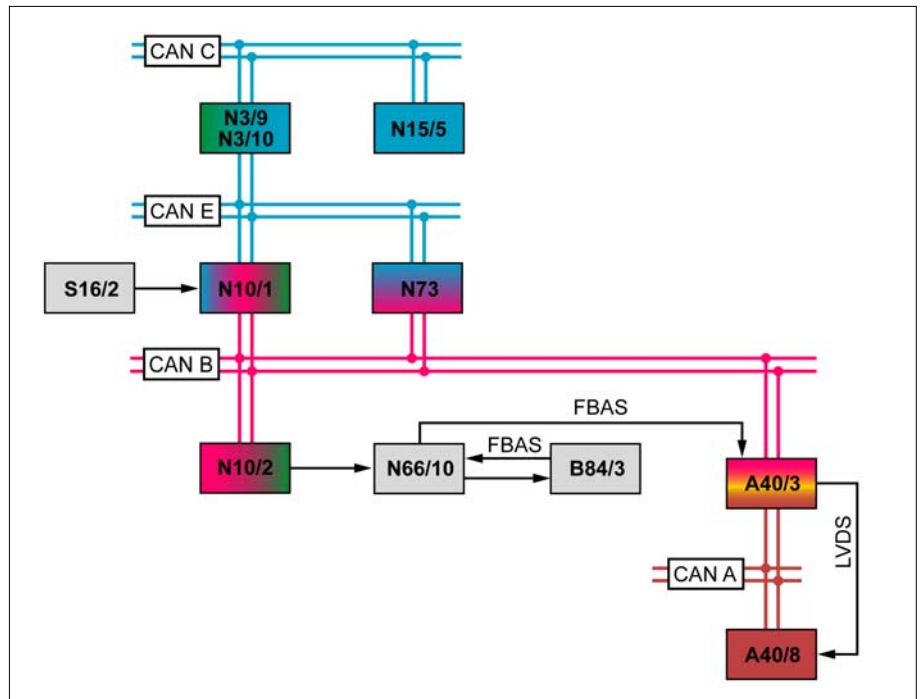


MODEL 207
up to model year 2014
with CODE 218 (Rear view camera)
without CODE 498 (Japanese version)

- A40/3 COMAND control unit
- A40/8 Audio/COMAND display
- B84/3 Backup camera
- N3/9 CDI control unit (with diesel engine)
- N3/10 ME-SFI [ME] control unit (with gasoline engine)
- N10/1 Front SAM control unit with fuse and relay module
- N10/2 Rear SAM control unit with fuse and relay module
- N15/5 Electronic selector lever module control unit (with transmission 722)
- N66/10 Backup camera voltage supply module
- N73 Electronic ignition switch control unit
- S16/2 Backup lamp switch (with transmission 711, 716)
- CAN A Telematics CAN
- CAN B Interior CAN
- CAN C Drive train CAN
- CAN E Chassis CAN
- FBAS Color Video Baseband Signal
- LVDS Low voltage differential signal



P54.65-4633-76

Function requirements, general

- Circuit 15 ON
- Reversing camera function activated via COMAND controller unit (A40/3)

[i] The electronic ignition lock control unit sends the status of circuit 15 via the interior CAN to the rear SAM control unit.

Reversing camera, general

The reversing camera assists the driver when reverse parking and when backing up.

Reversing camera function sequence

When reverse gear (with transmission 711, 716) or gear range "R" (with transmission 722) is engaged, the reversing camera is supplied with power by the power supply module.

The "reverse gear engaged" status is defined as follows:
 Vehicles with transmission 711, 716:

Engagement of reverse gear is recorded through the status of the backup lamp switch, which is read in directly by the front SAM control unit.

Vehicles with transmission 722:

The request to engage gear range "R" is defined by the corresponding selector lever position. The electronic selector lever module control unit sends the selector lever position via the drive train CAN, CDI control unit (with diesel engine), or ME-SFI control unit (with gasoline engine) and chassis CAN to the front SAM control unit.

[i] Two microprocessors are installed in the front SAM control unit, one for control of basic functions, e.g. the exterior lights, and the second for control of the central gateway functions. Both processors communicate with each other internally via interior CAN.

Using all incoming information, the microprocessor which controls the central gateway functions generates the "reverse gear engaged" signal (irrespective of the transmission variant) and sends this signal to the rear SAM control unit via the interior CAN. The rear SAM control unit then activates the backup lamp and, at the same time, supplies power to the reversing camera power supply module. The images captured by the reversing camera are transmitted as a Color Video Baseband Signal (CVBS) signal via the reversing camera power supply module to the COMAND controller unit. The COMAND controller unit then activates the Audio/COMAND display over the telematics CAN (CAN A). The images captured by the reversing camera are then transmitted directly via the Low Voltage Differential Signaling (LVDS) line to the Audio/COMAND display and shown there.

	Electrical function schematic, reversing camera		PE54.65-P-2051-97EAA
	Reversing camera, (RFK), overview of system components		GF54.65-P-9997CA