TECHNICAL SERVICE BULLETIN

Classification:	Reference:	Date:
DA24-008	NTB25-002	January 9, 2025

INTELLIGENT AROUND VIEW MONITOR CAMERA CALIBRATION

APPLIED VEHICLES: 2025 Rogue (T33)
APPLIED SYSTEMS: Intelligent Around View Monitor With ProPILOT ASSIST 2.1

SERVICE INFORMATION

If any Around View Monitor (AVM) camera (front, sides, or rear) and/or the AVM Control Module is replaced, camera calibration is required.

The **SERVICE PROCEDURE** in this bulletin can be used in conjunction with the ESM and CONSULT 4 procedures for additional clarification when performing AVM camera calibration.

- Refer to the ESM: **DRIVER INFORMATION & MULTIMEDIA > AUDIO, VISUAL & NAVIGATION SYSTEM > INTELLIGENT AROUND VIEW MONITOR > BASIC INSPECTION > CALIBRATING CAMERA IMAGE (INTELLIGENT AROUND VIEW MONITOR) > WITH ProPILOT ASSIST 2.1**

REQUIRED TOOLS

New or replacement Essential Tools are available from Tech Mate online: www.techmatetools.com, or by phone: 1-833-397-3493.

- Laser level (NI-53373)

Figure 1

- ADAS Calibration Rod (NI-53371)

Figure 2

- Calibration Targets (NI-53378)

Figure 3

The following required tools can be obtained from a variety of local retailers.

- Carpenter’s square (minimum 12 in. long leg)

Figure 4

- Painter’s tape [minimum width 1 7/8 in. (48 mm)]

Figure 5

- Permanent marker

Figure 6

- Chalk line tool

Figure 7

- Tape measure capable of measuring a minimum of 5 meters (must have metric markings)

Figure 8

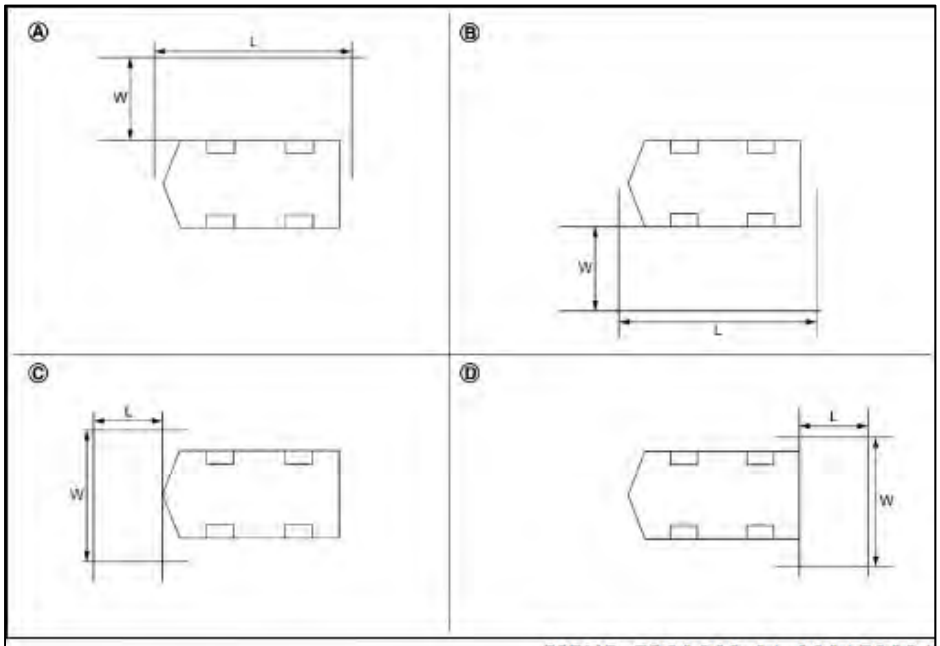
SERVICE PROCEDURE

IMPORTANT:

- A large area, free from obstructions, is needed to calibrate each camera.

  HINT: The shop floor area requirements are shown in Figure 9 (only one camera will be calibrated at a time so the vehicle can be repositioned for each camera as needed).

- A strong Wi-Fi or mobile hotspot is required.
- The floor should be as level as possible (drains are not allowed).
- The floor needs to be clean and dry, otherwise the tape will not stick and markings will not be clear.
- The hood must remain closed.
- The 12V battery must be in good condition.
- All measurements must be done in millimeters (mm).
- Fans should be avoided for target stability and laser level.



	Passenger camera calibration		Driver camera calibration
Ⓐ	L: 5000 mm W: 3000 mm	Ⓑ	L: 5000 mm W: 3000 mm
Ⓒ	Front camera calibration L: 3000 mm W: 5000 mm	Ⓓ	Rear camera calibration L: 3000 mm W: 5000 mm

Figure 9

IMPORTANT: Before starting, make sure ASIST on the CONSULT PC has been synchronized (updated) to the current date.

1. Turn the ignition ON with the engine OFF.

2. Confirm that the CONSULT PC is connected to Wi-Fi.

3. Connect the Vehicle Interface (VI) to the vehicle.

4. Start CONSULT 4 on the CONSULT PC.

5. If prompted, select **USA/CANADA Dealers** from the drop-down menu, and then select **OK**.

6. Login using your NNAnet credentials.

   IMPORTANT: If not prompted to enter your username and password, the CONSULT PC may not be connected to Wi-Fi. Close CONSULT 4, confirm the CONSULT PC is connected to Wi-Fi, and then reopen CONSULT 4.

7. Wait for the VI to be recognized.

8. Clear any DTC(s).

   - If any DTC(s) remain after attempting to clear the DTC(s), turn the vehicle OFF, remove the key, close the doors, and walk away from the vehicle for a minimum of 10 minutes.
   - If the CONSULT PC and VI remain connected, the vehicle alarm may sound during the 10 minute wait.
     - The CONSULT PC can be shut down and the VI removed to avoid the possibility of the vehicle alarm sounding during the 10 minute wait.
     - If the CONSULT PC is not shut down and the VI is not removed, use the key fob to stop the alarm, and then finish the 10 minute wait.

9. Recheck for any DTC(s).

   - If only AVM DTC(s) remain, continue to step 10 on page 7.
   - If DTC(s) remain in any other ECU other than AVM, return to ASIST for further diagnostic information.

10. Select **AVM**.

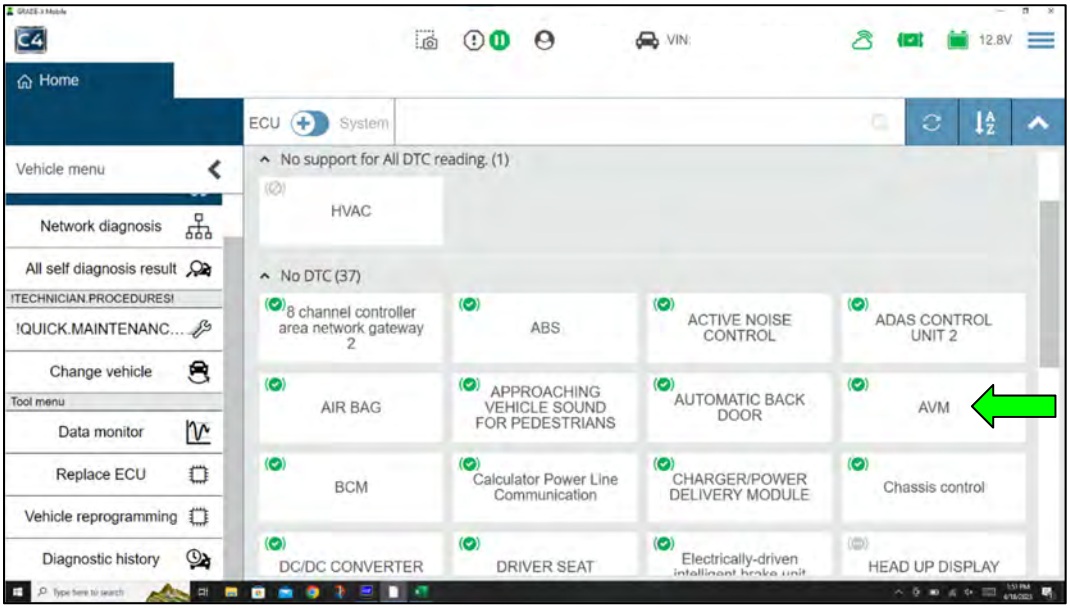


Figure 10

11. Select **Work supports**.

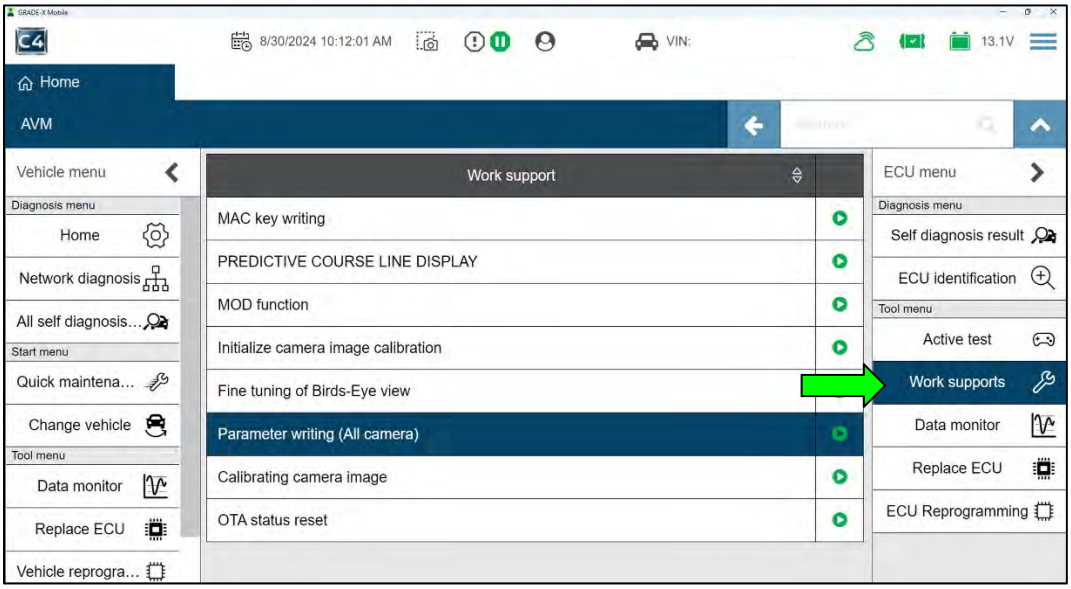


Figure 11

12. Select **Parameter writing (All camera)**, and then select the green Play icon (Figure 12).

HINT: It may take up to 5 minutes for the screen in Figure 13 to display once the green Play icon is selected.

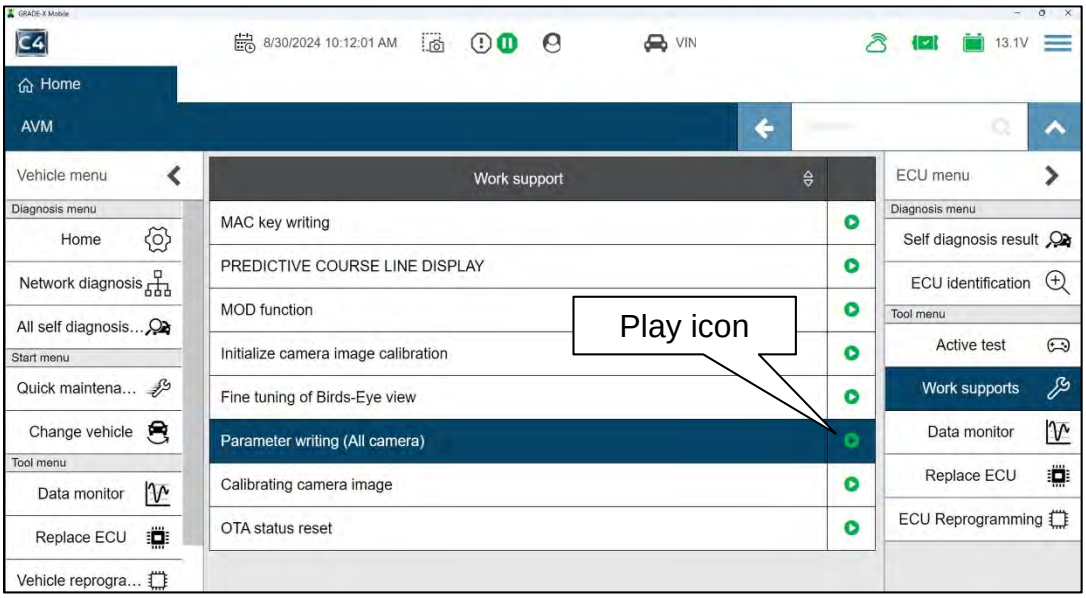


Figure 12

- If the **Parameter writing** is successful (Figure 13), select **END** and then skip to step 14 on page 10.

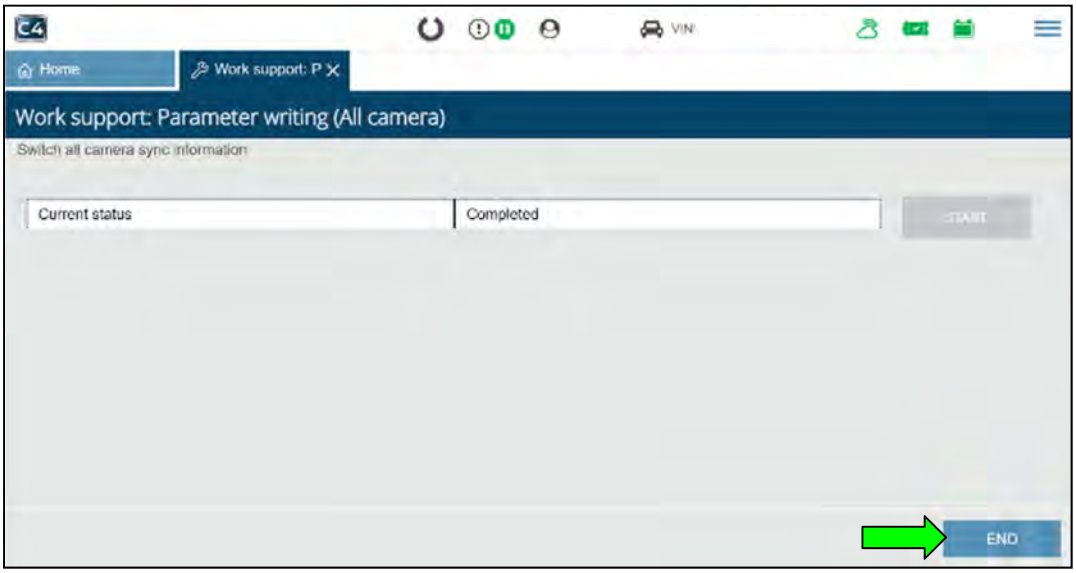


Figure 13

- If the **Parameter writing** was not successful (Figure 14), continue to step 13 before selecting **Retry**.

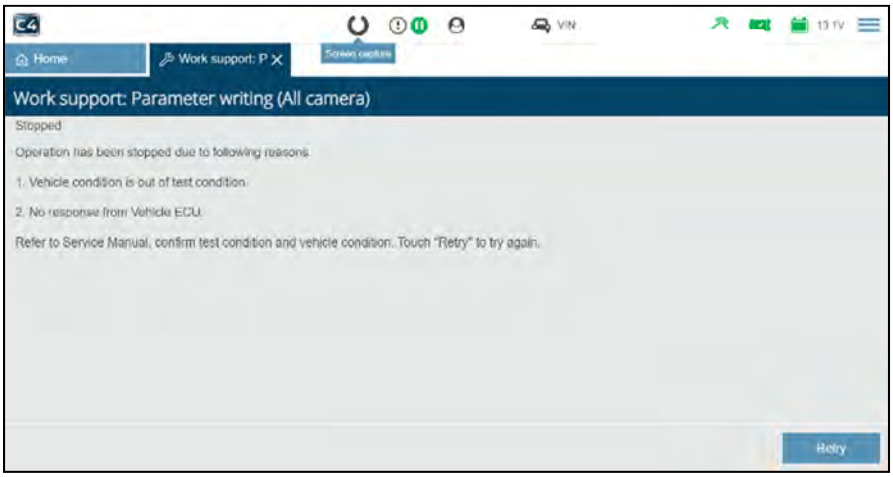


Figure 14

13. Perform the following steps in order, to retry **Parameter writing**:

HINT:

- If the CONSULT PC and VI remain connected, the vehicle alarm may sound during the 10 minute wait.
- The CONSULT PC can be shut down and the VI removed to avoid the possibility of the vehicle alarm sounding during the 10 minute wait.
- If the CONSULT PC is not shut down and the VI is not removed, use the key fob to stop the alarm, and then finish the 10 minute wait.

a. Turn the vehicle OFF.

b. Close and lock all the doors.

c. Move the keys away from the vehicle a minimum of 30 ft.

d. Wait 10 minutes.

e. Turn the ignition ON with the engine OFF.

f. Select **Retry** (Figure 14).

g. Once the **Parameter writing** is successful, continue to step 14 on page 10.

14. Check for any camera(s) that requires calibration.

- Confirm each camera image is displaying an actual steady image on the screen by cycling through the CAMERA button beside the display (the image may still look like it needs to be aimed).
  - o If there is a solid color (pink, green, gray, etc) and/or a flashing screen, one or more AVM cameras still require replacement.
    - ➢ Check each camera, one by one, by disconnecting the camera harnesses to determine the source of the solid color and/or flashing screen, and then repair accordingly.
  - o Any camera(s) that have a red boxed X will require calibration. Proceed to step 15 on page 11 to start marking the center point for each wheel and tire assembly.

    HINT: All four (4) cameras in Figure 15 require calibration.
  - o If there are no red boxed X's on the screen, the image on the screen appears OK, and any DTCs stored are PAST, camera calibration is not required. Skip to step 97 on page 67.

Figure 15

Marking the Center Point of the Wheel and Tire Assemblies

15. Place the laser level at 90° and approximately 800 mm (**31.5 in.**) from the wheel and tire assembly.

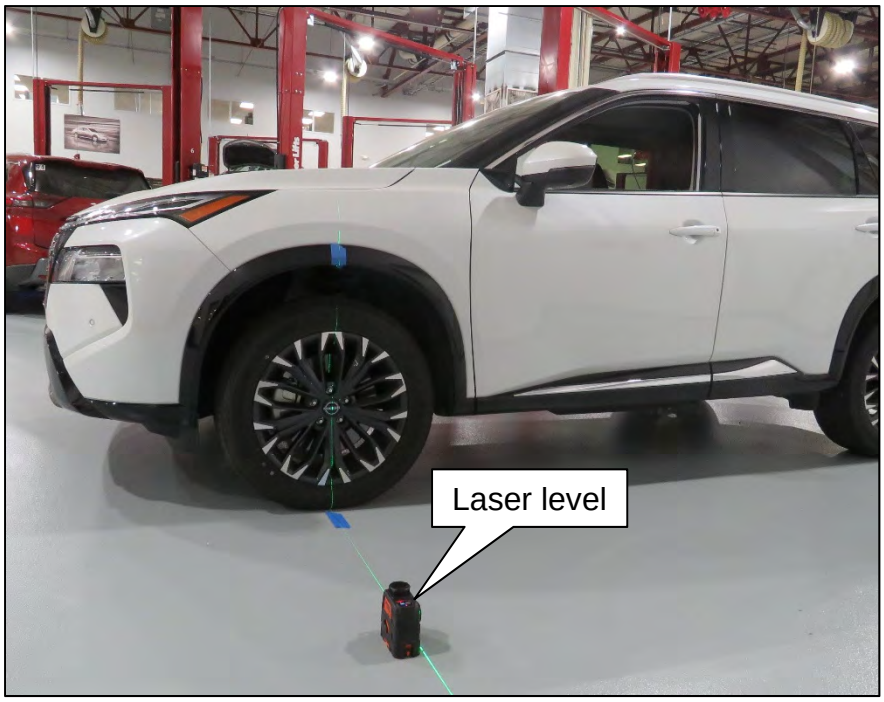


Figure 16

16. Align the vertical laser line to the wheel axle centerline (wheel center cap).

Figure 17

17. Mark the wheel arch and the floor near the tire.

HINT: The use of painter's tape helps capture the markings on the vehicle and floor.

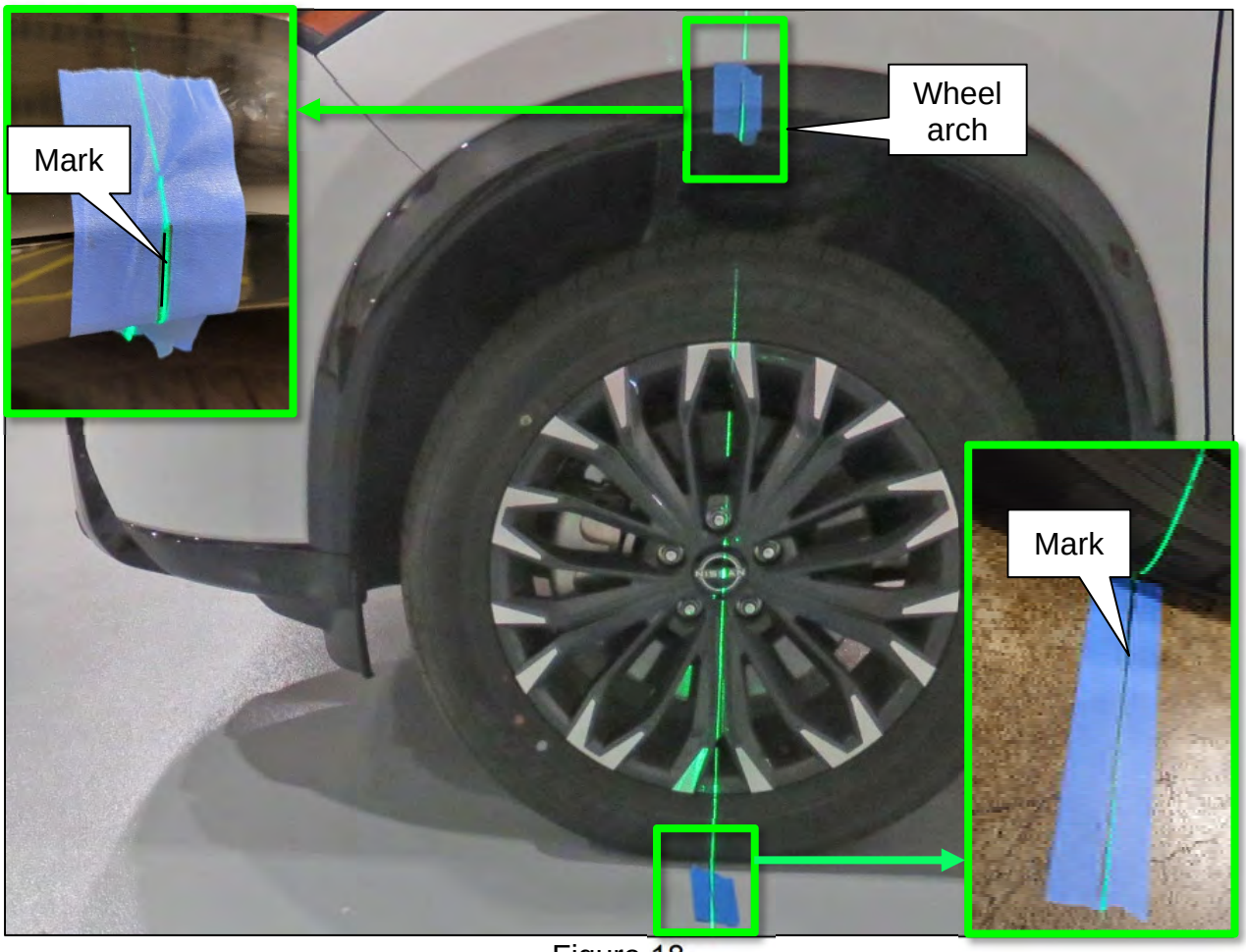


Figure 18

18. Move the laser so it is about 45° and approximately 800 mm (**31.5 in.**) from the wheel axle centerline.

HINT: The laser level can be either to the left or right of the wheel and tire assembly.

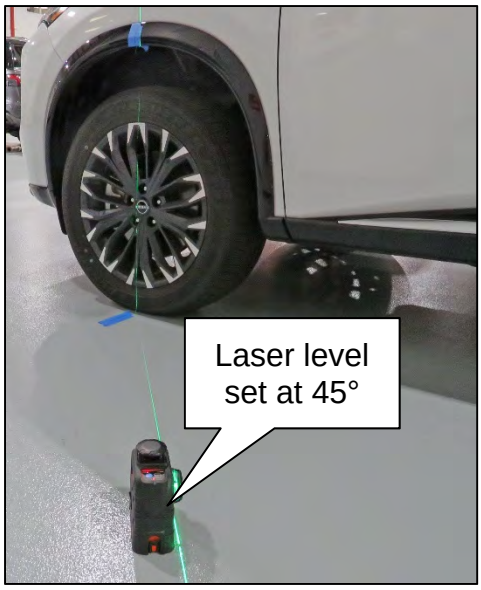


Figure 19

19. Line up the vertical laser line to the mark on the wheel arch (Figure 20), and then mark the floor with a cross-mark. This is the center point of the wheel and tire assembly (Figure 21).

HINT:

- The vertical laser line must line up with the line on the wheel arch, not the wheel center cap (Figure 20).
- To ensure the wheel center mark is not covered up by the bulge in the tire, ensure the vehicle is parked on a completely level area and the tires are properly inflated.

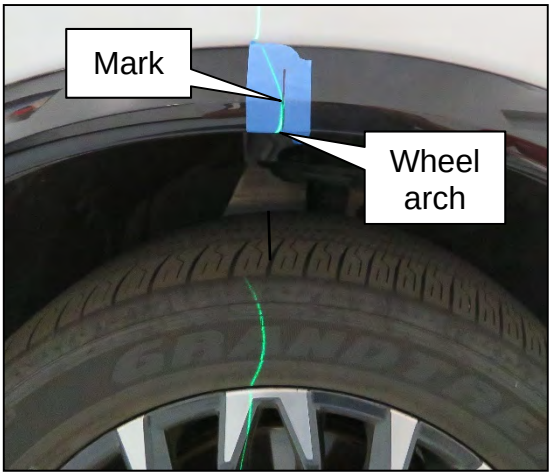


Figure 20

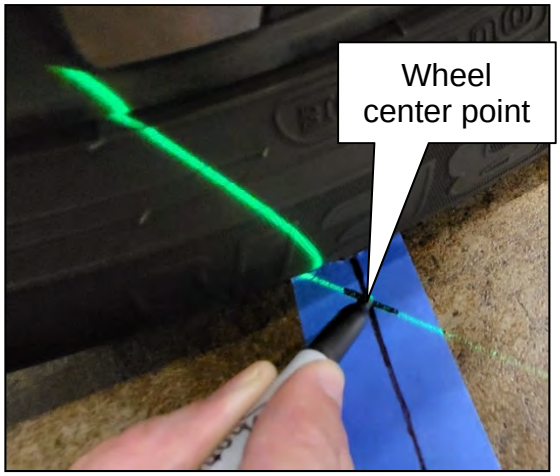


Figure 21

20. Repeat steps 15 - 19 starting on page 11, to mark the center point's at the three (3) remaining wheel and tire assemblies.

Placing Calibration Targets for the Driver (LH) and/or Passenger (RH) Side Cameras

IMPORTANT: Steps 21 - 33 and the related figures show the driver (LH) side of the vehicle. The passenger (RH) side is similar. If the AVM Control Module was replaced, steps 21 - 33 must be performed for both the driver and passenger side cameras.

21. Place the laser level approximately 1500 mm (**59 in.**) behind the rear wheel (Figure 22), and then align the laser level so that the laser line is perfectly centered through the center points of both wheel and tire assemblies marked in step 19 on page 13.

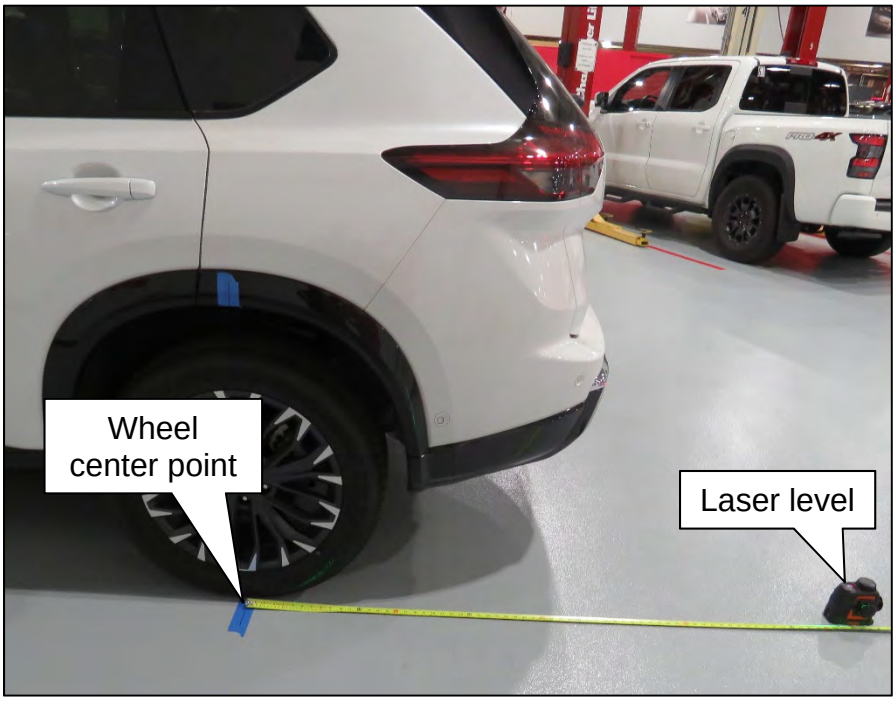


Figure 22

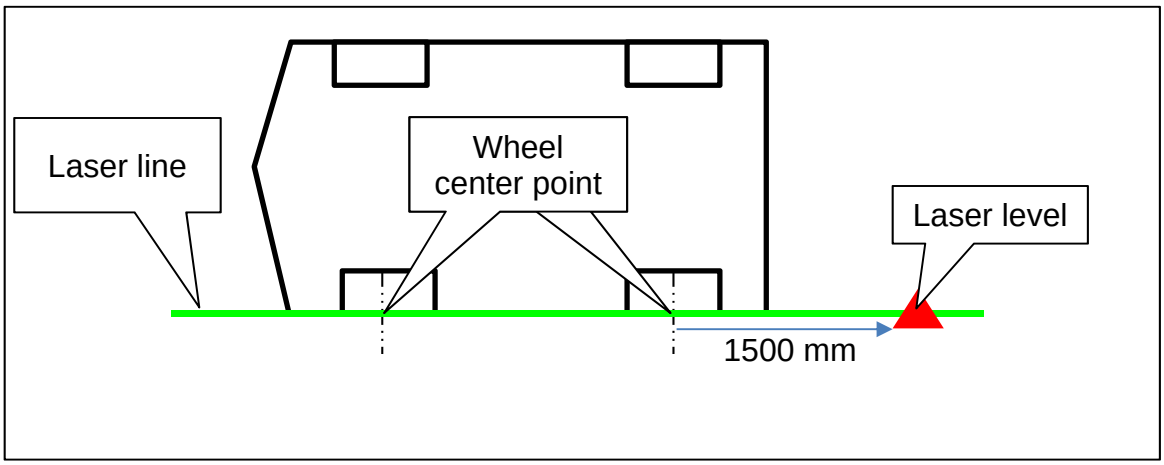


Figure 23

22. Activate a second vertical laser line (90° to the original laser line), and then mark a line at 500 mm and 2500 mm from the original laser line, as shown in Figure 24 and Figure 25.

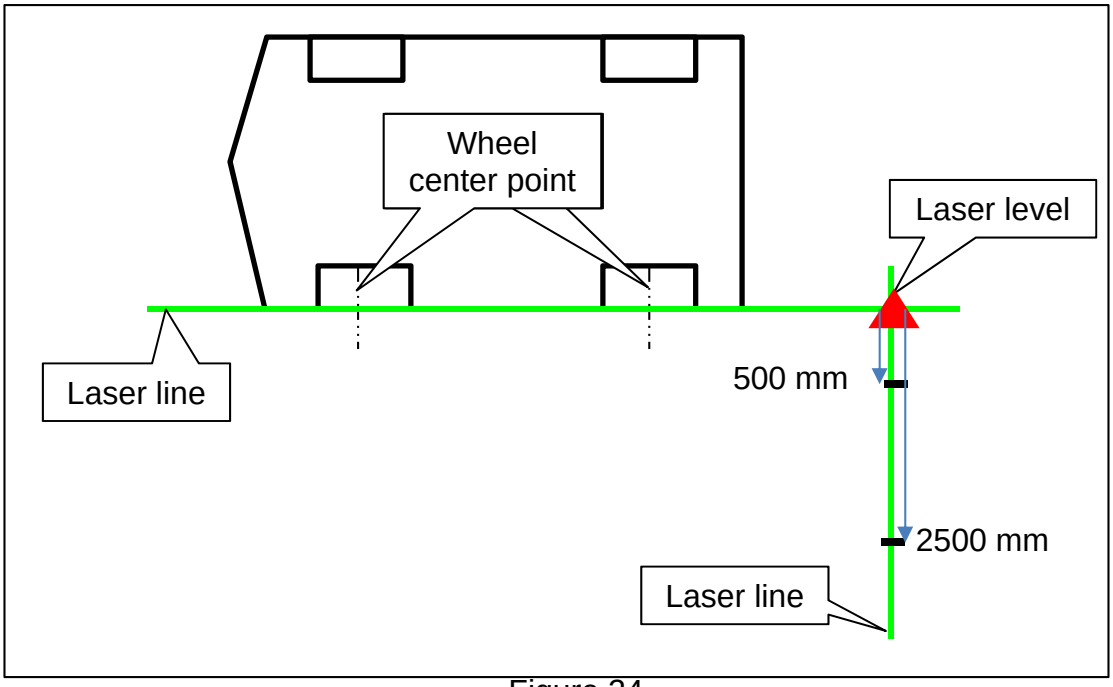


Figure 24

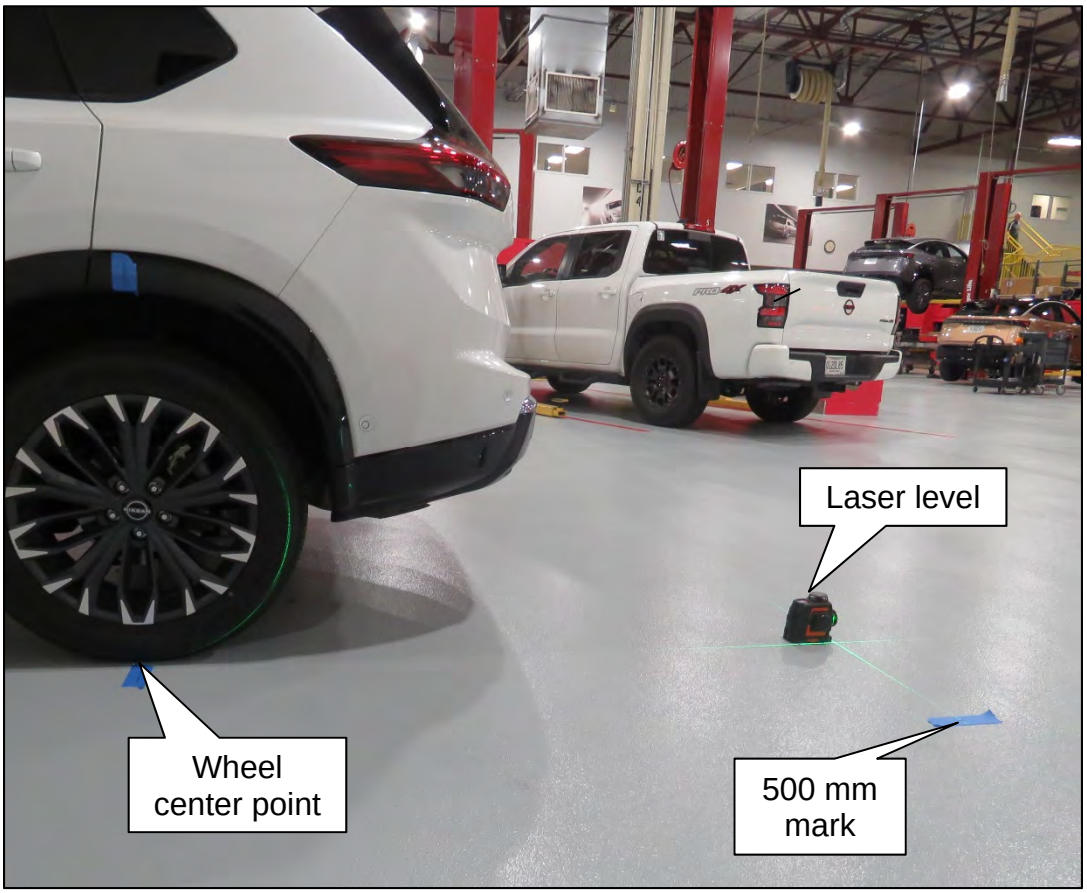


Figure 25

23. Repeat steps 21 - 22 starting on page 14, for the front of the vehicle.

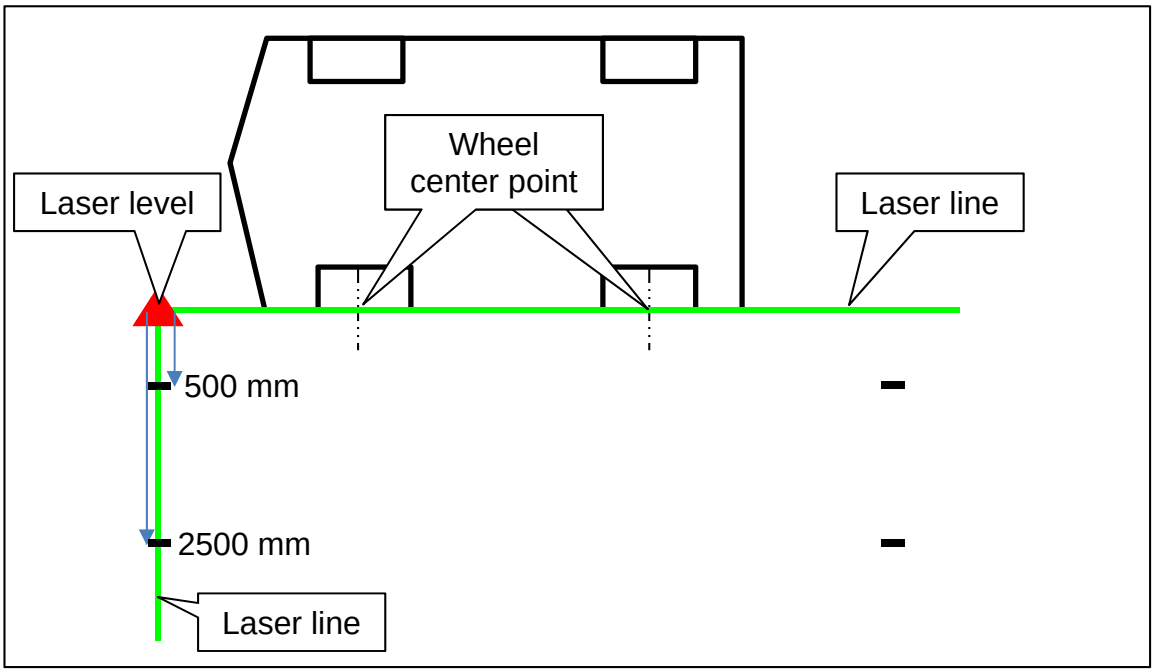


Figure 26

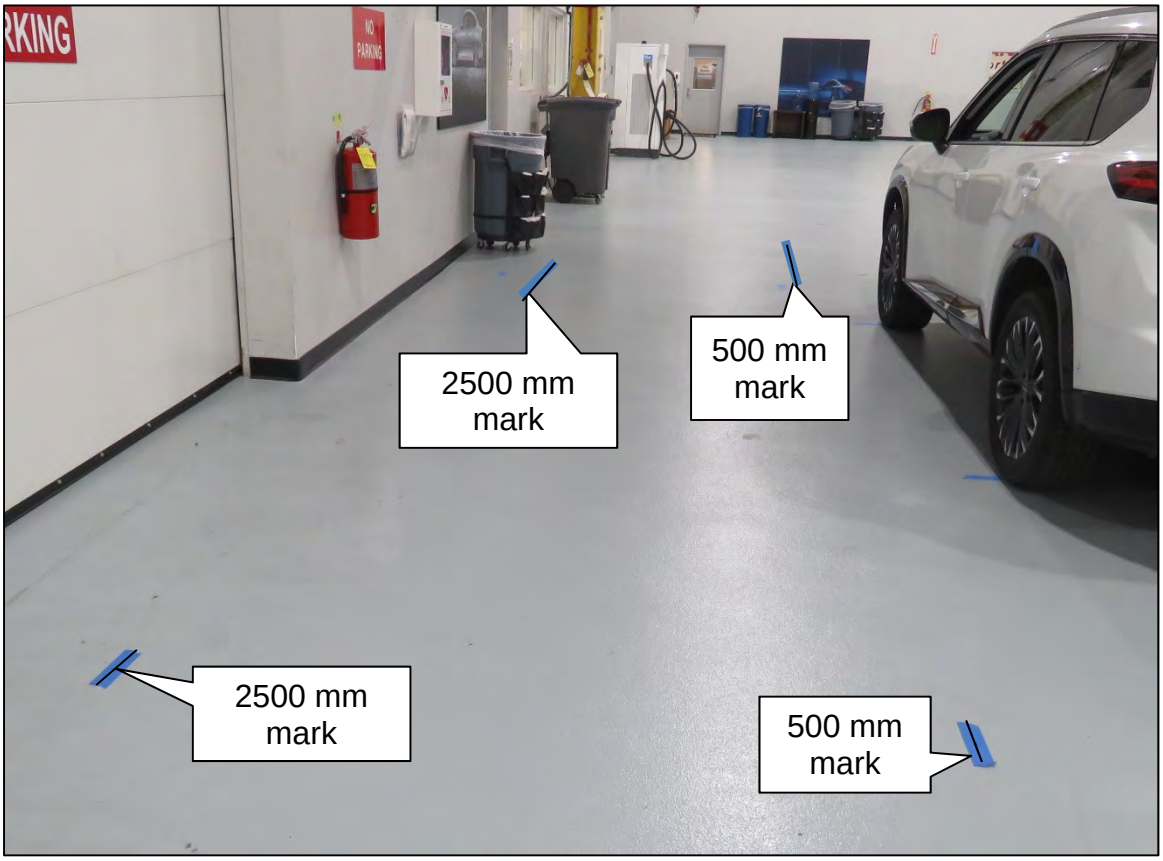


Figure 27

24. Use a chalk line tool to make a line between the 500 mm and 2500 mm marks, as shown in Figure 28 and Figure 29.

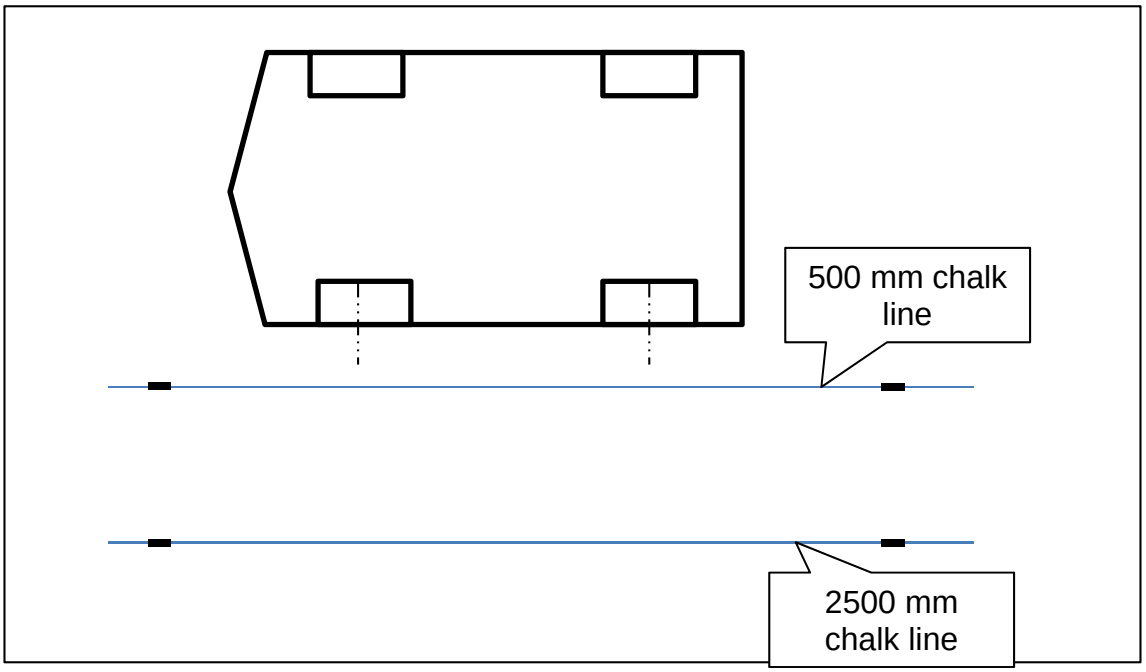


Figure 28

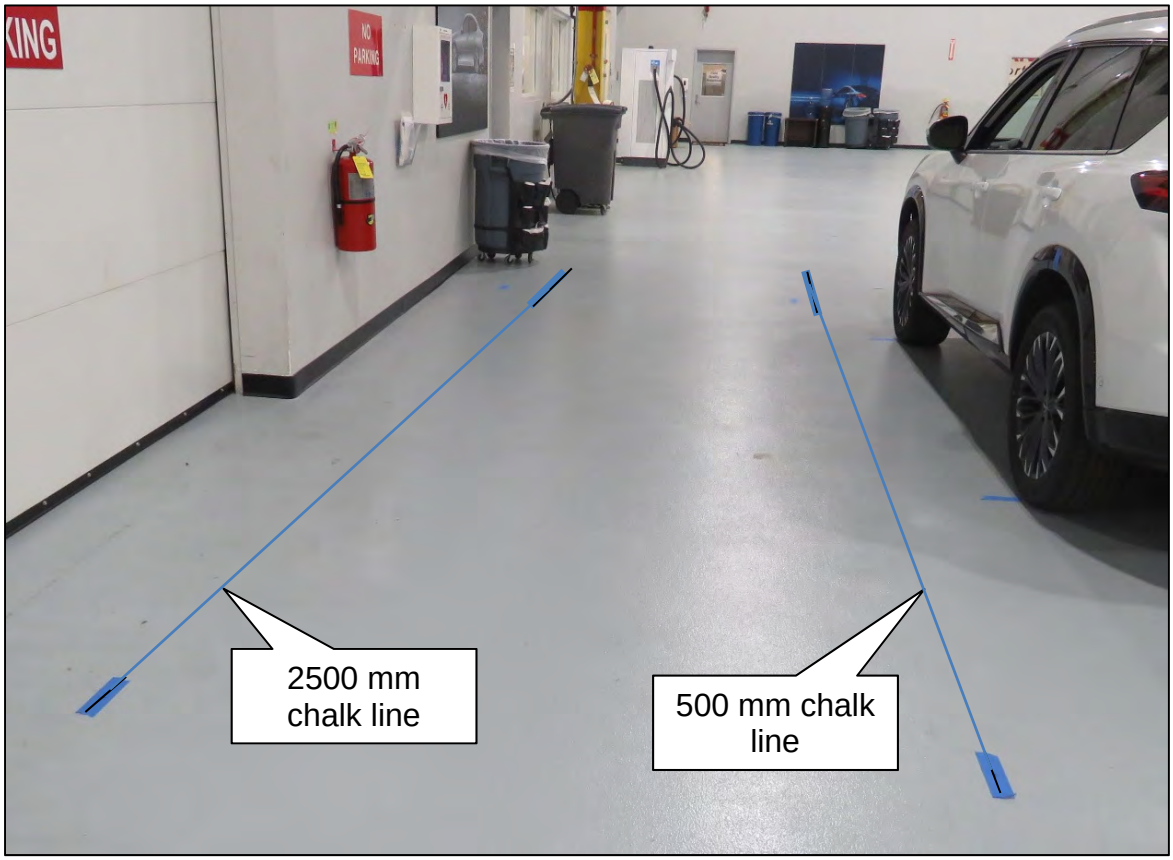


Figure 29

25. Place the laser level with both vertical lines activated, and align one laser line with the 500 mm chalk line and align the other laser line to the center point on the front driver (LH) side wheel, as shown in Figure 30 and Figure 31.

IMPORTANT: The laser line must be perfectly aligned with the 500 mm chalk line.

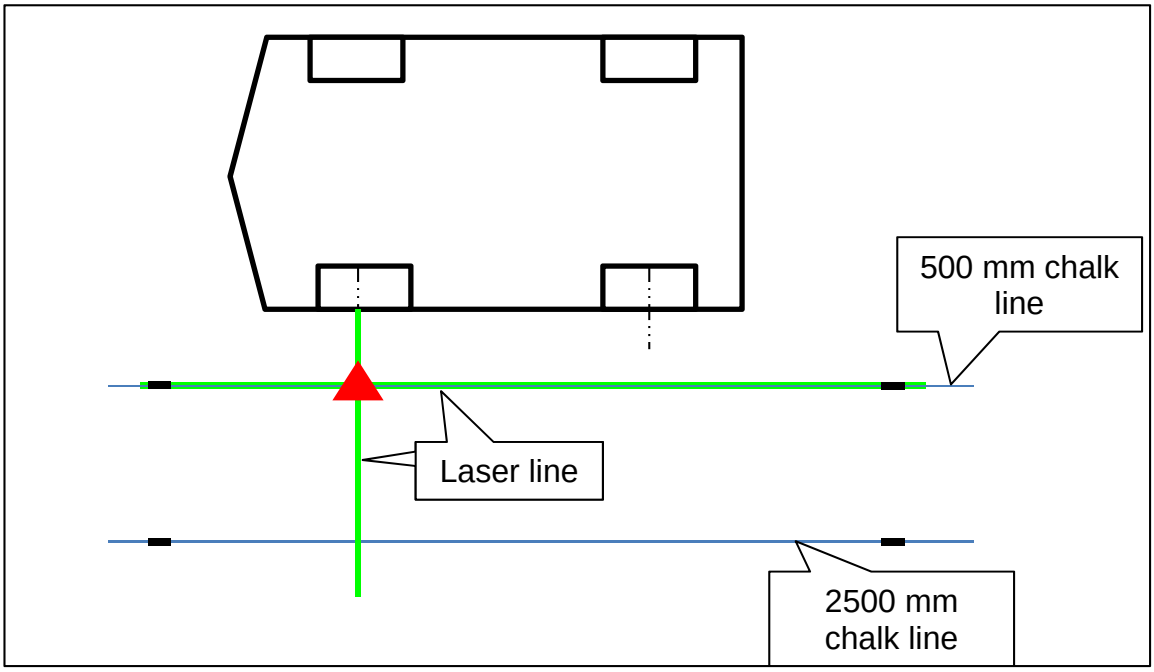


Figure 30

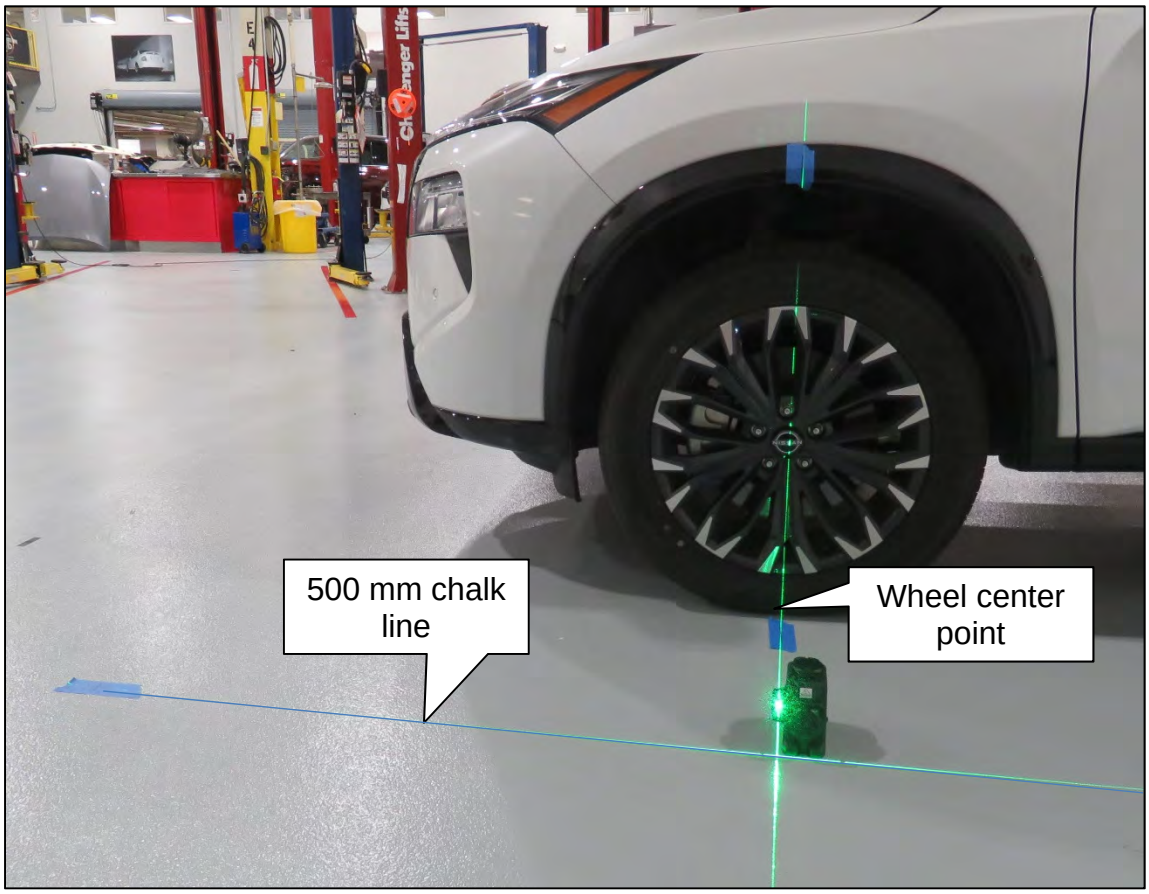


Figure 31

26. Place a mark on the floor below the laser line (Figure 32).

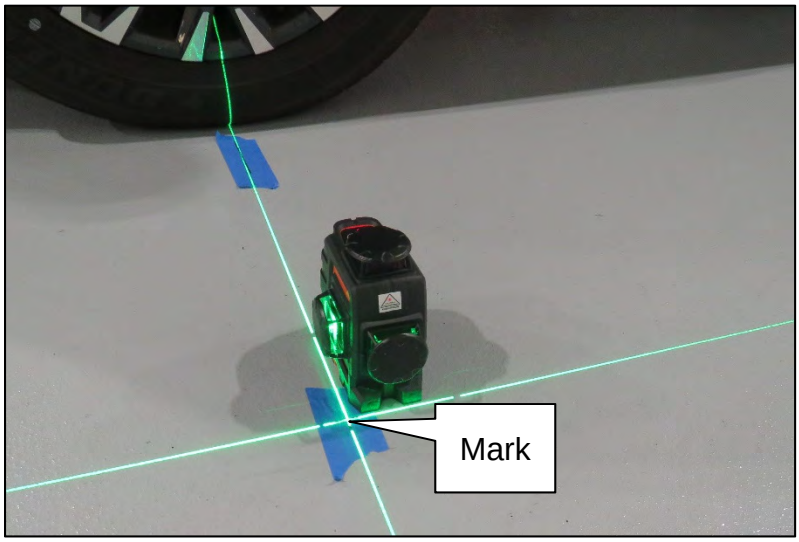


Figure 32

27. Measure and mark 1000 mm increments, as shown in Figure 33 and Figure 34.

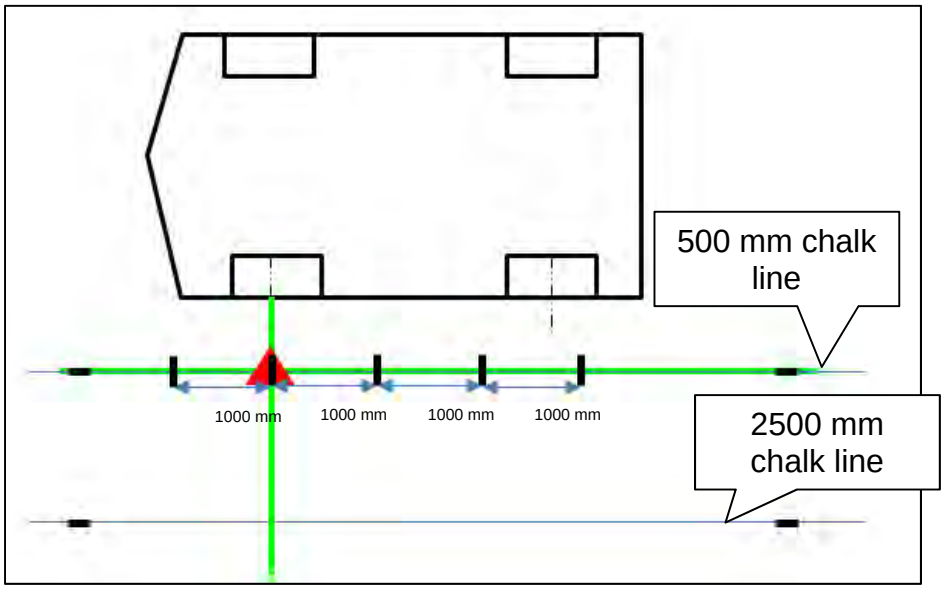


Figure 33

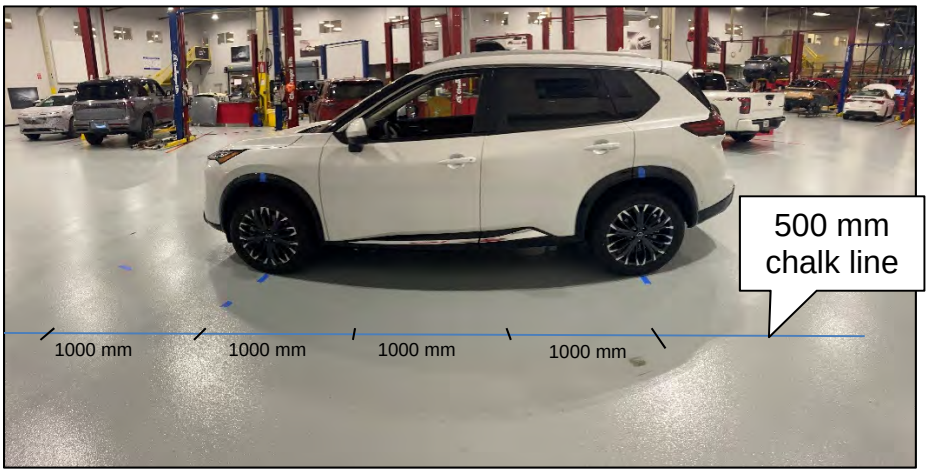


Figure 34

28. Move the laser level to the position shown in Figure 35, and then make a mark on the 2500 mm chalk line.

IMPORTANT: The laser line must be perfectly aligned with the 500 mm chalk line.

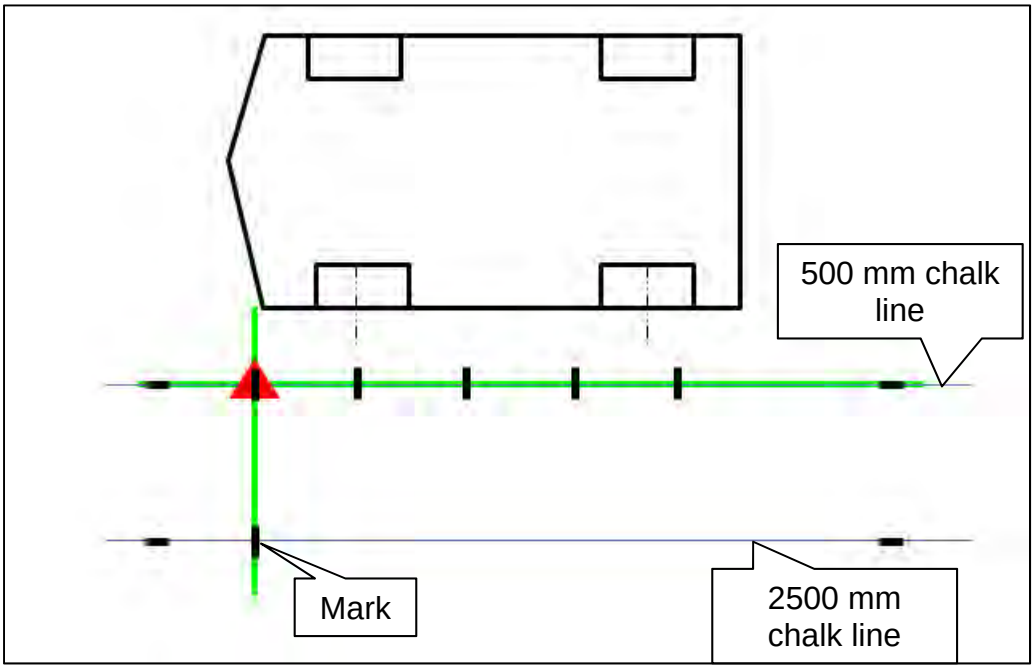


Figure 35

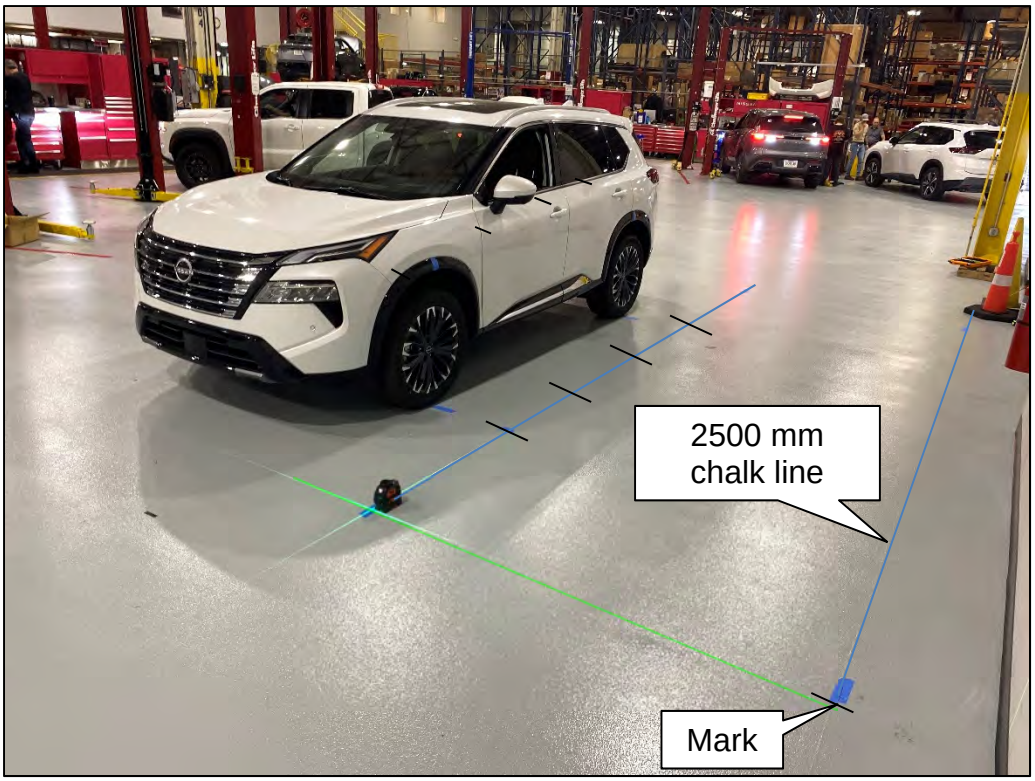


Figure 36

29. Move the laser level to the position shown in Figure 37, and then make a mark on the 2500 mm chalk line.

IMPORTANT: The laser line must be perfectly aligned with the 500 mm chalk line.

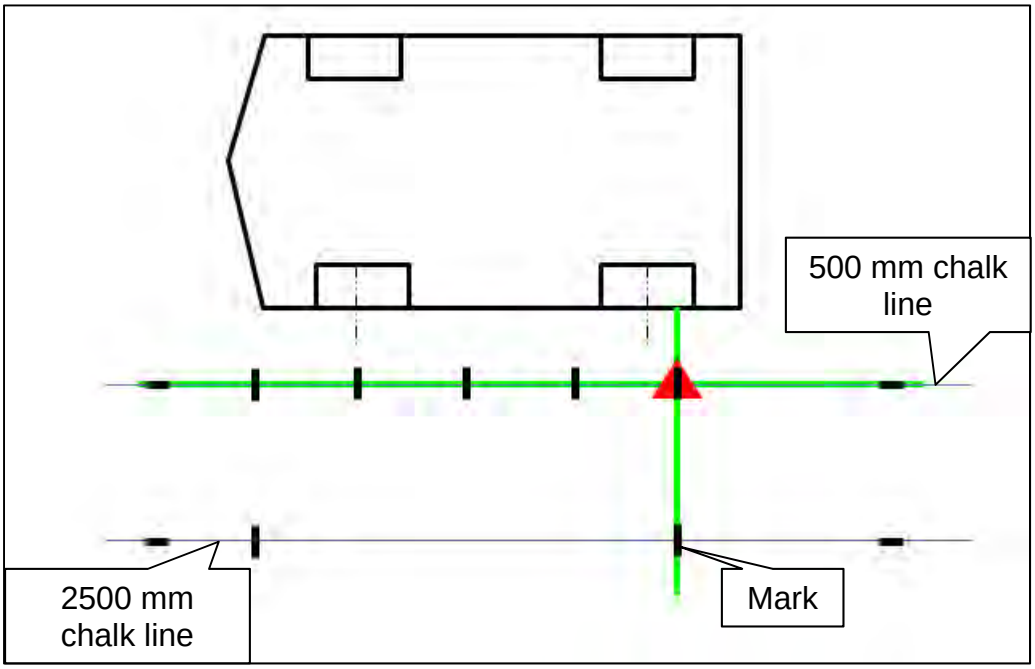


Figure 37

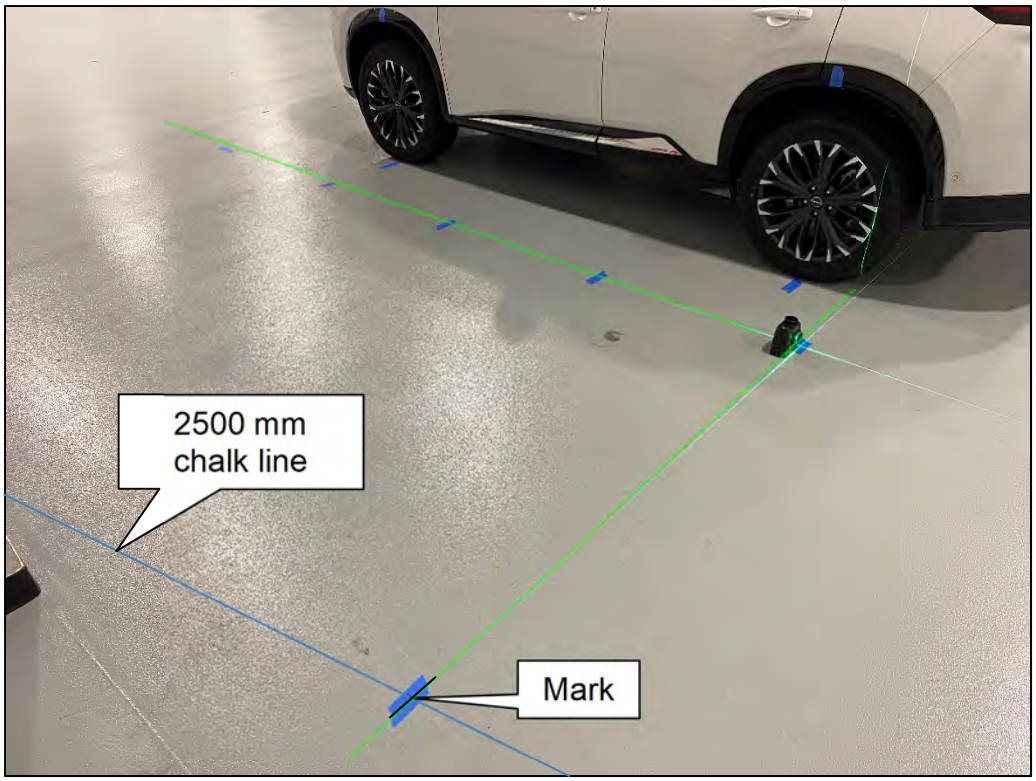


Figure 38

30. Using a carpenter's square, squared to the chalk line, extend each of the seven (7) marks 12 in. from the chalk line.

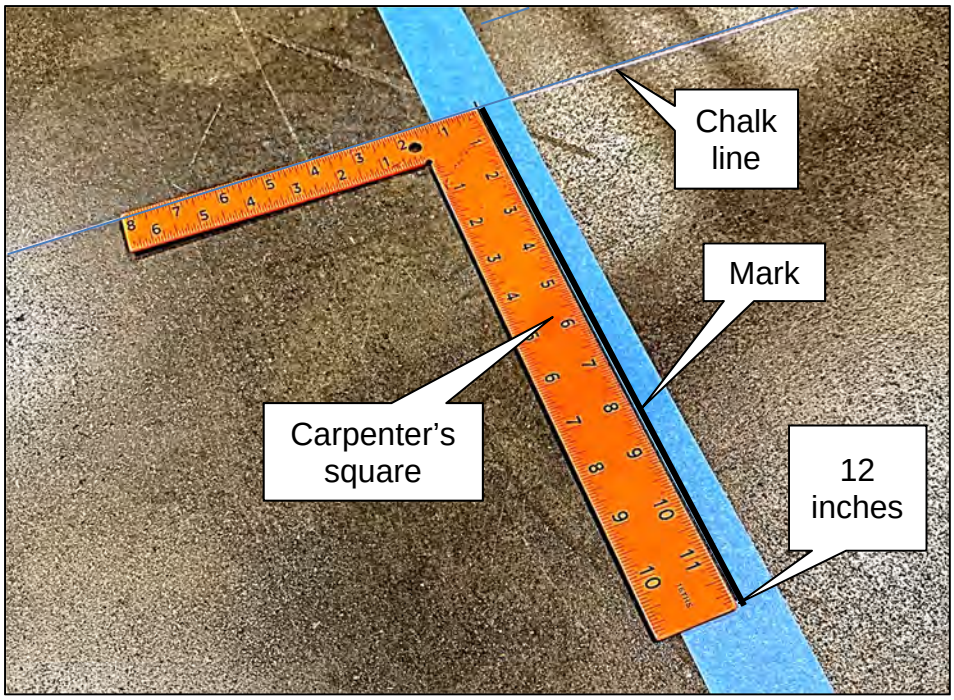


Figure 39

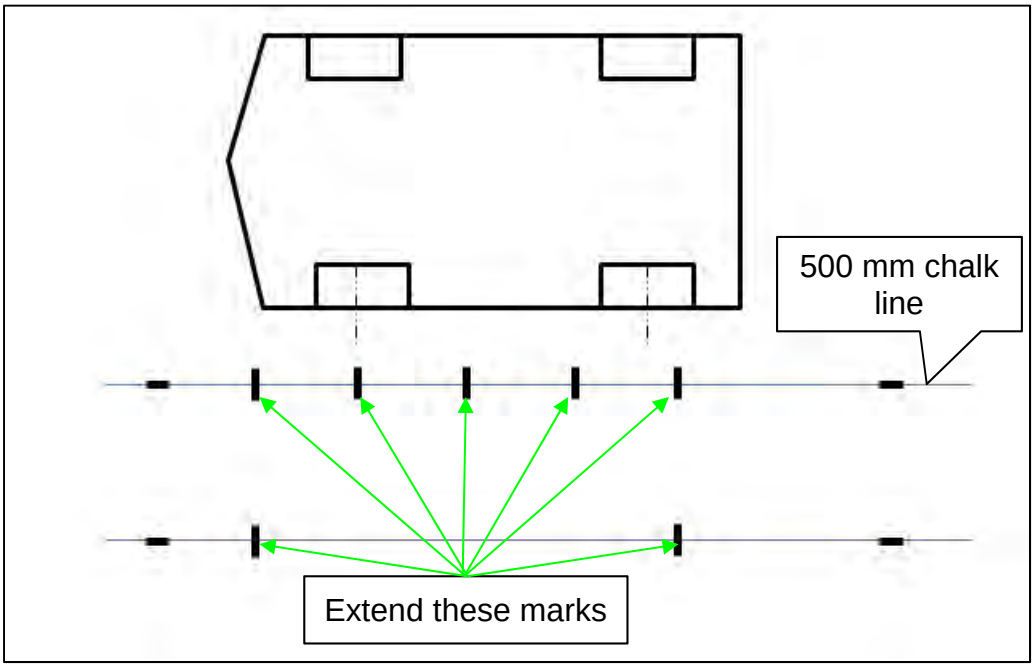


Figure 40

31. Place five (5) targets on the marks along the 500 mm chalk line.

IMPORTANT: Orient and align the targets, as shown in Figure 41, Figure 42 and Figure 43. The targets must be aligned with the 500 mm chalk line and the marks made in step 30 on page 22.

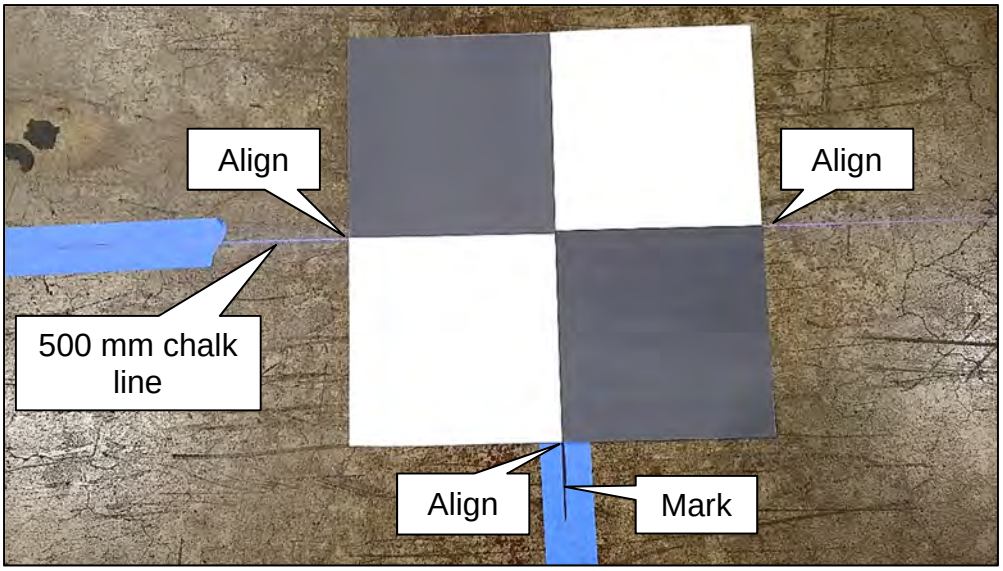


Figure 41

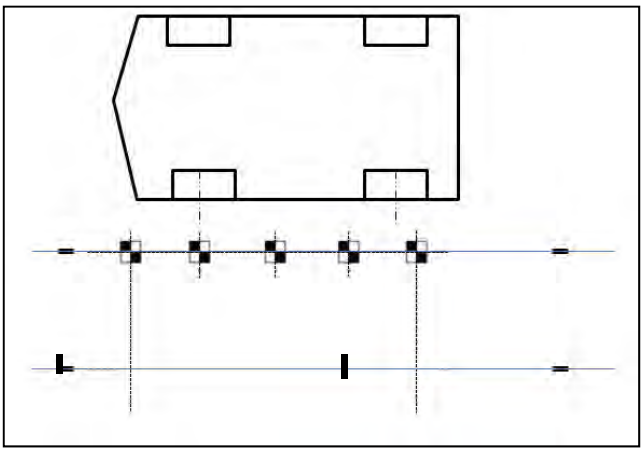


Figure 42

Figure 43

32. Place one (1) target on the forward most mark on the 2500 mm chalk line.

IMPORTANT: Orient and align the target, as shown in Figure 44, Figure 45 and Figure 46. The target must be aligned with the 2500 mm chalk line and the mark made in step 30 on page 22.

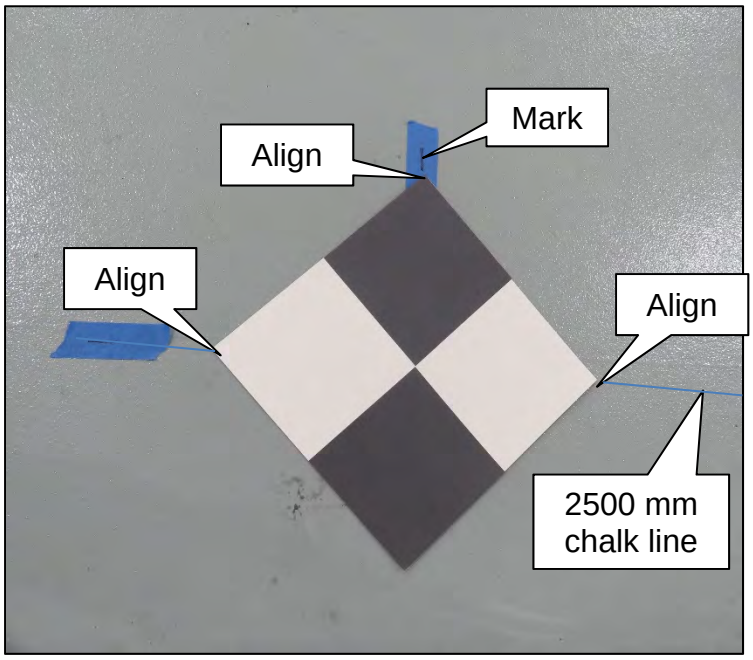


Figure 44

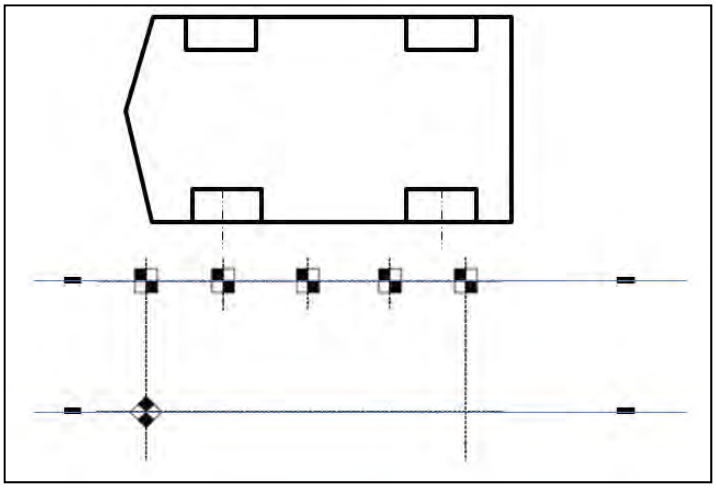


Figure 45

Figure 46

33. Place one (1) target on the rearward most mark on the 2500 mm chalk line.

IMPORTANT: Orient and align the target, as shown in Figure 47, Figure 48 and Figure 49. The target must be aligned with the 2500 mm chalk line and the mark made in step 30 on page 22.

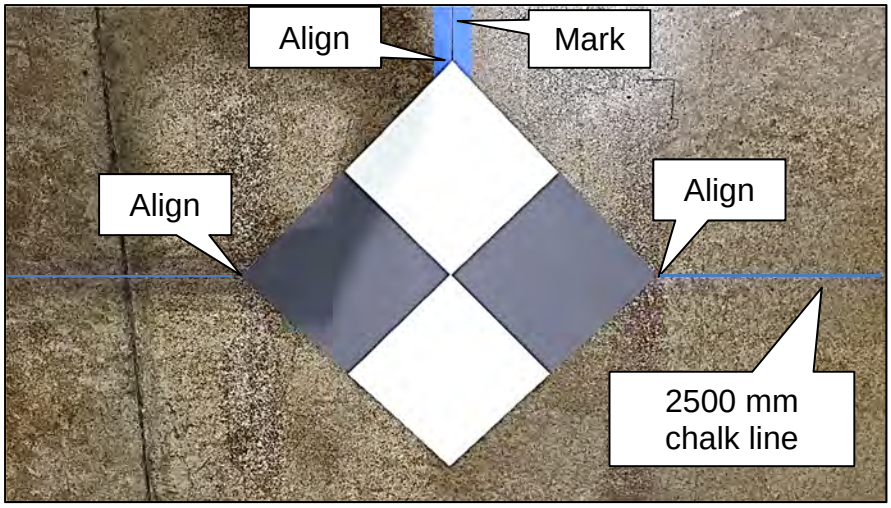


Figure 47

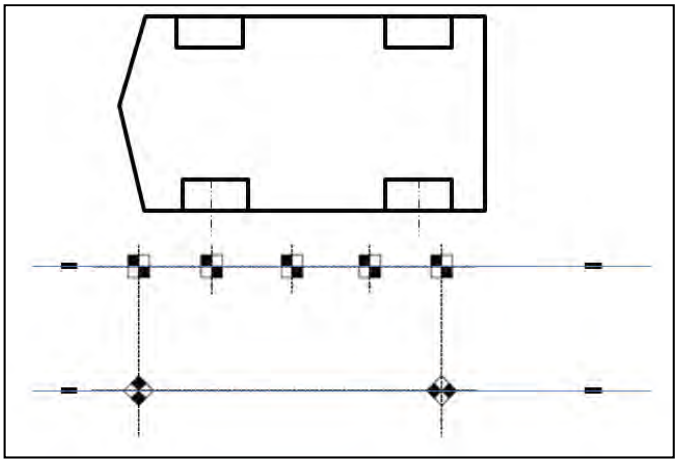


Figure 48

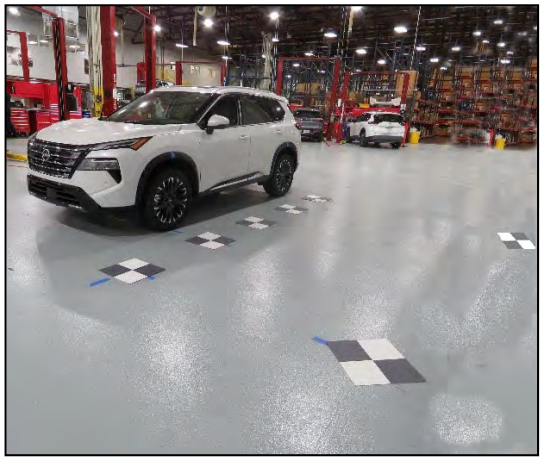


Figure 49

34. If the passenger (RH) side camera was replaced, repeat steps 21 - 33 starting on page 14, to place the calibration targets for the passenger (RH) side camera.

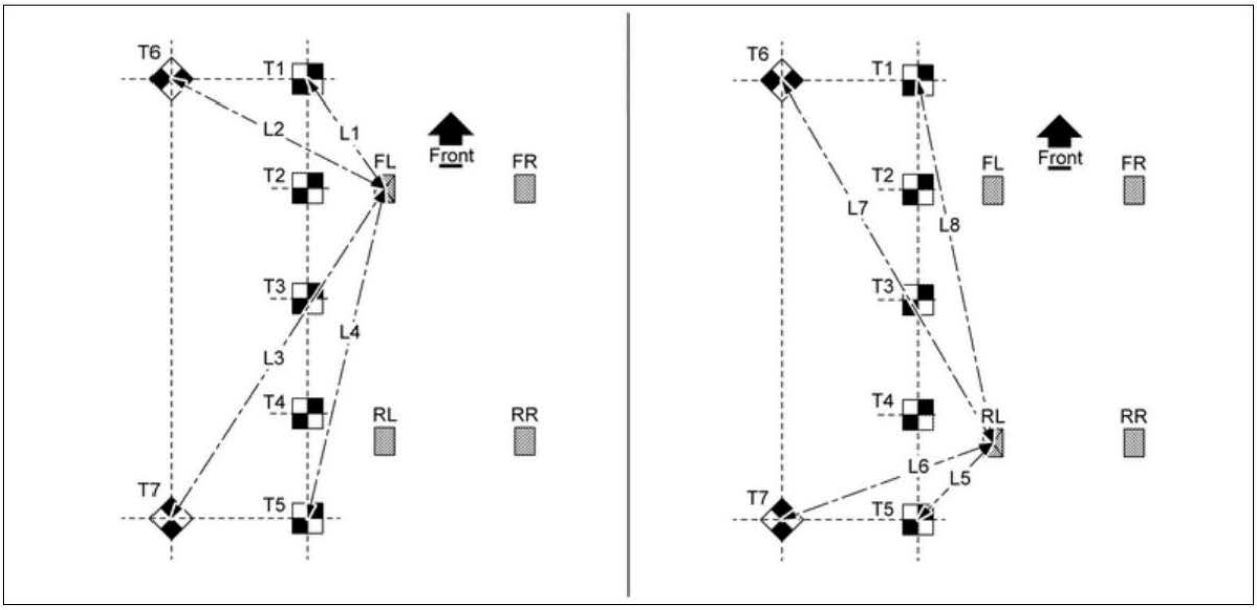
Driver (LH) Side Camera Calibration Measurements

35. Measure the distance between the wheel center point and the center of the calibration targets T1, T6, T7, and T5, as shown in Figure 50 below.

    IMPORTANT: All measurements must be in millimeters (mm). Refer to the illustrations in Figure 50 to ensure the correct measurement is documented in the correct order and for each calibration target.

ROGUE

Left camera-Length measurements



Length name	Wheel	Target	Measurement (mm)
L1	FL	T1	
L2	FL	T6	
L3	FL	T7	
L4	FL	T5	
L5	RL	T5	
L6	RL	T7	
L7	RL	T6	
L8	RL	T1	

Figure 50

36. Place the laser level on a clean cloth, and then on the roof of the vehicle.

IMPORTANT:

- Place the laser level in the middle of the vehicle's roof.
- The laser level must be still (no fans should be blowing).

Figure 51

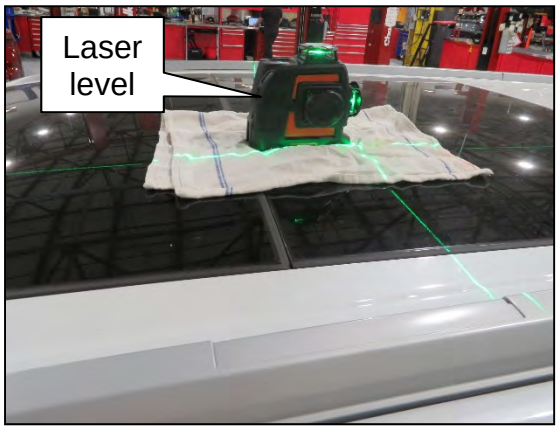


Figure 52

IMPORTANT: For steps 37 and 38:

- When holding the ADAS Calibration Rod, ensure the tool is completely upright and does not bend.
- All measurements must be in millimeters (mm).
- Refer to the illustrations in Figure 55 on page 28 to ensure the correct measurement is documented in the correct order and for each calibration target.

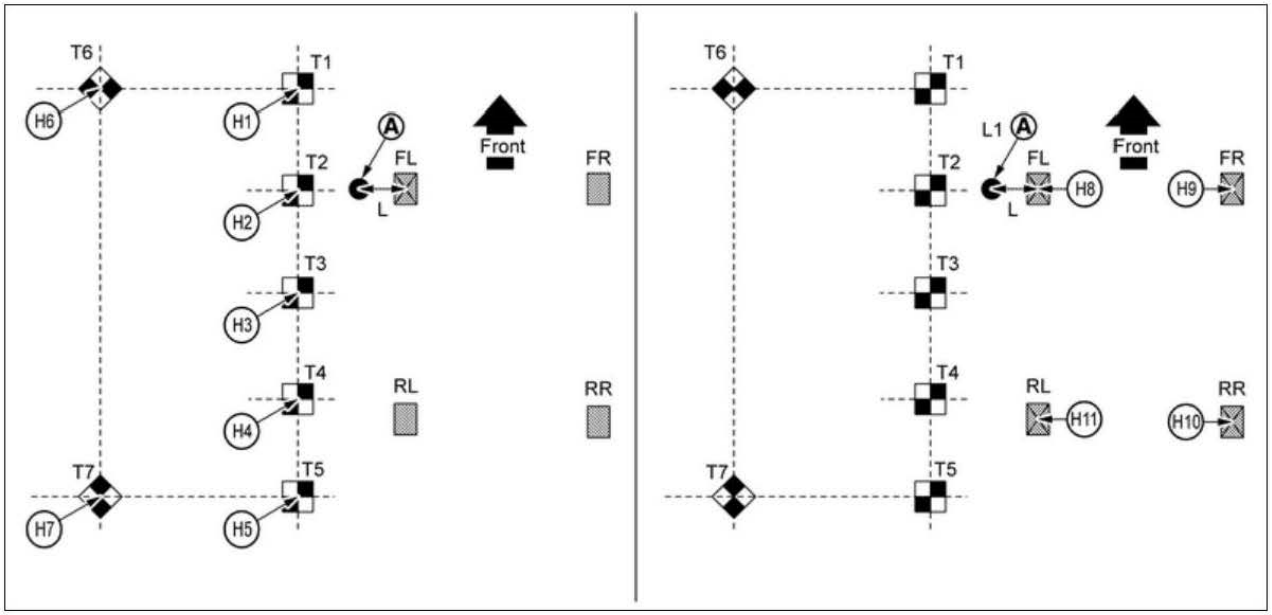
37. Using the ADAS Calibration Rod, measure the height from the center of each calibration target, and then record the measurements H1-H7 in the table in Figure 55 on page 28.

Figure 53

Figure 54

38. Using the ADAS Calibration Rod, measure the height from the wheel center point, and then record the measurements H8-H11 in the table in Figure 55 on page 28.

ROGUE
Left camera-Height measurements



Height name	Wheel	Target	Measurement (mm)
H1	-	T1	
H2	-	T2	
H3	-	T3	
H4	-	T4	
H5	-	T5	
H6	-	T6	
H7	-	T7	
H8	FL	-	
H9	FR	-	
H10	RR	-	
H11	RL	-	

Figure 55

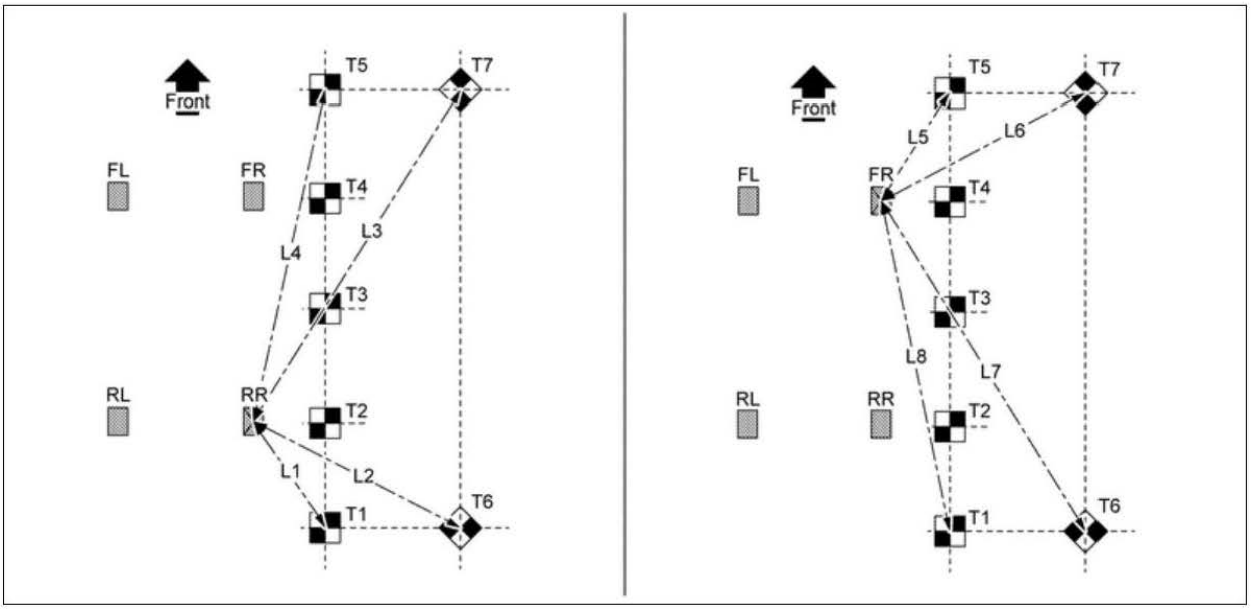
Passenger (RH) Side Camera Calibration Measurements

39. Measure the distance between the wheel center point and the center of the calibration targets T1, T6, T7, and T5, as shown in Figure 56 below.

    IMPORTANT: All measurements must be in millimeters (mm). Refer to the illustrations in Figure 56 to ensure the correct measurement is documented in the correct order and for each calibration target.

ROGUE

Right camera-Length measurements



Length name	Wheel	Target	Measurement (mm)
L1	RR	T1	
L2	RR	T6	
L3	RR	T7	
L4	RR	T5	
L5	FR	T5	
L6	FR	T7	
L7	FR	T6	
L8	FR	T1	

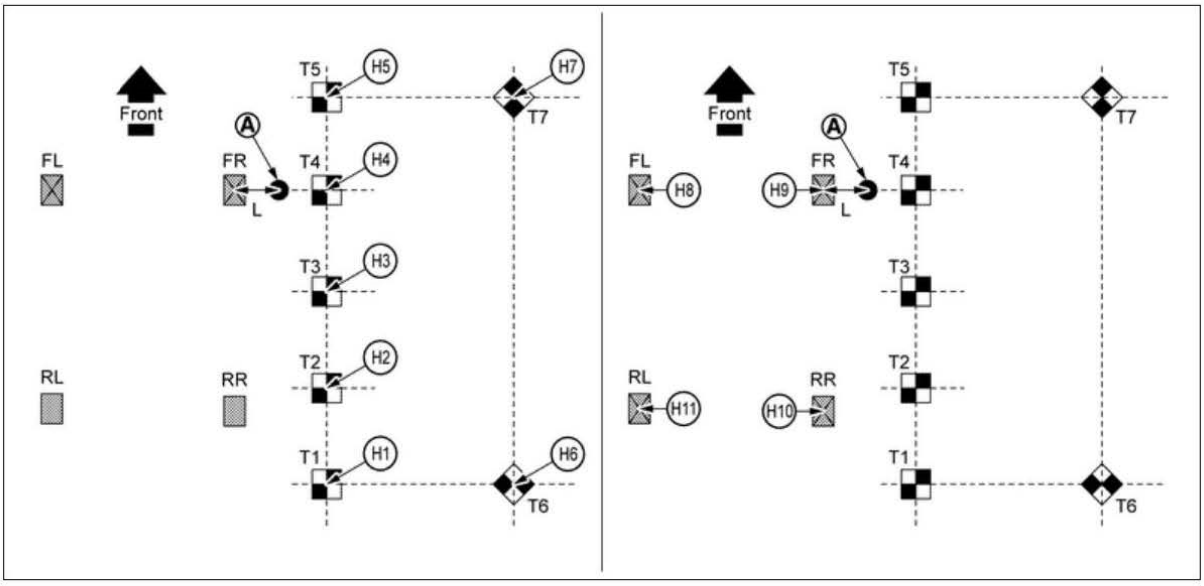
Figure 56

40. Refer to steps 36 - 38 on page 27 to set up the laser level to measure the height of the passenger (RH) side camera, and then document the measurements in Figure 57.

IMPORTANT: All measurements must be in millimeters (mm). Refer to the illustrations in Figure 57 to ensure the correct measurement is documented in the correct order and for each calibration target.

ROGUE

Right camera-Height measurements



Height name	Wheel	Target	Measurement (mm)
H1	-	T1	
H2	-	T2	
H3	-	T3	
H4	-	T4	
H5	-	T5	
H6	-	T6	
H7	-	T7	
H8	FL	-	
H9	FR	-	
H10	RR	-	
H11	RL	-	

Figure 57

Marking the Center Point for the Front of the Vehicle

41. Place the laser level approximately 800 mm (**31.5 in.**) from the front of the vehicle and align the laser with the front camera, as shown in Figure 59 and Figure 60.

    IMPORTANT: Be sure to center the laser line with the front camera and not the "NISSAN" brand name on the emblem.

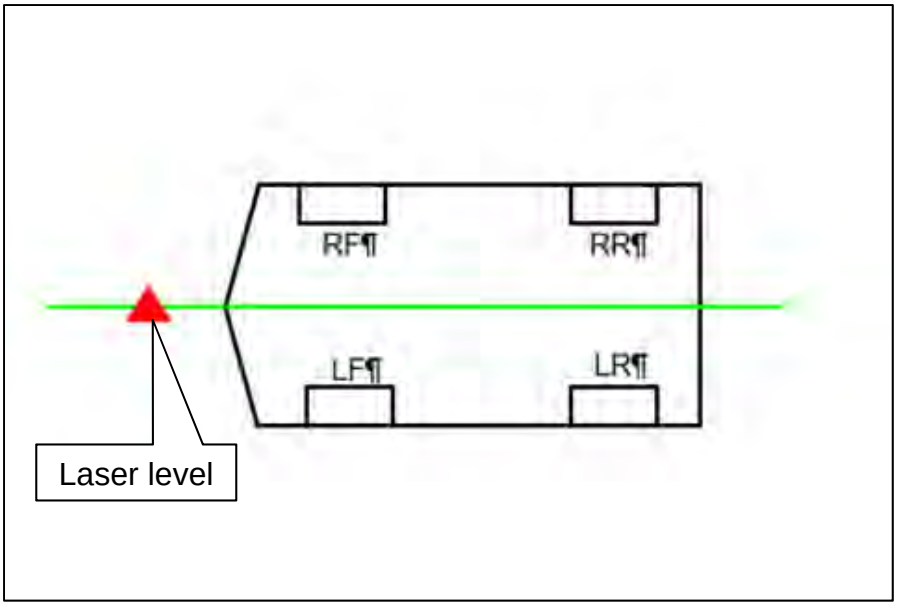


Figure 58

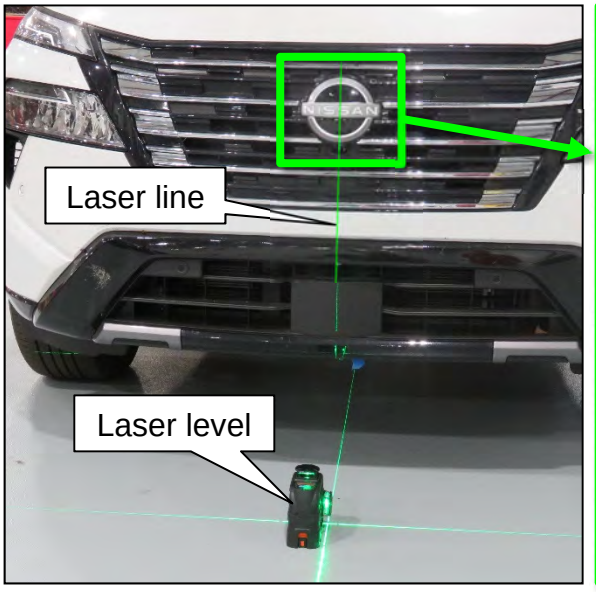


Figure 59

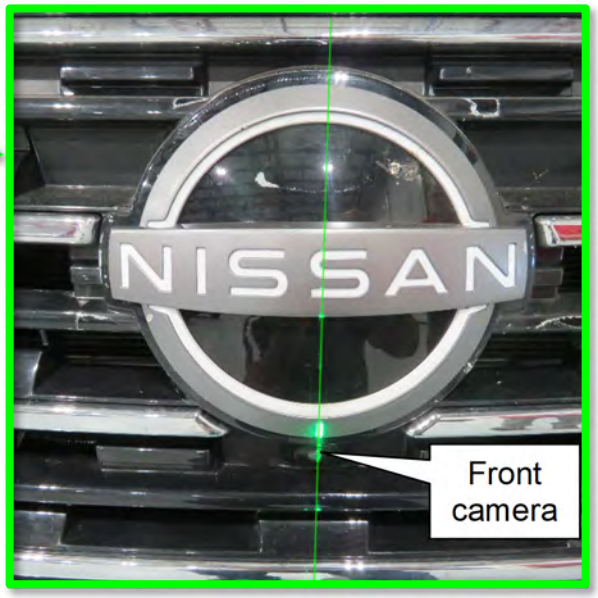


Figure 60

42. Apply painter's tape and mark the NISSAN emblem and the floor near the front fascia, as shown in Figure 61.

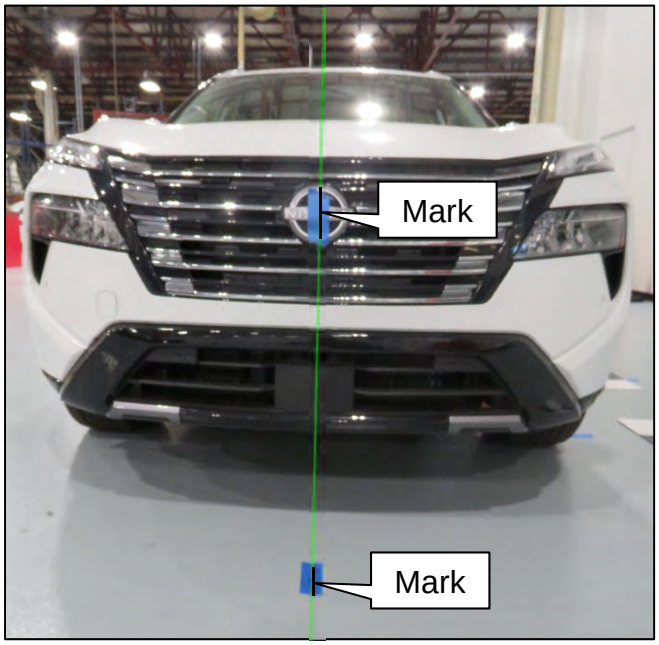


Figure 61

43. Move the laser so it is about 45° and approximately 800 mm (**31.5 in.**) from the front of the vehicle, and then line up the vertical laser line to the mark on the NISSAN emblem.

HINT: The laser level can be either to the left or right of the front of the vehicle.

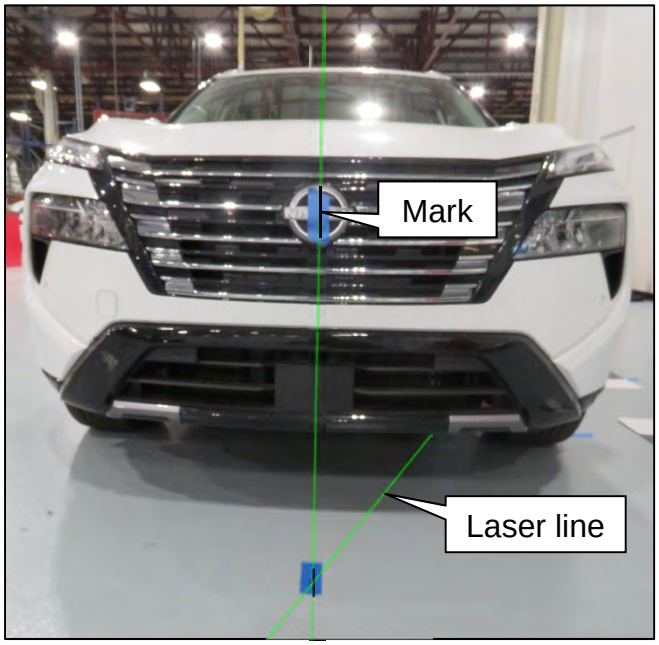


Figure 62

44. Mark the floor with a cross-mark, denoting the center point of the front of the vehicle.

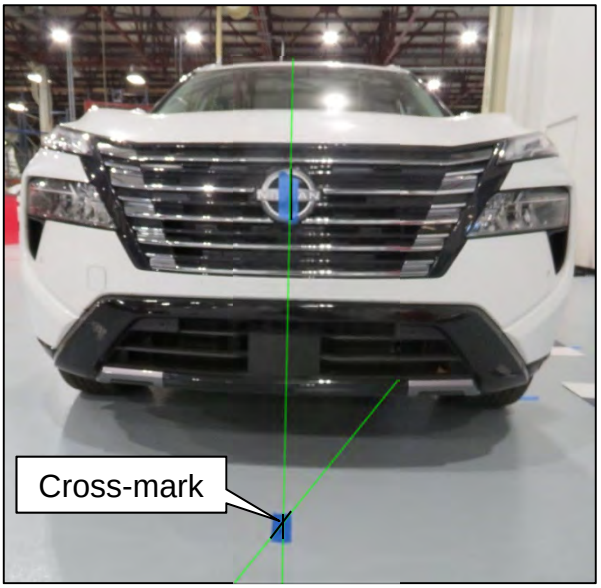


Figure 63

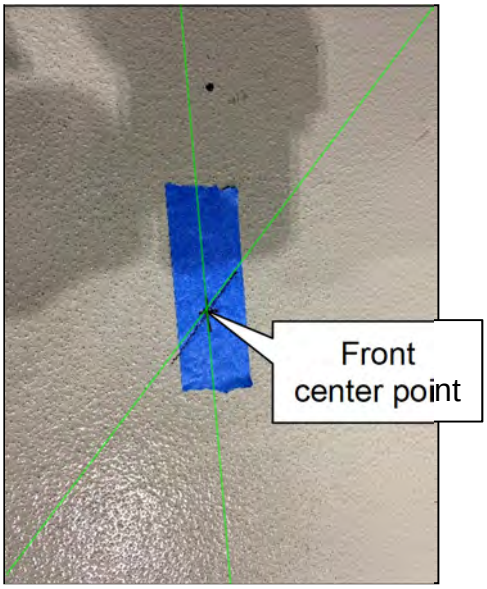


Figure 64

Marking the Center Point for the Rear of the Vehicle

45. Place the laser level approximately 800 mm (**31.5 in.**) from the rear of the vehicle and align the laser with the center mark at the front of the vehicle and the middle of the rear camera, as shown in Figure 66 and Figure 67.

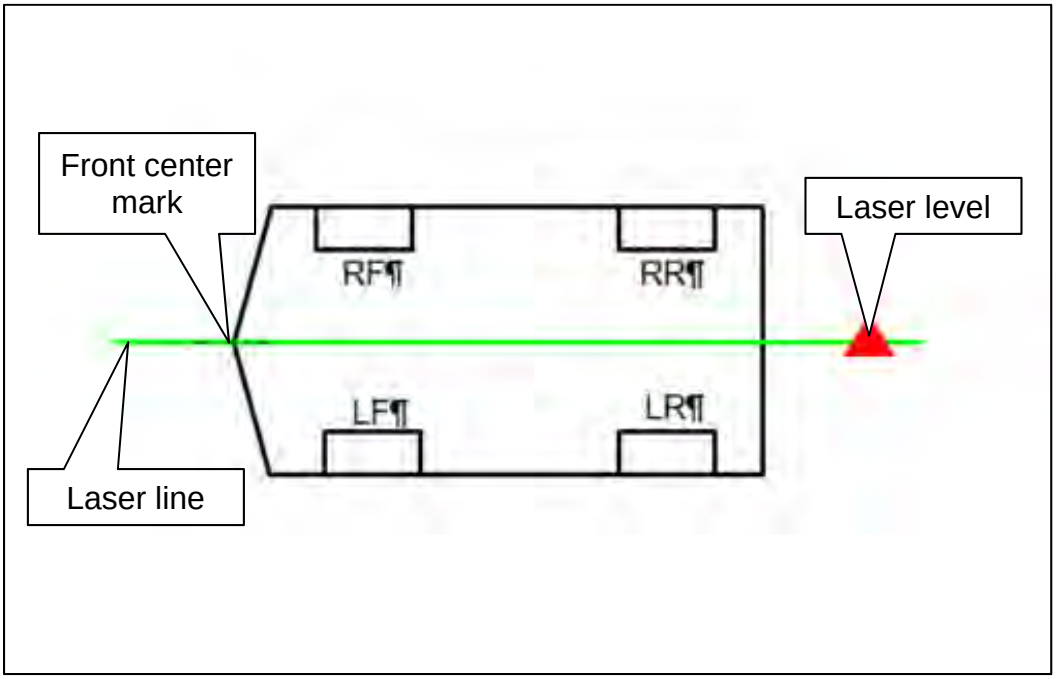


Figure 65

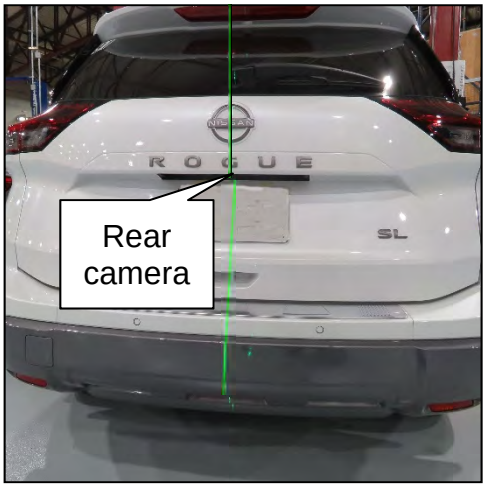


Figure 66

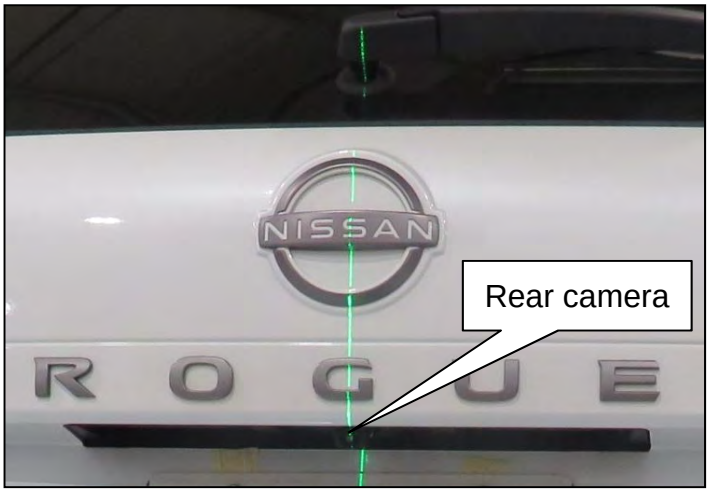


Figure 67

46. Mark the rear fascia, where shown in Figure 68, and the floor near the rear fascia.

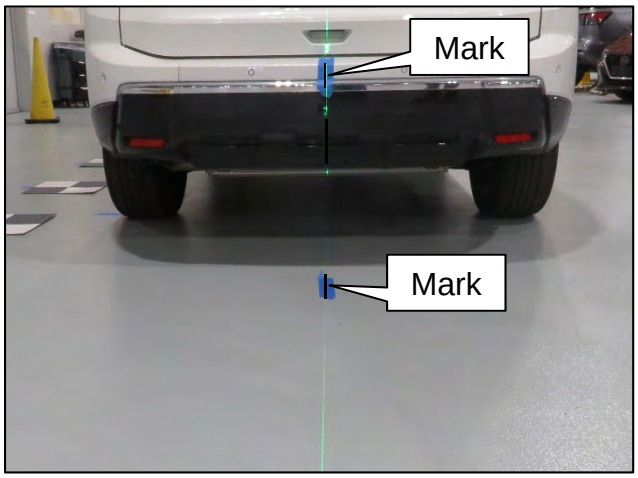


Figure 68

47. Move the laser so it is about 45° and approximately 800 mm (**31.5 in.**) from the rear of the vehicle, and then line up the vertical laser line to the mark on the rear fascia.

HINT: The laser level can be either to the left or right of the rear of the vehicle.

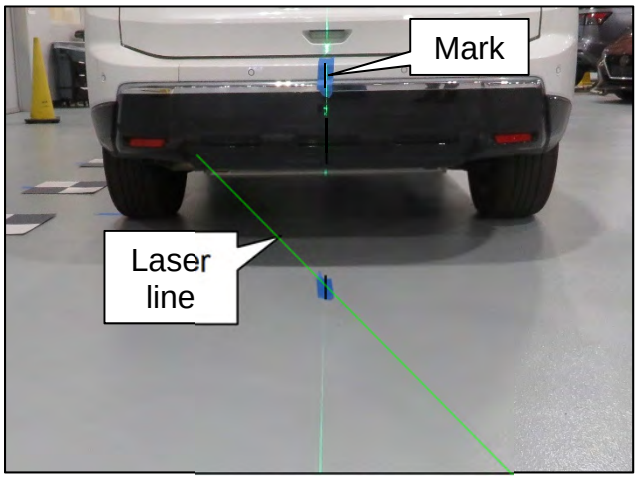


Figure 69

48. Mark the floor with a cross-mark, denoting the center point of the rear of the vehicle.

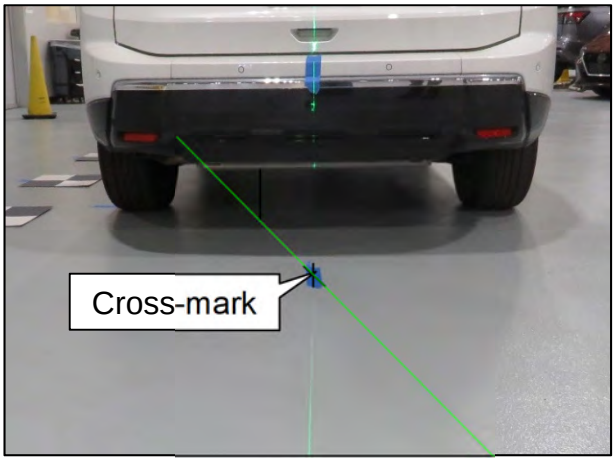


Figure 70

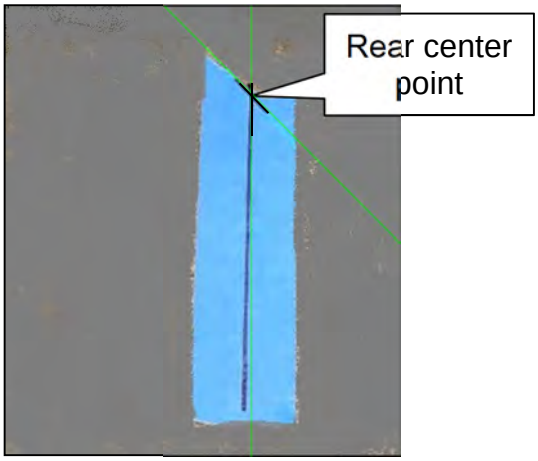


Figure 71

Placing Calibration Targets for the Front and/or Rear Cameras

IMPORTANT: Steps 49 - 63 and the related figures show the rear of the vehicle. The front is similar. If the AVM Control Module was replaced, steps 49 - 63 must be performed for both the front and rear cameras.

49. Place the laser level 2500 mm from the rear center point of the vehicle, and then align the laser line with both the front and rear center points, as shown in Figure 72 and Figure 73.

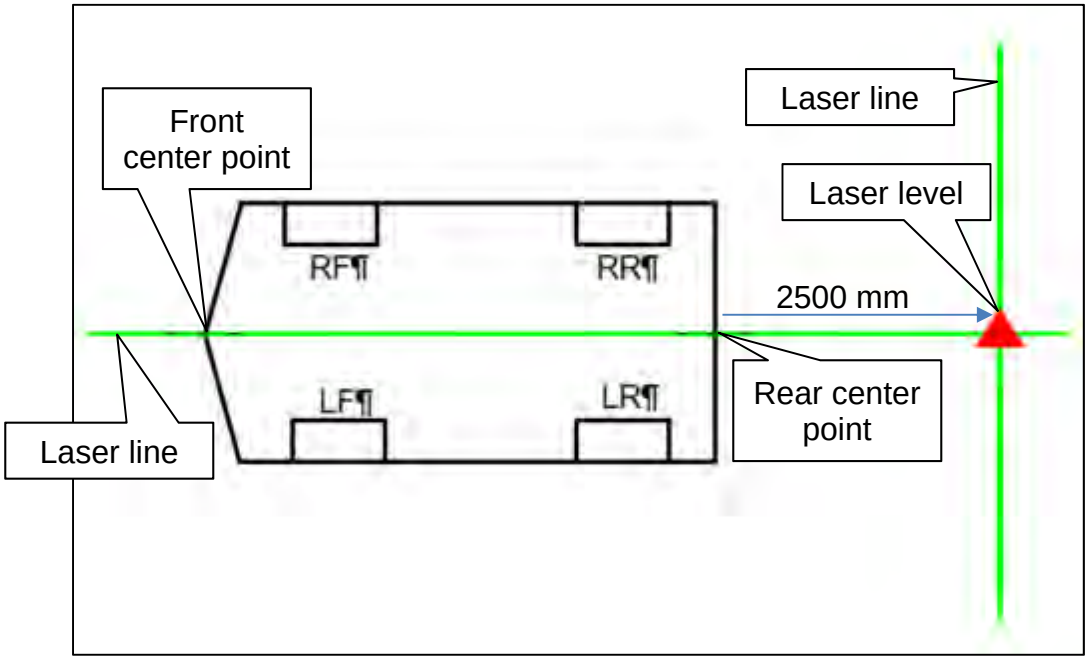


Figure 72

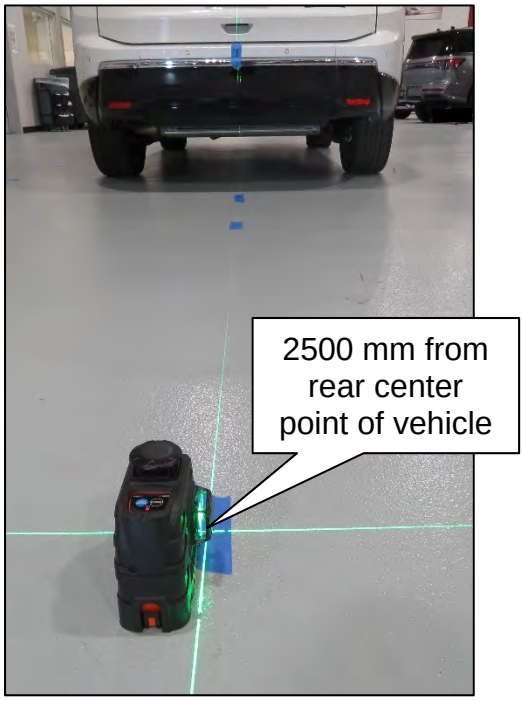


Figure 73

50. Place a cross-mark on the floor below the laser line (Figure 74).

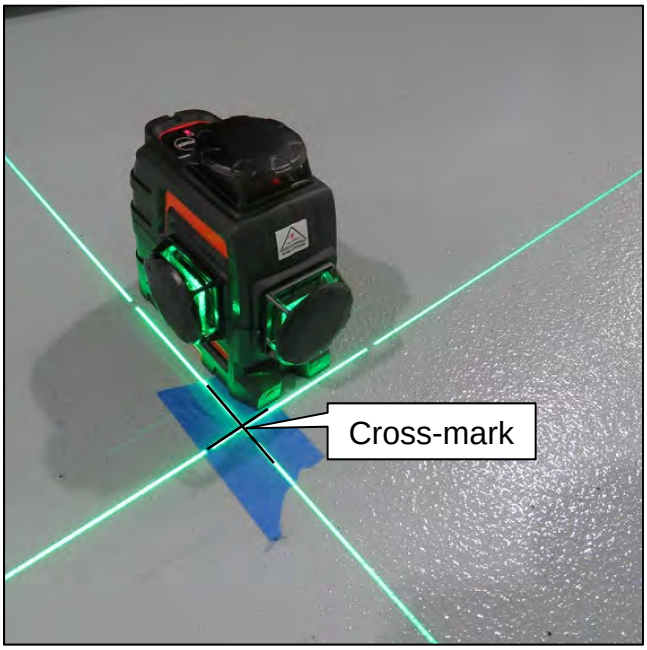


Figure 74

51. Measure and place a mark 500 mm from the rear center point.

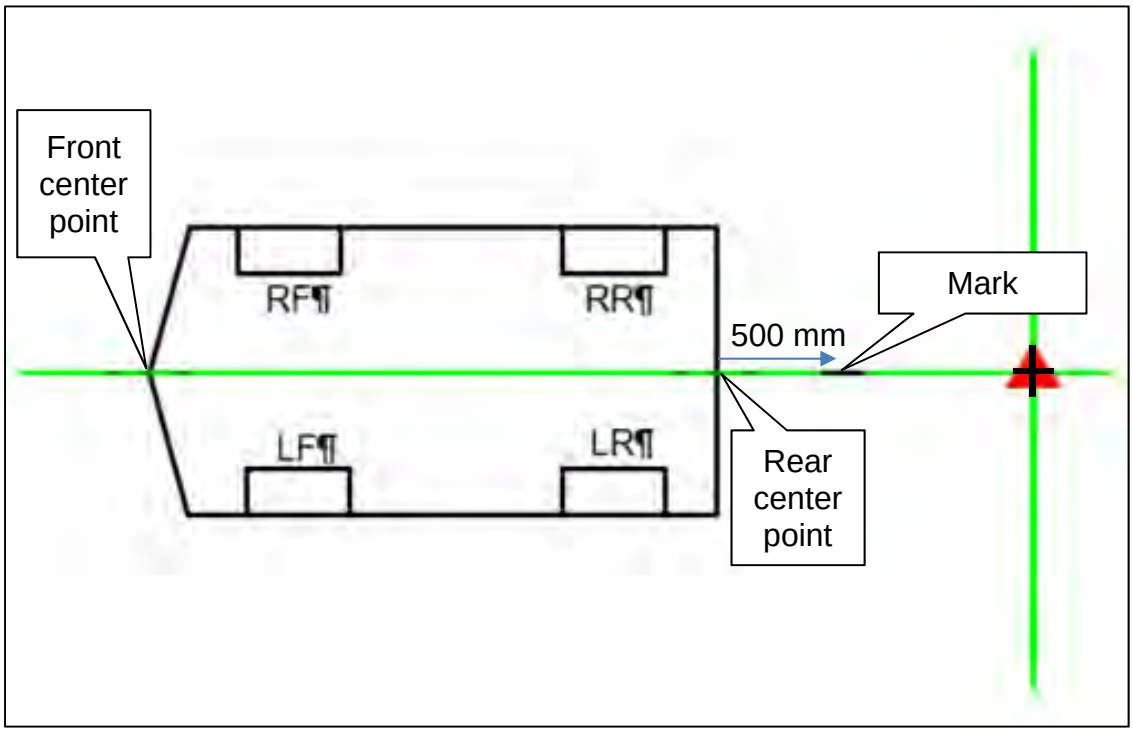


Figure 75

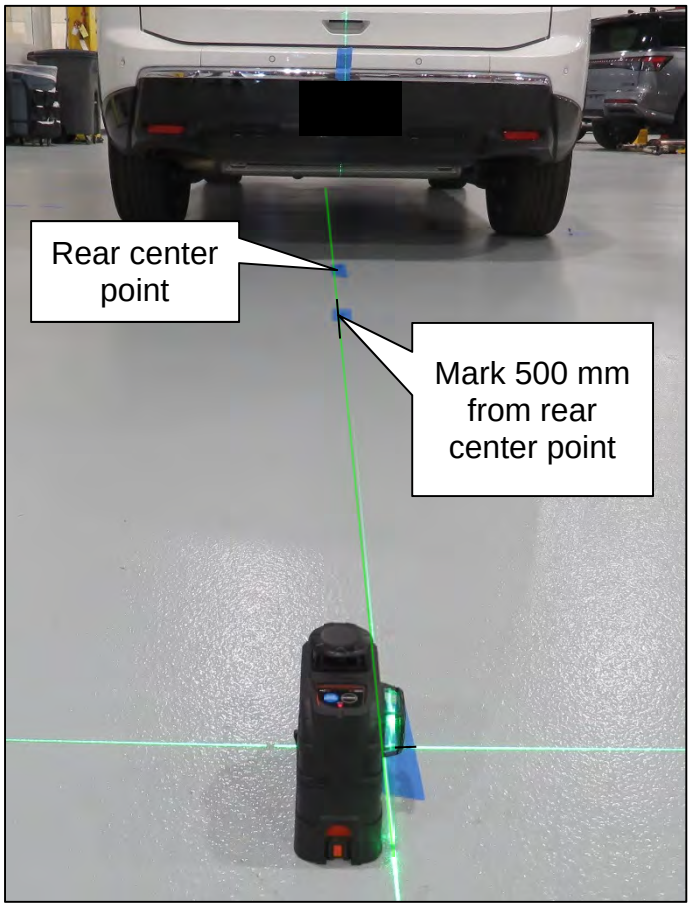


Figure 76

52. Measure and place a mark 2500 mm to the left and to the right of the laser level, as shown in Figure 77, Figure 78 and Figure 79.

- Laser not shown in Figure 79.

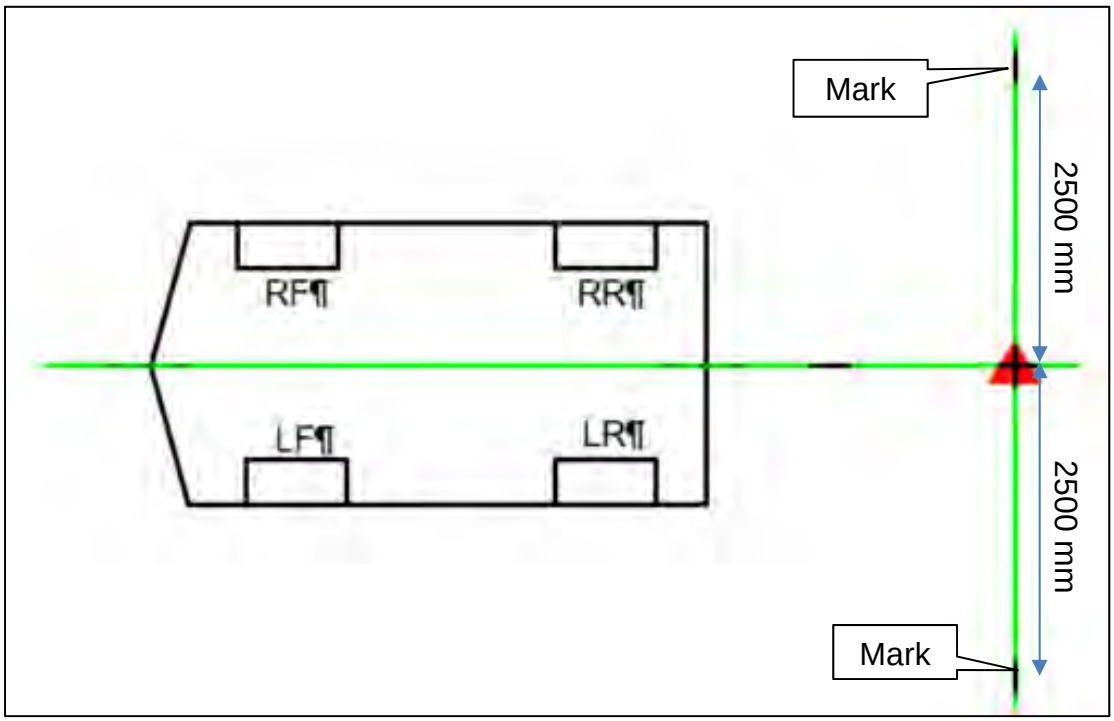


Figure 77

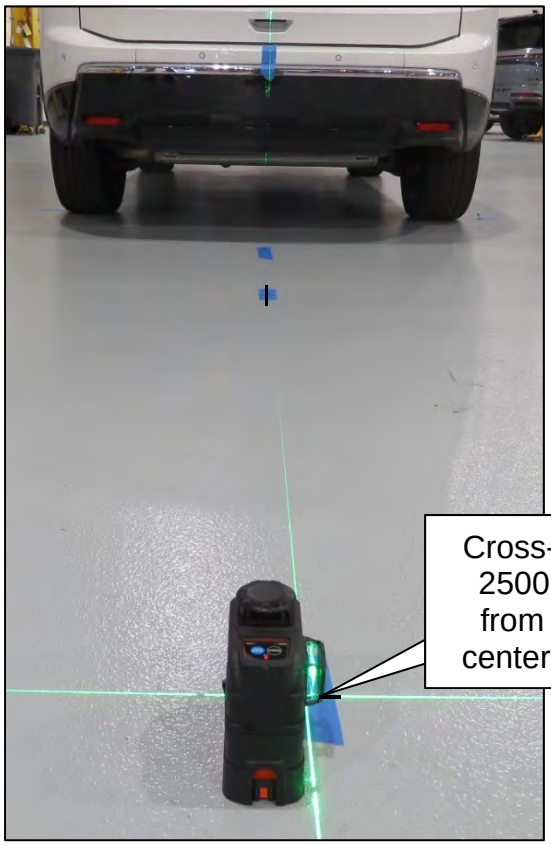


Figure 78

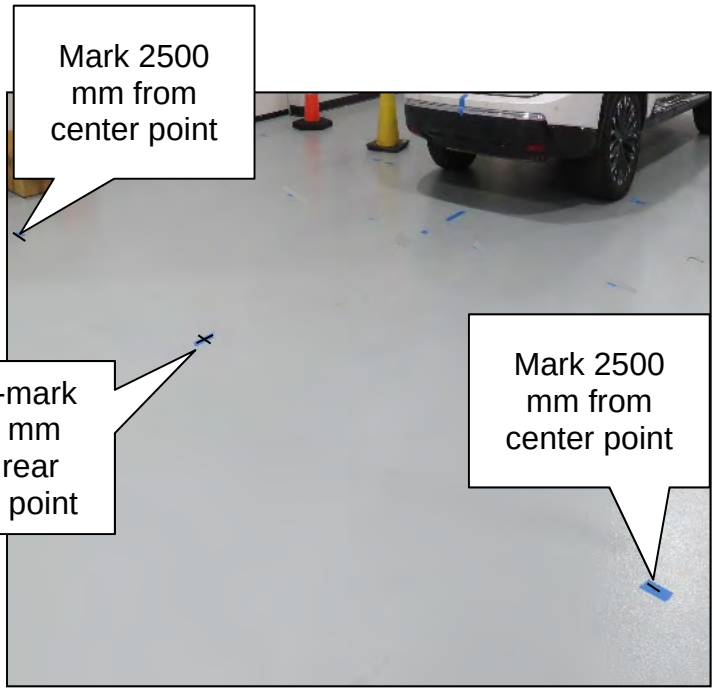


Figure 79

53. Move the laser to the 500 mm mark, and then measure and place a mark 2500 mm to the left and to the right of the laser level, as shown in Figure 80 and Figure 81.

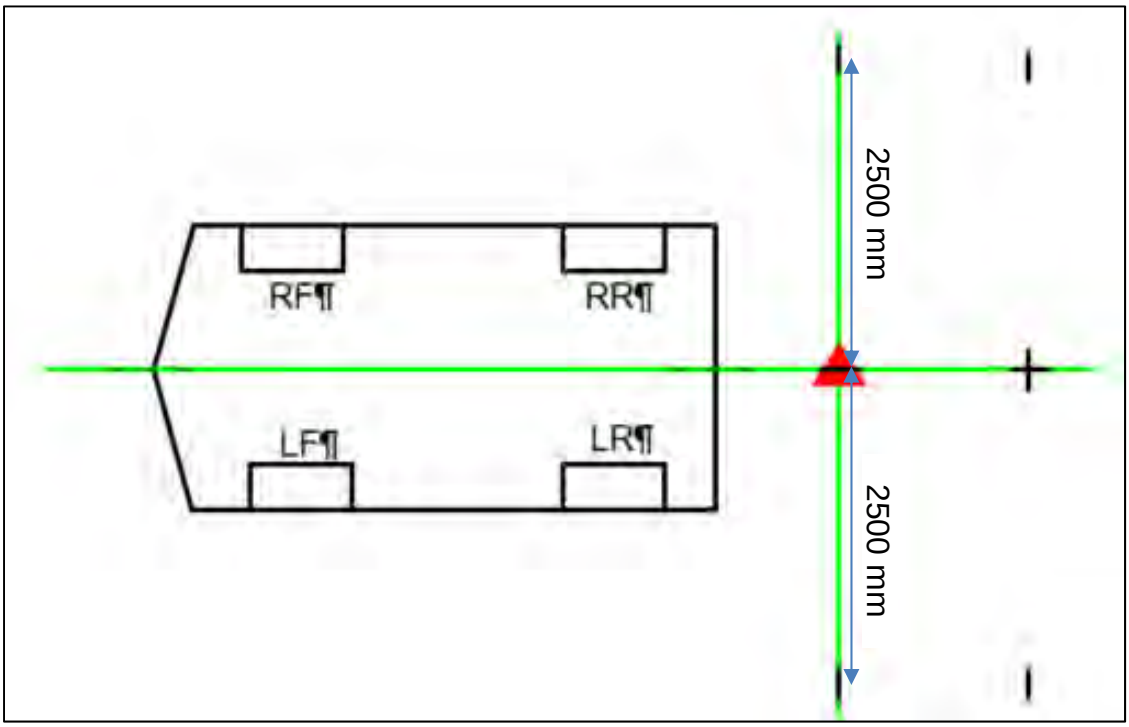


Figure 80

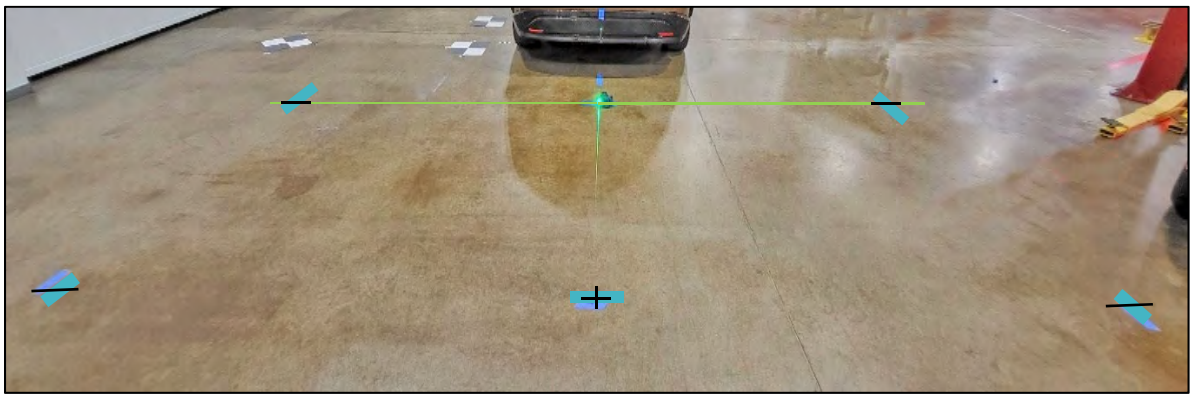


Figure 81

54. Use a chalk line tool to make a line between the 500 mm and 2500 mm marks, as shown in Figure 82 and Figure 83.

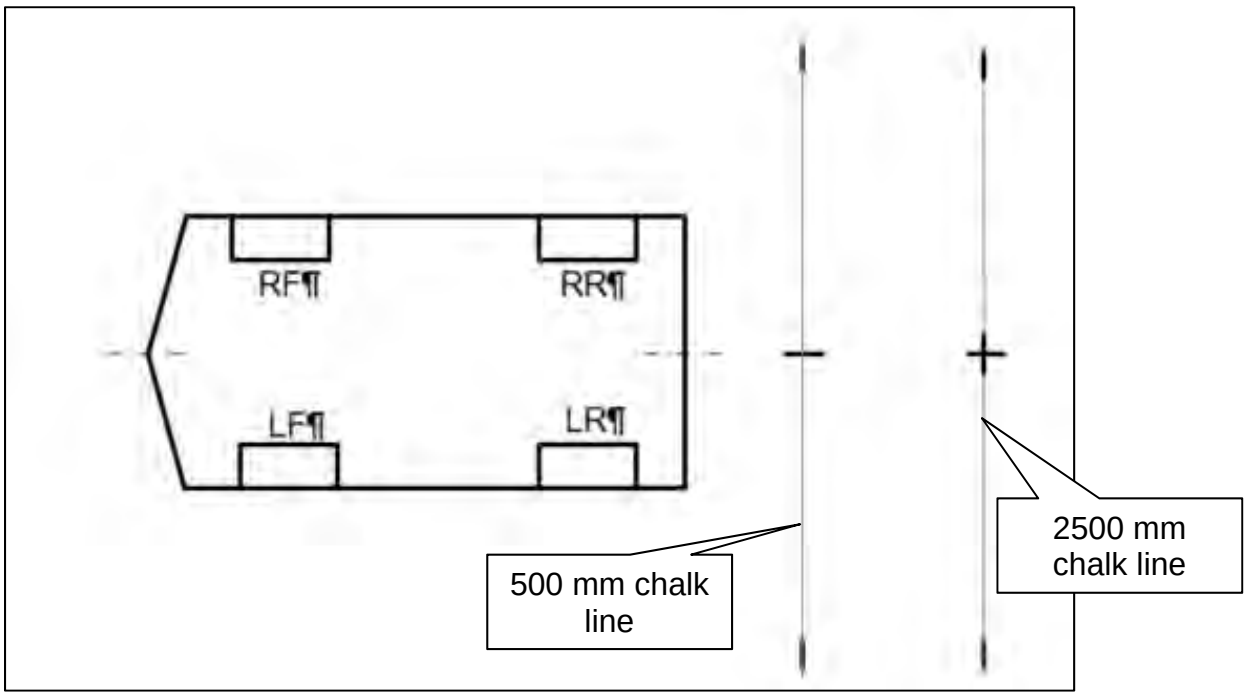


Figure 82

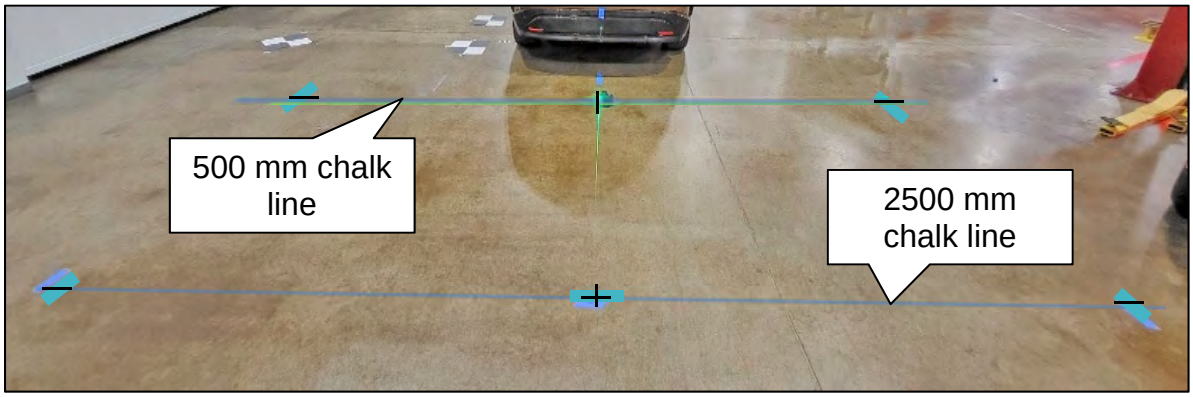


Figure 83

55. Place the laser level with both vertical lines activated, and align one laser line with the 500 mm chalk line and align the other laser line to the front and rear center point of the vehicle, as shown in Figure 84.

IMPORTANT: The laser line must be perfectly aligned with the 500 mm chalk line and the front and rear center points.

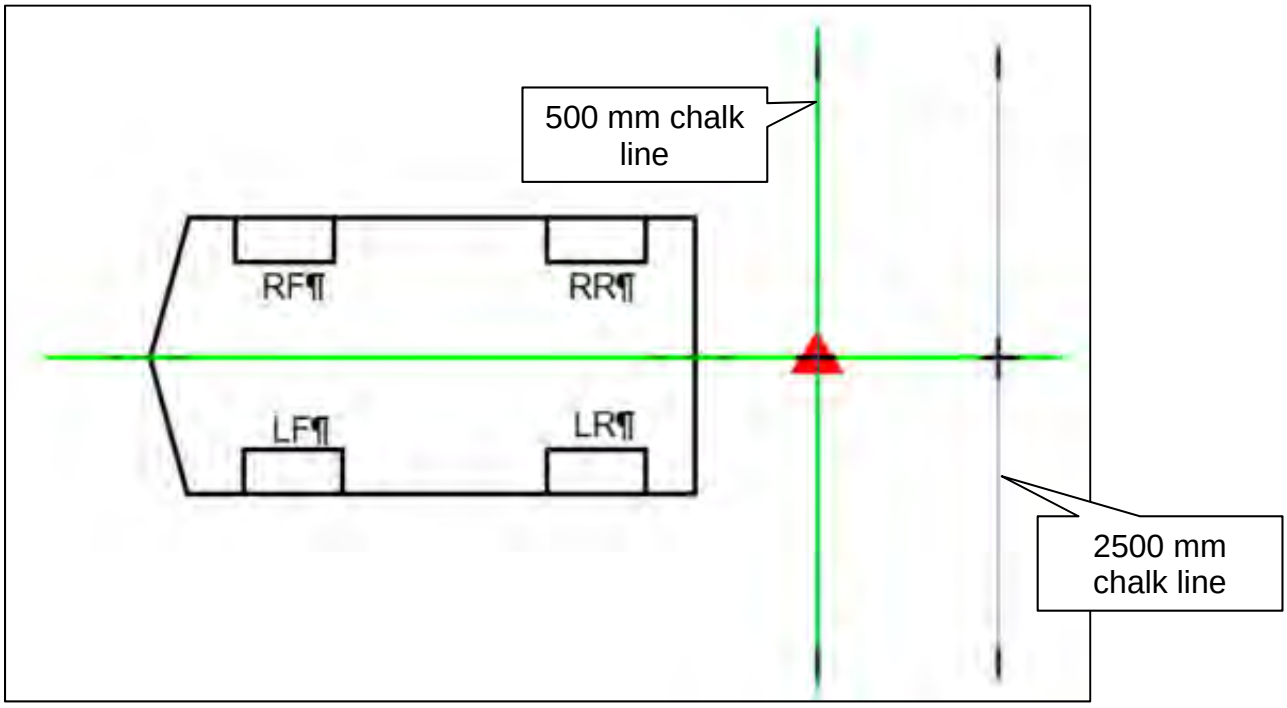


Figure 84

56. Place a cross-mark on the floor below the laser line (Figure 85).

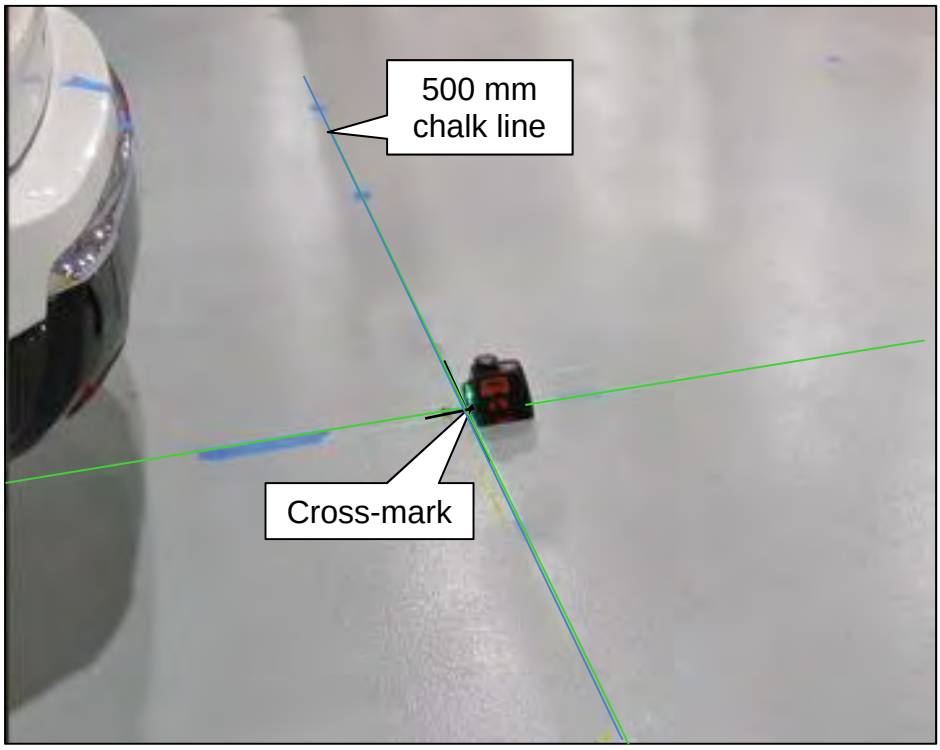


Figure 85

57. Measure and mark 1000 mm increments, as shown in Figure 86 and Figure 87.

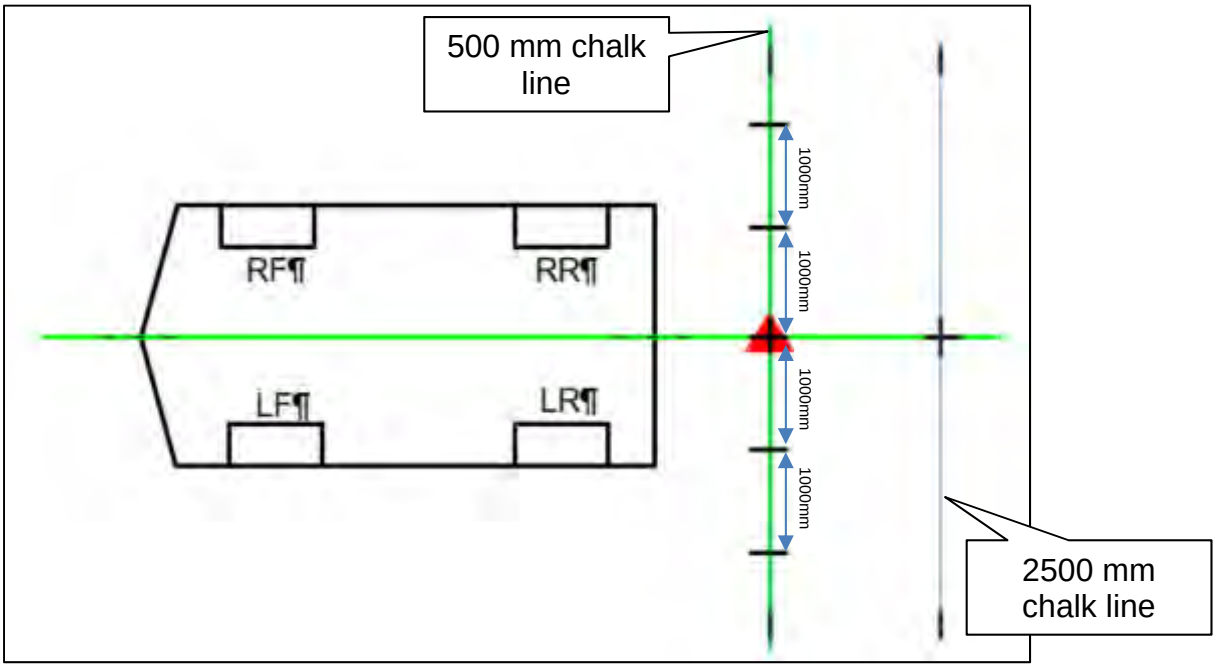


Figure 86

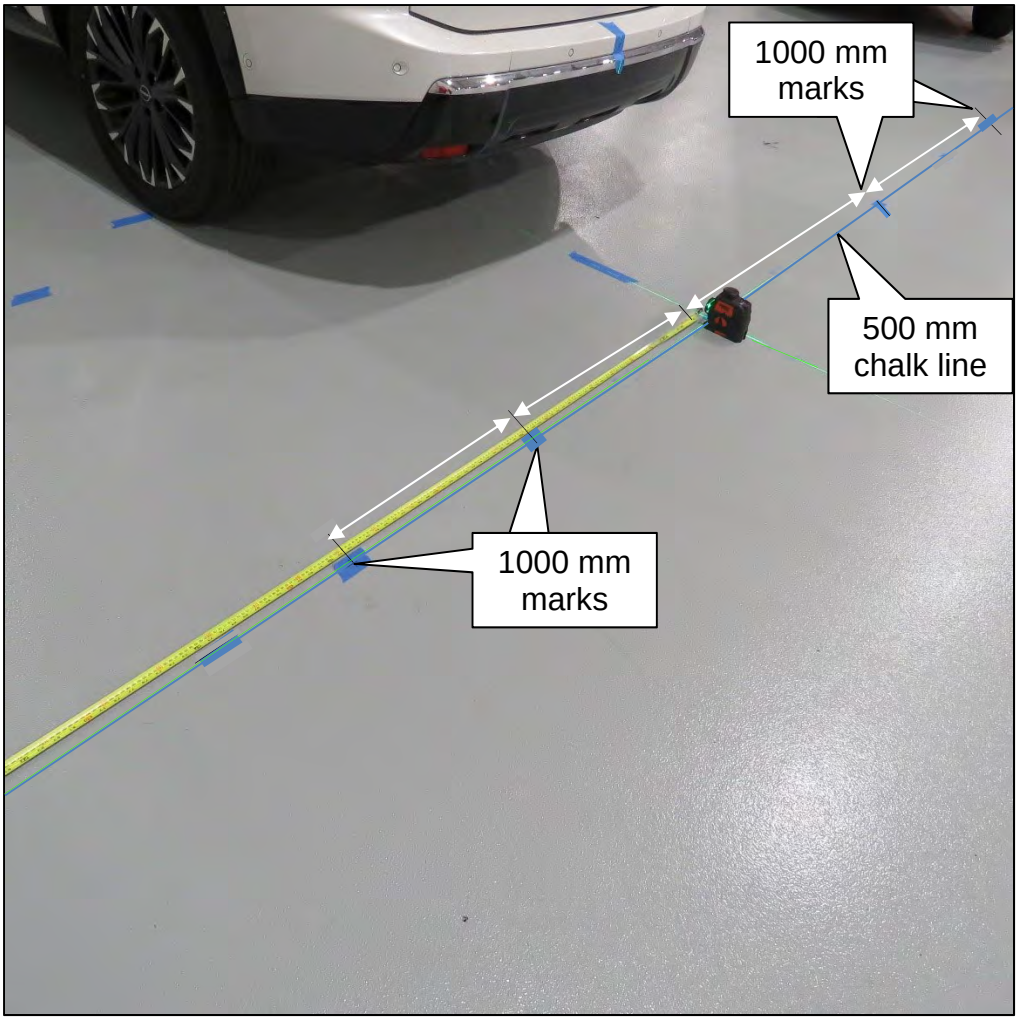


Figure 87

58. Move the laser level to the position shown in Figure 88, and then make a mark on the 2500 mm chalk line, as shown in Figure 88 and Figure 89.

IMPORTANT: The laser line must be perfectly aligned with the 500 mm chalk line.

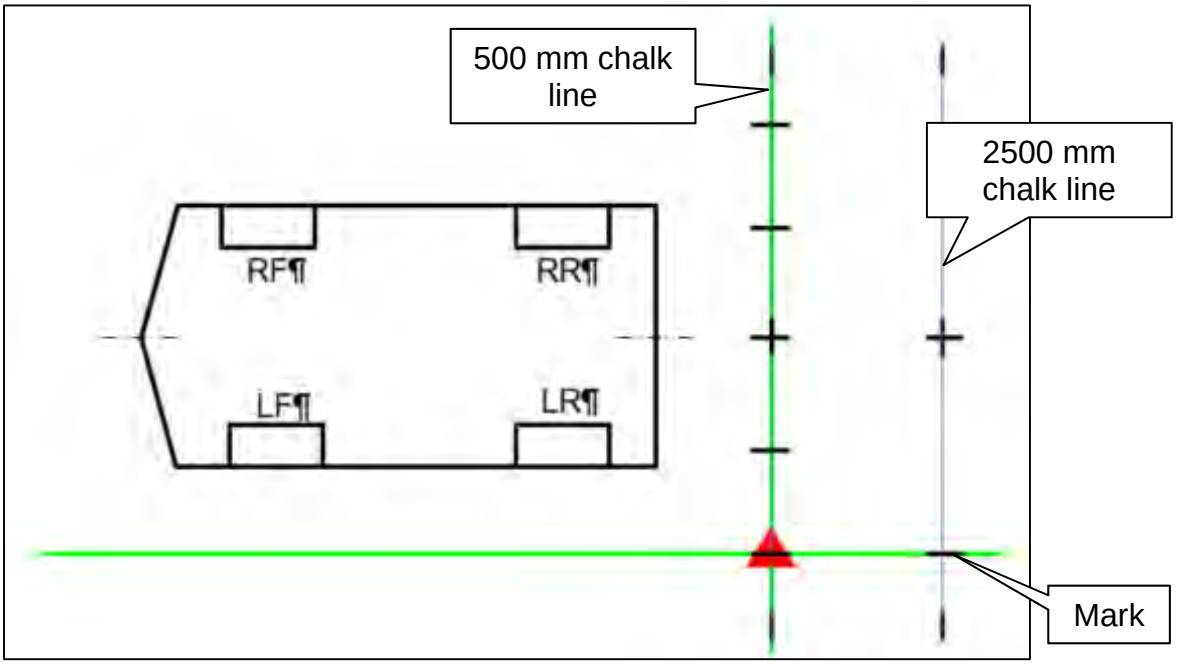


Figure 88

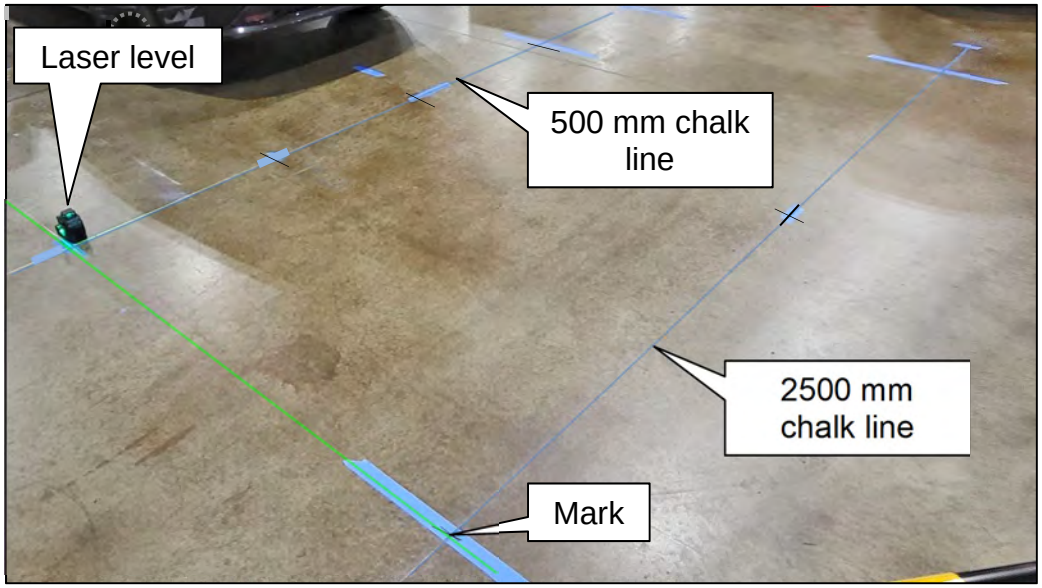


Figure 89

59. Move the laser level to the position shown in Figure 90, and then make a mark on the 2500 mm chalk line, as shown in Figure 90 and Figure 91.

IMPORTANT: The laser line must be perfectly aligned with the 500 mm chalk line.

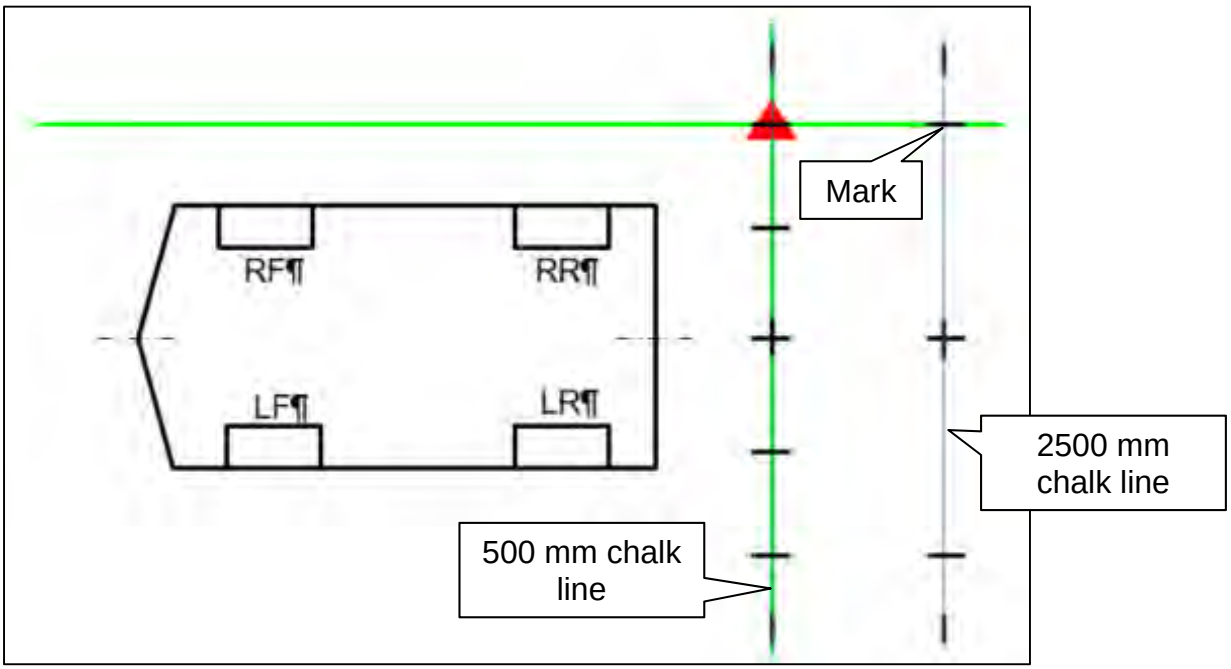


Figure 90

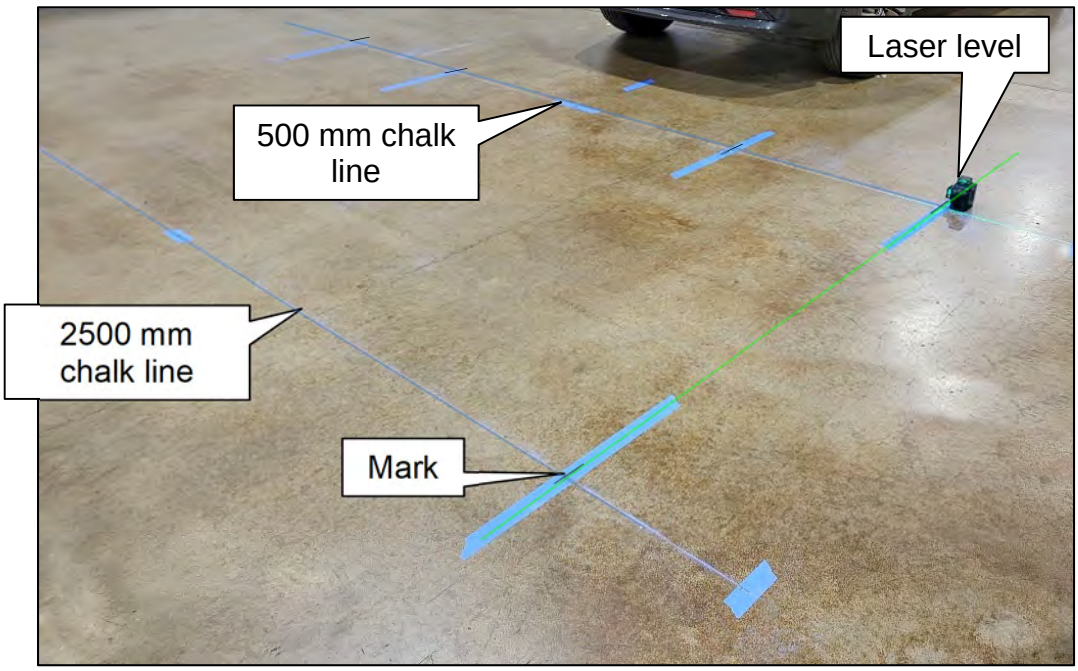


Figure 91

60. Using a carpenter's square, squared to the chalk line, extend each of the seven (7) marks 12 in. from the chalk line.

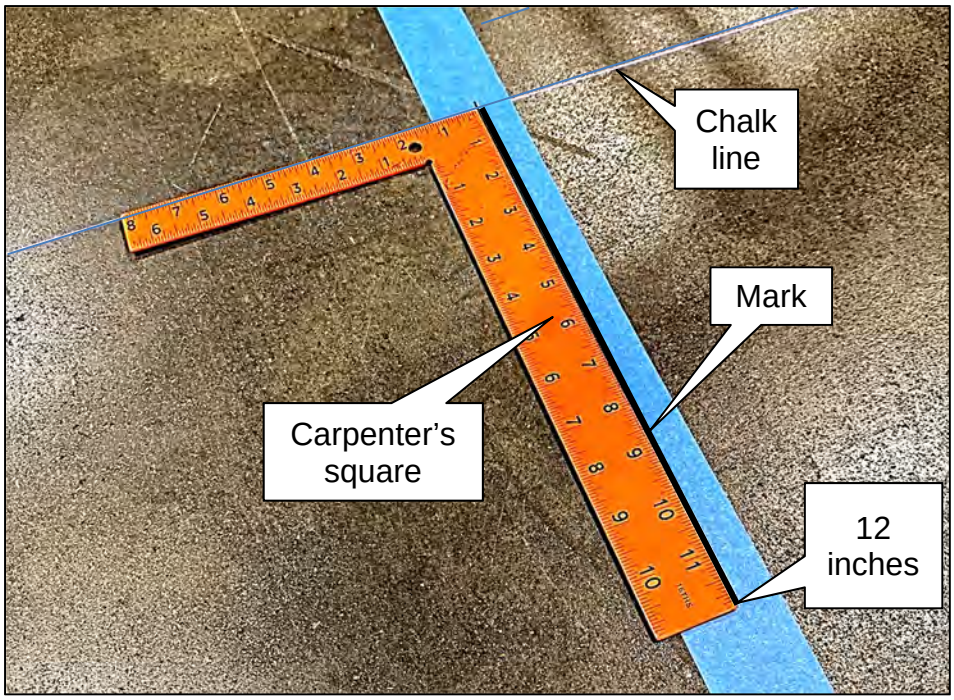


Figure 92

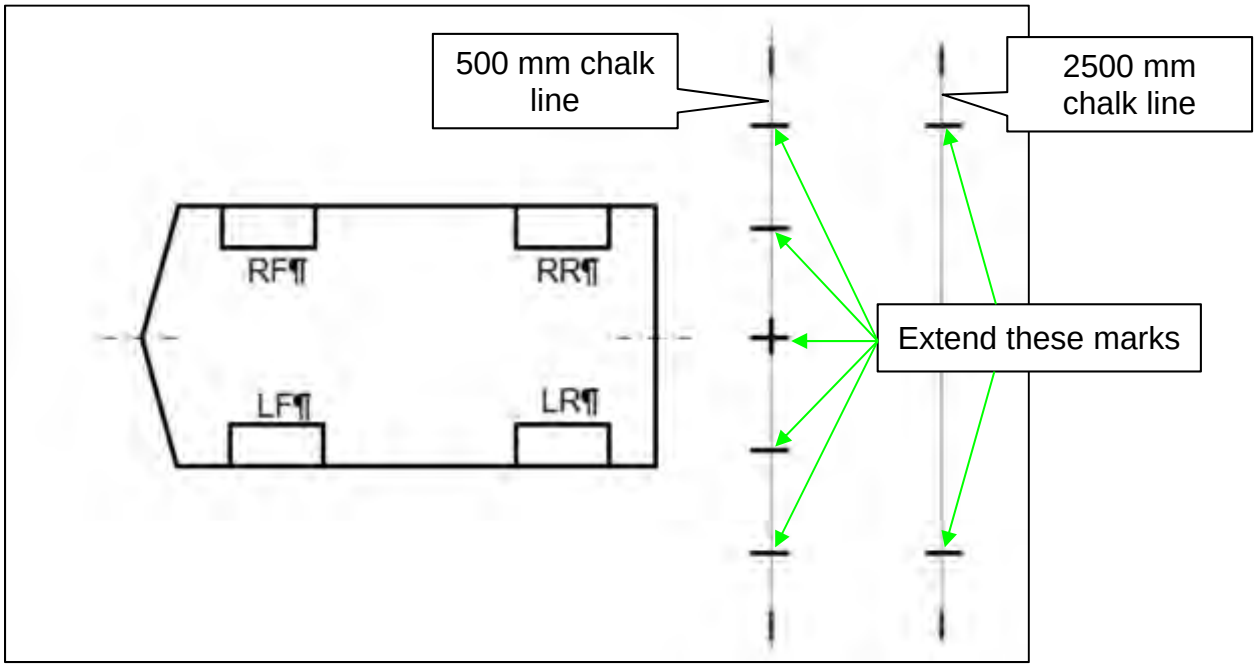


Figure 93

61. Place five (5) targets on the marks along the 500 mm chalk line.

IMPORTANT: Orient and align the targets, as shown in Figure 94, Figure 95, and Figure 96. The targets must be aligned with the 500 mm chalk line and the marks made in step 60 on page 47.

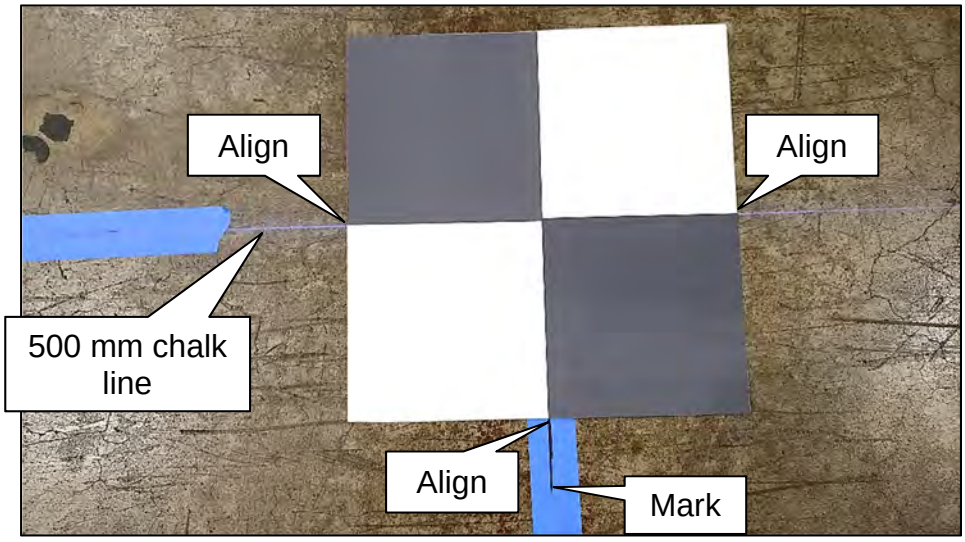


Figure 94

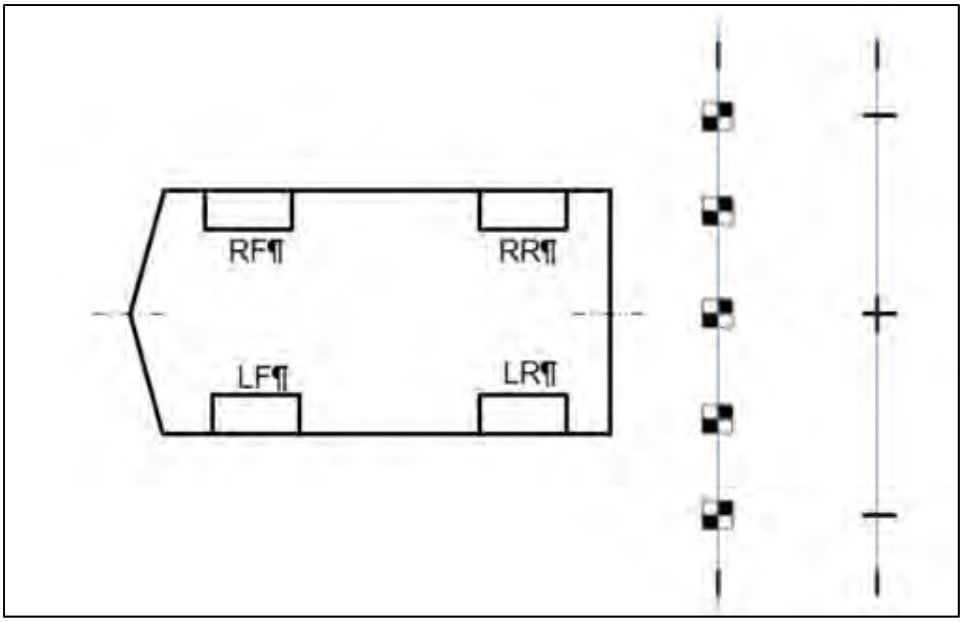


Figure 95

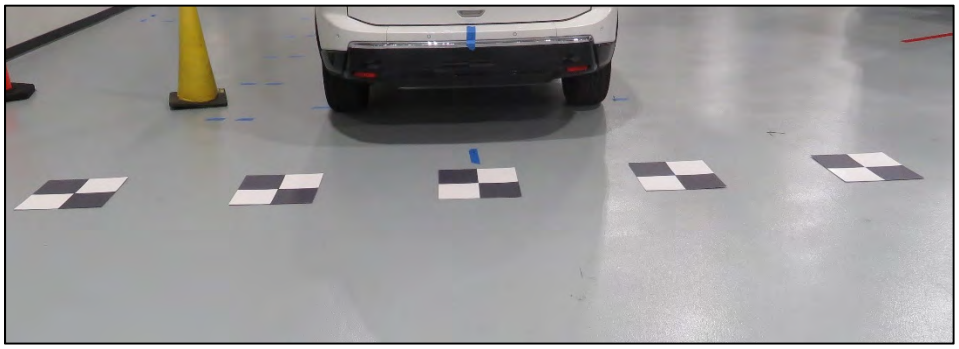


Figure 96

62. Place one (1) target on the driver (LH) side mark on the 2500 mm chalk line.

IMPORTANT: Orient and align the target, as shown in Figure 97, Figure 98, and Figure 99. The target must be aligned with the 2500 mm chalk line and the marks made in step 60 on page 47.

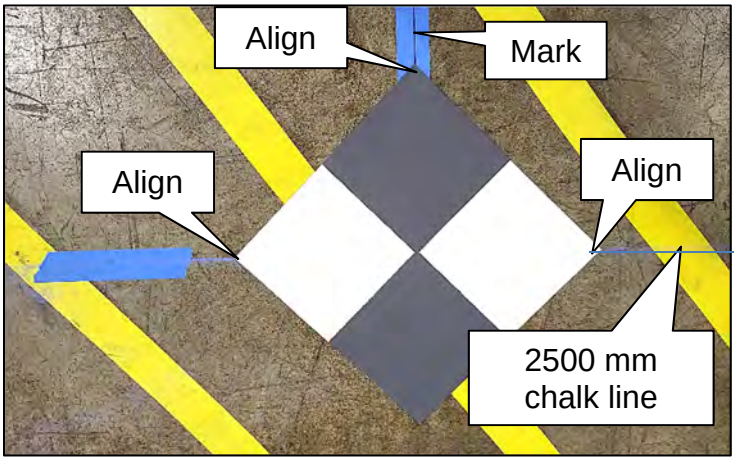


Figure 97

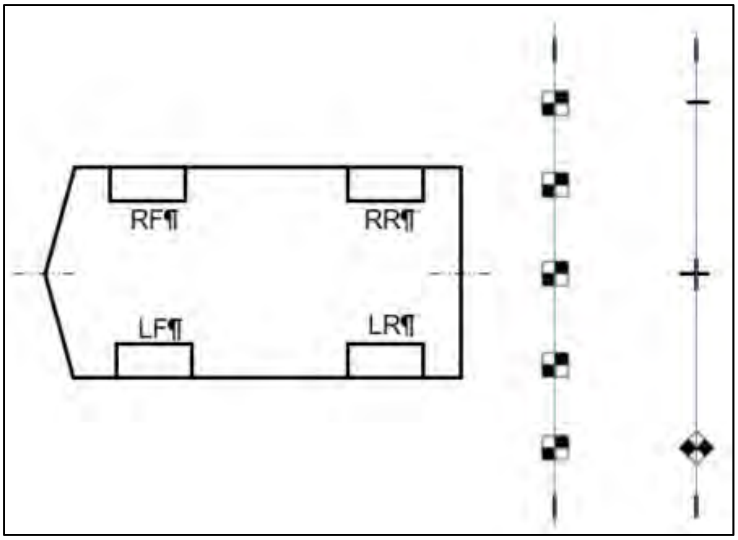


Figure 98

Figure 99

63. Place one (1) target on the passenger (RH) side mark on the 2500 mm chalk line.

IMPORTANT: Orient and align the target, as shown in Figure 100, Figure 101, and Figure 102. The target must be aligned with the 2500 mm chalk line and the marks made in step 60 on page 47.

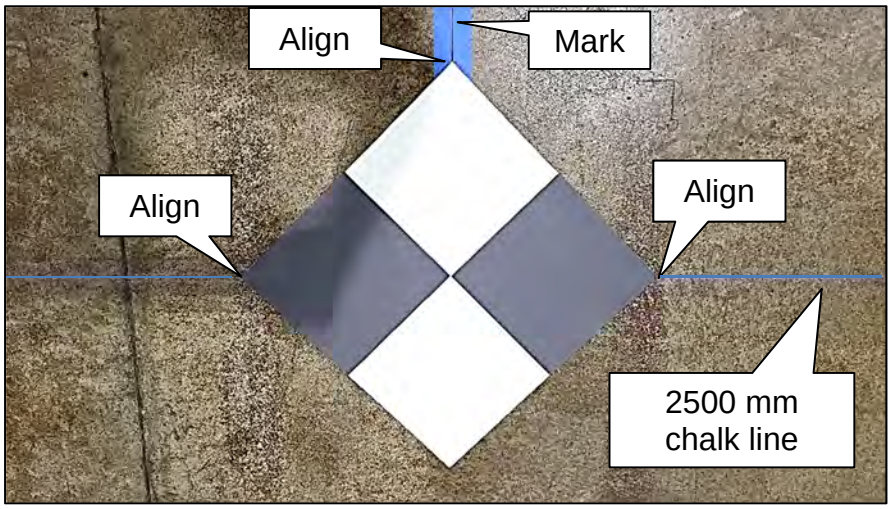


Figure 100

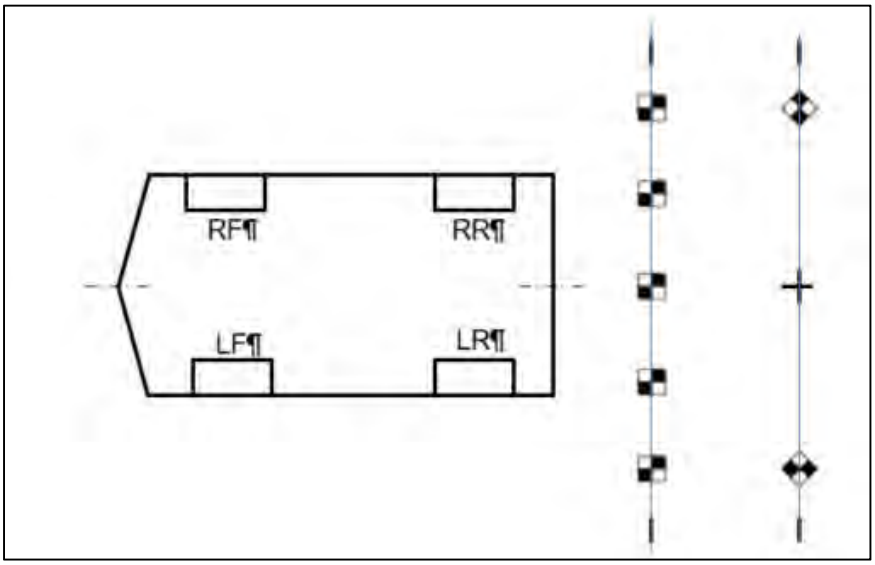


Figure 101

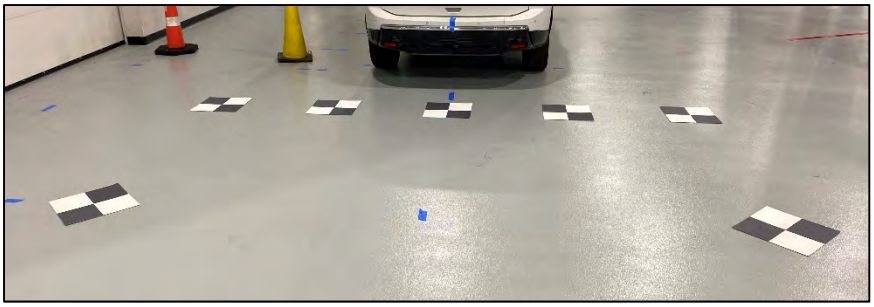


Figure 102

64. If the front camera was replaced, repeat steps 49 - 63 starting on page 37, to place the calibration targets for the front camera.

65. Measure 200 mm and 283 mm from the center point of the driver (LH) side rear wheel, and then make a mark at each measurement, as shown in Figure 103.

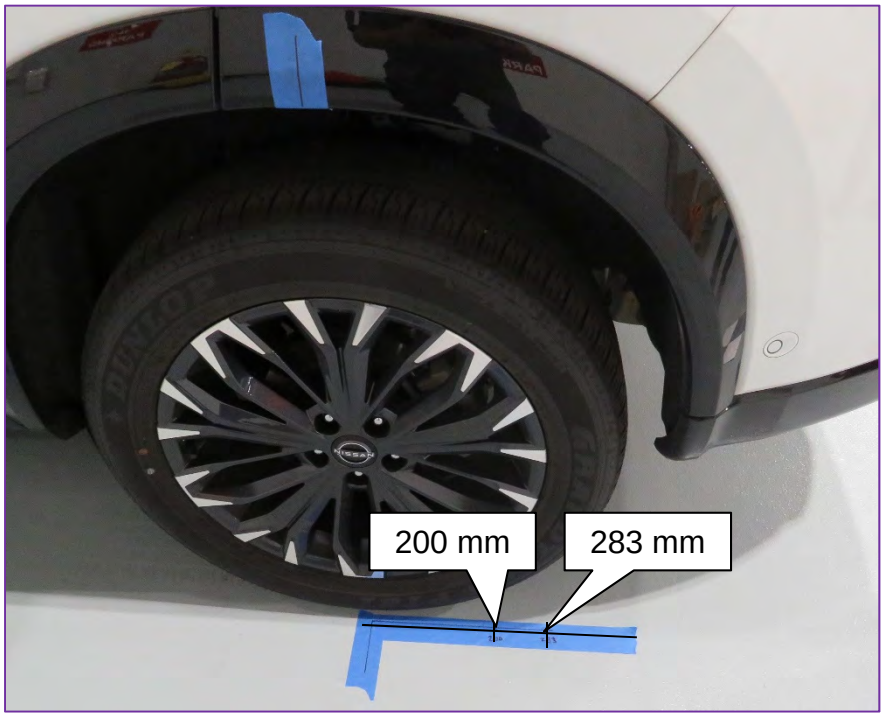


Figure 103

66. Measure 200 mm and 283 mm from the center point of the passenger (RH) side rear wheel, and then make a mark at each measurement, as shown in Figure 104.

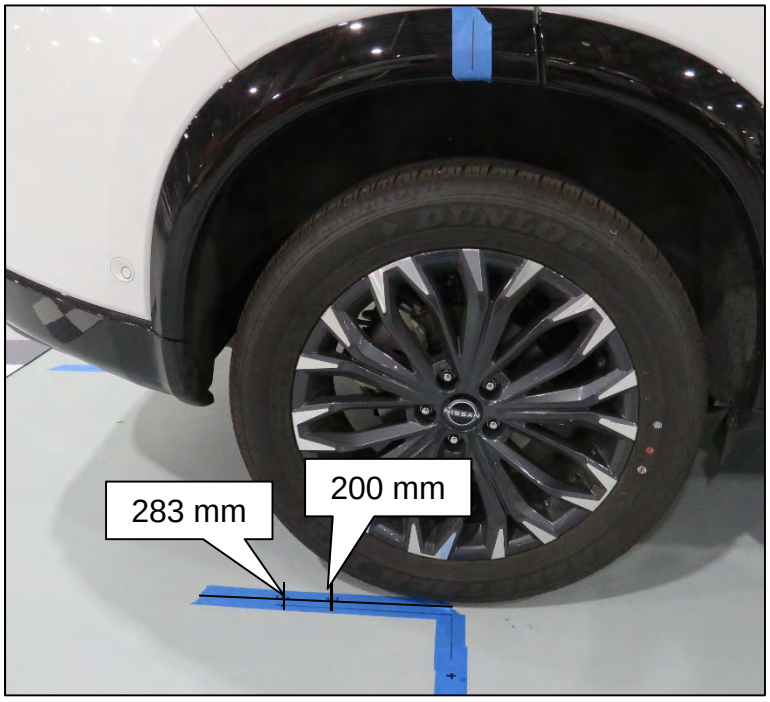


Figure 104

Rear Camera Calibration Measurements

IMPORTANT: All measurements must be in millimeters (mm). Refer to the illustrations in Figure 109 on page 54 to ensure the correct measurement is documented in the correct order and for each calibration target.

67. Measure the distance between the center point of the driver (LH) side rear wheel to the center of the calibration target T1, and then document that distance as L1 in Figure 109 on page 54.

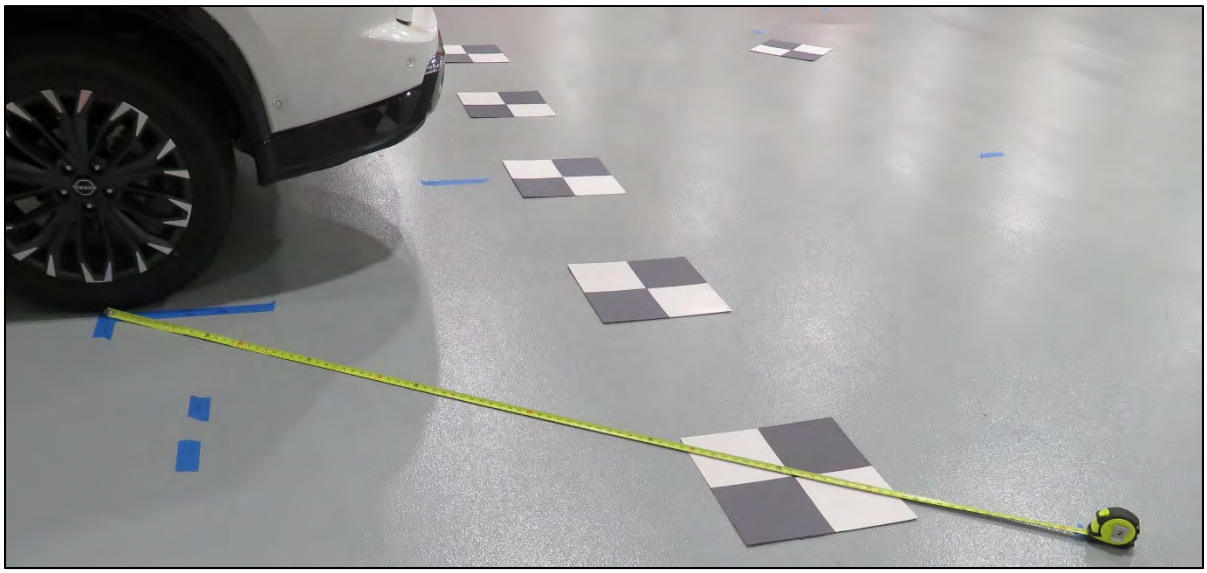


Figure 105

68. Measure the distance between the center point of the driver (LH) side rear wheel to the center of the calibration target T6, and then document that distance as L2 in Figure 109 on page 54.

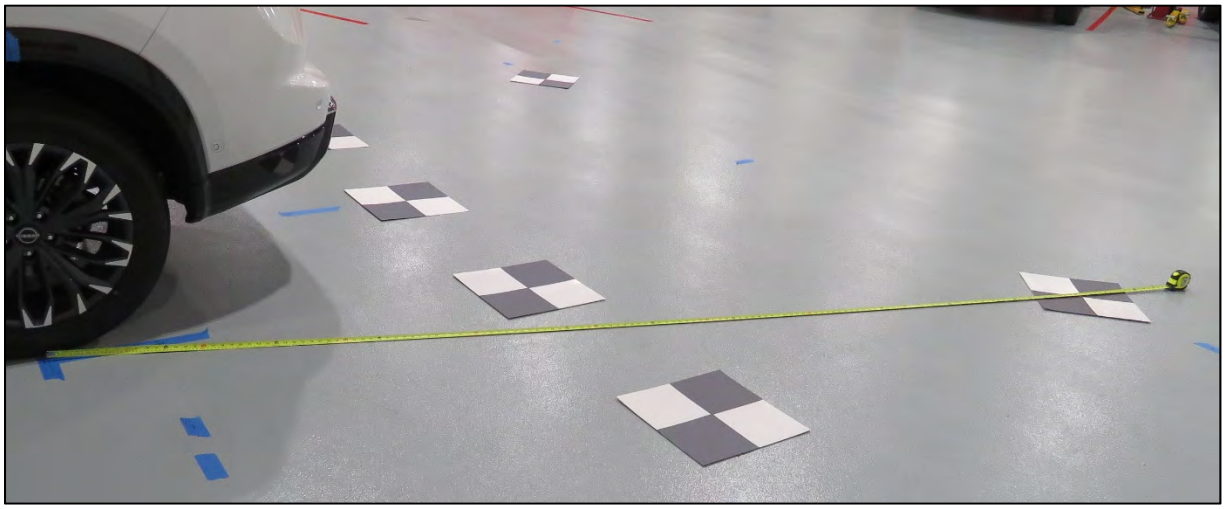


Figure 106

69. Measure the distance between the 283 mm mark of the driver (LH) side rear wheel to the most rearward point of the calibration target T7, and then document that distance as L3 in Figure 109 on page 54.

IMPORTANT: Do not measure to the center point of the target. Measure to the point shown in Figure 107.

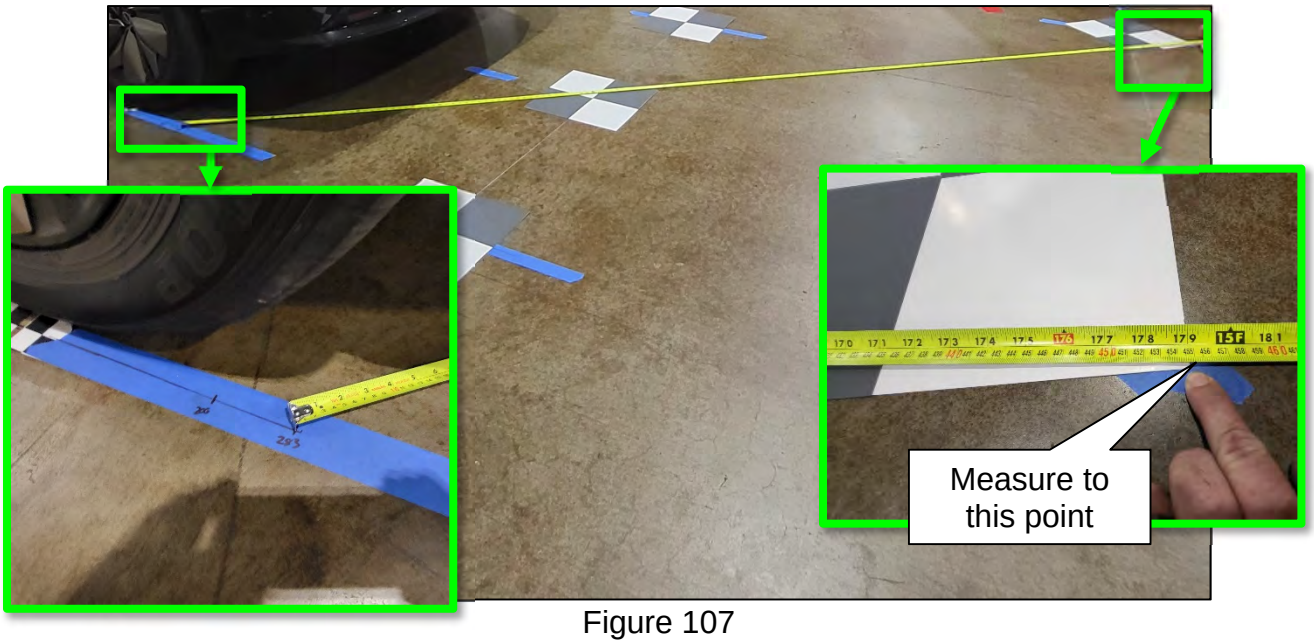


Figure 107

70. Measure the distance between the 200 mm mark of the driver (LH) side rear wheel to the most rearward point of the calibration target T5, and then document that distance as L4 in Figure 109 on page 54.

IMPORTANT: Do not measure to the center point of the target. Measure to the point shown in Figure 108.

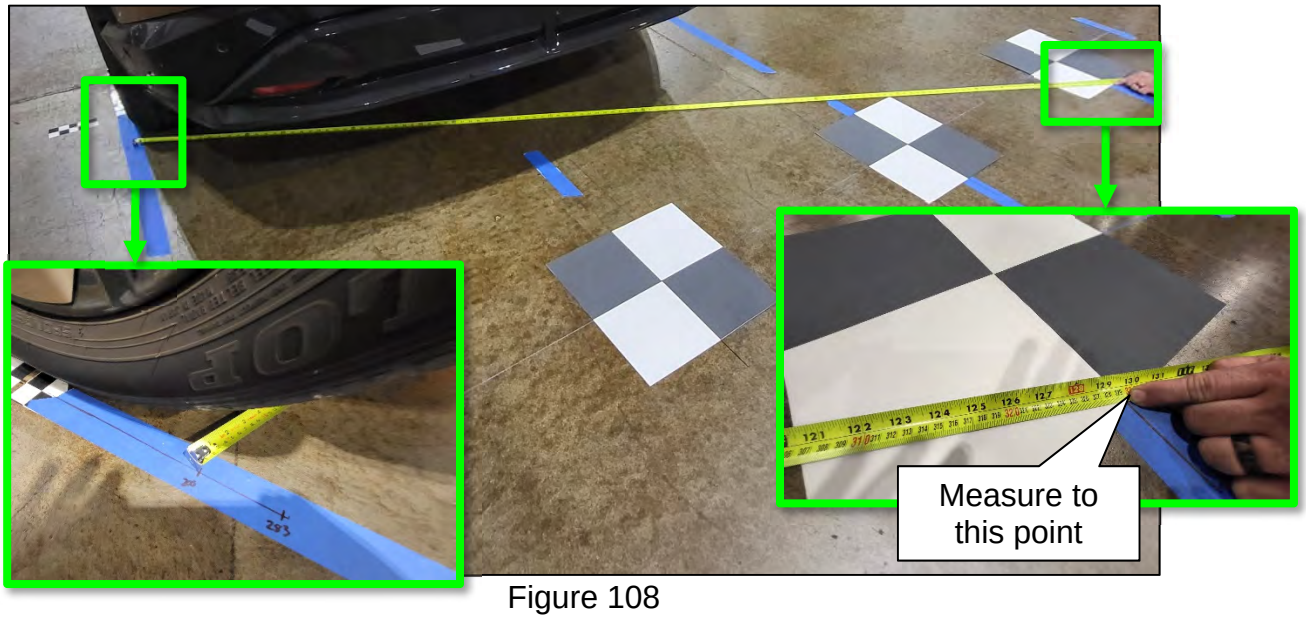
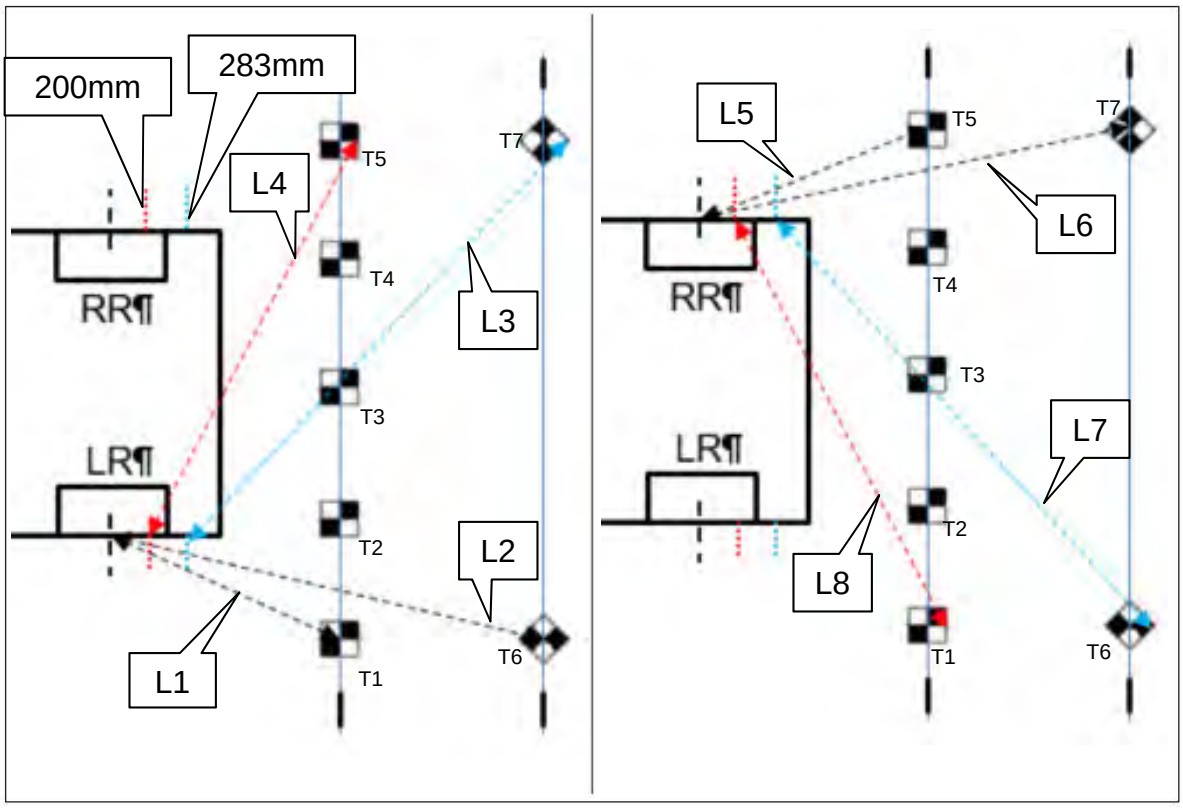


Figure 108

71. Perform steps 67 - 70 starting on page 52 for the passenger (RH) side rear wheel measurements L5-L8, and then document the distances in Figure 109.

ROGUE

Rear camera-Length measurements



Length name	Wheel	Target	Measurement (mm)
L1	**RL**	**T1**	
L2	**RL**	**T6**	
L3	**RL**	**T7**	**IMPORTANT:** Do not measure to the center point of the target. Measure to the point shown above.
L4	**RL**	**T5**	**IMPORTANT:** Do not measure to the center point of the target. Measure to the point shown above.
L5	**RR**	**T5**	
L6	**RR**	**T7**	
L7	**RR**	**T6**	**IMPORTANT:** Do not measure to the center point of the target. Measure to the point shown above.
L8	**RR**	**T1**	**IMPORTANT:** Do not measure to the center point of the target. Measure to the point shown above.

Figure 109

72. Place the laser level on a clean cloth, and then on the roof of the vehicle.

IMPORTANT:

- Place the laser level in the middle of the vehicle's roof.
- The laser level must be still (no fans should be blowing).

Figure 110

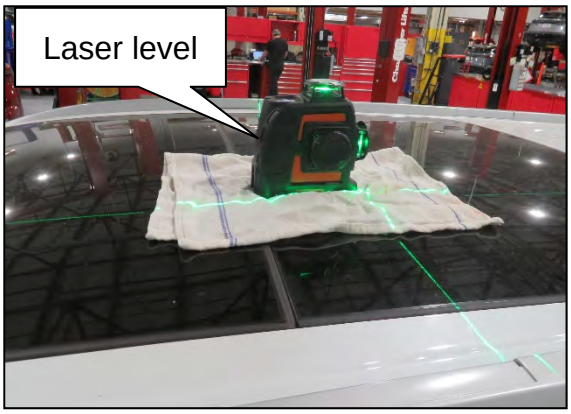


Figure 111

IMPORTANT: For steps 73 and 74:

- When holding the ADAS Calibration Rod, ensure the tool is completely upright and does not bend.
- All measurements must be in millimeters (mm).
- Refer to the illustrations in Figure 114 on page 56 to ensure the correct measurement is documented in the correct order and for each calibration target.

73. Using the ADAS Calibration Rod, measure the height from the center of each calibration target, and then record the measurements H1-H7 in the table in Figure 114 on page 56.

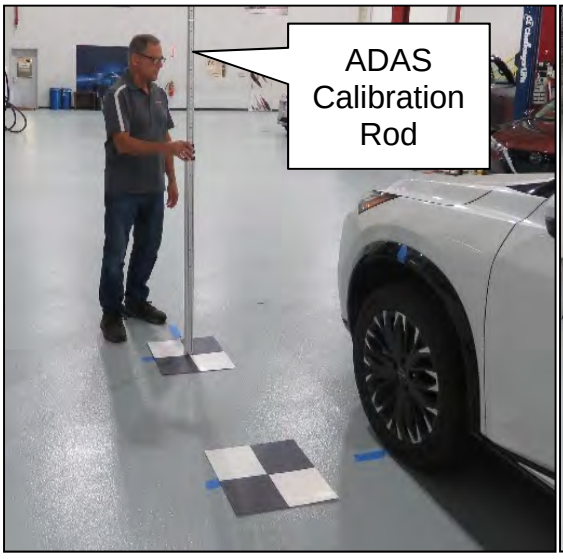


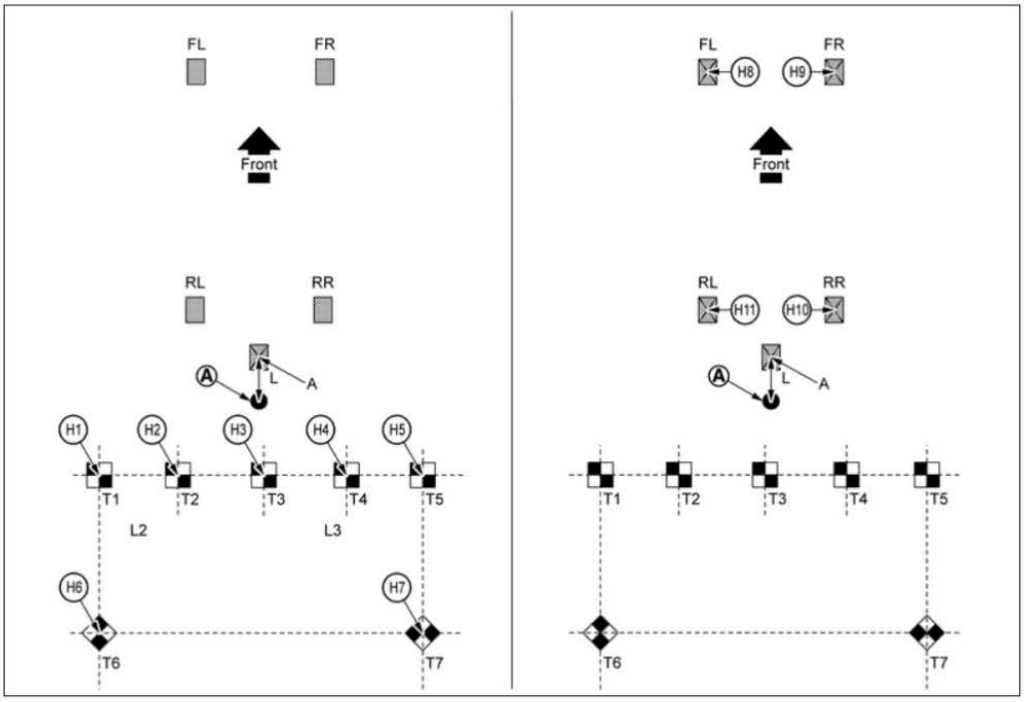
Figure 112

Figure 113

74. Using the ADAS Calibration Rod, measure the height from the wheel center point, and then record the measurements H8-H11 in the table in Figure 114 on page 56.

ROGUE

Rear camera-Height measurements



Height name	Wheel	Target	Measurement (mm)
H1	-	T1	
H2	-	T2	
H3	-	T3	
H4	-	T4	
H5	-	T5	
H6	-	T6	
H7	-	T7	
H8	FL	-	
H9	FR	-	
H10	RR	-	
H11	RL	-	

Figure 114

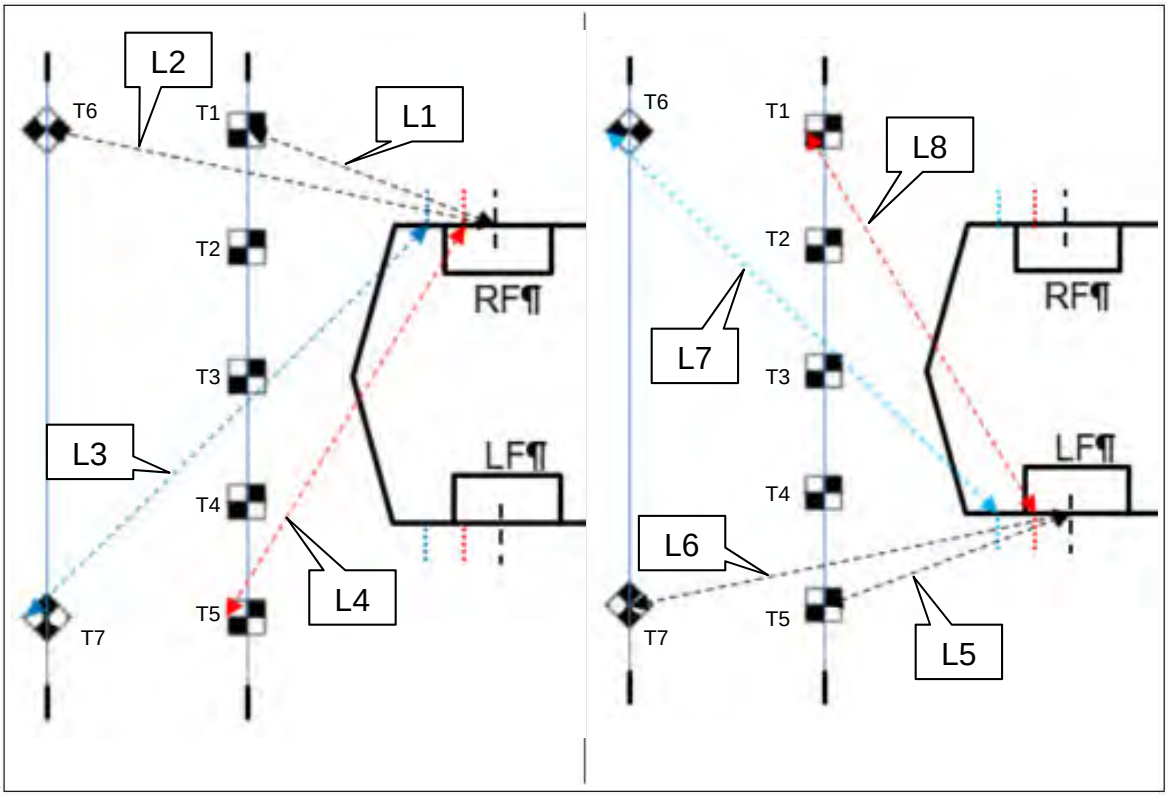
Front Camera Calibration Measurements

IMPORTANT: All measurements must be in millimeters (mm). Refer to the illustrations in Figure 115 (below) and Figure 116 on page 58 to ensure the correct measurement is documented in the correct order and for each calibration target.

75. Perform steps 65 - 71 starting on page 51 for the front camera.

ROGUE

Front camera-Length measurements



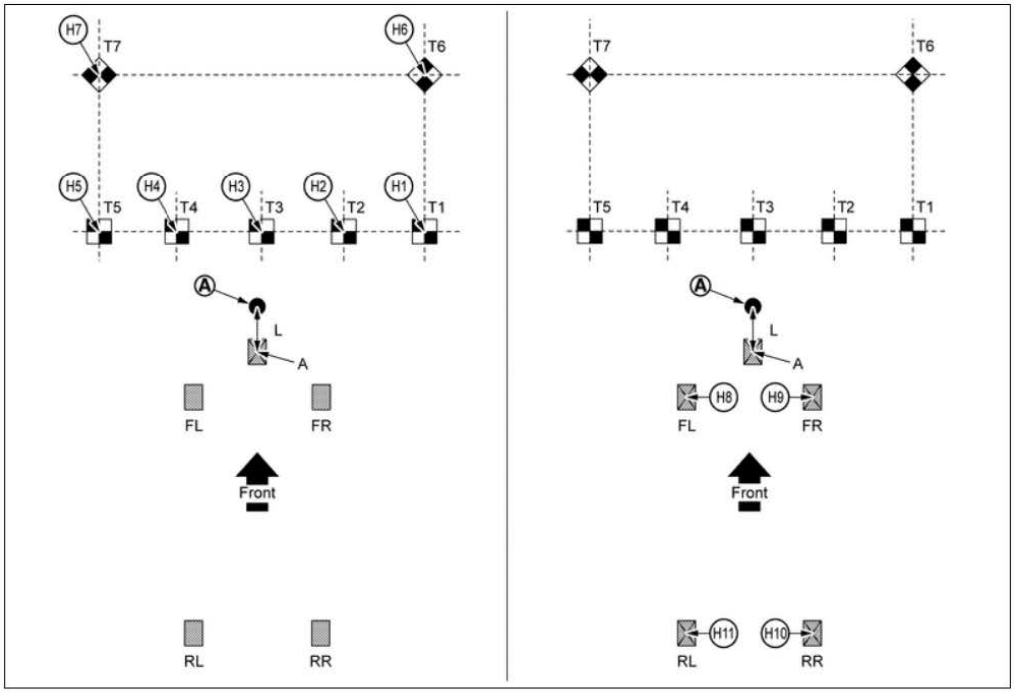
Length name	Wheel	Target	Measurement (mm)
L1	FR	T1	
L2	FR	T6	
L3	FR	T7	**IMPORTANT:** Do not measure to the center point of the target. Measure to the point shown above.
L4	FR	T5	**IMPORTANT:** Do not measure to the center point of the target. Measure to the point shown above.
L5	FL	T5	
L6	FL	T7	
L7	FL	T6	**IMPORTANT:** Do not measure to the center point of the target. Measure to the point shown above.
L8	FL	T1	**IMPORTANT:** Do not measure to the center point of the target. Measure to the point shown above.

Figure 115

76. Refer to steps 72 - 74 on page 55 to set up the laser level to measure the height of the front camera, and then document the measurements in Figure 116.

ROGUE

Front camera-Height measurements



Height name	Wheel	Target	Measurement (mm)
H1	-	T1	
H2	-	T2	
H3	-	T3	
H4	-	T4	
H5	-	T5	
H6	-	T6	
H7	-	T7	
H8	FL	-	
H9	FR	-	
H10	RR	-	
H11	RL	-	

Figure 116

Input the Calibration Target Measurements in CONSULT 4

77. Select **Calibrating camera image**, and then select the green Play icon.

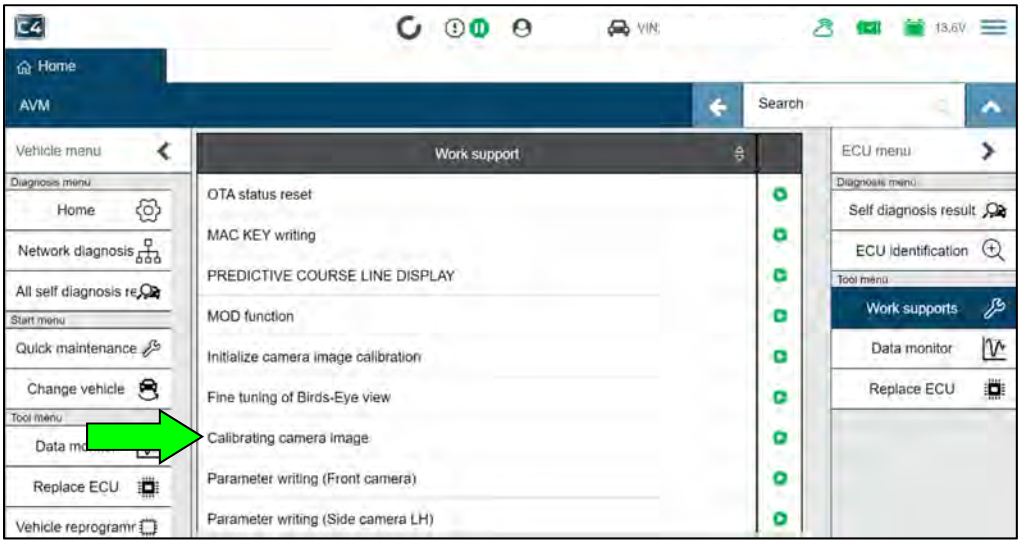


Figure 117

78. Select the camera that needs to be calibrated.

HINT: “No calibration data” displays next to the camera that needs to be calibrated.

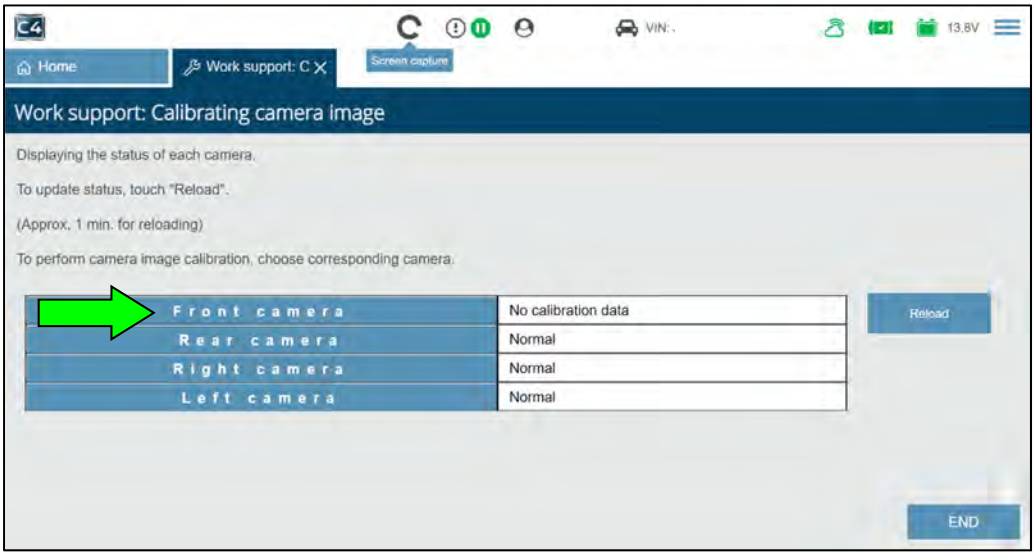


Figure 118

79. Select **Next**.

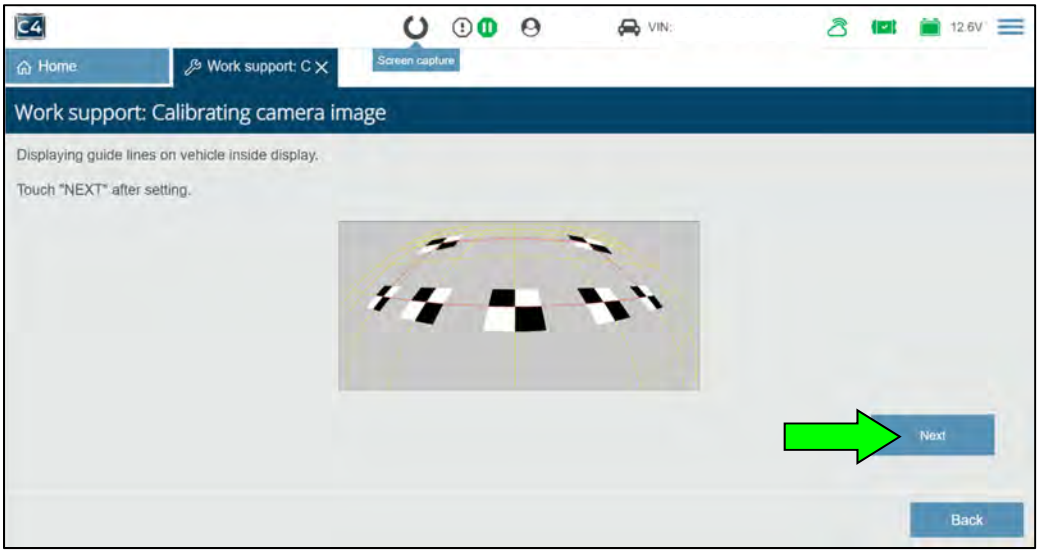


Figure 119

IMPORTANT: Steps 80 - 90 must be done at once. Do not stop in the middle of performing these steps as the CONSULT 4 will time out and all progress will be lost.

80. Select **1**.

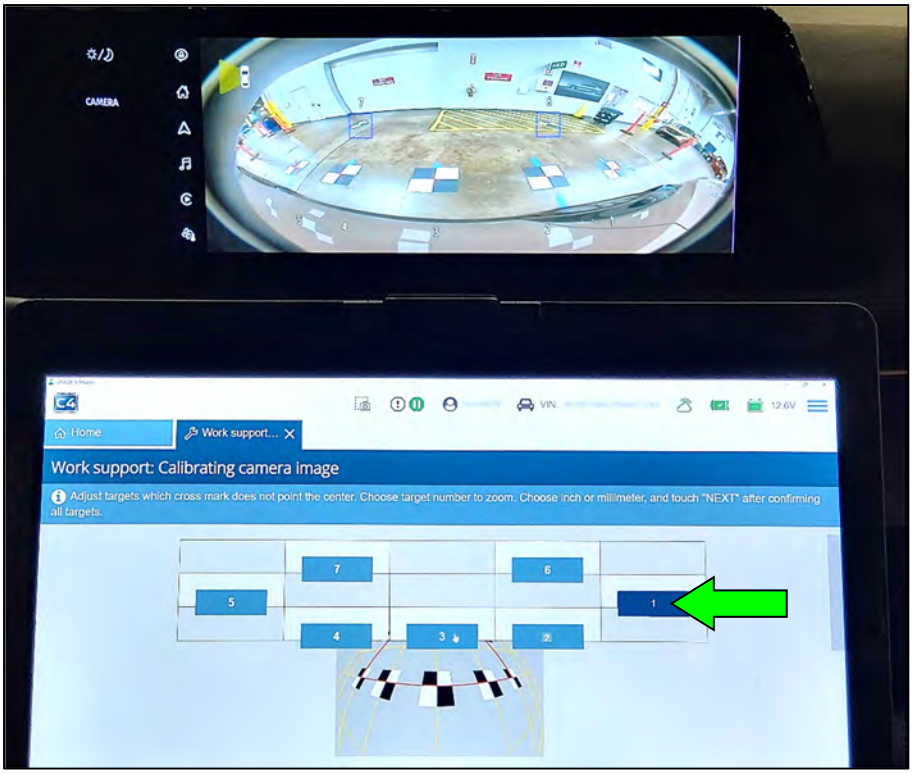


Figure 120

81. Move the center of the red crosshair to the center of the calibration target.

HINT: The TENTIMESUP, TENTIMESDOWN, TENTIMESRIGHT, and TENTIMESLEFT boxes will make large adjustments. The arrows will make small adjustments.

82. When the center of the red crosshair is in the center of the calibration target, select **OK** (Figure 121).

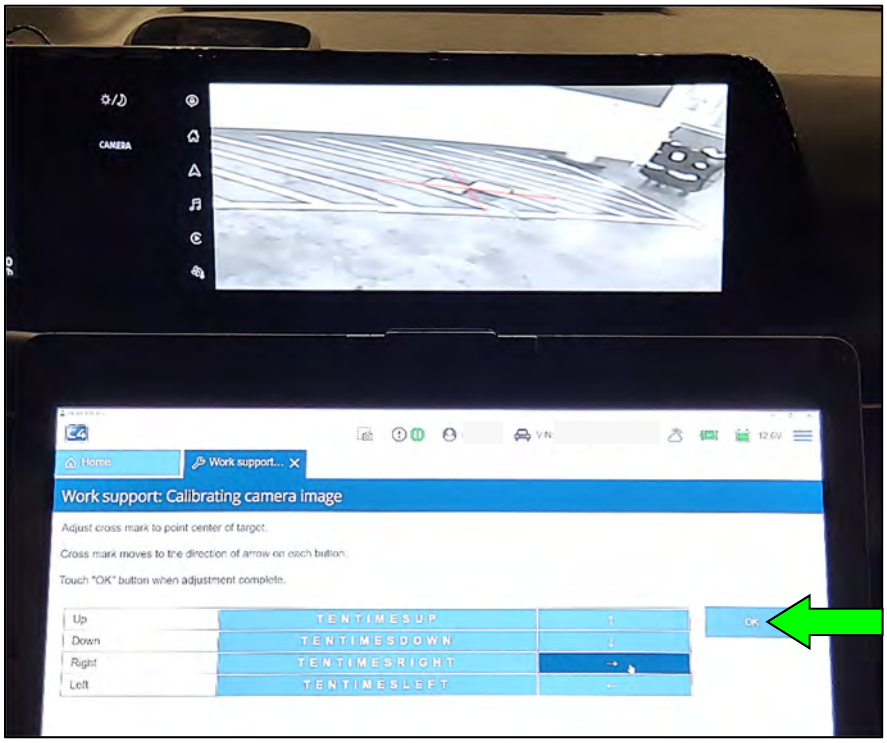


Figure 121

83. Repeat steps 80 - 82 starting on page 60, for all seven (7) targets, and then select **mm**.

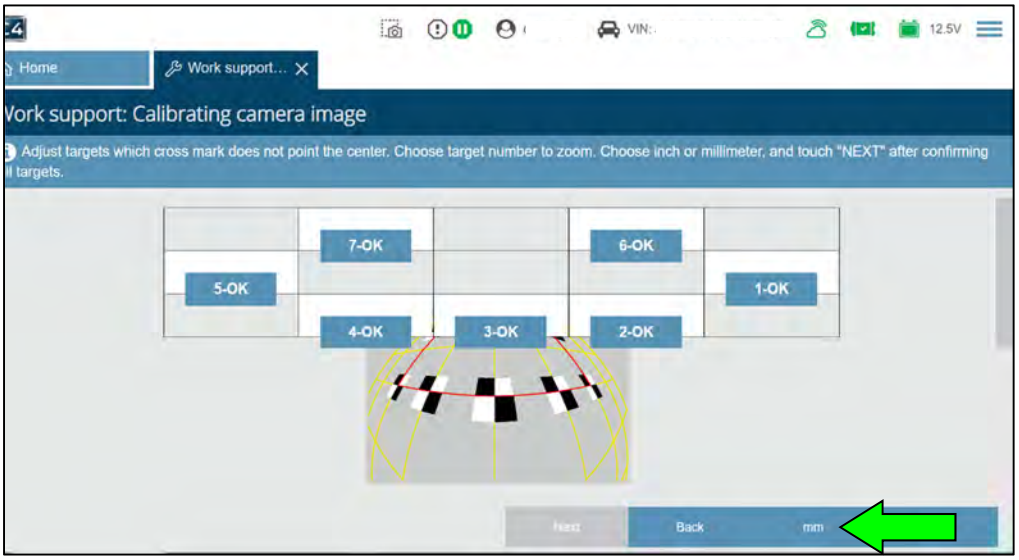


Figure 122

84. Select **Next**.

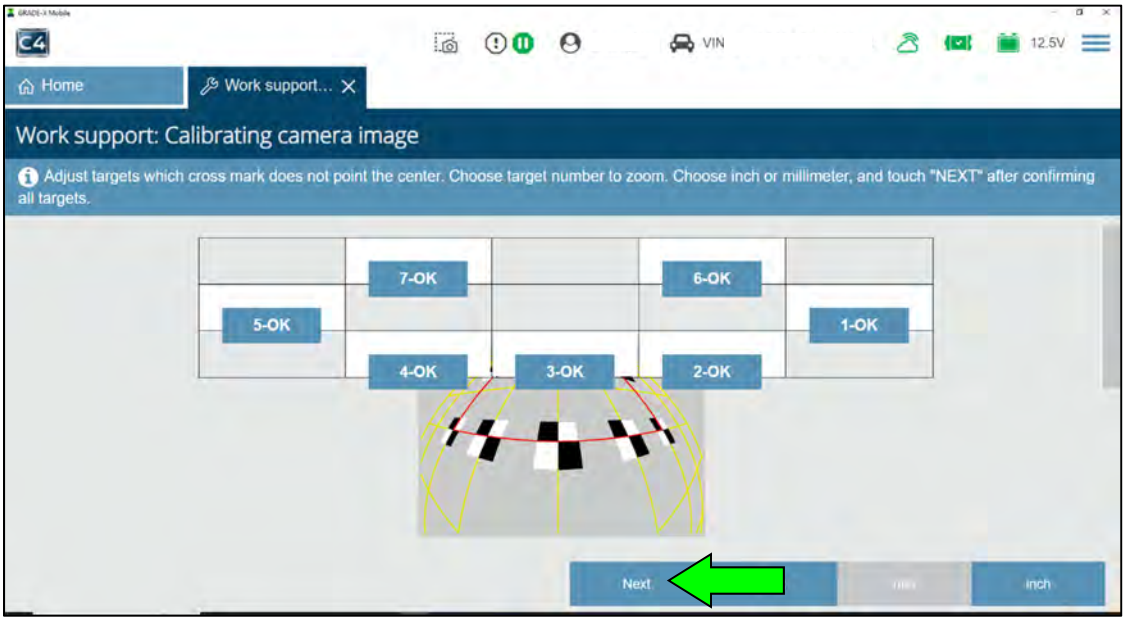


Figure 123

85. Input the length measurements L1-L4 documented for the camera being calibrated, and then select **Next**.

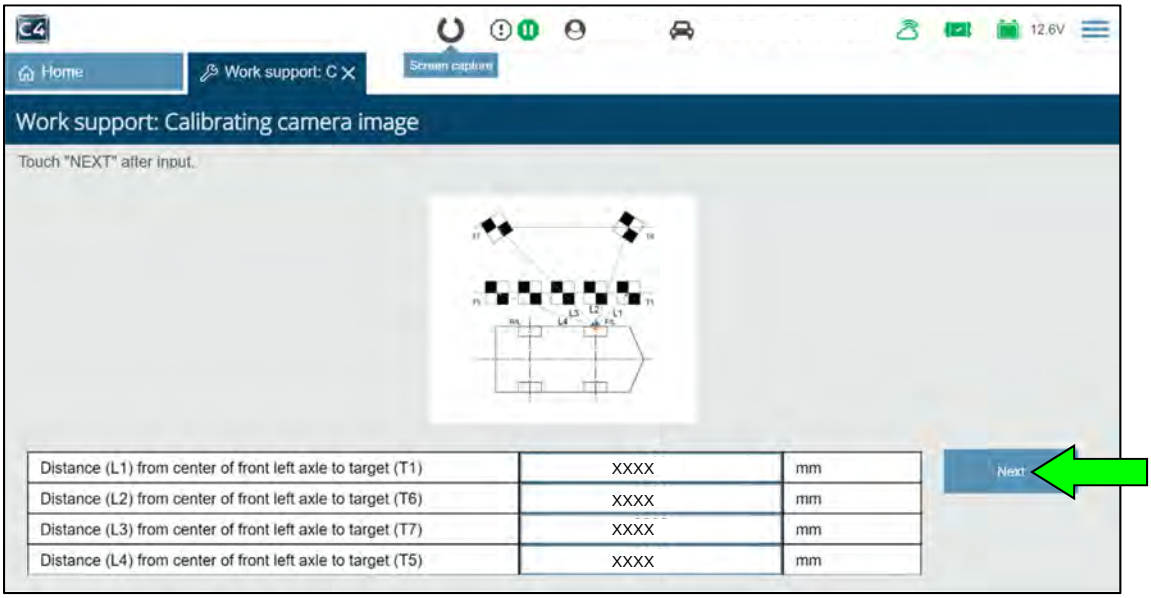


Figure 124

86. Input the length measurements L5-L8 documented for the camera being calibrated, and then select **Next**.

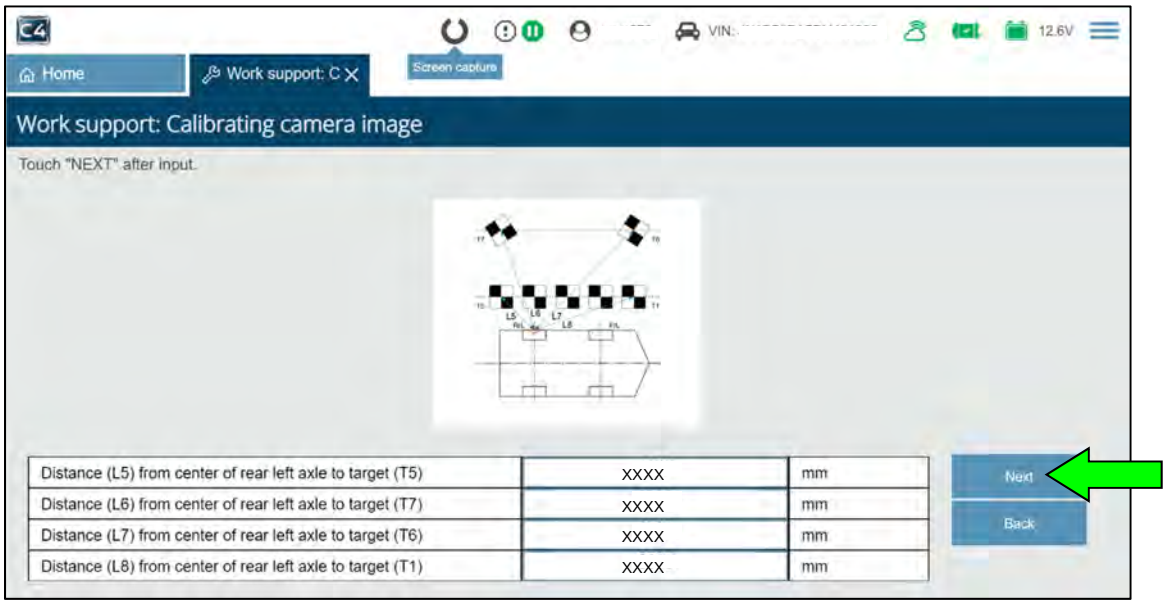


Figure 125

87. Input the height measurements H1-H4 documented for the camera being calibrated, and then select **Next**.

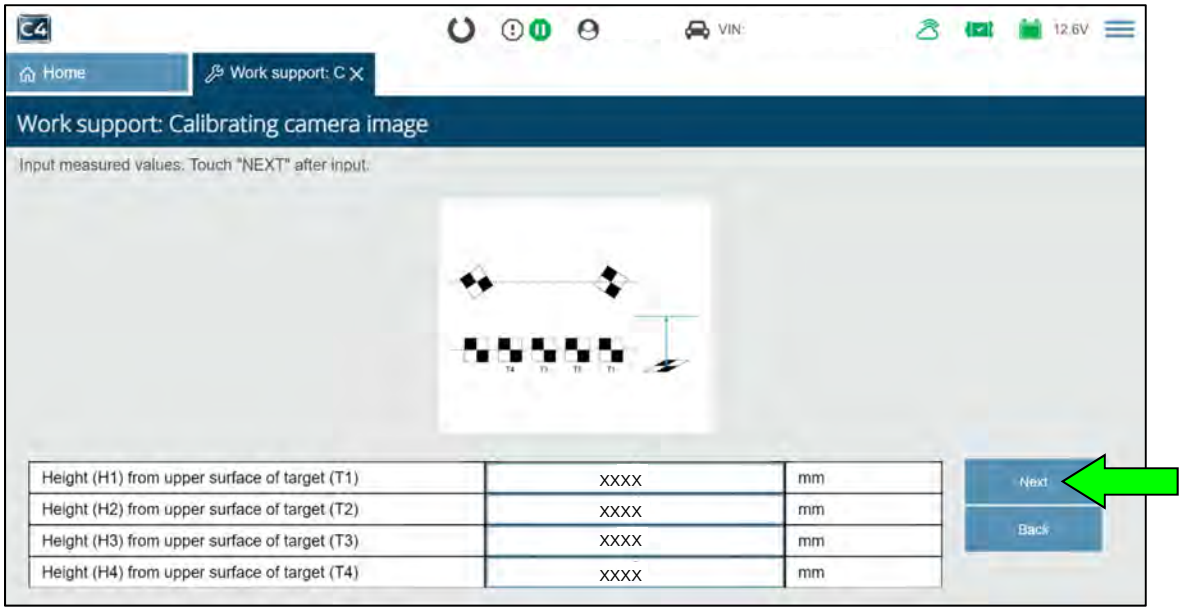


Figure 126

88. Input the height measurements H5-H7 documented for the camera being calibrated, and then select **Next**.

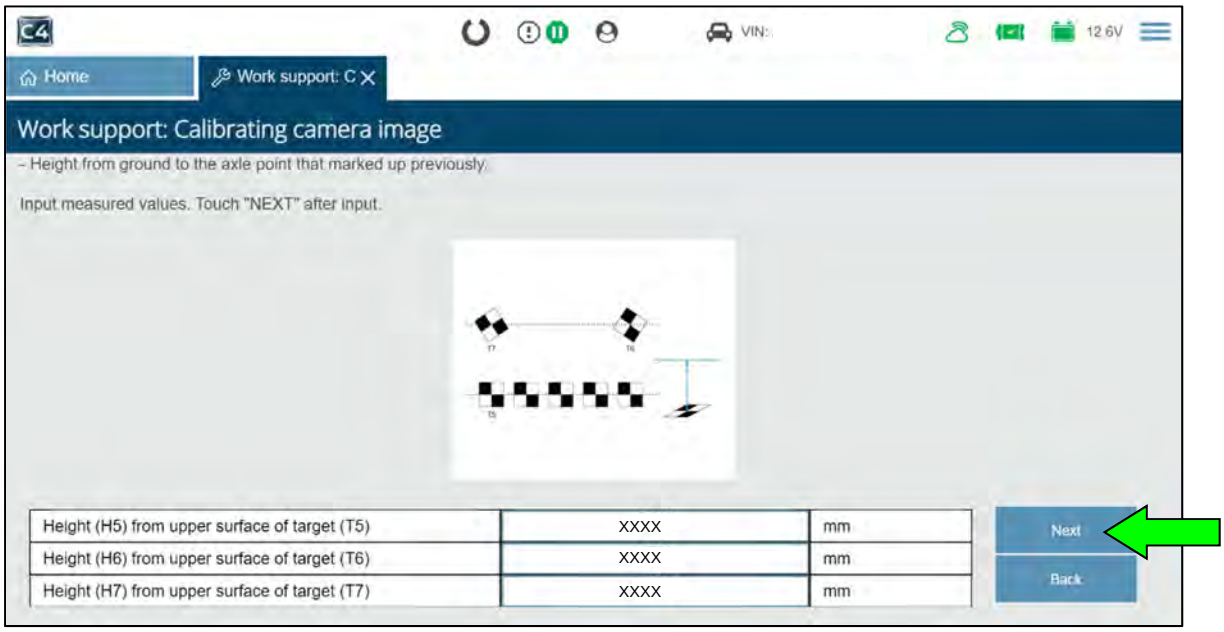


Figure 127

89. Input the height measurements H8-H11 documented for the camera being calibrated, and then select **Next**.

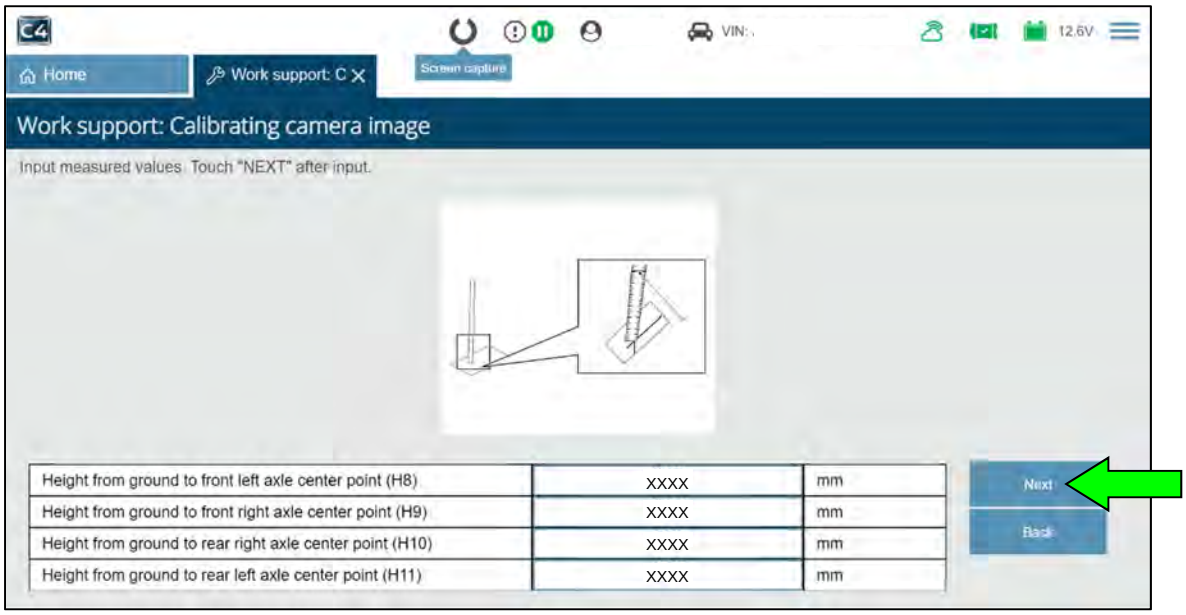


Figure 128

90. Select **OK**.

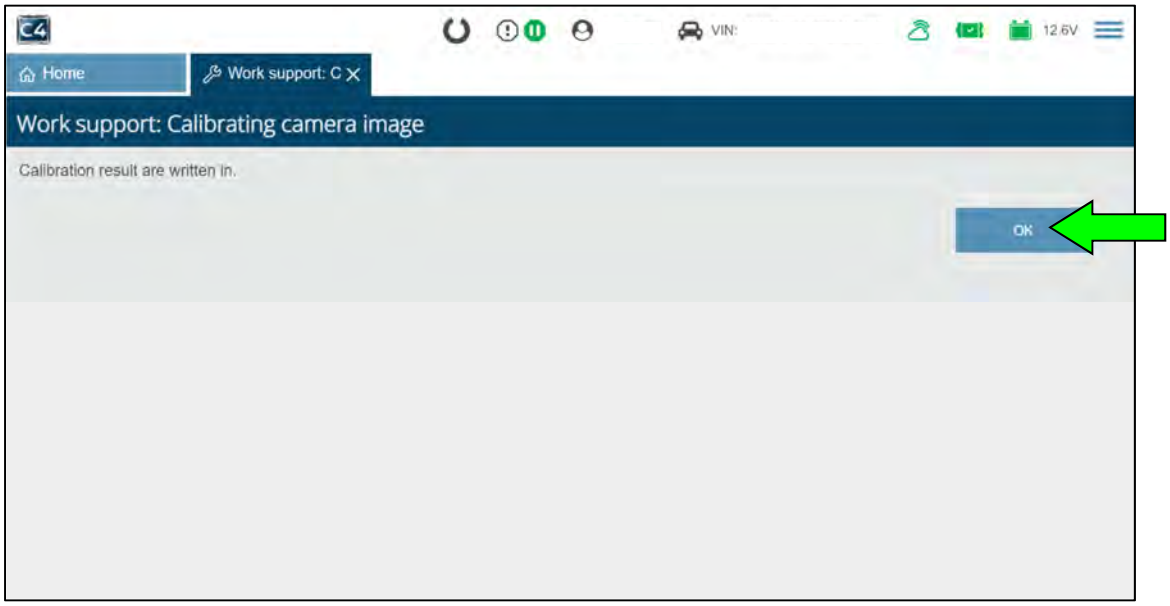


Figure 129

91. Select **Reload**.

HINT: The camera will show “No calibration data” until the **Reload** box is selected.

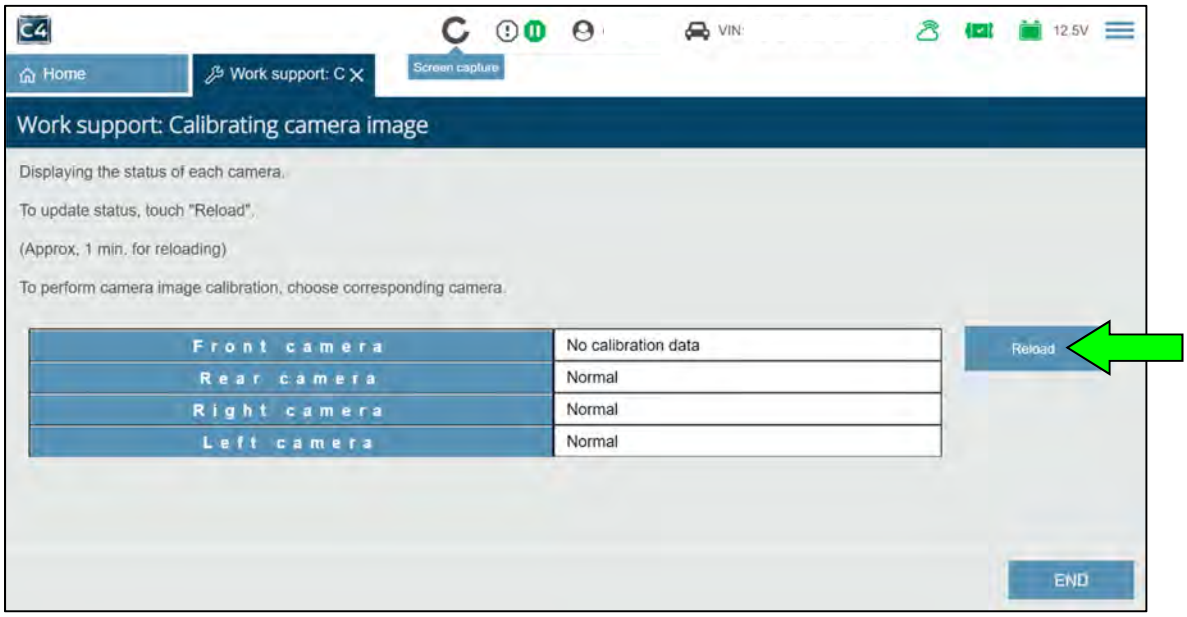


Figure 130

92. Perform steps 78 - 91 starting on page 59, for all cameras that required calibration.

93. Select **END**.

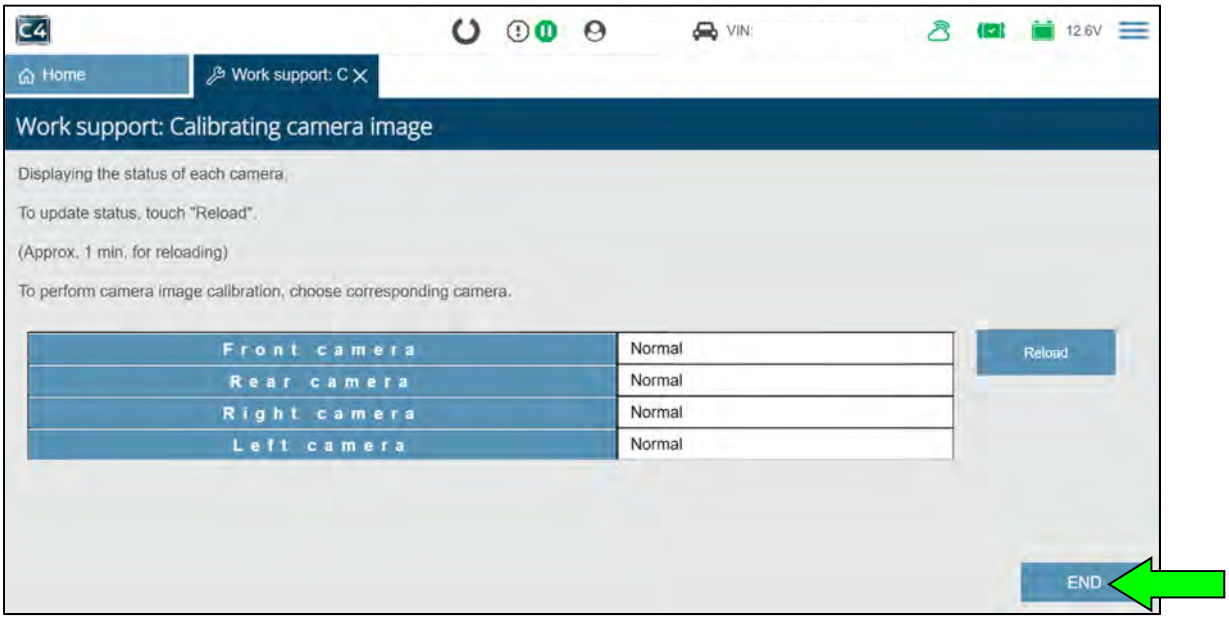


Figure 131

94. Clear all DTCs.

95. Remove the laser level from the top of the vehicle.

96. Remove all tape and markings from the vehicle.

97. Verify all AVM cameras function correctly.

- If all AVM cameras function correctly, when compared to a known good vehicle, the **SERVICE PROCEDURE** is complete.
- If any of the AVM cameras do not function correctly, when compared to a known good vehicle:
  - If DTCs are present, refer to the ESM for further diagnostic information.
  - If DTCs are not present:
    a. Disconnect both of the 12V battery cables, negative cable first.
       - Follow all ESM instructions and precautions when disconnecting the battery cables.
         - Refer to the ESM: **ELECTRICAL & POWER CONTROL > POWER SUPPLY, GROUND & CIRCUIT ELEMENTS > PRECAUTION > PRECAUTIONS FOR REMOVING BATTERY TERMINAL**

    b. Wait 30 seconds, and then touch the cables together.

    c. Wait 10 minutes.

    d. Reconnect the battery cables, positive cable first.

    e. Retry operation of the AVM cameras.
       - If any of the AVM cameras still do not function correctly, when compared to a known good vehicle, refer to the ESM for further diagnostic information.

AMENDMENT HISTORY

PUBLISHED DATE	REFERENCE	DESCRIPTION
January 9, 2025	NTB25-002	Original bulletin published