Technical Bulletin



SERVICE BULLETIN Classification: Reference: Date: WT04-004 NTB04-054 May 5, 2004

NISSAN; VEHICLE WHEEL ALIGNMENT

APPLIED VEHICLES: ALL Nissan vehicles

SERVICE INFORMATION

When adjusting the wheel alignment on Nissan vehicles, please note the following:

Preliminary Steps:

- 1. You should make sure that Tire Pressures are properly set before performing alignment checks.
- 2. Inspect the vehicle to make sure there are no signs of visible damage to any suspension components.

General Information and Recommendations:

- 1. A Four-Wheel Thrust Alignment should be performed.
 - This type of alignment is recommended for any Nissan vehicle.
 - The four-wheel thrust process ensures that the vehicle is properly aligned, and helps ensure proper 'centering' of the steering wheel.
- 2. Use the right alignment machine.
 - You must use a quality alignment machine that will give accurate results when performing alignment checks.
 - This would include machines such as the Hunter Series 611 or equivalent. Please refer to the Nissan TECH-MATE Service Equipment Catalog.
 - The alignment rack itself should be capable of accepting any Nissan vehicle.
 - The rack should be checked to ensure that it is level.

Nissan Bulletins are intended for use by qualified technicians, not 'do-it-yourselfers'. Qualified technicians are properly trained individuals who have the equipment, tools, safety instruction, and know-how to do a job properly and safely. NOTE: If you believe that a described condition may apply to a particular vehicle, DO NOT assume that it does. See your Nissan dealer to determine if this applies to your vehicle.

- 3. Make sure the machine is properly calibrated.
 - Your alignment equipment should be regularly calibrated in order to give correct information.
 - For example, HUNTER recommends that:
 - Standard style alignment machines ('internal reference' sensors) should be checked (and calibrated, if necessary) every six months.
 - "External reference" alignment machines (image based) should be checked <u>once</u> a <u>year</u>.
 - ➤ If any instrument that's part of the alignment machine is dropped, or damaged in some way, calibration should be checked immediately.
 - Check with the manufacturer of your specific equipment for their recommended Service/Calibration Schedule.

NOTE: In order to properly document any warranty claim repair, the following two items <u>MUST</u> be attached to the Repair Order (RO):

- A copy of the alignment machine printout showing the BEFORE and AFTER alignment readings.
- A copy of the alignment machine calibration certification.

IMPORTANT: If you don't attach these two items to the RO, the Claim may be denied (turned down).

The Alignment Process:

- <u>IMPORTANT</u>: Use only the alignment specifications listed in the appropriate Electronic Service Manual (ESM) when adjusting the alignment on any Nissan vehicle.
- When displaying the alignment settings, many alignment machines use a green/red or plus/minus or Go/No Go "indicator".
 - Do NOT use these indicators.
 - ➤ The alignment specifications used to make the color change may not be correct in your machine. This may result in an ERROR.
- Some newer Hunter or other brand alignment machines are equipped with an optional "Rolling Compensation" method.
 - Do NOT use this method to 'compensate' the sensors (alignment targets or heads), particularly when aligning the Nissan 350Z.
 - ➤ Use the "Jacking Compensation Method" for any alignment targets or heads sensors. You'll need to raise the vehicle to perform this compensation step.

After You Have Checked and Adjusted Any Vehicle Alignment:

- 1. Print out the BEFORE and AFTER measurements, and attach them to the Repair Order.
- 2. Road test the vehicle to make sure the steering wheel is "centered" when driving on a level road surface.

Warranty Claim Information:

In order to properly document any warranty claim repair, the following two items <u>MUST</u> be attached to the Repair Order (RO):

- A copy of the alignment machine printout showing the BEFORE and AFTER alignment readings.
- A copy of the alignment machine calibration certification.

IMPORTANT: If you don't attach these two items to the RO, the Claim may be denied (turned down).

Some final points:

- The same two items discussed above under Warranty Claim Information should be kept in the vehicle's service history file.
- For additional details regarding Nissan Vehicle Alignment, refer to the appropriate ESM for the vehicle you are working on.
- If you sublet alignments, the sublet shop must follow the same requirements as stated in this bulletin.