

Maintenance Manual for Chery A113
(Circuit Diagram)

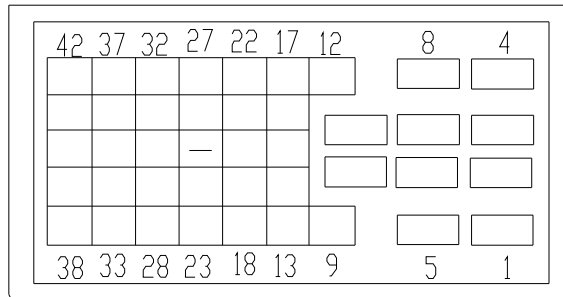
Content

Chapter 1	Illustration Instruction	3
I.	Definition of Main Harness Inserters	3
II.	Definition of Body Earth Points	7
1.	Earth Definition	7
2.	Distribution of Various Earth Points and Main Modules	7
3.	Photos of Earth Points	8
III.	Instruction of Main Circuit Symbols	9
IV.	Auxiliary Instruction of Circuit Diagram	10
1.	Instruction of Power Supply and Earth Wire	10
2.	Wire Size and Color	10
3.	Definition of Main Controls	10
4.	Pin Definition Explanation	10
V.	Fuse Definition	11
1.	Fuse Number	11
2.	Fuse Position and Function Instruction	12
2.1.	Front Compartment Relay Box Fuse	12
2.2.	Instrument Relay Box Fuse	13
Chapter 2	Circuit Control Theory Diagram	14
I.	Starter Charging System	14
II.	ABS Control System	15
III.	Airbag	16
IV.	Backup Radar	17
V.	Electric Rear View Mirror	18
VI.	Engine Anti-Deterrent	19
VII.	A/C, Defroster System	20
VIII.	Ceiling Lamp, Luggage Boot Lamp, and Sunroof System	21
IX.	Front/Rear Wiper System	22
X.	Turn Signal Lamp System	23
XI.	Radio/Player, Horn, Cigarette Lighter	24
XII.	Headlamp, Fog Lamp System	25
XIII.	BCM System	26
XIV.	Instrument System	27
XV.	473 Engine and Electric Injection System	28

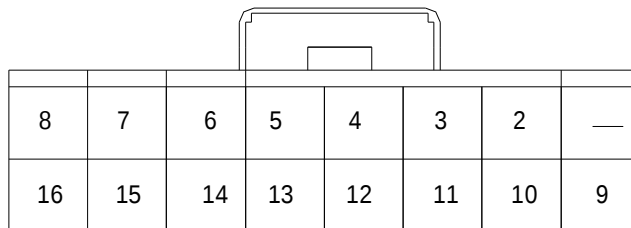
Chapter 1 Illustration Instruction

I. Definition of Main Harness Inserters

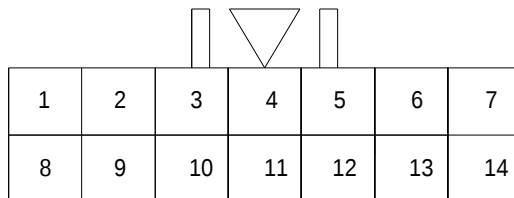
Engine/ECU (inserter of engine harness and ECU harness)



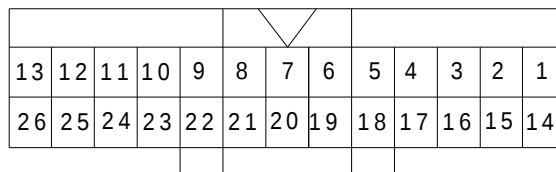
ECU/front (plug of ECU and front compartment harness)



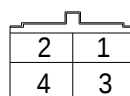
ECU/instrument (plug of ECU and instrument harness)



Interior/instrument A (plug A of interior harness and instrument harness)



Interior/instrumentB (plug B of interior harness and instrument harness)



Interior/front (plug of interior harness
and front compartment harness)

△							
8	7	6	5	4	3	2	1
16	15	14	13	12	11	10	9

Instrument/engine A (plug A of
instrument harness and engine)

7	6	5	4	3	2	1
14	13	12	11	10	9	8

Instrument/engine B (plug B of
instrument harness and engine)

1

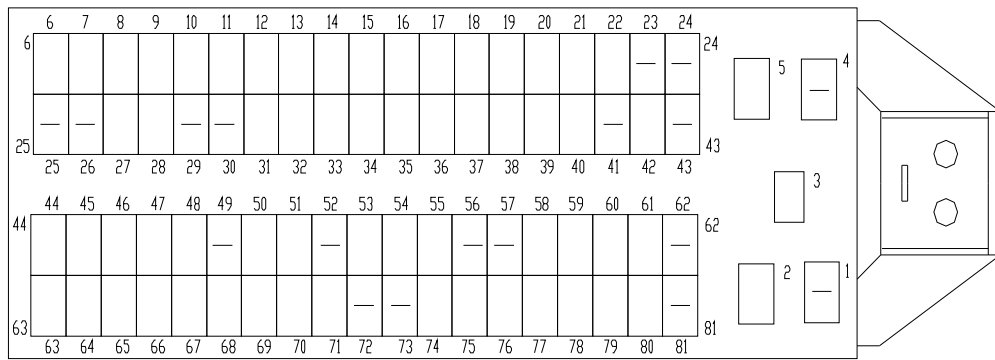
Instrument/front A (plug A of instrument
harness and front compartment harness)

1	2	—	4	5	6	7	8	9	10	11	12	—
—	—	—	—	18	19	—	—	22	23	24	25	26

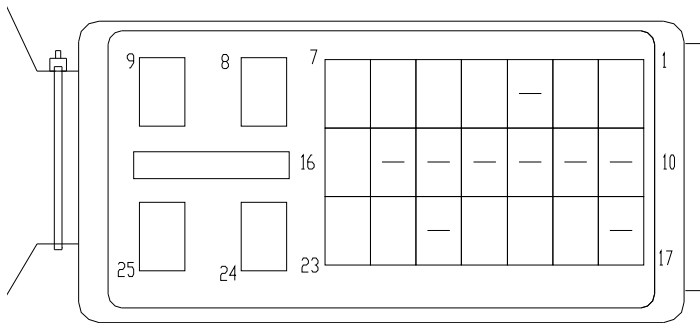
Instrument/front B (plug B of instrument
harness and front compartment harness)

2	1
4	3

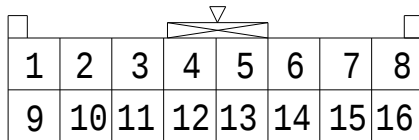
ECU pin definition



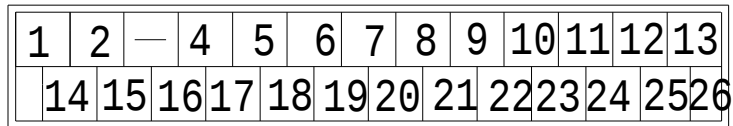
ABS pin definition



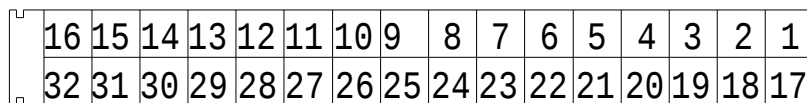
BCM A



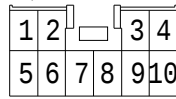
BCM B



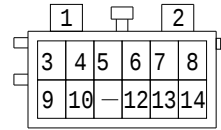
COMBINED INSTRUMENTS



Interior/left front A (plug A of interior harness and left front door harness)



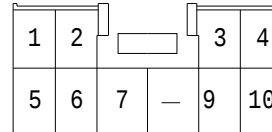
Interior/left front B (plug B of interior harness and left front door harness)



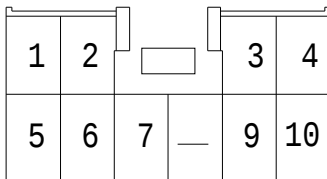
Interior/right front A (plug A of interior harness and right front door harness)



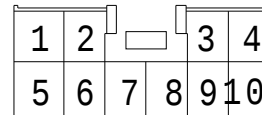
Interior/left rear (plug of interior harness and left rear door harness)



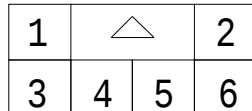
Interior/right rear (plug of interior harness and right rear door harness)



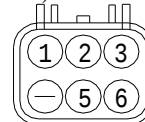
Interior/right front B (plug B of interior harness and right front door harness)



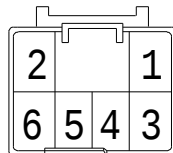
Interior/ceiling lamp (plug of interior harness and ceiling lamp harness)



Interior/airbag (plug of interior harness and airbag harness)



Interior/rear bumper (plug of interior harness and rear bumper harness)



II. Definition of Body Earth Points

1. Earth Definition

G100: Body earth, ABS earth

G101: Left front compartment earth (radiator fan, low beam, high beam, position lamp, turn signal lamp, front fog lamp, wiper, brake liquid level, anti-deterrent horn)

G102: Right front compartment earth (high beam, low beam, position lamp, turn signal lamp, side turn signal lamp, front fog lamp, horn)

G200: Power train, fuel position sensor, left front door, left rear door, front ceiling lamp

G201: Electric sunroof

G202: Tail lamp, backup radar, oil pump, rear wiper motor

G203: Luggage boot door (rear wiper, high mount brake lamp)

G204: Tail lamp earth

G206: BCM, seat belt switch

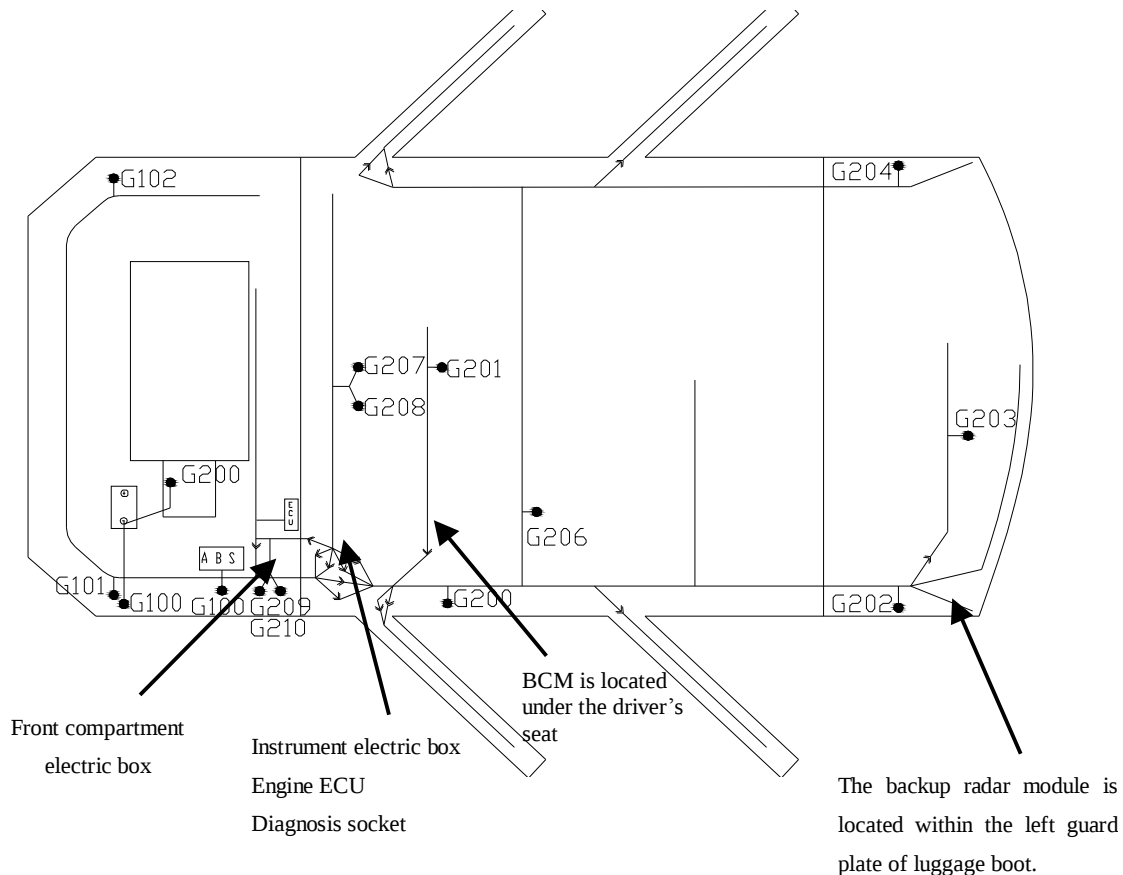
G207: Cigarette lighter, fan, instrument electric box

G208: Audio equipment, combined instrument, various control switches, diagnosis socket

G209: Engine ECU earth

G210: Engine ECU earth

2. Distribution of Various Earth Points and Main Modules

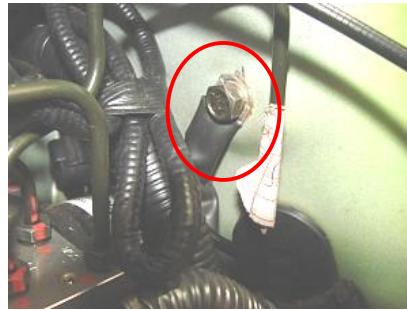


3. Photos of Earth Points

G100(Below battery)



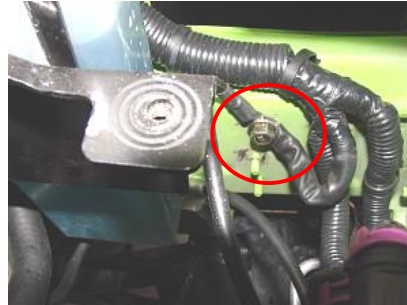
G100



G209, 210(Left lower side of front wall)



G101 (at left front longitudinal beam)



G102 (at right front longitudinal beam)



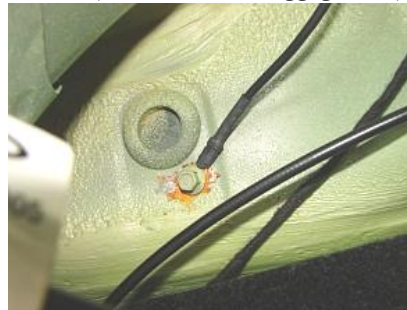
G201(At right front ceiling armrest)



G207, 208(at secondary instrument panel)



G202 (left rear side of luggage boot)



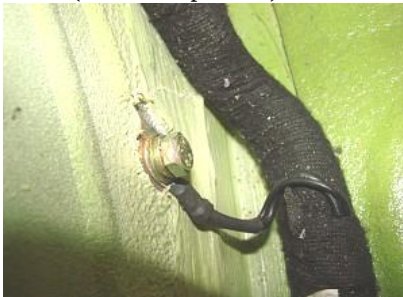
G204 (below right pillar C)



G206 (near BCM)



G200 (below left pillar B)



III. Instruction of Main Circuit Symbols

Symbol	Meaning	Symbol	Meaning
	Wiring joint		Motor
	Fuse position and specification		Bulb
	Relay		Switch control
	Shield wire		Resistance unit
	Shield wire		Electromagnetic coil
	This part is not covered within this system		LBD
	Connector		Earth

Note: Please validate specifically the real articles with the circuits for other symbols.

IV. Auxiliary Instruction of Circuit Diagram

1. Instruction of Power Supply and Earth Wire

30: Primary live wire from the battery

30a: Primary live wire from the battery

15: From the ignition switch (IGN1)

15a: From the ignition switch (IGN2)

Ka: From ignition switch (ACC, disconnect at start)

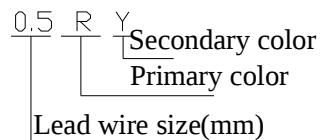
58b(RHEO): power supply for noctilucence illumination

30–(GROUND): Earth wire, from cathode terminal of the battery

2. Wire Size and Color

R Red; □ Orange; W White; B Black; Y Yellow; V Purple;

G Green; L Blue; Br Brown; Gr Grey; P Pink; Lg Light green;



3. Definition of Main Controls

This circuit control theory diagram uses “instrument plug/” to indicate the integrated relay plug of the instrument electric box.

This circuit control theory diagram uses “ECU” to indicate the engine control unit.

This circuit control theory diagram uses “BCM” to indicate the body control module.

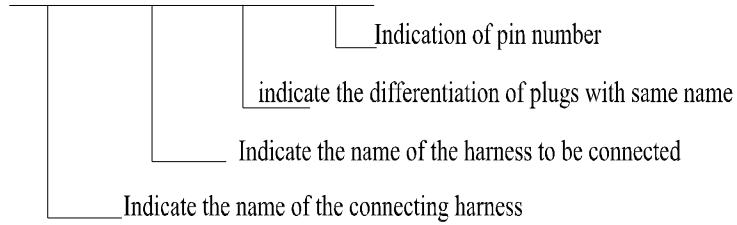
4. Pin Definition Explanation

The pin definition explanation of the circuit theory diagram:

For instance as follows:

4.1.

Instrument/interior/A/6



“Instrument/interior/A/6” indicates the #6 pin of plug A of instrument harness and interior harness connectors;

4.2. “To anti-deterrent module A5” indicates “to #5 pin of plug A of anti-deterrent module”;

4.3. “To ECU25” indicates “to #25 pin of ECU”;

V. Fuse Definition

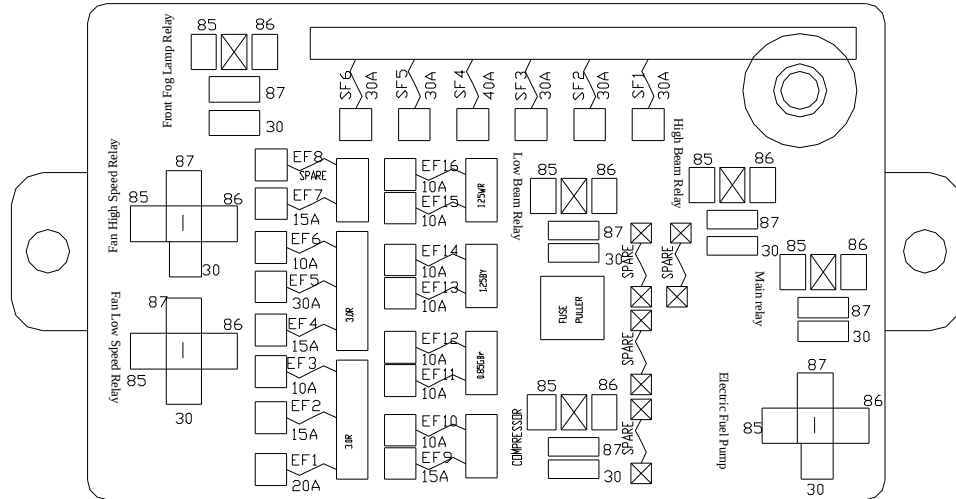
1. Fuse Number

The fuse number within the front compartment relay box is expressed by “EF+number” and “SF+number”.

The fuse number within the instrument relay box is expressed by “F+number”.

2. Fuse Position and Function Instruction

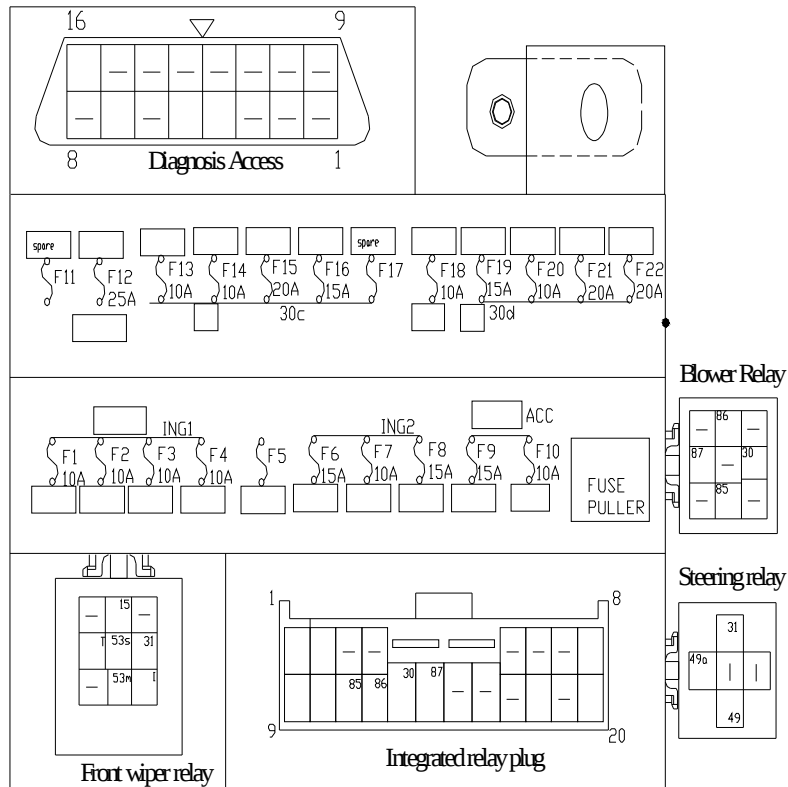
2.1. Front Compartment Relay Box Fuse



The front compartment relay box is located near the front compartment battery, with the detailed function instructions of the fuses are as follows:

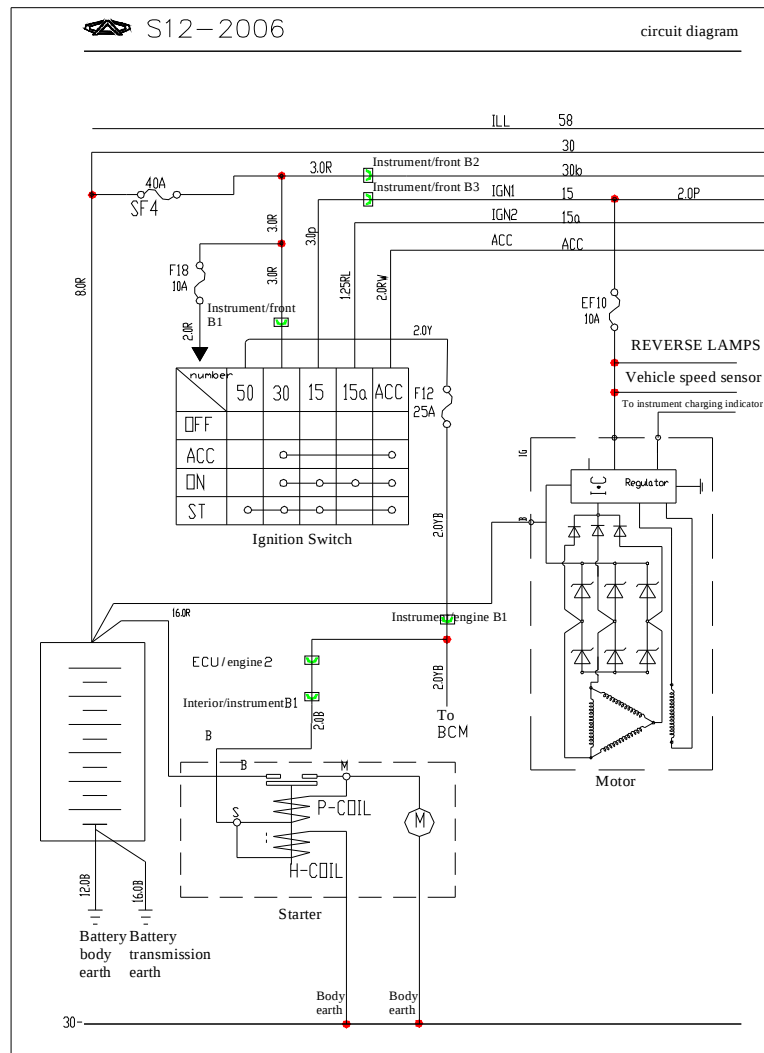
Fuse No.	Capacity	Function	Fuse No.	Capacity	Function
SF1	30A	Fan, high speed	EF6	10A	Compressor
SF2	30A	BCM	EF7	15A	Oxygen sensor
SF3	30A	A/C	EF8	Vacant	Vacant
SF4	40A	Instrument electric box	EF9	15A	Ignition coil
SF5	30A	ABS	EF10	10A	Backup lamp
SF6	30A	ABS	EF11	10A	Right position lamp
EF1	20A	Fan, low speed	EF12	10A	Left position lamp
EF2	15A	Front fog lamp	EF13	10A	Right high beam
EF3	10A	ECU	EF14	10A	Left high beam
EF4	15A	Fuel pump	EF15	10A	Right low beam
EF5	30A	Primary relay	EF16	10A	Left low beam

2.2. Instrument Relay Box Fuse

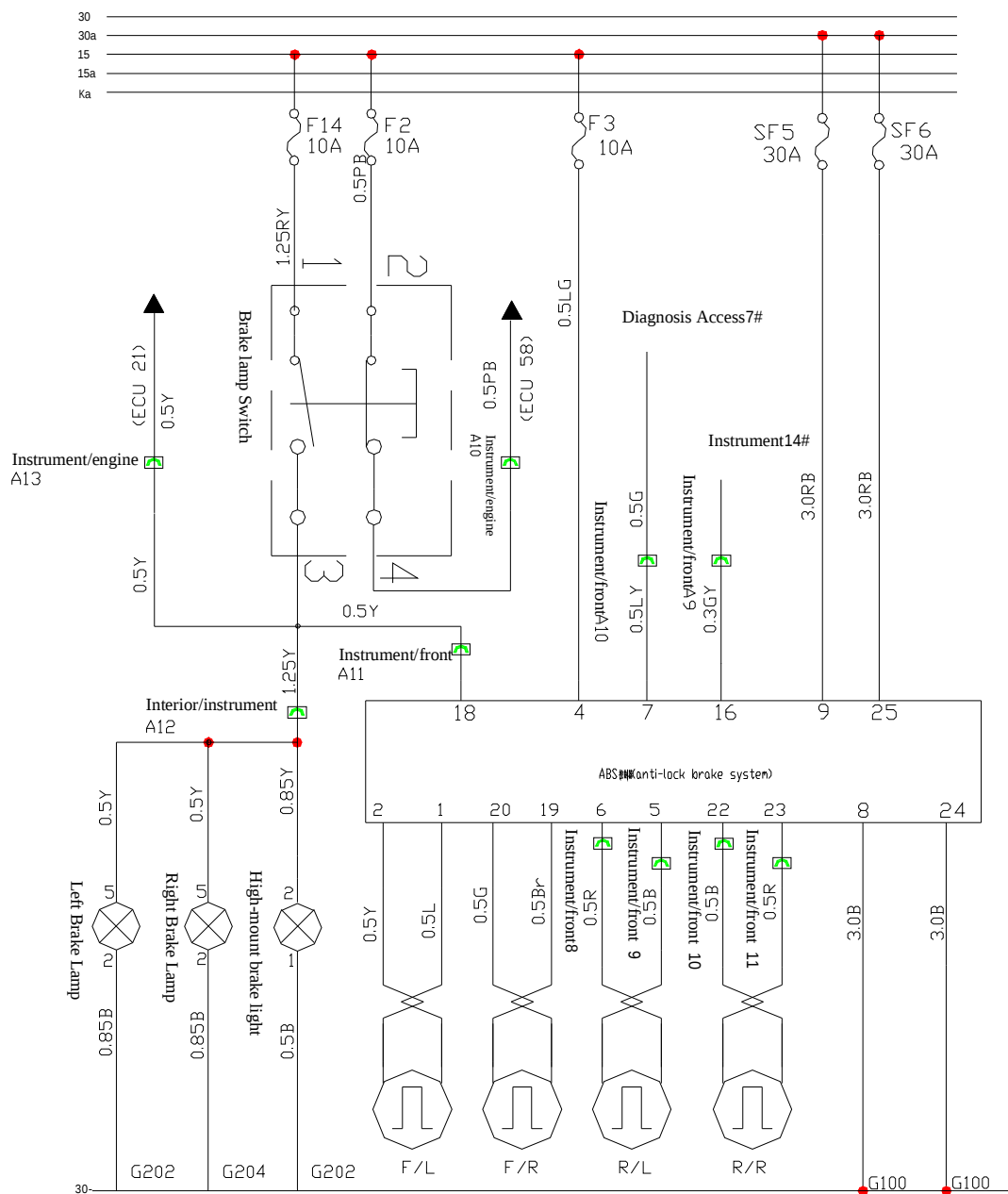


The instrument relay box is located within the left cover plate of the dashboard, with the detailed function instructions of the fuses are as follows:

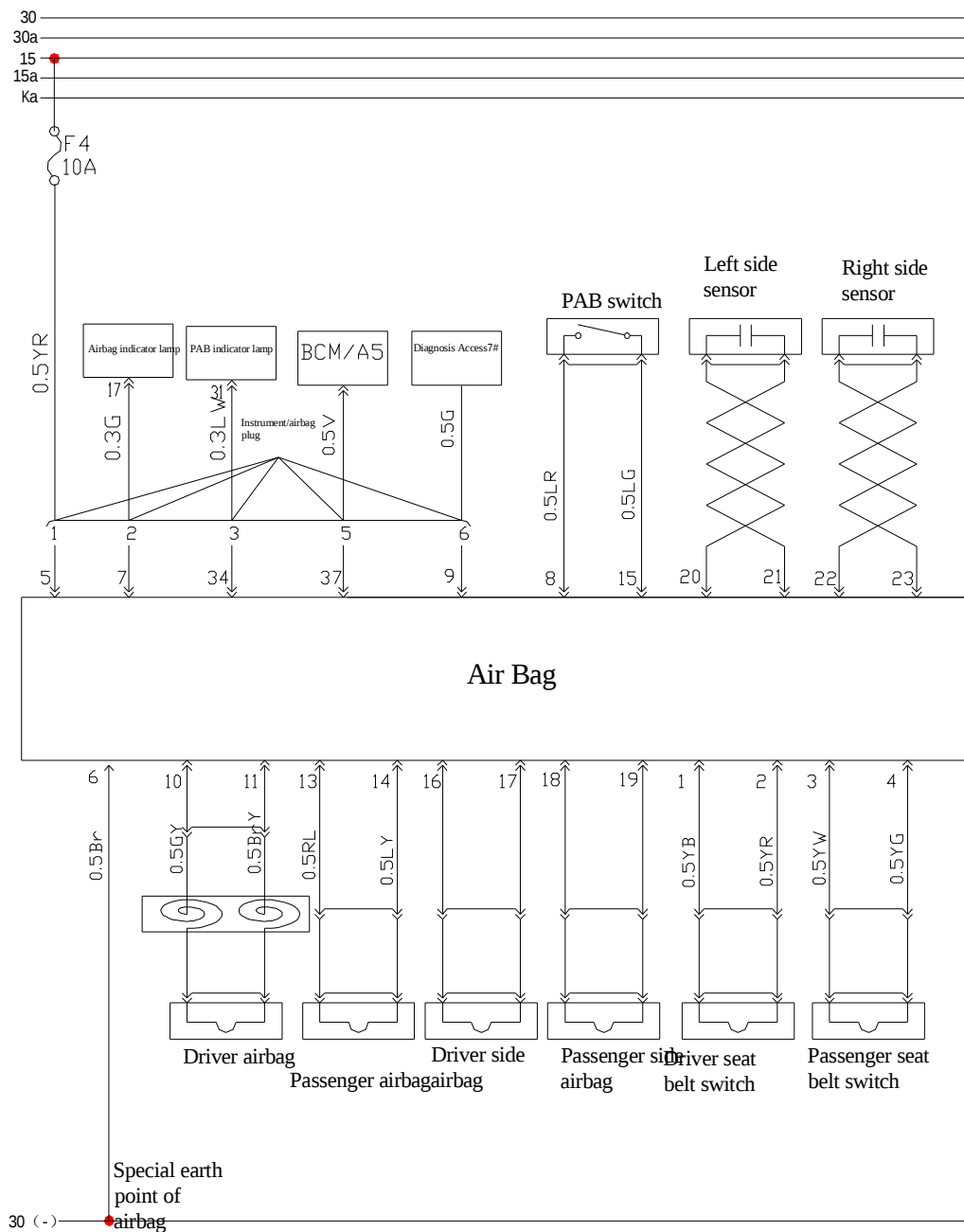
No	Specification	Functions	No	Specification	Functions
F22	20A	Rear defroster	F11		Vacant
F21	20A	Sunroof power supply	F10	10A	Radio/player control
F20	10A	Lamp switch, instrument	F9	15A	Cigar Lighter
F19	15A	Alarm switch	F8	15A	Front wiper
F18	10A	Clearance lamp, ceiling lamp	F7	10A	Steering power supply, A/C relay coil
F17		Vacant	F6	15A	Washer, rear wiper power supply, sunroof control
F16	15A	Horn, fog lamp	F5		Vacant
F15	20A	Audio device	F4	10A	Air Bag
F14	10A	Braking Lamp	F3	10A	ABS control
F13	10A	Diagnosis Access	F2	10A	Rear view mirror, brake switch, BCM
F12	25A	Start	F1	10A	COMBINED INSTRUMENTS



II. ABS Control System



III. Airbag



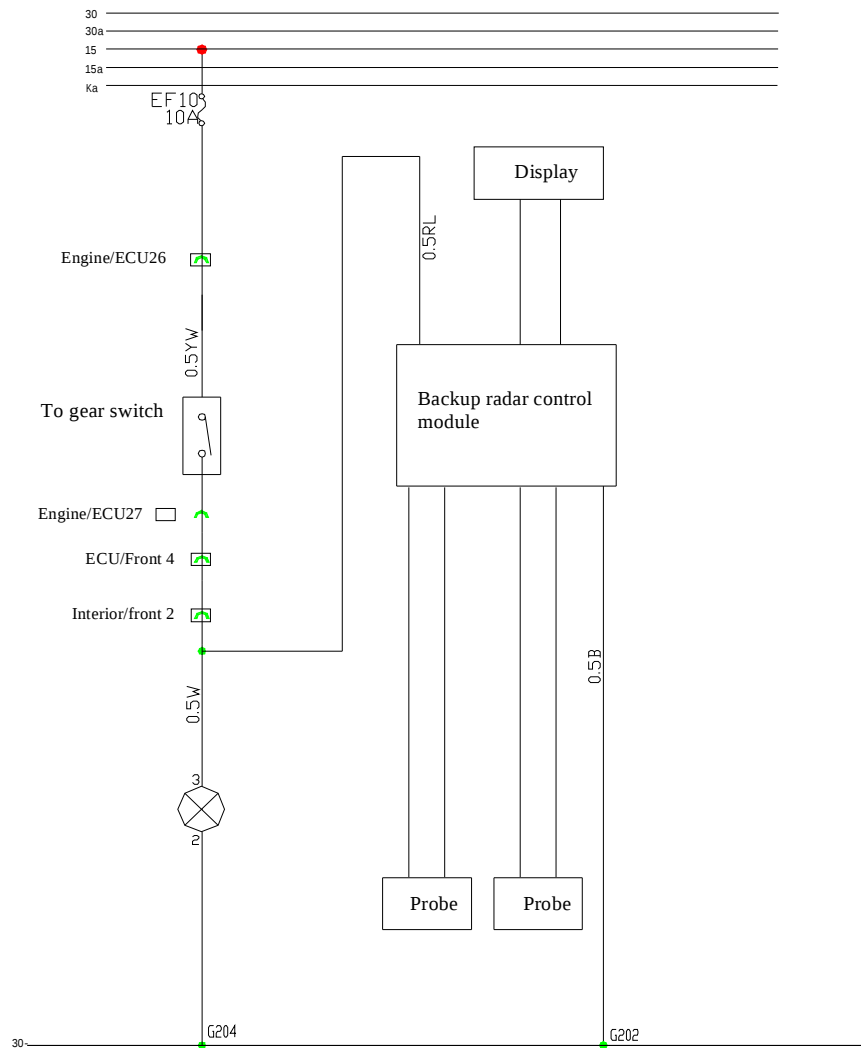
IV. Backup Radar



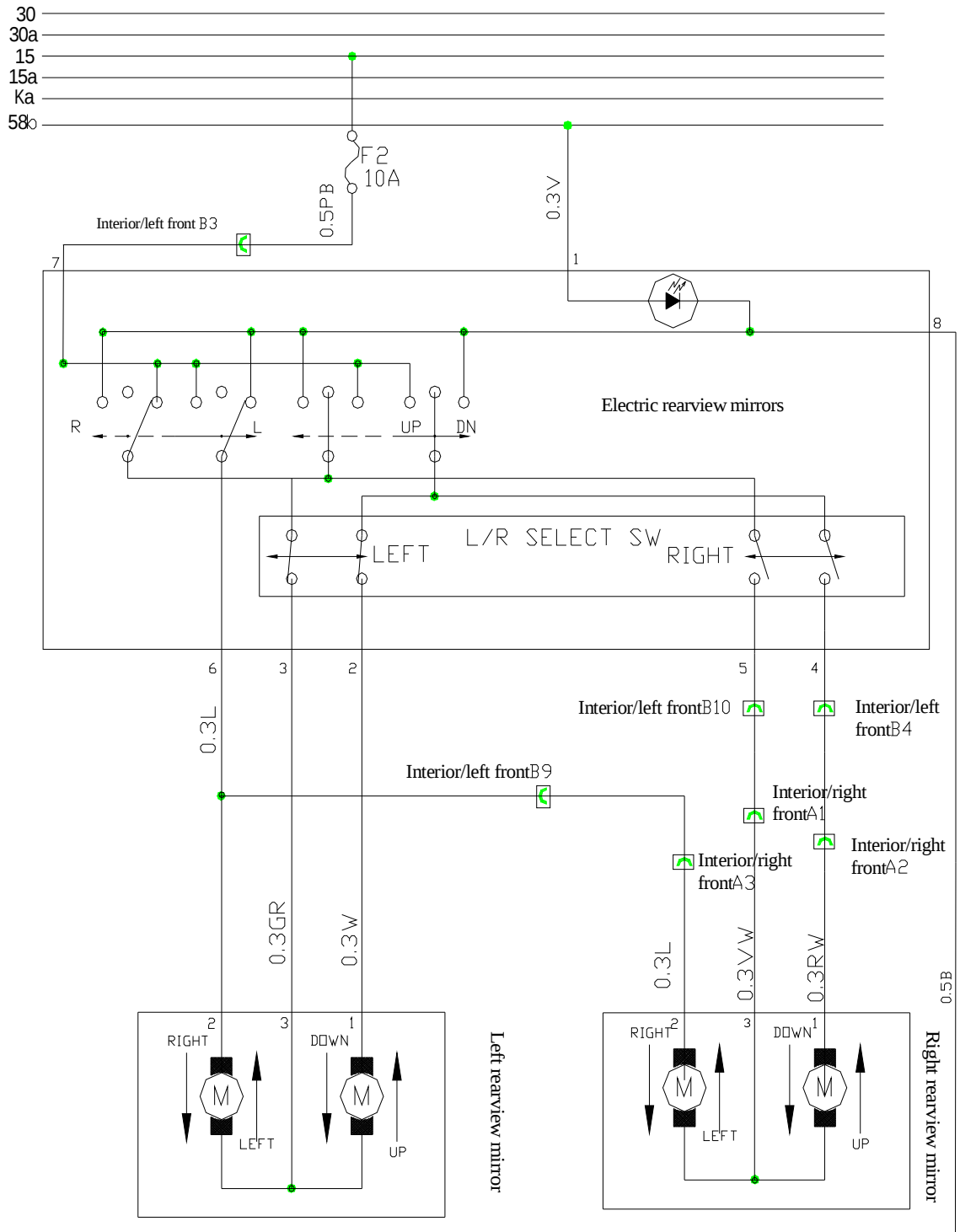
S12-2006

circuit diagram

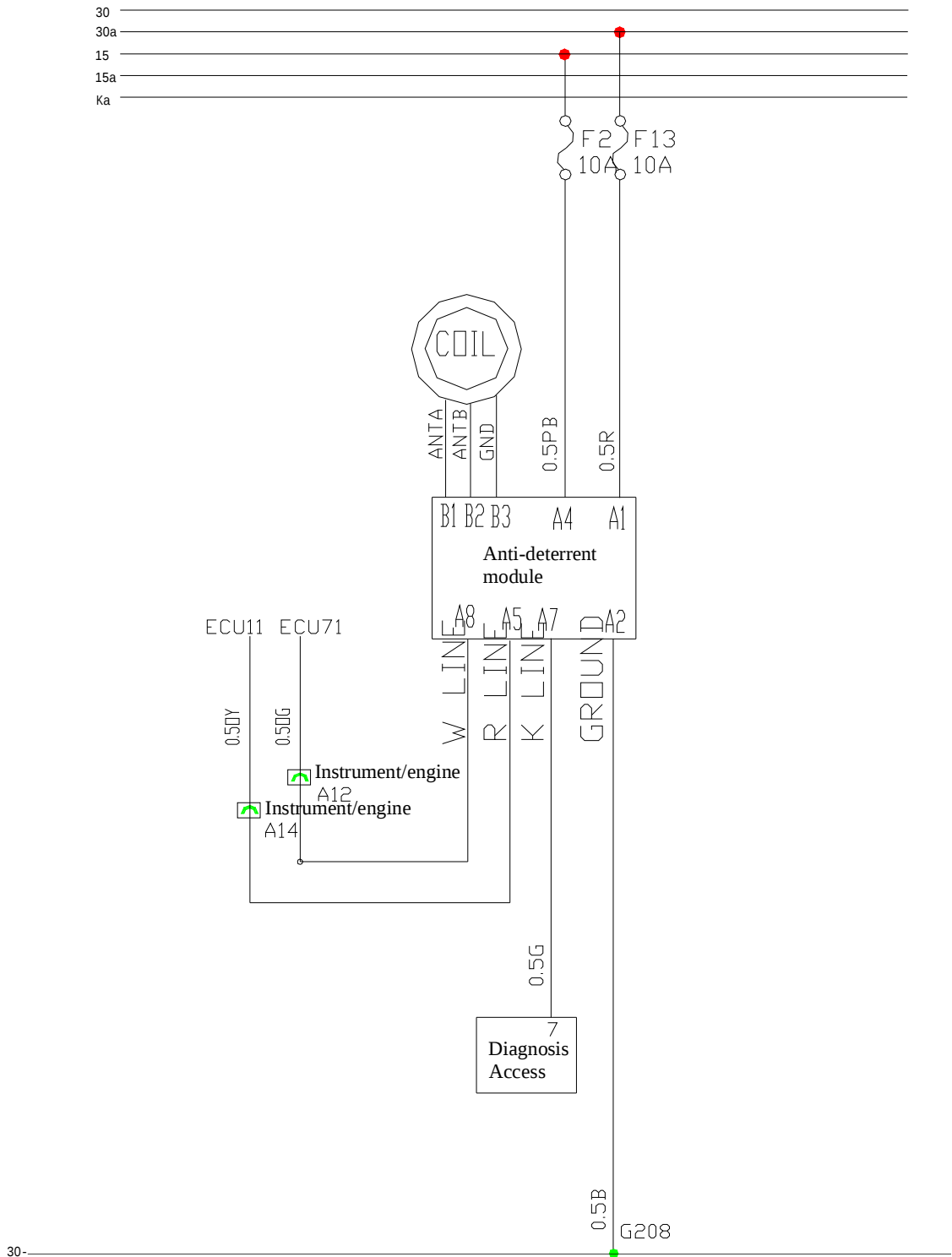
backup radar



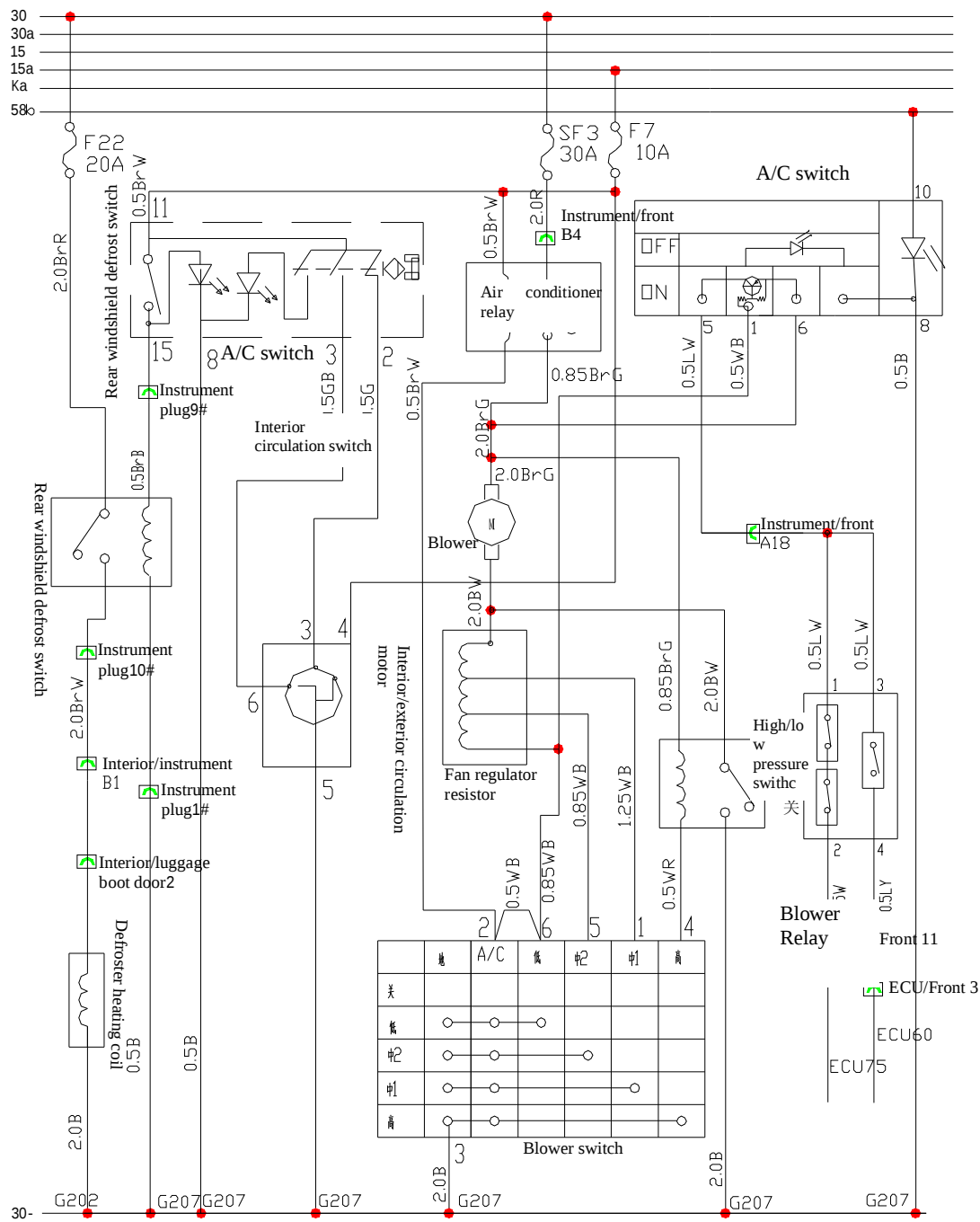
V. Electric Rear View Mirror



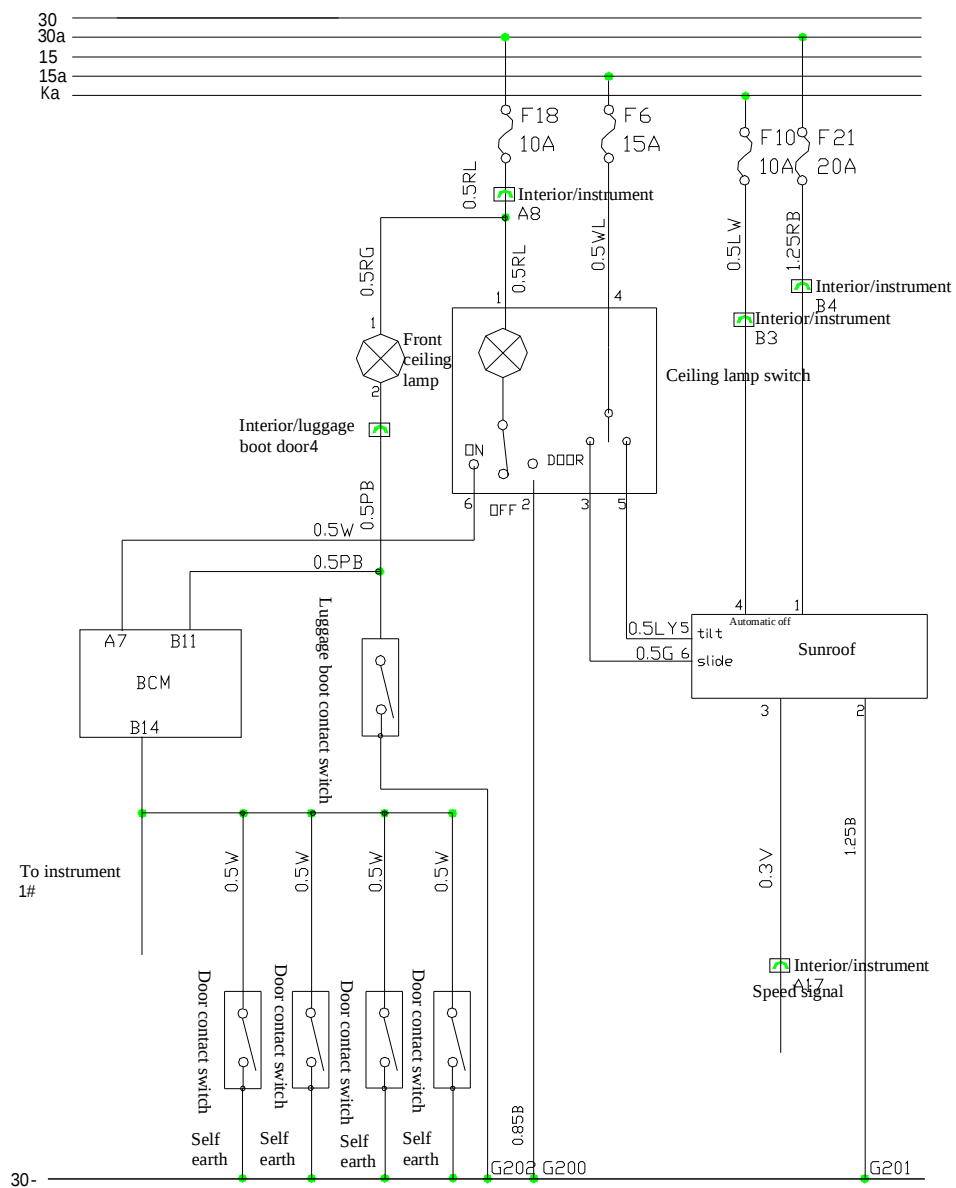
VI. Engine Anti-Deterrent



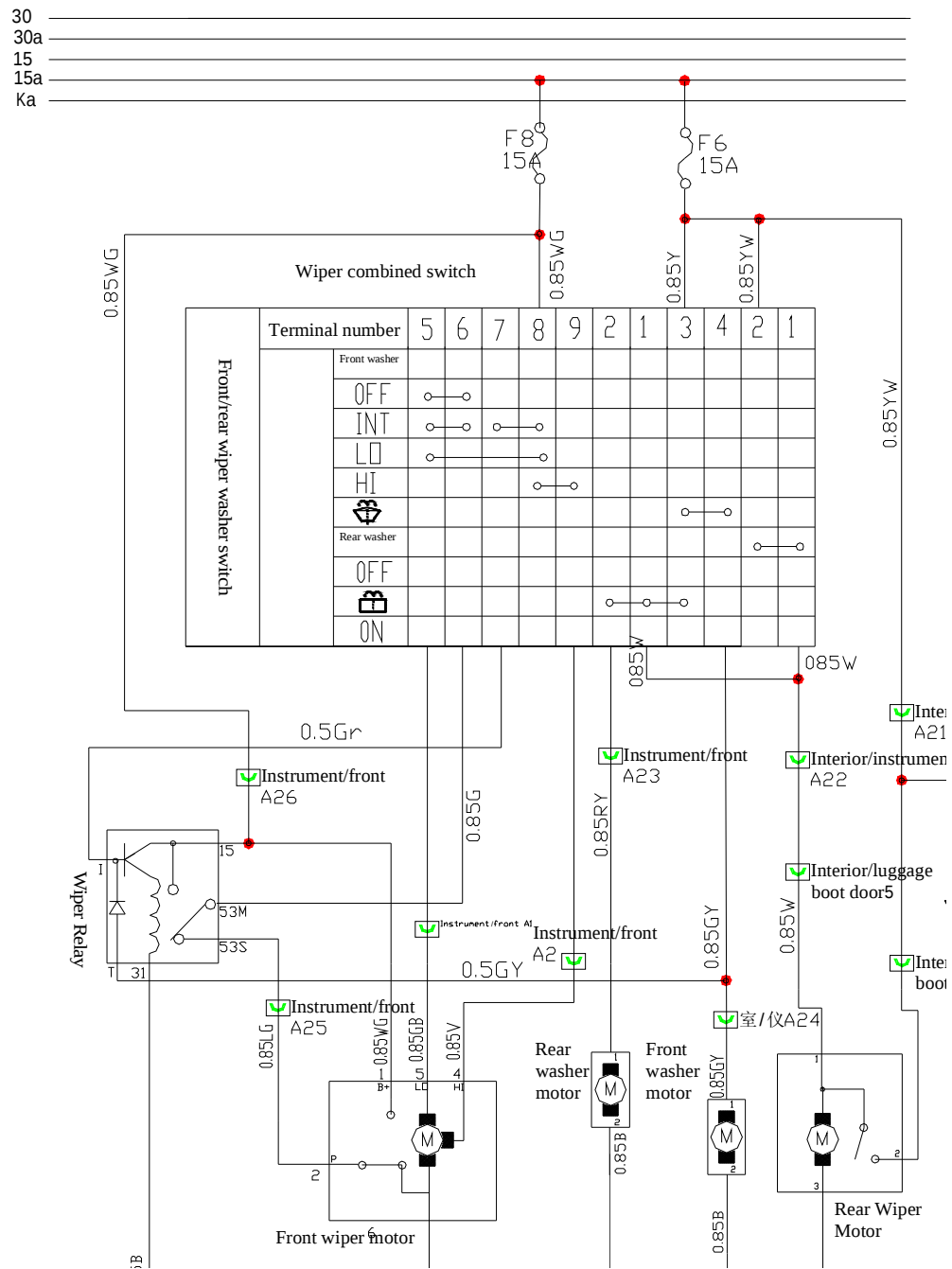
VII. A/C, Defroster System



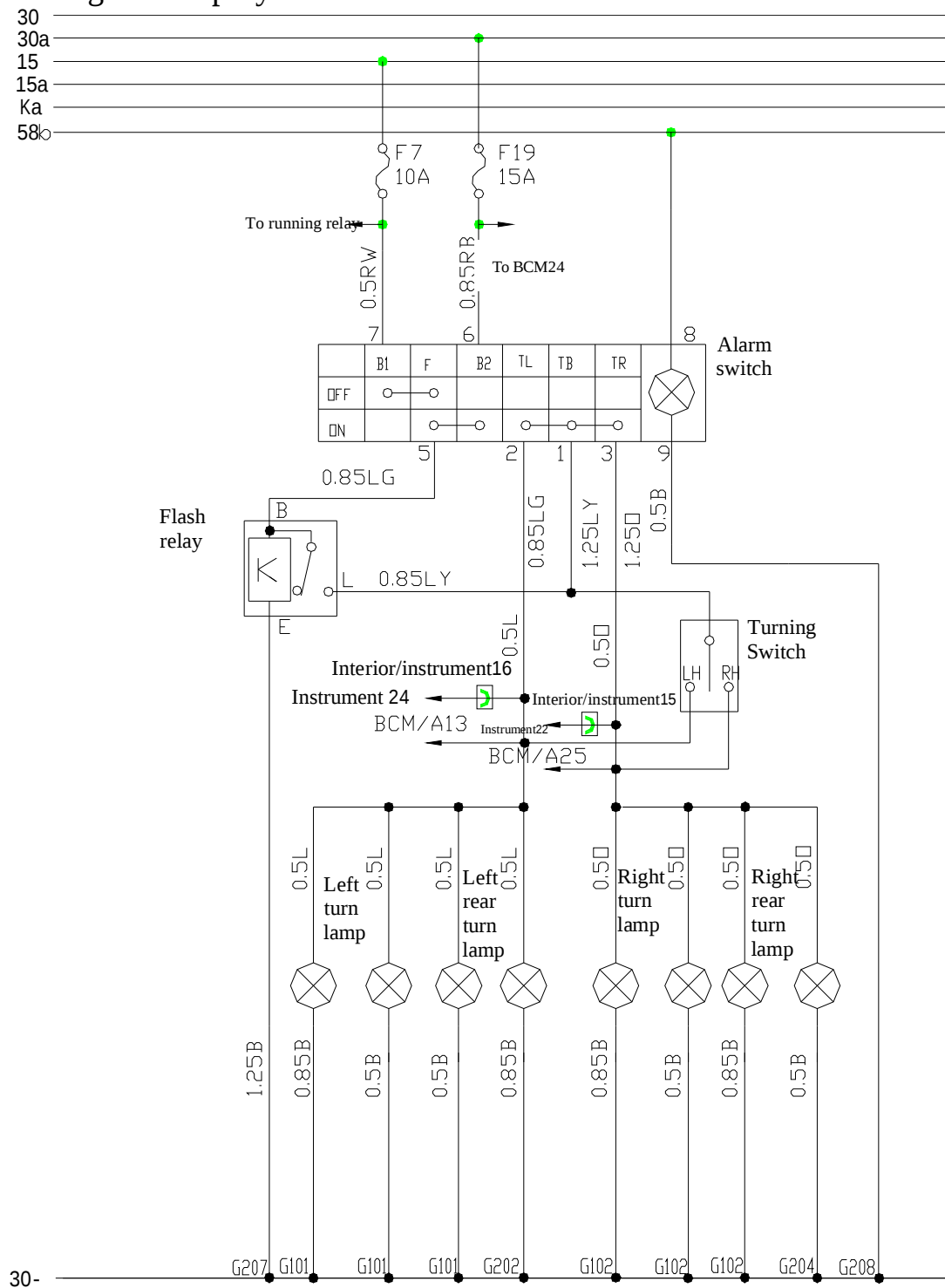
VIII. Ceiling Lamp, Luggage Boot Lamp, and Sunroof System



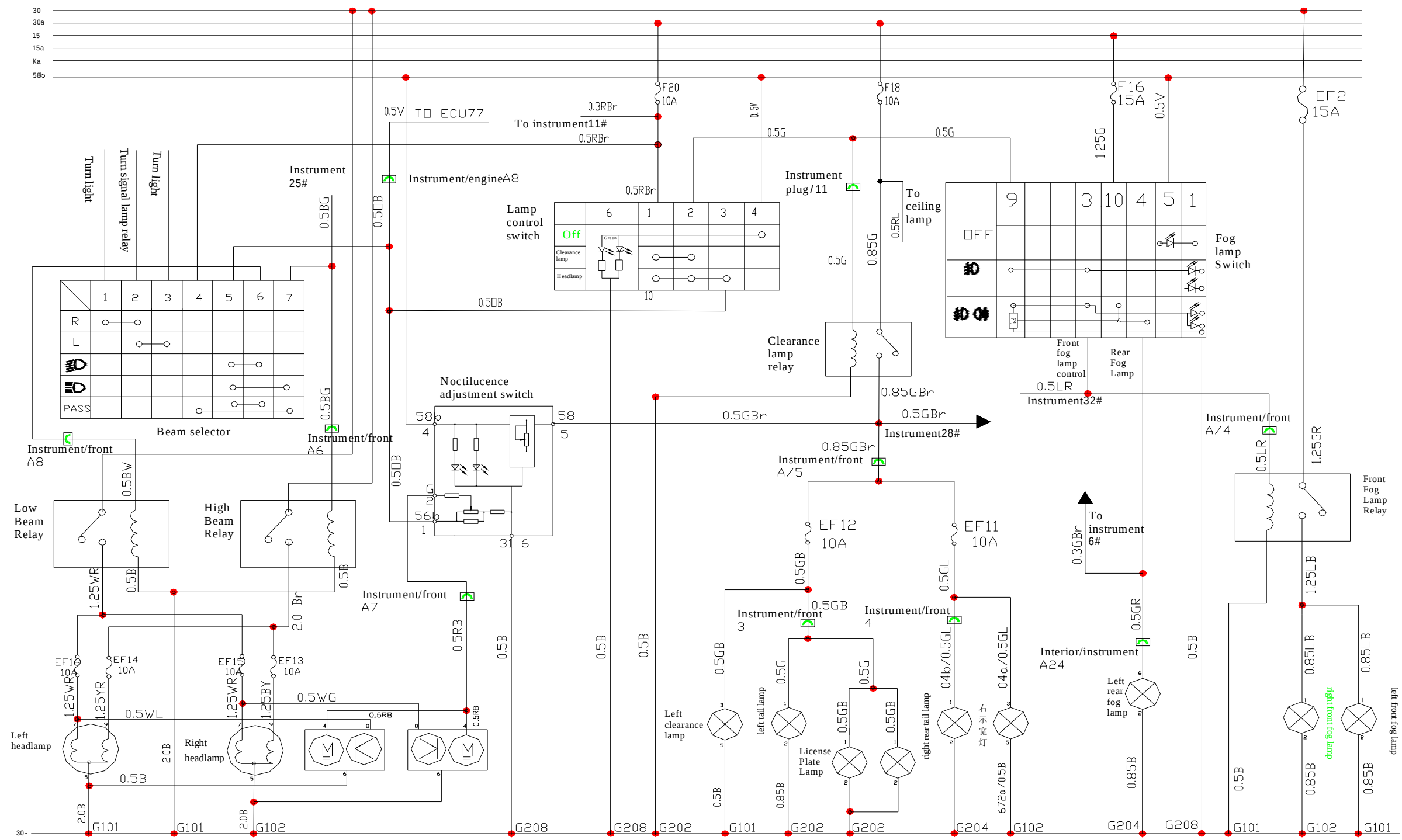
IX. Front/Rear Wiper System



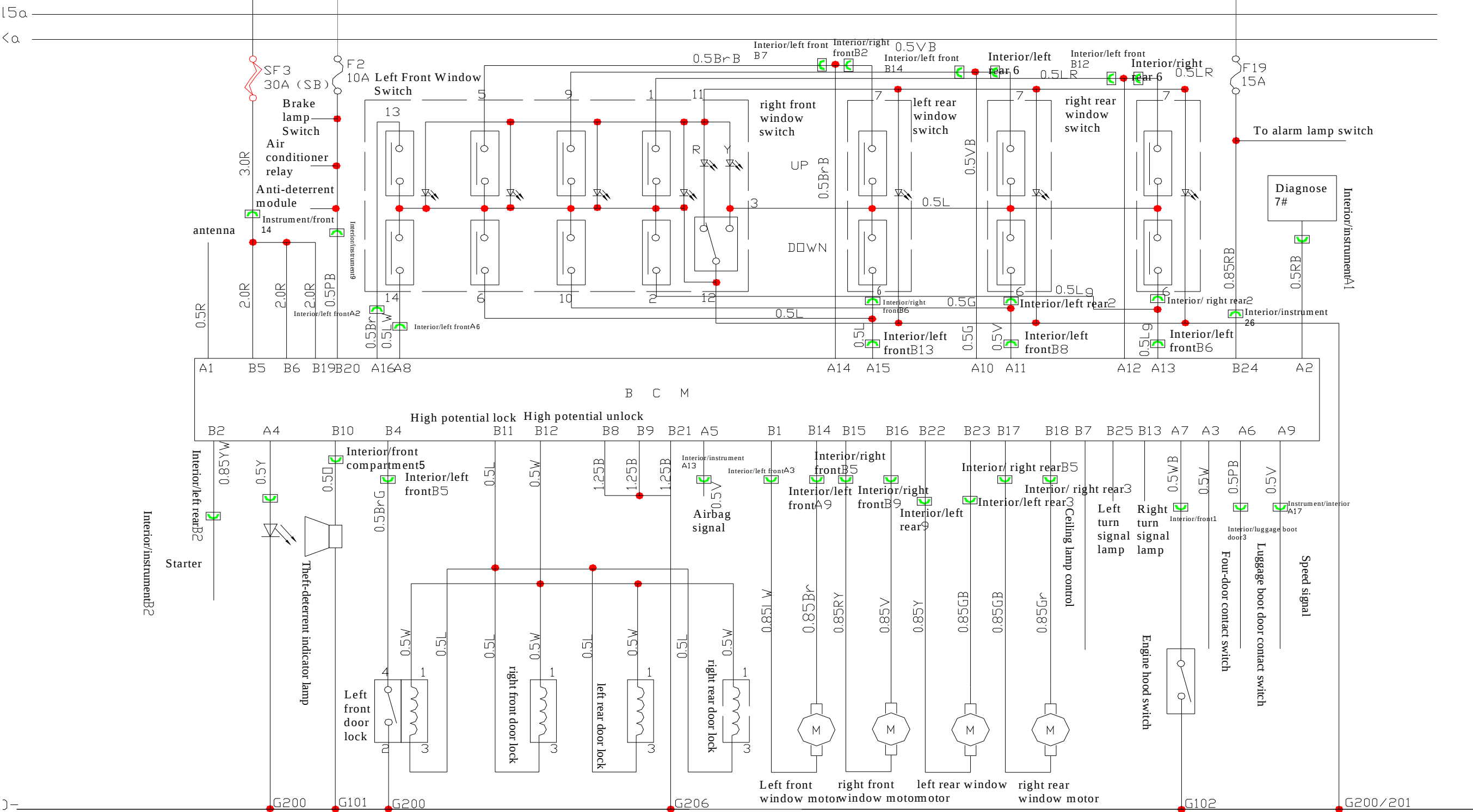
X. Turn Signal Lamp System



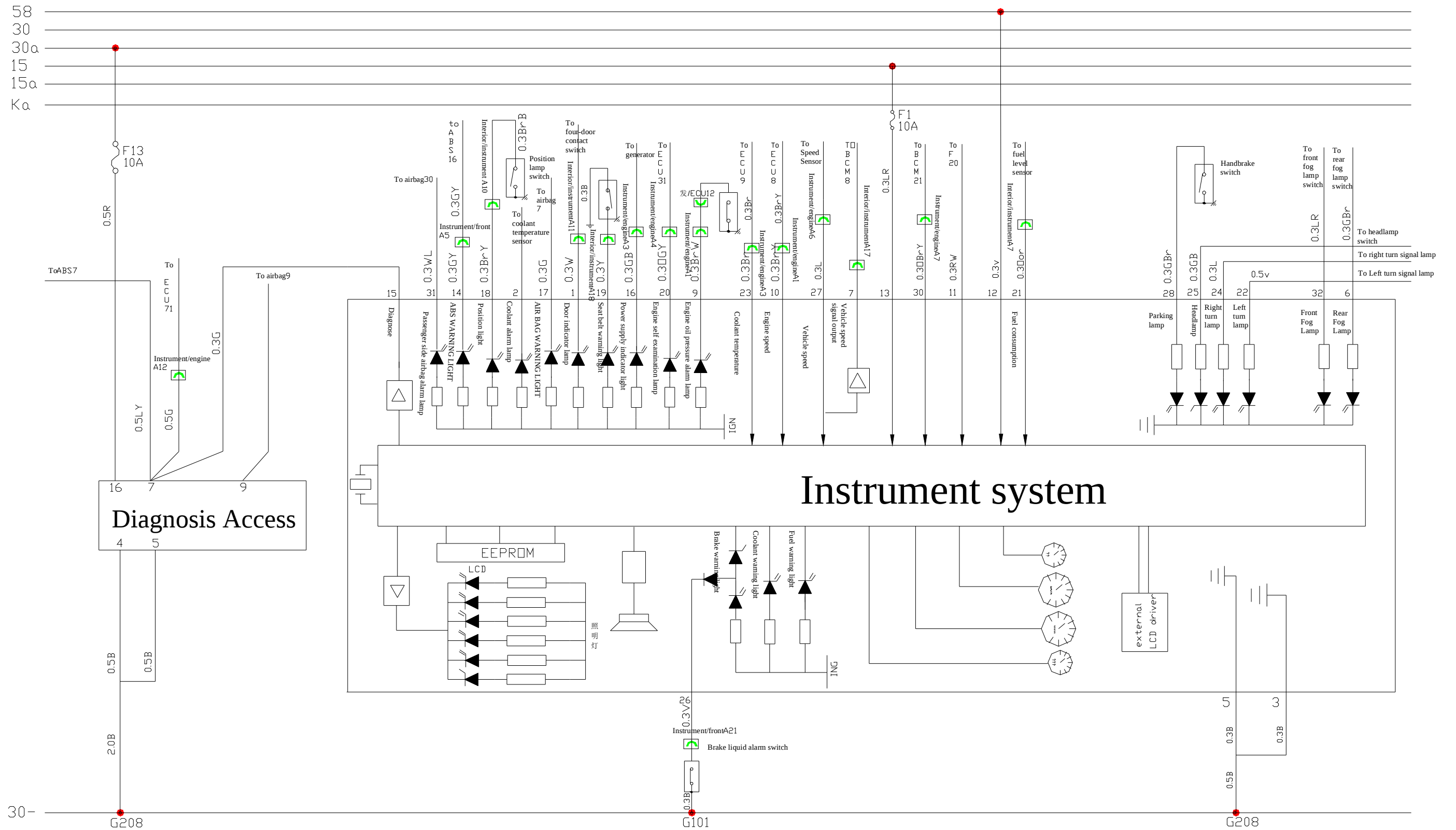
XII. Headlamp, Fog Lamp System



XIII. BCM System



XIV. Instrument System



XV. 473 Engine and Liandian Electric Injection System

