معاونت خدمات پس از فروش

مدیریت آموزش فنی

جزوه آموزشی

برق خودروهای سواری دانگفنگ

S30 – H30 & H30 CROSS

کلید مدرک: ۱۵۷۰۱

شهریور ماه ۱۳۹۴

مقدمه :

مجموعه ای که ارائه گردیده است تحت عنوان " راهنمای آموزشی برق خودروی دنگفنگ مدلهای S30 و H30 " بمنظور آشنایی مخاطبین دوره آموزش تخصصی معرفی خودروی فوق با نحوه انجام تعمیرات استاندارد منطبق با آخرین مدارک ارائه شده از کارخانجات شرکت دنگفنگ چین (شهر Wuhan) تهیه و تدوین گردیده است .

لازم به توضیح است پس از مطالعه دقیق مطالب این جزوه و با استفاده از مدارک تعمیرات و آخرین اطلاعات مرتبط با تغییرات در خط تولید خودروی فوق ؛ موجود در فضای سایت مهندسی ایساکو ، میتوان اقدام به رفع ایراد خودروهای مشتریان محترم خدمات پس از فروش نماییم و فعالیت موثر و اثر بخشی در جهت جلب رضایت مشتریان داشته باشیم .

فصل اول :

کلیات

۱) دسته سیمها
۲) کدینگ قطعات الکتریکی
۳) جعبه تقسیم انشعاب برق فضای موتور
۴) رله های فضای موتور و انشعاب بدنه
۵) جعبه فیوز اطاق سرنشین و پینهای آن
۶) انشعاب بدنه در فضای اطاق سرنشین
۷) کانکتور عیب یاب
۸) نمایشگر جلو آمپر وپینهای آن
۹) نقاط انشعاب دسته سیمها
۱۰) کانکتورهای داخلی و پینهای آن

List of harness

Harness code	Name of harness
FL_H	Front harness
IP_H	Instrument panel harness
EG_H	Engine harness
AB_H	Airbag harness
PD_H	Right front door harness
DD_H	Left front door harness
BD_H	Cabin harness
PA_H	Reverse sensor harness
RL_H	Left rear door harness
RR_H	Right rear door harness
LC_H	Luggage compartment harness (rear harness)
BlackD_H	Blackdoor harness-main
	Blackdoor harness-branch
RF_H	Roof harness
AC_H	Air conditioning harness
IGN_SW	Ignition switchharness
INJ_H	Injection harness
CS_H	Cooling fan harness
MIR_H	Electric rearview mirrorharness

List of electrical appliance components

Electrical appliance components	Pin (P)	Colour of connector
D000A (igntion switch)	2	Black
D000B(igntion switch)	2	Brown
D000C(igntion switch)	2	Grey
D001A(cockpit fuse box)	6	Black
D001B(cockpit fuse box)	10	Black
D001C(cockpit fuse box)	7	Black
D001D(cockpit fuse box)	6	White
D001E(cockpit fuse box)	12	Black
D001F(cockpit fuse box)	8	Black
D001G(cockpit fuse box)	2	Black
D001H(cockpit fuse box)	16	Grey red
D001I(cockpit fuse box)	6	Black
D002(engine compartment fuse box)	--	--
D003 (diagnostic unit)	16	Black
D004A(combination instrument A)	26	Blue
D004B(combination instrument B)	26	Yellow
D020A(light combination switch A)	9	Black
D020B(light combination switch B)	5	White
D101(starter)	1	
D102(generator)	1	
D1120(knock sensor)	2	Black
D1135(ignition coil)	4	Grey
D1203(inertia switch)	3	Black
D1210(fuel pump)	4	Black
D1211(fuel gauge)	3	Brown
D1215(canister purge valve)	2	Brown
D1256 (oil pump controller)	5	White
D1261(accelerator pedal sensor)	4	Black
D1262(throttle valve)	6	Brown
D1312(intake pressure sensor)	4	Grey
D1313(engine speed sensor)	2	Black

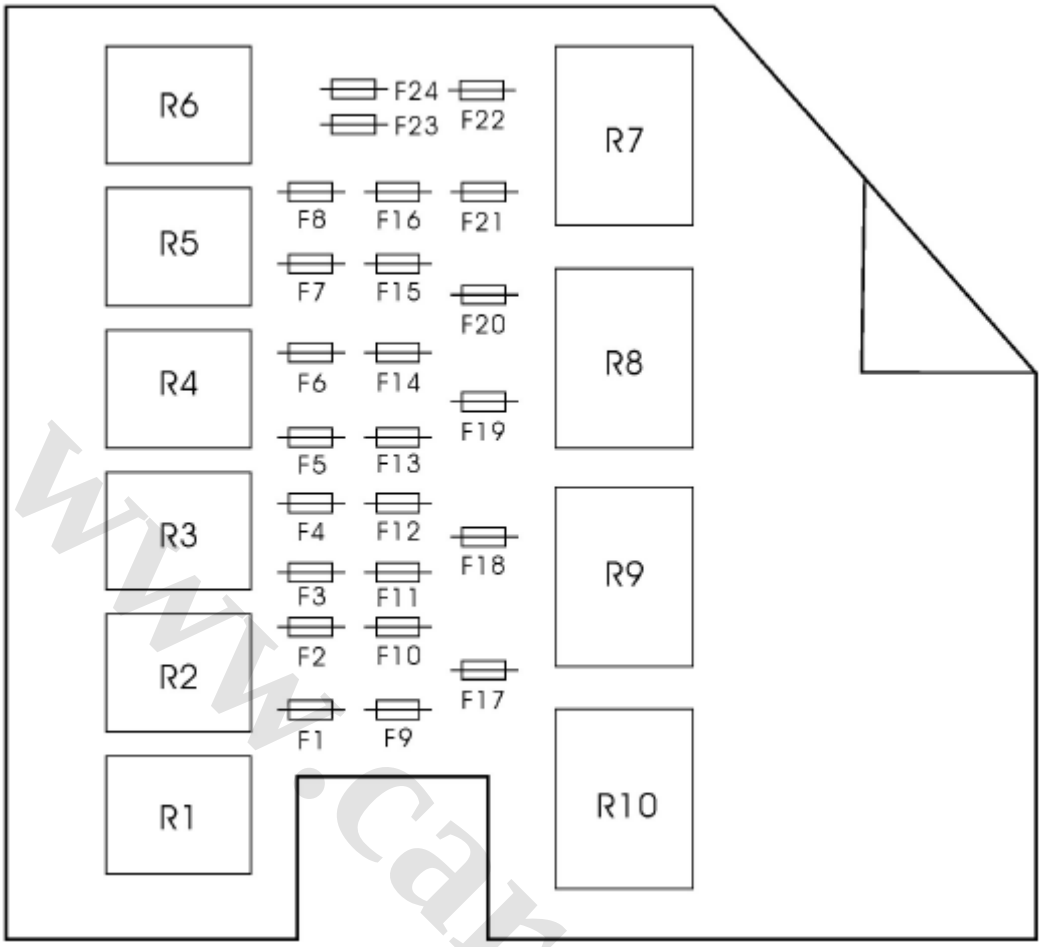
Electrical appliance components	Pin (P)	Colour of connector
D1320A(engine computer CLC)	48	Brown
D1320B(engine computer CLM1)	32	Black
D1320C(engine computer CLM2)	32	Grey
D1350(front oxygen sensor)	4	Green
D1351(rear oxygen sensor)	4	Blue
D1601A(transmission control module A)	24	White
D1601B(transmission control module B)	26	White
D1602A(transmission unit)	10	Grey
D1602B(gear selector switch)	9	Grey
D1603(mode selector switch)	8	Grey
D1604(transmission shift lock)	6	Grey
D1605(input speed sensor)	2	Blue
D1620(vehicle speed sensor)	3	White
D1620A(vehicle speed sensor)	3	Black
D210(brake switch)	2	Black
D210A(brake switch)	4	White
D2100(No.3 brake lamp)	2	White
D2100(No.3 brake lamp H30)	2	
D220(back-up lamp switch)	2	White
D2300(hazard warning lamp switch)	6	Brown
D252(high-pitched horn)	2	White
D2610(left headlamp)	6	Black
D2610A(left front steering lamp)	2	Black
D2615(right headlamp)	6	Black
D2615A(right front steering lamp)	2	Black
D2620(left rear combination lamp-body S30)	4	Black
D2620(left rear combination lamp H30)	6	
D2620A(left rear combination lamp-luggage compartment S30)	4	White
D2620A(left additional brake lamp/position lamp H30)	3	
D2625(right rear combination lamp-body S30)	4	Black
D2625(right rear combination H30)	6	
D2625A(right rear combination lamp-luggage compartment)	4	White
D2625A(right additional brake lamp/position lamp H30)	3	

Electrical appliance components	Pin (P)	Colour of connector
D2630(left license plate lamp)	2	Black
D2630(left license plate lamp H30)	2	
D2635(right license plate lamp)	2	Black
D2635(right license plate lamp H30)	2	
D2640(left front fog lamp)	2	Black
D2645(right front fog lamp)	2	Black
D301(front dome lamp)	6	White
D302(rear dome lamp)	3	White
D310A(luggage compartment lamp+)	1	Black
D310B(luggage compartment lamp-)	1	Black
D4005(engine coolant temperature sensor)	3	Blue
D412(oil pressure sensor)	2	Grey
D500(wiper combination switch)	11	Grey
D501(wiper motor)	5	White
D501A(rear wiper motor H30)	3	
D510(washing pump motor)	2	Black
D6000(master switch of window lifter)	18	White
D6011(window lifter motor)	3	Orange
D6015(window lifter switch)	5	White
D6016(window lifter motor)	3	Orange
D602(economic mode switch)	6	Black
D6020(window lifter switch)	5	White
D6021(window lifter motor)	3	Orange
D6210(Door lock)	6	Brown
D6215(Door lock)	6	Brown
D6220(Door lock)	5	Brown
D6260(luggage compartment lock S30)	3	Green
D6260(hatchback door lock H30)	3	
D6265(luggage compartment switch)	2	Black
D6265(hatchback door lock H30)	2	
D641(rearview mirror regulator)	12	White
D6410(left rearview mirror regulator motor)	5	White
D6415 (right rearview mirror regulator motor)	5	White

Electrical appliance components	Pin (P)	Colour of connector
D650(SRS control module)	50	Pink
D6502(seat belt reminder switch)	2	White
D6520(driver seat belt pretensioner)	2	Brown
D6525(passenger seat belt pretensioner)	2	Brown
D6530 (driver airbag)	2	Green
D6532(driver lateral impact sensor)	2	Orange
D6535(passenger airbag)	2	Green
D6537(passenger lateral impact sensor)	2	Orange
D680(sunroof control module)	6	White
D700(ABS control module)	26	Black
D7010(left front wheel speed sensor)	2	Grey
D7015(right front wheel speed sensor)	2	Grey
D7020(left rear wheel speed sensor)	2	Grey
D7025(right rear wheel speed sensor)	2	Grey
D703(brake fluid switch)	2	Black
D704(parking brake switch)	1	Brown
D721(multi-functional screen)	12	Brown
D723 (quartz clock)	6	Black
D750A(parking assist computer 1)	8	White
D750B(reversing assist computer 2)	6	Black
D7511(right sensor)	3	Black
D7512(right middle sensor)	3	Black
D7513(left middle sensor)	3	Black
D7514(left sensor)	3	Black
D800B(manual air-conditioning control module)	32	Green
D801(air conditioning pressure switch)	4	Brown
D8010(air conditioning compressor)	2	White
D8013(sunshine sensor)	4	White
D8100(cigarette lighter)	3	Black
D820(anti-theft controller module)	18	Black
D820A (rear window defroster +)	1	Black
D820B (rear window defroster -)	1	Black
D821(anti-theft response module)	6	Black

Electrical appliance components	Pin (P)	Colour of connector
D840(rearview mirror fuse)	2	
D840A(radio cassette player A)	8	Black
D840B(radio cassette player B)	8	White
D8410A(bass horn)	2	Black
D8410B(high-pitched horn)	3	Black
D8415A(woofer)	2	Black
D8415B(tweeter)	3	Black
D8420(woofer)	2	Black

Engine compartment fuse box



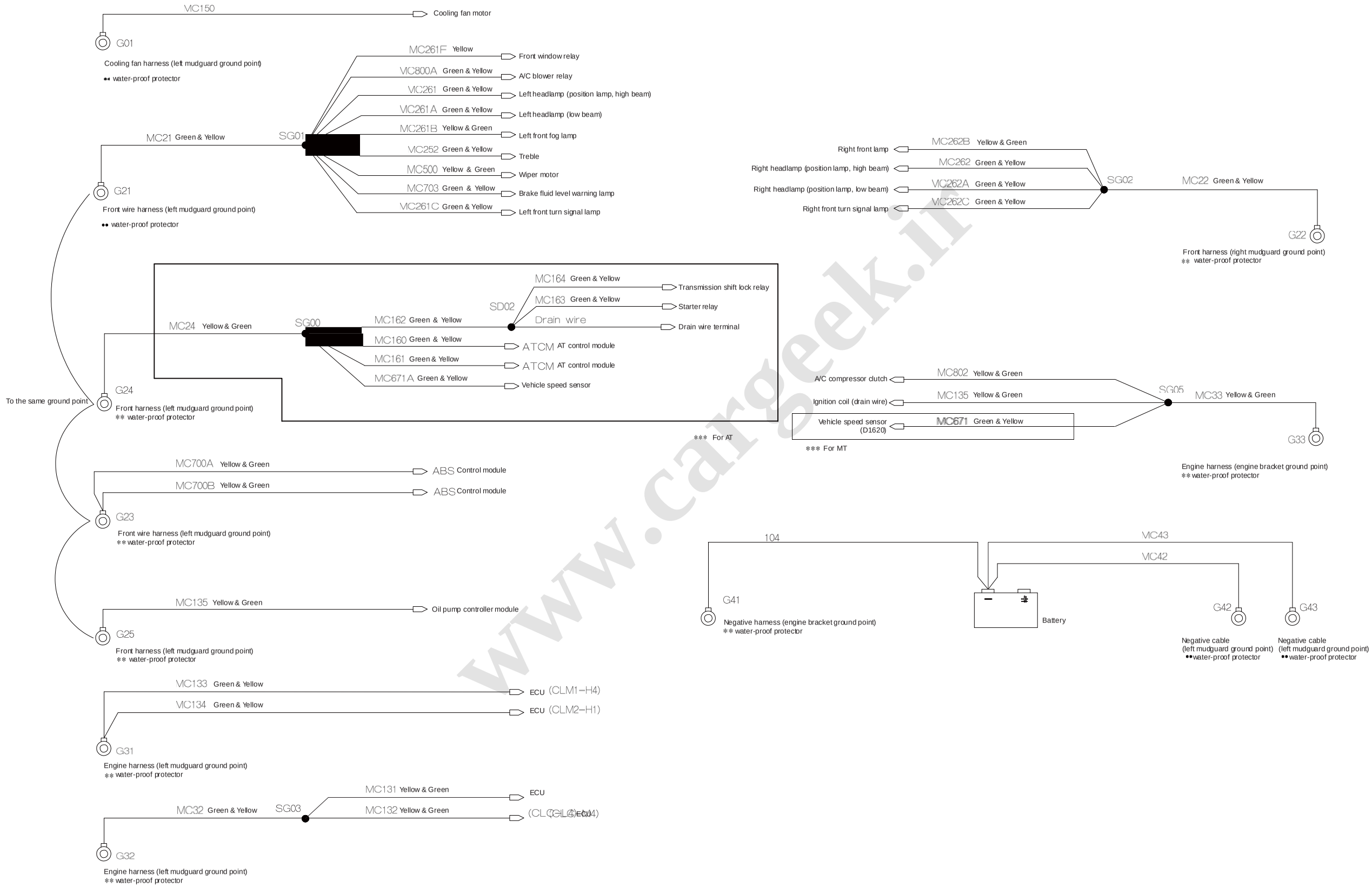
No.	Capacity	Function	Type of fuse
F1	10A	high beam light (left)	MINI
F2	10A	high beam light (right)	MINI
F3	10A	low beam light (left)	MINI
F4	10A	low beam light (right)	MINI
F5	15A	Startup&automatic gearshift lever lock, automatical transmission control unit	MINI
F6	10A	Rear wiper (H30)	MINI
F7	TBD	standby	MINI
F8	TBD	standby	MINI
F9	20A	Engine 1	MINI
F10	20A	Engine 2	MINI
F11	10A	igntion switch	MINI
F12	15A	ABS valve	MINI

No.	Capacity	Function	Type of fuse
F13	20A	ABS pump	MINI
F14	20A	front fog lamp	MINI
F15	10A	horn	MINI
F16	10A	air conditioning compressor clutch	MINI
F17	60A	cooling fan	JCASE
F18	40A	igntion switch	JCASE
F19	50A	cockpit central electric control box power supply	JCASE
F20	50A	cockpit central electric control box power supply	JCASE
F21	40A	air conditioning blower	JCASE
F22	30A	front electric window	JCASE
F23	TBD	standby	ATO
F24	TBD	standby	ATO

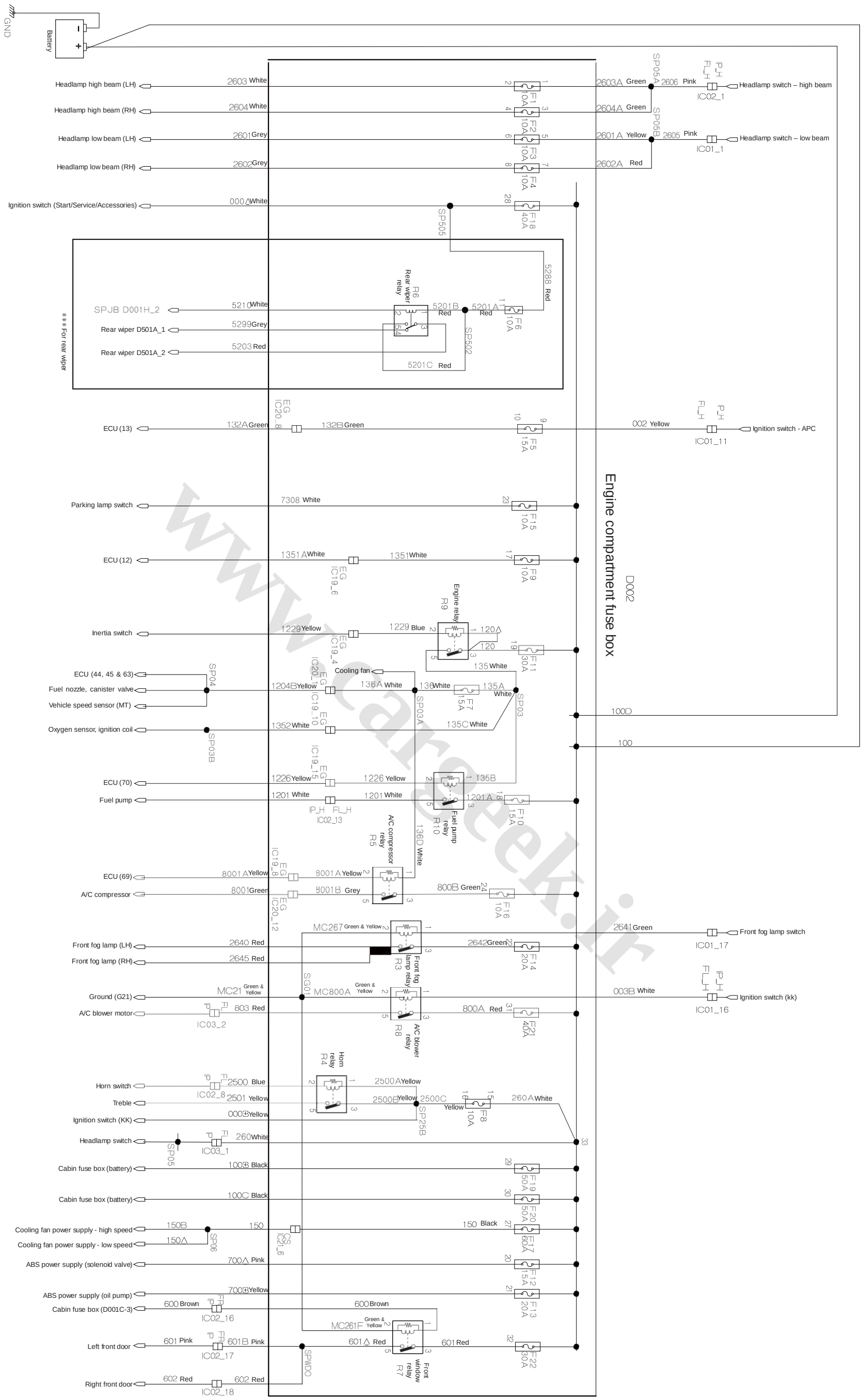
List of relays for the fuse box of engine compartment:

No.	Function
R1	starter relay
R2	automatic gearshift lever lock
R3	front fog lamp relay
R4	horn relay
R5	air conditioning compressor relay
R6	Rear wiper relay H30
R7	front electric window
R8	air conditioning blower relay
R9	engine relay-1
R10	engine relay-2

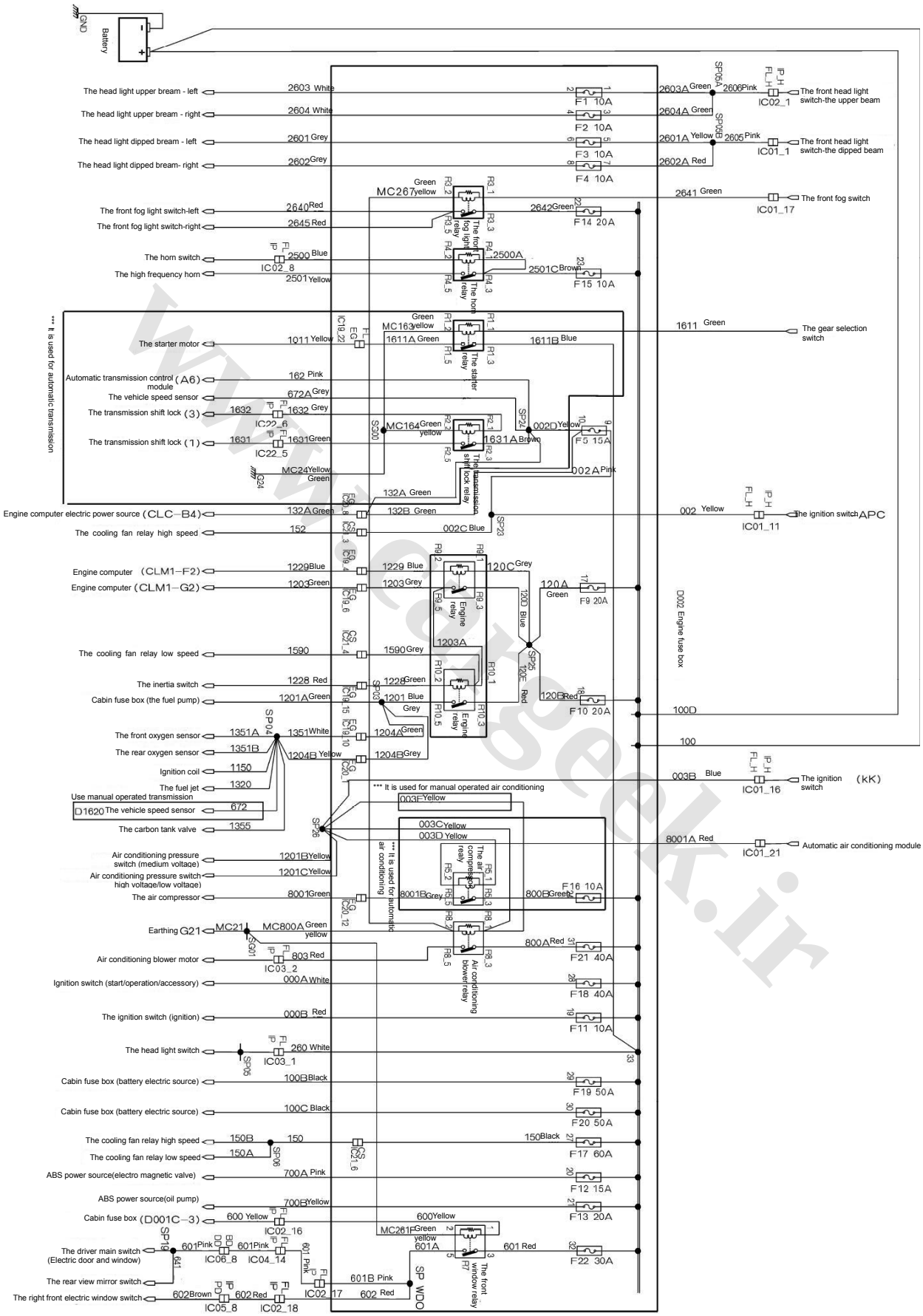
Electrical diagram of engine compartment ground



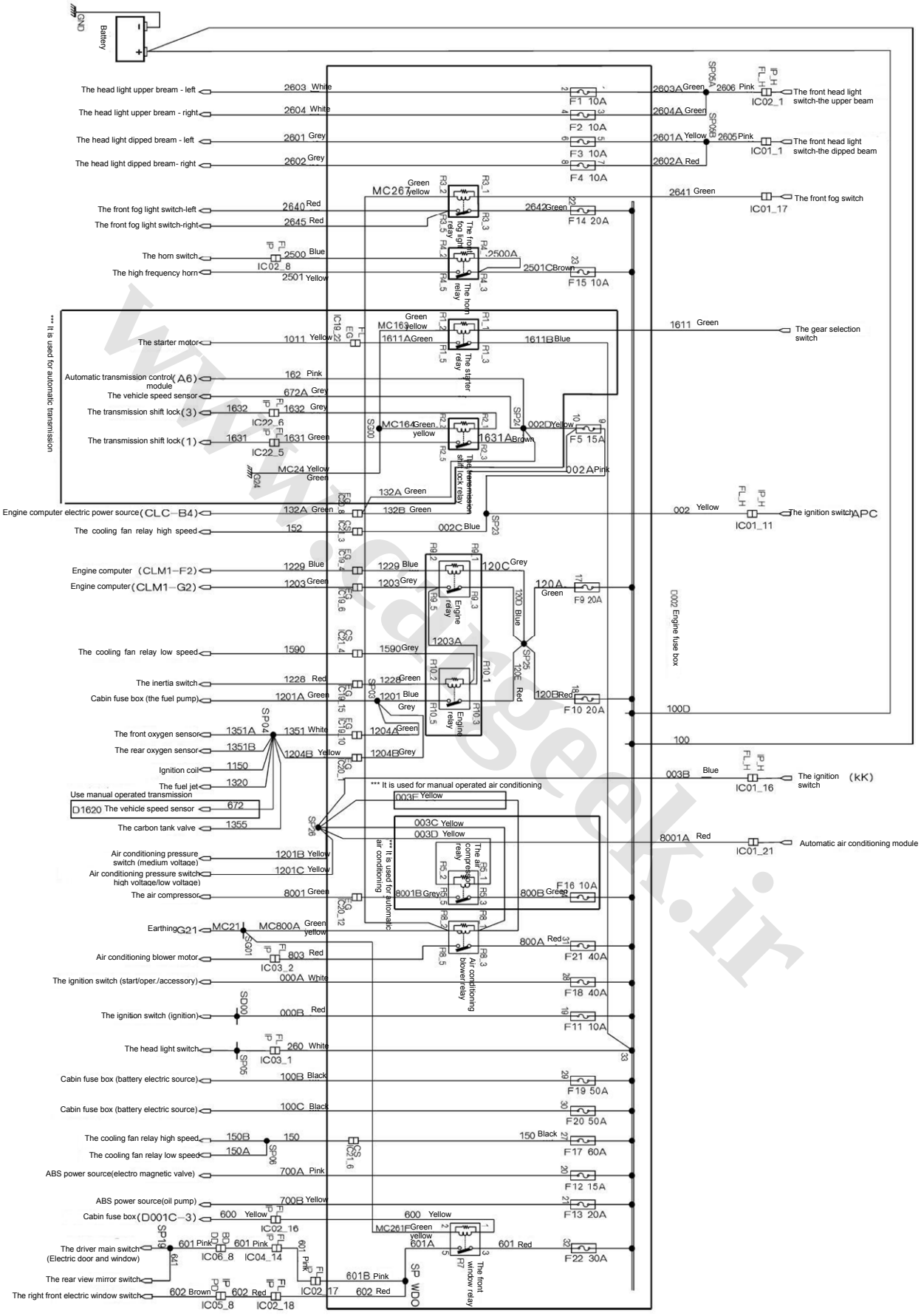
Electrical diagram of engine compartment power distribution



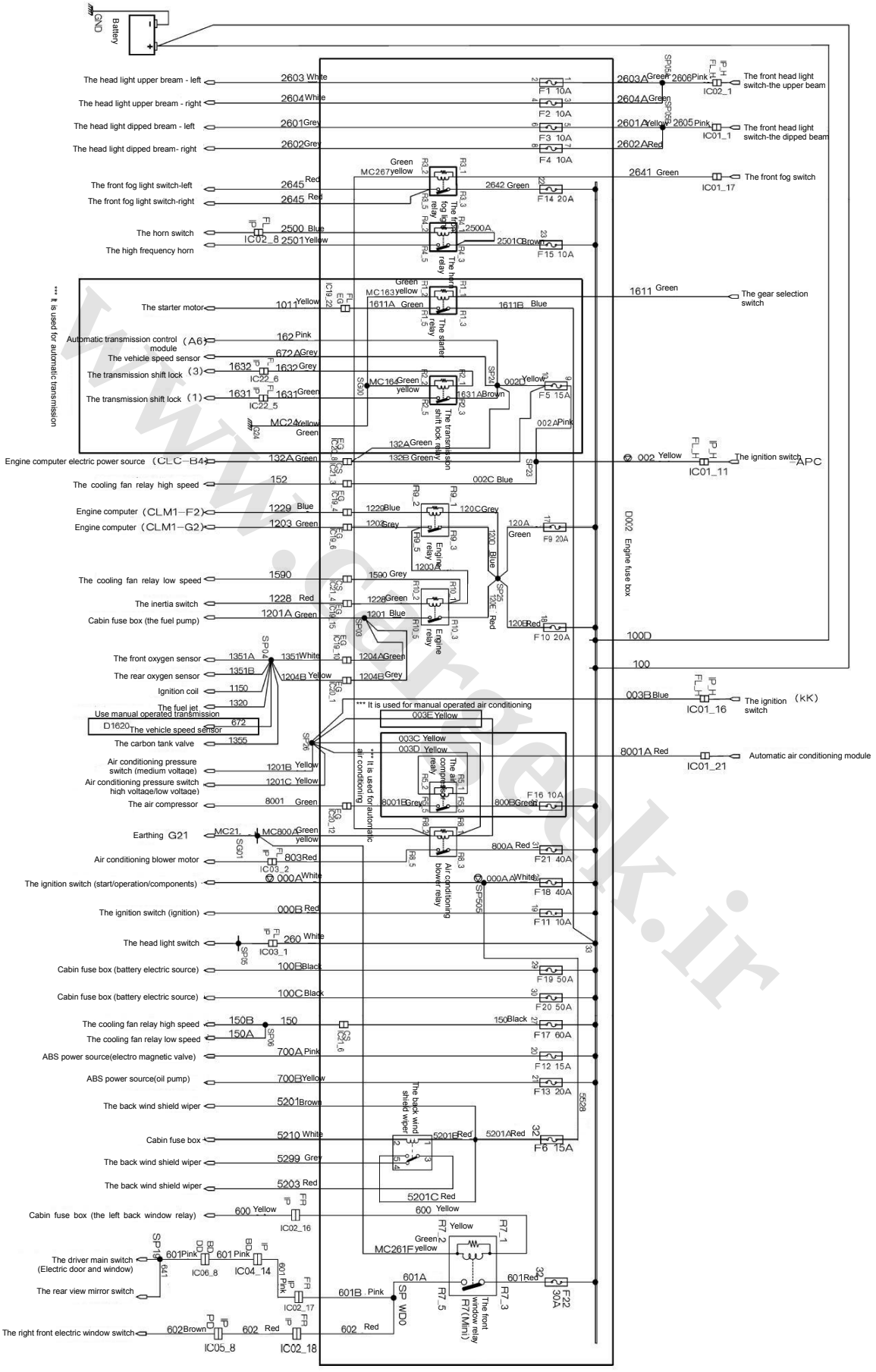
27.1 The electrical schematic diagram for the engine compartment power source distribution S30 (It is applicable to the 6 digits after code VIN, VIN <037670)



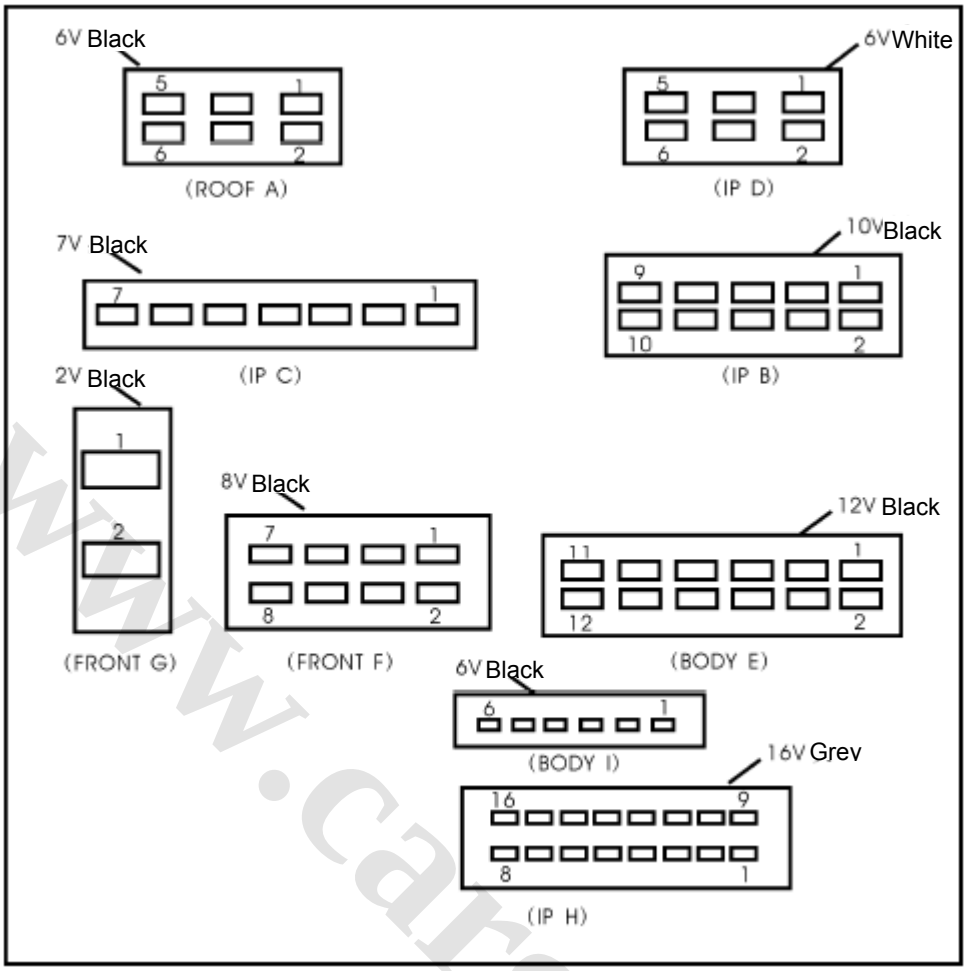
27.2 The electrical schematic diagram for the engine compartment power source distribution S30 (It is applicable to the 6 digits after code VIN, VIN ≥037670)

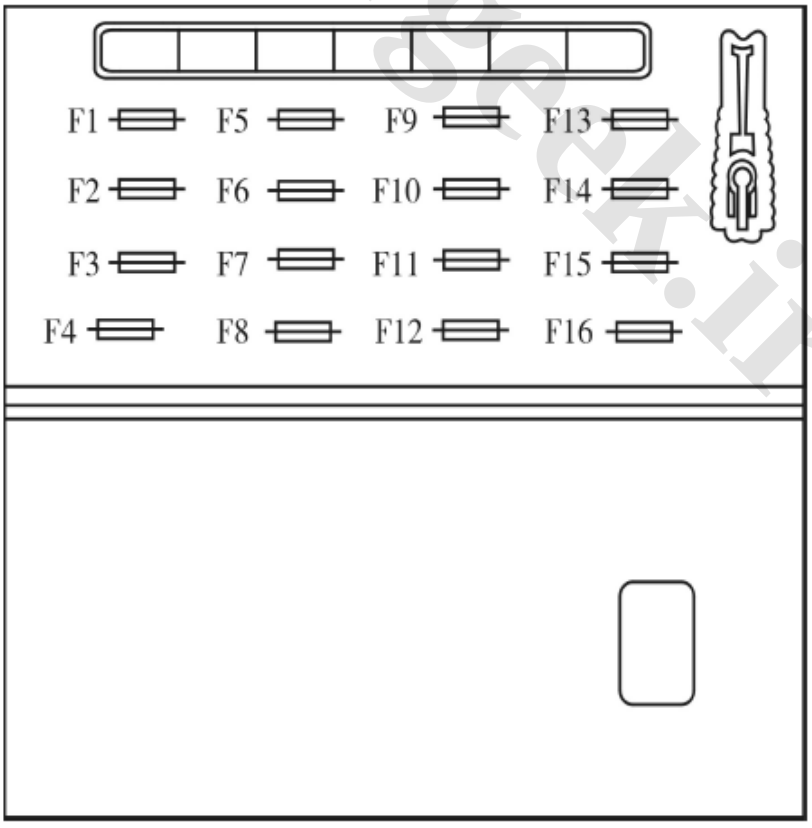


27.3 The electrical schematic diagram for the engine compartment power source distribution H30



Cabin fuse box





List of fuse for the fuse box of cockpit

No.	Capacity	Function of fuse
F1	5A	Right front position lamp, left rear position lamp
F2	5A	Cab illumination
F3	5A	Left front position lamp, right rear position lamp
F4	20A	radio cassette player, theftproof control box, cockpit central control box, theftproof LED indicating lamp, password theftproof indicating lamp, diagnose interface, combination instrument, clock/ multi-functional screen, automatic air-conditioning control module
F5	15A	Theftproof control box, diagnose interface, brake lamp switch, reversing light switch, combination instrument, back-up lamp switch ECU, ABS module, gear selector switch, mode selector switch, multi-functional screen
F6	10A	SRS unit
F7	10A	Rear fog lamp
F8	30A	Cigarette lighter
F9	30A	Rear window heater, rearview mirror heater
F10	30A	left rear electric doors and windows, sunroof motor (motor power), front electric rearview mirror/electric rearview mirror adjusting control circuit
F11	5A	Front dome lamp, rear dome lamp, luggage compartment lamp
F12	20A	Door –locked/unlocked, luggage compartment-unlocked, front wiper automatic reset
F13	5A	radio cassette player, clock, battery charging indicator, sunroof module
F14	20A	front wiper brush, front windshield washer
F15	15A	fuel pump
F16	30A	right rear electric window power supply

List of relays for the fuse box of cockpit

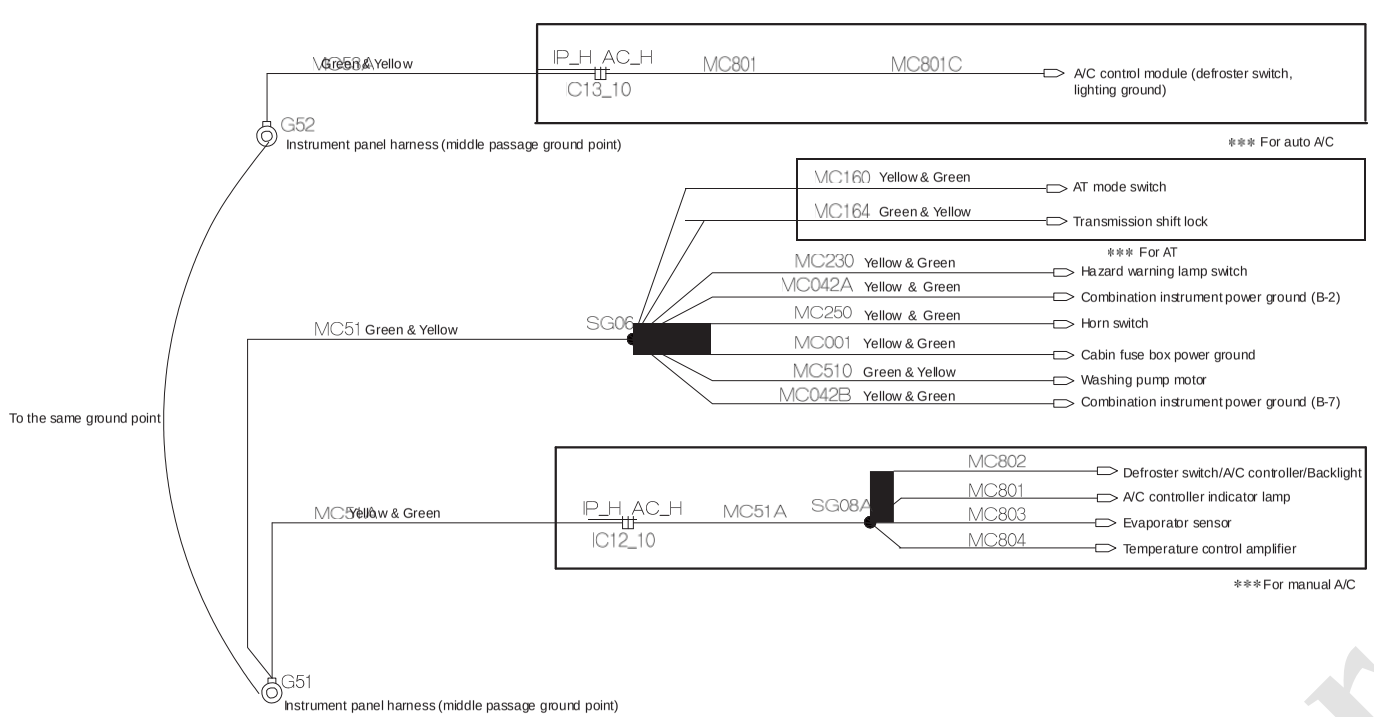
No.	Name of relay
1	left rear window relay
2	Door locking relay
3	Door unlocking relay
4	luggage compartment unlocking relay
6	front wiper relay
7	rear window defroster relay

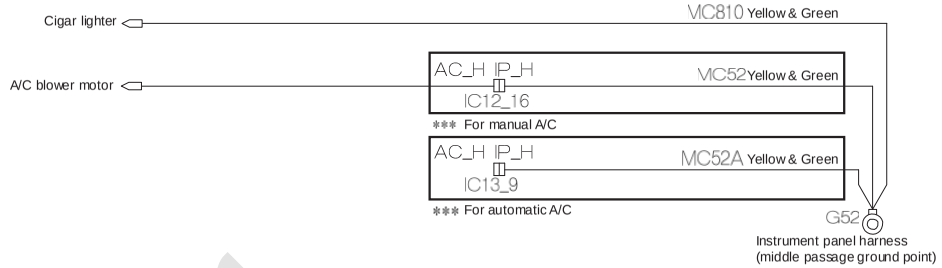
List of pins for the fuse box of cockpit

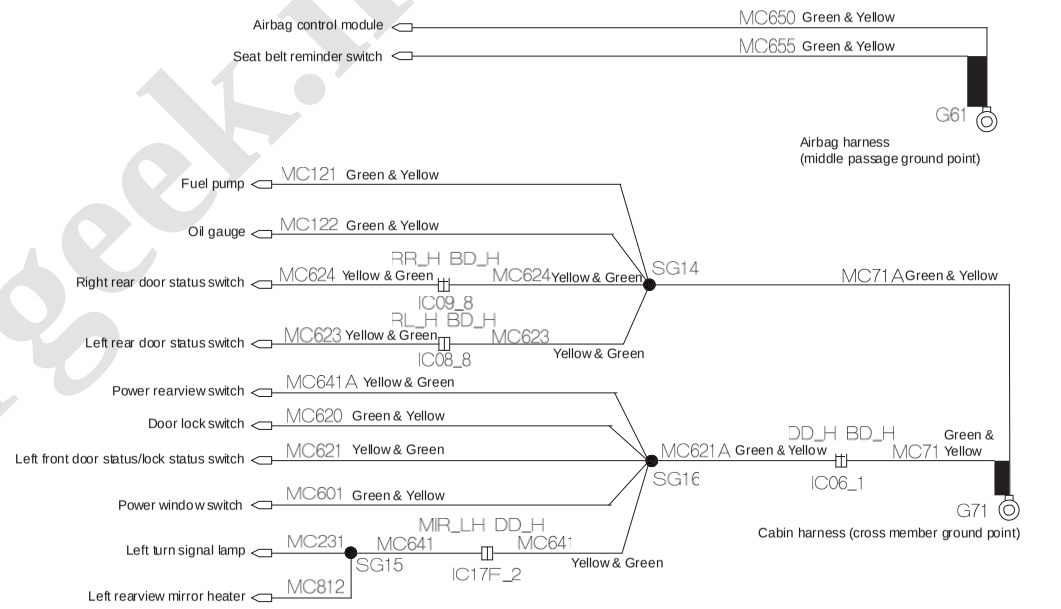
Pin	Definition
IP B_1	Connected to rear fog lamp switch
IP B_2	DVD\radio cassette player, theft proof alarm controller, combination instrument, theftproof LED indicating lamp, diagnose interface, quartz clock \multi-functional screen, automatic transmission control module power supply
IP B_3	Combination instrument, air conditioning control panel, multi-functional screen, radio cassette player, quartz clock back lighting, cigar lighter, hazard warning lamp
IP B_4	
IP B_5	Airbag module APC power supply
IP B_6	Cigarette lighter socket B+power supply
IP B_7	DVD\radio cassette player, battery charging alarm lamp, quartz clock and ACC power supply of multi-functional screen
IP B_8	
IP B_9	Connected brake switch, brake lamp
IP B_10	APC power supply of combination instrument, ABSAPC power supply, diagnostic unit, automatic transmission, theftproof alarm controller, brake switch, back-up lamp switch(reverse sensor ECU) , gear selector switch, mode selector switch
IP C_1	Right front door close+
IP C_2	Right front door open-
IP C_3	Front/rear electric window, rearview mirror adjusting power supply drive
IP C_4	ACC power supply of wiper system
IP C_5	Connected to right rearview mirror heater, defroster indicating lamp
IP C_6	Connected to right steering lamp
IP C_7	Connected to left steering lamp
IP C_8	
IP D_1	Connected to igntion switch APC gear
IP D_2	Connected to position lamp switch
IP D_3	Connected to igntion switch ACC gear
IP D_4	Connected to igntion switch KK gear
IP D_5	
IP D_6	Power supply ground
IP H_1	Intermittent position of rear wiper switch (H30)
IP H_2	Connected to fuse box R6 relay of cockpit
IP H_3	Connected to front washer switch
IP H_4	Key reminder input of theftproof alarm controller
IP H_5	Intermittent position of front wiper switch
IP H_6	
IP H_7	
IP H_8	Connected to left steering switch
IP H_9	Connected to defroster switch
IP H_10	Connected to right steering switch
IP H_11	Connected to the slightly open switch of right front door and the open door indicating lamp of combination instrument
IP H_12	Connected to flushing switch (H30)
IP H_13	Connected to hazard warning lamp switch
IP H_14	Signal feedback of rear wiper

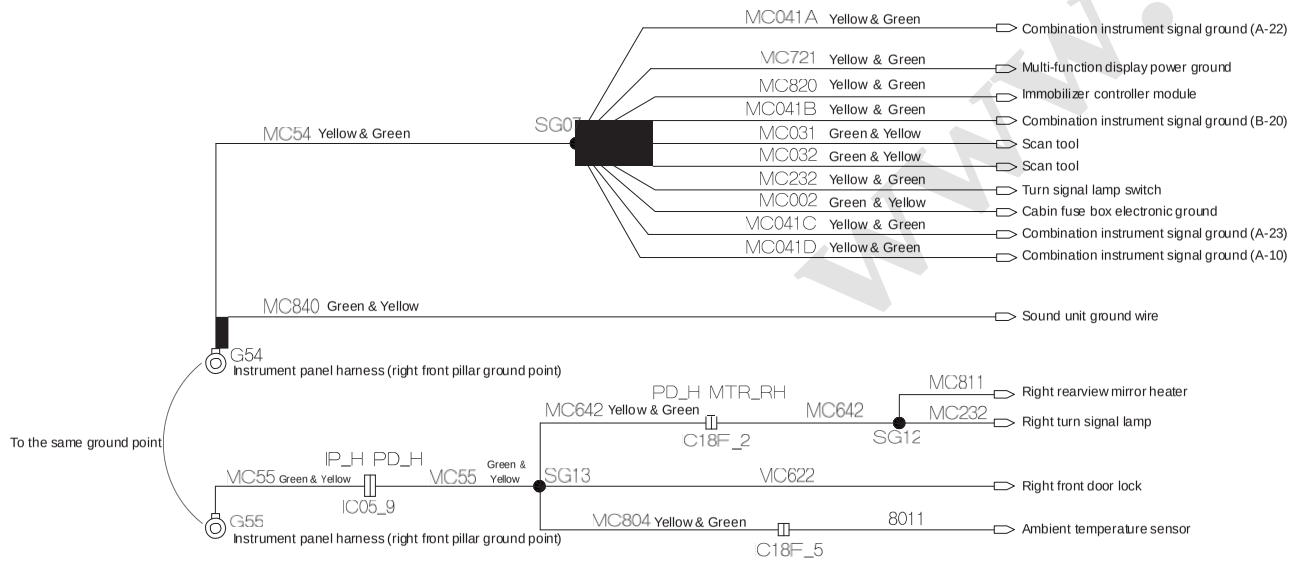
Pin	Definition
IP H_15	Connected to airbag trigger
IP H_16	Logic ground
RF A_1	Connected to the ON position of front/rear dome lamp switch, high-mounted stop lamp and sunroof module
RF A_2	Connected to high-mounted stop lamp
RF A_3	Connected to sunroof module
RF A_4	Connected to the DOOR position of front/rear dome lamp switch
RF A_5	Sunroof motor B+power supply
RF A_6	Connected to front dome lamp and rear dome lamp
BD E_1	Connected to right rear position lamp
BD E_2	Connected to left rear position lamp
BD E_3	Connected to luggage compartment lamp
BD E_4	Connected to rear fog lamp
BD E_5	Left front door, front door (left and right) open-
BD E_6	Connected to fuel pump
BD E_7	Main cab door and rear door (left and right) close+
BD E_8	
BD E_9	left rear electric window power supply drive
BD E_10	luggage compartment motor+
BD E_11	Rear windshield, left rearview heater
BD E_12	power supply drive of right rear electric window
BD I_1	left front door lock switch
BD I_2	
BD I_3	left front door lock state
BD I_4	Slightly open switch of left front door, rear door (left and right)
BD I_5	luggage compartment unlocking switch
BD I_6	luggage compartment contact switch
FL F_1	wiper low speed output
FL F_2	wiper stop position
FL F_3	Connected to right front position lamp
FL F_4	Connected to left front position lamp
FL F_5	speed signal input
FL F_6	wiper running position
FL F_7	Connected to cockpit fuse box R10 relay
FL F_8	
FL G_1	cockpit fuse box B+power supply
FL G_2	cockpit fuse box B+power supply

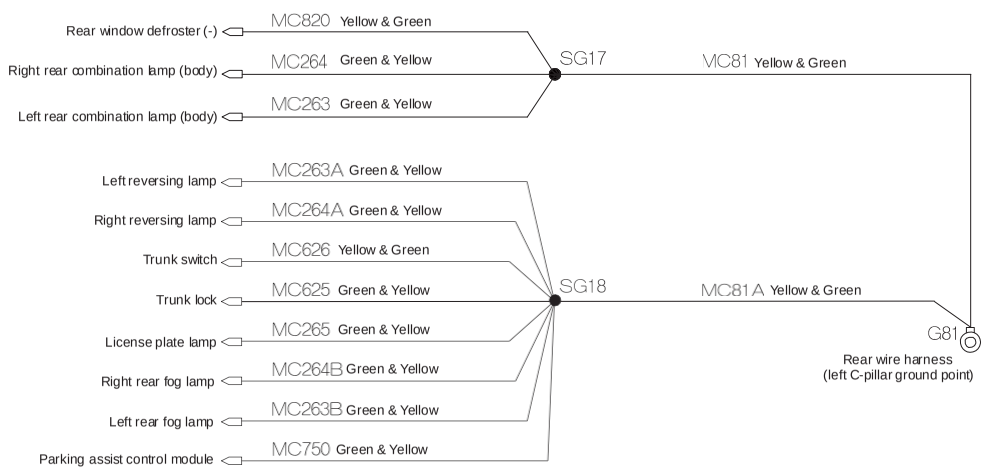
Electrical diagram of cabin ground









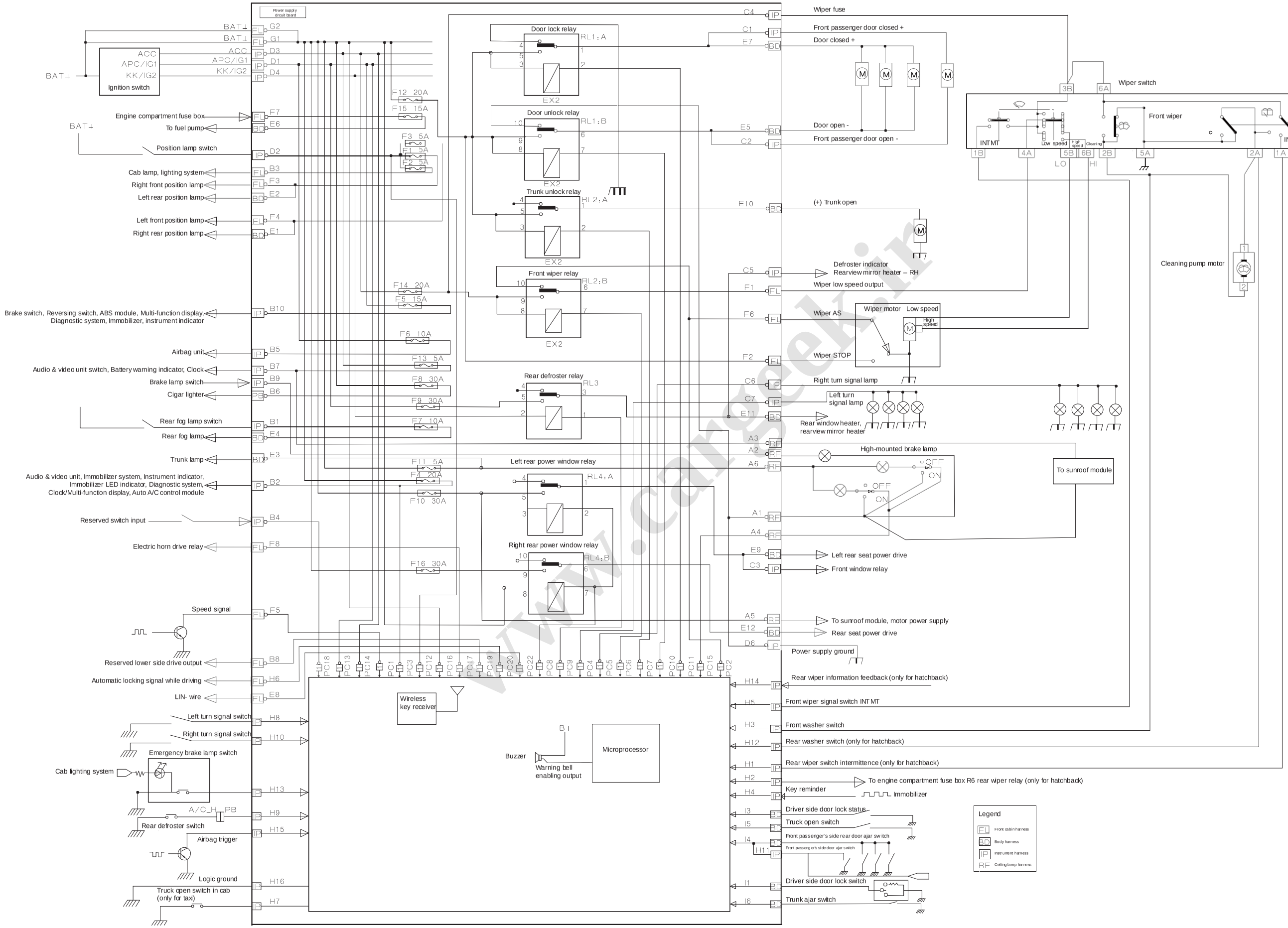


Cabin fuse box pin list:

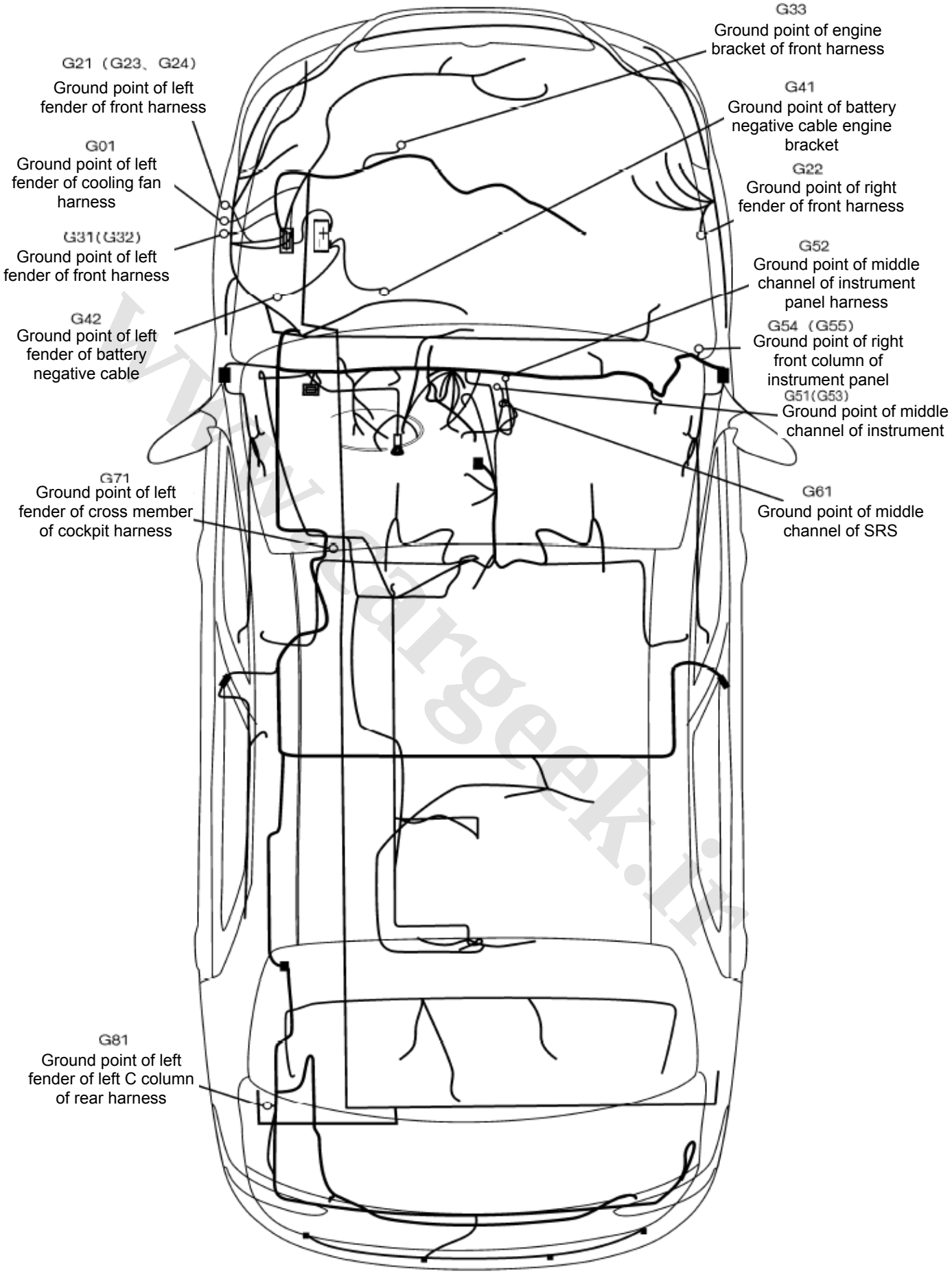
Pin	Definition
IP B_1	Rear fog lamp switch
IP B_2	Audio & video unit, Immobilizer system, Instrument indicator, Immobilizer LED indicator, Diagnostic system, Clock/Multi-function display, Auto A/C control module
IP B_3	Cab lighting lamp
IP B_4	Reserved switch input
IP B_5	Airbag unit
IP B_6	Cigar lighter
IP B_7	Audio & video unit switch, Battery warning indicator, Clock etc.
IP B_8	Reserved lower side drive output
IP B_9	Brake lamp switch
IP B_10	Brake switch, Reversing switch, ABS module, Multi-function display, Diagnostic system, Immobilizer, instrument indicator
IP C_1	Right front door lock
IP C_2	Right front door unlock
IP C_3	Front window relay
IP C_4	Wiper fuse
IP C_5	Defroster indicator lamp, right rearview heater
IP C_6	Right turn signal lamp
IP C_7	Left turn signal lamp
IP D_1	Ignition switch APC/IG1 gear
IP D_2	Position lamp switch
IP D_3	Ignition switch ACC gear
IP D_4	Ignition switch KK/IG2 gear
IP D_5	
IP D_6	Power ground
IP H_1	Rear wiper intermittent switch (only for hatchback)
IP H_2	Engine compartment terminal box (R6) rear wiper relay (only for hatchback)
IP H_3	Front wiper & washer switch
IP H_4	Key reminder input
IP H_5	Front wiper intermittent switch
IP H_6	Automatic locking signal while driving
IP H_7	Truck open switch in cab (only for taxi)
IP H_8	Left turn signal lamp switch
IP H_9	Rear defroster switch
IP H_10	Right turn signal lamp switch
IP H_11	Front passenger side door ajar switch
IP H_12	Rear wiper & washer switch
IP H_13	Hazard waning lamp switch

Pin	Definition
IP H_14	Rear wiper information feedback (only for hatchback)
IP H_15	Airbag trigger
IP H_16	Logic ground
RF A_1	Front/rear ceiling lamp switch ON, High-mounted brake lamp, Sunroof module
RF A_2	High-mounted brake lamp
RF A_3	Sunroof module
RF A_4	Front/rear ceiling lamp switch DOOR
RF A_5	Sunroof motor power supply
RF A_6	Front/Rear ceiling lamp
BD E_1	Right rear position lamp
BD E_2	Left rear position lamp
BD E_3	Trunk lamp
BD E_4	Rear fog lamp
BD E_5	Driver side door/left and right door unlock
BD E_6	Fuel pump
BD E_7	Driver side door/left and right door lock
BD E_8	LIN-wire
BD E_9	Left rear power window power drive
BD E_10	Trunk unlock
BD E_11	Rear window heater, left rearview mirror heater
BD E_12	Right rear power window power drive
BD I_1	Driver side door lock switch
BD I_2	
BD I_3	Driver side door lock status
BD I_4	Driver side door & left/right rear door ajar switch
BD I_5	Trunk unlock switch
BD I_6	Trunk ajar switch
FR F_1	Front wiper low-speed output
FR F_2	Front wiper stop position
FR F_3	Right front position lamp
FR F_4	Left front position lamp
FR F_5	Vehicle speed signal
FR F_6	Wiper operation position
FR F_7	Engine compartment terminal box
FR F_8	Electric horn drive relay
FR G_1	Cabin fuse box battery, positive
FR G_2	Cabin fuse box battery, positive

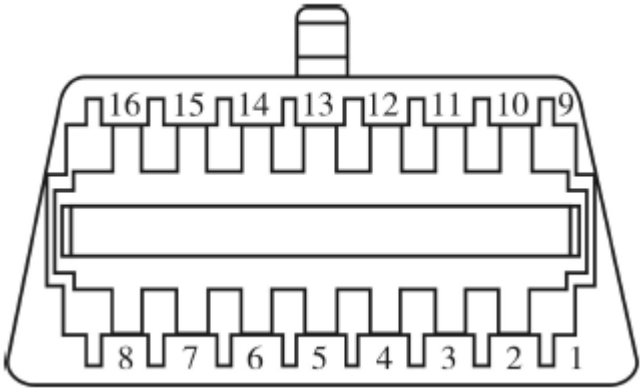
Electrical diagram of passenger side power distribution



Location plan of ground points

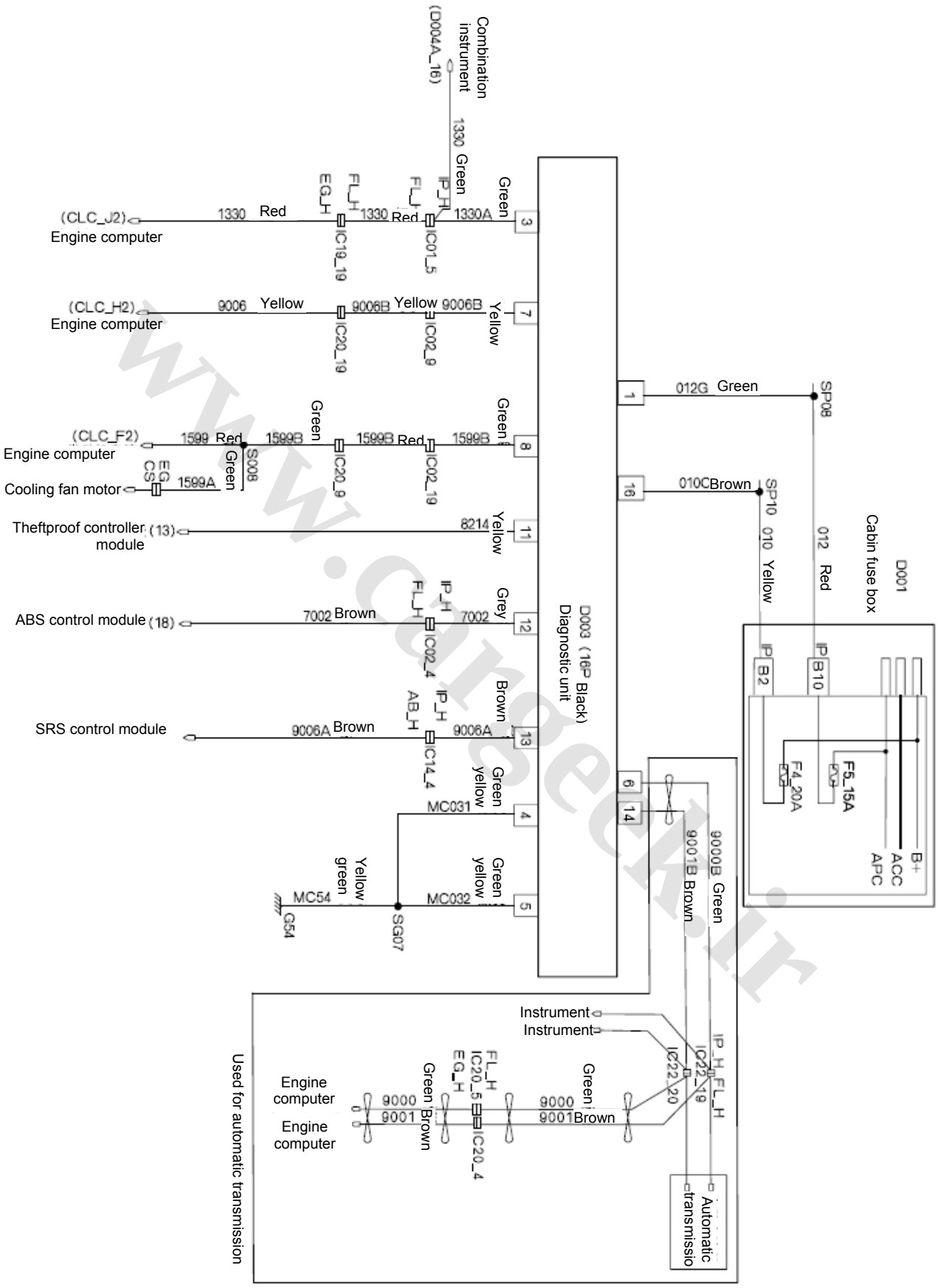


Diagnostic socket



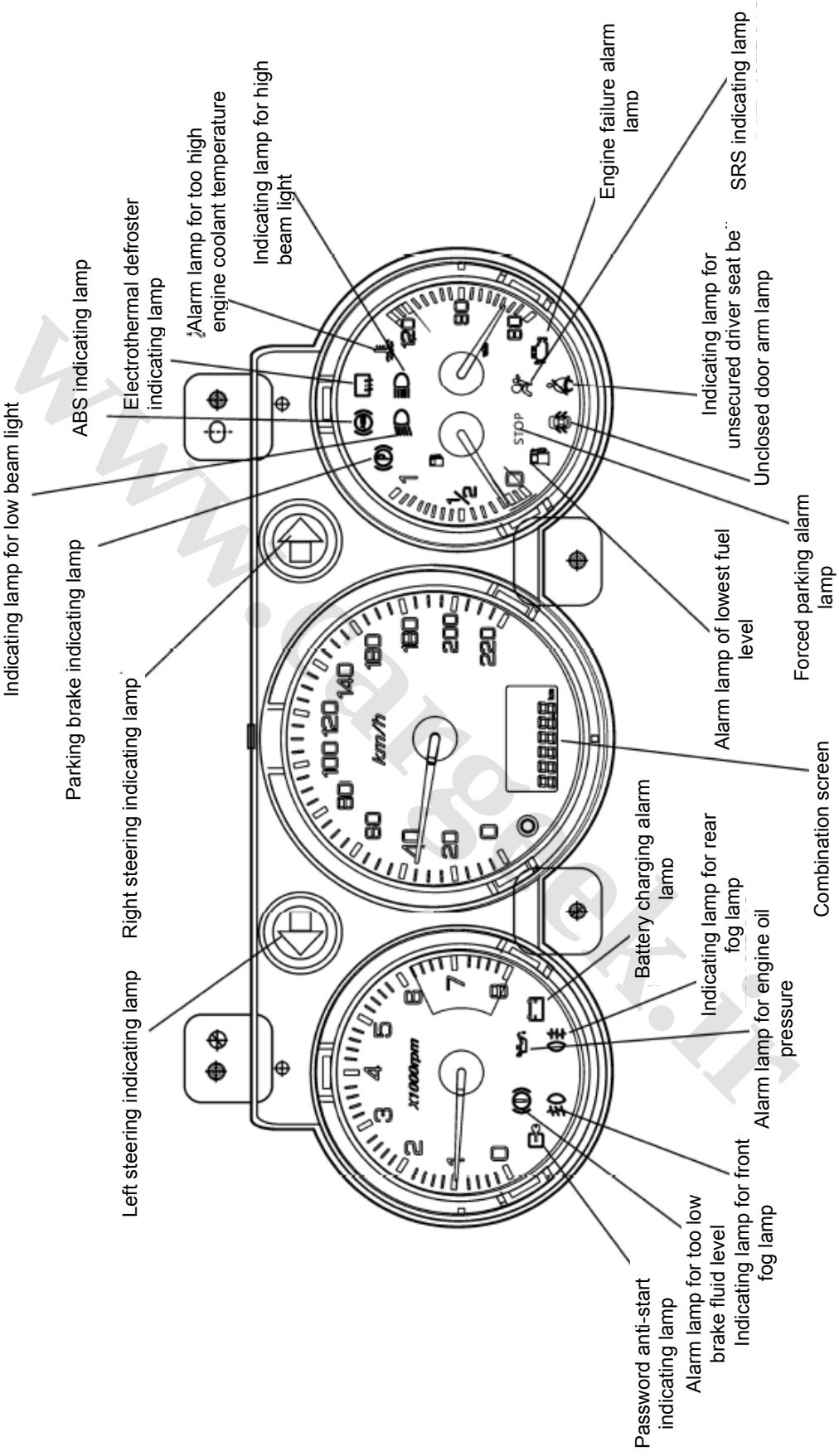
Pin	Function
1	Igntion switch
2	Unused
3	combination instrument ---engine computer
4	Grounding
5	Grounding
6	automatic transmission control module --engine computer
7	engine computer
8	engine computer ---cooling fan motor
9	Unused
10	Unused
11	Anti-theft controller module
12	ABS control module
13	SRS control module
14	automatic transmission control module --engine computer
15	Unused
16	Battery

1. Electrical schematic diagram of diagnostic socket

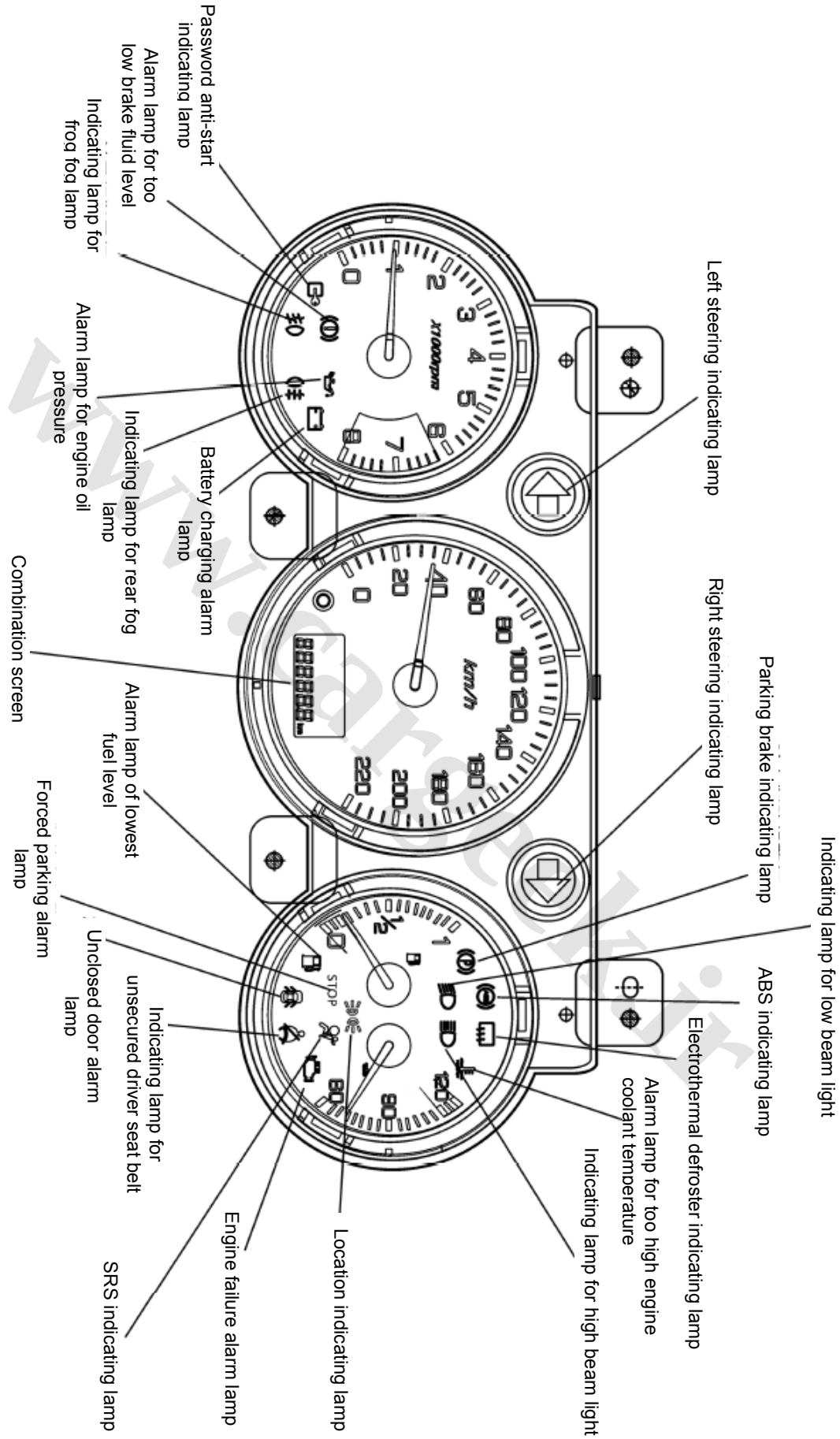


Combination instrument

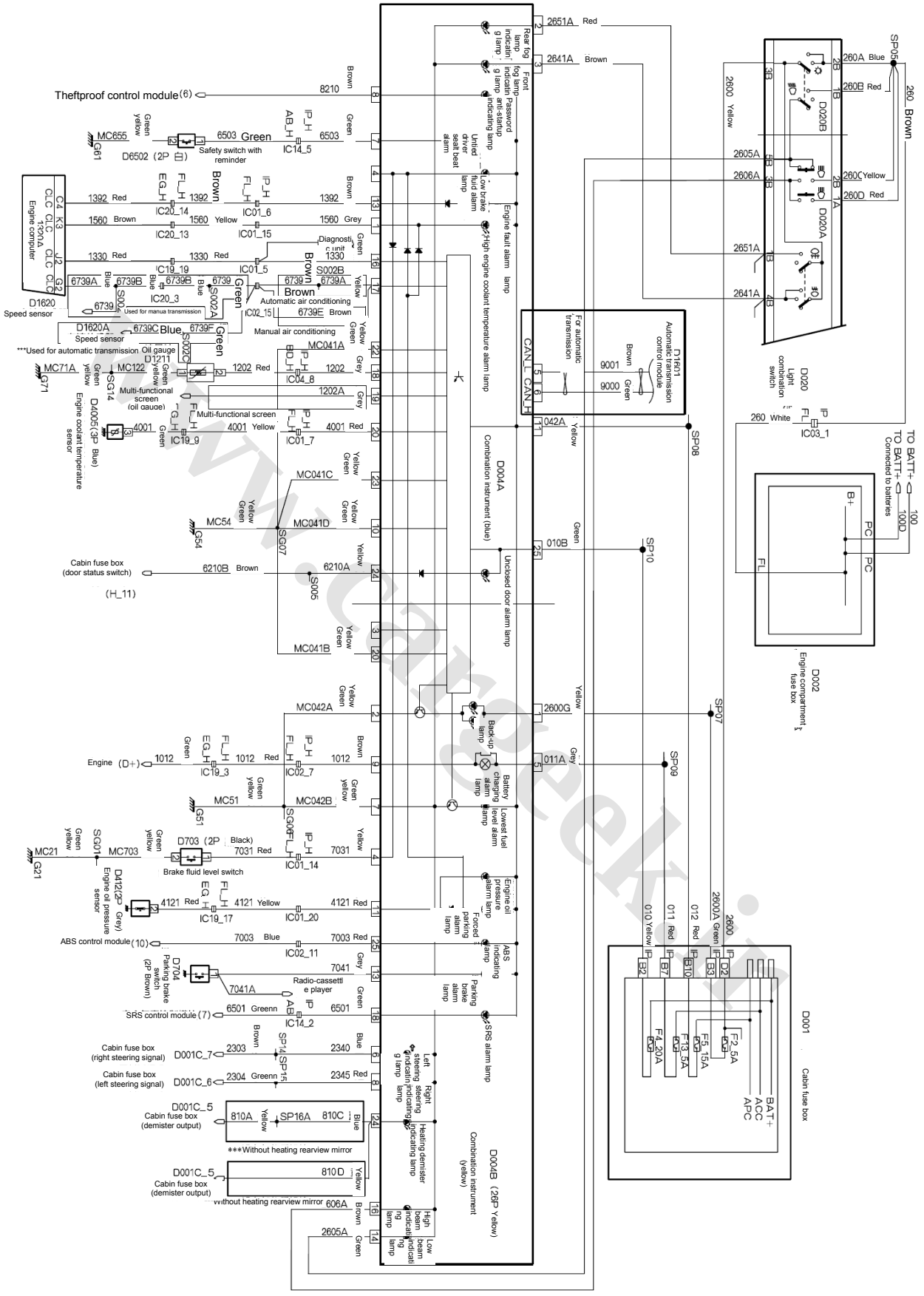
1. Combination instrument diagram and indicating and alarming lamp



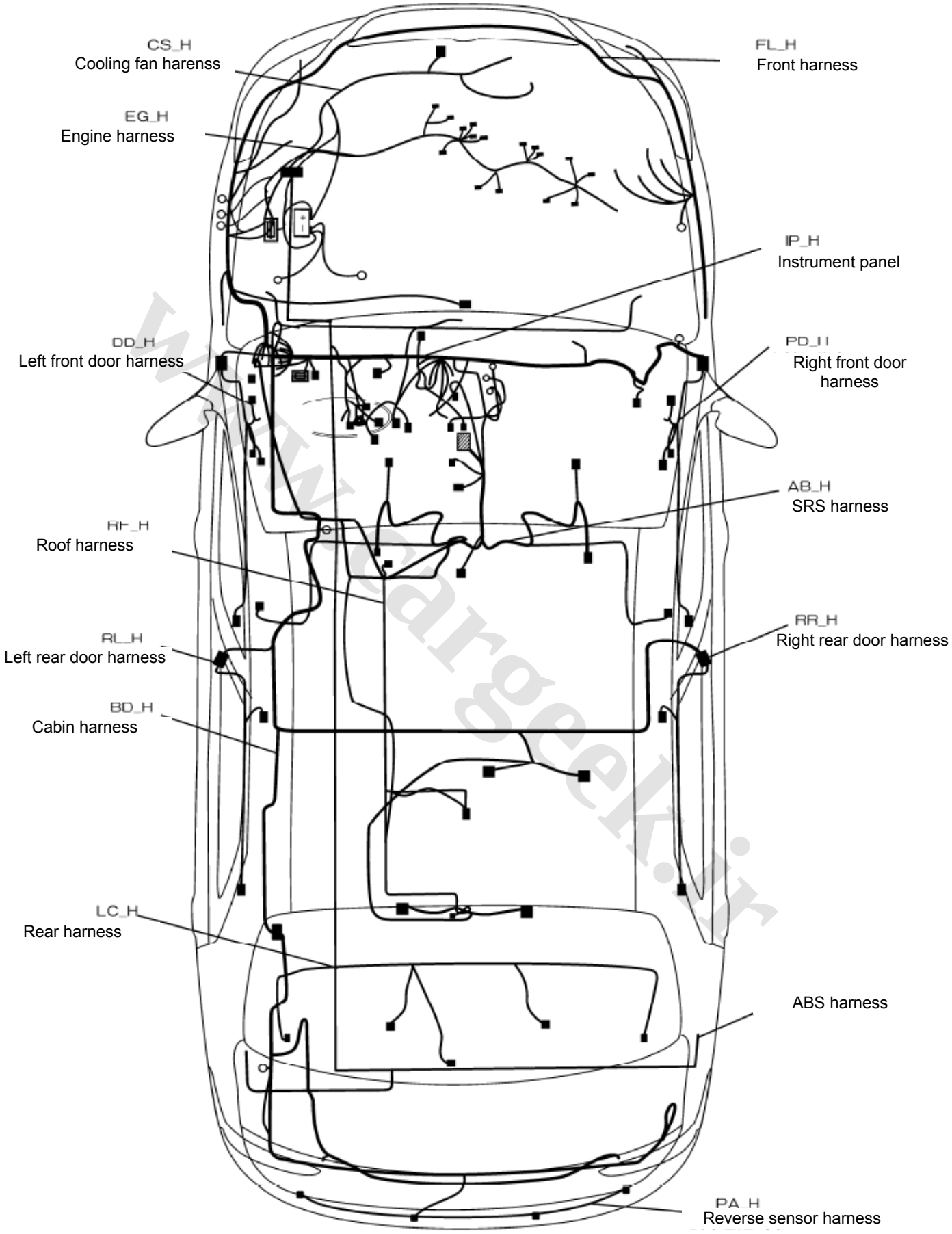
2. 2011-S30 combination instrument diagram and indicating and alarming lamp



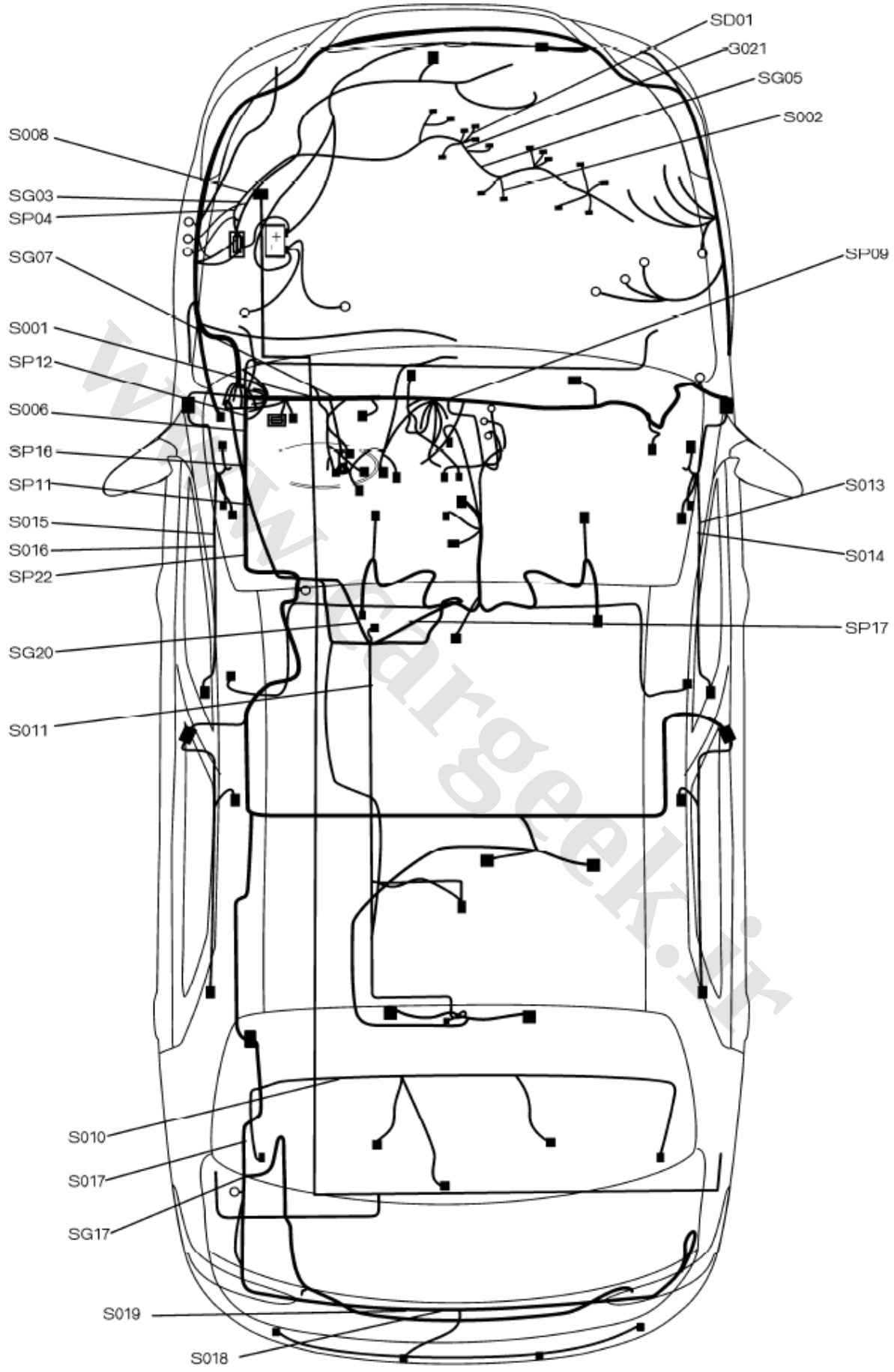
3. Electric schematic diagram of combination instrument



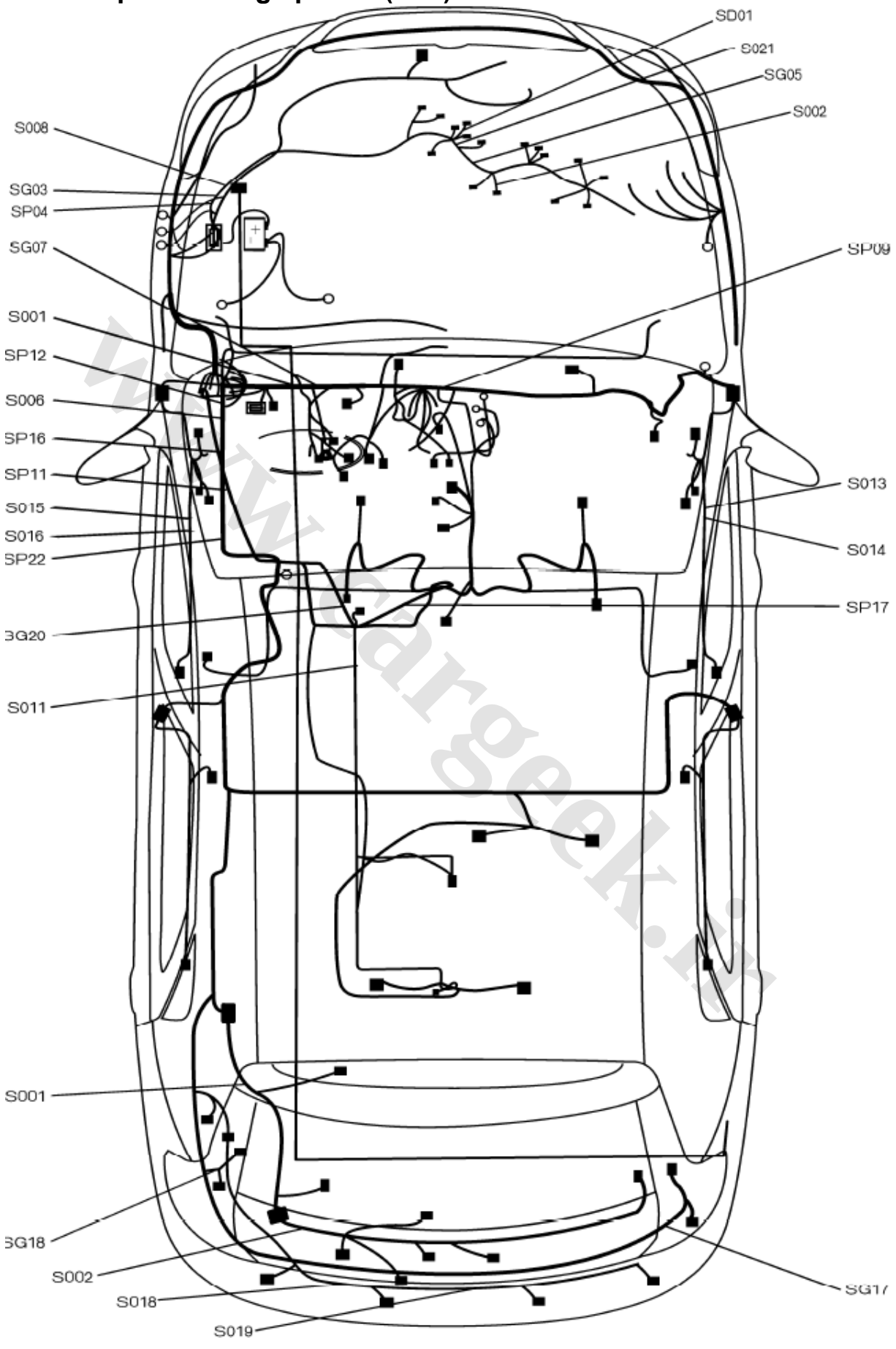
Location plan of harness



Location plan of hinge points (S30)



Location plan of hinge points (H30)



List of hinge points

List of hinge points of instrument panel harness (S30/H30)

A	manual transmission+manual air conditioning +clock
B	manual transmission+automatic air conditioning +display screen
C	automatic transmission+automatic air conditioning +display screen
D	automatic transmission+manual air conditioning +clock
E	manual transmission+manual air conditioning +display screen
F	automatic transmission+manual air conditioning +display screen
ALL	Shared

Hinge point	Conductor No.	Colour	Model	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
S001	2100C	Green	ALL	Cabin fuse box	D001B	S001	
-	1633	Red	C/D/F	S001		Transmission shift lock	D1604
-	2100	Green	A/B/C	S001		Brake switch	D210
-	2100A	Green		S001		IC02F	
-	2100B	Green	ALL	S001		IC04F	
-	2100D	Green	C/D/F	S001		Brake switch	D210A
S002B	6739B	Green	B/C	IC13F		S0026	
-	6739	Brown	B/C	S002B		IC02F	
-	6739A	Yellow	B / C	S002B		Combination instrument (Blue)	D004A
-	6739D	Green	B / C	S002B		Multi-functional screen	0721
S005	6210C	Red	ALL	Woofer	D820	S005	
-	6210B	Brown	ALL	Cabin fuse box	D001H	S005	
-	6210	Green	ALL	IC05F		S005	
-	6210A	Yellow	ALL	S005		Combination instrument (Blue)	D004A

Hinge point	Conductor No.	Colour	Model	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
SG07	MC723	Yellow green	A/D	Quartz clock	D723	SG07	
-	MC721	Yellow green	B/C/E/F	Multi-functional screen	D721	SG07	
-	MC54	Yellow green	ALL	G54		SG07	
-	MC041D	Yellow green	ALL	Combination instrument (Blue)	D004A	SG07	
-	MC041C	Yellow green	ALL	Combination instrument (Blue)	D004A	SG07	
-	MC041B	Yellow green	ALL	Combination instrument (Yellow)	D004B	SG07	
-	MC041A	Yellow green	ALL	Combination instrument (Blue)	D004A	SG07	
-	MC002	Green yellow	ALL	SG07		Cabin fuse box	D001H
-	MC031	Green yellow	ALL	SG07		Diagnostic unit	D003
-	MC032	Green yellow	ALL	SG07		Diagnostic unit	D003
-	MC232	Yellow green	ALL	SG07		Light combination switch	D020A
-	MC820	Yellow green	ALL	SG07		Theftproof controller module	D820
SP05	260	White	ALL	IC03F		SP05	
-	260A	Blue	ALL	SP05		Light combination switch B	D020B
-	260B	Red	ALL	SP05		Light combination switch B	D020B
-	260C	Yellow	ALL	SP05		Light combination switch A	D020A
-	260D	Red	ALL	SP05		Light combination switch A	D020A
SP07	2600A	Green	ALL	Cabin fuse box	D0018	SP07	
-	2600B	Brown	ALL	SP07		Hazard warning switch	D2300
-	2600D	Green	ALL	SP07		Radio cassette player A	D840A
-	2600E	Blue	B/C/E/F	SP07		Multi-functional screen	D721
-	2600F	Red	A/D/E/F	SP07		IC12F	
-	2600G	Yellow	ALL	SP07		Combination instrument (Yellow)	D0048
-	2600G	Red	B/C	SP07		IC13F	
-	2600I	Blue	ALL	SP07		Cigarette lighter	D8100
-	2600J	Brown	A/D	SP07		Quartz clock	D723
SP10	840	Yellow	ALL	Audio system	D840A	SP10	
-	820A	Green	ALL	Hazard warming switch	D2300	SP10	
-	010D	Red	A/D	Quartz clock	D723	SP10	
-	010A	Grey	B/C/E/F	Multi-functional screen	D721	SP10	
-	010-	Yellow	ALL	SP10		Cabin fuse box	D001B
-	010B	Green	ALL	SP10		Combination instrument (Blue)	D004A
-	010C	Brown	ALL	SP10		Diagnostic unit	D003
-	010E	Yellow	C/D/F	SP10		IC22F	
-	820	Yellow	ALL	SP10		Theftproof controller	D820

Hinge point	Conductor No.	Colour	Model	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
SP14	2330	Brown	ALL	IC04F		SP14	
-	2320	Red	ALL	IC04F		SP14	
-	2310	Red	ALL	IC01F		SP14	
-	2303	Brown	ALL	SP14		Cabin fuse box	D001C
-	2340	Blue	ALL	SP14		Combination instrument (Yellow)	D004B
SP15	2345	Red	ALL	Combination instrument (Yellow)	D0048	SP15	
-	2335	Brown	ALL	IC05F		SP15	
-	2304	Green	ALL	SP15		Cabin fuse box	D001C
-	2315	Green	ALL	SP15		IC01F	
-	2325	Yellow	ALL	SP15		IC04F	
SP16A	810B	Yellow	B/C	IC05F		SP16A	
-	810A	Yellow	B/C	SP16A		Cabin fuse box	D001C
-	810C	Blue	B/C	SP16A		Combination instrument (Yellow)	D004B
SP20	002B	Pink	ALL	IC01F		SP20	
-	002A	Red	ALL	Cabin fuse box	00010	SP20	
-	002-	Yellow	ALL	SP20		Ignition switch	D000C
SP21	003D	Green	B/C	IC13F		SP21	
-	003C	Green	A/D/E/F	IC12F		SP21	
-	003-	Brown	ALL	SP21		Ignition switch	D000B
-	003A	Green	ALL	SP21		Cabin fuse box	D001D
-	003B	Yellow	ALL	SP21		IC01F	

List of hinge points of instrument panel harness (S30)

Hinge point	Conductor No.	Colour	Model	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
SG06	MC160	Green yellow	ALL	Mode selector switch	D1603	SG06	
-	MC164	Green yellow	C/D/F	Transmission shift lock	D1604	SG06	
-	MC510	Green yellow	ALL	Wiper combination switch	D500	SG06	
-	MC51	Green yellow	ALL	D51		SG06	
-	MC230	Yellow green	ALL	Hazard warning switch	D2300	SG06	
-	MC001	Yellow green	ALL	SG06		Cabin fuse box	D001D
-	MC042A	Yellow green	ALL	SG06		Combination instrument (Yellow)	D0048
-	MC042B	Yellow green	ALL	SG06		Combination instrument (Yellow)	D0048
-	MC250	Yellow green	ALL	SG06		Light combination switch	D020B

List of hinge points of instrument panel harness (S30)

(Applicable to the last six digits of VIN<008679)

SP08	012W	Red	C/D/F	Brake switch	D210A	SP08	
-	822	Green	ALL	Theftproof controller module	D820	SP08	
-	012F	Red	C/D/F	Brake switch	D210A	SP08	
-	012A	Red	A/B/E	Brake switch	D210	SP08	
-	012-	Red	ALL	SP08		Cabin fuse box	D0018
-	012B	Green	ALL	SP08		IC01F	
-	012C	Brown	ALL	SP08		IC02F	
-	012G	Green	ALL	SP08		Diagnostic unit	D003
-	012H	Yellow	C/D/F	SP08		Mode selector switch	D1603
-	042A	Yellow	ALL	SP08		Combination instrument (Blue)	D004A
SP09	841	Red	ALL	Radio cassette player A	D840A	SP09	
-	011-	Red	ALL	SP09		Cabin fuse box	D001B
-	011A	Grey	ALL	SP09		Combination instrument (Yellow)	D004B
-	011B	Green	A/D	SP09		Quartz clock	D723
-	012E	Yellow	B/C/E/F	SP09		Multi-functional screen	D721

List of hinge points of instrument panel harness (S30)

(Applicable to the last six digits of VIN≥008679)

SP08	012W	Red	C/D/F	Brake switch	D210A	SP08	
-	822	Green	ALL	Theftproof controller module	D820	SP08	
-	012F	Red	C/D/F	Brake switch	D210A	SP08	
-	012A	Red	A/B/E	Brake switch	D210	SP08	
-	012-	Red	ALL	SP08		Cabin fuse box	D001B
-	012B	Green	ALL	SP08		IC01F	
-	012C	Brown	ALL	SP08		IC02F	
-	012E	Yellow	B/C/E/F	SP08		Multi-functional screen	D721
-	012G	Green	ALL	SP08		Diagnostic unit	D003
-	012H	Yellow	C/D/F	SP08		Mode selector switch	D1603
-	042A	Yellow	ALL	SP08		Combination instrument (Blue)	D004A
SP09	841	Red	ALL	Radio cassette player A	D840A	SP09	
-	011-	Red	ALL	SP09		Cabin fuse box	D001B
-	011A	Grey	ALL	SP09		Combination instrument (Yellow)	D004B
-	011B	Green	A/D	SP09		Quartz clock	D723

List of hinge points of instrument panel harness (H30)

Hinge point	Conductor No.	Colour	Model	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
SG06	MC510	Green yellow	ALL	Wiper combination switch	D500	SG06	
-	MC51	Green yellow	ALL	G51		SG06	
-	MC230	Yellow green	ALL	Hazard warning switch	D2300	SG06	
-	MC164	Green yellow	C/D/F	Transmission shift lock	D1604	SG06	
-	MC160	Yellow green	C/D/F	Mode selector switch	D1603	SG06	
-	MC001	Yellow green	ALL	SG06		Cabin fuse box	D001D
-	MC042A	Yellow green	ALL	SG06		Combination instrument (Yellow)	D004B
-	MC042B	Yellow green	ALL	SG06		Combination instrument (Yellow)	D004B
-	MC250	Yellow green	ALL	SG06		Light combination switch	D020B
SP08	012A	Red	A/B/E	Brake switch	D210	SP08	
-	012F	Red	C/D/F	Brake switch	D210A	SP08	
-	012W	Red	C/D/F	Brake switch	D210A	SP08	
-	822	Green	ALL	Theftproof controller module	D820	SP08	
-	012-	Red	ALL	SP08		Cabin fuse box	D001B
-	012B	Green	ALL	SP08		IC01F	
-	012C	Brown	ALL	SP08		IC02F	
-	012E	Yellow	B/C/E/F	SP08		Multi-functional screen	D721
-	012G	Green	ALL	SP08		Diagnostic unit	D003
-	012H	Yellow	C/D/F	SP08		Mode selector switch	D1603
-	042A	Yellow	ALL	SP08		Combination instrument	D004A
SP09	841	Grey	ALL	Radio cassette player A	D840A	SP09	
-	011-	Yellow	ALL	SP09		Cabin fuse box	D001B
-	011A	Green	ALL	SP09		Combination instrument (Yellow)	D004B
-	011B	Red	A/D	SP09		Quartz clock	D723

List of hinge points of front harness (S30/H30)

A	manual transmission+manual air conditioning
B	manual transmission+automatic air conditioning
C	automatic transmission+automatic air conditioning
D	automatic transmission+manual air conditioning
ALL	Shared

Hinge point	Conductor No.	Colour	Model	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
S002A	6739A	Green	A/B	Cabin fuse box	D001F	S002A	
-	6739	Green	A/B	IC02M		S002A	
-	6739B	Blue	A/B	S002A		IC20M	
S002C	6739G	Green	C/D	Cabin fuse box	D001F	S002C	
-	6739F	Green	C/D	IC02M		S002C	
-	6739E	Green	C/D	IC19M		S002C	
-	6739D	Blue	C/D	Transmission control module B	D1601B	S002C	
-	6739C	Blue	C/D	S002C		Speed sensor	D1620A
SD02	MC162	Green yellow	C/D	SG00		S002	
-	MC161	Green yellow	C/D	Transmission control module A	D1601A	S002	
-	MC160	Green yellow	C/D	Transmission control module A	D1601A	S002	
-	Drain	-	C/D	SD02		Drain	
SG00	MC24	Yellow green	C/D	G24		SG00	
-	MC164	Green yellow	C/D	Engine compartment fuse box	D002	SG00	
-	MC163	Green yellow	C/D	Engine compartment fuse box	D002	SG00	
-	MC162	Green yellow	C/D	SG00		SD02	
-	MC671A	Green yellow	C/D	SG00		Speed sensor	D1620A
SG02	MC22	Green yellow	ALL	G22		SG02	
-	MC262	Green yellow	ALL	SG02		Right headlamp	D2615
-	MC262A	Green yellow	ALL	SG02		Right headlamp	D2615
-	MC262B	Yellow green	ALL	SG02		Right front fog lamp	D2645
-	MC262C	Green yellow	ALL	SG02		Right front steering lamp	D2615A
SP03	1204B	Grey	ALL	IC20M		SP03	
-	1204A	Green	ALL	IC19M		SP03	
-	1201	Blue	ALL	Engine compartment fuse box	D002	SP03	
-	1201A	Green	ALL	SP03		Cabin fuse box	D001F

Hinge point	Conductor No.	Colour	Model	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
SP05A	2606	Pink	ALL	IC02M		SP05A	
-	2603A	Green	ALL	SP05A		Engine compartment fuse box	D002
-	2604A	Green	ALL	SP05A		Engine compartment fuse box	D002
SP05B	2602A	Red	ALL	Engine compartment fuse box	D002	SP05B	
-	2601A	Yellow	ALL	Engine compartment fuse box	D002	SP05B	
-	2605	Pink	ALL	SP05B		IC01M	
SP23	002-	Yellow	ALL	IC01M		SP23	
-	002A	Pink	ALL	SP23		Engine compartment fuse box	D002
-	002C	Blue	ALL	SP23		IC21M	
SP24	672A	Grey	C/D	Speed sensor	D1620A	SP24	
-	162	Pink	C/D	Transmission control module A	D1601A	SP24	
-	132A	Green	C/D	IC20M		SP24	
-	002D	Yellow	C/D	SP24		Engine compartment fuse box	D002
-	1631A	Brown	C/D	SP24		Engine compartment fuse box	D002
SP26	1201C	Yellow	ALL	Air conditioning pressure switch	D801	SP26	
-	1201B	Yellow	ALL	Air conditioning pressure switch	D801	SP26	
-	003B	Blue	ALL	SP26		IC01M	
-	003C	Yellow	B/C	SP26		Engine compartment fuse box	D002
-	003D	Yellow	B/C	SP26		Engine compartment fuse box	D002
-	003E	Yellow	A/D	SP26		Engine compartment fuse box	D002

List of hinge points of front harness (S30)

SP25	120A	Green	ALL	SP25		Engine compartment fuse box	D002
-	120B	Red	ALL	SP25		Engine compartment fuse box	D002
-	120C	Yellow	ALL	SP25		Engine compartment fuse box	D002
-	120D	Blue	ALL	SP25		Engine compartment fuse box	D002
-	120E	Red	ALL	SP25		Engine compartment fuse box	D002
SD00	000K	Red	C/D	Engine compartment fuse box	D002	SD00	
-	000B	Red	C/D	SD00		Cabin fuse box	D000A
-	001H	Yellow	C/D	SD00		Oil pump controller	D1256

List of hinge points of front harness (S30)
(Applicable to the last six digits of VIN<015982)

Hinge point	Conductor No.	Colour	Model	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
SG01	MC261C	Green yellow	ALL	Left headlamp	D2610A	SG01	
-	MC261B	Yellow green	ALL	Left front fog lamp	D2640	SG01	
-	MC252	Green yellow	ALL	Tweeter	D252	SG01	
-	MC21	Green yellow	ALL	SG01		G21	
-	MC261	Green yellow	ALL	SG01		Left headlamp	D2610
-	MC261A	Green yellow	ALL	SG01		Left headlamp	D2610
-	MC500	Yellow green	ALL	SG01		Wiper motor	D501
-	MC703	Green yellow	ALL	SG01		Brake fluid switch	D703
-	MC800A	Green yellow	ALL	SG01		Engine compartment fuse box	D002
-	MC601	Green yellow	ALL	SG01		Engine compartment fuse box	D002
SPWD0	601A	Red	ALL	Engine compartment fuse box	D002	SPWD0	
-	602	Red	ALL	SPWD0		IC02M	
-	601B	Pink	ALL	SPWD0		IC02M	

List of hinge points of front harness (S30)
(Applicable to the last six digits of VIN≥015982)

Hinge point	Conductor No.	Colour	Model	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
SG01	MC261C	Green yellow	ALL	Left headlamp	D2610A	SG01	
-	MC261B	Yellow green	ALL	Left front fog lamp	D2640	SG01	
-	MC252	Green yellow	ALL	Tweeter	D252	SG01	
-	MC21	Green yellow	ALL	SG01		G21	
-	MC261	Green yellow	ALL	SG01		Left headlamp	D2610
-	MC261A	Green yellow	ALL	SG01		Left headlamp	D2610
-	MC500	Yellow green	ALL	SG01		Wiper motor	D501
-	MC703	Green yellow	ALL	SG01		Brake fluid switch	D703
-	MC800A	Green yellow	ALL	SG01		Engine compartment fuse box	D002
-	MC261F	Green yellow	ALL	SG01		Engine compartment fuse box	D002
SPWD0	601A	Red	ALL	Engine compartment fuse box	D002	SPWD0	
-	601B	Pink	ALL	SPWD0		IC02M	
-	602	Red	ALL	SPWD0		IC02M	

List of hinge points of front harness (H30)

SG01	MC261C	Green yellow	ALL	Left headlamp	D2610A	SG01	
-	MC261B	Yellow green	ALL	Left front fog lamp	D2640	SG01	
-	MC252	Green yellow	ALL	Tweeter	D252	SG01	
-	MC21	Green yellow	ALL	SG01		G21	
-	MC261	Green yellow	ALL	SG01		Left headlamp	D2610
-	MC261A	Green yellow	ALL	SG01		Left headlamp	D2610
-	MC500	Yellow green	ALL	SG01		Wiper motor	D501
-	MC703	Green yellow	ALL	SG01		Brake fluid switch	D703
-	MC800A	Green yellow	ALL	SG01		Engine compartment fuse box	D002
-	MC261F	Green yellow	ALL	SG01		Engine compartment fuse box	D002
SPWD0	601A	Red	ALL	Engine compartment fuse box	D002	SPWD0	
-	601B	Pink	ALL	SPWD0		IC02M	
-	602	Red	ALL	SPWD0		IC02M	
SD00	000K	Red	C/D	Engine compartment fuse box	D002	SD00	
-	000B	Red	C/D	SD00		Cabin fuse box	D000A
-	000H	Yellow	C/D	SD00		Oil pump controller	D1256
SP25	120A	Green	ALL	SP25		Engine compartment fuse box	D002
-	120B	Red	ALL	SP25		Engine compartment fuse box	D002
-	120C	Grey	ALL	SP25		Engine compartment fuse box	D002
-	120D	Blue	ALL	SP25		Engine compartment fuse box	D002
-	120E	Red	ALL	SP25		Engine compartment fuse box	D002
SP502	5201A	Red	ALL	Engine compartment fuse box	D002	SP502	
-	5201B	Red	ALL	SP502		Engine compartment fuse box	D5002
-	5201C	Red	ALL	SP502		Engine compartment fuse box	D5002
SP505	000A	White	ALL	Ignition switch	D000A	SP505	
-	000AA	White	ALL	SP505		Engine compartment fuse box	D002
-	5288	Red	ALL	SP505		Engine compartment fuse box	D002

List of hinge points of roof harness (S30/H30)

A	Without sunroof module
C	With sunroof module
ALL	Shared

Hinge point	Conductor No.	Colour	Model	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
S011	3001B	Green	ALL	Rear dome lamp	D302	S011	
-	3001	Green	ALL	S011		Cabin fuse box	D001A
-	3001A	Green	ALL	S011		Front dome lamp	D301
SP17	300A	Red	ALL	Front dome lamp	D301	SP17	
-	300	Red	ALL	SP17		Cabin fuse box	D001A
-	300B	Red	ALL	SP17		Rear dome lamp	D302

List of hinge points of roof harness (S30)

Hinge point	Conductor No.	Colour	Model	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
SG20	MC680	Yellow green	C	Sunroof control module	D680	SG20	
-	MC3018	Green yellow	ALL	Rear dome lamp	D302	SG20	
-	MC301A	Green yellow	ALL	Front dome lamp	D301	SG20	
-	MC210	Green yellow	ALL	High-mounted stop lamp	D2100	SG20	
-	MC51	Yellow green	C	SG20		Cabin fuse box	D001A
	MC51A	Yellow green	A	SG20		Cabin fuse box	D001A

List of hinge points of roof harness (H30)

Hinge point	Conductor No.	Colour	Model	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
SG20	MC680	Yellow green	C	Sunroof control module	D680	SG20	
-	MC301B	Green yellow	ALL	Rear dome lamp	D302	SG20	
-	MC301A	Green yellow	ALL	Front dome lamp	D301	SG20	
-	MC51	Yellow green	C	SG20		Cabin fuse box	D001A
-	MC51A	Yellow green	A	SG20		Cabin fuse box	D001A

List of hinge points of engine harness (MT) (S30/H30)

Hinge point	Conductor No.	Colour	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
S002	6739B	Blue	IC20F		S002	
-	6739A	Blue	Engine computer	D1320A	S002	
-	6739	Brown	S002		Speed sensor	D1620
S008	1599	Red	Engine computer	D1320A	S008	
-	1599A	Green	S008		IC20F	
-	1599B	Green	S008		IC20F	
S021	1150B	-	CAP		S021	
-	1150A	White	Ignition coil	D1135	S021	
-	1150	Green	S021		SP04	
SD01	MC135	Green yellow	SG05		SD01	
-	Drain	-	SD01		Drain	
			-			
SG03	MC32	Green yellow	G32		SG03	
-	MC131	Yellow green	SG03		Engine computer	D1320A
-	MC132	Yellow green	SG03		Engine computer	D1320A
SG05	MC802	Green yellow	Air condition compressor	D8010	SG05	
-	MC671	Green yellow	Speed sensor	D1620	SG05	
-	MC135	Green yellow	SG05		SD01	
-	MC33	Yellow green	SG05		G33	
SP04	1351	White	IC19F		SP04	
-	1204B	Yellow	IC20F		SP04	
-	1150	Green	SP04		S021	
-	1320	Green	SP04		IC10F	
-	1351A	Grey	SP04		Front oxygen sensor	D1350
-	1351B	Grey	SP04		Rear oxygen sensor	D1351
-	1355	Brown	SP04		Canister purge valve	D1215
-	672	Yellow	SP04		Speed sensor	D1620
SP03A	1229	Blue	IC19F		SP03A	
-	1229B	Red	IC19F		SP03A	
-	1229A	Blue	SP03A		Engine computer	D1320B

Hinge point	Conductor No.	Colour	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
SP306	1228B	Red	IC19F		SP306	
-	1226	Green	SP306		Inertia switch	D1203
-	1226A	Green	SP306		Engine computer	D1320C

List of hinge points of engine harness (AT) (S30/H30)

Hinge point	Conductor No.	Colour	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
S008	1599	Red	Engine computer	D1320A	S008	
-	1599A	Green	S008		IC20F	
-	1599B	Green	S008		IC20F	
S021	1150B		CAP		S021	
-	1150A	White	Ignition coil	D1135	S021	
-	1150	Green	S021		SP04	
SD01	MC135	Green yellow	SG05		SD01	
-	Drain		SD01		Drain	
			-			
SG03	MC32	Green yellow	G32		SG03	
-	MC131	Yellow green	SG03		Engine computer	D1320A
-	MC132	Yellow green	SG03		Engine computer	D1320A
SG05	MC802	Green yellow	Air condition compressor	D8010	SG05	
-	MC135	Green yellow	SG05		SG01	
-	MC33	Yellow green	SG05		G33	
SP04	1351	White	IC19F		SP04	
-	1204B	Yellow	IC20F		SP04	
-	1150	Green	SP04		8021	
-	1320	Green	SP04		IC10F	
-	1351A	Grey	SP04		Front oxygen sensor	D1350
-	1351B	Grey	SP04		Rear oxygen sensor	D1351
-	1355	Brown	SP04		Canister purge valve	D1215
SP03A	1229	Blue	IC19F		SP03A	
-	1229B	Red	IC19F		SP03A	
-	1229A		SP03A		Engine computer	D1320B
SP306	1228B	Red	IC19F		SP306	
-	1226	Green	SP306		Inertia switch	D1203
-	1226A	Green	SP306		Engine computer	D1320C

List of hinge points of cockpit harness(S30/H30)

Hinge point	Conductor No.	Colour	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
S006	6210D	Brown	IC09F		S006	
-	6210C	Green	IC08F		S006	
-	6210	Red	S006		Cabin fuse box	D001I
-	6210A	Red	S006		IC06F	
SG14	MC623	Green yellow	IC08F		SG14	
-	MC71A	Green yellow	G71		SG14	
-	MC121	Green yellow	SG14		Fuel pump	D1210
-	MC122	Green yellow	SG14		Oil level sensor	D1211
-	MC624	Green yellow	SG14		IC09F	
SP11	6201D	Red	IC09F		SP11	
-	6201C	Brown	IC08F		SP11	
-	6201	Grey	SP11		Cabin fuse box	D001E
-	6201A	Green	SP11		IC06F	
SP12	6200D	Red	IC09F		SP12	
-	6200C	Red	IC08F		SP12	
-	6200	Green	SP12		Cabin fuse box	D001E
-	6200A	Red	SP12		IC06F	

List of hinge points of cockpit harness (S30)

SP16	810C	Red	IC07F		SP16	
-	810A	Yellow	SP16		Cabin fuse box	D001E
-	810B	Brown	SP16		IC06F	
SP307	6250B	Brown	IC06F		SP307	
-	6250A	Brown	SP307		IC04M	
-	6250	Brown	SP307		Cabin fuse box	0001I

List of hinge points of cockpit harness(H30)

Hinge point	Conductor No.	Colour	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
SP16	810C	Red	IC07M		SP16	
-	810A	Yellow	SP16		Cabin fuse box	D001E
-	810B	Brown	SP16		IC06F	
SP17	2201A	Brown	Left rear combination lamp	D2620	S017	
-	2201B	Yellow	Right rear combination lamp	D2625	S017	
-	2201	Brown	S017		IC04M	
-	2201C	Green	S017		Parking assist computer	D750A
S100	2620	Brown	Cabin fuse box	D001E	S100	
-	2620A	Brown	S100		IC07M	
-	2620C	Brown	S100		Left additional brake lamp/position lamp	D2620A
-	2620D	Brown	S100		Left rear combination lamp	D2620
S101	2110C	Brown	Right rear combination lamp	D2625	S101	
-	2115A	Brown	Right additional brake lamp/position lamp	D2625A	S101	
			-			
S101	2100D	Green	S101		IC07M	
-	2110	Green	S101		Left rear combination lamp	D2620
-	2110A	Green	S101		Left additional brake lamp/position lamp	D2620A
S500	2650A	Green	Left rear combination lamp	D2620	S500	
-	2650B	Brown	Right rear combination lamp	D2625	S500	
-	2650	Green	S500		Cabin fuse box	D001E
S501	2625A	Green	Right additional brake lamp/position lamp	D2625A	S501	
-	2625B	Green	Right rear combination lamp	D2625	S501	
-	2625	Green	S501		Cabin fuse box	D001E
SG17	MC264	Green yellow	Right rear combination lamp	D2625	SG17	
-	MC264A	Green yellow	Right additional brake lamp/position lamp	D2625A	SG17	
-	MC81	Green yellow	SG17		G81	
SG18	MC263	Yellow green	Left rear combination lamp	D2620	SG18	
-	MC263A	Green yellow	Left additional brake lamp/position lamp	D2620A	SG18	
-	MC750	Green yellow	Parking assist computer 1	D750A	SG18	
-	MC501	Yellow green	SG18		IC07M	
-	MC81A	Yellow green	SG18		G81	

Hinge point	Conductor No.	Colour	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
SP307	6250B	Brown	IC06F		SP307	
-	6250A	Brown	SP307		IC04M	
-	6250	Brown	SP307		Cabin fuse box	D001I

List of hinge points of rear harness (S30)

Hinge point	Conductor No.	Colour	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
S010	3101	Brown	Luggage compartment lamp-	D310B	S010	
-	6260	Green	S010		Luggage compartment lock	D6260
-	6260A	Brown	S010		IC07M	
S017	2201C	Green	Parking assist computer 1	D750A	S017	
-	2201B	Yellow	Right rear combination lamp-Luggage compartment	D2625A	S017	
-	2201A	Brown	Left rear combination lamp-Luggage compartment	D2620A	S017	
-	2201	Green	S017		IC07M	
SG17	MC820	Yellow green	Rear window dimister	D8208	SG17	
-	MC81	Yellow green	G81		SG17	
-	MC263	Green yellow	Left rear combination lamp-Body	D2620	SG17	
-	MC264	Green yellow	SG17		Right rear combination lamp	D2625
SG18	MC81A	Yellow green	G81		SG18	
-	MC750	Green yellow	Parking assist computer 1	D750A	SG18	
-	MC263B	Green yellow	Left rear combination lamp-Luggage compartment	D2620A	SG18	
-	MC263A	Green yellow	Left rear combination lamp-Luggage compartment	D2620A	SG18	
-	MC264A	Green yellow	SG18		Right rear combination lamp-Luggage compartment	D2625A
-	MC264B	Green yellow	SG18		Right rear combination lamp-Luggage compartment	D2625A
-	MC265	Green yellow	SG18		Left license plate lamp	D2630
-	MC625	Green yellow	SG18		Luggage compartment lock	D6260
-	MC626	Yellow green	SG18		Right license plate lamp	D6265

List of hinge points of main backdoor harness (H30)

Hinge point	Conductor No.	Colour	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
S001	MC500	Grey	No.3 brake lamp	D2100	S001	
-	MC501A	Yellow green	SDL		S001	
-	MC501	Yellow green	S001		IC07F	

List of hinge points of backdoor harness branch (H30)

Hinge point	Conductor No.	Colour	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
S002	MC263B	Green yellow	Left license plate lamp	D2630	S002	
-	MC266	Green yellow	Right license plate lamp	D2635	S002	
-	MC626	Yellow green	Hatchback door switch	D6265	S002	
-	MC820	Yellow green	Rear window defroster-	D820B	S002	
-	MC501	Yellow green	S002		SDR	
-	MC521	Green yellow	S002		Rear wiper motor	D501A
-	MC625	Green yellow	S002		Hatchback door lock	D6260

List of hinge points of right front door harness (S30/H30)

Hinge point	Conductor No.	Colour	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
S013	8415A	Red	Woofer	D8415A	S013	
-	8415	Yellow	S013		IC05M	
-	8415B	Green	S013		Tweeter	D8415B

List of hinge points of right front door harness (S30/H30)

(Applicable to the last six digits of VIN<005834)

Hinge point	Conductor No.	Colour	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
S014	8416A	Yellow	Woofer	D8415A	S014	
-	8416	Brown	S014		IC05M	
-	8416B	Brown	S014		Tweeter	D8415B
SG13	MC642	Yellow green	IC18F		SG13	
-	MC55	Green yellow	SG13		IC05M	
-	MC622	Yellow green	SG13		Door lock	D6215

List of hinge points of right front door harness (S30/H30)

(Applicable to the last six digits of VIN≥005834)

Hinge point	Conductor No.	Colour	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
S014	8416A	Yellow	Woofer	D8415A	S014	
-	8416	Blue	S014		IC05M	
-	8416B	Brown	S014		Tweeter	D8415B
SG13	MC55	Green yellow	IC05M		SG13	
-	MC642	Yellow green	SG13		IC18F	
-	MC622	Yellow green	SG13		Door lock	D6215

List of hinge points of left front door harness (S30/H30)

Hinge point	Conductor No.	Colour	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
S012	6402	Green	IC17F		S012	
-	6400	Green	S012		Rearview mirror regulator	D641
-	6401	Green	S012		IC06M	
S016	8411A	Brown	Bass horn	D8410A	S016	
-	8411	Brown	S016		IC06M	
-	8411B	Brown	S016		Tweeter	D8410B

List of hinge points of left front door harness (S30/H30)

(Applicable to the last six digits of VIN<005834)

Hinge point	Conductor No.	Colour	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
S015	8410A	Green	Bass horn	D8410A	S015	
-	8410	Red	S015		IC06M	
-	8410B	Green	S015		Tweeter	D8410B
SG16	MC621A	Green yellow	IC06M		SG16	
-	MC621	Yellow green	Door lock	D6210	SG16	
-	MC601	Green yellow	SG16		Main window regulator switch	D6000
-	MC620	Green yellow	SG16		Main window regulator switch	D6000
-	MC641	Yellow green	SG16		IC17F	
-	MC641A	Yellow green	SG16		Rearview mirror regulator	D641
SP19	601	Pink	IC06M		SP19	
-	601A	Brown	SP19		Main window regulator switch	D6000
-	641	Red	SP19		Rearview mirror regulator	D641

List of hinge points of left front door harness (S30/H30)
(Applicable to the last six digits of VIN≥005834)

Hinge point	Conductor No.	Colour	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
S015	8410A	Green	Bass horn	D8410A	S015	
-	8410	Grey	S015		IC06M	
-	8410B	Green	S015		Tweeter	D8410B
SG16	MC621A	Green yellow	IC06M		SG16	
-	MC601	Green yellow	SG16		Main window regulator switch	D6000
-	MC620	Green yellow	SG16		Main window regulator switch	D6000
-	MC641	Yellow green	SG16		IC17F	
-	MC641A	Yellow green	SG16		Rearview mirror regulator	D641
-	MC621	Yellow green	SG16		Door lock	D6210
SP19	601	Pink	IC06M		SP19	
-	601B	Pink	Rearview mirror fuse	D840	SP19	
-	601A	Brown	SP19		Main window regulator switch	D6000

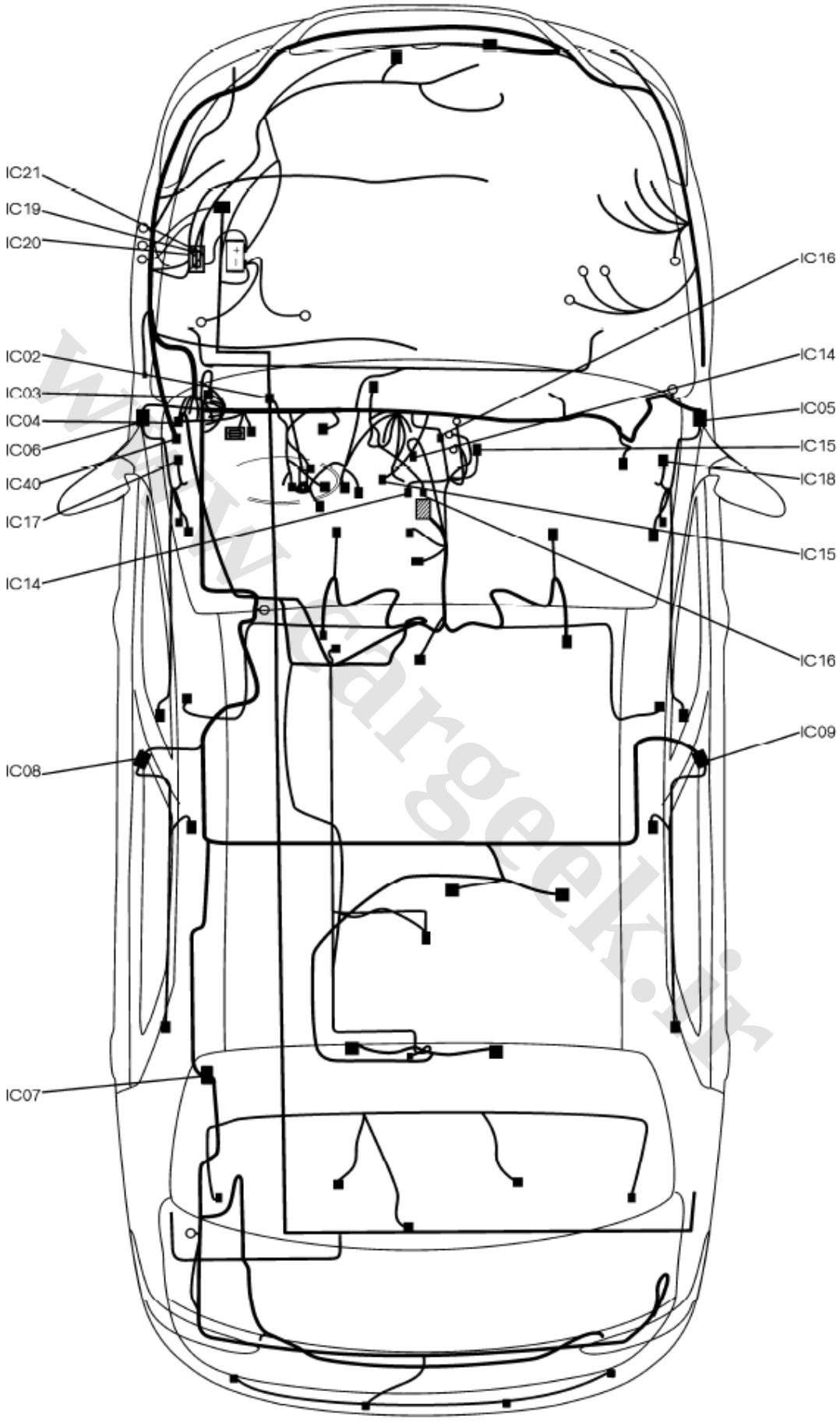
List of hinge points of reverse sensor harness (S30)

Hinge point	Conductor No.	Colour	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
S018	7501	Red	Reversing assist computer 2	D750B	S018	
-	7501A	Red	S018		Right sensor	D7511
-	7501B	Red	S018		Right middle sensor	D7512
-	7501C	Red	S018		Left middle sensor	D7513
-	7501D	Red	S018		Left sensor	D7514
-						
S019	7502		Reversing assist computer 2	D750B	S019	
-	7502A		S019		Right sensor	D7511
-	7502B	Blue	S019		Right middle sensor	D7512
-	7502C	Blue	S019		Left middle sensor	D7513
-	7502D	Blue	S019		Left sensor	D7514

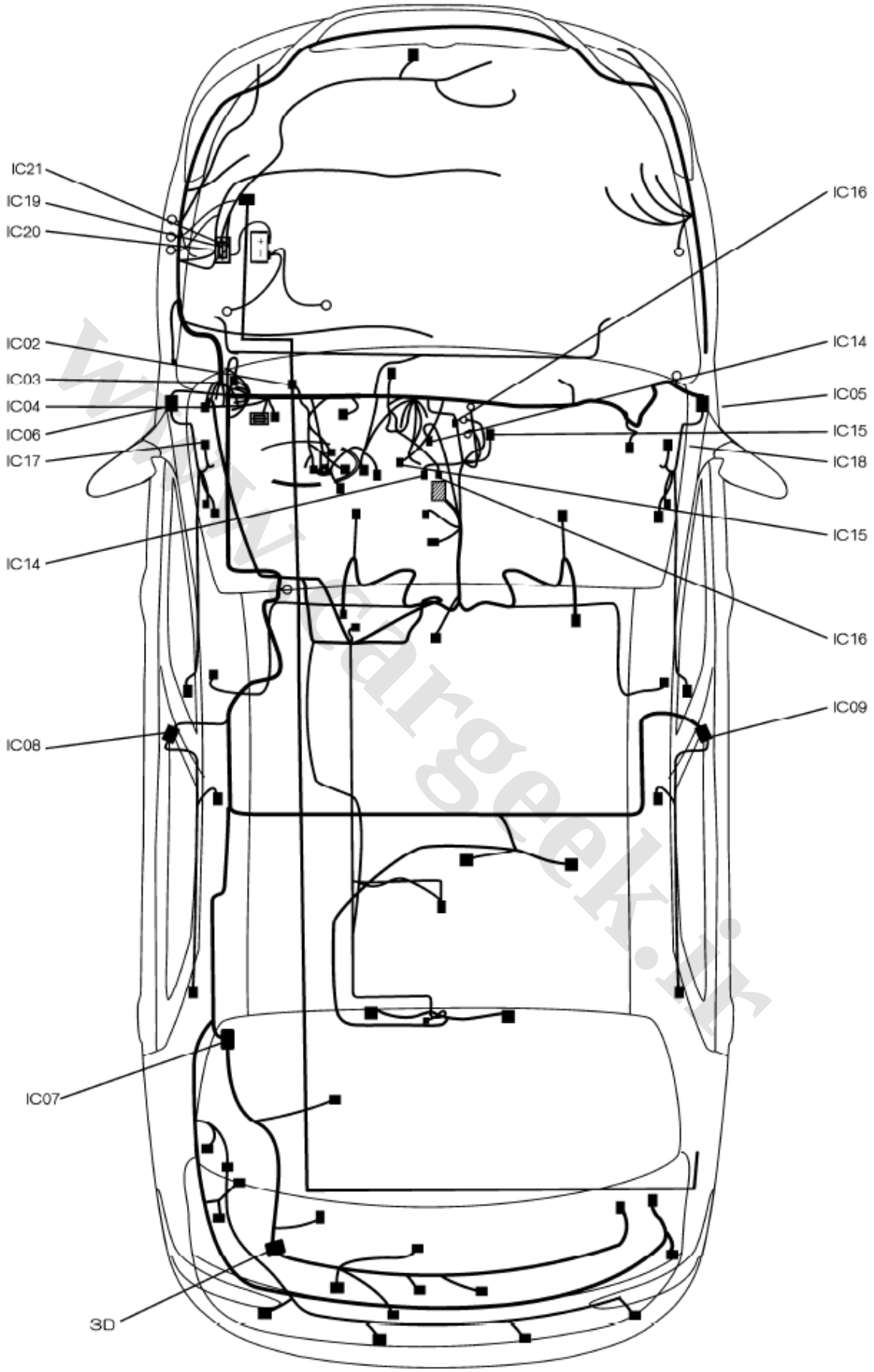
List of hinge points of reverse sensor harness (H30)

Hinge point	Conductor No.	Colour	No.1 terminal	Electrical appliance No.	No.2 terminal	Electrical appliance No.
S018	7501	Red	Reversing assist computer 2	D7508	S018	
-	75010	Red	Left sensor	D7514	S018	
-	7501A	Red	S018		Right sensor	D7511
-	75018	Red	S018		Right middle sensor	D7512
-	75010	Red	S018		Left middle sensor	D7513
S019	7502	Blue	Reversing assist computer 2	D7508	S019	
-	7502D	Blue	Left sensor	D7514	S019	
-	7502A	Blue	S019		Right sensor	D7511
-	7502B	Blue	S019		Right middle sensor	D7512
-	7502C	Blue	S019		Left middle sensor	D7513

Location plan of junction connectors (S30)



Location plan of junction connectors (H30)



List of junction connectors

Note: the VIN code stated in the list is the the last six digits of VIN code.

Instrument panel harness (S30)		
B	manual transmission+automatic air conditioning+display screen	VIN<008679
C	automatic transmission+automatic air conditioning+display screen	
E	manual transmission+manual air conditioning+display screen	
F	automatic transmission+manual air conditioning+display screen	
ALL	Shared	

IC01F: instrument panel harness--front harness (22P Brown) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	2605	Yellow	D020A	ALL	12	8077	Brown	IC12F	E/F
2	012B	Green	SP08	ALL	12	8077A	Brown	IC13F	B/C
3	2201	Brown	IC04F	ALL	13	5011	Yellow	D500	ALL
4	2310	Red	SP14	ALL	14	7031	Yellow	D004B	ALL
5	1330	Green	D004A	ALL	15	1560	Grey	D004A	ALL
5	1330A	Green	D003	ALL	16	003B	Yellow	SP21	ALL
6	1392	Brown	D004A	ALL	17	2641	Red	D020A	ALL
7	4001	Red	D004A	ALL	18	1368	Grey	D721	B/C/E/F
8	2315	Green	SP15	ALL	19	8081	Yellow	IC12F	E/F
9	8080	Grey	IC12F	E/F	19	8081A	Yellow	IC13F	B/C
9	8080A	Grey	IC13F	B/C	20	4121	Red	D004B	ALL
10	5014	Red	D500	ALL	21	8001	Brown	IC12F	E/F
11	002B	Pink	SP20	ALL	21	8001A	Brown	IC13F	B/C
					22	1011	Green	D000B	B/E
					22	1610	Green	D000B	C/F

IC02F: instrument panel harness--front harness (26P White) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	2606	Green	D020A	ALL	14	5111	Red	D500	ALL
2	012C	Brown	SP08	ALL	15	6739	Brown	S002B	B/C
3	8200	Red	D820	ALL	15	6739E	Brown	D004A	E/F
3	8200A	Green	D820	ALL	15	6739G	Brown	D721	E/F
4	7002	Grey	D003	ALL	16				
5	8269	Blue	D820	ALL	17				
6	602B	Brown	D001C	ALL	18				
7	1012	Brown	D004B	ALL	19	1599B	Green	D003	ALL
8	2500	Red	D020B	ALL	20	602	Red	IC05F	ALL
9	9006B	Yellow	D003	ALL	21				
10	601	Pink	IC04F	ALL	22	5112	Brown	D500	ALL
11	7003	Red	D004B	ALL	23	7020	White	IC04F	ALL
12	5016	Yellow	D500	ALL	24	7021	Red	IC04F	ALL
13	2100A	Green	S001	ALL	25	7025	Green	IC04F	ALL
					26	7026	Brown	IC04F	ALL

IC03F: instrument panel harness--front harness (2P Brown) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	260	White	SP05	ALL	2	803	Red	IC12F	E/F
					2	803A	Red	IC13F	B/C

IC04F: instrument panel harness--cockpit harness (22P Black) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	7020	White	IC02F	ALL	12	6017	Brown	IC05F	ALL
2	7021	Red	IC02F	ALL	13	2325	Yellow	SP15	ALL
3	2320	Red	SP14	ALL	14	601	Pink	IC02F	ALL
4	2330	Brown	SP14	ALL	15	6411	Blue	IC05F	ALL
5	8425	Green	D840B	ALL	16	8426	Yellow	D840B	ALL
6	6412	Red	IC05F	ALL	17	6401	Blue	IC05F	ALL
7	8420	Yellow	D840B	ALL	18	8421	Green	D840B	ALL
8	1202	Grey	D004A	ALL	19	7026	Brown	IC02F	ALL
9	7025	Green	IC02F	ALL	20	8411	Red	D840B	ALL
10	8410	Green	D840B	ALL	21	2100B	Green	S001	ALL
11	2201	Brown	IC01F	ALL	22	6019	Yellow	IC05F	ALL

IC05F: instrument panel harness--right front door harness (20P Yellow) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	810B	Yellow	SP16A	B/C	11				
2	6017	Brown	IC04F	ALL	12	MC804	Green yellow	IC13F	B/C
3	6401	Blue	IC04F	ALL	13	8011	Yellow	IC13F	B/C
4					14				
5	6210	Green	S005	ALL	15	2335	Brown	SP15	ALL
6					16	6412	Red	IC04F	ALL
7	6019	Yellow	IC04F	ALL	17	6201	Yellow	D001C	ALL
8	602	Red	IC02F	ALL	18	8415	Brown	D840B	ALL
9	MC55	Green yellow	G55	ALL	19	8416	Grey	D840B	ALL
10	6411	Blue	IC04F	ALL	20	6200	Red	D001C	ALL

IC12F: instrument panel harness--manual air conditioning harness (16P Black) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	003C	Green	SP21	E/F	9	803	Red	IC03F	E/F
2	2600F	Red	SP07	E/F	10	MC51A	Yellow green	051	E/F
3	8100	Brown	D001H	E/F	11	8001	Brown	IC01F	E/F
4	8081	Yellow	IC01F	E/F	12				
5					13				
6					14				
7	8080	Grey	IC01F	E/F	15				
8	8077	Brown	IC01F	E/F	16	MC52	Yellow green	G52	E/F

IC13F: instrument panel harness--automatic air conditioning harness (16P Grey) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	2600H	Red	SP07	B/C	9	MC52A	Yellow green	G52	B/C
2	8100A	Red	D001H	B/C	10	MC53A	Green yellow	G53	B
3	MC803	Yellow green	D8013	B/C	10	MC801	Green yellow	SG09	C
4	6739B	Green	S002B	B/C	11	MC51B	Yellow green	G51	B/C
5	8013	Red	D8013	B/C	12	8081A	Yellow	IC01F	B/C
6	8011	Yellow	IC05F	B/C	13	8080A	Grey	IC01F	B/C
6	8011A	Yellow	D721	B/C	14				
7	8001A	Brown	IC01F	B/C	15	8077A	Brown	IC01F	B/C
8	003D	Green	SP21	B/C	16	803A	Red	IC03F	B/C

IC14M: instrument panel harness--SRS harness (10P Green) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	652	Brown	D001B	ALL	6				
2	6501	Green	D004B	ALL	7				
3					8	6502	Brown	D001H	ALL
4	9006A	Brown	D003	ALL	9				
5	6503	Green	D004A	ALL	10				

IC15AF: instrument panel harness--driver airbag (2P Yellow) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	6510	Orange	IC15M	ALL	2	6511	Yellow	IC15M	ALL

IC15M: instrument panel harness--SRS harness (2PBrown) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	6510	Orange	IC15AF	ALL	2	6511	Yellow	IC15AF	ALL

IC16M: instrument panel harness--SRS harness (2P Green) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	6515	Orange	ICI6AF	ALL	2	6516	Yellow	ICI6AF	ALL

IC16AF: instrument panel harness--passenger airbag (2P Green) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	6515	Orange	IC16M	ALL	2	6516	Yellow	IC16M	ALL

IC22F: instrument panel harness--front harness (20P White) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	010E	Yellow	SP10	C/F	11	1623	Red	D1603	C/F
2	1622	Blue	D1603	C/F	12	1620	Brown	D1603	C/F
3					13				
4	1621	Grey	D1603	C/F	14				
5	1631	Green	D1604	C/F	15				
6	1632	Grey	D1604	C/F	16				
7	7309	Red	D210A	C/F	17				
8					18				
9	1625	Yellow	D1603	C/F	19	9000	Green	D004A	C/F
10	1624	Green	D1603	C/F	19	9000B	Green	D003	C/F
					20	9001	Brown	D004A	C/F
					20	9001B	Brown	D003	C/F

Instrument panel harness (S30)		
B	manual transmission+automatic air conditioning+display screen	008679≤VIN<038979
C	automatic transmission+automatic air conditioning+display screen	008679≤VIN<037670
E	manual transmission+manual air conditioning+display screen	008679≤VIN<038932
F	automatic transmission+manual air conditioning+display screen	008679≤VIN<037670
ALL	Shared	

IC01F: instrument panel harness--front harness (22P Brown) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	2605	Yellow	D020A	ALL	12	8077	Brown	IC12F	E/F
2	012B	Green	SP08	ALL	12	8077A	Brown	IC13F	B/C
3	2201	Brown	IC04F	ALL	13	5011	Yellow	D500	ALL
4	2310	Red	SP14	ALL	14	7031	Yellow	D004B	ALL
5	1330	Green	D004A	ALL	15	1560	Grey	D004A	ALL
5	1330A	Green	D003	ALL	16	003B	Yellow	SP21	ALL
6	1392	Brown	D004A	ALL	17	2641	Red	D020A	ALL
7	4001	Red	D004A	ALL	18	1368	Grey	D721	B/C/E/F
8	2315	Green	SP15	ALL	19	8081	Yellow	IC12F	E/F
9	8080	Grey	IC12F	E/F	19	8081A	Yellow	IC13F	B/C
9	8080A	Grey	IC13F	B/C	20	4121	Red	D004B	ALL
10	5014	Red	D500	ALL	21	8001	Brown	IC12F	E/F
11	002B	Pink	SP20	ALL	21	8001A	Brown	IC13F	B/C
					22	1011	Green	D000B	B/E
					22	1610	Green	D000B	C/F

IC02F: instrument panel harness--front harness (26P White) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	2606	Green	D020A	ALL	14	5111	Red	D500	ALL
2	012C	Brown	SP08	ALL	15	6739	Brown	S002B	B/C
3	8200	Red	D820	ALL	15	6739E	Brown	D004A	E/F
3	8200A	Green	D820	ALL	15	6739G	Brown	D721	E/F
4	7002	Grey	D003	ALL	16	600	Brown	D001C	ALL
5	8269	Blue	D820	ALL	17	601	Pink	IC04F	ALL
6					18	602	Red	IC05F	ALL
7	1012	Brown	D004B	ALL	19	1599B	Green	D003	ALL
8	2500	Red	D020B	ALL	20				
9	9006B	Yellow	D003	ALL	21				
10					22	5112	Brown	D500	ALL
11	7003	Red	D004B	ALL	23	7020	White	IC04F	ALL
12	5016	Yellow	D500	ALL	24	7021	Red	IC04F	ALL
13	2100A	Green	S001	ALL	25	7025	Green	IC04F	ALL
					26	7026	Brown	IC04F	ALL

IC03F: instrument panel harness--front harness (2P Brown) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	260	White	SP05	ALL	2	803	Red	IC12F	E/F
					2	803A	Red	IC13F	B/C

IC04F: instrument panel harness--cockpit harness (22P Black) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	7020	White	IC02F	ALL	12	6017	Brown	IC05F	ALL
2	7021	Red	IC02F	ALL	13	2325	Yellow	SP15	ALL
3	2320	Red	SP14	ALL	14	601	Pink	IC02F	ALL
4	2330	Brown	SP14	ALL	15	6411	Blue	IC05F	ALL
5	8425	Green	D840B	ALL	16	8426	Yellow	D840B	ALL
6	6412	Red	IC05F	ALL	17	6401	Blue	IC05F	ALL
7	8420	Yellow	D840B	ALL	18	8421	Green	D840B	ALL
8	1202	Grey	D004A	ALL	19	7026	Brown	IC02F	ALL
9	7025	Green	IC02F	ALL	20	8411	Red	D840B	ALL
10	8410	Green	D840B	ALL	21	2100B	Green	S001	ALL
11	2201	Brown	IC01F	ALL	22	6019	Yellow	IC05F	ALL

IC05F: instrument panel harness--right front door harness (20P Yellow) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	810B	Yellow	SP16A	B/C	11				
2	6017	Brown	IC04F	ALL	12	MC804	Green yellow	IC13F	B/C
3	6401	Blue	IC04F	ALL	13	8011	Yellow	IC13F	B/C
4					14				
5	6210	Green	S005	ALL	15	2335	Brown	SP15	ALL
6					16	6412	Red	IC04F	ALL
7	6019	Yellow	IC04F	ALL	17	6201	Yellow	D001C	ALL
8	602	Red	IC02F	ALL	18	8415	Brown	D840B	ALL
9	MC55	Green yellow	G55	ALL	19	8416	Grey	D840B	ALL
10	6411	Blue	IC04F	ALL^	20	6200	Red	D001C	ALL

IC12F: instrument panel harness--manual air conditioning harness (16P Black) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	003C	Green	SP21	E/F	9	803	Red	IC03F	E/F
2	2600F	Red	SP07	E/F	10	MC51A	Yellow green	051	E/F
3	8100	Brown	D001H	E/F	11	8001	Brown	IC01F	E/F
4	8081	Yellow	IC01F	E/F	12				
5					13				
6					14				
7	8080	Grey	IC01F	E/F	15				
8	8077	Brown	IC01F	E/F	16	MC52	Yellow green	G52	E/F

IC13F: instrument panel harness--automatic air conditioning harness (16P Grey) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	2600H	Red	SP07	B/C	9	MC52A	Yellow green	G52	B/C
2	8100A	Red	D001H	B/C	10	MC53A	Green yellow	G53	B
3	MC803	Yellow green	D8013	B/C	10	MC801	Green yellow	SG09	C
4	6739B	Green	S002B	B/C	11	MC51B	Yellow green	G51	B/C
5	8013	Red	D8013	B/C	12	8081A	Yellow	IC01F	B/C
6	8011	Yellow	IC05F	B/C	13	8080A	Grey	IC01F	B/C
6	8011A	Yellow	D721	B/C	14				
7	8001A	Brown	IC01F	B/C	15	8077A	Brown	IC01F	B/C
8	003D	Green	SP21	B/C	16	803A	Red	IC03F	B/C

IC14M: instrument panel harness--SRS harness (10P Green) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	652	Brown	D001B	ALL	6				
2	6501	Green	D004B	ALL	7				
3					8	6502	Brown	D001H	ALL
4	9006A	Brown	D003	ALL	9				
5	6503	Green	D004A	ALL	10				

IC15AF: instrument panel harness--driver airbag (2P Yellow) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	6510	Orange	IC15M	ALL	2	6511	Yellow	IC15M	ALL

IC15M: instrument panel harness--SRS harness (2PBrown) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	6510	Orange	IC15AF	ALL	2	6511	Yellow	IC15AF	ALL

IC16M: instrument panel harness--SRS harness (2P Green) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	6515	Orange	ICI6AF	ALL	2	6516	Yellow	ICI6AF	ALL

IC16AF: instrument panel harness--passenger airbag (2P Green) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	6515	Orange	IC16M	ALL	2	6516	Yellow	IC16M	ALL

IC22F: instrument panel harness--front harness (20P White) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	010E	Yellow	SP10	C/F	11	1623	Red	D1603	C/F
2	1622	Blue	D1603	C/F	12	1620	Brown	D1603	C/F
3					13				
4	1621	Grey	D1603	C/F	14				
5	1631	Green	D1604	C/F	15				
6	1632	Grey	D1604	C/F	16				
7	7309	Red	D210A	C/F	17				
8					18				
9	1625	Yellow	D1603	C/F	19	9000	Green	D004A	C/F
10	1624	Green	D1603	C/F	19	9000B	Green	D003	C/F
					20	9001	Brown	D004A	C/F
					20	9001B	Brown	D003	C/F

Instrument panel harness (S30)		
B	manual transmission+automatic air conditioning+display screen	VIN≥038979
C	automatic transmission+automatic air conditioning+display screen	VIN≥037670
E	manual transmission+manual air conditioning+display screen	VIN≥038932
F	automatic transmission+manual air conditioning+display screen	VIN≥037670
ALL	Shared	

IC01F: instrument panel harness--front harness (22P Brown) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	2605	Yellow	D020A	ALL	12	8077	Brown	IC12F	E/F
2	012B	Green	SP08	ALL	12	8077A	Brown	IC13F	B/C
3	2201	Brown	IC04F	ALL	13	5011	Yellow	D500	ALL
4	2310	Red	SP14	ALL	14	7031	Yellow	D004B	ALL
5	1330	Green	D004A	ALL	15	1560	Grey	D004A	ALL
5	1330A	Green	D003	ALL	16	003B	Yellow	SP21	ALL
6	1392	Brown	D004A	ALL	17	2641	Red	D020A	ALL
7	4001	Red	D004A	ALL	18	1368	Grey	D721	B/C/E/F
8	2315	Green	SP15	ALL	19	8081	Yellow	IC12F	E/F
9	8080	Grey	IC12F	E/F	19	8081A	Yellow	IC13F	B/C
9	8080A	Grey	IC13F	B/C	20	4121	Red	D004B	ALL
10	5014	Red	D500	ALL	21	8001	Brown	IC12F	E/F
11	002B	Pink	SP20	ALL	21	8001A	Brown	IC13F	B/C
					22	1011	Green	D000B	B/E
					22	1610	Green	D000B	C/F

IC02F: instrument panel harness--front harness (26P White) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	2606	Green	D020A	ALL	14	5111	Red	D500	ALL
2	012C	Brown	SP08	ALL	15	6739	Brown	S002B	B/C
3	8200	Red	D820	ALL	15	6739E	Brown	D004A	A/D/E/F
3	8200A	Green	D820	ALL	15	6739G	Brown	D721	E/F
4	7002	Grey	D003	ALL	16	600	Brown	D001C	ALL
5	8269	Blue	D820	ALL	17	601	Pink	IC04F	ALL
6					18	602	Red	IC05F	ALL
7	1012	Brown	D004B	ALL	19	1599B	Green	D003	ALL
8	2500	Red	D020B	ALL	20				
9	9006B	Yellow	D003	ALL	21				
10	6250	Brown	IC04F	ALL	22	5112	Brown	D500	ALL
11	7003	Red	D004B	ALL	23	7020	White	IC04F	ALL
12	5016	Yellow	D500	ALL	24	7021	Red	IC04F	ALL
13	2100A	Green	S001	ALL	25	7025	Green	IC04F	ALL
					26	7026	Brown	IC04F	ALL

IC03F: instrument panel harness--front harness (2P Brown) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	260	White	SP05	ALL	2	803	Red	IC12F	E/F
					2	803A	Red	IC13F	B/C

IC04F: instrument panel harness--cockpit harness (26P Black) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	7020	White	IC02F	ALL	14	601	Pink	IC02F	ALL
2	7021	Red	IC02F	ALL	15	6411	Blue	IC05F	ALL
3	2320	Red	SP14	ALL	16	8426	Yellow	D840B	ALL
4	2330	Brown	SP14	ALL	17	6401	Blue	IC05F	ALL
5	8425	Green	D840B	ALL	18	8421	Green	D840B	ALL
6	6412	Red	IC05F	ALL	19	7026	Brown	IC02F	ALL
7	8420	Yellow	D840B	ALL	20	8411	Red	D840B	ALL
8	1202	Grey	D004A	ALL	21	2100B	Green	S001	ALL
9	7025	Green	IC02F	ALL	22	6019	Yellow	IC05F	ALL
10	8410	Green	D840B	ALL	23	6250	Brown	IC02F	ALL
11	2201	Brown	IC01F	ALL					
12	6017	Brown	IC05F	ALL					
13	2325	Yellow	SP15	ALL					

IC05F: instrument panel harness--right front door harness (20P Yellow) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	810B	Yellow	SP16A	B/C	11				
2	6017	Brown	IC04F	ALL	12	MC804	Green yellow	IC13F	B/C
3	6401	Blue	IC04F	ALL	13	8011	Yellow	IC13F	B/C
4					14				
5	6210	Green	S005	ALL	15	2335	Brown	SP15	ALL
6					16	6412	Red	IC04F	ALL
7	6019	Yellow	IC04F	ALL	17	6201	Yellow	D001C	ALL
8	602	Red	IC02F	ALL	18	8415	Brown	D840B	ALL
9	MC55	Green yellow	G55	ALL	19	8416	Grey	D840B	ALL
10	6411	Blue	IC04F	ALL^	20	6200	Red	D001C	ALL

IC12F: instrument panel harness--manual air conditioning harness (16P Black) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	003C	Green	SP21	E/F	9	803	Red	IC03F	E/F
2	2600F	Red	SP07	E/F	10	MC51A	Yellow green	051	E/F
3	8100	Brown	D001H	E/F	11	8001	Brown	IC01F	E/F
4	8081	Yellow	IC01F	E/F	12				
5					13				
6					14				
7	8080	Grey	IC01F	E/F	15				
8	8077	Brown	IC01F	E/F	16	MC52	Yellow green	G52	E/F

IC13F: instrument panel harness--automatic air conditioning harness (16P Grey) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	2600H	Red	SP07	B/C	9	MC52A	Yellow green	G52	B/C
2	8100A	Red	D001H	B/C	10	MC53A	Green yellow	G53	B
3	MC803	Yellow green	D8013	B/C	10	MC801	Green yellow	SG09	C
4	6739B	Green	S002B	B/C	11	MC51B	Yellow green	G51	B/C
5	8013	Red	D8013	B/C	12	8081A	Yellow	IC01F	B/C
6	8011	Yellow	IC05F	B/C	13	8080A	Grey	IC01F	B/C
6	8011A	Yellow	D721	B/C	14				
7	8001A	Brown	IC01F	B/C	15	8077A	Brown	IC01F	B/C
8	003D	Green	SP21	B/C	16	803A	Red	IC03F	B/C

IC14M: instrument panel harness--SRS harness (10P Green) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	652	Brown	D001B	ALL	6				
2	6501	Green	D004B	ALL	7				
3					8	6502	Brown	D001H	ALL
4	9006A	Brown	D003	ALL	9				
5	6503	Green	D004A	ALL	10				

IC15AF: instrument panel harness--driver airbag (2P Yellow) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	6510	Orange	IC15M	ALL	2	6511	Yellow	IC15M	ALL

IC15M: instrument panel harness--SRS harness (2PBrown) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	6510	Orange	IC15AF	ALL	2	6511	Yellow	IC15AF	ALL

IC16M: instrument panel harness--SRS harness (2P Green) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	6515	Orange	ICI6AF	ALL	2	6516	Yellow	ICI6AF	ALL

IC16AF: instrument panel harness--passenger airbag (2P Green) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	6515	Orange	IC16M	ALL	2	6516	Yellow	IC16M	ALL

IC22F: instrument panel harness--front harness (20P White) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	010E	Yellow	SP10	C/F	11	1623	Red	D1603	C/F
2	1622	Blue	D1603	C/F	12	1620	Brown	D1603	C/F
3					13				
4	1621	Grey	D1603	C/F	14				
5	1631	Green	D1604	C/F	15				
6	1632	Grey	D1604	C/F	16				
7	7309	Red	D210A	C/F	17				
8					18				
9	1625	Yellow	D1603	C/F	19	9000	Green	D004A	C/F
10	1624	Green	D1603	C/F	19	9000B	Green	D003	C/F
					20	9001	Brown	D004A	C/F
					20	9001B	Brown	D003	C/F

Instrument panel harness (H30)		
B	manual transmission+automatic air conditioning+display screen	VIN<038052
C	automatic transmission+automatic air conditioning+display screen	VIN<037836
E	manual transmission+manual air conditioning+display screen	VIN<037957
F	automatic transmission+manual air conditioning+display screen	VIN<037831
ALL	Shared	

IC01F: instrument panel harness--front harness (22P Brown) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	2605	Yellow	D020A	ALL	12	8077	Brown	IC12F	E/F
2	012B	Green	SP08	ALL	12	8077A	Brown	IC13F	B/C
3	2201	Brown	IC04F	ALL	13	5011	Yellow	D500	ALL
4	2310	Red	SP14	ALL	14	7031	Yellow	D004B	ALL
5	1330	Green	D004A	ALL	15	1560	Grey	D004A	ALL
5	1330A	Green	D003	ALL	16	003B	Yellow	SP21	ALL
6	1392	Brown	D004A	ALL	17	2641	Red	D020A	ALL
7	4001	Red	D004A	ALL	18	1368	Grey	D721	B/C/E/F
8	2315	Green	SP15	ALL	19	8081	Yellow	IC12F	E/F
9	8080	Grey	IC12F	E/F	19	8081A	Yellow	IC13F	B/C
9	8080A	Grey	IC13F	B/C	20	4121	Red	D004B	ALL
10	5014	Red	D500	ALL	21	8001	Brown	IC12F	E/F
11	002B	Pink	SP20	ALL	21	8001A	Brown	IC13F	B/C
					22	1011	Green	D000B	B/E
					22	1610	Green	D000B	C/F

IC02F: instrument panel harness--front harness (26P White) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	2606	Green	D020A	ALL	14	5111	Red	D500	ALL
2	012C	Brown	SP08	ALL	15	6739	Brown	S002B	B/C
3	8200	Red	D820	ALL	15	6739E	Brown	D004A	A/D/E/F
3	8200A	Green	D820	ALL	15	6739G	Brown	D721	E/F
4	7002	Grey	D003	ALL	16	600	Brown	D001C	ALL
5	8269	Blue	D820	ALL	17	601	Pink	IC04F	ALL
6	5210	White	D001H		18	602	Red	IC05F	ALL
7	1012	Brown	D004B	ALL	19	1599B	Green	D003	ALL
8	2500	Red	D020B	ALL	20	5299	Grey	IC30F	ALL
9	9006B	Yellow	D003	ALL	21	5203	Red	IC30F	ALL
10					22	5112	Brown	D500	ALL
11	7003	Red	D004B	ALL	23	7020	White	IC04F	ALL
12	5016	Yellow	D500	ALL	24	7021	Red	IC04F	ALL
13	2100A	Green	S001	ALL	25	7025	Green	IC04F	ALL
					26	7026	Brown	IC04F	ALL

IC03F: instrument panel harness--front harness (2P Brown) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	260	White	SP05	ALL	2	803	Red	IC12F	E/F
					2	803A	Red	IC13F	B/C

IC04F: instrument panel harness--cockpit harness (22P Black) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	7020	White	IC02F	ALL	12	6017	Brown	IC05F	ALL
2	7021	Red	IC02F	ALL	13	2325	Yellow	SP15	ALL
3	2320	Red	SP14	ALL	14	601	Pink	IC02F	ALL
4	2330	Brown	SP14	ALL	15	6411	Blue	IC05F	ALL
5	8425	Green	D840B	ALL	16	8426	Yellow	D840B	ALL
6	6412	Red	IC05F	ALL	17	6401	Blue	IC05F	ALL
7	8420	Yellow	D840B	ALL	18	8421	Green	D840B	ALL
8	1202	Grey	D004A	ALL	19	7026	Brown	IC02F	ALL
9	7025	Green	IC02F	ALL	20	8411	Red	D840B	ALL
10	8410	Green	D840B	ALL	21	2100B	Green	S001	ALL
11	2201	Brown	IC01F	ALL	22	6019	Yellow	IC05F	ALL

IC30F:instrument panel harness—Cabin harness (2P) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	5203	Red	IC02F	ALL	2	5299	Grey	IC02F	ALL
					2	5299A	Grey	D001H	ALL

IC05F: instrument panel harness--right front door harness (20P Yellow) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	810B	Yellow	SP16A	B/C	11				
2	6017	Brown	IC04F	ALL	12	MC804	Green yellow	IC13F	B/C
3	6401	Blue	IC04F	ALL	13	8011	Yellow	IC13F	B/C
4					14				
5	6210	Green	S005	ALL	15	2335	Brown	SP15	ALL
6					16	6412	Red	IC04F	ALL
7	6019	Yellow	IC04F	ALL	17	6201	Yellow	D001C	ALL
8	602	Red	IC02F	ALL	18	8415	Brown	D840B	ALL
9	MC55	Green yellow	G55	ALL	19	8416	Grey	D840B	ALL
10	6411	Blue	IC04F	ALL^	20	6200	Red	D001C	ALL

IC12F: instrument panel harness--manual air conditioning harness (16P Black) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	003C	Green	SP21	E/F	9	803	Red	IC03F	E/F
2	2600F	Red	SP07	E/F	10	MC51A	Yellow green	051	E/F
3	8100	Brown	D001H	E/F	11	8001	Brown	IC01F	E/F
4	8081	Yellow	IC01F	E/F	12				
5					13				
6					14				
7	8080	Grey	IC01F	E/F	15				
8	8077	Brown	IC01F	E/F	16	MC52	Yellow green	G52	E/F

IC13F: instrument panel harness--automatic air conditioning harness (16P Grey) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	2600H	Red	SP07	B/C	9	MC52A	Yellow green	G52	B/C
2	8100A	Red	D001H	B/C	10	MC53A	Green yellow	G53	B
3	MC803	Yellow green	D8013	B/C	11	MC804	Green yellow	IC05F	B/C
4	6739B	Green	S002B	B/C	12	8081A	Yellow	IC01F	B/C
5	8013	Red	D8013	B/C	13	8080A	Grey	IC01F	B/C
6	8011	Yellow	IC05F	B/C	14				
6	8011A	Yellow	D721	B/C	15	8077A	Brown	IC01F	B/C
7	8001A	Brown	IC01F	B/C	16	803A	Red	IC03F	B/C
8	003D	Green	SP21	B/C					

IC14M: instrument panel harness--SRS harness (10P Green) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	652	Brown	D001B	ALL	6				
2	6501	Green	D004B	ALL	7				
3					8	6502	Brown	D001H	ALL
4	9006A	Brown	D003	ALL	9				
5	6503	Green	D004A	ALL	10				

IC15AF: instrument panel harness--driver airbag (2P Yellow) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	6510	Orange	IC15M	ALL	2	6511	Yellow	IC15M	ALL

IC15M: instrument panel harness--SRS harness (2PBrown) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	6510	Orange	IC15AF	ALL	2	6511	Yellow	IC15AF	ALL

IC16M: instrument panel harness--SRS harness (2P Green) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	6515	Orange	ICI6AF	ALL	2	6516	Yellow	ICI6AF	ALL

IC16AF: instrument panel harness--passenger airbag (2P Green) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	6515	Orange	IC16M	ALL	2	6516	Yellow	IC16M	ALL

IC22F: instrument panel harness--front harness (20P White) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	010E	Yellow	SP10	C/F	11	1623	Red	D1603	C/F
2	1622	Blue	D1603	C/F	12	1620	Brown	D1603	C/F
3					13				
4	1621	Grey	D1603	C/F	14				
5	1631	Green	D1604	C/F	15				
6	1632	Grey	D1604	C/F	16				
7	7309	Red	D210A	C/F	17				
8					18				
9	1625	Yellow	D1603	C/F	19	9000	Green	D004A	C/F
10	1624	Green	D1603	C/F	19	9000B	Green	D003	C/F
					20	9001	Brown	D004A	C/F
					20	9001B	Brown	D003	C/F

Instrument panel harness (H30)		
B	manual transmission+automatic air conditioning+display screen	VIN≥038052
C	automatic transmission+automatic air conditioning+display screen	VIN≥037836
E	manual transmission+manual air conditioning+display screen	VIN≥037957
F	automatic transmission+manual air conditioning+display screen	VIN≥037831
ALL	Shared	

IC01F: instrument panel harness--front harness (22P Brown) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	2605	Yellow	D020A	ALL	12	8077	Brown	IC12F	E/F
2	012B	Green	SP08	ALL	12	8077A	Brown	IC13F	B/C
3	2201	Brown	IC04F	ALL	13	5011	Yellow	D500	ALL
4	2310	Red	SP14	ALL	14	7031	Yellow	D004B	ALL
5	1330	Green	D004A	ALL	15	1560	Grey	D004A	ALL
5	1330A	Green	D003	ALL	16	003B	Yellow	SP21	ALL
6	1392	Brown	D004A	ALL	17	2641	Red	D020A	ALL
7	4001	Red	D004A	ALL	18	1368	Grey	D721	B/C/E/F
8	2315	Green	SP15	ALL	19	8081	Yellow	IC12F	E/F
9	8080	Grey	IC12F	E/F	19	8081A	Yellow	IC13F	B/C
9	8080A	Grey	IC13F	B/C	20	4121	Red	D004B	ALL
10	5014	Red	D500	ALL	21	8001	Brown	IC12F	E/F
11	002B	Pink	SP20	ALL	21	8001A	Brown	IC13F	B/C
					22	1011	Green	D000B	B/E
					22	1610	Green	D000B	C/F

IC02F: instrument panel harness--front harness (26P White) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	2606	Green	D020A	ALL	14	5111	Red	D500	ALL
2	012C	Brown	SP08	ALL	15	6739	Brown	S002B	B/C
3	8200	Red	D820	ALL	15	6739E	Brown	D004A	A/D/E/F
3	8200A	Green	D820	ALL	15	6739G	Brown	D721	E/F
4	7002	Grey	D003	ALL	16	600	Brown	D001C	ALL
5	8269	Blue	D820	ALL	17	601	Pink	IC04F	ALL
6	5210	White	D001H	ALL	18	602	Red	IC05F	ALL
7	1012	Brown	D004B	ALL	19	1599B	Green	D003	ALL
8	2500	Red	D020B	ALL	20	5299	Grey	IC30F	ALL
9	9006B	Yellow	D003	ALL	21	5203	Red	IC30F	ALL
10	6250	Brown	IC04F	ALL	22	5112	Brown	D500	ALL
11	7003	Red	D004B	ALL	23	7020	White	IC04F	ALL
12	5016	Yellow	D500	ALL	24	7021	Red	IC04F	ALL
13	2100A	Green	S001	ALL	25	7025	Green	IC04F	ALL
					26	7026	Brown	IC04F	ALL

IC03F: instrument panel harness--front harness (2P Brown) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	260	White	SP05	ALL	2	803	Red	IC12F	E/F
					2	803A	Red	IC13F	B/C

IC04F: instrument panel harness--cockpit harness (26P Black) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	7020	White	IC02F	ALL	14	601	Pink	IC02F	ALL
2	7021	Red	IC02F	ALL	15	6411	Blue	IC05F	ALL
3	2320	Red	SP14	ALL	16	8426	Yellow	D840B	ALL
4	2330	Brown	SP14	ALL	17	6401	Blue	IC05F	ALL
5	8425	Green	D840B	ALL	18	8421	Green	D840B	ALL
6	6412	Red	IC05F	ALL	19	7026	Brown	IC02F	ALL
7	8420	Yellow	D840B	ALL	20	8411	Red	D840B	ALL
8	1202	Grey	D004A	ALL	21	2100B	Green	S001	ALL
9	7025	Green	IC02F	ALL	22	6019	Yellow	IC05F	ALL
10	8410	Green	D840B	ALL	23	6250	Brown	IC02F	ALL
11	2201	Brown	IC01F	ALL	24				
12	6017	Brown	IC05F	ALL	25				
13	2325	Yellow	SP15	ALL	26				

IC30F:instrument panel harness—Cabin harness (2P) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	5203	Red	IC02F	ALL	2	5299	Grey	IC02F	ALL
					2	5299A	Grey	D001H	ALL

IC05F: instrument panel harness--right front door harness (20P Yellow) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	810B	Yellow	SP16A	B/C	11				
2	6017	Brown	IC04F	ALL	12	MC804	Green yellow	IC13F	B/C
3	6401	Blue	IC04F	ALL	13	8011	Yellow	IC13F	B/C
4					14				
5	6210	Green	S005	ALL	15	2335	Brown	SP15	ALL
6					16	6412	Red	IC04F	ALL
7	6019	Yellow	IC04F	ALL	17	6201	Yellow	D001C	ALL
8	602	Red	IC02F	ALL	18	8415	Brown	D840B	ALL
9	MC55	Green yellow	G55	ALL	19	8416	Grey	D840B	ALL
10	6411	Blue	IC04F	ALL^	20	6200	Red	D001C	ALL

IC12F: instrument panel harness--manual air conditioning harness (16P Black) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	003C	Green	SP21	E/F	9	803	Red	IC03F	E/F
2	2600F	Red	SP07	E/F	10	MC51A	Yellow green	051	E/F
3	8100	Brown	D001H	E/F	11	8001	Brown	IC01F	E/F
4	8081	Yellow	IC01F	E/F	12				
5					13				
6					14				
7	8080	Grey	IC01F	E/F	15				
8	8077	Brown	IC01F	E/F	16	MC52	Yellow green	G52	E/F

IC13F: instrument panel harness--automatic air conditioning harness (16P Grey) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	2600H	Red	SP07	B/C	9	MC52A	Yellow green	G52	B/C
2	8100A	Red	D001H	B/C	10	MC53A	Green yellow	G53	B
3	MC803	Yellow green	D8013	B/C	11	MC804	Green yellow	SG09	C
4	6739B	Green	S002B	B/C	12	8081A	Yellow	IC01F	B/C
5	8013	Red	D8013	B/C	13	8080A	Grey	IC01F	B/C
6	8011	Yellow	IC05F	B/C	14				
6	8011A	Yellow	D721	B/C	15	8077A	Brown	IC01F	B/C
7	8001A	Brown	IC01F	B/C	16	803A	Red	IC03F	B/C
8	003D	Green	SP21	B/C					

IC14M: instrument panel harness--SRS harness (10P Green) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	652	Brown	D001B	ALL	6				
2	6501	Green	D004B	ALL	7				
3					8	6502	Brown	D001H	ALL
4	9006A	Brown	D003	ALL	9				
5	6503	Green	D004A	ALL	10				

IC15AF: instrument panel harness--driver airbag (2P Yellow) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	6510	Orange	IC15M	ALL	2	6511	Yellow	IC15M	ALL

IC15M: instrument panel harness--SRS harness (2PBrown) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	6510	Orange	IC15AF	ALL	2	6511	Yellow	IC15AF	ALL

IC16M: instrument panel harness--SRS harness (2P Green) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	6515	Orange	ICI6AF	ALL	2	6516	Yellow	ICI6AF	ALL

IC16AF: instrument panel harness--passenger airbag (2P Green) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	6515	Orange	IC16M	ALL	2	6516	Yellow	IC16M	ALL

IC22F: instrument panel harness--front harness (20P White) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	010E	Yellow	SP10	C/F	11	1623	Red	D1603	C/F
2	1622	Blue	D1603	C/F	12	1620	Brown	D1603	C/F
3					13				
4	1621	Grey	D1603	C/F	14				
5	1631	Green	D1604	C/F	15				
6	1632	Grey	D1604	C/F	16				
7	7309	Red	D210A	C/F	17				
8					18				
9	1625	Yellow	D1603	C/F	19	9000	Green	D004A	C/F
10	1624	Green	D1603	C/F	19	9000B	Green	D003	C/F
					20	9001	Brown	D004A	C/F
					20	9001B	Brown	D003	C/F

Front harness (S30)		
A	manual transmission+manual air conditioning	VIN<015982
B	manual transmission+automatic air conditioning	
C	automatic transmission+manual air conditioning	
D	automatic transmission+automatic air conditioning	
ALL	Shared	

IC01M: front harness--instrument panel harness (22P Brown) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	2605	Pink	SP05B	ALL	12	8077	Green	D801	ALL
2	012B	Yellow	IC19M	A/B	13	5011	Yellow	D001F	ALL
2	012D	Grey	D1602B	C/D	14	7031	Red	D703	ALL
3	2201	Green	IC20M	A/B	15	1560	Yellow	IC20M	ALL
3	2201A	Green	D16028	C/D	16	003B	Blue	SP26	ALL
3	2201B	Yellow	D16018	C/D	17	2641	Green	D002	ALL
4	2310	Brown	D2610A	ALL	18	1368	Red	IC20M	ALL
5	1330	Red	IC19M	ALL	19	8081	Blue	IC20M	ALL
6	1392	Brown	IC20M	ALL	20	4121	Yellow	IC19M	ALL
7	4001	Yellow	IC19M	ALL	21	8001	Grey	IC20M	A/D
8	2315	Brown	D2615A	ALL	21	8001A	Red	D002	B/C
9	8080	Green	IC19M	ALL	22	1011	Green	IC19M	A/B
10	5014	Grey	D501	ALL	*22*	1610	Green	D1602B	C/D
11	002-	Yellow	SP23	ALL					

IC02M: front harness--instrument panel harness (26P White) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	2606	Pink	SP05A	ALL	15	6739	Green	S002A	A/B
2	012C	Yellow	D700	ALL	15	6739F	Green	S002C	C/D
3	8200	Red	IC19M	ALL	16				
4	7002	Brown	D700	ALL	17				
5	8269	Blue	IC19M	ALL	18				
6	602A	Brown	D002	ALL	19	1599B	Red	IC20M	ALL
7	1012	Red	IC19M	ALL	20	602	Red	SPWD0	ALL
8	2500	Blue	D002	ALL	21				
9	9006B	Yellow	IC20M	ALL	*22*	5112	Yellow	D510	ALL
10	601B	Pink	SPWD0	ALL	23	7020	Green	D700	ALL
11	7003	Blue	D700	ALL	24	7021	Brown	D700	ALL
12	5016	Brown	D501	ALL	25	7025	Green	D700	ALL
13	2100	Green	D700	ALL	26	7026	Brown	D700	ALL
14	5111	Green	D510	ALL					

IC03M: front harness--instrument panel harness (2P Brown) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	260	White	D002	ALL	2	803	Red	D002	ALL

IC19M: front harness--engine harness (26P White) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1					15	1228	Green	D002	ALL
2	8076	Green	D801	ALL	16	6739E	Green	S002C	C/D
3	1012	Red	IC02M	ALL	17	4121	Yellow	IC01M	ALL
4	1229	Blue	D002	ALL	18	8269	Blue	IC02M	ALL
5	1592	Green	IC21M	ALL	19	1330	Red	IC01M	ALL
6	1203	Grey	D002	ALL	20				
7	8200	Red	IC02M	ALL	21	012B	Yellow	IC01M	A/B
8	8080	Green	IC01M	ALL	22	1011	Green	IC01M	A/B
9	4001	Yellow	IC01M	ALL	22	1611A	Green	D002	C/D
10	1204A	Green	SP03	ALL	23				
11					24	7309	Red	IC22M	C/D
12					25				
13					26				
14									

IC20M: front harness--engine harness (22P White) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	1204B	Grey	SP03	ALL	12	8001	Grey	IC01M	A/D
2					12	8001B	Grey	D002	B/C
3	6739B	Blue	S002A	A/B	13	1560	Yellow	IC01M	ALL
4	9000A	Green	IC22M	C/D	14	1392	Brown	IC01M	ALL
5	9001A	Brown	IC22M	C/D	15	1368	Red	IC01M	ALL
6					16				
7	8081	Blue	IC01M	ALL	17				
8	132A	Green	SP24	C/D	18	1599A	Yellow	IC21M	ALL
8	132B	Green	D002	A/B	19	9006B	Yellow	IC02M	ALL
9	1599B	Red	IC02M	ALL	20				
10	1595	Brown	IC21M	ALL	21				
11	2201	Green	IC01M	A/B	22				

IC21M: front harness--cooling fan harness (6P White) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	1592	Green	IC19M	ALL	4	1590	Grey	D002	ALL
2	1595	Brown	IC20M	ALL	5	1599A	Yellow	IC20M	ALL
3	002C	Blue	SP23	ALL	6	150	Black	D002	ALL

IC22M: front harness--instrument panel harness (20P White) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	160	Yellow	D1601A	C/D	11	1623	Red	D1601B	C/D
2	1622	Blue	D1601B	C/D	12	1620	Brown	D1601B	C/D
3					13				
4	1621	Grey	D1601B	C/D	14				
5	1631	Green	D002	C/D	15				
6	1632	Grey	D002	C/D	16				
7	7309	Red	IC19M	C/D	17				
8					18				
9	1625	Yellow	D1601B	C/D	19	9000	Green	D1601A	C/D
10	1624	Green	D1601B	C/D	19	9000A	Green	IC20M	C/D
					20	9001	Brown	D1601A	C/D
					20	9001A	Brown	IC20M	C/D

Front harness (S30)		
A	manual transmission+manual air conditioning	015982≤VIN<038932
B	manual transmission+automatic air conditioning	015982≤VIN<038979
C	automatic transmission+manual air conditioning	015982 ≤VIN<037670
D	automatic transmission+automatic air conditioning	015982≤VIN<037670
ALL	Shared	

IC01M: front harness--instrument panel harness (22P Brown) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	2605	Pink	SP053	ALL	12	8077	Green	D801	ALL
2	012B	Yellow	IC19M	A/B	13	5011	Yellow	D001F	ALL
2	012D	Grey	D1602B	C/D	14	7031	Red	D703	ALL
3	2201	Green	IC19M	A/B	15	1560	Yellow	IC20M	ALL
3	2201A	Green	D1602B	C/D	16	0038	Blue	SP26	ALL
3	2201B	Yellow	D1601B	C/D	17	2641	Green	D002	ALL
4	2310	Brown	D2610A	ALL	18	1368	Red	IC20M	ALL
5	1330	Red	IC19M	ALL	19	8081	Blue	IC20M	ALL
6	1392	Brown	IC20M	ALL	20	4121	Yellow	IC19M	ALL
7	4001	Yellow	IC19M	ALL	21	8001	Grey	IC20M	A/D
8	2315	Brown	D2615A	ALL	21	8001A	Red	D002	B/C
9	8080	Green	IC19M	ALL	22	1011	Green	IC19M	A/B
10	5014	Grey	D501	ALL	22	1610	Green	D160B	C/D
11	002-	Yellow	SP23	ALL					

IC02M: front harness--instrument panel harness (26P White) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	2606	Pink	SP05A	ALL	15	6739	Green	S002A	A/B
2	012C	Yellow	D700	ALL	15	6739F	Green	S002C	C/D
3	8200	Red	IC19M	ALL	16	600	Brown	D002	ALL
4	7002	Brown	D700	ALL	17	601B	Pink	SPWD0	ALL
5	8269	Blue	IC19M	ALL	18	602	Red	SPWD0	ALL
6					19	1599B	Red	IC20M	ALL
7	1012	Red	IC19M	ALL	20				
8	2500	Blue	D002	ALL	21				
9	9006B	Yellow	IC20M	ALL	22	5112	Yellow	D510	ALL
10					23	7020	Green	D700	ALL
11	7003	Blue	D700	ALL	24	7021	Brown	D700	ALL
12	5016	Brown	D501	ALL	25	7025	Green	D700	ALL
13	2100	Green	D700	ALL	26	7026	Brown	D700	ALL
14	5111	Green	D510	ALL					

IC03M: front harness--instrument panel harness (2P Brown) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	260	White	D002	ALL	2	803	Red	D002	ALL

IC19M: front harness--engine harness (26P White) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1					15	1228	Green	D002	ALL
2	8076	Green	D801	ALL	16	6739E	Green	S002C	C/D
3	1012	Red	IC02M	ALL	17	4121	Yellow	IC01M	ALL
4	1229	Blue	D002	ALL	18	8269	Blue	IC02M	ALL
5	1592	Green	IC21M	ALL	19	1330	Red	IC01M	ALL
6	1203	Grey	D002	ALL	20				
7	8200	Red	IC02M	ALL	21	012B	Yellow	IC01M	A/B
8	8080	Green	IC01M	ALL	*22*	1011	Green	IC01M	A/B
9	4001	Yellow	IC01M	ALL	*22*	1611A	Green	D002	C/D
10	1204A	Green	SP03	ALL	23				
11					24	7309	Red	IC22M	C/D
12					25				
13					26				
14									

IC20M: front harness--engine harness (22P White) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	1204B	Grey	SP03	ALL	12	8001	Grey	IC01M	A/D
2	1377	Red	D1261	ALL	12	8001B	Grey	D002	B/C
3	6739B		S002A	A/B	13	1560	Yellow	IC01M	ALL
4	9000A	Green	IC22M	C/D	14	1392	Brown	IC01M	ALL
5	9001A	Brown	IC22M	C/D	15	1368	Red	IC01M	ALL
6	1378	Green	D1261	ALL	16				
7	8081	Blue	IC01M	ALL	17	1380	Yellow	D1261	ALL
8	132A	Green	SP24	C/D	18	1599A	Yellow	IC21M	ALL
8	132B	Green	D002	A/B	19	9006B	Yellow	IC02M	ALL
9	1599B	Red	IC02M	ALL	20	1379	Brown	D1261	ALL
10	1595	Brown	IC21M	ALL	21				
11	2201	Green	IC01M	A/B	*22*				

IC21M: front harness--cooling fan harness (6P White) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	1592	Green	IC19M	ALL	4	1590	Grey	D002	ALL
2	1595	Brown	IC20M	ALL	5	1599A	Yellow	IC20M	ALL
3	002C	Blue	SP23	ALL	6	150	Black	D002	ALL

IC22M: front harness--instrument panel harness (20P White) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	160	Yellow	D1601A	C/D	11	1623	Red	D1601B	C/D
2	1622		D1601B	C/D	12	1620	Brown	D1601B	C/D
3					13				
4	1621	Grey	D1601B	C/D	14				
5	1631	Green	D002	C/D	15				
6	1632	Grey	D002	C/D	16				
7	7309	Red	IC19M	C/D	17				
8					18				
9	1625	Yellow	D1601B	C/D	19	9000	Green	D1601A	C/D
10	1624	Green	D1601B	C/D	19	9000A	Green	IC20M	C/D
					20	9001	Brown	D1601A	C/D
					20	9001A	Brown	IC20M	C/D

Front harness (S30)		
A	manual transmission+manual air conditioning	015982≤VIN<038932
B	manual transmission+automatic air conditioning	015982≤VIN<038979
C	automatic transmission+manual air conditioning	015982 ≤VIN<037670
D	automatic transmission+automatic air conditioning	015982≤VIN<037670
ALL	Shared	

IC01M: front harness--instrument panel harness (22P Brown) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	2605	Pink	SP053	ALL	12	8077	Green	D801	ALL
2	012B	Yellow	IC19M	A/B	13	5011	Yellow	D001F	ALL
2	012D	Grey	D1602B	C/D	14	7031	Red	D703	ALL
3	2201	Green	IC19M	A/B	15	1560	Yellow	IC20M	ALL
3	2201A	Green	D1602B	C/D	16	003B	Blue	SP26	ALL
3	2201B	Yellow	D1601B	C/D	17	2641	Green	D002	ALL
4	2310	Brown	D2610A	ALL	18	1368	Red	IC20M	ALL
5	1330	Red	IC19M	ALL	19	8081	Blue	IC20M	ALL
6	1392	Brown	IC20M	ALL	20	4121	Yellow	IC19M	ALL
7	4001	Yellow	IC19M	ALL	21	8001	Grey	IC20M	A/D
8	2315	Brown	D2615A	ALL	21	8001A	Red	D002	B/C
9	8080	Green	IC19M	ALL	22	1011	Green	IC19M	A/B
10	5014	Grey	D501	ALL	22	1610	Green	D1602B	C/D
11	002-	Yellow	SP23	ALL					

IC02M: front harness--instrument panel harness (26P White) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	2606	Pink	SP05A	ALL	15	6739	Green	S002A	A/B
2	012C	Yellow	D700	ALL	15	6739F	Green	S002C	C/D
3	8200	Red	IC19M	ALL	16	600	Brown	D002	ALL
4	7002	Brown	D700	ALL	17	601B	Pink	SPWD0	ALL
5	8269	Blue	IC19M	ALL	18	602	Red	SPWD0	ALL
6					19	1599B	Red	IC20M	ALL
7	1012	Red	IC19M	ALL	20				
8	2500	Blue	D002	ALL	21				
9	9006B	Yellow	IC20M	ALL	22	5112	Yellow	D510	ALL
10					23	7020	Green	D700	ALL
11	7003	Blue	D700	ALL	24	7021	Brown	D700	ALL
12	5016	Brown	D501	ALL	25	7025	Green	D700	ALL
13	2100	Green	D700	ALL	26	7026	Brown	D700	ALL
14	5111	Green	D510	ALL					

IC03M: front harness--instrument panel harness (2P Brown) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	260	White	D002	ALL	2	803	Red	D002	ALL

IC19M: front harness--engine harness (26P White) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	1229B	Red	D1256	ALL	15	1228	Green	D002	ALL
2	8076	Green	D801	ALL	16	6739E	Green	S002C	C/D
3	1012	Red	IC02M	ALL	17	4121	Yellow	IC01M	ALL
4	1229	Blue	D002	ALL	18	8269	Blue	IC02M	ALL
5	1592	Green	IC21M	ALL	19	1330	Red	IC01M	ALL
6	1203	Grey	D002	ALL	20				
7	8200	Red	IC02M	ALL	21	012B	Yellow	IC01M	A/B
8	8080	Green	IC01M	ALL	*22*	1011	Green	IC01M	A/B
9	4001	Yellow	IC01M	ALL	*22*	1611A	Green	D002	C/D
10	1204A	Green	SP03	ALL	23				
11					24	7309	Red	IC22M	C/D
12					25				
13					26				
14									

IC20M: front harness--engine harness (22P White) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	1204B	Grey	SP03	ALL	12	8001	Grey	IC01M	A/D
2	1377	Red	D1261	ALL	12	8001B	Grey	D002	B/C
3	6739B	Blue	S002A	A/B	13	1560	Yellow	IC01M	ALL
4	9000A	Green	IC22M	C/D	14	1392	Brown	IC01M	ALL
5	9001A	Brown	IC22M	C/D	15	1368	Red	IC01M	ALL
6	1378	Green	D1261	ALL	16				
7	8081	Blue	IC01M	ALL	17	1380	Yellow	D1261	ALL
8	132A	Green	SP24	C/D	18	1599A	Yellow	IC21M	ALL
8	132B	Green	D002	A/B	19	9006B	Yellow	IC02M	ALL
9	1599B	Red	IC02M	ALL	20	1379	Brown	D1261	ALL
10	1595	Brown	IC21M	ALL	21				
11	2201	Green	IC01M	A/B	*22*				

IC21M: front harness--cooling fan harness (6P White) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	1592	Green	IC19M	ALL	4	1590	Grey	D002	ALL
2	1595	Brown	IC20M	ALL	5	1599A	Yellow	IC20M	ALL
3	002C	Blue	SP23	ALL	6	150	Black	D002	ALL

IC22M: front harness--instrument panel harness (20P White) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	160	Yellow	D1601A	C/D	11	1623	Red	D1601B	C/D
2	1622	Blue	D1601B	C/D	12	1620	Brown	D1601B	C/D
3					13				
4	1621	Grey	D1601B	C/D	14				
5	1631	Green	D002	C/D	15				
6	1632	Grey	D002	C/D	16				
7	7309	Red	IC19M	C/D	17				
8					18				
9	1625	Yellow	D1601B	C/D	19	9000	Green	D1601A	C/D
10	1624	Green	D1601B	C/D	19	9000A	Green	IC20M	C/D
					20	9001	Brown	D1601A	C/D
					20	9001A	Brown	IC20M	C/D

Front harness (S30)		
A	manual transmission+manual air conditioning	VIN≥038932
B	manual transmission+automatic air conditioning	VIN≥038979
C	automatic transmission+manual air conditioning	VIN≥037670
D	automatic transmission+automatic air conditioning	VIN≥037670
ALL	Shared	

IC01M: front harness--instrument panel harness (22P Brown) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	2605	Pink	SP053	ALL	12	8077	Green	D801	ALL
2	012B	Yellow	IC19M	A/B	13	5011	Yellow	D001F	ALL
2	012D	Grey	D1602B	C/D	14	7031	Red	D703	ALL
3	2201	Green	IC19M	A/B	15	1560	Yellow	IC20M	ALL
3	2201A	Green	D1602B	C/D	16	0038	Blue	SP26	ALL
3	2201B	Yellow	D1601B	C/D	17	2641	Green	D002	ALL
4	2310	Brown	D2610A	ALL	18	1368	Red	IC20M	ALL
5	1330	Red	IC19M	ALL	19	8081	Blue	IC20M	ALL
6	1392	Brown	IC20M	ALL	20	4121	Yellow	IC19M	ALL
7	4001	Yellow	IC19M	ALL	21	8001	Grey	IC20M	A/D
8	2315	Brown	D2615A	ALL	21	8001A	Red	D002	B/C
9	8080	Green	IC19M	ALL	22	1011	Green	IC19M	A/B
10	5014	Grey	D501	ALL	22	1610	Green	D1602B	C/D
11	002-	Yellow	SP23	ALL					

IC02M: front harness--instrument panel harness (26P White) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	2606	Pink	SP05A	ALL	15	6739	Green	S002A	A/B
2	012C	Yellow	D700	ALL	15	6739F	Green	S002C	C/D
3	8200	Red	IC19M	ALL	16	600	Brown	D002	ALL
4	7002	Brown	D700	ALL	17	601B	Pink	SPWD0	ALL
5	8269	Blue	IC19M	ALL	18	602	Red	SPWD0	ALL
6					19	1599B	Red	IC20M	ALL
7	1012	Red	IC19M	ALL	20				
8	2500	Blue	D002	ALL	21				
9	9006B	Yellow	IC20M	ALL	22	5112	Yellow	D510	ALL
10	6250	Brown	D1265	ALL	23	7020	Green	D700	ALL
11	7003	Blue	D700	ALL	24	7021	Brown	D700	ALL
12	5016	Brown	D501	ALL	25	7025	Green	D700	ALL
13	2100	Green	D700	ALL	26	7026	Brown	D700	ALL
14	5111	Green	D510	ALL					

IC03M: front harness--instrument panel harness (2P Brown) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	260	White	D002	ALL	2	803	Red	D002	ALL

IC19M: front harness--engine harness (26P White) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	1229B	Red	D1256	ALL	15	1228	Green	D002	ALL
2	8076	Green	D801	ALL	16	6739E	Green	S002C	C/D
3	1012	Red	IC02M	ALL	17	4121	Yellow	IC01M	ALL
4	1229	Blue	D002	ALL	18	8269	Blue	IC02M	ALL
5	1592	Green	IC21M	ALL	19	1330	Red	IC01M	ALL
6	1203	Grey	D002	ALL	20	1229	Blue	D1256	ALL
7	8200	Red	IC02M	ALL	21	012B	Yellow	IC01M	A/B
8	8080	Green	IC01M	ALL	*22*	1011	Green	IC01M	A/B
9	4001	Yellow	IC01M	ALL	*22*	1611A	Green	D002	C/D
10	1204A	Green	SP03	ALL	23				
11					24	7309	Red	IC22M	C/D
12					25				
13					26				
14									

IC20M: front harness--engine harness (22P White) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	1204B	Grey	SP03	ALL	12	8001	Grey	IC01M	A/D
2	1377	Red	D1261	ALL	12	8001B	Grey	D002	B/C
3	6739B	Blue	S002A	A/B	13	1560	Yellow	IC01M	ALL
4	9000A	Green	IC22M	C/D	14	1392	Brown	IC01M	ALL
5	9001A	Brown	IC22M	C/D	15	1368	Red	IC01M	ALL
6	1378	Green	D1261	ALL	16				
7	8081	Blue	IC01M	ALL	17	1380	Yellow	D1261	ALL
8	132A	Green	SP24	C/D	18	1599A	Yellow	IC21M	ALL
8	132B	Green	D002	A/B	19	9006B	Yellow	IC02M	ALL
9	1599B	Red	IC02M	ALL	20	1379	Brown	D1261	ALL
10	1595	Brown	IC21M	ALL	21				
11	2201	Green	IC01M	A/B	*22*				

IC21M: front harness--cooling fan harness (6P White) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	1592	Green	IC19M	ALL	4	1590	Grey	D002	ALL
2	1595	Brown	IC20M	ALL	5	1599A	Yellow	IC20M	ALL
3	002C	Blue	SP23	ALL	6	150	Black	D002	ALL

IC22M: front harness--instrument panel harness (20P White) (S30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	160	Yellow	D1601A	C/D	11	1623	Red	D1601B	C/D
2	1622	Blue	D1601B	C/D	12	1620	Brown	D1601B	C/D
3					13				
4	1621	Grey	D1601B	C/D	14				
5	1631	Green	D002	C/D	15				
6	1632	Grey	D002	C/D	16				
7	7309	Red	IC19M	C/D	17				
8					18				
9	1625	Yellow	D1601B	C/D	19	9000	Green	D1601A	C/D
10	1624	Green	D1601B	C/D	19	9000A	Green	IC20M	C/D
					20	9001	Brown	D1601A	C/D
					20	9001A	Brown	IC20M	C/D

Front harness (H30)		
A	manual transmission+manual air conditioning	VIN<037957
B	manual transmission+automatic air conditioning	VIN<038052
C	automatic transmission+manual air conditioning	VIN<037831
D	automatic transmission+automatic air conditioning	VIN<037836
ALL	Shared	

IC01M: front harness--instrument panel harness (22P Brown) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	2605	Pink	SP053	ALL	12	8077	Green	D801	ALL
2	012B	Yellow	IC19M	A/B	13	5011	Yellow	D001F	ALL
2	012D	Grey	D1602B	C/D	14	7031	Red	D703	ALL
3	2201	Green	IC19M	A/B	15	1560	Yellow	IC20M	ALL
3	2201A	Green	D1602B	C/D	16	0038	Blue	SP26	ALL
3	2201B	Yellow	D1601B	C/D	17	2641	Green	D002	ALL
4	2310	Brown	D2610A	ALL	18	1368	Red	IC20M	ALL
5	1330	Red	IC19M	ALL	19	8081	Blue	IC20M	ALL
6	1392	Brown	IC20M	ALL	20	4121	Yellow	IC19M	ALL
7	4001	Yellow	IC19M	ALL	21	8001	Grey	IC20M	A/D
8	2315	Brown	D2615A	ALL	21	8001A	Red	D002	B/C
9	8080	Green	IC19M	ALL	22	1011	Green	IC19M	A/B
10	5014	Grey	D501	ALL	22	1610	Green	D1602B	C/D
11	002-	Yellow	SP23	ALL					

IC02M: front harness--instrument panel harness (26P White) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	2606	Pink	SP05A	ALL	15	6739	Green	S002A	A/B
2	012C	Yellow	D700	ALL	15	6739F	Green	S002C	C/D
3	8200	Red	IC19M	ALL	16	600	Brown	D002	ALL
4	7002	Brown	D700	ALL	17	601B	Pink	SPWD0	ALL
5	8269	Blue	IC19M	ALL	18	602	Red	SPWD0	ALL
6	5210	White	D002	ALL	19	1599B	Red	IC20M	ALL
7	1012	Red	IC19M	ALL	20	5299	Grey	D002	ALL
8	2500	Blue	D002	ALL	21	5203	Red	D022	ALL
9	9006B	Yellow	IC20M	ALL	22	5112	Yellow	D510	ALL
10					23	7020	Green	D700	ALL
11	7003	Blue	D700	ALL	24	7021	Brown	D700	ALL
12	5016	Brown	D501	ALL	25	7025	Green	D700	ALL
13	2100	Green	D700	ALL	26	7026	Brown	D700	ALL
14	5111	Green	D510	ALL					

IC03M: front harness--instrument panel harness (2P Brown) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	260	White	D002	ALL	2	803	Red	D002	ALL

IC19M: front harness--engine harness (26P White) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1					15	1228	Green	D002	ALL
2	8076	Green	D801	ALL	16	6739E	Green	S002C	C/D
3	1012	Red	IC02M	ALL	17	4121	Yellow	IC01M	ALL
4	1229	Blue	D002	ALL	18	8269	Blue	IC02M	ALL
5	1592	Green	IC21M	ALL	19	1330	Red	IC01M	ALL
6	1203	Grey	D002	ALL	20				
7	8200	Red	IC02M	ALL	21	012B	Yellow	IC01M	A/B
8	8080	Green	IC01M	ALL	*22*	1011	Green	IC01M	A/B
9	4001	Yellow	IC01M	ALL	*22*	1611A	Green	D002	C/D
10	1204A	Green	SP03	ALL	23				
11					24	7309	Red	IC22M	C/D
12					25				
13					26				
14									

IC20M: front harness--engine harness (22P White) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	1204B	Grey	SP03	ALL	12	8001	Grey	IC01M	A/D
2	1377	Red	D1261	ALL	12	8001B	Grey	D002	B/C
3	6739B	Blue	S002A	A/B	13	1560	Yellow	IC01M	ALL
4	9000A	Green	IC22M	C/D	14	1392	Brown	IC01M	ALL
5	9001A	Brown	IC22M	C/D	15	1368	Red	IC01M	ALL
6	1378	Green	D1261	ALL	16				
7	8081	Blue	IC01M	ALL	17	1380	Yellow	D1261	ALL
8	132A	Green	SP24	C/D	18	1599A	Yellow	IC21M	ALL
8	132B	Green	D002	A/B	19	9006B	Yellow	IC02M	ALL
9	1599B	Red	IC02M	ALL	20	1379	Brown	D1261	ALL
10	1595	Brown	IC21M	ALL	21				
11	2201	Green	IC01M	A/B	*22*				

IC21M: front harness--cooling fan harness (6P White) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	1592	Green	IC19M	ALL	4	1590	Grey	D002	ALL
2	1595	Brown	IC20M	ALL	5	1599A	Yellow	IC20M	ALL
3	002C	Blue	SP23	ALL	6	150	Black	D002	ALL

IC22M: front harness--instrument panel harness (20P White) (H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	160	Yellow	D1601A	C/D	11	1623	Red	D1601B	C/D
2	1622	Blue	D1601B	C/D	12	1620	Brown	D1601B	C/D
3					13				
4	1621	Grey	D1601B	C/D	14				
5	1631	Green	D002	C/D	15				
6	1632	Grey	D002	C/D	16				
7	7309	Red	IC19M	C/D	17				
8					18				
9	1625	Yellow	D1601B	C/D	19	9000	Green	D1601A	C/D
10	1624	Green	D1601B	C/D	19	9000A	Green	IC20M	C/D
					20	9001	Brown	D1601A	C/D
					20	9001A	Brown	IC20M	C/D

SRS harness	
A	SRS (without sidebag)
B&C	SRS (with sidebag)
ALL	Shared

IC14F: SRS harness--instrument panel harness (10P Green) (S30/H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	652	Brown	D650	ALL	6				
2	6501	Green	D650	ALL	7				
3					8	6502	Brown	D650	ALL
4	9006A	Brown	D650	ALL	9				
5	6503	Green	D6502	ALL	10				

IC15F: SRS harness--instrument panel harness (2P Brown) (S30/H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	6510	Orange	D650	ALL	2	6511	Yellow	D650	ALL

IC16F: SRS harness--instrument panel harness (2P Green) (S30/H30)

Pin	Conductor No.	Colour	Connection	Model	Pin	Conductor No.	Colour	Connection	Model
1	6515	Orange	D650	ALL	2	6516	Yellow	D650	ALL

Engine harness (MT)	VIN<007559

IC10F: engine harness (MT)--ejector harness (6P Grey) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	1321	Grey	D1320C	4			
2	1322	Grey	D1320C	5	1323	Green	D1320C
3	1320	Green	SP04	6	1324	Green	D1320C

IC19F: engine harness (MT)-- front harness (26P White) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1				14			
2	8076	Blue	D1320A	15	1228	Red	D1203
3	1012	Green	D102	16			
4	1229	Blue	D1320B	17	4121	Red	D412
5	1592	Yellow	D1320A	18	8269	Green	D1320A
6	1203	Green	013203	19	1330	Red	D1320A
7	8200	Brown	D1320A	20			
8	8080	Yellow	D1320A	21	012B	Green	D220
9	4001	Green	D4005	22	1011	Yellow	D101
10	1351	White	SP04	23			
11				24			
12				25			
13				26			

IC20F: engine harness (MT)-- front harness (22P White) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	12048	Yellow	SP04	12	8001	Green	D8010
2				13	1560	Brown	D1320A
3	67398	Blue	S002	14	1392	Red	D1320A
4				15	1368	Brown	D1320A
5				16			
6				17			
7	8081	Green	D1320A	18	1599A	Green	S008
8	132A	Green	D1320A	19	9006	Yellow	D1320A
9	1599B	Green	S008	20			
10	1595	Blue	D1320A	21			
11	2201	Grey	D220	22			

Engine harness (MT)	007559≤VIN<015982

IC10F: engine harness (MT)--ejector harness (6P Grey) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	1321	Grey	D1320C	4			
2	1322	Grey	D1320C	5	1323	Green	D1320C
3	1320	Green	SP04	6	1324	Green	D1320C

IC19F: engine harness (MT)-- front harness (26P White) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1				14			
2	8076	Blue	D1320A	15	1228	Red	D1203
3	1012	Green	D102	16			
4	1229	Blue	D1320B	17	4121	Red	D412
5	1592	Yellow	D1320A	18	8269	Green	D1320A
6	1203	Green	013203	19	1330	Red	D1320A
7	8200	Brown	D1320A	20			
8	8080	Yellow	D1320A	21	012B	Green	D220
9	4001	Green	D4005	22	1011	Yellow	D101
10	1351	White	SP04	23			
11				24			
12				25			
13				26			

IC20F: engine harness (MT)-- front harness (22P White) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	1204B	Yellow	SP04	12	8001	Green	D8010
2				13	1560	Brown	D1320A
3	6739B	Blue	S002	14	1392	Red	D1320A
4				15	1368	Brown	D1320A
5				16			
6				17			
7	8081	Green	D1320A	18	1599A	Green	S008
8	132A	Green	D1320A	19	9006	Yellow	D1320A
9	1599B	Green	S008	20			
10	1595	Blue	D1320A	21			
11	2201	Grey	D220	22			

Engine harness (MT)	015982≤VIN<037957

IC10F: engine harness (MT)--ejector harness (6P Grey) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	1321	Grey	D1320C	4			
2	1322	Grey	D1320C	5	1323	Green	D1320C
3	1320	Green	SP04	6	1324	Green	D1320C

IC19F: engine harness (MT)-- front harness (26P White) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1				14			
2	8076	Blue	D1320A	15	1228	Red	D1203
3	1012	Green	D102	16			
4	1229	Blue	D1320B	17	4121	Red	D412
5	1592	Yellow	D1320A	18	8269	Green	D1320A
6	1203	Green	013203	19	1330	Red	D1320A
7	8200	Brown	D1320A	20			
8	8080	Yellow	D1320A	21	012B	Green	D220
9	4001	Green	D4005	22	1011	Yellow	D101
10	1351	White	SP04	23			
11				24			
12				25			
13				26			

IC20F: engine harness (MT)-- front harness (22P White) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	12048	Yellow	SP04	12	8001	Green	D8010
2	1377	Red	D1320A	13	1560	Brown	D1320A
3	67398	Blue	S002	14	1392	Red	D1320A
4				15	1368	Brown	D1320A
5				16			
6	1378	Green	D1320A	17	1380	Yellow	D1320A
7	8081	Green	D1320A	18	1599A	Green	S008
8	132A	Green	D1320A	19	9006	Yellow	D1320A
9	1599B	Green	S008	20	1379	Brown	D1320A
10	1595	Blue	D1320A	21			
11	2201	Grey	D220	22			

Engine harness (MT)	VIN≥037957

IC10F: engine harness (MT)--ejector harness (6P Grey) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	1321	Grey	D1320C	4			
2	1322	Grey	D1320C	5	1323	Green	D1320C
3	1320	Green	SP04	6	1324	Green	D1320C

IC19F: engine harness (MT)-- front harness (26P White) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	1228B	Red	SP306	14			
2	8076	Blue	D1320A	15	1228	Red	D1203
3	1012	Green	D102	16			
4	1229	Blue	D1320B	17	4121	Red	D412
5	1592	Yellow	D1320A	18	8269	Green	D1320A
6	1203	Green	013203	19	1330	Red	D1320A
7	8200	Brown	D1320A	20	1229B	Blue	SP03A
8	8080	Yellow	D1320A	21	012B	Green	D220
9	4001	Green	D4005	22	1011	Yellow	D101
10	1351	White	SP04	23			
11				24			
12				25			
13				26			

IC20F: engine harness (MT)-- front harness (22P White) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	1204B	Yellow	SP04	12	8001	Green	D8010
2	1377	Red	D1320A	13	1560	Brown	D1320A
3	6739B	Blue	S002	14	1392	Red	D1320A
4				15	1368	Brown	D1320A
5				16			
6	1378	Green	D1320A	17	1380	Yellow	D1320A
7	8081	Green	D1320A	18	1599A	Green	S008
8	132A	Green	D1320A	19	9006	Yellow	D1320A
9	1599B	Green	S008	20	1379	Brown	D1320A
10	1595	Blue	D1320A	21			
11	2201	Grey	D220	22			

Engine harness (AT)	VIN<009772

IC10F: engine harness (AT)--ejector harness (6P Grey) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	1321	Grey	D1320C	4			
2	1322	Grey	D1320C	5	1323	Green	D1320C
3	1320	Green	SP04	6	1324	Green	D1320C

IC19F: engine harness (AT)-- front harness (26P White) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1				14			
2	8076	Blue	D1320A	15	1228	Red	D1203
3	1012	Green	D102	16	6739C	Blue	D1320A
4	1229	Blue	D1320B	17	4121	Red	D412
5	1592	Yellow	D1320A	18	8269	Green	D1320A
6	1203	Green	013203	19	1330	Red	D1320A
7	8200	Brown	D1320A	20			
8	8080	Yellow	D1320A	21			
9	4001	Green	D4005	22	1011	Yellow	D101
10	1351	White	SP04	23			
11				24	7309	Red	D1320A
12				25			
13				26			

IC20F: engine harness (AT)-- front harness (22P White) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	1204B	Yellow	SP04	12	8001	Green	D8010
2				13	1560	Brown	D1320A
3				14	1392	Red	D1320A
4	9000	Green	D1320A	15	1368	Brown	D1320A
5	9001	Brown	D1320A	16			
6				17			
7	8081	Green	D1320A	18	1599A	Green	S008
8	132A	Green	D1320A	19	9006	Yellow	D1320A
9	1599B	Green	S008	20			
10	1595	Blue	D1320A	21			
11				22			

Engine harness (AT)	009772≤VIN<015982

IC10F: engine harness (AT)--ejector harness (6P Grey) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	1321	Grey	D1320C	4			
2	1322	Grey	D1320C	5	1323	Green	D1320C
3	1320	Green	SP04	6	1324	Green	D1320C

IC19F: engine harness (AT)-- front harness (26P White) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1				14			
2	8076	Blue	D1320A	15	1228	Red	D1203
3	1012	Green	D102	16	6739C	Blue	D1320A
4	1229	Blue	D1320B	17	4121	Red	D412
5	1592	Yellow	D1320A	18	8269	Green	D1320A
6	1203	Green	013203	19	1330	Red	D1320A
7	8200	Brown	D1320A	20			
8	8080	Yellow	D1320A	21			
9	4001	Green	D4005	22	1011	Yellow	D101
10	1351	White	SP04	23			
11				24	7309	Red	D1320A
12				25			
13				26			

IC20F: engine harness (AT)-- front harness (22P White) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	12048	Yellow	SP04	12	8001	Green	D8010
2				13	1560	Brown	D1320A
3				14	1392	Red	D1320A
4	9000	Green	D1320A	15	1368	Brown	D1320A
5	9001	Brown	D1320A	16			
6				17			
7	8081	Green	D1320A	18	1599A	Green	S008
8	132A	Green	D1320A	19	9006	Yellow	D1320A
9	1599B	Green	S008	20			
10	1595	Blue	D1320A	21			
11				22			

Engine harness (AT)	015982≤VIN<037633

IC10F: engine harness (AT)--ejector harness (6P Grey) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	1321	Grey	D1320C	4			
2	1322	Grey	D1320C	5	1323	Green	D1320C
3	1320	Green	SP04	6	1324	Green	D1320C

IC19F: engine harness (AT)-- front harness (26P White) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1				14			
2	8076	Blue	D1320A	15	1228	Red	D1203
3	1012	Green	D102	16	6739C	Blue	D1320A
4	1229	Blue	D1320B	17	4121	Red	D412
5	1592	Yellow	D1320A	18	8269	Green	D1320A
6	1203	Green	013203	19	1330	Red	D1320A
7	8200	Brown	D1320A	20			
8	8080	Yellow	D1320A	21			
9	4001	Green	D4005	22	1011	Yellow	D101
10	1351	White	SP04	23			
11				24	7309	Red	D1320A
12				25			
13				26			

IC20F: engine harness (AT)-- front harness (22P White) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	12048	Yellow	SP04	12	8001	Green	D8010
2	1377	Red	D1320A	13	1560	Brown	D1320A
3				14	1392	Red	D1320A
4	9000	Green	D1320A	15	1368	Brown	D1320A
5	9001	Brown	D1320A	16			
6	1378	Green	D1320A	17	1380	Yellow	D1320A
7	8081	Green	D1320A	18	1599A	Green	S008
8	132A	Green	D1320A	19	9006	Yellow	D1320A
9	1599B	Green	S008	20	1379	Brown	D1320A
10	1595	Blue	D1320A	21			
11				22			

Engine harness (AT)	VIN≥037633

IC10F: engine harness (AT)--ejector harness (6P Grey) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	1321	Grey	D1320C	4			
2	1322	Grey	D1320C	5	1323	Green	D1320C
3	1320	Green	SP04	6	1324	Green	D1320C

IC19F: engine harness (AT)-- front harness (26P White) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	1228B	Red	SP306	14			
2	8076	Blue	D1320A	15	1228	Red	D1203
3	1012	Green	D102	16	6739C	Blue	D1320A
4	1229	Blue	D1320B	17	4121	Red	D412
5	1592	Yellow	D1320A	18	8269	Green	D1320A
6	1203	Green	013203	19	1330	Red	D1320A
7	8200	Brown	D1320A	20	1229B	Blue	SP03A
8	8080	Yellow	D1320A	21			
9	4001	Green	D4005	22	1011	Yellow	D101
10	1351	White	SP04	23			
11				24	7309	Red	D1320A
12				25			
13				26			

IC20F: engine harness (AT)-- front harness (22P White) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	1204B	Yellow	SP04	12	8001	Green	D8010
2	1377	Red	D1320A	13	1560	Brown	D1320A
3				14	1392	Red	D1320A
4	9000	Green	D1320A	15	1368	Brown	D1320A
5	9001	Brown	D1320A	16			
6	1378	Green	D1320A	17	1380	Yellow	D1320A
7	8081	Green	D1320A	18	1599A	Green	S008
8	132A	Green	D1320A	19	9006	Yellow	D1320A
9	1599B	Green	S008	20	1379	Brown	D1320A
10	1595	Blue	D1320A	21			
11				22			

Cabin harness (S30)	
manual transmission+manual air conditioning	VIN< 008679
manual transmission+automatic air conditioning	
automatic transmission+manual air conditioning	
automatic transmission+automatic air conditioning	

IC04M: cockpit harness--instrument panel harness (22P Black) (S30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	7020	White	D7020	12	6017	Yellow	IC06F
2	7021	Red	D7020	13	2325	Red	IC07F
3	2320	Red	IC07F	14	601	Pink	IC06F
4	2330	Yellow	IC06F	15	6411	Brown	IC06F
5	8425	Green	IC09F	16	8426	Red	IC09F
6	6412	Brown	IC06F	17	6401	Yellow	IC06F
7	8420	Yellow	IC08F	18	8421	Brown	IC08F
8	1202	Red	D1211	19	7026	Brown	D7025
9	7025	Green	D7025	20	8411	Yellow	IC06F
10	8410	Green	IC06F	21	2100B	Green	IC07F
11	2201	Brown	IC07F	22	6019	Red	IC06F

IC06F: cockpit harness—left front door harness (20P Yellow) (S30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	MC71	Green yellow	G71	11	6401	Yellow	IC04M
2	6029	Yellow	IC09F	12	6205	Green	D001I
3	6027	Grey	IC09F	13	810B	Brown	SP16
4	6024	Green	IC08F	14	2330	Yellow	IC04M
5	6022	Brown	IC08F	15	6201A	Green	SP11
6	6019	Red	IC04M	16	6412	Blue	IC04M
7	6017	Yellow	IC04M	17	6200A	Red	SP12
8	601	Pink	IC04M	18	6411	White	IC04M
9	6250	Brown	D001I	19	8410	Grey	IC04M
10	6210A	Red	S006	20	8411	Pink	IC04M

IC07F: cockpit harness—rear harness (20P White) (S30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	810C	Red	SP16	11			
2				12	6206	Green	D001E
3	2651B	Yellow	D001E	13			
4				14	2620	Brown	D001E
5	310	Red	D001E	15			
6	2320	Red	IC04M	16	6265	Green	D001I
7				17	6260	Yellow	D001I
8	2325	Red	IC04M	18	2625	Green	D001E
9	2201	Brown	IC04M	19			
10				20	2100B	Green	IC04M

IC08F: cockpit harness—left rear door harness (10P Black) (S30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	6200C	Red	SP12	6			
2	6022	Brown	IC06F	7	6023	Red	D001E
3	6210C	Green	S006	8	MC623	Green yellow	SG14
4	8421	Brown	IC04M	9	6024	Green	IC06F
5	8420	Yellow	IC04M	10	6201C	Brown	SP11

IC09F: cockpit harness—right rear door harness (10P Black) (S30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	6200D	Red	SP12	6			
2	6027	Grey	IC06F	7	6028	Yellow	D001E
3	6210D	Brown	S006	8	MC624	Green yellow	SG14
4	8426	Red	IC04M	9	6029	Yellow	IC06F
5	8425	Green	IC04M	10	6201D	Red	SP11

Cabin harness (S30)	
manual transmission+manual air conditioning	008679≤VIN<038932
manual transmission+automatic air conditioning	008679≤VIN<038979
automatic transmission+manual air conditioning	008679≤VIN<037670
automatic transmission+automatic air conditioning	008679≤VIN<037670

IC04M: cockpit harness--instrument panel harness (26P Black) (S30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	7020	White	D7020	12	6017	Yellow	IC06F
2	7021	Red	D7020	13	2325	Red	IC07F
3	2320	Milk white	IC07F	14	601	Pink	IC06F
4	2330	Yellow	IC06F	15	6411	Brown	IC06F
5	8425	Green	IC09F	16	8426	Red	IC09F
6	6412	Brown	IC06F	17	6401	Yellow	IC06F
7	8420	Yellow	IC08F	18	8421	Brown	IC08F
8	1202	Red	D1211	19	7026	Brown	D7025
9	7025	Green	D7025	20	8411	Yellow	IC06F
10	8410	Grey	IC06F	21	2100B	Green	IC07F
11	2201	Brown	IC07F	22	6019	Red	IC06F

IC06F: cockpit harness--left front door harness (20P Yellow) (S30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	MC71	Green yellow	G71	11	6401	Yellow	IC04M
2	6029	Yellow	IC09F	12	6205	Green	D001I
3	6027	Grey	IC09F	13	810B	Brown	SP16
4	6024	Green	IC08F	14	2330	Yellow	IC04M
5	6022	Brown	IC08F	15	6201A	Green	SP11
6	6019	Red	IC04M	16	6412	Blue	IC04M
7	6017	Yellow	IC04M	17	6200A	Red	SP12
8	601	Pink	IC04M	18	6411	White	IC04M
9	6250	Brown	D001I	19	8410	Grey	IC04M
10	6210A	Red	S006	20	8411	Pink	IC04M

IC08F: cockpit harness--left rear door harness (10P Black) (S30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	6200C	Red	SP12	6			
2	6022	Brown	IC06F	7	6023	Red	D001E
3	6210C	Green	S006	8	MC623	Green yellow	SG14
4	8421	Brown	IC04M	9	6024	Green	IC06F
5	8420	Yellow	IC04M	10	6201C	Brown	SP11

IC09F: cockpit harness--right rear door harness (10P Black) (S30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	6200D	Red	SP12	6			
2	6027	Grey	IC06F	7	6028	Yellow	D001E
3	6210D	Brown	S006	8	MC624	Green yellow	SG14
4	8426	Red	IC04M	9	6029	Yellow	IC06F
5	8425	Green	IC04M	10	6201D	Red	SP11

IC07M: cockpit harness--main backdoor harness (10P White) (H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	2100B	Green	IC04M	6	MC501	Yellow green	SG18
1	2100D	Green	S101	7	810C	Red	SP16
2	6206	Green	D001E	8	5299	Grey	IC30M
3	2620A	Brown	S100	9			
4	6265	Green	D001I	10	3101	Brown	D310B
5	5203	Red	IC03M	10	6260	Yellow	D001I

IC30M: cockpit harness--instrument panel harness (2P）(H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	5203	Red	IC07M	2	5299	Grey	IC07M

Cabin harness (S30)	
manual transmission+manual air conditioning	VIN≥038932
manual transmission+automatic air conditioning	VIN≥038979
automatic transmission+manual air conditioning	VIN≥037670
automatic transmission+automatic air conditioning	VIN≥037670

IC04M: cockpit harness--instrument panel harness (26P Black) (S30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	7020	White	D7020	14	601	Pink	IC06F
2	7021	Red	D7020	15	6411	Brown	IC06F
3	2320	Milk white	IC07F	16	8426	Red	IC09F
4	2330	Yellow	IC06F	17	6401	Yellow	IC06F
5	8425	Green	IC09F	18	8421	Brown	IC08F
6	6412	Brown	IC06F	19	7026	Brown	D7025
7	8420	Yellow	IC08F	20	8411	Pink	IC06F
8	1202	Red	D1211	21	2100B	Green	IC07F
9	7025	Green	D7025	22	6019	Red	IC06F
10	8410	Grey	IC06F	23	6250A	Brown	SP307
11	2201	Brown	IC07F	24			
12	6017	Yellow	IC06F	25			
13	2325	Red	IC07F	26			

IC06F: cockpit harness--left front door harness (20P Yellow) (S30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	MC71	Green yellow	G71	11	6401	Yellow	IC04M
2	6029	Yellow	IC09F	12	6205	Green	D001I
3	6027	Grey	IC09F	13	810B	Brown	SP16
4	6024	Green	IC08F	14	2330	Yellow	IC04M
5	6022	Brown	IC08F	15	6201A	Green	SP11
6	6019	Red	IC04M	16	6412	Blue	IC04M
7	6017	Yellow	IC04M	17	6200A	Red	SP12
8	601	Pink	IC04M	18	6411	White	IC04M
9	6250B	Brown	SP307	19	8410	Grey	IC04M
10	6210A	Red	S006	20	8411	Pink	IC04M

IC07F: cockpit harness--rear harness (20P White) (S30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	810C	Red	SP16	11			
2				12	6206	Green	D001E
3	2651B	Yellow	D001E	13			
4				14	2620	Brown	D001E
5	310	Red	D001E	15			
6	2320	Milk white	IC04M	16	6265	Green	D001I
7				17	6260	Yellow	D001I
8	2325	Red	IC04M	18	2625	Green	D001E
9	2201	Brown	IC04M	19			
10				20	2100B	Green	IC04M

IC08F: cockpit harness--left rear door harness (10P Black) (S30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	6200C	Red	SP12	6			
2	6022	Brown	IC06F	7	6023	Red	D001E
3	6210C	Green	S006	8	MC623	Green yellow	SG14
4	8421	Brown	IC04M	9	6024	Green	IC06F
5	8420	Yellow	IC04M	10	6201C	Brown	SP11

IC09F: cockpit harness--right rear door harness (10P Black) (S30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	6200D	Red	SP12	6			
2	6027	Grey	IC06F	7	6028	Yellow	D001E
3	6210D	Brown	S006	8	MC624	Green yellow	SG14
4	8426	Red	IC04M	9	6029	Yellow	IC06F
5	8425	Green	IC04M	10	6201D	Red	SP11

Cabin harness (H30)	
manual transmission+manual air conditioning	VIN<037957
manual transmission+automatic air conditioning	VIN<038052
automatic transmission+manual air conditioning	VIN<037831
automatic transmission+automatic air conditioning	VIN<037836

IC04M: cockpit harness--instrument panel harness (22P White) (H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	7020	White	D7020	12	6017	Yellow	IC06F
2	7021	Red	D7020	13	2325	Yellow	IC07F
3	2320	Milk white	D2620	14	601	Pink	IC06F
4	2330	Yellow	IC06F	15	6411	White	IC06F
5	8425	Green	IC09F	16	8426	Red	IC09F
6	6412	Blue	IC06F	17	6401	Yellow	IC06F
7	8420	Yellow	IC08F	18	8421	Brown	IC08F
8	1202	Red	D1211	19	7026	Brown	D7025
9	7025	Green	D7025	20	8411	Pink	IC06F
10	8410	Grey	IC06F	21	2100B	Green	IC07M
11	2201	Brown	S017	22	6019	Red	IC06F

IC06F: cockpit harness--left front door harness (20P Yellow) (S30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	MC71	Green yellow	G71	11	6401	Yellow	IC04M
2	6029	Yellow	IC09F	12	6205	Green	D001I
3	6027	Grey	IC09F	13	810B	Brown	SP16
4	6024	Green	IC08F	14	2330	Yellow	IC04M
5	6022	Brown	IC08F	15	6201A	Green	SP11
6	6019	Red	IC04M	16	6412	Blue	IC04M
7	6017	Yellow	IC04M	17	6200A	Red	SP12
8	601	Pink	IC04M	18	6411	White	IC04M
9	6250	Brown	D001I	19	8410	Grey	IC04M
10	6210A	Red	S006	20	8411	Pink	IC04M

IC08F: cockpit harness--left rear door harness (10P Black) (H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	6200C	Red	SP12	6			
2	6022	Brown	IC06F	7	6023	Red	D001E
3	6210C	Green	S006	8	MC623	Green yellow	SG14
4	8421	Brown	IC04M	9	6024	Green	IC06F
5	8420	Yellow	IC04M	10	6201C	Brown	SP11

IC09F: cockpit harness--right rear door harness (10P Black) (H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	6200D	Red	SP12	6			
2	6027	Grey	IC06F	7	6028	Yellow	D001E
3	6210D	Brown	S006	8	MC624	Green yellow	SG14
4	8426	Red	IC04M	9	6029	Yellow	IC06F
5	8425	Green	IC04M	10	6201D	Red	SP11

IC07M: cockpit harness--main backdoor harness (10P White) (H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	2100B	Green	IC04M	6	MC501	Yellow green	SG18
1	2100D	Green	S101	7	810C	Red	SP16
2	6206	Green	D001E	8	5299	Grey	IC30M
3	2620A	Brown	S100	9			
4	6265	Green	D0011	10	3101	Brown	D310B
5	5203	Red	IC30M	10	6260	Yellow	D0011

IC30M: cockpit harness--instrument panel harness (2P) (H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	5203	Red	IC07M	2	5299	Grey	IC07M

Cabin harness (H30)	
manual transmission+manual air conditioning	VIN≥037957
manual transmission+automatic air conditioning	VIN≥038052
automatic transmission+manual air conditioning	VIN≥037831
automatic transmission+automatic air conditioning	VIN≥037836

IC04M: cockpit harness--instrument panel harness (26P White) (H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	7020	White	D7020	14	601	Pink	IC06F
2	7021	Red	D7020	15	6411	Brown	IC06F
3	2320	Milk white	IC07F	16	8426	Red	IC09F
4	2330	Yellow	IC06F	17	6401	Yellow	IC06F
5	8425	Green	IC09F	18	8421	Brown	IC08F
6	6412	Blue	IC06F	19	7026	Brown	D7025
7	8420	Yellow	IC08F	20	8411	Pink	IC06F
8	1202	Red	D1211	21	2100B	Green	IC07M
9	7025	Green	D7025	22	6019	Red	IC06F
10	8410	Grey	IC06F	23	6250A	Brown	SP307
11	2201	Brown	S017	24			
12	6017	Yellow	IC06F	25			
13	2325	Yellow	D2625	26			

IC06F: cockpit harness--left front door harness (20P Yellow) (H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	MC71	Green yellow	G71	11	6401	Yellow	IC04M
2	6029	Yellow	IC09F	12	6205	Green	D001I
3	6027	Grey	IC09F	13	810B	Brown	SP16
4	6024	Green	IC08F	14	2330	Yellow	IC04M
5	6022	Brown	IC08F	15	6201A	Green	SP11
6	6019	Red	IC04M	16	6412	Blue	IC04M
7	6017	Yellow	IC04M	17	6200A	Red	SP12
8	601	Pink	IC04M	18	6411	White	IC04M
9	6250	Brown	D001I	19	8410	Grey	IC04M
10	6210A	Red	S006	20	8411	Pink	IC04M

IC08F: cockpit harness--left rear door harness (10P Black) (H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	6200C	Red	SP12	6			
2	6022	Brown	IC06F	7	6023	Red	D001E
3	6210C	Green	S006	8	MC623	Green yellow	SG14
4	8421	Brown	IC04M	9	6024	Green	IC06F
5	8420	Yellow	IC04M	10	6201C	Brown	SP11

IC09F: cockpit harness--right rear door harness (10P Black) (H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	6200D	Red	SP12	6			
2	6027	Grey	IC06F	7	6028	Yellow	D001E
3	6210D	Brown	S006	8	MC624	Green yellow	SG14
4	8426	Red	IC04M	9	6029	Yellow	IC06F
5	8425	Green	IC04M	10	6201D	Red	SP11

IC07M: cockpit harness--main backdoor harness (10P White) (H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	2100B	Green	IC04M	6	MC501	Yellow green	SG18
1	2100D	Green	S101	7	810C	Red	SP16
2	6206	Green	D001E	8	5299	Grey	IC30M
3	2620A	Brown	S100	9			
4	6265	Green	D001I	10	3101	Brown	D310B
5	5203	Red	IC03M	10	6260	Yellow	D001I

IC30M: cockpit harness--instrument panel harness (2P）(H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	5203	Red	IC07M	2	5299	Grey	IC07M

IC07M: rear harness --cockpit harness (20P White) (S30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	810C	Pink	D820A	12	6206	Yellow	D6260
2				13			
3	2650	Green	D2620A	14	2620	Brown	D2620
3	2655	Brown	D2625A	14	2620A	Red	D2630
4				15			
5	310	Green	D310A	16	6265	Yellow	D6265
6	2320	Red	D2620	17	6260A	Brown	S010
7				18	2625	Green	D2625
8	2325	Yellow	D2625	19			
9	2201	Green	8017	20	2110	Green	D2620
10				20	2115	Brown	D2625
11							

IC05M: right front door harness --instrument panel harness (20P Yellow) (S30/H30)
(Applicable to the last six digits of VIN<005834)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	810B	Green	IC18F	11			
2	6017	Grey	D6015	12	MC804	Yellow green	IC18F
3	6401	Green	IC18F	13	8011	Brown	IC18F
4				14			
5	6210	Yellow	D6215	15	2335	Yellow	IC18F
6				16	6412	Brown	IC18F
7	6019	Grey	D6015	17	6201	Green	D6215
8	602	Brown	D6015	18	8415	Yellow	S013
9	MC55	Green yellow	SG13	19	8416	Brown	S014
10	6411	Yellow	IC18F	20	6200	Red	D6215

IC05M: right front door harness --instrument panel harness (20P Yellow) (S30/H30)
(Applicable to the last six digits of VIN≥005834)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	810B	Green	IC18F	11			
2	6017	Grey	D6015	12	MC804	Yellow green	IC18F
3	6401	Green	IC18F	13	8011	Brown	IC18F
4				14			
5	6210	Yellow	D6215	15	2335	White	IC18F
6				16	6412	Brown	IC18F
7	6019	Yellow	D6015	17	6201	Green	D6215
8	602	Brown	D6015	18	8415	Yellow	S013
9	MC55	Green yellow	SG13	19	8416	Blue	S014
10	6411	Yellow	IC18F	20	6200	Red	D6215

IC05M: right front door harness --instrument panel harness (20P Yellow) (S30/H30)

(Applicable to the last six digits of VIN≤005834)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	810B	Green	IC18F	11			
2	6017	Grey	D6015	12	MC804	Yellow green	IC18F
3	6401	Green	IC18F	13	8011	Brown	IC18F
4				14			
5	6210	Yellow	D6215	15	2335	White	IC18F
6				16	6412	Brown	IC18F
7	6019	Yellow	D6015	17	6201	Green	D6215
8	602	Brown	D6015	18	8415	Yellow	S013
9	MC55	Green yellow	SG13	19	8416	Blue	S014
10	6411	Yellow	IC18F	20	6200	Red	D6215

IC18F: right front door harness --rearview (8P White) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	2335	White	IC05M	5	MC804	Yellow green	IC05M
2	1642	Yellow green	SG13	6	810B	Green	IC05M
3	6401	Green	IC05M	7	6411	Yellow	IC05M
4	8011	Brown	IC05M	8	6412	Brown	IC05M

IC06M: left front door harness--cockpit harness (20P Yellow) (S30/H30)

(Applicable to the last six digits of VIN<005834)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	MC621A	Green yellow	SG16	11	6401	Green	S012
2	6029	Yellow	D6000	12	6205	Brown	D6000
3	6027	Green	D6000	13	8108	Red	IC17F
4	6024	Red	D6000	14	2330	Yellow	IC17F
5	6022	Yellow	D6000	15	6201	Green	D6210
6	6019	Brown	D6000	16	6412	Brown	D641
7	6017	Grey	D6000	17	6200	Red	D6210
8	601	Pink	SP19	18	6411	Yellow	D641
9	6250	Red	D6210	19	8410	Red	S015
10	6210	Yellow	D6210	20	8411	Brown	S016

IC06M: right front door harness --instrument panel harness (20P Yellow) (S30/H30)

(Applicable to the last six digits of VIN≥005834)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	MC621A	Green yellow	SG16	11	6401	Green	S012
2	6029	White	D6000	12	6205	Brown	D6000
3	6027	Green	D6000	13	8108	Red	IC17F
4	6024	Red	D6000	14	2330	Yellow	IC17F
5	6022	Yellow	D6000	15	6201	Green	D6210
6	6019	Brown	D6000	16	6412	Brown	D641
7	6017	Grey	D6000	17	6200	Red	D6210
8	601	Pink	SP19	18	6411	Yellow	D641
9	6250	Blue	D6210	19	8410	Grey	S015
10	6210	Yellow	D6210	20	8411	Brown	S016

IC17F: left front door harness--rearview (8P White) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	2330	Yellow	IC06M	5			
2	MC641	Yellow green	SG16	6	810B	Red	IC06M
3	6402	Green	S012	7	6415	Grey	D641
4				8	6416	Yellow	D641

IC08M: rear door harness--cockpit harness (10P Black) (S30/H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	6200	Red	D6220	6			
2	6022	Green	D6020	7	6023	Brown	D6020
3	6210	Yellow	D6220	8	MC623	Yellow green	D6220
4	8421	Green	D8420	9	6024	Grey	D6020
5	8420	Brown	D8420	10	6201	Green	D6220

IC07F: main backdoor harness --cockpit harness (10P White) (H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	2100B	Green	D2100	6	MC501	Yellow green	S001
2	6206	Yellow	SDL	7	810C	Red	D820A
3	2620A	Red	SDL	8	5299	Grey	SDL
4	6265	Yellow	SDL	9			
5	5203	Red	SDL	10	6260	Green	SDL

SDL: main backdoor harness --backdoor harness branch (10P) (H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	MC501A	Yellow green	S001	6			
2	6265	Yellow	IC07F	7	5203	Red	IC07F
3	6206	Yellow	IC07F	8	2620A	Red	IC07F
4	6260	Green	IC07F	9	5299	Grey	IC07F
5				10			

SDR: backdoor harness branch --main backdoor harness (10P) (H30)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	MC501A	Yellow green	S002	6			
2	6265	Yellow	D6265	7	5203	Red	D501A
3	6206	Yellow	D6260	8	2620A	Red	D2630
4	6260	Green	D6260	9	5299	Grey	D501A
5				10			

IC10F: Main back door harness-cabin harness (4P)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	8806	Black	S001	3			
2	8809	Green	SDR	4	8808	Red	SDR

SDL: Main backdoor harness-branch back door harness (10P)

Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	MC501A	Yellow green	S001	6	8808	Red	IC10F
2	6265	Yellow	IC07F	7	5203	Red	IC07F
3	6206	Yellow	IC07F	8	2620A	Red	IC07F
4	6260	Green	IC07F	9	5299	Grey	IC07F
5	8806	Black	IC10F	10	8809	Green	IC10F

SDL: Branch backdoor harness-main back door harness (10P)

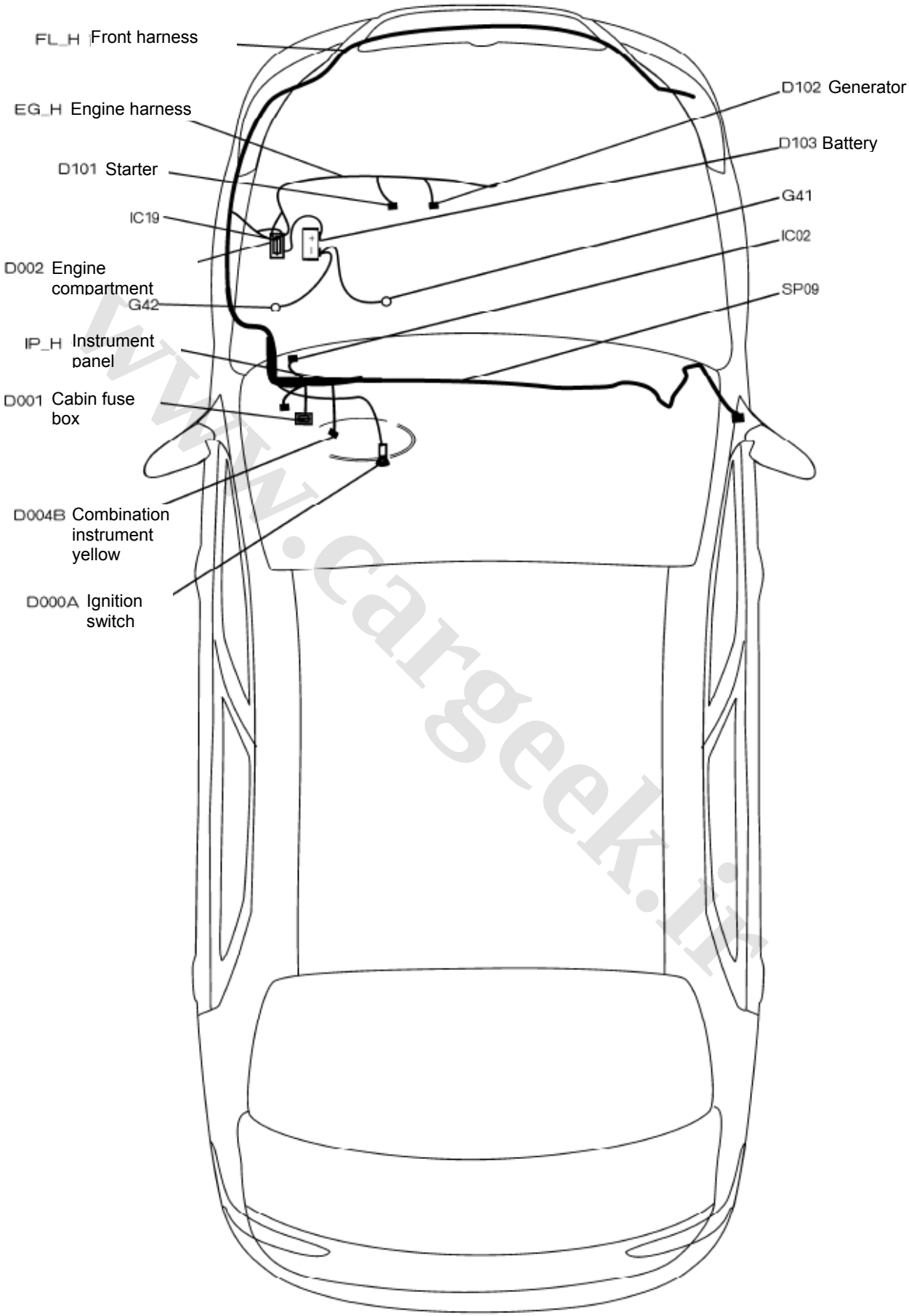
Pin	Conductor No.	Colour	Connection	Pin	Conductor No.	Colour	Connection
1	MC501A	Yellow green	S002	6	8808	Red	D2631
2	6265	Yellow	D6265	7	5203	Red	D501A
3	6206	Yellow	D6260	8	2620A	Red	D2630
4	6260	Green	D6260	9	5299	Grey	D501A
5	8806	Black	D2631	10	8809	Green	D2631

فصل دوم :

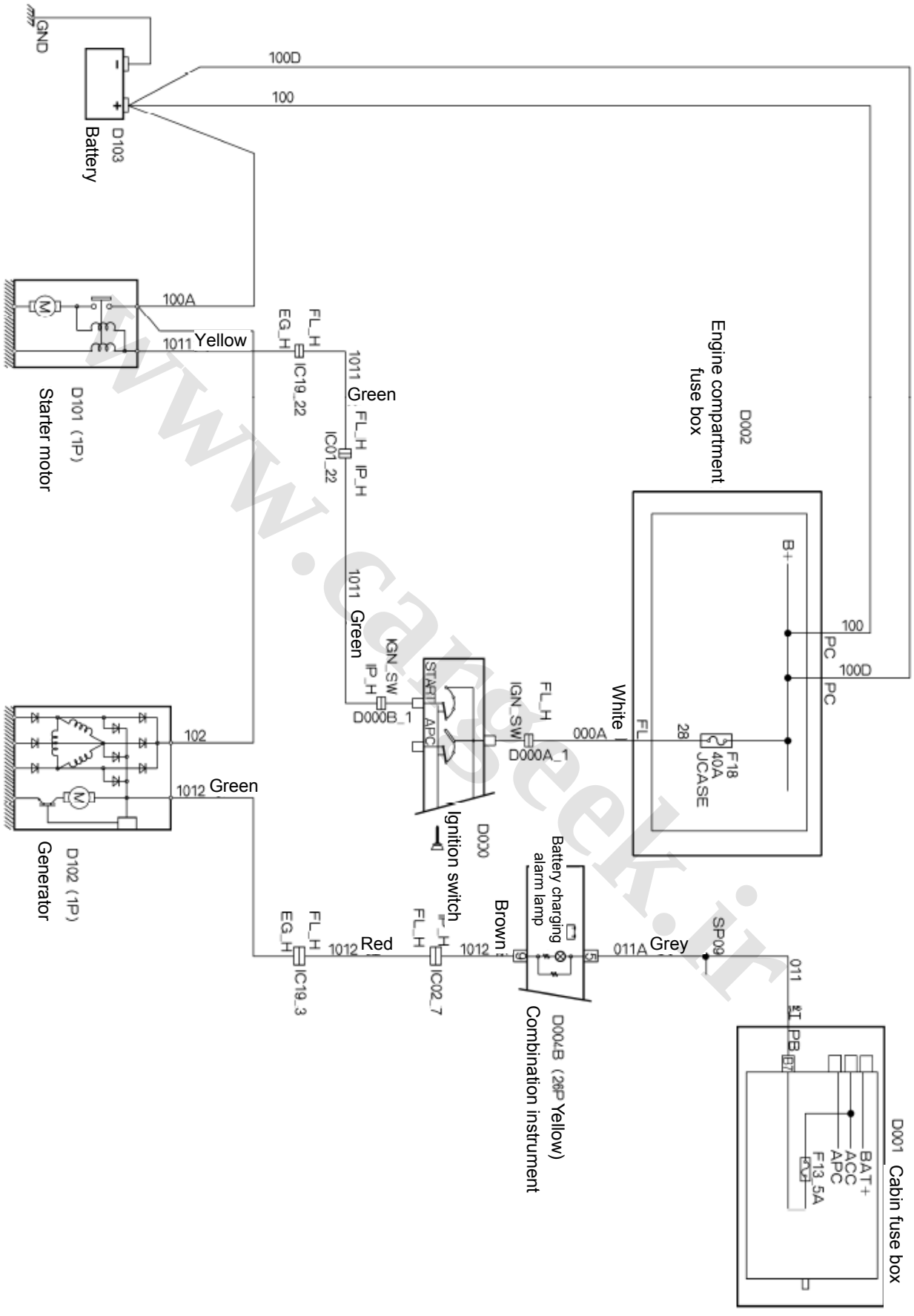
دیاگرامهای سیستمهای برقی

Electrical appliance diagrams

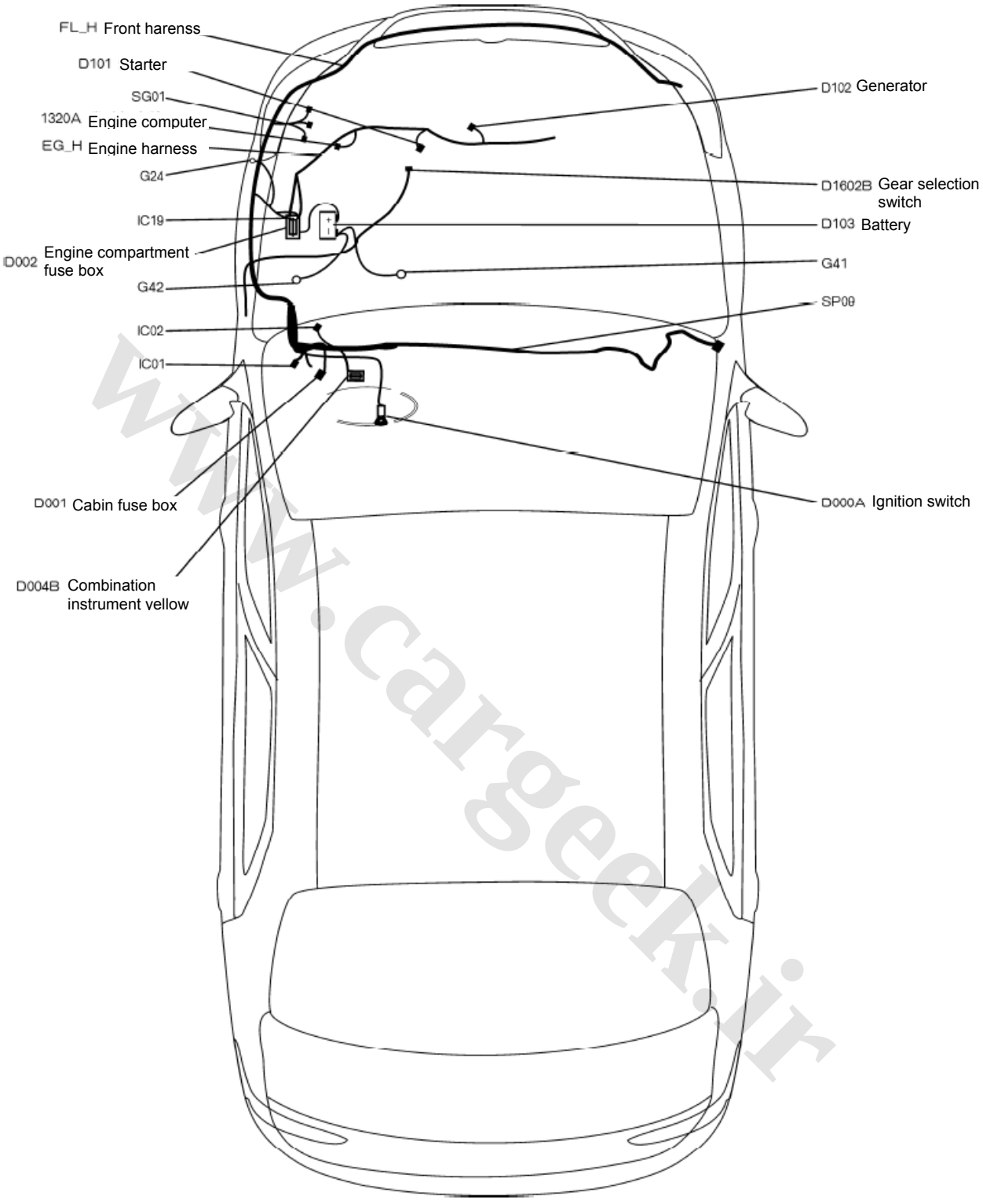
1.1. Location plan of startup and charging apparatus (manual transmission) S30/H30



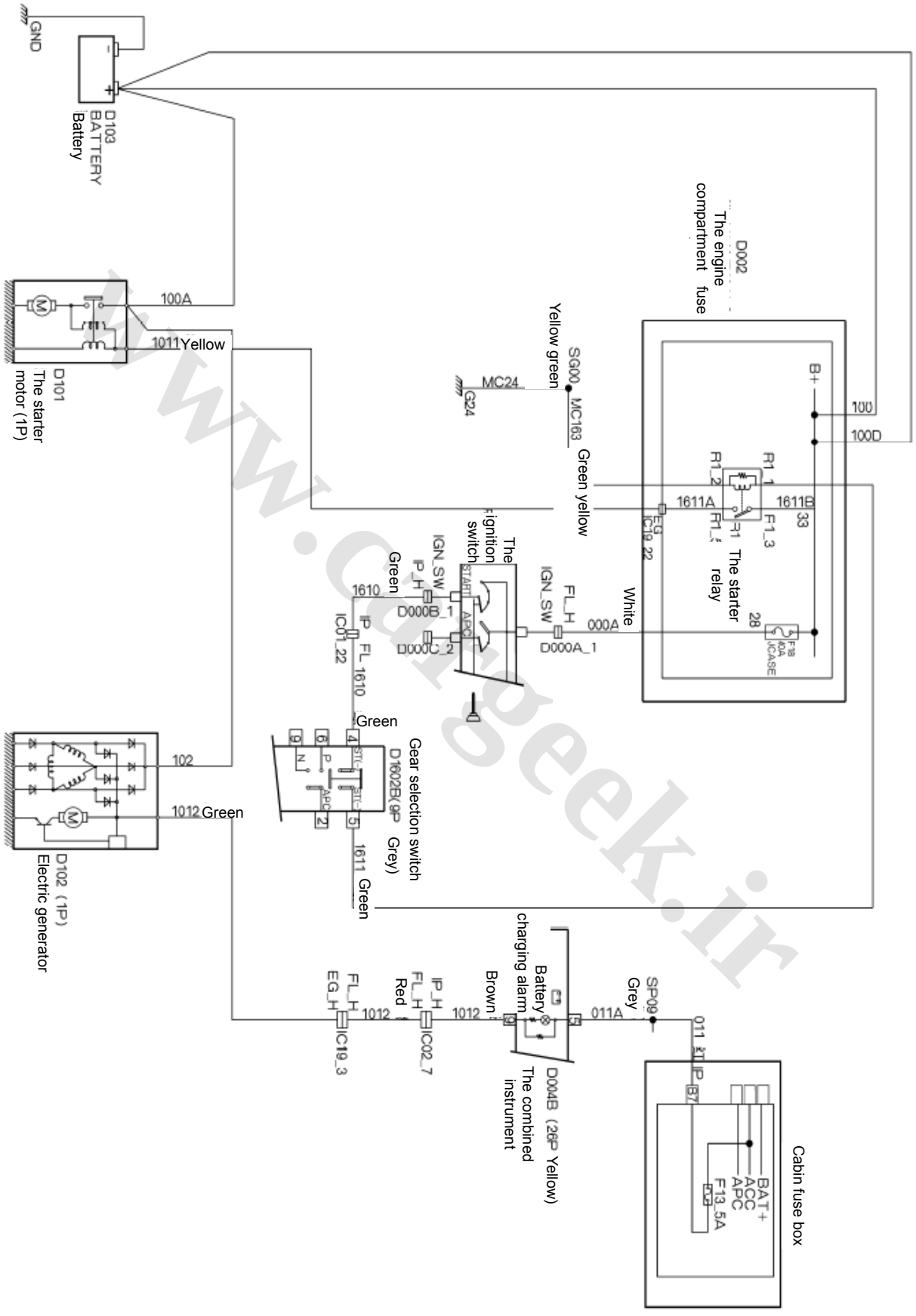
1.2. Electrical appliance diagram of startup and charging apparatus (manual transmission) S30/H30



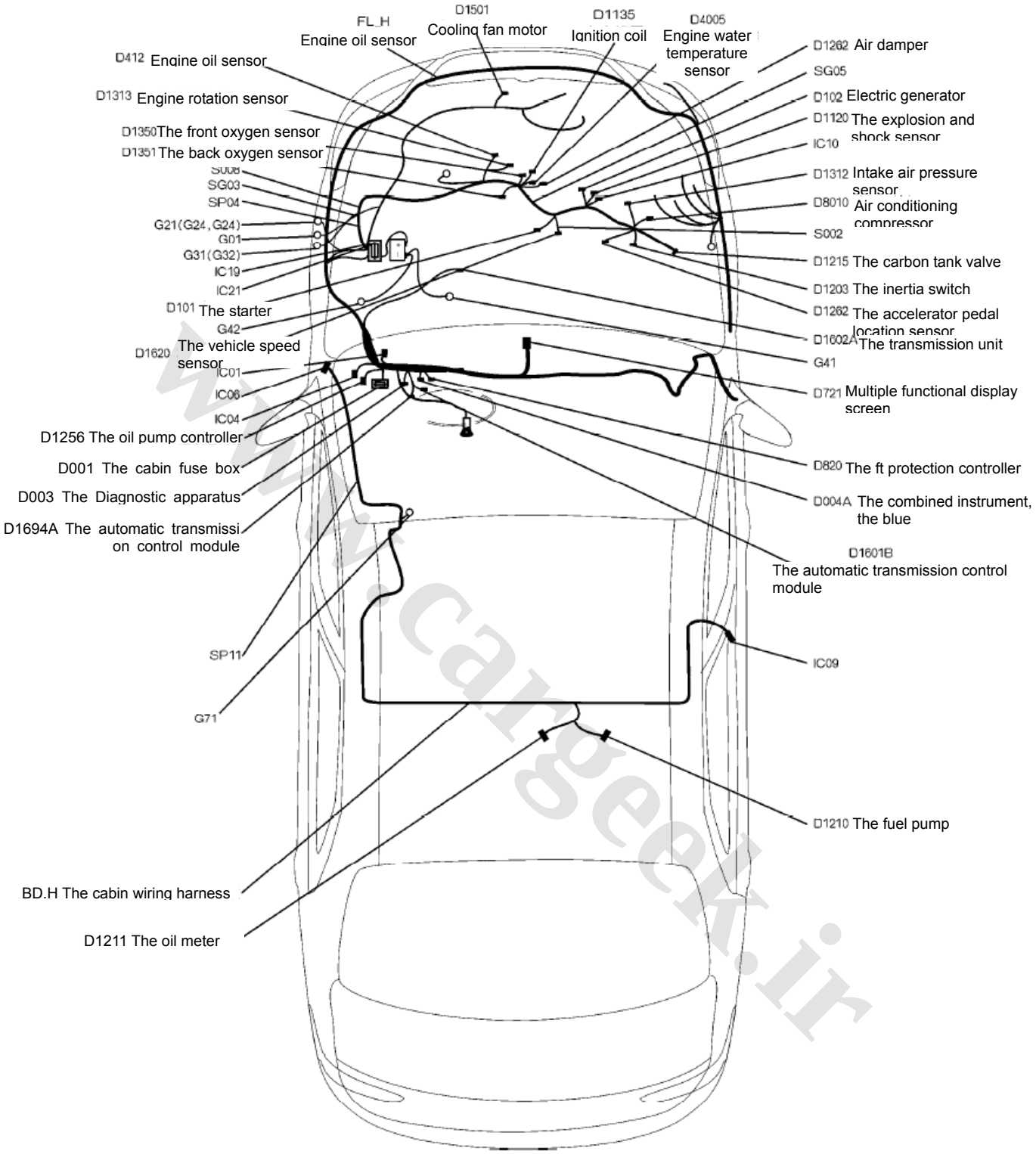
2.1. Location plan of starter and charging unit (automatic transmission) S30/H30



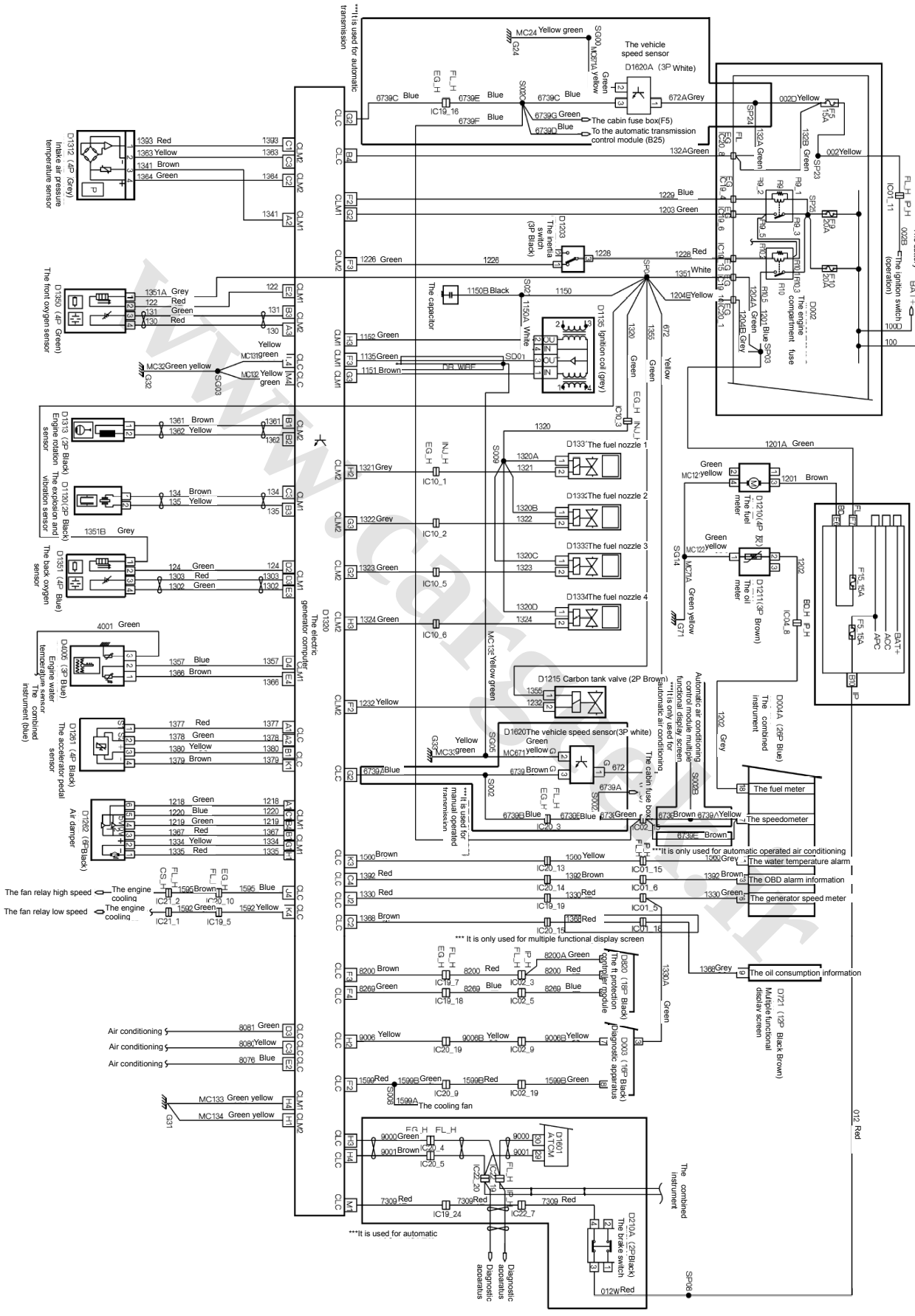
2.2. The electrical schematic diagram for the start up and the charging (the automatic transmission) S30/H30



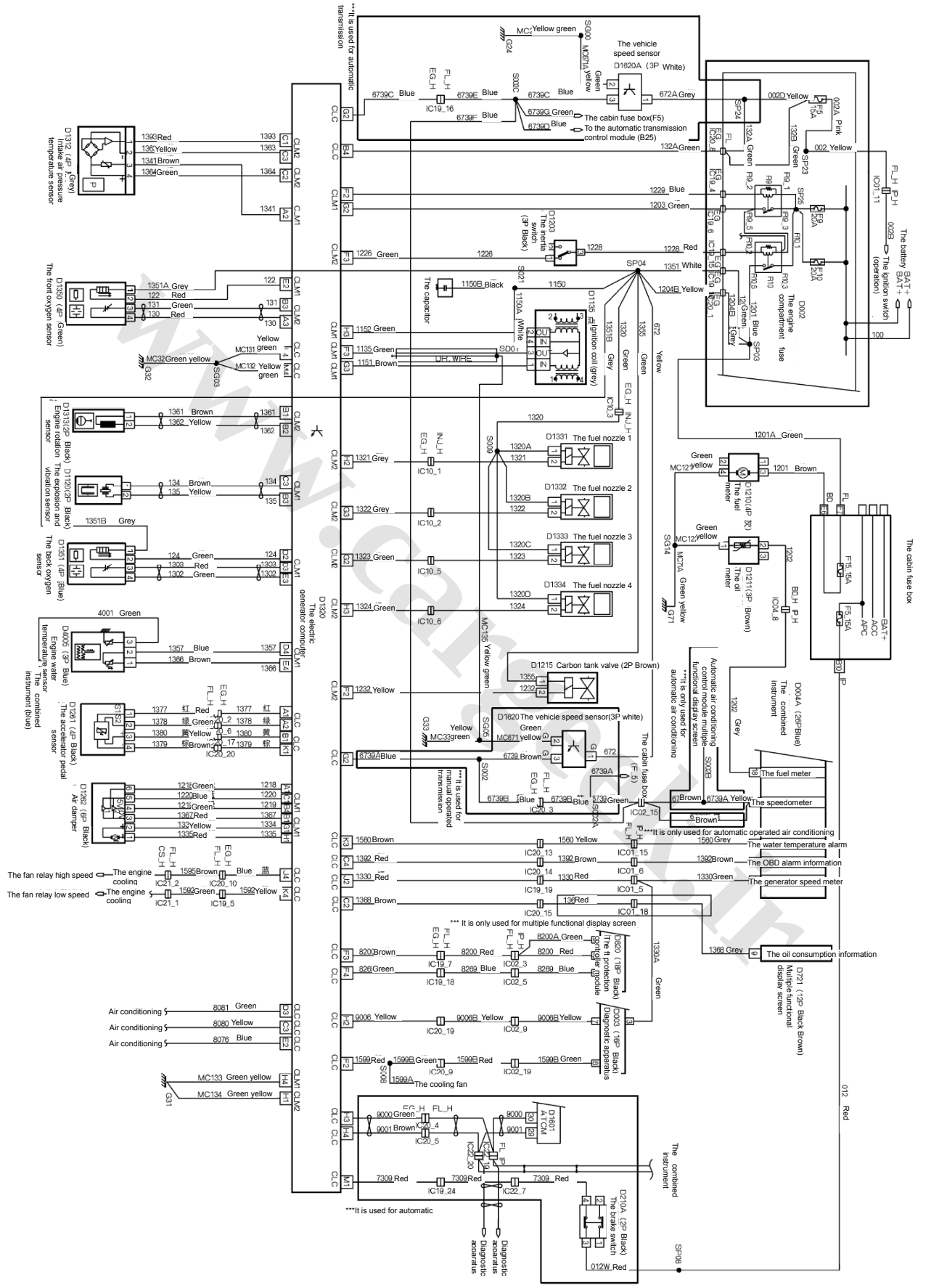
3.1 The electrical location diagram for the engine control S30/H30



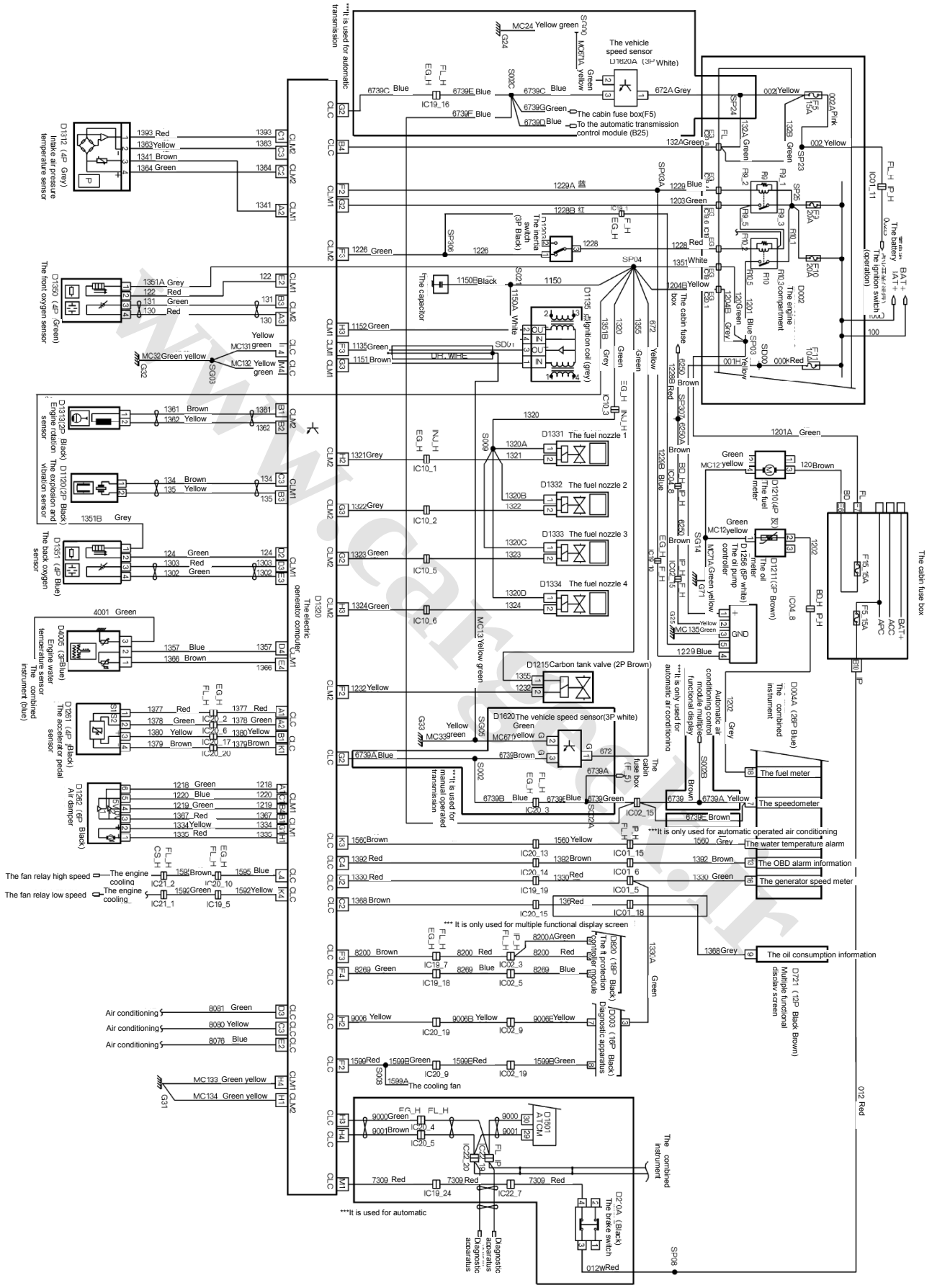
3.2 The electrical location diagram for the engine control S30/H30 (It is applicable to the 6 digits after code VIN, VIN less than 015982)



3.3 The electrical location diagram for the engine control S30/H30 (It is applicable to the 6 digits 015982after code ≤VIN <037670)



3.4 The electrical location diagram for the engine control S30/H30 (It is applicable to the 6 digits after code VIN≥037670)



4.14 The definition for the engine computer (ECU) pin

D1320C (The engine computer/CLM2 32P grey)

A1	-	A2	-	A3	The front oxygen sensor	A4	-
B1	The engine rotation speed A1	B2	The engine rotation speed B (Earth)	B3	The front oxygen reference earth	B4	-
C1	Air intake pressure sensor	C2	Air intake pressure sensor	C3	The external sensor power supply 5V2	C4	-
D1	-	D2	-	D3	-	D4	-
E1	-	E2	-	E3	-	E4	-
F1	-	F2	Carbon tank valve	F3	The oil pump relay	F4	-
G1	-	G2	The oil nozzle 2 (the third cylinder)-	G3	The oil nozzle 4 (the second cylinder)-	G4	-
H1	Earth	H2	The oil nozzle 1 (the first cylinder)-	H3	The oil nozzle 3 (the fourth cylinder)-	H4	-

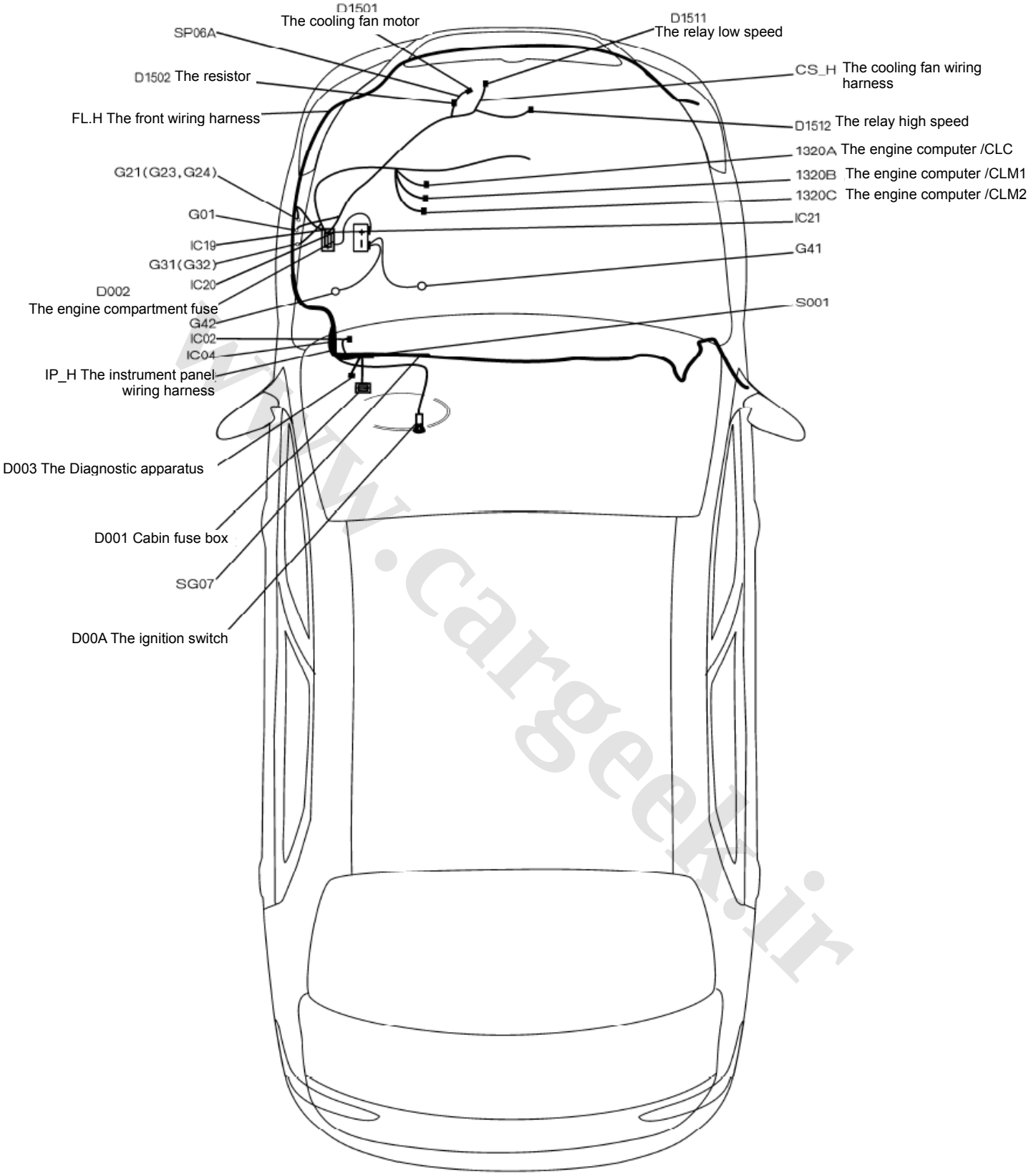
D1320A (The engine computer/CLC 48P brown)

A1	The acceleration pedal sensor 1	A2	The acceleration pedal sensor 2	A3	-	A4	-
B1	The acceleration pedal sensor power supply	B2	-	B3	-	B4	The ignition switch KL15
C1	-	C2	The fuel oil consumption output	C3	Air conditioning compressor switch	C4	The fault alarm light
D1	-	D2	-	D3	Air conditioning compressor switch request	D4	-
E1	-	E2	The fan high speed order	E3	-	E4	-
F1	-	F2	The engine fan fault inspection	F3	The theft protection	F4	-
G1	-	G2	The speed sensor	G3	-	G4	-
H1	-	H2	The diagnosis line K	H3	CAN trunk line CAN-H	H4	CAN trunk line CAN-L
J1	-	J2	The engine rotation speed output	J3		J4	The engine fan rotation speed
K1		K2	-	K3	Water temperature alarm	K4	The engine fan relay
L1	-	L2	-	L3	-	L4	Battery
M1	-	M2	-	M3	-	M4	Oil ejection earth

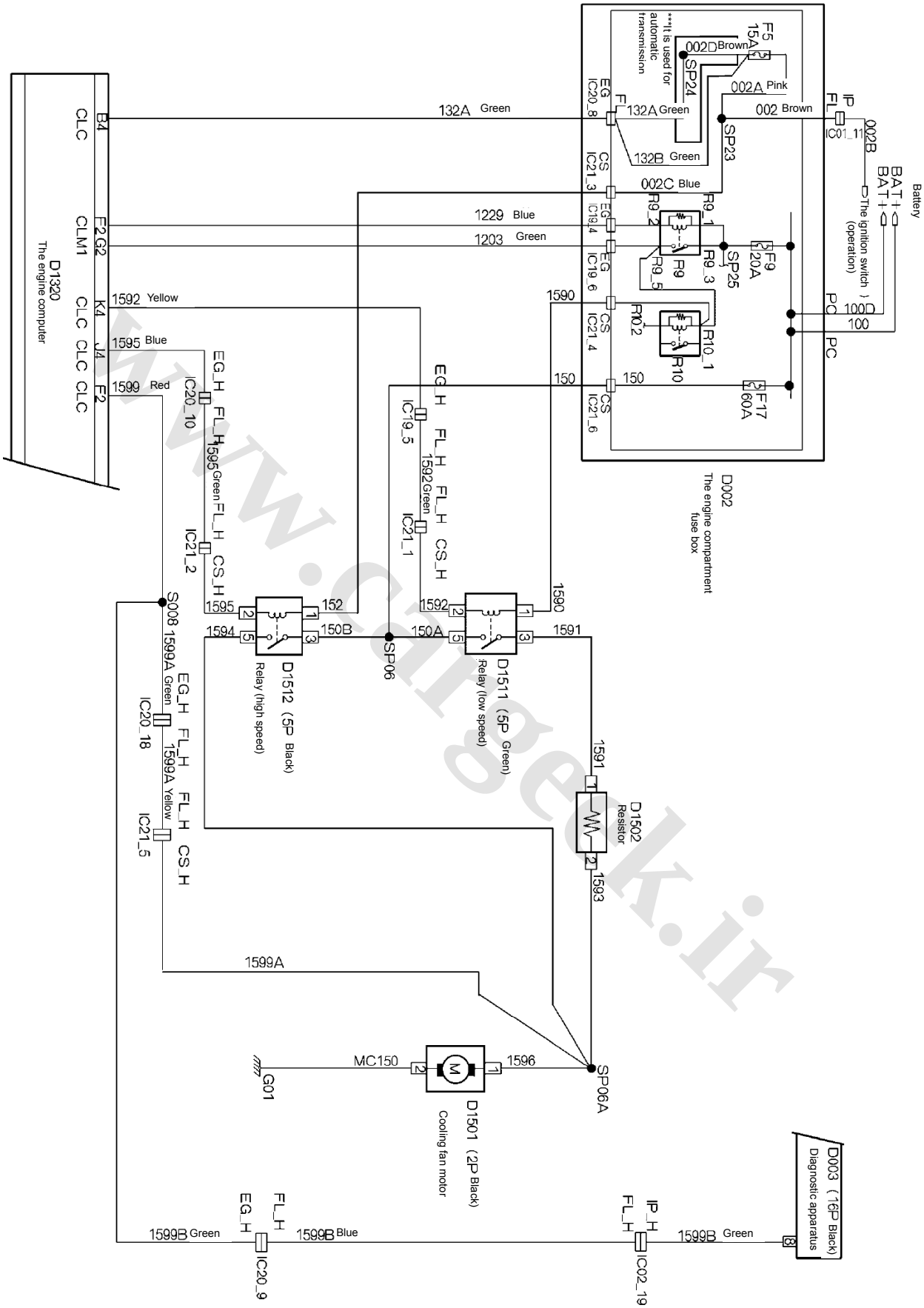
D1320B (The engine computer/CLM1 32P black)

A1	The air damper sensor 1	A2	Air intake temperature sensor	A3	-	A4	-
B1	The air damper sensor reference earth	B2	-	B3	The explosion and vibration sensor-	B4	The air damper sensor 2
C1	Power supply	C2	-	C3	The explosion and vibration sensor+	C4	-
D1	-	D2	The back oxygen sensor heating	D3	The back oxygen sensor earth	D4	Water temperature earth
E1	-	E2	The front oxygen sensor heating	E3	The back oxygen sensor	E4	Water temperature sensor
F1	-	F2	The main relay control	F3	The phase sensor	F4	-
G1	The air damper drive +	G2	Controllable power supply UBR	G3	The ignition 1 (the first and fourth cylinders)-	G4	-
H1	The air damper drive -	H2	-	H3	The ignition 1 (the second and third cylinders)-	H4	The ignition earth

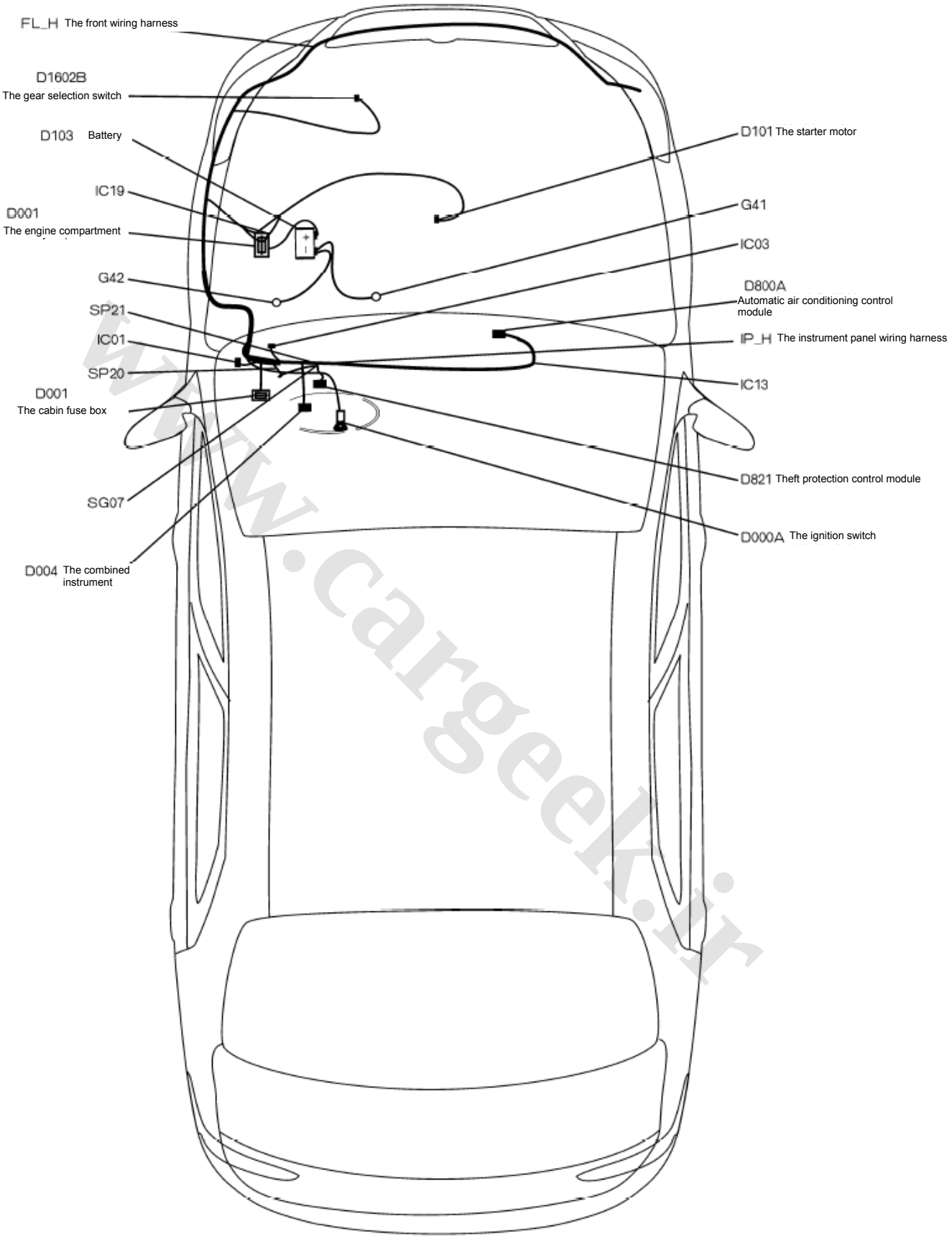
4.1 The electrical location diagram for the engine cooling control S30/H30



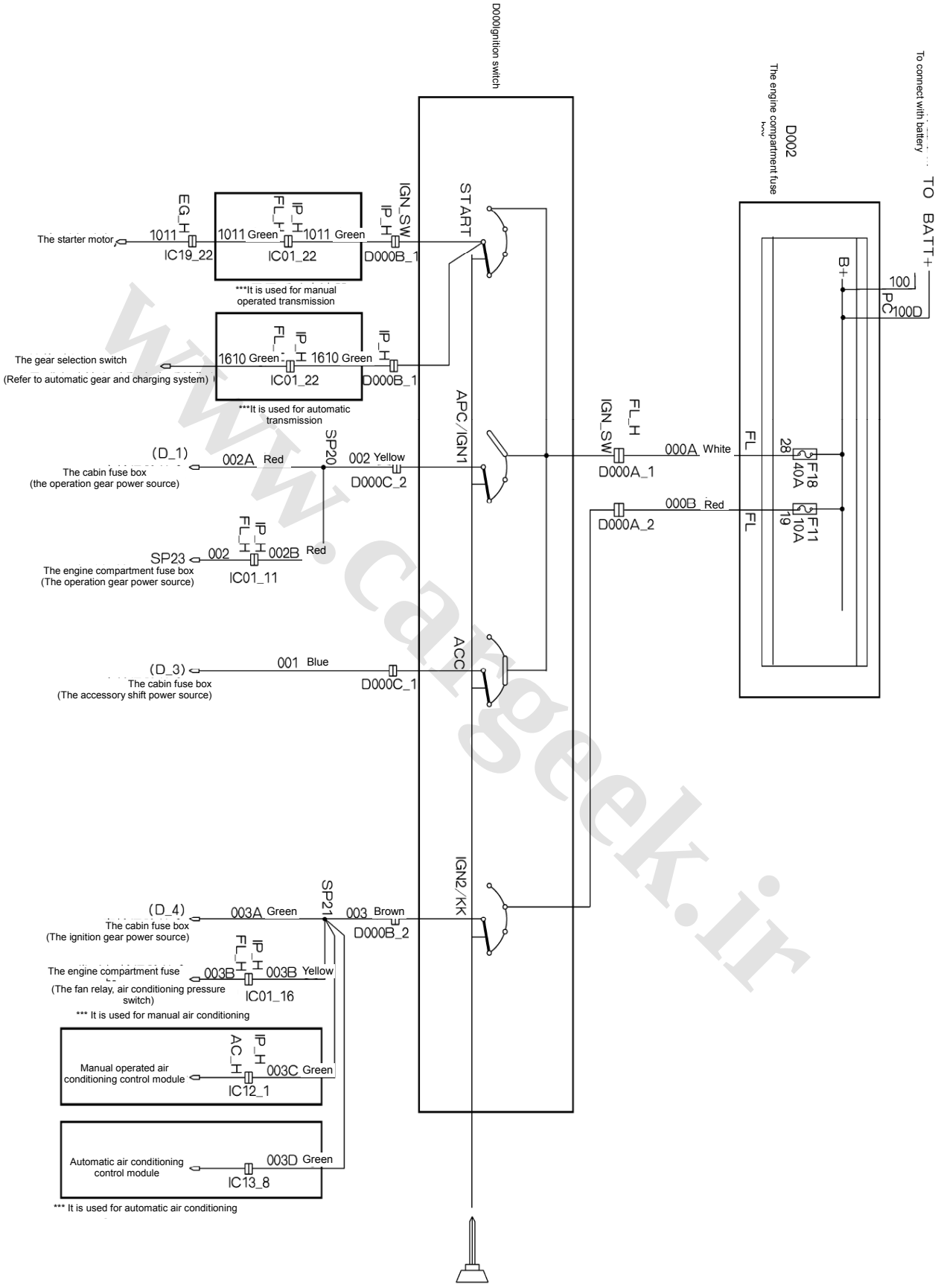
4.2 The electrical schematic diagram for the engine cooling control S30/H30



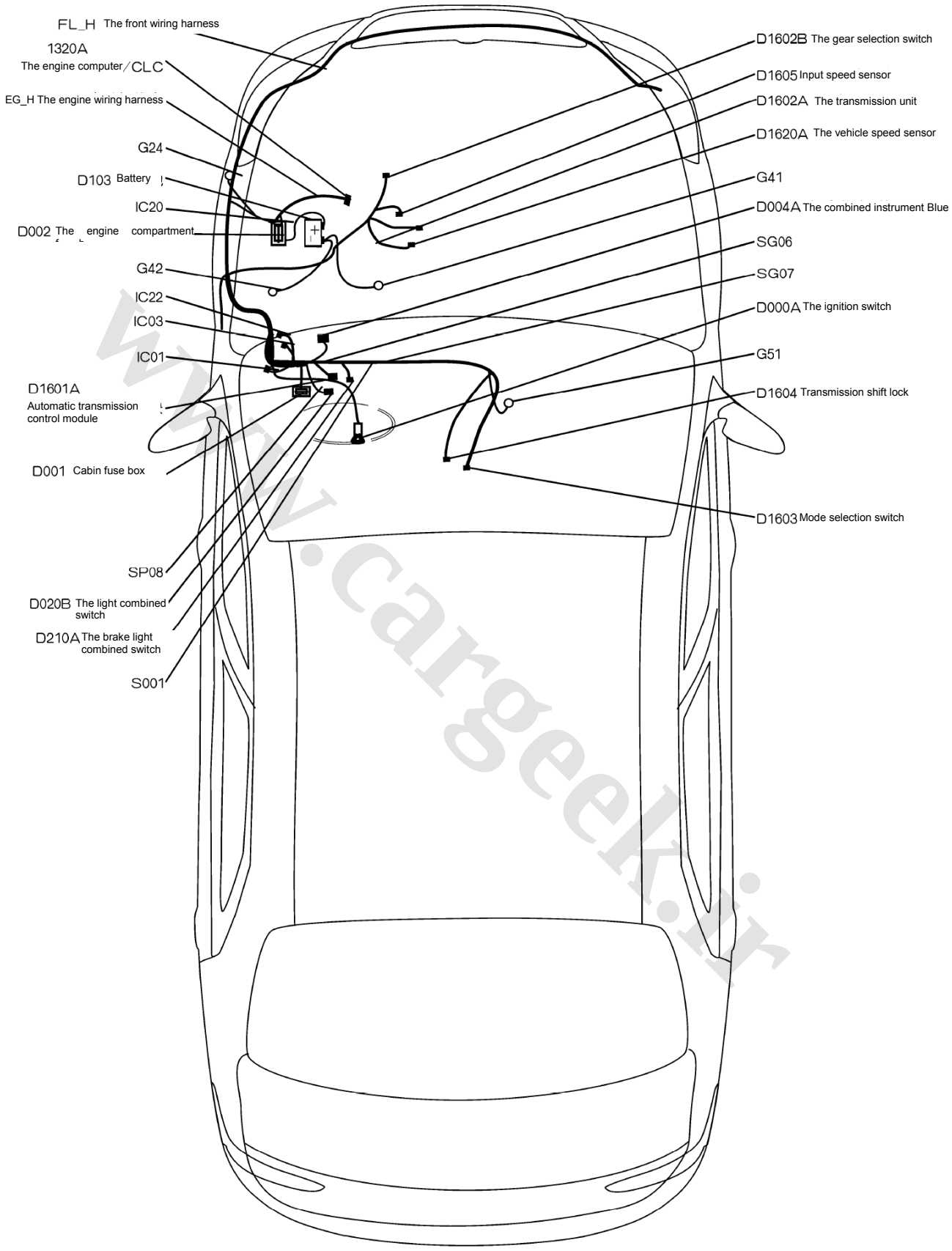
5.1 The electrical location diagram for the ignition switch S30/H30



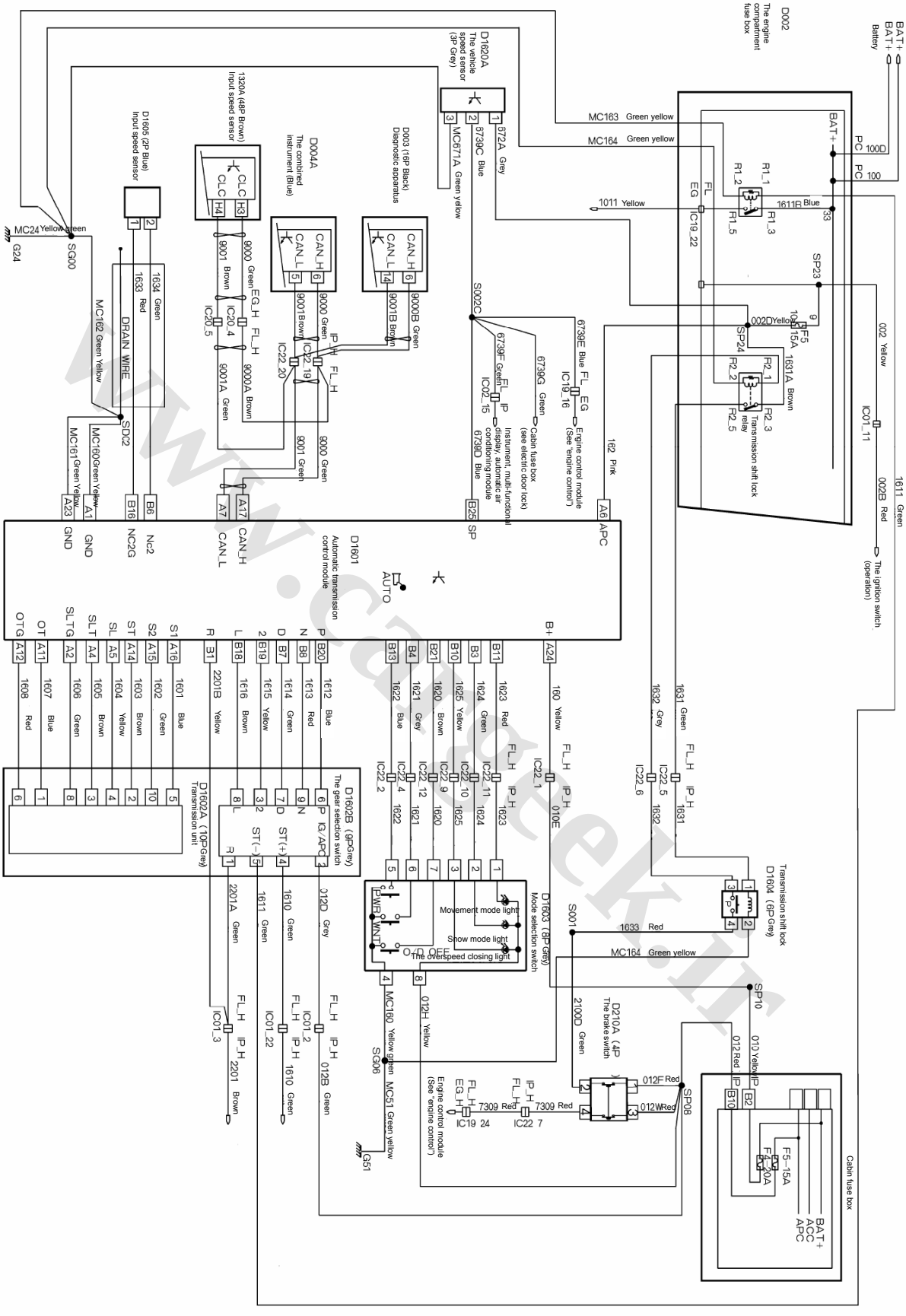
5.2 The electrical location diagram for the ignition switch S30/H30



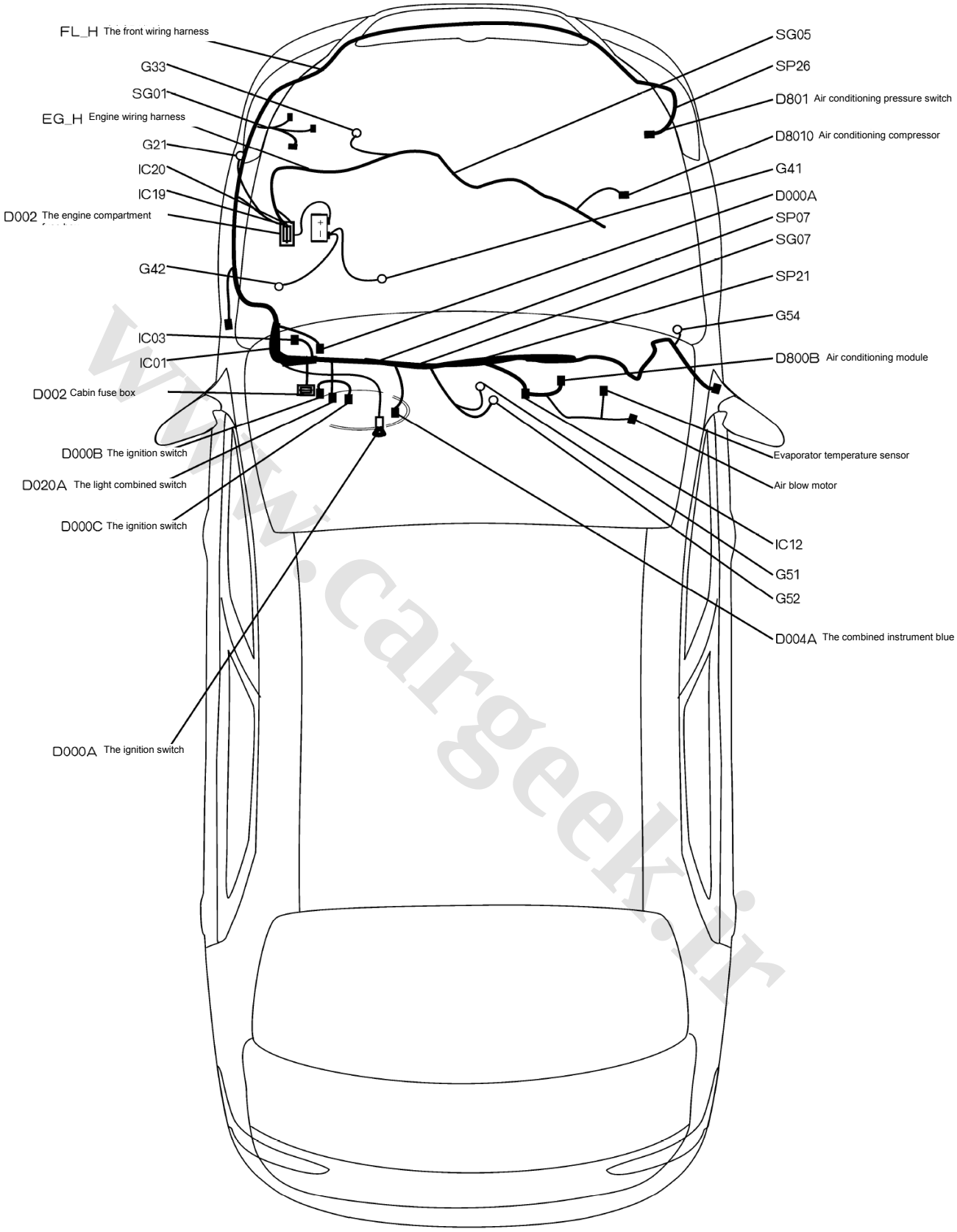
6.1 The electrical location diagram for the automatic transmission S30/H30



6.2 The electrical schematic diagram for the automatic transmission S30/H30

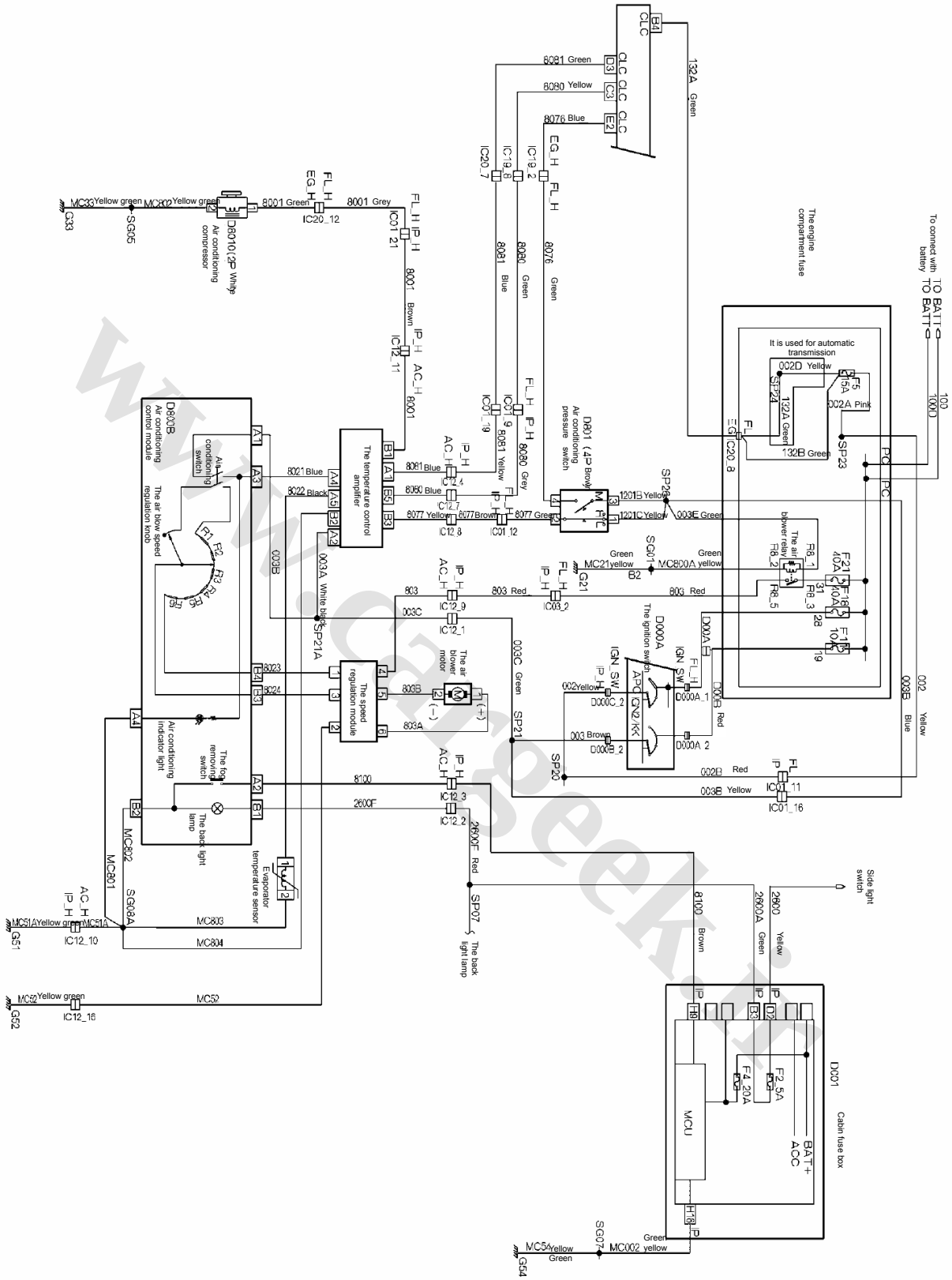


7.1 The electrical position diagram for the manual operated transmission S30/H30

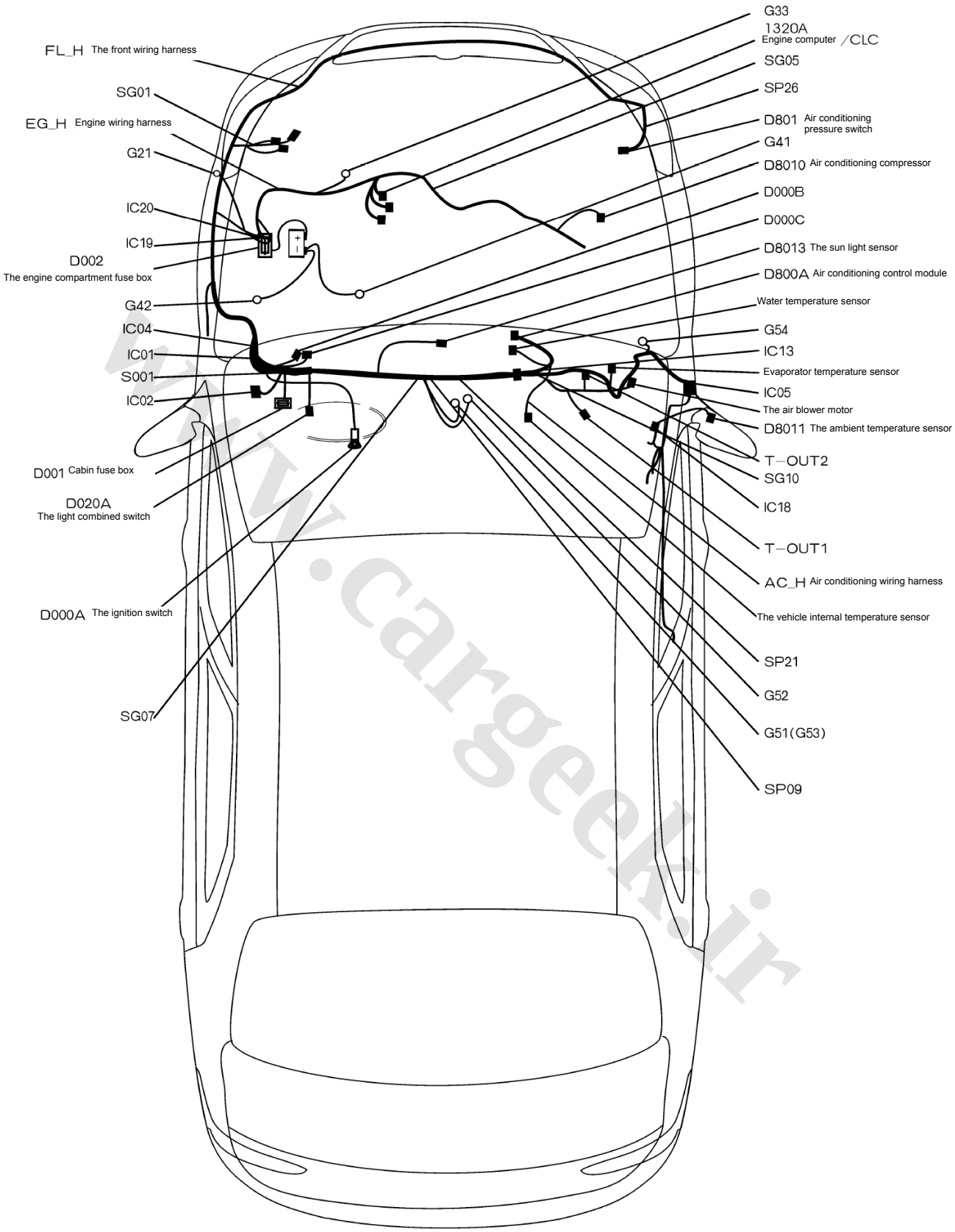


The ignition switch

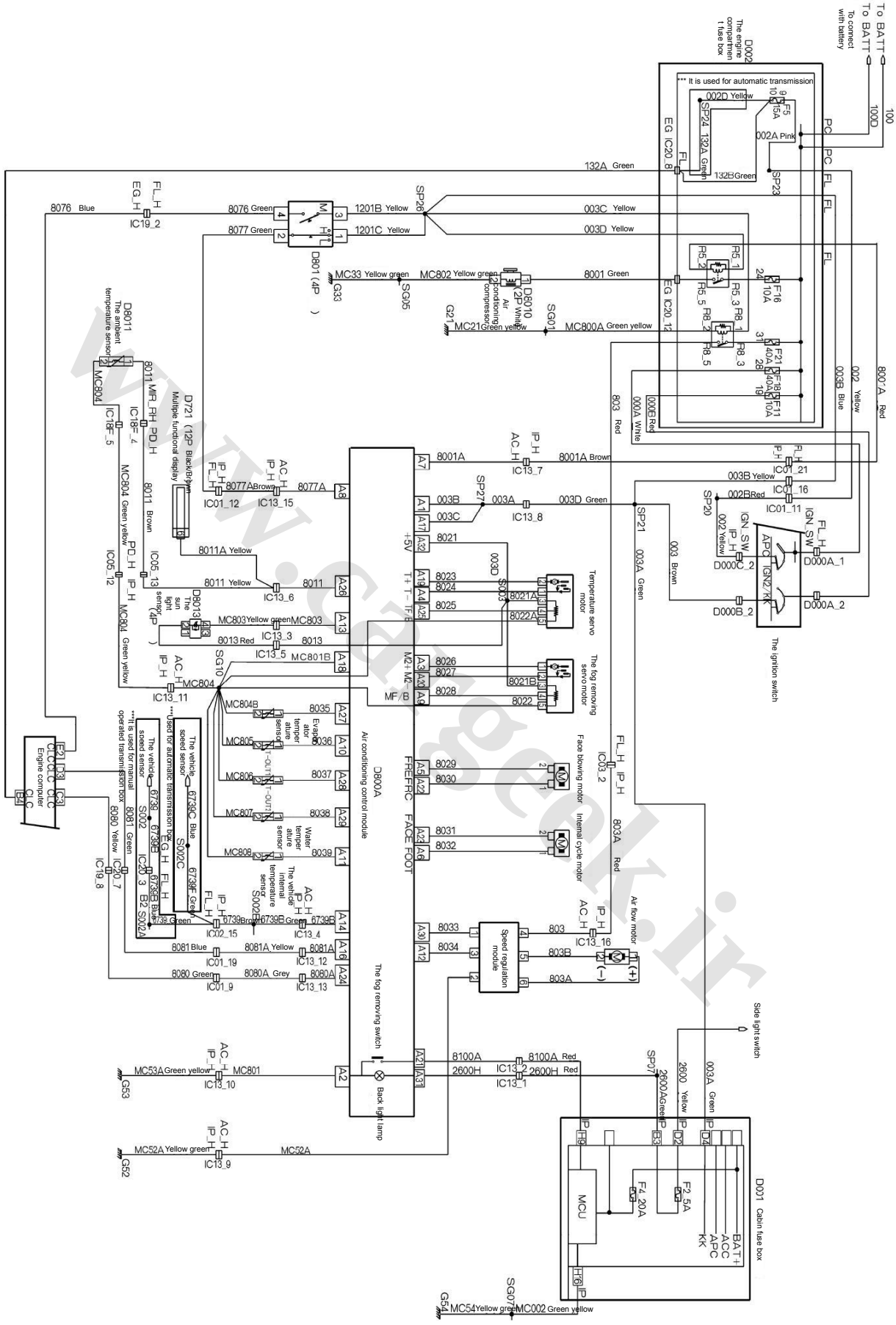
7.2 The electrical schematic diagram for the manual operated air conditioning S30/H30



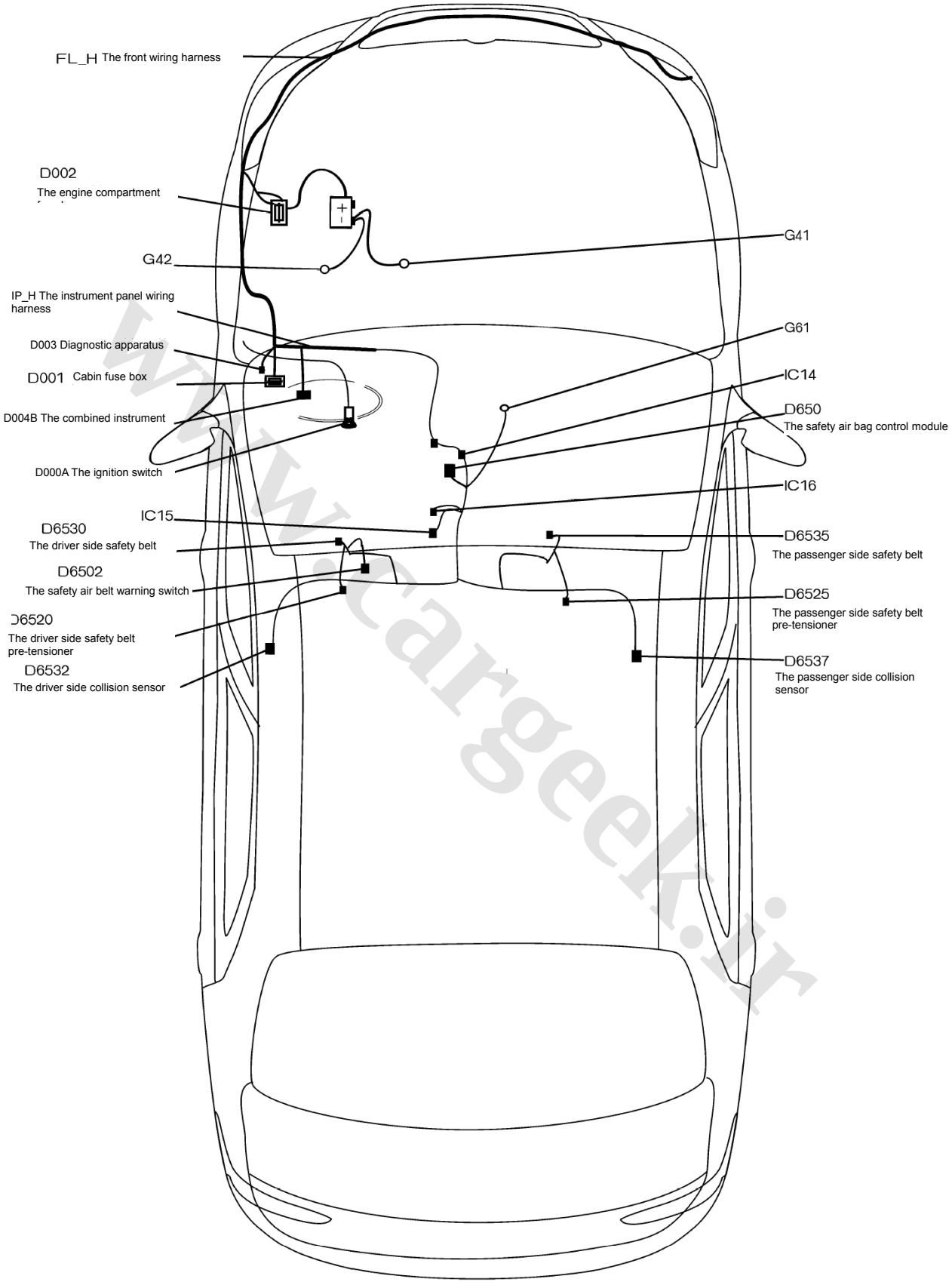
8.1 The electrical location diagram for automatic air conditioning S30/H30



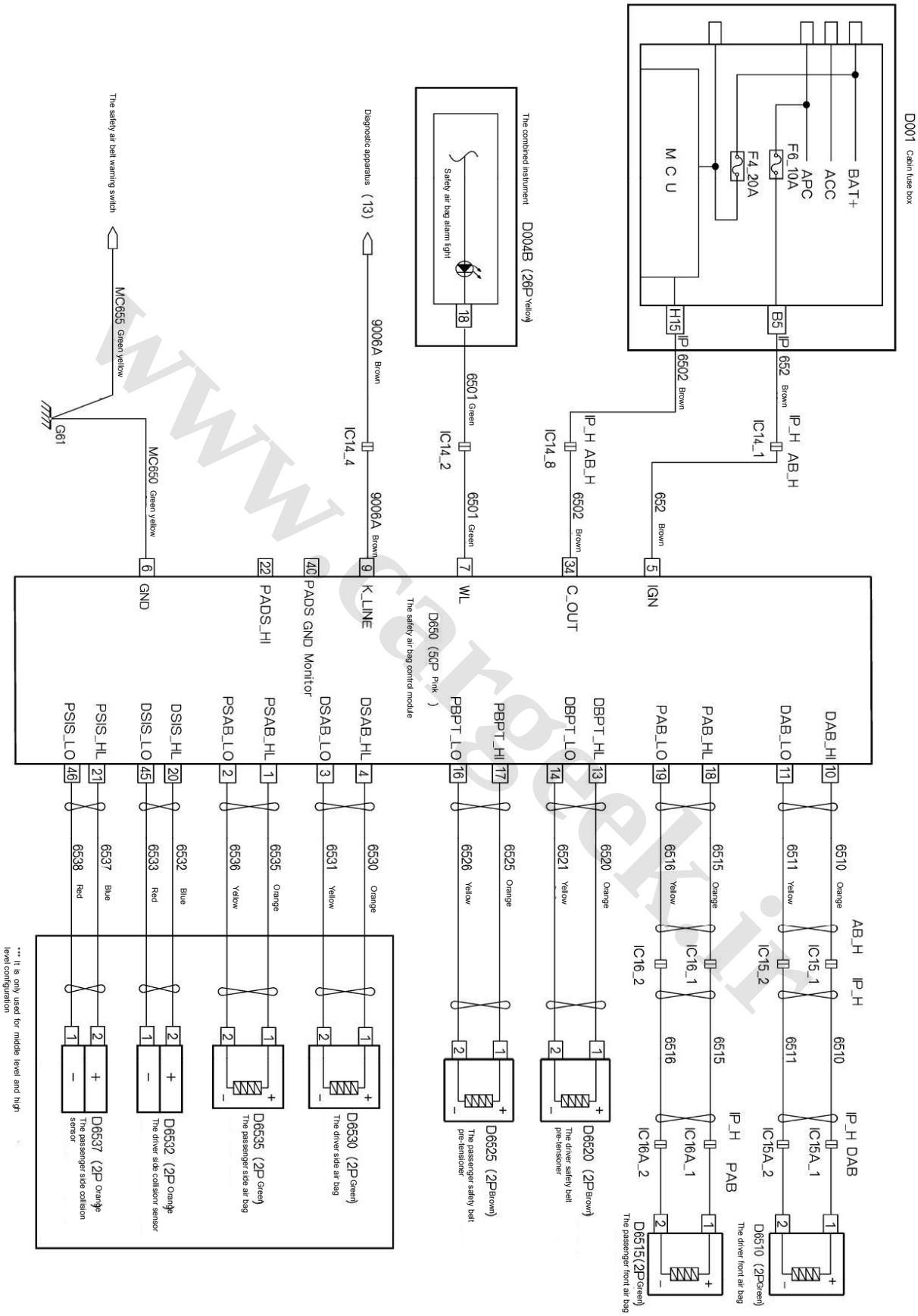
8.2 The electrical schematic diagram for automatic air conditioning S30/H30



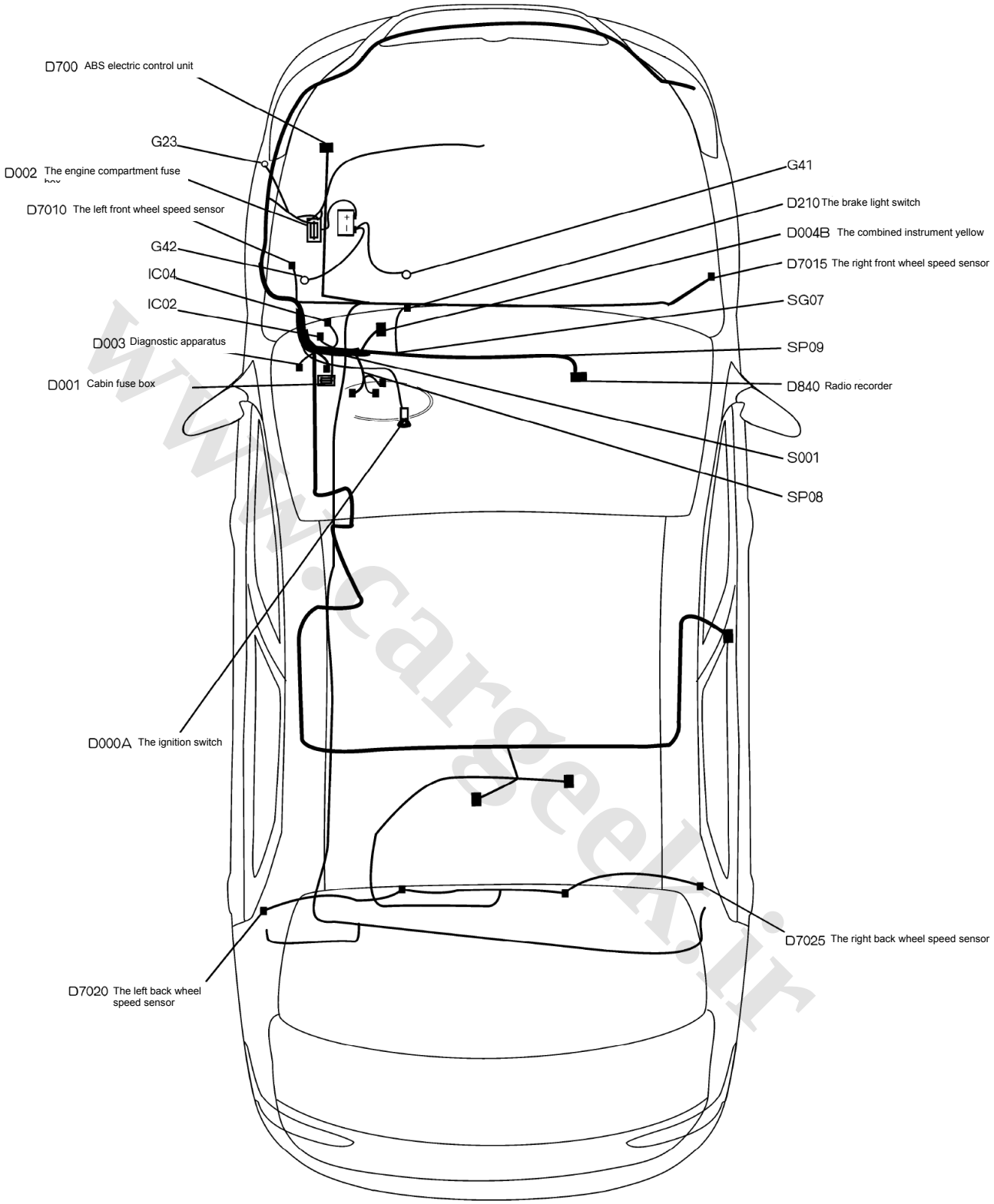
9.1 The electrical location diagram for safety air bag S30/H30



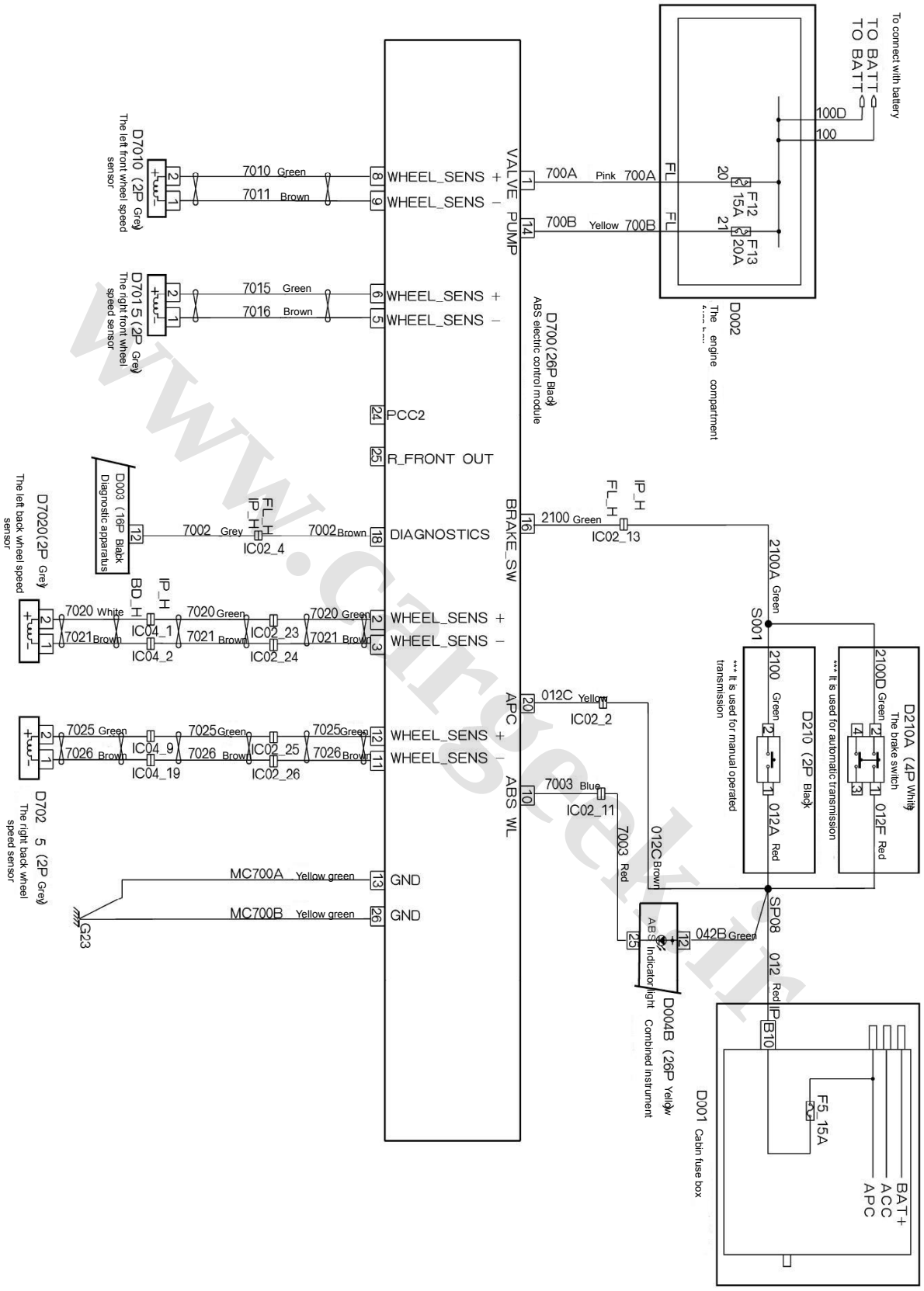
9.2 The electrical schematic diagram for safety air bag S30/H30



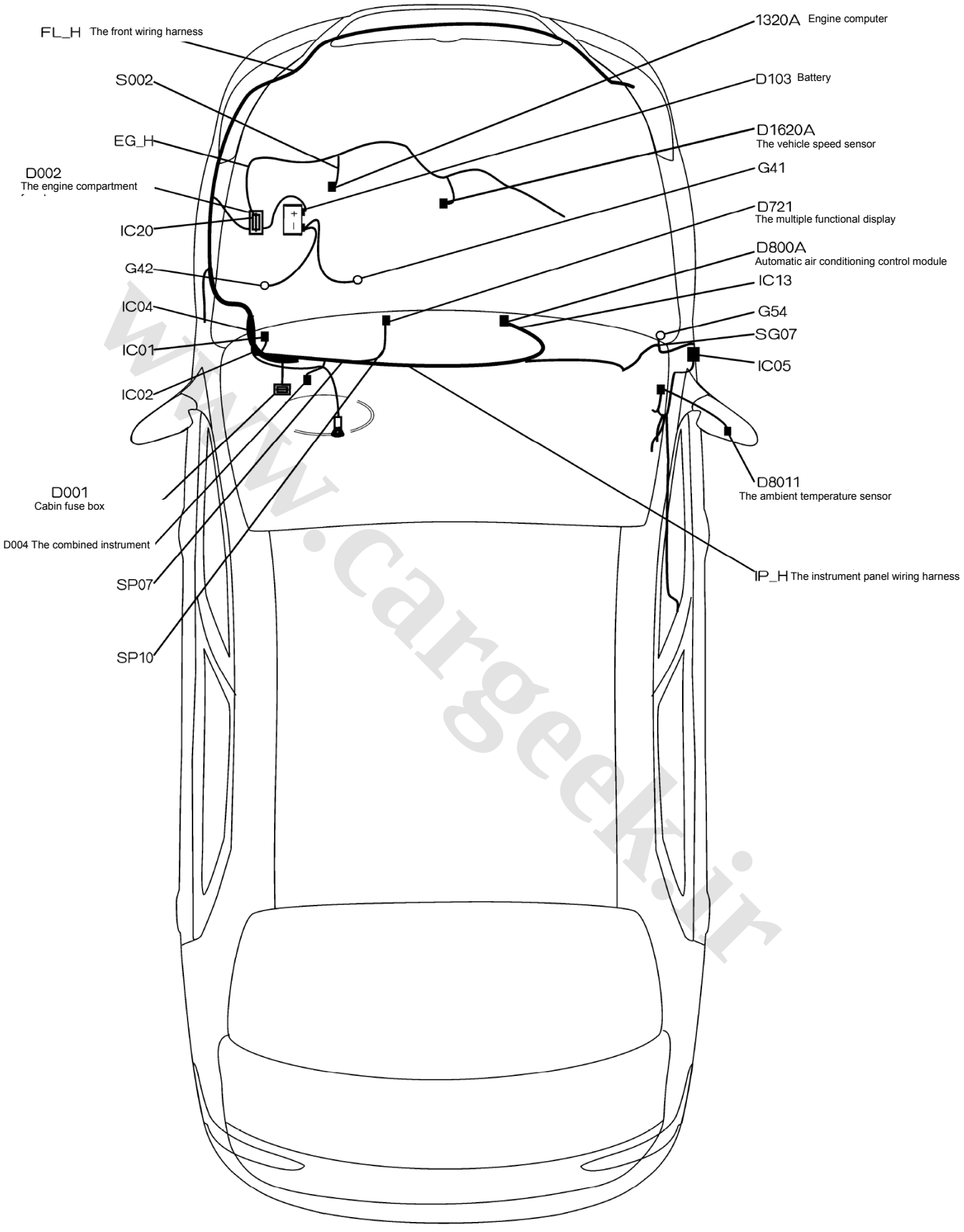
10.1 The electrical location diagram for the brake locking prevention system S30/H30



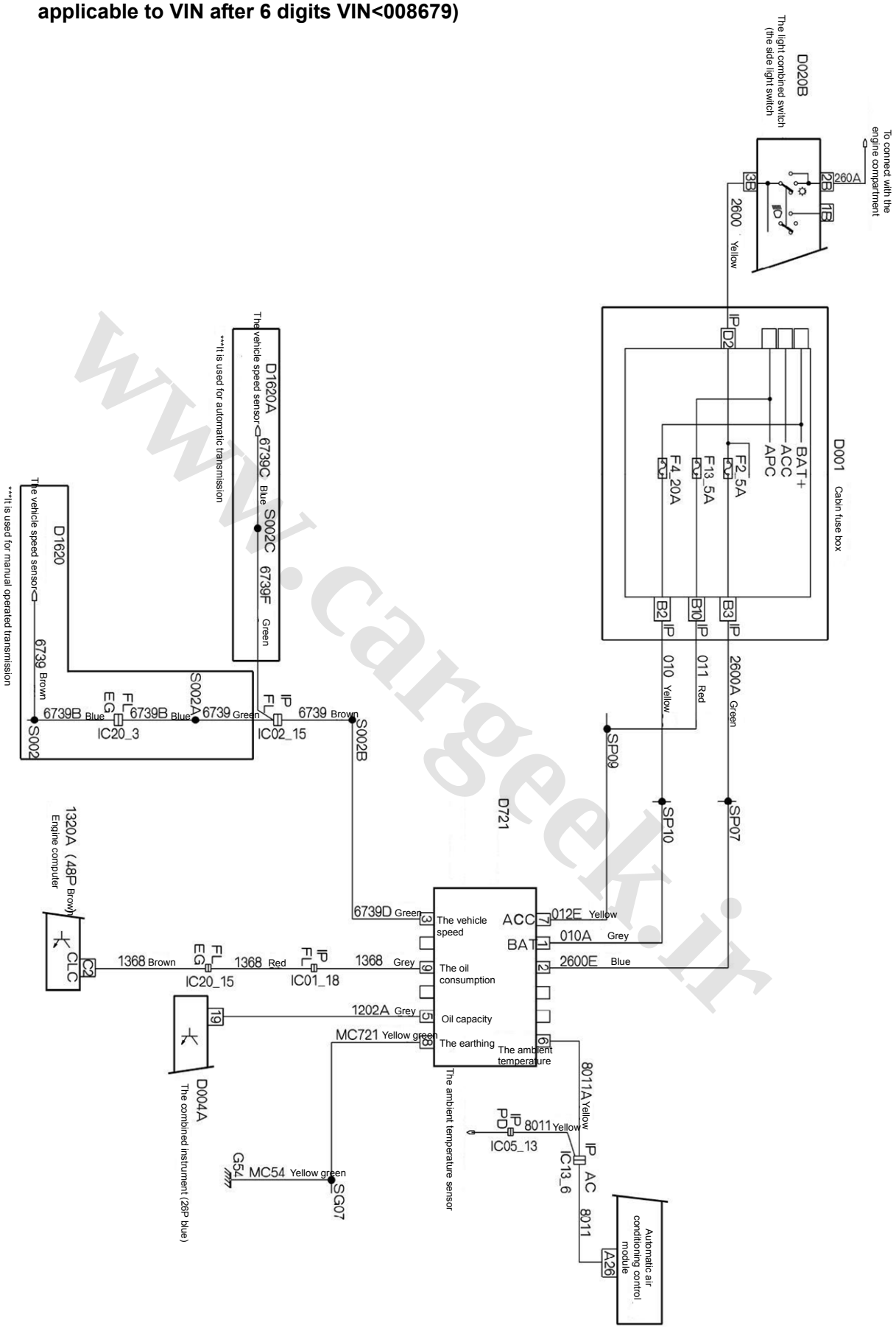
10.1 The electrical location diagram for the brake locking prevention system S30/H30



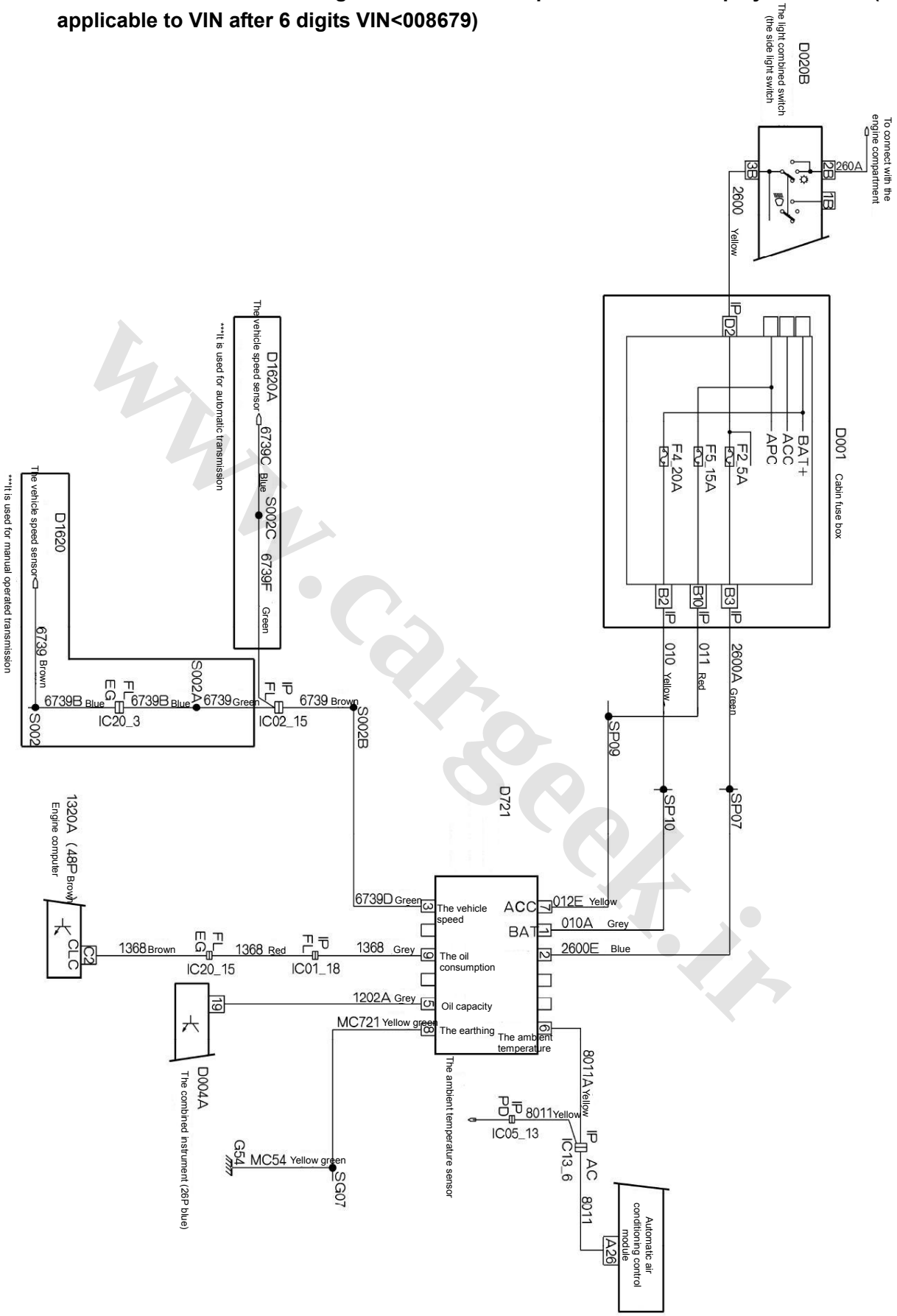
11.1 The electrical location diagram for the multiple functional display S30/H30



11.2 The electrical location diagram for the multiple functional display S30/H30 (it is applicable to VIN after 6 digits VIN<008679)

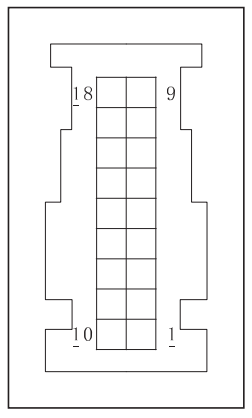


11.3 The electrical location diagram for the multiple functional display S30/H30 (it is applicable to VIN after 6 digits VIN<008679)

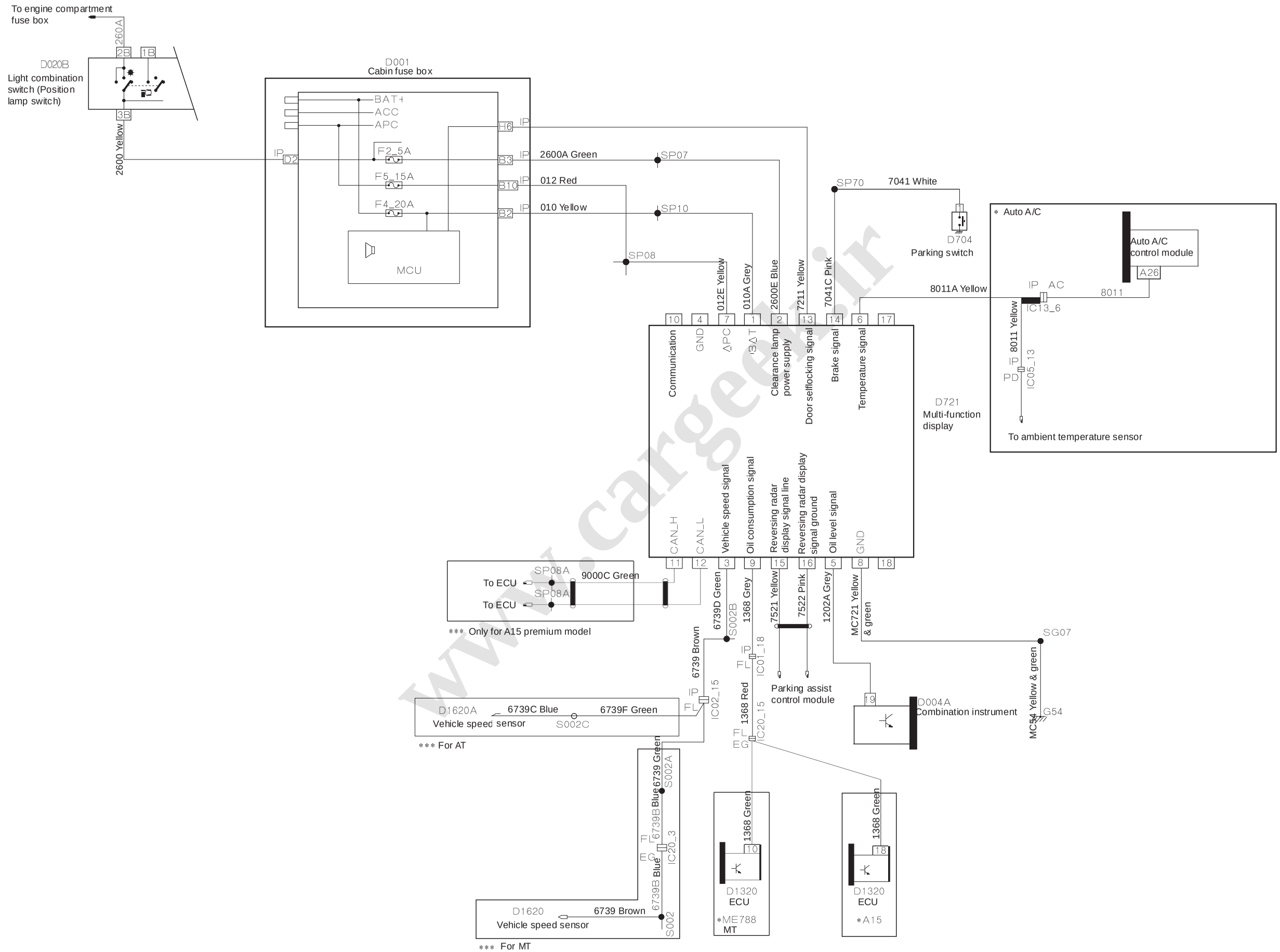


Multi-function Display

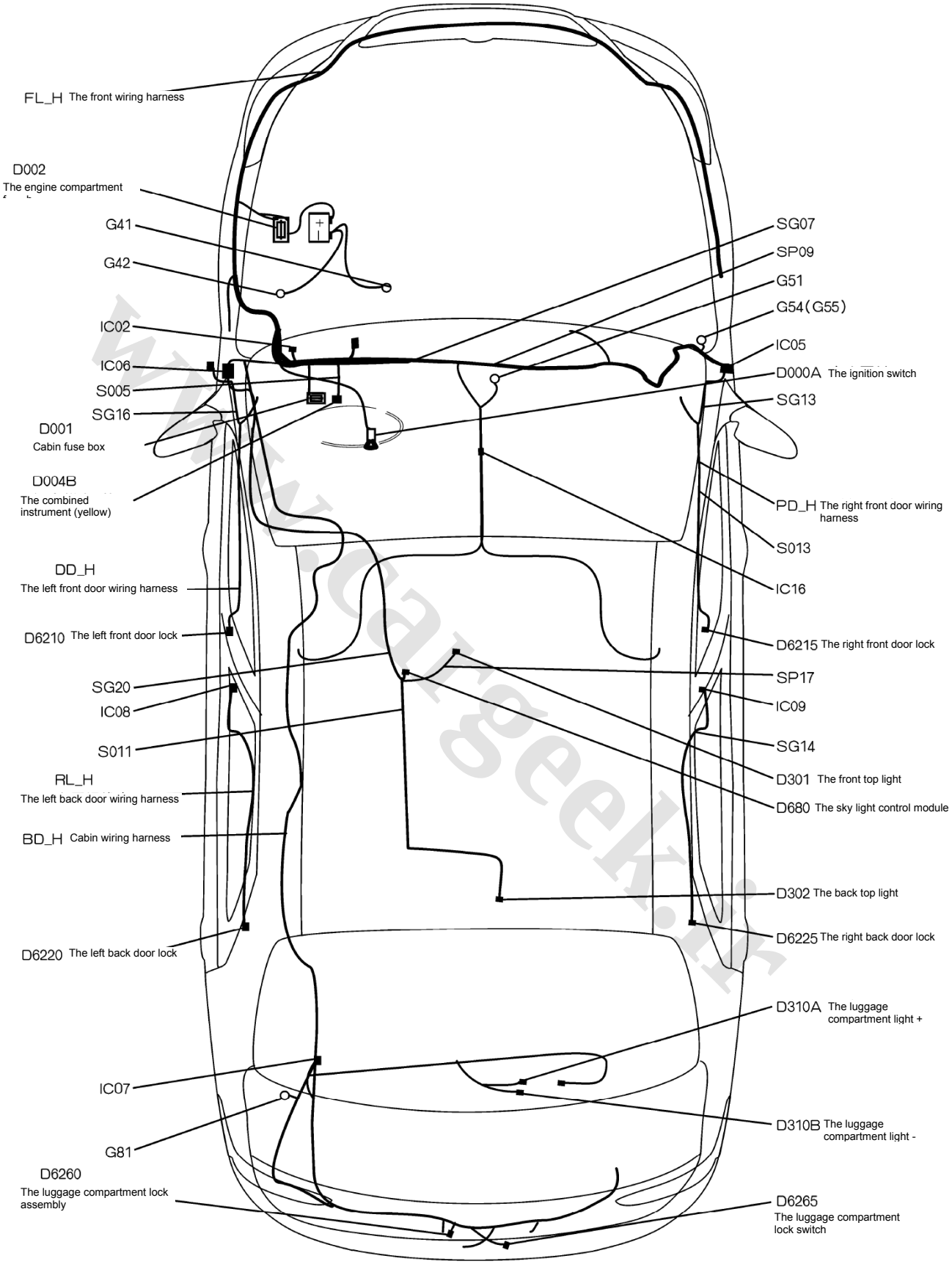
Pin No.	Pin definition	Pin No.	Pin definition
1	B+ (Battery)	10	Communication
2	Clearance lamp power supply	11	CAN H
3	Vehicle speed signal	12	CAN L
4	NC	13	Autolock signal
5	Fuel level signal	14	Brake signal
6	Temperature signal	15	Reversing radar display signal line
7	Ignition power supply	16	Reversing radar display signal ground
8	Power supply ground	17	NC
9	Fuel consumption signal	18	NC



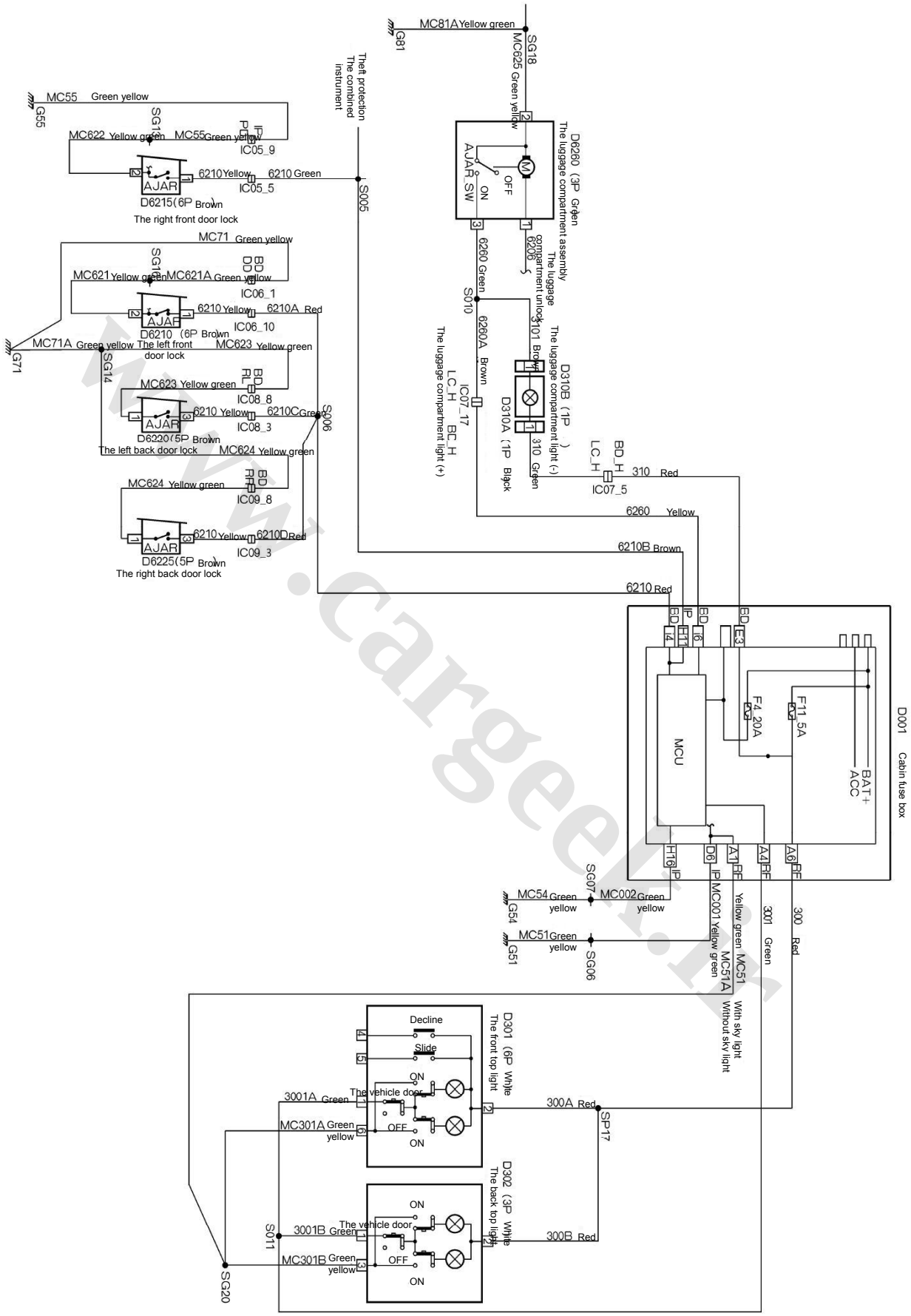
Electrical Diagram of Multi-function Display (MT/AT DLX)



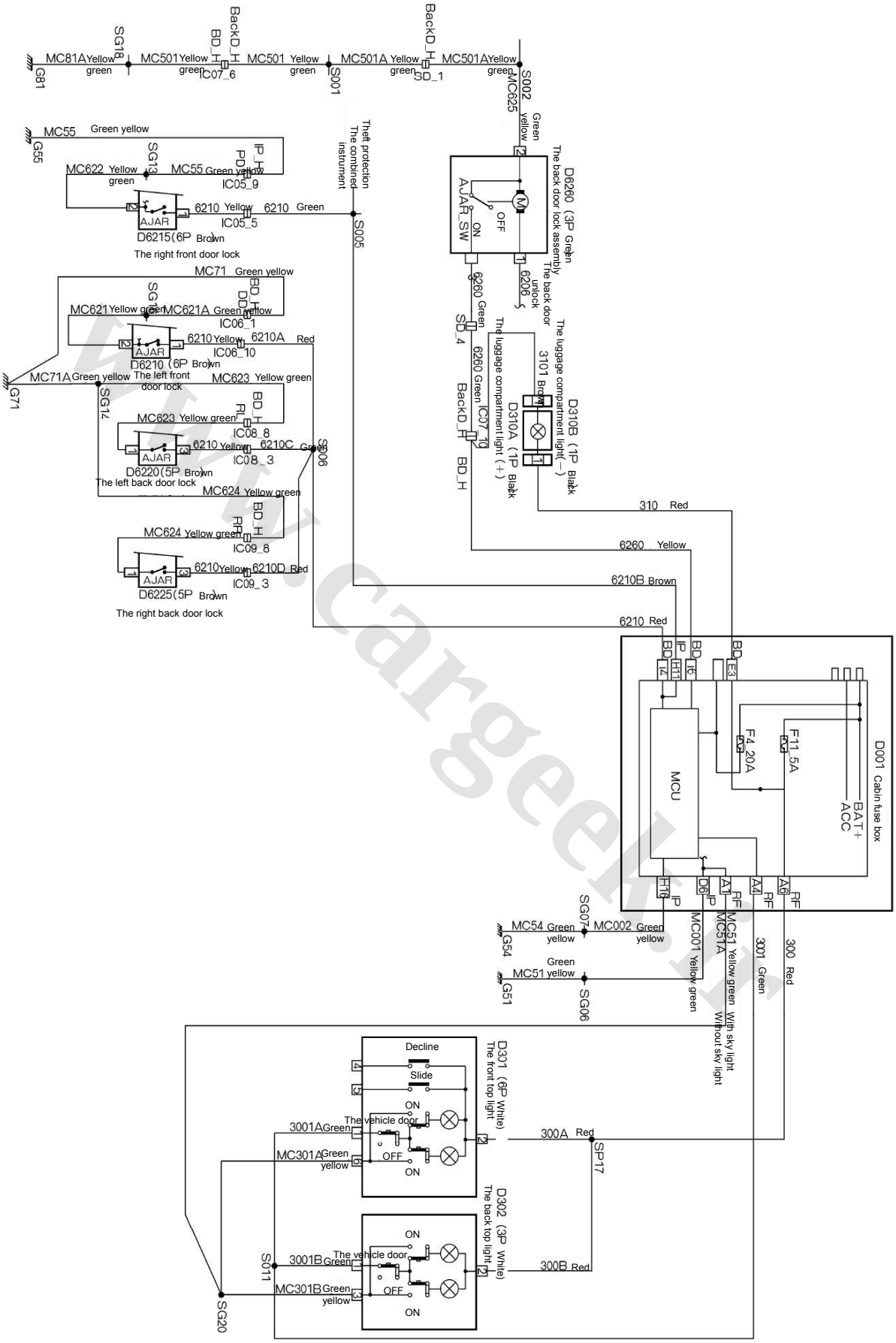
12.1 The electrical location diagram for the internal lighting S30/H30



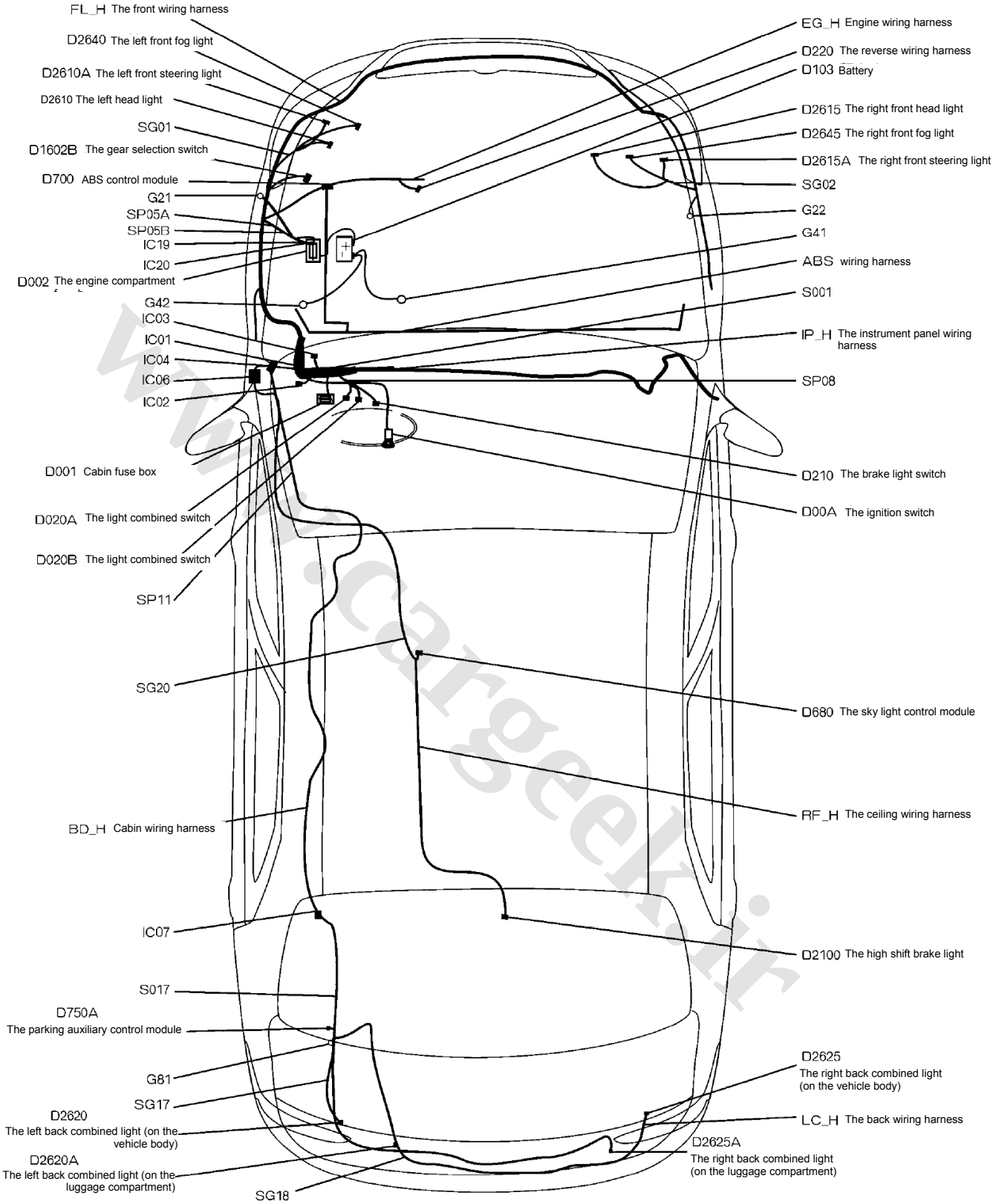
12.2 The electrical location diagram for the internal lighting S30



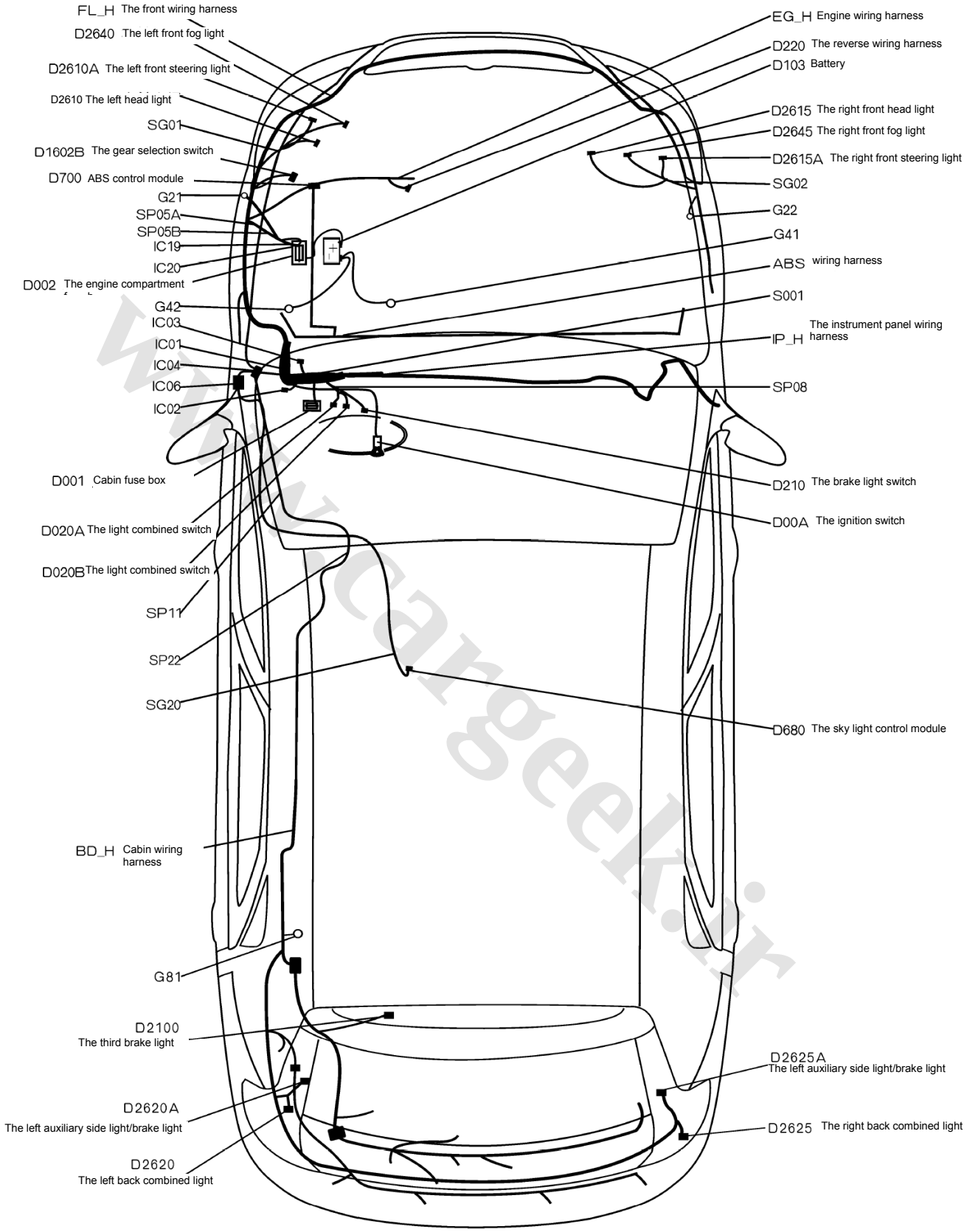
12.3 The electrical schematic diagram for the internal lighting H30



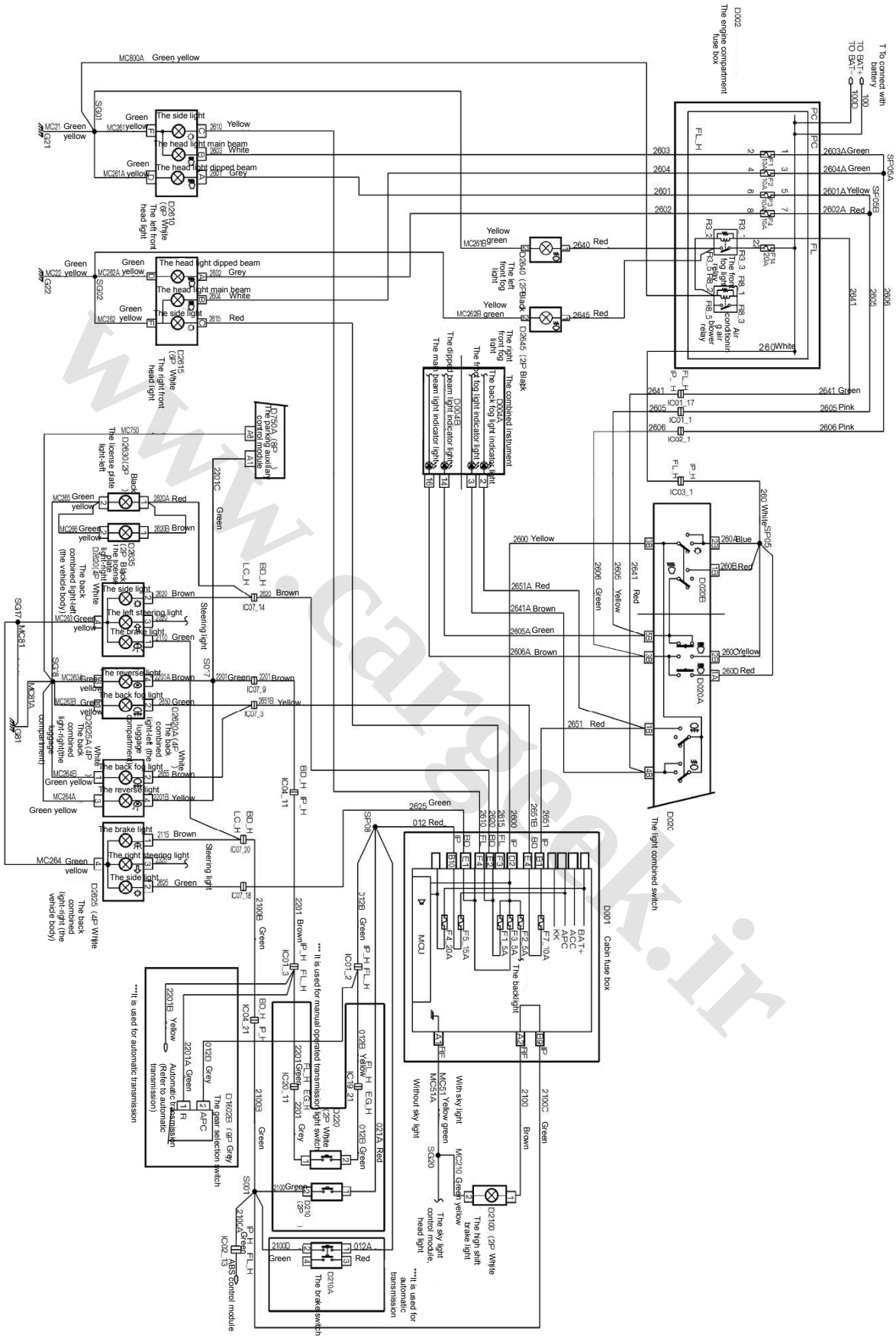
13.1 The electrical location diagram for the external lighting S30



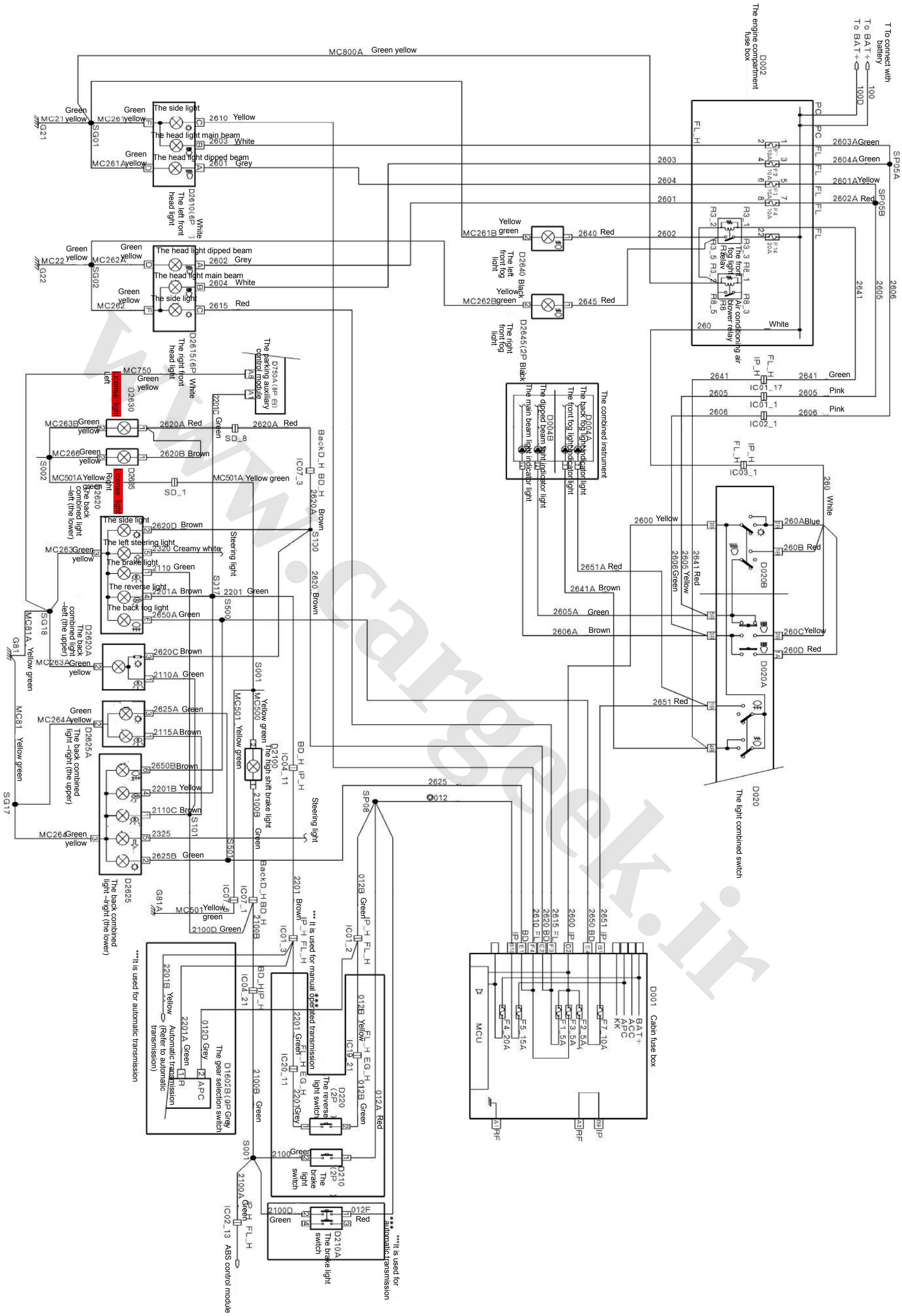
13.2 The electrical location diagram for the external lighting H30



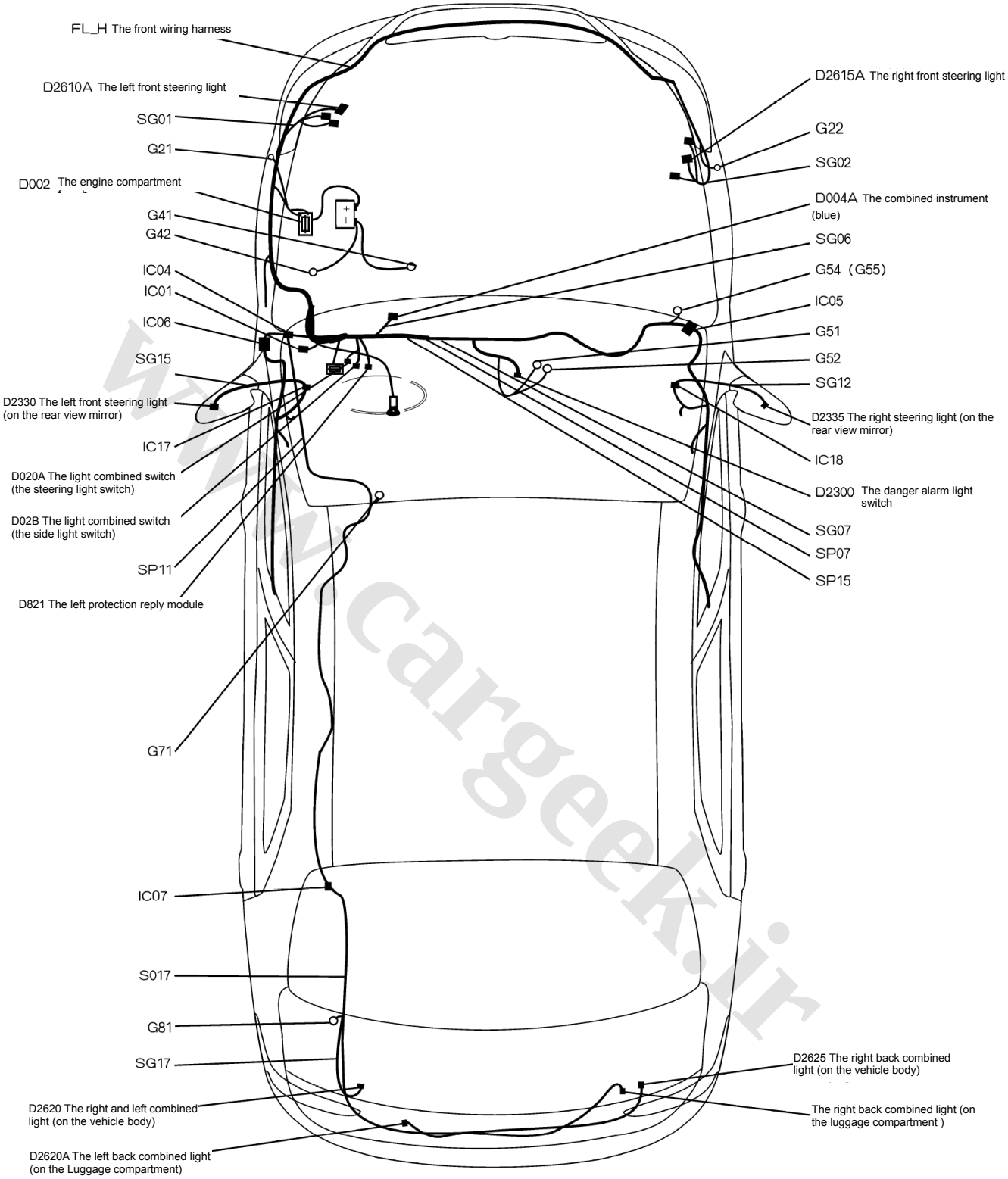
13.3 The electrical schematic diagram for the external lighting H30



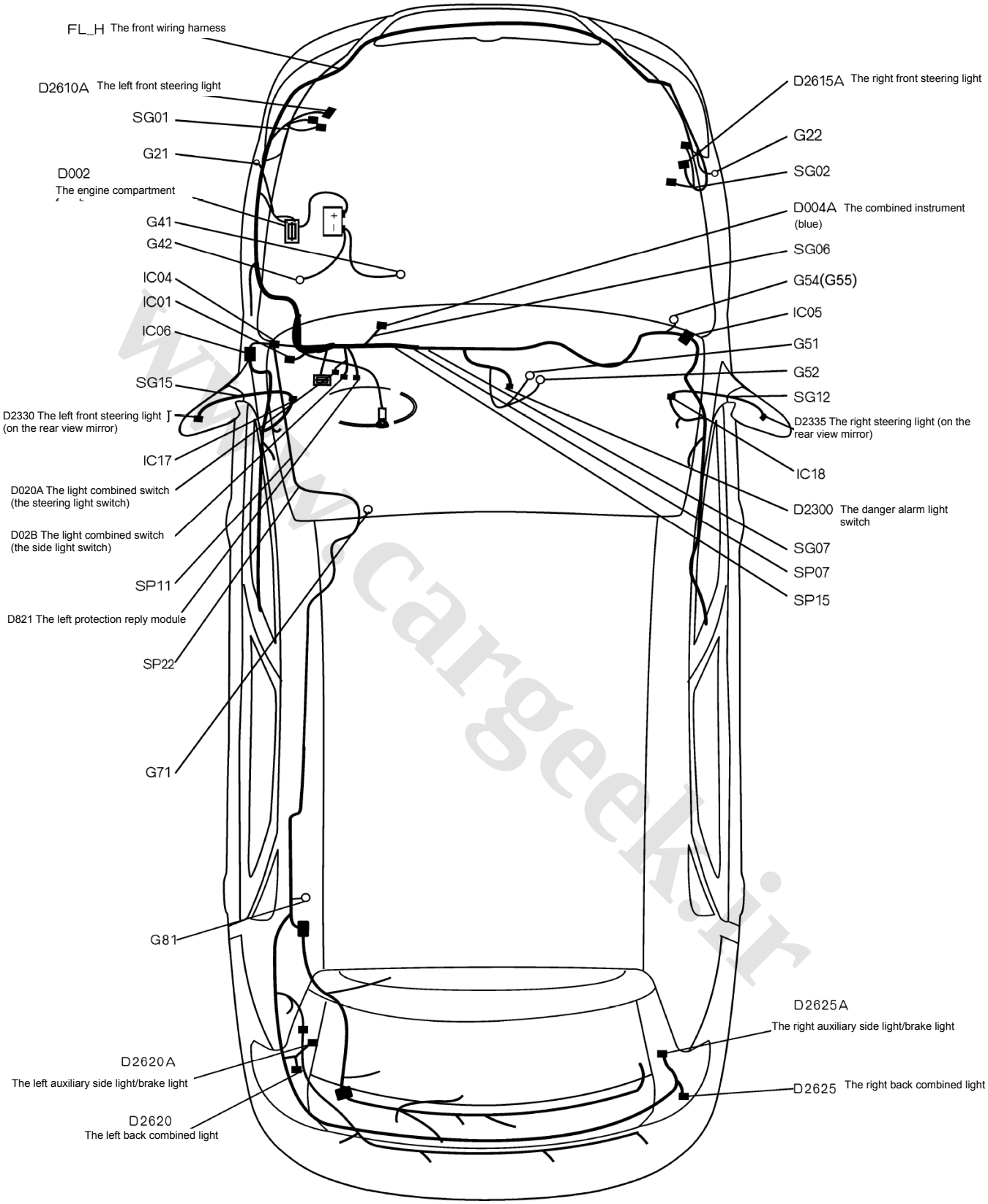
13.4 The electrical schematic diagram for the external lighting H30



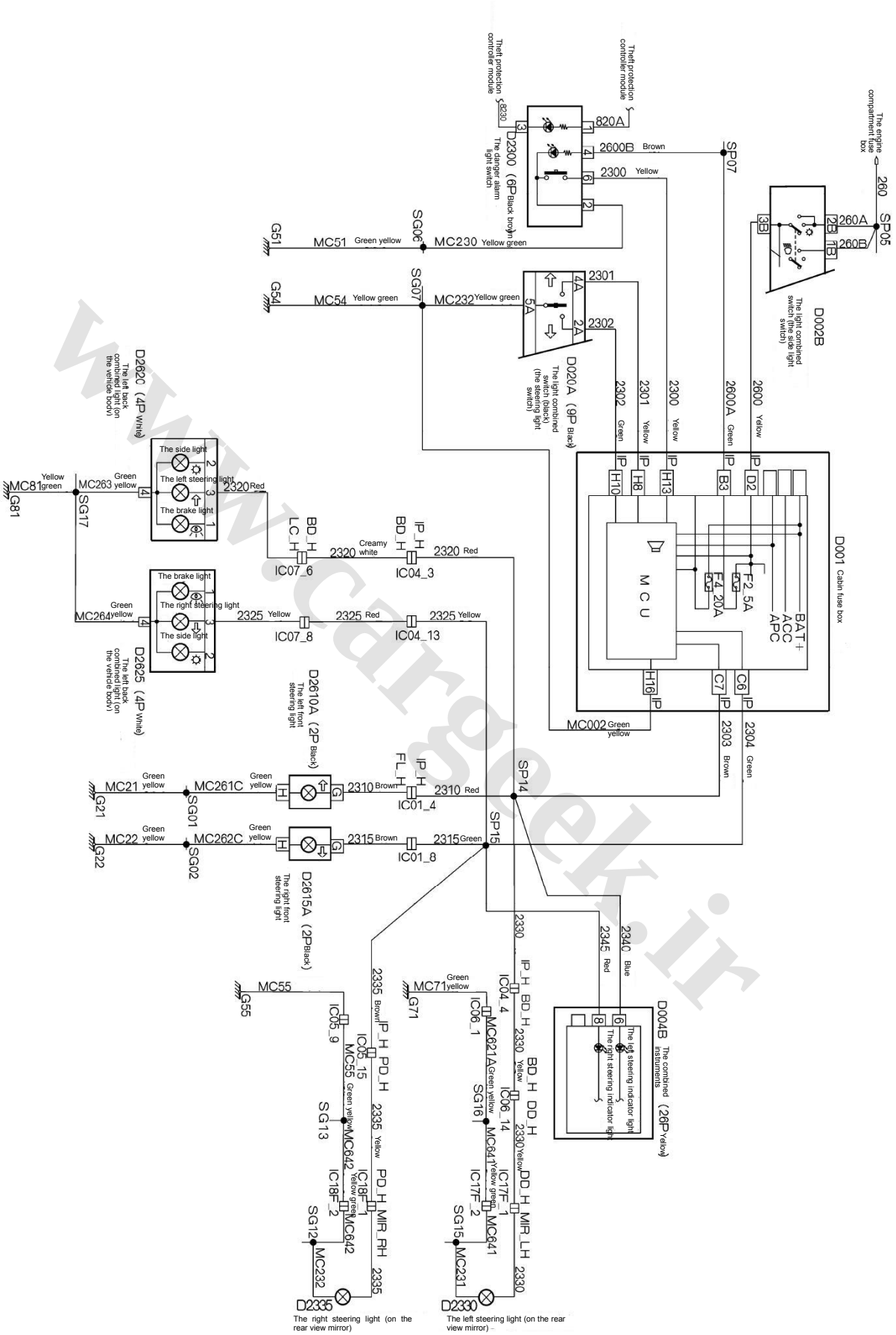
14.1 The electrical location diagram for the steering and danger alarm light (S30)



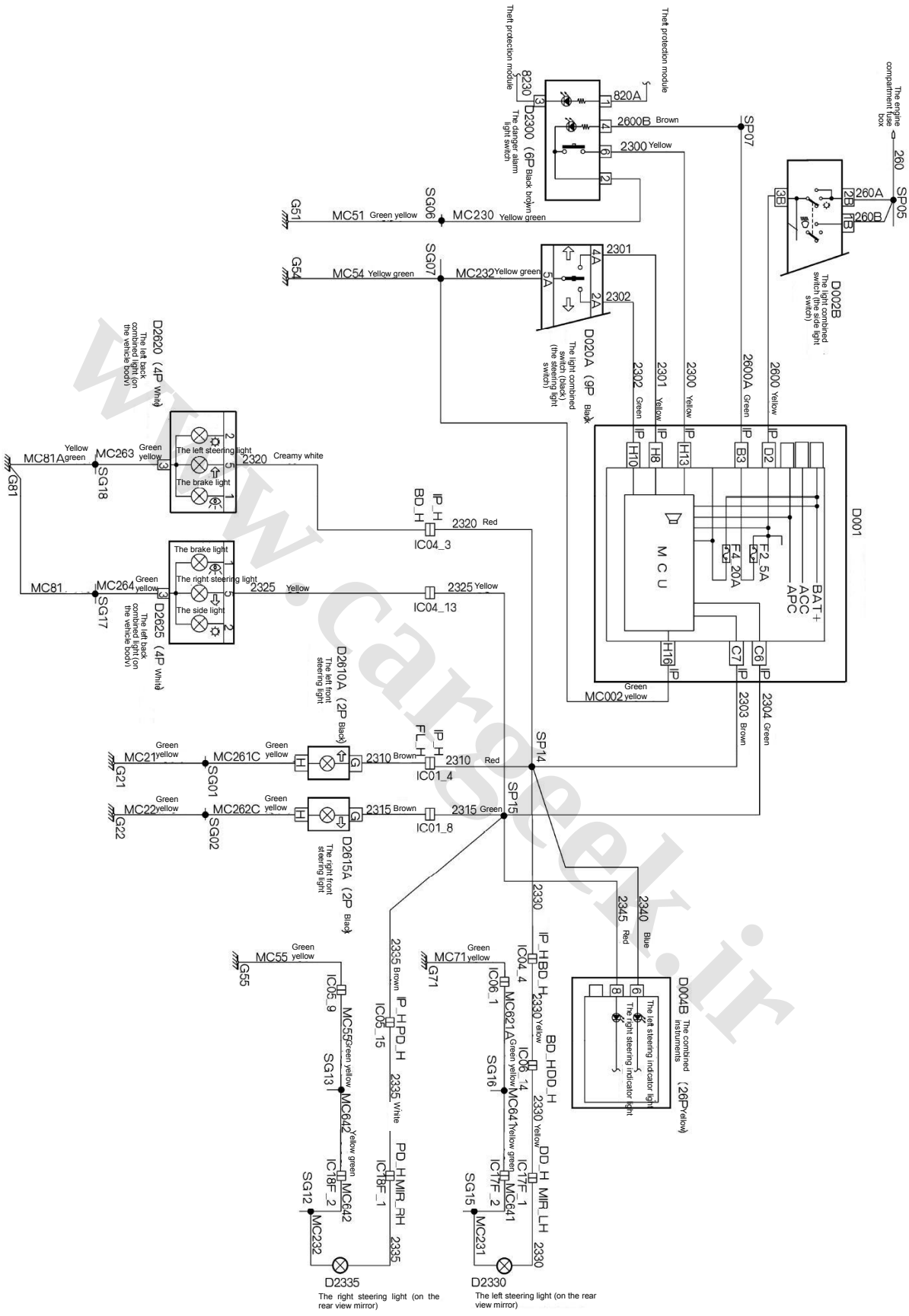
14.2 The electrical location diagram for the steering and danger alarm light (H30)



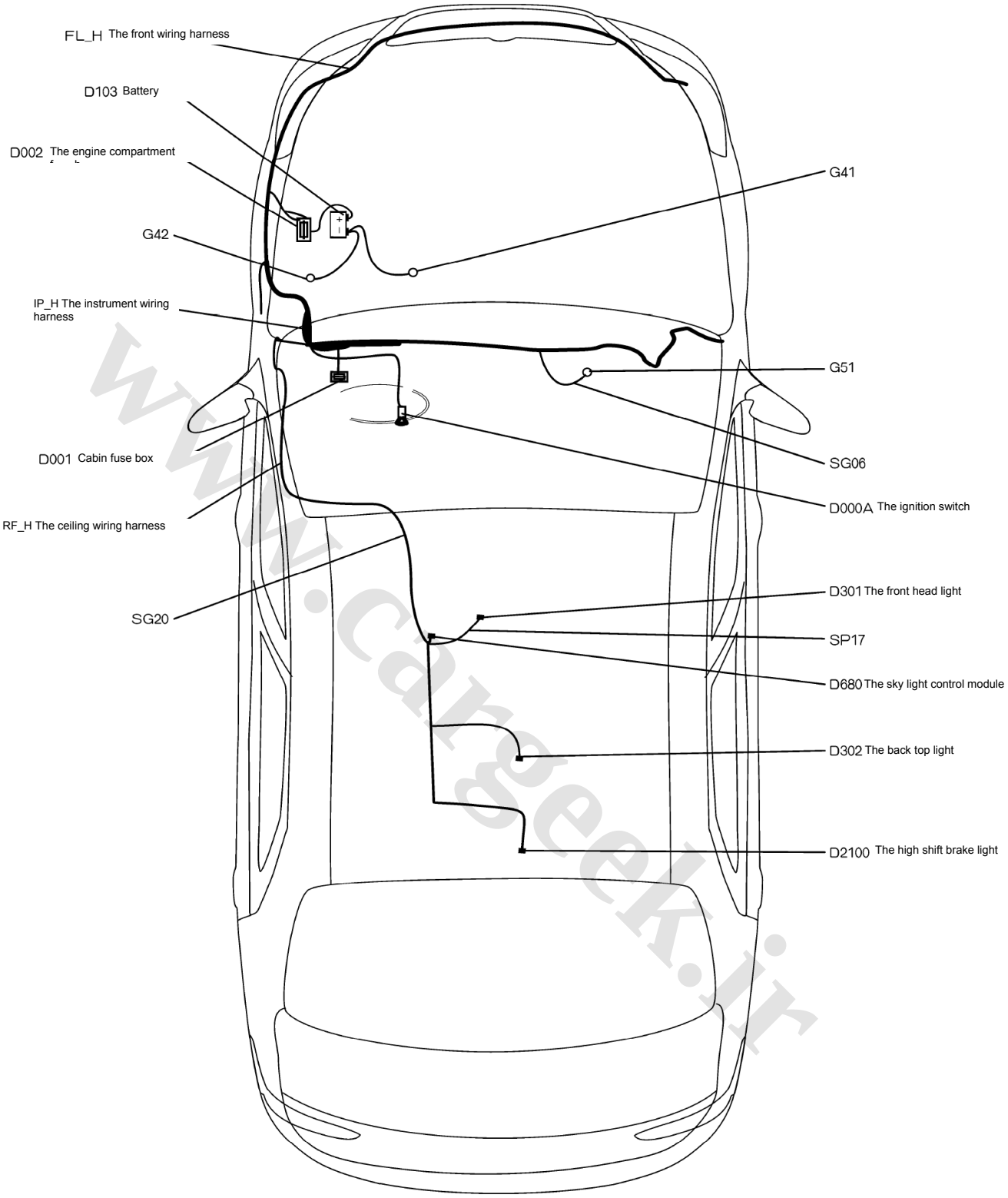
14.3 The electrical schematic diagram for the steering and danger alarm light (H30)



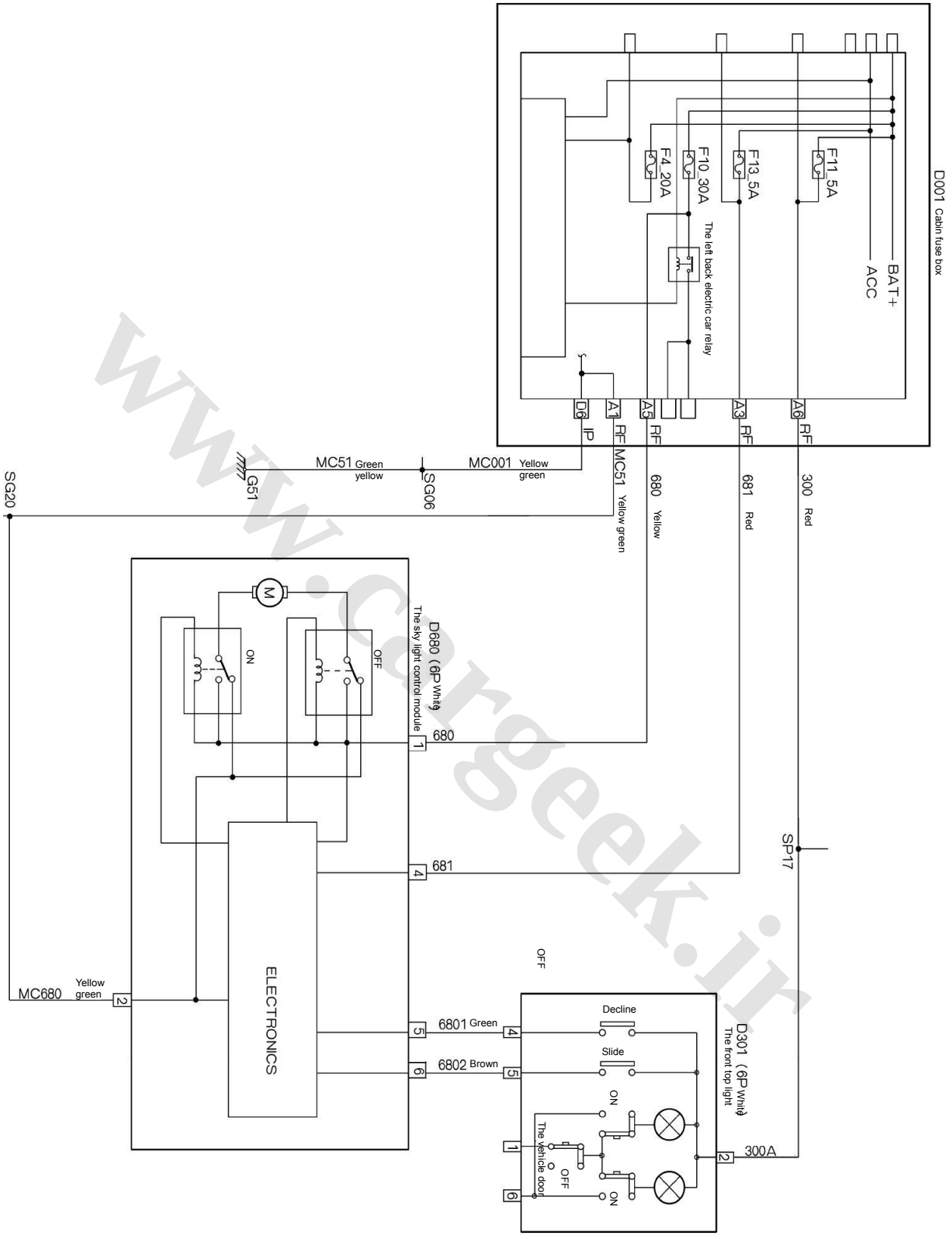
14.4 The electrical schematic diagram for the steering and danger alarm light (H30)



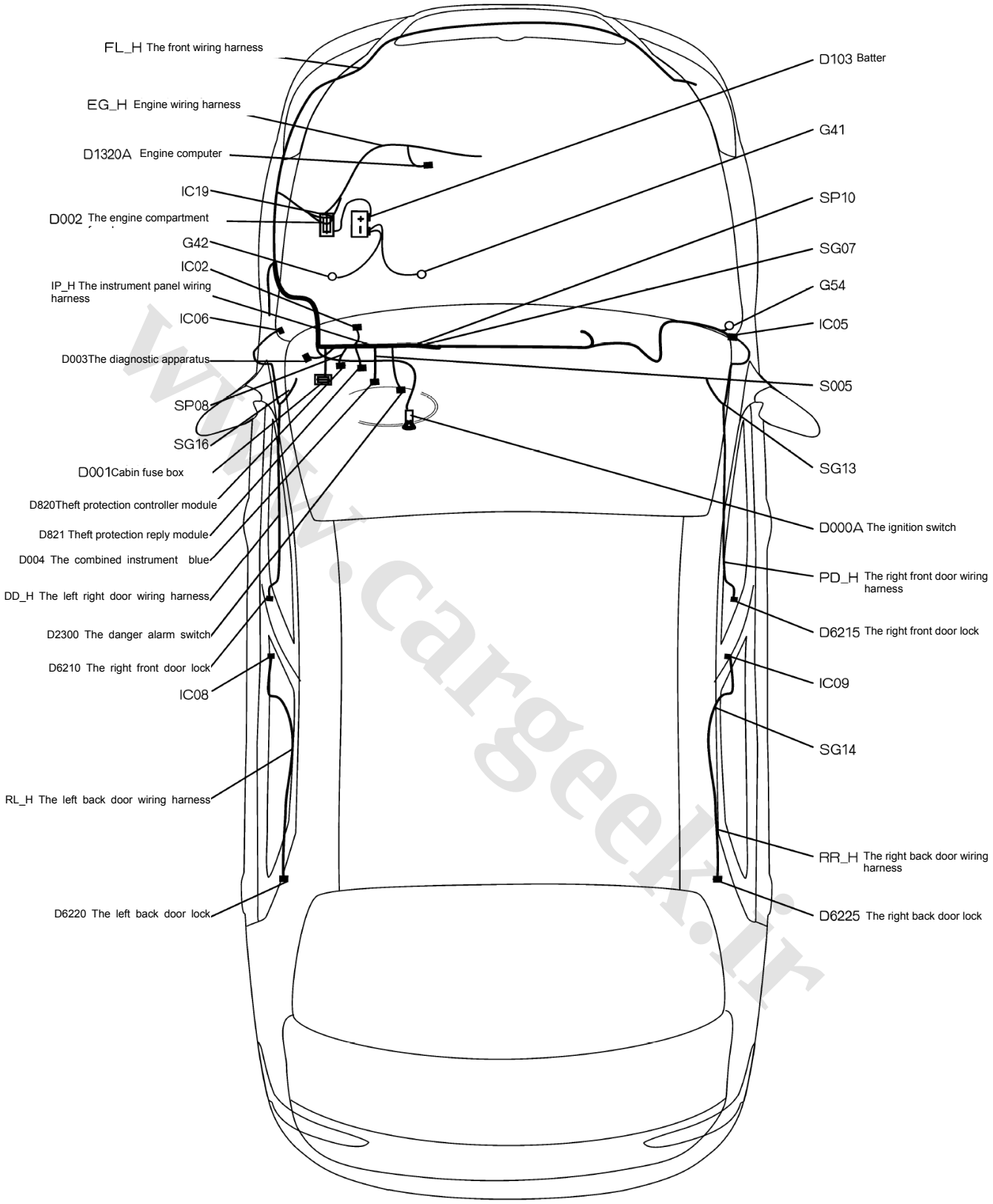
15.1 The electrical location diagram for the electric sun roofS30/H30)



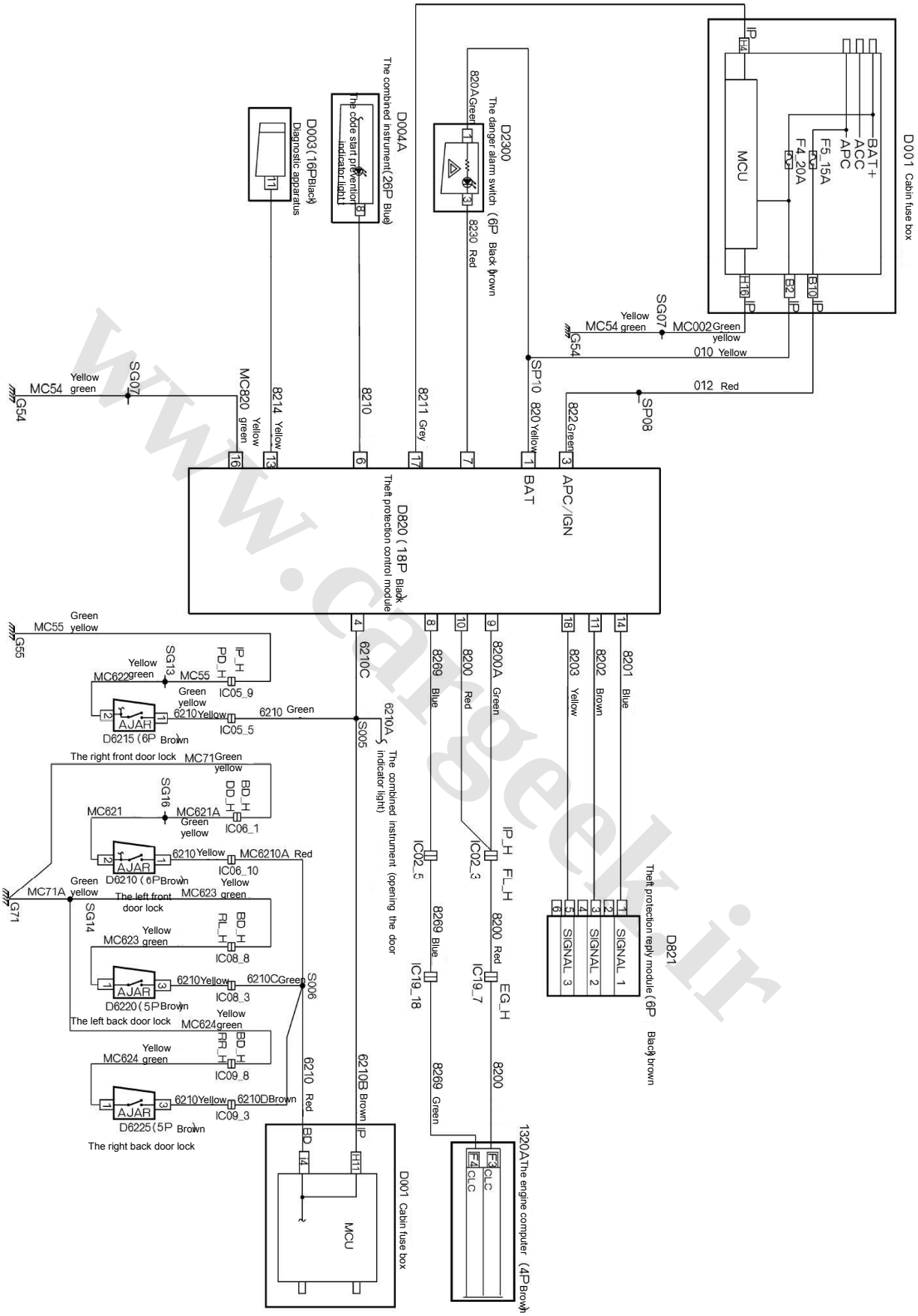
15.2 The electrical schematic diagram for the electric sun roofS30/H30)



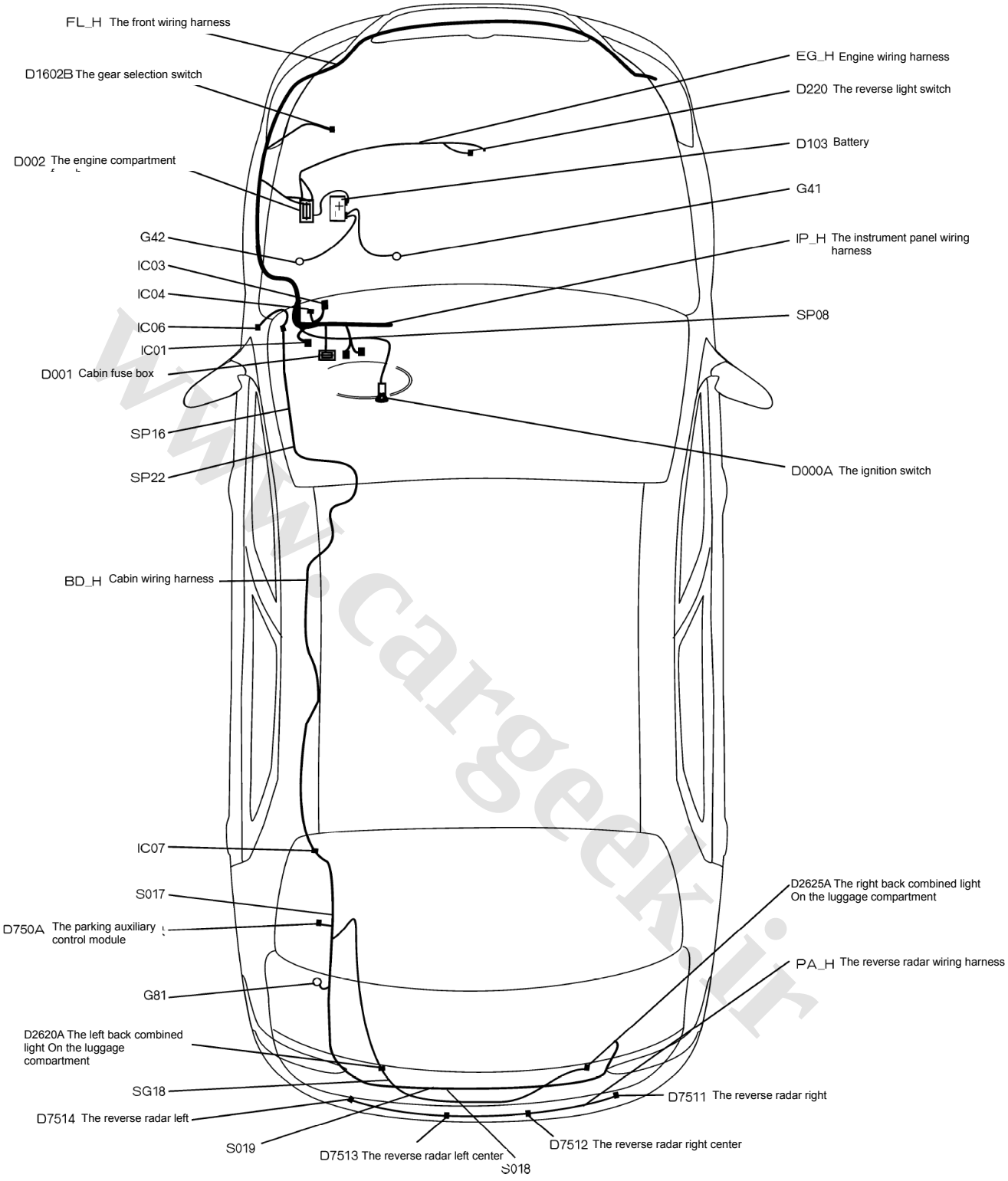
16.1 The electrical location diagram for the ft protection controller S30/H30)



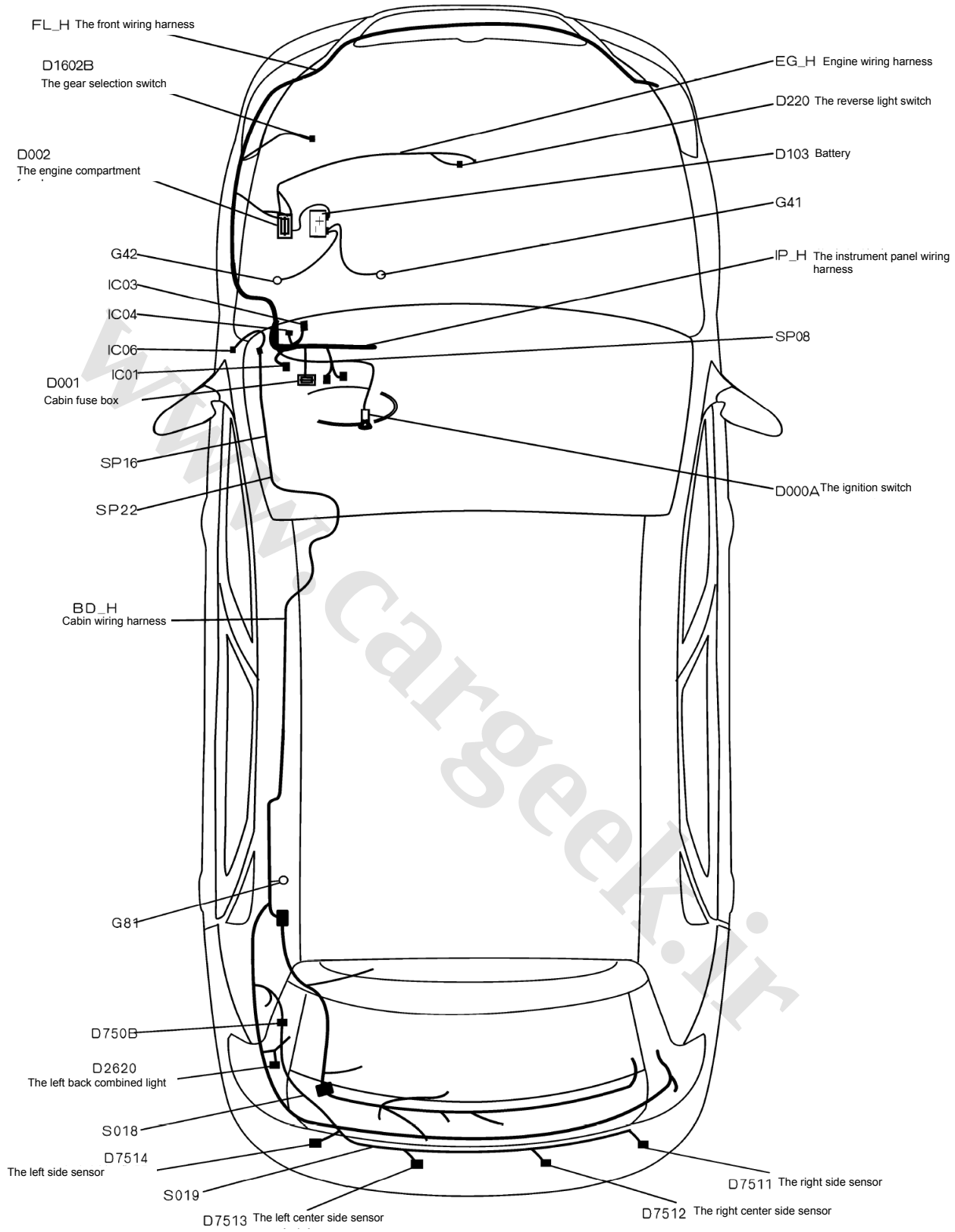
16.2 The electrical schematic diagram for the ft protection controller S30/H30)



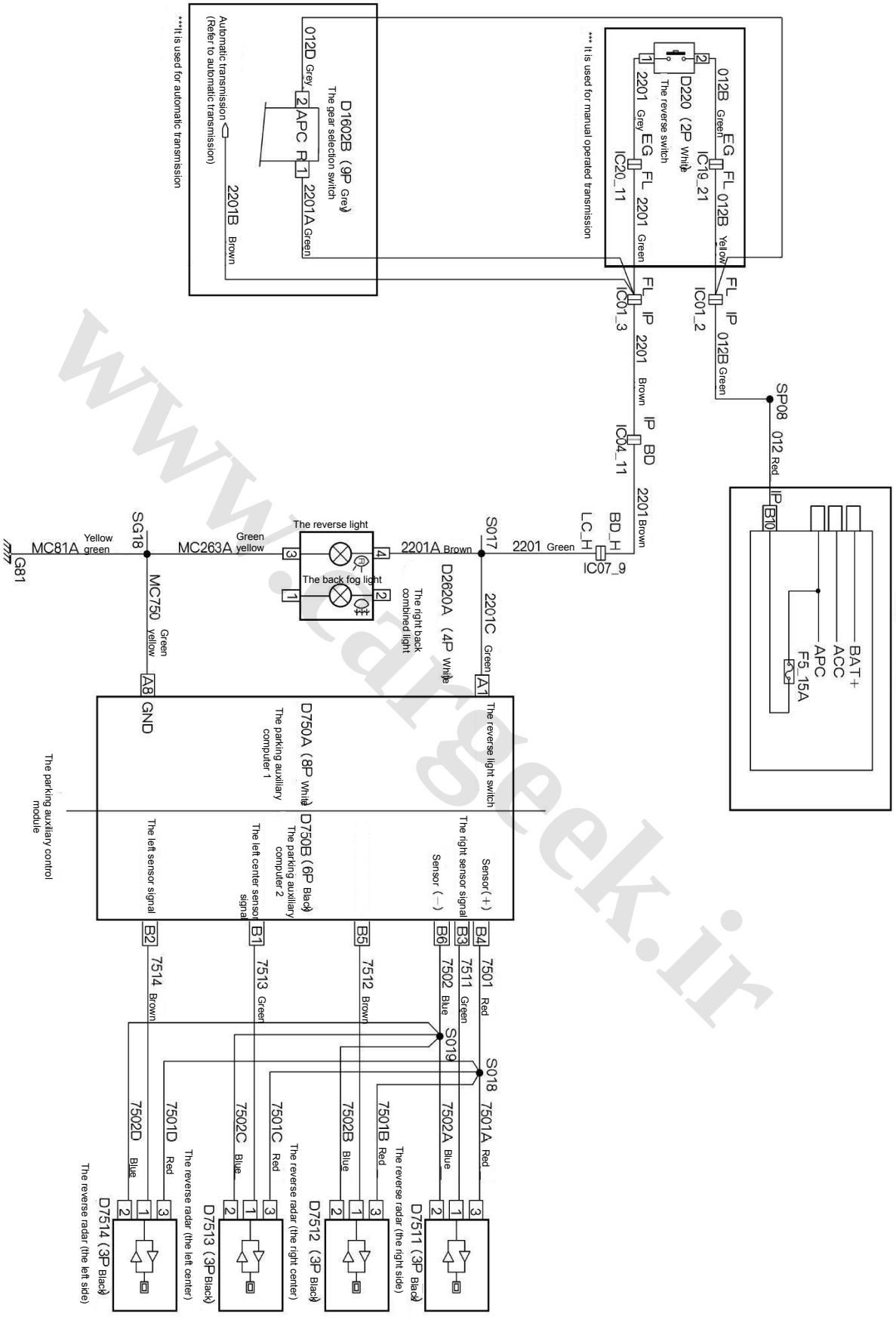
17.1 The auxiliary electrical location diagram for the parking S30



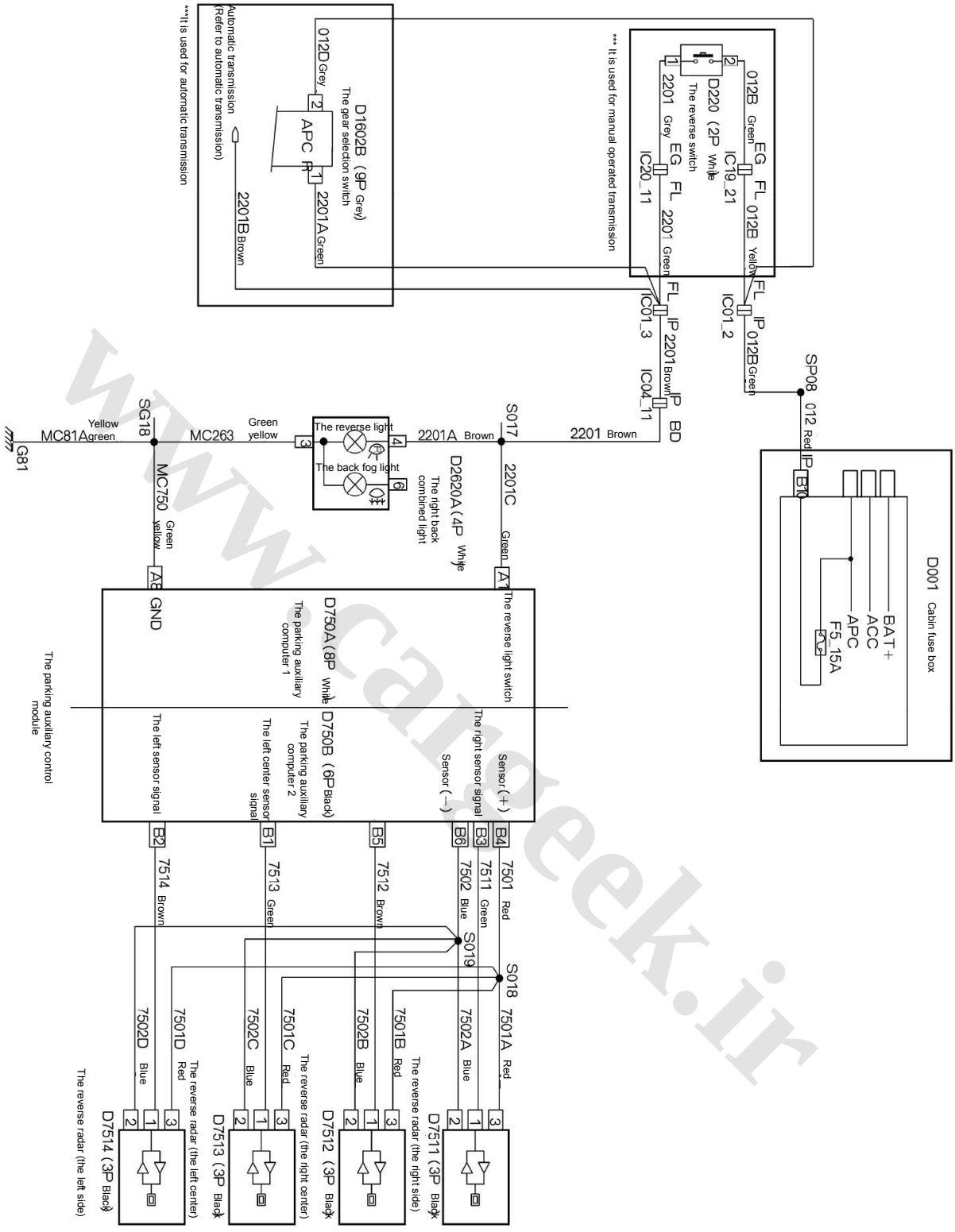
17.2 The auxiliary electrical location diagram for the parking H30



17.3 The auxiliary electrical schematic diagram for the parking S30

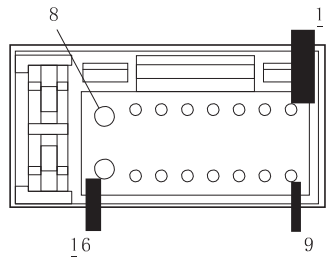


17.4 The auxiliary electrical schematic diagram for the parking H30



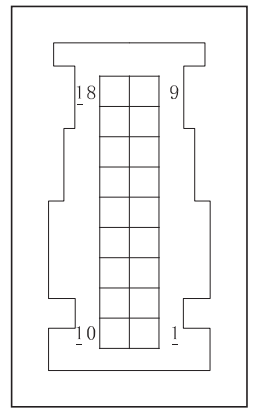
Parking Assist Control Module

Pin No.	Pin function	Pin No.	Pin function
1	Right sensor signal line	9	N/A
2	Right middle sensor signal line	10	Sensor ground
3	Left middle sensor signal line	11	Sensor power supply cabl
4	Left sensor signal line	12	N/A
5	Data signal line	13	Data signal ground
6	N/A	14	N/A
7	N/A	15	N/A
8	Reversing lamp power supply, positive	16	Reversing lamp power supply negative

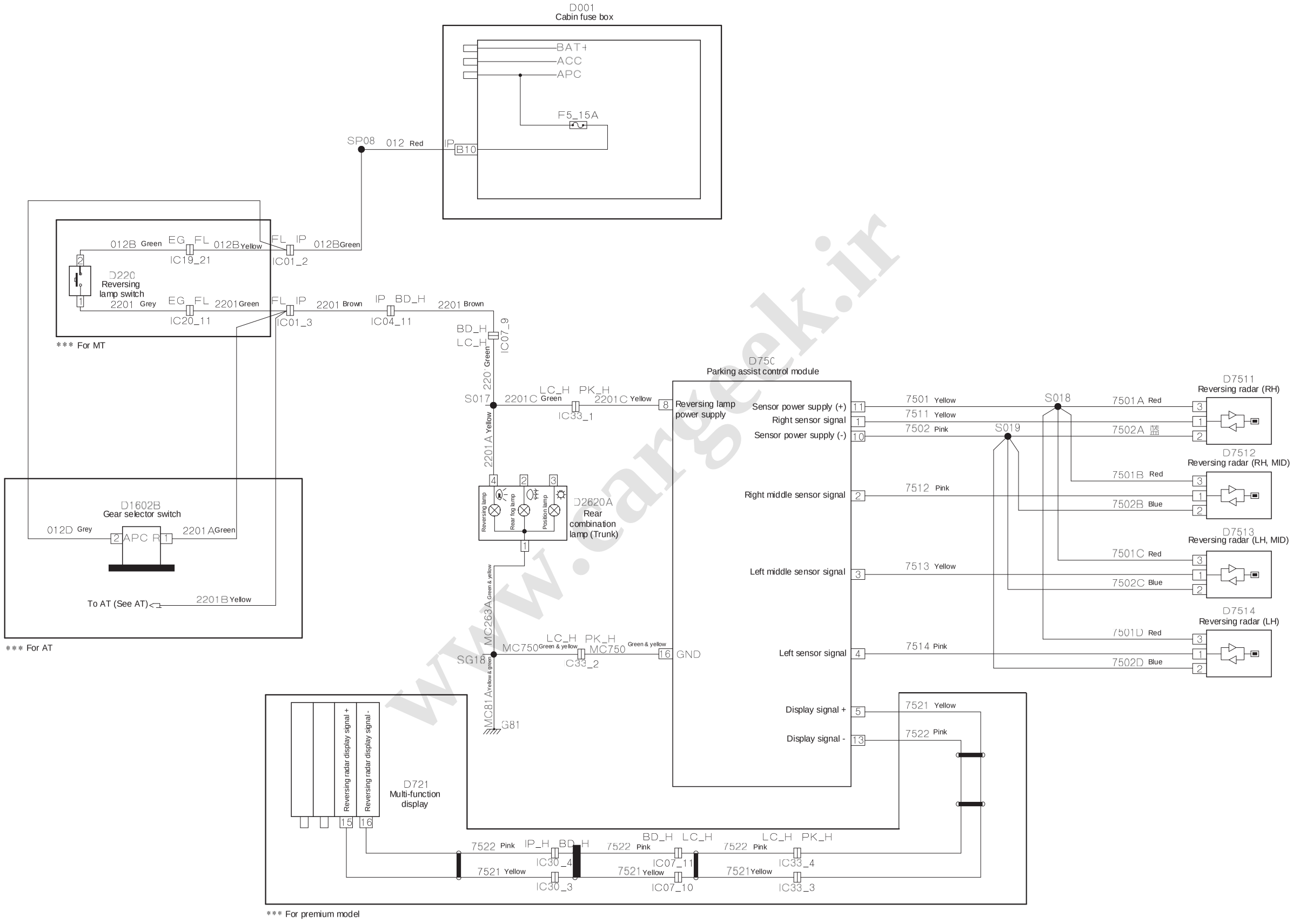


Multi-function Display

Pin No.	Pin function	Pin No.	Pin function
1	Battery	10	Communication
2	Clearance lamp power supply	11	CAN_H
3	Vehicle speed signal	12	CAN_L
4	NC	13	Autolock signal
5	Oil level signal	14	Brake signal
6	Temperature signal	15	Reversing radar display signal line
7	Ignition power supply	16	Reversing radar display signal ground
8	Power supply ground	17	NC
9	Oil consumption signal	18	NC

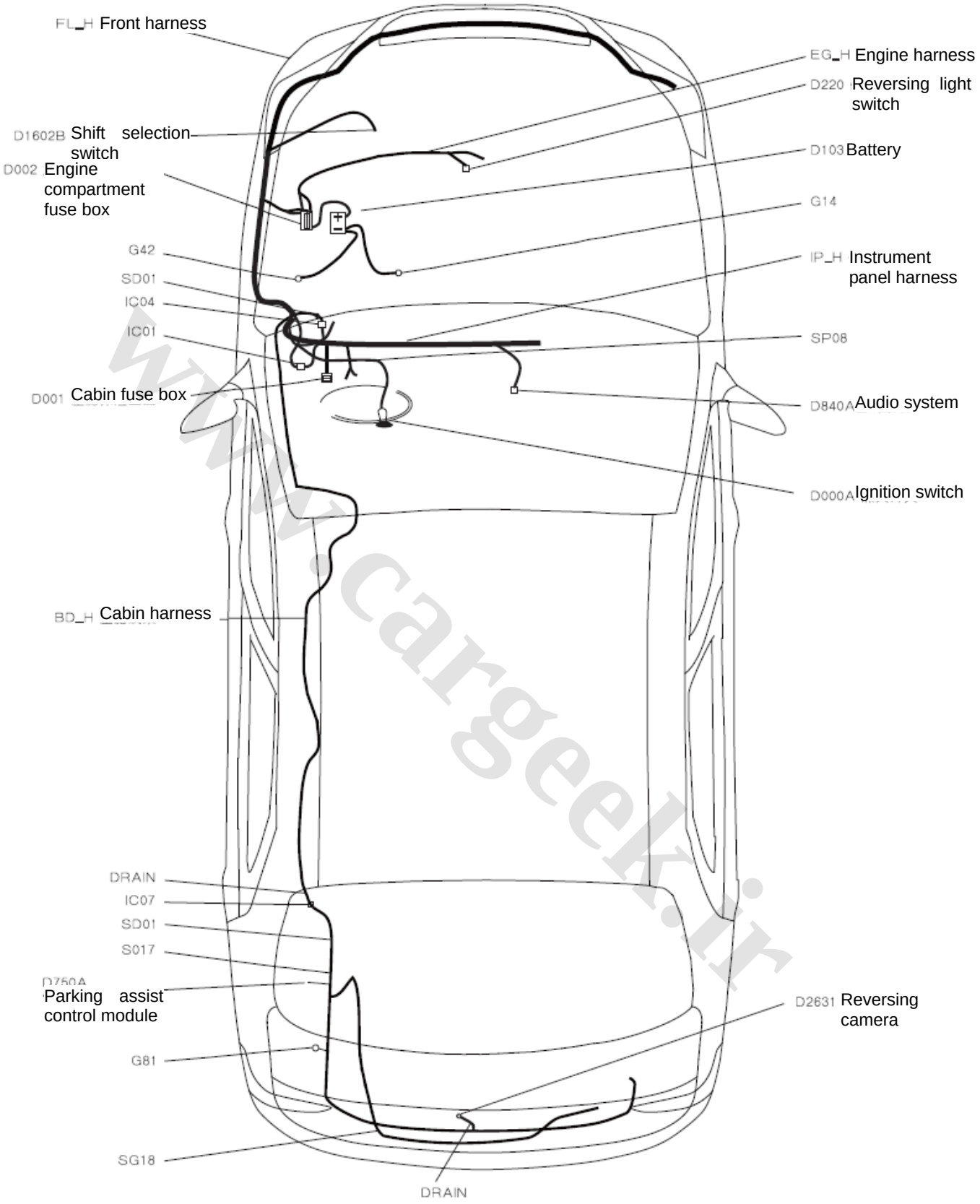


Electrical Diagram of Parking Assist (BF3MT/AT XV, BF3MT/AT DLX)

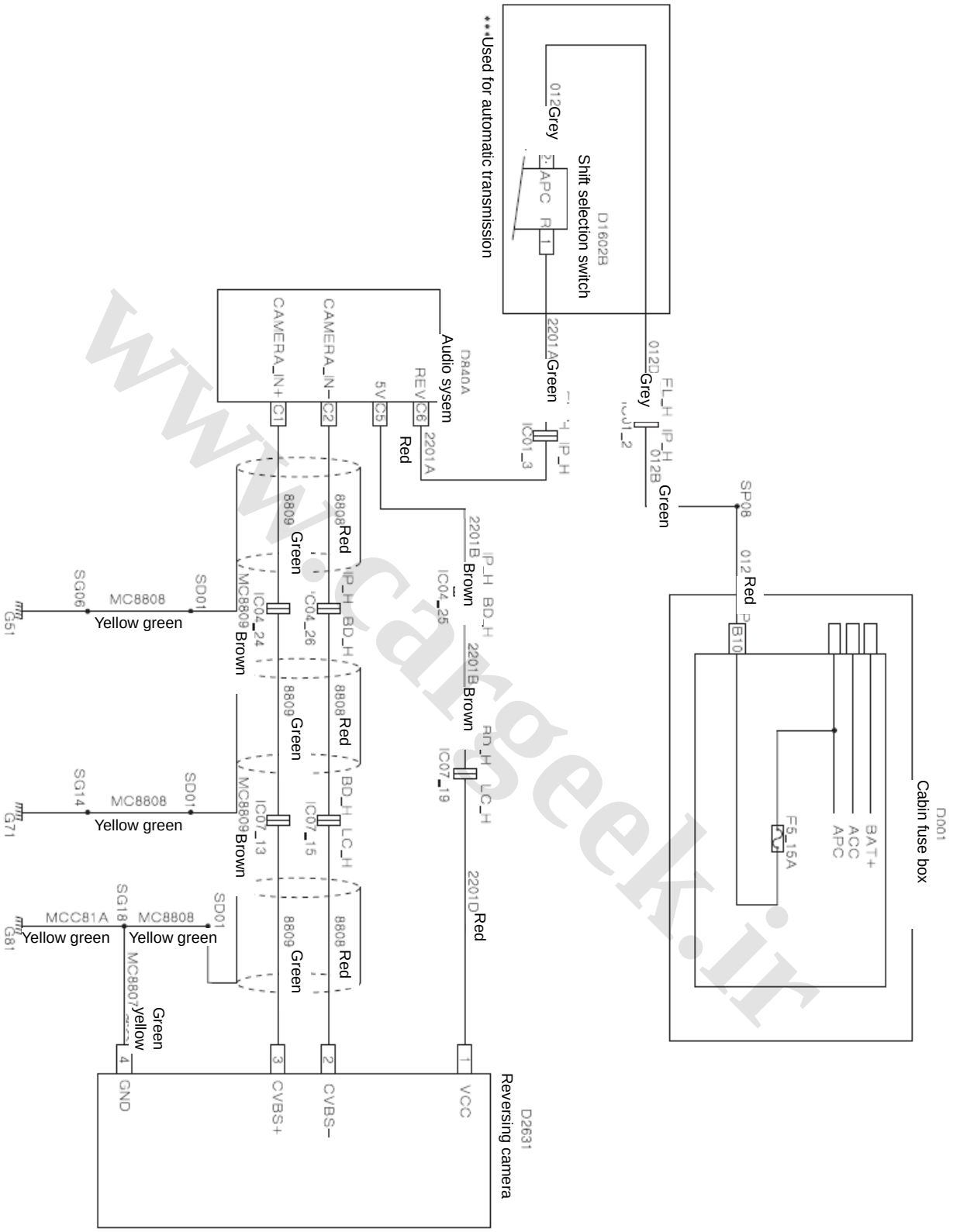


Schematic diagram for electrical appliance

1.1- Location diagram for the reversing image electrical appliances (S30)

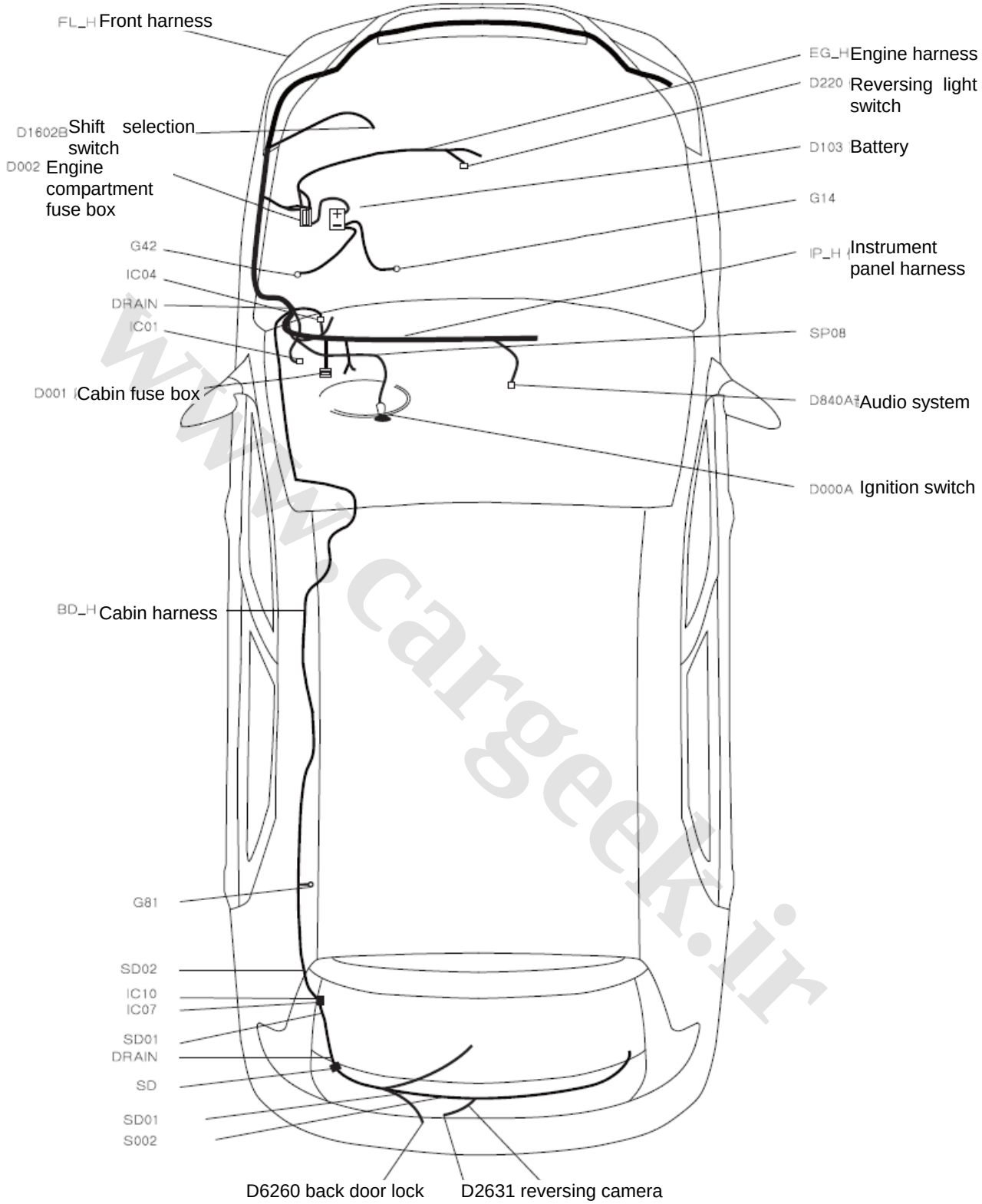


1.3- Scehmatic diagram for the reversing image electrical appliances (S30)

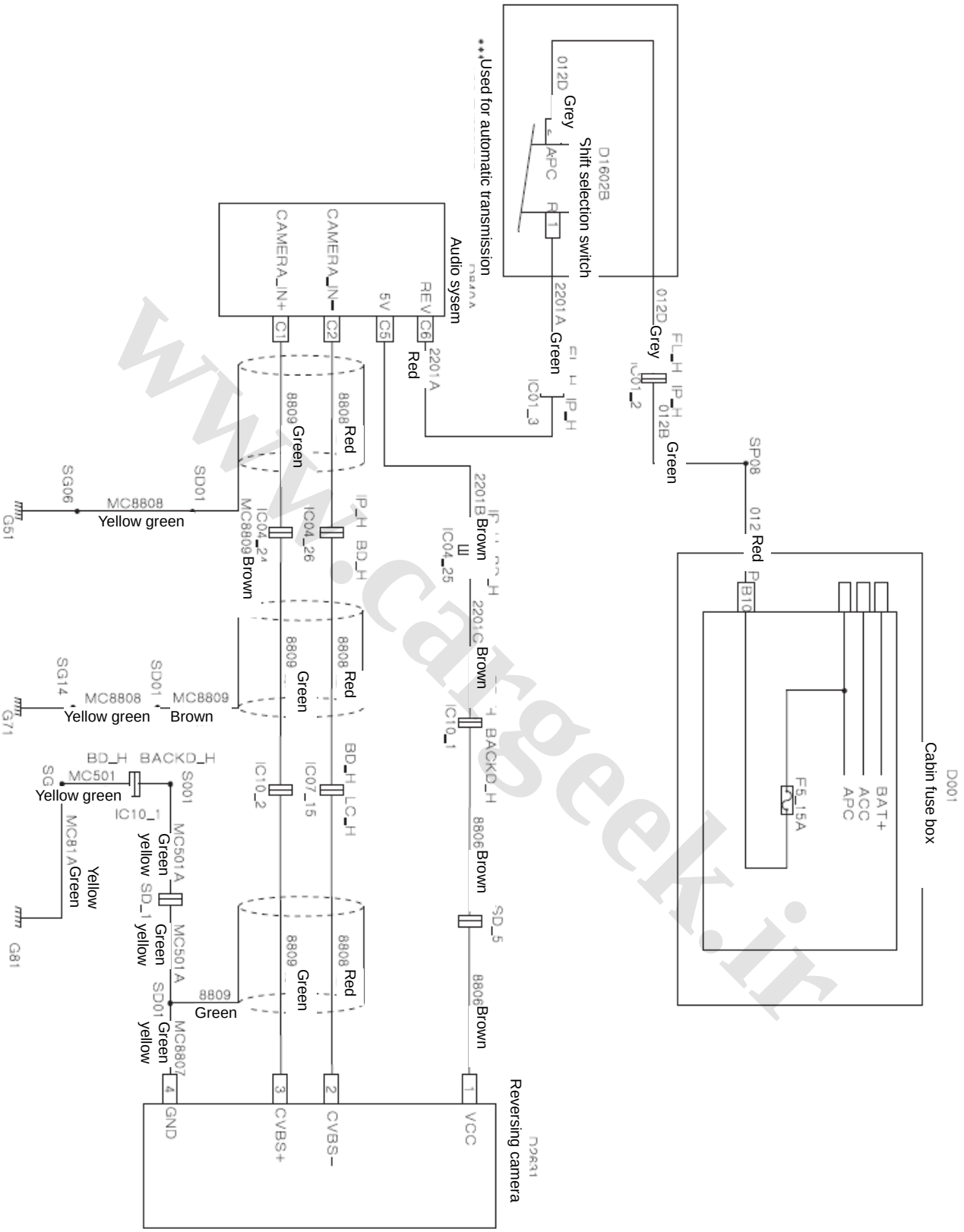


Schematic diagram for electrical appliance

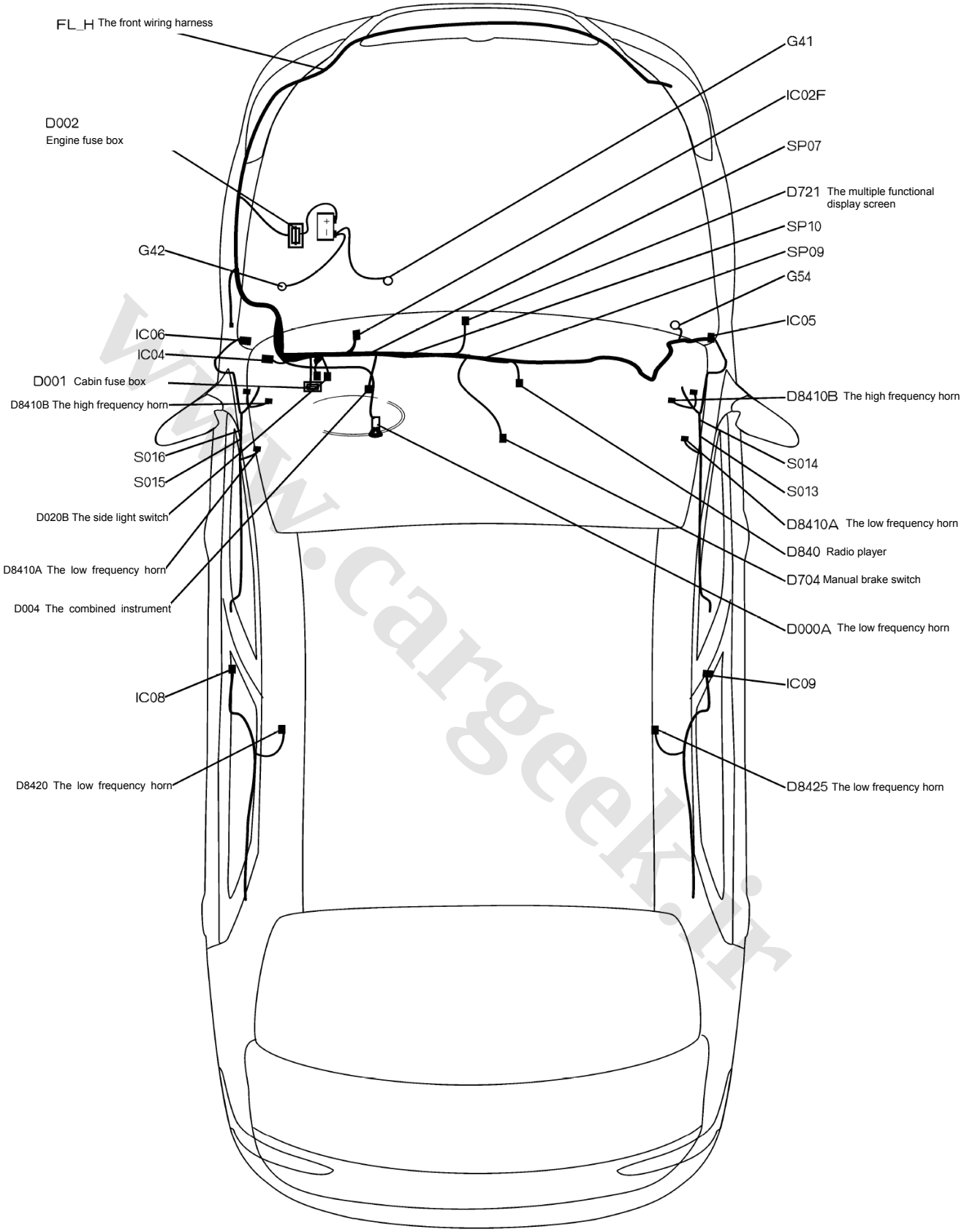
1.2- Location diagram for the reversing image electrical appliances (H30)



1.4- Schematic diagram for the reversing image electrical appliances (H30)



23.1 The electrical location diagram for the acoustic system S30 /H30



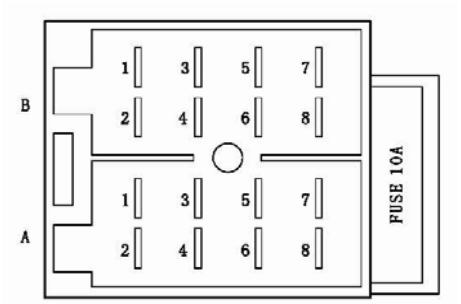
MP3 Sound Headunit

Sound Headunit A

Pin No.	Pin description
A1	Steering wheel line control -
A2	Steering wheel line control +
A3	NC
A4	Ignition key ACC
A5	NC
A6	Clearance lamp power supply ILL
A7	Power supply B +
A8	GND

Sound Headunit B

Pin No.	Pin description
B1	Right rear speaker (RR+)
B2	Right rear speaker (RR-)
B3	Right front speaker (FR+)
B4	Right front speaker (FR-)
B5	Left front speaker (FL+)
B6	Left front speaker (FL-)
B7	Left rear speaker (RL+)
B8	Left rear speaker (RL-)



MP5 Sound Headunit

Sound Headunit A

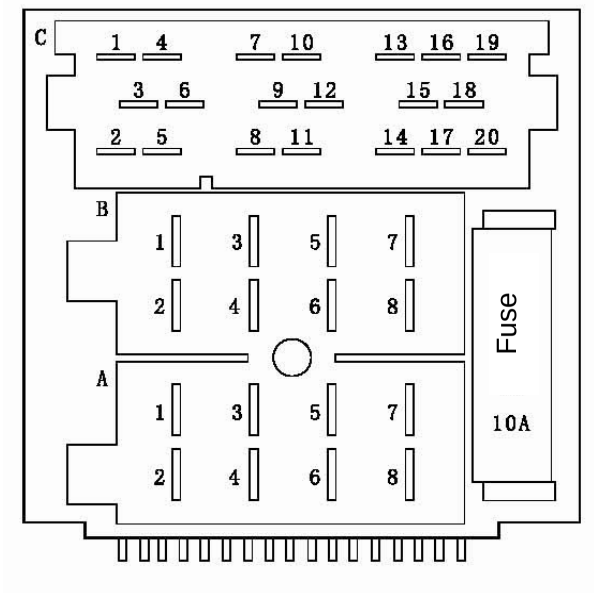
Pin No.	Pin description
A1	Line control ground (GND)
A2	Line control power supply (POWER)
A3	Brake control (AVC)
A4	ACC (+)
A5	Antenna
A6	Panel illumination (ILL +)
A7	Vehicle battery (BATTERY)
A8	GND

Sound Headunit B

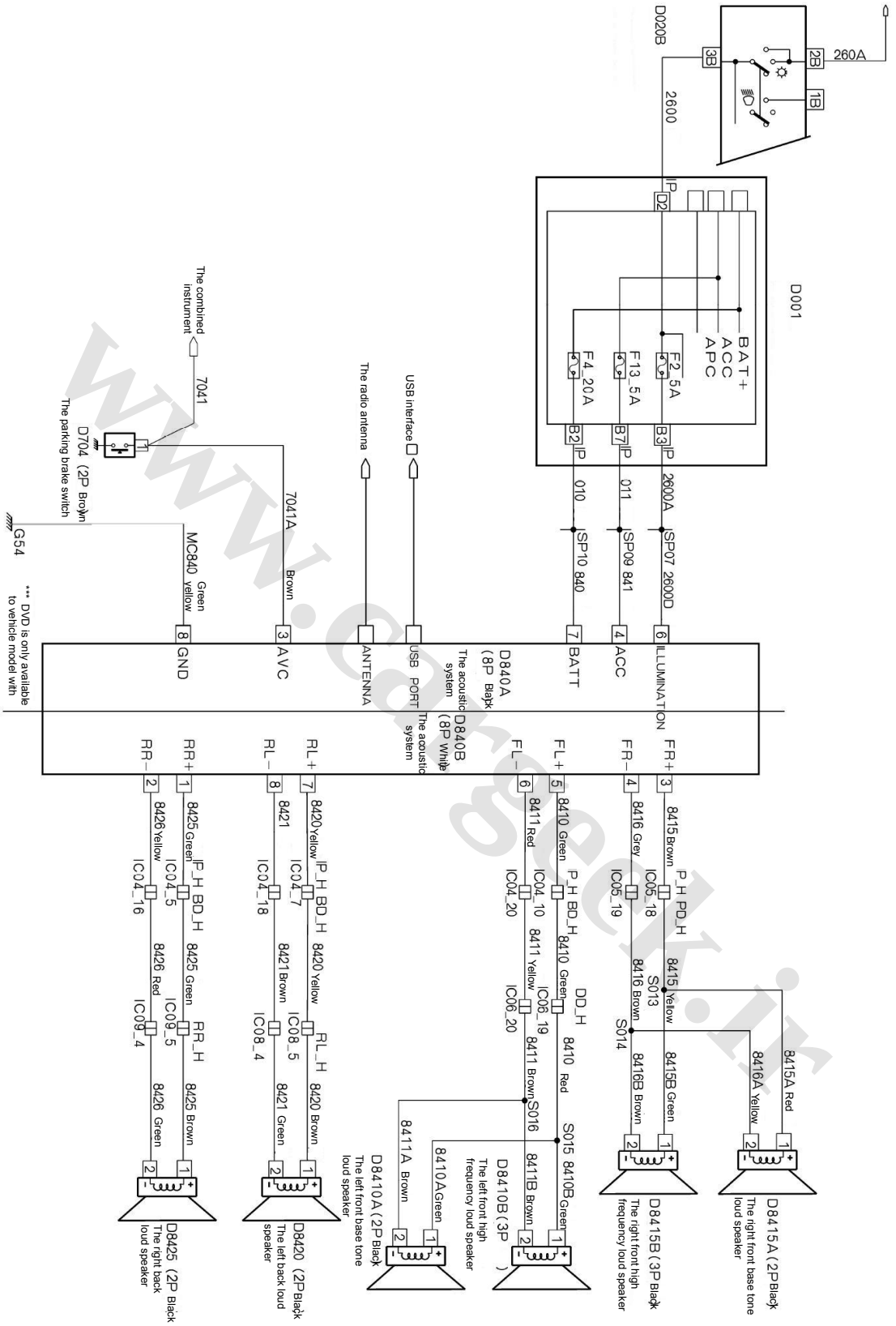
Pin No.	Pin description
B1	Right rear (+) RR (+)
B2	Right rear (-) RR (-)
B3	Right front (+) FR (+)
B4	Right front (-) FR (-)
B5	Left front (+) FL (+)
B6	Left front (-) FL (-)
B7	Left rear (+) RL (+)
B8	Left rear (-) RL (-)

Sound Headunit C

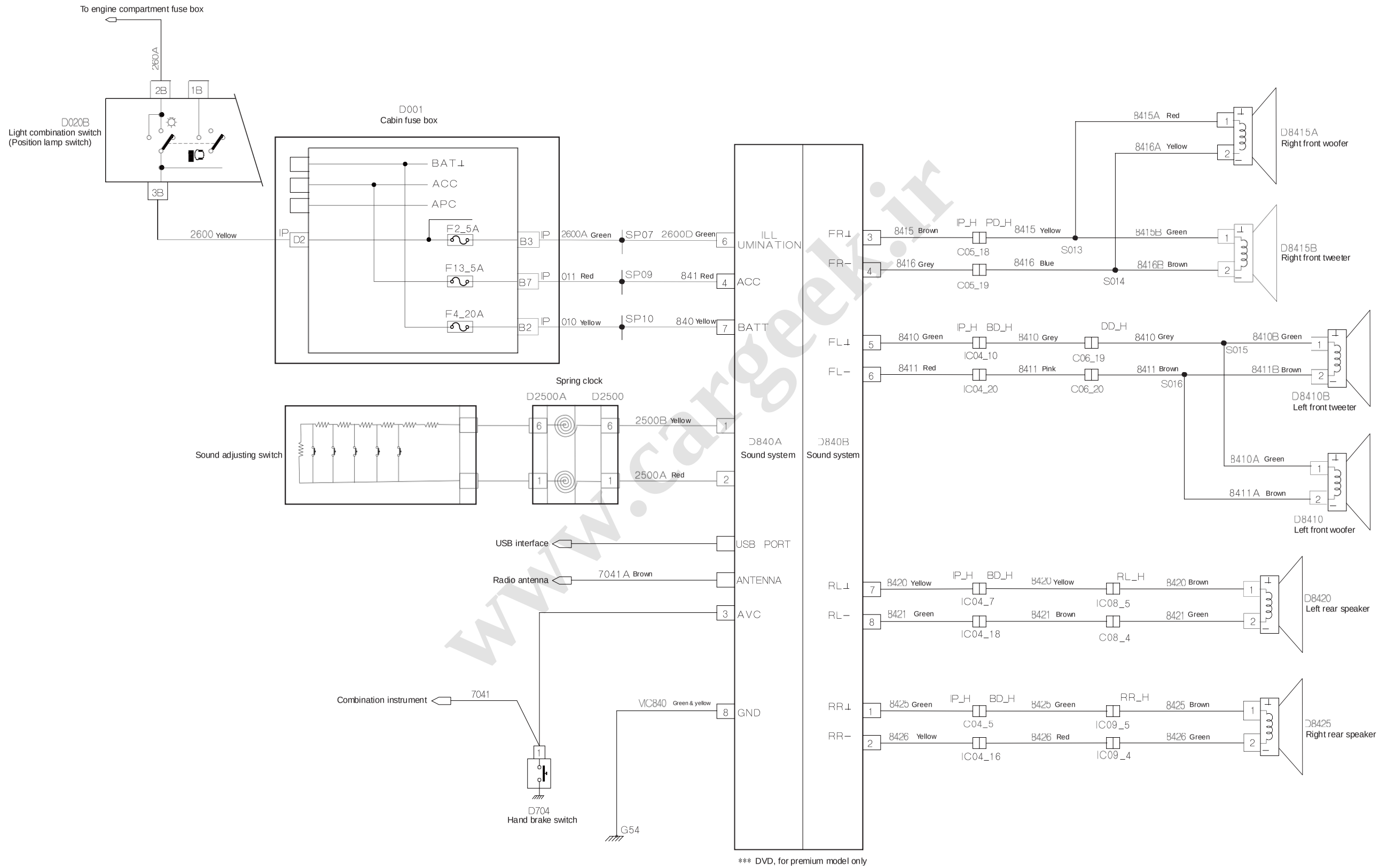
Pin No.	Pin description
C1	Camera video cable
C2	Video cable ground
C3	
C4	
C5	Camera voltage and current, 12 V 0.2 A
C6	Reversing signal control line
C7	
C8	
C9	
C10	Camera ground
C11	
C12	
C13	
C14	
C15	
C16	
C17	
C18	
C19	
C20	



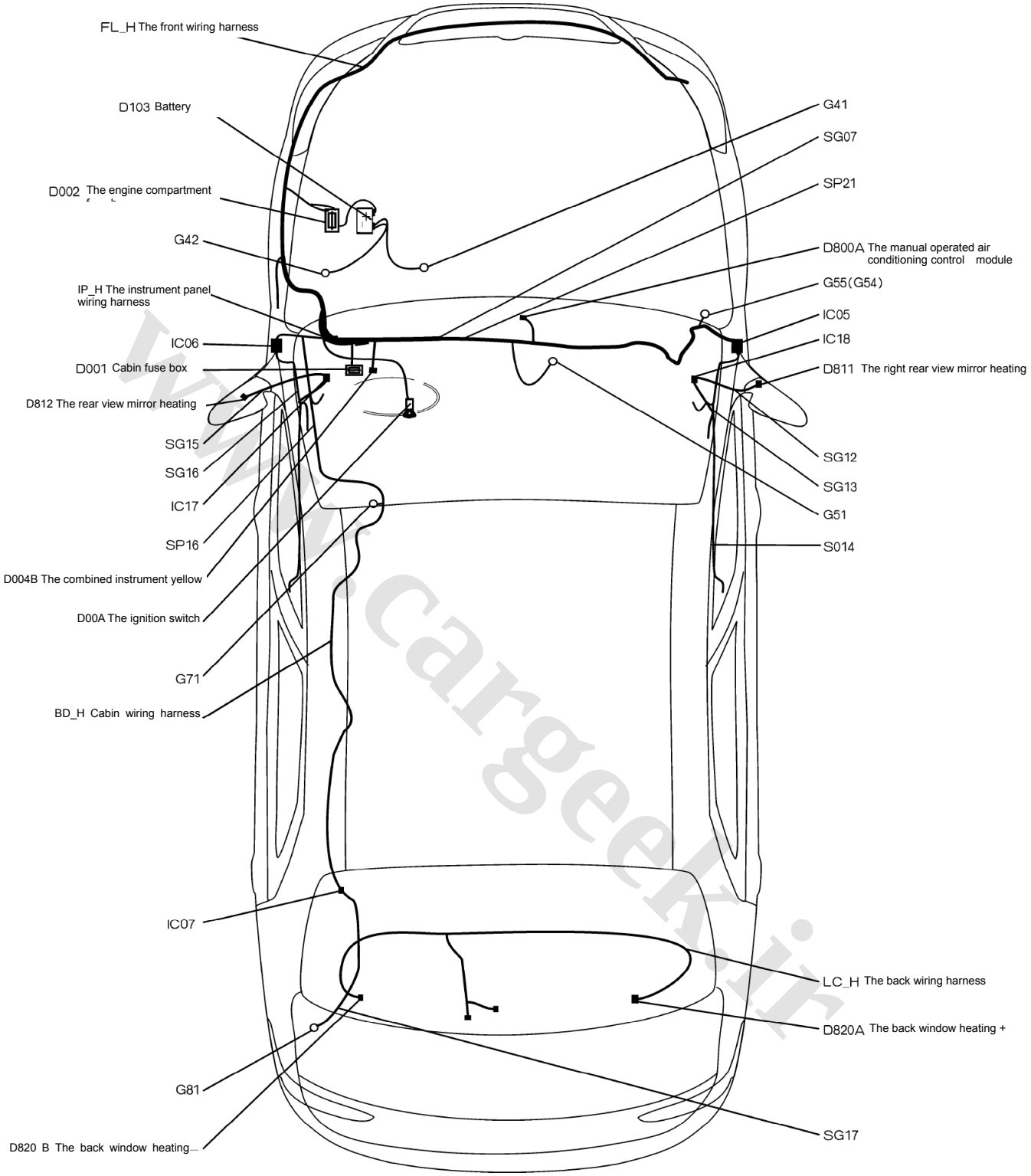
23.3 The electrical location diagram for the acoustic system S30 /H30



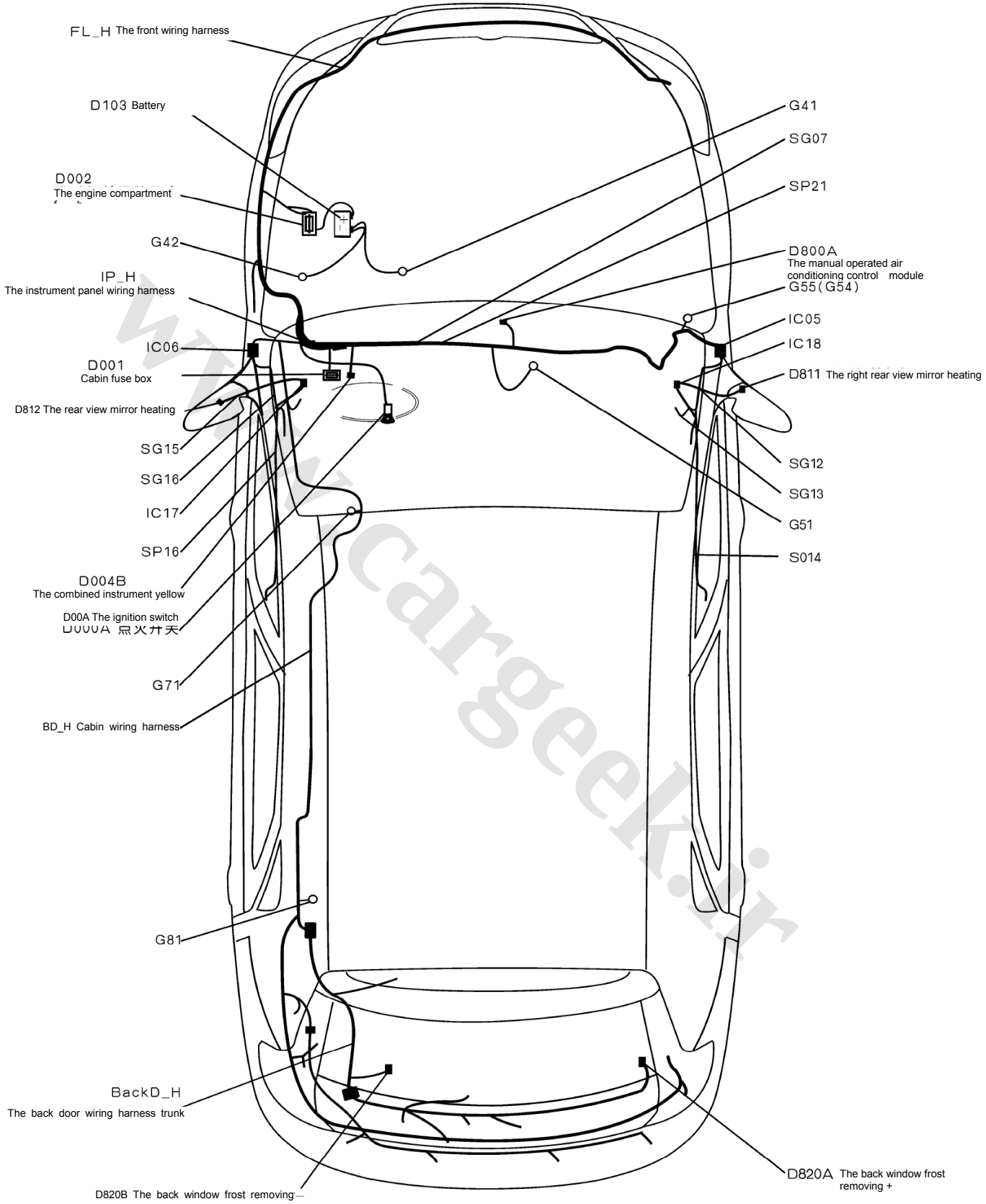
Electrical Diagram of Sound System



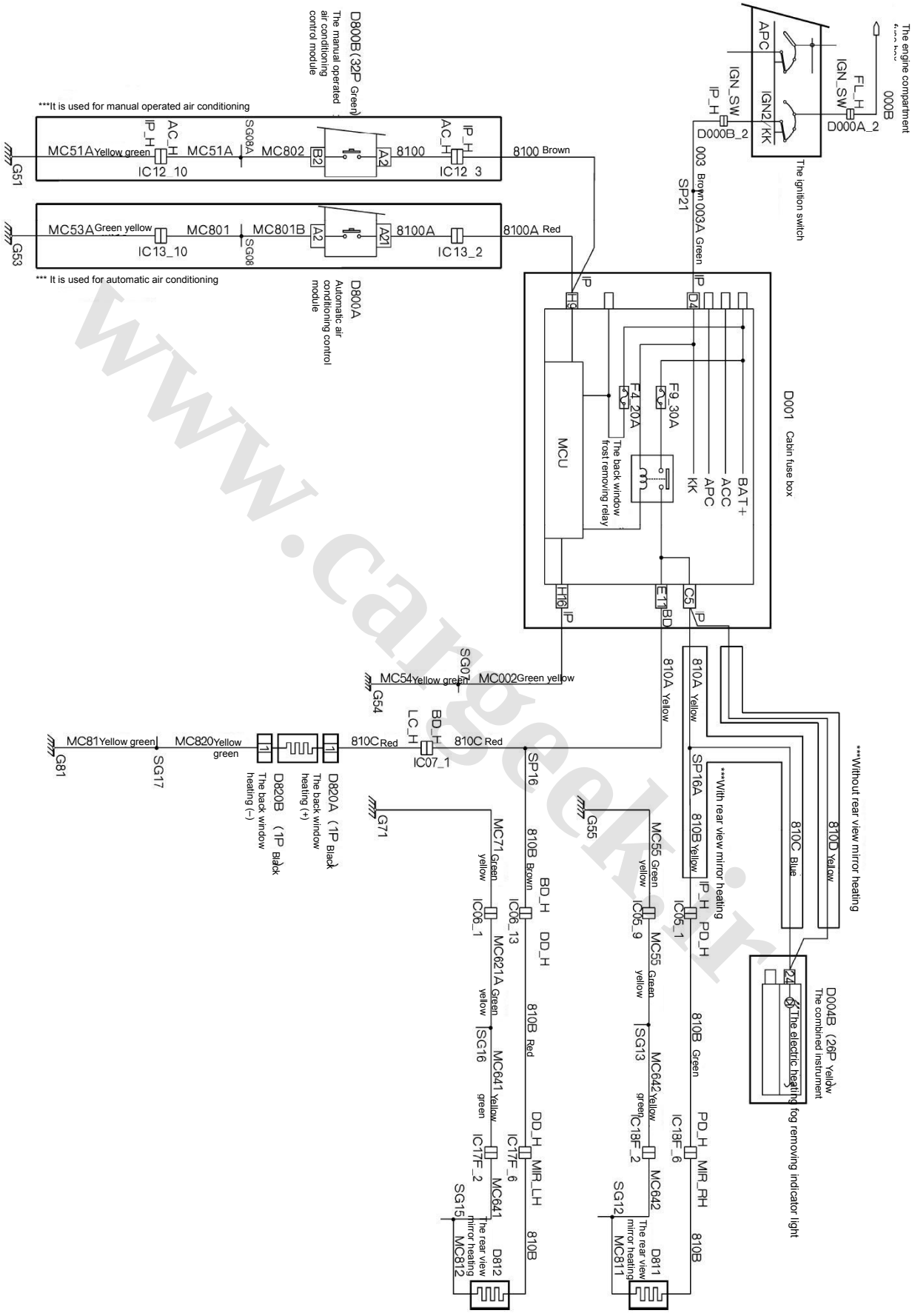
18.1 The electrical location diagram for the back window and rear view mirror S30



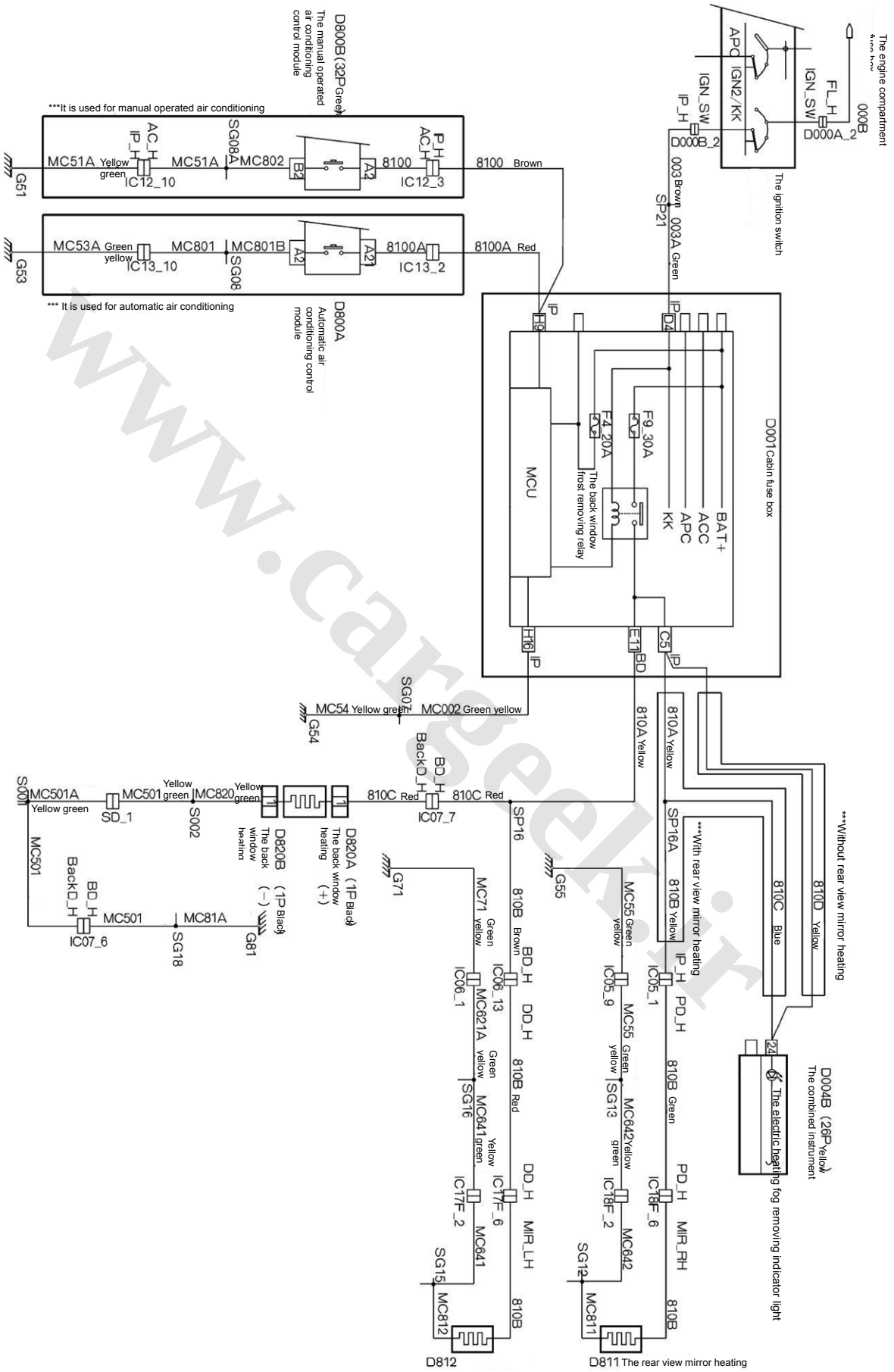
18.2 The electrical location diagram for the back window and rear view mirror (H30)



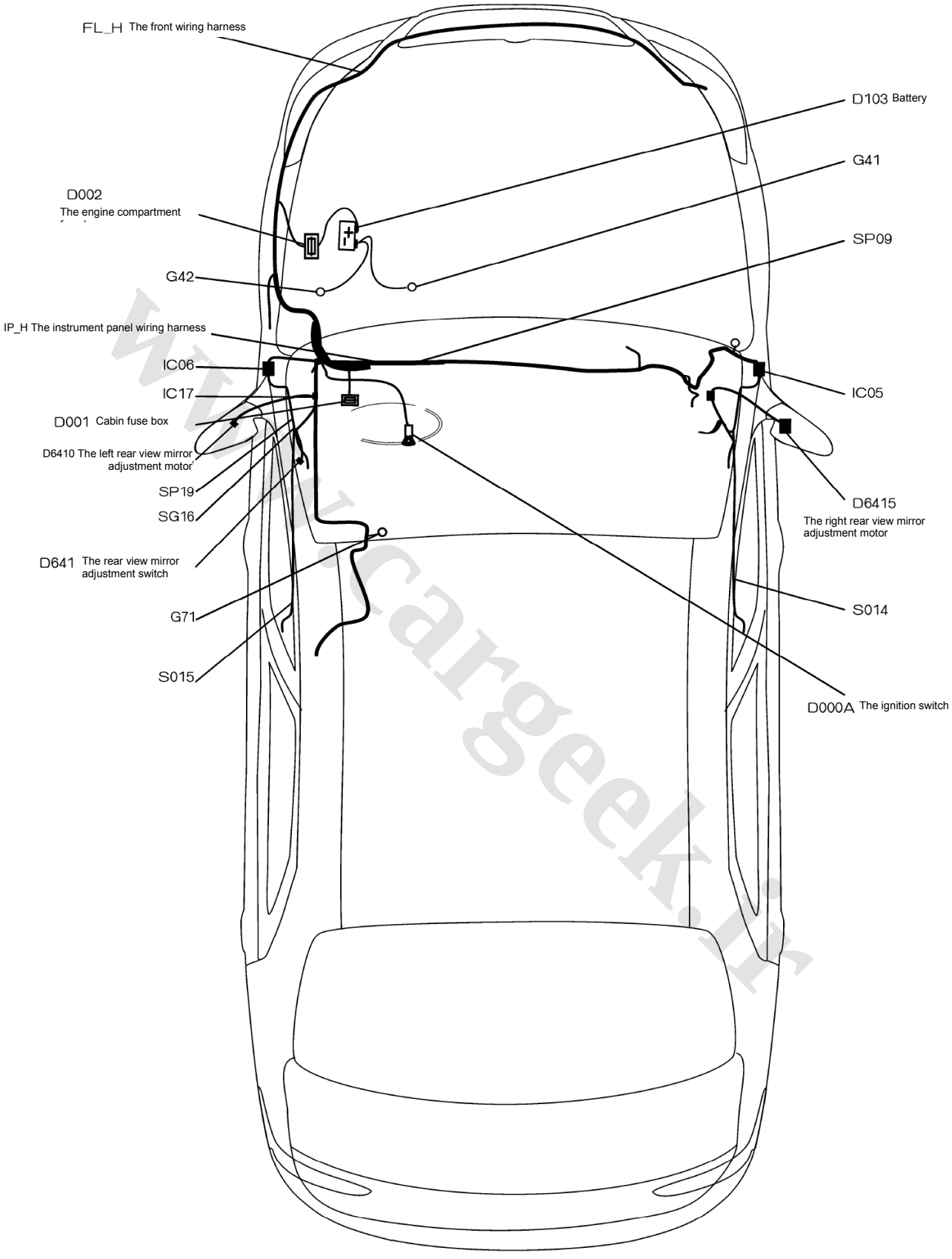
18.3 The electrical schematic diagram for the back window and rear view mirror's fog removing (S30)



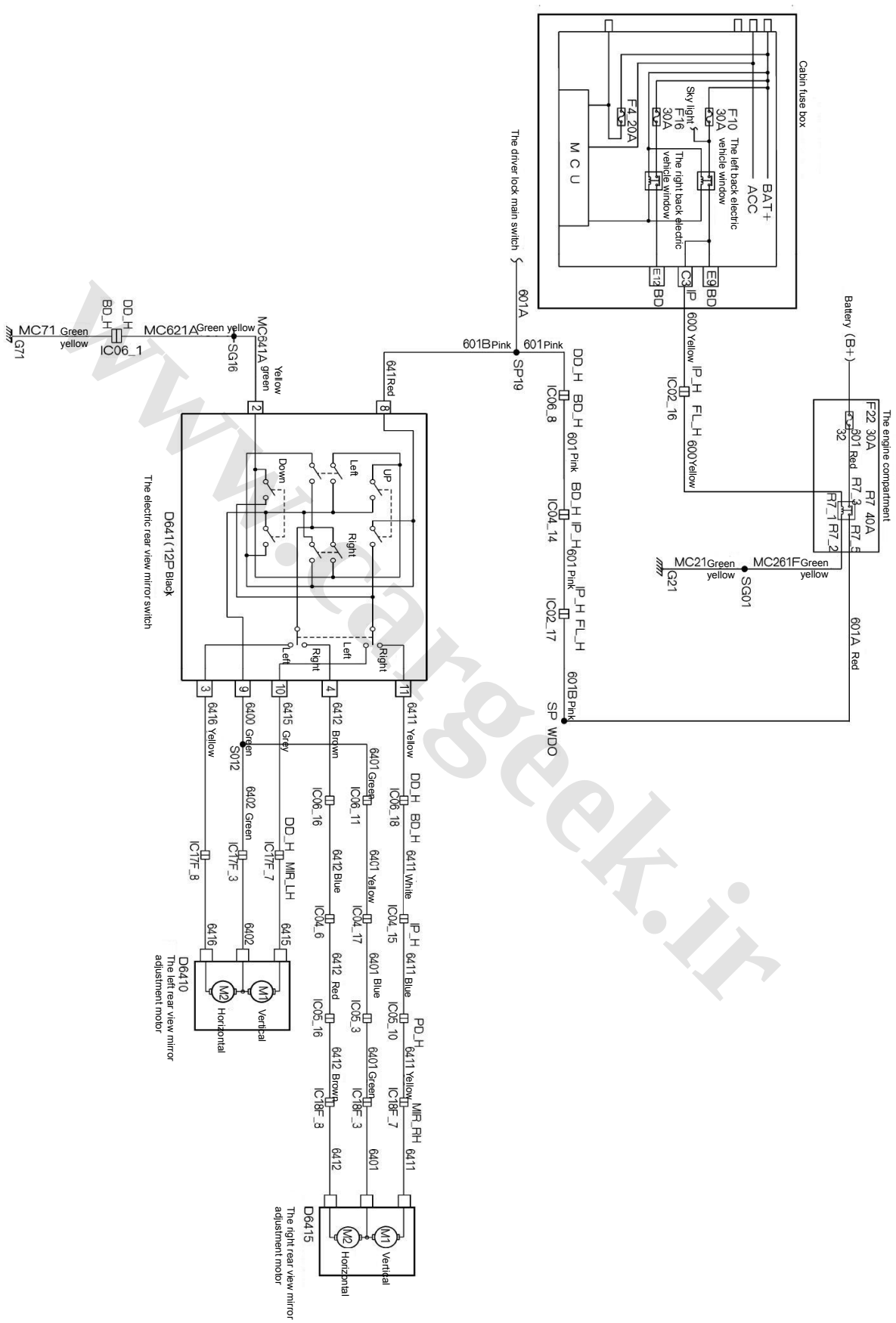
18.4 The electrical schematic diagram for the back window and rear view mirror 's fog removing (H30)



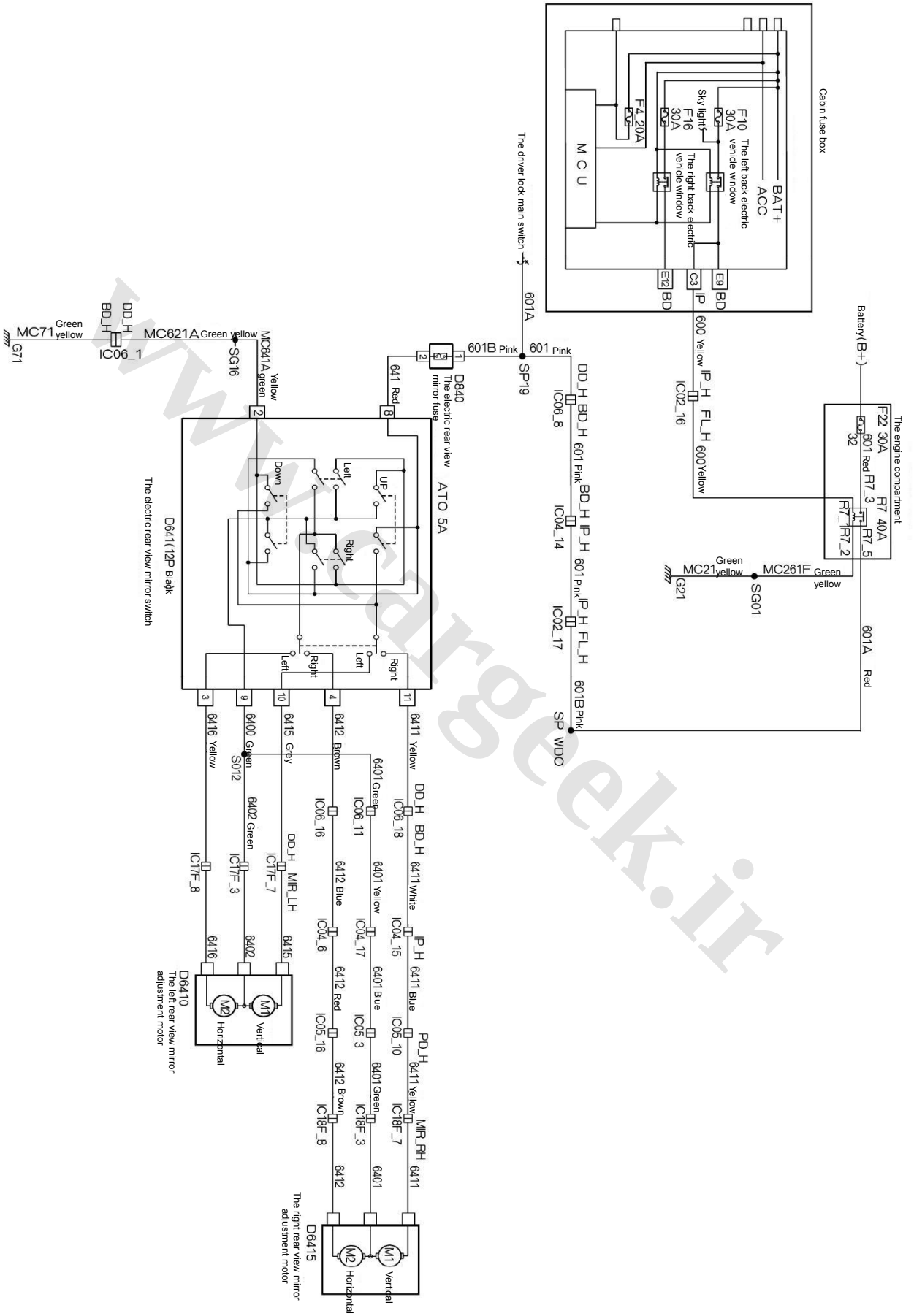
19.1 The electrical location diagram for the electric rear view mirror S30/H30)



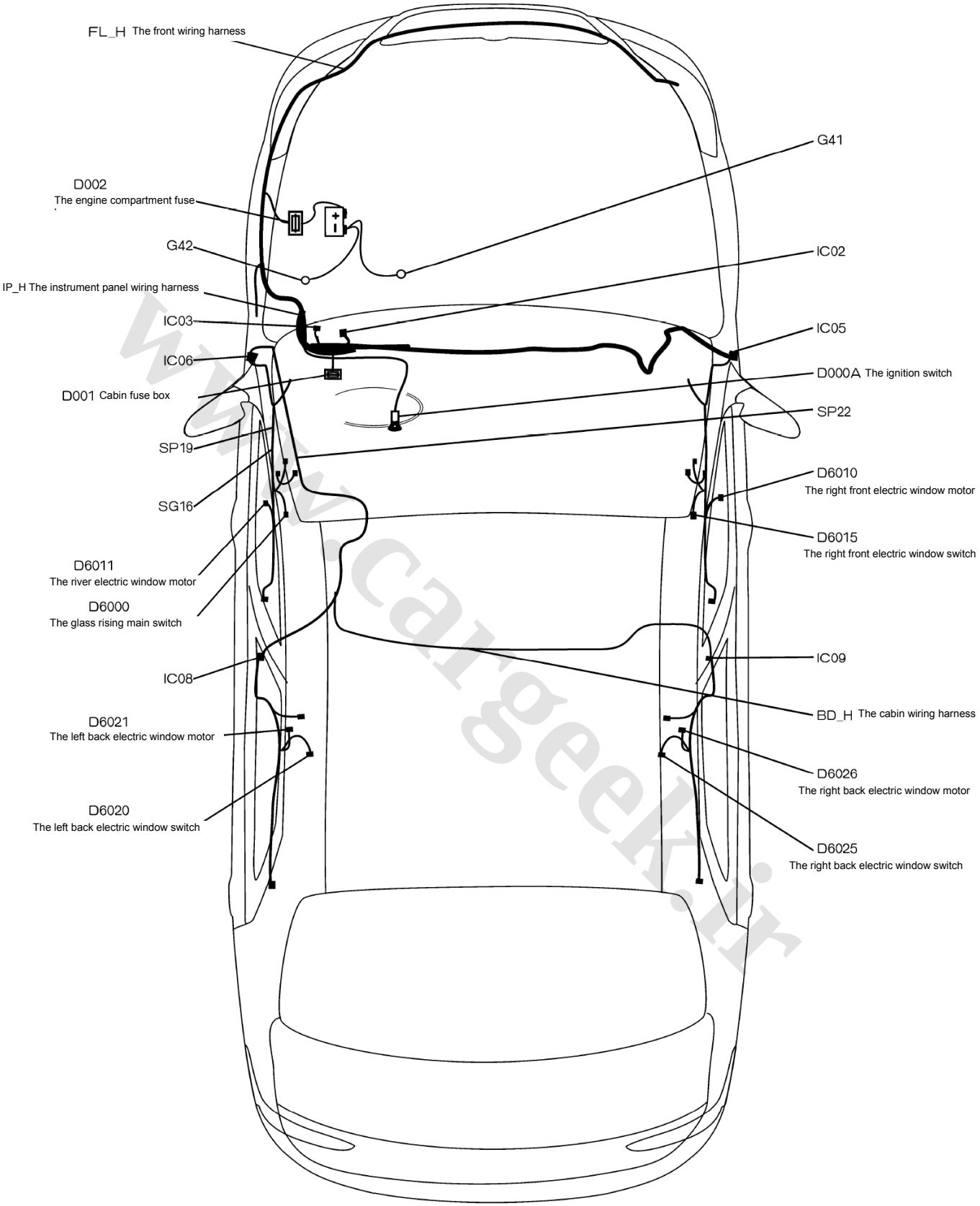
19.2 The electrical schematic diagram for the electric rear view mirror S30/H30) (it is applicable to 6 digits after VIN, VIN <005834



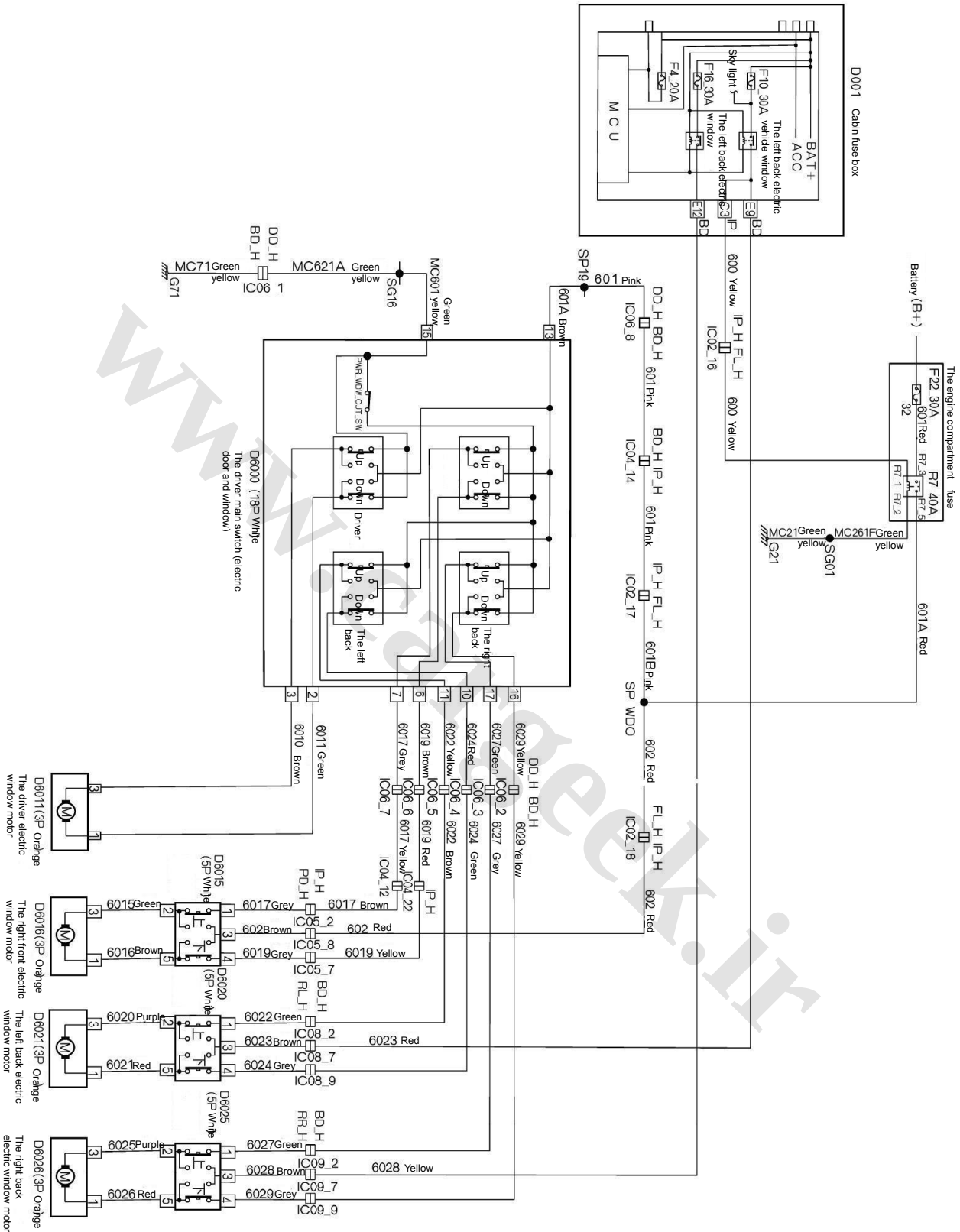
19.3 The electrical schematic diagram for the electric rear view mirror S30/H30) (it is applicable to 6 digits after VIN, VIN ≥005834



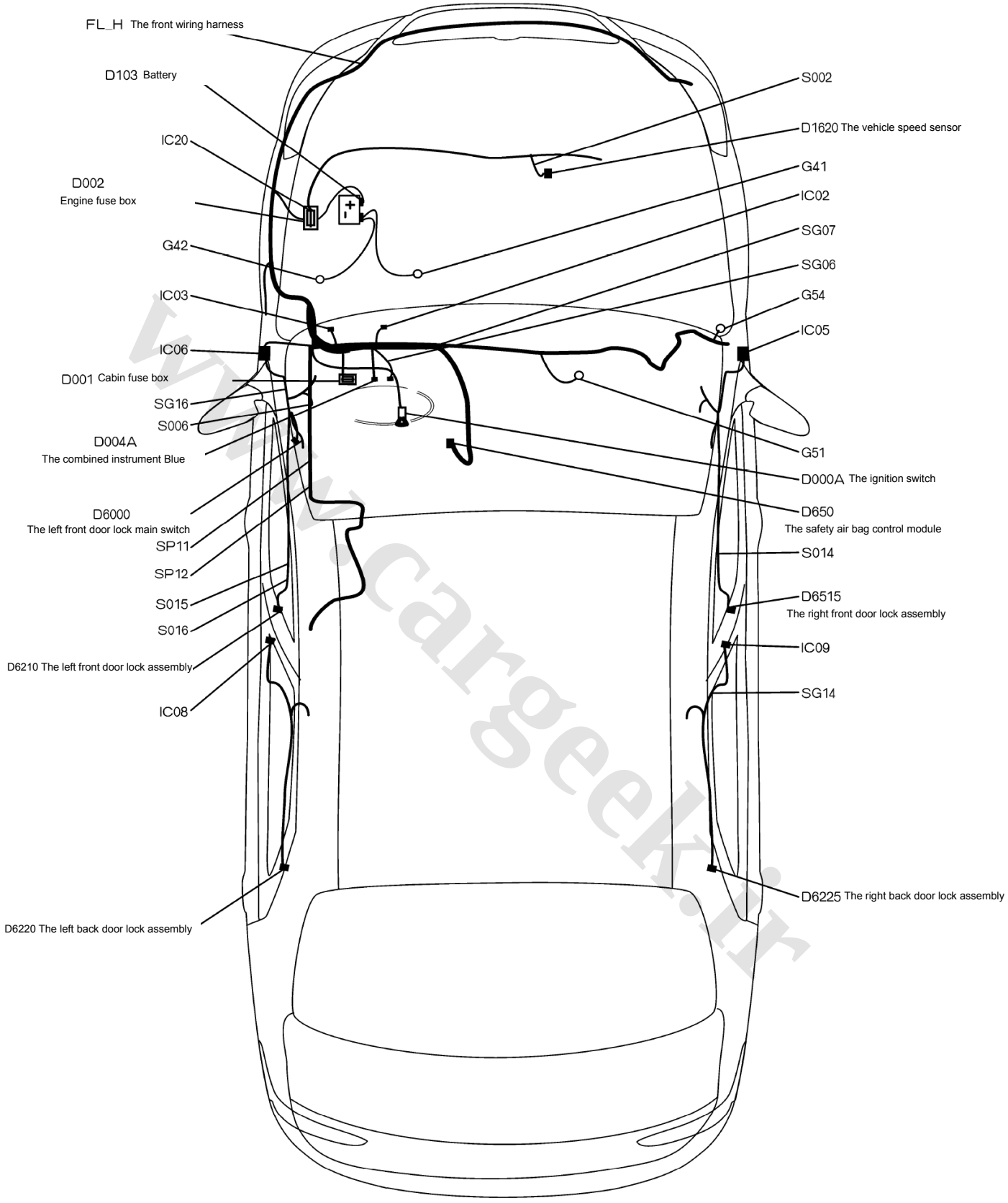
20.1 The electrical location diagram for the electric vehicle door and window S30/H30



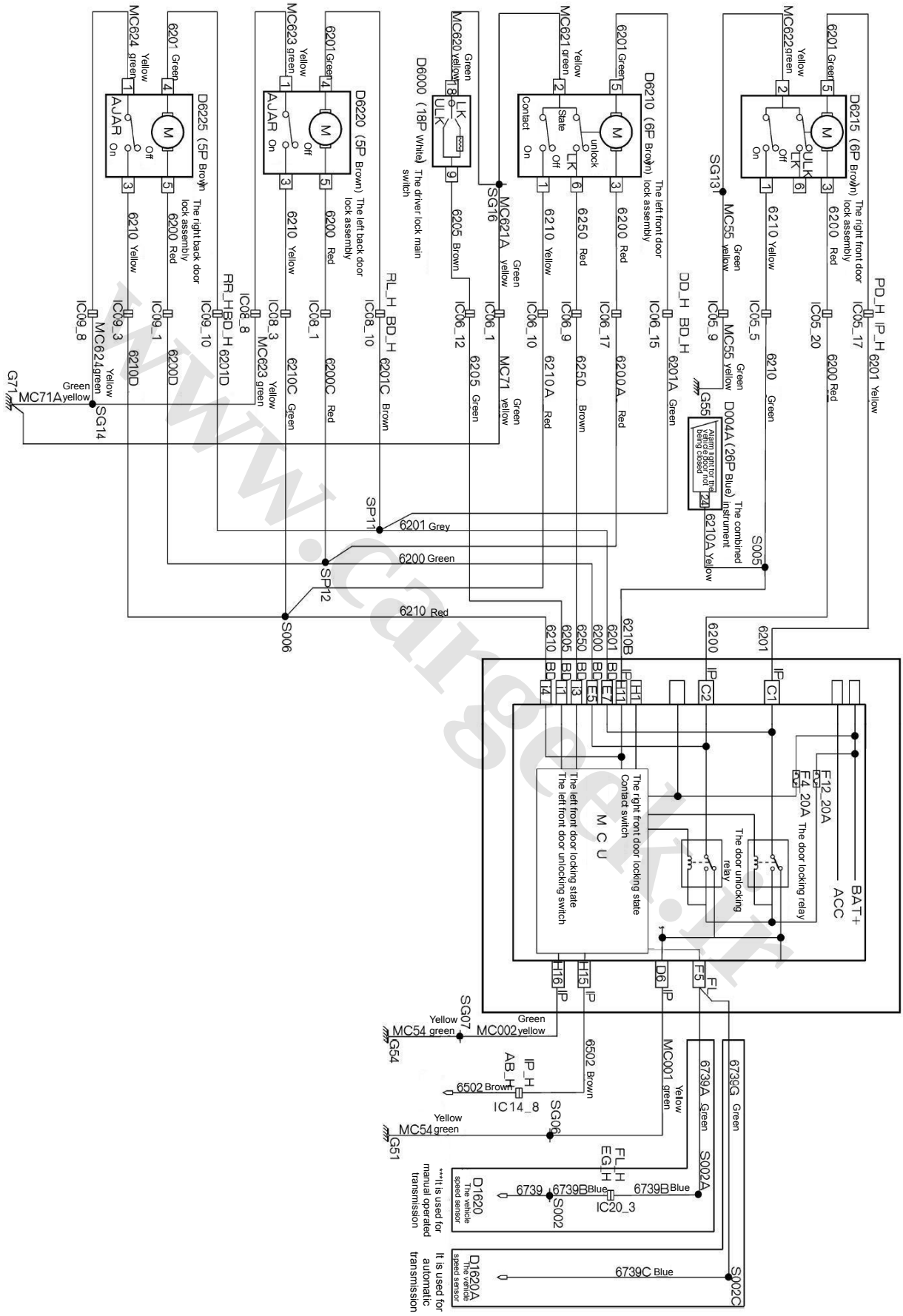
20.2 The electrical schematic diagram for the electric vehicle door and window S30/H30



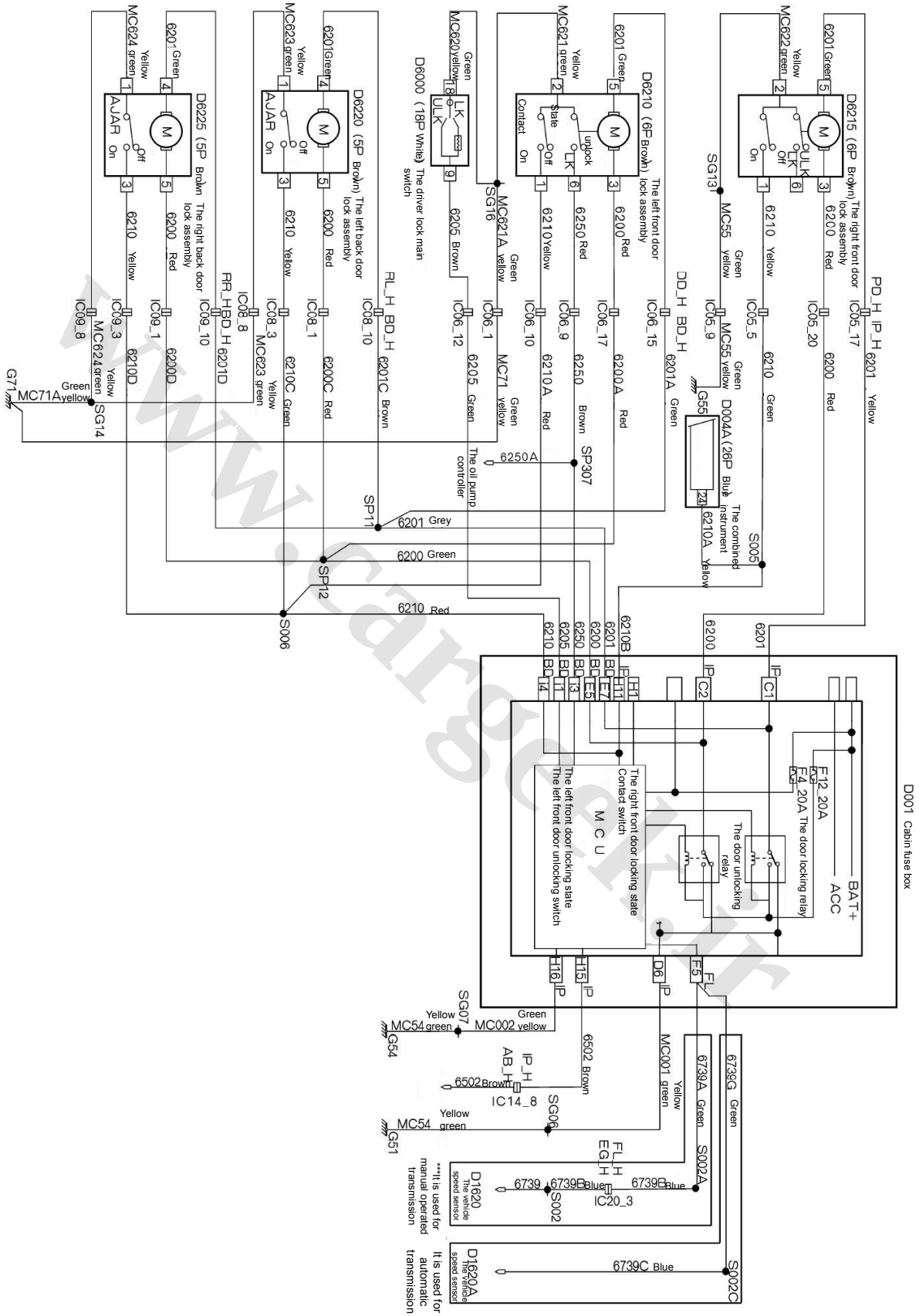
21.1 The electrical location diagram for the electric door lock S30/H30



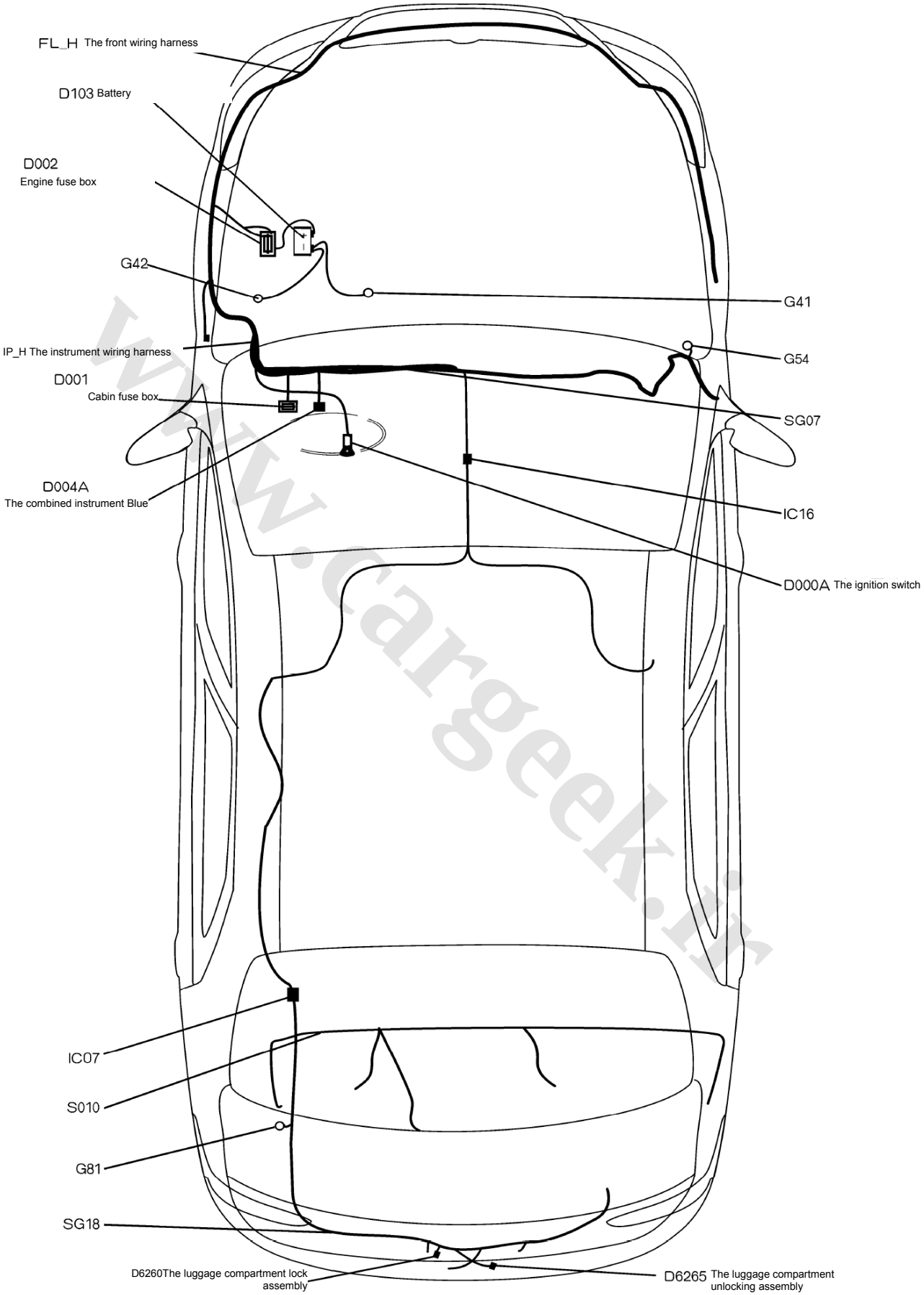
21.2 The electrical schematic diagram for the electric door lock S30/H30 (It is applicable to 6 digits after VIN, VIN <037670)



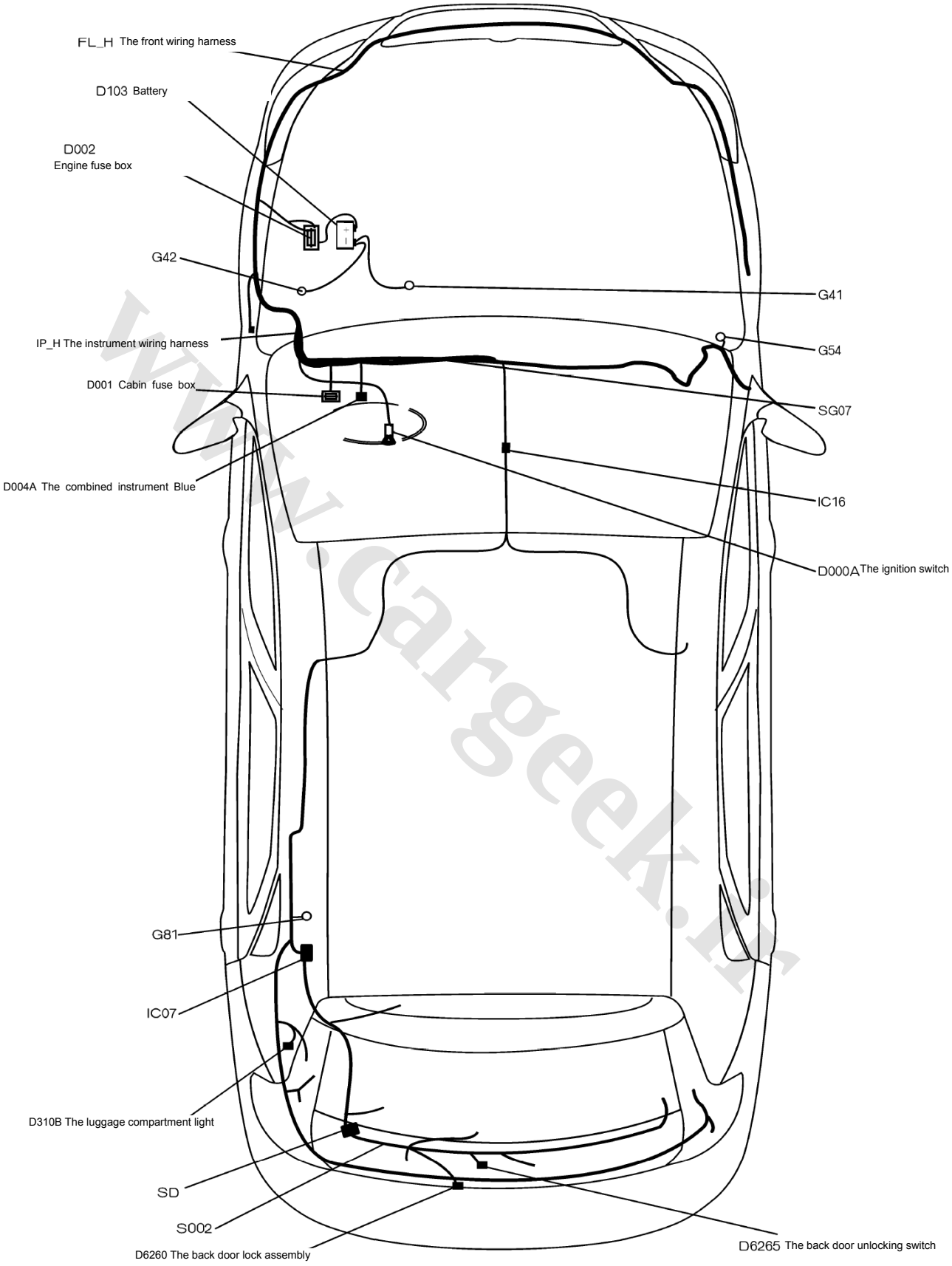
21.3 The electrical schematic diagram for the electric door lock S30/H30 (It is applicable to 6 digits after VIN, VIN≥037670)



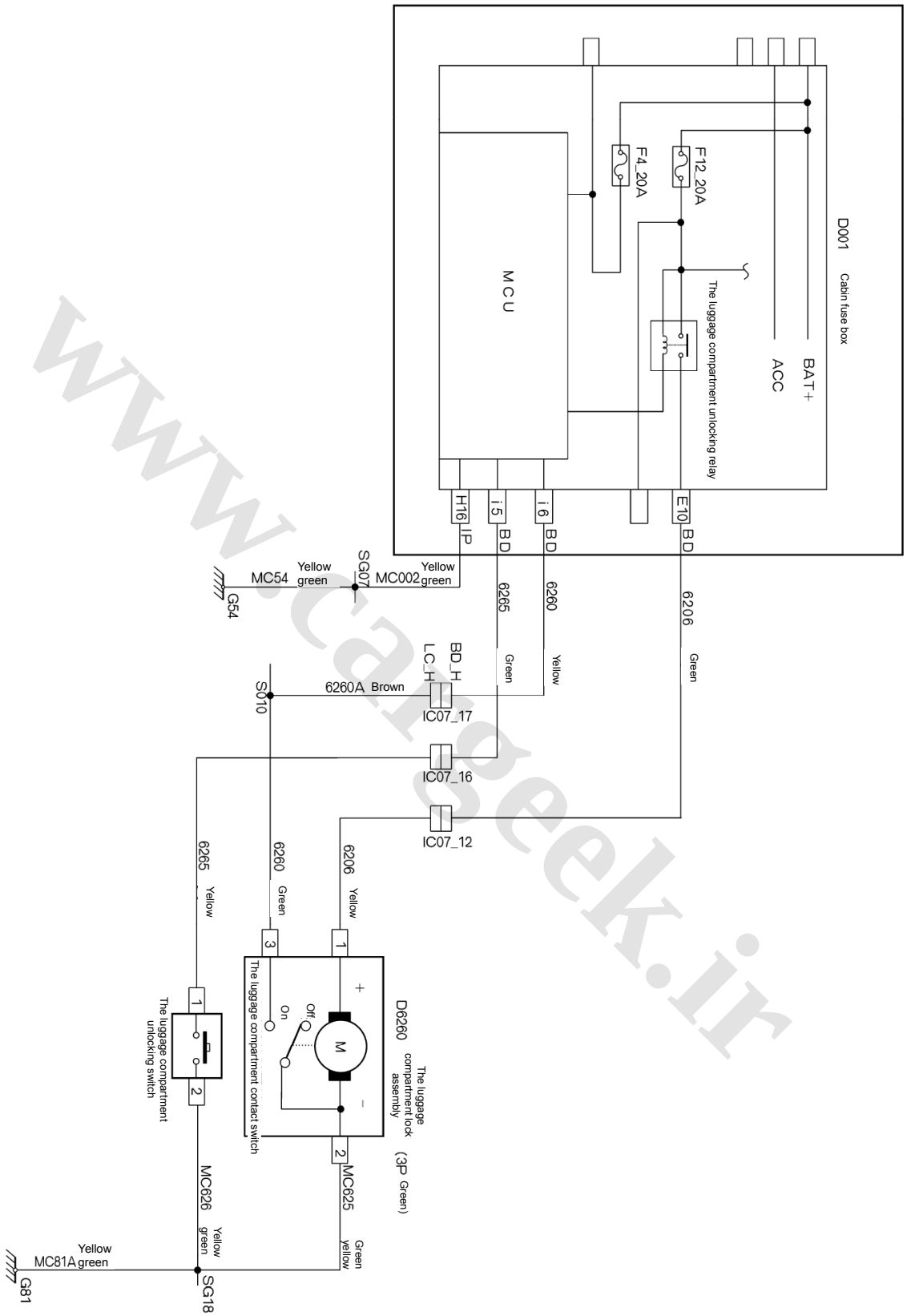
22.1 The electrical location diagram for the luggage compartment unlocking S30



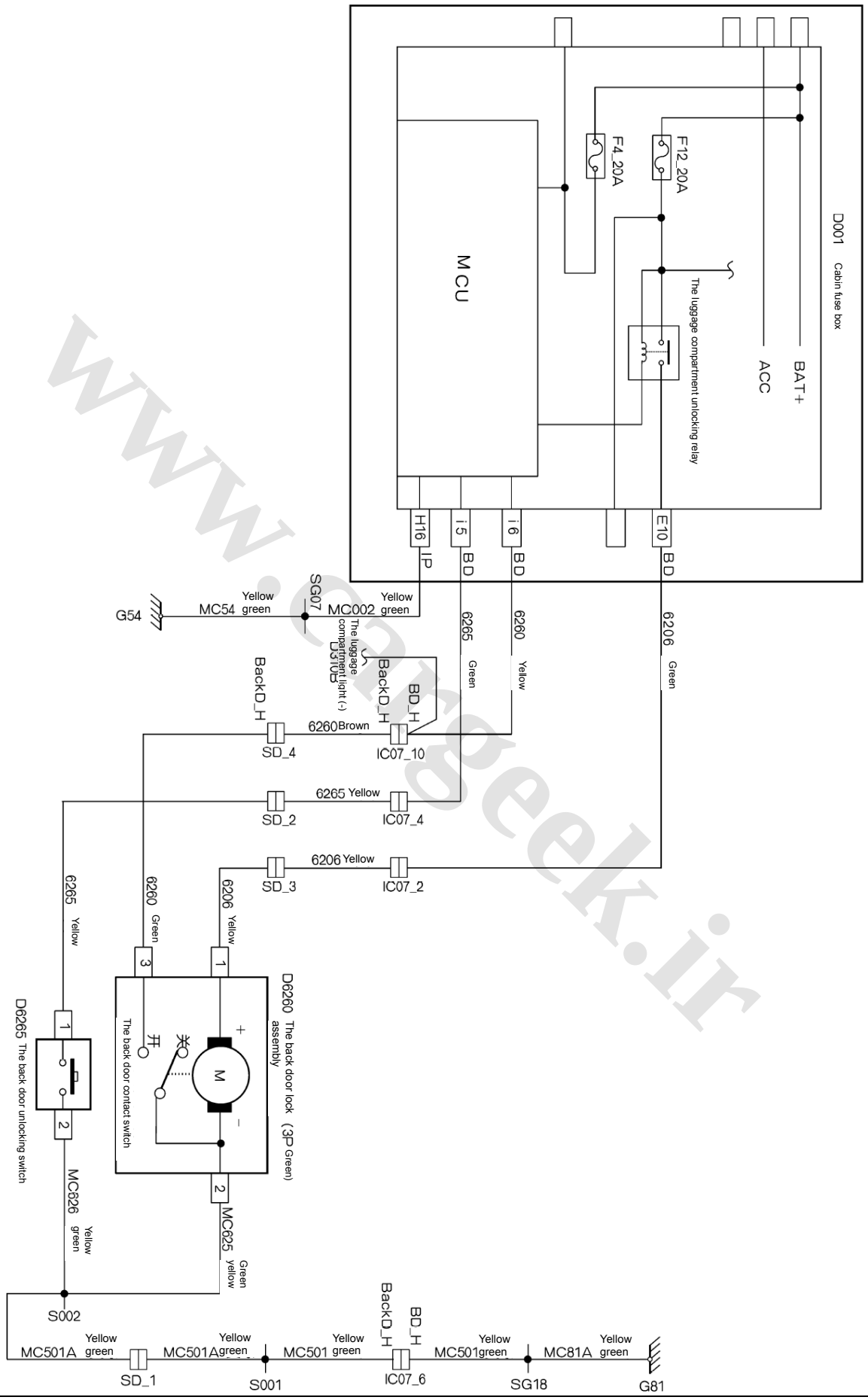
22.2 The electrical location diagram for the back door unlocking H30



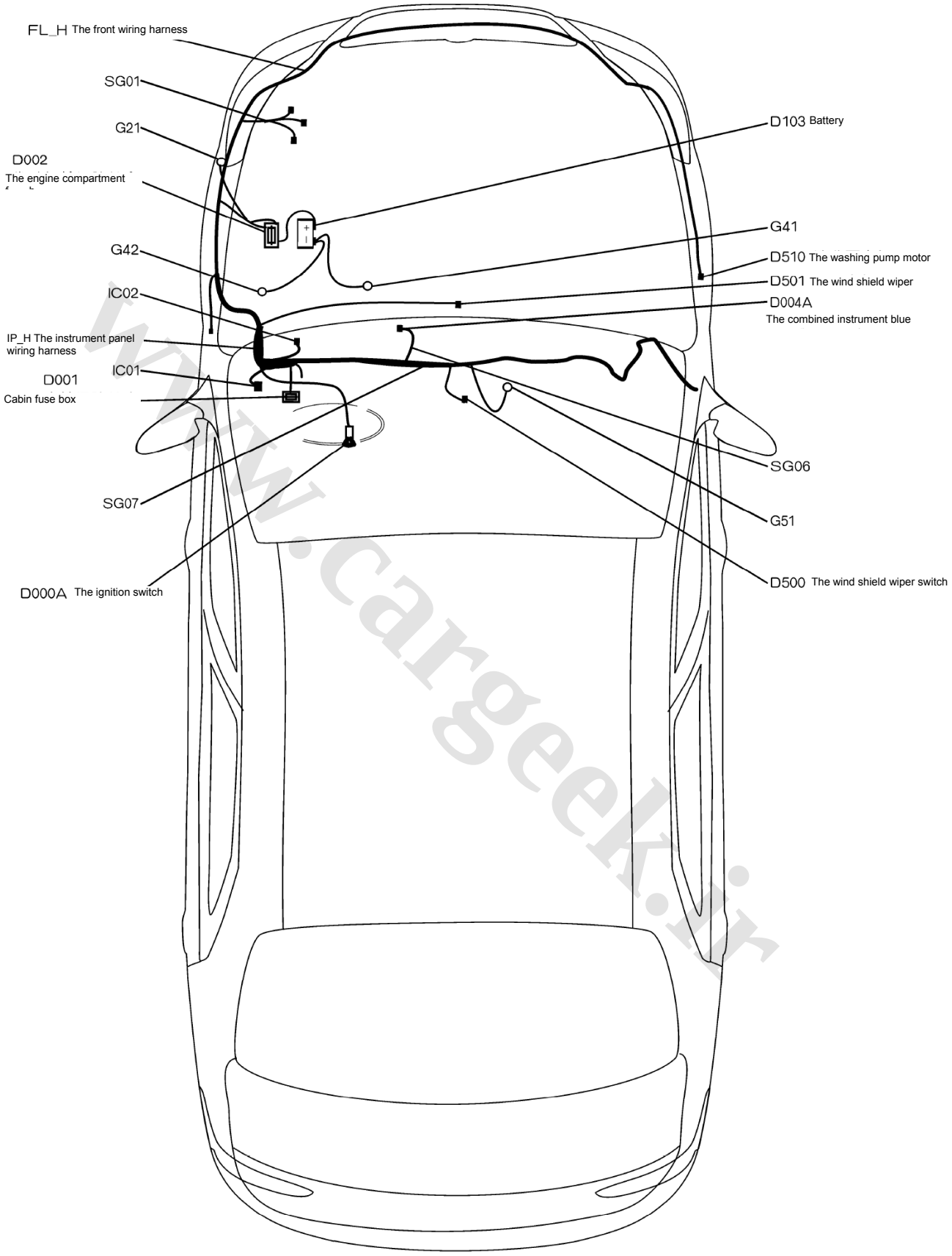
22.3 The electrical schematic diagram for the back door unlocking S30



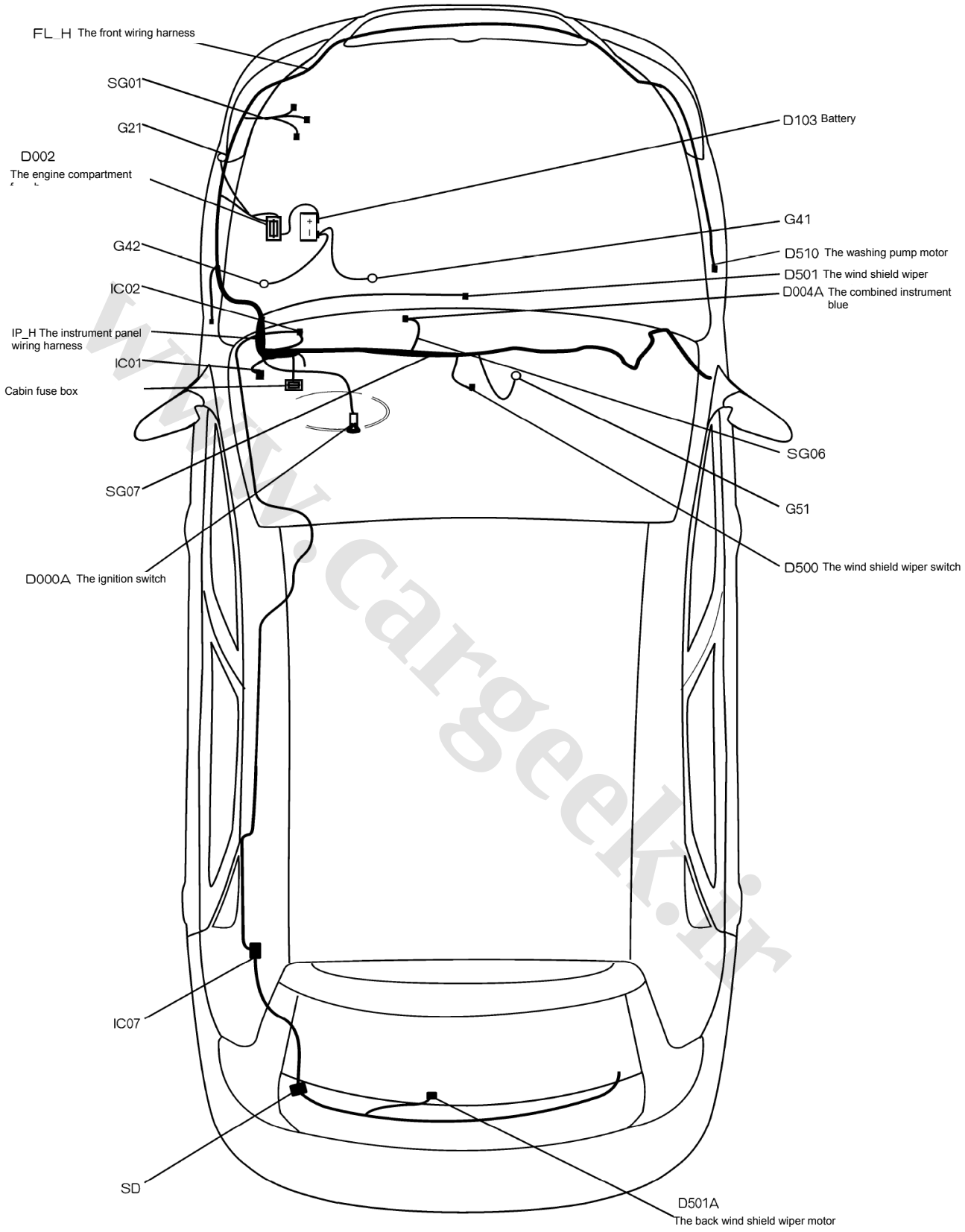
22.4 The electrical schematic diagram for the back door unlocking H30



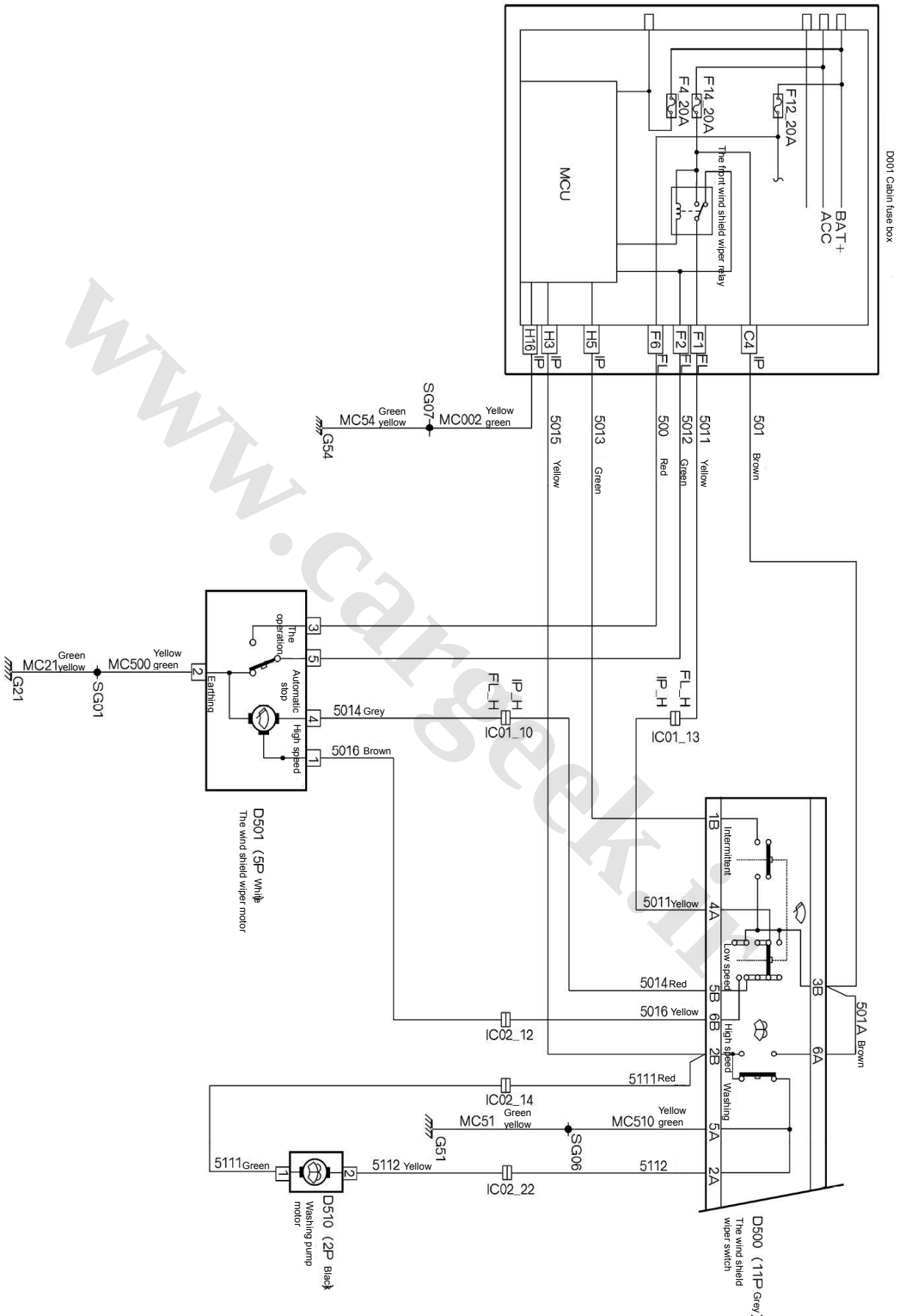
24.1 The electrical location diagram for the wind shield wiper and washing pump (S30)



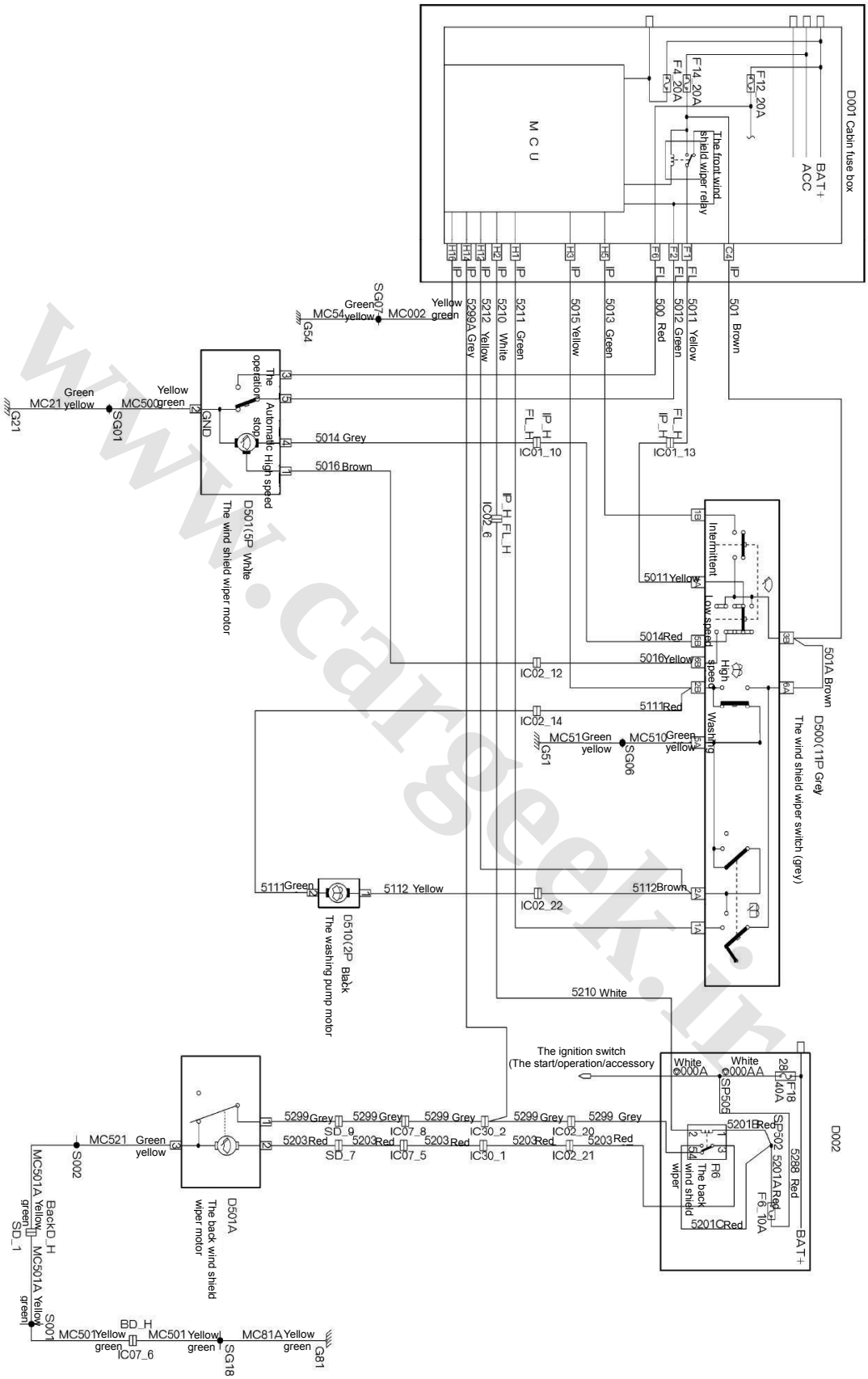
24.2 The electrical location diagram for the wind shield wiper and washing pump (H30)



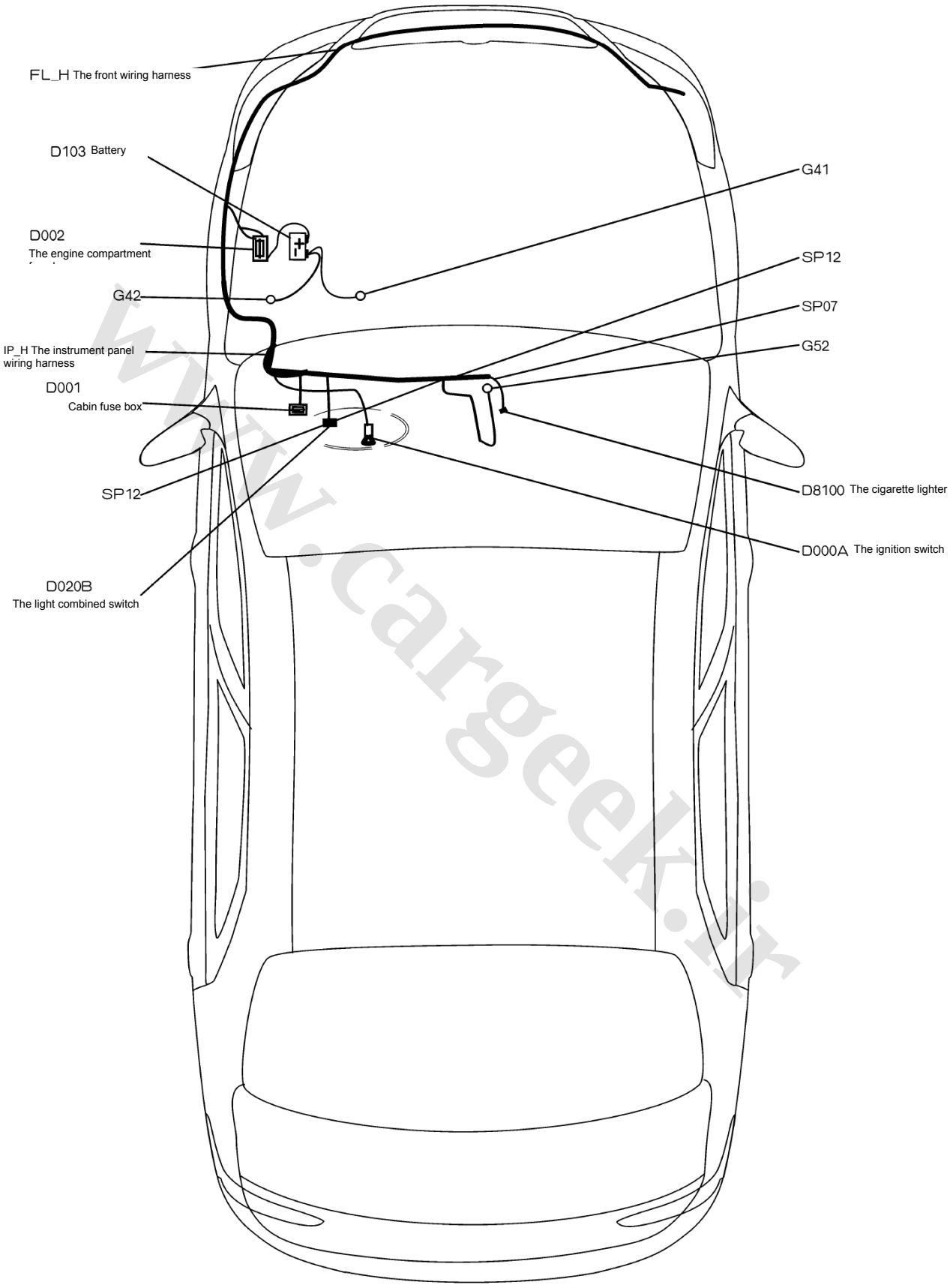
24.3 The electrical schematic diagram for the wind shield wiper and washing pump (S30)



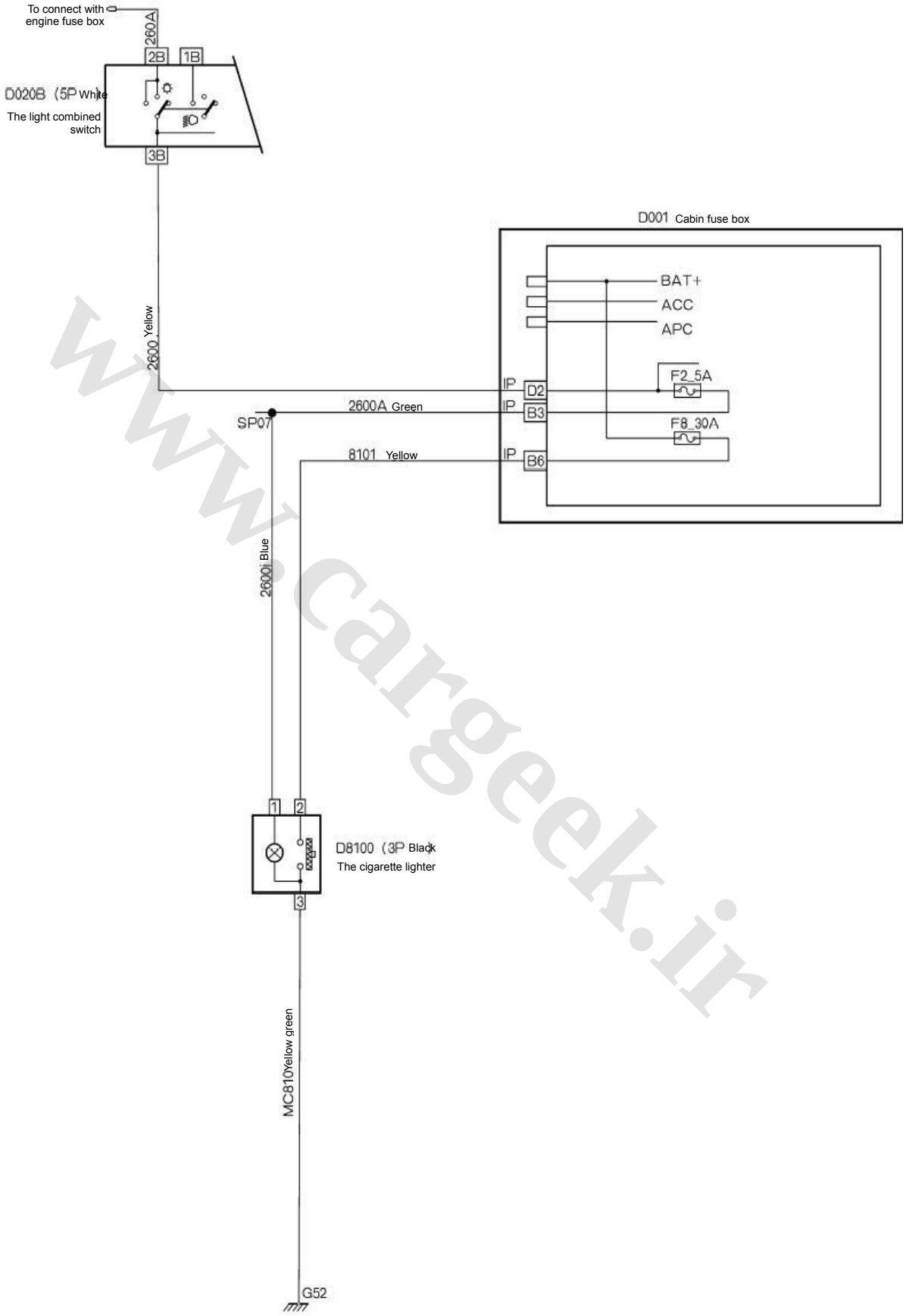
24.4 The electrical schematic diagram for the wind shield wiper and washing pump (H30)



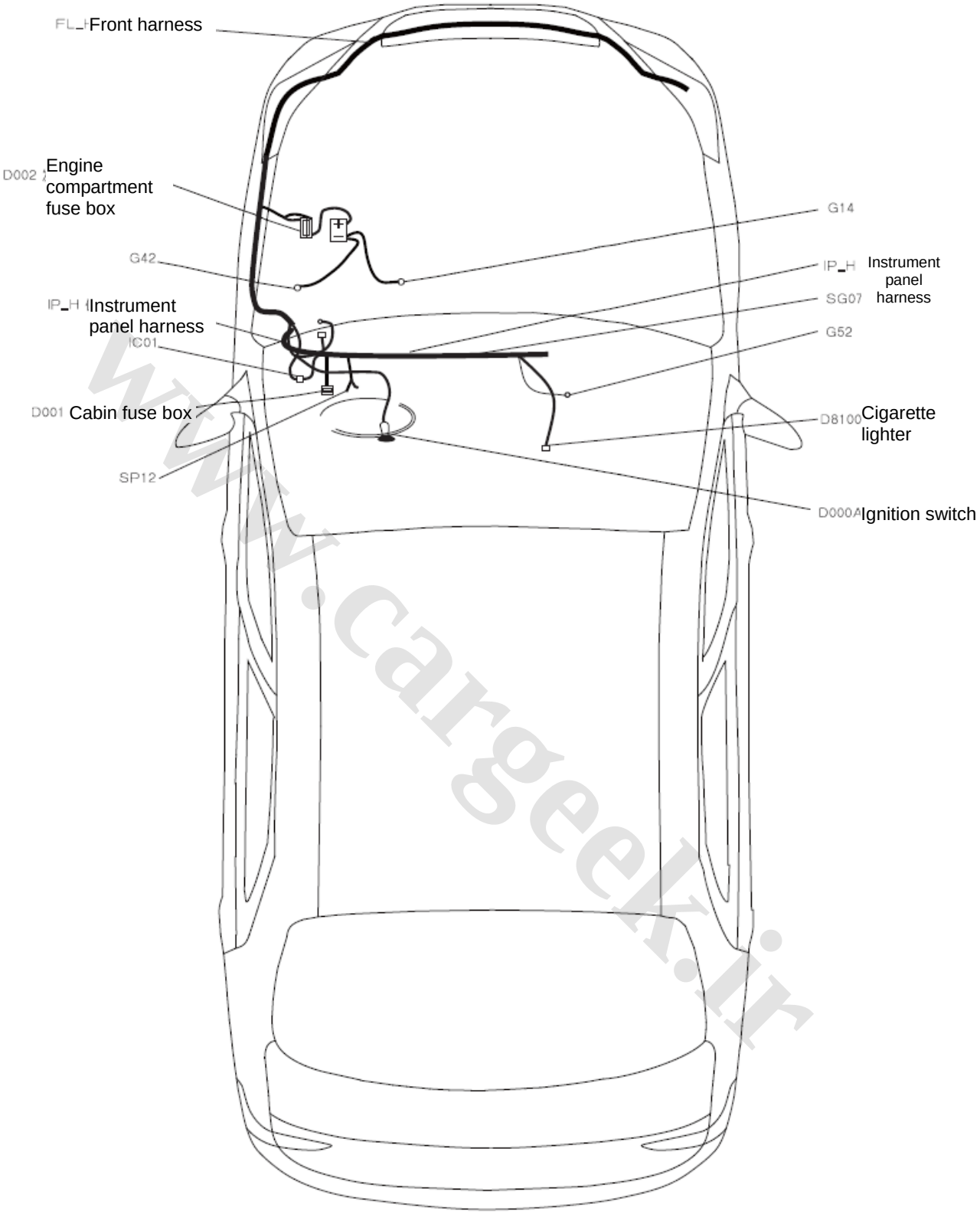
25.1 The electrical location diagram for the cigarette lighter (H30)



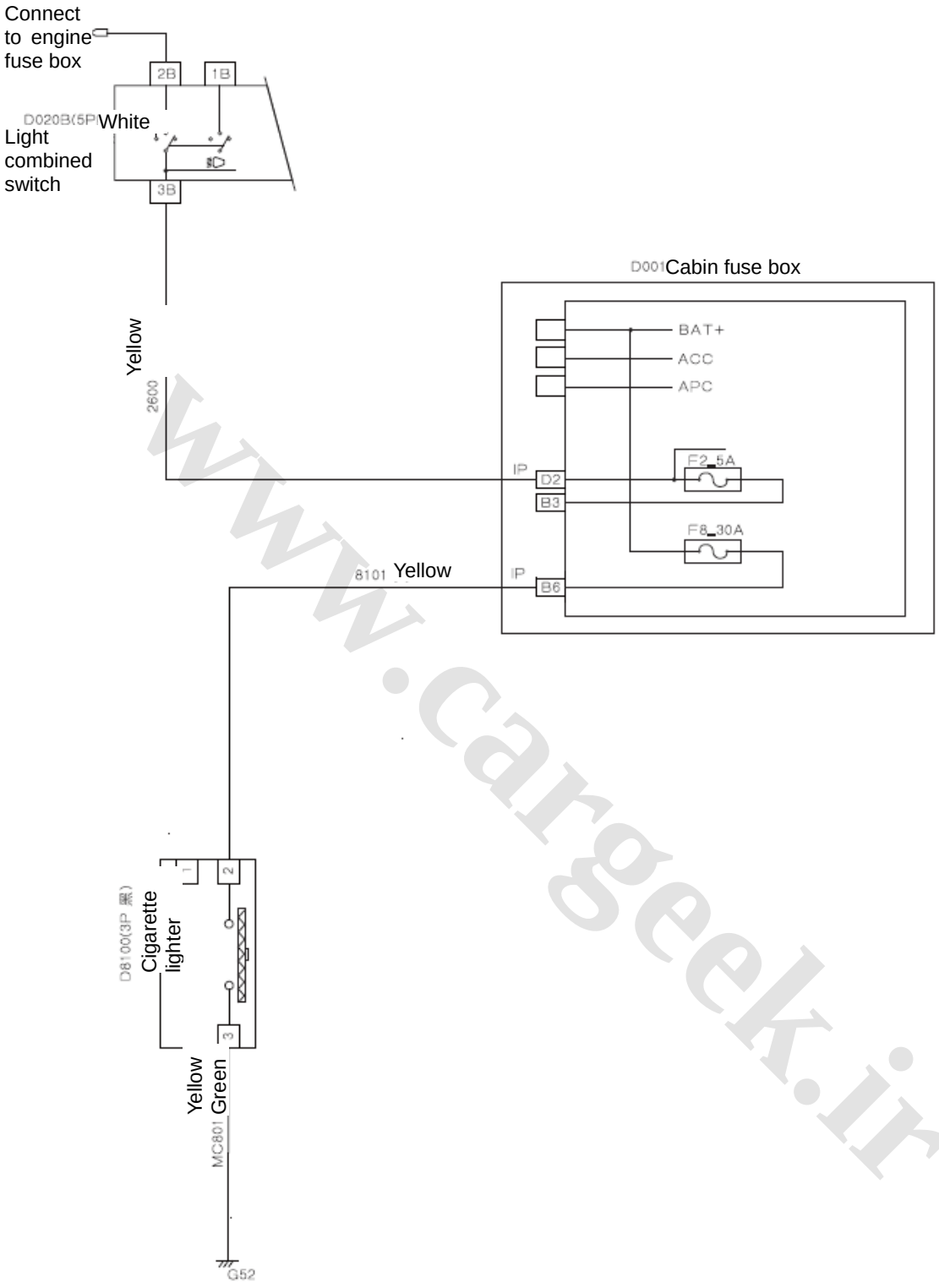
25.2 The electrical schematic diagram for the cigarette lighter S30/H30



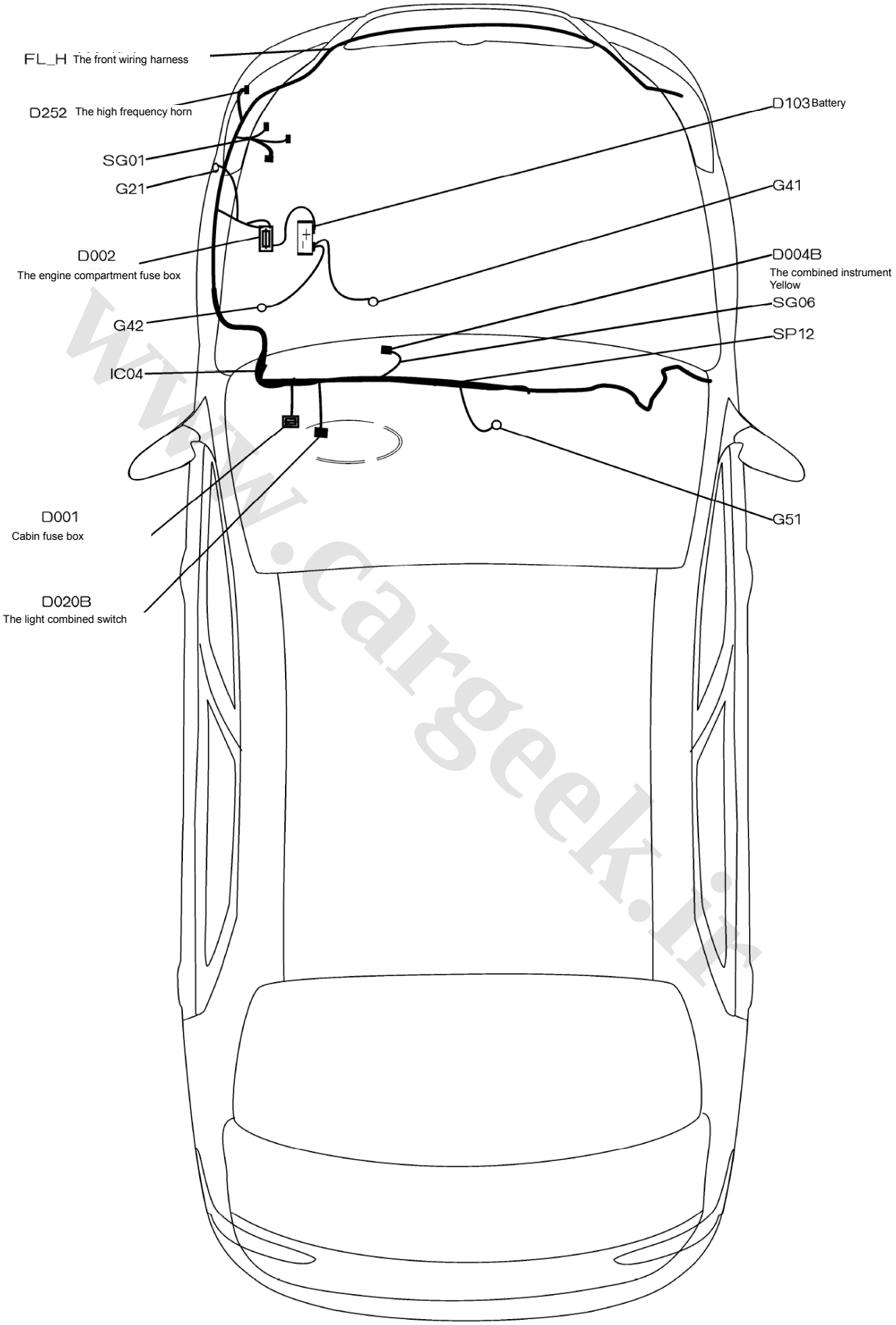
2.1- Location diagram for the cigarette lighter electrical appliances (S30/H30)



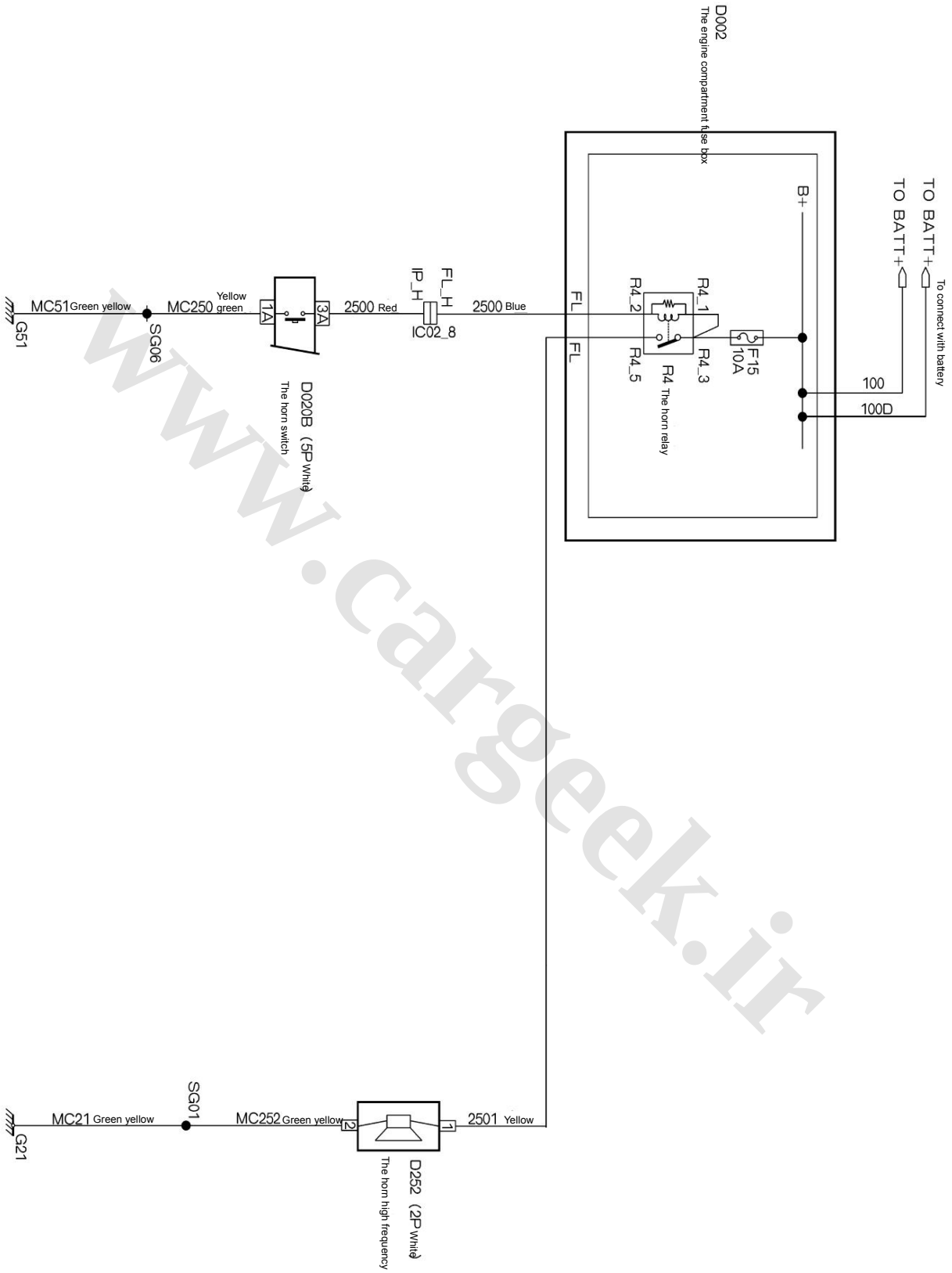
2.2 - Schematic diagram for the cigarette lighter electrical appliances (S30/H30)



26.1 The electrical location diagram for the horn S30/H30



26.2 The electrical schematic diagram for the horn S30/H30



فصل سوم :

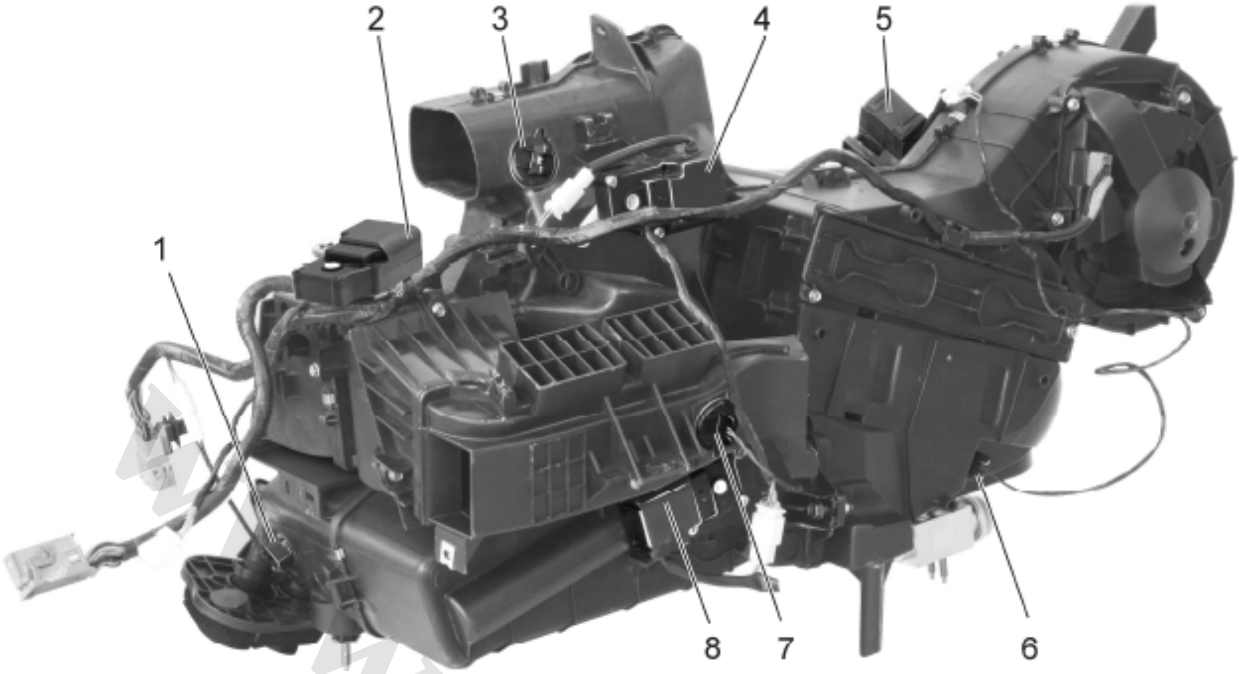
(پیوست)

مشخصات و عملکرد سیستمهای برقی:

۱) سیستم تهویه مطبوع (خود عیب یاب)
۲) سیستم کیسه هوا و کمربند ایمنی پیش کشنده
۳) سیستم پنجره سقفی متحرک (SUN ROOF)
٤) تصاویر قطعات سیستمهای مختلف
٥) دستگاه عیب یاب استاندارد

6. The automatic air conditioning

6.1 The structure for the air conditioning assembly

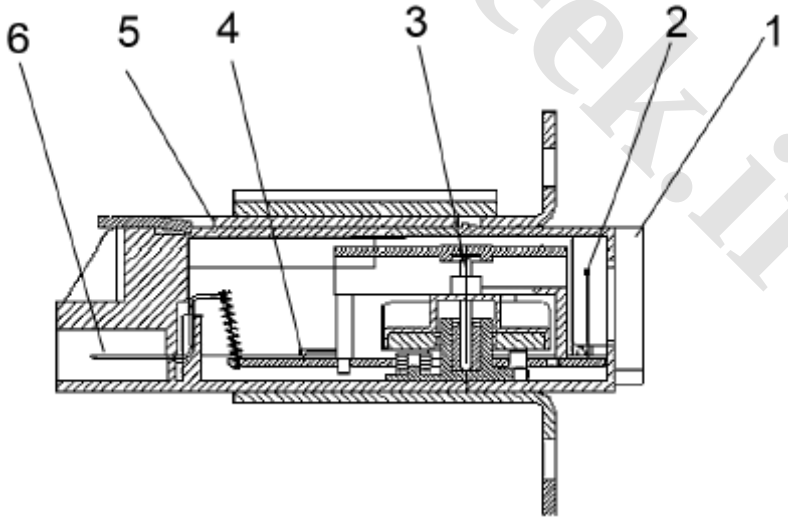


1. The water temperature sensor 2. Foot blowing and defrosting servo motor 3. The face uptake temperature sensor (T-out 1) 4. The face blowing servo motor 5. The inner and outer cycling servo motor 6. The evaporator temperature sensor 7. The foot uptake sensor

Fig. 6.1 The chart for the automatic air conditioning assembly

(1) The indoor temperature sensor

The indoor temperature sensor is installed near the instrument panel at the front row, located at the opposite of the auxiliary driver seat, for delivering the information of air temperature inside the vehicle to the computer, so that the computer shall conduct the management over the mixing and air flow distribution and recycling and other functions. It is a piezoelectricity resistance type sensor, the power is supplied by 5V DC electricity.



1. The sealing strip 2. The thermistor 3. The fan blade combination 4. The circuit board 5. The bracket case 6.The plug connector

Fig. 6.2 The structure for the indoor temperature sensor

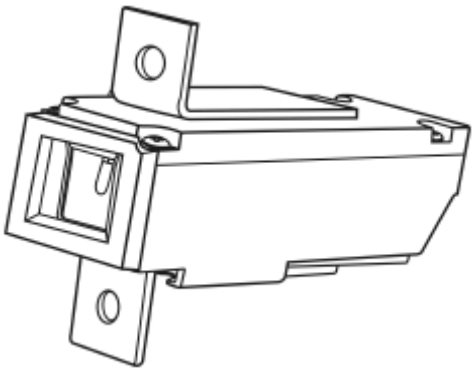
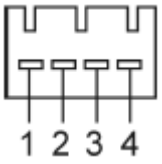


Fig. 6.3 The outline for the indoor temperature sensor

The description for the sensor output

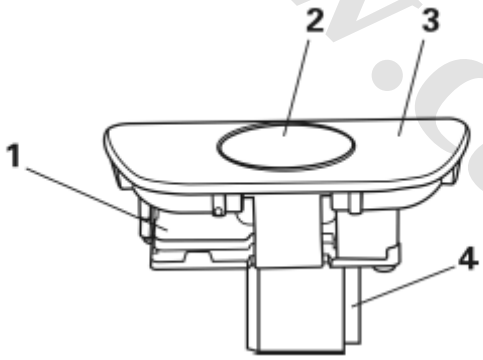


1.The sensor output
2.The sensor output 2
3. The blow power supply -
4. The blow power supply +12V, DC

Fig. 6.4 The definition for the indoor temperature sensor pins

(2) The sun light sensor

The sun light sensor is an indication for the annual average radiation volume for the whole car, it is a current type sensor. It is located in the middle of the instrument panel at the back of the front window glass (shield), in the process of use, the relationship with the real annual average radiation volume shall be demarcated, then the amendment shall be done in the procedure.



1. The circuit board 2. Photodiode
3. The plastic cover 4. The plug connector

Fig. 6.5 The sketch for the sun light sensor

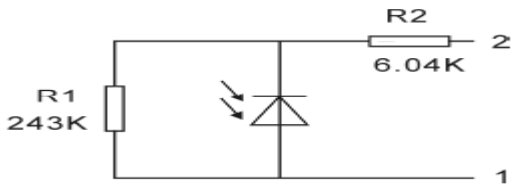


Fig 6.6 The schematic diagram for the inside of the sun light sensor

The sun light sensor is a kind of optic-chemical diode (PCD) located on the instrument panel. This sensor shall send the signal to the air conditioning control module (ECCM), and displays the daily sun light intensity of the temperature inside the vehicle. If the sun light intensity is very strong as indicated by the sun light sensor, the air conditioning module shall enable the blower to operate in the maximal speed, and make up the extra radiation heat with the maximal cooling volume. At the same time, if the sun light indicated by the sun light sensor is quite weak (the cloudy), then the air conditioning module shall lower the rotation speed of the blower, and the system shall not possibly operate under the maximal cooling volume state.

(5) The water temperature sensor

The water temperature sensor is a temperature indication for the engine cooling fluid, it is a kind of resistance type sensor very close to the radiator surface. It is the indication for the temperature damper heating capacity.

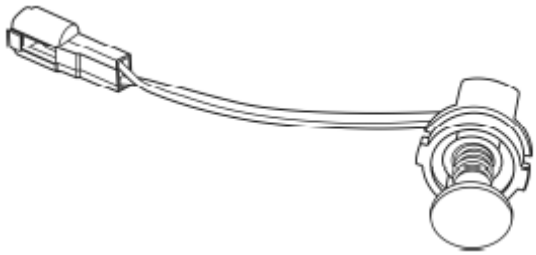


Fig. 6.7 The outline diagram for the water temperature sensor

(4) The evaporator temperature sensor

The evaporator temperature sensor is a kind of temperature sensing resistance type sensor, it is fixed in the air at the evaporator air outgoing side through the case. It shall send to the air conditioning control module through the evaporator air outgoing temperature information, so that the air conditioning control module can determine the air temperature being blown out.

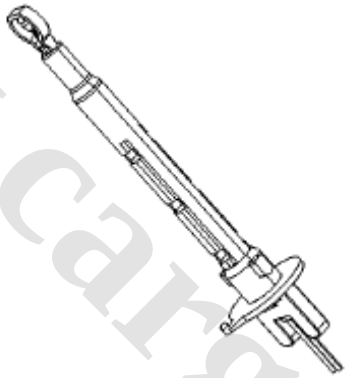
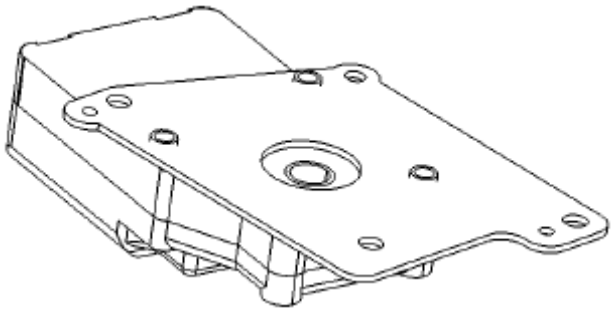


Fig. 6.8 The outline diagram for the evaporator temperature sensor

(5) The temperature servo motor

The temperature servo motor is the most important motor for the air conditioning temperature control. Through adjusting the temperature servo motor, the cooling and hot air mixed degree may be adjusted, it shall reach the aim of adjusting the outgoing air temperature. The temperature servo motor is connected with the temperature damper with the gear, because this kind of connection, the motor rotation angle and the damper rotating angle is a linear change, with high rotation accuracy. The temperature damper is continuously control, in this way, it shall maintain the best temperature damper opening angle according to the objective of the temperature damper and the current opening angle. As the preset temperature is 18^{o}C, the air mixed door is fixed at the very cold position, as the preset temperature is 32^{o}C, the air mixed door is fixed at the very hot position.



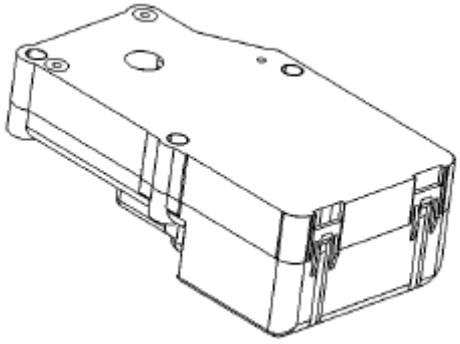
The fault inspection:

The fault state:

- The exhausted air temperature has no change.
- The temperature servo motor is not working normally.

Fig. 6.9 The temperature servo motor

(6) The face blowing servo motor



The fault state:

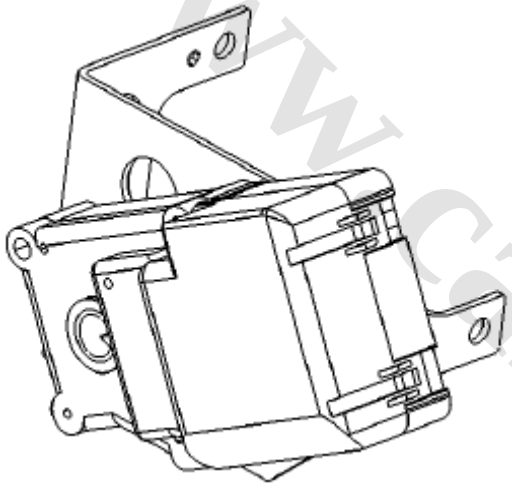
- The uptake has no change.
- The face blowing servo motor is not working normally.

Inspection means: Inspection circuit is cut off or on.

Fig. 6.10 The face blowing servo motor

The face blowing servo motor is the actuator for selecting the outgoing air direction of the air conditioning system, it is divided into the face blowing mode: Off and On.

(7) The foot blowing and defrosting servo motor



The fault inspection:

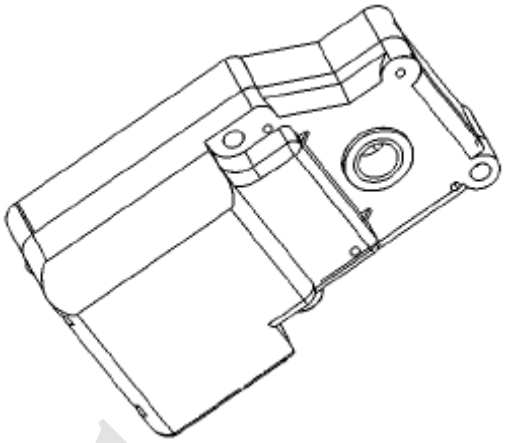
The fault state:

- The uptake has no change.
- The foot blowing and defrosting servo motor is not working normally.

Fig. 6.11 The foot blowing and defrosting servo motor

The foot blowing and defrosting servo motor is the actuator for selecting the air outgoing direction of the air conditioning system. It is divided into three modes of foot blowing, defrosting and foot blowing & defrosting. The mode damper is very important to the air hot exchange for the whole car, under heating conditions, it is adopted foot blowing mode, due to little density of the hot air, it shall rise naturally, it is favorable to the balanced heating for the whole vehicle.

(8) The inner and outer cycling servo motor



The fault inspection:

The fault state:

- The intake valve has no change.
- The inner and outer cycling servo motor is not working normally.

Inspection means: Inspection circuit is cut off or on.

Fig. 6.12 The inner and outer cycling servo motor

The inner and outer cycling servo motor is the actuator for selecting the air incoming direction of the air conditioning system. The air conditioning system incoming air is divided into the inner and outer cycling. The inner and outer selection is very important for removing the humidity inside the vehicle. When the ambient temperature is lower than 0^{o}C, the outside air in theory has no humidity, but due to the relationship of the people, evaporation of steam exists inside the vehicle, the humidity comes from inside the vehicle, at this time, the inner and outer cycling door is at outer cycle, it is favorable to the humidity removal inside the vehicle. When air compressor is working in the summer, the inner cycle shall be used.

6.2 The self-diagnosis system for the automatic air conditioning

(1) The fault report for the damper actuator and the sensor:

If the damper actuator and the sensor has occurred any fault, then E shall be displayed on the screen, and the relevant fault code shall also be displayed in the self-diagnosis mode.

(2) The self-diagnosis mode:

First press down AUTO and hold it on, then press MODE after 2sec, the system enters into the self-diagnosis mode, and displays the fault serial number at the last two digits of the original set temperature on the screen, the first two digits of the original set temperature displays the fault code, 00 shall be displayed for no-fault, and the fault code shall be displayed it any fault occurred (details refer to table below). Now the set temperature knob is rotated for turning to the pages, for displaying the next or the previous code and fault code. Now press OFF key to quit the self-diagnosis mode, and return to the system original state.

The chart for handling the fault of the damper actuator and the sensor

Fault codes	Fault parts/software edition	Fault cause and description	The handling plan
00	The software edition	Two digits edition number	
01	The temperature servo motor	Difficult to rotate, the potentiometer is short or open	
02	The defrosting servo motor	Difficult to rotate, the potentiometer is short or open	
03	The water temperature sensor	In short or open circuit	Take Twat=90^{o}C
04	The ambient temperature sensor	In short or open circuit	Take Tamb=20^{o}C
05	The temperature sensor inside the vehicle	In short or open circuit	Take Tcab=25oC
06	The evaporator temperature sensor	In short or open circuit	Take Tevap=25oC
07	The heat outgoing air temperature sensor	In short or open circuit	Take Tout1=25^{o}C
08	The foot outgoing air temperature sensor	In short or open circuit	Take Tout2=25^{o}C
09	The sun light sensor	In short or open circuit	Take Ldef=300w/m^{2}

② The inspection mode

First press AUTO and hold it on, then press  , after maintaining for 2sec, the system enters the inspection mode, and after entering into the inspection mode successfully, Zero shall be displayed for the ten place digit, ones place digit, decimal and degree centigrade of the original set temperature of the screen. Rotate the air speed adjustment knob to turn over the page, and display the previous or the next numerical value, and the original set decimal and degree centigrade of the screen shall display the inspection serial number, the ten place and ones place, now press OFF key to quit the self-diagnosis mode, and return to the original state of the system. The details for the inspection refer to table below.

The table for the inspection numerical value definition

Serial No.	Numerical value	Remarks
01	Tamb	The temperature inside the vehicle
02	Tinc	The temperature outside the vehicle
03	Tevap	The evaporation temperature
04	Twar	The water temperature
05	Tidef (1/20)	The sun light radiation (take 1/20 of the sample value)
06	Tout vent	The breast outgoing air temperature
07	Tout foot	The foot outgoing air temperature
08	Speed (1/5)	The vehicle speed (take 1/5 of the sample value)
09	Tset	

(2) Other functions

When the controller has received the back light open signal, now turn on the controller back light signal. AS the system is at OFF position, the screen back light is off. The screen back light brightness can not be adjusted.

The automatic air conditioning controller is adopted EEPROM mode storage memory contents, the storage time is set as 2sec after end of pressing the key, the storage contents are as follows: the system state, each actuator state, air compressor state and blower state.

As the vehicle ignition lock is open, the controlled starts working with electricity, all equipments return to the electricity cut-off state of the last ignition lock, namely recover all the memory state.

If the memory contents impossible to be correctly read due to the damage of the storage area, the system automatically set up the start initial state to:

The set temperature: 25^{o}C

The system state: The system is off, in manual operated state;

The mode actuator: Manual operated and face blowing;

The cycle actuator: Manual operated and outer cycle

The temperature actuator: The automatic operation

6.3 The definition for the automatic air conditioning control module pins

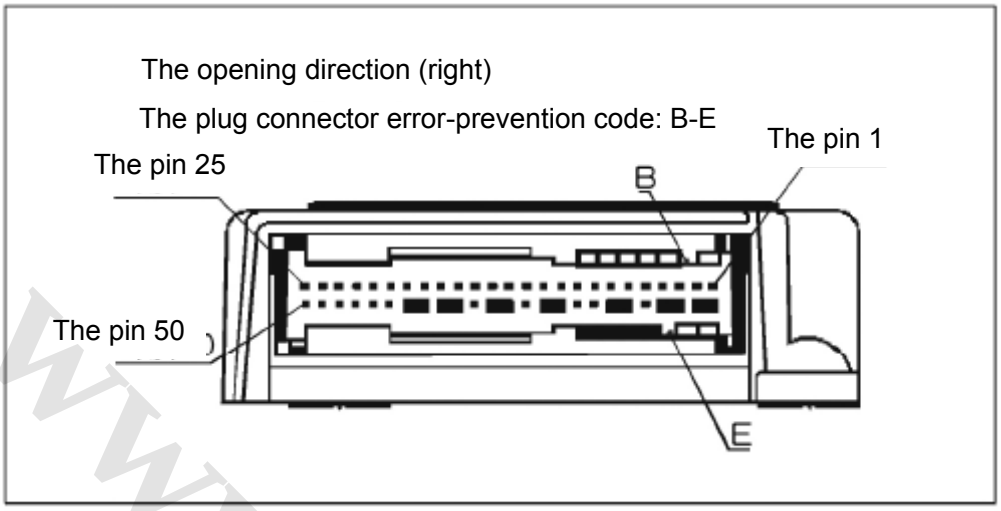
Pins	Signals	The voltage	The current	Remark
1	IG2	12V	<2A	
2	GND	0V	<2A	
3	MI+	0V/12V	300mA	The Defrosting and foot servo motor positive drive (high effective)
4	T-	0V/12V	300mA	The temperature servo motor negative drive (high effective)
5	FRE	0V/12V	300mA	The cycle servo motor outer cycle drive (high effective)
6	FOOT	0V-12V	300mA	The face blowing servo motor and foot blowing drive (high effective)
7	A/C output	0V/12V	<700mA	Air compressor output (high effective)
8	Pressure switch	0V/12V	5mA	The air conditioning pressure switch signal
9	M1 F/B	0V-5V	5mA	The defrosting and foot servo motor feed back signal
10	Tout 1	0V-5V	2mA	The face outgoing air temperature sensor signal
11	Incar	0V-5V	2mA	The vehicle internal temperature sensor signal
12	TB	0V-5V	4mA	The blower speed regulation drive signal
13	Solar	0V-5V	2mA	The sun light sensor
14	Speed	0V/12V	2mA	The vehicle speed signal
15				
16	A/C request	0V/12V	5mA	Air compressor request
17	IG2	12V	<2A	
18	SGND	0V	<2A	
19	T+	0V/12V	300mA	The temperature servo motor positive drive (high effective)
20	M1-	0V/12V	300mA	The Defrosting and foot servo motor negative drive (high effective)
21	R/Defrost	0V/12V	<150mA	The back defrosting relay drive (low effective)
22	REC	0V/12V	300mA	The cycle servo motor inner cycle drive(high effective)
23	VENT	0V/12V	300mA	The face blowing servo motor facing blowing drive (high effective)
24	A/C response	0V/12V	5mA	The air compressor reaction
25	T F/B	0V-5V	5mA	The temperature servo motor feed back signal
26	AMB	0V-5V	2mA	The ambient temperature sensor signal
27	Evap	0V-5V	2mA	The evaporator sensor signal
28	Tout 2	0V-5V	2mA	The foot outgoing air temperature sensor signal
29	Water	0V-12V	2mA	The water temperature sensor signal
30	TC	0V-12V	5mA	The blower voltage feed back signal
31	Lamp +	0V/12V	60mA	The back light signal (positive)
32	+5V	+5V	4mA	5V

7. The safety air bag system

7.1 Definition for the plug connectors and pins of the safety air bag control module

(1) The chart for the air bag module plug connectors

4LOOP plug connector chart



6LOOP plug connector chart

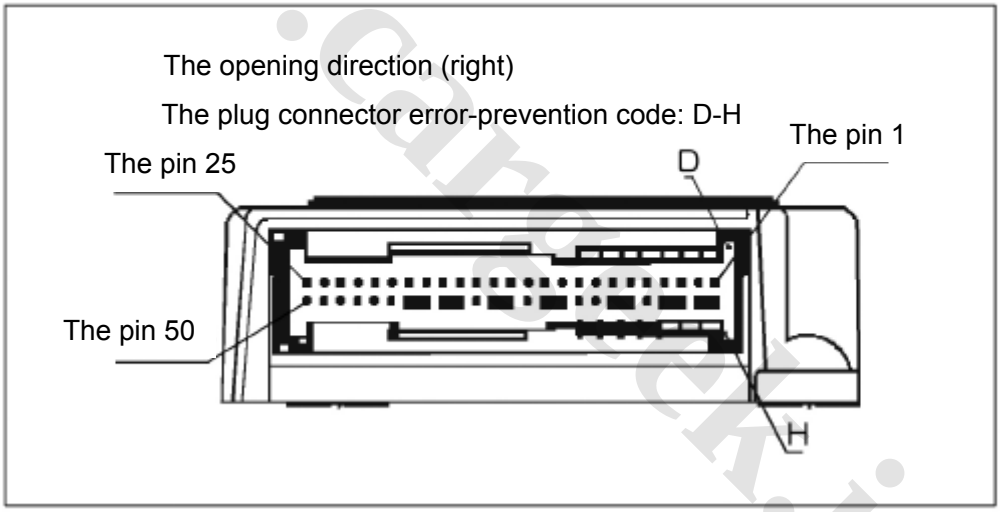


Fig. 7.1 The chart for the air bag module plug connectors

(2) The definition for the control module pins

The definition for 4LOOP/6LOOP safety air bag control module pins

Pins	The definition of pins	4LOOP	6LOOP
1	The air bag at the passenger side, high	×	●
2	The air bag at the passenger side, low	×	●
3	The air bag at the driver side, low	×	●
4	The air bag at the driver side, high	×	●
5	The power supply	●	●
6	The earthing	●	●
7	The alarm light	●	●
8	×	×	×
9	Line K	●	●
10	The air bag at the front of the driver, high	●	●
11	The air bag at the front of the driver, low	●	●
12	The driver belt buckle switch	×	×
13	The driver safety belt pre-tensioner, high	●	●
14	The driver safety belt pre-tensioner, low	●	●
15	Flash codes switch	●	●
16	The passenger safety belt pre-tensioner, low	●	●
17	The passenger safety belt pre-tensioner, high	●	●
18	The air bag at the front of the passenger, high	●	●
19	The air bag at the front of the passenger, low	●	●
20	The collision sensor at the side of the driver, high	×	●
21	The collision sensor at the side of the driver, high	×	●
22	The invalidation switch for the passenger safety air bag	×	×
23	The closing indicator light for the passenger safety air bag	×	×
24	×	×	×
25	×	×	×
26	The short bar	●	●
27	The short bar	●	●
28	The short bar	●	●
29	The short bar	●	●
30	×	×	×
31	The short bar	●	●
32	The short bar	●	●
33	×	×	×
34	The collision output	●	●
35	The short bar	●	●
36	The short bar	●	●
37			

Pins	The definition of pins	4LOOP	6LOOP
37	The passenger side belt buckle switch	×	×
38	The short bar	●	●
39	The short bar	●	●
40	The invalidation switch low end for the passenger safety air bag	×	×
41	The short bar	●	●
42	The short bar	●	●
43	The short bar	●	●
44	The short bar	●	●
45	The collision sensor at the side of the driver, low	×	●
46	The collision sensor at the side of the driver, high	×	●
47	×	×	×
48	×	×	×
49	×	×	×
50	×	×	×

Notes: ×indicates not being used, ● indicates being used.

7.2 The inspection for the safety air bag system

Before the inspection of the safety air bag system, it needs using multi-meter to check the vehicle's battery voltage, and confirm its voltage working in normal scope. The working voltage required for the air bag safety system is 10V to 16V.

Warning: Only the fault diagnostic apparatus can be used for inspecting the safety air bag system, it does not permit using other apparatus to inspect the safety air bag system.

(1) Use the alarm light for inspection

The safety air bag alarm light is on the vehicle instrument panel, through the change of the light, it indicates the working state of the safety air bag system. In general situation, when the vehicle key is turned to ON, the safety air bag alarm light shall start blinking, after blinking for 6 times, the alarm light shall be off, and it shall not be on only the key is open for the next time. If it is not this situation, it indicates the safety air bag system has the fault, it needs to be inspected.

①The alarm light is not on or is always on

Place the ignition switch at ON position, if the safety air bag alarm light is not on from the very start or is always on from the very start, it indicates that the safety air bag alarm light is in fault, or the line is in fault, it is possible that the air bag wiring harness is not connected. These faults generally do not belong to the fault inside the safety air bag system, the alarm light and the line shall be repaired according to the repair method for the vehicle electrical appliances.

②The alarm light is always on after the blink

After the safety air bag alarm light is on, it shall be off after blinking for about 6sec. Then it shall be continuously on. It indicates that safety air bag system has the fault, it needs to be repaired well.

(2) The inspection with the fault diagnostic apparatus

After the fault existing in the safety air bag system is found with the safety air bag alarm light, special fault inspection apparatus may be used for confirming the concrete fault. The inspection process chart is indicated by Fig. 7.2 The fault diagnosis process as below:

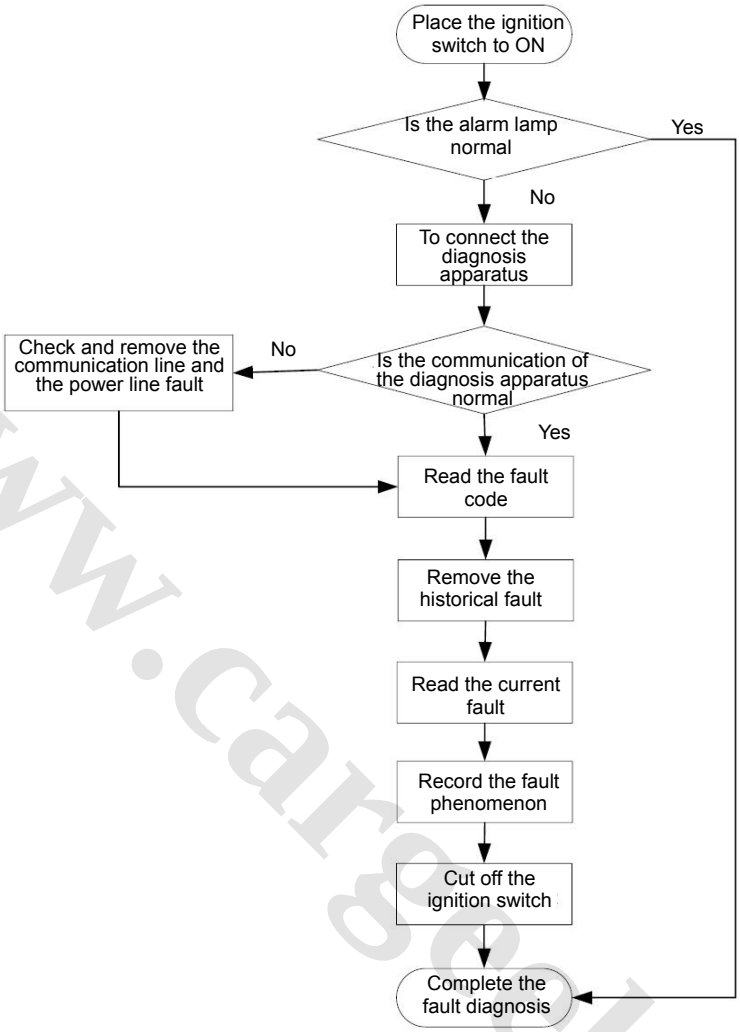


Fig. 7.2 The diagnosis process chart for the safety air bag fault

7.3 The maintenance for the safety air bag system

Once the safety air bag has any fault, it needs to be maintained by professional repair man, non-professional personnel may not conduct the maintenance work for the system.

Warning: On the professional personnel may conduct the maintenance work for the safety air bag system, otherwise it shall cause grave human injury.

(1) The preparation work before the maintenance

Before the maintenance, it needs first to remove the power supply to the vehicle, the method is as follows: Remove the cathode connection of the vehicle battery, use the insulation tape to wrap well the wire connection head for insulation, and wait for 2 minutes.

Attention: Inside of the safety air bag control module (ACU) has the power cut-off protection function, namely it shall keep the power supply for a short time inside the safety air bag control module at the power supply is cut off. So it needs to cut off the power for enough long (2 minutes), in order to enable the internal protection function to lose its efficacy.

Warning: Maintenance with electricity on for the safety air bag system is extremely dangerous, it may greatly possible to cause grave human injury due to mistaken blast of the system.

(2) The fault description and the handling mode

① The safety air bag alarm light has no indication.

The possible causes:

- No power supply is provided (The fuse is broken)
- The combined instrument fault (The alarm light is damaged)
- The wiring harness between the instrument and the safety air bag system has fault

The maintenance process:

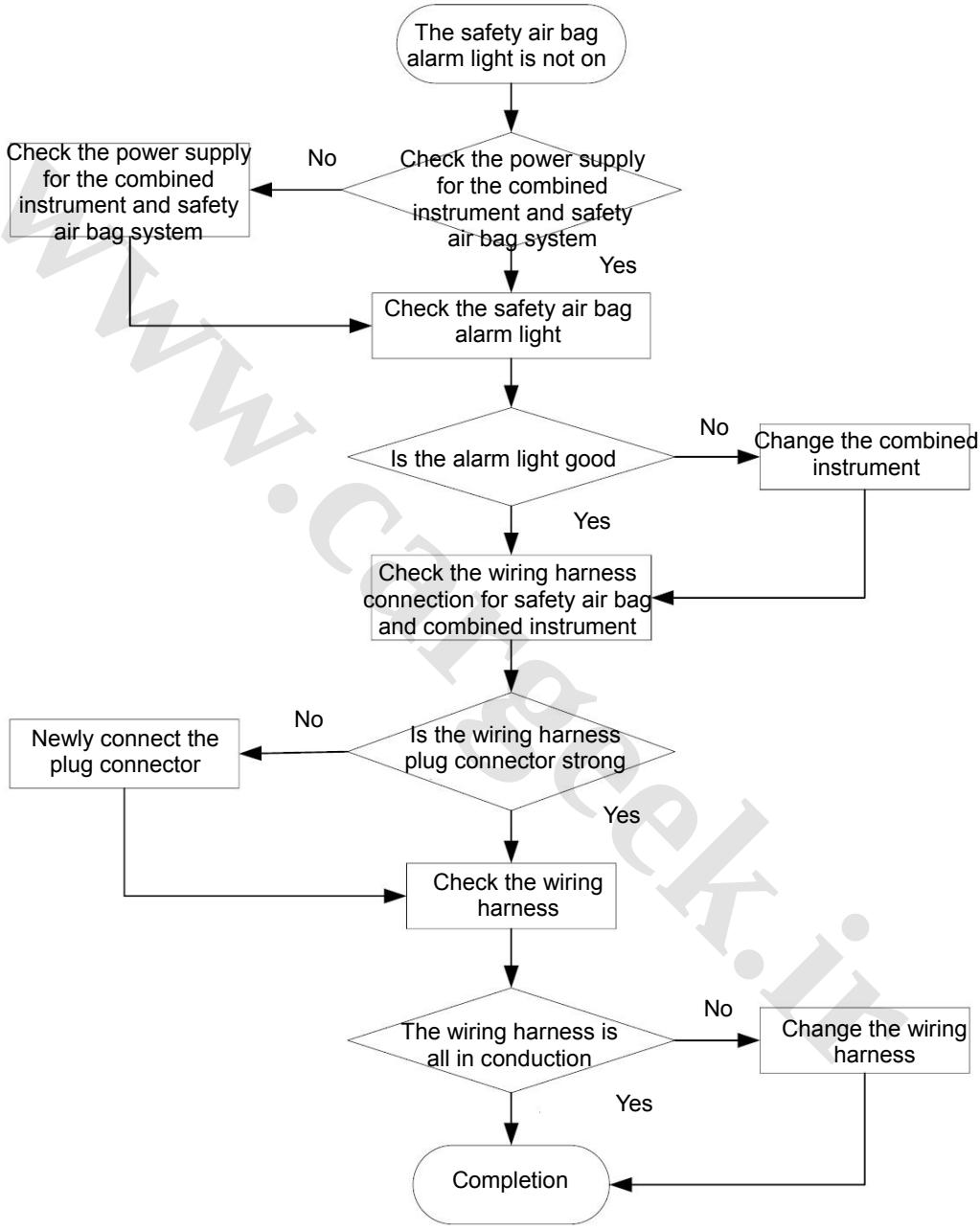


Fig. 7.3 The maintenance process for the safety air bag alarm light

After the end of the maintenance, newly inspect the system with the fault diagnostic apparatus, its inspection process refers to Fig. 7.2 The inspection of the safety air bag system.

② The fault of the driver air bag

The possible causes:

- The trunk line connection fault between the safety air bag control module (ACU) and the safety air bag system assembly wiring harness
- The fault of the safety air bag trunk line wiring harness
- The connection fault for the safety air bag trunk line wiring harness and the rotating connector
- The internal fault of the rotating connector.
- The connection fault for the rotating connector and the driver's safety air bag module.
- The fault of the driver's safety air bag module.

The maintenance process:

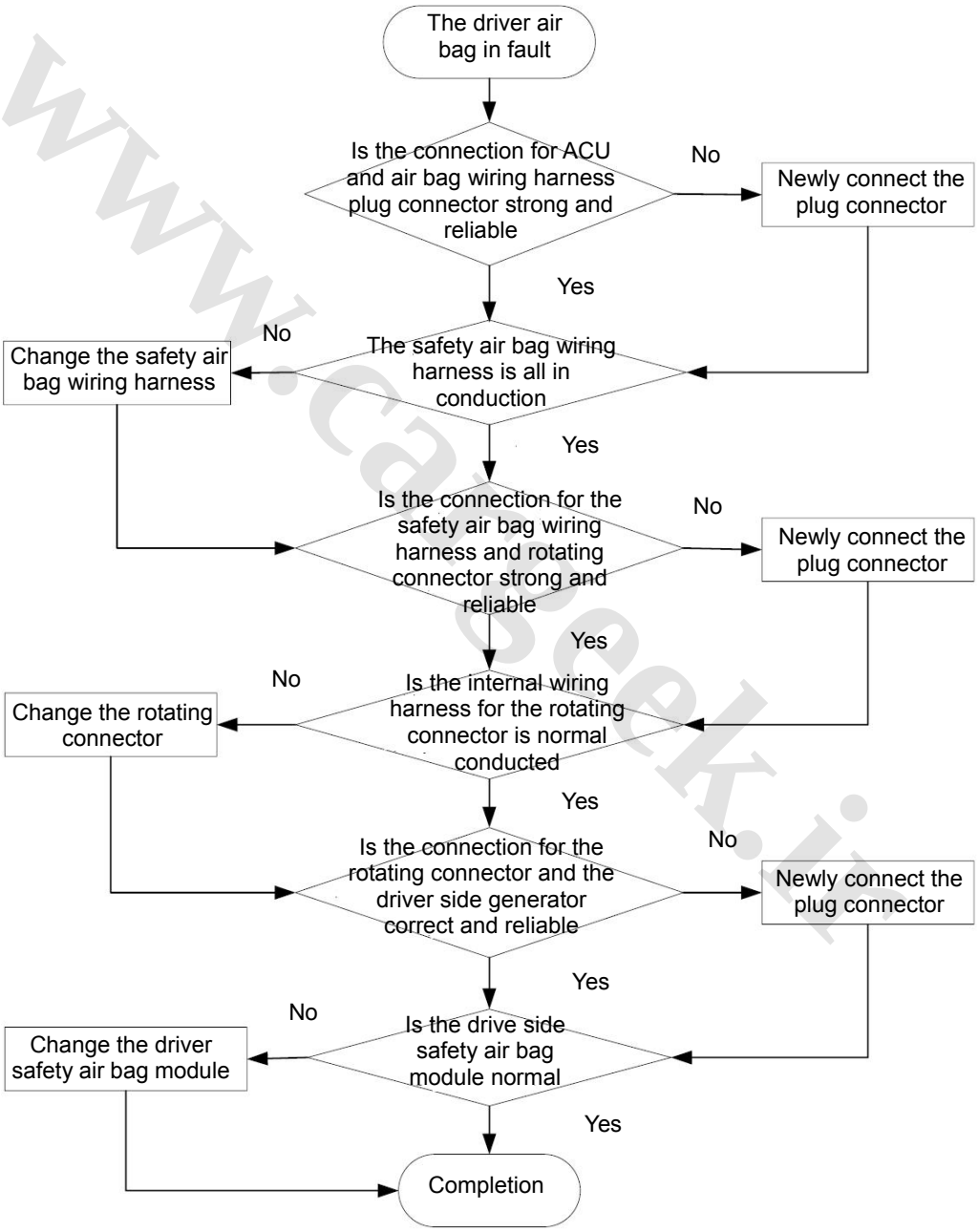


Fig. 7.4 The maintenance process for the driver side safety air bag

After the end of the maintenance, newly inspect the system with the fault diagnostic apparatus, its inspection process refers to Fig. 7.2 The inspection of the safety air bag system.

③ The passenger safety air bag in fault

The possible causes:

- The connection fault for the safety air bag control module (ACU) and the safety air bag system assembly wiring harness
- The connection fault for the safety air bag assembly wiring harness
- The connection fault for the safety air bag assembly wiring harness and the passenger module
- The fault for the passenger safety air bag module

The maintenance process:

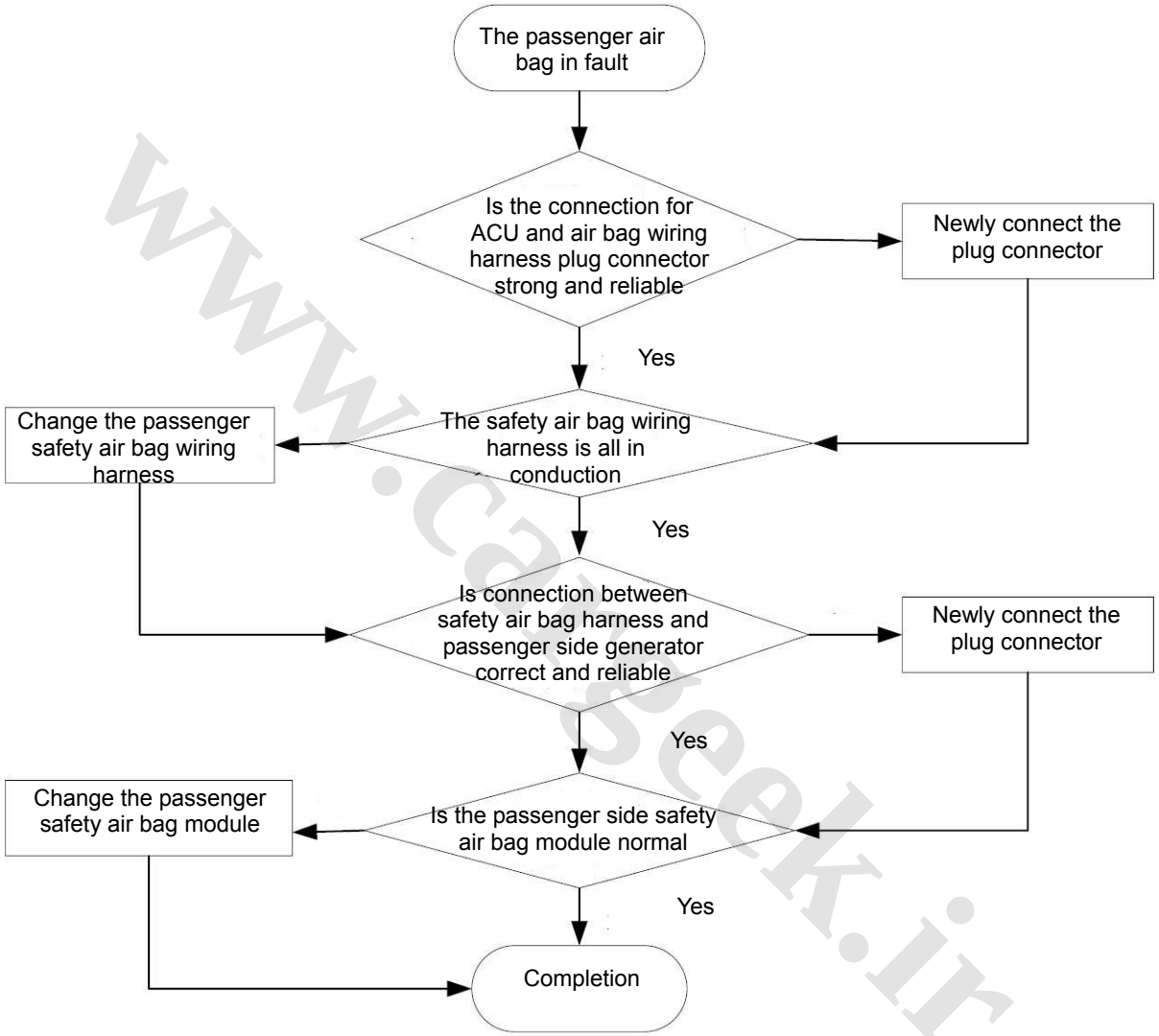


Fig. 7.5 The maintenance process for the passenger safety air bag

After the end of the maintenance, newly inspect the system with the fault diagnostic apparatus, its inspection process refers to Fig. 7.2 The inspection of the safety air bag system.

④ The fault of the side air bag

The possible causes:

- The connection fault for the safety air bag control module (ACU) and the safety air bag system assembly wiring harness
- The fault for the safety air bag assembly wiring harness
- The connection fault for the safety air bag assembly wiring harness and the side safety air bag module
- The fault for the side safety air bag module

The maintenance process:

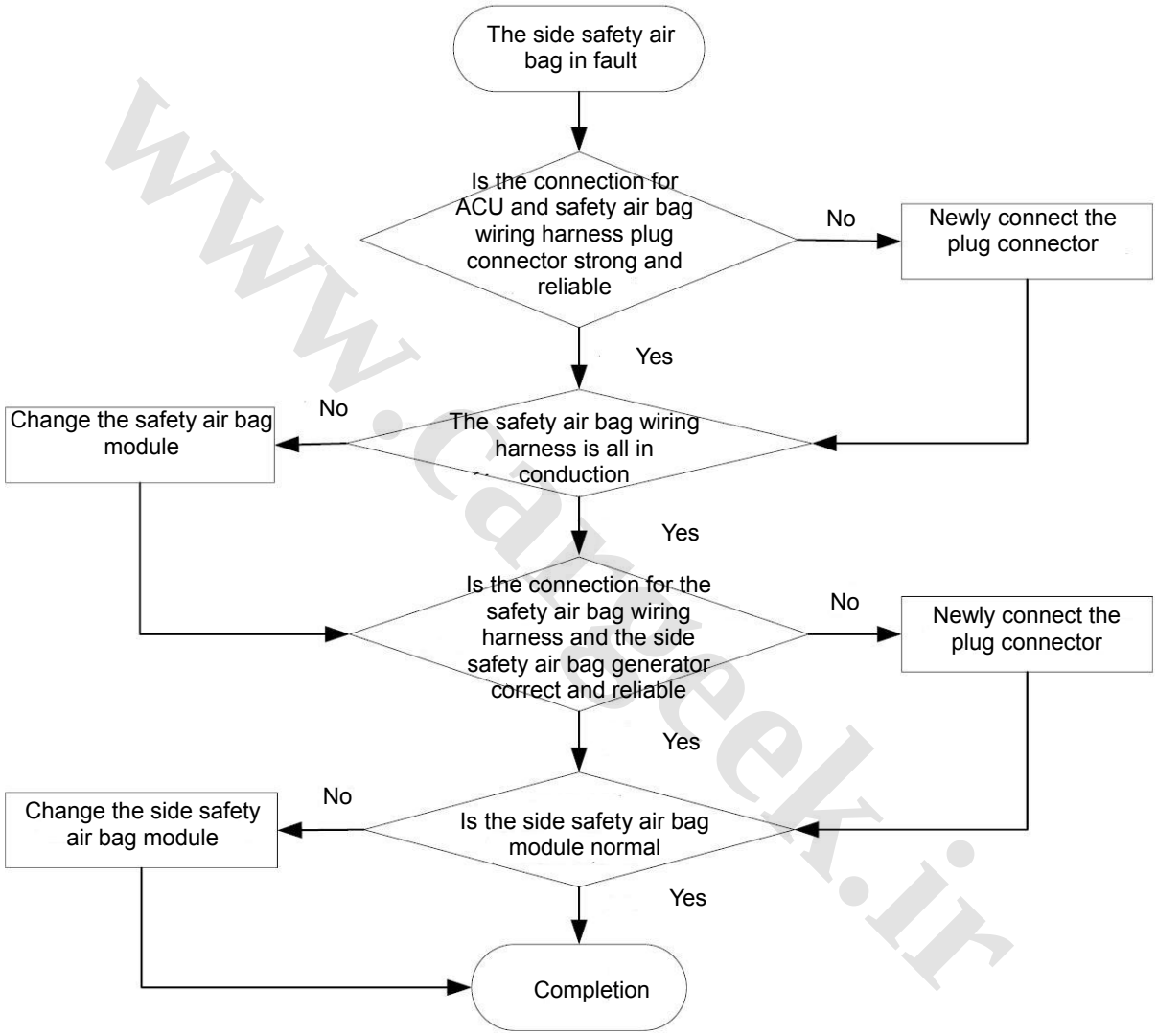


Fig. 7.6 The maintenance process for the side safety air bag

After the end of the maintenance, newly inspect the system with the fault diagnostic apparatus, its inspection process refers to Fig. 7.2 The inspection of the safety air bag system.

⑤The fault of the side collision sensor

The possible causes:

- The connection fault for the safety air bag control module (ACU) and the safety air bag system assembly wiring harness
- The fault for the safety air bag assembly wiring harness
- The connection fault for the safety air bag assembly wiring harness and the side collision sensor
- The fault for the side collision sensor

The maintenance process:

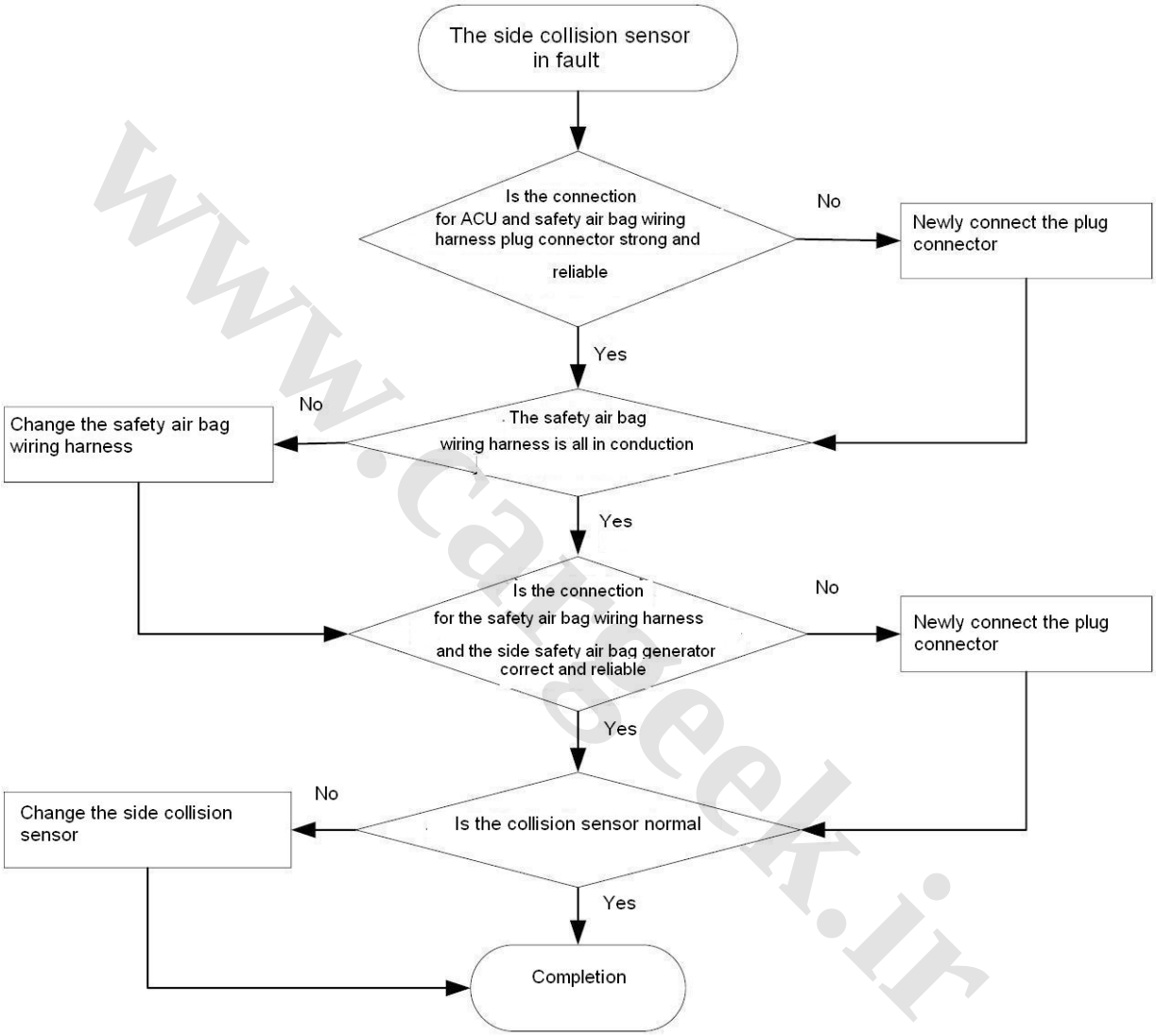


Fig. 7.7 The maintenance process for the side collision sensor

After the end of the maintenance, newly inspect the system with the fault diagnostic apparatus, its inspection process refers to Fig. 7.2 The inspection of the safety air bag system.

⑥ The internal fault for the safety air bag control module

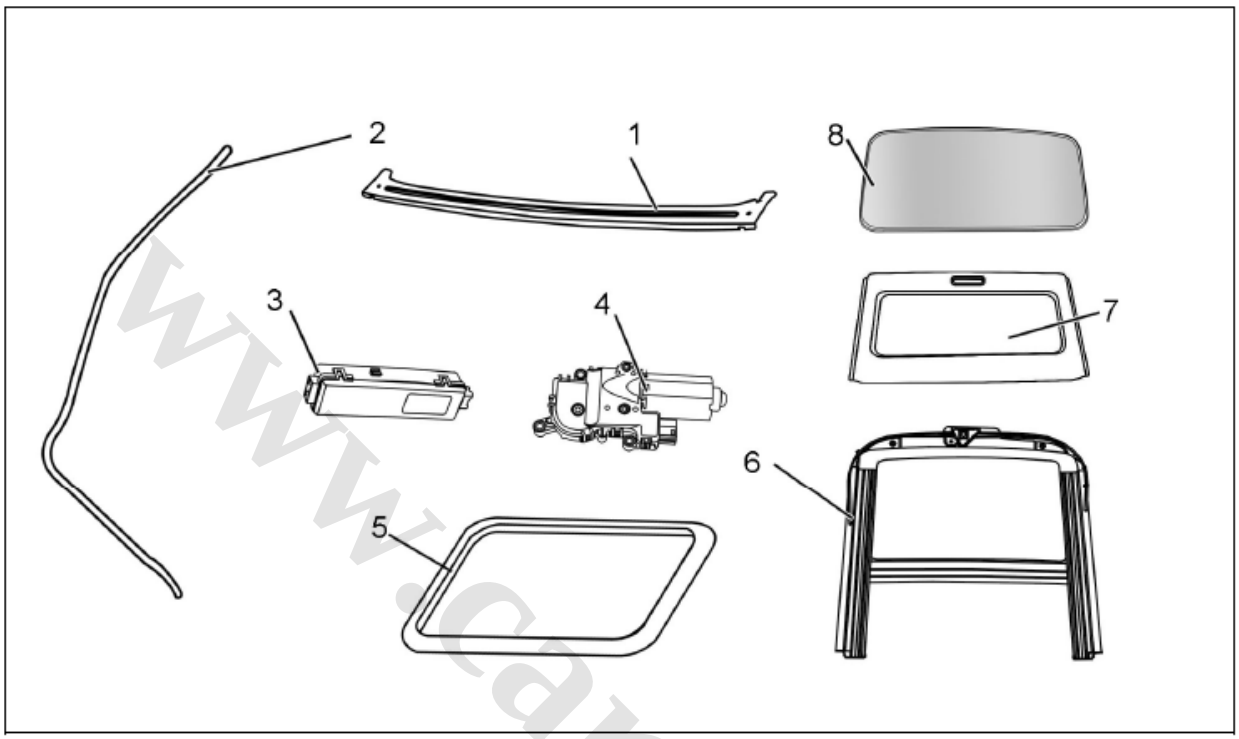
Once the safety air bag control module reports the internal error, it needs to change the safety air bag control module. After the end of the change, newly inspect the system with the fault diagnostic apparatus, its inspection process refers to Fig. 7.2 The inspection of the safety air bag system.

15. Sunroof

Description of sunroof system

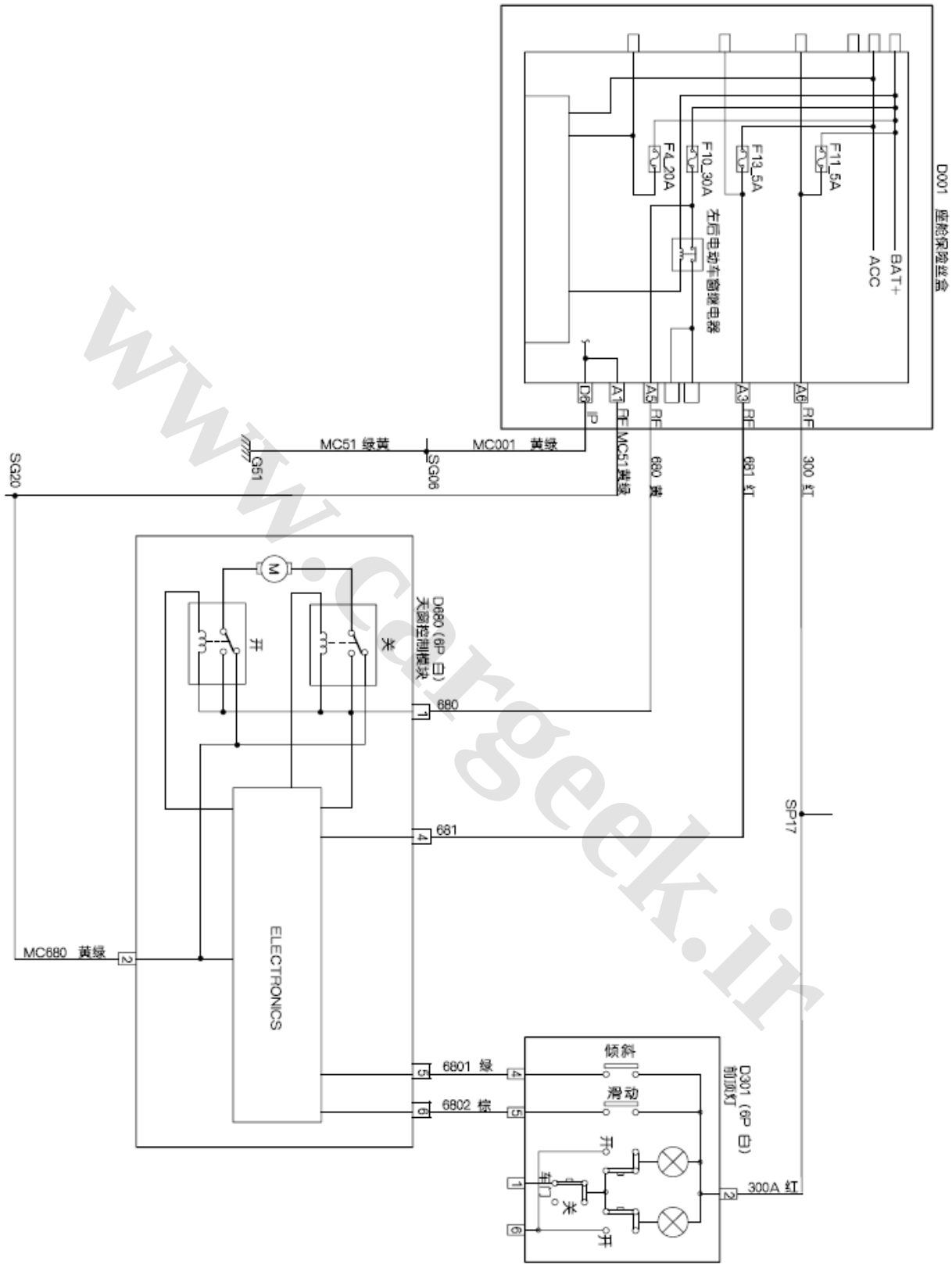
1. Sunroof

1.1. Structural description



1--water chute 2—drain pipe (4 pipes) 3--sunroof control unit 4--motor
5--trim strip 6—frame assembly 7--sun visor 8--sunroof glass assembly

1.2. Electrical schematic diagram of sunroof



座舱保险丝盒	**Cockpit fuse box**	前顶灯	**Front dome lamp**
左后电动车窗继电器	**Left rear electrical controlled window relay**	车门	**Door**
黄	**Yellow**	倾斜	**Tilt**
黄绿	**Yellow green**	滑动	**Slide**
绿黄	**Green yellow**	关	**OFF**
天窗控制模块	**Sunroof control module**	开	**ON**
白	**White**	红	**Red**
绿	**Green**	棕	**Brown**

2. Common troubleshooting

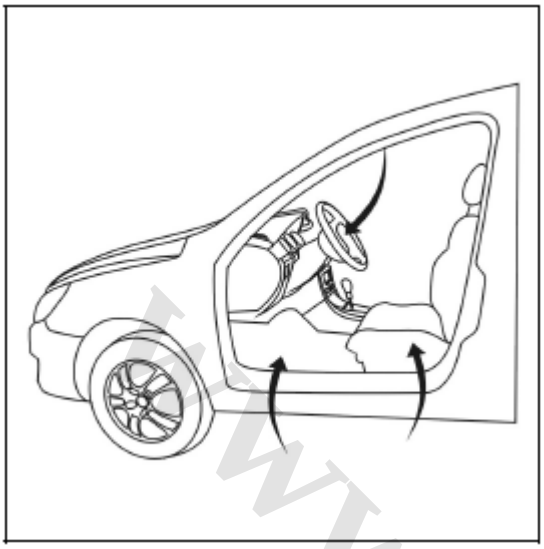
Symptom of failure	Failure analysis	Troubleshooting
Sunroof is inactive	Mechanical failure	Turn on ignition switch and press Slide or Tilt button. If sunroof moves a little or if the sound of relay actuation is heard but sunroof doesn't move: ● Replace sunroof frame assembly.
	No drive power supply	Power supply line fault. Please check: ● Fuse of sunroof driving circuit; ● Power supply line and harness of sunroof.
	No control signal	1. Check whether the voltage of the 4th pin of sunroof control unit is battery voltage. If not, ● Check the signal circuit and harness of ignition switch. 2. Turn on ignition switch and press and hold Tilt button. Check whether the voltage of the 5th pin of sunroof control unit is battery voltage. If not: ● Check Tilt status signal circuit; ● Check Tilt operation button. 3. Igniter is in effective position. Press and hold Slide button. Check whether the voltage of the 6th pin of ECU is at high level (battery voltage). If not: ● Check Slide status signal circuit; ● Check Slide operation button.
	ECU fault	1. Igniter is in effective position. Press and hold Tilt and Slide buttons respectively. Check that the voltage of the 5th and 6th pins of ECU is battery voltage: ● Replace ECU.
Sunroof stops in incorrect position	Information loss of system internal position	1. Check whether the voltage of the 1st and 2nd pins of ECU is in the range of effective working voltage. If not: ● Charge battery or replace the battery with an acceptable battery; ● Check sunroof power supply line and harness; ● Perform initialization operation after voltage is recovered into the range of effective working voltage. 2. Perform initialization operation after battery replacement or after voltage is recovered into the range of effective working voltage. "Initialization operation": ● Operate Slide or Tilt buttons to make sunroof in a certain middle position, press and hold Tilt button till sunroof is in full tilt position and makes a short sound, then immediately release Tilt button; 3. If sunroof operation is still abnormal after initialization: ● Check whether Hall sensor is broken; ● Check whether the voltage of the 1st and 2nd pins of ECU is in the range of effective working voltage.
No response to Tilt button or partially nonresponsive	In system-defined stop position	1. Check whether sunroof is in full tilt position where sunroof doesn't respond to operation.
	Tilt signal fail	1. Press and hold Tilt button. Check whether the voltage of the 5th pin of ECU is at high level (battery voltage). If not: ● Check the signal circuit of Tilt operation;

		● Check Tilt operation button.
	Operating voltage is not within normal range	1. Shortly press Tilt button and check whether the voltage of the 1st and 2nd pins is in the range of effective working voltage at the moment of sunroof movement. If not: ● Replace or charge battery; ● Check the potential drop of harness and connector.
	ECU fault	1. Replace ECU.
No response to Slide button or partially nonresponsive	In system-defined stop position	1. Check whether sunroof is in full tilt position where sunroof doesn't respond to operation.
	Slide signal fail	1. Press and hold Slide button and check whether the voltage of the 6th pin of ECU is at high level (battery voltage). If not: ● Check the signal circuit of Slide operation; ● Check Slide operation button.
	Operating voltage is not within normal range	1. Shortly press Slide button and check whether the voltage of the 1st and 2nd pins is in the range of effective working voltage at the moment of sunroof movement. If not: ● Replace or charge battery; ● Check the potential drop of harness and connector.
	ECU fault	1. Replace ECU.
Slide button operation is allowed in full close position. Nonresponsive to any button operation in full close position	Operating voltage is not within normal range	1. Check whether the voltage of the 1st and 2nd pins is in the range of effective working voltage at the moment of sunroof movement. If not: ● Replace or charge battery; ● Check the potential drop of harness and connector.
Interrupted movement of sunroof in Slide and/or Tilt button operation	Hall sensor is broken	1. Check whether the output of Hall sensor is normal square wave. If not: ● Replace Hall sensor and then execute "Initialize Operation".
	Operating voltage is not within normal range	1. Check whether the voltage of the 1st and 2nd pins of ECU is in the range of effective working voltage. If not: ● Charge battery or replace the battery with an acceptable battery; ● Check sunroof power supply line and harness; ● Perform initialization operation after voltage is recovered into the range of effective working voltage.
Sunroof is auto-off without any operation	Igniter single fault	1. Check whether the voltage of 4th pin of ECU is at low level (0V voltage). If not: ● Check whether igniter is in effective position; ● Check the status signal circuit and harness of igniter.
Sunroof is auto-off immediately after turning ignition key to OFF position	Short sunroof auto-off time	1. Check whether the voltage of 4th pin of ECU is at low level (0V voltage). If so: ● Check whether the voltage of the 5th or 6th pin of ECU is in the range of effective working voltage (battery voltage). If not, make sure that its voltage is in the range of effective working voltage;
Sunroof is not auto-off after turning ignition key to OFF position	Igniter single fail	1. Check whether the voltage of 4th pin of ECU is at low level (0V voltage). If not: ● Check whether igniter is in effective position; ● Check the status signal circuit and harness of igniter. 2. Check whether the voltage of 4th pin of ECU is at low

		level (0V voltage). If so: ● If the sound of relay actuation is heard but sunroof doesn't move after a long time, ECU or sunroof mechanism fault is considered. ● If no sound of relay actuation is heard, ECU fault is considered. Replace ECU.
Sunroof is not auto-off in place after turning ignition key to OFF position	Mechanism failure	1. If sunroof is auto on during movement again and again, ● Sunroof is subject to great resistance. Please clean dust or apply grease to it: ● Sunroof system is deformed. Turn ignition key to effective position and press and hold Slide or Tilt button to close sunroof.
	Igniter single fail	1. Check whether the voltage of 4th pin of ECU is at low level (0V voltage). If not: ● Check whether igniter is in effective position; ● Check the status signal circuit and harness of igniter.
	Internal data loss	1. The internal travel data of sunroof is lost. After switching igniter to working position: ● Execute "Initialize Operation".
Sunroof is operational even if ignition key is not in effective position	Igniter single fail	1. Check whether the voltage of 4th pin of ECU is at low level (0V voltage). If not: ● Check the status signal circuit and harness of igniter.
When sunroof is in tilt side area, sunroof is auto-off immediately after ignition key sparks	Short sunroof auto-off time	1. Check whether the voltage of 5th or 6th pin of ECU is in the range of effective working voltage (battery voltage). If not: ● Make sure that its voltage is in the range of effective working voltage; ● Return igniter to ACC position to tilt sunroof and then switch igniter to OFF position.
When shortly pressing Slide button and/or shortly pressing Tilt button to close sunroof, sunroof fails to auto return in case of obstruction	Anti-squeeze function fault	1. Check whether the voltage of 5th or 6th pin of ECU is at high level (battery voltage). If not: ● Check the signal circuit of Slide and/or Tilt operation; ● Check Slide and Tilt buttons; ● ECU fault, replace ECU.
When shortly pressing Slide button and/or shortly pressing Tilt button to open or tilt sunroof, sunroof stop in case of no obstruction	Large mechanism	1. Sunroof is subject to great resistance: ● Please clean dust or apply grease to it;

Disassembly and assembly of sunroof glass

1. Protection

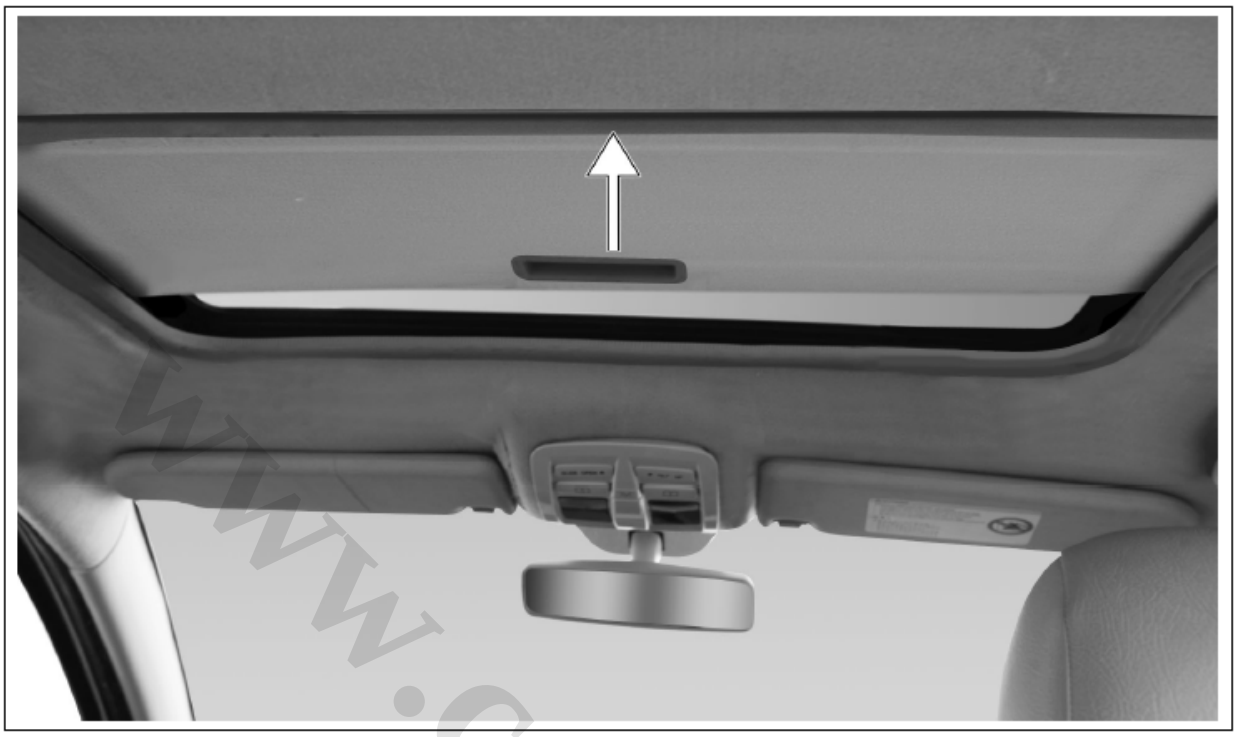


Protective pads shall be placed at the following parts:

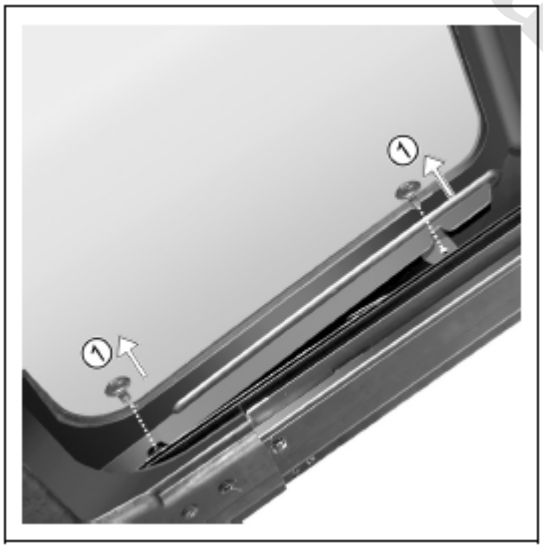
- Driver's seat;
- Carpet (driver side);
- Steering wheel;
- Shift lever;
- Parking brake lever.

2. Disassembly

Disconnect battery negative cable.



- Pull back the sun visor



- Remove screw (1) in the direction as indicated in the figure; (operate in the same way on the other side)

Remove sunroof glass from the roof with care.

3. Assembly

Attention: tightening torque of glass mounting screw (1): 5±0.5N·m.
Assembly is in the reverse order of the disassembly.

4. Inspection

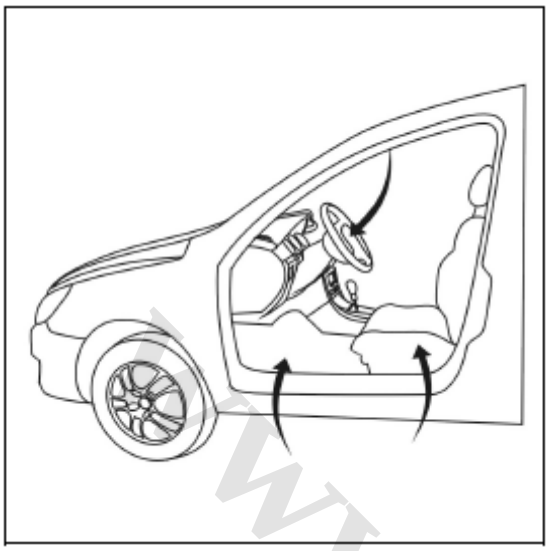
Connect battery negative cable;
Turn ignition key to “ACC” position;
Operate sunroof control button to check whether the sunroof glass installed is in normal working condition.
Refer to the following operation:

Opening backward Press Slide button (less than 0.5 sec) make glass panel drive sun visor to slide to maximum position; During the opening and sliding of glass panel, press Slide button (less than 0.5 sec) again to stop glass in the present position; Press and hold Slide button (more than 0.5 sec). During the opening and sliding of glass panel, release the button to stop glass panel.	**Closing forward** When sunroof is in open state, press Tilt button (less than 0.5 sec) to make all the glass panels close automatically; During the closing and sliding of glass panel, press Tilt button (less than 0.5 sec) again to stop glass in the present position; Press and hold Tilt button (more than 0.5 sec). During the closing and sliding of glass panel, release the button to stop glass panel; Pull back sun visor with hand to close it.
Tilted opening When sunroof is in close state, press Tilt button to make the rear of glass panel tilt and open. Pull back sun visor with hand to open it.	**Tilted closing** When sunroof is in tilt and open state, press Slide button to descend and close glass panel; Pull back sun visor with hand to close it.

Tips: upon the completion of above operation, perform water pouring test to sunroof to ensure the sound tightness of sunroof.

Disassembly and assembly of sunroof motor

1. Protection

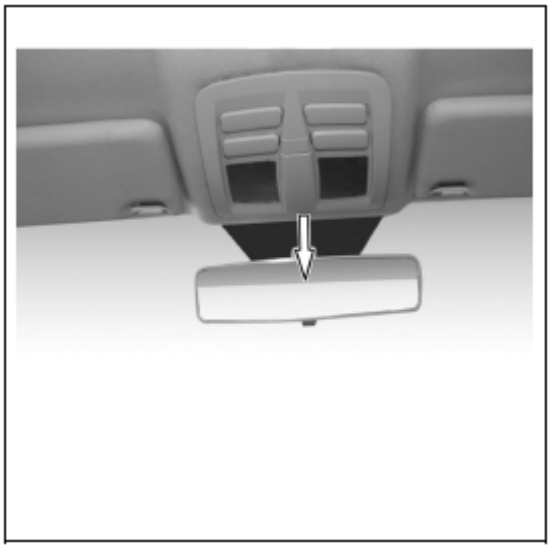


Protective pads shall be placed at the following parts:

- Driver's seat;
- Carpet (driver side);
- Steering wheel;
- Shift lever;
- Parking brake lever.

2. Disassembly

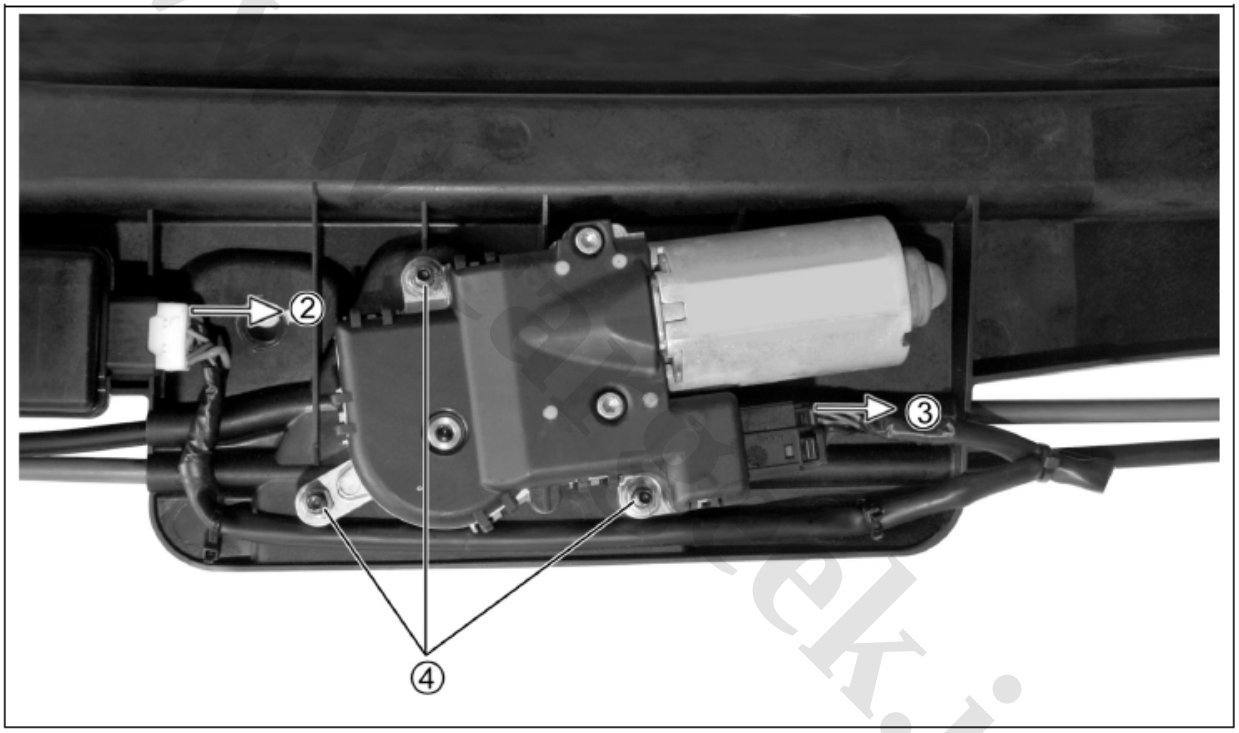
Disconnect battery negative cable.



- Push aside the seat frame of front roof lamp in the direction as indicated in the figure.

- Disengage the connector at "a" point;
- Take out front roof lamp assembly.

- Remove the screw (1) of motor mounting bracket



- Press down connector snap and disengage connector (2);
- Press down connector snap and disengage connector (3);
- Remove motor bracket nut (4).

3. Assembly

Assembly is in the reverse order of the disassembly.

4. Inspection

Connect battery cable;
Turn ignition key to “ACC” position;
Operate sunroof control button to check whether the sunroof is in normal working condition.

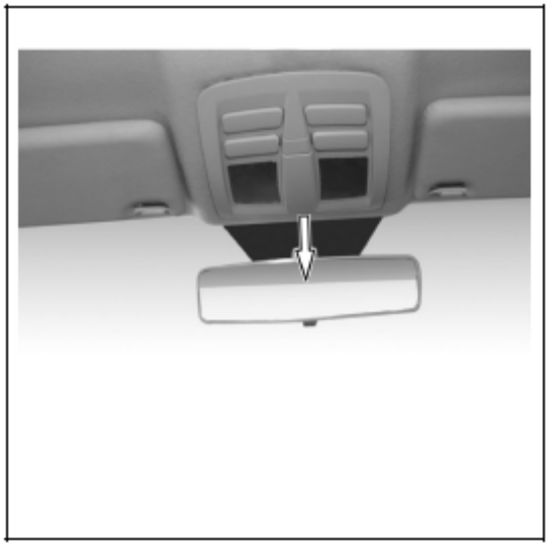
Disassembly and assembly of sunroof control unit

1. Protection

Protective pads shall be placed at the following parts:

- Driver's seat;
- Carpet (driver side);
- Steering wheel;
- Shift lever;
- Parking brake lever.

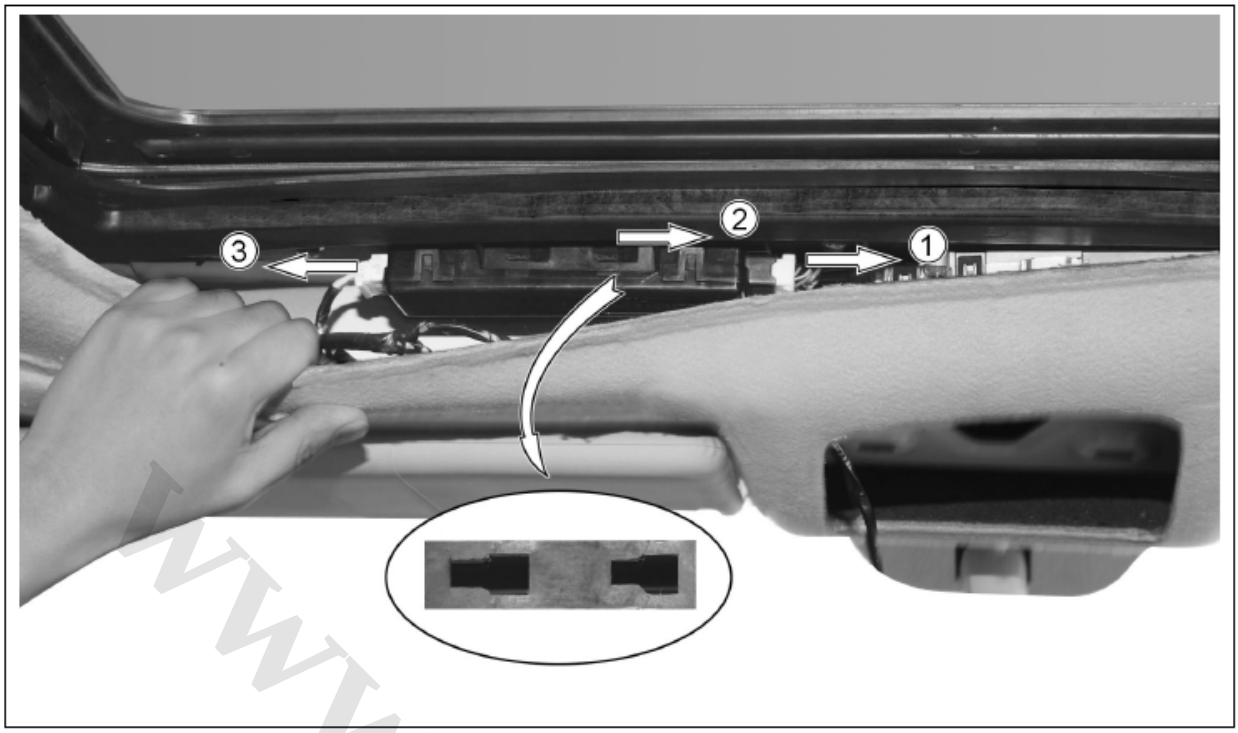
2. Disassembly



- Push aside the seat frame of front roof lamp in the direction as indicated in the figure.

- Disengage the connector at "a" point;
- Take out front roof lamp assembly.

- Pull back the sun visor (in the direction as indicated by "a");
- Pull back a part of trim strip (in the direction as indicated by "b").



- Slightly pull down the roof on the left of front roof lamp;
- Press down connector snap and disengage connector (1);
- Pull control unit rightward to the right most of snap as indicated in the figure. Push forward to take down sunroof control unit. Do no damage plastic snap (2);
- Pull out control unit rightward, press down connector snap and disengage connector (3).

3. Assembly

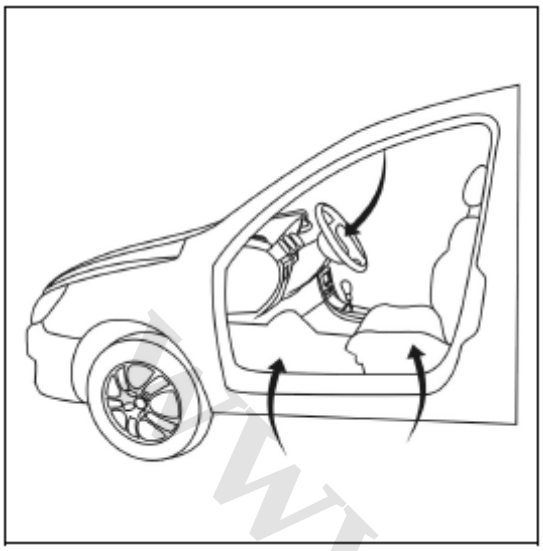
Assembly is in the reverse order of the disassembly.
Attention Handle with care to avoid damaging roof.

4. Inspection

Connect battery cable;
Turn ignition key to “ACC” position;
Operate sunroof control button to check whether the sunroof is in normal working condition.

Disassembly and assembly of sunroof assembly

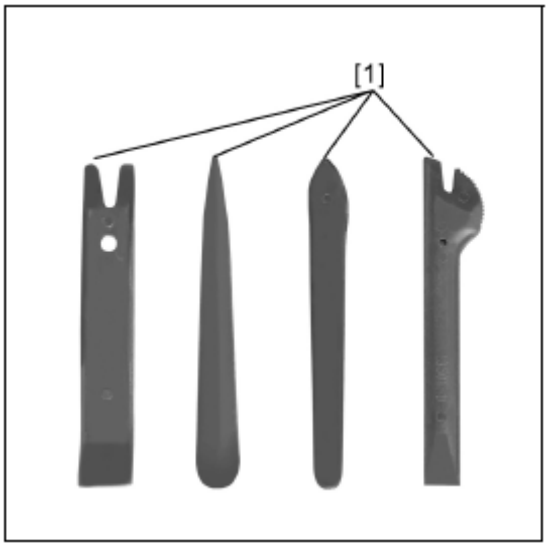
1. Protection



Protective pads shall be placed at the following parts:

- Driver's seat;
- Carpet (driver side);
- Steering wheel;
- Shift lever;
- Parking brake lever.

2. Recommended tools

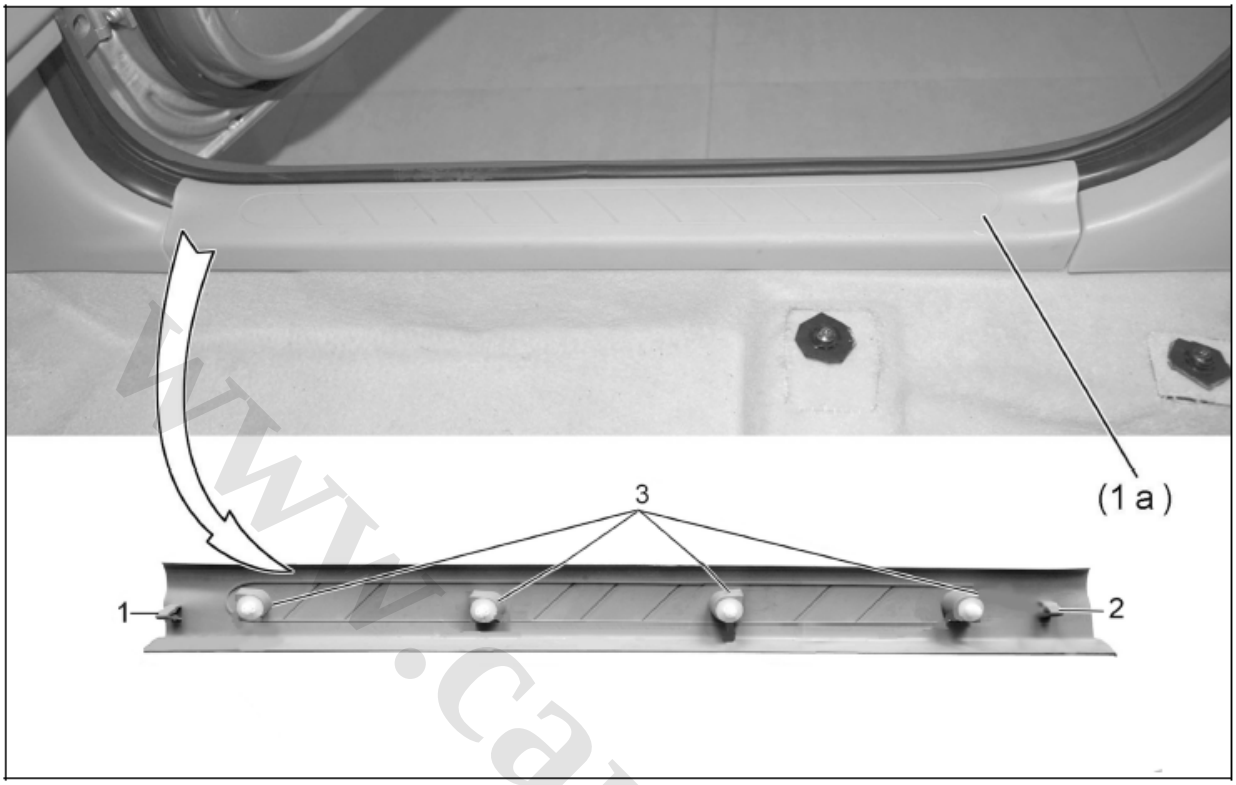


[1] Disassembly tool for interior trim parts BF1102A;

3. Disassembly

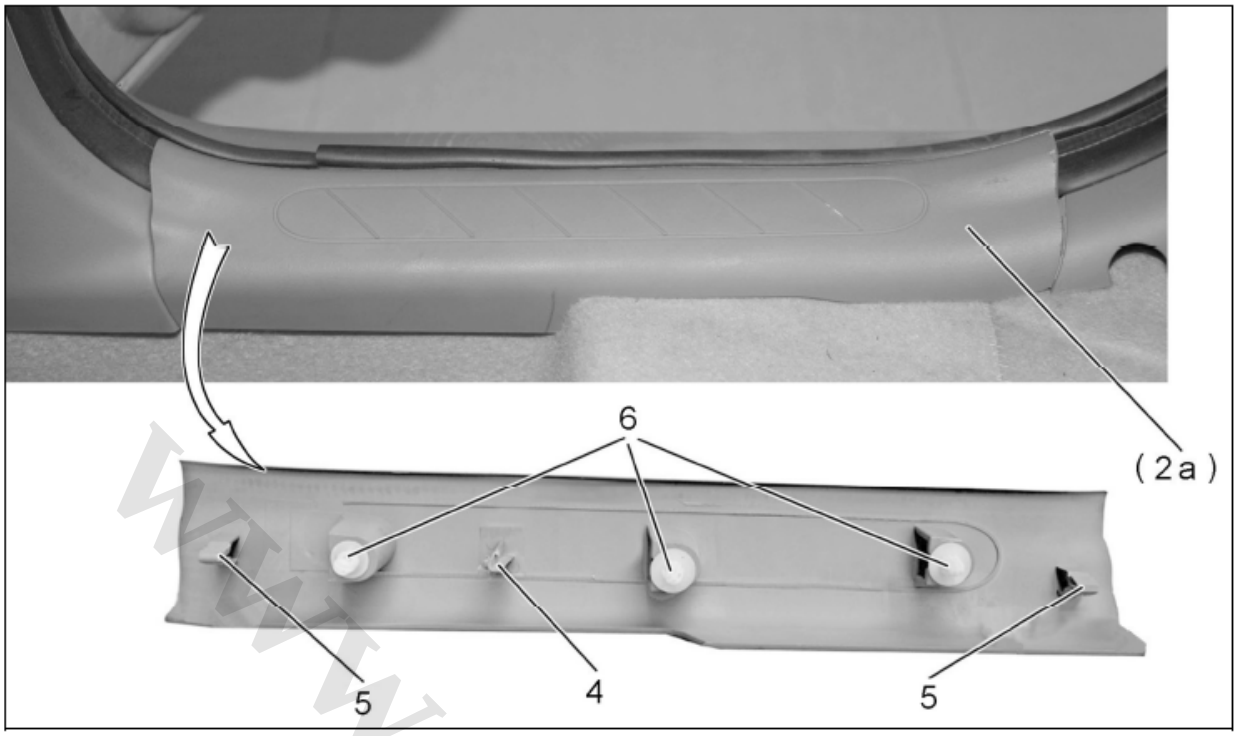
3.1. Disassembly of interior trim parts

3.1.1. Disassembly of front sill trim strip



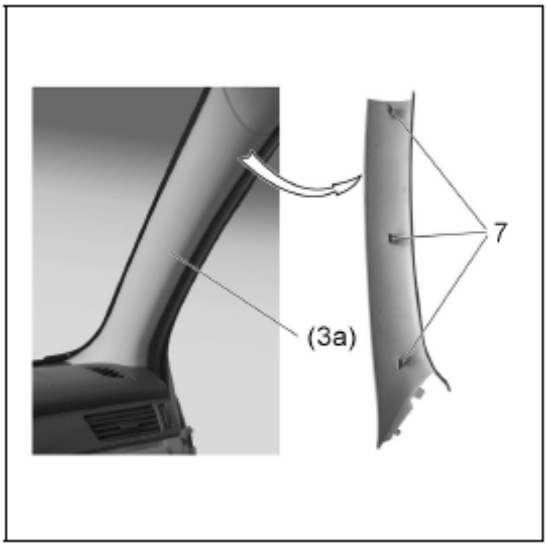
- Disengage snaps (1) and (2);
- Use tool [1] to remove plastic dowel (3);
- Front sill trim strip (1a).

3.1.2. Disassembly of rear sill trim strip



- Disengage snaps (4) and (5);
- Use tool [1] to remove plastic dowel (6);
- Rear sill trim strip (2a);
- Remove the front and rear sash trim strips.

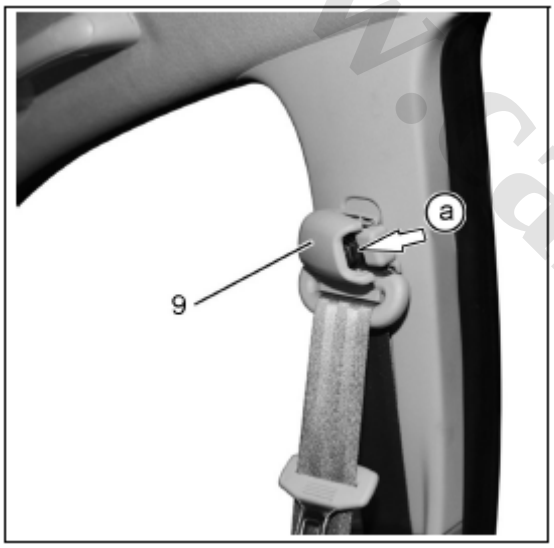
3.1.3. Disassembly of upper apron of front pillar



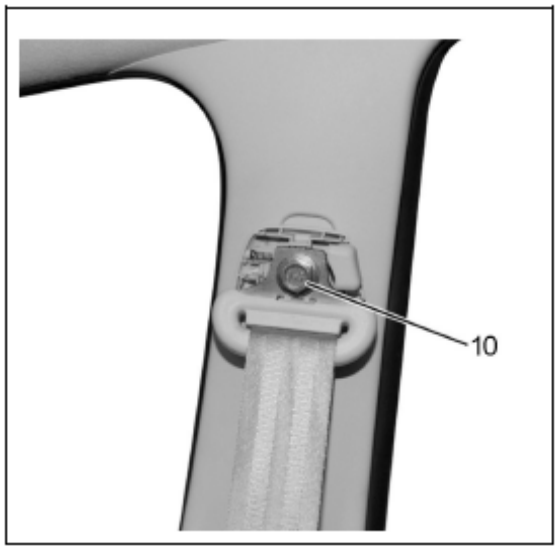
- Disengage snap (7);
- Upper apron of front pillar (3a).

3.1.4. Disassembly of rear seat belt

- Bolt (8);

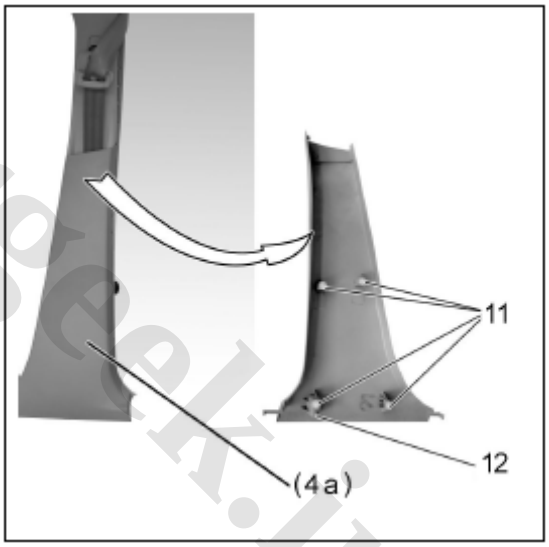


- Push aside the shield (9) in the “a” direction as indicated in the figure.



- Remove bolt (10).

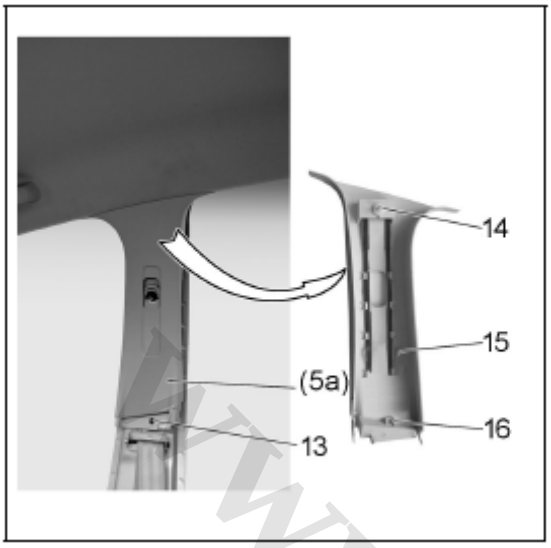
3.1.5. Disassembly of lower apron of center pillar



- Plastic dowel (11);
- Lower apron of center pillar (4a).

Attention Do not damage snap (12).

3.1.6. Disassembly of center pillar upper apron



- Remove screw (13);
- Remove plastic dowel (14);
- Upper apron of center pillar (5a).

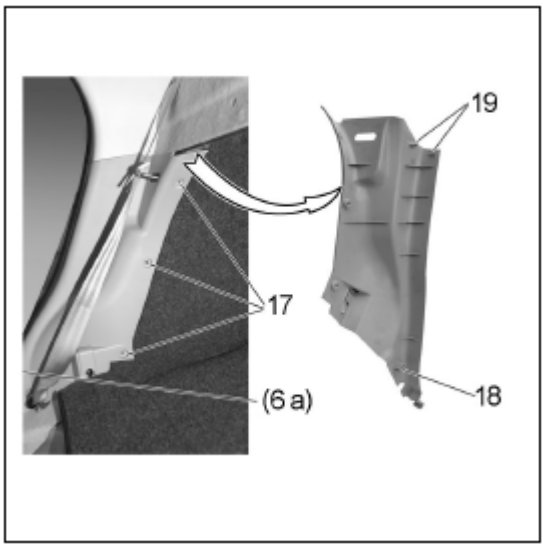
Attention Be careful to avoid damaging the snap detents (15) and (16) as shown in the figure.

Tips: remove rear seat back and lift rear cushion for the convenience of operation.

3.1.7. Disassembly of rear pillar lower apron

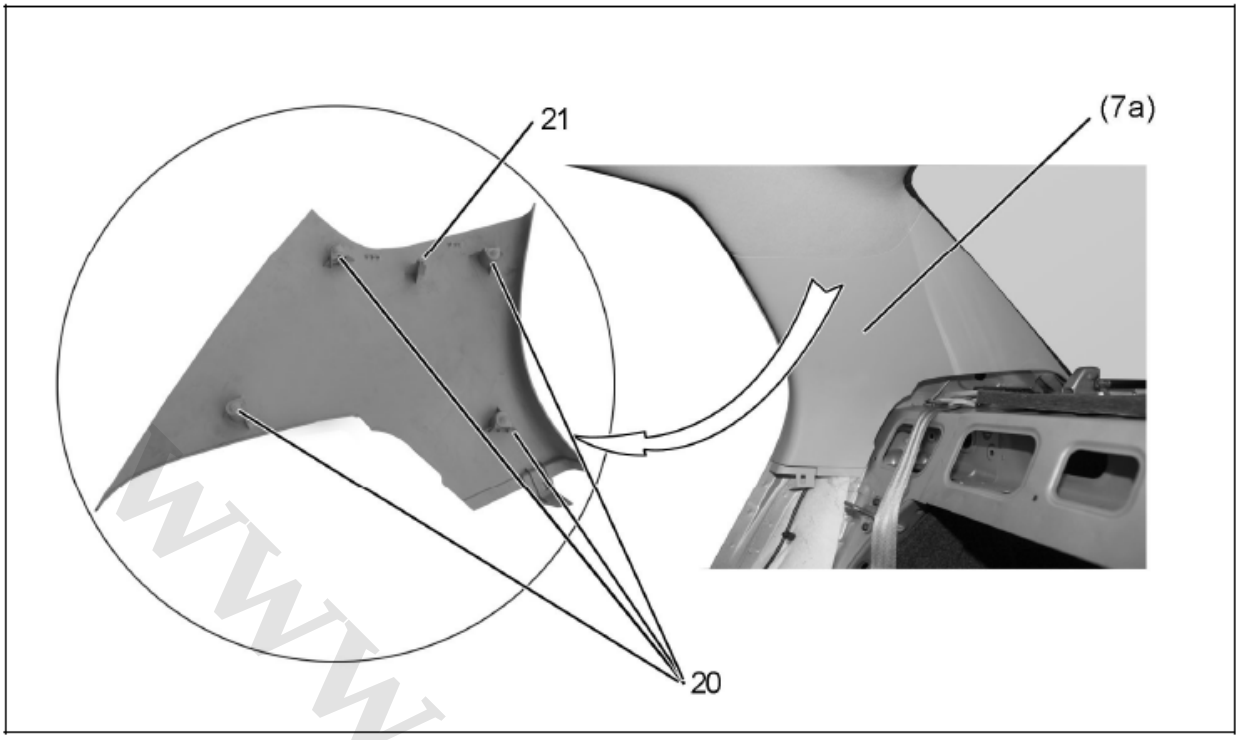
Preparation:

- Remove rear seat
- Remove rear seat belt



- Screw (17);
- Use tool [1] to remove plastic dowel (18);
- Use tool [1] to disengage snap (19);
- Lower apron of rear pillar (6a).

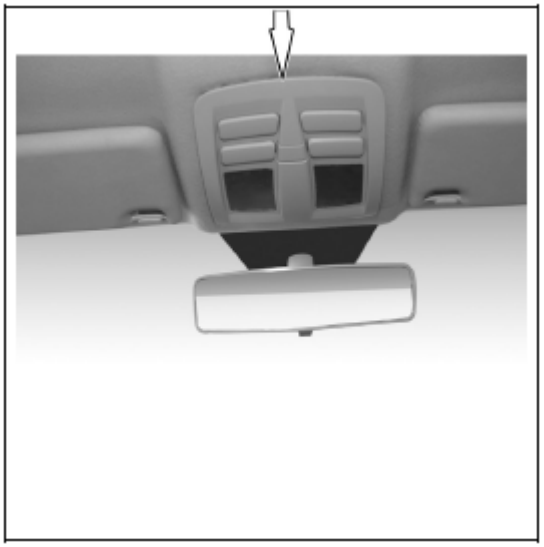
3.1.8. Disassembly of upper apron assembly of rear pillar



- Use tool [1] to remove plastic dowel (20);
- Take down upper apron assembly (7a).

Attention Avoid damaging the location pin (21) as shown in the figure.

3.1.9. Disassembly of front roof lamp



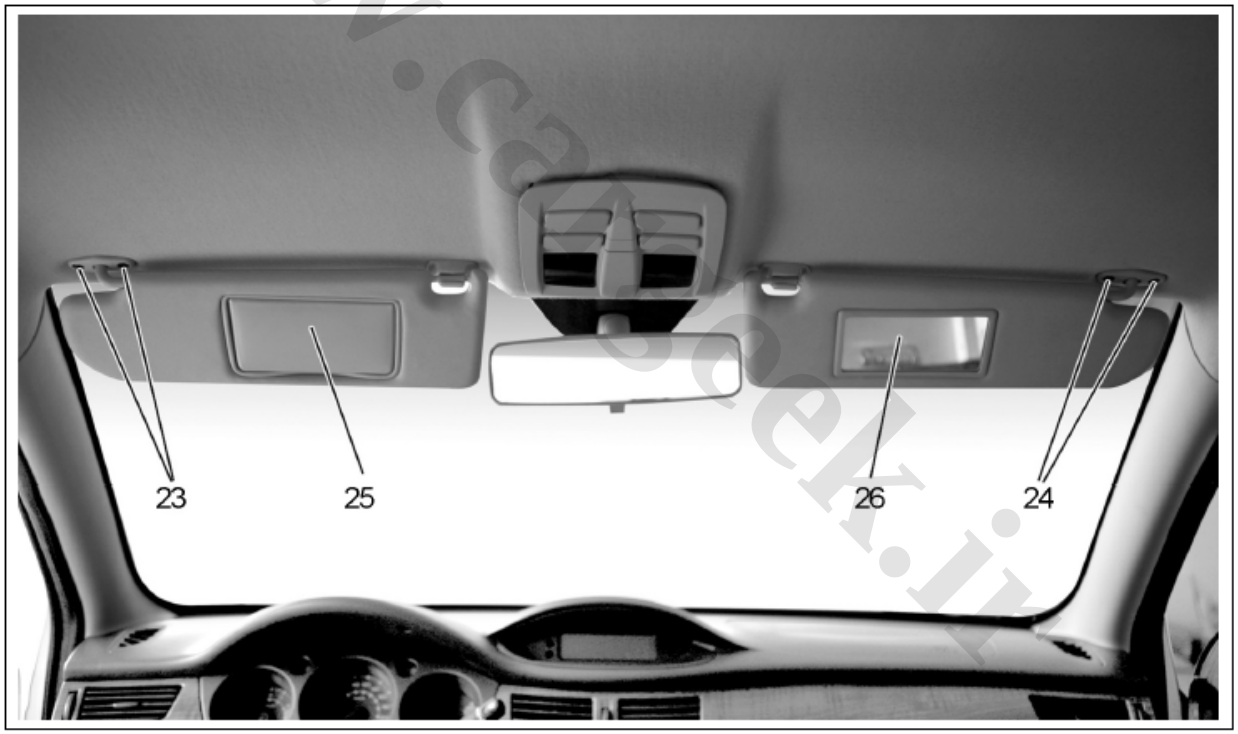
- Push aside roof lamp seat frame in the direction as indicated in the figure;

- Disengage the connector at “a” point;
- Take out front roof lamp assembly.

3.1.10. Disassembly of sunroof trim strip

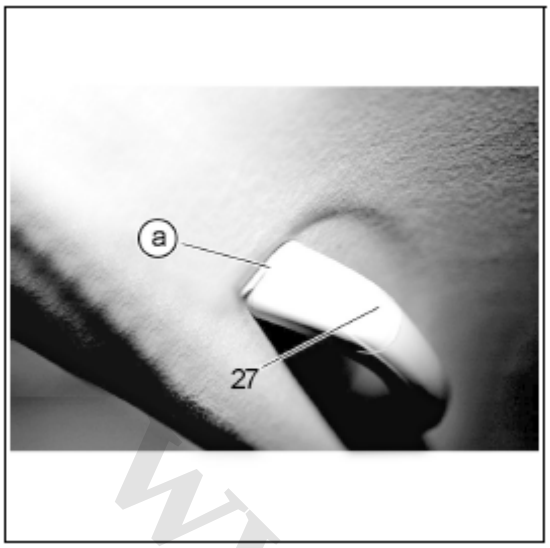
- Remove trim strip (22).

3.1.11. Disassembly of the left and right sun visors

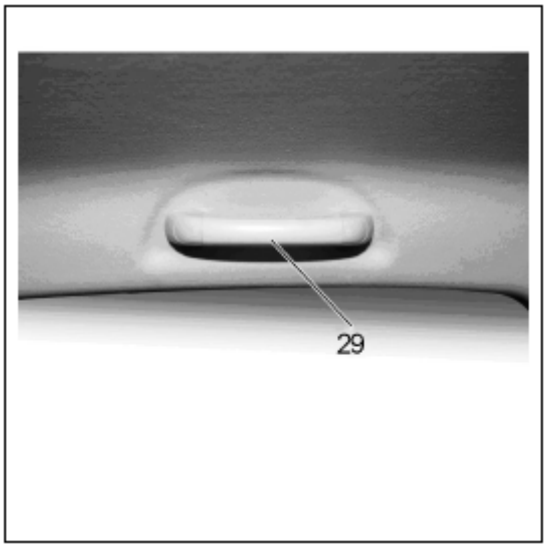


- Remove screws (23) and (24);
- Take down sun visors (25) and (26);
- Remove the fixing screw of sun visor hook and take down hook.

3.1.12. Disassembly of handle



- Observe there is a small opening “a” in the handle;
- Push aside the trim covers (27) on the both sides of handle.



- Take down handle (29).

- Screw (28).

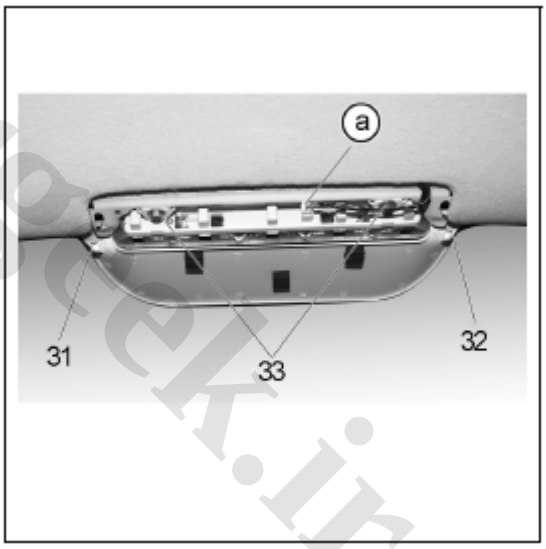
3.1.13. Disassembly of rear roof lamp

- Push aside seat frame outward in the direction as indicated in the figure.

- Disengage the connector at “a” point;
- Take out rear roof lamp assembly.

3.1.14. Disassembly of the 3rd brake light

- Press and hold the snaps at “a” and “b” points.
- Dismantle the cover (30) as shown in the figure.



Snaps (31) and (32).

- Disengage the connector at “a” point;
- Bolt (33);
- Remove the 3rd brake light assembly;
- Remove inner roof trim panel.

Tips: pull out roof from boot.

3.2. Disassembly and assembly of sunroof

- Press down connector snap and disengage connector (1);
- Remove plastic hose and metal clamp (2) and remove tool BF1103;
- Remove the screw (3) of sunroof mounting support.

Attention: the mounting torque of screw (3) and roof is 8±2 N·m.

Attention Assistance is needed during removing screw (3) to avoid accidental fall of sunroof.

4. Assembly

Assembly is in the reverse order of the disassembly.

Disassembly and assembly of sun visor

1. Disassembly

- Remove slide-rail end-stop rivet (1).

- Take care to pull sun visor out of slide rail as shown in the figure to avoid damage.

2. Assembly

- Insert sun visor into side rail;
- Use riveter to rivet end stop.

Remarks:

Sunroof initialization:

Sunroof initialization is to recover the internal parameters of mechanism and electronic control unit of sun roof in abnormal condition to original position and ensure mutually automatic matching through operation. It is advanced operation that is suitable to professional technicians or maintenance personnel.

Mode of initialization:

- Manual: initialization is executed by personnel.
- AUTO: initialization is executed automatically by ECU during sunroof movement. Initialization and its object have no effect on operation, functions and performance. Users are unaware of it.

When needs to initialize:

- ECU is connected to power source for the first time.
- When replacing ECU, the internal parameters of mechanical mechanism and ECU shall match each other.
- After the replacement the mechanical components of sunroof.
- After the replacement of HALL sensor due to fault.
- Stopping point position is different from actual stopping point position.
- Forced initialization by personnel.

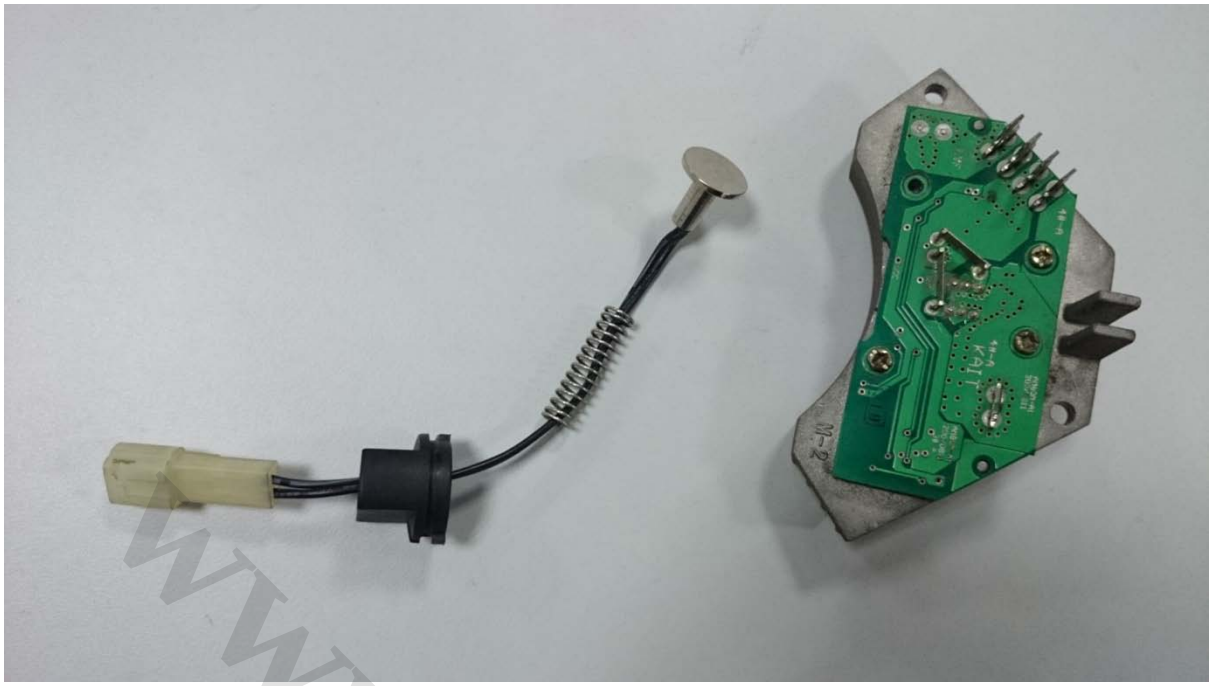
How to initialize:

No.	Applicable situation	Operating steps
1	After replacing auto battery or connecting to battery terminal	1. Turn ignition key to A position or start engine; 2. Press and hold TILT button (7 sec) to make sunroof moves to the highest position and descends a little automatically; 3. Release TILT button.
2	Power-fail recovery of sunroof ECU	
3	After replacing or removing sunroof ECU	
4	Sunroof inchings after shortly pressing SLIDE or TILT button.	

Re-initialize:

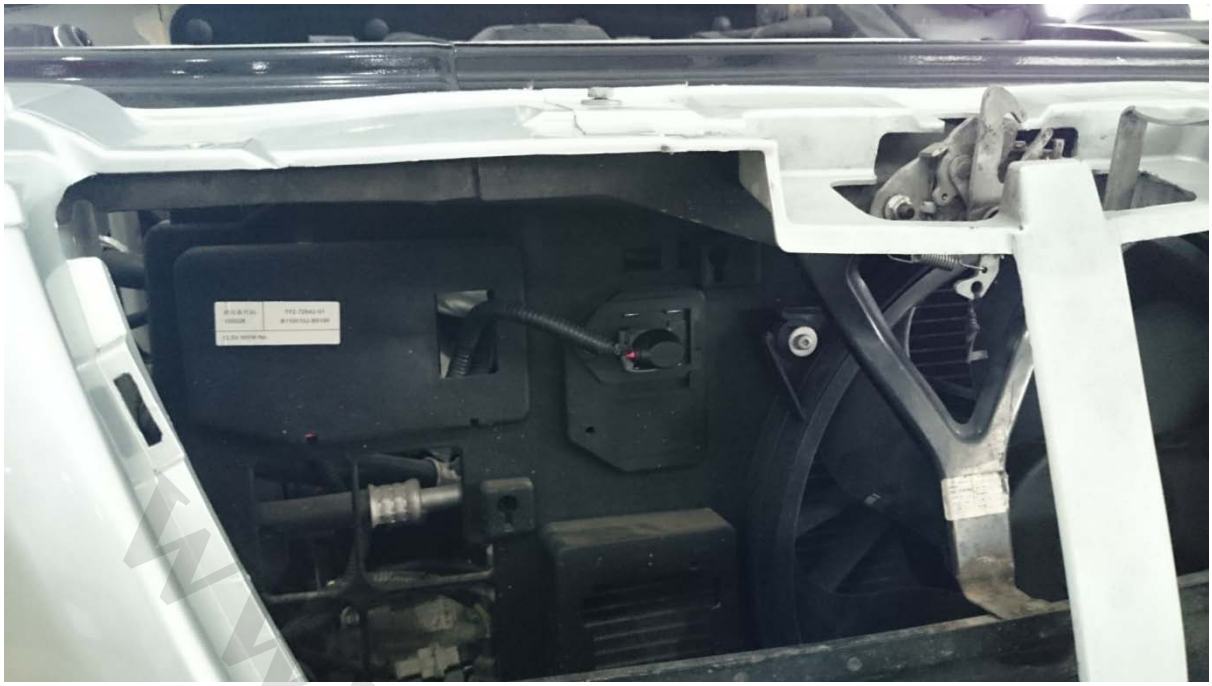
No.	Applicable situation	Operating steps
1	After shortly press SLIDE or TILT button, sunroofs move continuously but stop in wrong positions respectively (for sample: not in place, not fully closed)	1. Turn ignition key to A position or start engine; 2. Shortly press TILT button to make sunroof move to full tilt position; 3. Press and hold TILT button (7 sec) to make sunroof moves to the highest position and descends a little automatically. 4. Release TILT button. Attention If sunroof fails to move to full tilt position after shortly pressing TILT button, initialization operation can't be executed by foresaid method. In such case, disconnect and reconnect auto battery negative terminal and then execute "initialization"

		operation.

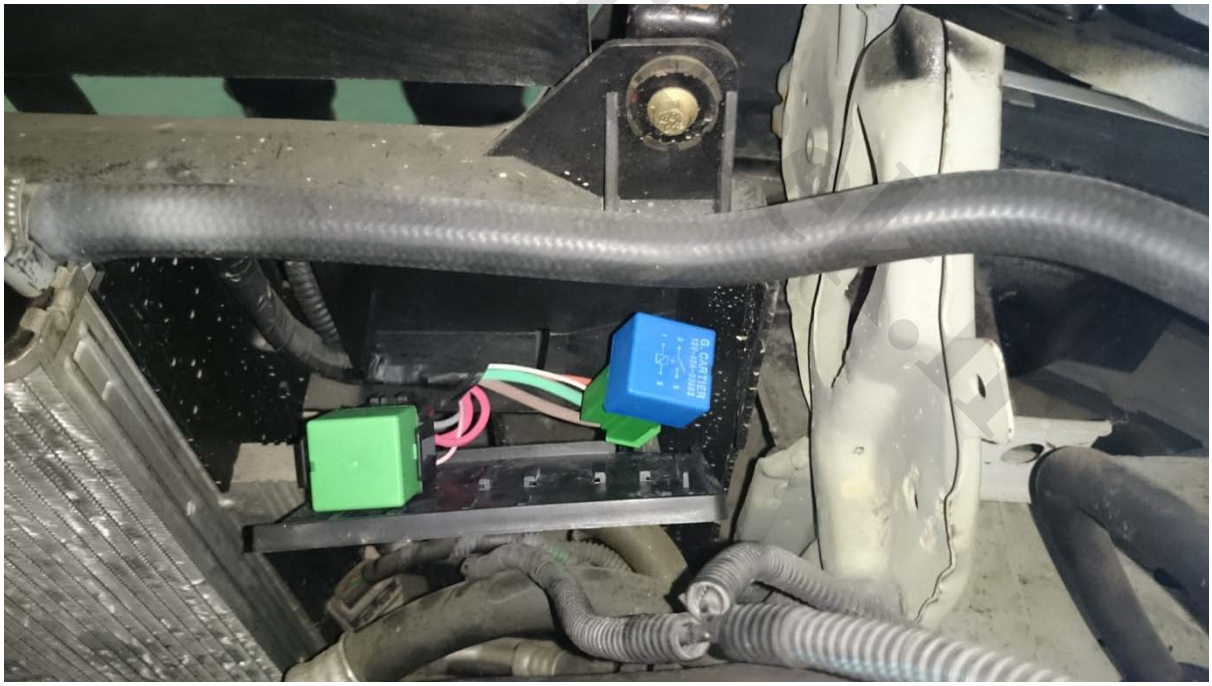


(مدول کنترل سرعت فن بخاری و سنسور دمای بخاری)

(سنسور دمای مایع خنک کننده موتور)

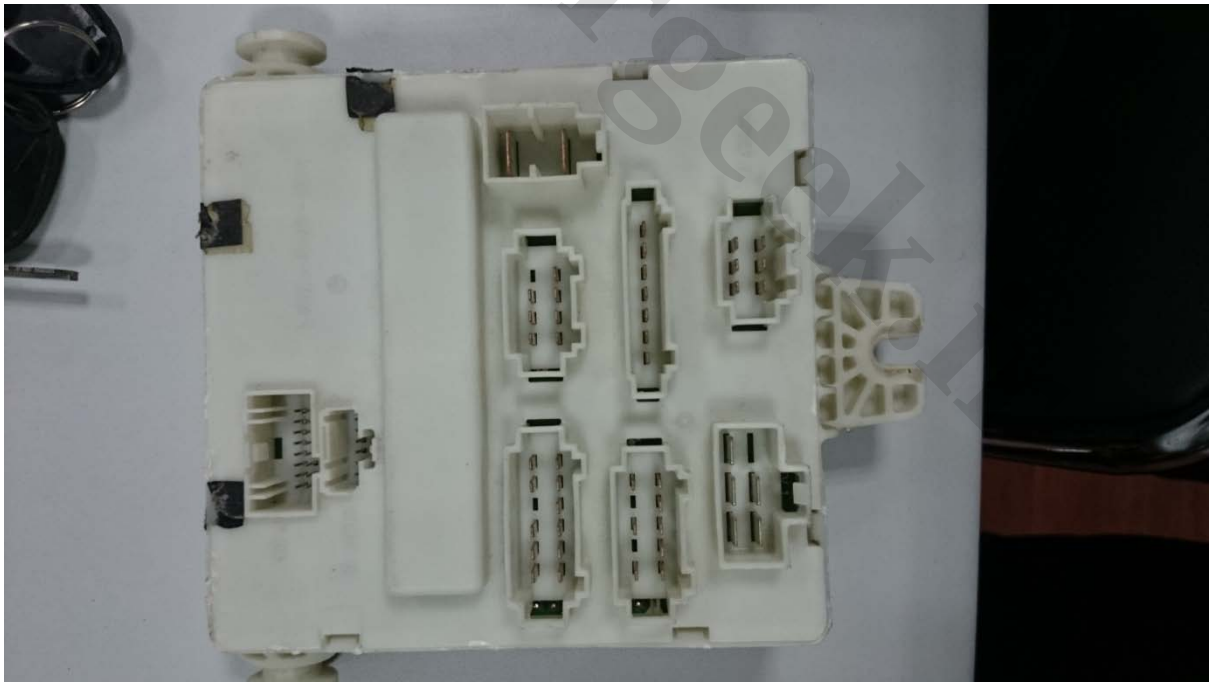


(مقاومت محدود کننده جریان فن رادیاتور)

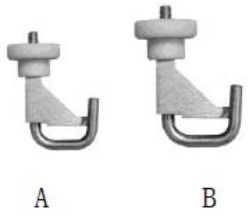


(رله های فن رادیاتور)

(کنترل یونیت موتور، ایمومبیلایزر و سیستم انشعاب برق داخل اطاق)



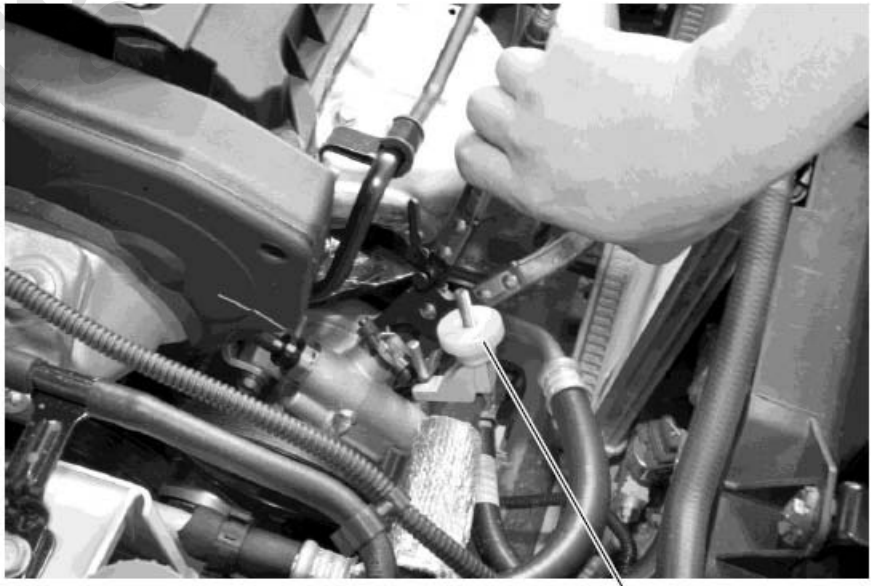
(کانکتورهای سیستم انشعاب برق داخل اطاق)

S/N	Special Tool No.	Special Tool Name	Tool Photo	Number of Complete Sets	Applicable Model	Tool Category	Breakdown Process	Tool Group	Remarks
					Aeolus	By Applicable Assembly	Aeolus		
6	BF0108A/B	Rubber pipe clamp plier	 A B	2	●	Service process for engine	Disassembling and assembling of engine-transmission assembly/power steering bump	S30	

Application: for clamping the soft rubber pipe for vehicle to avoid the leakage of coolant, power steering fluid and make it easy to carry out the service operation without draining the oil

Operation Instruction:

Firstly, unscrew the rubber pipe clamp plier BF0108A, turn the snap gauge to cover the soft rubber pipe with it, and then turn the knob of rubber pipe clamp plier BF0108A to the end to clamp the soft pipe to avoid the leakage of oil, and finally, disconnect the soft pipe connector for service operation.

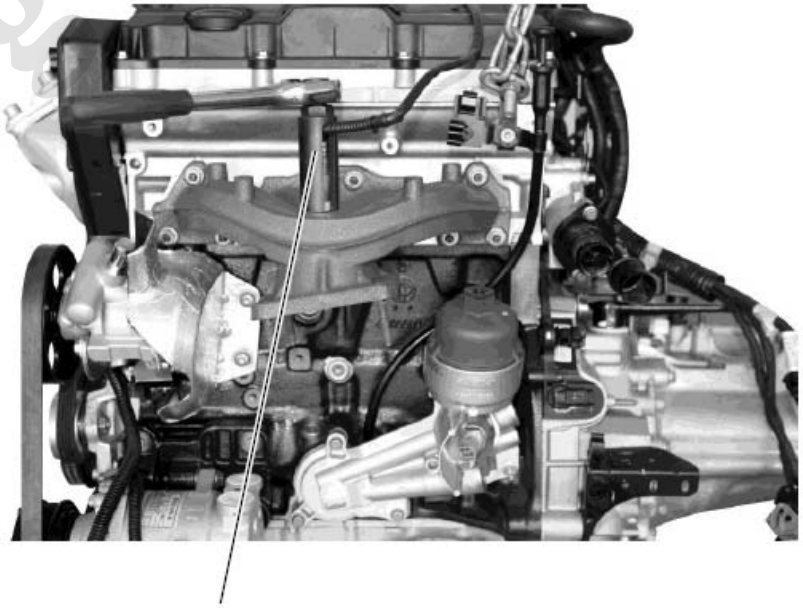


S/N	Special Tool No.	Special Tool Name	Tool Photo	Number of Complete Sets	Applicable Model	Tool Category	Breakdown Process	Tool Group	Remarks
					Aeolus	By Applicable Assembly	Aeolus		
13	BF0116	Disassembling and assembling sleeve for oxygen sensor		1	●	Service process for engine	Disassembling and assembling of front & rear oxygen sensors	S30	

Application: for disassembling and assembling oxygen sensor.

Operation Instruction:

Assemble the end with opening of disassembling and assembling sleeve for oxygen sensor BF0116 as oxygen sensor harness goes, and then disassemble and assemble front and rear oxygen sensor by using it in conjunction with ratchet spanner.



S/N	Special Tool No.	Special Tool Name	Tool Photo	Number of Complete Sets	Applicable Model	Tool Category	Breakdown Process	Tool Group	Remarks
					Aeolus	By Applicable Assembly	Aeolus		
37	BF1103	Removal plier for plastic pin bolt		1	●	Body service tool	Removal of trims	S30	

Application: for checking power steering pipeline pressure.

Operation Instruction:

Clamp the head of the plastic pin bolt with slot at the head of the tool to remove the plastic pin bolt.

S/N	Special Tool No.	Special Tool Name	Tool Photo	Number of Complete Sets	Applicable Model	Tool Category	Breakdown Process	Tool Group	Remarks
					Aeolus	By Applicable Assembly	Aeolus		
38	BF1104	Wiper arm separator		1	●	Body service tool	Disassembling of wiper	S30	

Application: for disassembling and assembling wiper assembly.

Operation Instruction:

Take down the wiper arm nut plug, remove the nut, install wiper arm separator BF1104, and rotate hexagon socket screw to head out the wiper arm.

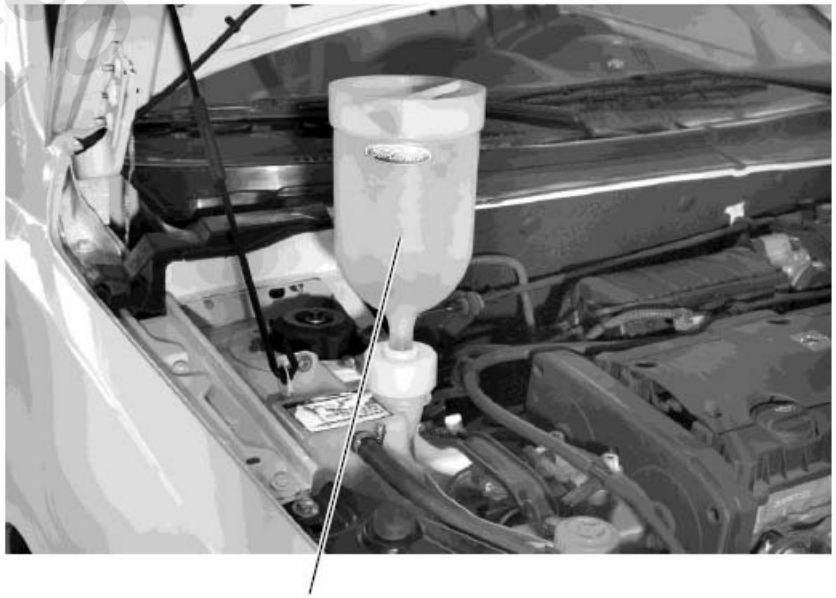
S/N	Special Tool No.	Special Tool Name	Tool Photo	Number of Complete Sets	Applicable Model	Tool Category	Breakdown Process	Tool Group	Remarks
					Aeolus	By Applicable Assembly	Aeolus		
83	BF0104	Coolant filling barrel		1	●	Service process for engine	Draining - filling - exhausting of cooling system	S30	

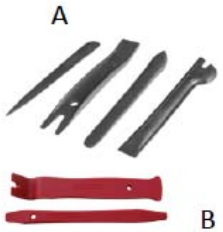
Application: for filling coolant & exhausting.

Operation Instruction:

Remove the coolant reservoir cover, and then fasten the coolant filling barrel onto the coolant reservoir. Push the T-bar in the coolant filling barrel to the bottom to open the coolant filling port, and fill the coolant. Ensure that the coolant level is not below the middle position of the coolant filling barrel. Carry out the exhausting for the engine cooling system (refer to the Service Manual for information on relevant operation processes). After the exhausting, lift up the T-bar in the coolant filling barrel to close the coolant filling port and then remove the coolant filling barrel, and finally tighten the coolant reservoir cover.

Caution: when installing or disassembling, screw the connecting cap of the coolant filling barrel rather than directly turn the coolant filling barrel, in order to prevent the joint between the coolant filling barrel and the connecting cap from being damage which may cause coolant leakage.



S/N	Special Tool No.	Special Tool Name	Tool Photo	Number of Complete Sets	Applicable Model	Tool Category	Breakdown Process	Tool Group	Remarks
					Aeolus	By Applicable Assembly	Aeolus		
99	BF1102A/B	Inner trim removal tool		5	●	Body equipment service tool	Removal or inner trim	S30	

Application: for disassembling instruments and body exterior trims.

Operation Instruction:




Table of Contents

Introduction

X-431 automobile diagnostic platform(DFPV Diag. for short) is a newly developed special automobile diagnostic computer. Including all the advantages of its predecessor, DFPV Diag. is designed to cover diesel and gas-fueled vehicle models of 12V&24V voltage.

It featured ergonomic design, compact structure, convenient use and strong expandability.

Features

- No need for battery conversion when testing 24V trucks.
- Fast upgrading via the internet to keep up with the latest vehicle models.
- International design to adapt to all diagnostic sockets.
- Including all the electronic control system.
- Unique data transfer to ensure fast operation.
- Connection with PC to keep service records through optional X431 PCCENTER.
- Large compact flash memory for data storage.
- CAN diagnostic adaptor for CANBUS models.

Precaution on Operation

- Do not insert and pull out CF card too frequently. Press ejector button before pulling out the CF card. Insert the CF card into the CF card slot, ***keep the face labeled "UPSIDE" upward***, and make sure the card is fully seated.
- Handle with care. Avoid hitting. Unplug the power after operation.
- Put the stylus into the hole of DFPV Diag. handle after operation. And put the cables, connectors and other accessories into box.
- Hold the connector when plug or unplug it. Do not pull the cable for unplugging.

Maintenance

Storage

- Store the DFPV Diag. on a flat and dry place with suitable temperature.
- Never put the DFPV Diag. in direct sunlight or near the heating source.
- Prevent smoke, water and oil from entering the DFPV Diag..
- Avoid shock, dust, moisture and extremely high temperature.
- Do not disassemble the main unit. Clean the outside surface and screen with soft cloth that is dipped with a little water if the main unit is dirty. This should be done after the machine is turned off and the power cable is removed.
- Periodically turn on the DFPV Diag. main unit if it is not operated for long time to avoid moisture.

Take Care of the Screen

- Turn off the power if it is expected not to operate the DFPV Diag. for a long while. It can extend the life of screen and save energy.
- Do not put anything on the main unit to avoid damage to the internal parts.
- Use the equipped stylus to click the screen. Do not use fingernail or other sharp object to touch the screen.
- Dust may be accumulated on the LCD screen owing to electrostatic. It is suggested to buy the special LCD screen wiper to clean the screen gently. Do not wipe the screen with bare finger.

- Never use chemicals to clean the screen.

Maintenance of CF card

- Do not pull out the CF card when the DFPV Diag. main unit is working.
- Pull out the CF card and store it in the place without magnetic field after the machine is turned off. Do not turn on/off the DFPV Diag. main unit too frequently.
- CF card reader/writer may be used when doing updating. The CF card must not be pulled out when the CF card reader/writer is being used. Otherwise, the data in the CF card will be lost. Procedure for pulling out the CF card is as follows:

  On the desktop of Windows, open the window of "My computer". Click the right mouse button on "Removable disk" to pop up a menu. Select "Ejector (J)" in the menu. Then pull out the CF card. The written data may be lost if the CF card is pulled out discretionarily. When you want to use the CF card again, put it in.

- In case DFPV Diag. CF card is damaged and the program in the card can not be used, please use the following procedure to remake the CF card:

  ✧ Log onto the website "www.X431.com". Enter your username and password to log in. Select the SMARTBOX No., and then download the DFPV Diag. UPDATE TOOLS, DISPLAY PROGRAM, SYSTEM DATA and necessary diagnostic program into your computer.

  ✧ Install the DFPV Diag. UPDATE TOOLS into computer.

  ✧ Format the DFPV Diag. CF card.

  ✧ Run the DFPV Diag. UPDATE TOOLS and write the display program, system data and diagnostic programs onto CF card.

Outline of DFPV Diag.

Figure 1-01

Figure 1-01 shows the outline of DFPV Diag.. Additional parts, such as main cable, power cable, power adapter, CF card, CF card reader/writer, diagnostic connectors and so on, are equipped for vehicle diagnosis.

Ports

See Figure 1-02 for DFPV Diag. connection ports.

Figure 1-02

Hardware Configuration

For vehicle diagnosis, some accessories (e.g. connectors and cables) should be used to

connect the DFPV Diag. main parts to the vehicle diagnostic socket.

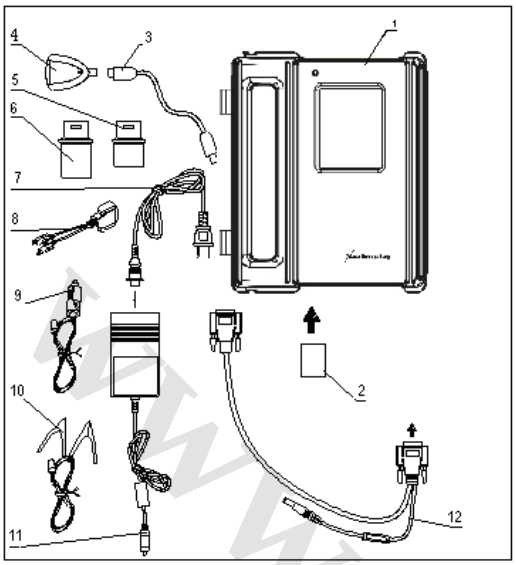


Figure 1-03

DFPV Diag. configuration is as shown in Figure 1-03.

No.	Name	Description
1	DFPV Diag. Main Unit	The screen of main unit can display the operation buttons, the test result and the help information.
2	CF card	Store diagnostic software and data
3	USB cable	Connect CF card reader and computer
4	CF card reader	Read or write data from/to the CF card
5	Diagnostic connector	SMART OBDII -16E Dozens of connectors are provided/available for various vehicles. Here shows a typical one.
6	CAN BUS diagnostic connector	Test CAN BUS system.
7	Power cord	Connect the AC 100-240V (50-60Hz) outlet and the power adapter.
8	Diagnostic connector with cable	Connect the vehicle diagnostic socket
9	Cigarette lighter cable	Get power from the vehicle cigarette lighter
10	Battery cable w/two clips	Get power from the vehicle battery
11	Power adapter	Convert 100-240V AC power into 12V DC power.
12	Main cable	To connect the diagnostic connector and DFPV Diag. main unit

Printer Operation

Figure 1-04 shows the back view of the DFPV Diag..

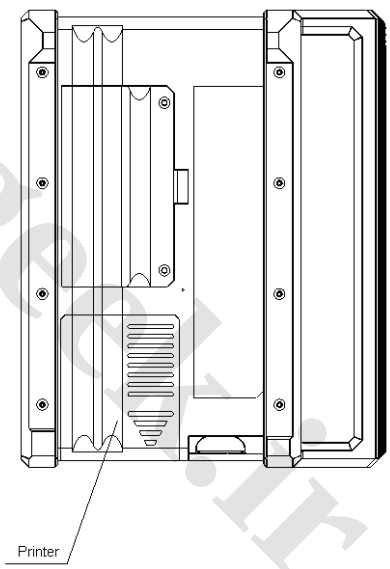


Figure 1-04

Mounting Paper

Miniprinter uses thermal paper with size of Φ 30 × 57mm (internal hole Φ 7mm). Refer to Figure 1-05 for mounting the paper.

1. Open the housing of main unit and get out

main unit.

2. Open the paper lid on the back of the printer. See Figure 1-05a.

Figure 1-05a

3. Take out the spindle and mount the paper scroll onto the spindle. Put the paper spindle into the printer with correct direction. The paper may not be fed if the direction is wrong. See Figure 1-05b.

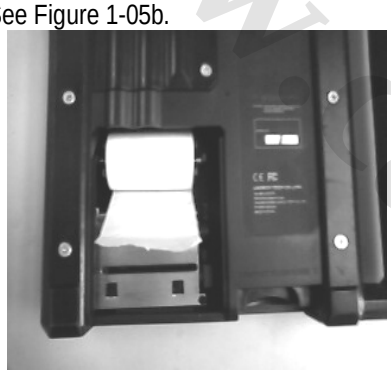


Figure 1-05b

4. Open the side plate, pull up the pressing rod and lead the paper into slot. See Figure 1-05c.Turn the feed knob clockwise until the paper comes out of the outlet. See Figure 1-05d.

Figure 1-05c

Figure 1-05d

5. Adjust the paper and attach the paper lid.
6. Put main unit into housing.

Specifications

- Operating system: LINUX
- CF card: 512M
- Main unit I/O: standard serial/parallel port
- Main unit power source: DC12V
- Main unit power: about 5W
- Printer: high-speed thermal mini printer
- Screen: 240*320 LCD touch screen with back light

Vehicle Diagnosis

Button Descriptions

The main buttons on the operation interface and their functions are as follows:
[BACK]: to return to the previous interface.
[START]: to do the next operation.
[EXIT]: to exit the diagnostic program.
[OK]: to confirm and execute.
[CANCEL]: to cancel present operation and return to the previous interface.
[PAGE UP]: to display the previous page. It is inactive if the current page is the first page.
[PAGE DOWN]: to display the next page. It is inactive if the current page is the last page.
[HOME]: return to the main interface.
[BOX INFO]: to show the version information of SMARTBOX.
[HELP]: to display the help information.
[RETRY]: to do the unfinished operation once again.

Conditions for Test

- Turn on the key.
- The rated voltage of the DFPV Diag. is 12V. The voltage of vehicle battery may be 12V or 24V.
- The throttle should be in the closed position.
- DFPV Diag. can be operated in the temperature of 0-50℃. (30 minutes of warming-up may be necessary when the ambient temperature is 5℃) .

Select Diagnostic connector

Various diagnostic connectors are supplied with DFPV Diag.. Select a specific connector according to the tested vehicle.

Let's take Benz heavy-duty vehicle (Benz HD for short) as example to describe the test procedure.

Note:
The test procedure for different vehicle make is similar. Please refer to the described procedure and the screen prompts when diagnosing other vehicle.

Benz HD is usually equipped with 14PIN or 16PIN diagnostic socket.

Diagnostic Socket Location

The location of different model will be different. For details, please refer to Service Manual.

Connection

- Insert the CF card into the CF card slot, *keep the face labeled "UPSIDE" upward, and make sure the card is fully seated*.
- Insert one end of the main cable into the diagnostic socket on SMARTBOX.
- Connect the other end of the main cable to one end of SMART OBDII -16E.
- Connect the other end of SMART OBDII -16E to diagnostic connector.
- Connect the other end of the diagnostic connector to the vehicle diagnostic socket. See Figure 2-01.

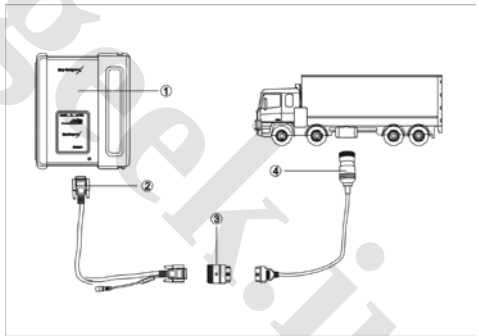


Figure 2-01

①-DFPV Diag. ②-Diagnostic main cable③-SMART OBDII -16E ④-Diagnostic connector

Note:
If the power supply on vehicle diagnostic socket is insufficient or the power pin is damaged, you can get power in the following ways:

- *From cigarette lighter: insert one end of the cigarette lighter cable into the lighter socket in vehicle and connect the other end to the power connector of DFPV Diag. main cable.*

- *From battery: clamp the two clips of battery cable on the positive and negative poles of battery and insert another end of the cable into the power connector of DFPV Diag. main cable.*

- *From power adapter: connect the power adapter to the 100-240V AC outlet with power cord. Insert the 12V DC plug of power adapter into the power connector of DFPV Diag. main cable*

Operation

Entering Function Menu

After connection, press [POWER] key to start DFPV Diag..
After starting the main unit, press [HOTKEY] (or click [Start] button on the main menu, and select [GAG]→[GD Scan] on the pop-up menu), the screen will display the home page of vehicle diagnosis as shown in Figure 2-02.

Figure 2-02

Button descriptions:

- *[QUIT]: to exit the diagnostic program.*
- *[BOX INFO.]: to display hardware and software version of SMARTBOX.*
- *[HELP]: to display help information.*
- *[START]: to start the diagnosis.*

Click [START] button, the screen will display the vehicle make menu as shown in Figure 2-03.

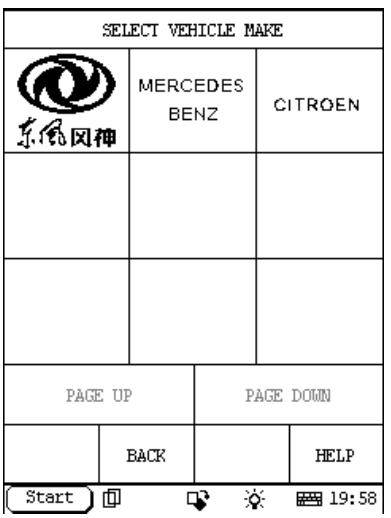


Figure 2-03

Button descriptions:

- *[BACK]: to return to the previous interface.*
- *[PAGE UP]: to display the previous page, it is inactive if the current page is the first page.*
- *[PAGE DOWN]: to display the next page, it is inactive if the current page is the last page.*
- *[HELP]: to display the help information.*

Click the icon of DFBF on the vehicle make menu. The screen will be displayed as shown in Figure 2-04.

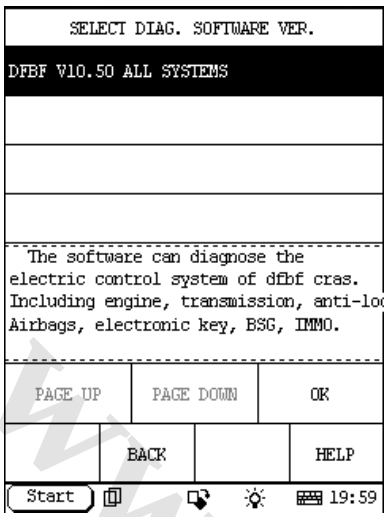


Figure 2-04

Button descriptions:

- *[BACK]: to return to the previous interface.*
- *[HELP]: to display the help information.*

Click [DFBF V10.50 All Systems]. DFPV Diag. begins reset and check the SMARTBOX, the screen will be displayed as shown in Figure 2-05.

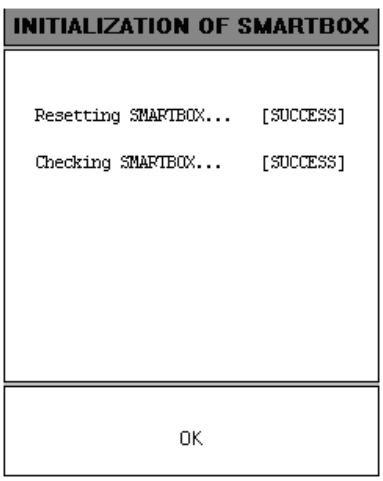


Figure 2-05

Button descriptions:
[OK]: to go on the test.

Click [OK]. The display will be as shown in Figure 2-06.

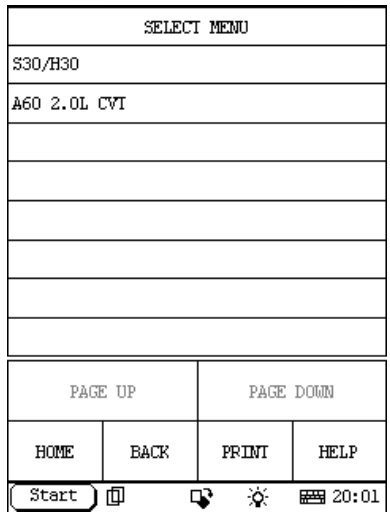


Figure 2-06

Click [S30/H30]. The display will be as shown in Figure 2-07.

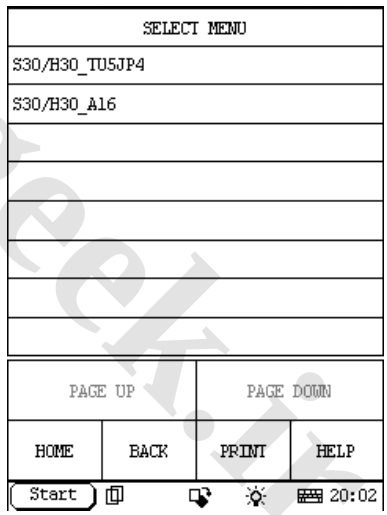


Figure 2-07

The software can diagnose the electronic control systems of S30 up to 2012.

After selecting menu "S30/H30_TU5JP4" , the screen displays the menu of test systems as shown in Figure 2-08

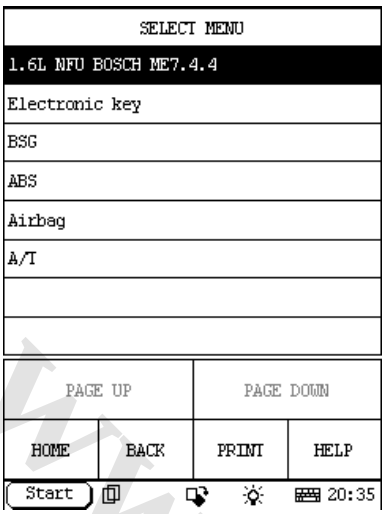


Figure 2-08

There are several pages for the menu. Click [PAGE DOWN] to see the next page.

Button descriptions:

- *[PAGE DOWN]: to display the next page.*
- *[HOME]: to return to the homepage of vehicle diagnosis.*
- *[BACK]: to return to the previous interface.*
- *[HELP]: to display the help information.*

Click [1.6L NFU BOSH ME7.4.4].If the communication is successful, the screen will display the menu as shown in Figure 2-09.

Note:
The test operation for different systems is similar. Here we take [Engine electronics] as an example to describe.

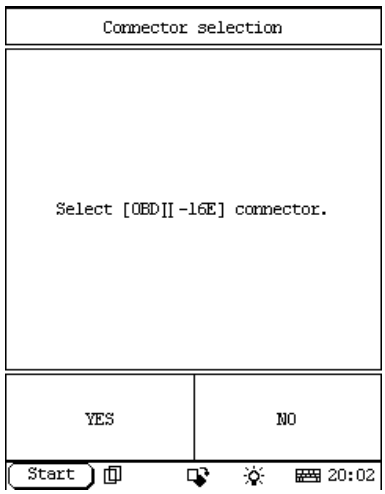


Figure 2-09

Button descriptions:

- *[YES]: to go on the test.*

Click [YES] button. The screen will display the function menu as shown in Figure 2-10.

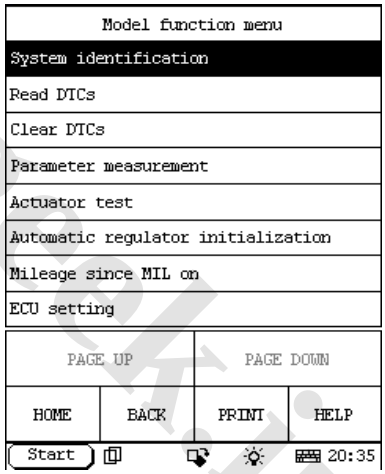


Figure 2-10

Button descriptions:

- *[HOME]: to return to the homepage of vehicle diagnosis.*
- *[BACK]: to return to the previous interface.*
- *[HELP]: to display the help information.*
- *[PAGE DOWN]: to display the next page.*

Control Unit Version

Click menu [System identification]. The screen will display the information on ECU of the tested system. See Figure 2-11.

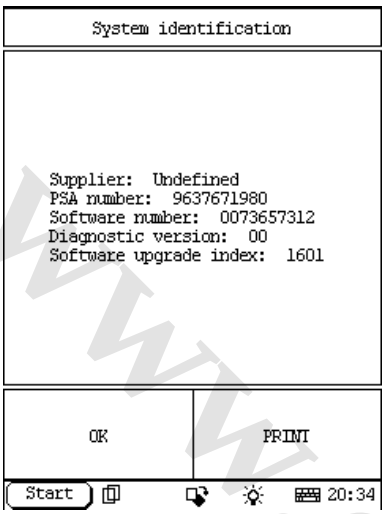


Figure 2-11

Note:
The information is from the vehicle ECU. If you have any question during test, don't hesitate to contact LAUNCH to get answer as soon as possible.

Click [OK] button to return to the function menu.

Read DTCs

Click [Read DTC] in the function menu. DFPV Diag. starts to test the fault code. The screen will display the test result when the test is finished. Figure 2-12 is an example of a test.

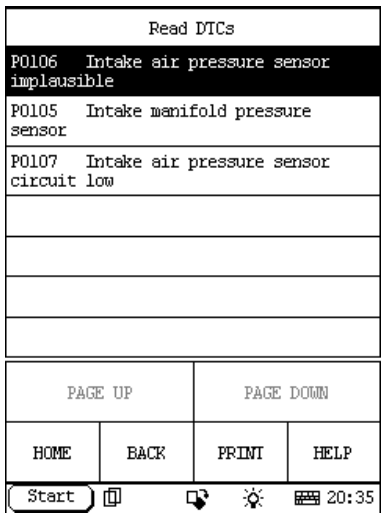


Figure 2-12

Button descriptions:

- *[HOME]: to return to the homepage of vehicle diagnosis.*
- *[BACK]: to return to the previous interface.*

If there is no fault code in the tested system, the display will be as shown in Figure 2-13.

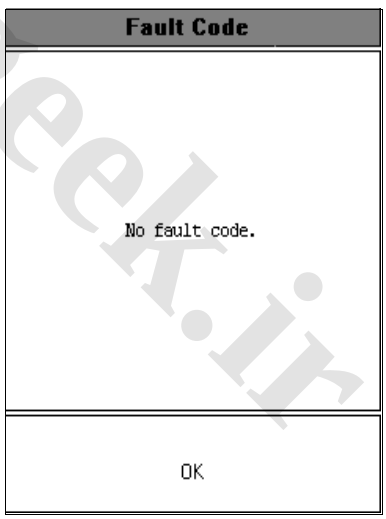


Figure 2-13

Click [OK] button to return to the function menu.

Clear DTCs

Click [Clear DTCs] in the function menu. DFPV Diag. starts to erase the fault code. See Figure 2-14.

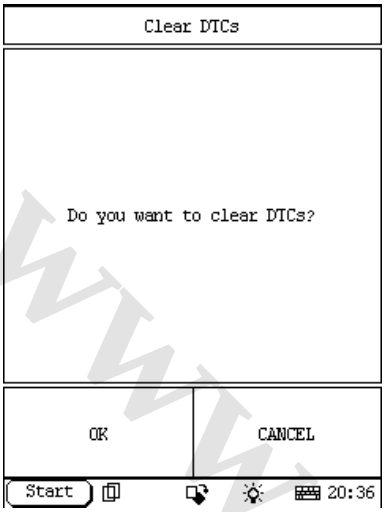


Figure 2-14

If all fault codes are erased or there is no fault code in the tested system, the screen will be displayed as shown in Figure 2-15.

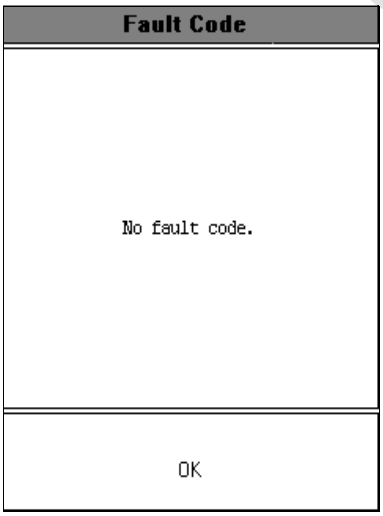


Figure 2-15

Click [OK] button to return to the function menu.

Actuator test

Click [Actuator test] in the function menu. The screen will display the information as shown in Figure 2-16.

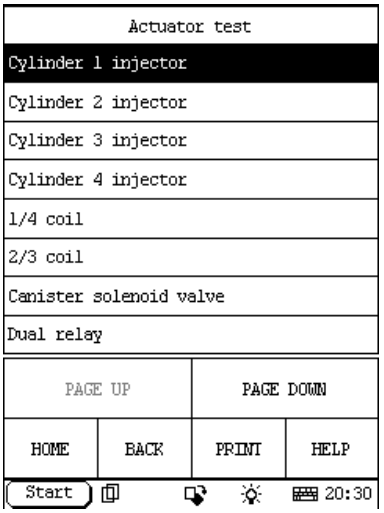


Figure 2-16

Click the corresponding data stream items.

Button descriptions:

- *[PAGE DOWN]: to display the next page.*
- *[HOME]: to return to the homepage of vehicle diagnosis.*
- *[BACK]: to return to the previous interface.*
- *[HELP]: to display the help information.*

The screen will display the information as shown in Figure 2-17.

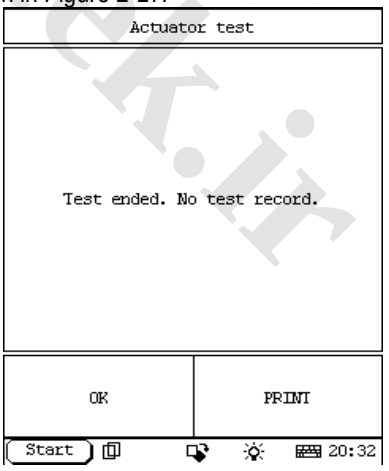


Figure 2-17

Read DateStream

Click [Parameter measurement] in the function menu. The screen will display the information as shown in Figure 2-18.

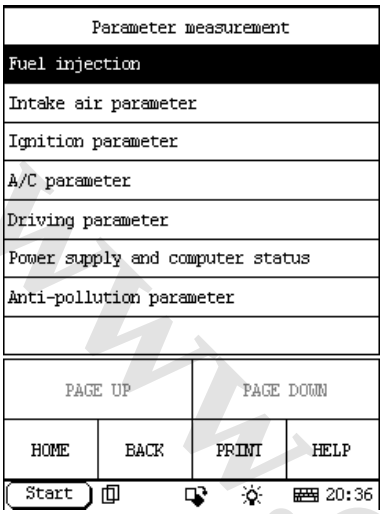


Figure 2-18

Click the corresponding data stream items.

Button descriptions:

- *[PAGE DOWN]: to display the next page.*
- *[HOME]: to return to the homepage of vehicle diagnosis.*
- *[BACK]: to return to the previous interface.*
- *[HELP]: to display the help information.*

Click [Fuel injection] in the function menu. The screen will display the information as shown in Figure 2-19.

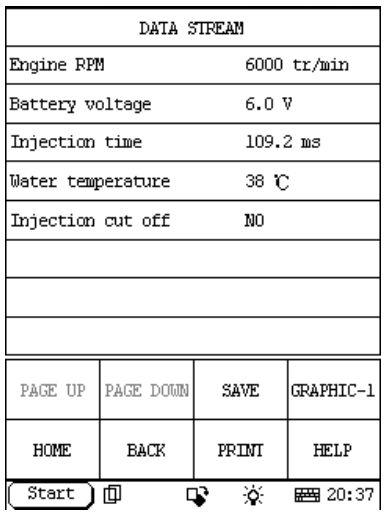


Figure 2-19

Click [GRAPHIC-1] in Figure 2-19, the screen will display the wave form of the first data item. Click [PAGE DOWN], it will display wave form of next data item. See Figure 2-20.

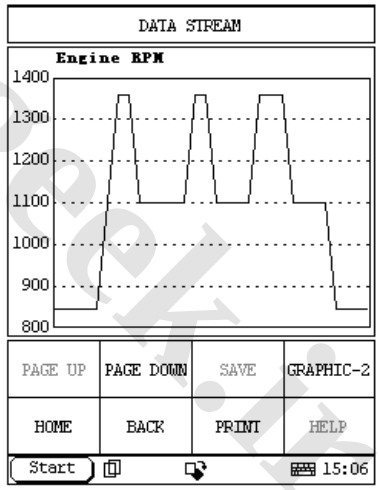


Figure 2-20

Click [GRAPHIC-2] to display the waveforms of 2 data stream items. It is convenient for users to make live comparison between two correlative data stream items.

Note:

- *The two display modes -- [GRAPHIC-1] and [GRAPHIC-2] can be switched.*

Record Data Stream

Record data stream function is mainly used for:

A. Recording and saving the data under normal driving status as the standard value for reference;
B. Snapping and recording pending trouble codes for analysis.

If you want to record the selected data stream, please click [SAVE] in Figure 2-19. The screen will display the menu as shown in Figure 2-21.

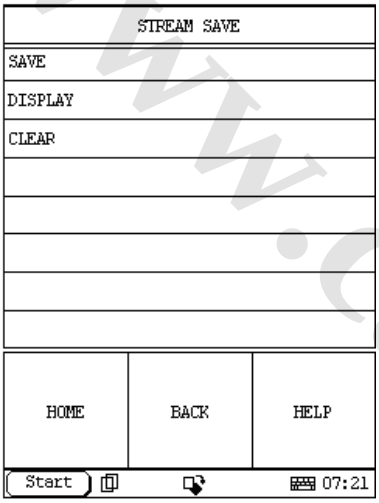


Figure 2-21

Note: the SAVE in Figure 2-19 is actually the menu. Only enter this menu, can you save, display and clear data

.

Click [SAVE] to enter the interface as shown in Figure 2-22. Now it starts to record data stream.

Click [STOP] to terminate the record. And the recorded data stream will be saved into the save folder in the CF card.

The data in the CF card can be uploaded to PC or service department of Launch and the recorded data stream can be analyzed.

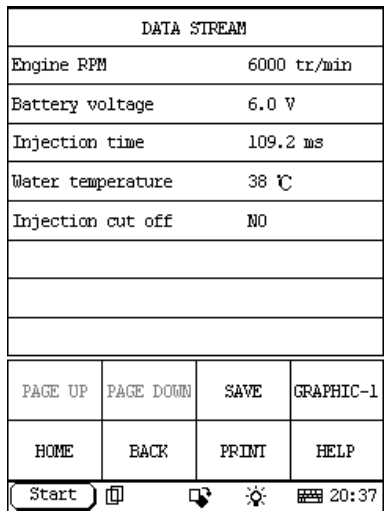


Figure 2-22

Note: the name of the file can be automatically generated.

Download DEMO program from www.x431.com to your DFPV DIAG., power DFPV DIAG. through DC, and start the DEMO program to enter the interface as shown in the Figure 2-21.

Click DISPLAY and the screen will display the recorded file as shown in Figure 2-23. The name of file is composed of software name, record date and record time.

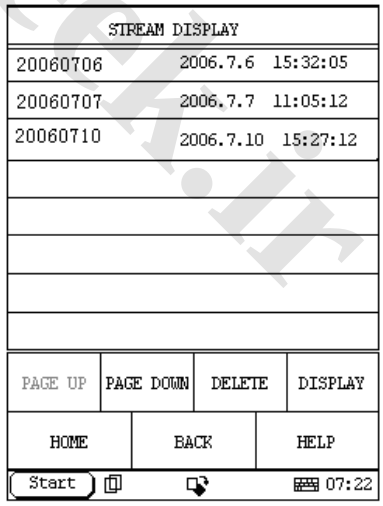


Figure 2-23

Note: if there is more than one page in the file, you can click PAGE DOWN to view.

Choose one recorded file, and click DISPLAY to enter the interface as shown in Figure 2-24.

You can click [<-] or [->] to view the previous frame or the latter frame.

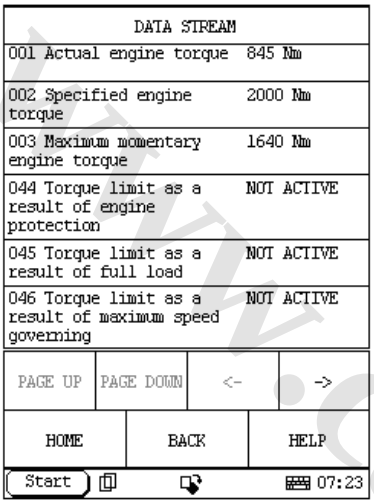


Figure 2-24

Update of Diagnostic Software

The Internet update function of DFPV Diag. provides user with a convenient and quick way to download the software from our website for update.

LAUNCH put the latest version of software to www. X431. com and display the massage on the news page. User can use computer to visit the Website in any part of the world. After registration, the latest version of software can be downloaded. Then user can update his DFPV Diag. by unzipping and installing the software.

Hardware Requirement

Necessary hardware:

1. A computer that can access the Internet.
2. A CF card reader/writer and a CF card that need to be updated.

See Figure 3-01 for hardware connection.

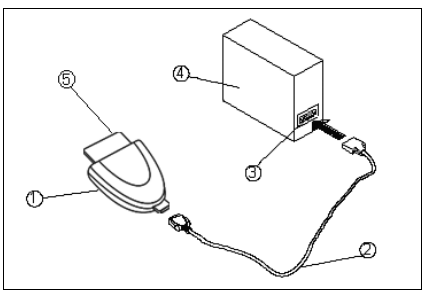


Figure 3-01

1-CF card reader/writer 2-USB cable
3-USB Port 4-Computer 5-CF card

- Insert the CF card into the CF card reader/writer.
- Connect one end of the USB cable② to the port of the CF card reader/writer①, and the other end to the USB port of the computer.

User Registration

Log on www.X431.com. Select the favorite language on the pull-down menu at the upper left of the interface to enter the homepage. See Figure 3-02.

Figure 3-02

Click "Register" in the interface as shown in Figure 3-02 to open the window as shown in Figure 3-03.

Figure 3-03

Note:
When the member purchases one or more products after registration, he should log onto the member area, and then click "product control" to register the newly purchased product. Refer to the section "Member login".

The terms of service is shown in the screen. After reading and fully understand it, click "I accept" button to enter the interface as shown in Figure 3-04.

Fill in Product Information

Fill in the serial No. of DFPV Diag. smartbox, registration No. and dealer code in the interface as shown in Figure 3-04.

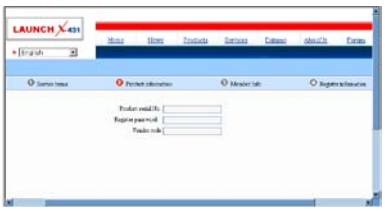


Figure 3-04

The serial No. is marked on the back of smartbox. The registration No. is in an envelope delivered with the product (the number must be kept confidential). The dealer code is attached on the last page of the user's manual.

After the information is filled, click "Next step" to enter the next interface as shown in Figure 3-05.

Note:

1. *When a product is sold, the dealer will log onto www. X431. com and enter the dealer code in the "Dealer administration" area so that the user can do effective registration later. User should contact the dealer if registration can not be done effectively.*
2. *If the filled serial No. or registration No. is invalid, the screen will display the message as shown in Figure below. Click "OK" button to return to the previous interface to re-fill the correct numbers.*

Fill User Information

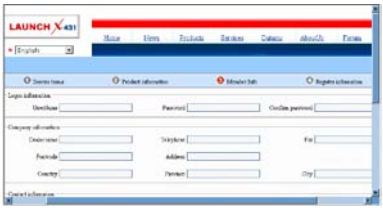


Figure 3-05

After information is filled in the interface shown in Figure 3-05(The red textbox must be filled. After registration, we will send the confidential information to your registered e-mail, so please make sure that your e-mail is valid.), click "Next step", and then the screen will display the interface shown as Figure 3-06. Click "OK' then the registration is completed.

Figure 3-06

Note:
Only the registered user can download and update the software.

Software Update

Member Login

The user becomes the registered member after registration. Member can log in the website by filling username, password and user type in the interface as shown in Figure 3-02.

Note: when choosing the user type, the common users may choose the customer. If the dealer and the branch want to log in the website, please use the user information given by LAUNCH head office.

After log successfully, the screen will display the interface as shown in Figure 3-07(The default interface is download center interface).

Figure 3-07

[Download Center]: Refer to "software download".

[Purchase Center]& [Update center]: Refer to "software purchase and update".

[Member Information]: Display and renew the current member information.

[Product Registration]: Register newly purchased product.

[Order Information]: Check or cancel the unpaid order.

[Renew Password]: After entering the right old password, then can renew the password.

[Awarded for complaint] If users meet some trouble during the operation, he can feedback to LAUNCH. Effective complaint will be awarded by LAUNCH

[Logout]: Users exit the registration.

Software Download

After log successfully, the screen will enter the [download center] interface. (See Figure 3-07) Registered user can download the software that installed in the download center.

Before download, users had better set up a new folder named [DFPV Diag. update] on the computer desktop and put the download file to the[DFPV Diag. update] according the next steps.

Note:

1. *Software update of free charge will be provided by LAUNCH for one year. The free period is from the registration date on the website, not the purchase date. That is, during one year after the registration, users can free download the corresponding software.*
2. *If there is not the latest version in the download center, users can buy the version in the purchase center or in the update center. In the purchase center, users can buy the software that doesn't install in the download center. In the update center, users can buy the software that is beyond the free download period. After purchase successfully, the purchased software will be automatically added to the download center list.*

Update Tool Download

Before update, users must download the update tools. On the drop-down menu, users select the language then click [download]. The screen will display the interface as shown in Figure 3-08.

Figure 3-08

Click [save] to put it into the[DFPV Diag. update].

Display Program Download

When downloading the diagnostic program, users can also download the display program. On the drop-down menu, users select the language then click [down].Click [save] on the pop-up menu to put the program into the[DFPV Diag. update].

Diagnostic Program Download

On the drop-down menu, select the language and the version (The default version is the latest version). Click [down] icon, then click [save] on the pop-up menu to save the file.
Click [view] to learn the detailed information of the version.
Users can down the diagnostic program into the [DFPV Diag. update]. Up to now, the software that is for update is downloaded completely.

Figure 3-09

Software Update

Open the "DFPV Diag. update" folder, and double click the icon  . Then install the update tool according to the prompts on the screen.
When the installation is complete, the "DFPV Diag. update tool" icon will appear on the desktop.
Double click the "DFPV Diag. update tool" icon to run the program. The program will automatically check the downloaded update files, including the diagnostic program and the display program. See Figure 3-10

Figure 3-10

Select the module for update in the interface shown in Figure 3-10, and click "Update" icon to update. When the update is completed, prompts will appear to notify successful update.

Software Purchase and Update

If users can't find the software that he needed, at this time users should buy the software in the purchase center. Log on the www.X431.com then enter the interface as shown in Figure 3-11.

Figure 3-11

Click [purchase center] to choose serial number, and then tick in front of software number.

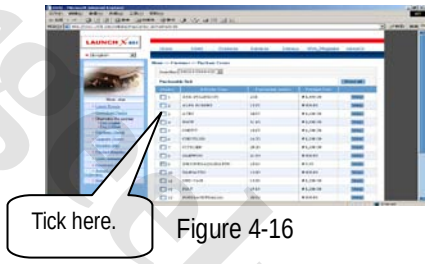


Figure 4-16

Take AUDI as an example, click [view] behind AUDI, and the screen will display the detailed information about the AUDI diagnostic software.

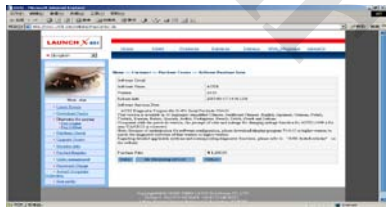


Figure 4-17

Click [order] to add the selected software to shopping cart. See Figure 4-17.

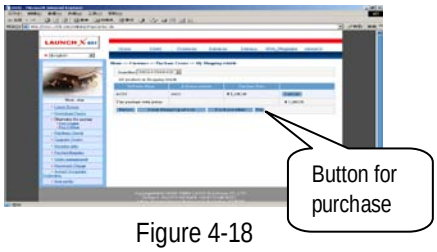


Figure 4-18

Click [pay] to buy the software. The bought software will be automatically added to the user's download center.

Click [clear] to clear all the software in the shopping cart.

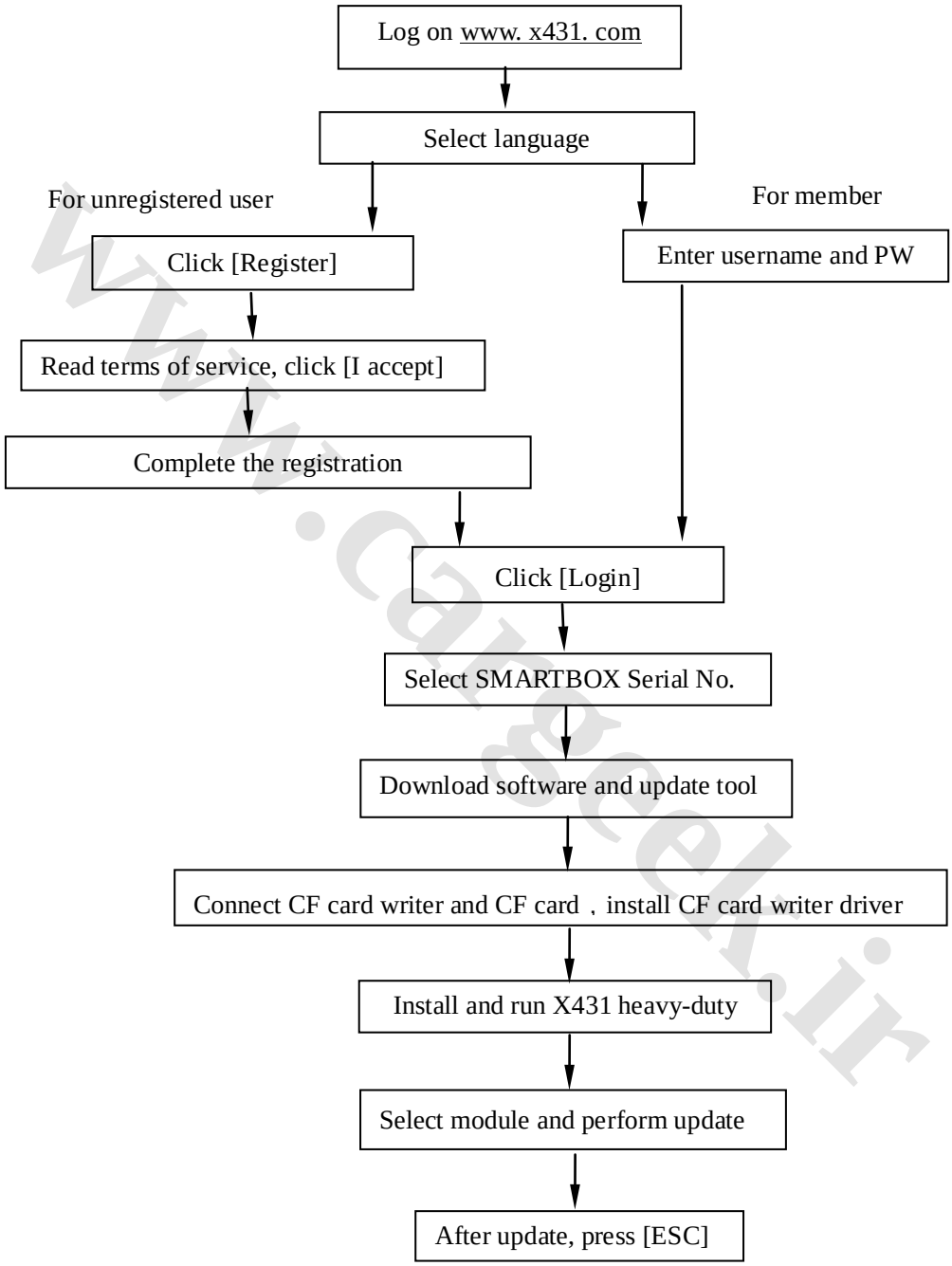
Click [purchase other] to buy other software. See Figure 4-18

.

Note:

The operation for update center is the same as that for the purchase center.

Flow Chart of DFPV Diag. Update for New User



Main Unit

Introduction

Interface

Turn on the power source, and then press [Power] key on the machine. The screen will display the prompts about touch screen calibration. Press [Hot] key (refer to the section "Calibrate Touch screen" for detailed steps) if you want to make calibration, otherwise, you can wait until it displays the start interface as shown in Figure 4-01.

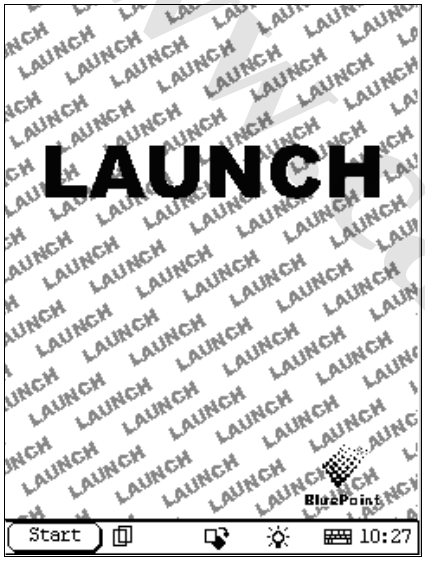


Figure 4-01

Note:
An interface for User Register will be displayed when the machine is started at first time. Refer to the section "User Register" for detailed steps.

When you want to turn off the machine, press and hold [Power] key for at least 2 seconds.

[Start] button**:** Its function is the same as that in Windows. Click it to pop up the start menu. The items and their respective functions in the menu are shown in the following table.

[ ] Active Taskbar Icon: Click it by stylus to display and switch the executed programs.

[ ] Overturn Icon: Click it by stylus to overturn the menu at 180 degrees

[ ] Soft Keyboard Icon: Click it to activate the soft keyboard. Then you have two ways to choose:

1. Input by soft keyboard;
2. Input by writing board.

Functions:

PIM (Personal Information Management)	Memo	To record all kinds of important information and ideas, and make corresponding classification.
	Address	To store the detailed information of relative, friends, colleagues and business partners, which can be easily edited, retrieved and searched.
	To Do	It is convenient for user to record the business to do or being done, to delete or add task records, to arrange the priority of tasks, and to browse the classified tasks.

	Schedule	To arrange the appointments, journeys and meetings in a whole day; to check time schedule on business daily, weekly, monthly and/or annually; and to describe the place, time and other details for each schedule record.
Tools	Calculator	Both simple and scientific calculators are available.
	World Time	The time of many big cities in the world are offered. It is a helpful assistant for your travel.
	Mini Dictionary	An English-Chinese dictionary embodies a large number of words, which cover all fields to overcome your inconvenience in language.
	Picture View	To enjoy all kinds of pictures which can be zoomed in/out.
	Run	To start executable applications which are based on the operating system of the unit.
Game	FIR	It is a kind of chess.
	Reversi	To play for a while in your leisure time.
Control Panel	Application	To link the application with the 'Start' menu, or delete it from the 'Start' menu.
	Power Management	To preset the use of power to save on electricity as possible.
	Clock Set	To set the system time.
	Contrast	To adjust the contrast of display.
	Language Set	To select language to be used.
Vehicle maintenance	Vehicle diagnosis	Professional function of vehicle diagnosis.
	Sensor test and simulation	To test the sensor on vehicle and simulate the output signal from the sensor.

Input

Note: To input data, please activate Soft Keyboard with stylus and use the stylus in the subsequent operations.

Using the Soft Keyboard

Activate and Hide

You can click Soft Keyboard icon on the bottom of the touch screen to activate the soft keyboard, and click again to hide it.

Input by Soft Keyboard

You have two ways to choose. One is to input by Soft Keyboard just like normal keyboard, but with stylus instead of finger. The other is to input by writing board.

Click [En] button, it will switch from normal keyboard to writing board [Hw]. And click [Hw] button, it will switch back.

The Function Key

There are four function keys on the upper-right of the Soft Keyboard. SBC/DBC case, punctuations, Keyboard/Writing board, and the Soft Keyboard position can be determined by clicking one of the four keys for each of the functions from left to right. (Refer to Figure 4-02)

The four function keys at the upper-middle position are for moving the cursor leftward, rightward, upward or downward.

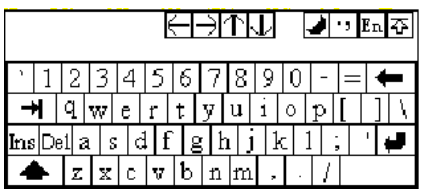


Figure 4-02

In keyboard mode, the key at the bottom left of the keyboard is [Shift] key. Click it to change the lowercase letter into the uppercase letter, and the numeral key into special symbol (same as the special characters corresponding to the numeral keys in normal keyboard). The white key at the bottom right of the Soft Keyboard is space key.

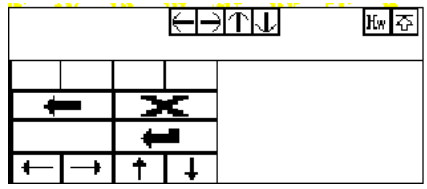


Figure 4-03

In writing board mode (refer to Figure 4-03), there are eight function keys at the lower left of the soft keyboard. The four ones on the bottom implement the function: to move the cursor leftward, rightward, upward or downward. The other four functions are (from left to right): to delete the first character before the current cursor, clear the hand-writing section, space and return.

Input **by** Keyboard

1) Open an interface, such as User information.
2) Click Soft Keyboard Icon in the tool bar to activate Soft Keyboard.
3) Click the characters on Soft Keyboard to enter data. (Refer to Figure 4-04)

Input by Writing Board

1) Open an interface, such as Memo.
2) Click [New] button.
3) Click the function key to switch to Writing Board. (Refer to the section "Use for Soft Keyboard").
4) Write on the white board to the right of the Soft Keyboard. Enter the information by function key operation.

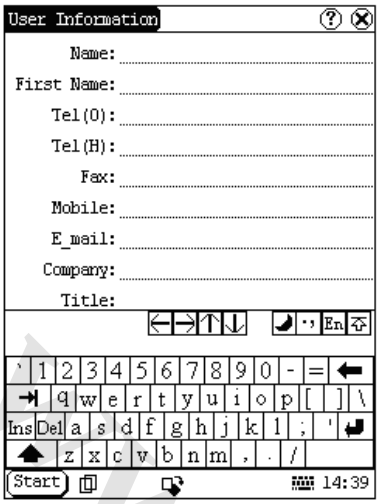


Figure 4-04

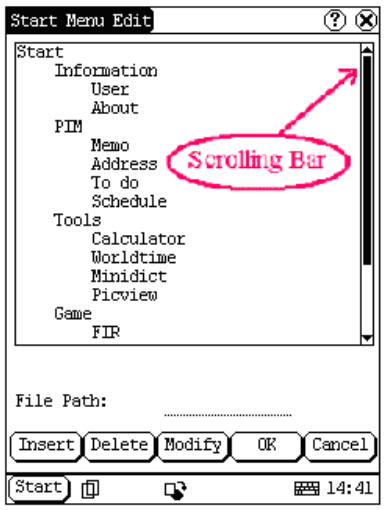


Figure 4-06

Control of App

Check Box

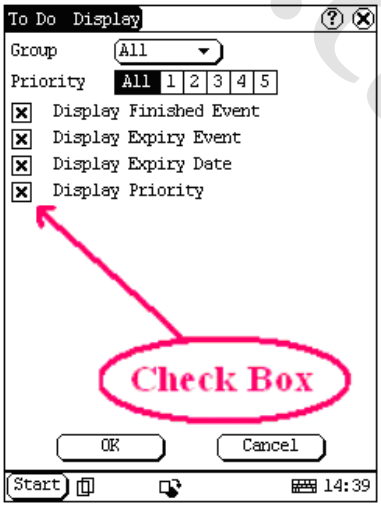


Figure 4-05

Click the check box to select the function. When the function is selected, 'X ' will be marked in the check box and the function description will be displayed on the right of the check box. You can select several functions at the same time. (Refer to Figure 4-05)

Scrolling Bar

Scrolling Bar is usually at the right side of the touch screen. You can click or drag it to operate. If the content can't be displayed completely in one page, moving the Scrolling Bar can turn to next page. (Refer to Figure 4-06)

Common Button

[⊗] Button at top right corner of the interface: After clicking it, current interface will be closed. When editing is being done, clicking of the button will be treated as quitting the editing.

[?] Button at top right corner of the interface : After clicking it, the help information will be shown.

[Cancel] Button in the interface: After clicking it, current interface will be closed.

Help

Click [?] button at the top right corner of the interface to get helpful tips for current interface.

Tools and Game

Tools

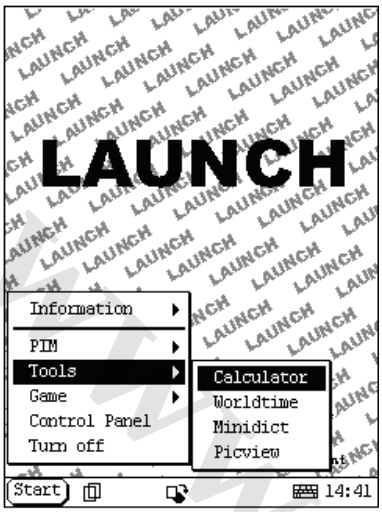


Figure 4-07

1) Click [Start] button.
2) Select 'Tools' in the pop-up menu.
3) Select the function needed in the pop-up submenu. (Refer to Figure 4-07)

Calculator

This calculator can perform not only common calculations as a simple calculator, such as addition and subtraction, but also the function operations as a scientific calculator, such as logarithm and factorial. (Refer to Figure 4-09).

1) In the pop-up menu of 'Tools', select 'Calculator' to open the Calculator interface.
2) Click the square overlap icon on upper left of the screen to switch between scientific calculator and simple calculator.
3) Click 'Unit Conversion' button to switch between unit conversion calculator and simple calculator.

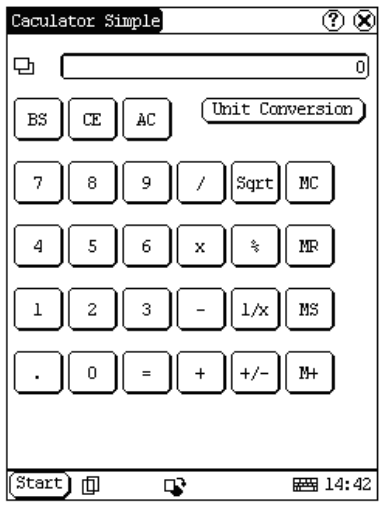


Figure 4-08

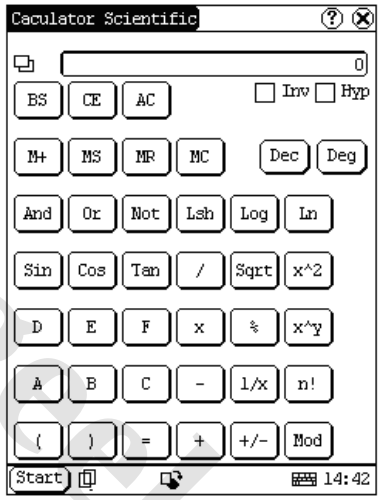


Figure 4-09

Common Calculator (Refer to Figure 4-08):

1) Click numeral keys on the screen to input.
2) Or activate Soft Keyboard, and click numeral key on Soft Keyboard to input.
3) The operation is the same as that for normal calculator.

Unit Conversion Calculator (Refer to Figure 4-10):

1) Click 'Unit type' button at the top right corner to select unit type.
2) Input the number to be converted in the blank next to the unit name, and then you will see the conversion result.

3) If you want to return to simple calculator, please click 'X' button at the top right corner to close the current interface.

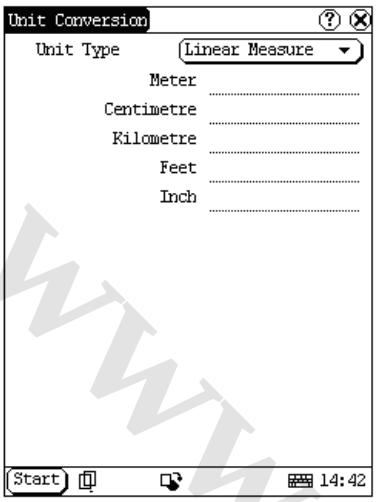


Figure 4-10

World Time

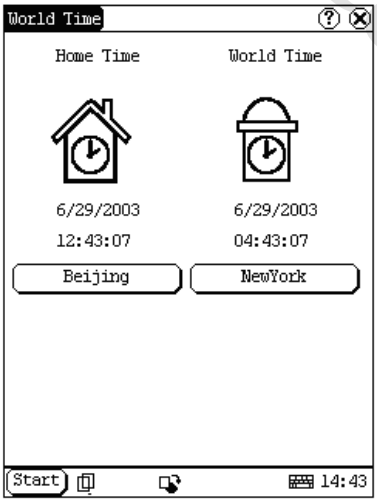


Figure 4-11

1) In the pop-up menu of 'Tools', select 'world time' to open the world time interface.
2) Click the button under the 'Home Time' icon to select region.
3) Click the button under the 'World Time' icon to select region.
4) Then you can see the time directly. (See Figure 4-11).

Dictionary

1) In the pop-up menu of 'Tools', select 'Dictionary' to open the Dictionary interface. (See Figure 4-12)
2) Activate Soft Keyboard, and input words.
3) Select the word from the list on the left.
4) Click the word, and then you can find the translation in the right list.

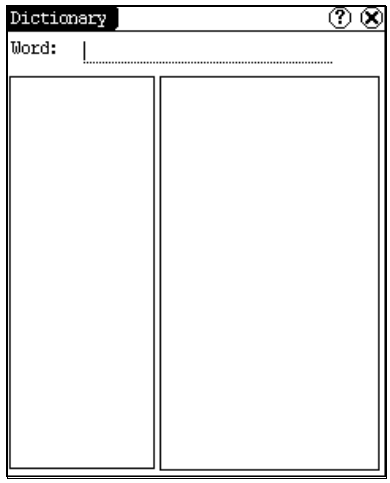


Figure 4-12

Picture View

1) Click [Start] button.
2) Select 'Tools' in the pop-up menu. (See Figure 4-13)
3) In the pop-up 'Tools' list, select 'Picview' to open the Picture interface.
4) In the Picture interface, click  icon in the toolbar on the top. (See Figure 4-14)
5) Select directory from the left list interface.
6) Select file from the right list interface.
7) Click [Parent Dir] button, and you can see the directory of current directory's parent.
8) You can see the directory of the picture at the right side of 'Path'.
9) You can see the file name of the picture at the right side of 'File'.
10) Click [OK] button to open the picture.

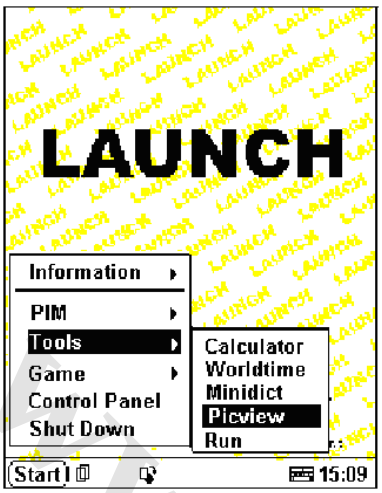


Figure 4-13

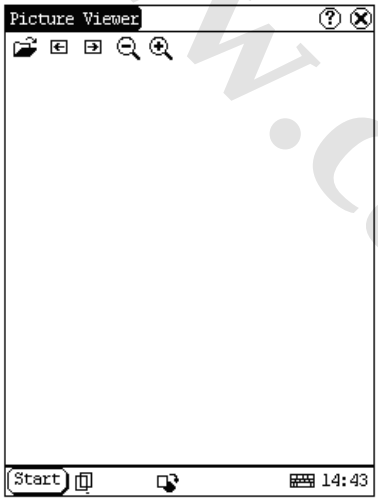


Figure 4-14

Browse the pictures in current directory

1) In the Picture interface, click icon on the top to browse the previous picture.
2) In the Picture interface, click icon on the top to browse the next picture.

Note:

This operation is needed only when more than one picture has been stored.

Zoom in and zoom out:

In the Picture interface, click or icon on the top, then you can zoom in or zoom out the current picture at will.

Game

Figure 4-15

1) Click [Start] button.
2) Select 'Game' in the pop-up menu.
3) Select the function in the pop-up submenu. (See Figure 4-15)

FIR

1) In the pop-up submenu of 'Game', select 'FIR' to open the Chess Board.
2) Click black or white chessman to begin the game. The one who select the black chessman will start first. (See Figure 4-16)

Rules for the game:

You must try to make your five chessmen line up and prevent your adversary from achieving this goal in the process. The one whose 5 chessmen are lined up first is winner. You can choose the black or white chessman at the bottom of the Chess Board before starting playing.

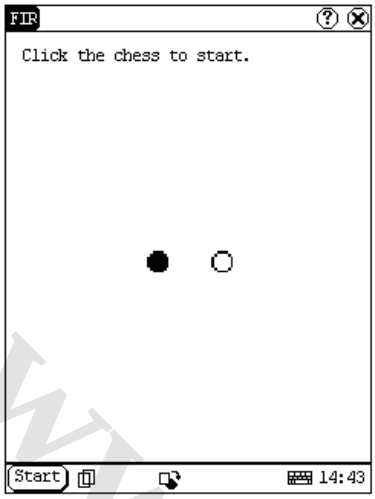


Figure 4-16

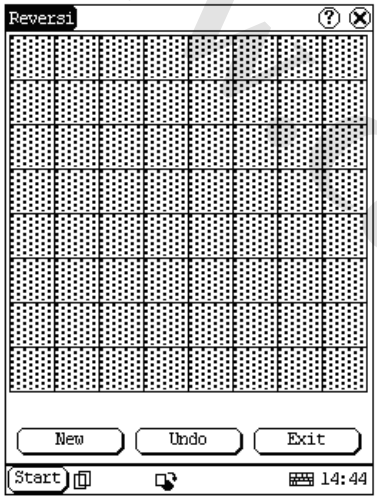


Figure 4-17

Reversi

1) In the pop-up menu of 'Game', select 'Reversi' to open the Chess Board. (See Figure 4-17)
2) Click [New Game] button to start.
3) Click [Undo] button for pull back.
4) Click [Close] button to close the Chess Board.

Rule:

The one who chooses white chessman can play first. All black chessmen between two white chessmen will turn to white ones and all white chessmen between two black chessmen will turn to black ones. So the player should be able to reverse adversary's chessmen in each step. When the chessboard is full of chessmen, the number of the chessmen for each color should be counted. The one who conserve more chessmen on the chessboard is winner.

PIM

1) Click [Start] button.
2) Select 'PIM ' in the pop-up menu.
3) Select the function needed in the pop-up list. See Figure 4-18.

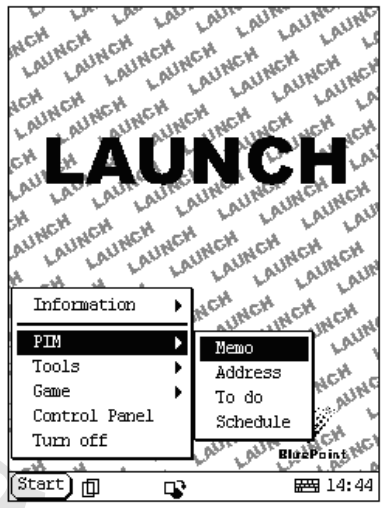


Figure 4-18

Memo

The basic functions of Memo include: add new memo, view memo, delete memo, browse by types, etc.

1) In the pop-up 'PIM' list, select 'Memo' to open the Memo interface. (See Figure 4-19)
2) After you click the [▼] button on top right corner, the type list will pop up. Then you can select the type of the memo.
3) You can also select the Edit Group in the type list to open the Edit Group interface.
4) The memo list of corresponding type will be displayed in the list box on the midst of the Memo interface.
5) Click one memo in the memo list to open the Memo Edit interface.
6) Click [New] button to open the New Memo interface.

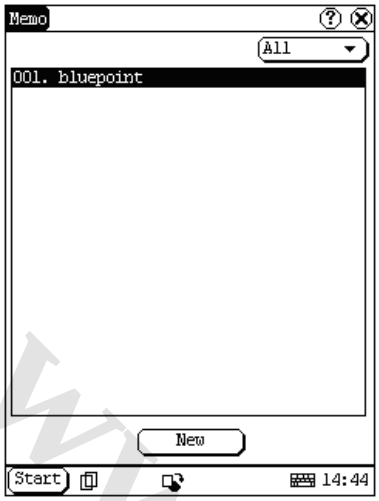


Figure 4-19

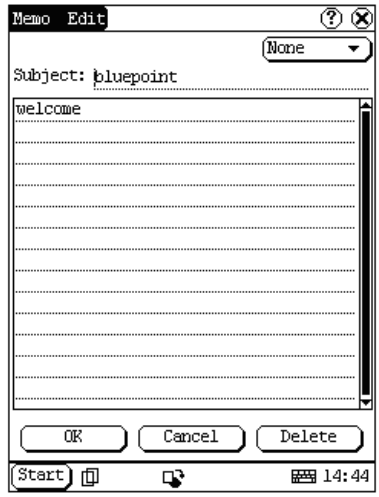


Figure 4-20

Add New Memo

1) In the Memo interface, click [New] button to open the New Memo interface.
2) Activate Soft Keyboard, and fill the subject and contents.
3) Click the button on top right corner, then select the type in the pop-up list
4) Click [OK] button to save and close the New Memo interface.
5) Then you can see the new memo in the list box of the Memo interface.

View Memo

1) In the list box of the Memo interface, click the memo that you want to view.
2) Then you can view the contents of the memo in the opened Memo Edit interface.
3) Click [OK] button to close the Memo Edit interface.

Edit Memo

1) In the list box of the Memo interface, click the memo that you want to edit.
2) Then you can edit the contents of the memo in the opened Memo Edit interface. See Figure 4-20.
3) After editing, click [OK] button to save the edited contents and close the Memo Edit interface.

Delete Memo

1) In the list box of the Memo interface, click the memo that you want to delete.
2) Then you can delete the memo in the opened Memo Edit interface.
3) Click [Delete] button to delete the memo and close the Memo Edit interface.

Edit Type

1) Click the [▼] button on the top right of the interface ① so that the type list pops up.
2) In the type list, select the Edit Group to open the Edit Group interface.
3) In the Edit Group interface, activate Soft Keyboard.
4) In the text box at the bottom of the interface, input the name of the type.
5) Click [Add] button to add a new type and it will be displayed in the list box of the Edit Group interface. (See Figure 4-21)
6) Select one type in the list box, and then click [Delete] button to delete it.
7) Click [Close] button to close the Edit Group interface.

The interface ① : It represents the Memo Interface, the New Memo interface and the Memo Edit interface.

Figure 4-21

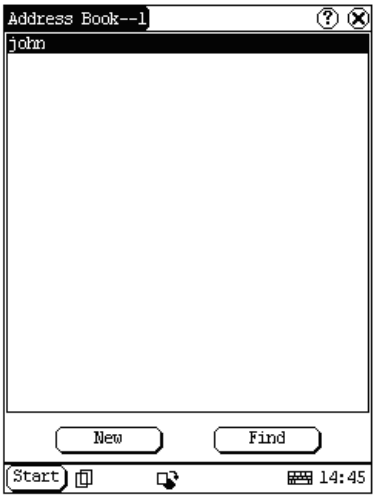


Figure 4-22

Browse By Types

1) Click the [▼] button on the top right of the Memo interface so that the type list pops up.
2) Select the type in the list.
3) Then you can see the memo belonging to the type in the list box.

Note: Only the memo belonging to the type can be displayed here. If you want to browse all memos, please select 'All' in the steps 1 and 2.

Address

The basic functions of Address Book include: add new address, view address, delete address, to search address, etc.

1) In the pop-up 'PIM' list, select 'Address' to open the Address Book interface.
2) It lists the name of persons whose communication information has been stored.
3) Click [New] button to open the Address New interface. (See Figure 4-22)
4) Click [Find] button to pop up the Find People interface.

The operation guide for each function is described below:

Add New Address

1) In the Address Book interface, click [New] button to open the Address New interface. (See Figure 4-23)
2) Activate Soft Keyboard, and fill the detailed information on relatives and friends.
3) Click [OK] button to save and close the Address New interface.
4) Then the added name will be displayed in the list box of the Address Book interface.

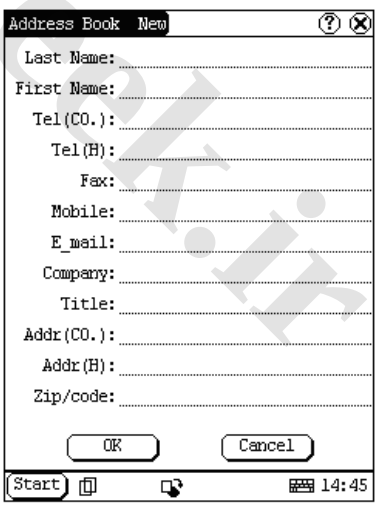


Figure 4-23

View Address

1) In the list box of the Address Book interface, click the name that you want to

view.

2) Then the detailed information about the person will be shown in the opened Address Edit interface.
3) Click [OK] button to close the Address Edit interface.

Edit Address

1) In the list box of the Address Book interface, click the name that you want to edit.
2) Then the information about the person can be edited in the opened Address Edit interface. See Figure 4-24.
3) After editing, click [OK] button to save the edited contents and close the Address Edit interface.

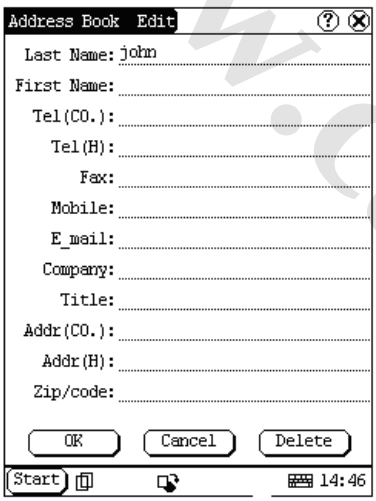


Figure 4-24

Delete Address

1) In the list box of the Address Book interface, click the name that you want to delete.
2) Then the information about the person will be shown in the opened Address Edit interface.
3) Click [Delete] button to delete the person's information and close the Address Edit interface.

Search Address

1) In the Address Book interface, click [Find] button to pop up the Find People interface. See Figure 4-25.
2) Activate Soft Keyboard, and input the name you want to search.
3) Click [OK] button, and then you will see that the name you search is highlighted in the list box.

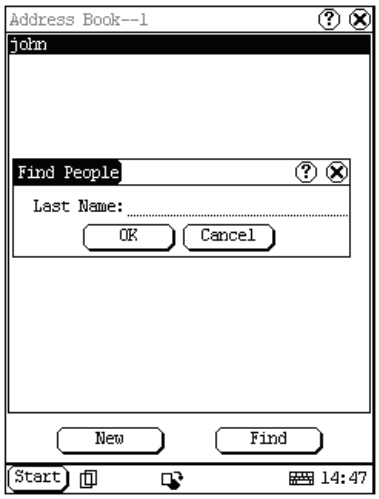


Figure 4-25

To Do

The basic functions of To Do include: add new To Do, view To Do, delete To Do and set To Do, etc.

Figure 4-26

1) In the pop-up 'PIM' list, select 'To Do' item to open the To Do interface.
2) The To Do list of corresponding items will

be displayed in the list box on the midst of the Memo interface.

3) Click [Options] button to open the To Do Display interface. (See Figure 4-26)
4) Click [New] button to open the To Do New interface.

Add New To Do

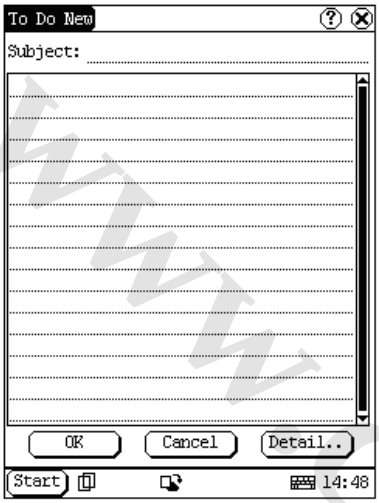


Figure 4-27

1) In the To Do interface, click [New] button to open the To Do New interface. See Figure 4-27.
2) Activate Soft Keyboard, and fill in the subject and contents.
3) Click [Detail] button to open the To Do Detail interface. See Figure 4-28.
4) In the To Do Detail interface, click the button to the right of 'Group' to pop up the type list.
5) Click the button to the right of 'Expired', and select the data in the pop-up list.
6) Click the number to the right of 'Priority' to set the priority of the To Do.
7) If the To Do has been finished, please click the box to the right of 'Finished'. When the function is selected, 'X' will be marked in the box,.
8) Click [OK] button to save and close the To Do Detail interface.
9) In the To Do Detail interface, click [OK] button to save and close the To Do New interface.

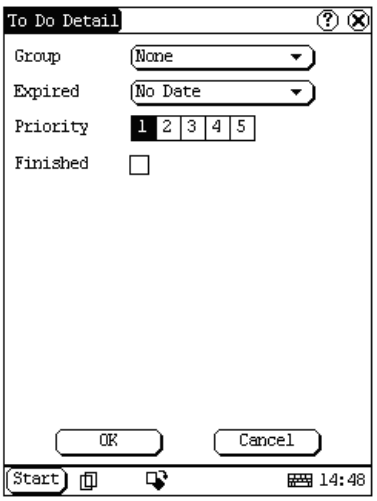


Figure 4-28

View To Do

1) In the list box of the To Do interface, click the to do that you want to view.
2) Then the contents of the To Do will be shown in the opened To Do Edit interface.
3) Click [OK] button to close the To Do Edit interface.

Edit To Do

1) In the list box of the To Do interface, click the memo that you want to edit.
2) Then the contents of the memo will be shown in the opened To Do Edit interface.
3) Click [Detail] button to open the To Do Detail interface, please refer to step 4~8 in the section "Add New To Do".
4) After editing, click [OK] button to save the edited contents and close the To Do Edit interface.

Delete To Do

1) In the list box of the To Do interface, click the to do that you want to delete.
2) Then the contents will be shown in the opened To Do Edit interface.
3) Click [Delete] button to delete the To Do and close the To Do Edit interface.

Edit Type

1) Click the [▾] button to the right of 'Group' in the interface ① so that the type list

pops up.

2) In the type list, select 'Edit Group' to open the Edit Group interface. See Figure 4-29.
3) In the Edit Group interface, activate Soft Keyboard.
4) In the text box at the bottom of the interface, input the name of the type.
5) Click [New] button to add a new type and it will be displayed in the list box of the Edit Group interface.
6) Select one type in the list box, and then click [Delete] button to delete it.
7) Click [Close] button to close the Edit Group interface.

The interface ① : It represents the To Do Detail Interface (Refer to step 1-3 in the section "Add New To Do" and "Edit To Do"), and the To Do Display interface (Refer to step 1 in the section "The Set of Display ").

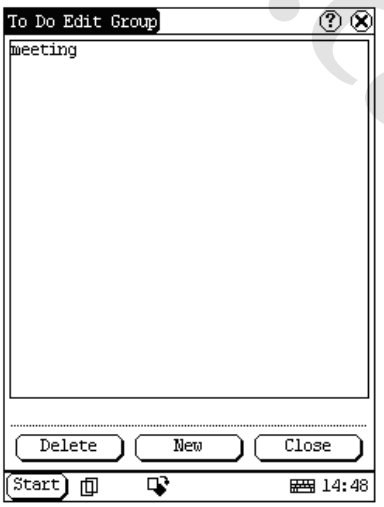


Figure 4-29

The Set of display

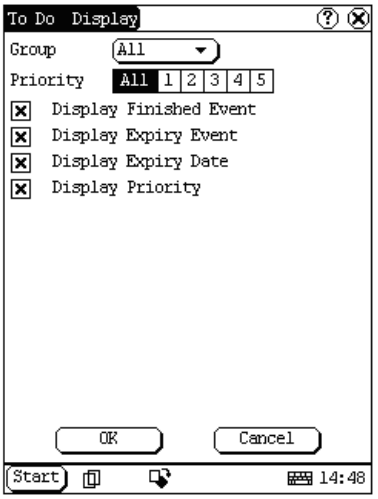


Figure 4-30

1) In the To Do interface, click [Options] button to open the To Do Display interface.
2) In the To Do Display interface, click the button to the right of 'Group' to pop up type list, and select the type in the pop-up list.
3) Click the button to the right of 'Expired', and select the data in the pop-up list.
4) Click the number or 'All' to the right of 'Priority' to set the priority of the displayed To Do.
5) Click the box to the right of each function. When 'X' is displayed in the box, the function is selected. (See Figure 4-30)
6) Click [OK] button to close the To Do Display interface.
7) Then you can see the corresponding To Do in the list box of the To Do interface.

Schedule

The basic functions of Schedule include: add new schedule, view schedule, delete schedule, etc.

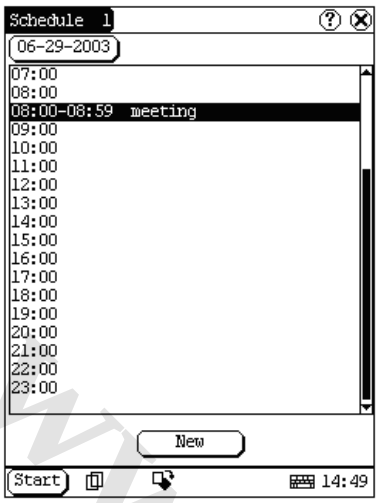


Figure 4-31

1) In the pop-up list of 'PIM', select 'Schedule' to open the Schedule interface.
2) Click the Date button on the upper left of the interface to open the Select Date interface.
3) In the list box in the middle of the interface, all schedules on that day corresponding to the Date button will be displayed. (See Figure 4-31)
4) Click [New] button, and then the cycle list pops up. You may select 'Common', 'Daily', 'Weekly', 'Monthly' and 'Annual'.
5) In the cycle list, select one item to open the Schedule New interface.

Add New Schedule

Set the date of the schedule:

1) In the Schedule interface, click the Date button on the upper left to open the Select Date interface.
2) In the Select Date interface, click [◀] icon to the left of the month or year to select the previous month or year.
3) Click the [▶] icon to the right of the month or year to select the next month or year. (See Figure 4-32)
4) Click to select the date in the current month. When it is highlighted, it is selected.
5) Or click [Today] button to display the current year, month and date directly.
6) Click [OK] button to save the date setting and close the Select Date interface.
7) You may see the date you set on the button on the top right of the Schedule interface.

Figure 4-32

Set the cycle of the schedule:

1) In the Schedule interface, click [New] button so that the Cycle list pops up. See Figure 4-33.
2) In the Cycle list, select 'Common' if it is done on the selected date.
3) Select 'Daily' if it is done every day.
4) Select 'Weekly' if it is done on a fixed day every week.
5) Select 'Monthly' if it is done on a fixed day every month.
6) Select 'Annual' if it is done on a fixed day every year.
7) After selecting, open the New Schedule interface.

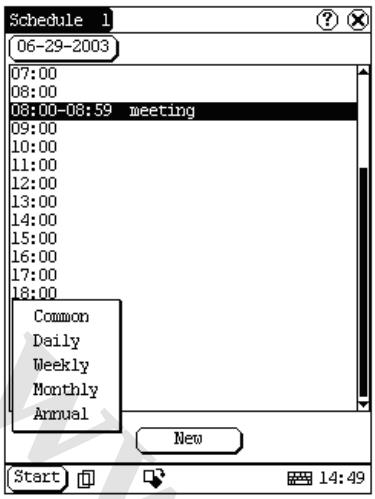


Figure 4-33

Set the content of the schedule:

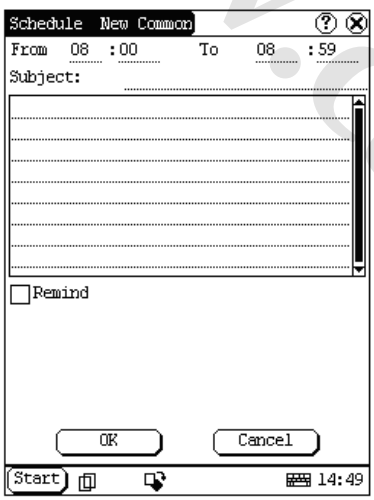


Figure 4-34

1) In the Schedule New interface, activate Soft Keyboard, and fill the subject and contents.
2) In the textbox on the top of the interface, fill the time of the schedule.
3) If the selected cycle is 'Daily', 'Weekly', 'Monthly' or 'Annual', you can input the repeat time in the textbox on the bottom of the interface. See Figure 4-34.
4) "Remind" function can be selected and the reminding time can be set in the interface. The "Remind" function will not be available when the machine is turned off.
5) Click [OK] button to save and close the Schedule New interface

View Schedule

1) In the Schedule interface, select the date that has been scheduled. (Refer to the section "Add New Schedule → Set the date of the schedule")
2) In the list box of the Schedule interface, click Scrolling Bar to turn to next page, and click the schedule you want to view.
3) Then the contents of the schedule will be shown in the opened Schedule View interface.
4) Click [OK] button to close the Schedule View interface.

Edit Schedule

1) In the Schedule interface, select the date that has been scheduled. (Refer to the section "Add New Schedule → Set the date of the schedule")
2) In the list box of the Schedule interface, click Scrolling Bar to turn to next page, and click the schedule you want to edit.
3) Then the contents of the schedule will be shown in the opened Schedule View interface.
4) If the edited affair is 'Daily', 'Weekly', 'Monthly' or 'Annual', you can edit the repeat time in the textbox on the bottom of the interface.
5) After editing, click [OK] button to save the edited contents and close the Schedule View interface.

Delete Schedule

1) In the Schedule interface, select the date that has been scheduled. (Refer to the section "Add New Schedule → Set the date of the schedule")
2) In the list box of the Schedule interface, click Scrolling Bar to turn to next page, and click the schedule you want to edit.
3) Then the schedule will be shown in the opened Schedule View interface. See Figure 4-35.
4) Click [Delete] button to delete it and close the Schedule View interface.

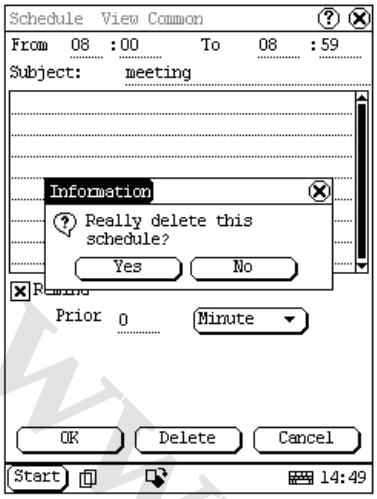


Figure 4-35

System

Control Panel

The control panel includes all interrelated software and hardware configurations. It makes the software more custom-built for you by configuring.

1) Click [Start] button.
2) Select 'Control Panel' in the pop-up menu.
3) Open the Control Panel interface. (See Figure 4-36)

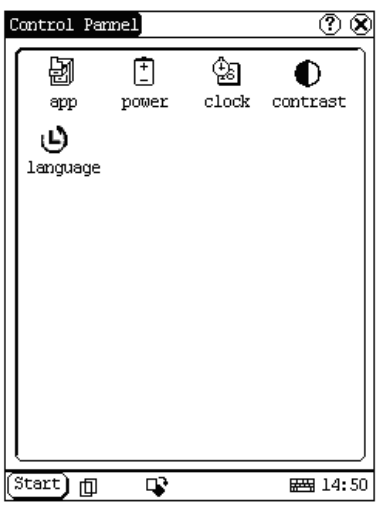


Figure 4-36

Application

It displays the application information contained in the 'Start' menu, including the group name, the submenu, etc.

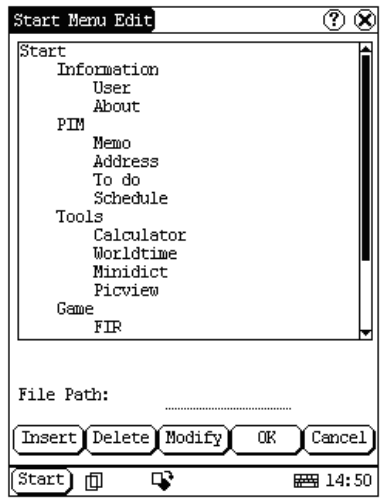


Figure 4-37

1) In the Control Panel interface, click 'App' icon to open the Application Manager interface.
2) Then you can see the corresponding information in the list box of the interface. (See Figure 4-37)
3) Insert a new group:
Click [Insert] button and input the item name. Then choose "Start" as its parent and click [OK] button.

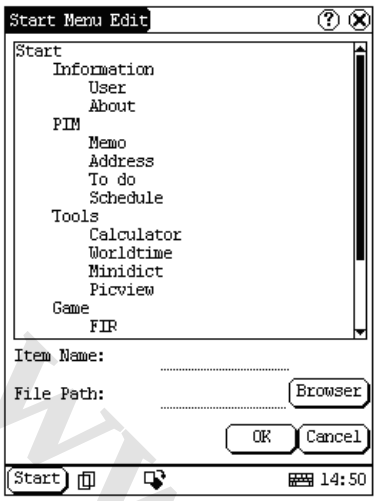


Figure 4-38

4) Insert a new submenu:
Click [Insert] button and input the item name and the file path. Then choose a group as its parent and click [OK] button.
The path can be inputted directly or found out in a dialogue box after clicking [Browser] button. See Figure 4-38 and Figure 4-39. Click [OK] button after selecting an item in the list. Then the selected file will be automatically copied to the edit box.

The submenu should be linked to a present group instead of the "Start" item or another submenu.

5) Delete a group or a submenu:
Select a group or a submenu and then click [Delete] button. When a group is deleted, all of its submenus will be deleted.

6) Modify a group or a submenu:
Click [Modify] button and then select the group or submenu from the list. Now you can modify the item name, file path and so on followed by clicking [OK] button.

7) Save the information:
After editing the application, click [OK] button. The modified information will be saved in the corresponding file. If you want to quit the modification, click [Cancel] button.

Note:
Quit all other applications before saving the modification.

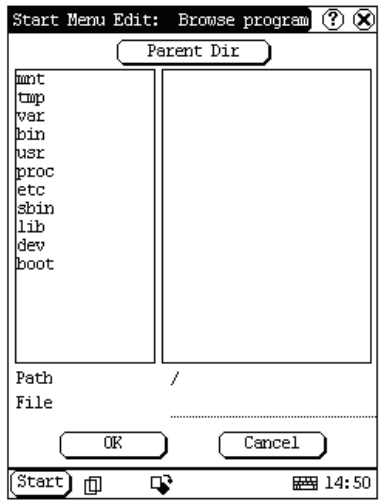


Figure 4-39

Power Management

In the Power Manager interface, you can see the condition of memory, and set the standby time. (See Figure 4-40)

1) In the Control Panel interface, click 'Power' icon to open the Power Manager interface.
2) Click the button to the right of 'Standby time', and select the time or 'None' in the pop-up list.
3) Click [OK] button to save the setting and close the Power Manager interface.

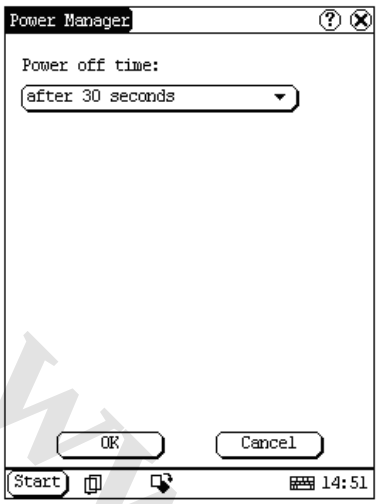


Figure 4-40

Clock

User can set the time and the time zone of the system.

Figure 4-41

Set Time:

1) In the Control Panel interface, click 'Clock' icon to open the Date/Time interface as shown in Figure 4-41.
2) In the Date/Time interface, click [Set Time] button to open the Set Time interface as shown in Figure 4-42.
3) Click the characters to the right of 'Day' to set AM and PM, the selected one will be highlighted.
4) Activate Soft Keyboard, and then you can set 'Hours', 'Minutes' and 'Seconds' directly.
5) Click [OK] button to save and close the Set Time interface.

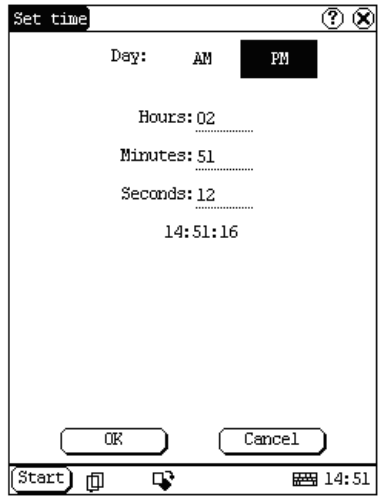


Figure 4-42

Set Date:

1) In the Date/Time interface, you can set date directly.
2) Click [◀] icon to the left of the month or year to select the previous month or year.
3) Click the [▶] icon to the right of the month or year to select the next month or year. (See Figure 4-41)
4) Click the date in the current month. It will be highlighted when it is selected.
5) Click [Set Time] button to save the setting.
6) Click [Quit] button to exit.

Set Time Zone

1) In the Date/Time interface, click [Set Time zone] button to open the Set Zone interface as shown in Figure 4-43.
2) Click Scrolling Bar to turn to next page of the list, and select your zone. It will be highlighted when it is selected.
3) Click [OK] button to save and close the Set Zone interface.

Figure 4-43

After finishing all settings, click [OK] button in the Date/Time interface to exit and close the interface.

Contrast

It is for adjusting the contrast of the screen to make the interface clearer.

1) In the Control Panel interface, click 'Contrast' icon to open the Contrast interface. See Figure 4-44.
2) In the Contrast interface, click the position you want, and then you can set it.

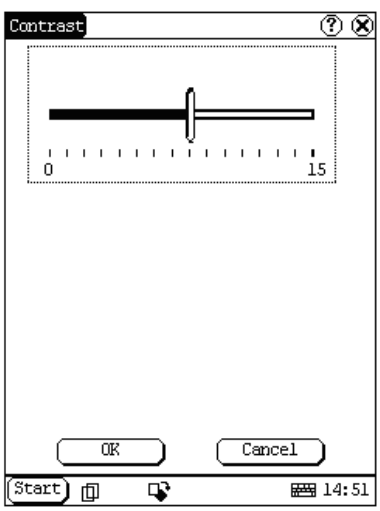


Figure 4-44

Language

You can make selection among several languages for convenient operation of the system.

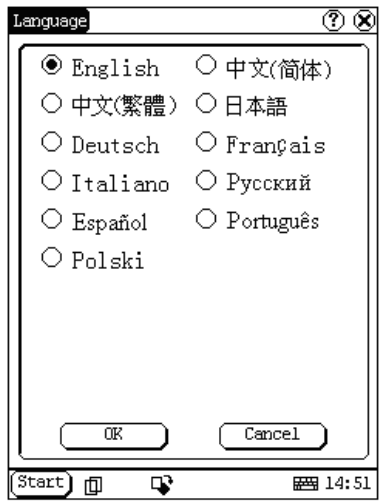


Figure 4-45

1) In the Control Panel interface, click 'Language' icon to open the Language interface. See Figure 4-45.
2) Select the language you want to use.
3) Click [OK] button to confirm the selection and close the language interface and the Control Panel interface.

Note: Before selecting language, be sure to quit all applications.

System Information

Calibrate Touch screen

It is for getting the desired accuracy of the touch screen. Calibrating of touch screen can be divided into two steps. The first step is to detect noise automatically. If you click the touch screen at this step, the noise value would be affected. After detecting the noise, the system will come to the calibration step. Then the cross cursor will be displayed.

1) After switching on the machine, follow the tips to press the hot key. The calibration interface will be opened.
2) Click the cross cursor on the screen

accurately, and wait until it changes. Then one step of calibration is finished.

3) After calibration is finished for all corners, the system will automatically return to the start-up main interface.

Note:

- *Do not click the touch screen before the cross cursor appears.*
- *In the calibration step, if you fail to click the cross cursor accurately, the cross cursor will be displayed on the screen again and again until the calibration is finished completely.*

User Register

The user's right can be well protected after registration.

1) Click [Start] button.
2) Select 'Information' in the pop-up menu.
3) Select 'User' in the pop-up list to open the User Information interface. (See Figure 4-46)
4) In the User Information interface, activate Soft Keyboard, and input the user information. (See Figure 4-47)
5) Click [OK] button to save the information and close the User Information interface.

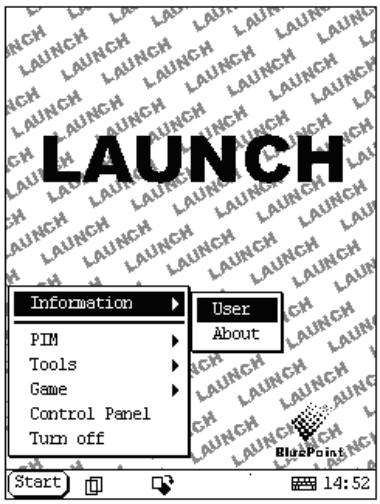


Figure 4-46

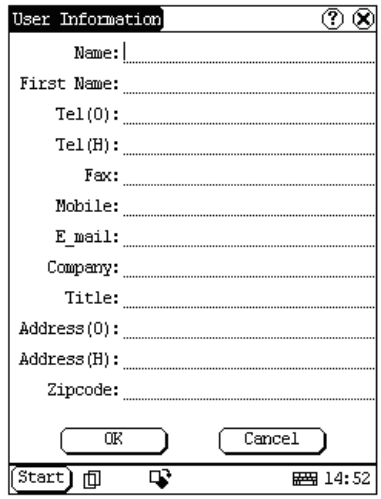


Figure 4-47

About

In 'Information' list, click 'About' to display the information on system software and hardware, then click [OK] button to close it. (See Figure 4-48)

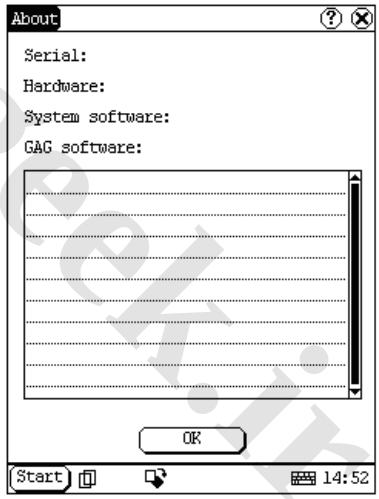


Figure 4-48

Shut Down

Click "Shut Down" in the Start menu when you attempt to turn off the machine.

FAQ

DFPV Diag. is a hi-tech product. With the development of modern automotive industry, more and more new technology will be adopted and there may be questions during operation. Read the user's manual to get the answer whenever you have any question, or contact our Customer Service Center for help.

Here we list some frequently asked questions and answers relating to DFPV Diag..

About Update via Internet

Question: "Removable Disk" icon does not appear in the catalogue of "My computer" after the CF card reader/writer is connected to the USB port of computer. Why?

Answer:
Possible cause: there may not be driver for CF card reader/writer in the computer. The default driver is with the operating systems like Windows Me/2000/XP, Mac OS 9.x/Mac OS X and Linux 2.4.X. However, there is no such default driver with Windows 98.

Solution: Check if there is the driver for CF card reader/writer in the computer. If the computer uses Windows 98 operating system, it is necessary to install the driver into computer by using the CD-ROM provided with CF card reader/writer.

When the CF card reader/writer driver is installed successfully, a "Removable disk" icon will appear in the catalogue of "My computer". Usually it is listed after original disk drive. For example, if there were drives A, B, C and D originally, the removable disk will be "E". If there were drives A, B, C, D and E originally, the removable disk will be "F". The rest may be deduced by analogy.

Question: Some downloaded diagnostic program is not listed in the update tool, what is the reason?

Answer: There are two possible causes:
1. The downloaded diagnostic program is not put in the same folder as other diagnostic programs. Please move it to the same folder as others.
2. The diagnostic program is not fully downloaded. Please download the program again.

Question: When the updated software is used in vehicle diagnosis, some diagnostic program can not be downloaded successfully from the CF card. Why?

Answer: possible causes and solutions:
1. The Display Program may have not been updated. Please update the Display Program.
2. The diagnostic program for the vehicle make is damaged. Please re-download the diagnostic program and update.

Question: Why can't the main unit recognize the replaced CF card?

Answer: There are two possible causes:
1. The original 32M CF card has not been fully copied. Please delete the incomplete file and copy again.
2. The CF card reader/writer is not compatible with the CF card. Monofunctional CF card reader/writer is better in such situation.

Question: How to make a new DFPV Diag. CF card when the data in old one is lost or damaged?

Answer: In case DFPV Diag. CF card is damaged and the program in the card can not be used, please use the following procedure to make a new CF card:

1. Log onto the website "www. X431. com". Enter your username and password to log in.

   Select the SMARTBOX No., and then download the following programs into your computer:

1) Necessary programs for making CF card:

- DFPV Diag. UPDATE TOOLS---- for writing the program from computer to CF card when doing DFPV Diag. update
- DISPLAY PROGRAM---- for displaying the DFPV Diag. diagnostic information and managing the DFPV Diag. diagnostic programs
- SYSTEM DATA---- system data used by DFPV Diag. system

2) Optional programs that can be selected according to user's demand:
Diagnostic program for various vehicles

2. Install the DFPV Diag. UPDATE TOOLS into computer.

3. Format the DFPV Diag. CF card.

4. Run the DFPV Diag. UPDATE TOOLS and write the display program, system data and diagnostic programs onto CF card.

About Hardware

Question: After DFPV Diag. downloads the diagnostic program from the CF card, it prompts "Please contact your local dealer". What is the reason?

Answer: It is because the license No. in CF card does not match the SMARTBOX. It can be solved in the following way:
1. Download the software that is corresponding to the SMARTBOX so that the CF card can match the SMARTBOX.
2. Use the UPDATE TOOL that is provided on http: // www. X431. com for update. Never use WINZIP or other decompressing tool for update.

Question: Why does the LCD screen respond so slowly?

Answer: It is because the ambient temperature is close to the lower limit of operating temperature range (0-50℃). In this situation, it is necessary to warm up the machine for 20 minutes before test.

Question: Power can not be turned on with the power button on the main unit after the machine is connected to vehicle diagnostic socket through cables and connectors. What can I do?

Answer: Check the power pin of vehicle diagnostic socket with multimeter for power. The power pin in diagnostic socket varies from one vehicle to another. Please refer to the User's Manual of specific vehicle diagnostic program to find the power pin. If there is no power supply from the diagnostic socket, please get power in other ways, such as from battery or cigarette lighter.

Question: There is no character on the backlit screen. What should I do?

Answer: Check if the power is well connected. Turn off the machine, unplug the power connector and re-plug it. Turn on the machine after it has been connected to the power for 1 second.

Question: Why can't the diagnostic program be downloaded to SMARTBOX?

Answer: Please make sure that the SMARTBOX is well connected with DFPV Diag. main unit.

Question: Why does DFPV Diag. fail in communication with ECU?

Answer: Please make sure that the diagnostic connector and diagnostic program are matching vehicle make.

Question: The screen keeps blank after flashing when the machine is turned on. What should I do?

Answer: Take out the CF card and re-start the machine to see if there is normal display. If the display is normal when the CF card is taken out, the CF card should be replaced. If the screen is still blank, please contact the local service engineer.

Question: Why does the system prompt that no CF card is found when the machine is turned on?

Answer: The possible cause is that no CF card is in the machine, or CF card is inserted improperly or damaged. If it is damaged, it is necessary to make a new one.

Question: What should I do if I can't get into the diagnostic interface during test?

Answer: The possible cause is that no CF card is in the machine, or CF card is inserted improperly or damaged. If it is damaged, it is necessary to make a new one.

Question: Program is not run or screen is confused after glints. What should I do?

Answer: Unplug the 9-pin connector on the main unit and re-plug it.

Question: What can I do if the system halts or fails during self-detection?

Answer: Please make sure that cables and CF card are well connected.

Question: Why can't the data be inputted after Soft Keyboard is activated?

Answer: The position where the cursor lies can't be edited. Or you have not activated the cursor on the input position. Please use the stylus to click the part to edit. When the cursor twinkles, you can input the data.

Question: The screen is inactive after the cross cursor appears on the screen. Why?

Answer: The system is calibrating the touch screen. The machine will work after the screen is calibrated. Refer to the section "Calibrate Touch Screen" in User's Manual".

Question: Why does the saved data disappear?

Answer: There are two possible causes:
1. Your CF card is damaged.
2. You've changed language and the data is related to language. You may find the data after switching back to the former language.

Question: How to know what applications (interfaces) are opened.

Answer: Click the active taskbar icon, then the pop-up list will display the applications (interfaces) opened.

Question: Why can't I do operation in current interface?

Answer: There are two possible causes:
1. Your current interface has exited illegally. In this situation, you may not see the name of the application (interface) in the pop-up list when you click the active taskbar icon.
2. The system is busy, please wait patiently, or click the active taskbar icon to switch to another application.

Question: The listed icons of vehicle make occupy more than one page of screen. I may have to turn several pages to find a specific icon of vehicle make. How can it be simplified?

Answer: DFPV Diag. can test many vehicle makes and the vehicle makes are still increasing. We have considered the convenience when designing the software. The system will count the clicks and move the icon with more clicks forward.

About System Setting

Question: The screen is too white and characters can not be seen. What is the reason and what should I do?

Answer: It may be caused by improper contrast. Please refer to the section "Contrast" to adjust the contrast.

Question: The screen is inactive after the cross cursor appears on the screen. Why?

Answer: The system is calibrating the touch

screen. The machine will work after the screen is calibrated. Refer to the section "Calibrate Touch Screen" in User's Manual".

Question: The screen does not respond or responds wrongly when I click it with stylus. What should I do?

Answer: It is necessary to calibrate the screen. Please refer to the section "Calibrate Touch Screen" in User's Manual.

Question: The time displayed in the lower right corner of the screen is incorrect. How to adjust it?

Answer: It is because the time was set incorrectly. Please refer to the section "Clock" in the User's Manual to set correct time.

About Operation

Question: System halts when reading data stream. What is the reason?

Answer: It may be caused by a slackened connector. Please turn off the machine, firmly connect the connector, and switch on the machine again.

Question: Why is the screen inactive when the cross cursor is clicked during screen calibration?

Answer: You may have touched the screen when the system is detecting noise before the cross cursor appears. Please turn off the machine and then turn on. Calibrate the screen after the cross cursor appears.

Question: Why is the machine automatically powered off during standby?

Answer: It is because the machine has been set for energy saving. Automatic shutdown will take place if the machine is not operated for a specified period of time. Refer to the section "Power management" in User's Manual to set the "Power off time" to "None" or select a longer standby time.

Question: Why can't the tested result be printed out?

Answer: There may be no paper in the printer or the printer is not well connected. Please mount a roll of new paper. See the section "Printer Operation" in the User's Manual.

Question: Why is there no character in the printed paper?

Answer: The paper is mounted reversely. Please take out the paper and mount it again. See the section "Printer Operation" in the User's Manual.

Question: Why can't I input data after activating Soft Keyboard?

Answer: The position where the cursor lies can't be edited. Or you have not activated the cursor on the input position. Use the stylus to click the part to edit. When the cursor twinkles, you can input the data.

Question: What should I do if I am not able to switch from Active Taskbar to the running application interface?

Answer: Please close interfaces related to the application, such as the Help or Detail.

Question: Why does the saved data disappear?

Answer: There are two possible causes:
1. Your CF card is damaged. It is necessary to make a new CF card.
2. You've changed language and the data is related to language. You may find the data after switching back to the former language.

Question: What can I do when the screen is confused?

Answer: Please quit the current application (interface), and run it again. If the problem still exists, please restart the system.

Question: How to know what applications (interfaces) are opened.

Answer: Click the active taskbar icon, then the pop-up list will display the applications (interfaces) opened.

Question: Why can't I do operation in current interface?

Answer: There are two possible causes:
1. Your current interface has exited illegally. In this situation, you may not see the name of the application (interface) in the pop-up list when you click the active taskbar icon.
2. The system is busy, please wait patiently, or click the active taskbar icon to switch to another application.

Questions Related to Vehicle

Question: Why does the screen flickers during engine starting?

Answer: It is caused by the electromagnetic interference. No problem with DFPV Diag..

Question: Why is operation interrupted during diagnosis?

Answer: It may be caused by electromagnetic interference or incorrect connection of connector.

Question: Why is there no response from vehicle ECU at communication?
Answer: Make sure that the voltage of vehicle battery, ignition timer and idle speed are in standard range; the throttle is in the closed position; and all electric devices, such as A/C, headlight, stereos etc, are turned off. Refer to the section "Conditions for Test".

Question: Some systems can not be diagnosed. Why?

Answer: The diagnostic socket for the system on some early vehicle may be separated. Refer to the vehicle instruction manual.

Question: No trouble code is found. Why?

Answer: It may be caused by the shared circuit. Find the nearest trouble code and circuit for analysis.

Question: Why are there too many trouble codes?

Answer: It may be caused by poor contact or poor grounding. Make sure that the vehicle model/year is selected correctly and the vehicle is equipped with the system.