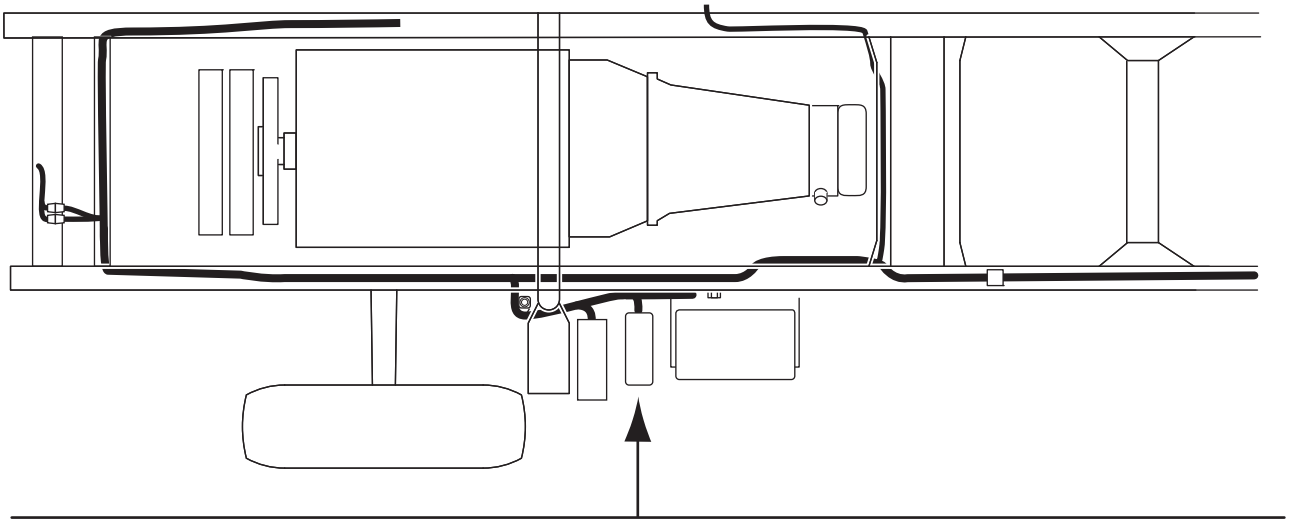
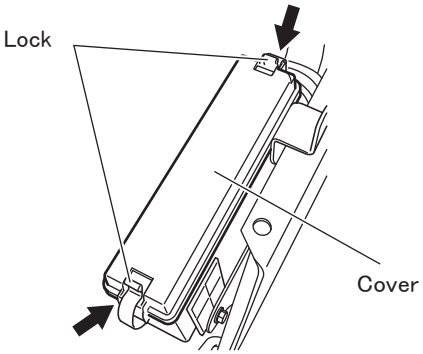
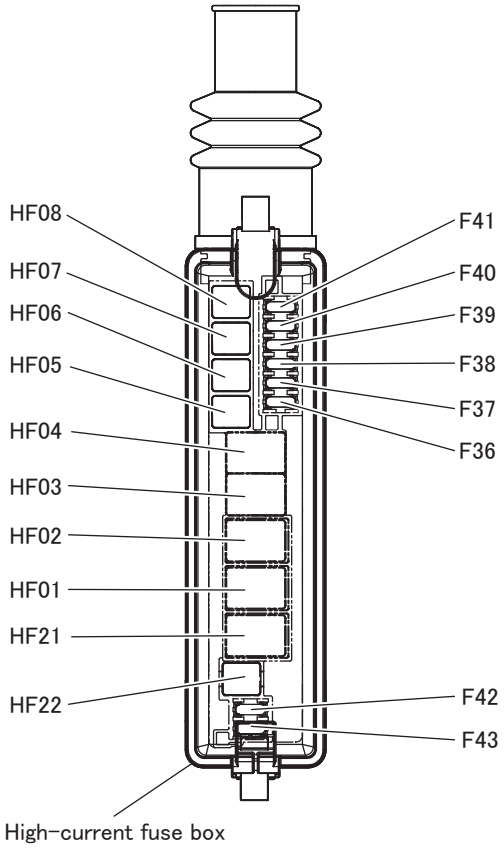
GROUP 54-01
POWER, CHARGE AND GROUND CIRCUIT

HIGH-CURRENT FUSE BOX







WARNING ⚠

- To prevent possible injury, be sure to disconnect the negative (−) cable of the battery and insulate it with tape before removing high-current fuses. (See Gr54-00A.)

CAUTION ⚠

- With the negative (−) cable of the battery connected, some high-current fuses are always under battery voltage. An arc will be generated when any of these high-current fuses is replaced without disconnecting the battery negative cable, and this could cause the related electric devices to be damaged.
- If replace the fuse, remove the high-current fuse box from the vehicle.
- If a fuse blows out, identify and remedy the cause, then replace the fuse.
- Be sure to use the fuse with the specified ampere.

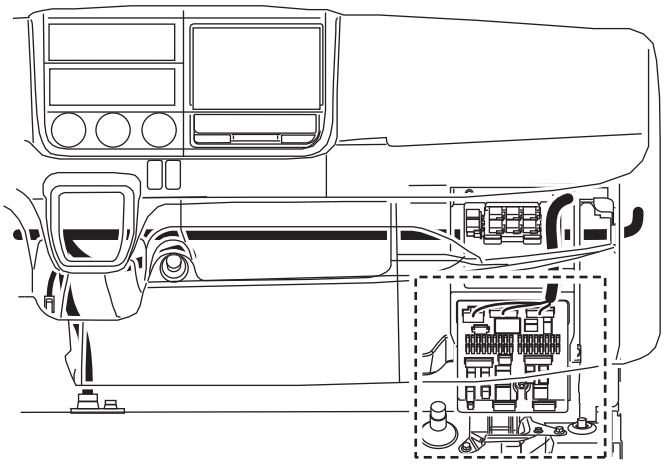
54-L10053HF-1

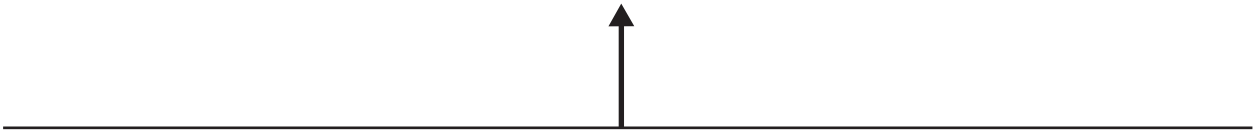
High-current fuse box

Fuse No.	Main load	Capacity
HF01	SAM	140A
HF02	—	—
HF03	SAM	80A
HF04	—	—
HF05	Glow ECU	60A
HF06	Starter relay	40A
HF07	—	—
HF08	Hydraulic unit	50A
HF21	—	—
HF22	SAM	40A
F36	—	—
F37	—	—
F38	—	—
F39	—	—
F40	—	—
F41	Hydraulic unit	30A
F42	—	—
F43	—	—

SAM : Signal detect and actuation modules
ECU : Electronic control unit

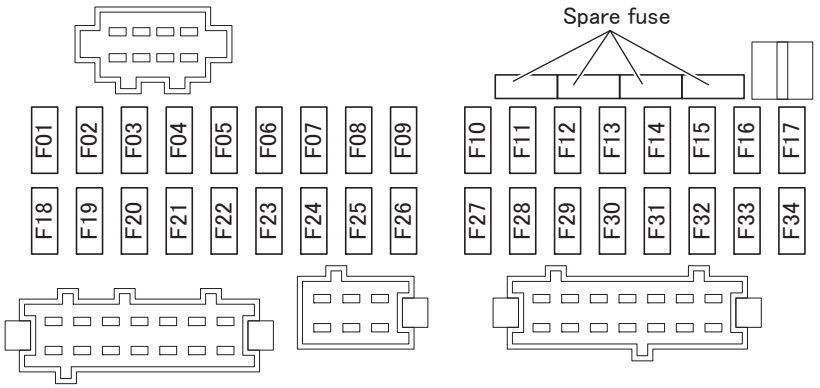
FUSE BOX



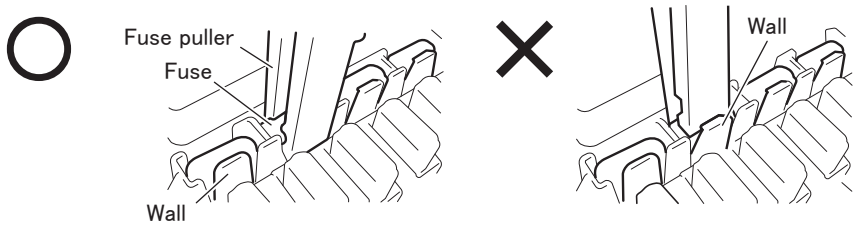


<Inside of SAM>

SAM : Signal detect and actuation modules



Removal of spare fuse



WARNING ⚠

- To prevent possible injury, be sure to disconnect the negative (−) cable of the battery and insulate it with tape before removing fuses. (See Gr54-00A.)

CAUTION ⚠

- If a fuse blows out, identify and remedy the cause, then replace the fuse.
- Be sure to use the fuse with the specified ampere.
- Insert the fuse puller into the gap on the outer side of the fuse holder wall to remove the spare fuse. Do not force the puller into the gap on the inner side of the fuse holder wall. Doing so will break the SAM and cause malfunctions or a fire.

54-L10053FUSE-1

Fuse box

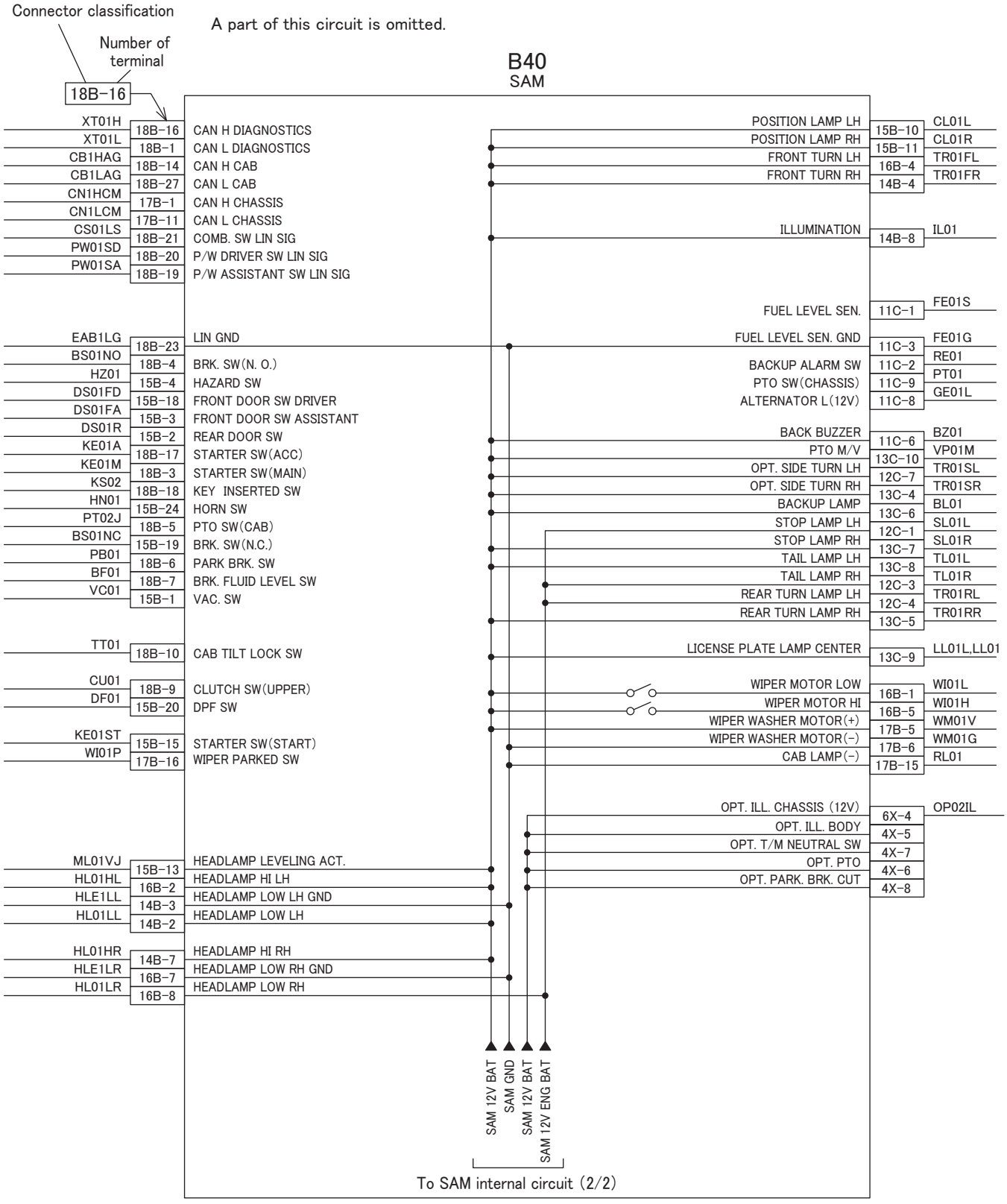
Fuse No.	Main load	Capacity
F01	Starter	10A
F02	—	—
F03	SRS airbag	10A
F04	Opt (IGN)	10A
F05	Power window (driver's seat side)	30A
F06	—	—
F07	Power window (assistant driver's seat side)	30A
F08	—	—
F09	Meter cluster, diagnosis connector, combination switch	10A
F10	—	—
F11	Blower fan	30A
F12	Audio, cab lamp	15A
F13	Starter switch, ISS ECU (B)	10A
F14	Horn	10A
F15	Audio	10A
F16	Cigarette lighter	20A
F17	Fuel filter	20A
F18	ABS ECU	10A
F19	Engine ECU	15A
F20	ISS ECU (IGN)	10A
F21	—	—
F22	Meter cluster	15A
F23	—	—
F24	—	—
F25	Opt (ACC)	10A
F26	Opt (B)	10A
F27	—	—
F28	Engine ECU	15A
F29	—	—
F30	—	—
F31	Engine ECU	20A
F32	—	—
F33	—	—
F34	Fuel pump	15A

ABS : Anti-lock brake system
ECU : Electronic control unit
SAM : Signal detect and actuation modules
SRS : Supplemental restraint system
ISS : Idling stop and start system

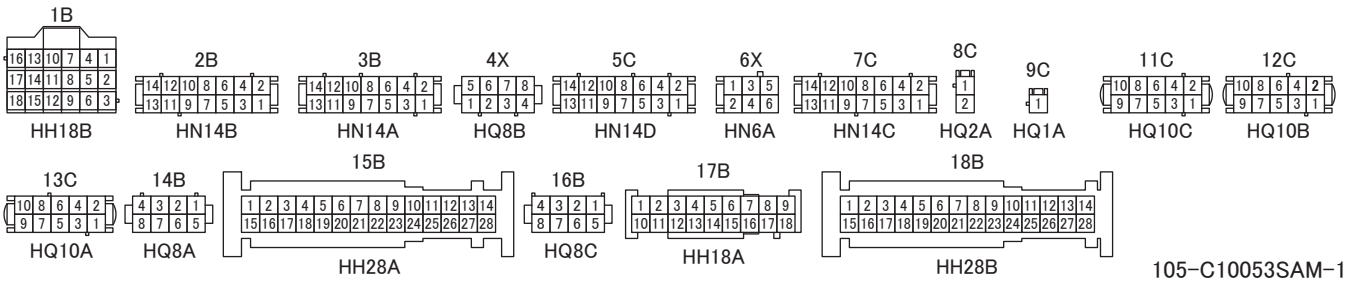
105 SAM INTERNAL CIRCUIT

(1/2)

SAM : Signal detect and actuation modules



SAM connector (harness side)

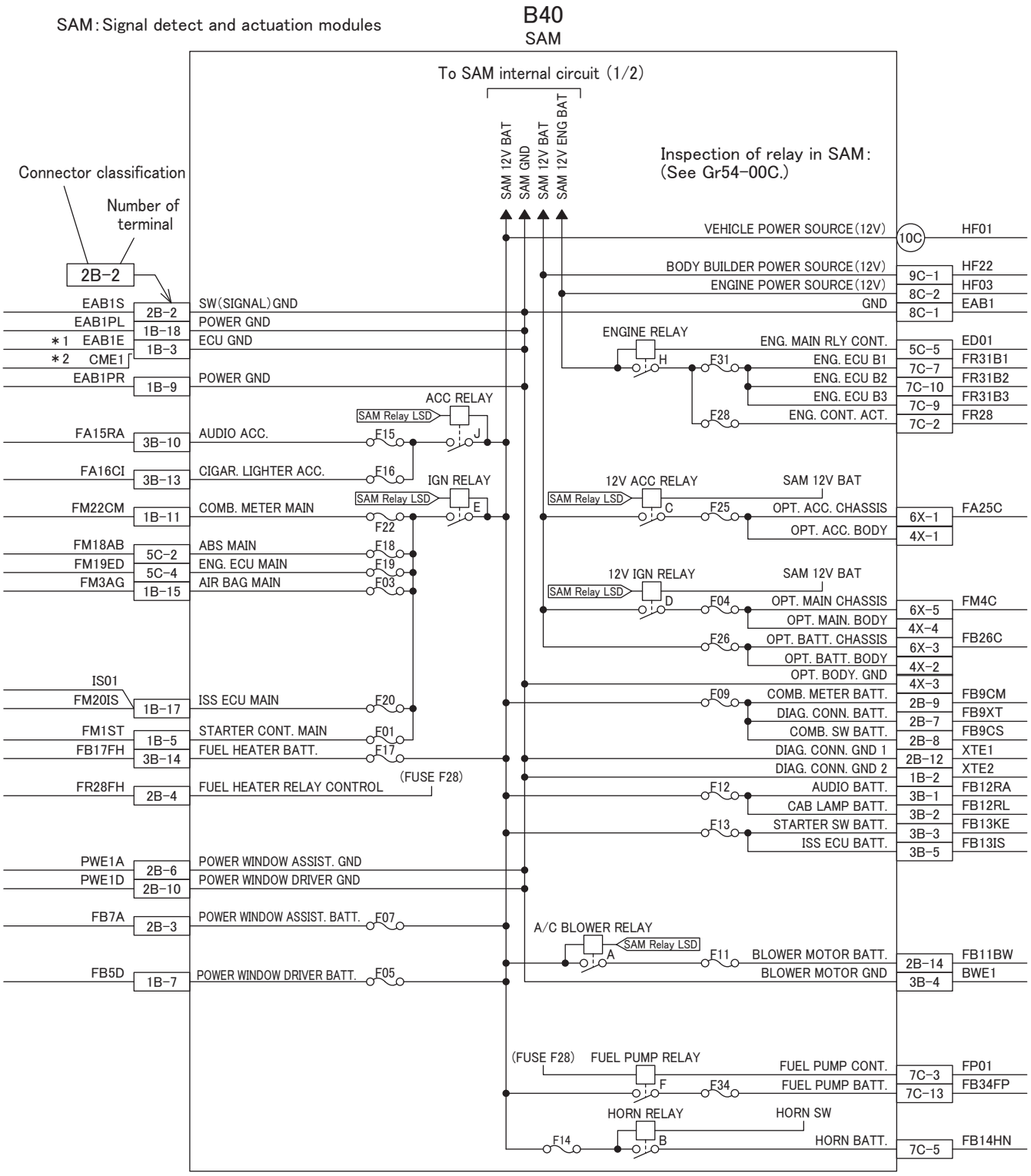


105-C10053SAM-1

(2/2)

A part of this circuit is omitted.

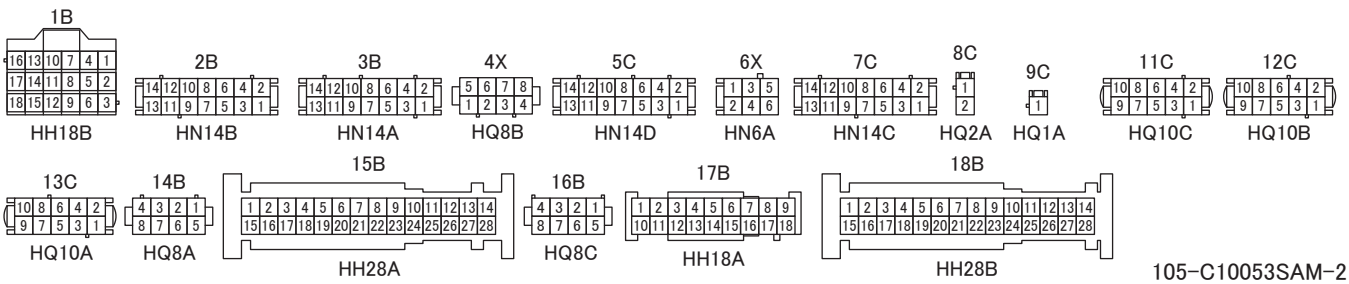
SAM : Signal detect and actuation modules



*1 : With SRS airbag or ISS
*2 : Except *1

ISS : Idling stop and start system
SRS : Supplemental restraint system

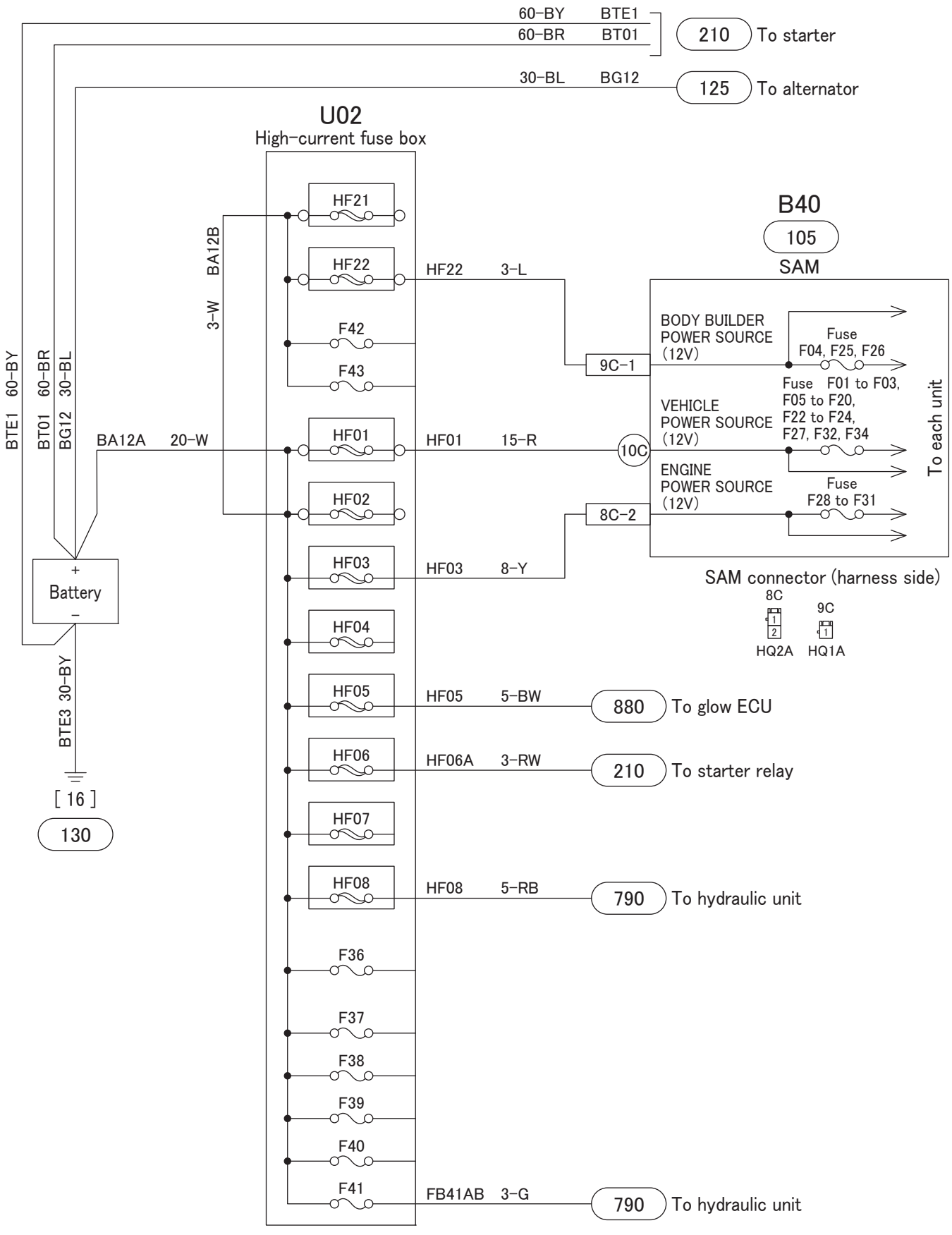
SAM connector (harness side)



105-C10053SAM-2

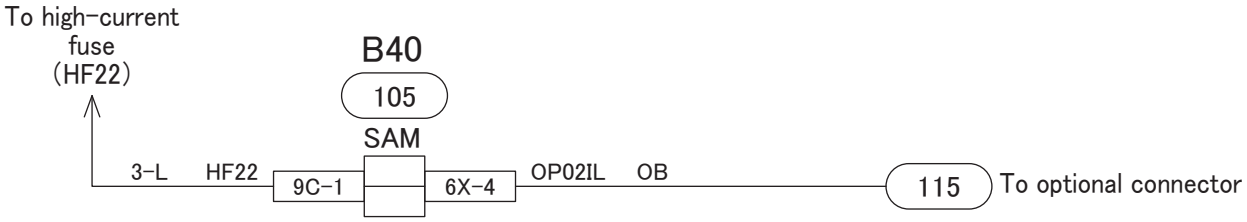
Battery → high-current fuse → SAM

ECU: Electronic control unit

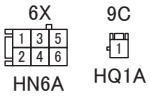


110-C10053ALL

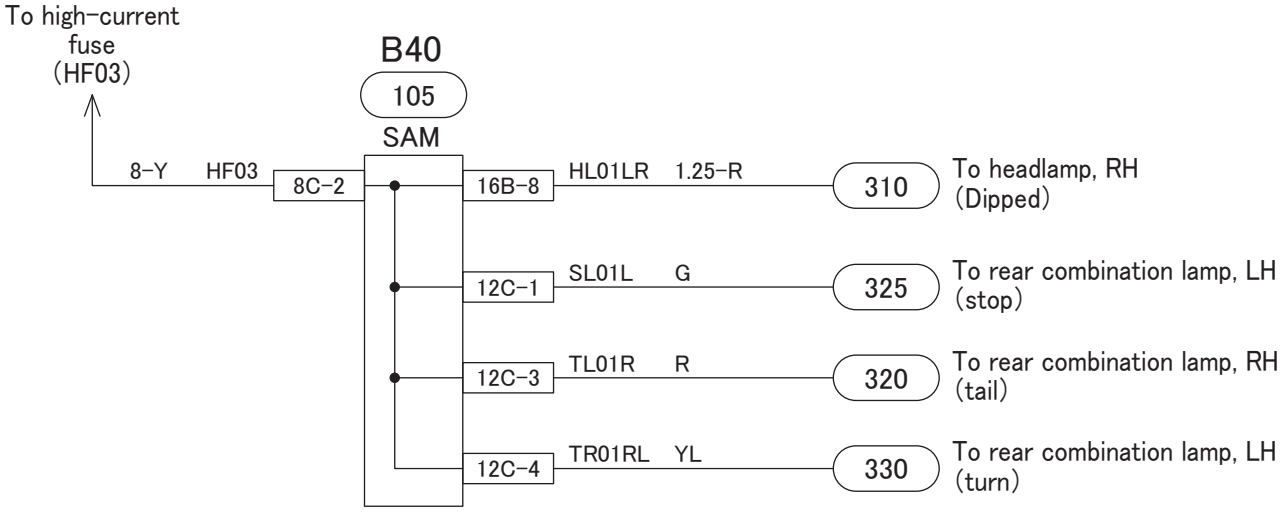
SAM
(12V BAT)



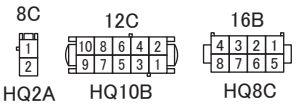
SAM connector (harness side)



SAM
(12V ENG BAT)



SAM connector (harness side)

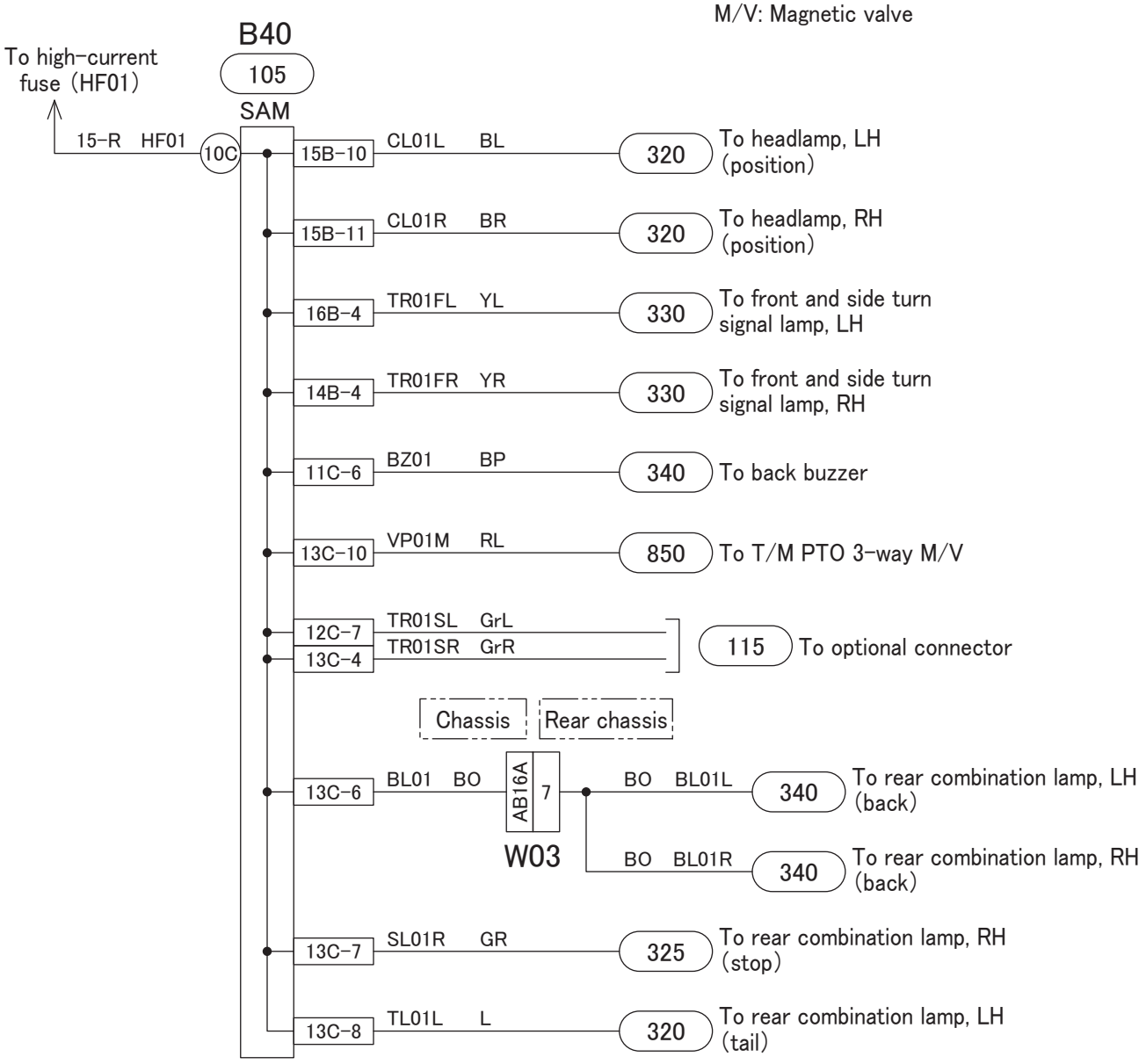


110-C10053-12E

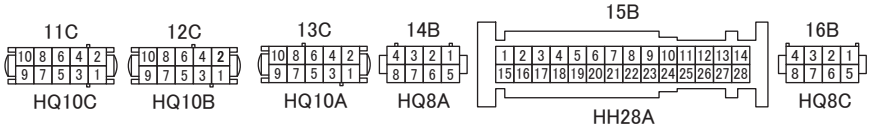
M E M O

SAM
(12V BAT)1/4

T/M: Transmission
PTO: Power take-off
M/V: Magnetic valve

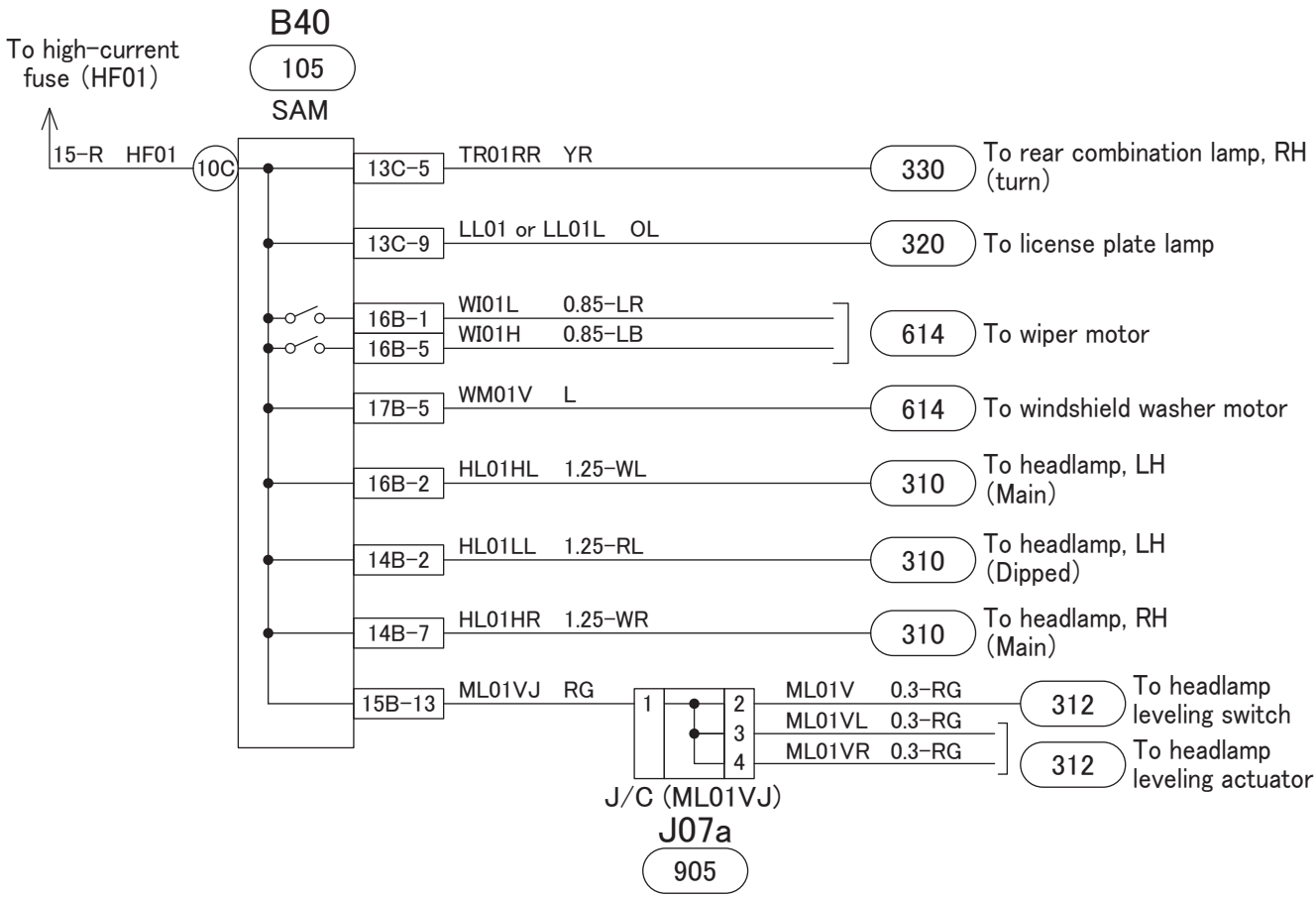


SAM connector (harness side)

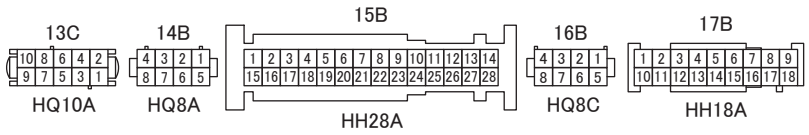


110-C10053-12-1

SAM
(12V BAT)2/4



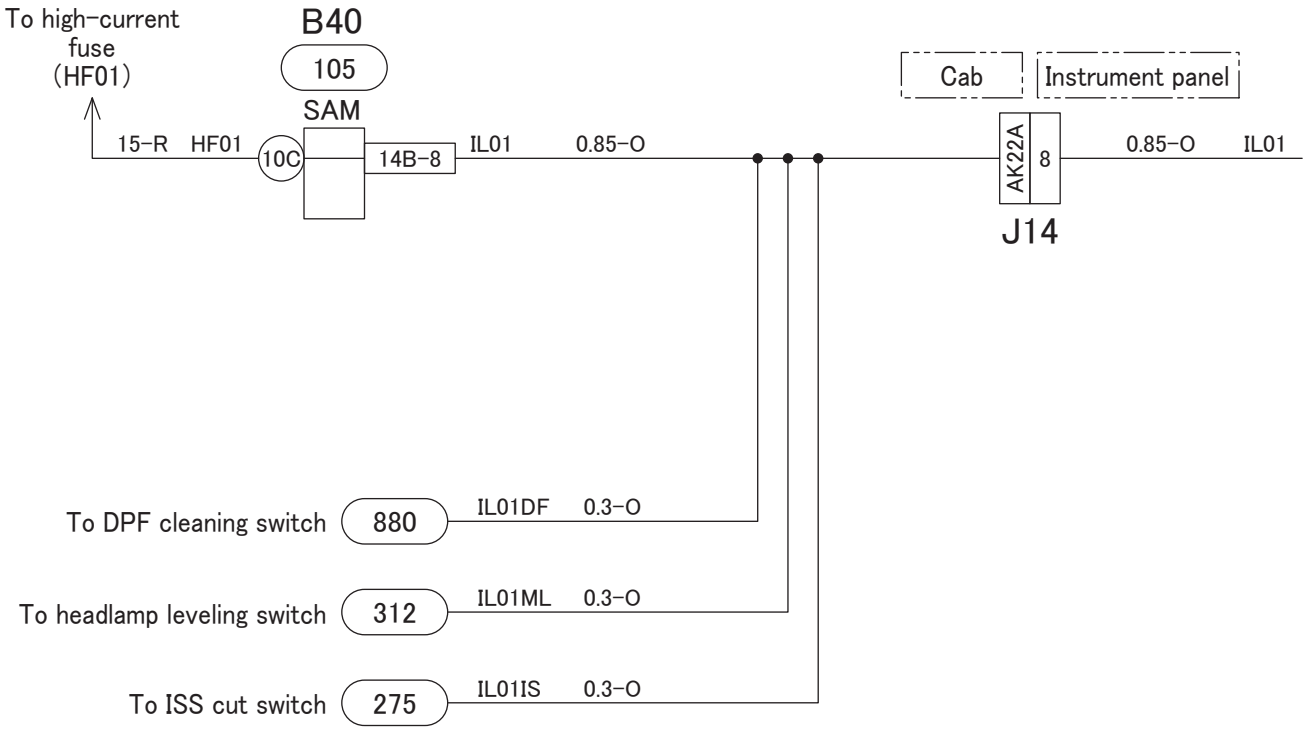
SAM connector (harness side)



110-C10053-12-2

SAM
(12V BAT)3/4

DPF: Diesel particulate filter
ISS: Idling stop and start system

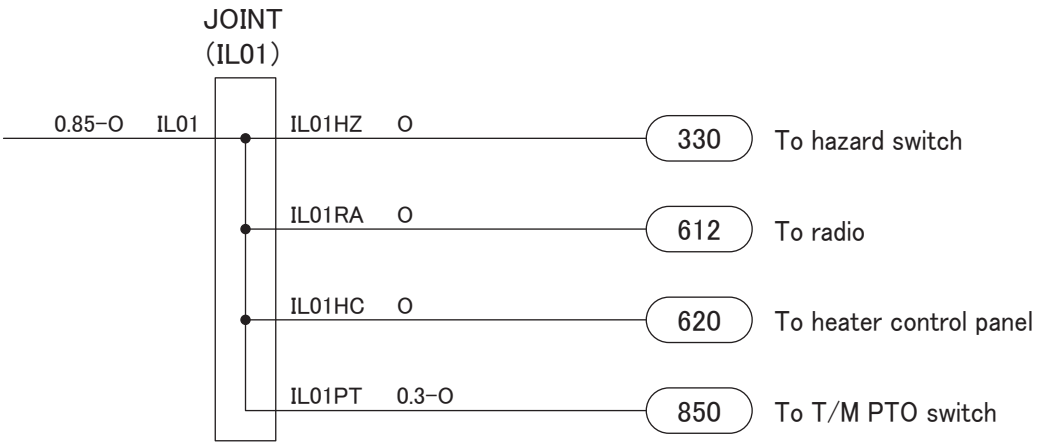


SAM connector (harness side)

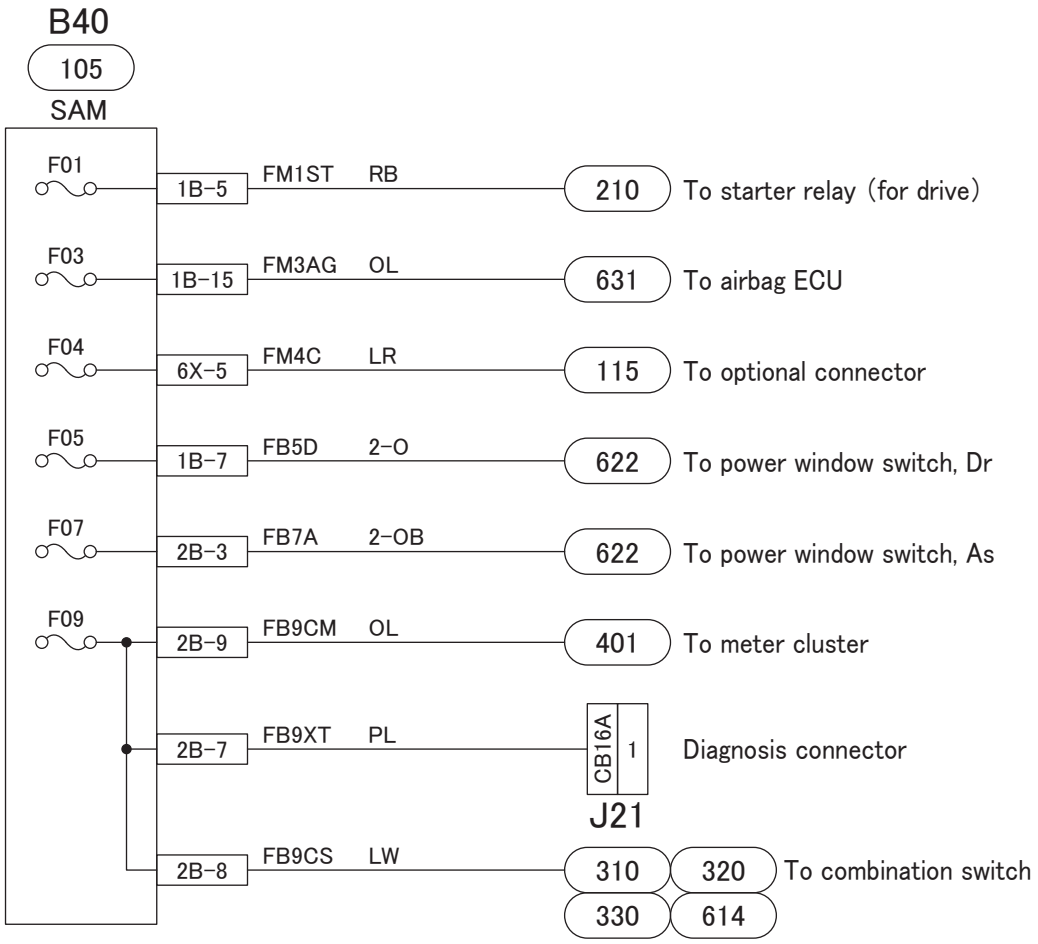
110-C10053-12-3

SAM
(12V BAT)4/4

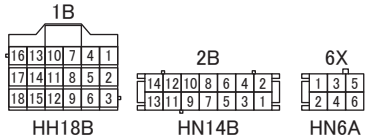
T/M: Transmission
PTO: Power take-off



SAM
(Fuse F01 to F09)



SAM connector (harness side)

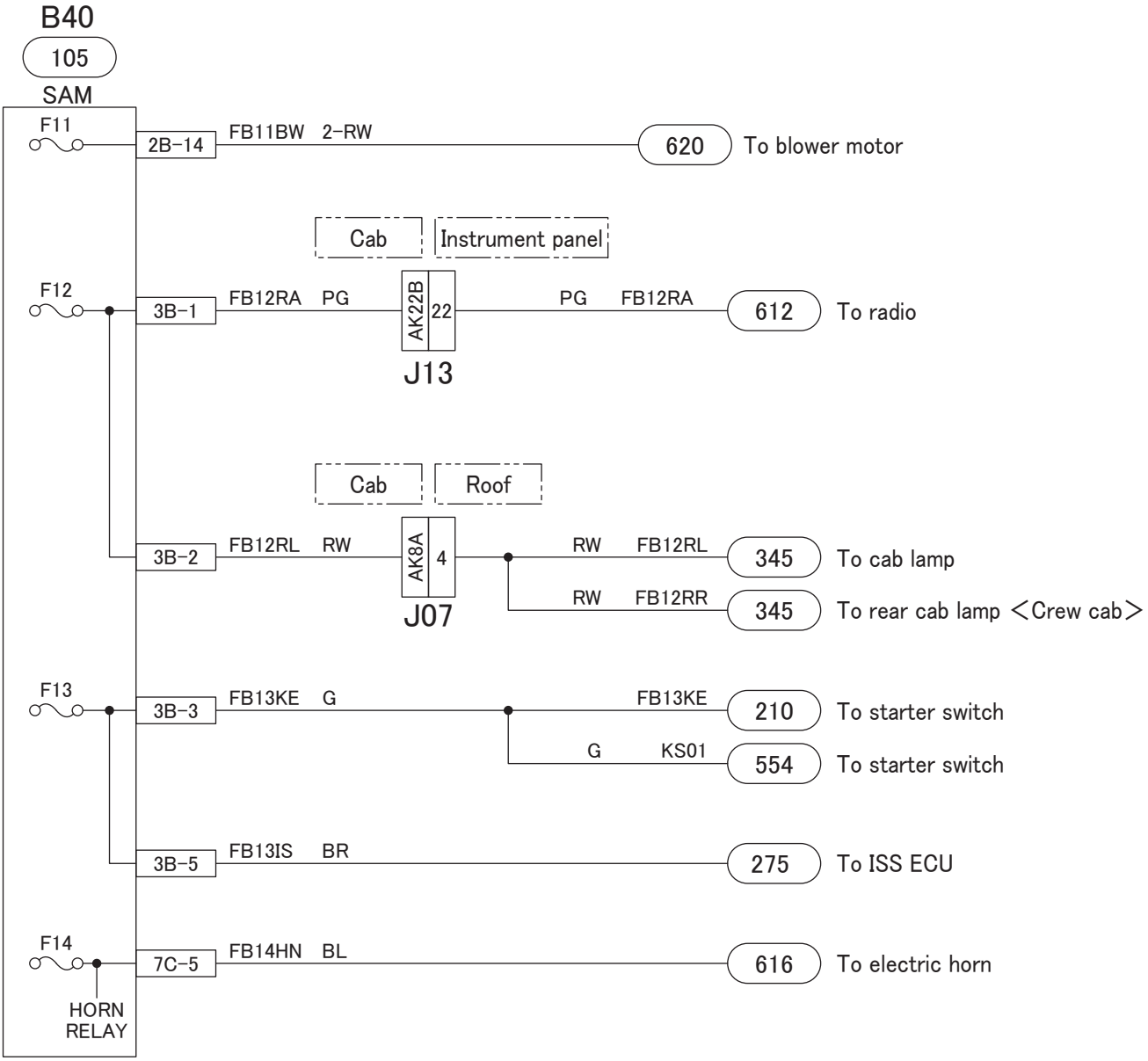


ECU: Electronic control unit
Dr: Driver's seat side
As: Assistant driver's seat side

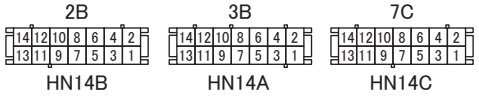
110-C10053F01

SAM
(Fuse F11 to F14)

ECU: Electronic control unit
ISS: Idling stop and start system

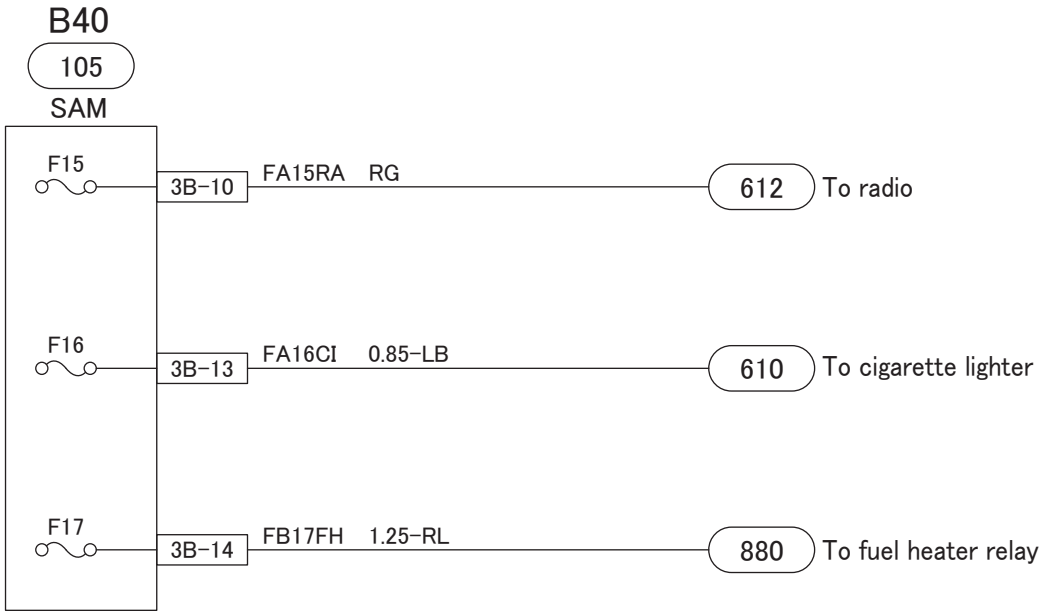


SAM connector (harness side)



110-C10053F11

SAM
(Fuse F15 to F17)

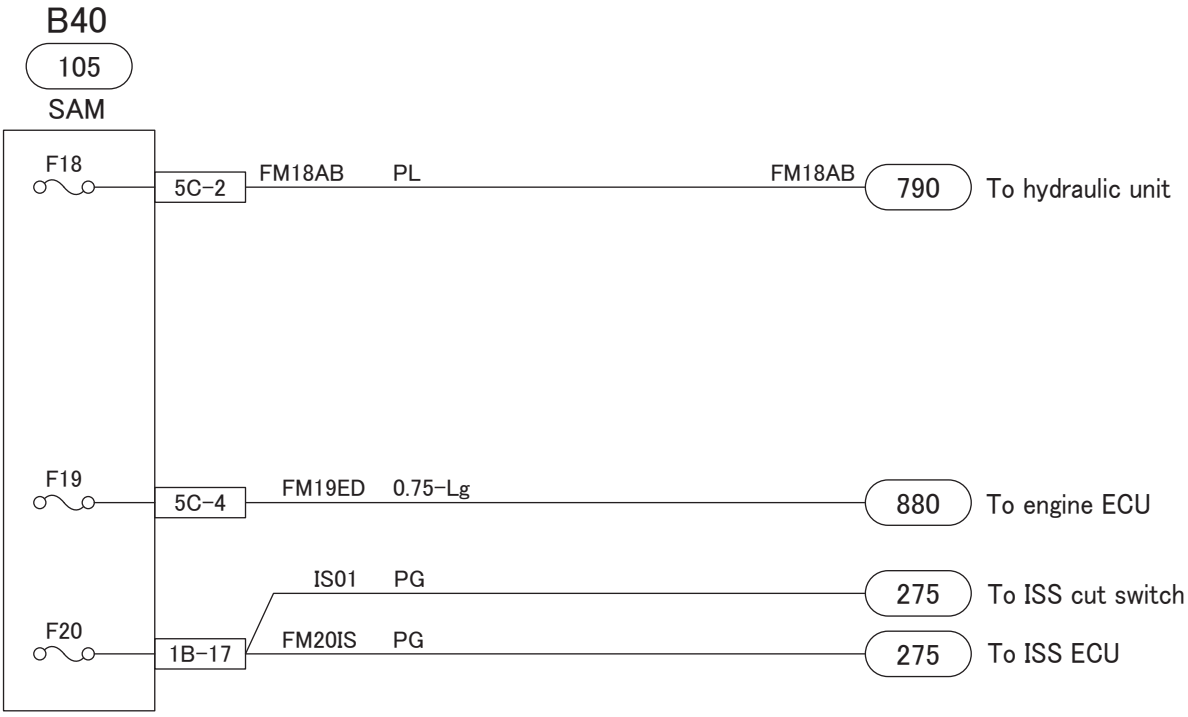


SAM connector (harness side)

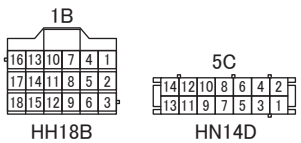
110-C10053F15

SAM
(Fuse F18 to F20)

ECU: Electronic control unit
ISS: Idling stop and start system

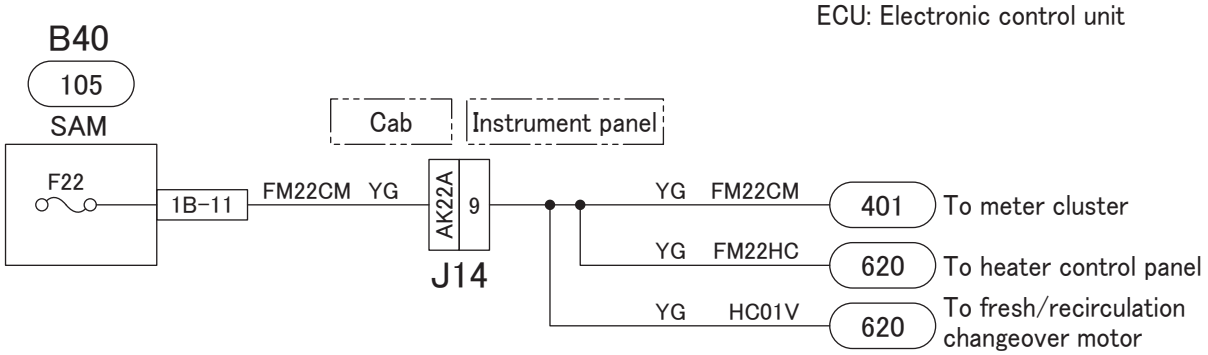


SAM connector (harness side)

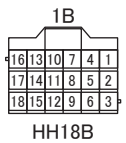


110-C10053F18

SAM
(Fuse F22)

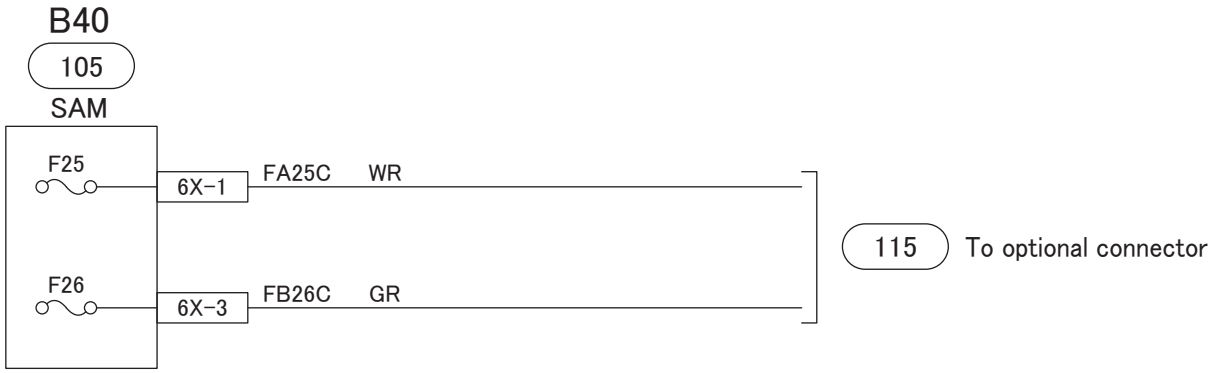


SAM connector (harness side)



110-C10053F22

SAM
(Fuse F25, F26)

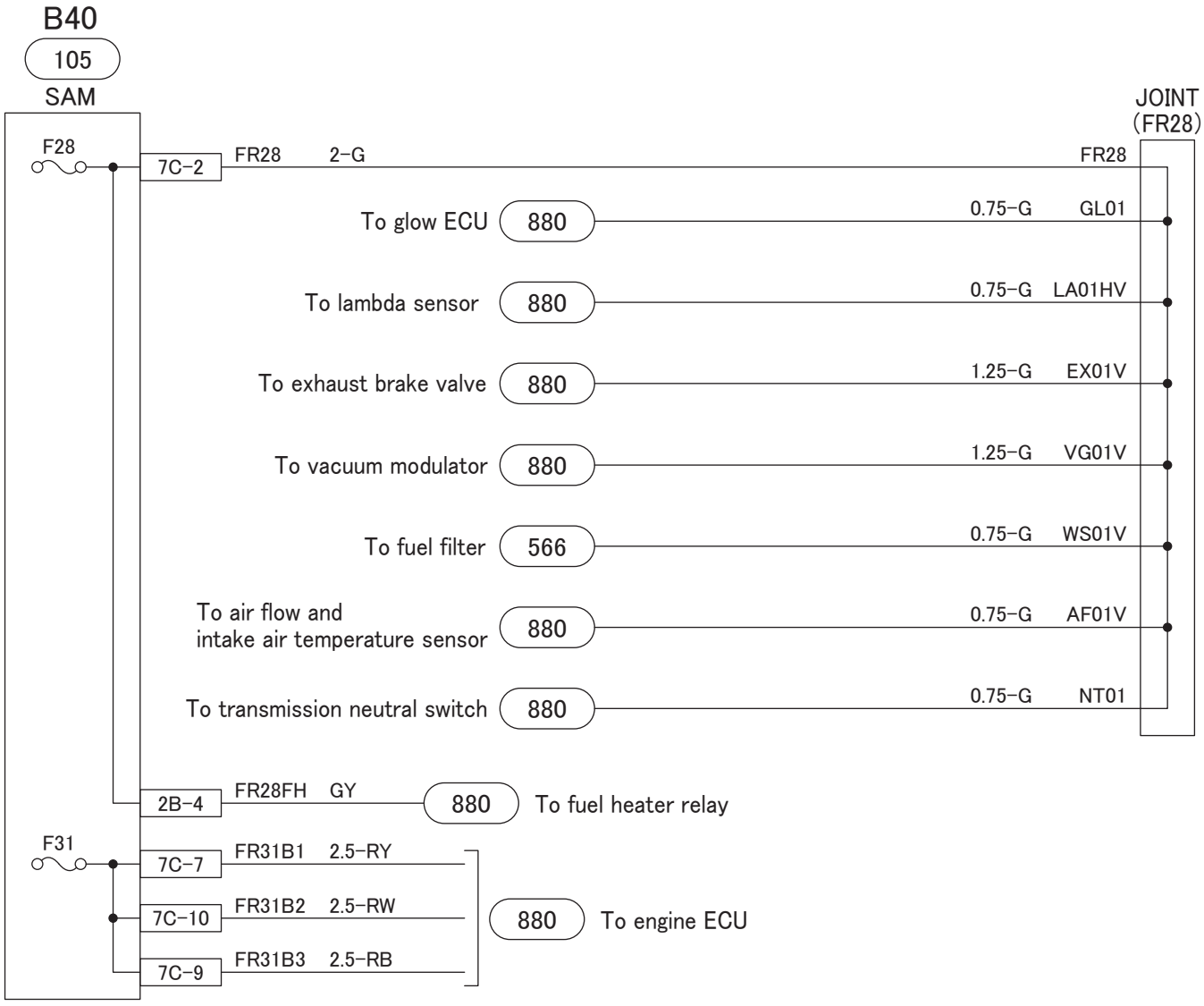


SAM connector (harness side)

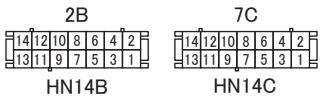
110-C10053F25

SAM
(Fuse F28 to F31)

ECU: Electronic control unit

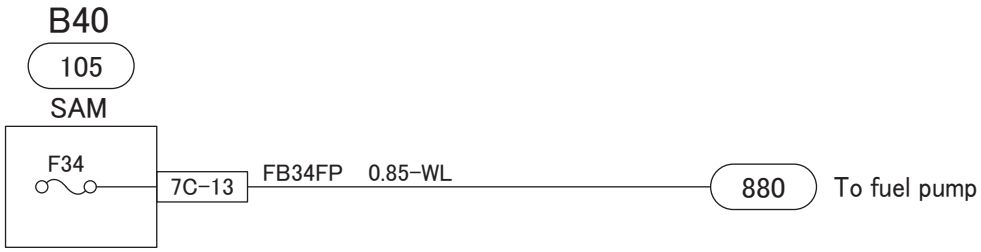


SAM connector (harness side)

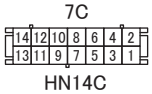


110-C10053F28

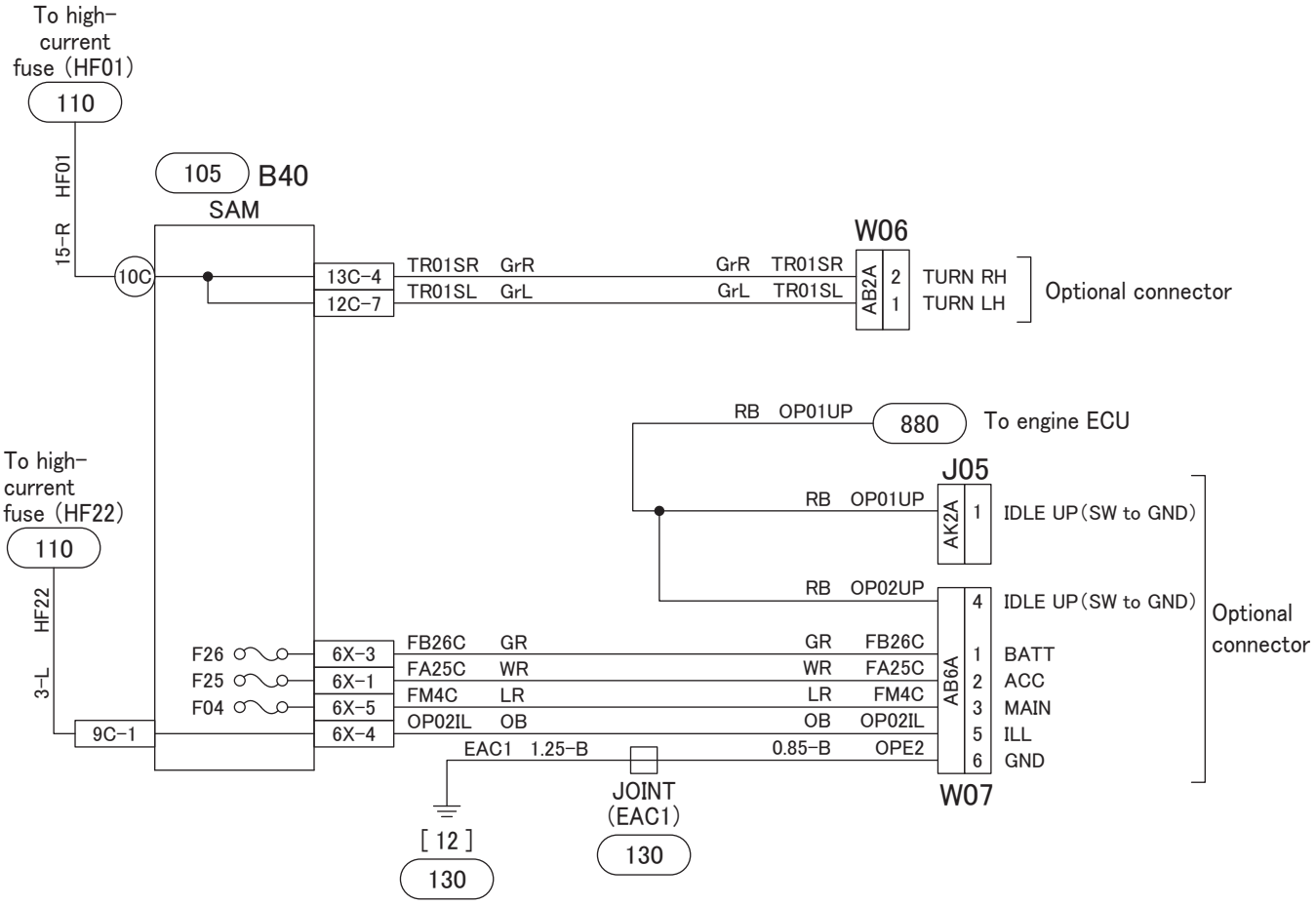
SAM
(Fuse F34)



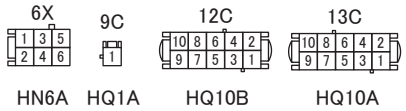
SAM connector (harness side)



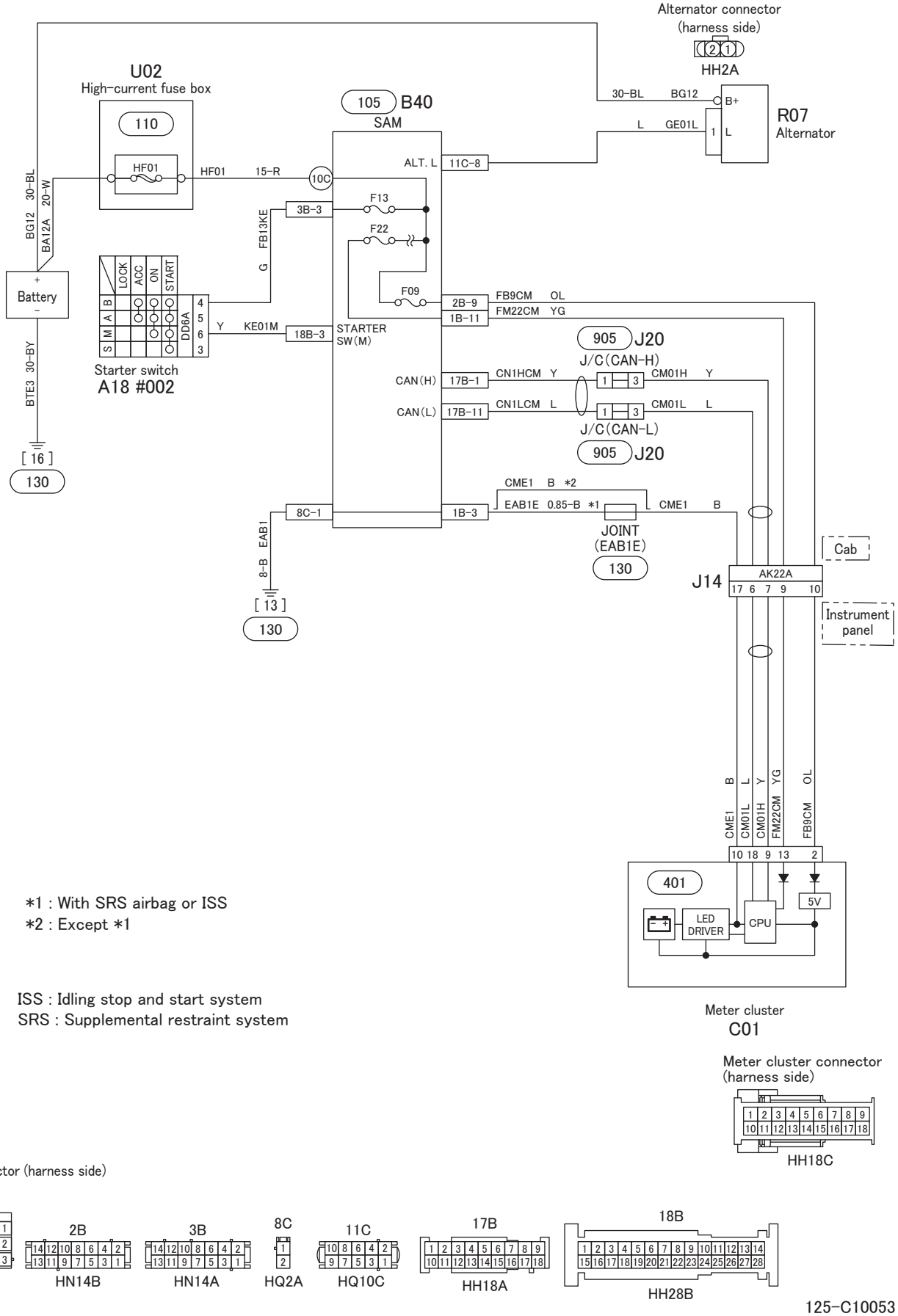
ECU: Electronic control unit



SAM connector (harness side)



115-C10053



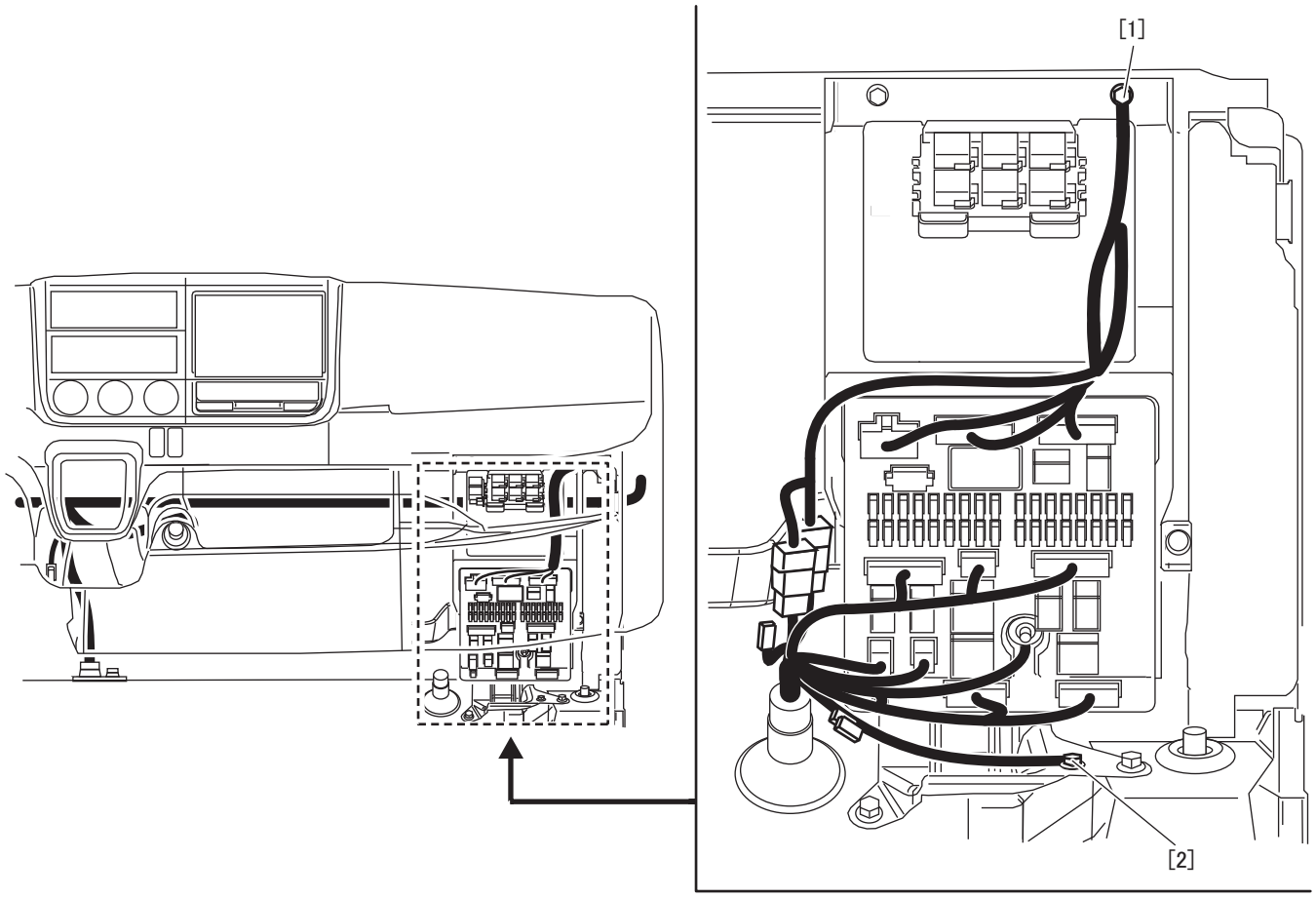
*1 : With SRS airbag or ISS
*2 : Except *1

ISS : Idling stop and start system
SRS : Supplemental restraint system

SAM connector (harness side)

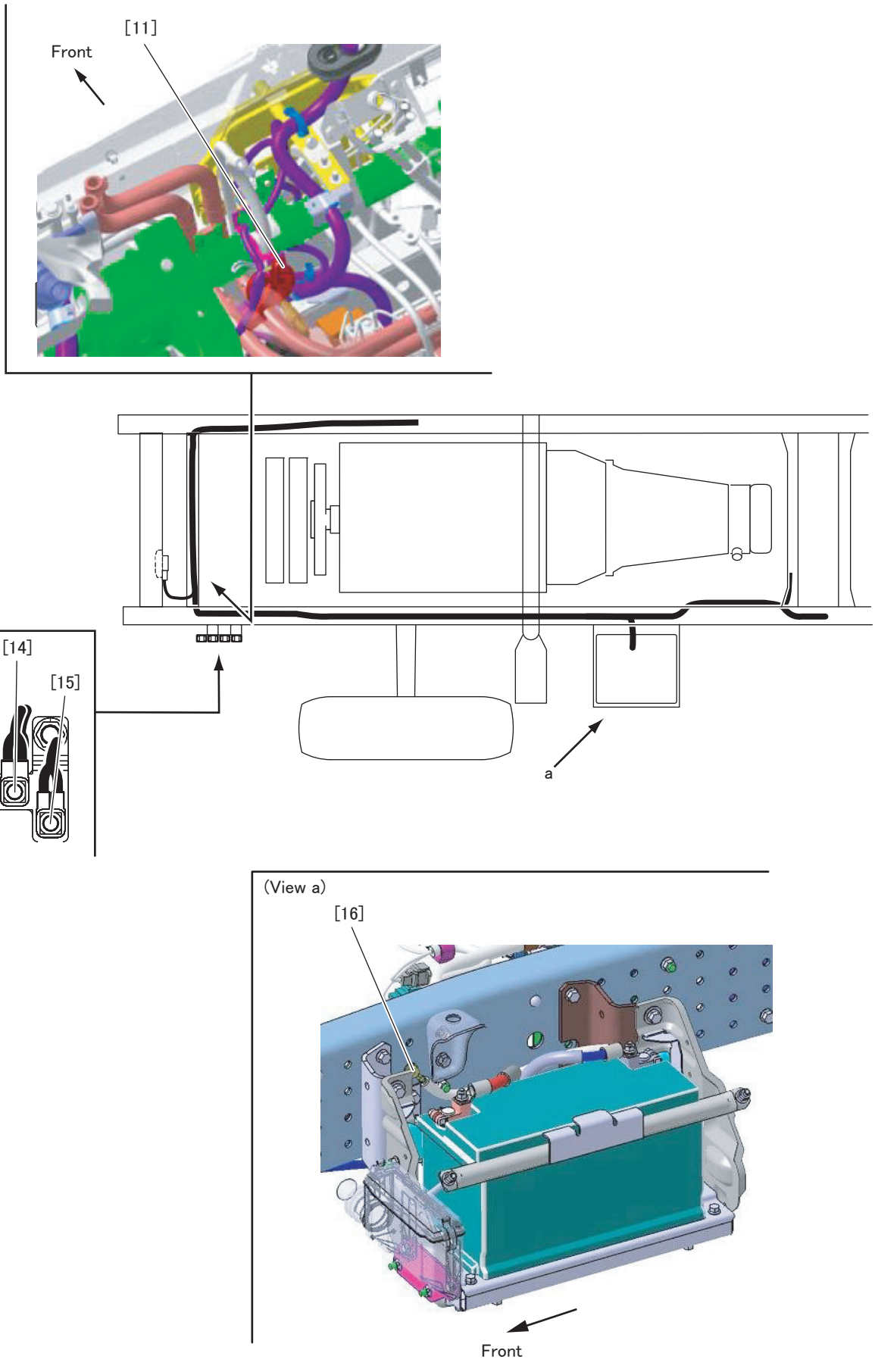
125-C10053

[1] – [2] Cab ground



Location	Circuit No.	Wire diameter – wire color	Destination	Remarks
[1]	EAB2	1.25-B	JOINT (EAB2)	
[2]	EAB3	1.25-B	Frame ground ([12])	

[11] – [16] Chassis ground



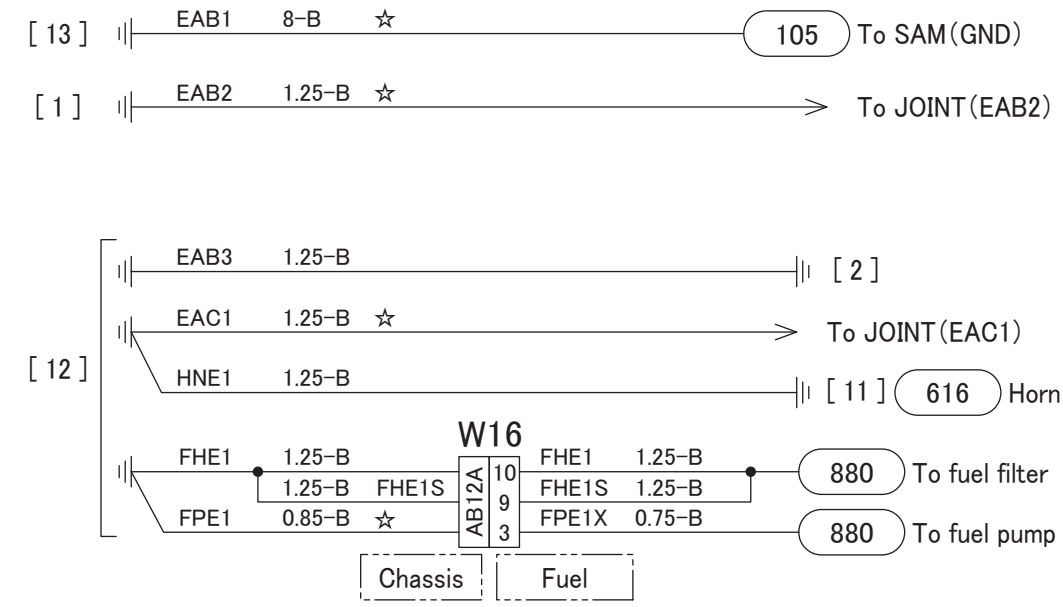
Location	Circuit No.	Wire diameter – wire color	Destination	Remarks
[11]	HNE1	1.25–B	Frame ground ([12])	Horn
[12]	EAB3	1.25–B	Cab ground ([2])	
	EAC1	1.25–B	JOINT (EAC1)	
	FHE1	1.25–B	Fuel filter	
	FPE1	0.85–B		
	HNE1	1.25–B	Horn ground	
[13]	EAB1	8–B	SAM	
[14]	ABE1	3–B	Hydraulic unit	ABS
	ABE2	3–B		
	EDE1	2.5–B	Engine ECU	
	EDE2	2.5–B		
	EDE3	2.5–B		
	EXE1	1.25–B		
[15]	EAR1	1.25–B	JOINT (EAR1)	
[16]	BTE3	30–BY	Battery	

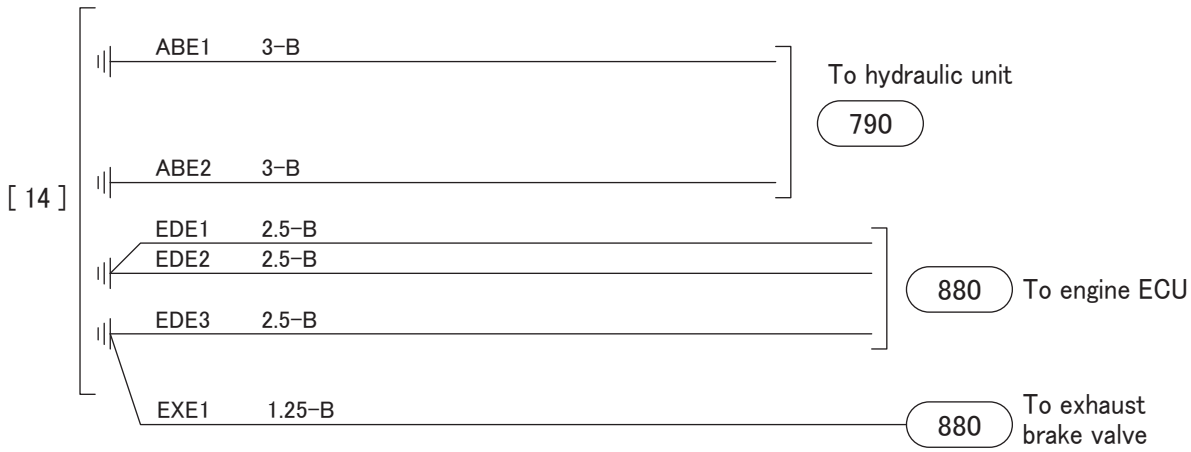
ABS : Anti-lock brake system
ECU : Electronic control unit
SAM : Signal detect and actuation modules

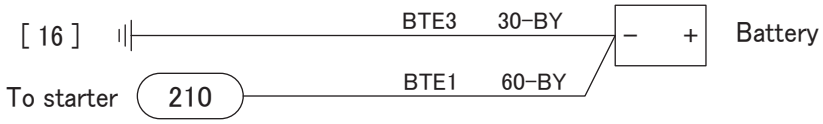
Entire ground

ECU: Electronic control unit

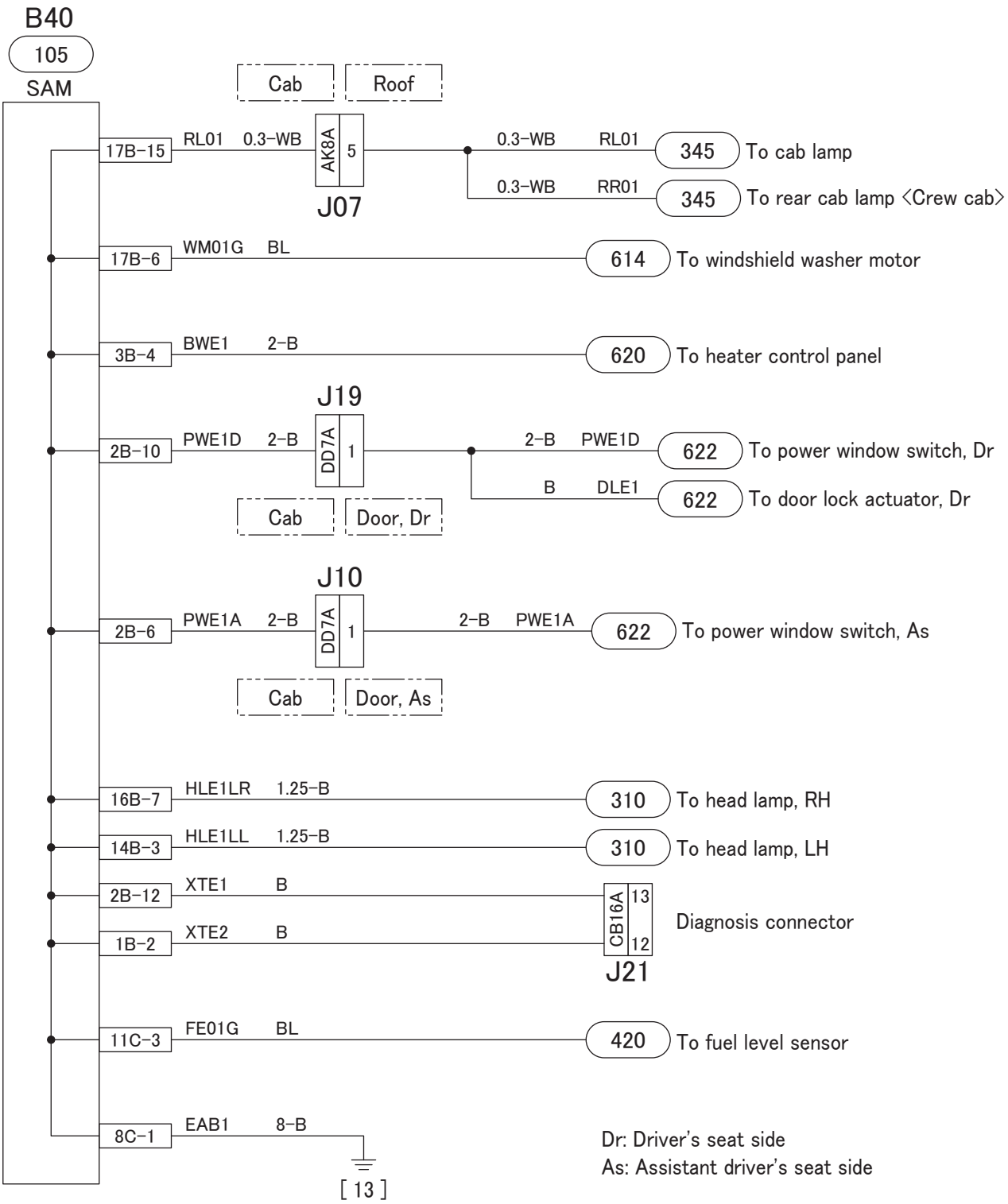
- This diagram indicates grounding points.
- See the following pages for branching of grounding (wiring for ☆). (in circuit No. order)



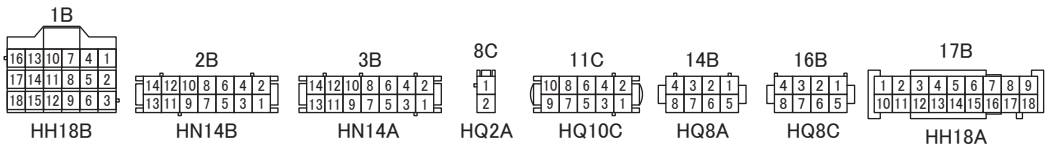




Circuit No. EAB1 ground (1/6)

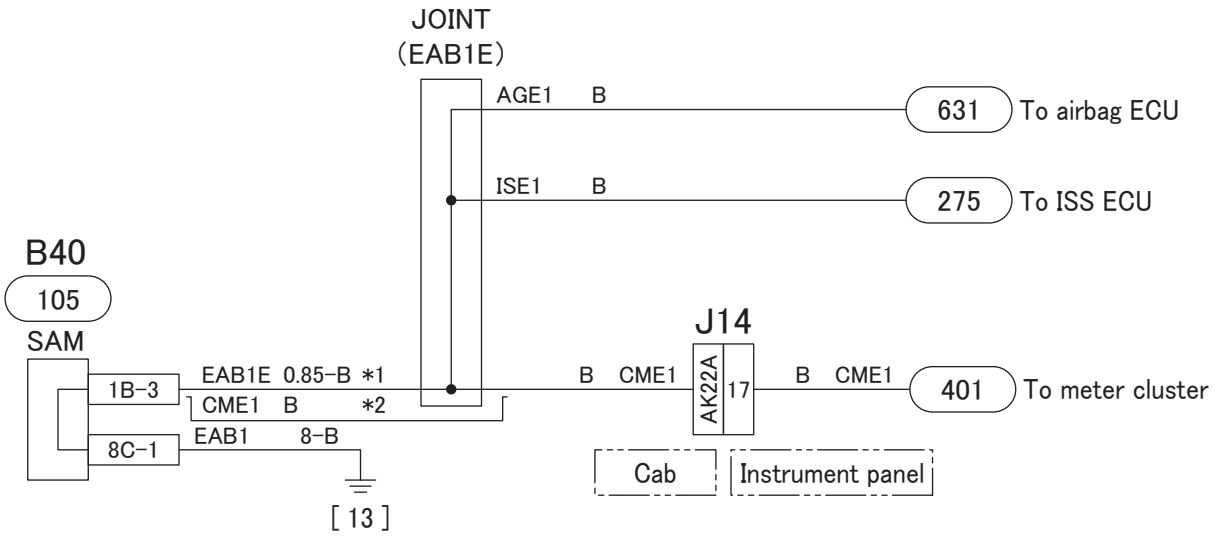


SAM connector (harness side)



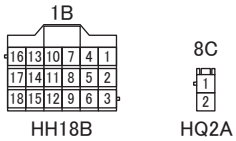
130-C10053EAB1-1

Circuit No. EAB1 ground (2/6)
＜JOINT(EAB1E)＞



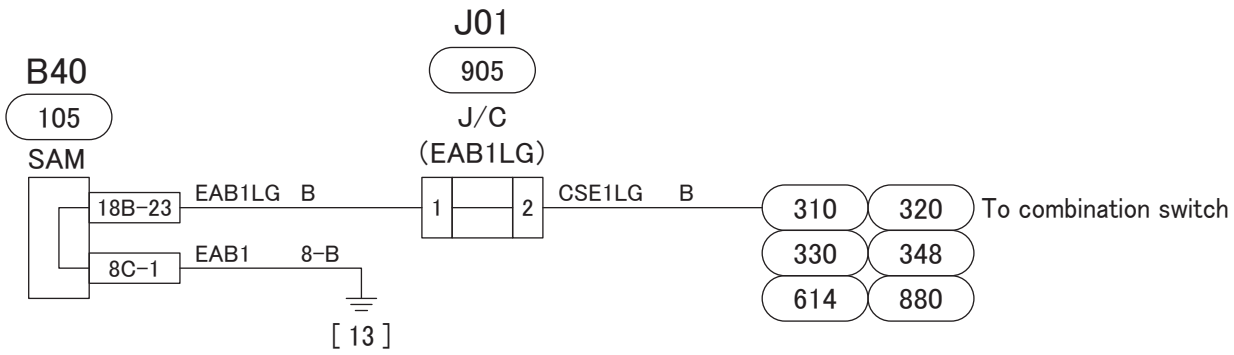
*1 : With SRS airbag or ISS
*2 : Except *1

SAM connector (harness side)

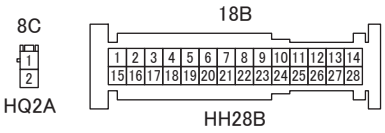


ECU: Electronic control unit
ISS: Idling stop and start system
SRS: Supplemental restraint system

Circuit No. EAB1 ground (3/6)
＜J/C(EAB1LG)＞



SAM connector (harness side)



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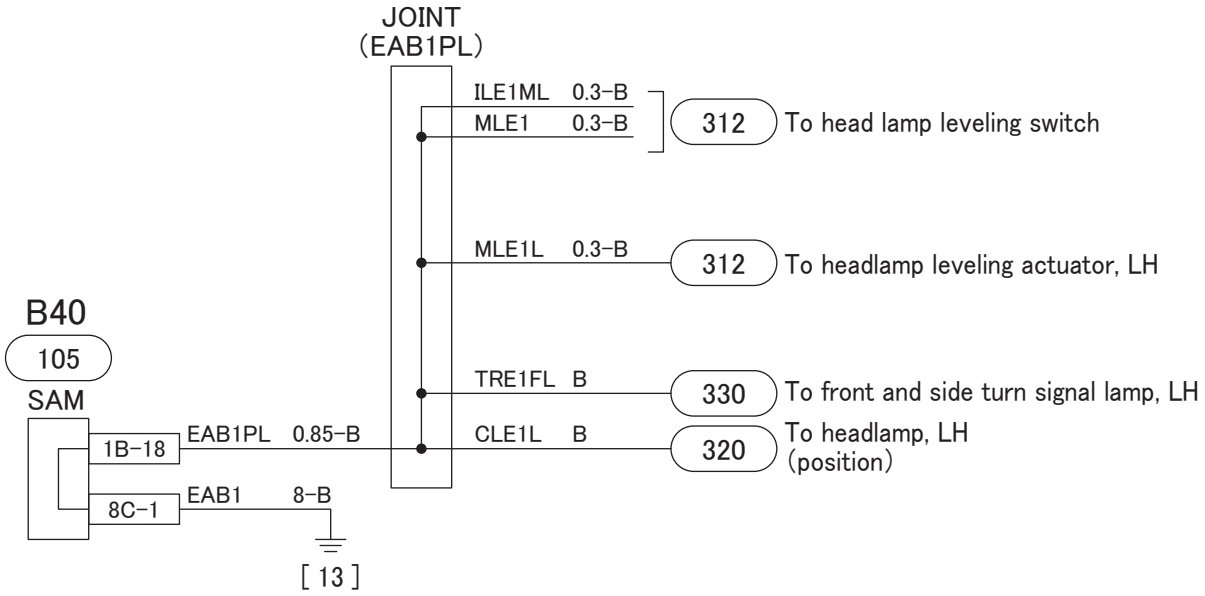
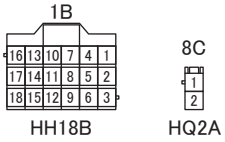
Circuit No. EAB1 ground (4/6)
＜JOINT(EAB1PL)＞

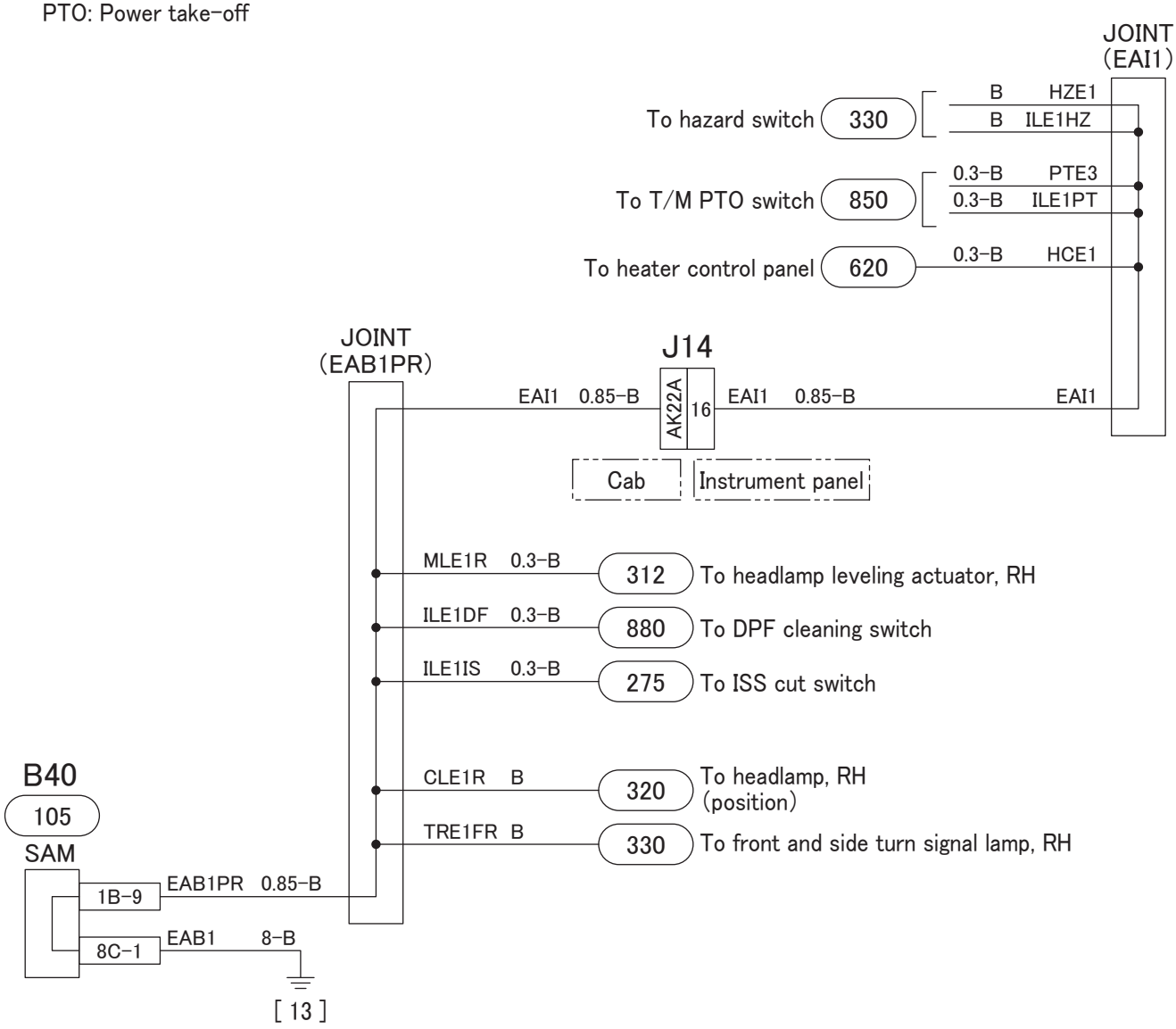


SAM connector (harness side)

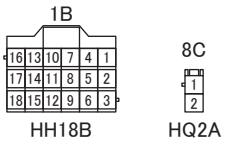


Circuit No. EAB1 ground (5/6)
＜JOINT(EAB1PR), JOINT(EAI1)＞

ISS: Idling stop and start system
DPF: Diesel particulate filter
T/M: Transmission
PTO: Power take-off

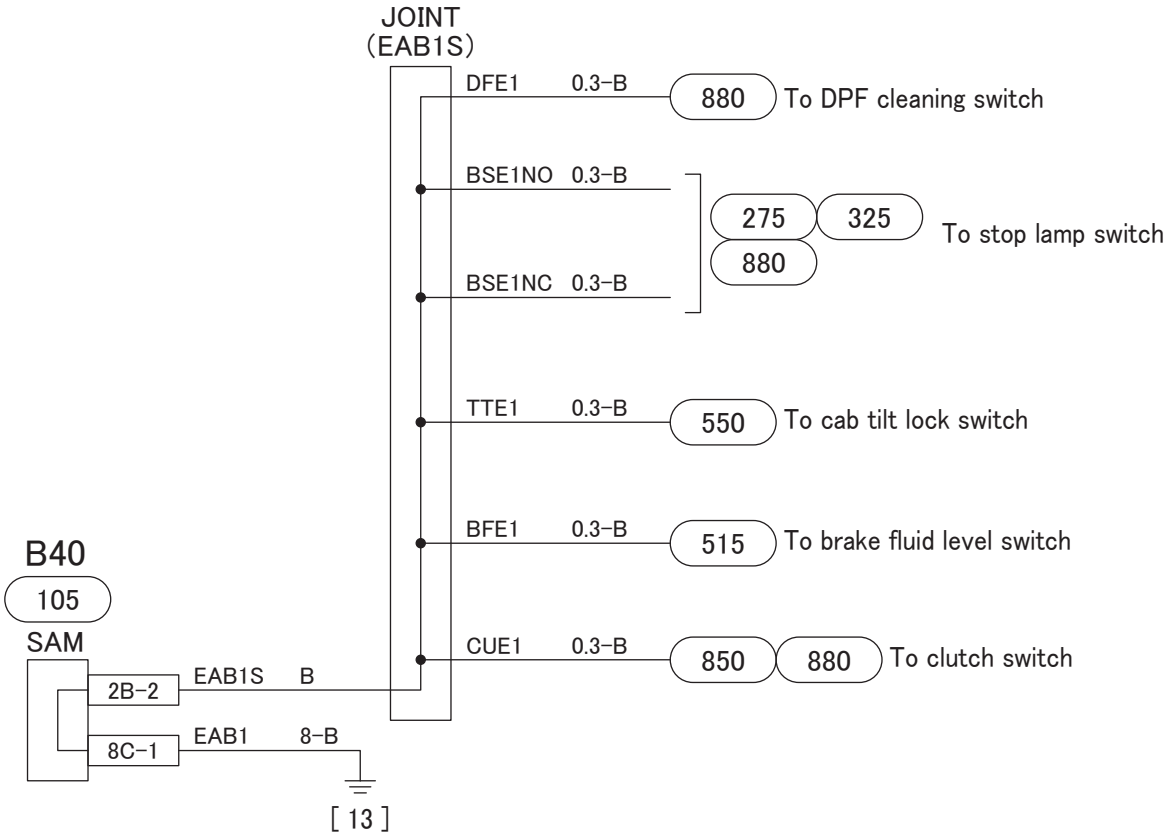


SAM connector (harness side)

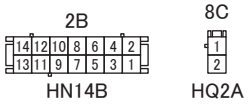


Circuit No. EAB1 ground (6/6)
＜JOINT(EAB1S)＞

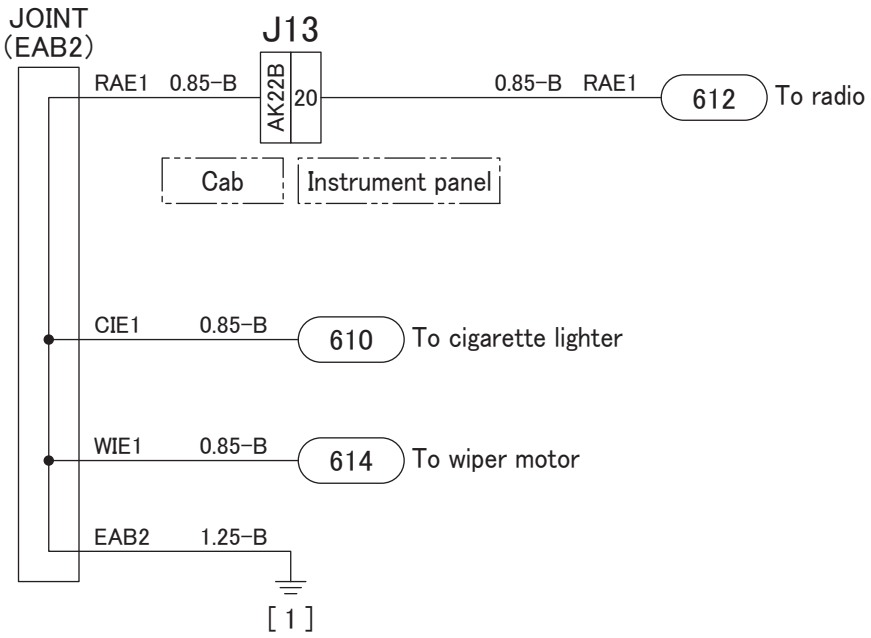
DPF: Diesel particulate filter



SAM connector (harness side)



Circuit No. EAB2 ground



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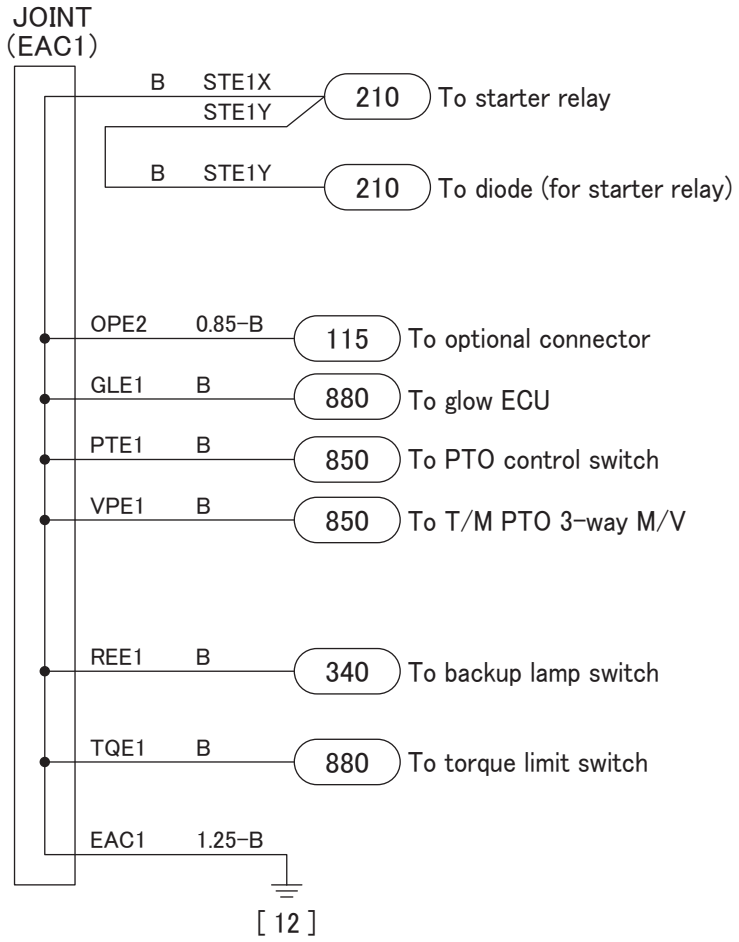
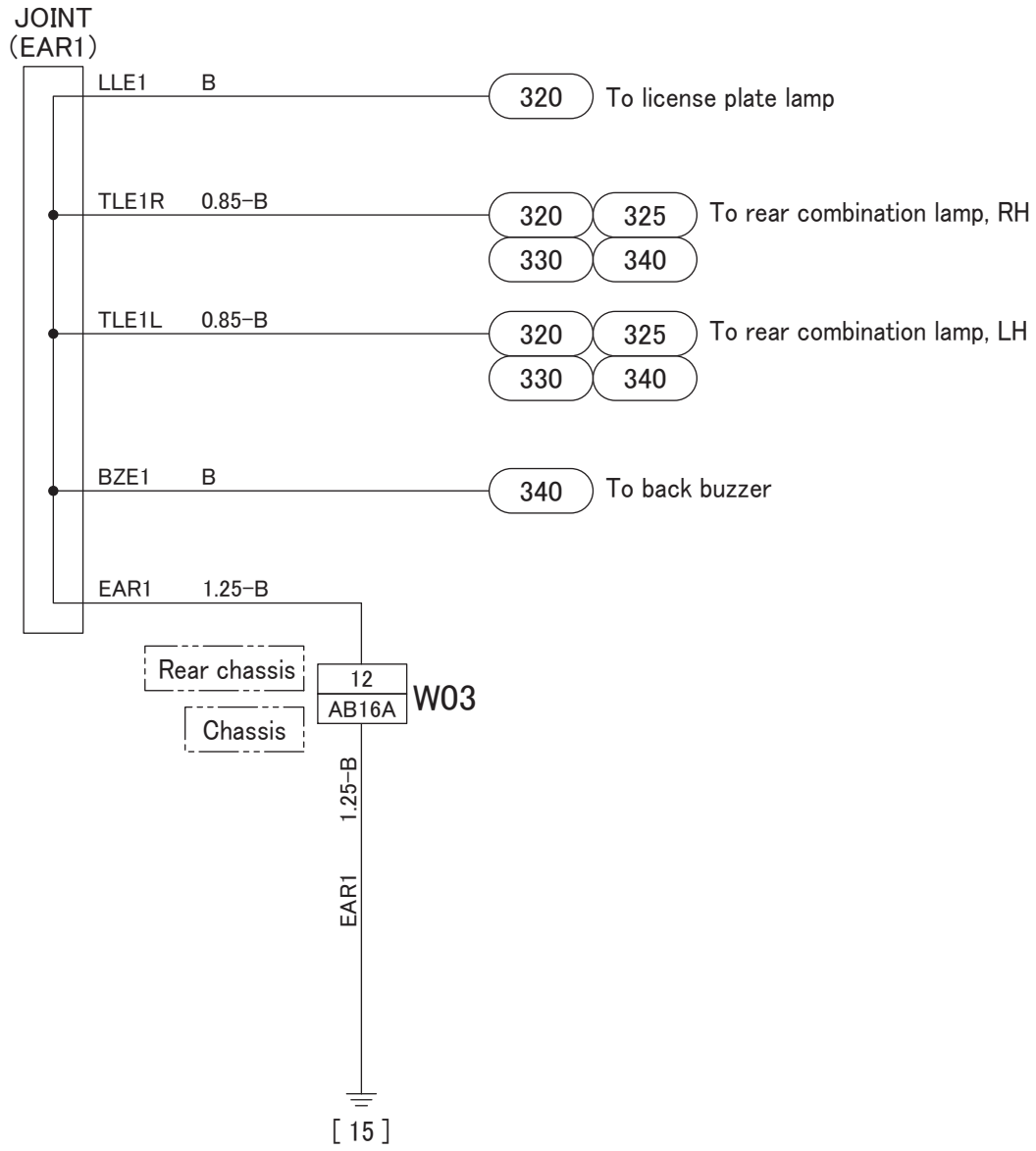
Circuit No. EAC1 ground

ECU: Electronic control unit
T/M: Transmission
PTO: Power take-off
M/V: Magnetic valve



Circuit No. EAR1 ground



130-C10053EAR1

Circuit No. FPE1 ground