



## SIB 66 11 20 REVERSING ASSISTANT LIMITATIONS

### MODEL

E-Series	Model Description	Production Date	Affected Option Code
F91	M8 Convertible	Start  Of  Production	5DM – Parking Assistant
F92	M8 Coupe		
F93	M8 Gran Coupe		
F95	X5 M Sports Activity Vehicle (SAV)		
F96	X6 M Sports Activity Coupe (SAC)		
G05	X5 SAV		Or
G06	X6 SAC		
G07	X7 SAV		
G12	7 Series Sedan (LCI)		
G14	8 Series Convertible		
G15	8 Series Coupe		5DN – Parking Assistant Plus
G16	8 Series Gran Coupe		
G20	3 Series Sedan		
G29	Z4 Roadster		

### SITUATION

The Reversing Assistant function is not operating to customer expectations.

Some possible customer concerns are:

- Vehicle does not avoid objects in its path
- Tires or wheels contact the curb
- Reversing Assistant only works for a short distance

### CAUSE

Limitations of the Reversing Assistant.

### CORRECTION

The Reversing Assistant function is described in detail in the owner's manual section titled "Driver Assistance System" for the vehicle. The owner's manual is provided:

- Printed
- Integrated (electronic) via iDrive/Central Information Display, per path "CAR".

### INFORMATION

The Reversing Assistant function supports the driver when performing a reversing maneuver in a constricted (unusual) area. Example: When reversing (backing) out of narrow and difficult parking areas or spaces which may include having to reverse for an extended distance.

Here are some functional requirements to follow during the recording phase or parking space entry:

- Continuous forward driving
- Maximum distance recorded / saved 165 feet
- Vehicle speed ≤ 20 mph
- Path width must be at least 1 foot wider on each side of the vehicle, from the outer edge of the exterior mirrors (mirrors extended due to side view cameras)

The table below outlines the "Responsibility" for the various vehicle function when the Reversing Assistant function is activated:

Vehicle system	Responsibility
Steering input	Vehicle – Reversing Assistant
Accelerator (speed $\leq$ 3 mph)	Driver
Brake application	Driver
Monitoring vehicle surroundings & path	Driver

### Important:

1. After completing the recording distance, any changes in the surroundings will not be accounted for by the system. Example, if another vehicle should park or protrude into the last recorded path.
2. The reversing assistant does not avoid object(s) on the recorded path. It simply reverses along the recorded the path. Therefore, the driver is responsible for monitoring the vehicle surroundings and must apply the brakes or steer around the objects if required.
3. The Reversing Assistant function is cancelled when the driver steers the vehicle. The driver must then complete the reversing maneuver.
4. A vehicle equipped with Active Park Distance Control (aPDC) may in certain circumstances brake automatically for detected objects as part of the activated “emergency braking” function. This may conflict with the driver’s decision and assessment of the object.

Outlined below are some known system **limitations** (operational parameters) of the Reversing Assistant which may possibly lead to either:

1. Positive functionality (good performance)
2. Unfavorable functionality (poor performance)

### Possible positive functionality results when:

- Driving forward at a speed  $\leq$  20 mph during entry (recording phase)
- Reversing at a speed  $\leq$  5 mph (reversing assistant active)
- Maximum distance stored or saved is approximately 165 feet of continuous forward driving
- Corners must be driven very slowly
- Avoid fast steering movements (change in direction  $\leq$  25°/sec)
- Do not steer to maximum steering angle (end points)
- Path width must be at least 1 foot wider on each side of the vehicle, from the outer edge of the exterior mirrors (mirrors extended due to side view cameras)
- Maximum permitted offset per maneuver is 1.5 feet depending the path/route design

### Possible unfavorable functionality results when:

- Forward driving speed too high  $\geq$  21 mph during entry (recording phase)
- Switching between forward and reverse gears during entry (recording phase)
- Reversing too fast - speed above 6 mph when the function is active
- Incorrect tire(s) and /or tire size
- Varying tire pressure between entry and exit of the parking space
- Damage to the vehicle’s cameras, sensors, steering, suspension and braking system; etc.
- Slope or incline in the route may affect the offset of the vehicle
- Steering while at a standstill during entry (recording phase)
- Very fast steering wheel movements ( $\geq$  25°/sec) during entry (recording phase)
- Steering to the maximum steering angle during entry (recording phase)
- Wheel alignment off

**Diagnostic hint recommendations:**

1. Duplicate the issue – can the concern be repeatedly demonstrated/duplicated?
  - a) Is it specific to one location?
  - b) Note any unusual objects in or near the driven pathway
2. This function uses the control modules and sensors from both the Park Distance Control (PDC) and the Park Maneuver Assistant (PMA).
3. Review all faults stored in the related systems.
4. If the environmental influences and the local conditions can be ruled out, then the following may provide some improvement in the functionality:
  - a) Wheel alignment check
  - b) Reset of data via ISTA service function “Adjust driving dynamic sensors”. This can be found as follows:  
Vehicle management / Service function / Suspension / Traction control system /

**WARRANTY INFORMATION**

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