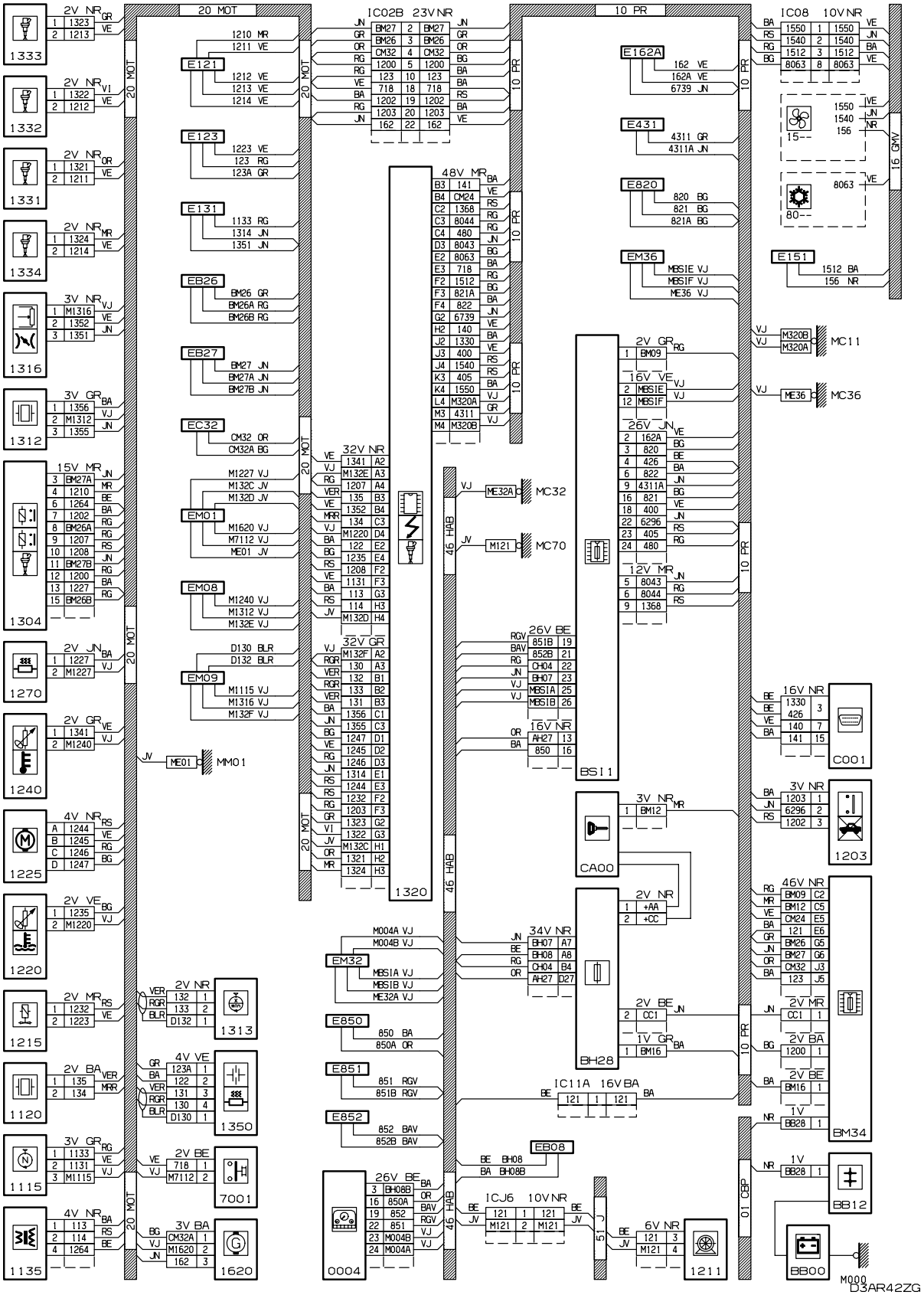


D3AQ86NI

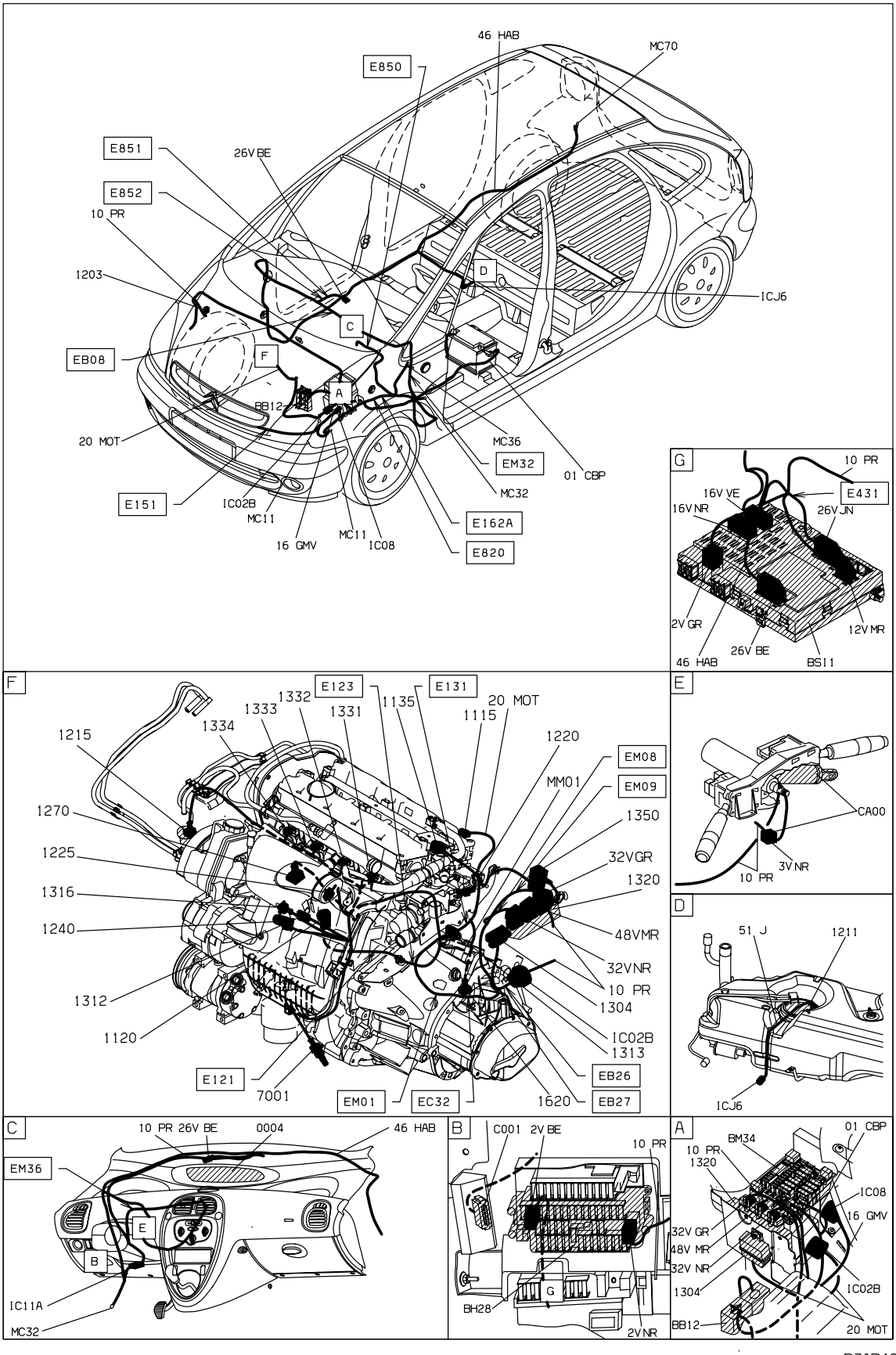
Picasso 2.0 MM48P EW10J4 (RFM) 喷射-点火



Picasso 2.0 MM48P EW10J4 (RFM) 喷射-点火



Picasso 2.0 MM48P EW10J4 (RFM) 喷射-点火



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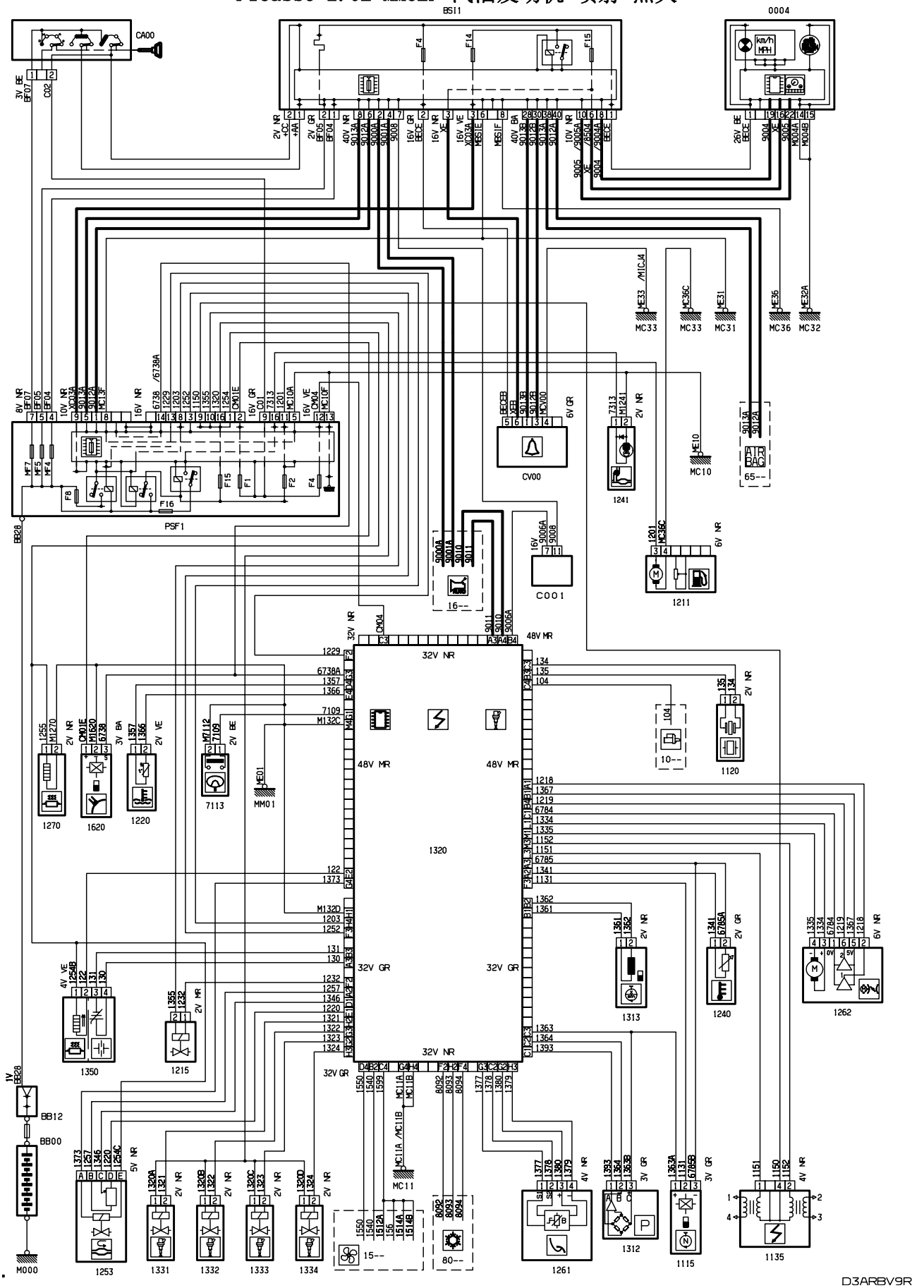
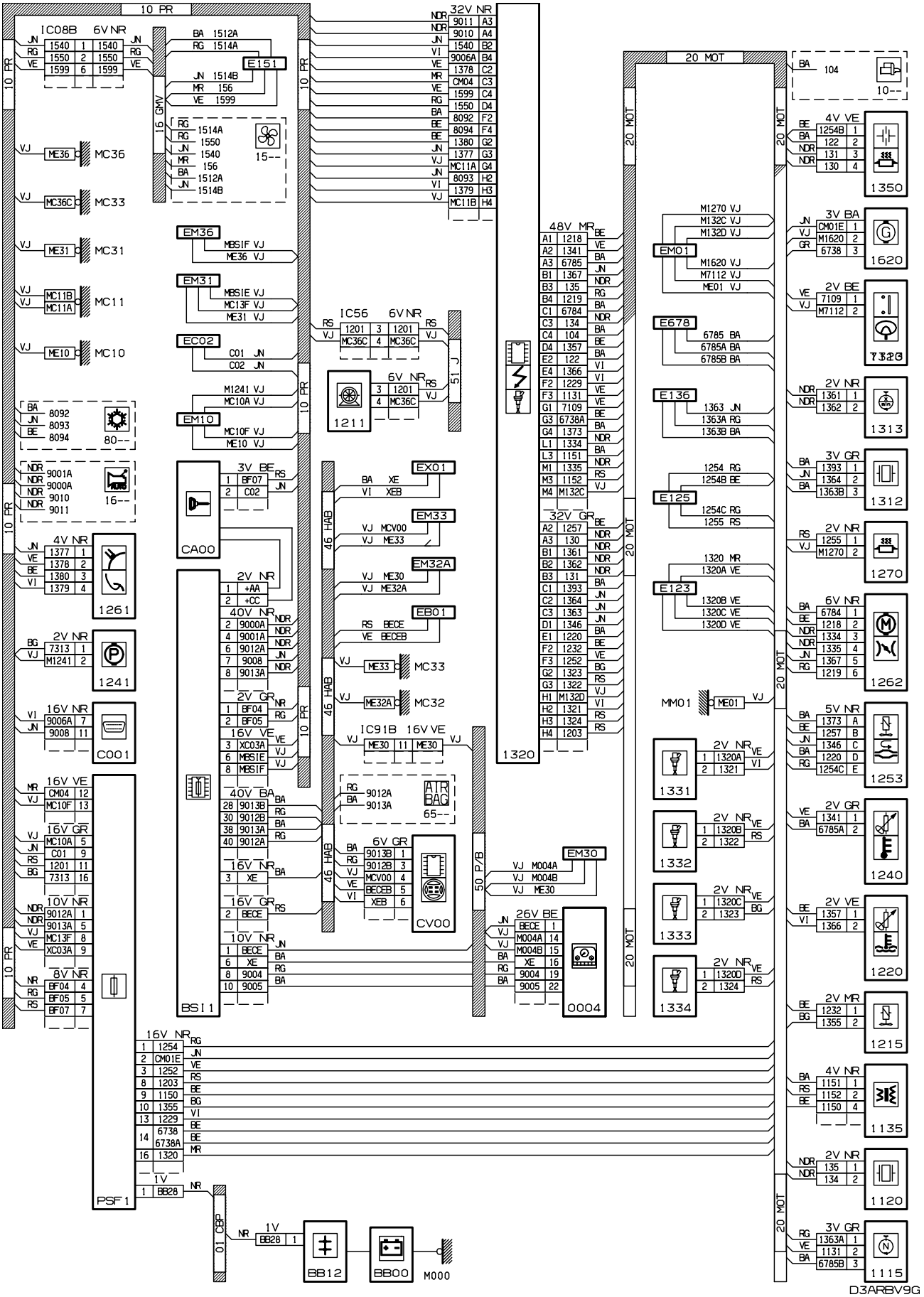
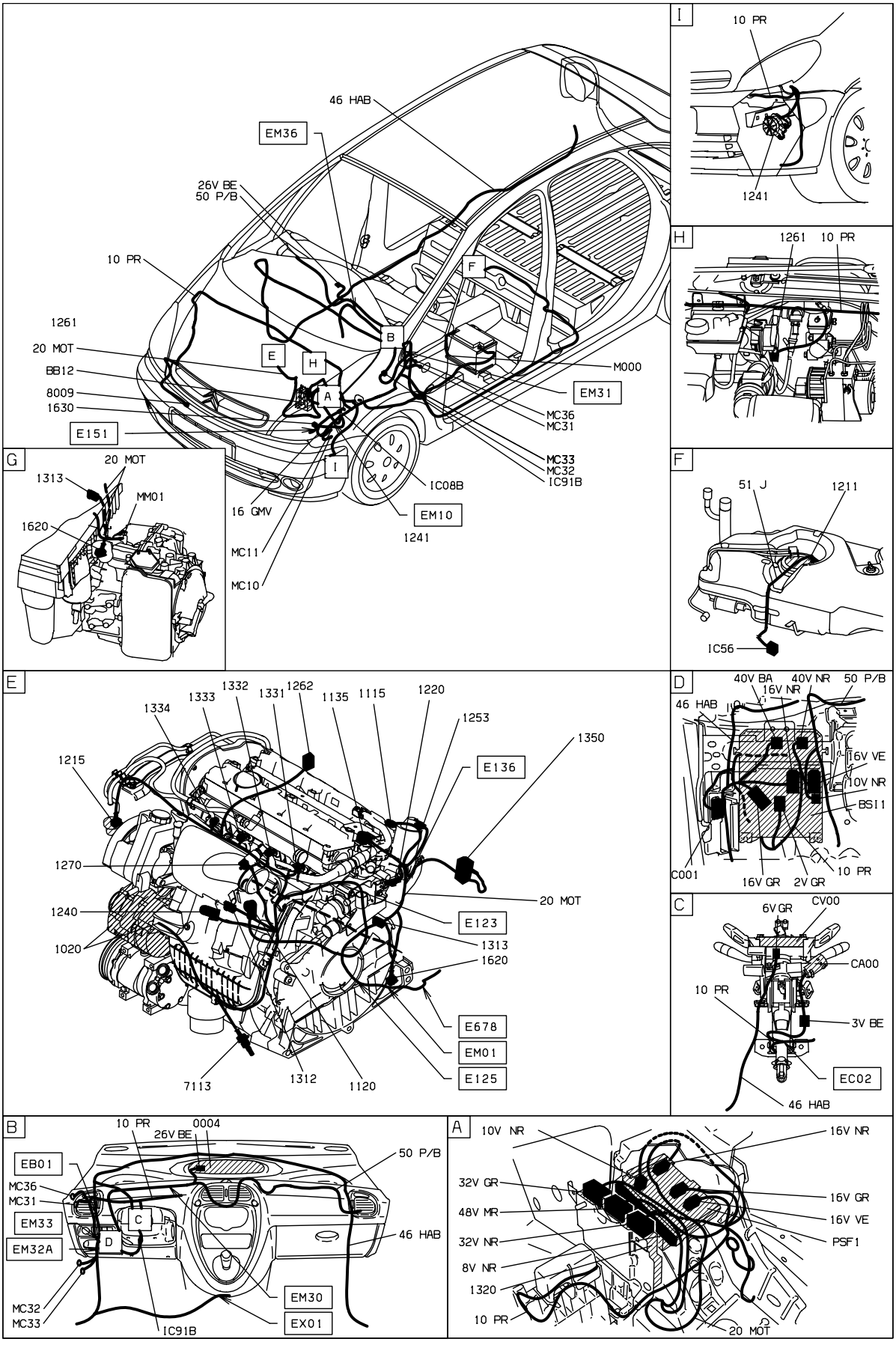
Picasso 2.0L MM6LP 汽油发动机 喷射-点火



Picasso 2.0L MM6LP 汽油发动机 喷射-点火



Picasso 2.0L MM6LP 汽油发动机 喷射-点火



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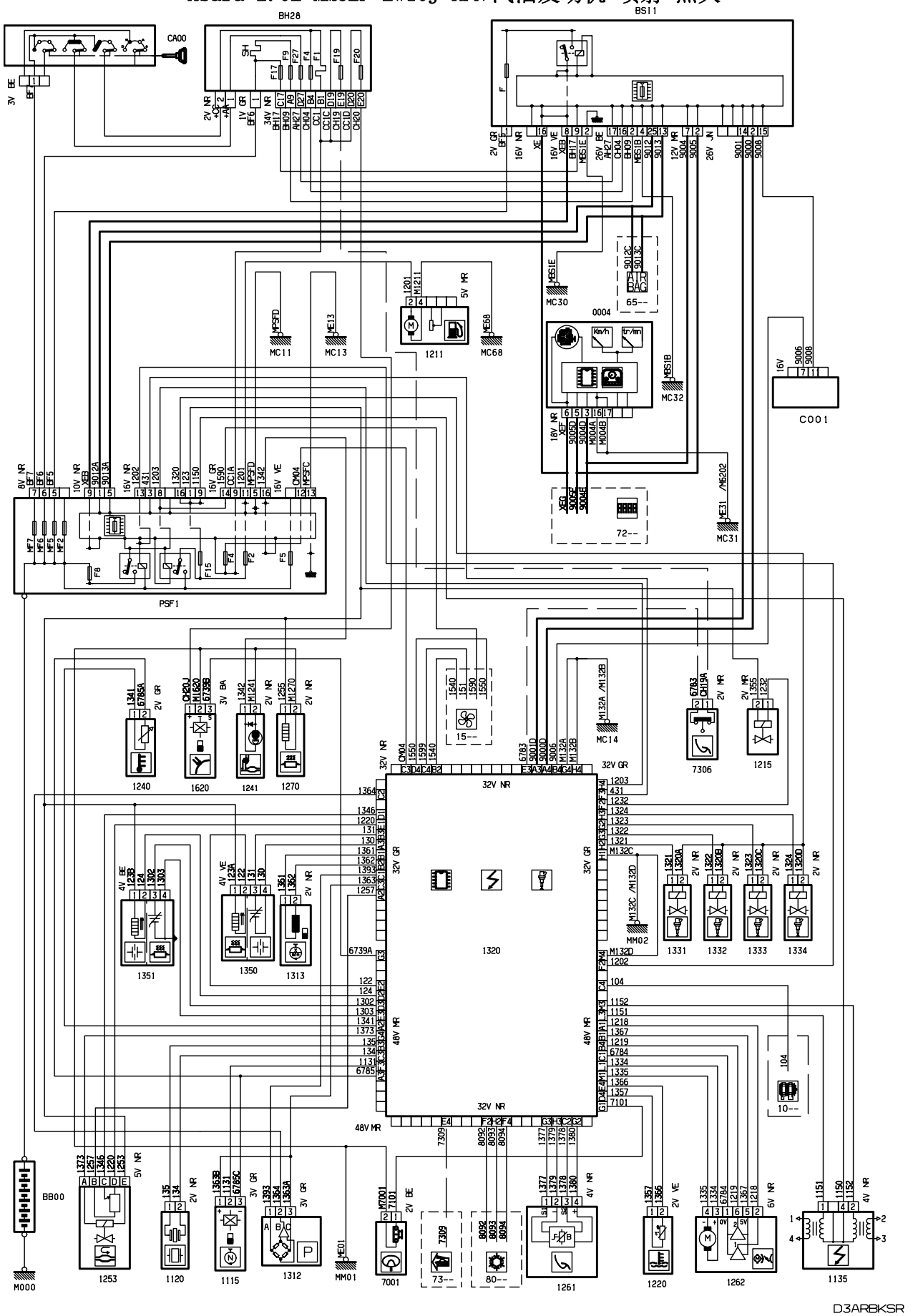

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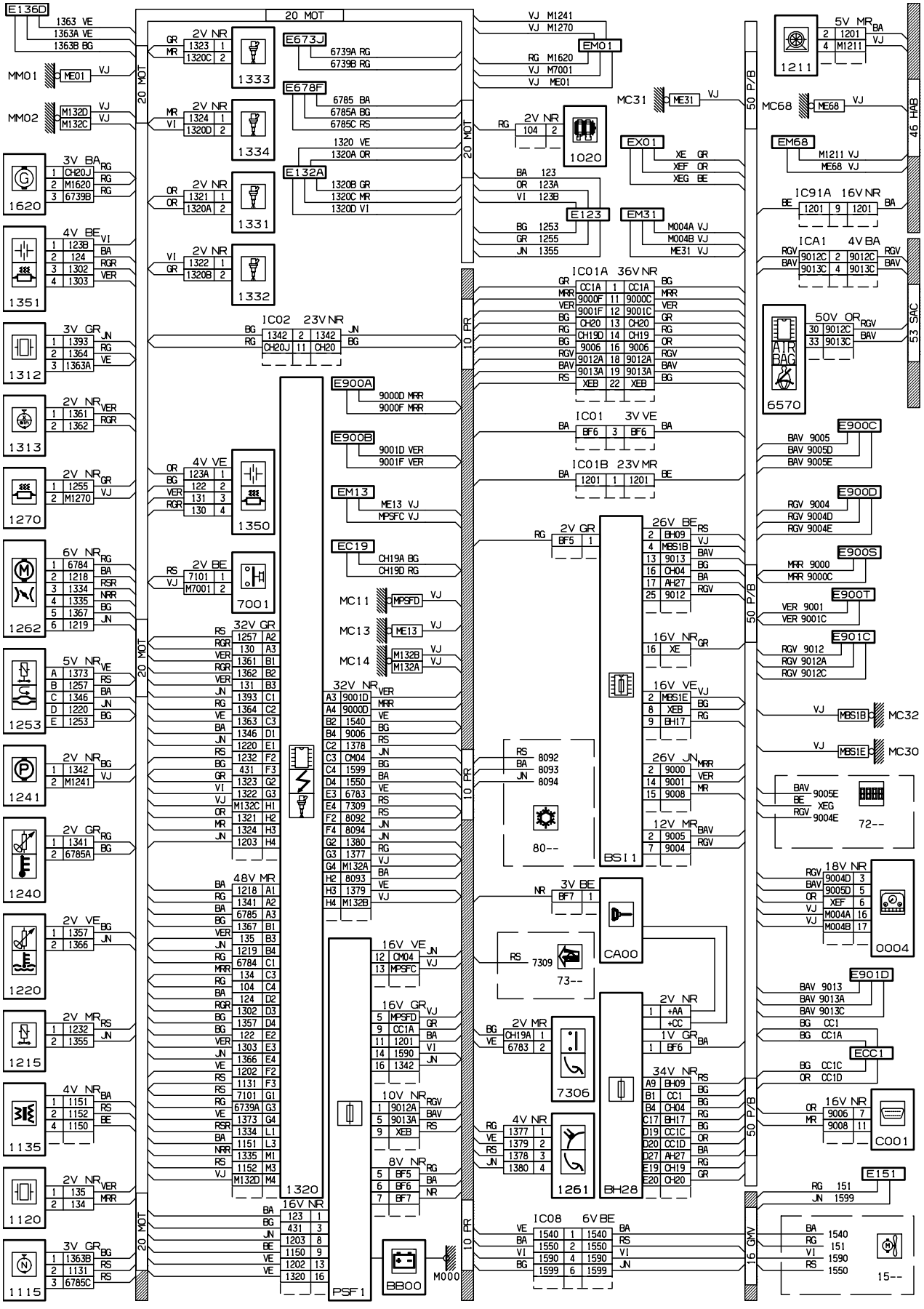
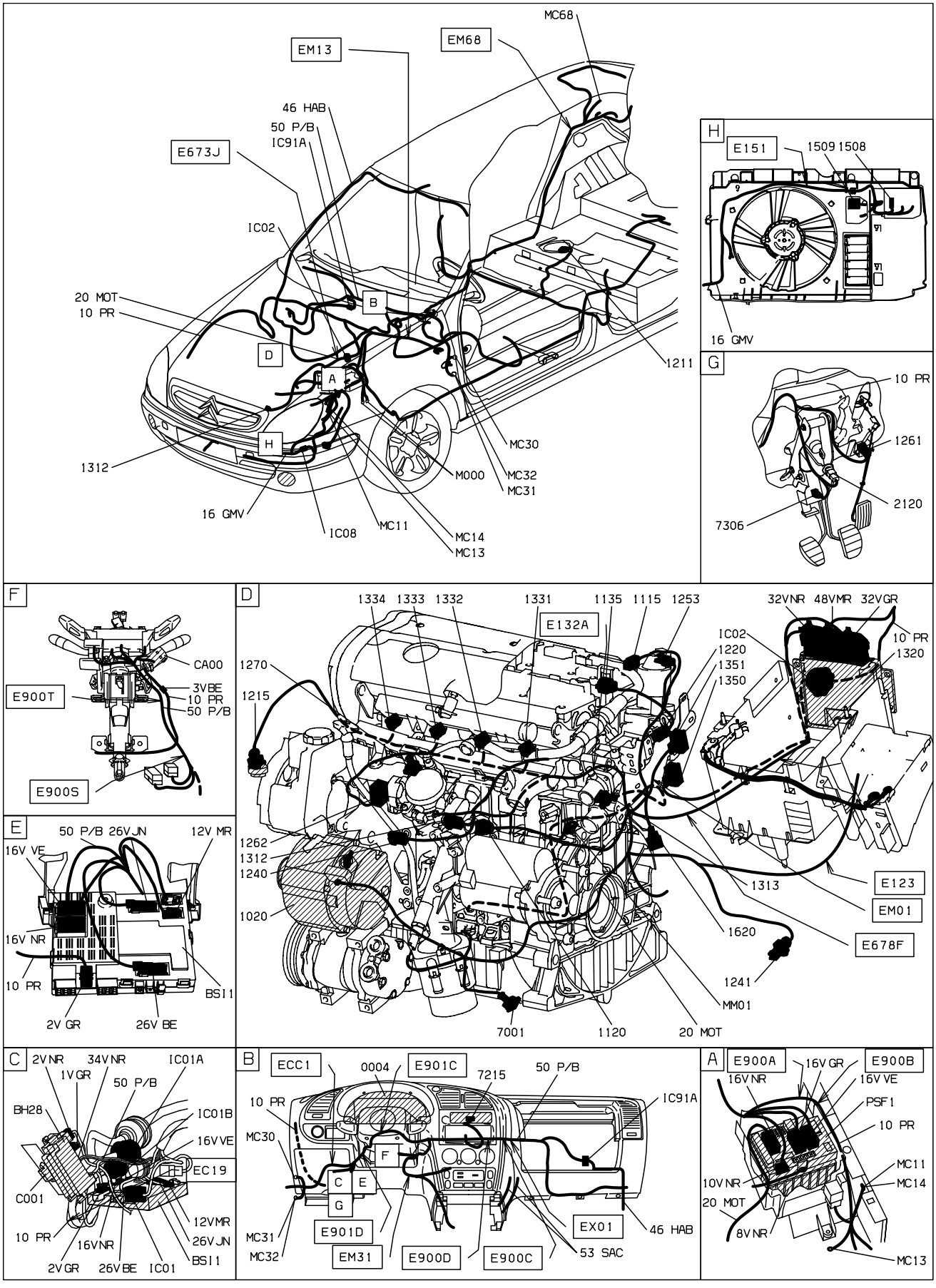


Xsara 2.0L MM6LP EW10J RFN 汽油发动机 喷射-点火



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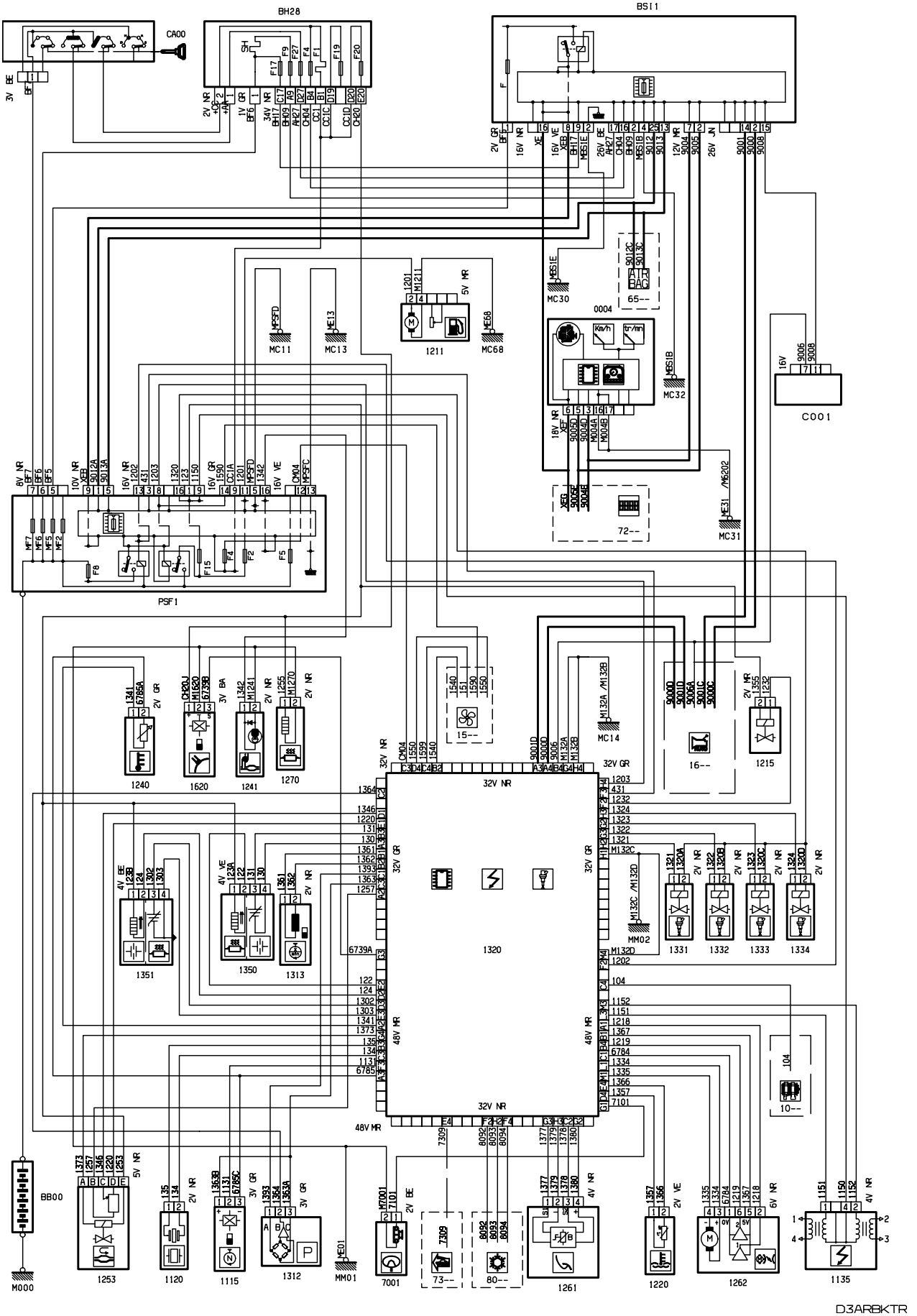

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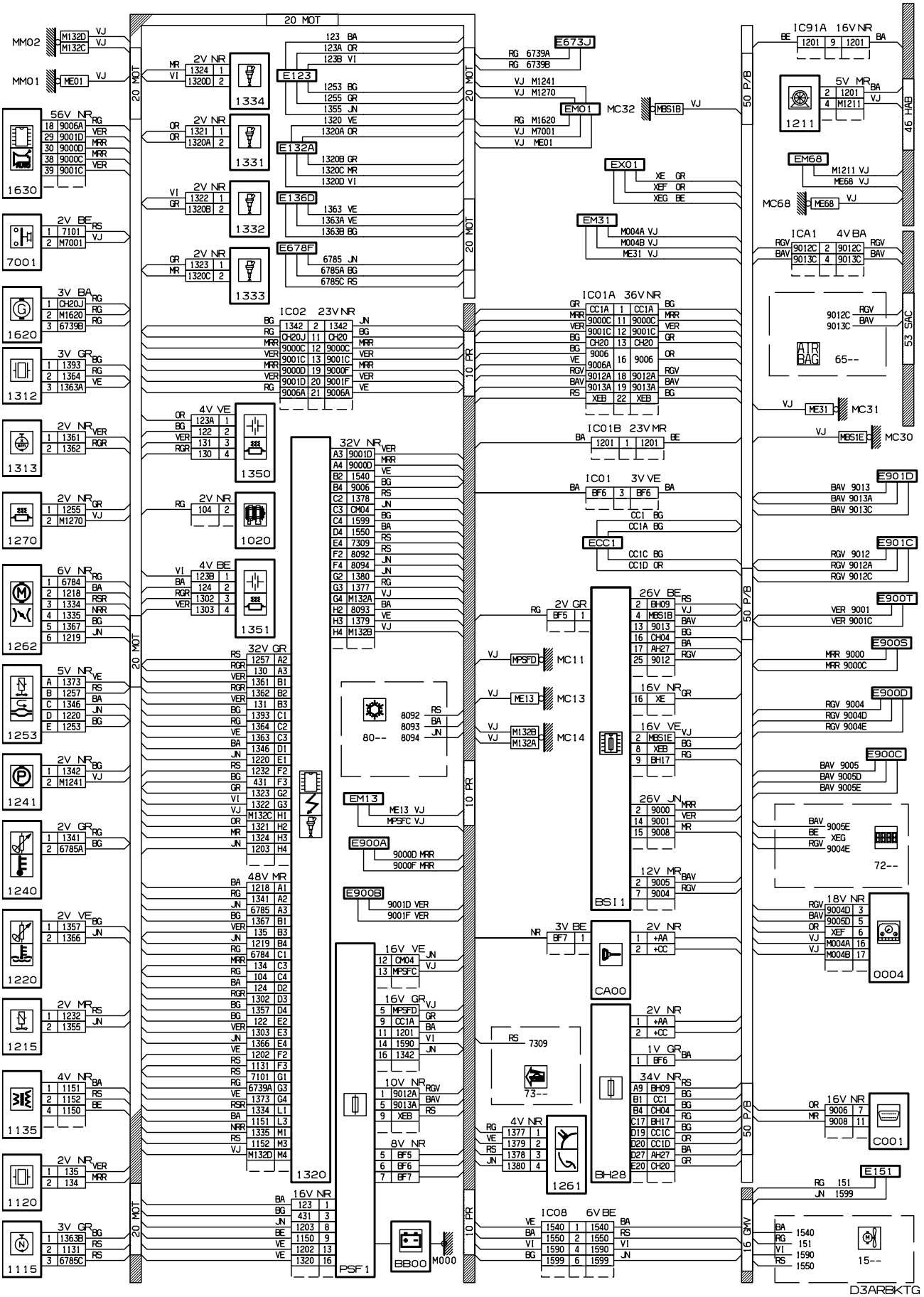
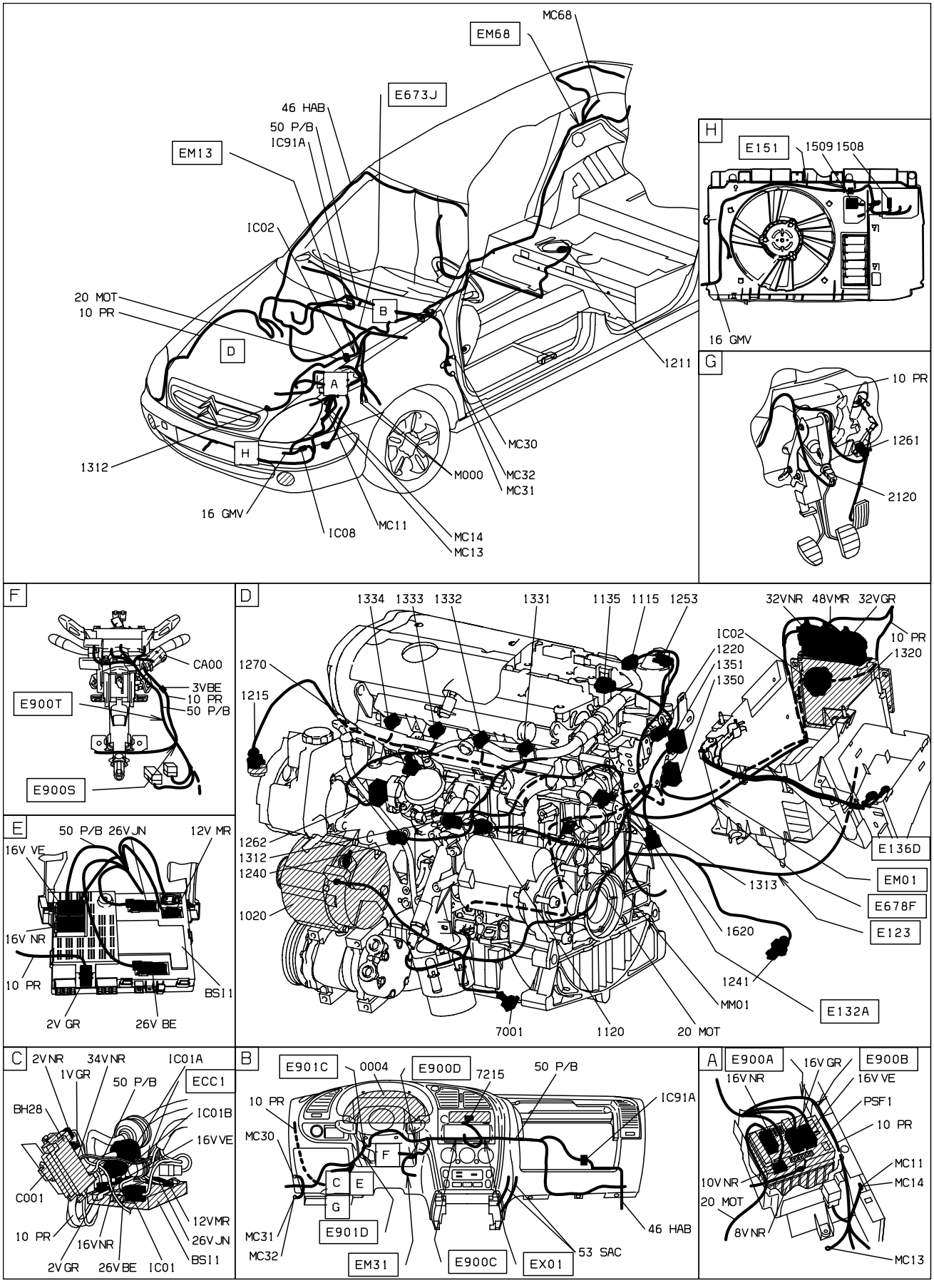
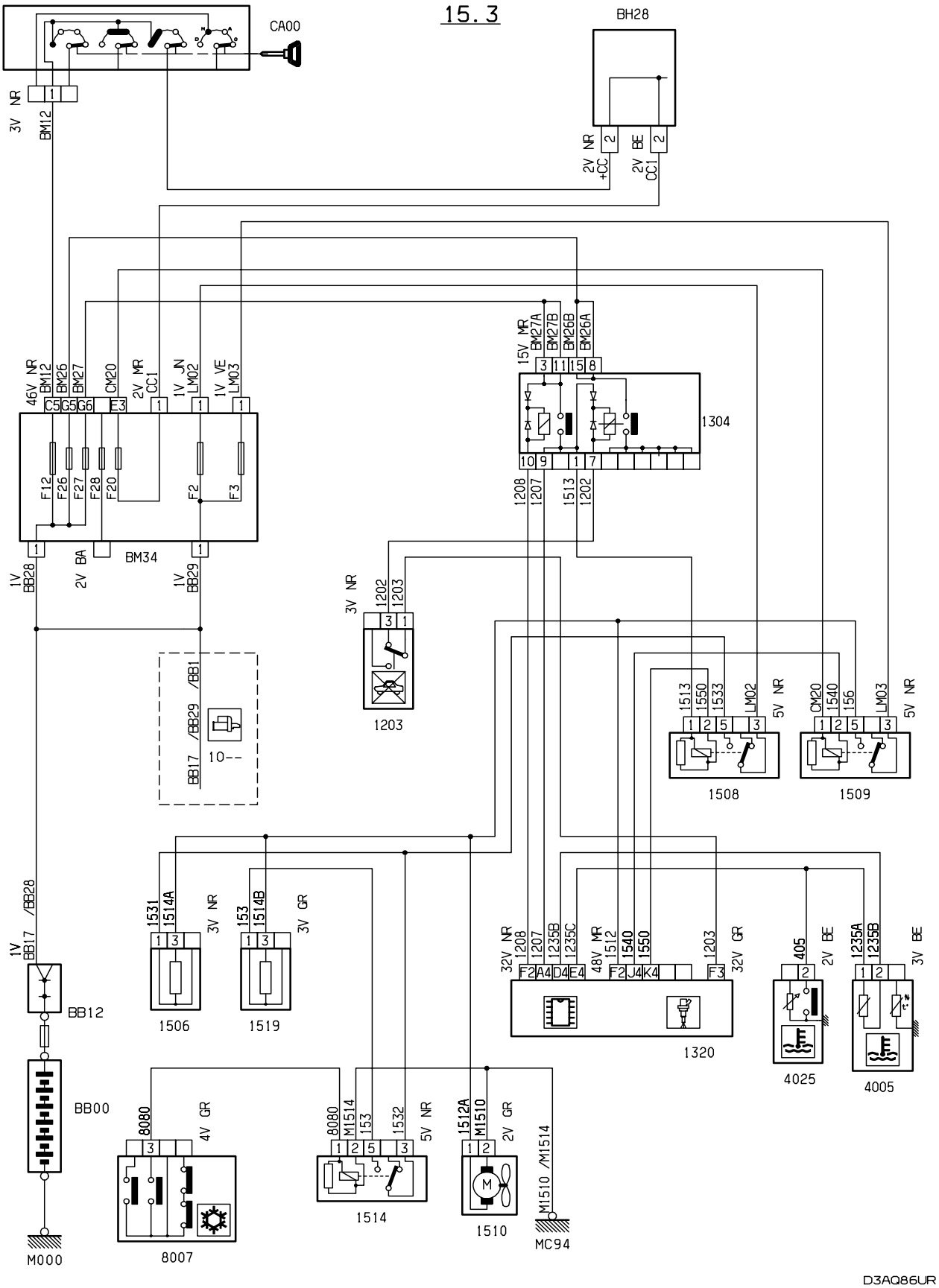


Xsara 2.0L MM6LP EW10J RFN - AL4 汽油发动机 喷射-点火



D3ARBKT I

Picasso 1.6L M7.4.4 发动机冷却



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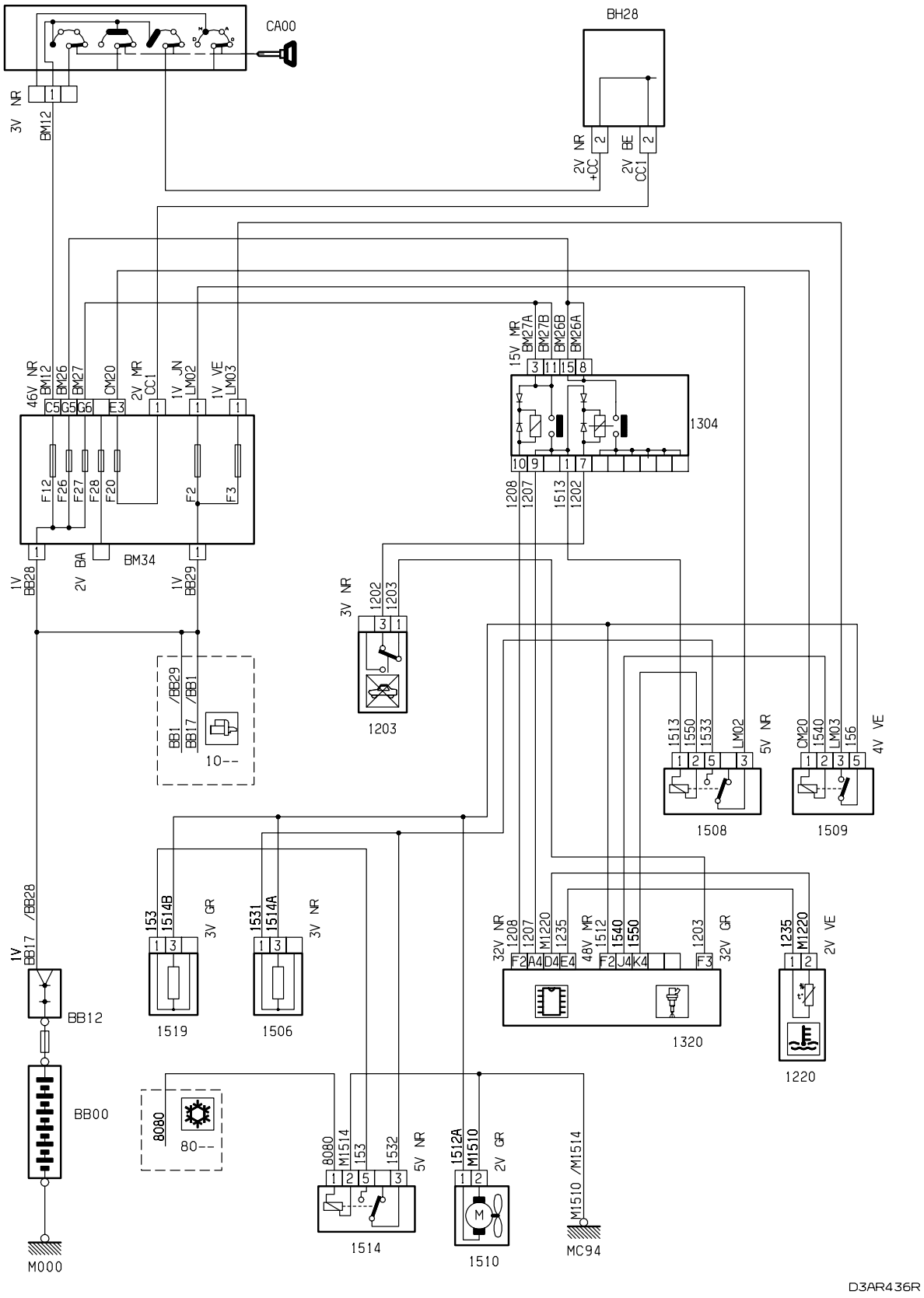

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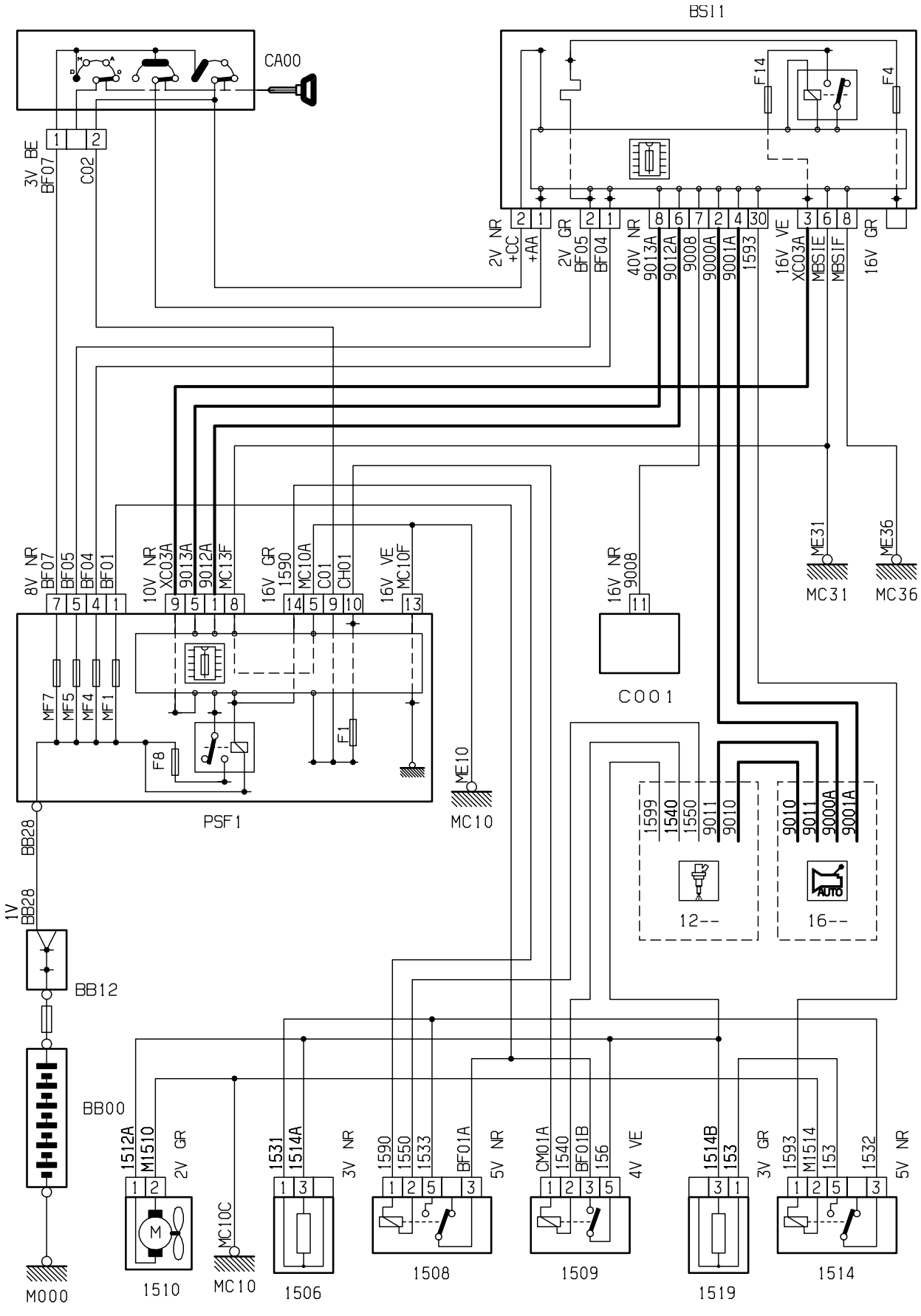

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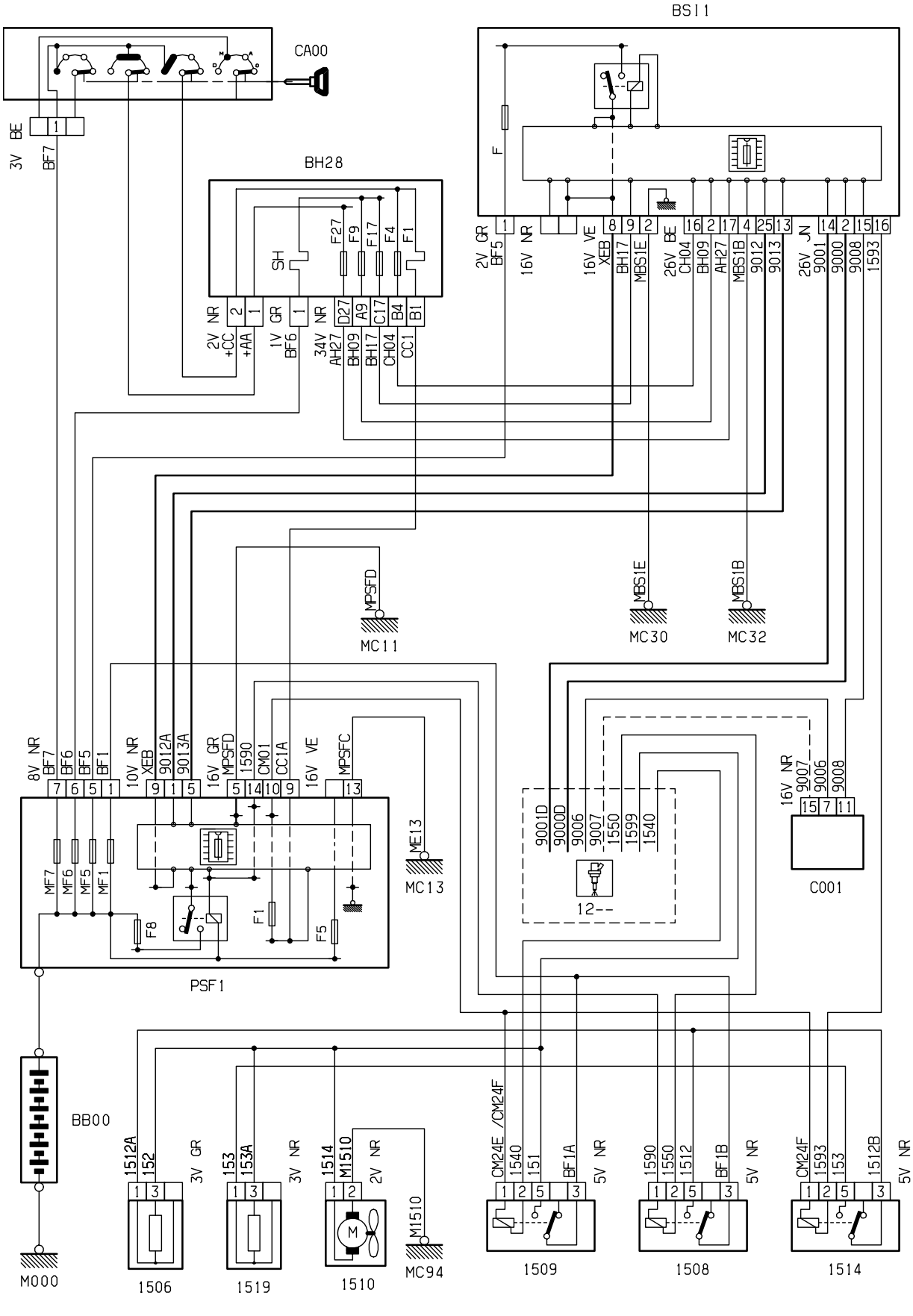

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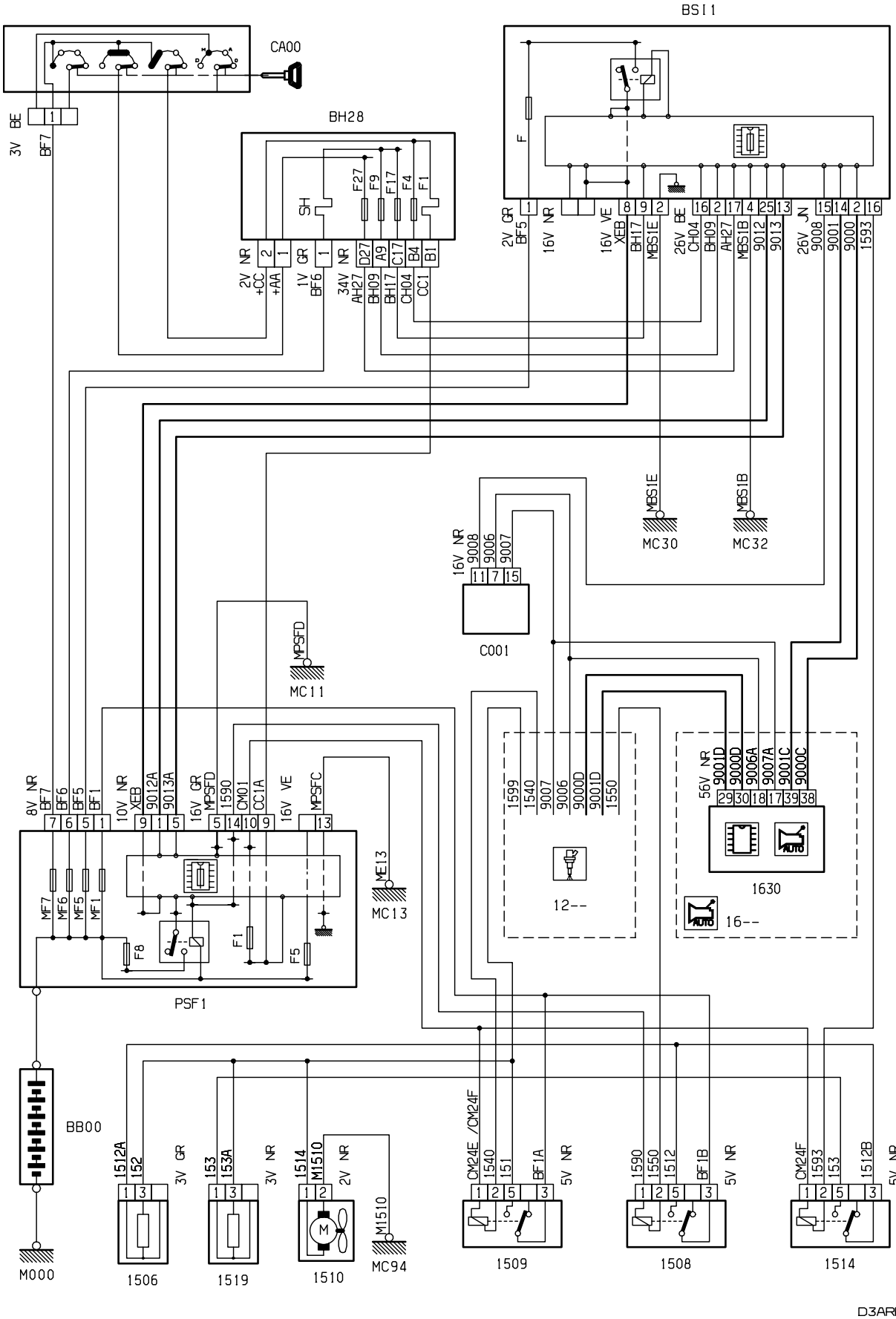
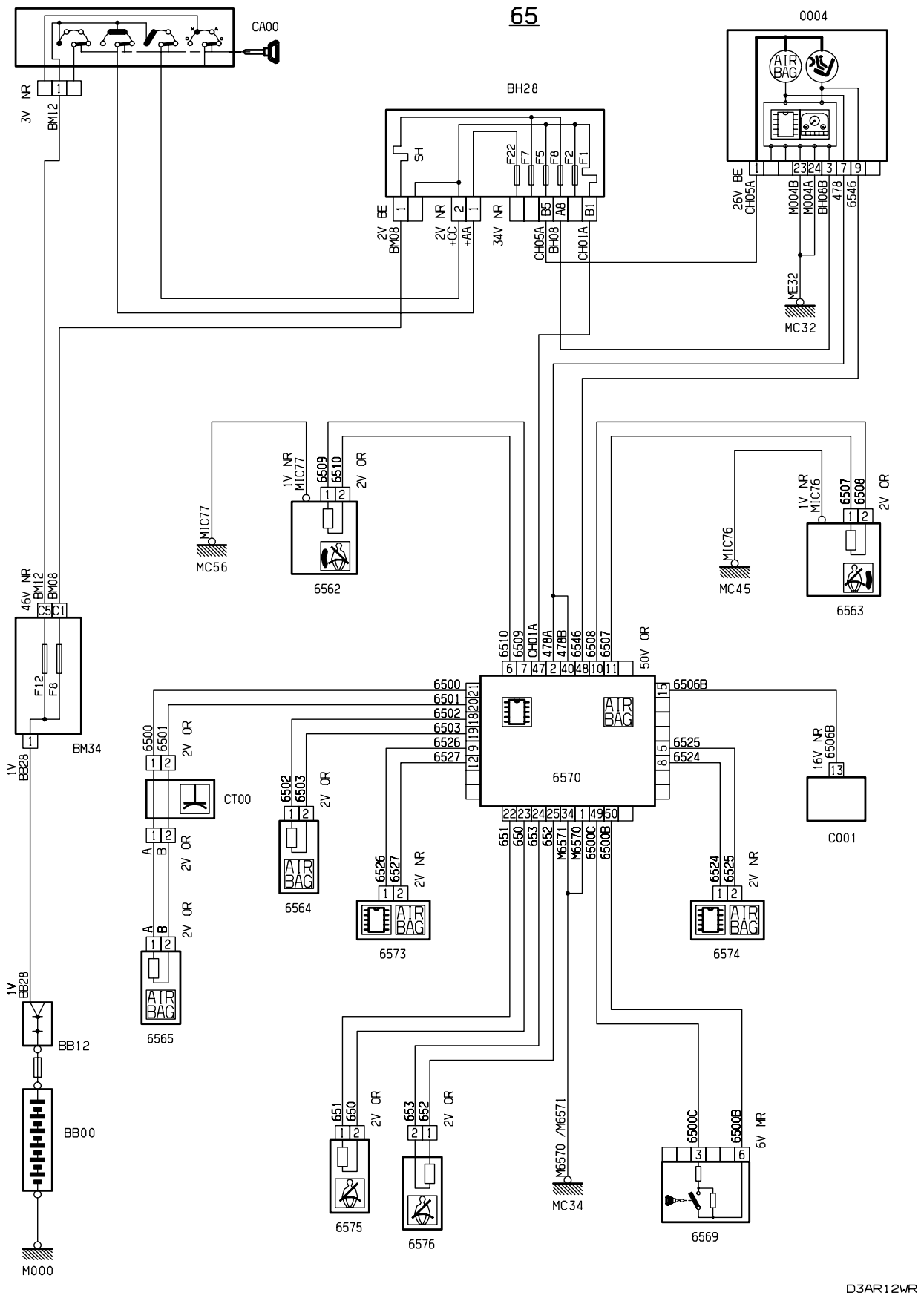


Picasso 1.6L M7.4.4 安全气囊、预张紧安全带



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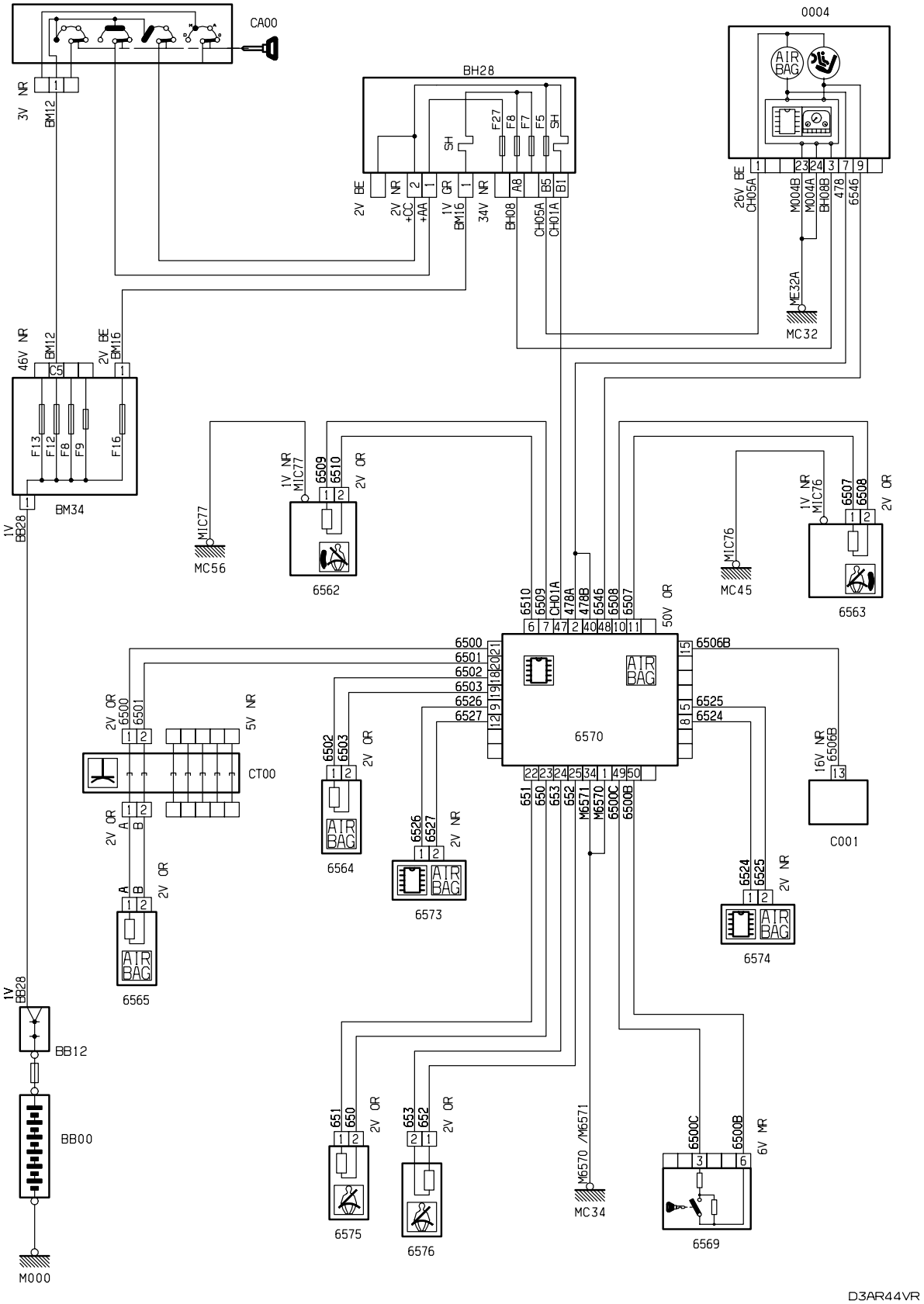
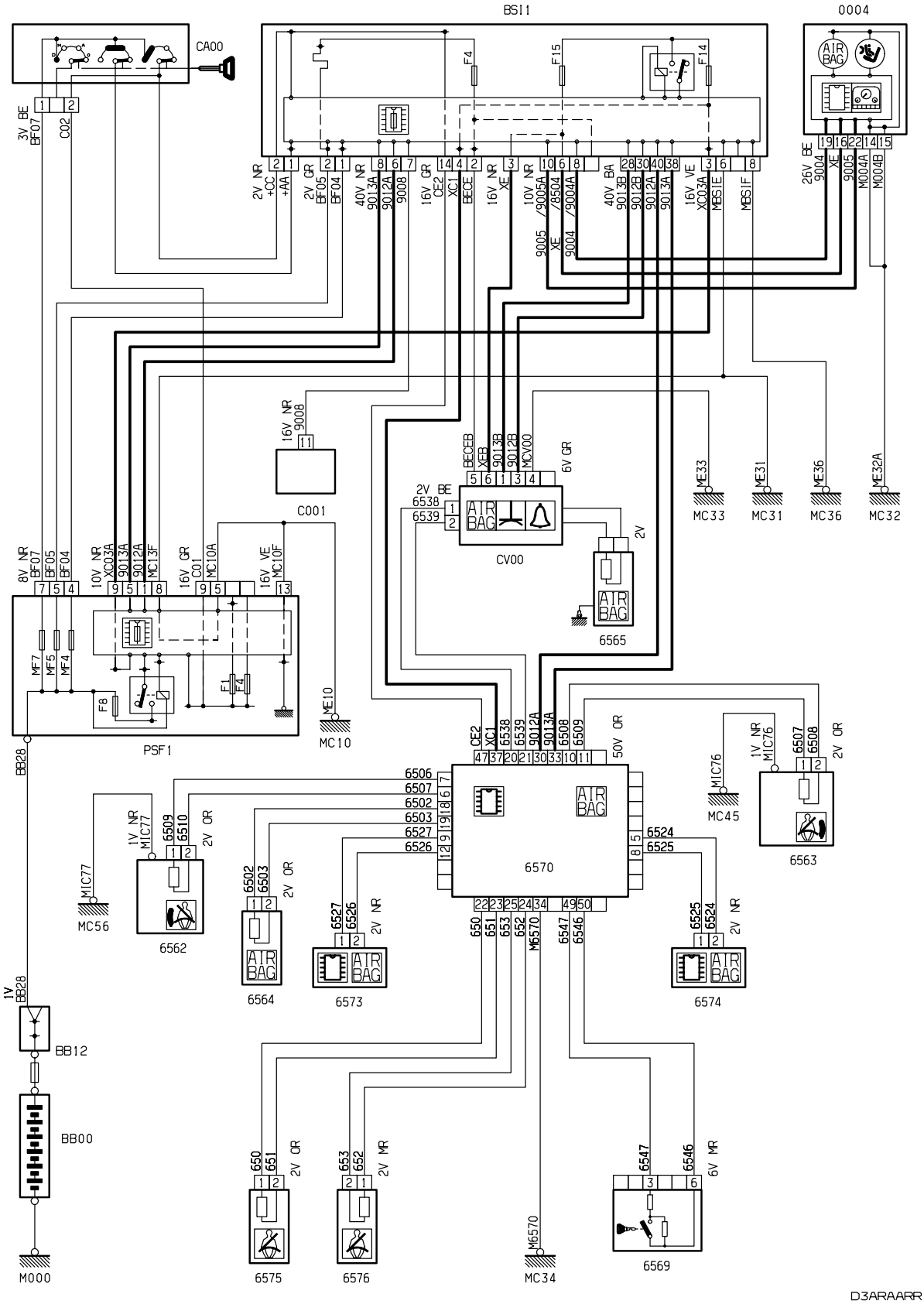


Picasso 2.0L MM6LP 安全气囊、预张紧安全带



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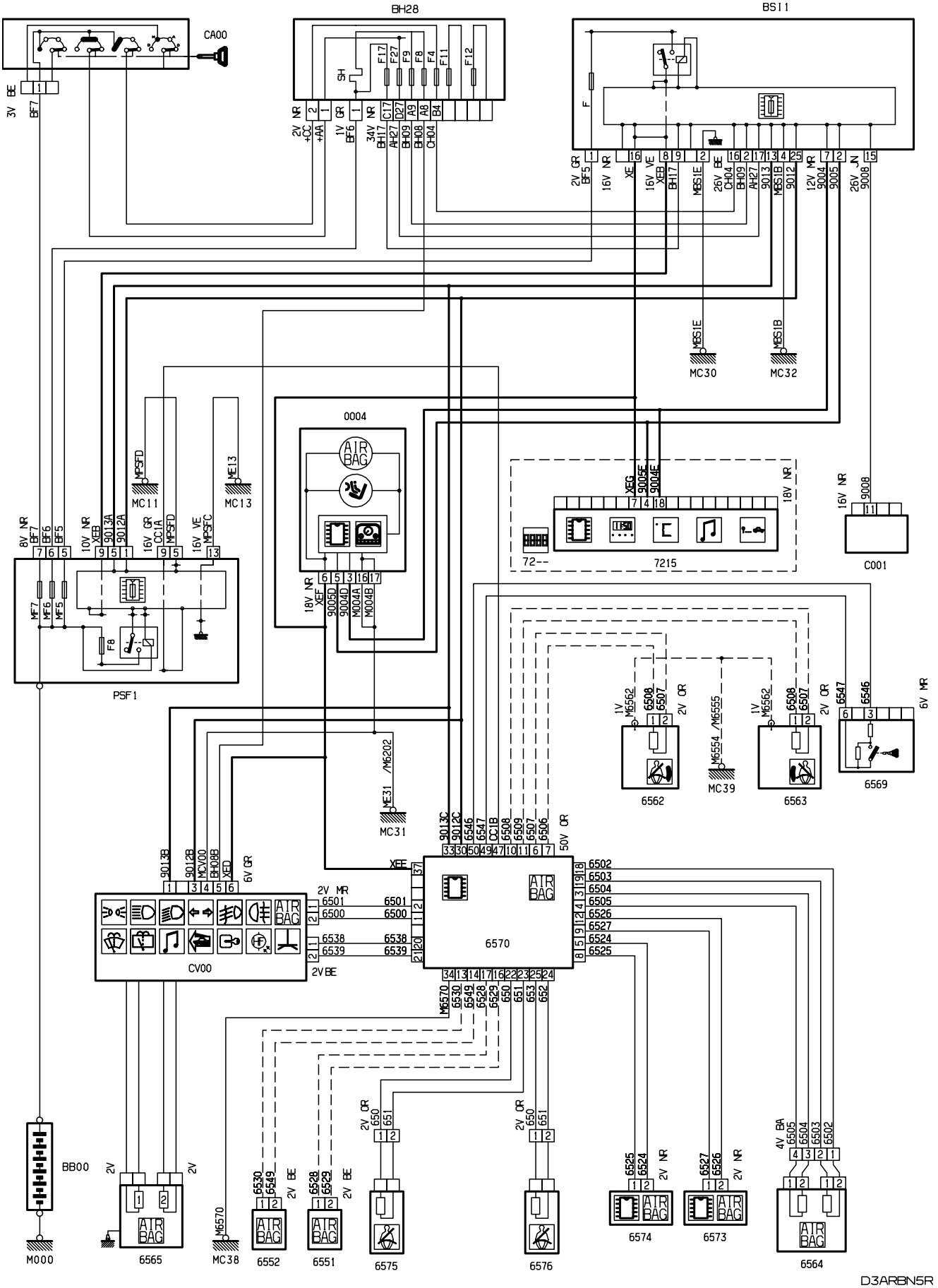
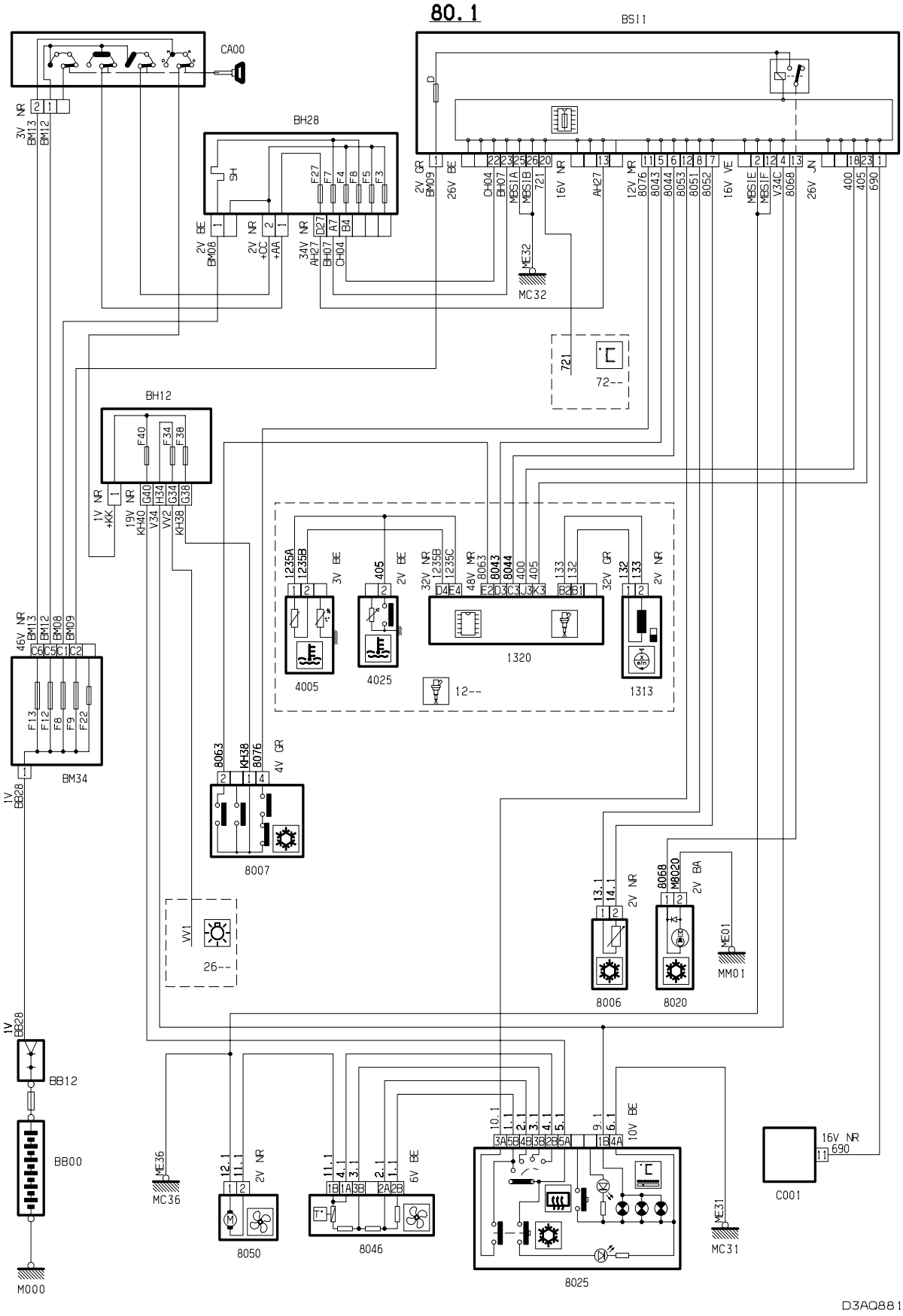
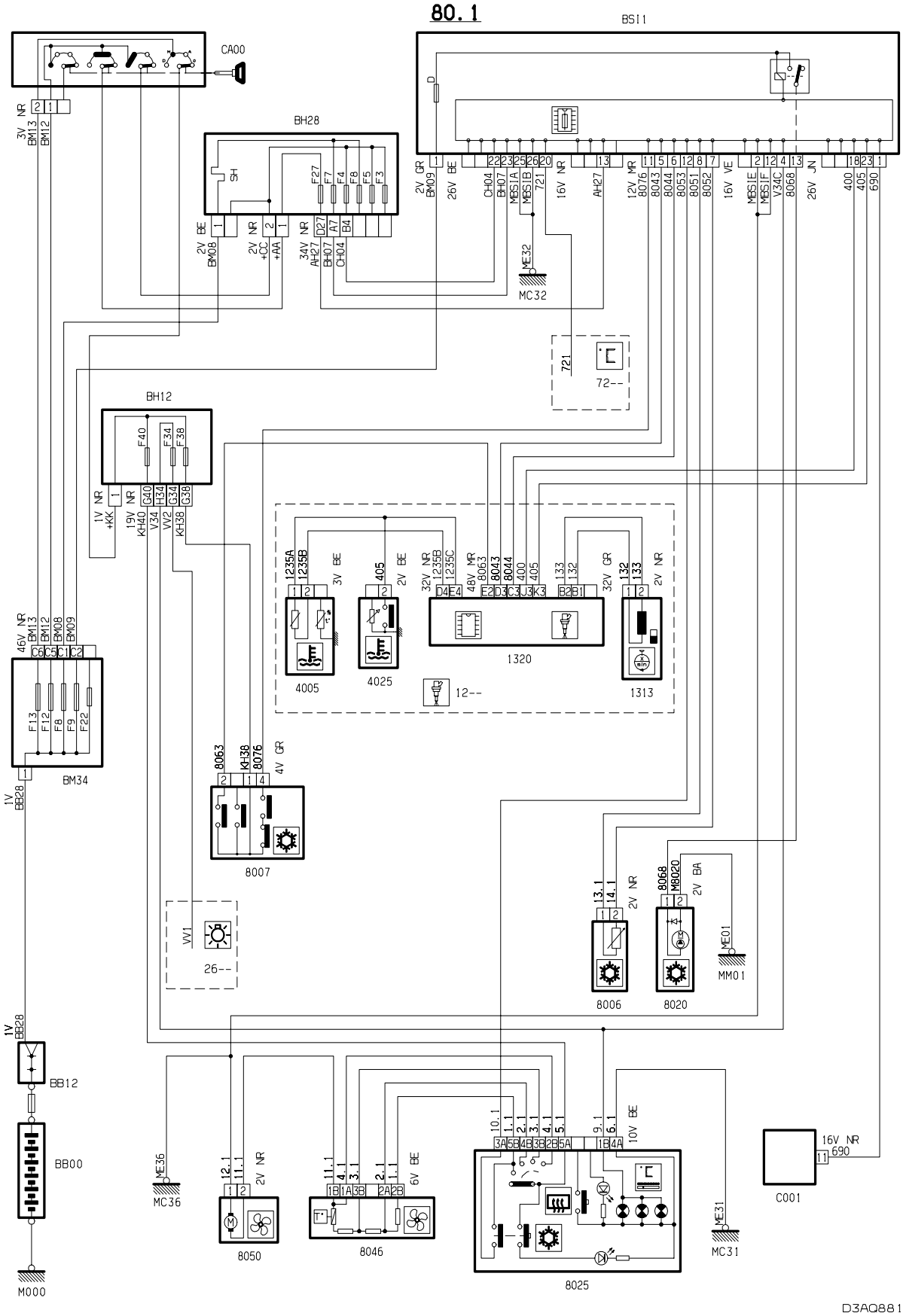


Picasso 1.6L M7.4.4 空调



Picasso 1.6L M7.4.4 空调（带自动控制）



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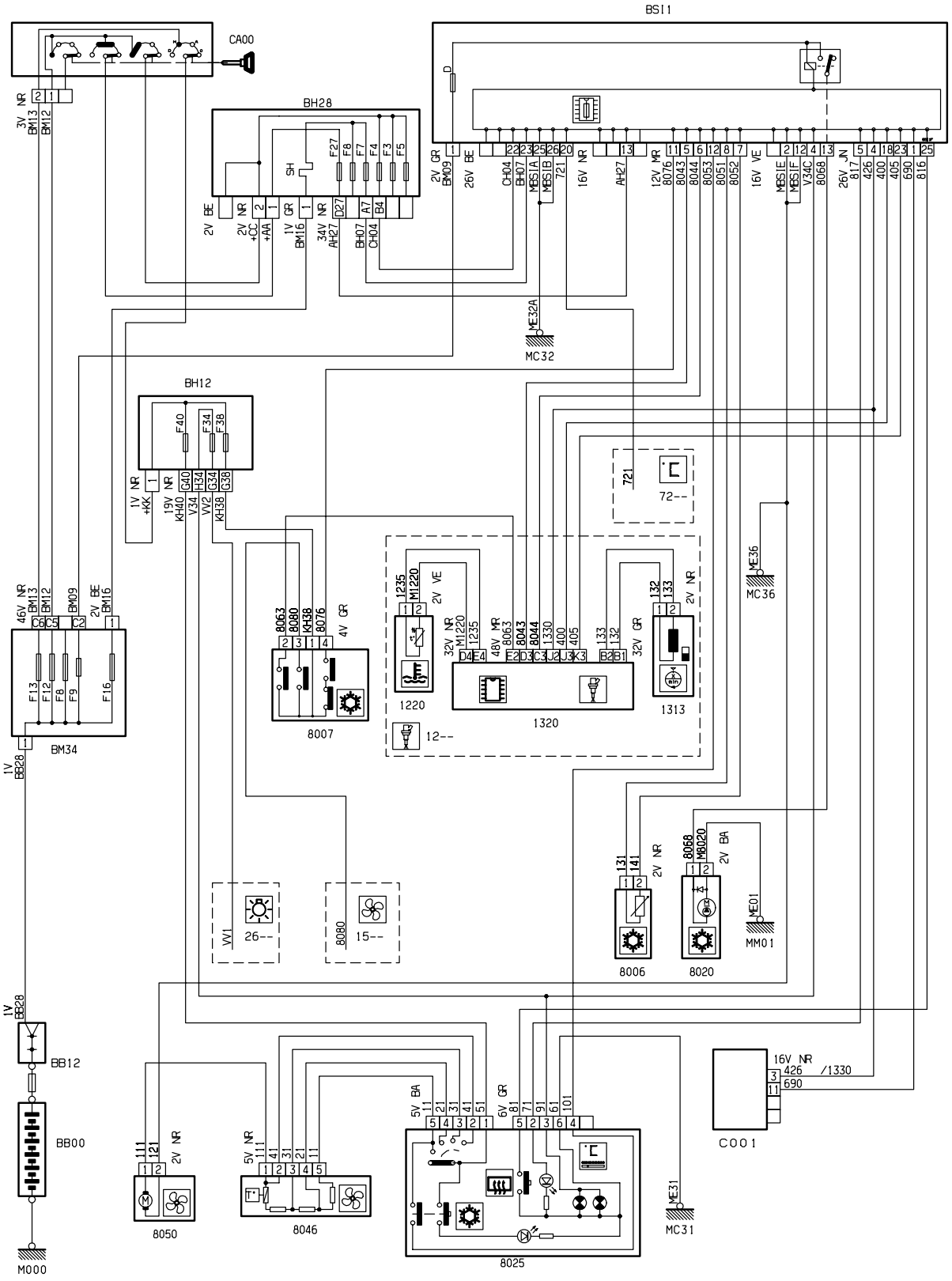
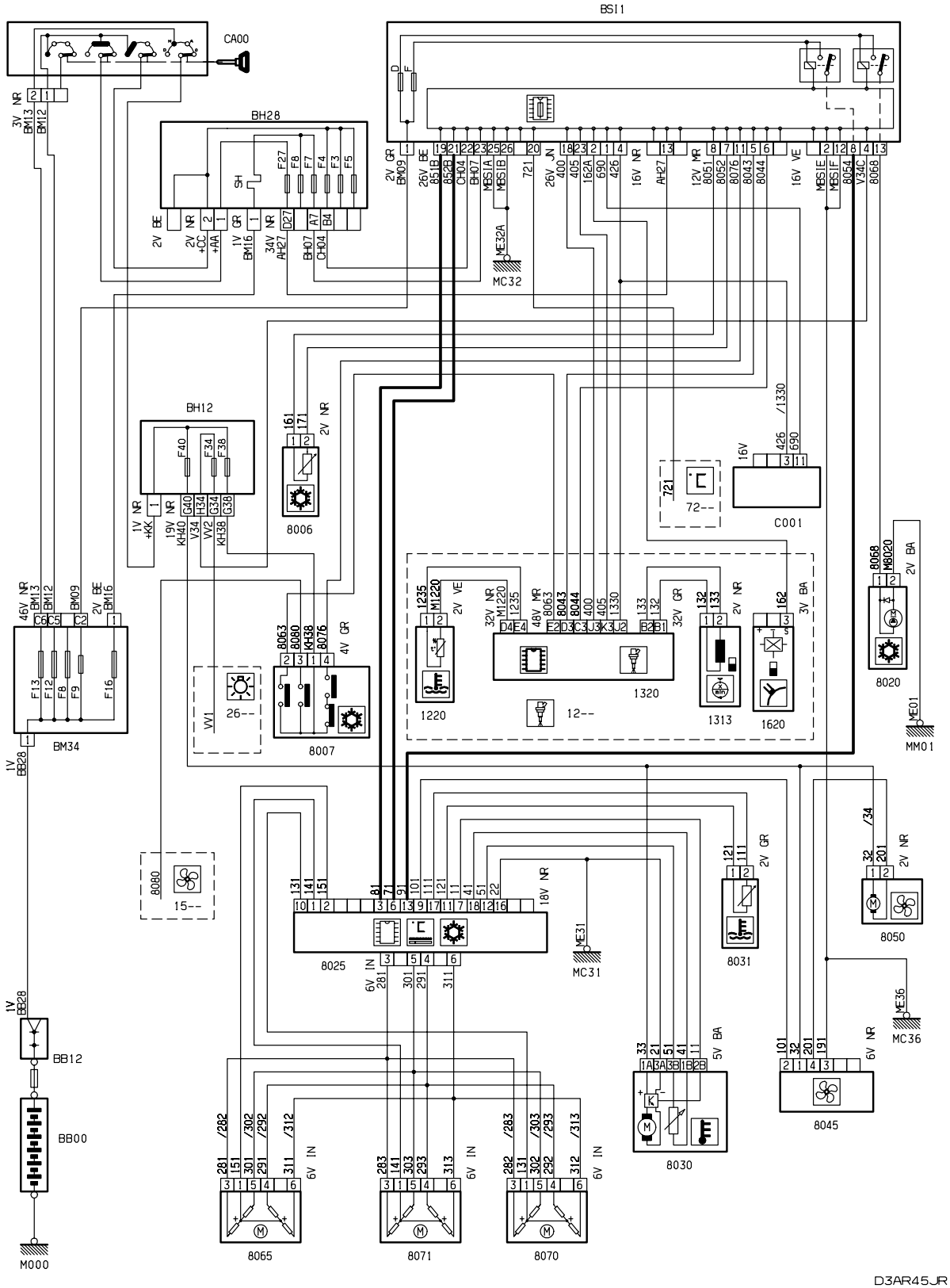
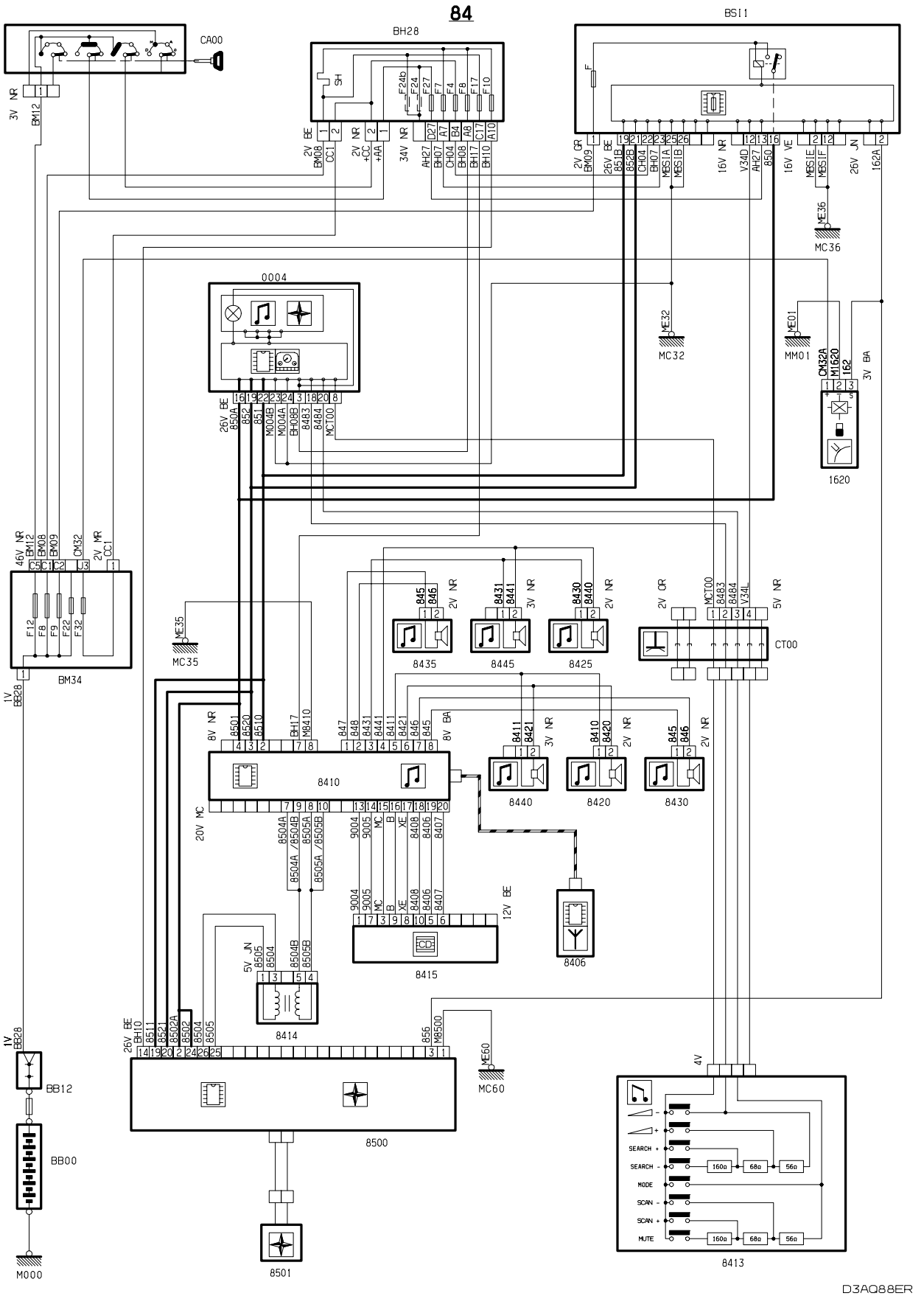


Picasso 2.0L MM48P EW10J4(RFM) 空调（带自动控制）



Picasso 1.6L M7.4.4 收放机



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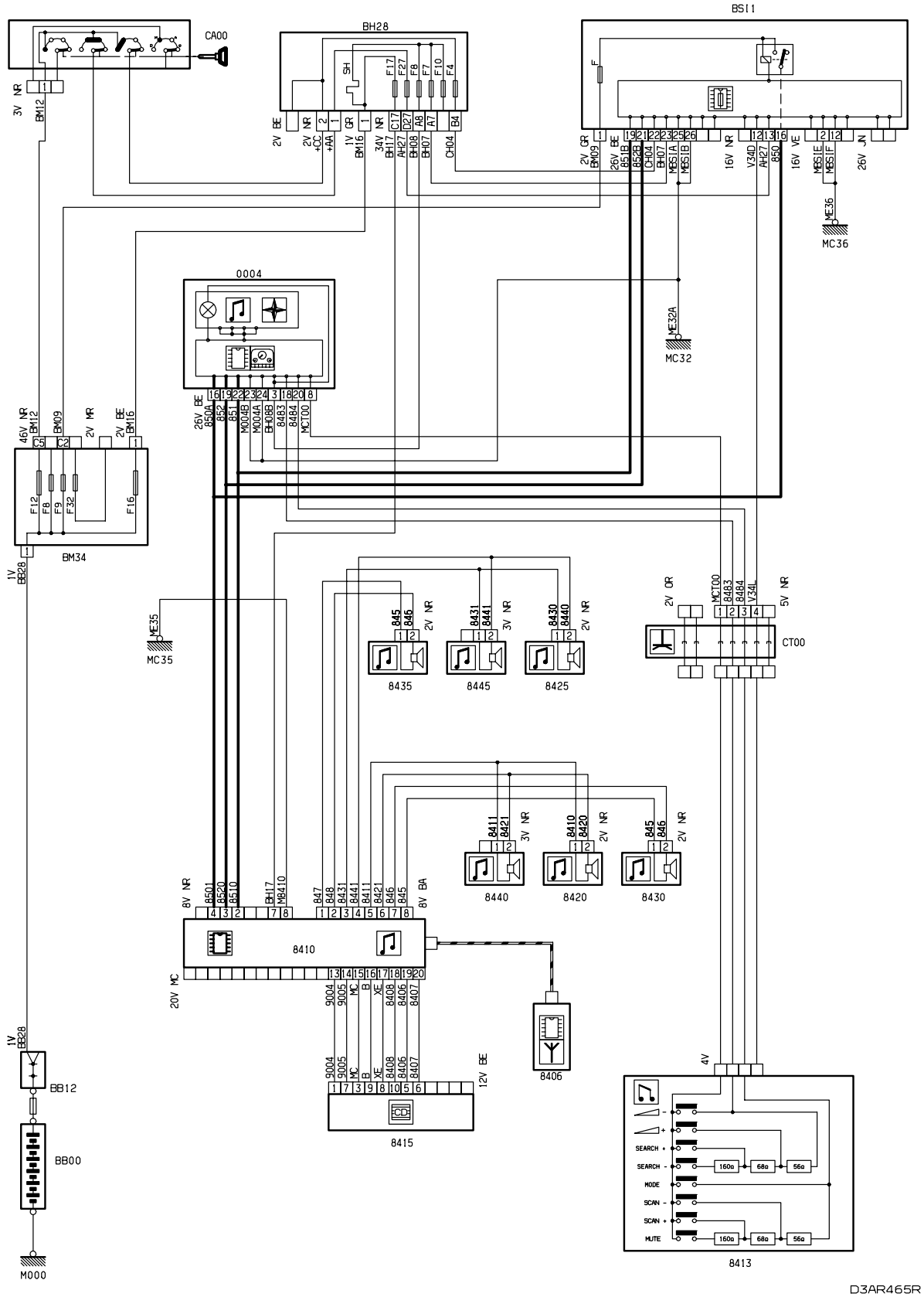

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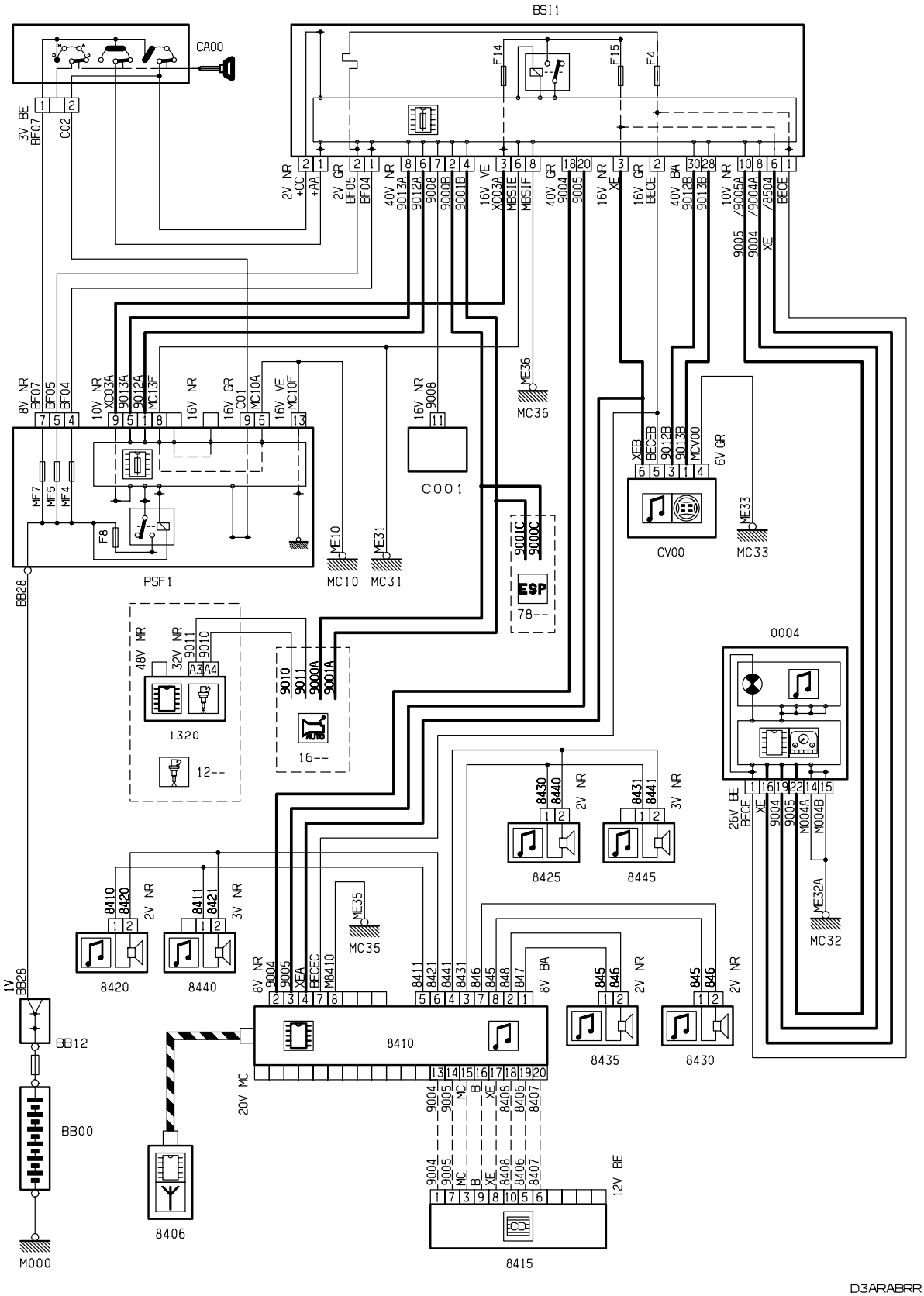

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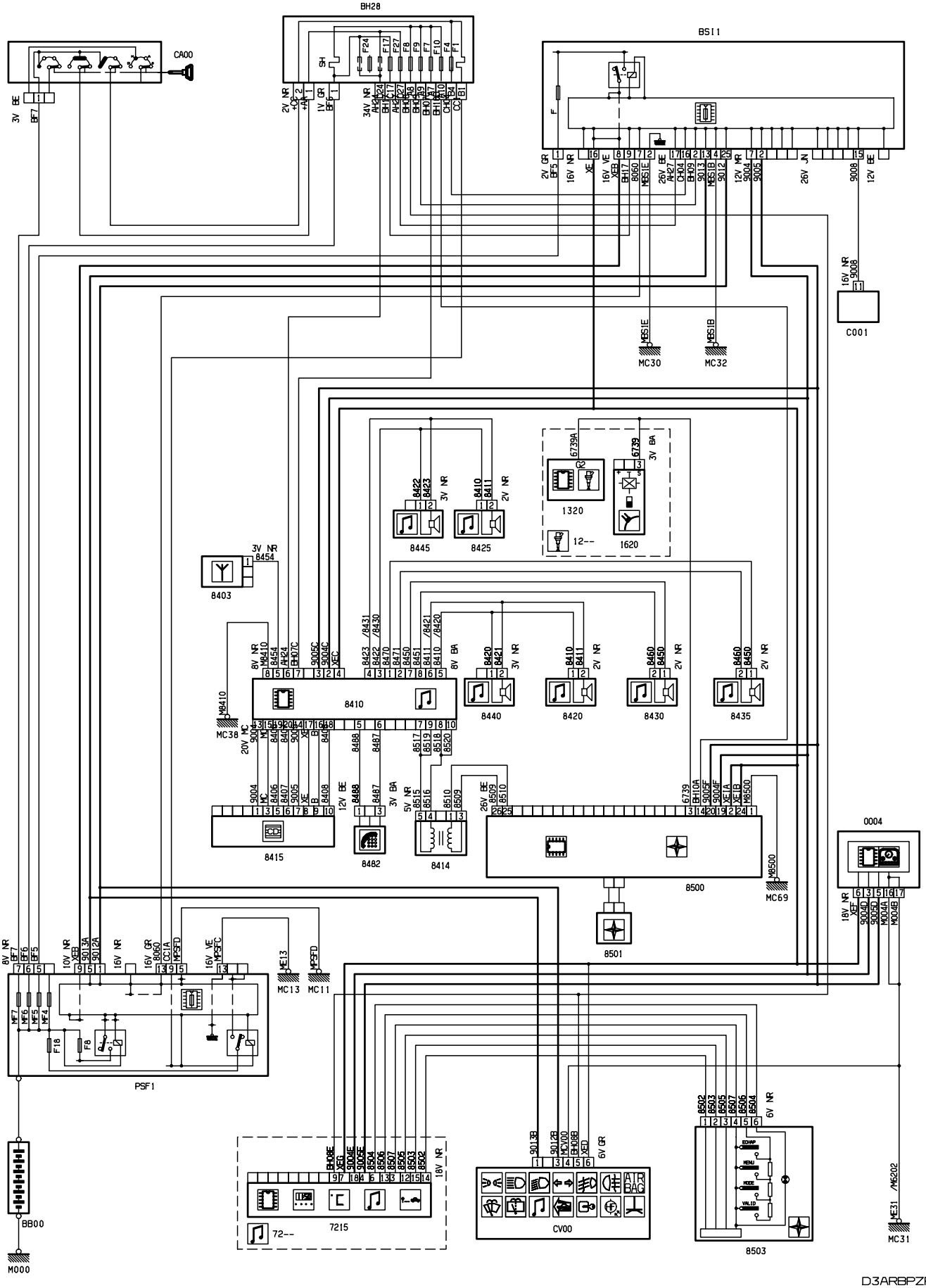
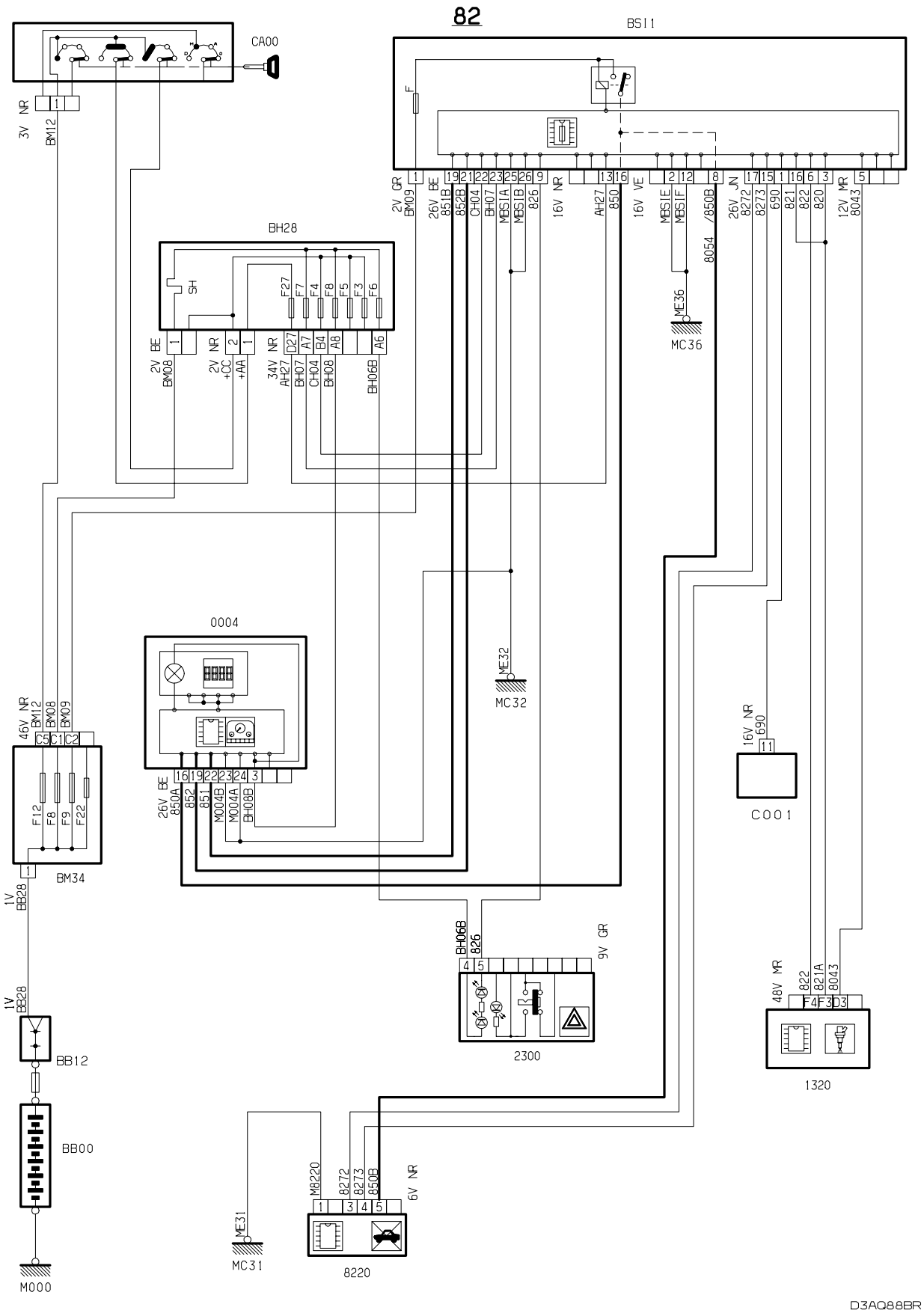


Picasso 1.6L M7.4.4 密码应答器



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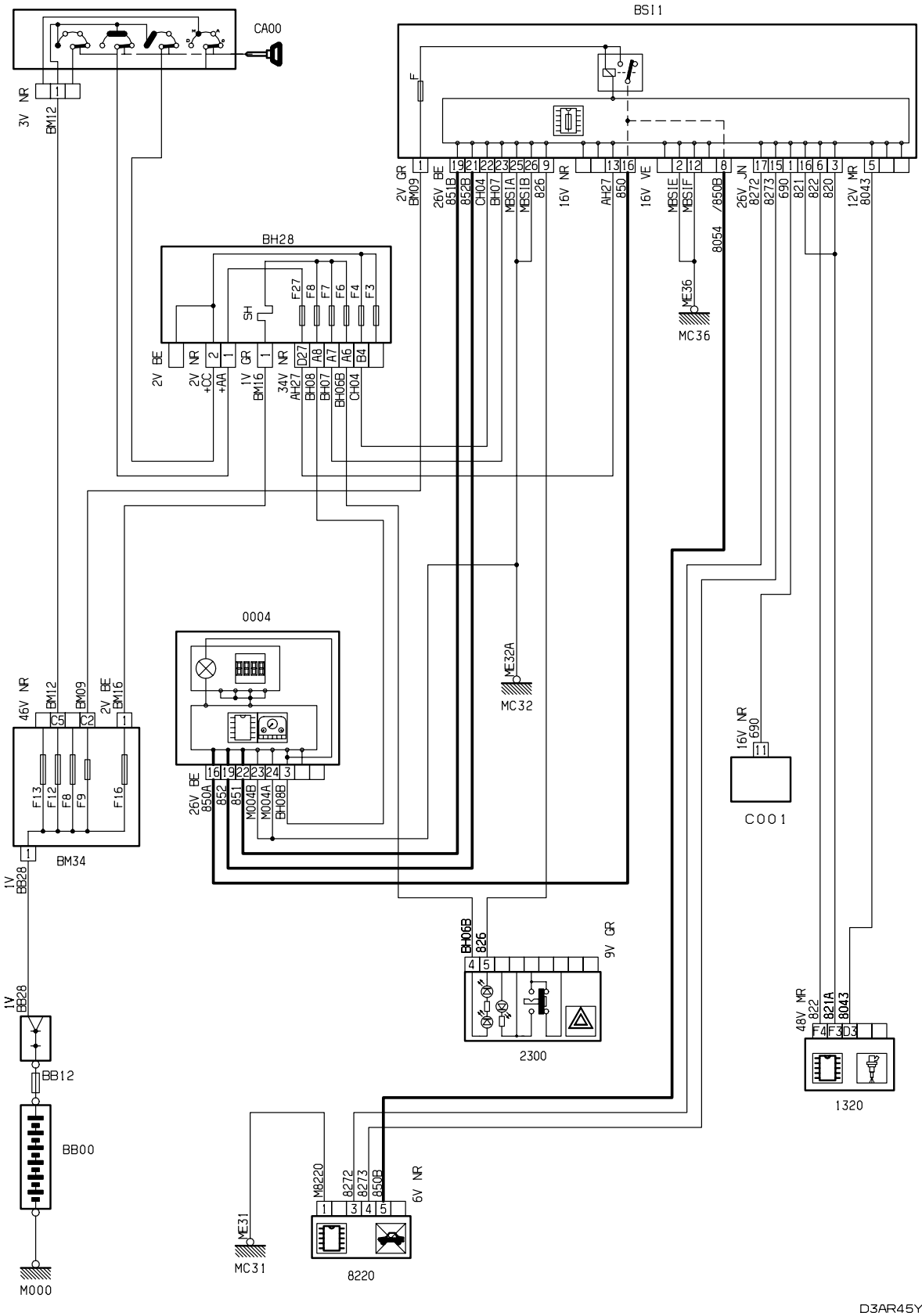

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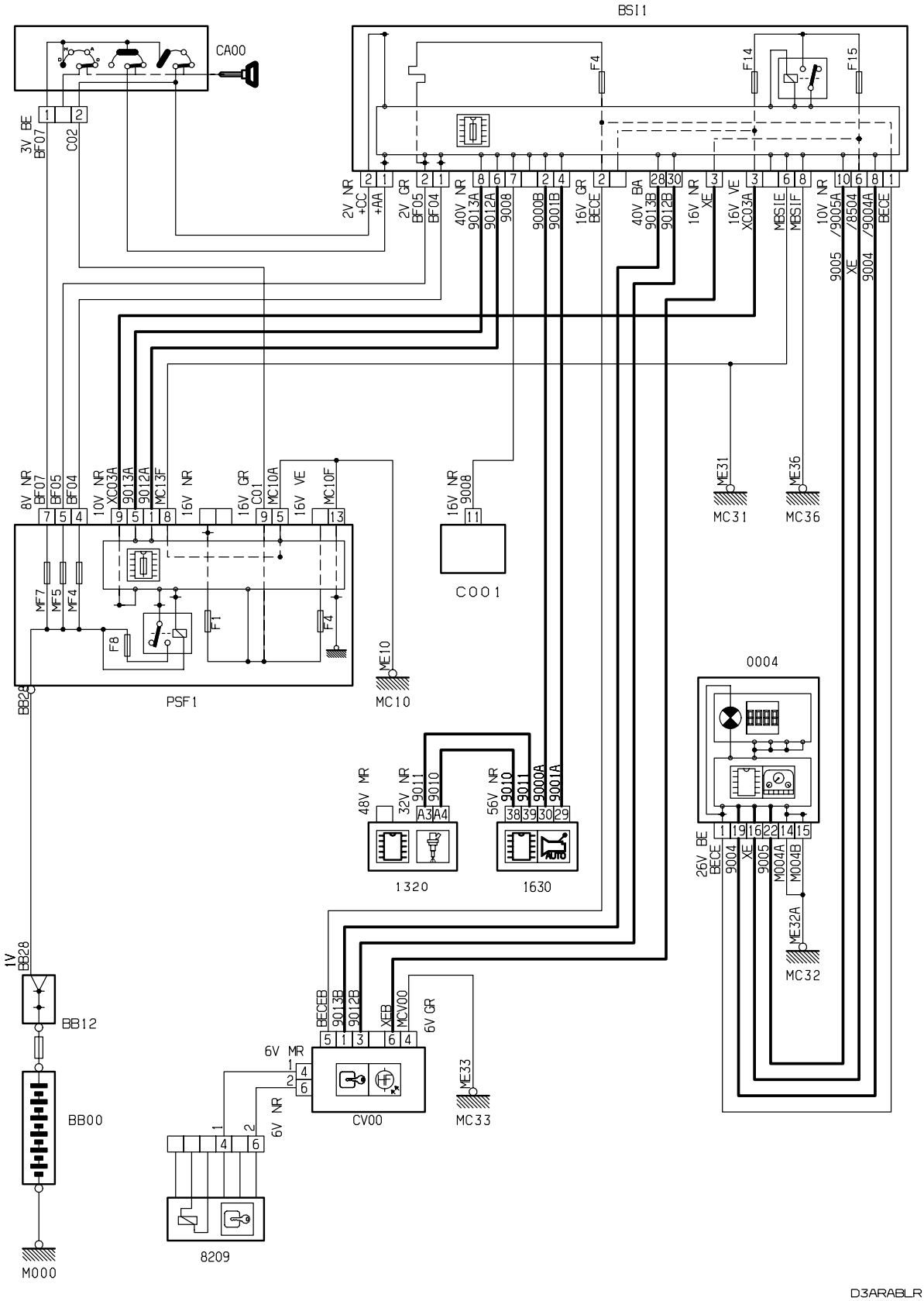

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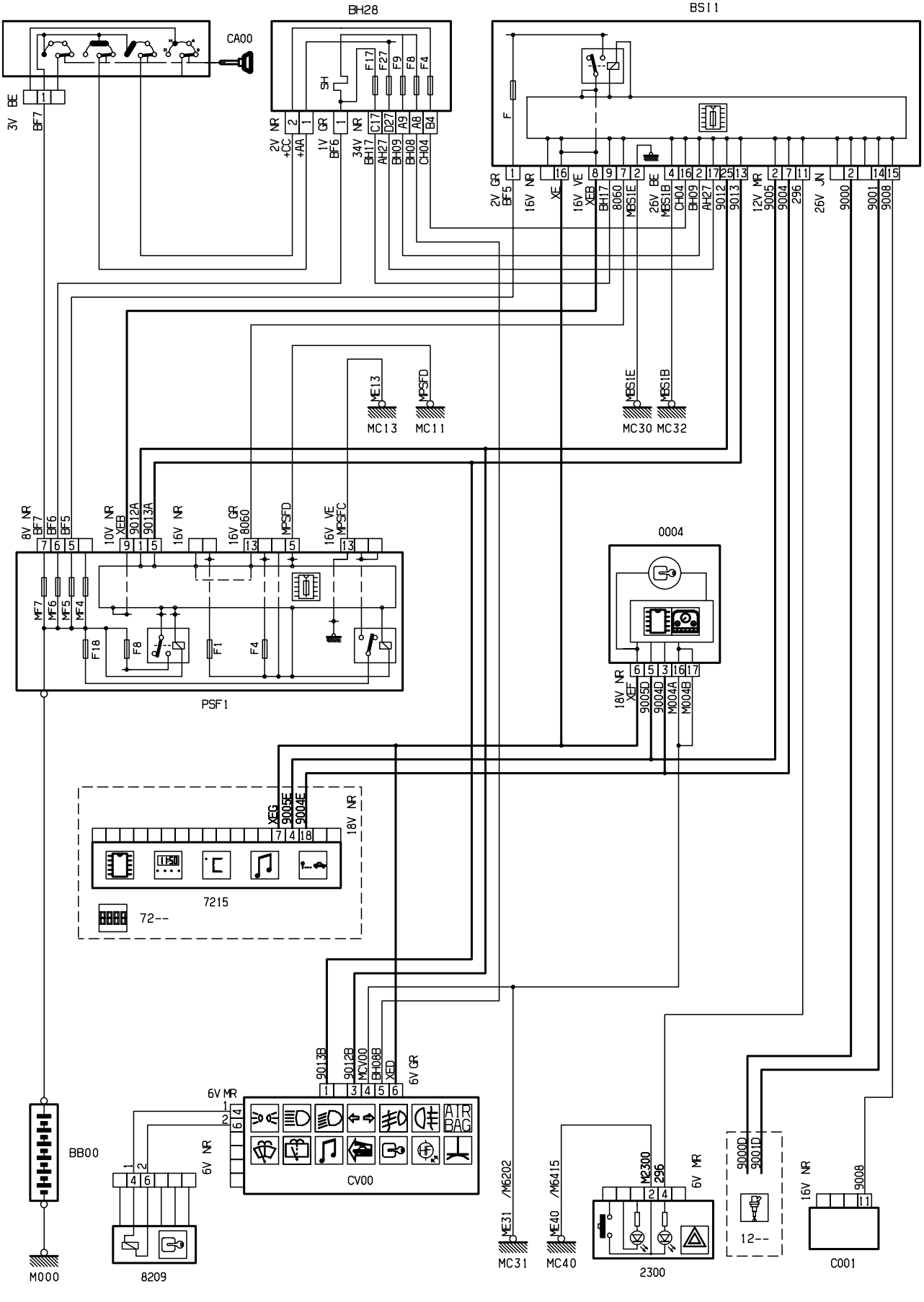

电路识图练习

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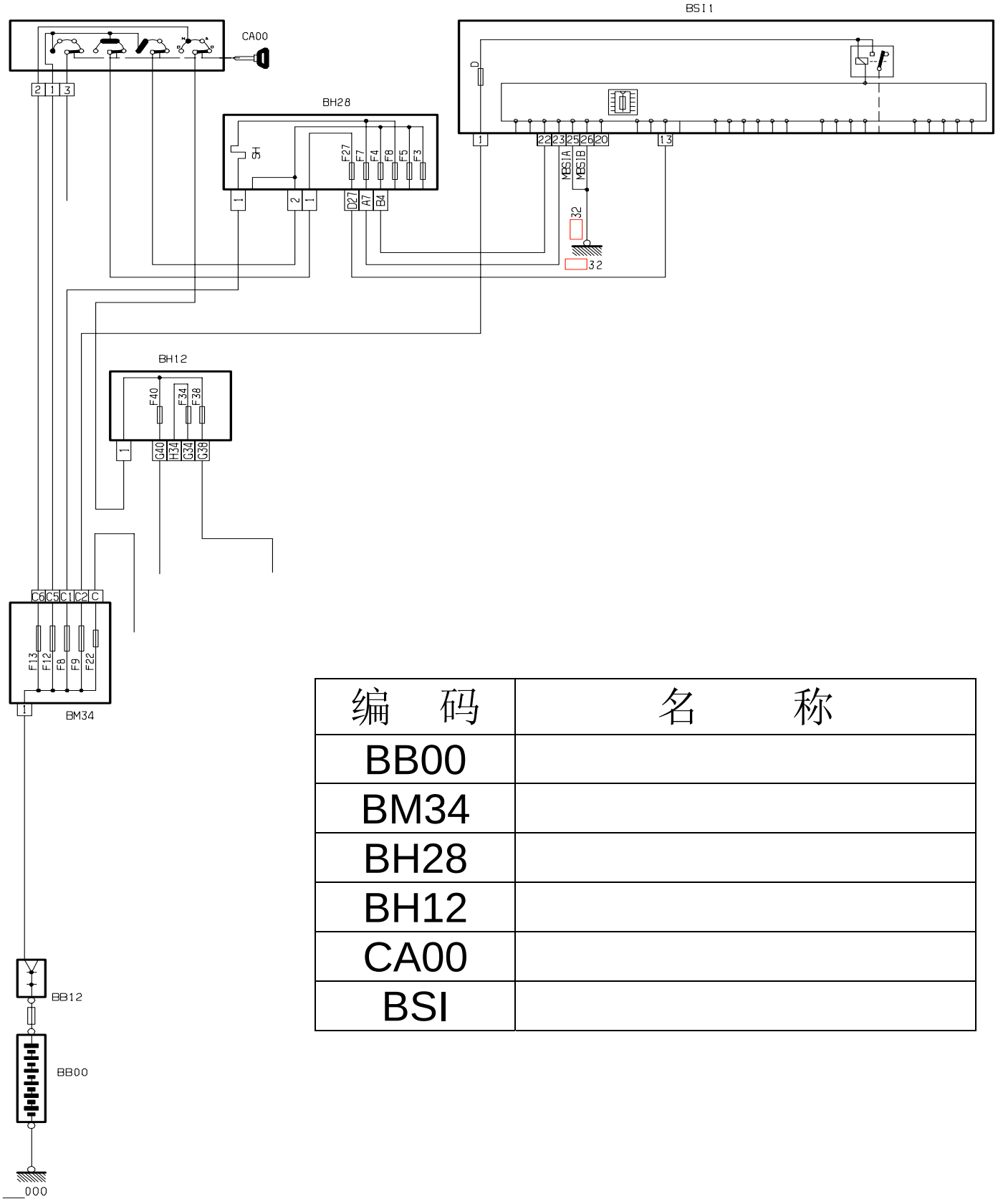

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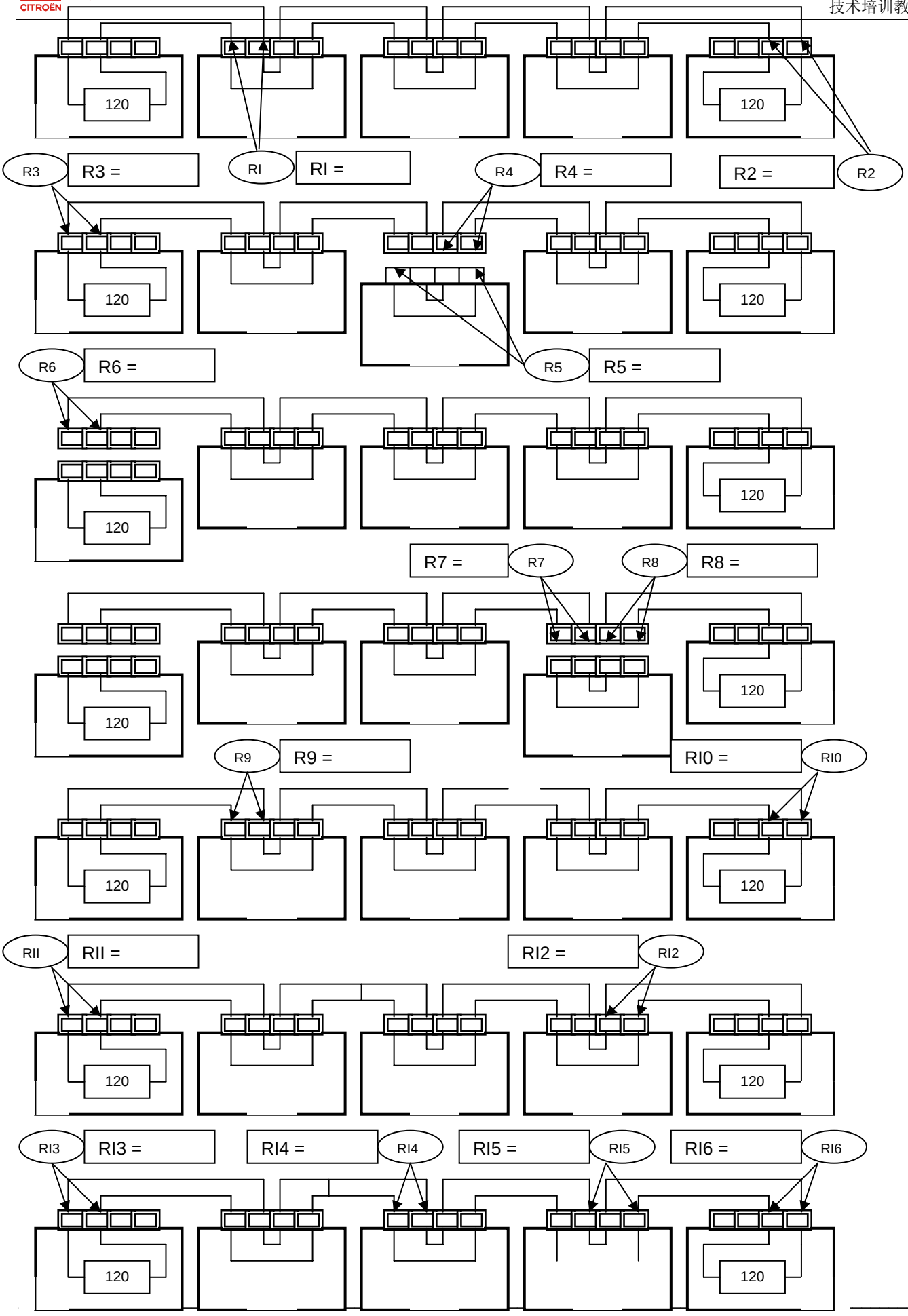
BH28	
BH12	
CA00	
BSI	


120
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RI
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R2
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RII
RII =
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RI4
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RI6 =
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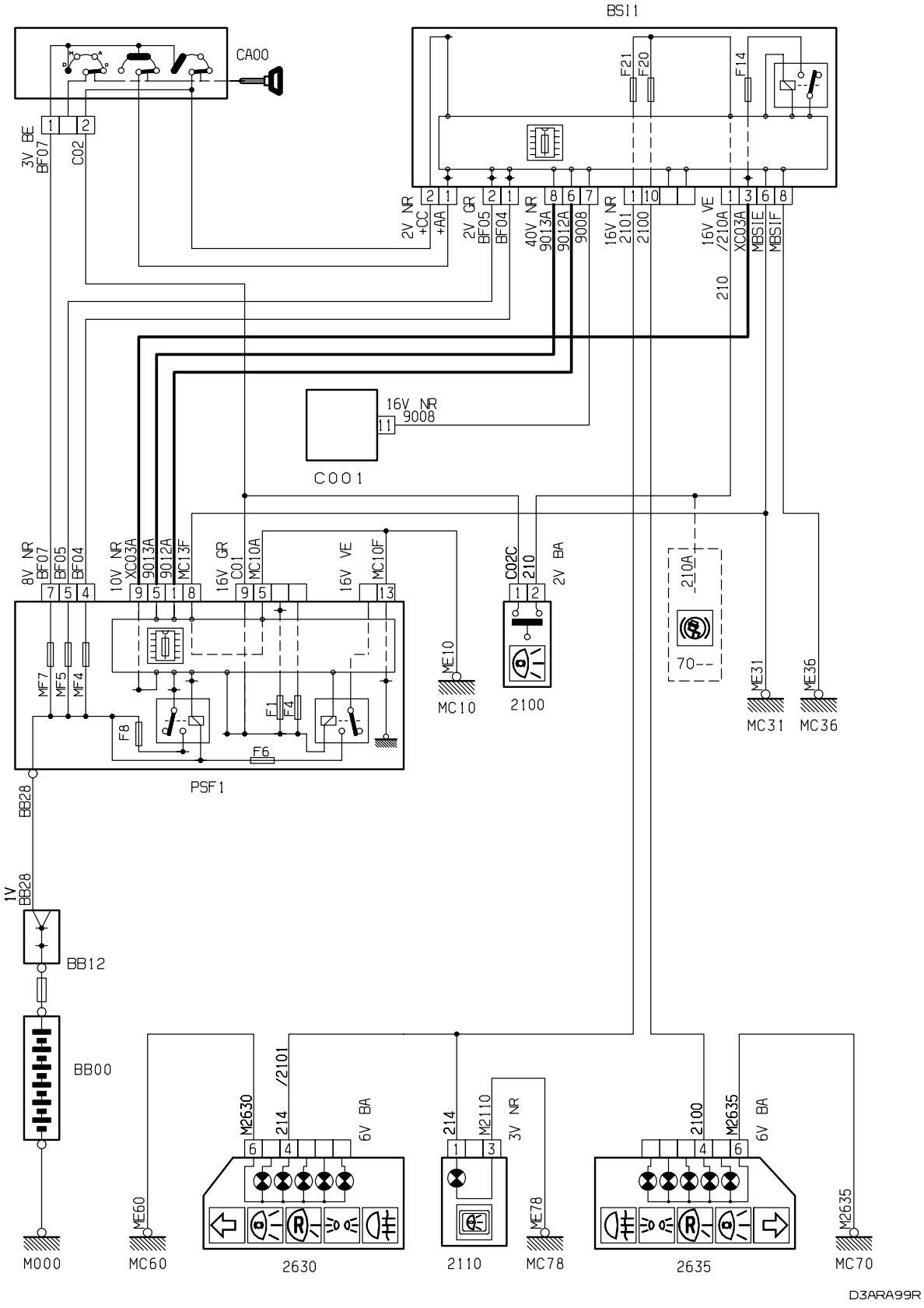
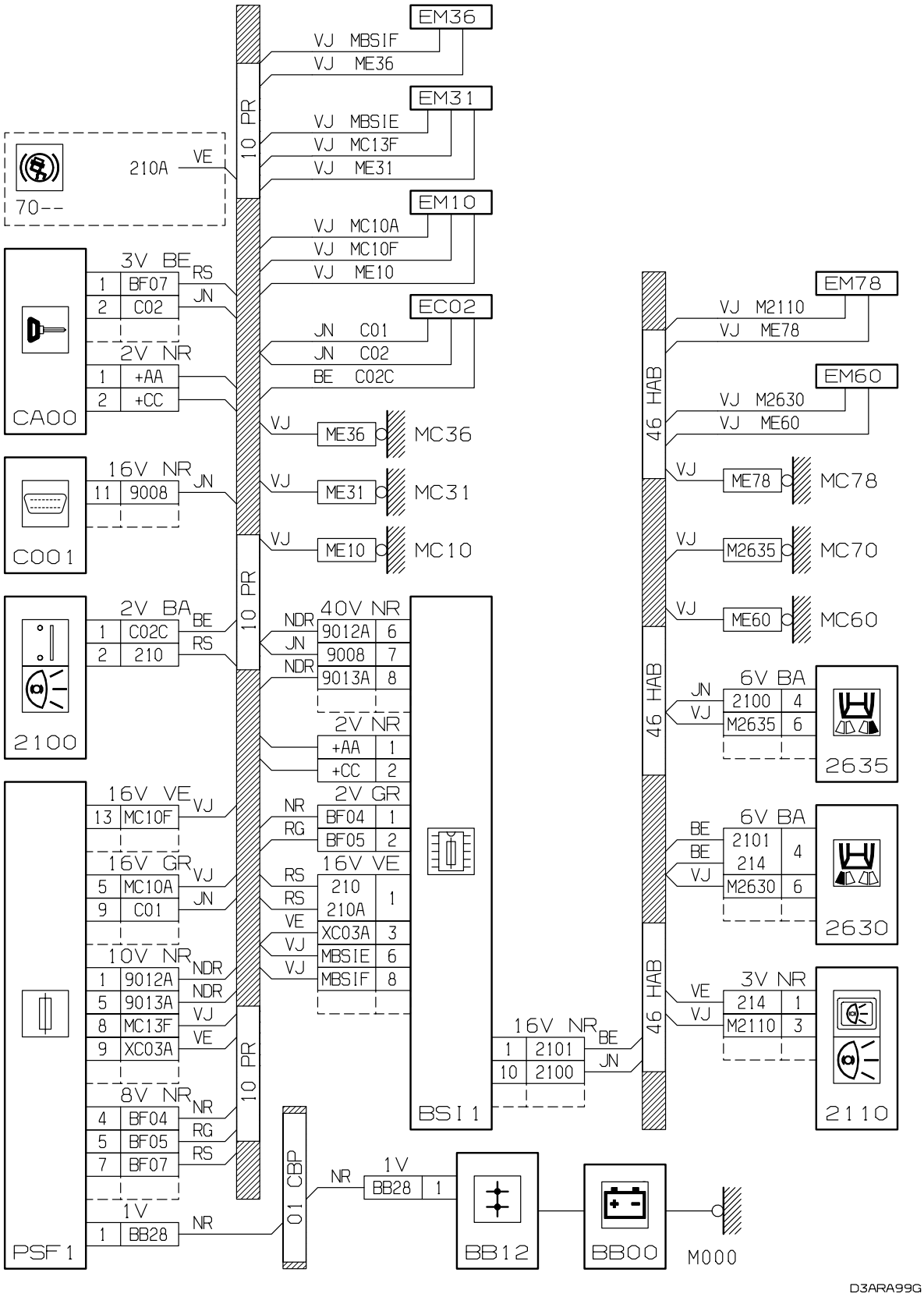
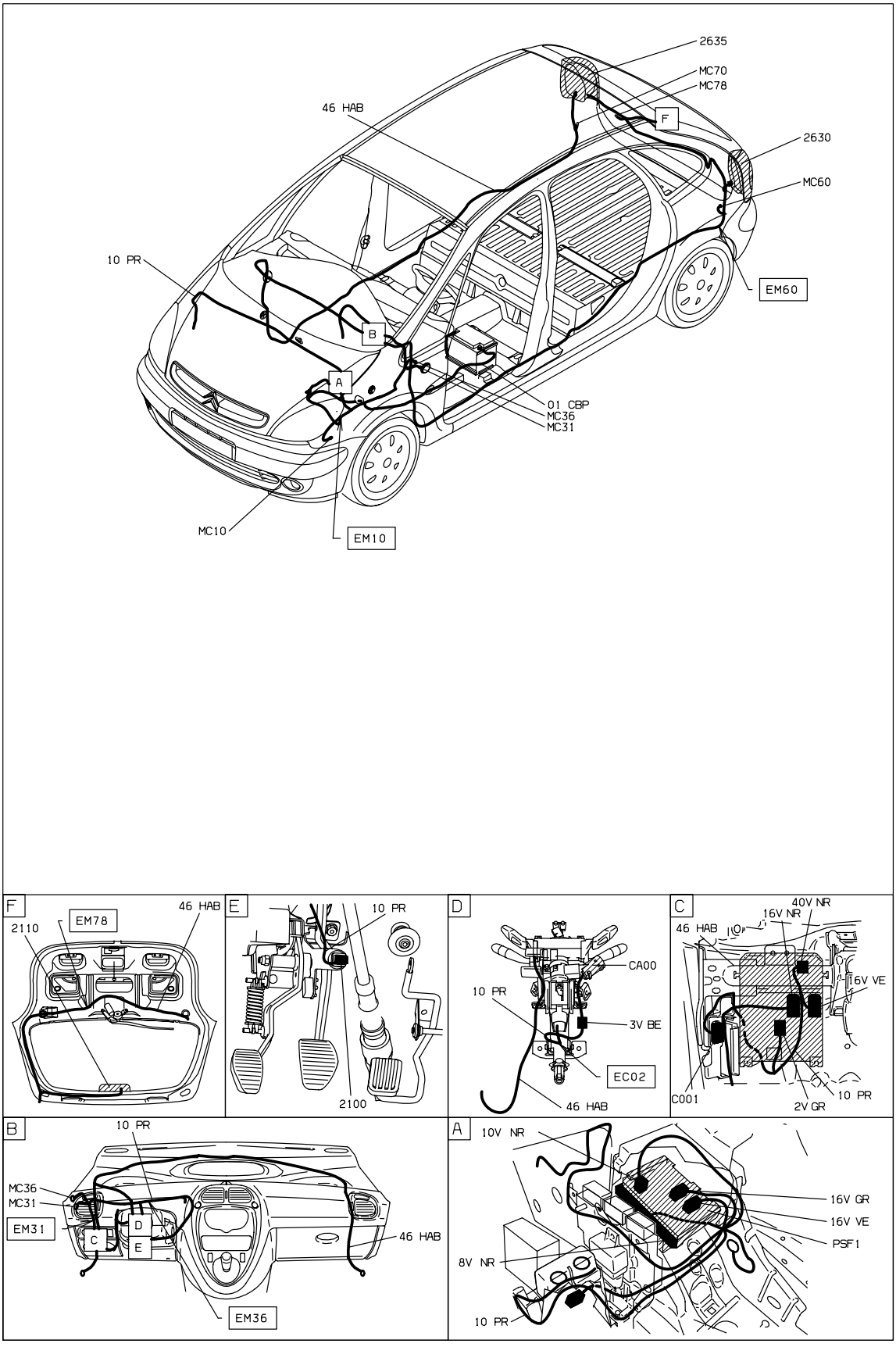
Picasso 2.0L MM6LP 制动灯



Picasso 2.0L MM6LP 制动灯



Picasso 2.0L MM6LP 制动灯



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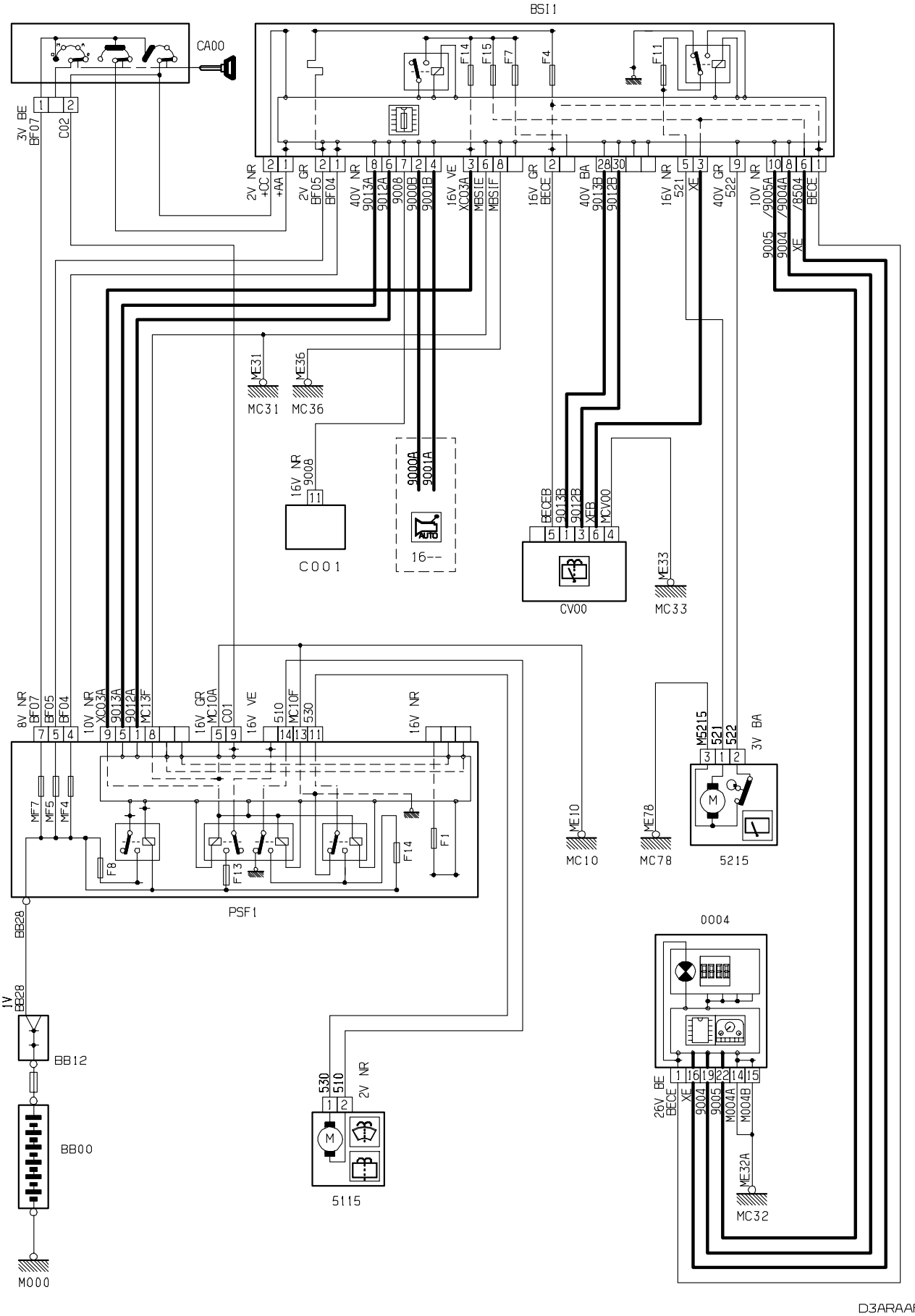
Picasso 2.0L MM6LP 后雨刮



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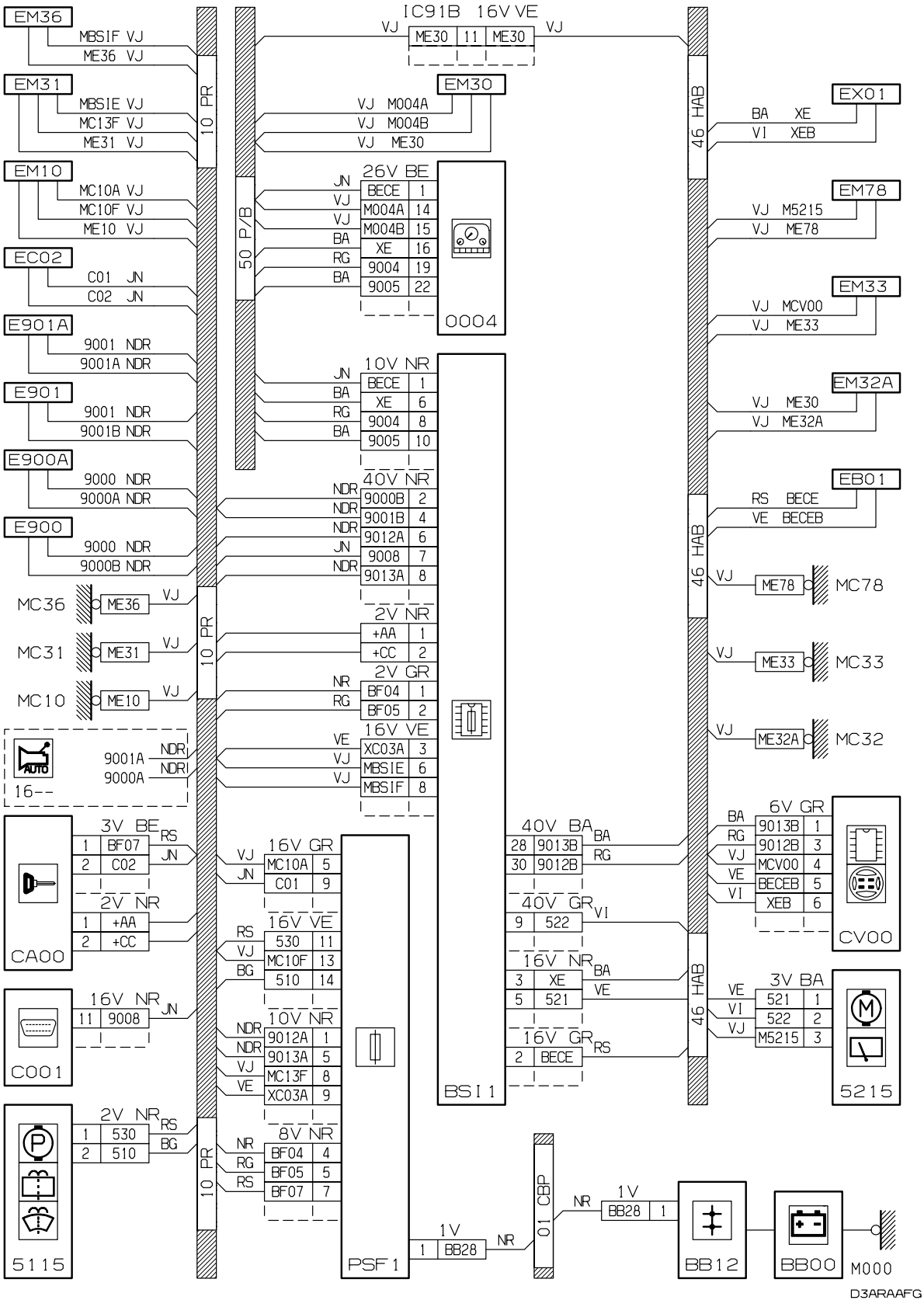
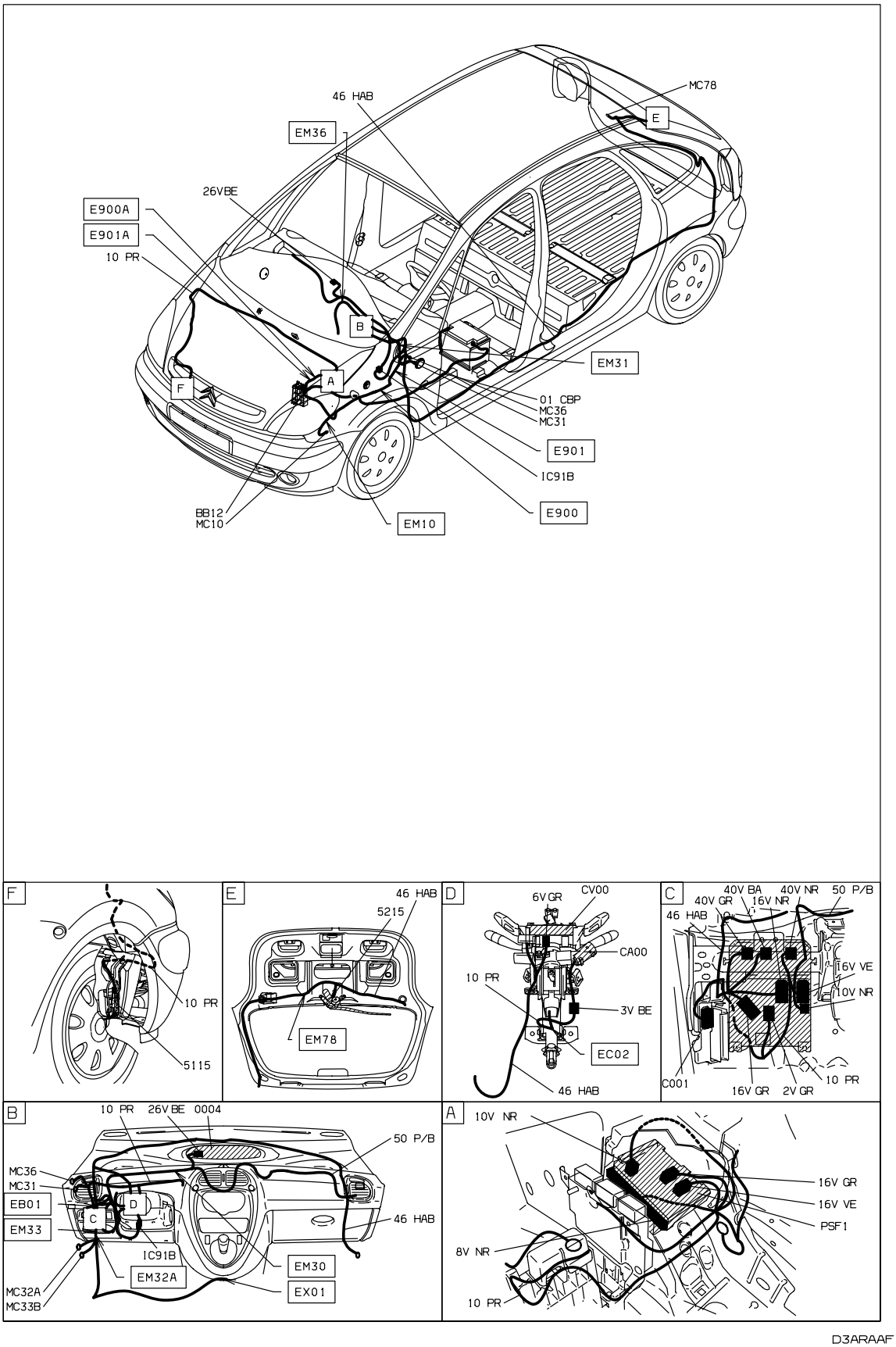
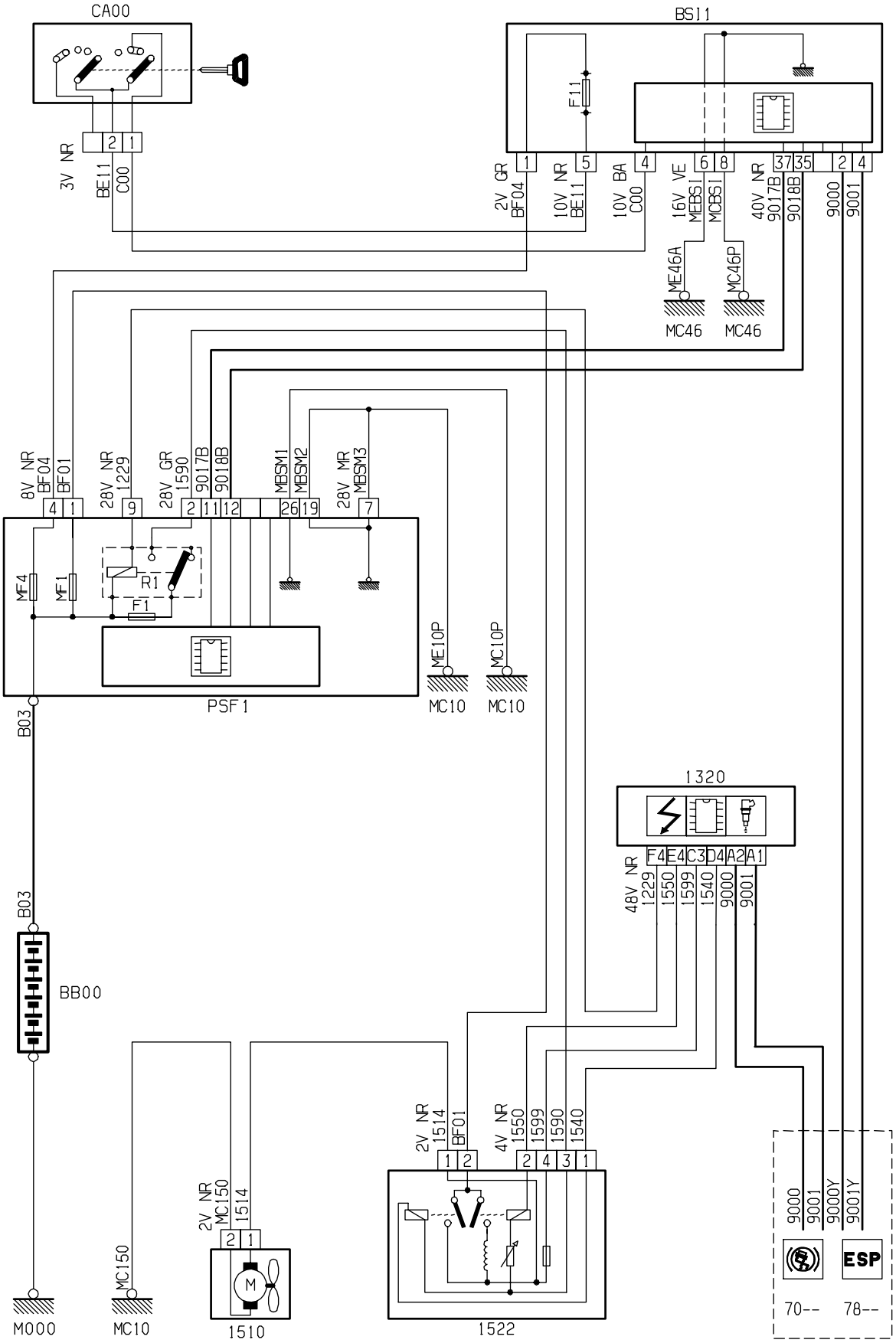


Picasso 2.0L MM6LP 后雨刮



D3ARAAF I

B53 发动机冷却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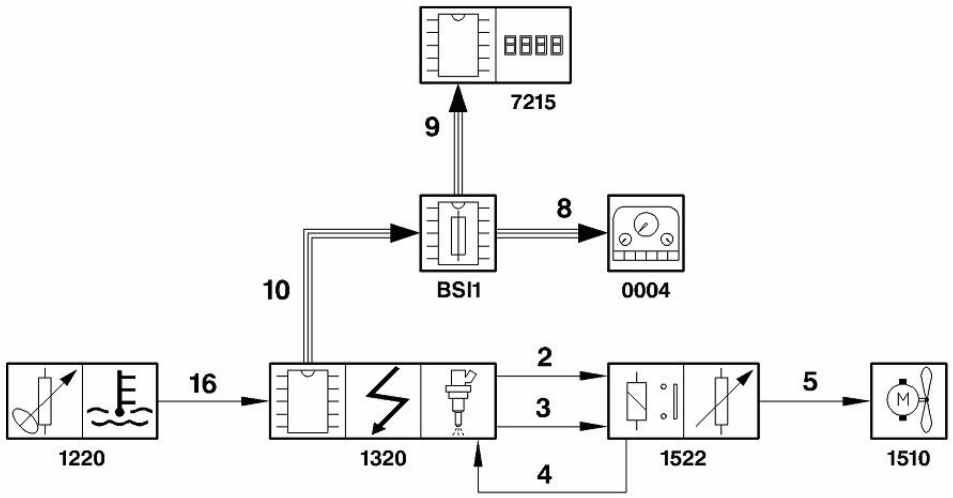
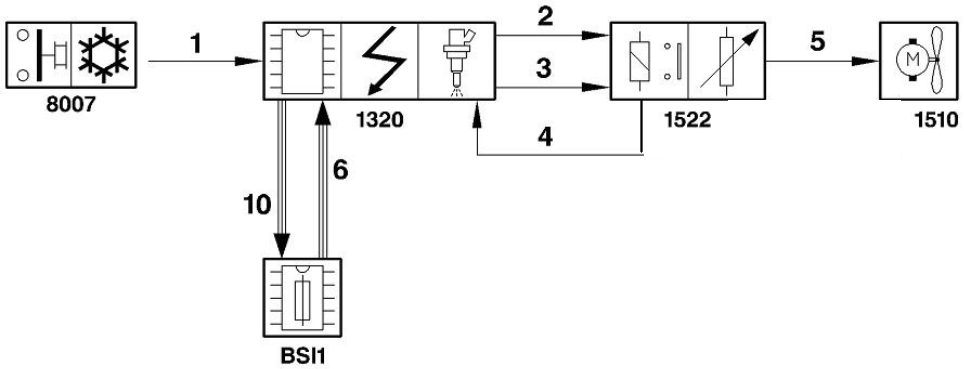
C00
BSI1
F11
2V GR
BF04
10V NR
BE11
10V BA
C00
16V VE
MEBSI
MCBSI
40V NR
9017B
9018B
9000
9001
ME46A
MC46P
MC46
MC46
8V NR
BF04
BF01
28V NR
1229
28V GR
1590
9017B
9018B
MBSM1
MBSM2
28V MR
MBSM3
MF4
MF1
R1
F1
PSF1
ME10P
MC10P
MC10
MC10
B03
B03
BB00
1320
48V NR
1229
1550
1599
1540
9000
9001
F4
E4
C3
D4
A2
A1
2V NR
1514
BF01
4V NR
1550
1599
1590
1540
2V NR
MC150
1514
MC150
M000
MC10
1510
1522
9000
9001
9000Y
9001Y
ESP
70--
78--

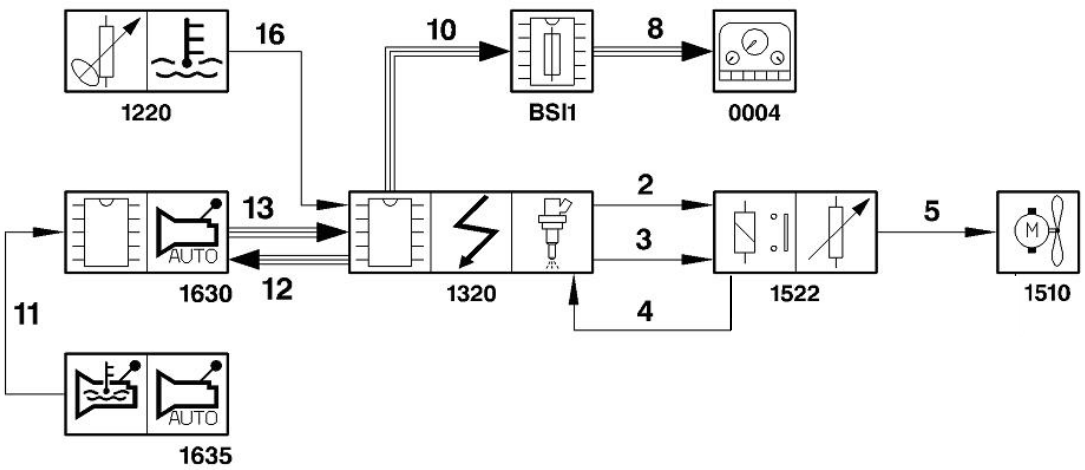
B53 发动机温度－冷却风扇运转



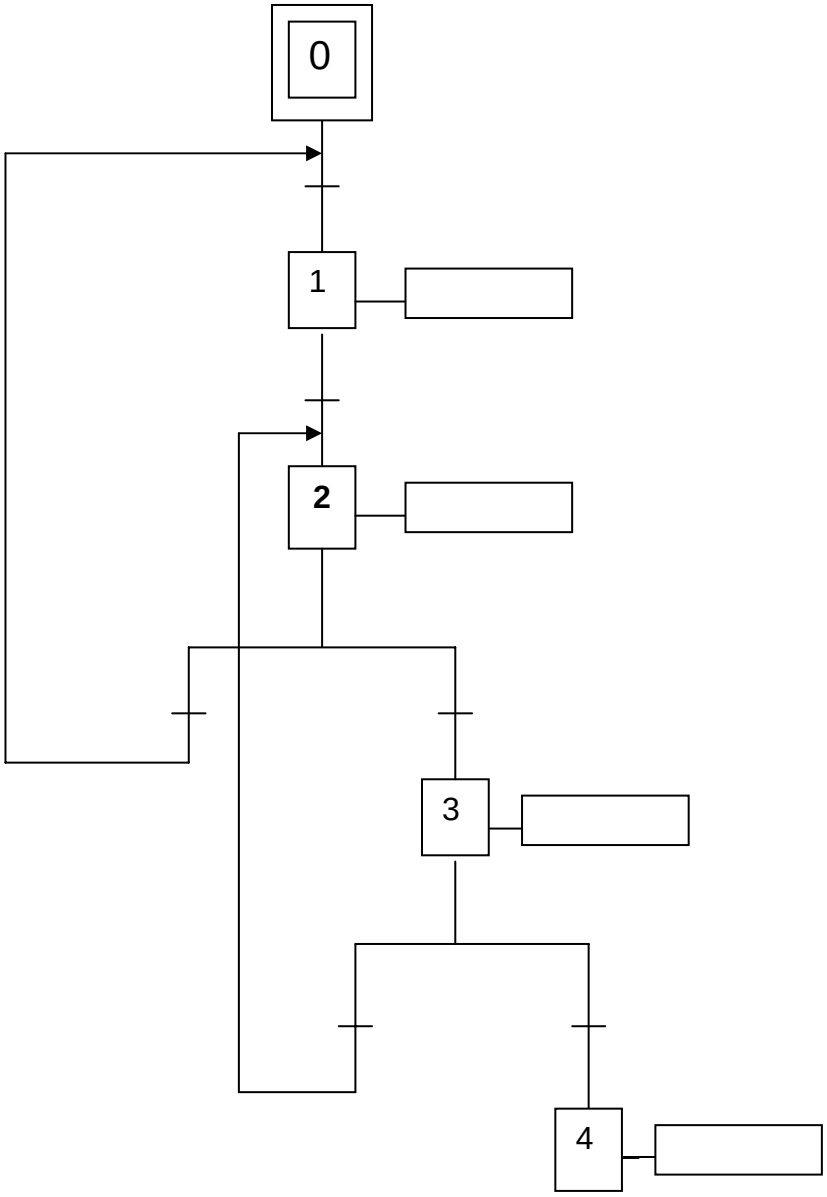
B53 发动机温度－冷却风扇运转

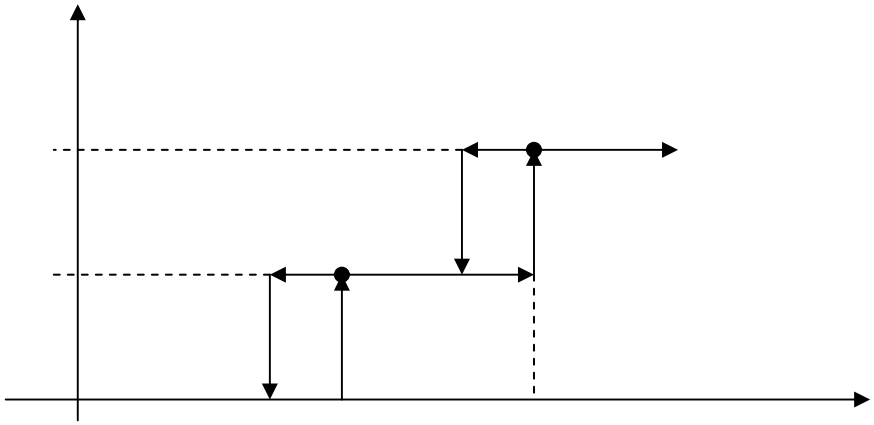


B53 自动变速箱油温－冷却风扇运转

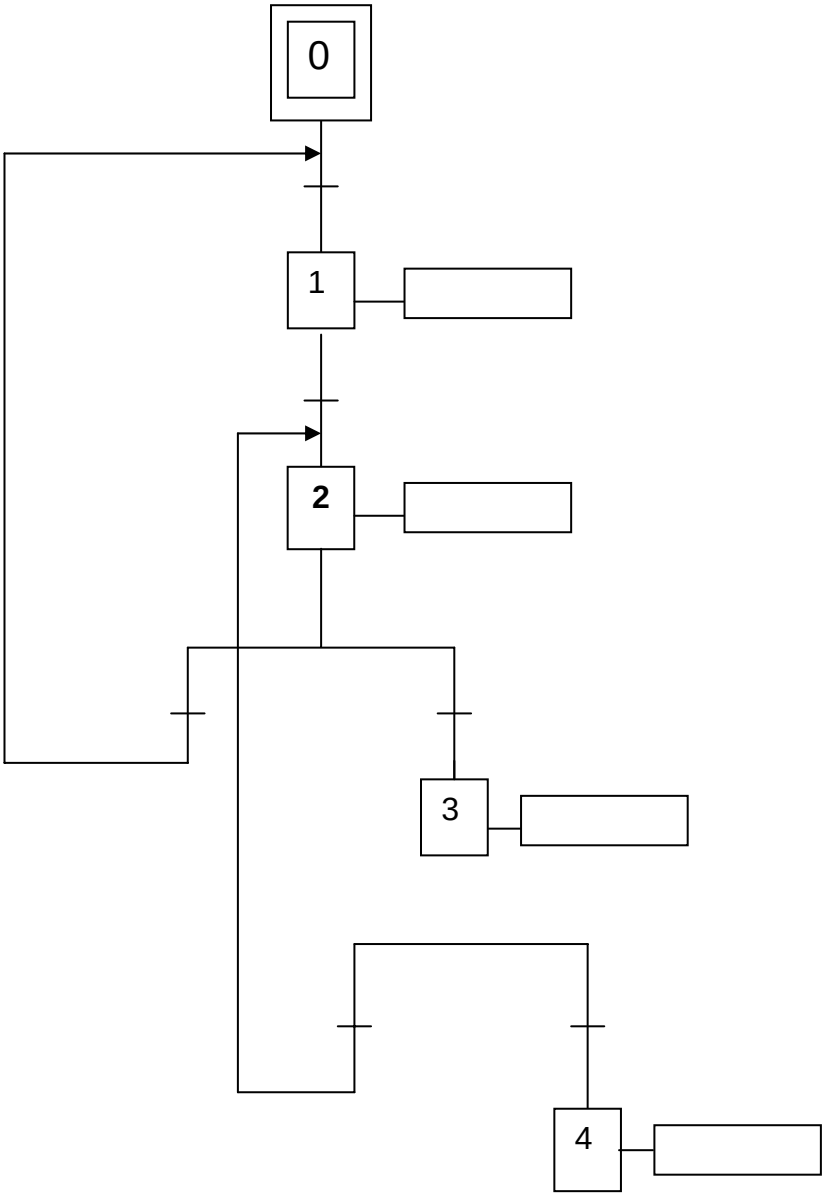


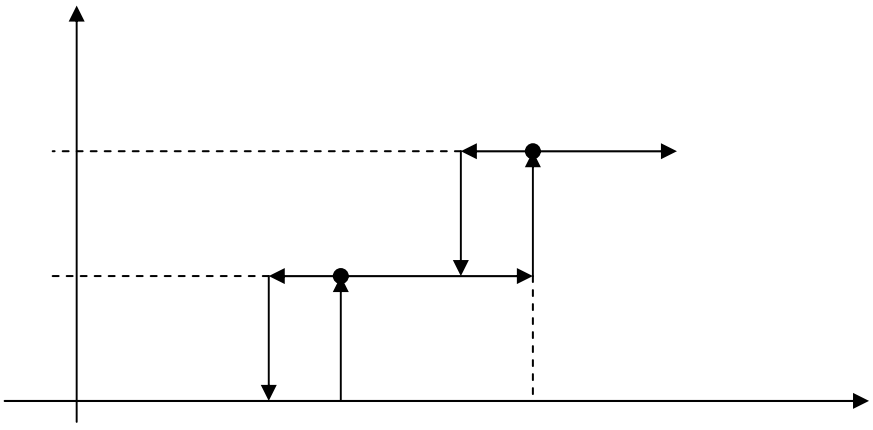
B53 发动机温度—冷却风扇运转分析



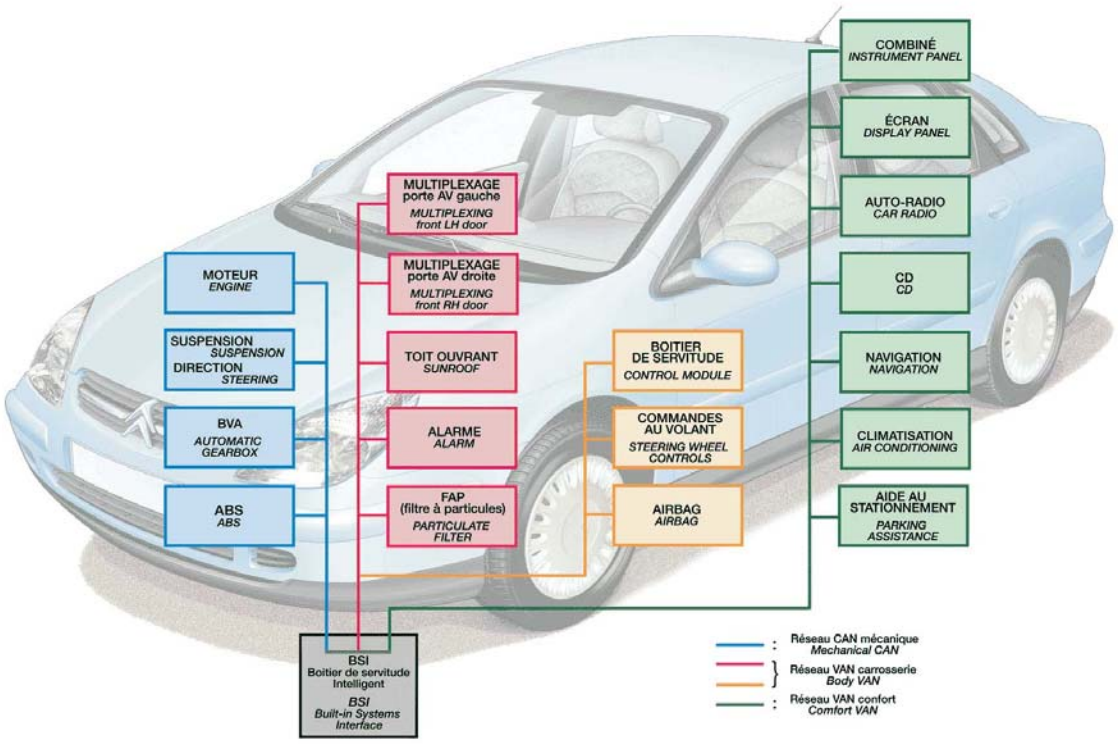


B53 空调系统压力—冷却风扇运转分析





Xsara 2.0L BVA 网络识别



CAN ：

_____ _____ _____

VAN 车身:

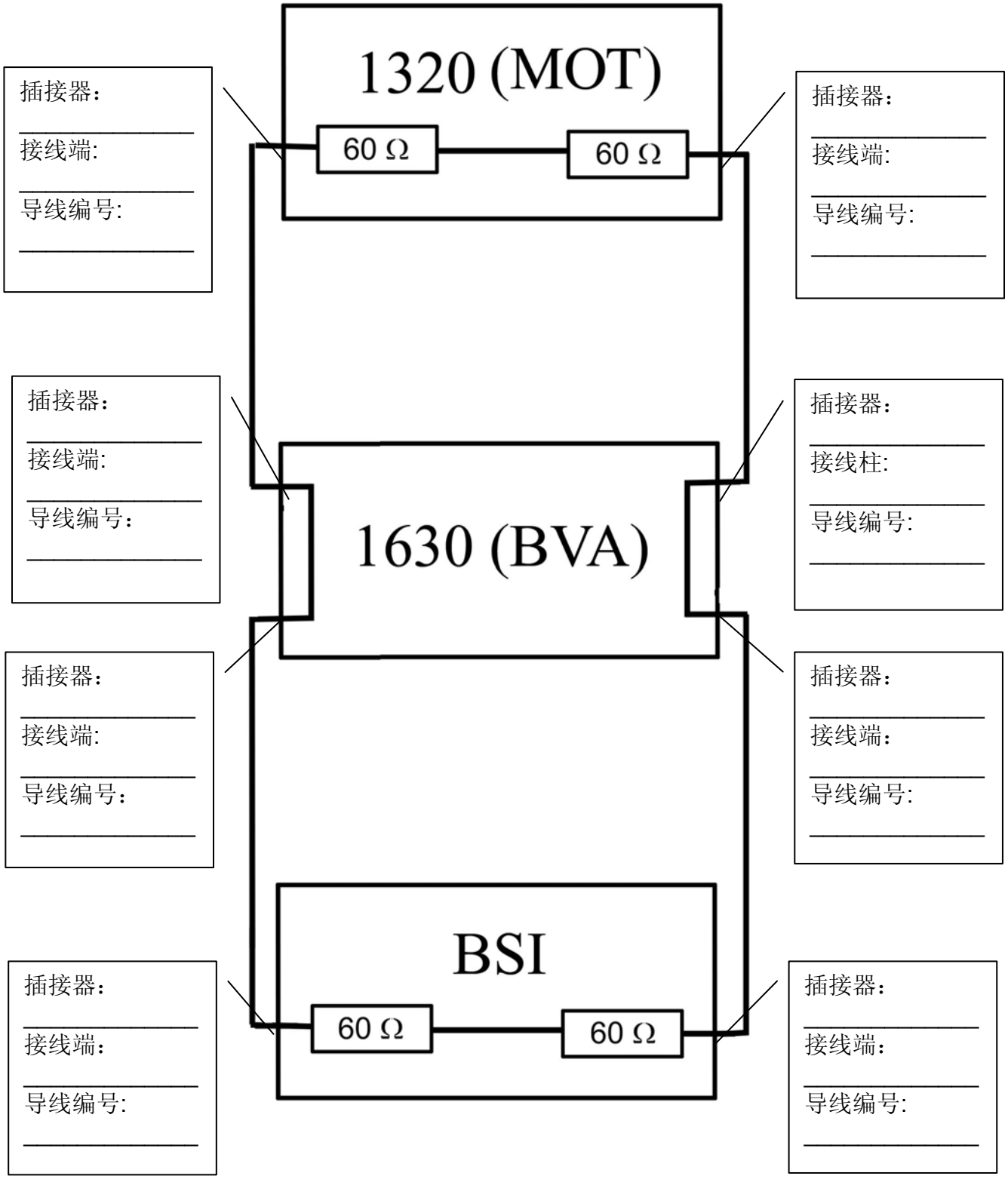
_____ _____ _____ _____

VAN 舒适:

_____ _____ _____ _____

_____ _____ _____ _____

根据电路图识别 CAN 网中各计算机插接器、接线端及导线编号



测量 CAN 网直流电阻

断开 1630 测 BSI ：

_____ 对 _____

直流电阻值：_____

断开 1630 测 1320 ：

_____ 对 _____

直流电阻值：_____

连接 1630 测 BSI ：

_____ 对 _____

直流电阻值：_____

连接 1630 测 1320 ：

_____ 对 _____

直流电阻值：_____

CAN 网发生故障后启动车辆。

结论：_____

启动车辆后，制造 CAN 网故障启动空调。

结论：_____

观察 CAN 网故障时组合仪表、多功能屏的显示

操 作	观察到的现象	
	0004	0049
插接器端子_____接 GND		
插接器的端子_____接U_{bat}		
插接器的端子 _____接GND		
插接器的端子_____接U_{bat}		
两插接器端子短接		

使用 PROXIA 观察 CAN 网故障 BSI、组合仪表、多功能屏记录的故障

操 作	PROXIA读到的故障		
	BSI	0004	0049
插接器端子_____接 GND			
插接器的端子_____接Ubat			
插接器的端子 _____接GND			
插接器的端子_____接Ubat			
两插接器端子短接			

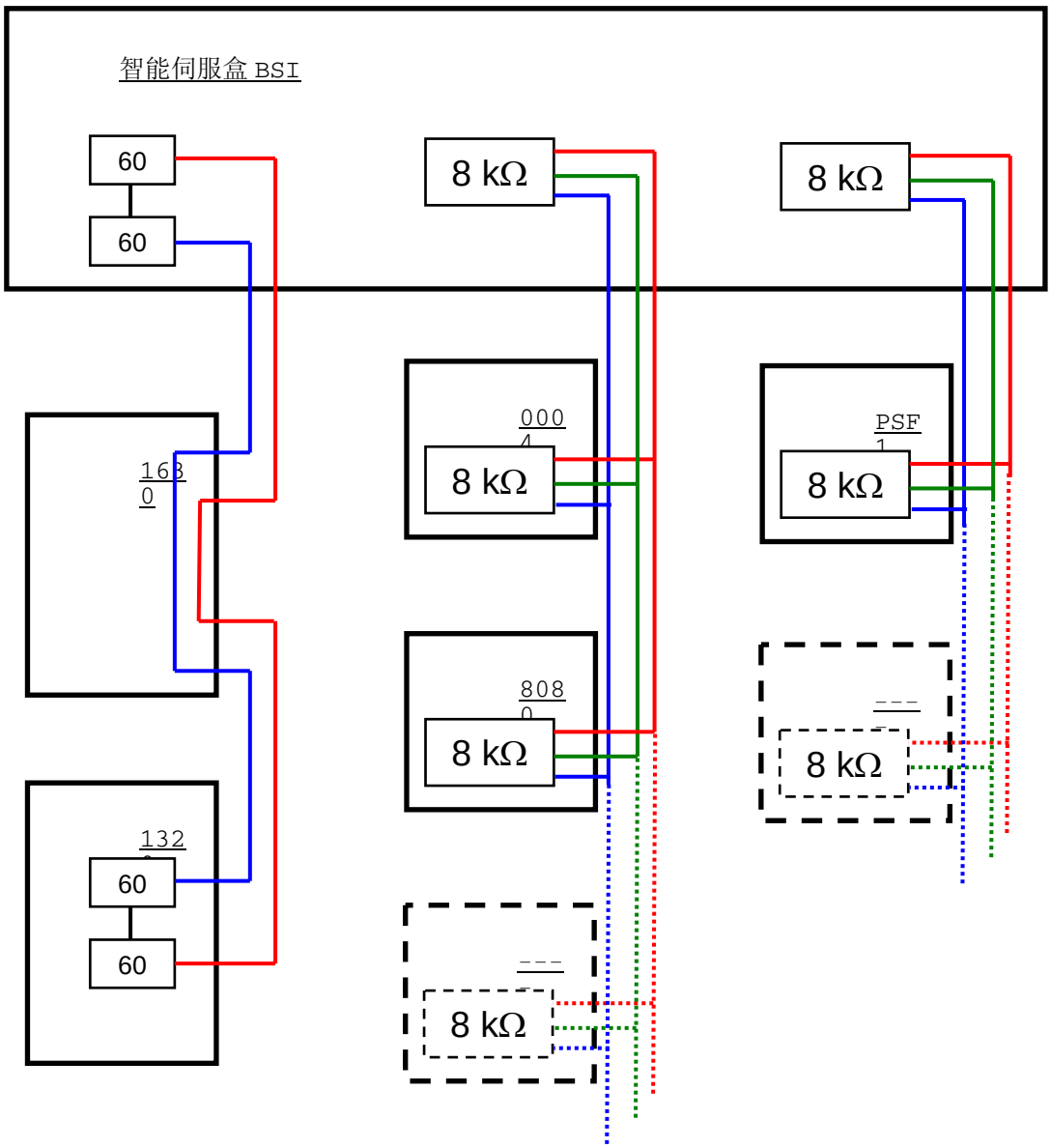
Xsara 2.0L BVA CAN网 和 VAN网

内容：

Xsara 2.0L BVA CAN网测量；

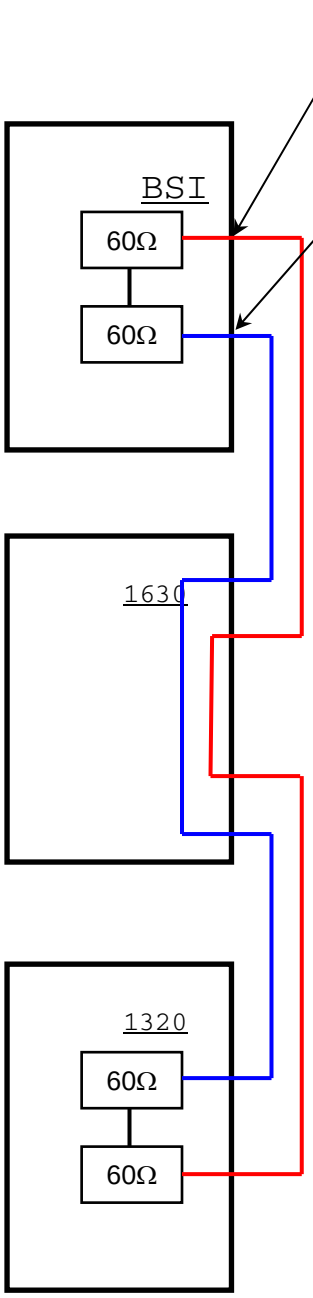
Xsara 2.0L BVA VAN舒适网测量；

Xsara 2.0L BVA VAN车身网测量。



Xsara 2.0 L BVA CAN 网测量

CAN— H (9000)　　CAN— L (9001)



U_2 26V JN = ……. CAN H

U_{14} 26V JN = ……. CAN L

1）切断点火开关，断开蓄电池：

测量 26 V JN 的第 2 脚和第 14 脚之间的电阻值

$R_{2.14}$ = …….

2）切断点火开关，断开蓄电池，断开发动机电控单元 ：

测量 26 V JN 的第 2 脚和第 14 脚之间的电阻值。

$R_{2.14}$ = …….

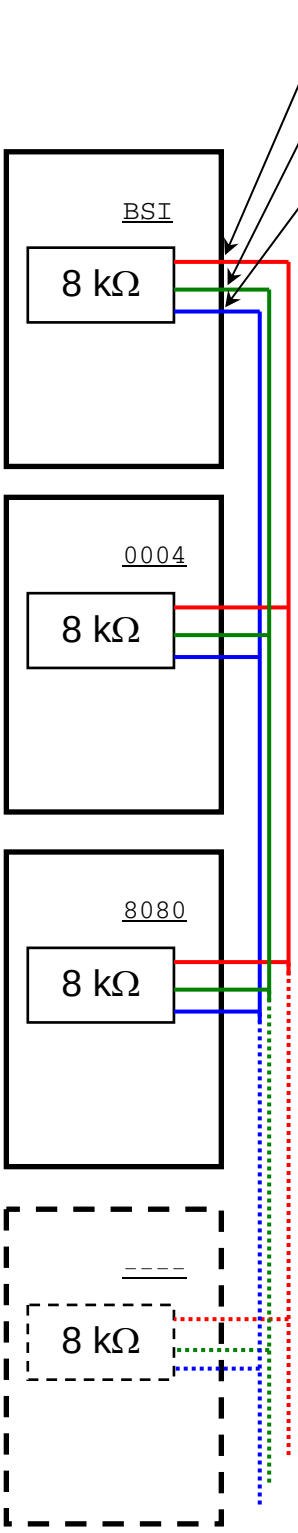
3）切断点火开关，断开电池，断开智能伺服盒 BSI ：

测量 26 V JN 的第 2 脚和第 14 脚之间的电阻值。

$R_{2.14}$ = …….

Xsara 2.0 L BVA VAN 舒适网测量

Data ——— 9004 Data/——— 9005 +VAN - XE



U_{16} 16V NR = ... + VAN

U_{2} 12V MR = ... DATA

U_{7} 12V MR = ... DATA/

1）关闭点火开关，断开蓄电池：

测量 12 V MR 的第 2 脚和第 7 脚之间的电阻值.

$R_{2.7}$ = ...

2）关闭点火开关，断开蓄电池，断开空调计算机 ：

测量 12 V MR 的第 2 脚和第 7 脚之间的电阻值.

$R_{2.7}$ = ...

3）VAN 舒适网上共连接几个计算机?

.....

提示：$\frac{1}{Req} = \frac{1}{R1} \times \frac{1}{R2} \times \frac{1}{R3} \times K$

4）VAN 进入休眠最多需要多长时间 ？

.....

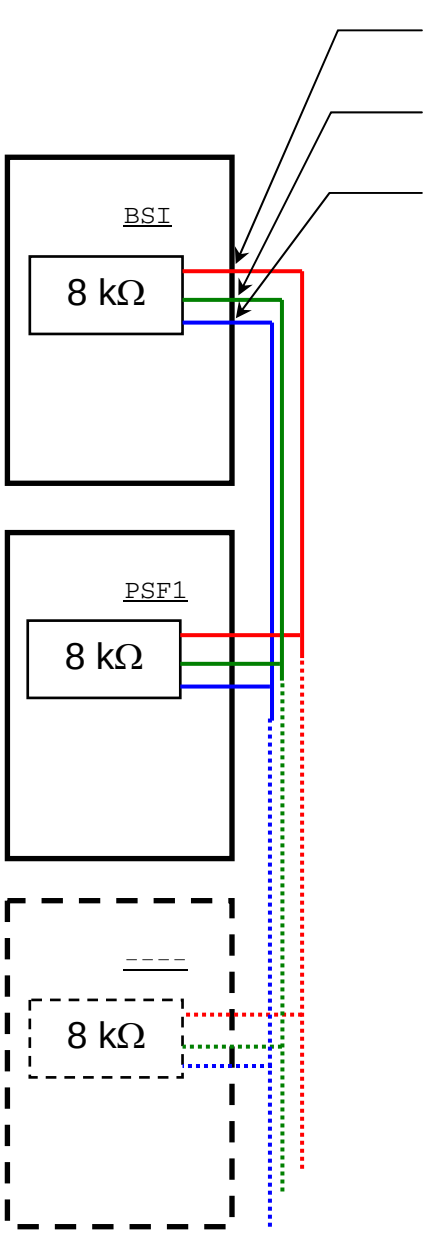
5）VAN 休眠后 XE 电压是：_____

VAN 休眠后 DATA 电压是：_____

VAN 休眠后 DATA/电压是：_____

Xsara 2.0 L BVA VAN 车身网测量

DATA - 9012　　DATA/ — 9013　　+VAN — XEB



U_8 16V VE = ... + VAN

U_{25} 26V BE = ... DATA

U_{13} 26V BE = ... DATA/

1) 断开点火开关, 断开电池:

测量 26 V BE 的第 25 脚和第 13 脚之间的电阻值.

$R_{25.13}$ = ...

2) 在 **VAN** 车身网中连有多少个计算机 ?

.....

3) VAN 网进入休眠需要的时间最长是多少?

.....

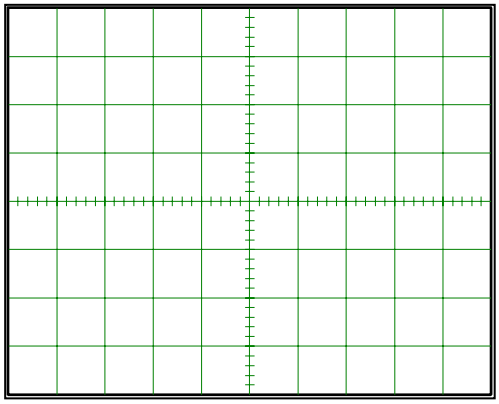
4) 如果把 **26V BE** 第 **13** 接线脚接到地线上会发生什么?

.....

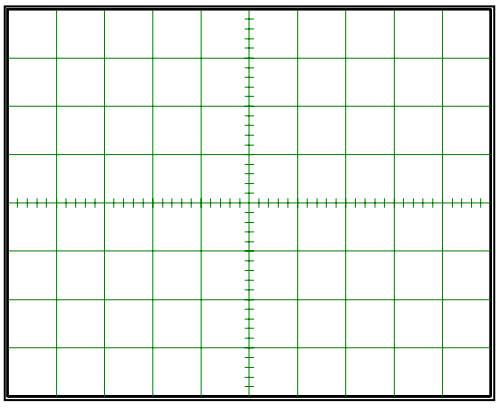
CAN I/S 网波形记录

双 VAN-CAN

CAN - H　　导线编号：----------

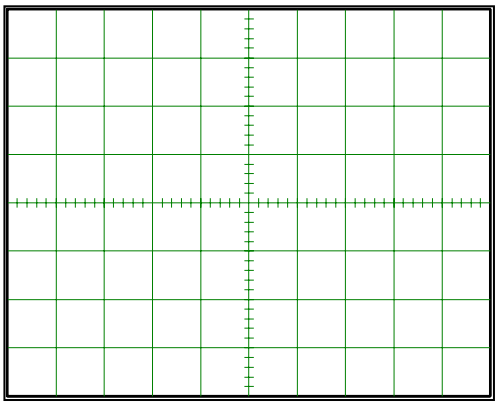


CAN - L　　导线编号：----------

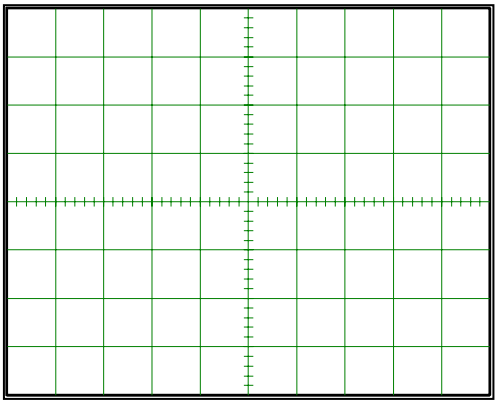


Full CAN

CAN HS　CAN-H　导线编号：----------



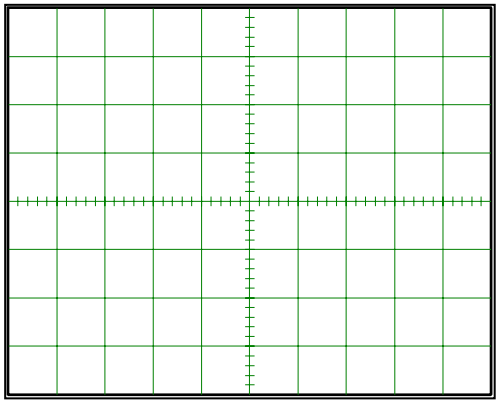
CAN HS　CAN-L　导线编号：----------



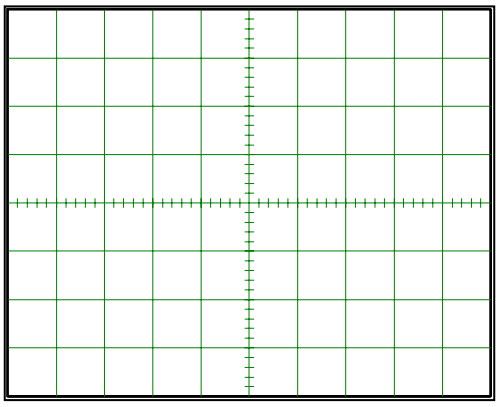
车身网波形记录

双 VAN-CAN

DATA　　导线编号：----------

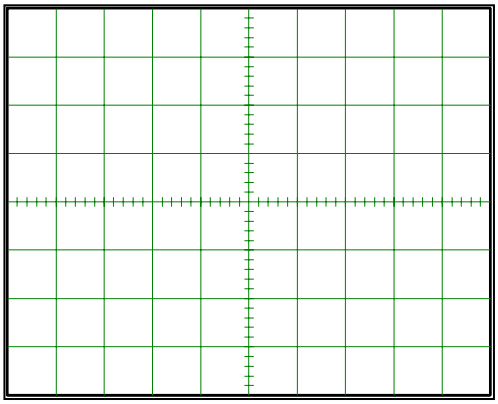


DATA/　　导线编号：----------

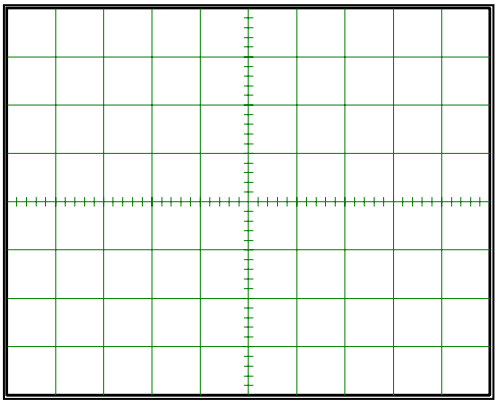


Full CAN

CAN LS　CAN-H　导线编号：----------



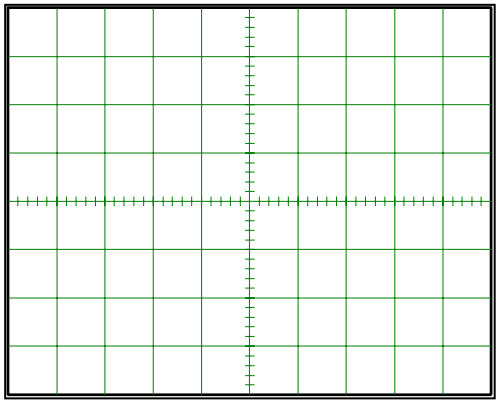
CAN LS　CAN-L　导线编号：----------



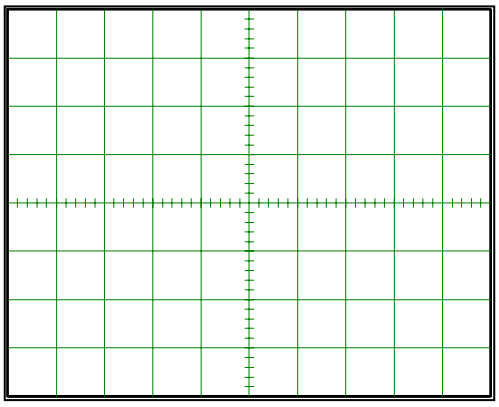
舒适网波形记录

双 VAN-CAN

DATA　　导线编号：----------

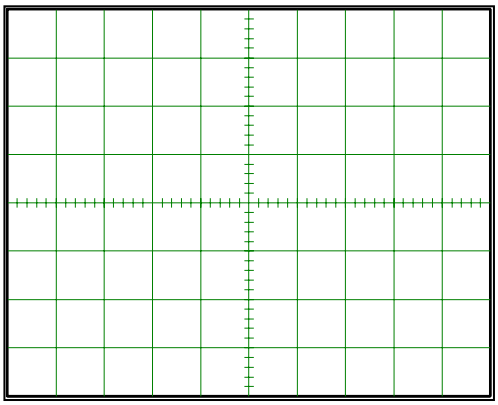


DATA/　　导线编号：----------

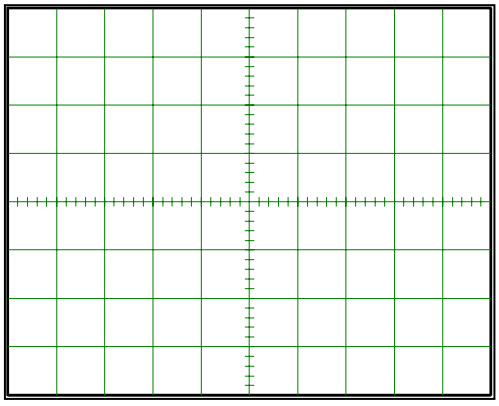


Full CAN

CAN LS　CAN-H　导线编号：----------



CAN LS　CAN-L　导线编号：----------



故障诊断记录

诊断车型		备件组织号	
ECU 型号		变速箱型号	

观察到的故障现象

Proxia 读取的故障

故 障 原 因

故障诊断记录

诊断车型		备件组织号	
ECU 型号		变速箱型号	

观察到的故障现象

Proxia 读取的故障

故 障 原 因

故障诊断记录

诊断车型		备件组织号	
ECU 型号		变速箱型号	

观察到的故障现象

Proxia 读取的故障

故 障 原 因

发动机温度控制分析

车型	电控单元	实现冷却风扇不同转速的控制单元			空调压力信息来自
		低速	中速	高速	
Picasso 1.6	M 7.4.4				
Picasso 2.0	MM48P				
Picasso 2.0	MM6LP				
Xsara 2.0	MM6LP				

网络结构分析

车型	电控单元	CAN	VAN 车身	VAN 舒适
Picasso 1.6	M 7.4.4			
Picasso 2.0	MM48P			
Picasso 2.0	MM6LP			
Xsara 2.0	MM6LP			