NISSAN ROGUE T33 Millimeter Wave Radar Calibration

Tested Model: NISSAN ROGUE T33

Function Description:

Situations requiring calibration:

- Radar sensor loose or replaced.
- Bumper bracket loose or replaced.
- Sensor locking bracket loose or removed.
- Wheel suspension geometry changes.
- The rear end inside the front of the vehicle is hit by external force.

Execution Conditions:

- When performing millimeter wave radar adjustment, place the vehicle on a level ground with normal tire pressure and normal four-wheel alignment.
- A flat working space within 5 m (16.4 ft) in front and 3 m (9.84 ft) in width.
- Remove the millimeter wave radar baffle.
- Be sure to place the target correctly according to the device prompt information steps.

Procedure:

1. Turn on the vehicle ignition switch. On an X431-PAD 5, choose [Local Diagnosis], and then choose [Nissan] to enter the menu (as shown in Figure 1).

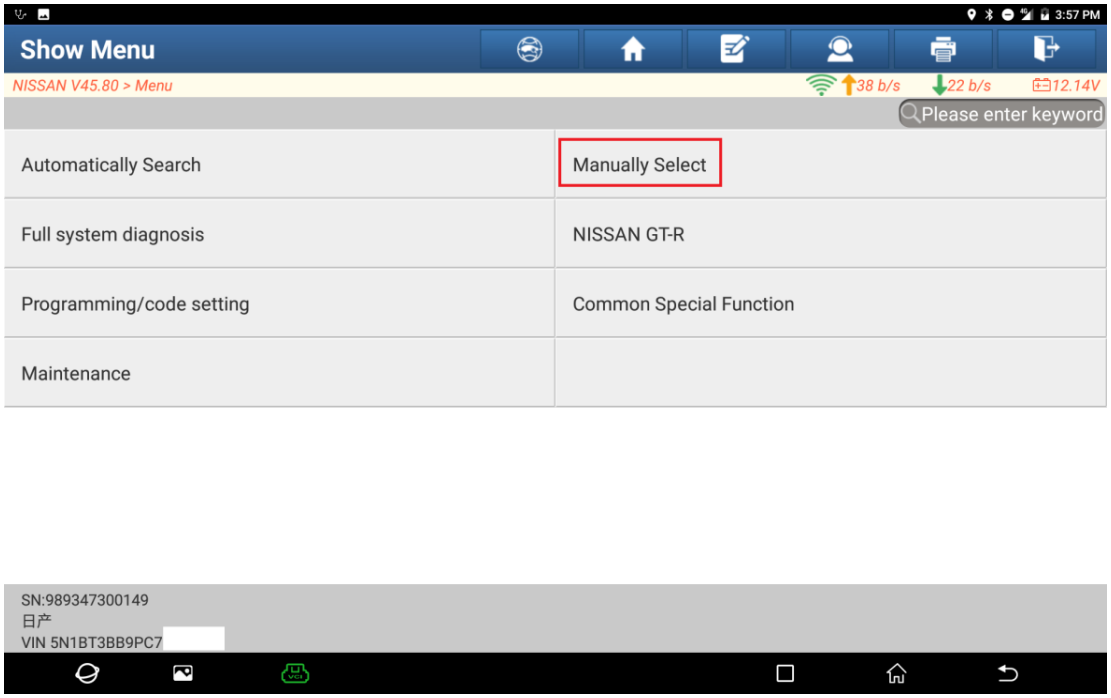

Figure 1

2. Choose [Manually Select -> North America -> American Samoa -> >ROGUE -> T33 -> 2023-] in sequence to enter the full vehicle systems, and click [Smart Detection] to scan the full vehicle systems (as shown in Figure 2).

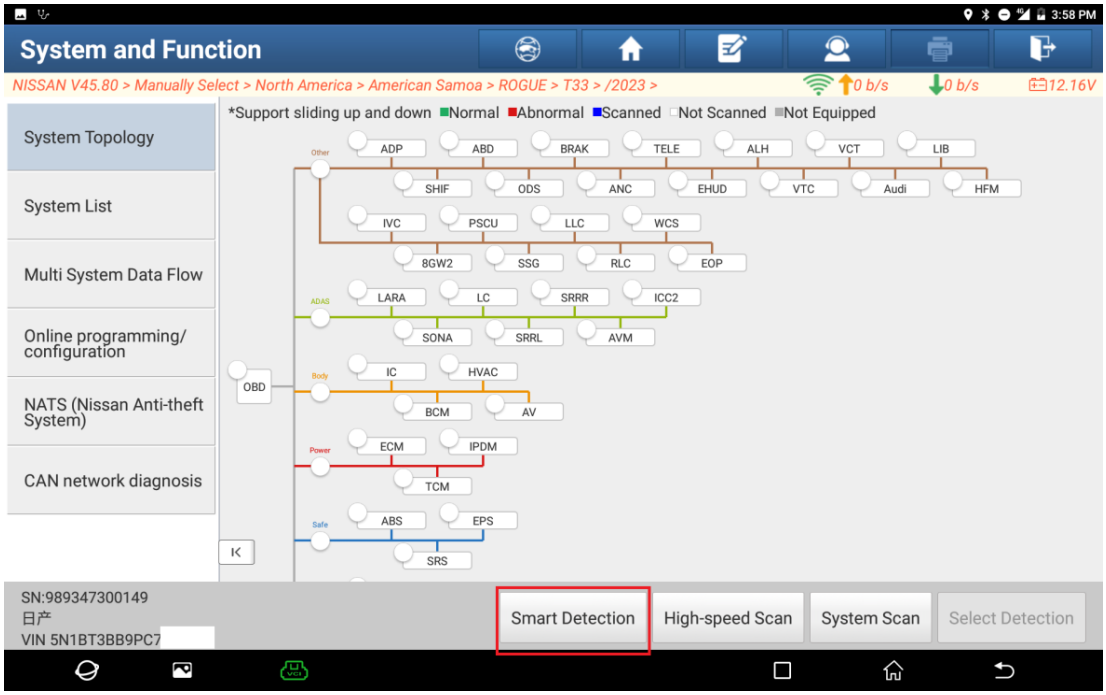

Figure 2

3. Choose [System List] and then choose [All Wheel Drive (AWD)/4 Wheel Drive (4WD) System] (as shown in Figure 3).

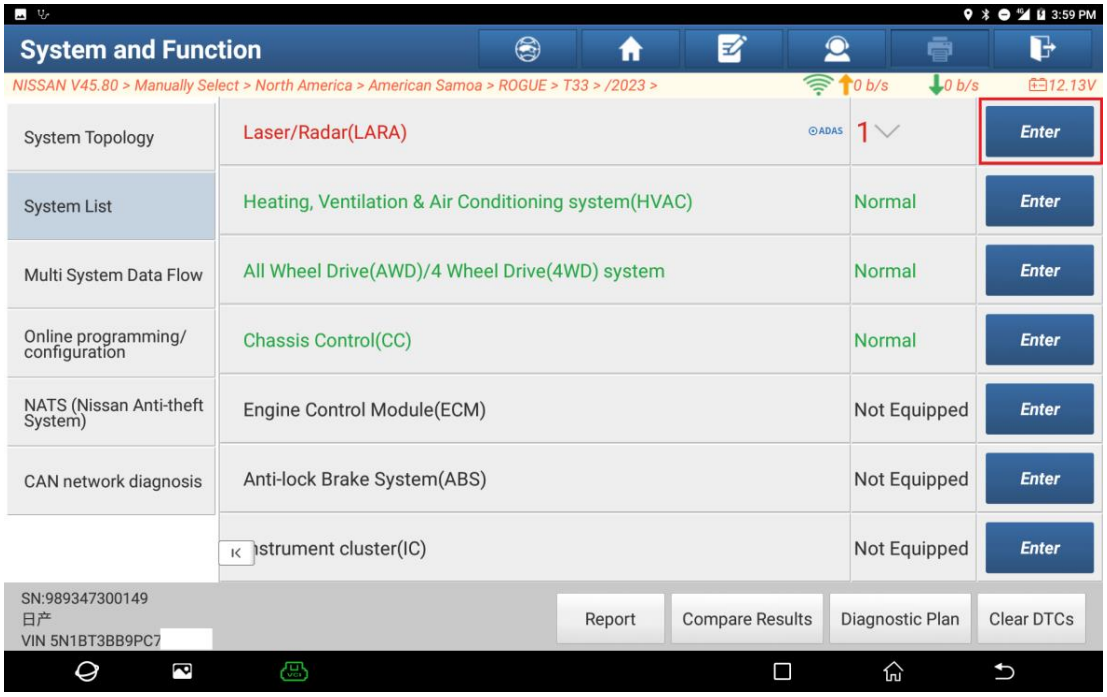

Figure 3

4. Choose [WORK SUPPORT] (as shown in Figure 4).

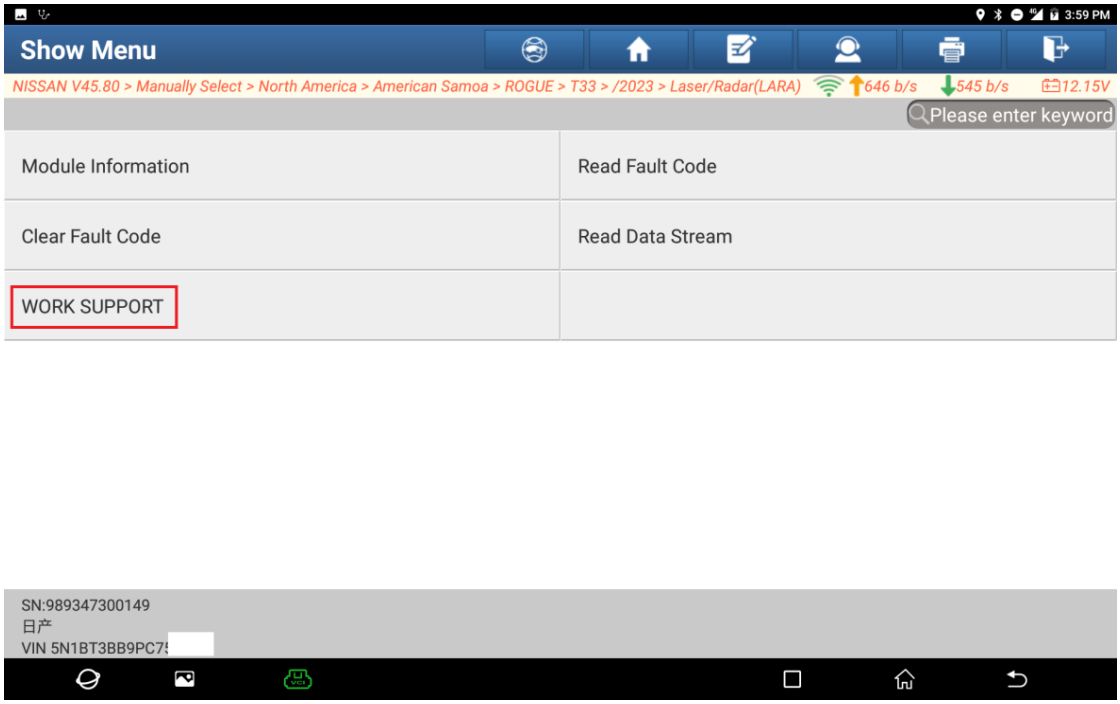

Figure 4

5. Choose [Millimeter Wave Radar Adjustment] (as shown in Figure 5).

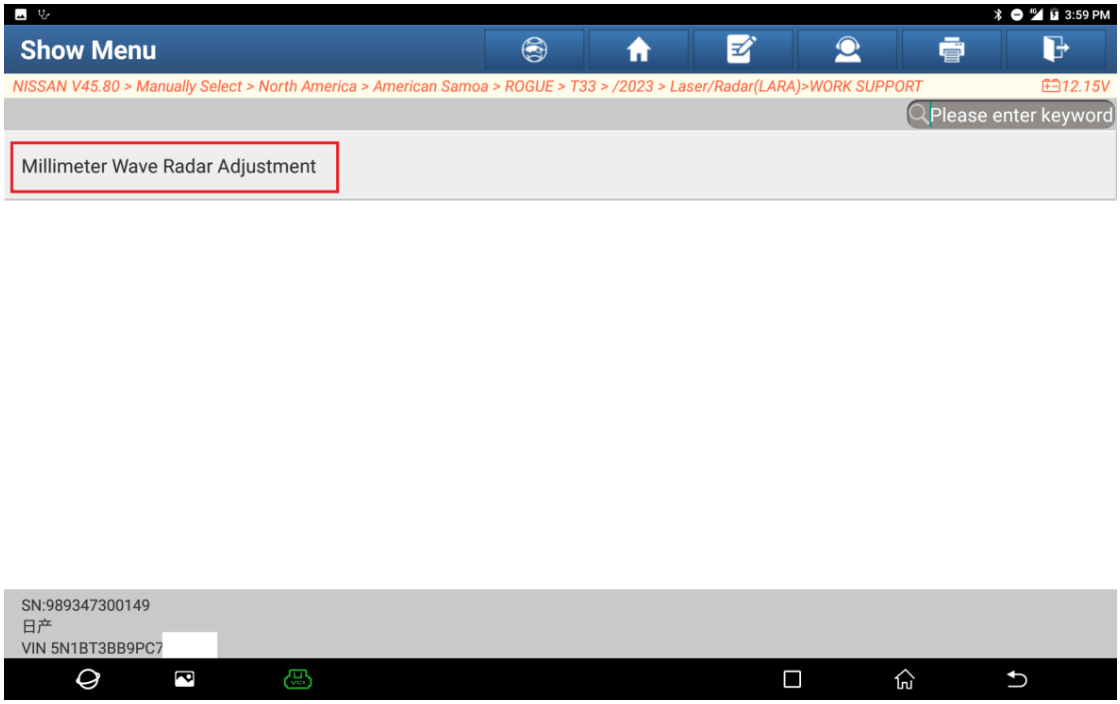

Figure 5

6. If the target is ADAS Mobile type, choose [ADAS Mobile] (as shown in Figure 6).

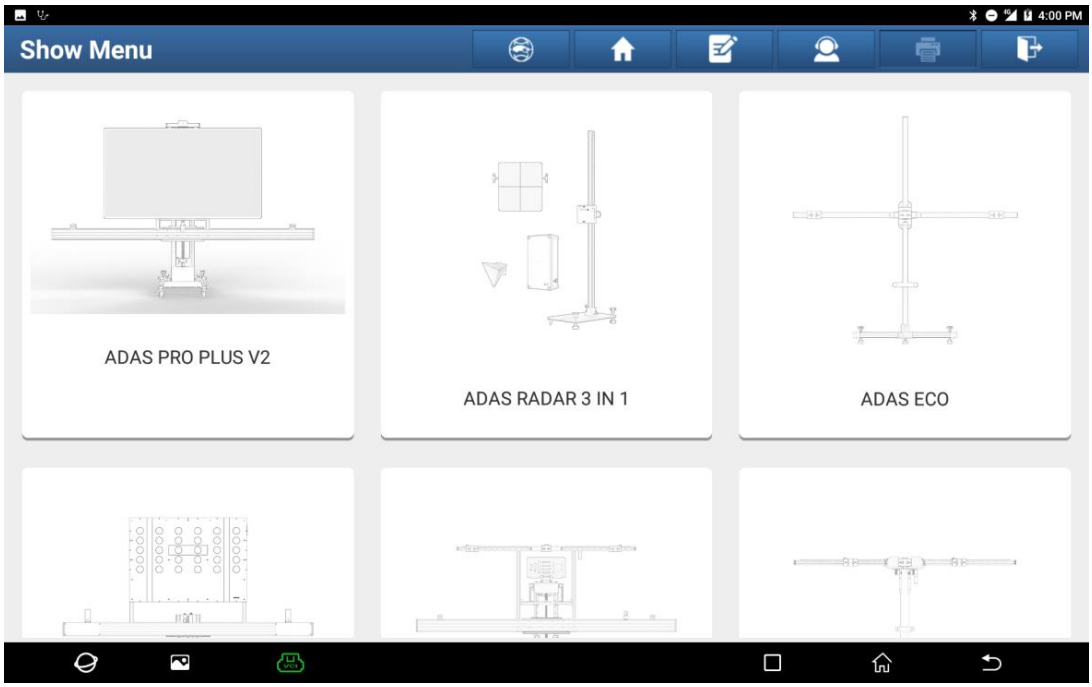

Figure 6

7. Click OK to determine point A and point B (as shown in Figure 7).

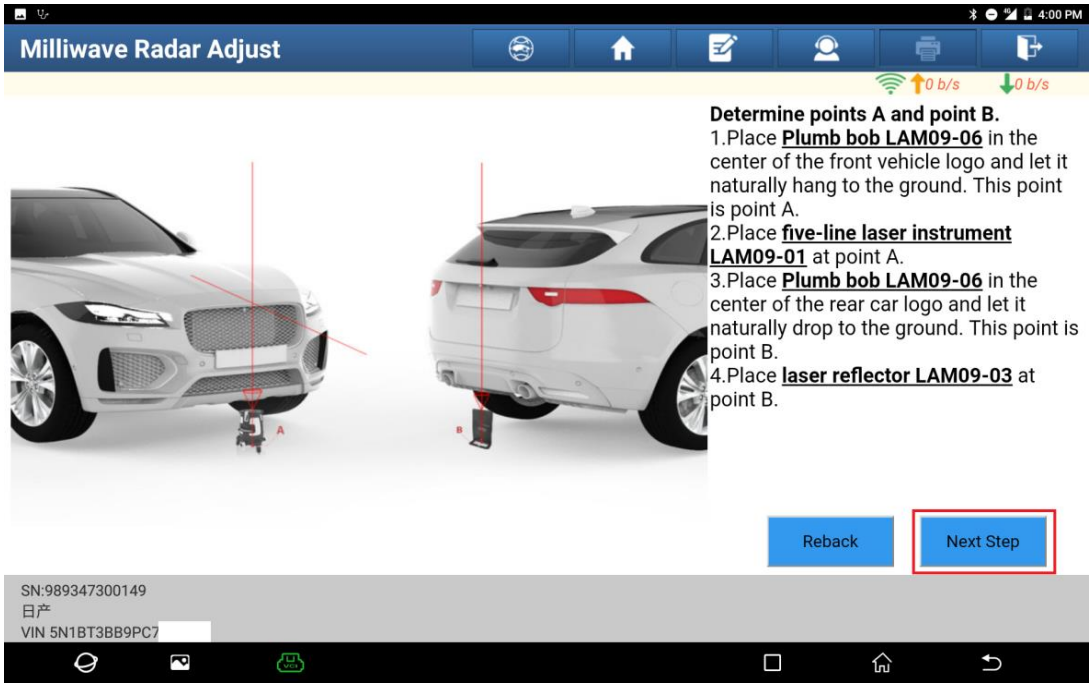

Figure 7

8. Click [Next Step]. Connect points A and B with laser to determine the vehicle center line P (as shown in Figure 8).

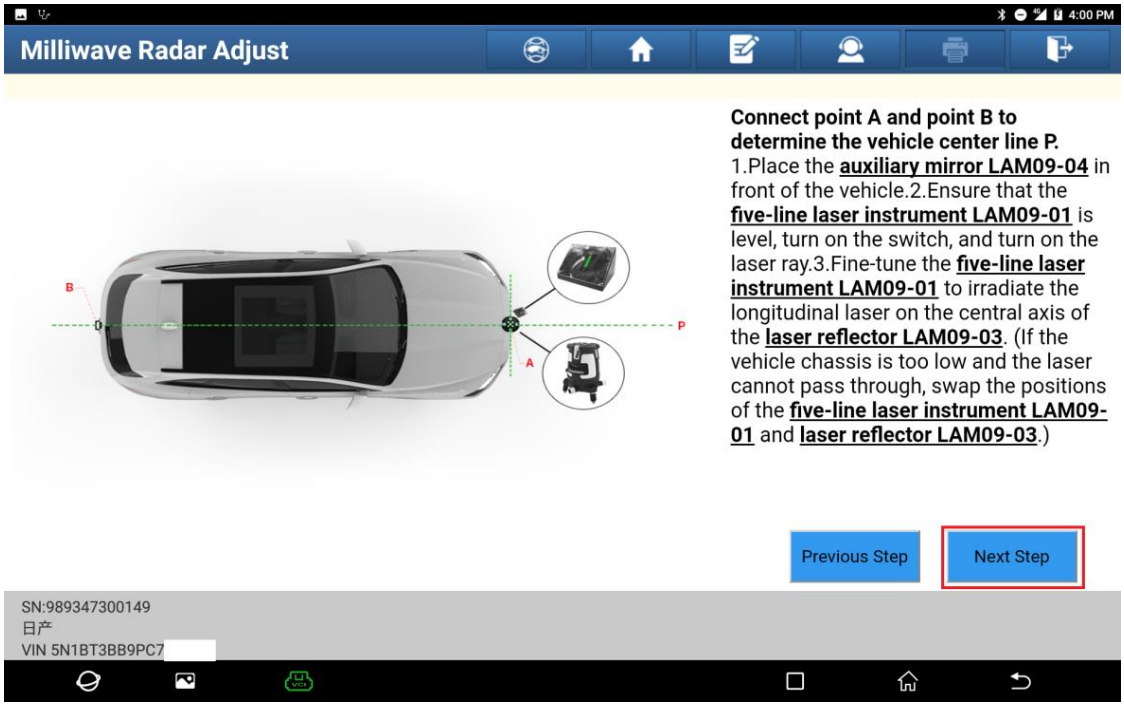

Figure 8

9. Click [Next Step]. Confirm the mark point C on the center line (as shown in Figure 9).

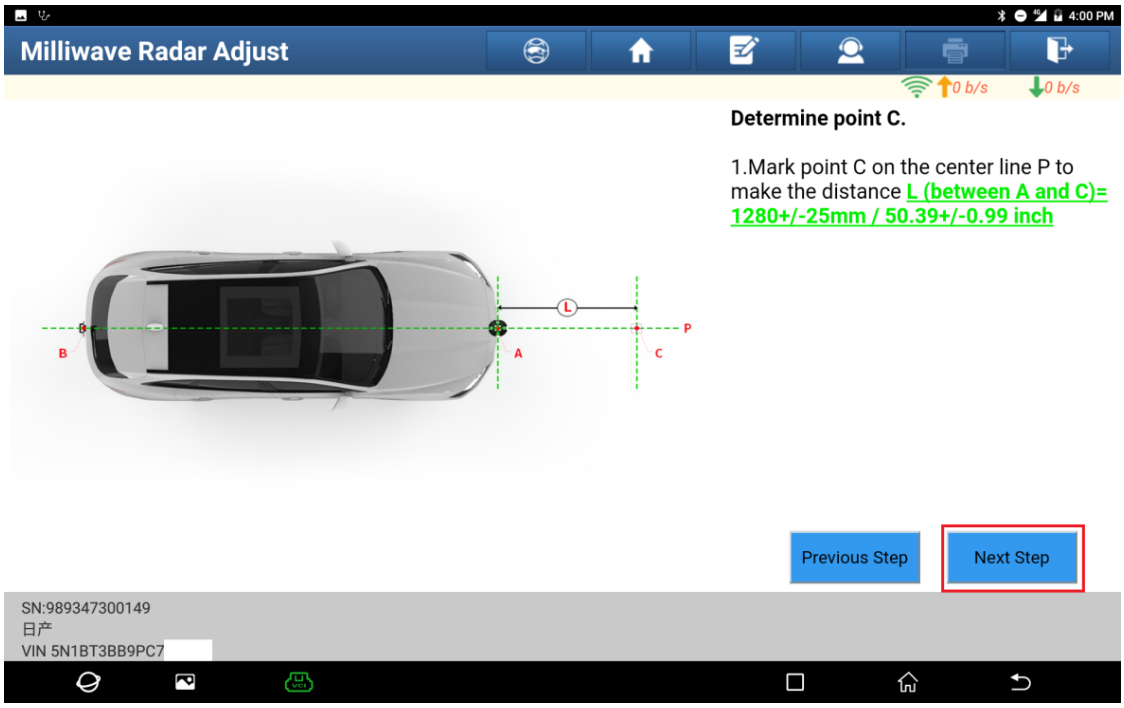

Figure 9

10. Click [Next Step]. Fix the mounting plate (as shown in Figure 10).

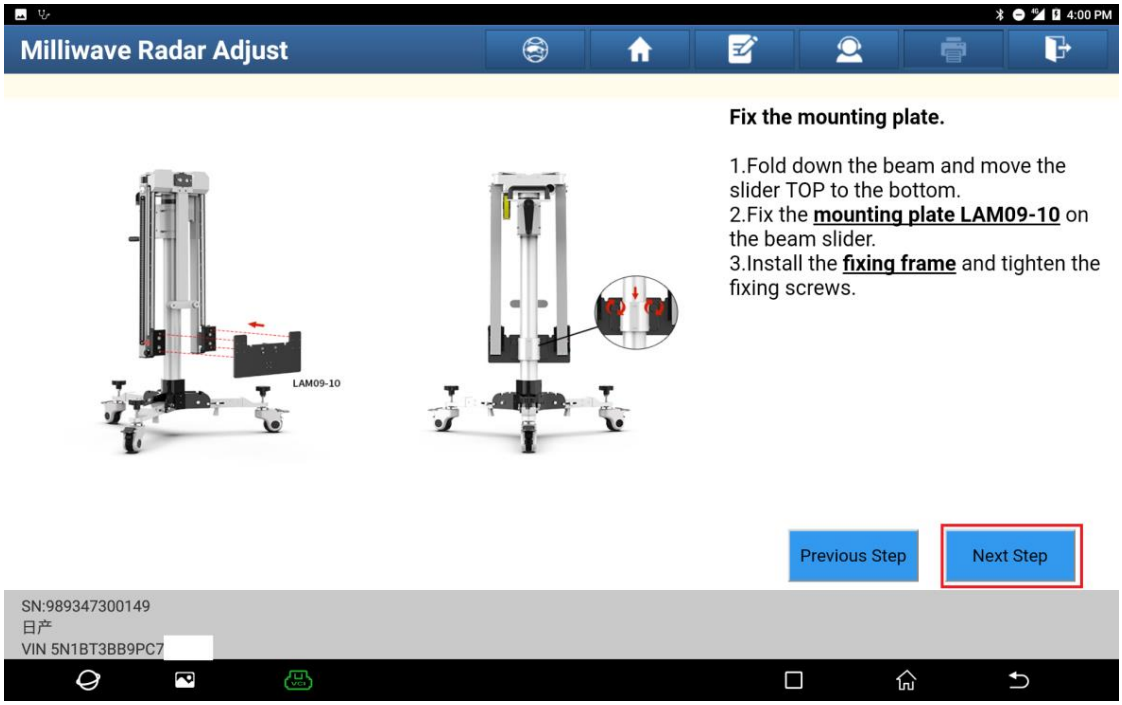

Figure 10

11. Click [Next Step]. Place ADAS Mobile (as shown in Figure 11).

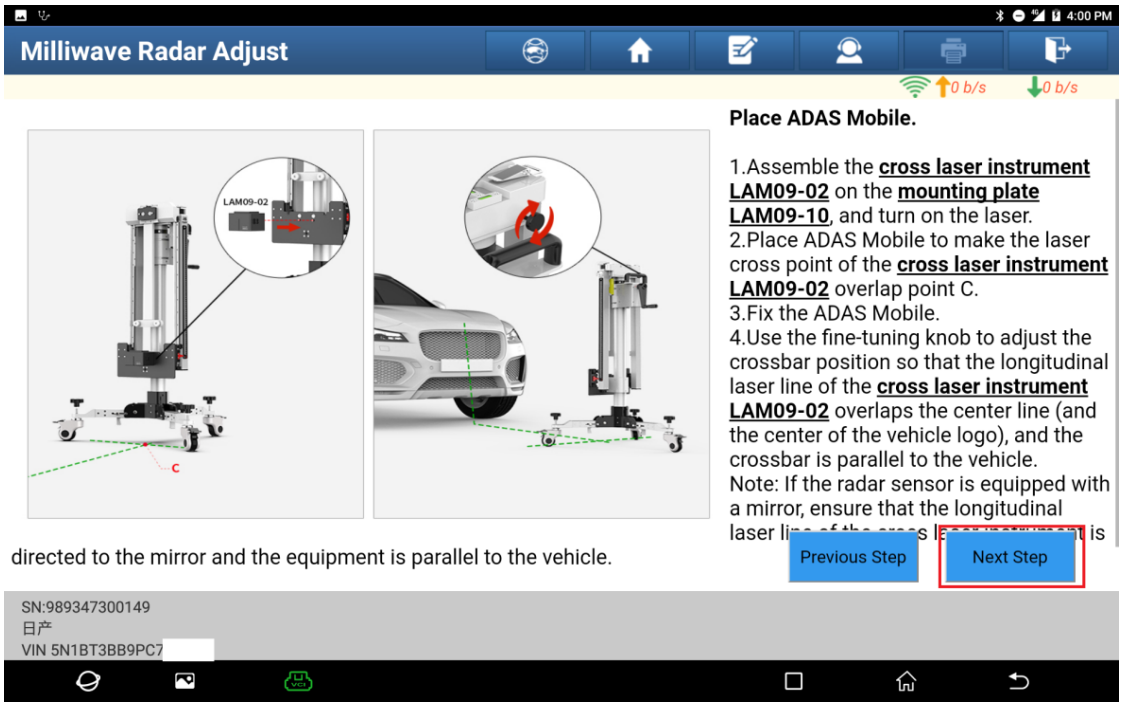

Figure 11

12. Click [Next Step]. Install the ACC radar reflector and adjust the horizontal position (as shown in Figure 12).

Figure 12

13. Click [Next Step]. Adjust the target height (as shown in Figure 13).

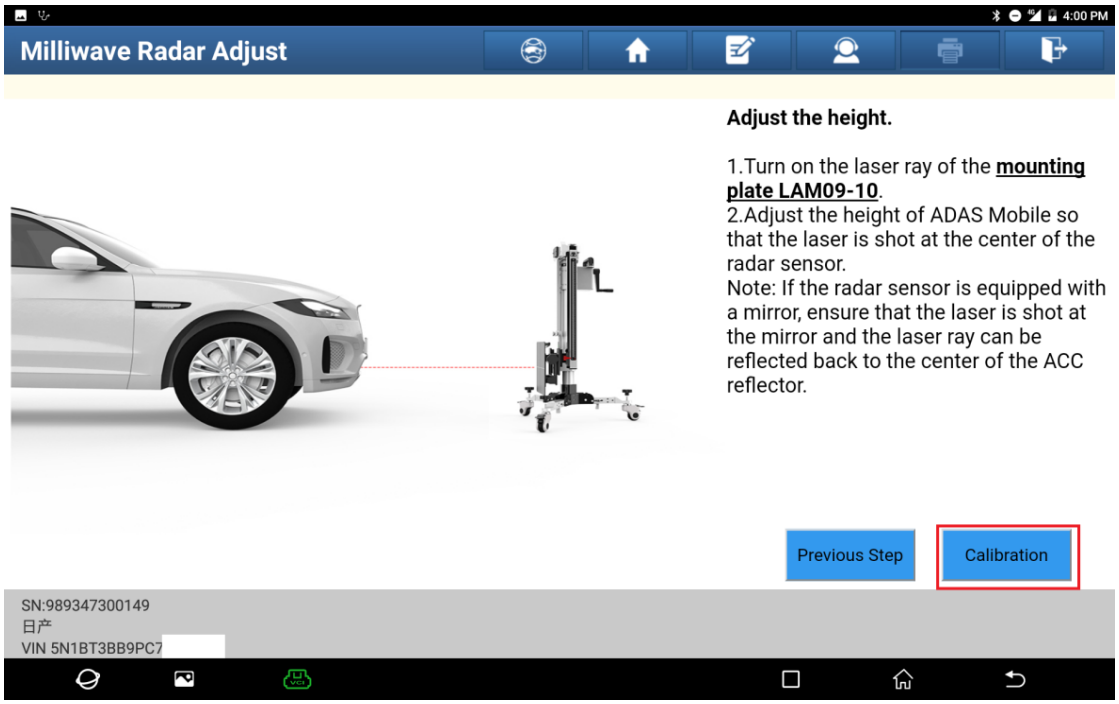

Figure 13

14. Place the target as shown in Figures 14, 15, and 16.

Figure 14

Figure 15

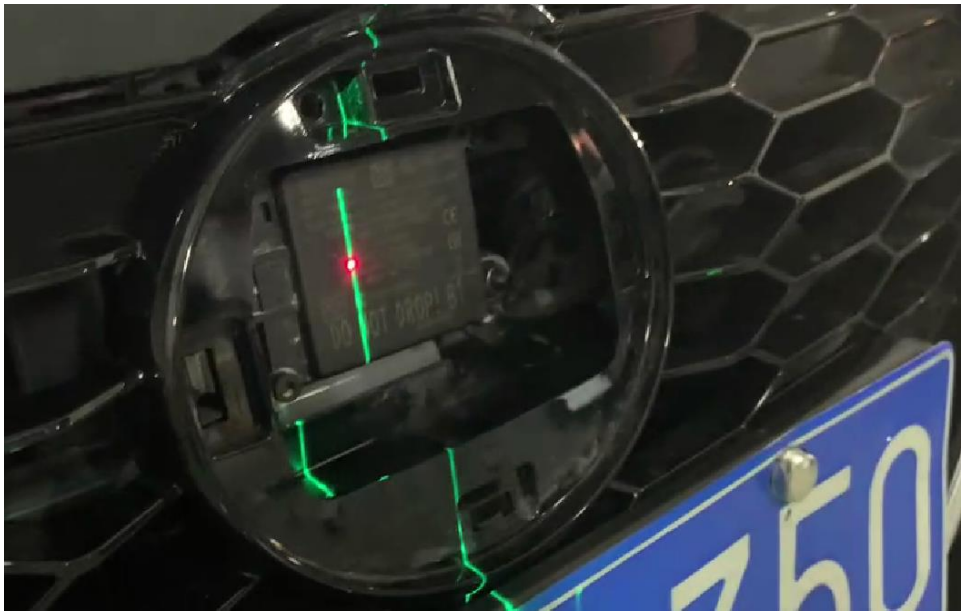

Figure 16

15. Click [Calibration]. The prompt information is displayed. If the conditions are met, click OK (as shown in Figure 17).

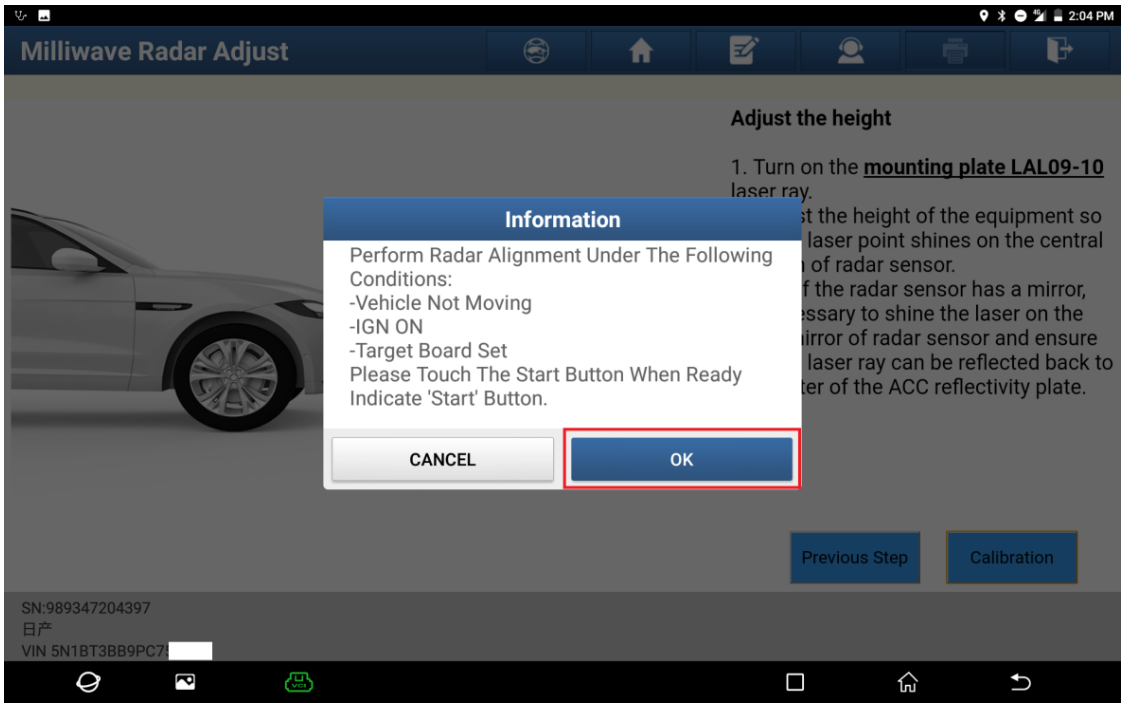

Figure 17

16. Click [Start] to perform the millimeter wave radar adjustment operation (as shown in Figure 18).

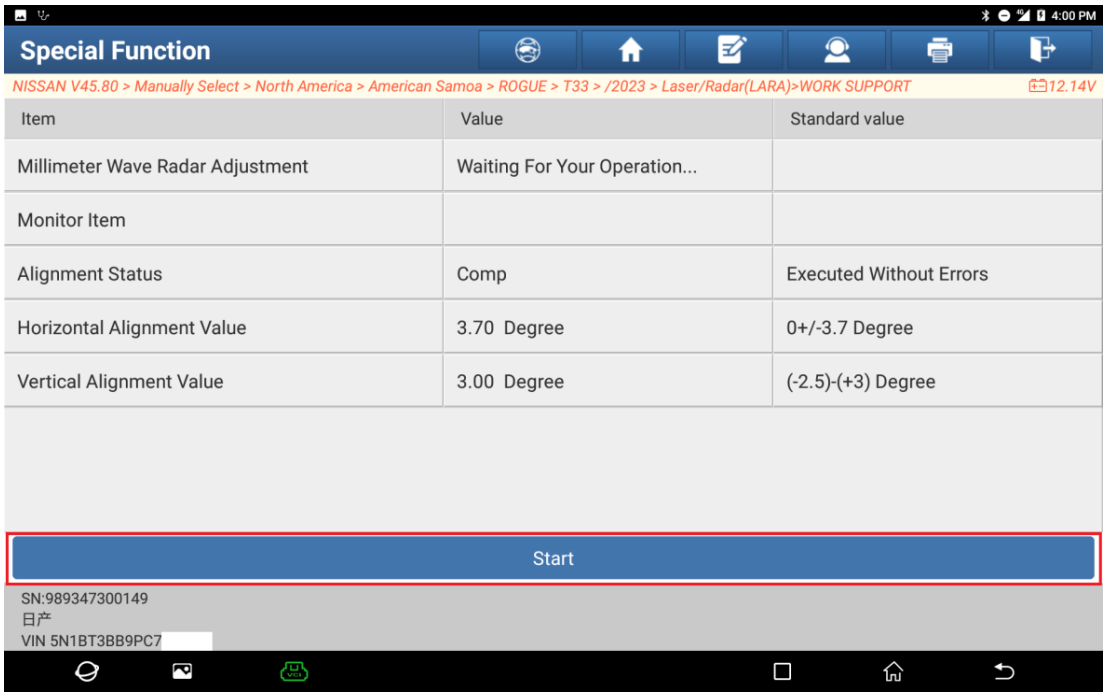

Figure 18

17. The millimeter wave radar adjustment is successful and completed (as shown in Figure 19).

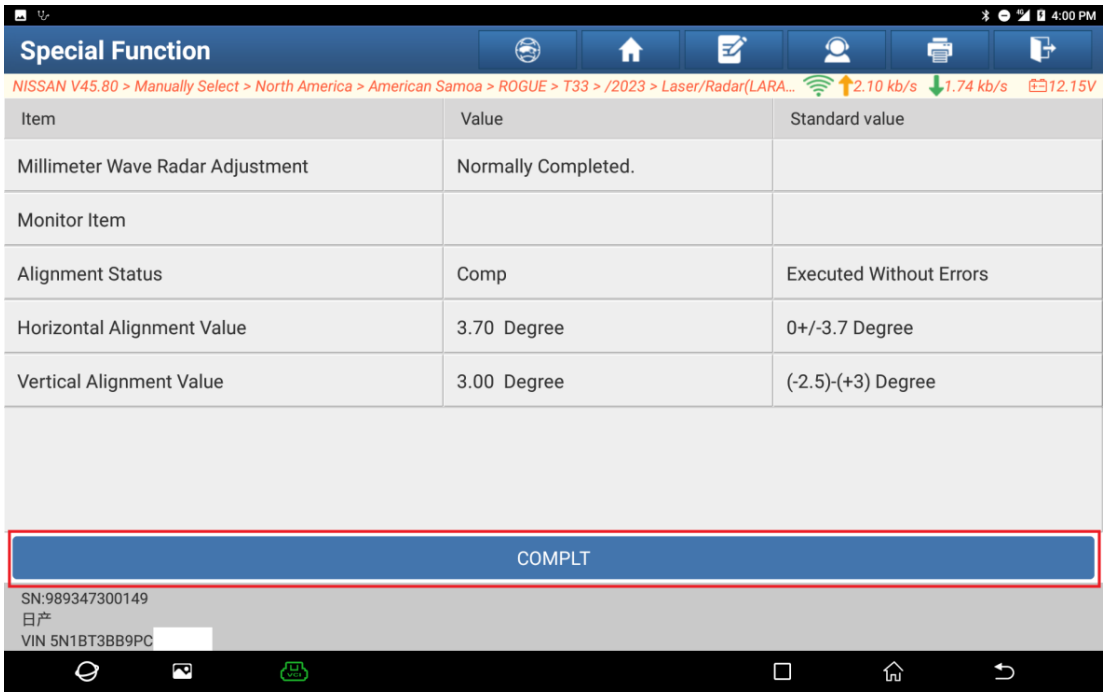

Figure 19

18. Save the ADAS diagnostic report (as shown in Figure 20).

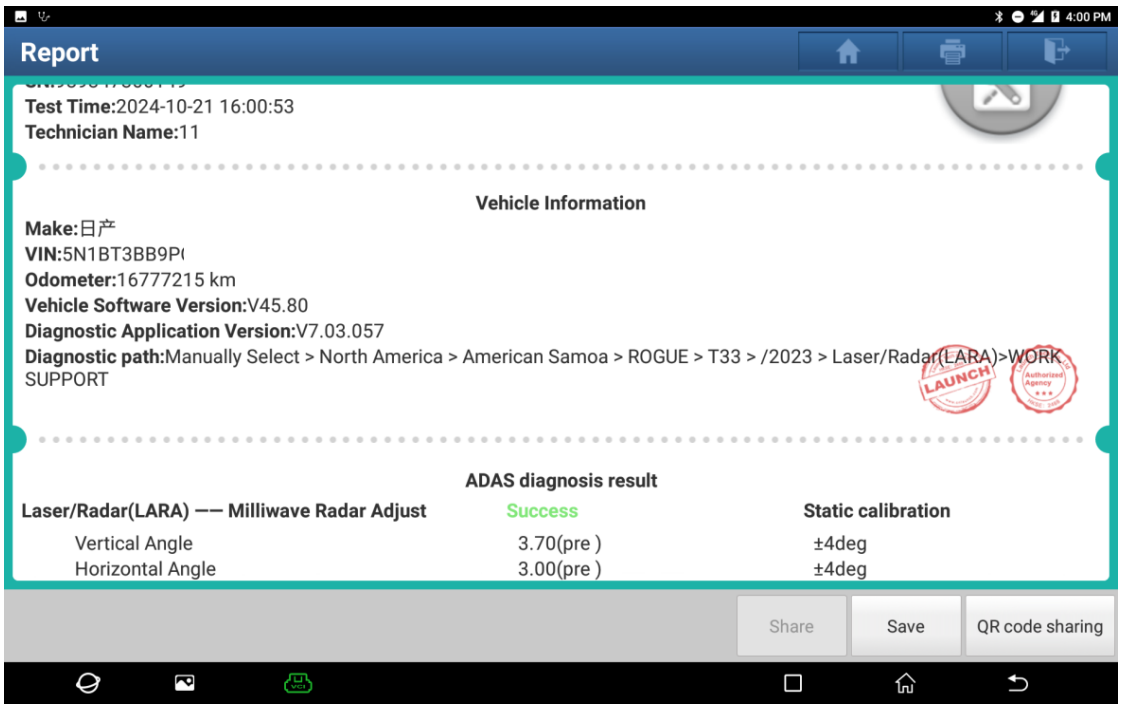

Figure 20

Statement: