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# SIM 66 02 20

KAFAS (CAMERA-BASED DRIVER ASSISTANCE SYSTEMS) LIMITATIONS

#### MODEL

E-Series	Model Description	Production Date	Affected Option Code
F54	MINI Clubman		
F55	MINI Hardtop 4 Door	From: Start	5AV – Active Guard
F56	MINI Hardtop 2 Door	Of	Or
F57	MINI Convertible	Production	5AS – Driving
F60	MINI Countryman		Assistant

Note: Vehicles produced from July 2015 with option code 541 – Active Cruise Control (ACC) are also covered by this SI.

## **SITUATION**

KAFAS camera-based assistance system (without radar) is not operating up to customer expectations.

Customers can report system errors such as:

- Vehicle equipped with camera-based ACC, brakes without apparent reason and then does not accelerate
- When ACC is active, the vehicle does not brake, although it is obvious it should brake; or it even accelerates
- KAFAS system deactivates independently, due to system limitations that are not clear to the customer
- KAFAS system cannot be activated due to system limitations that are not clear to the customer
- When accelerating from a standstill, the vehicle does not automatically start in "Follow mode"
- Road signs are sporadically not detected
- Lane departure warning sporadically fails to function

For the situations described in this service information bulletin that pertain to normal system limitations, <u>ISTA diagnosis does not show any relevant fault codes stored</u>. The only exception is KAFAS fault code 0x800AC4 – "Camera calibration unsuccessful". Follow the recommendation in the table below for each situation.

If other fault codes are stored for driver assistance systems, the information in this service information does not apply. Complete the test plans linked to the other fault codes in order to correct the problem.

## CAUSE

Limitations of the Camera-Based Driver Assistance System (KAFAS).

## **CORRECTION**

Advise the customer that various possible limitations of the KAFAS system are described in detail in the owner's manual section titled "Driver Assistance System" for the vehicle.

## **INFORMATION**

The situations described above may all be caused by known limitations of the system such as:

- Dirty windshield
- Incomplete calibration process
- Unsuccessful calibration
- Restricted visibility due to weather conditions or parked vehicles
- Missing lamps on target vehicle, or incomplete illumination

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- Non-standard vehicle exterior surfaces
- Insufficient ambient lighting
- Abrupt motion of the target vehicle

There are two categories of system limitations – those that can be eliminated and those that are beyond control. The following table details possible limitations and what, if anything, can be done to eliminate or explain them.

Limitation	Recommendation	Notes
Obstructed camera	Remove obstruction	Clean the windshield.
view		Replace the wipers.
Calibration incomplete	Complete calibration	Calibration is a lengthy process. Features may be non-functional during calibration. No faults stored during calibration period. Calibration needed after windshield replacement.
Calibration failed	Diagnose with ISTA.	<ul> <li>Check installation of KAFAS such as:</li> <li>KAFAS unit is properly installed within mounting tabs</li> <li>Mounting bracket aligned &amp; secured correctly to windshield</li> <li>Viewing area is clean</li> </ul>
Tire size within MINI specification	Refer to tire size table for specific vehicle, located on the driver's B-pillar.	<ul> <li>Possible situation:</li> <li>Non-approved tires lead to inconsistent behavior, causing KAFAS to turn off</li> <li>Correct tire size</li> <li>Reset calibration via ISTA</li> </ul>
Visibility impaired/affected	Weather &/or Lighting conditions - Inform customer	<ul> <li>Possible situations: <ul> <li>Heavy (strong) rain</li> <li>Snowfall</li> <li>Ice</li> <li>Fog</li> <li>Low or blinding sun (strong back light)</li> <li>Tunnel entries/exits (abrupt transitions light/dark)</li> </ul> </li> </ul>
Non-typical surrounding vehicles	Inform customer	Possible situations: • Rear of vehicle poorly illuminated • Extinguished taillights • Custom rear body shape • Carried load (e.g., log truck) • Open trailers • Open tailgates
Surrounding vehicle/pedestrian actions	Inform customer	<ul> <li>Possible situations:</li> <li>Sudden lane change</li> <li>Sudden movement in traffic</li> <li>Too close to/on highway</li> </ul>

#### WARRANTY INFORMATION

This Service Information Bulletin serves to provide Technical Information to aid in understanding of the situations described above.

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#### **QUESTIONS REGARDING THIS BULLETIN**

Technical inquires	Submit feedback at the top of this bulletin
Warranty inquires	Submit an IDS ticket to the Warranty Department
Parts inquiries	Submit an IDS ticket to the Parts Department