



Technical Service Bulletin

GROUP

BODY ELECTRICAL

NUMBER

18-BE-008

DATE

JULY, 2018

MODEL(S)

SANTA FE (TM)

SUBJECT: SANTA FE (TM) AROUND VIEW MONITORING SYSTEM (AVM) CALIBRATION

★ IMPORTANT

Use this information bulletin to calibrate the Around View Monitoring System (AVM) after repairs.

Description: This bulletin describes the procedure to calibrate the Around View Monitoring System (AVM) on 2019 and newer Santa Fe (TM) vehicles.



Applicable Vehicles: 2019MY Santa Fe (TM)

Parts Information:

Part Name	Part Number	Image	Remark
• AVM Kit with Type A Adaptor	• G0GHDN0001		Kit Containing: • Reference Lines • Reference Scale • Reference Targets
• GDS-Mobile Complete Kit • GDS-Mobile Lit Kit (includes VCI II Module)	• GDSM-CPKITH • GDSM-LTKITH		• Tablet with GDS software • Scan tool needed to interface with vehicle

NOTE 1: AVM and GDS Mobile Kits have been sent to each dealership. Additional kits can be purchased through Bosch (1-866-539-4248).

WARRANTY INFORMATION: Normal warranty applies where applicable.

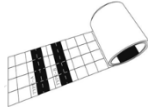
Circulate To: General Manager, Service Manager, Parts Manager, Warranty Manager, Service Advisors, Technicians, Body Shop Manager, Fleet Repair

Service Procedure:

1. AVM Calibration Preparation:

In an open area with a level floor,
Lay out the:

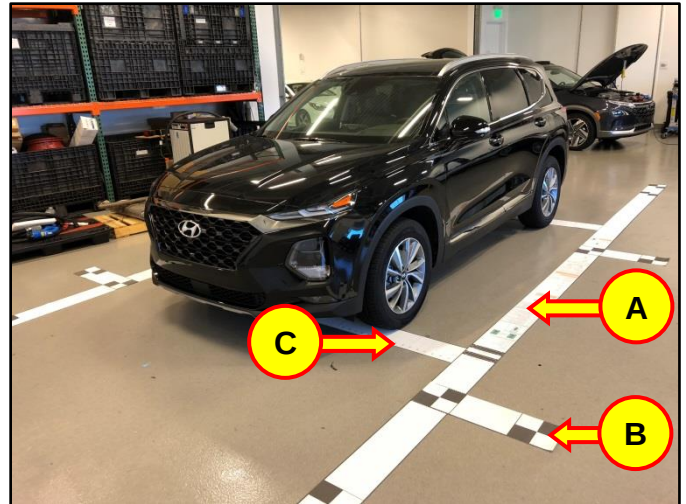
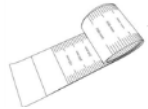
1. Reference Lines (A)



2. Reference Targets (B)

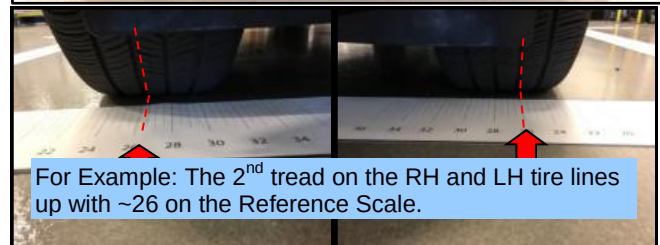
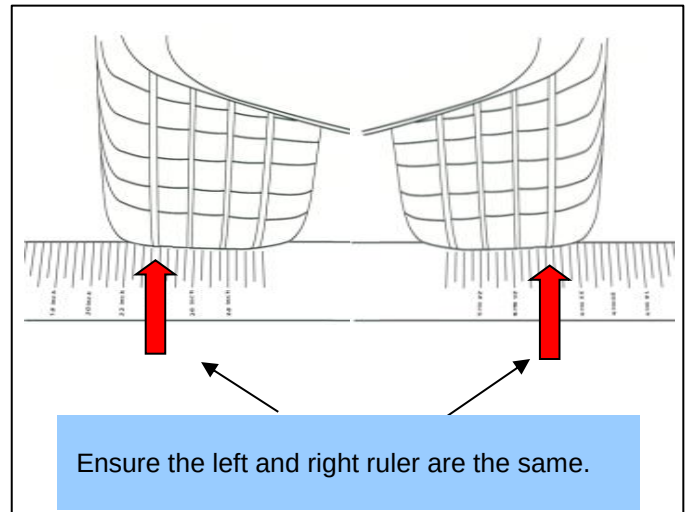


3. Reference Scale (C)

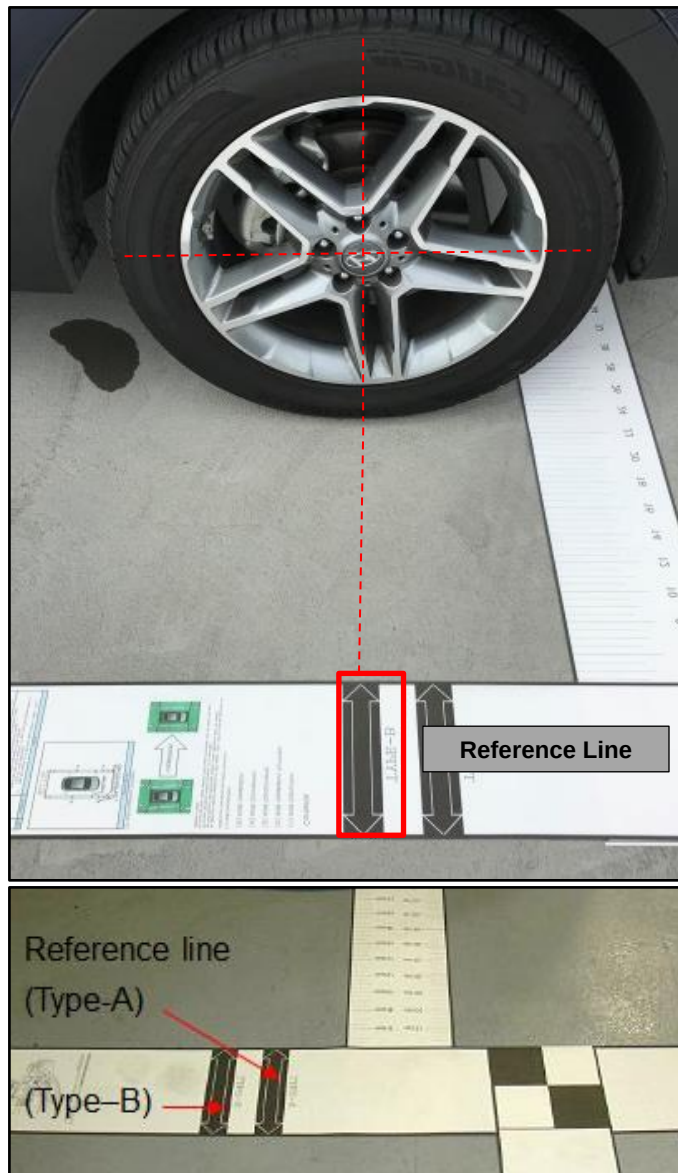


2. Set the central point of the vehicle by adjusting the Reference Scale to the left or right, so that the ruler values under both tires are identical.

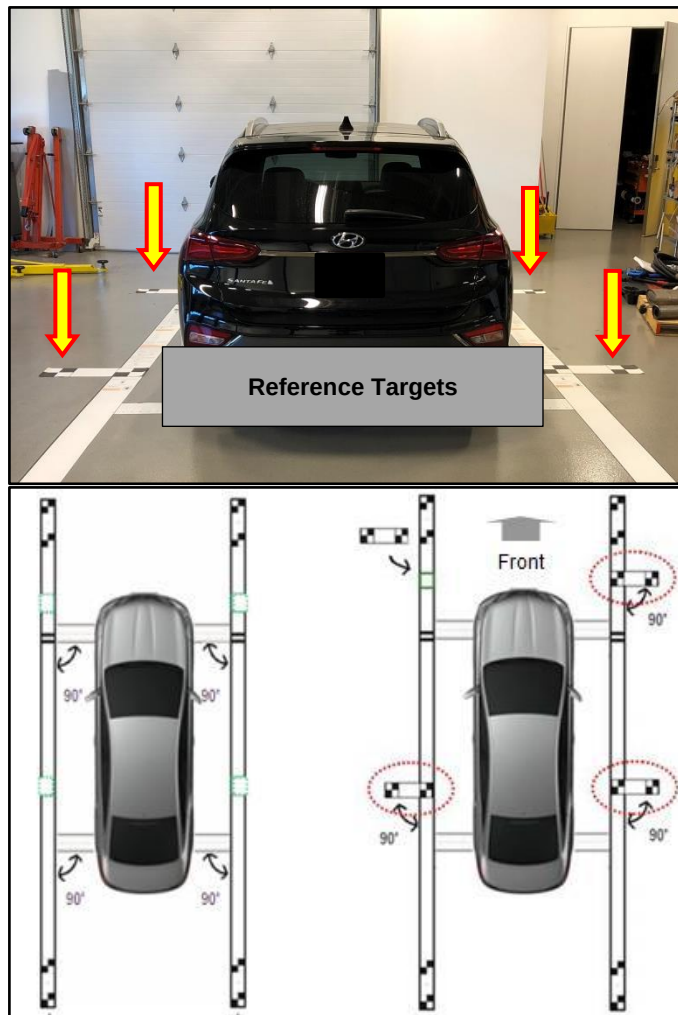
In the example shown on the right, the 2nd tread on both the RH and LH tire lines up with ~26.



3. Set up the Reference Lines by lining up the "Type B" line directly with the center of the front wheel (repeat for both the left and right side of the vehicle).

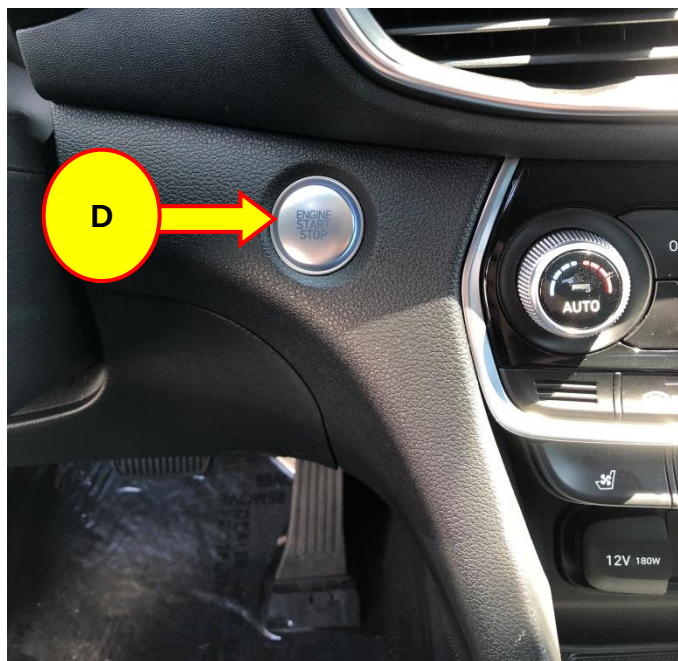


4. Lay the (4) Reference Targets on the marked locations.

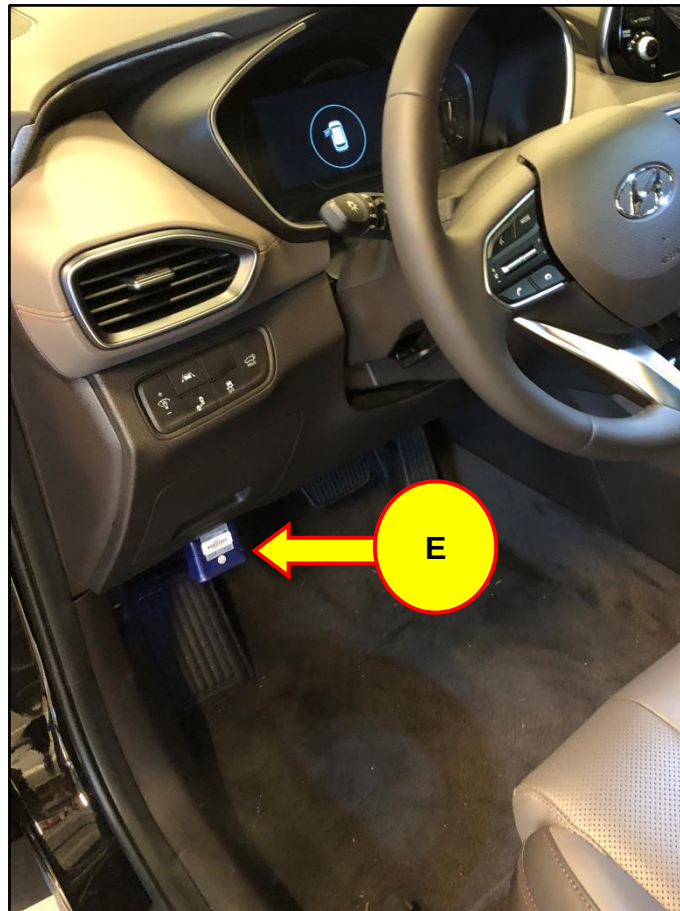


5. **AVM Calibration Procedure:**

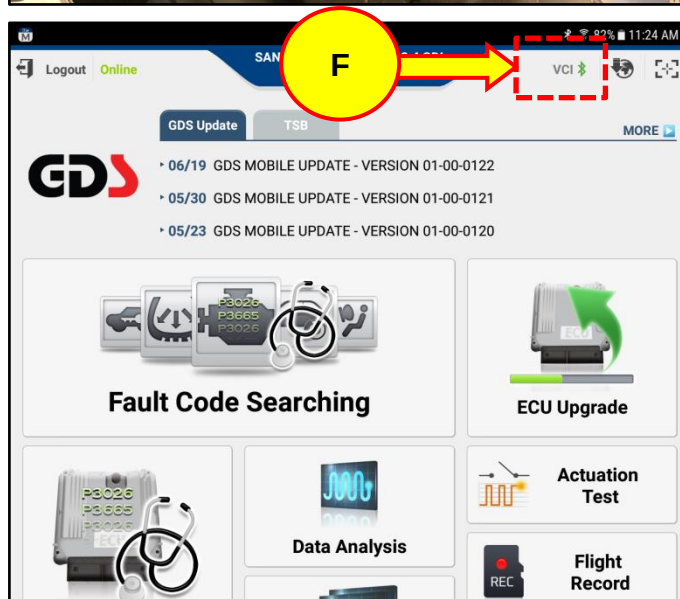
Press the **START STOP BUTTON (D)** to put the vehicle into accessories mode.



6. Plug the VCI II Module into the vehicle's DLC port (E) located beneath the left kick panel area.

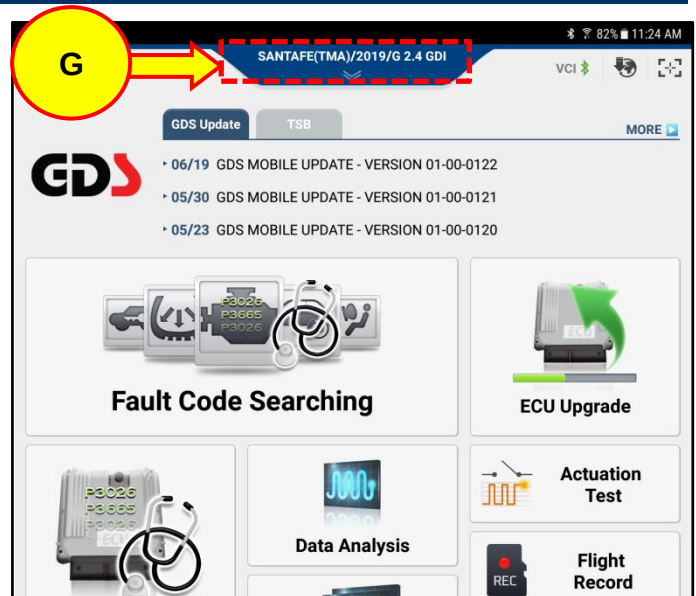


7. Open the GDS software and tap the VCI button (F) at the top right corner to initiate a connection between the tablet and module.

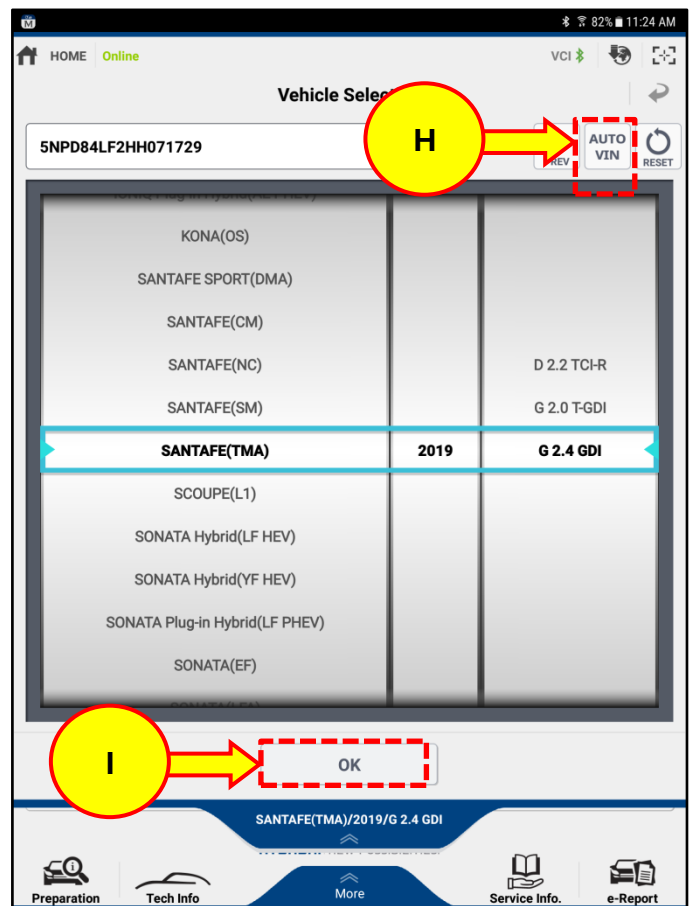


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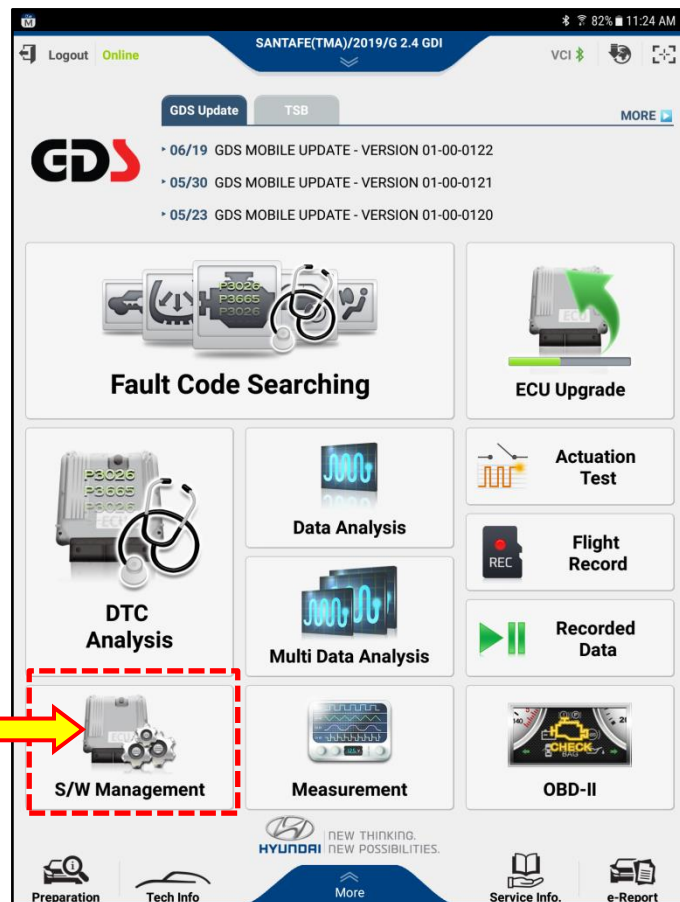
8. Once a connection has been established, tap the top of the screen (G) to enter the vehicle selection page.



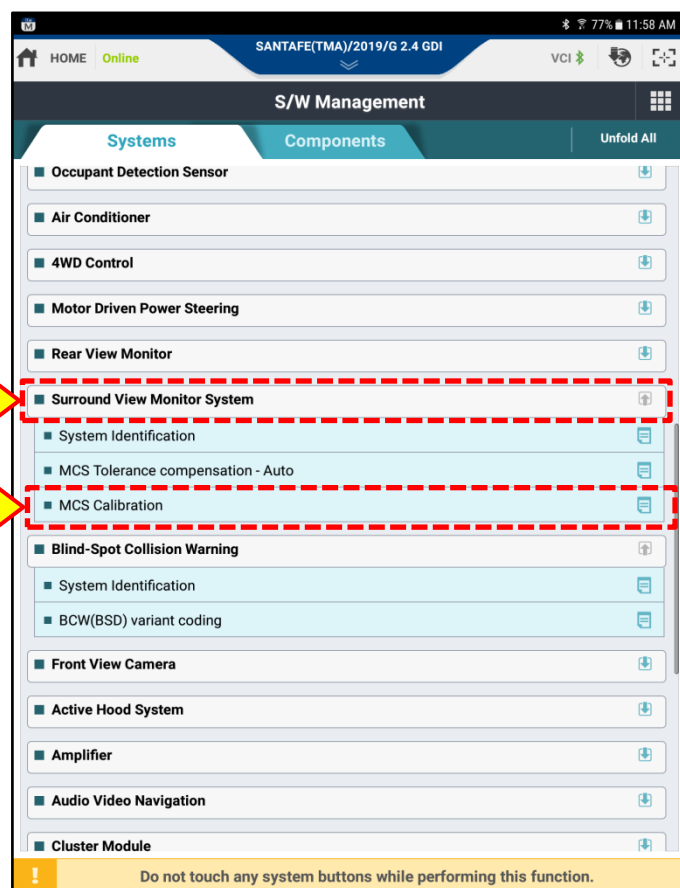
9. Tap the AUTO VIN button (H). The vehicle VIN, model, model year, and engine size will automatically populate. Tap the OK button (I) to confirm the populated information.



10. Upon Vehicle Selection confirmation, the screen will load to the GDS Home page. Select the S/W Management button (J).



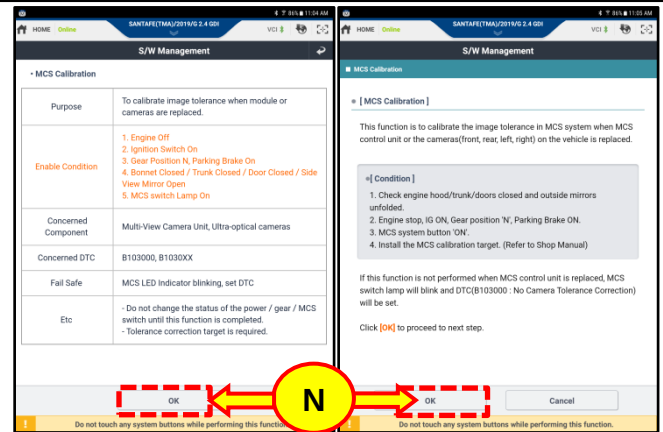
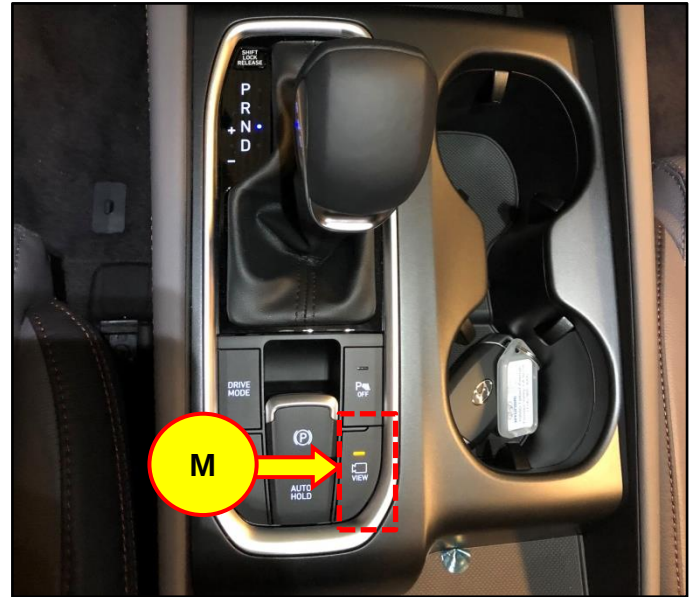
11. In the S/W management page, select Surround View Monitor System (K). Then select MCS Calibration (L).



12. Confirm the following pre-conditions:

- Engine OFF (Step 5)
- Gear position N, Parking brake ON/Engaged
- Hood Closed/Trunk Closed/Door Closed/Side View Mirror Open
- MCS Button ON (M)

Then tap OK (N) to proceed.



13. Proceed with the calibration procedure:

- Use the controls on the GDS software (O) to align the blinking cross box (P) onto the center of the reference targets, tapping “OK” (Q) to switch between cross box.
- When all targets have been aligned tap “Update MCS” (R).
- Upon tapping “Update MCS” you will be prompted to check that all 4 cross boxes have been set correctly. Tap “OK” (S) to proceed to the next camera. Repeat this step for all cameras.

NOTICE

The navigation system will automatically reboot after all the cameras have been calibrated.

S/W Management

MCS Calibration

1. Overlap the blinking cross box(+) on AVN monitor of vehicle to calibration coordinates of calibration target by using and press [OK] button.
2. Overlap the other cross boxes to calibration coordinates of calibration target with same method and press [OK] button, then press [Update MCS] button to proceed to next camera.
3. With same method as front camera, perform the calibration procedure in order of rear → left → right camera.
4. Monitor the MCS update process with monitor after press [Update MCS] button when last camera calibration procedure is complete.
5. Check the proper image displaying on monitor.

※ You can re-do the calibration procedure with [Reset] button.

Update MCS

Close

Information

Please check all 4 cross boxes on AVN monitor of vehicle are correctly input and press [OK] button.
If not, press [Cancel] button and then input the calibration coordinates.

OK

Cancel

S

14. Upon completion verify that the cameras have been properly calibrated.
- The left and right reference lines should appear as straight lines.
 - The front and rear bumper should not be visible on the screen.

NOTICE

If either of these conditions is not met, repeat steps 12 and 13.

