

General Information

Technical Parameters

Main Vehicle Dimension Parameters

Product model	EPX1A-1200
Driving type	Front-motor, front-wheel-drive
Length of outline dimension, mm	5270
Width of outline dimension, mm	2000
Height of outline dimension, mm	1840
Wheel base, mm	3200
Front/rear suspension, mm	955/1115
Front track/rear track, mm	1690/1712 1700/1722
Minimum turning circle diameter, m	12.7±1

Complete Vehicle Mass Parameters

Product model	EPX1A-1200		
Maximum allowable total mass, kg	3095	3095	3000
Curb weight, kg	2535	2410	2310
Axle load (front/rear axle load under curb weight), kg	1415/1680	1415/1680	1335/1665
Number of seats	7, 8	7, 8	7, 8

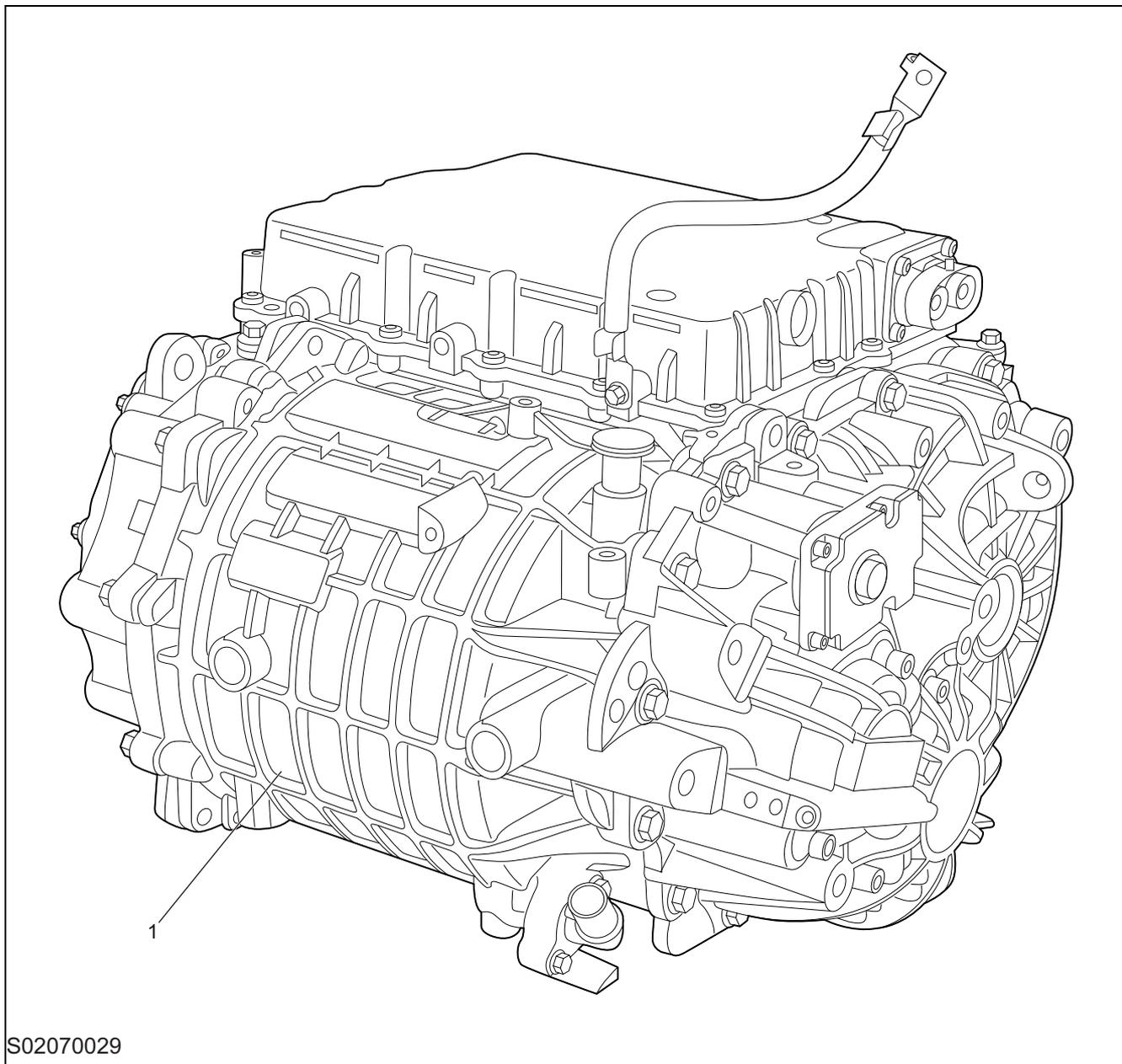
Dynamic Performance Index

Items	Parameters		
Maximum allowable total mass, kg	3095	3095	3000
Curb weight, kg	2535	2410	2310
Maximum design speed, km/hour	180	180	180
Maximum gradability, %	30	30	30
Acceleration capacity, s (0 - 100km/h acceleration time)	8.9	8.9	8.9
Driving range, km (working condition method)	430	435	440

Electric Drive System

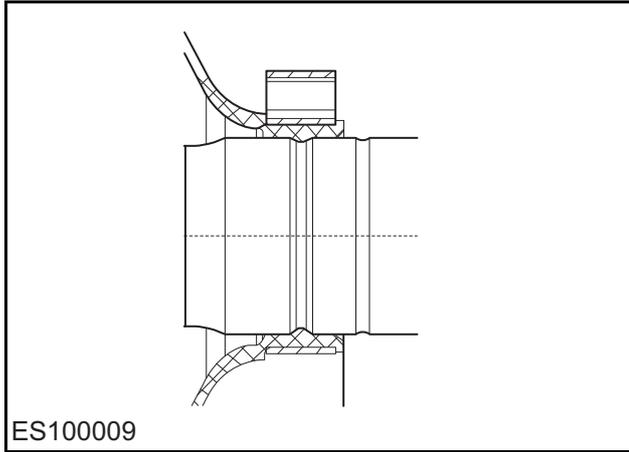
Layout

Electric Drive System Diagram



- 1 Electric Drive System Assembly

Front and Rear Drive Shafts

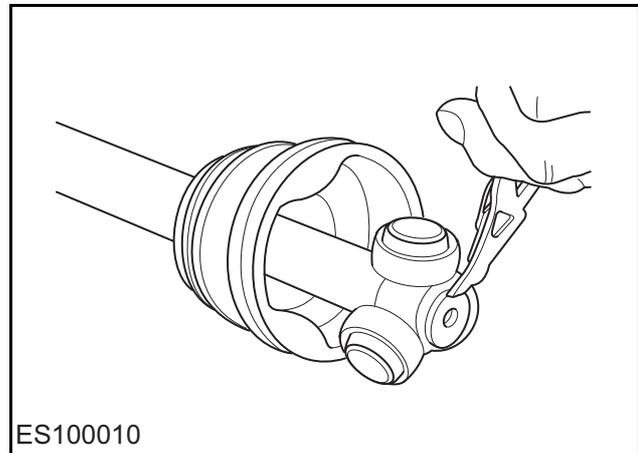


- 2 Install a new snap ring to the intermediate solid shaft.
- 3 Fill the constant-velocity universal joint with the lubricating grease provided, and apply the residual grease on the inner side of dust shield of constant-velocity universal joint.
- 4 Press the intermediate solid shaft into the constant-velocity universal joint completely.
- 5 Clean the junction between the dust shield and constant-velocity universal joint, and fix the dust shield clamp (large).
- 6 Ensure the constant-velocity universal joint will not interfere the dust shield when rotating freely from each direction.
- 7 Install the drive shaft, refer to "[Front Axle Shaft Replacement - Left](#)" or "[Front Axle Shaft Replacement - Right](#)".

Tripod Universal Joint and Its Dust Shield Replacement

Removal

- 1 Remove the drive shaft, refer to "[Front Axle Shaft Replacement - Left](#)" or "[Front Axle Shaft Replacement - Right](#)".
- 2 Install the axle shaft clip to the vise.
- 3 Loosen and discard clamps at both ends of the dust shield.
- 4 Remove the intermediate solid shaft of drive shaft.
- 5 Remove the snap spring at the end of intermediate solid shaft with the nipper pliers and discard it.



- 6 Remove the tripod joint and dust shield from the intermediate shaft.

Installation

- 1 Clean the intermediate solid shaft, tripod shaft and sleeve.
- 2 Install the dust shield to the intermediate solid shaft with a new clamp (small) and install its ends to the outside of two grooves.
- 3 Locate the tripod joint onto the intermediate solid shaft.
- 4 Install a new snap spring onto the end of intermediate solid shaft.
- 5 Fill the tripod universal joint with the lubricating grease provided, and apply the residual grease on the inner side of dust shield of constant-velocity universal joint.
- 6 Press the intermediate solid shaft into the tripod universal joint completely.

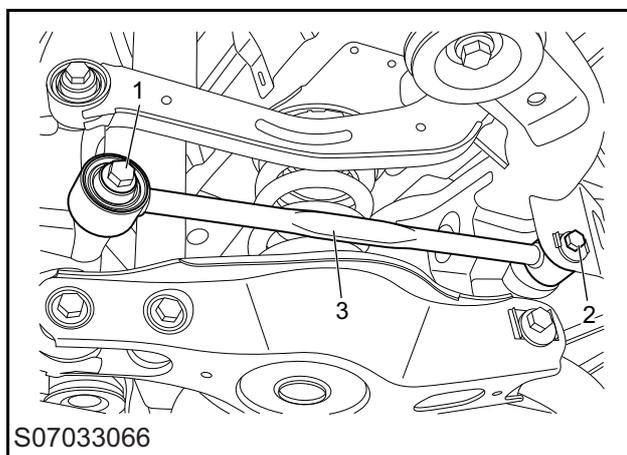
Rear Suspension

- 2 Install the bolt and nut fixing the rear suspension upper trailing arm assembly to the steering knuckle, tighten them to 90 ± 10 Nm + ($90^\circ\pm 5^\circ$), and check the torque.
- 3 Install the bolt and nut fixing the rear suspension upper trailing arm assembly to the rear suspension, tighten them to 90 ± 10 Nm + ($90^\circ\pm 5^\circ$), and check the torque.
- 4 Install the rear wheels. Refer to "[Wheel Replacement](#)".

Rear Suspension Lower Trailing Arm Assembly Replacement

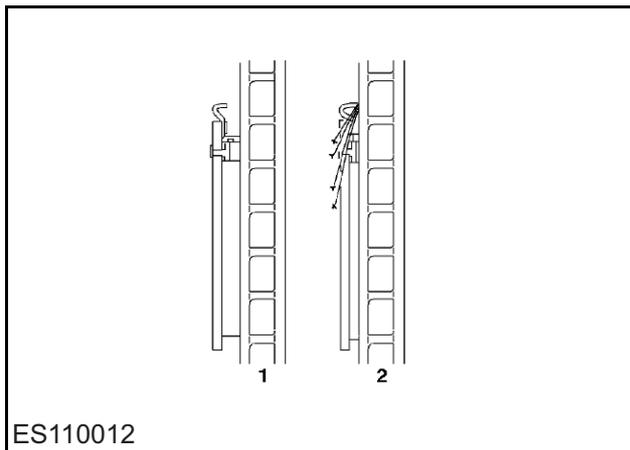
Removal

- 1 Raise the vehicle.
- 2 Remove the rear wheels. Refer to "[Wheel Replacement](#)".
- 3 Remove the bolt (1) fixing the rear suspension lower trailing arm assembly to the steering knuckle.
- 4 Remove the bolt (2) and nut fixing the rear suspension lower trailing arm assembly to the rear suspension.
- 5 Remove the rear suspension lower trailing arm assembly (3).



Installation

- 1 Install the rear suspension lower trailing arm assembly.
- 2 Install the bolt and nut fixing the rear suspension lower trailing arm assembly to the rear suspension, tighten them to 110 ± 10 Nm, and check the torque.
- 3 Install the rear suspension lower trailing arm assembly to the steering knuckle, tighten it to 180 ± 10 Nm, and check the torque.
- 4 Install the rear wheels. Refer to "[Wheel Replacement](#)".
- 5 Check four-wheel alignment parameters. Refer to "[Four-wheel Alignment](#)".



- 4 Install the circlip.
- 5 Install the front brake linings.

Warning: The brake linings of front wheels must be replaced together, otherwise the braking efficiency may be weakened.

- 6 Install the caliper guide pin, and the tightening torque of the front brake caliper is 30-35 Nm, while the tightening torque of the rear brake caliper is 50-60 Nm.
- 7 Install the wheels. Refer to "[Wheel Replacement](#)".

Caution: After starting the engine, step on the brake pedal several times prior to driving.

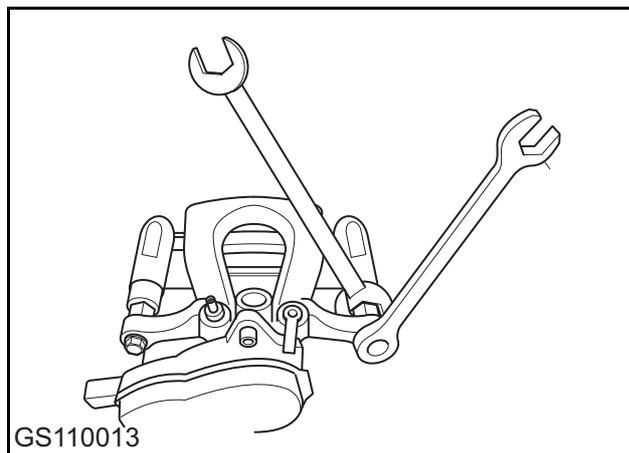
Rear Brake Lining Replacement

Removal

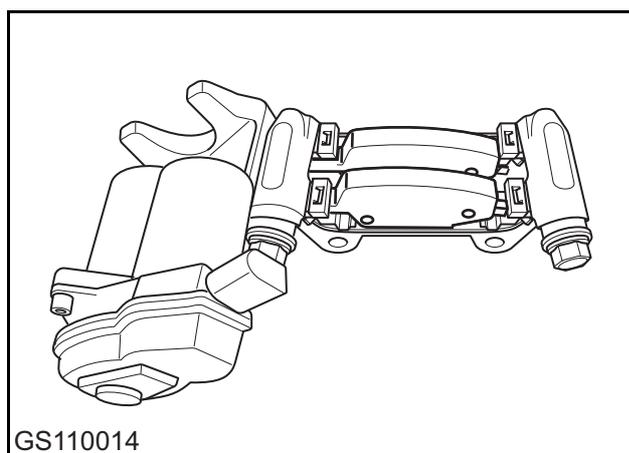
- 1 EPB is put into maintenance mode through the scan tool and activated, at this time, the motor drives the shaft to allow the pressure nut return to its initial position. In case of special circumstances, for example, vehicle out of power/failure to enter maintenance mode, or without scan tool, EPB can be manually released, refer to "[EPB Manual Release](#)".
- 2 Place the vehicle on the lift and lift it to a certain height.

Warning: The vehicle must be supported on a safe device.

- 3 Remove wheels.
- 4 Unscrew a guide rod bolt further away from the EPB.



- 5 Turn the housing assembly over.

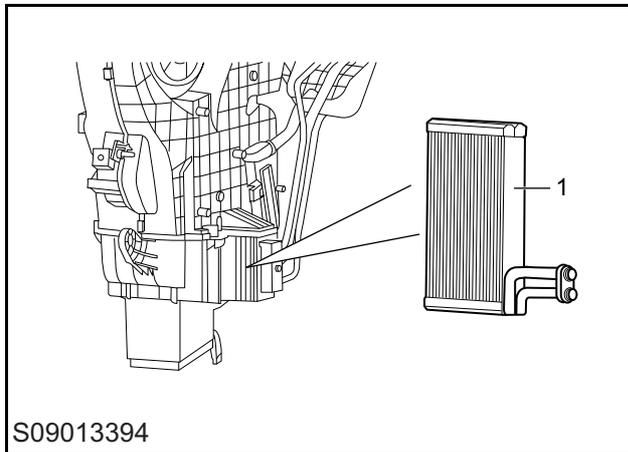


- 6 Use a tool to push the piston back.

Rear Evaporator Core Assembly Replacement

Removal

- 1 Disconnect the negative battery cable.
- 2 Recover the A/C refrigerant. Refer to "[Refrigerant Drain and Refill](#)".
- 3 Remove the rear A/C cabinet assembly. Refer to "[Rear A/C Cabinet Assembly Replacement](#)".
- 4 Remove the rear expansion valve. Refer to "[Rear Expansion Valve Replacement](#)".
- 5 Remove the bolts of the rear A/C assembly housing.
- 6 Remove the rear evaporator core assembly (1).



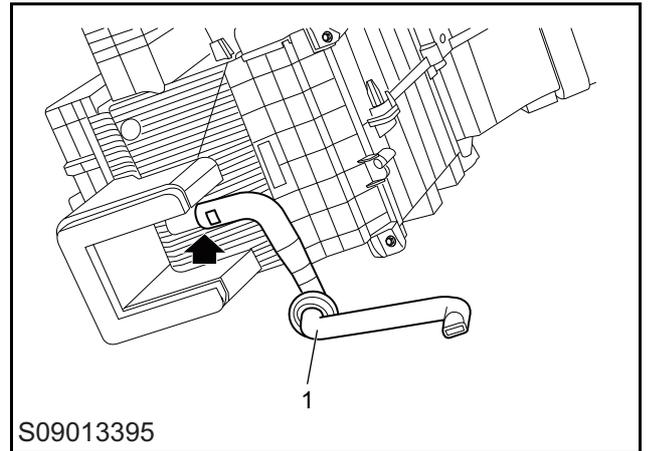
Installation

- 1 Install the rear evaporator core assembly.
- 2 Install the rear expansion valve. Refer to "[Rear Expansion Valve Replacement](#)".
- 3 Install the bolts of the rear A/C assembly housing.
- 4 Install the rear A/C cabinet assembly. Refer to "[Rear A/C Cabinet Assembly Replacement](#)".
- 5 Refill the A/C refrigerant. Refer to "[Refrigerant Drain and Refill](#)".
- 6 Connect the negative battery cable.

Rear A/C Drain Pipe Assembly Replacement

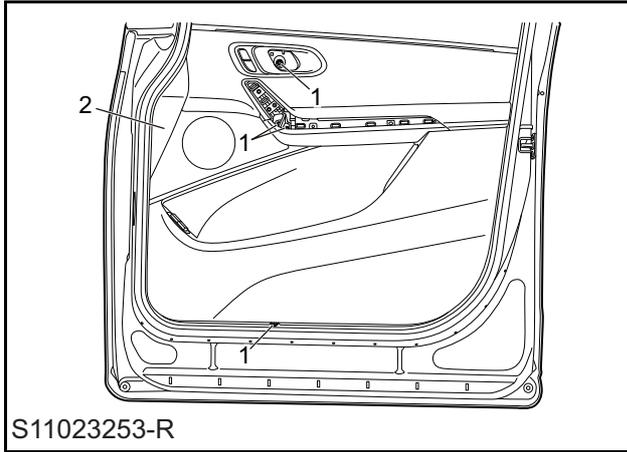
Removal

- 1 Disconnect the negative battery cable.
- 2 Recover the A/C refrigerant. Refer to "[Refrigerant Drain and Refill](#)".
- 3 Remove the rear A/C cabinet assembly. Refer to "[Rear A/C Cabinet Assembly Replacement](#)".
- 4 Remove the rear A/C drain pipe assembly (1).



Installation

- 1 Install the rear A/C drain pipe assembly.
- 2 Install the rear A/C cabinet assembly. Refer to "[Rear A/C Cabinet Assembly Replacement](#)".
- 3 Refill the A/C refrigerant. Refer to "[Refrigerant Drain and Refill](#)".
- 4 Connect the negative battery cable.



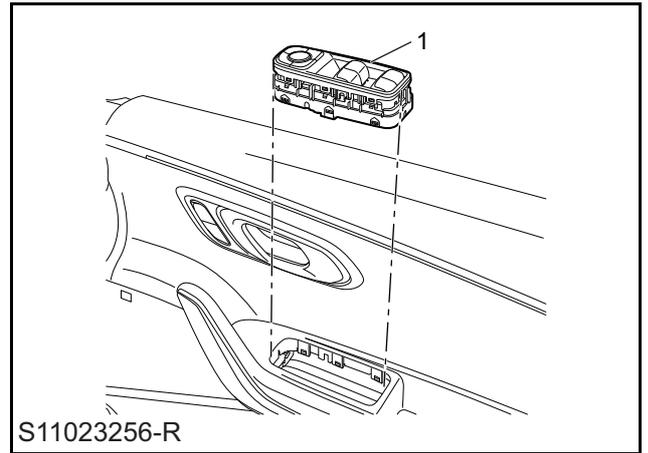
Installation

- 1 Install the door lock cable.
- 2 Connect the electrical connector.
- 3 Align the clips, and install the front door trim panel to the front door.
- 4 Install and tighten the screws of the front door interior trim panel.
- 5 Install and tighten the screws at the front door interior trim panel handle box.
- 6 Install the front door inclined handle cover plate.
- 7 Connect the negative battery cable.

Driver Side Door Panel Switch Assembly Replacement

Removal

- 1 Disconnect the negative battery cable.
- 2 Remove the front door interior trim panel. Refer to "[Front Door Interior Trim Panel Assembly Replacement](#)".
- 3 Remove the driver side door panel switch assembly (1).



Installation

- 1 Install the driver side door panel switch assembly.
- 2 Install the front door interior trim panel. Refer to "[Front Door Interior Trim Panel Assembly Replacement](#)".
- 3 Connect the negative battery cable.

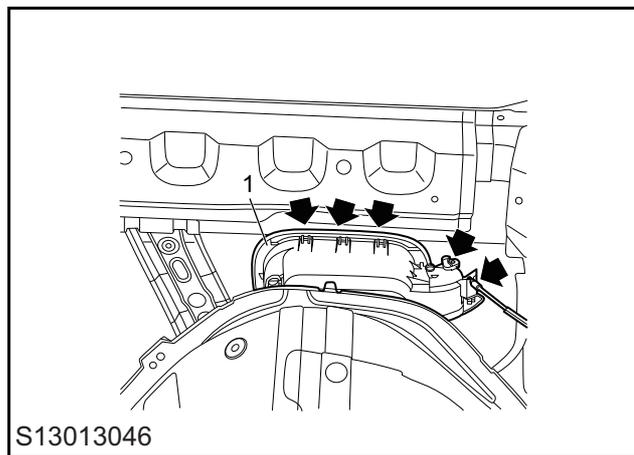
Rear Body

Service Guide

Fuel Filler Flap Assembly Replacement

Removal

- 1 Disconnect the negative battery cable.
- 2 Remove the left rear quarter trim panel assembly. Refer to "[Rear Quarter Trim Panel Assembly Replacement \(Left\)](#)".
- 3 Disconnect the electrical connector of the fuel filler flap assembly.
- 4 Disconnect the limit lock cable of the fuel filler flap assembly.
- 5 Disconnect the clips of the fuel filler flap assembly.
- 6 Remove the fuel filler flap assembly (1).



Installation

- 1 Align the clips, and locate the fuel filler flap on the body.

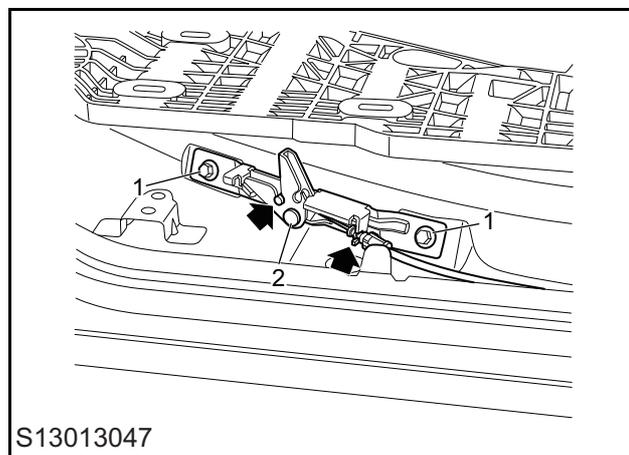
Caution: Adjust the gap around the fuel filler flap to prevent interference with the quarter.

- 2 Connect the limit lock cable of the fuel filler flap assembly.
- 3 Connect the electrical connector of the fuel filler flap assembly.
- 4 Install the left rear quarter trim panel assembly. Refer to "[Rear Quarter Trim Panel Assembly Replacement \(Left\)](#)".
- 5 Connect the negative battery cable.

Fuel Filler Flap Sliding Door Limit Lock Replacement

Removal

- 1 Disconnect the negative battery cable.
- 2 Remove the side sliding door courtesy panel covering. Refer to "[Side Sliding Door Courtesy Panel Covering Replacement](#)".
- 3 Disconnect the limit lock cable of the fuel filler flap assembly.
- 4 Remove the bolts (1) of the fuel filler flap sliding door limit lock.
- 5 Remove the fuel filler flap sliding door limit lock (2).



Installation

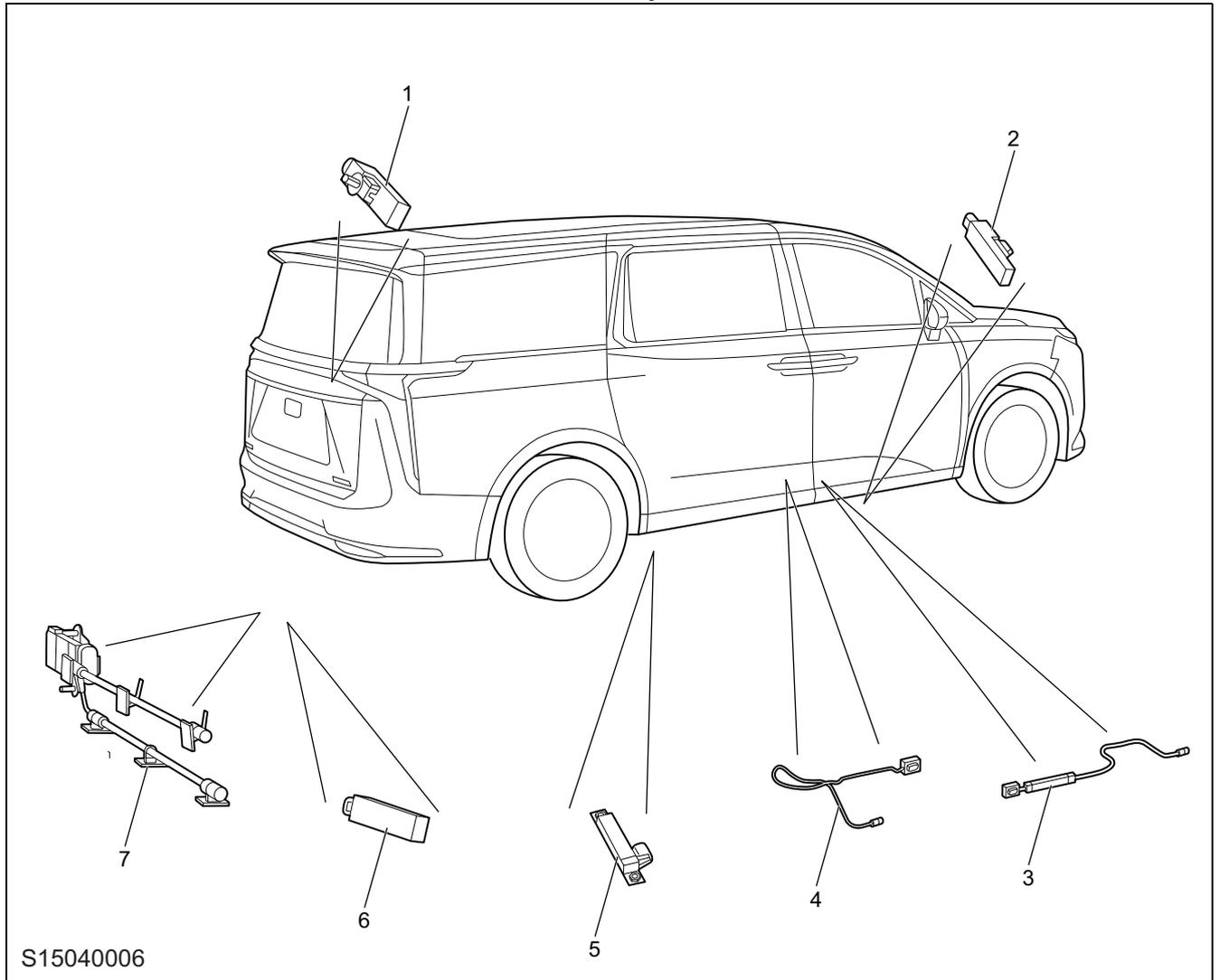
- 1 Install the fuel filler flap sliding door limit lock.
- 2 Install the bolts of the fuel filler flap sliding door limit lock, tighten them to 9 ± 1 Nm, and check the torque.
- 3 Connect the limit lock cable of the fuel filler flap assembly.
- 4 Install the side sliding door courtesy panel covering. Refer to "[Side Sliding Door Courtesy Panel Covering Replacement](#)".
- 5 Connect the negative battery cable.

Keyless Start and Immobilizer (Including Key Start)

Keyless Start and Immobilizer (Including Key Start)

Layout

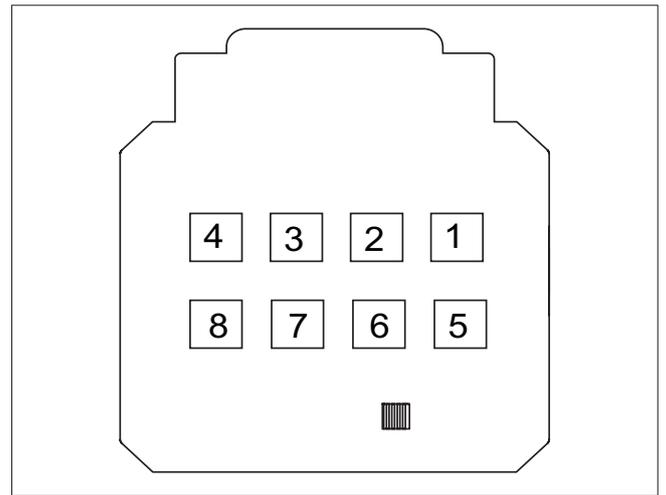
Antenna Layout



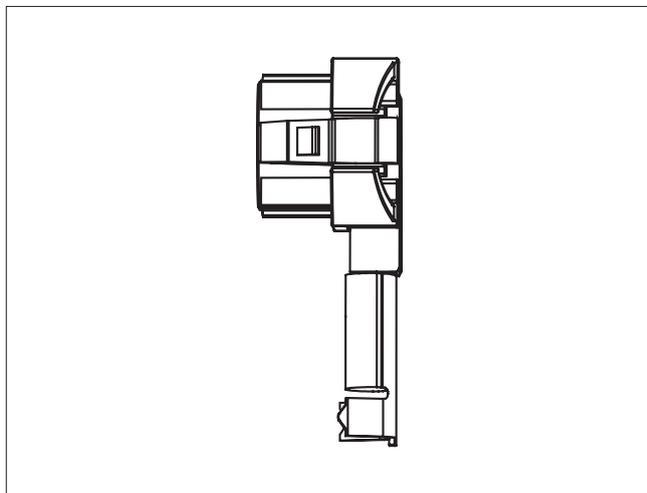
- | | |
|---|--|
| 1 Interior Low-frequency Antenna (Rear) | 4 Handle Antenna (Inside side door handle) |
| 2 Interior Low-frequency Antenna (Auxiliary Fascia Console) | 5 Interior Low-frequency Antenna (Middle) |
| 3 Handle Antenna (Inside front door handle) | 6 Tailgate Antenna |
| | 7 Tailgate Opening Sensor |

Wiring Harness Distribution and Electric Component Pin Definition 4-80

Pin No.	Color	Function	Re- marks
4	-	-	
5	D-BU/YE	Enable	
6	-	-	
7	BK	GND	
8	-	-	
9	-	-	
10	-	-	
11	-	-	
12	-	-	



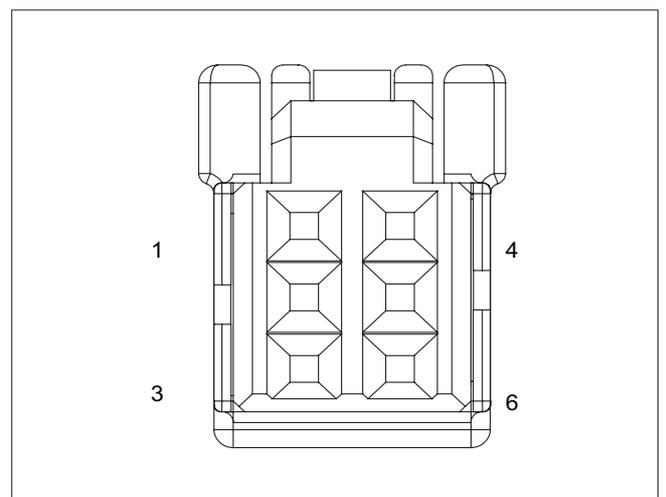
IP09_D Integrated Tri-screen (Lighting Output)
CONN 8 F 0.64 BLK



IP09_C' Instrument Screen (High Configuration) LVDS
CONN 1 F FAKRA BLK

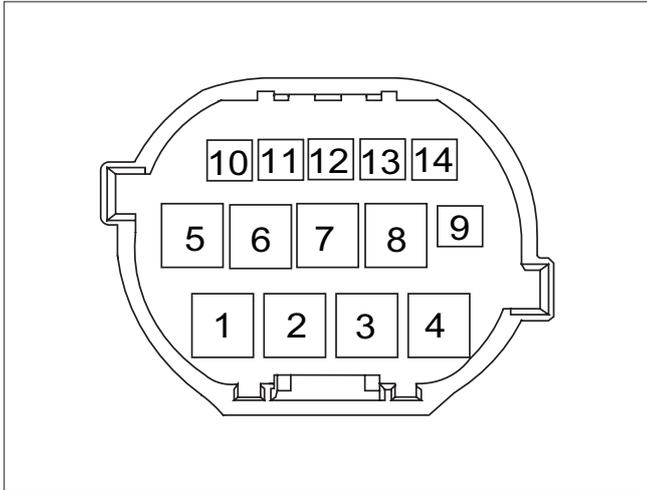
Pin No.	Color	Function	Re- marks
1	RD/WH	CL30S	
2	-	-	
3	BK/WH	PWM INPUT	
4	VT/WH	-	
5	BK	GND	
6	-	-	
7	WH	Combination Lamp OUTPUT1	
8	YE	FOG OUTPUT2	

Pin No.	Color	Function	Re- marks
1		GND	
2		LVDS 1-	
3		GND	
4		LVDS 1+	



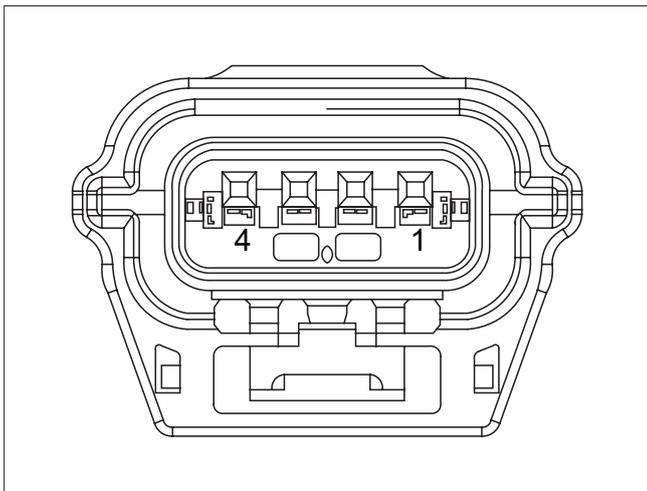
IP10 Front Passenger Mini Screen
CONN 6 F 025 BLU

4.12.1 Front Bumper Harness Right



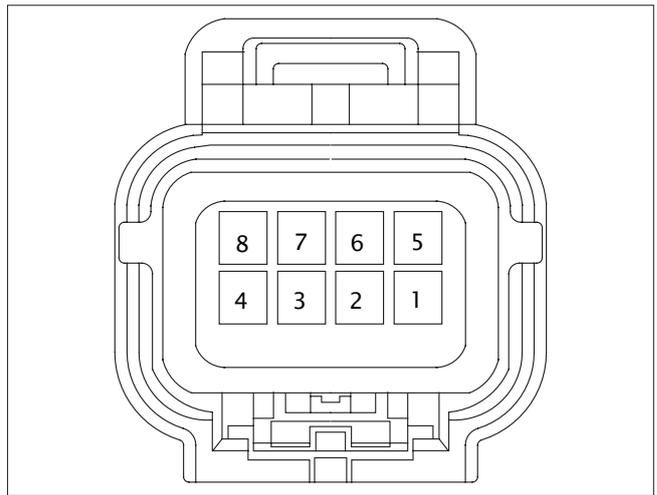
PFR01 Right Headlamp
ASM CONN 14 F 025 060

Pin No.	Color	Function	Re- marks
3	-	-	
4	-	-	
7	-	-	
8	-	-	
9	-	-	
10	-	-	
11	-	-	



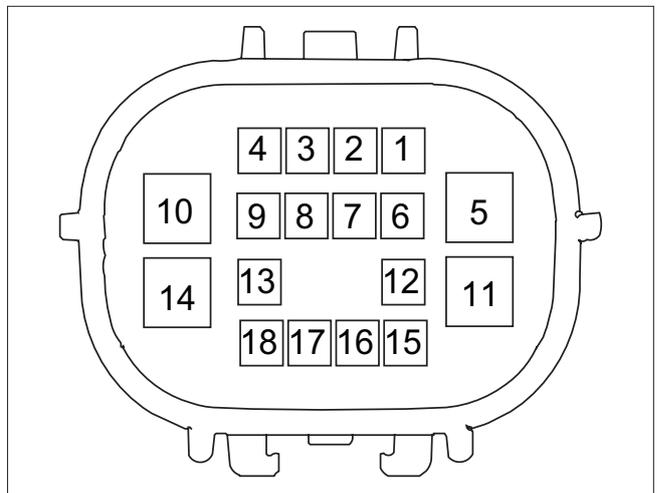
PFR02 Reversing Radar (Front Right)
ASM CONN 4 F 0.64 RH BLK SLD

Pin No.	Color	Function	Re- marks
2	-	-	



PFR03 Front Right Corner Millimeter-wave Radar
ASM CONN 8 F 025 HS CONN BLK SLD

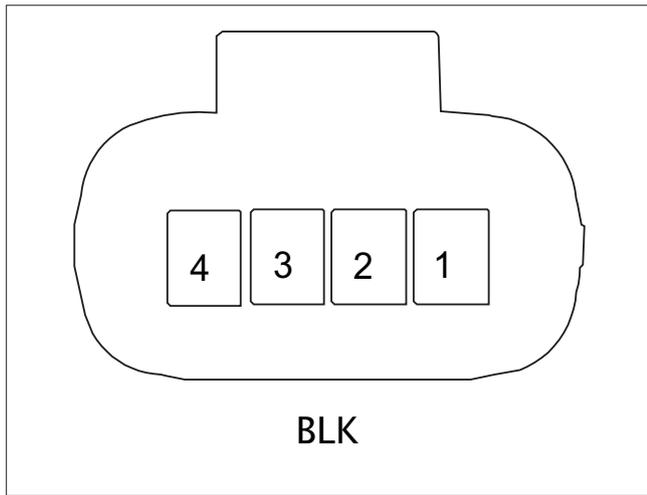
Pin No.	Color	Function	Re- marks
2	-	-	
3	-	-	
4	-	-	
7	-	-	



PF-EB(R) Inline
ASM CONN 18 M 0.64 1.5 SLD

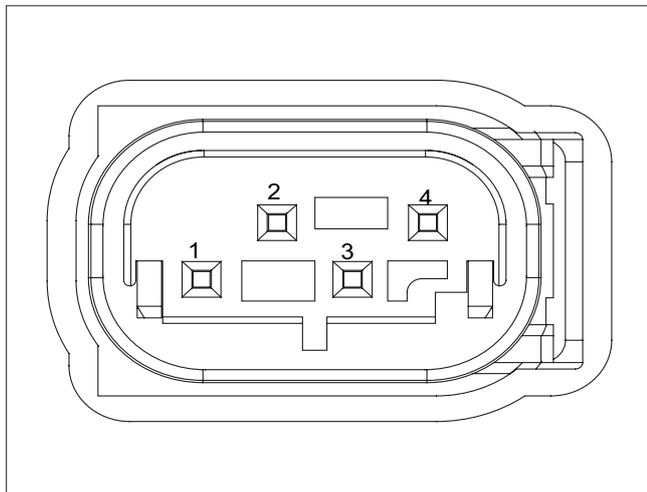
Pin No.	Color	Function	Re- marks
15	-	-	
18	-	-	

Wiring Harness Distribution and Electric Component Pin Definition 4-278



EB219 chiller Front Electronic Expansion Valve
ASM CONN 4 F 1.2 MCON-LL BLK SLD

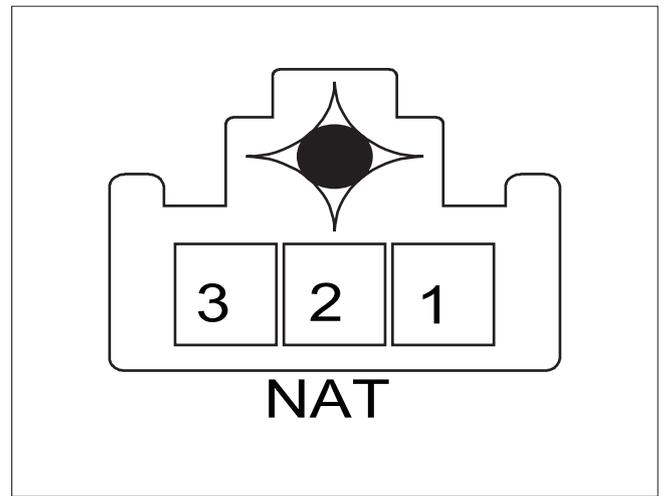
Pin No.	Color	Function	Re- marks
1	PU	ECCV_1	
2	GY/L-GN	ECCV_2	
3	OG/RD	ECCV_3	
4	YE/GY	ECCV_4	



EB220 Compressor Inlet PT Sensor
ASM CONN 4 F 0.64 MQS BLK SLD

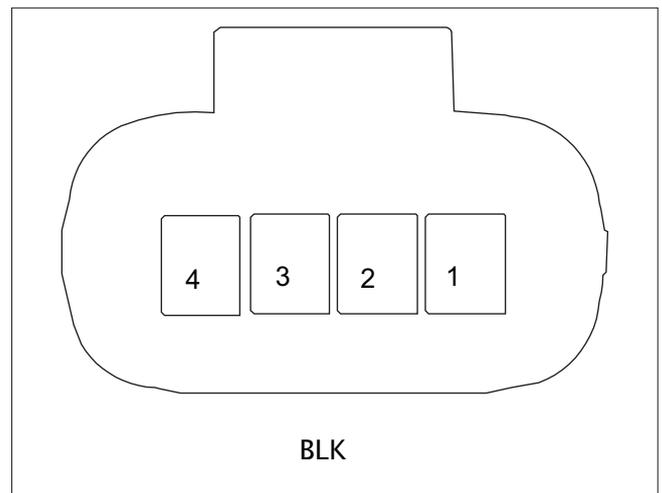
Pin No.	Color	Function	Re- marks
1	BK/WH	Sensor GND	
2	D-GN/OG	Pressure Output	
3	WH/RD	Thermistor Resis- tance Output	

Pin No.	Color	Function	Re- marks
4	VT/RD	Power	



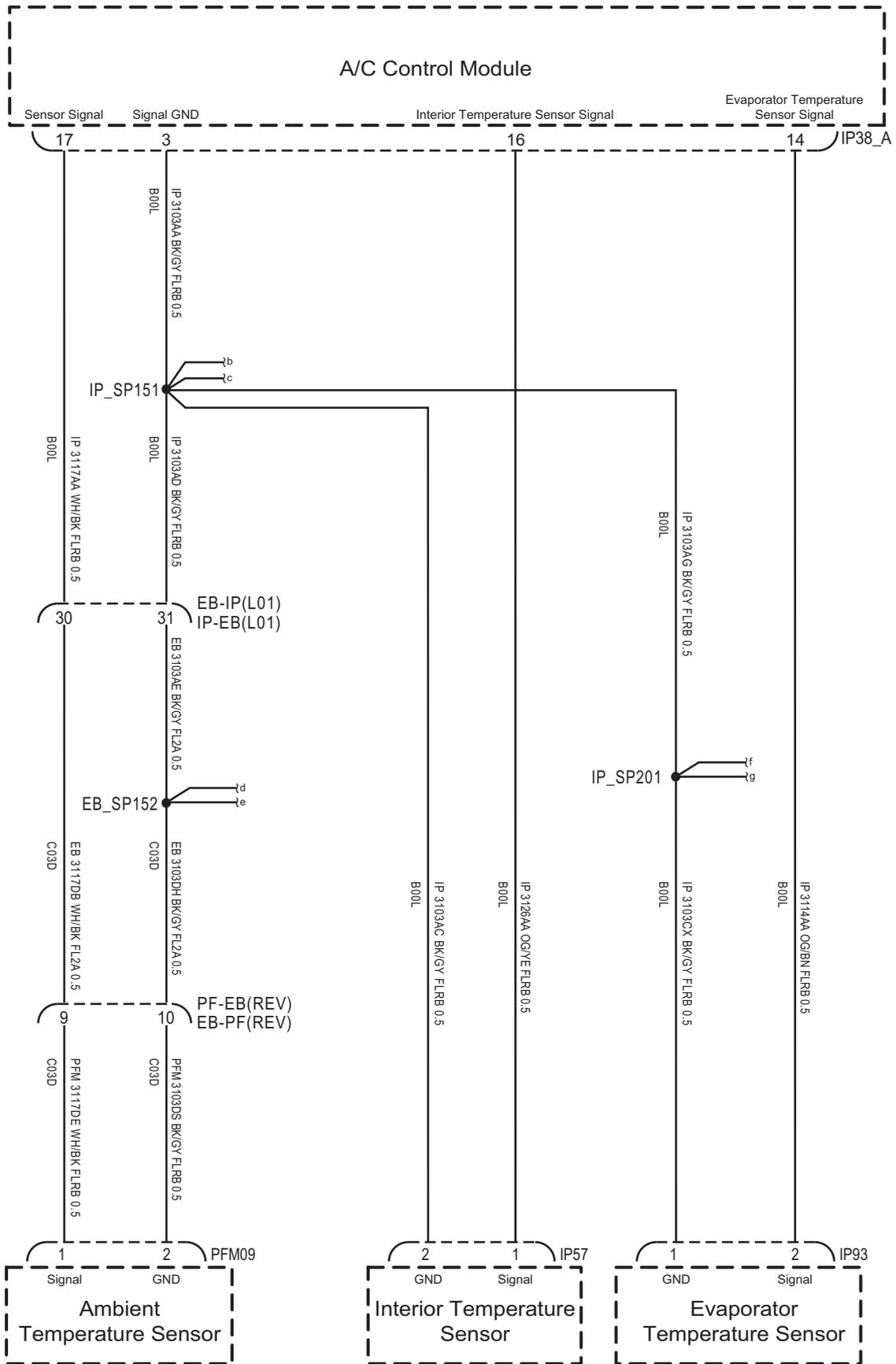
EB222 Rear A/C Electronic Expansion Valve_EV
CONN 3 F 2.7 SDL NAT

Pin No.	Color	Function	Re- marks
1	BK	GND	
2	RD/WH	KL30	
3	PK	LIN_HPC	



EB223 Front A/C - Electronic Expansion Valve EVCC_
LHD
ASM CONN 4 F 1.2 MCON-LL BLK SLD

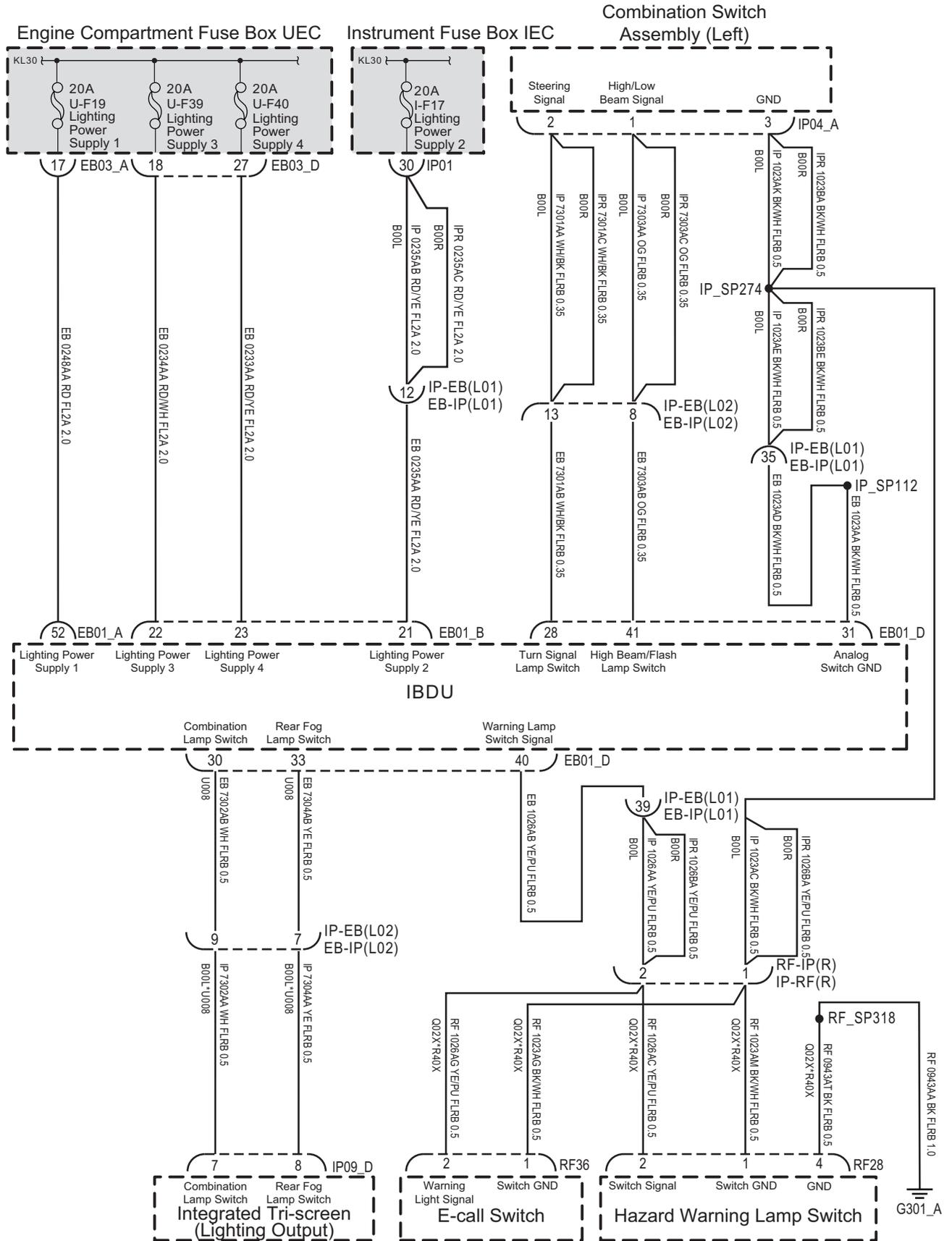
5.3.9 Air Conditioning and Heating System 5 - LHD



Circuit Diagram 5-410

5.6 Exterior Lighting System

5.6.1 Exterior Lighting System 1



Circuit Diagram 5-534

5.23.6 CAN/LIN Data Communication System 4 - LHD

